

SCATALOGIC RITES

OF ALL NATIONS.

A Dissertation upon the Employment of Excrementitious Remedial Agents in Religion, Therapeutics, Divination, Witchcraft, Love-Philthers, etc., in all Parts of the Globe.

BASED UPON ORIGINAL NOTES AND PERSONAL OBSERVATION, AND UPON
COMPILATION FROM OVER ONE THOUSAND AUTHORITIES.

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NOT FOR GENERAL PERUSAL.

WASHINGTON, D.C.

W. H. LOWDERMILK & CO.

1891.

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University Press :
JOHN WILSON AND SON, CAMBRIDGE, U.S.A.

PREFACE.

THE subject of SCATALOGIC or STERCORACEOUS RITES AND PRACTICES, however repellent it may be under some of its aspects, is none the less deserving of the profoundest consideration, — if for no other reason than that from the former universal dissemination of such aberrations of the intellect, as well as of the religious impulses of the human race, and their present curtailment or restriction, the progress of humanity upward and onward may best be measured.

Philosophical and erudite thinkers of past ages have published tomes of greater or less magnitude upon this subject; among these authors, it may be sufficient, at this moment, to mention Schurig, Etmuller, Flemming, Paullini, Beckherius, Rosinus Lentilius, and Levinus Lemnius. The historian Buckle regarded the subject as one well worthy of examination and study, as will appear in the text from the memoranda found in his scrap-books after his death.

The philosopher Boyle is credited with the paternity of a work which appeared over the signature "B," bearing upon the same topic.

The anonymous author or authors of the very learned pamphlet "*Bibliotheca Scatologica*," for the perusal of which I am indebted to the courtesy of Surgeon John S. Billings, collected a mass of most valuable bibliographical references.

Quite recently there have appeared in the "*Mitterlungen Gesselsch.*," Wien, 1888, two pages of the work of Dr. M. Hofler, "*Volksmedizin und Aberglaube in Oberbayern Gegenwart und Vergangenheit*," describing some of the excrementitious remedies still existing in the folk-medicine of Bavaria.

But while treatises upon this subject are by no means rare, they are not accessible, except to those scholars who are within reach of the largest libraries ; and while all, or nearly all, indicate the association of these practices with sorcery and witchcraft, as well as with folk-medicine, no writer has hitherto ventured to suggest the distinctively religious derivation to be ascribed to them.

From the moment when the disgusting "Urine Dance of the Zuñis" was performed in the author's presence down to the hour of concluding this work, a careful examination has been made of more than one thousand treatises of various kinds and all sizes, from the musty pig-skin covered black letter of the fifteenth century to the more modest but not less valuable pamphlet of later years. These treatises have covered the field of primitive religion, medicine, and magic, and have likewise included a most liberal portion of the best books of travel and observation among primitive peoples in every part of the world ; not only English authorities, but also the writings of the best French, Spanish, German, Latin, Greek, Arabic, and Celtic authors are here presented, together with an examination of what has come down to us from leaders of Eastern religious thought and from the monastic "leeches" of the Anglo-Saxons.

A great number of examples of the use of stercoraceous remedies has been inserted under the head of "Therapeutics," for two excellent reasons : first, to show that the use of such remedies was most widely disseminated ; and secondly, to demonstrate that this use had been handed down from century to century.

Had any other course been followed, objection might have been raised that unusual remedies, or those of eccentric practitioners only, had been sought for and quoted for the purpose of proving that Filth Pharmacy was a thoroughly consistent and fully developed school in the science of therapeutics, from the most primitive times down to and even overlapping our own days.

A perusal of this volume cannot fail to convince the most critical that it has been written in a spirit of fairness as much as is possible to human nature, and without prepossession or prejudice in any direction.

The fact that so many citations have been incorporated in this compilation without comment, may be claimed as an additional proof of the unbiassed character of the work.

No collection of facts constitutes a science. All that can properly be done with facts not positively known to be related, is to place them, as here placed, in juxtaposition, leaving the reader to frame his own conclusions; by no other method can an author escape the imputation of distorting or perverting evidence.

The great number of letters received from distinguished scholars in all parts of the world, from Edinburgh to New South Wales, attests the interest felt in this treatise, and at the same time places the author under obligations which words cannot express. Special acknowledgments are due to:—

Professor W. ROBERTSON SMITH, Editor of the <i>Encyclopædia Britannica</i> .	JOHN FRAZER, Esq., LL.D., Sydney, New South Wales.
Major-General J. G. FORLONG, author of "The Rivers of Life," Edinburgh.	Capt. HENRI JOUAN, French Navy.
HAVELOCK ELLIS, Esq., Editor of the <i>Contemporary Science Series</i> .	Dr. BERNARD, Cannes, France.
Prof. TYRRELL S. LEITH, of Bombay (since dead).	Dr. ROBERT FLETCHER.
FRANK REDE FOWKE, Esq., South Kensington Museum, London.	Dr. FRANZ BOAS, Clark University, Worcester, Mass.
JAMES G. FRAZER, Esq., M. A., author of "The Golden Bough," Trinity College, Cambridge.	Dr. HENRY STRICKER, Frankfort, Germany.
Dr. GUSTAV JAEGER, of Stuttgart.	Chief Engineer MELVILLE, U. S. Navy.
Dr. J. W. KINGSLEY, of Cambridge.	Prof. OTIS T. MASON, National Museum, Washington, D. C.
Prof. E. B. TYLOR, Oxford.	WILLIAM H. GILDER, the Arctic explorer and writer.
Prof. E. N. HORSFORD, Harvard University.	Dr. ALBERT S. GATSCHET, Bureau of Ethnology, Washington, D. C.
Prof. F. W. PUTNAM, Peabody Archaeological Museum, Cambridge, Mass.	Rev. HENRY CLAY TRUMBULL, Editor of "The Sunday School Times," of Philadelphia, Penn.
Surgeon WASHINGTON MATTHEWS, U. S. Army.	Hon. LAMBERT TREE, ex-minister to Russia.
Surgeon B. J. D. IRWIN, U. S. Army.	ANDREW LANG.
F. B. KYNGDON, Esq., Secretary Royal Society, Sydney, New South Wales.	J. S. HITTEL, San Francisco, Cal.
J. F. MANN, Esq., Sydney, New South Wales.	M. M. H. GAIDOZ, editor of "Mélusine," Paris.
	Dr. S. B. EVANS, Ottumwa, Ia.

Rev. J. OWEN DORSEY, Bureau of
Ethnology, Washington, D. C.

Mr. W. W. ROCKHILL, the distin-
guished Oriental scholar and ex-
plorer.

Hon. H. T. ALLEN, Secretary Korean
Legation.

Mrs. F. D. BERGEN, and many other
correspondents.

Last, but not least, to Dr. J. HAMP-
DEN PORTER, of the city of Wash-
ington, whose friendly offices
amounted practically to a collabora-
tion.

All papers of this series which relate to the manners and usages of the Indians of the southwestern portion of our territory, especially those concerning the urine dances, phallic dances, snake dances of the Zuñis, Mokis, and other Pueblos; the Navajoes of New Mexico; the sun dance of the Sioux, etc., have been compiled from memoranda gathered under the direction of Lieutenant-General P. H. SHERIDAN, in 1881 and 1882. Those referring to Apaches, etc., of Arizona; to Northern Mexico; to pueblo ruins and cliff and cave dwellings; to Sioux, Cheyennes, Crows, Arapahoes, Pawnees, Shoshones, Utes, and other tribes, extending back to 1869, were mainly obtained while the author was serving as aide-de-camp upon the staff of Brigadier-General GEORGE CROOK, during the campaigns conducted by that officer against hostile tribes west of the Missouri, from the British line down into Mexico, and to a considerable extent under General CROOK's direction, and with his encouragement and assistance.

The translations from German texts were made by Messrs. Smith, Pratz, and Bunnemeyer, while for the analysis of the pills made out of the ordure of the Grand Lama of Thibet, the author desires to express his acknowledgments to Dr. W. M. Mew.

J. G. B.

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SCATALOGIC RITES

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I.

PRELIMINARY REMARKS.

"The proper study of mankind is man."

"The study of man is the study of man's religion." — MAX MÜLLER.

"Few who will give their minds to master the general principles of savage religion will ever again think it ridiculous. . . . Far from its beliefs and practices being a rubbish heap of miscellaneous folly, they are consistent and logical in so high a degree as to begin, as soon as even roughly classified, to display the principles of their formation and development; and these principles prove to be essentially rational, though working in a mental condition of intense and inveterate ignorance." — *Primitive Culture*, E. B. Tylor, New York, 1874, vol. i. p. 21.

THE object of the present monograph is to arrange in a form for easy reference such allusions as have come under the author's notice bearing upon the use of human or animal ordure or urine or articles apparently intended as substitutes for them, whether in rites of a clearly religious or "medicine" type, or in those which, while not pronouncedly such, have about them suggestions that they may be survivals of former urine dances or ur-orgies among tribes and peoples from whose later mode of life and thought they have been eliminated.

The difficulties surrounding the elucidation of this topic will no doubt occur to every student of anthropology or ethnology. The rites and practices herein spoken of are to be found only in communities isolated from the world, and are such as even savages would shrink from revealing unnecessarily to strangers; while, too frequently, observers of intelligence have failed to improve opportunities for noting the existence of rites of this nature, or else, restrained by a false modesty, have clothed their remarks in vague and indefinite phraseology, forget-

ting that as a physician, to be skilful, must study his patients both in sickness and in health, so the anthropologist must study man, not alone wherein he reflects the grandeur of his Maker, but likewise in his grosser and more animal propensities.

When the first edition of "Notes and Memoranda," etc., upon this subject, was distributed by the Smithsonian Institution, the author was prepared to believe that, to a large and constantly increasing circle of scholars, the subject would prove of unusual interest, and that, to repeat the words of a great emperor, as quoted by a greater philosopher, all belonging to primitive man was worthy of scrutiny and examination by those who would become familiar with his history and evolution.

"We ought to be able to say, like the Emperor Maximilian, 'home sum, humani nihil a me alienum puto,' or translating his words literally, 'I am a man; nothing pertaining to man I deem foreign to myself.'" — (Max Müller, "Chips from a German Workshop." Maximilian was using a citation from Terence.)

The author also felt that to such a circle it would not be necessary for him to make an apology analogous to that with which Pellegrini sought to defend the noble profession of medicine in the early days of printing.¹ But it was with no inconsiderable amount of pride that he saw his pamphlet honored by the earnest attention of men eminent in the world of thought, who by suggestion and criticism, given in kindness and received with gratitude, have contributed to the amplification of the original "Notes and Memoranda" into the present treatise.

That these disgusting rites are distinctively religious in origin, no one, after a careful perusal of all that is to be presented upon that head, will care to deny; and that their examination will be productive of important results will be equally incontrovertible when that exami-

¹ John Baptist Pellegrini, who wrote an "Apologia . . . adversus Philosophiae et Medicinae calumniatores," at Bononiae (Bologna), 1582, uses only this expression, "Quamvis humanis corporis excrementa conspicienda considerandaque esse praecipiat non tamen propter hoc aliquid suae nobilitati et proestantiae detrahitur," p. 190. He means that the nobility of the medical profession is in no manner impaired by the fact that the good physician examines the egestae of his patient. "However disgusting the subject may appear to such readers who do not consider it in the light of science, the article is a fair specimen of the maxim that, for a scientific mind, nothing is too abject or insignificant for consideration; and it also illustrates the other principle, that to the pure everything is pure. Many of the rites described in these pages show how deeply engraved in the human mind is the tendency of symbolizing, anthromorphizing, and deifying abstract ideas and phenomena of nature." — (Extract from review by Dr. Alfred Gatchett, Bureau of Ethnology, in "Folk-Lore Journal," Boston, Mass.)

nation shall be conducted on the broad principle that the benefit or detriment mankind may have received from religion in general or from any particular form of religion, can be ascertained only by a comparison between man's actions and principles of conduct in the earliest stages of culture, and those observable while actuated by the religious sentiment of the present day.

Hebrews and Christians will discover a common ground of congratulation in the fact that believers in their systems are now absolutely free from any suggestion of this filth taint, every example to the contrary being in direct opposition to the spirit and practice of those two great bodies to which the world's civilization is so deeply indebted.

But under another point of view, the study of primitive man is an impossibility and an absurdity unless prosecuted as an investigation into his mode of religious thought, since religion guided every thought and deed of his daily life. Rink, after saying that the "whole study of prehistoric man . . . which has hitherto almost exclusively been founded upon the study of the ornaments, weapons, and other remains of primitive peoples," must in future be based upon an inquiry into their spiritual thought, remarks that "The time will surely come when any relic of spiritual life brought down to us from prehistoric mankind, which may still be found in the folk-lore of the more isolated and primitive nations, will be valued as highly as those primitive remains."— ("Tales and Traditions of the Eskimo," Rink, Edinburgh, 1875, page 6 of Preface.)

Repugnant, therefore, as the subject is under most points of view, the author has felt constrained to reproduce all that he has seen and read, hoping that, in the fuller consideration that all forms of primitive religion are now receiving, this, the most brutal, possibly, of all, may claim some share of examination and discussion. To serve as a nucleus for notes and memoranda since gleaned, the author has reproduced his original monograph, first published in the Transactions of the American Association for the Advancement of Science, 1885, and read by title at the Ann Arbor, Michigan, meeting, in the same year.

II.

THE URINE DANCE OF THE ZUÑIS.

ON the evening of November 17, 1881, during my stay in the village of Zuñi, New Mexico, the *Nehue-Cue*, one of the secret orders of the Zuñis, sent word to Mr. Frank H. Cushing,¹ whose guest I was, that they would do us the unusual honor of coming to our house to give us one of their characteristic dances, which, Cushing said, was unprecedented.

The squaws of the governor's family put the long living-room to rights, sweeping the floor and sprinkling it with water to lay the dust. Soon after dark the dancers entered; they were twelve in number, two being boys. The centre men were naked, with the exception of black breech-clouts of archaic style. The hair was worn naturally, with a bunch of wild-turkey feathers tied in front, and one of corn husks over each ear. White bands were painted across the face at eyes and mouth. Each wore a collar or neckcloth of black woollen stuff. Broad white bands, one inch wide, were painted around the body at the navel, around the arms, the legs at mid-thighs, and knees. Tortoise-shell rattles hung from the right knee. Blue woollen footless leggings were worn with low-cut moccasins, and in the right hand each waved a waud made of an ear of corn, trimmed with the plumage of the wild turkey and macaw. The others were arrayed in old, cast-off American Army clothing, and all wore white cotton night-caps, with corn-husks twisted into the hair at top of head and ears. Several wore, in addition to the tortoise-shell rattles, strings of brass sleigh-bells at knees. One was more grotesquely attired than the rest, in a long India-rubber gossamer "overall," and with a pair of goggles, painted white, over his eyes. His general "get-up" was a spirited take-off upon a Mexican priest. Another was a very good counterfeit of a young woman.

¹ Mr. Cushing's reputation as an ethnologist is now so firmly established in two continents that no further reference to his self-sacrificing and invaluable labors in the cause of science seems to be necessary.

To the accompaniment of an oblong drum and of the rattles and bells spoken of they shuffled into the long room, crammed with spectators of both sexes and of all sizes and ages. Their song was apparently a ludicrous reference to everything and everybody in sight, Cushing, Mindeleff, and myself receiving special attention, to the uncontrolled merriment of the red-skinned listeners. I had taken my station at one side of the room, seated upon the banquette, and having in front of me a rude bench or table, upon which was a small coal-oil lamp. I suppose that in the halo diffused by the feeble light, and in my "stained-glass attitude," I must have borne some resemblance to the pictures of saints hanging upon the walls of old Mexican churches; to such a fancied resemblance I at least attribute the performance which followed.

The dancers suddenly wheeled into line, threw themselves on their knees before my table, and with extravagant beatings of breast began an outlandish but faithful mockery of a Mexican Catholic congregation at vespers. One bawled out a parody upon the pater-noster, another mumbled along in the manner of an old man reciting the rosary, while the fellow with the India-rubber coat jumped up and began a passionate exhortation or sermon, which for mimetic fidelity was incomparable. This kept the audience laughing with sore sides for some moments, until, at a signal from the leader, the dancers suddenly countermarched out of the room in single file as they had entered.

An interlude followed of ten minutes, during which the dusty floor was sprinkled by men who spat water forcibly from their mouths. The *Nekue-Cue* re-entered; this time two of their number were stark naked. Their singing was very peculiar, and sounded like a chorus of chimney-sweeps, and their dance became a stiff-legged jump, with heels kept twelve inches apart. After they had ambled around the room two or three times, Cushing announced in the Zuñi language that a "feast" was ready for them, at which they loudly roared their approbation, and advanced to strike hands with the munificent "Americanos," addressing us in a funny gibberish of broken Spanish, English, and Zuñi. They then squatted upon the ground and consumed with zest large "ollas" full of tea, and dishes of hard tack and sugar. As they were about finishing this a squaw entered, carrying an "olla" of urine, of which the filthy brutes drank heartily.

I refused to believe the evidence of my senses, and asked Cushing if that were really human urine. "Why, certainly," replied he, "and

here comes more of it." This time it was a large tin pailful, not less than two gallons. I was standing by the squaw as she offered this strange and abominable refreshment. She made a motion with her hand to indicate to me that it was urine, and one of the old men repeated the Spanish word *mear* (to urinate), while my sense of smell demonstrated the truth of their statements.

The dancers swallowed great draughts, smacked their lips, and, amid the roaring merriment of the spectators, remarked that it was very, very good. The clowns were now upon their mettle, each trying to surpass his neighbors in feats of nastiness. One swallowed a fragment of corn-husk, saying he thought it very good and better than bread; his *vis-à-vis* attempted to chew and gulp down a piece of filthy rag. Another expressed regret that the dance had not been held out of doors, in one of the plazas; there they could show what they could do. There they always made it a point of honor to eat the excrement of men and dogs.

For my own part, I felt satisfied with the omission, particularly as the room, stuffed with one hundred Zuñis, had become so foul and filthy as to be almost unbearable. The dance, as good luck would have it, did not last many minutes, and we soon had a chance to run into the refreshing night air.

To this outline description of a disgusting rite, I have little to add. The Zuñis, in explanation, stated that the *Nehue-Cue* were a Medicine Order, which held these dances from time to time to inure the stomachs of members to any kind of food, no matter how revolting. This statement may seem plausible enough when we understand that religion and medicine, among primitive races, are almost always one and the same thing, or at least so closely intertwined, that it is a matter of difficulty to decide where one begins and the other ends.¹

Religion, in its dramatic ceremonial, preserves, to some extent, the history of the particular race in which it dwells. Among nations of high development, miracles, moralities, and passion plays have taught, down to our own day, in object lessons, the sacred history in which the

¹ There are three secret orders in Zuñi, — the "Zuñi," the "Knife," and the "Nehue-Cue." The object of the latter is said to be to teach fortitude to its members, as well as to teach them the therapeutics of stomachic disorders, etc. In their dances they resort to the horrible practice of drinking human urine, eating human excrement, animal excrement, and other nastiness which can only be believed by seeing it." — (Extract from the Personal Notes of Captain Bourke, November 16, 1881.)

spectators believed. Some analogous purpose may have been held in view by the first organizers of the urine dance. In their early history, the Zuñis and other Pueblos suffered from constant warfare with savage antagonists and with each other. From the position of their villages, long sieges must of necessity have been sustained, in which sieges famine and disease, no doubt, were the allies counted upon by the investing forces. We may have in this abominable dance a tradition of the extremity to which the Zuñis of the long ago were reduced at some unknown period. A similar catastrophe in the history of the Jews is intimated in 2 Kings xviii. 27 ; and again in Isaiah xxxvi. 12 : " But Rab-shakeh said unto them : hath my master sent me to thy master, and to thee to speak these words ? hath he not sent me to the men which sit on the wall, that they may *eat their own dung and drink their own piss* with you ? " In the course of my studies I came across a reference to a very similar dance, occurring among one of the fanatical sects of the Arabian Bedouins, but the journal in which it was recorded, the " London Lancet," I think, was unfortunately mislaid.¹

As illustrative of the tenacity with which such vile ceremonial, once adopted by a sect, will adhere to it and become ingrafted upon its life, long after the motives which have suggested or commended it have vanished in oblivion, let me quote a few lines from Max Müller's " Chips from a German Workshop," " Essay upon the Parsees," pp. 163, 164, Scribner's edition, 1869 : " The *nirang* is the urine of a cow, ox, or she-goat, and the rubbing of it over the face and hands is the second thing a Parsee does after getting out of bed. Either before applying the *nirang* to the face and hands, or while it remains on the hands after being applied, he should not touch anything directly with his hands ; but, in order to wash out the *nirang*, he either asks somebody else to pour water on his hands, or resorts to the device of taking hold of the pot through the intervention of a piece of cloth, such as a handkerchief or his *sudra*, — that is, his blouse. He first pours water on his hand, then takes the pot in that hand and washes his other hand, face, and feet." — (Quoting from Dadabhai-Nadrosi's " Description of the Parsees.")

¹ " There must, I think, be some mistake about the fanatical dance of Arabian Bedouins ; probably one of the wild practices of Moslem Dervishes was described in the source you have mislaid. These practices are Turkish or Persian, not Arabian, in origin. The Rifar Dervishes eat live serpents and scorpions, and, I dare say, perform still more disgusting acts." — (Personal letter from Professor W. Robertson Smith, Christ's College, Cambridge, England.)

Continuing, Max Müller says : " Strange as this process of purification may appear, it becomes perfectly disgusting when we are told that women, after childbirth, have not only to undergo this sacred ablution, but actually to drink a little of the *nirang*, and that the same rite is imposed on children at the time of their investiture with the *Sudra* and *Koshti*, — the badges of the Zoroastrian faith."

Before proceeding further it may be advisable to clinch the fact that the Urine Dance of the Zuñis was not a sporadic instance, peculiar to that pueblo, or to a particular portion of that pueblo ; it was a tribal rite, recognized and commended by the whole community, and entering into the ritual of all the pueblos of the Southwest.

Upon this point a few words from the author's personal journal of Nov. 24, 1881, may well be introduced to prove its existence among the Moquis, — the informant, Nana-je, being a young Moqui of the strictest integrity and veracity : " In the circle I noticed Nana-je and the young Nehue-cue boy who was with us a few nights since. During a pause in the conversation I asked the young Nehue if he had been drinking any urine lately. This occasioned some laughter among the Indians ; but to my surprise Nana-je spoke up and said : ' I am a Nehue also. The Nehue of Zuñi are nothing to the same order among the Moquis. There the Nehue not only drink urine, as you saw done the other night, but also eat human and animal excrement. They eat it here too ; but we eat all that is set before us. We have a medicine which makes us drunk like whiskey ; we drink a lot of that before we commence ; it makes us drunk. We don't care what happens ; and nothing of that kind that we eat or drink can ever do us any harm.' The Nehue-cue are to be found in all the pueblos on the Rio Grande and close to it ; only there they don't do things openly."

In addition to the above, we have the testimony of Mr. Thomas V. Keam, who has lived for many years among the Moquis, and who confirms from personal observation all that has been here said.

The extracts from personal correspondence with Professor Bandelier are of special value, that gentleman having devoted years of painstaking investigation to the history of the Pueblos, and acquired a most intimate knowledge of them, based upon constant personal observation and scholarship of the highest order.

In a personal letter, dated Santa Fé, N. M., June 7, 1888, he tells, among much other most interesting information, that he saw at the Pueblo of Cochiti, on Nov. 10, 1880, " the Koshare eating their own excrement."

The following description of the "Club-house" of the Nehue-cue may be of interest: "It was twenty-one paces long, nine paces wide, with a banquette running round on three sides; in front of the altar were sacred bowls of earthenware, with paintings of tadpoles to typify water of summer, frogs for perennial water, and the sea-serpent for ocean water. (They describe the sea-serpent (*vibora del mar*) as very large, with feathers (spray?) on its head, eating people who went into the water, and when cut up with big knives yielding a great deal of oil.) In the first of the sacred dishes was a conch-shell from the sea, wands made of ears of corn, with hearts of chalchihuitl, and exterior ornamentation of the plumage of the parrot and turkey. Bowls of sacred meal (*kunque*) were on the floor; this sacred meal, to be found in niches in the house of every Zuñi, or for that matter of almost every pueblo throughout New Mexico and Arizona, is generally made of a mixture of blue corn-meal, shells, and chalchihuitl; but for more solemn occasions, as the old Indian Pedro Pino assured me, sea-sand is added. Around the room at intervals were pictographs of birds, — ducks and others, — nine in number on one side, and nine of clown-gods on the other. These pictures were fairly well delineated in black and in red and yellow ochre. The god of "The Winged Knife" was represented back of the altar. In this room were also kept several of the painted oblong wooden drums seen in every sacred dance." — (Extract from personal notes of Captain Bourke, Nov. 17, 1881.)

"Have you ever, while in New Mexico, witnessed the dance of that cluster or order called the "Ko-sha-re" among the Queres, "Ko-sa-re" among the Tehuas, and "Shu-re" among the Tiguas? I have witnessed it several times; and these gentlemen, many of whom belong to the circle of my warm personal friends, display a peculiar appetite for what the human body commonly not only rejects, but also ejects. I am sorry that I did not know of your work any sooner, as else I could have given you very full descriptions of these dances. The cluster in question have a very peculiar task, inasmuch as the ripening of all kinds of fruits is at their charge, even the fruit in the mother's womb, and their rites are therefore of sickening obscenity. The swallowing of excrements is but a mild performance in comparison with what I have been obliged to see and witness." — (Letter from Professor Bandelier, dated at Santa Fé, N. M., April 25, 1888.)

Major Ferry, whom the author met in the office of General Robert McFeely, Acting Secretary of War, Oct. 5, 1888, stated that he was the son of the first Protestant missionary to build a church at Macki-

naw, and that the Indians of the Ojibway tribe who lived in the neighborhood of that post indulged from time to time in orgies in which the drinking of urine was a feature.

Mr. Daniel W. Lord, a gentleman who was for a time associated with Mr. Frank H. Cushing in his investigations among the Zuñis of New Mexico, makes the following statement:—

“In June, 1888, I was a spectator of an orgy at the Zuñi pueblo in New Mexico. The ceremonial dance of that afternoon had been finished in the small plaza generally used for dances in the northwestern part of the pueblo when this supplementary rite took place. One of the Indians brought into the plaza the excrement to be employed, and it was passed from hand to hand and eaten. Those taking part in the ceremony were few in number, certainly not more than eight or ten. They drank urine from a large shallow bowl, and meanwhile kept up a running fire of comments and exclamations among themselves, as if urging one another to drink heartily, which indeed they did. At last one of those taking part was made sick, and vomited after the ceremony was over. The inhabitants of the pueblo upon the house-tops overlooking the plaza were interested spectators of the scene. Some of the sallies of the actors were received with laughter, and others with signs of disgust and repugnance, but not of disapprobation. The ceremony was not repeated, to my knowledge, during my stay at the pueblo, which continued till July, 1889.”—(Personal letter to Captain Bourke, dated Washington, D. C., May 26, 1890.)

III.

THE FEAST OF FOOLS IN EUROPE.

CLOSELY corresponding to this urine dance of the Zuñis was the Feast of Fools in Continental Europe, the description of which here given is quoted from Dulaure :—

“La grand’messe commençait alors ; tous les ecclésiastiques y assistaient, le visage barbouillé de noir, ou couvert d’un masque hideux ou ridicule. Pendant la célébration, les uns, vêtus en baladins ou en femmes, dansaient au milieu du chœur et y chantaient des chansons bouffones ou obscènes. Les autres venaient manger sur l’autel des saucisses et des boudins, jouer aux cartes ou aux dcz, devant le prêtre célébrant, l’encensaient avec un encensoir, ou brûlaient de vieilles savates, et lui en faisaient respirer la fumée.

“Après la messe, nouveaux actes d’extravagance et d’impiété. Les prêtres, confondus avec les habitants des deux sexes, couraient, dansaient dans l’église, s’excitaient à toutes les folies, à toutes les actions licencieuses que leur inspirait une imagination effrénée. Plus de honte, plus de pudcur ; aucune digue n’arrêtait le débordement de la folie et des passions. . . .

“Au milieu du tumulte, des blasphèmes et des chants dissolus, on voyait les uns se dépouiller entièrement de leurs habits, d’autres se livrer aux actes du plus honteux libertinage.

“ . . . Les acteurs, montés sur des tombereaux pleins d’ordures, s’amusaient à en jeter à la populace qui les entouraient. . . . Ces scènes étaient toujours accompagnées de chansons ordurières et impies.” — (Dulaure, “Des Divinités Génératrices,” chap. xv. p. 315 *et seq.*, Paris, 1825.)

COMPARISON BETWEEN THE FEAST OF FOOLS AND THE URINE DANCE.

In the above description may be seen that the principal actors (taking possession of the church during high mass) had their faces daubed

and painted, or masked in a harlequin manner; that they were dressed as clowns or as women; that they ate upon the altar itself sausages and blood-puddings. Now the word "blood-pudding" in French is *boudin*; but *boudin* also meant "excrement."¹ Add to this the feature that these clowns, after leaving the church, took their stand in dung-carts (*tombereaux*), and threw *ordure* upon the by-standers; and finally that some of these actors appeared perfectly naked ("on voyait les uns se dépouiller entièrement de leurs habits"), and it must be admitted that there is certainly a wonderful concatenation of resemblances between these filthy and inexplicable rites on different sides of a great ocean.

THE FEAST OF FOOLS TRACED BACK TO MOST ANCIENT TIMES.

Dulaure makes no attempt to trace the origin of these ceremonies in France; he contents himself with saying, "Ces cérémonies . . . ont subsisté pendant douze ou quinze siècles," or, in other words, that they were of Pagan origin. In twelve or fifteen hundred years the rite might have been well sublimed from the eating of pure excrement, as among the Zuñis, to the consumption of the *boudin*, the excrement symbol.² Conceding for the moment that this suspicion is correct, we have a proof of the antiquity of the urine dance among the Zuñis. So great is the resemblance between the Zuñi rite and that just described by Dulaure that we should have reason for believing that the new country borrowed from the old some of the features transmitted to the present day; and were there not evidence of a wider distribution of this observance, it might be assumed that the Catholic missionaries (who worked among the Zuñis from 1580, or thereabout, and excepting during intervals of revolt remained on duty in Zuñi down to the period of American occupation) found the obscene and disgusting orgy in full vigor, and realizing the danger, by unwise precipitancy, of destroying all hopes of winning over this people, shrewdly concluded to tacitly accept the religious abnormality and to engraft upon it the plant flourishing so bravely in the vicinity of their European homes.

¹ See in Dictionary of French and English Language, by Ferdinand E. A. Gasc, London, Bell and Daldy, York Street, Covent Garden, 1873.

Littre, whose work appeared in 1863, gives as one of his definitions, "anything that is shaped like a sausage."

Bescherelle, Spiers and Surenne, and Boyer, do not give Gasc's definition.

² And very probably a phallic symbol also.

DISAPPEARANCE OF THE FEAST OF FOOLS.

In France the Feast of Fools disappeared only with the French Revolution ; in other parts of Continental Europe it began to wane about the time of the Reformation. In England, "the abbot of unreason," whose pranks are outlined by Sir Walter Scott in his novel "The Abbot," the miracle plays which had once served a good purpose in teaching Scriptural lessons to an illiterate peasantry, and the "moralities" of the same general purport, faded away under the stern antagonism of the Puritan iconoclast. The Feast of Fools, as such, was abolished by Henry VIII. A. D. 1541. — (See "The English Reformation," Francis Charles Massingberd, London, 1857, p. 125.)¹

Picart's account of the Feast of Fools is similar to that given by Dulaure. He says that it took place in the church, at Christmas tide, and was borrowed from the Roman Saturnalia ; was never approved of by the Christian church as a body, but fought against from the earliest times :—

"Les uns étoient masqués ou avec des visages barbouillés qui faisoient peur ou qui faisoient rire ; les autres en habits de femmes ou de pantomimes, tels que sont les ministres du théâtre.

"Ils dansoient dans le chœur, en entrant, et chantoient des chansons obscènes. Les Diacres et les sou-diacres prenoient plaisir à manger des boudins et des saucisses sur l'autel, au nez du prêtre célébrant ; ils jouoient à des jeux aux cartes et aux dés ; ils mettoient dans l'encensoir quelques morceaux de vieilles savates pour lui faire respirer une mauvaise odeur.

"Après la messe, chacun couroit, sautoit et dansoit par l'église avec tant d'impudence, que quelques uns n'avoient pas honte de se porter à toutes sortes d'indécences et de se dépouillier entièrement ; ensuite, ils se faisoient trainer par les rues dans des tombereaux pleins d'ordures, d'où ils prenoient plaisir d'en jeter à la populace qui s'assembloit autour d'eux.

"Ils s'arrétoient et faisoient de leurs corps des mouvements et des postures lascives qu'ils accompagnoient de paroles impudiques.

"Les plus impudiques d'entre les seculiers se mêloient parmi le clergé, pour faire aussi quelques personnages de Foux en habits ecclésiastiques de Moines et de Religieuses." — (Picart, "Coûtures et Céré-

¹ Faber advances the opinion that the "mummers" or clowns who figured in the pastimes of "the abbot of unreason," etc., bear a strong resemblance to the animal-headed Egyptian priests in the sacred dances represented on the Bembine or Isiac table. (See Faber's "Pagan Idolatry," London, 1816, vol. ii. p. 479.)

monies religieuses de toutes les Nations du Monde," Amsterdam, Holland, 1729, vol. ix. pp. 5, 6).

Diderot and d'Alembert use almost the same terms; the officiating clergy were clad "les uns comme des bouffons, les autres en habits de femmes ou masqués d'une façon monstrueuse . . . ils mangeaient et jouaient aux dés sur l'autel à côté du prêtre qui célébroit la messe. Ils mettoient des ordures dans les encensoirs." They say that the details would not bear repetition. This feast prevailed generally in Continental Europe from Christmas to Epiphany, and in England, especially in York. — (Diderot and D'Alembert, *Encyclopædia*, "Fête des Fous," Geneva, Switzerland, 1779.)

Markham discovers a resemblance between the "Monk of Misrule" of Christendom in the Middle Ages, and "Gylongs dressed in parti-colored habits . . . singing and dancing before the Teshu Lama in Thibet." — (See Markham's "Thibet," London, 1879, page 95, footnote. See also Bogle's description of the ceremonies in connection with the New Year, in presence of the Teshu Lama, in Markham's "Thibet," p. 106.)

The Mandans had an annual festival one of the features of which was "the expulsion of the devil . . . He was chased from the village . . . the women pelting him with dirt." — ("The Golden Bough," Frazer, London, 1890, vol. ii. p. 184, quoting Catlin's "North American Indians," page 166.)

The authors who have referred at greater or less length, and with more or less preciseness, to the Feast of Fools, Feast of Asses, and others of that kind, are legion; unfortunately, without an exception, they have contented themselves with a description of the obscene absurdities connected with these popular religious gatherings, without attempting an analysis of the underlying motives which prompted them, or even making an intelligent effort to trace their origin. Where the last has been alluded to at all, it has almost invariably been with the assertion that the Feast of Fools was a survival from the Roman Saturnalia.

This can scarcely have been the case; in the progress of this work it is purposed to make evident that the use of human and animal egestæ in religious ceremonial was common all over the world, antedating the Roman Saturnalia, or at least totally unconnected with it. The correct interpretation of the Feast of Fools would, therefore, seem to be that which recognized it as a reversion to a pre-Christian type of thought dating back to the earliest appearance of the Aryan race in Europe.

The introduction of the Christian religion was accompanied by many compromises; wherever it was opposed by too great odds, in point of numbers, it permitted the retention of practices repugnant to its own teachings; or, if the term "permitted" be an objectionable one to some ears, we may substitute the expression "acquiesced in" for "permitted," and then follow down the course of persistent antagonism, which, after a while, modified permanent retention into a periodical, perhaps an irregular, resumption, and this last into burlesque survival.

Ducange, in his "Glossarium," introduces the Ritual of the Mass at the Feast of the Ass, familiar to most readers, — but he adds nothing to what has already been quoted in regard to the Feast of Fools itself.

This reference from Ducange will also be found in Schaff-Herzog, "Religious Encyclopædia," New York, 1882, article "Festival." This Ritual was written out in 1369 at Viviers in France.

Fosbroke gives no information on the subject of the Feast of Fools not already incorporated in this volume. He simply says: "In the Feast of Fools they put on masks, took the dress, etc., of women, danced and sung in the choir, ate fat cakes upon the horn of the altar, where the celebrating priest played at dice, put stinking stuff from the leather of old shoes in the censer, jumped about the church, with the addition of obscene jests, songs, and unseemly attitudes. Another part of this indecorous buffoonery was shaving the precentor of fools upon a stage, erected before the church, in the presence of the people; and during the operation he amused them with lewd and vulgar discourses and gestures. They also had carts full of ordure which they threw occasionally upon the populace. This exhibition was always in Christmas time or near it, but was not confined to a particular day." — (Rev. Thomas Dudley Fosbroke, "Cyclopædia of Antiquities," London, 1843, vol. 2, article "Festivals." Most of his information seems to be derived from Ducange.)

"The Feast of Fools was celebrated as before in various masquerades of Women, Lions, Players, etc. They danced and sung in the choir, ate fat cakes upon the horn of the altar, where the celebrating priest played at dice, put stinking stuff from the leather of old shoes into the censer, ran, jumped, etc., through the church."¹

¹ "However horrible was this profanation, I could quote a passage where in part of a curious penance actions most indecent were to be publicly performed upon the altar-table; and therefore our ancestors had plainly not the same ludicrous ideas of

In Brand's "Popular Antiquities," London, 1873, vol. 3, pp. 497-505, will be found a pretty full description of the Lords of Misrule, but the only reference of value for our purposes is one from Polydorus Virgil, who recognized the derivation of these Feasts from the Roman Saturnalia. "There is nothing," says the author of the essay to retrieve the Ancient Celtic, "that will bear a clearer demonstration than that the primitive Christians, by way of conciliating the Pagans to a better worship, humored their prejudices by yielding to a conformity of names and even of customs, where they did not interfere with the fundamentals of the Christian doctrine. . . . Among these, in imitation of the Roman Saturnalia, was the Festum Fatuorum, when part of the jollity of the season was a burlesque election of a mock-pope, mock-cardinals, mock-bishops, attended with a thousand ridiculous and indecent ceremonies, gambols, and antics, such as singing and dancing in the churches, in lewd attitudes, to ludicrous anthems, all allusively to the exploded pretensions of the Druids whom these sports were calculated to expose to scorn and derision. This Feast of Fools," continues he, "had its designed effect, and contributed perhaps more to the extermination of these heathens than all the collateral aids of fire and sword, neither of which were spared in the persecution of them." — (Brand, "Popular Antiquities," London, 1872, vol. i. p. 36.)

Strutt's "Sports and Pastimes," edition of London, 1855, article "Festival of Fools," in lib. iv. cap. 3, contains nothing not already learned.

Jacob Grimm, "Teutonic Mythology" (Stallybrass), London, 1882, vol. i. p. 92, has the following: —

"The collection of the Letters of Boniface has a passage lamenting the confusion of Christian and heathen rites into which foolish or reckless priests had suffered themselves to fall."

Banier shows that on the First of January the people of France ran about the streets of their towns, disguised as animals, masked and playing all sorts of pranks. This custom was derived from the Druids and lasted in full vigor "to the twelfth century of the Christian era." — ("Mythology," Banier, vol. iii. p. 247.)

"The heathen gods even, though represented as feeble in comparison with the true God, were not always pictured as powerless in themselves; they were perverted into hostile, malignant powers, into these mummeries as ourselves. They were the mere coarse festivities of the age which delighted in low humor." — (Fosbroke, "British Monachism," 2d edition, London, 1817, quoted principally from Ducange.)

demons, sorcerers, and giants, who had to be put down, but were nevertheless credited with a certain mischievous activity and influence. Here and there a heathen tradition or a superstitious custom lived on by merely changing the names and applying to Christ, Mary, and the saints what had formerly been related and believed of idols." — ("Teutonic Mythology," Jacob Grimm (Stallybrass), London, 1882, vol. i. Introduction, page 5.) . . . "At the time when Christianity began to press forward, many of the heathen seem to have entertained the notion, which the missionaries did all in their power to resist, of combining the new doctrine with the ancient faith and even of fusing them into one. — (Idem, p. 7.) . . . Of Norsemen, as well as of Anglo-Saxons, we are told that some believed at the same time in Christ and in heathen gods, or at least continued to invoke the latter in particular cases in which they had formerly proved helpful to them. So even by Christians much later the old deities seem to have been named and their aid invoked in enchantments and spells. — (Idem, pp. 7 and 8.) . . . The Teutonic races forsook the faith of their fathers very gradually and slowly from the fourth to the eleventh century." — (Idem. p. 8.)

On the following pages, 9, 10, and 11, Grimm shows us how little is really known of the religions of ancient Europe, whether of the Latin or of the Teutonic or Celtic races; he alludes to "the gradual transformation of the gods into devils, of the wise women into witches, of the worship into superstitious customs. — (Idem. p. 11.) Heathen festivals and customs were transformed into Christian. — (Idem, p. 12.) . . . Private sacrifices, intended for gods or spirits, could not be eradicated among the people for a long time, because they were bound up with customs and festivals, and might at last become an unmeaning practice." — (Idem, vol. iii. p. 1009.)

"It is a natural and well-known fact that the gods of one nation become the devils of their conquerors or successors." — (Folk-Medicine, William George Black, London, 1883, p. 12.)

"Few things are so indestructible as a superstitious belief once implanted in human credulity. . . . The sacred rites of the superseded faith become the forbidden magic of its successors." — ("History of the Inquisition," Henry Charles Lea, New York, 1888, vol. iii. p. 379.) "Its gods become evil spirits." — (Idem, p. 379.) . . . The same views are advanced in Madame Blavatsky's "Isis Unveiled."

THE "SZOMBATIAKS" OF TRANSYLVANIA.

In further explanation of the tenacity with which older cults survive long after the newer religions seem to have gained predominance in countries and nations, it is extremely appropriate to introduce a passage from an article in the "St. James' Gazette," entitled "Crypto-Jews," reprinted in the Sunday edition of the "Sun," New York, sometime in October, 1888.

The writer, in speaking of the Szombatiaks of Transylvania, remarks : "The crypto-Judaism of the Szombatiaks was suspected for centuries, but not until twenty years ago was it positively known. Then, on the occasion of a Jewish emancipation act for Hungary, the sturdy old peasants, indistinguishable in dress, manners, and language from the native Szeklers, sent a deputation to Pesth to ask that their names might be erased from the church rolls. They explained that they were Jews whose forefathers had settled in Hungary at the time of the expedition of Titus to Dacia. Though baptized, married, and buried as Christians, maintaining Christian pastors, and attending Christian churches, they had always in secret observed their ancient religion."

It is a matter of surprise to find so little on the subject of the Feast of Fools in Forlong's comprehensive work on Religion. All that he says is that "the Yule-tide fêtes were noted for men disguising themselves as women, and *vice versa*, showing their connection with the old Sigillaria of the Saturnalia, which, formerly observed on the 14th of January, were afterwards continued to three, four, five, and some say seven days, and by the common people even until Candlemas Day. Both were prohibited when their gross immoralities became apparent to better educated communities. 'In Paris,' says Trusler in his 'Chronology,' 'the First of January was observed as Mask Day for two hundred and forty years, when all sorts of indecencies and obscene rites occurred.' " — ("Rivers of Life," Forlong, London, 1883, vol. i. p. 434.)

In addition to the above, there is evidence of its survival among the rustic population of Germany. Brand enumerates many curious practices of the carnival just before Ash Wednesday, and even on that day, after the distribution of the ashes. Young maidens in Germany were carried "in a cart or tumbrel" by the youths of the village to the nearest brook or pond, and there thoroughly ducked, the drawers of the cart throwing dust and ashes on all near them. In Oxfordshire it was the custom for

bands of boys to stroll from house to house singing and demanding largess of eggs and bacon, not receiving which, "they commonly cut the latch of the door or stop the key-hole with dirt" ("Popular Antiquities," London, 1872, vol. i. pp. 94 *et seq.*, article "Ash Wednesday"), "or leave some more nasty token of displeasure" (*idem*). This may have been a survival from the Feast of Fools. Brand refers to Hospinian, "*De Origine Festorum Christianorum*," "for several curious customs and ceremonies observed abroad during the three first days of the Quinquagesima week" (p. 99).

Turning from the Teutonic race to the Slav, we find that the Feast of Fools seems still to linger among the Russian peasantry. "At one time a custom prevailed of going about from one friend's house to another masked, and committing every conceivable prank. Then the people feasted on blinnies, — a pancake similar to the English crumpet" ("A Hoosier in Russia," Perry S. Heath, New York, 1888, p. 109); all this at Christmas-tide.

Something very much like it, without any obscene features, was noted by Blunt in the early years of the present century. See his "Vestiges," p. 119.

Hone ("*Ancient Mysteries Described*," London, 1823, pp. 148 *et seq.*) thinks that a Jewish imitation of the Greek drama of the close of the second century, whose plot, characters, etc., were taken from the Exodus, was the first miracle play. The author was one Ezekiel, who was believed to have written it with a patriotic purpose after the destruction of Jerusalem. The early Fathers — Cyril, Tertullian, Cyprian, Basil, Clemens Alexandrinus, and Augustine — inveighed against sacred dramas; but the outside pressure was too great, and the Church was forced to yield to popular demand.

As late as the fifteenth century Pius II. said that the Italian priests had probably never read the New Testament; and Robert Stephens made the same charge against the doctors of the Sorbonne in the same age.

The necessity of dramatic representation would therefore soon outweigh objections made on the score of historical anachronism or doctrinal inaccuracy in these miracle plays.

Theophylact, Patriarch of Constantinople in the tenth century, is credited by the Byzantine historian Cedranus with the introduction of the Feast of Fools and Feast of the Ass, "thereby scandalizing God and the memory of his saints, by admitting into the sacred service diabolical dances, exclamations of ribaldry, and ballads borrowed from

the streets and brothels." — (Hone, quoting Wharton, "Miscellaneous Writings upon the Drama and Fiction," vol. ii. p. 369.)

In 1590, at Paris, the mendicant orders, led by the Bishop of Senlis, paraded the streets with tucked up robes, representing the Church Militant. These processions were believed to be the legitimate offspring of heathen pageants, — that is, that of Saint Peter in Vinculis was believed to be the transformed spectacle in honor of Augustus's victory at Actium, etc.

Beletus describes the Feast of Fools as he saw it in the twelfth century. His account, given by Hone (p. 159), agrees word for word with that of Dulaure, excepting that, through an error of translation perhaps, he is made to say that the participants "ate rich puddings on the corners of the altar;" but as the word "pudding" meant even in the English language a meat pudding or sausage, the error is an immaterial one.

Victor Hugo describes in brief the Feast of Fools as seen at Paris in 1482, on the 6th of January. He says that the "Fête des Rois and the Fête des Fous were united in a double holiday since time immemorial." His description is very meagre, but from it may be extracted the information that in these feasts of fools female actresses appeared masked; that the noblest and greatest personages in the kingdom of France were among the prominent spectators; but there is not much else. (See the opening chapters of "Notre Dame.")

The Festival of Moharren in Persia is a kind of miracle play, or Passion play, commemorating the rise and progress of Islamism. "Among these occurrences are the deaths of Hassein and Hossein, the birth of the prophet, the martyrdom of the Imam Rezah, and the death of Fatimeh, daughter of Mahomet." — (Benjamin, "Persia," London, 1887.)

This reference to the use of pudding or sausage on the altar itself is the most persistent feature in the descriptions of the whole ceremony. But little difficulty will be experienced in showing that it was originally an excrement sausage, prepared and offered up, perhaps eaten, for a definite purpose. This phase of the subject will be considered further on; for the present only one citation need be introduced to show that in carnival time human excrement itself, and not the symbol, made its appearance: —

"The following extract from Barnaby Googe's translation of 'Naogeorgus' will show the extent of these festivities (that is, those of the carnival at Shrove Tuesday). After describing the wanton behavior of

men dressed as women and of women arrayed in the garb of men, of clowns dressed as devils, as animals, or running about perfectly naked, the account goes on to say :—

“ ‘ But others bear a torle, that on a cushion soft they lay ;
And one there is that with a flap doth keep the flies away :
I would there might another be, an officer of those,
Whose room might serve to take away the scent from every nose.’ ” —

(Quoted in Brand, “ Popular Antiquities,” London, 1872, vol. i. p. 66, article “ Shrove Tuesday.”)

The Puritan’s horror of heathenish rites and superstitious vestiges had for its basis something far above unreasoning fanaticism ; he realized, if not through learned study, by an intuition which had all the force of genius, that every unmeaning practice, every rustic observance, which could not prove its title clear to a noble genealogy was a pagan survival, which conscience required him to tear up and destroy, root and branch.

The Puritan may have made himself very much of a burden and a nuisance to his neighbors before his self-imposed task was completed, yet it is worthy of remark and of praise that his mission was a most effectual one in wiping from the face of the earth innumerable vestiges of pre-Christian idolatry.

This being understood, some importance attaches to the following otherwise vague couplet from “ Hudibras.”

“ Butler mentions the black pudding in his ‘ Hudibras,’ speaking of the religious scruples of some of the fanatics of his time :—

“ ‘ Some for abolishing black pudding,
And eating nothing with the blood in.’ ” —

(Brand, “ Popular Antiquities,” London, 1872, vol. i. p. 400, article “ Martinmas.”)

These sausages, made in links, certainly suggest the *boudins* of the Feast of Fools. They were made from the flesh, blood, and entrails of pork killed by several families in common on the 17th day of December, known as “ Sow Day.”

In the early days of the Reformation in Germany, in the May games, the Pope was “ portrayed in his pontificalibus riding on a great sow, and holding before her taster a dirty pudding.” — (Harington, “ Ajax,” p. 35.)

The most sensible explanation of the Feast of Fools that has as yet

appeared is to be found in Frazer's "Golden Bough" (London, 1890, vol. i. pp. 218 *et seq.*, article "Temporary Kings"). He shows that the regal power was not in ancient times a life tenure, but was either revoked under the direction of the priestly body when the incumbent began to show signs of increasing age and diminishing mental powers, or at the expiration of a fixed period, — generally about twelve years. In the lapse of time the king's abdication became an empty form, and his renunciation of powers purely farcical, his temporary successor a clown who amused the fickle populace during his ephemeral assumption of honors. Examples are drawn from Babylonia, Cambodia, Siam, Egypt, India, etc., the odd feature being that these festivals occur at dates ranging from our February to April. During the festival in Siam, in the month of April, "the dancing Brahmins carry buffalo horns with which they draw water from a large copper caldron and sprinkle it on the people; this is supposed to bring good luck." — ("The Golden Bough," James G. Fraser, M.A., London, 1890, vol. i. p. 230.)

In the preceding paragraph we have a distinct survival. The buffalo horns may represent phalli, and the water may be a substitute for a liquid which to the present generation might be more objectionable.

But upon another matter stress should be laid; in both the Feast of Fools and in the Urine Dance of the Zuñis, it has been shown that some of the actors were naked or disguised as women.

No attempt is made to prove anything in regard to the European orgy, because research has thrown no light upon the reasons for which the participants assumed the raiment of the opposite sex.

In the case of the Zuñis, the author has had, from the first, a suspicion, which he took occasion to communicate to Professor F. W. Putnam three years since, that these individuals were of the class called by Father Lafitau "*hommes habillés en femme*," and referred to with such frequency by the earliest French and Spanish authorities. This suspicion has been strengthened by correspondence lately received from Professor Bandelier which is, however, suppressed at the request of the latter.

In this connection, the student should not fail to read the remarkable contribution of A. B. Holder, M. D., of Memphis, Tennessee, in the New York Medical Journal of Dec. 7, 1889, entitled "The Boté: description of a peculiar sexual perversion found among the North American Indians."

An explanation of the "*hommes habillés en femme*," may be suggested in the following from Boas, descriptive of certain religious

dances of the Eskimo : "Those who were born in abnormal presentations, wear women's dresses at this feast, and must make their round in a direction opposite to the movement of the sun." — ("The Central Eskimo," Franz Boas, in Sixth Annual Report, Bureau of Ethnology, Washington, D. C., 1888, p. 611.)

IV.

THE COMMEMORATIVE CHARACTER OF RELIGIOUS FESTIVALS.

THE opinion expressed above concerning the commemorative character of religious festivals echoes that which Godfrey Higgins enunciated several generations ago. The learned author of "Anacalypsis" says that festivals "accompanied with dancing and music" . . . "were established to keep in recollection victories or other important events." (Higgins' "Anacalypsis," London, 1810, vol. ii. p. 424.) He argues the subject at some length on pages 424-426, but the above is sufficient for the present purpose.

"In the religious rites of a people I should expect to find the earliest of their habits and customs." — (Idem, vol. i. p. 15.)

Applying the above remark to the Zuñi dance, it may be interpreted as a dramatic pictograph of some half-forgotten episode in tribal history. To strengthen this view by example, let us recall the fact that the army of Crusaders under Peter the Hermit was so closely beleaguered by the Moslems in Nicomedia in Bithynia that they were compelled to drink their own urine. We read the narrative set out in cold type. The Zuñis would have transmitted a record of the event by a dramatic representation which time would incrust with all the veneration that religion could impart.

The authority for the above statement in regard to the Crusaders is to be found in Purchas, "Pilgrims," lib. 8, cap. 1, p. 1191. Neither Gibbon nor Michaud expresses this fact so clearly, but each speaks of the terrible sufferings which decimated the undisciplined hordes of Walter the Penniless and Peter, and reduced the survivors to cannibalism.

The urine of horses was drunk by the people of Crotta while besieged by Metellus. — (See, in Montaigne's Essays, "On Horses," cap. xlviii.; see also, in Harington, "Ajax" — "Ulysses upon Ajax," p. 42.)

Shipwrecked English seamen drank human urine for want of water. (See in Purchas, vol. iv. p. 1188.) In the year 1877 Captain Nicholas Nolan, Tenth Cavalry, while scouting with his troop after hostile Indians on the Staked Plains of Texas, was lost; and as supplies became exhausted, the command was reduced to living for several days on the blood of their horses and their own urine, water not being discovered in that vicinity. — (See Hammersley's Record of Living Officers of the United States Army.)

History is replete with examples of the same general character; witness the sieges of Jerusalem, Numantia, Ghent, the famine in France under Louis XIV., and many others.

THE GENERALLY SACRED CHARACTER OF DANCING.

"Dancing was originally merely religious, intended to assist the memory in retaining the sacred learning which originated previous to the invention of letters. Indeed, I believe that there were no parts of the rites and ceremonies of antiquity which were not adopted with a view to keep in recollection the ancient learning before letters were known." — (Higgins' "Anacalypsis," vol. ii. p. 179.)

In one of the sieges of Samaria, it is recorded that "The fourth part of a cab of dove's dung sold for five pieces of silver." — (2 Kings, vi. 25.)

There is another interpretation of the meaning of this expression, not so literal, which it is well to insert at this point.

"When Samaria was besieged, the town was a prey to all the horrors of famine; hunger was so extreme that five pieces of silver was the price given for a small measure (fourth part of a cab) of dove's dung. This seems, at first sight, ridiculous. But Bochart maintains very plausibly that this name was then and is now given by the Arabs to a species of vetch (*pois chiches*)." — ("Philosophy of Magic," Eusebe Salverte, New York, 1862, vol. i. p. 70.)

"The pulse called garbansos is believed by certain authors to be the dove's dung mentioned at the siege of Samaria; . . . they have likewise been taken for the pigeons' dung mentioned at the siege of Samaria. And, indeed, as the cicer is pointed at one end and acquires an ash color in parching, the first of which circumstances answers to the figure, the other to the usual color of pigeons' dung, the supposition is by no means to be disregarded." — ("Shaw's Travels in Barbary," in "Pinkerton's Voyages," London, 1814, vol. xv. p. 600.)

FRAY DIEGO DURAN'S ACCOUNT OF THE MEXICAN FESTIVALS.

All that Higgins believed was believed and asserted by the Dominican missionary Diego Duran. Duran complains bitterly that the unwise destruction of the ancient Mexican pictographs and all that explained the religion of the natives left the missionaries in ignorance as to what was religion and what was not. The Indians, taking advantage of this, mocked and ridiculed the dogmas and ceremonies of the new creed in the very face of its expounders, who still lacked a complete mastery of the language of the conquered. The Indians never could be induced to admit that they still adhered to their old superstitions, or that they were boldly indulging in their religious observances; many times, says the shrewd old chronicler, it would appear that they were merely indulging in some pleasant pastime, while they were really engaged in idolatry; or that they were playing games, when truly they were casting lots for future events before the priest's eyes; or that they were subjecting themselves to penitential discipline, when they were sacrificing to their gods. This remark applied to all that they did. In dances, in baths, in markets, in singing their songs, in their dramas (the word is "*comedia*," a comedy, but a note in the margin of the manuscript says that probably this ought to be "*comida*," food, or dinner, or feast), in sowing, in reaping, in putting away the harvest in their granaries, even in tilling the ground, in building their houses, in their funerals, in their burials, in marriages, in the birth of children, into everything they did entered idolatry and superstition.

"Parece muchas veces pensar que estan haciendo placer y estan idolatrando; y pensar que estan jugando y estan echando suertes de los sucesos delante de nuestros ojos y no los entendemos y pensamos que se disciplinan y estanse sacrificando.

"Y asi erraron mucho los que con bueno celo (pero no con mucha prudencia), quemaron y destruyeron al principio todas las pinturas de antiguallas que tenian; pues, nos dejaron tan sin luz que delante de nuestros ojos idolatran y no los entendemos.

"En los mitotes, en los baños, en los mercados, y en los cantares que cantan lamentando sus Dioses y sus Señores Antiguos, en las comedias, en los banquetes, y en el diferenciar en el de ellas, en todo se halla supersticion é idolátria; en el sembrar, en el coger, en el encerrar en los troges, hasta en el labrar la tierra y edificar las casas; pues en los mortuorios y entierros, y en los casamientos y en los nacimientos de los niños, especialmente si era hijo de algun Señor; eran estrañas las

ceremonias que se le hacian ; y donde todo se perfeccionaba era en la celebracion de las fiestas ; finalmente, en todo mezclaban supersticion é idolatria ; hasta en irse á bañarse al rio los viejos, puesto escrúpulo á la republica sino fuese habiendo precedido tales y tales ceremonias ; todo lo cual nos es encubierto por el gran secreto que tienen.” — (Diego Duran, lib. 2, concluding remarks.)

Fray Diego Duran, a Fray Predicador of the Dominican order, says, at the end of his second volume, that it was finished in 1581.

The very same views were held by Father Geronimo Boscána, a Franciscan, who ministered for seventeen years to the Indians of California. Every act of an Indian's life was guided by religion. — (See “Chinigichinich,” included in A. A. Robinson's “California,” New York, 1850.)

The Apaches have dances in which the prehistoric condition of the tribe is thus represented ; so have the Mojaves and the Zuñis ; while in the snake dance of the Moquis and the sun dance of the Sioux the same faithful adherence to traditional costume and manners is apparent.

THE URINE DANCE OF THE ZUÑIS MAY CONSERVE A TRADITION OF THE TIME WHEN VILE ALIMENT WAS IN USE.

The Zuñi dance may therefore not improperly be considered among other points of view, under that which suggests a commemoration of the earliest life of this people, when vile aliment of every kind may have been in use through necessity.

An examination of evidence will show that foods now justly regarded as noxious were once not unknown to nations of even greater development than any as yet attained by the Rio Grande Pueblos.

Necessity was not always the inciting motive ; frequently religious frenzy was responsible for orgies of which only vague accounts and still vaguer explanations have come down to us.

The religious examples will be adduced at a later moment, as will those in which human or animal excreta have been employed in ordeals and punishments, terrestrial and supernal.

So long as the lines of investigation are included within civilized limits, the instances noticed very properly fall under the classification of mania and of abnormal appetite ; and the latter, in turn, may be subdivided into the two classes of the innate and the acquired, the second of which has presented a constant decrease since physicians have rejected such disgusting remedial agents from the *Materia Medica*.

That both human ordure and urine have been, and that they may still to a limited extent be, added by the rustic population of portions of Europe to the contents of love-philters is a fact established beyond peradventure; and that the followers of the Grand Lama of Thibet stand accused, on what has the semblance of excellent authority, of obtaining from their priests the egestæ of that potent hierarch and adopting them as condiments, food, charms, amulets, and talismans, as well as internal medicines, will be fully stated in the chapters devoted to that purpose.

Schurig gives numerous examples of the eating of human and animal excrement by epileptics, by maniacs, by chlorotic young women, or by women in pregnancy, by children who had defiled their beds and dreading detection swallowed the evidences of their guilt, and finally by men and women with abnormal appetites. — (See Schurig, "Chylogia," Dresden, 1725, pp. 45, 81, 84, 780–782.)

Burton relates the story of a young German girl, Catherine Gualter, in 1571, as told by Cornelius Gemma, who vomited, "among other things, pigeons' dung and goose-dung." She was apparently a victim of hysteria, and in her paroxysms had previously swallowed all manner of objectionable matter. — (See "Anatomy of Melancholy," edition of London, 1806, vol. i. p. 76.)

"On a vu, surtout dans les hôpitaux, des femmes se faire un jeu d'avaler clandestinement leurs urines à mesure qu'elles les rendaient, et essayer faire croire qu'elles n'en rendaient point du tout." — (Personal letter to Captain Bourke from Mr. Frank Rede Fowke, dated Department of Science and Art, South Kensington Museum, London, S. W., June 18, 1888.)

V.

HUMAN EXCREMENT USED IN FOOD BY THE INSANE
AND OTHERS.

THE subject of excrement-eating among insane persons has engaged the attention of medical experts. H. B. Obersteiner, in a communication to the "Psychiatrisches Centralblatt," Wien, 1871, vol. iii. p. 95, informs that periodical that Dr. A. Erlenmeyer, Jr., induced by a lecture delivered by Professor Lang in 1872, had prepared a tabulated series of data embodying the results of his observations upon the existence of coprophagy among insane persons. He found that one in a hundred of persons suffering from mental diseases indulged in this abnormal appetite; the majority of these were men. No particular relation could be established between excrement-eating and Onanism; and no deleterious effect upon the alimentary organs was detected.

"In pathological reversion of type, due to cerebral disease, there are certain stages in some forms of mental disease in which some of the actions to which you refer are not uncommon." — (Personal letter to Captain Bourke from Surgeon John S. Billings, U. S. Army, in charge of the Army Medical Museum, dated Washington, D. C., April 23, 1888.)

"A boy of four years old had fouled in bed; but being much afraid of whipping, he ate his own dung, yet he could not blot the sign out of the sheets; wherefore, being asked by threatenings, he at length tells the chance. But being asked of its savor, he said it was of a stinking and somewhat sweet one. . . . A noble little virgin, being very desirous of her salvation, eats her own dung, and was weak and sick. She was asked of what savor it was, and she answered it was of a stinking and a waterishly sweet one." These examples Von Helmont says were personally known to him, as was that of the painter of Brussels who, going mad, subsisted for twenty-three days on his own excrements. — (See Von Helmont's "Oritrika" (English translation), London, 1662, pp. 211, 212. Von Helmont's work is a folio of 1161 pages.)

A French lady was in the habit of carrying about her pulverized human excrements, which she ate, and would afterwards lick her fingers. (Christian Franz Paullini, "Dreck Apothek," Frankfort, 1696, p. 9.) Paullini also gives the instance of the painter of Brussels already cited on preceding page.

"Bouillon Lagrange, pharmacien à Paris, que ses confrères appellaient Bouillon à Pointu, a publié un ouvrage, intitulé la Chimie du Gout, sur la fabrication des liqueurs de table, et il donne la recette d'une préparation qu'il appelle Eau de Mille Fleurs qui se compose de bouse de vache, infusée dans l'eau de vie." — ("Bibliotheca Scatologica," pp. 93-96.)

"As to the excrements of the cow, they are still used to form the so-called 'eau de mille fleurs,' recommended by several pharmacopœias as a remedy for cachexy." — ("Zoological Mythology," Angelo de Gubernatis, London, 1874, vol. i. p. 275-277.)

"Scatophagi. Ces gourmets d'un genre particulier, ces ruminants de nouvelle espèce, ces épicuriens blasés ou raffinés, s'appellaient scatophages, ou scybalophages. (De scybales, scybala, σκύβαλα. Voyez dans Dioscoride, lib. 5, c. 77, et Gorreus, Def. med. p. 579, les diverses acceptions de ce mot.) L'empereur Commode était de ceux-là; 'Dicitur saepe praetiosissimis cibis humana stercora miscuisse, nec abstinuisse gustu,' dit Lampride (Vie de l'empereur Commode, p. 160). Riedlinus (Linear. Medic., an. 1697, mens. nov. obs. 23, p. 800) rapporte le cas d'une femme qui affirmait 'nullum cibum in tota vita sua palato magis satisfacisse.' Sauvage (Nosologie méthodique) dit qu'une fille lui a avoué qu'elle avait mangé jadis avec un plaisir infini la croûte qui s'attache aux murailles des latrines. Zacutus Lusitanus a connu une demoiselle qui, ayant par hasard goûté ses excréments, en fit dans la suite sa nourriture favorite, au point qu'elle ne pouvait en passer sans être malade.

"J. J. Wypffer, Dec. III? an. 2, obs. 135, schol., p. 199, rapporte un fait du même genre. De même: Ehrenfreid; Pagendornius (Obs. et hist. phys. med. cent. 3, hist. 95); Daniel Eremita (Descript. Helvet. oper. p. 402); P. Tollius (Epist. itinerar. 62, p. 247); Tob. Pfanner (Diatrib. de Charismati, seu miracul. et antiq. eccles., c. 2); [Citations are also made from Von Helmont, Frommann, Rosinus Lentilius, and Paullini, which have been quoted elsewhere direct from those authors.] P. Borellus (Obs. phys. med. cent. 4, obs. 2); J. Johnstonus (Thaumagograph, admirand. homin. c. 2, art. 2); George Hanneous (Dec. II., an. 8, obs. 115); P. Romelius (Dec. III., an 7 and 8, obs.

40) ; Mich. Bern. Valentin. (Novell. med. log. as. II.). Nous croyons nous rappeler qu'il existe des exemples du même genre dans l'ouvrage de J. B. Cardan, intitulé : 'De Abstinētis ab usu ciborum fetidorum,' libellus imprimé à la suite du traité 'De Utilitate ex adversis capiēda' de son père. On a connu à Paris un riche bourgeois, nommé Paperal, qui, par une étrange dépravation de goût, avalait des excréments de petits enfants. (Virey, Nouv. Dict. d'hist. nat. Deterville, tom. X.) La traduction même rapporte qu'ils les mangeait avec une cuiller d'or. Ce n'est pas le seul exemple d'un goût aussi bizarre. Bouillon portait toujours une boîte d'or remplie non de tabac, mais des excréments humains. (Voy. Dulaure, Hist. de Paris, edit. de 1825, t. VII. p. 262.)" — (Bibliotheca Scatologica, pages 93 to 96.)

"La fiente de bécasse, dont les fines gourmets, véritablement scatophages, sont, comme on sait, très friands." — (Bibliotheca Scatologica, p. 133.)

In this curious book, full of learning and research, there are citations from more than three hundred authorities, some of them, of course, merely obscene and not coming within the purview of these notes, but others, as may be readily understood from reading the extracts taken from them, of the highest value in a scientific sense. Schurig gives an instance of voracity in which a certain glutton, after consuming all other food in sight, was wont to satisfy himself with urine and excrement : "Et si panes deerant, sua ipse excrementa comedebat et lotium bibebat." (Schurig, "Chylologia," Dresden, 1725, p. 52.) A case is given of a patient who having once experienced the beneficial effects of mouse-dung in some complaint, became a confirmed mouse-dung eater, and was in the habit of picking it up from the floor of his house before the servants could sweep it away. — (See Schurig, "Chylologia," Dresden, 1725, p. 823 *et seq.*)

The enceinte wife of a farmer in the town of Hassfort, on the Main, ate the excrements of her husband, warm and smoking. — (See Christian Franz Paullini, "Dreck Apothek," edition of Frankfort, 1696, page 8. See also quotation from "Ephemeridum Physico-Medicorum," Leipsig. 1694, on page 212 of this volume.)

"Chacun en fait, en voit, en sent, en touche, en parle, souvent en écrit, quelquefois en lit, et si chacun n'en mange pas, c'est que nous ne sommes pas encore au temps où les bécasses tomberont toutes rôties ; mais de celui-la en voudrait manger." — (Bibliotheca Scatologica, p. 21, "Oratio pro Guano Humano.")

An extract is here given from a letter sent to Charlotte Elizabeth of

Bavaria, Princess-Palatine, daughter of Charles Louis, Elector-Palatine of the Rhine, born at Heidelberg, in 1652; she married the brother of Louis XIV., the widower of Henrietta Maria of England.

The letter in question was sent her by her aunt, the wife of the Elector of Hanover, and may serve to give an idea of the boldness of the opinions entertained by the ladies of high rank in that era, and the coarseness with which they expressed them:—

“HANOVRE, 31 Octobre, 1694.

“Si la viande fait la merde, il est vrai de dire que la merde fait la viande. . . . Est-ce que dans les tables les plus délicates, la merde n’y est pas servie en ragoûts? . . . Les boudins, les andouilles, les saucisses, ne sont-ce pas de ragoûts dans des sacs à merde?”

The letters here spoken of are to be found almost complete in the *Bibliotheca Scatologica*, pages 17–21.

The following appeared in an article headed “The Last Cholera Epidemic in Paris,” in the “General Homœopathic Journal,” vol. cxiii., page 15, 1886: “The neighbors of an establishment famous for its excellent bread, pastry, and similar products of luxury, complained again and again of the disgusting smells which prevailed therein and which penetrated into their dwellings. The appearance of cholera finally lent force to these complaints, and the sanitary inspectors who were sent to investigate the matter found that there was a connection between the water-closets of these dwellings and the reservoir containing the water used in the preparation of the bread. This connection was cut off at once, but the immediate result thereof was a perceptible deterioration of the quality of the bread. Chemists have evidently no difficulty in demonstrating that water impregnated with ‘extract of water-closet,’ has the peculiar property of causing dough to rise particularly fine, thereby imparting to bread the nice appearance and pleasant flavor which is the principal quality of luxurious bread.” — (Personal letter from Dr. Gustav Jaeger, Stuttgart, Germany. See page 39.)

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VI.

THE EMPLOYMENT OF EXCREMENT IN FOOD BY
SAVAGE TRIBES.

THE very earliest accounts of the Indians of Florida and Texas refer to the use of such aliment. Cabeza de Vaca, one of the survivors of the ill-fated expedition of Panfilo de Narvaez, was a prisoner among various tribes for many years, and finally, accompanied by three comrades as wretched as himself, succeeded in traversing the continent, coming out at Culiacan, on the Pacific Coast, in 1536. His narrative says that the "Floridians," "for food, dug roots, and that they ate spiders, ants' eggs, worms, lizards, salamanders, snakes, earth, wood, the dung of deer, and many other things."¹ The same account, given in Purchas's "Pilgrims" (vol. iv. lib. 8, cap. 1, sec. 2, p. 1512) expresses it that "they also eat earth, wood, and whatever they can get; the dung of wild beasts." These remarks may be understood as applying to all tribes seen by this early explorer east of the Rocky mountains.

Gomara identifies this loathsome diet with a particular tribe, the "Yaguaces" of Florida. "They eat spiders, ants, worms, lizards of two kinds, snakes, earth, wood, and ordure of all kinds of wild animals."²

The California Indians were still viler. The German Jesuit, Father Jacob Baegert, speaking of the Lower Californians (among whom he resided continuously from 1748 to 1765), says:—

"They eat the seeds of the pitahaya (giant cactus) which have passed off undigested from their own stomachs; they gather their own

¹ "Ils mangent des araignées, des œufs de fourmis, des vers, des lézards, des salamandres, des couleuvres, de la terre, du bois, de la fiente de cerfs, et bien d'autres choses."—(Alvar Nuñez Cabeza de Vaca, in "Ternaux," vol. vii. p. 144.)

² "Comen arañas, hormigas, gusanos, salamanquesas, lagartijas, culebras, palos, tierra, y cagajones y cagarrutas."—(Gómara, "Historia de las Indias," p. 182.) He derives his information from the narrative of Vaca. The word "cagajon" means horse-dung, the dung of mules and asses; "cagarruta," the dung of sheep, goats, and mice.

excrement, separate the seeds from it, roast, grind, and eat them, making merry over the loathsome meal." And again: "In the mission of Saint Ignatius, . . . there are persons who will attach a piece of meat to a string and swallow it and pull it out again a dozen times in succession, for the sake of protracting the enjoyment of its taste." — (Translation of Dr. Charles F. Rau, in Annual Report, Smithsonian Institution, 1866, p. 363.)

A similar use of meat tied to a string is understood to have once been practised by European sailors for the purpose of teasing green comrades suffering from the agonies of sea-sickness.

(Fuegians.) "One of them immediately coughed up a piece of blubber which he had been eating and gave it to another, who swallowed it with much ceremony and with a peculiar guttural noise." — ("Voyage of the Adventure and Beagle," London, 1839, vol. i. p. 315.)

The same information is to be found in Clavigero ("Historia de la Baja California," Mexico, 1852, p. 24), and in H. H. Bancroft's "Native Races of the Pacific Slope," vol. i. p. 561; both of whom derive from Father Baegert. Orozco y Berra also has the story; but he adds that oftentimes numbers of the Californians would meet and pass the delicious tid-bit from mouth to mouth.¹

Castañeda alludes to the Californians as a race of naked savages, who ate their own excrement.²

The Indians of North America, according to Harmon, "boil the buffalo paunch with much of its dung adhering to it," — a filthy mode of cooking which in itself would mean little, since it can be paralleled in almost all tribes. But in another paragraph the same author says: "Many consider a broth made by means of the dung of the cariboo and the hare to be a dainty dish" (Harmon's "Journal," etc., Andover, 1820, p. 324).³

¹ "Algunas veces se juntan varios Indios y á la redonda va corriendo el bocado de uno en otro." — (Orozco y Berra, "Geografía de las lenguas de Mejico," Mexico, 1854, p. 359.)

² "Peuplé de sauvagés qui vont tous nus, et qui mangent leurs propres ordures." — (Castañeda, in Ternaux, vol. ix. p. 156.)

Castañeda de Nagera accompanied the expedition of Francisco Vazquez de Coronado, which entered Arizona, New Mexico, and the buffalo country in 1540-1542. Part of this expedition, under Don Garcia Lope de Cardena, went down the Colorado River, which separates California from Arizona; while another detachment, under Melchior Diaz, struck the river closer to its mouth, and crossed into what is now California.

³ Harmon's notes are of special interest at this point because he is speaking of the Ta-cully or Carriers, who belong to the same Tinnch stock as the Apaches and

The Abbé Domenech asserts the same of the bands near Lake Superior: "In boiling their wild rice to eat, they mix it with the excrement of rabbits, — a delicacy appreciated by the epicures among them" (Domenech, "Deserts," vol. ii. p. 311).

Of the negroes of Guinea an old authority relates that they "ate filthy, stinking elephant's and buffalo's flesh, wherein there is a thousand maggots, and many times stinks like carrion. They eat raw dogge guts, and never seethe nor roast them" (De Bry, *Ind. Orient.* in Purchas's "Pilgrims," vol. ii. p. 905). And another says that the Mosagueys make themselves a "pottage with milk and fresh dung of kine, which, mixed together and heat at the fire, they drinke, saying it makes them strong" (Purchas, lib. 9, cap. 12, sec. 4, p. 1555).

The Peruvians ate their meat and fish raw; but nothing further is said by Gómara. "Comen crudo la carne y el pescado" (Gómara, "Hist. de las Indias," p. 234.)

The savages of Australia "make a sweet and luscious beverage by mixing taarp with water. Taarp is the excrement of a small green beetle, wherein the larvæ thereof are deposited." — ("The Aborigines of Victoria and Riverina," P. Beveridge, Melbourne, 1889, p. 126; received through the kindness of the Royal Society of Sydney, New South Wales, T. B. Kyngdon, Secretary.)

"One of them (Snakes), who had seized about nine feet of the entrails, was chewing it at one end, while with his hand he was diligently clearing his way by discharging the contents of the other. It was indeed impossible to see these wretches ravenously feeding on the filth of animals, and the blood streaming from their mouths, without deploring how nearly the condition of savages approaches that of the brute creation." — (Lewis and Clark, quoted by Spencer, "Descriptive Sociology: 'Snakes.'")

"Some authors have said that all the Hottentots devour the entrails of beasts, uncleansed of their filth and excrements, and that, whether sound or rotten, they consider them as the greatest delicacies in the world; but this is not true. I have always found that when they had entrails to eat they turned and stripped them of their filth and washed them in clear water." — ("Peter Kolben's Voyage to the Cape of Good Hope," in Knox's "Voyages and Travels," London, 1777, vol. ii. p. 385.)

Navajoes of Arizona and New Mexico, Lipans of Texas, Umpquas of Washington Territory, Hoopahs of California, and Slocuss of the head-waters of the Columbia River.

Atkinson declined to dine with a party of Kirghis who had killed a sheep, "having seen the entrails put into the pan after undergoing but a very slight purification." — ("Siberia," T. W. Atkinson, New York, 1865, p. 219, and again p. 433.)

"The entrails of animals and other refuse matter thrown overboard from the English ships is eagerly collected and eaten by the Cochinese, whom Mr. White even accuses of having a predilection for filth." — ("Encyc. of Geography," Philadelphia, 1845, vol. ii. p. 397, article "Farther India.")

(Arabs of the Red Sea.) "The water of Dobelew and Irwee tasted strongly of musk, from the dung of the goats and antelopes, and the smell before you drink it is more nauseous than the taste." — ("Travels to discover the Source of the Nile," James Bruce, Dublin, 1790, vol. i. p. 367.)

From thus enduring water polluted with the excrements of animals to drinking beverages to which urine has been purposely added, as Sir Samuel Baker and Colonel Chaille Long show to have been the custom of the negroes near Gondokoro with their milk, is but a very small step.

Chaille Long relates that in Central Africa he and his men were obliged to drink water which was a mixture of the excrements of the rhinoceros and the elephant (see "Central Africa," New York, 1877, p. 86). Livingston tells us that the Africans living along the banks of the Zambesi are careful not to drink except from springs or wells which they dig in the sand. "During nearly nine months in the year ordure is deposited around countless villages along the thousands of miles drained by the Zambesi. When the heavy rains come down and sweep the vast fetid accumulation into the torrents the water is polluted with filth" ("Zambesi," London, 1865, p. 181).

Rev. J. Owen Dorsey reports that he has seen, while among the Ponkas, "a woman and a child devour the entrails of a beef, with the contents" (personal letter to Captain Bourke).

Réclus says that the Eastern Inuit eat excrement. "Ils ne réculent pas devant les intestins de l'ours, pas même devant ses excréments, et se jettent avec avidité sur la nourriture mal digérée qu'ils retirent du ventre des rennes" ("Les Primitifs," Paris, 1885, pp. 31, 32). "Les Ygarrotes des Philippines, qui versent comme sauce à leur viande crue le jus des fientes d'un buffle fraîchement abattu" (idem, p. 31).

The tribes of Angola, West Africa, cook the entrails of deer without removing the contents; this is for the purpose of getting a flavor, as

the excrement itself is not eaten ("Muhongo," interpretation by Rev. Mr. Chatelain).

The Thibetan monk was not to eat entrails. "Ne pas manger des tripes" ("Pratimoksha Sutra," W. W. Rockhill, Soc. Asiatique, Paris, 1885.)

(Tunguses of Siberia.) "They eat up every part of the animal which they kill, not throwing away even the impurities of the bowels, with which they make a sort of black pudding by a mixture of blood and fat." — (Gavrila Sarytschew, in Phillips's "Voyages," London, 1807, vol. v.)

Natives of Eastern Siberia "ate with avidity the entrails of the seal without cleaning in the least the partly digested food from the intestines, the ordure of the seal being as offensive to civilized man as the fæces of men or dogs." — (Personal letter from Chief Engineer Melville, U. S. Navy, to Captain Bourke.)

The Aleuts and Indians from the extreme northern coast of America with Melville's party displayed the same appetite for the half-digested contents of the paunches of the seals killed by them. This appetite was not due to lack of food, as Melville takes care to explain. At another time he detected his "natives" in the act of eating "plentifully, though covertly, of the droppings of the reindeer" (*idem*).

VII.

URINE IN HUMAN FOOD.

CHINOOK OLIVES.

THE addition of urine to human food is mentioned by various writers. Speaking of the Chinooks, Paul Kane describes a delicacy manufactured by some of the Indians among whom he travelled, and called by him "Chinook Olives." They were nothing more nor less than acorns soaked for five months in human urine (see Kane, "Artist's Wanderings in North America," London, 1859, p. 187). Spencer copies Kane's story in his "Descriptive Sociology," article "Chinooks."

"In Queensland, near Darlington, there is a tract of country covered with a peculiar species of pine, yielding an edible nut of which the natives are extremely fond. . . . The men would form large clay pans in the soil, into which they would urinate; they would then collect an abundance of these seeds and steep them in the urine. A fermentation took place, and all the seeds were devoured greedily, the effect being to cause a temporary madness among the men, — in fact a perfect delirium tremens. On these occasions it was dangerous for any one to approach them. The liquid was not used in any way." — (Personal letter from John F. Mann, Esq., Neutral Bay, Sydney, New South Wales.)

This account not only recalls the story told by the artist Kane in the preceding paragraph, but establishes the fact that in Australia there is something with a marvellous resemblance to the Ur-Orgie of the people of Siberia.

Chief Engineer George W. Melville, U. S. Navy, author of "In the Lena Delta," has had much experience with the natives of Northern Siberia, among whom it was his misfortune to be cast away. In a personal letter to Captain Bourke he states that he observed several instances of Siberian women drinking their own or their neighbor's freshly voided urine. Once, in Sutke Harbor, Saint Lawrence Bay,

near East Cape, when he "frowned at their unclean and unseemly act, they seemed very much amused, and after a moment's talk, one of them voided her urine and another drank it, both being very much diverted by my disgust." He further relates that when his "natives" could not obtain from his limited supplies all the alcohol they wanted, they made a mixture of alcohol and their own urine in equal parts and drank it down.

"On the morning of the 8th of May, while struggling with an attack of fever, I received a visit from Gilmoro, who brought me a gourd of milk as an expression of gratitude for saving him at an opportune moment his position. Burning with fever, I drained at one draught a goblet full of the foaming liquid ere the sense of taste could detect the nauseous mixture; my stomach, however, quickly rebelled, and rejected in violent retching the unsavory potion, seven eighths of which were simply the urine of the cow! — a practice, by the by, common to all Central Africans, who never drink milk unless thus mixed."

"This fetish and superstition thereby insures protection for the cow here, as on the Bahr-el Abiad, mysteriously connected with the unknown, — a shadow possibly of the old Egyptian worship." — ("Central Africa," Chaille Long, New York, 1877, p. 70.)

URINE IN BREAD-MAKING.

A comparatively late writer says of the Moquis of Arizona: "They are not as clean in their housekeeping as the Navajoes, and it is hinted that they sometimes mix their meal with chamber-lye for these festive occasions; but I did not know that until I talked with Mormons who visited them" (J. H. Beadle, "Western Wilds," Cincinnati, Ohio, 1878, p. 279).

Beadle lived and ate with the Moquis for a number of days. This story, coming from the Mormons, may refer to some imperfectly understood ceremonial.

There is some ground for suspecting that urine may have been employed by bakers in Europe prior to the introduction of the "barm" or ale yeast as a ferment. Ammonia is at the present time made use of by the Germans in this industry (see page 32).

It is possible that the following account of the manner of eating blubber among the Patagonians may mean that urine was poured over it: "He put the same piece on the fire again, and after an addition to it too offensive to mention, again sucked it" ("Voyage of the Adventure and Beagle," London, 1839, vol. i. p. 343).

As bearing upon the ingestion of human excreta, which would seem to excite a natural feeling of revulsion, the following statement may have some significance: Spencer Saint John, in his "Life in the Far East," London, 1842, after describing a head feast among the Dyaks, says that, after certain preliminary rites and amusements, "they commence eating and drinking . . . an extraordinary accumulation, — fowls roasted with their feathers on, eggs black with age, decayed fruit, rice of all colors and kinds, strong-smelling fish almost approaching a state of rottenness, and their drink having the appearance and thickness of curds, in which they mix pepper and other ingredients. It has a sickening effect upon them, and they swallow it more as a duty than because they relish it."

Evidently nastiness is an object, since "before they have added any extraneous matter" this drink "is not unpleasant, having something the taste of spruce-beer" (p. 66).

If the ceremony in question partakes of the nature of a sacrifice, — which is not at all certain from the text, in which it is described as an "entertainment," but which appears probable from its being connected with the organization and representation of the tribe and from its relation to head-hunting, — then it may be assumed that the spoiled food and nauseous drink are perfectly natural features, which have their counterparts in many places.

As a rule, the more painful, costly, unnatural, and disgusting a rite is, the more essentially sacrificial is its character, — for obvious reasons.

Von Stralenburg says of the Koraks that they use the same tubs as urinals and for the purpose of holding drinking water (see citation on page 152 of this volume).

HUMAN ORDURE EATEN BY EAST INDIAN FANATICS.

Speaking of the remnants of the Hindu sect of the Aghozis, an English writer observes: —

"In proof of their indifference to worldly objects they eat and drink whatever is given to them, even ordure and carrion. They smear their bodies also with excrement, and carry it about with them in a wooden cup, or skull, either to swallow it, if by so doing they can get a few pice, or to throw it upon the persons or into the houses of those who refuse to comply with their demands." — ("Religious Sects of the Hindus," in "Asiatic Researches," vol. xvii. p. 205, Calcutta, India, 1832.)

Another writer confirms the above. The Abbé Dubois says that the Gurus, or Indian priests, sometimes, as a mark of favor, present to their disciples "the water in which they had washed their feet, which is preserved and sometimes drunk by those who receive it" (Dubois, "People of India," London, 1817, p. 64). This practice, he tells us, is general among the sectaries of Siva, and is not uncommon with many of the Vishnuites in regard to their *vashtuma*. "Neither is it the most disgusting of the practices that prevail in that sect of fanatics, as they are under the reproach of eating as a hallowed morsel the very ordure that proceeds from their Gurus, and swallowing the water with which they have rinsed their mouths or washed their faces, with many other practices equally revolting to nature" (*idem*, p. 71).

Again, on page 331, Dubois alludes to the Gymnosophists "or naked Samnyasis of India . . . eating human excrement, without showing the slightest symptom of disgust."

As bearing not unremotely upon this point, the author wishes to say that in his personal notes and memoranda can be found references to one of the medicine-men of the Sioux who assured his admirers that everything about him was "medicine," even his excrement, which could be transmuted into copper cartridges.

"I was informed that vast numbers of Shordrus drank the water in which a Brahmin has dipped his foot, and abstain from food in the morning till this ceremony be over. Some persons do this every day. . . . Persons may be seen carrying a small quantity of water in a cup and entreating the first Brahmin they see to put his toe in it. . . . Some persons keep water thus sanctified in their houses."—(Ward, quoted by Southey in his "Commonplace Book," London, 1849, 2d series, p. 521.)

VIII.

THE ORDURE OF THE GRAND LAMA OF THIBET.

THAT the same disgusting veneration was accorded the person of the Grand Lama of Thibet, was once generally believed. Maltebrun asserts it in positive terms: "It is a certain fact that the refuse excreted from his body is collected with sacred solicitude, to be employed as amulets and infallible antidotes to disease."

And, quoting from Pallas, book 1, p. 212, he adds: "Il est hors de doute que le contenu de sa chaise percée est dévotement recueilli; les parties solides sont distribuées comme des amulettes qu'on porte au cou; le liquide est pris intérieurement comme une médecine infallible." — (Maltebrun, *Universal Geography*, article "Thibet," vol. ii. lib. 45, American edition, Philadelphia, 1832.)

The Abbé Huc denies this assertion: "The Talé Lama is venerated by the Thibetans and the Mongols like a divinity. The influence he exercises over the Buddhist population is truly astonishing; but still it is going too far to say that his excrements are carefully collected and made into amulets, which devotees inclose in pouches and carry around their necks." — (Huc, "Travels in Tartary, Thibet, and China," London, 1849, vol. ii. p. 198.)

HUC AND DUBOIS COMPARED.

Huc was a keen and observing traveller; he was well acquainted with the languages and customs of the Mongolians; his tour into Thibet was replete with incident, and his narrative never flags in interest. Still, in Thibet he was only a traveller; the upper classes of the Buddhist priesthood looked upon him with suspicion. The lower orders of priesthood and people did seem to consider him as a Lama from the far East, but he did not succeed in gaining the confidence of the Thibetans to the extent possessed by Dubois among the Brahminical sects. The history of the latter author is a peculiar one: A French priest, driven from his native land by the excesses of the

revolution, he took refuge in India, devoting himself for nearly twenty years to missionary labor among the people, with whom he became so thoroughly identified that when his notes appeared they were published at the expense of the British East India Company, and distributed among its officials as a text-book.

While it is possible to consult earlier authorities, the determination of this matter should not be allowed to remain in controversy. The first Europeans known to have penetrated to Thibet (or Barantola, as they called it) were the Jesuits Grueber and Dorville, who, returning from China to Europe, walked through Thibet, and down through India to the sea-coast. This was in 1661; another member of the same order, Father Andrade, claimed to have succeeded in the same perilous undertaking at an earlier date (1621), but the names of the cities he visited proves that he did not get beyond what is now known as Afghanistan, at the foot of the mountains bordering on Thibet. While Grueber and Dorville were making their journey, or not many years after, Father Gerbillon, also a Jesuit, had taken up his abode among the nomadic Tartars, acquiring an influence with them of which the Emperor of China was glad to avail himself in emergencies. None of these travellers claimed to have seen the Grand Lama in person.

“Grueber assures us that the grandees of the kingdom are very anxious to procure the excrements of this divinity (i. e., the Grand Lama), which they usually wear about their necks as relics. In another place he says that the Lamas make a great advantage by the large presents they receive for helping the grandees to some of his excrements, or urine; for, by wearing the first about their necks, and mixing the latter with their victuals, they imagine themselves to be secure against all bodily infirmities. In confirmation of this, Gerbillon informs us that the Mongols wear his excrements, pulverized, in little bags about their necks, as precious relics, capable of preserving them from all misfortunes, and curing them of all sorts of distempers. When this Jesuit was on his second journey into Western Tartary, a deputy from one of the principal lamas offered the emperor’s uncle a certain powder, contained in a little packet of very white paper, neatly wrapped up in a scarf of very white taffety; but that prince told him that as it was not the custom of the Manchews to make use of such things, he durst not receive it. The author took this powder to be either some of the Great Lama’s excrements, or the ashes of something that had been used by him.” — (“A Description of Thibet,”

in Pinkerton's "Voyages and Travels," London, 1814, vol. vii. p. 559).

"Grueber, in his late account of his return from China, A. D. 1661, by way of Lassa, or Barantola, as Kircher calls it (see Kircher, *China Illustrata*, part ii. c. 1), but Grueber himself Barantaka (where, he saith, no Christian hath never been). . . above all, he wondered at their pope (the Grand Lama of Thibet), to whom they give divine honors, and worship his very excrements, and put them up in golden boxes, as a most excellent remedy against all mischiefs." — (Stillington, "Defence of Discourse concerning Idolatry in Church of Rome," London, 1676, pp. 116–120, quoted by H. T. Buckle, in his "Commonplace Book," p. 79, vol. ii. of his Works, London, 1872).

Turner, "Embassy to Thibet," London, 1806, makes no reference to the use of the excrements of the Grand Lama.

Friar Odoric, of Pordenone, visited L'hassa, Thibet, between A. D. 1316 and 1330 (see Markham's edition of Bogle's "Thibet," London, 1879, p. 46). Markham believes that the Jesuit Antonio Andrada, "in 1624," whom he styles "an undaunted missionary," "found his way over the lofty passes to Rudok," "climbed the terrific passes to the source of the Ganges, and eventually, after fearful sufferings, reached the shores of the sacred lake of Mansorewar, the source of the Sutlej." — (Introduction to Bogle's "Thibet," London, 1879).

Warren Hastings speaks of the Thibetan priests of high degree, the "Ku-tchuck-tus," who, he says, "admit a superiority in the Dalai Lama, so that his excrements are sold as charms, at great price, among all the Tartar tribes of this religion." — ("Memorandum on Thibet," accompanying the instructions to Mr. Bogle, the first English ambassador to that country. See in Markham's "Thibet," London, 1879, p. 11.)

It is truly remarkable that neither in the report nor letters of Bogle, nor in the notes of Manning, nor in the fragments of Grueber, Desideri, nor Horace Della Penna, preserved in Markham's "Thibet," can any allusion be found to the use of the excrements of the Grand Lama in religion or medicine.

"Les grands du royaume" (i. e., of Barantola), "recherchent fort les excréments de cette divinité" (i. e., Lamacongiu). "Ils les portent ordinairement à leur col comme des reliques." — ("Voyage de P. Grueber à Chine," taken from *Conversations with P. Grueber*. See, in Thevenot, vol. ii., "Relations de Divers Voyages curieux," Melchisidec Thevenot, Paris, 1696, vol. ii.).

Several authorities from whom much was expected are absolutely silent.

No mention is to be found in Rubruquis of any use of human ordure or urine among the Tartars among whom he travelled; all that he says is that they baked their bread on cow-dung. This monk, a Franciscan, was sent by King Louis IX. (Saint Louis), of France, on a mission to the Grand Khan of Tartary in 1253, in the execution of which office he travelled for thousands of miles through their territory. In Pinkerton it is said: "The travels of Rubruquis are equally astonishing in whatever light they are considered. Take them with respect to length, and they extend upwards of five thousand miles one way and nearly six thousand another." — (Vol. vii. p. 96.)

During such a long journey he should have been able to notice much, but we are to bear in mind that the manners of the Tartars of the Grand Khan were at that time somewhat modified by contact with European civilization, having among them many prisoners, as Rubruquis points out, who officiated as artificers, while, on the other hand, we know that the monk was thoroughly ignorant of all their dialects. Marco Polo, who lived among the Tartars about the same time, says: "But now the Tartars are mixed and confounded, and so are their fashions." — (Marco Polo, "Travels," in Pinkerton's "Voyages," London, 1814, vol. vii. p. 124.)

Du Halde, although he gives an account of Thibet in his fourth volume, and seems to be familiar with all the works on that country, mentioning Fathers Grueber and Dorville, yet makes no allusion to the use of the excrements of the Grand Lama as amulets or internally. (See Du Halde's "History of China," London, 1736.) The fault may lie with his translator in his zeal to "expurgate."

Du Halde, a Jesuit missionary, had the assistance of all the members of his order on duty in China; no less than a score or more aided him; one of the number, Father Constancin, had a tour of service in the Flowery Kingdom, as a missionary, of over thirty-two consecutive years. During the generation preceding the appearance of Du Halde's work, the Jesuits had traversed China, Tartary, and Thibet. Tavernier, whose opportunities for observation were excellent, asserted the fact without ambiguity. The excrement of the Grand Lama was carefully collected, dried, and in various ways used as a condiment, as a snuff, and as a medicine.

"The Butan merchants assured Tavernier that they strew his ordure, powdered, over their victuals." — (Tavernier, "Travels," vol. ii. p. 185.

Footnote to page 559, vol. vii. Pinkerton's "Voyages and Travels," London, 1814.)

"Unde tantis venerationis indiciis ab omnibus colitur, ut beatum ille se reputet, cui Larnarum (quod summis et pretiosis muneribus eum in finem, non sine magno eorum lucro corrumpere solent) benignitate aliquid ex naturalis secessus sordibus aut urina Magnæ Lamæ obtigerit. Ex ejusmodi enim collo portatis, urina quoque cibis commixta." — (Letter of Father Adam Schall, S. J., "Aulæ Sino-Tartariæ Supremi Concilii Mandarinus," in Thevenot, vol. ii.; Thevenot's second volume contains three short letters in Latin from Grueber to members of his order, but in none is there any mention made of the ordure of the Grand Lama.)

"There is no king in the world more feared and respected by his subjects than the king of Butan; being in a manner adored by them. . . . The merchants assured Tavernier that those about the king preserve his ordure, dry it, and reduce it to powder like snuff; that then putting it into boxes, they go every market-day and present it to the chief traders and farmers, who, recompensing them for their great kindness, carry it home as a great rarity, and when they feast their friends, strew it upon their meat. The author adds that two of them showed him their boxes with the powder in them." — ("A Description of Thibet," in Pinkerton, London, 1814, vol. vii. 567.)

The expression "king of Butan," as used by Tavernier, means the Grand Lama of Thibet. Tavernier's statement has been accepted by the most careful writers. "Indorum nonnullos, incolas scilicet regni Boutan Homerda seu excrementis alvinis Regis sui siccatis et pulverisatis cibos amicis et convivis suis appositos condire, refert Johannes Baptista Tavernier, Itinerar, Indic. lib. 3, cap. 15, fol. m. (Schurig, "Chylologia," Dresden, 1725, p. 775.) The same paragraph quoted in the Bibliotheca Scatologica, pages 29, 93, and 96, to which the anonymous author adds, "et les Tartares et les Japonais tenaient en pareille vénération la merde du grand lama et du Dairi."

Rosinus Lentilius, in the Ephemeridum Physico-Medicorum, Leipsig, 1694, speaks of the Grand Lama of Thibet as held in such high veneration by the devotees of his faith that his excrements, carefully collected, dried, powdered, and sold at high prices by the priests, were used as a sternutatory powder, to induce sneezing, and as a condiment for their food, and as a remedy for all the graver forms of disease. He quotes all this from Tavernier, and from Erasmus Franciscus, p. 1662. There is also another citation from Tavernier, lib. 4, cap. 7.

"Nec de rege in Bantam, et summo Tangathani Regni Pontifice, magno Lama, quos tanto in honore subditi habent ut merda eorum magno studio collectam, et in pulverem comminutam (quam Brachmines aere multo simplicibus divendunt) illi quidem scil. Boutamenses, loco pulvere nasalis utantur, eoque lautius, victuri cibos condiant hi vero scil. Tangat hani pro remedio longe presentissimo ad varios desperatissimosque morbos habeant, aliisque medicamentis admisceant, per sæpe memoratum Tavernier, Itin. lib. 3, cap. 15, et Franciscus, loc. cit. p. 1662.

References to "amulets" among the peoples of Tartary and Thibet are made by nearly all travellers; but few seem to have considered it worth while to determine of what these amulets were composed.

Fathers Grueber and Dorville say of the Kalmuck Tartar women, "each with a charm about their necks to preserve them from dangers." These may have been ordure amulets of the Grand Lama.

In his condensation of the travels into Thibet of Fathers Grueber and Dorville, Pinkerton omits what they had to say about these amulets, although in another place, already cited, he refers to it.

(Burats of Siberia.) "I could observe no images among them except some relics given them by their priests which they had from the Delay-Lama; these are commonly hung up in a corner of their tents, and sometimes about their necks, by way of an amulet to preserve them from misfortunes." (Bell, "Travels in Asia," with the Russian Embassy to China, in 1714, in Pinkerton, vol. vii. p. 347). Undoubtedly, these were amulets of human ordure, etc., received from the Grand Lama.

(Kalmucks of Siberia.) "Des pilules bénites qui viennent du Tibet méritent attention; on les appelle Schalir. Les prêtres ne les donnent qu'aux Kalmouks riches ou de distinction; ils les portent toujours sur eux, et ils n'en font usage que dans les maladies graves où la mort leur paraît presque inévitable. Ils prétendent que ces pilules servent à distraire l'âme des choses temporelles, et à la sanctifier: elles sont noires et de la grosseur d'un pois. Je presumai qu'elles renfermaient de l'opium ou autre narcotique; mais on m'assure au contraire que leur vertu était purgatif." — (Voyages de Pallas, Paris, 1793, vol. i. pp. 567, 568.)

(Mongolia.) "When famous lamas die and their bodies are burnt, little white pills are reported as found among the ashes, and sold for large sums to the devout, as being the concentrated virtue of the man and possessing the power of insuring a happy future for him who

swallows one near death. This is quite common. I heard of one man who improved on this by giving out that these little pills were in the habit of coming out through the skin of various parts of the body. These pills, called Sharil, met with a ready sale, and then the man himself reaped the reward of his virtue and did not allow all the profit to go to his heir." — ("Among the Mongols," Rev. James Gilmour, London, 1883, p. 231.)

This writer says that these sacred pills are white; another one, already noted, describes them as black, while those obtained by the author from Mr. W. W. Rockhill are red.

Vambéry instances one of the holy men of the Turkomans who, after reciting a number of sacred verses, "used to place before him a cup of water into which he spat at the end of each poem, and this composition . . . was sold to the best bidder as a wonder-working medicine." — ("Travels in Central Asia," New York, 1865, p. 272.)

Such use of the excrement of ecclesiastical dignitaries was indicated in Oriental literature. In the "Arabian Nights" King Afrida says to the Emirs, among other things, "And I purpose this night to sacre you all with the Holy Incense." When the Emirs heard these words, they kissed the ground before him. Now the incense which he designated was the excrement of the Chief Patriarch, the denier, the defiler of the truth, and they sought for it with such instance, and they so highly valued it, that the high-priests of the Greeks used to send it to all the countries of the Christians in silken wraps, after mixing it with musk and ambergris; hearing of it, kings would pay a thousand gold pieces for every dram, and they sent for and sought it to fumigate brides withal; and the Chief Priests and the Great Kings were wont to use a little of it as a Collyrium for the eyes, and as a remedy in sickness and colic; and the Patriarchs used to mix their own skite (excrement) with it, for that the skite of the Chief Patriarch would not suffice for ten countries." — (Burton's edition, vol. ii. pp. 222, 223). In Burton's Index this is called "Holy Merde." Burton also says, "The idea of the Holy Merde might have been suggested by the Hindus; see Mandeville, of the archiprotopapaton (prelate) carrying ox-dung and cow-urine to the king, who therewith anoints his face and breast, etc. And, incredible to relate, this is still practised by the Parsis, one of the most progressive and sharpest-witted of the Asiatic races." — (Idem.)

Rochefoucauld tells us that we ascribe to others the faults of which we ourselves would be guilty, had we the opportunity. The Arabians

no doubt were fully acquainted with just such customs; possibly, the Greeks also.

The Kalmucks believe in spirits or genii called "Bourkans," and in a maleficent one known as "Erlík-khan." They tell a story of three of these "Bourkans," one of them being Sakya-Muni: "Étant un jour assis ensemble, firent leurs prières dans la plus grande ferveur, ayant les yeux fermés, ainsi que cela se pratique chez les Kalmouks, le génie infernal s'approche d'eux, et fit ses ordures dans la coupe sacrée que les prêtres ont devant eux lorsqu'ils font la prière. Dès que les dieux s'en aperçurent, ils tinrent conseil. Ils conclurent que s'ils répandoient cette matière vénimeuse dans les airs, ils feroient périr tous les habitants de cet élément; et que s'ils la jetoient sur la terre, ils feroient mourir tous les êtres vivans qui l'occupent. Ils résolurent donc, pour le bien de l'humanité, de l'avaler. Sakya-Muni eut pour sa part le fond de la coupe; le levain étoit si fort que son visage devint tout bleu. C'est la raison pour laquelle on lui peint la figure en bleu dans les images; ses idoles ont seulement le bonnet vernissé en bleu." — (Voyages de Pallas, Paris, 1793, vol. i. p. 548).

This is a lame explanation, invented by the Lamas after men had become somewhat refined, and had begun to evince a repugnance to these diabolical usages. Compare with the notes presented by Mr. W. W. Rockhill, the Oriental scholar and Thibetan explorer, on p. 37.

The following is from a manuscript by Mr. W. W. Rockhill, entitled "The Lamaist Ceremony called the Making of the Mani Pills:"—

"Certain indestructible particles of the bodies of the Buddhas and saints, as well as certain other bodily remains, have ever been considered by Buddhists to enjoy certain properties, such as that of emitting light, and of having great curative properties. The travels of Huein-Tsang and of Fa-lisien are filled with accounts of the discovery of such treasures, and of the supernatural properties which they possessed. Among Thibetans, the first class of these relics is known as 'pedung' (npel-gedung), the second as 'dung-rus' (gdung-rus). They say the pedung are minute globules found in the bones of Buddhas and saints, that they possess wonderful brilliancy, and that sometimes they may be seen on the exterior of some saintly person, when they have the appearance of brilliant drops of sweat. While these pedung have most potent curative properties, they become also the palladium of the locality fortunate enough to have them. By a natural extension of the idea of the power of pedung, Thibetans have come to think that if one preserves and carries about on one's person

even a little of the excretions, or of the hair or nail-trimmings of a saint who is known to have pedung, such, for instance, as the Tale-Lama, or the Panchan-Rimpoche, they will shield him from gun or sword wounds, sickness, etc.; hence the extraordinary objects one so often finds in Thibetan charm-boxes (Ka-Wo).

"The properties of pedung have also given rise to another belief, with which this paper is more properly concerned, — that of manufacturing pills, to which the god Shourizog, at the supplication of the officiating lamas, imparts the properties of his own divine body, and then imparts to them the curative and protective properties of real pedung. These pills are known as mani-rilbu, or 'precious pills,' and are in constant use as medicine among the people of Thibet and Mongolia. Large quantities of them are also sent by each tribute-bearing minion to the Emperor of China. In Chinese, they are called 'Tsu-mu-yas,' or 'thih-ma-yao,' and must not be confounded with a liliaceous plant of same name (Hanbury's *Anemarrhena asphodeloides*), the rhizome of which is used in medicine, and which is also a product of Thibet.

"Perhaps the better name for 'mani-rilbu' is 'tzu-sheng-wan,' 'dilated pills,' which I have heard used for them in Pekin, as will be better seen after reading the following account of the manner in which they are manufactured.

"The greater part of the account here given of the process of making the pills is taken from a Thibetan work containing a minute account of the ceremony, together with the prayers to be recited, etc., the title of which is 'Ceremony of Making Mani Pills' (Mani Rilbu grub gi choga), in seven leaves.

"Verbal explanations from the lamas who explained the text to me are incorporated wherever necessary.

"Seven days prior to the commencement of the ceremony the lama who is to conduct it and the priests who are to take part in it commence to abstain from the use of meat, spirits, garlic, tobacco, and other articles of food held impure, or which are bad-smelling, and during the progress of the ceremony, which is twenty-one, forty-nine, or one hundred days in length, none of the above articles are allowed in the temple, nor are unclean persons or those who are partaking of the above prohibited substances.

"The ceremony begins by making the pills, and the process is described, in the work mentioned above, as follows: "The Lama, his head clean-shaved, and his vestments being as they should be, grinds

into fine flour some roasted grain, then mixing it with pure and sweet-scented water, he makes the necessary amount of paste; the pills are then made and coated over with red. When all this has been done, a vase is taken which is dry and without any flaw or blemish, and which is also perfectly clean, and in it the pills are poured until it is two-thirds full. The vase is then wrapped in a silk cover, which is tied on with a silk thread, and sealed. The vase, after this, is put on a stand, in a perfectly upright position, and around the latter are arranged bowls of water and other offerings, two by two. The most revered image of Tug-je-chon-po (i. e., Shouresig) which the lamasery possesses is then clothed in its robes, and placed on top of the vase; then, without shaking the vase, a dorje (a marginal note explains that this is the Thunder-bolt or Sadjra of Indra: it is in constant use in all the Lamaist ceremonies, and is generally held in the right hand, between the thumb and index, while prayers are being read. In the left hand the lama usually holds a bell), wrapped in a clean piece of cotton or woollen stuff, is tied to the string around the neck of the vase. After an interval of meditation and prayer, offerings are made of 'water, flowers, incense, lamps, perfumes, food, etc., . . . while music plays.' Then the help of the god is invoked 'to impart the necessary virtues to the pills, . . . for this world is sunk in sin and iniquity, and Shouresig alone can help it, and drag it out of the mire.' As a means thereto he is now besought, in his great mercifulness, to bless these pills, so that they may free from the orb of transmigration those who shall have attained maturity of mind,' to impart to them by absorption the peculiar flavor of his resplendent person, so that they may become indistinguishable from it, like water poured into water, etc., etc.

"This ceremony, which is a most expensive one, and most trying on the Lamas, is not at all common in the Lamaseries of China or Mongolia, and is confined to the larger one in Thibet; the only one at Peking, where it is sometimes performed, is the Shih-fang-tang, to the west of the Hsi-huang-tsu, outside of the north side of the city."

The above ceremony describes a symbolical alvine dejection, and the most plausible explanation is, that the lamas, finding trade good and the Buddhist laity willing to accept more "amulets" than the Grand Lama was able, unaided, to supply, hit upon this truly miraculous mode of replenishing their stock.

Mr. Rockhill explains that the word "pedung," used in the above description, means "remains." Taking into consideration the fact

that these people, although remotely, are related to the Aryan stock, which is the ancestor of the English, German, Irish, Latin, and others, from which we spring, the meaning, as here given, is certainly not without significance. "Dung," in our own tongue, means nothing more nor less than remains, reliquæ of a certain kind.

Webster traces the word "dung" to the Anglo-Saxon *dung*, *dyncg*, *dincg*, — excrement; *Dyngan*, to dung; N. H. German, *dung*, *dunger*; O. H. German, *Tunga*; Sw. *Dynga*; Danish, *Dynge* and *Dyngd*; Icelandic, *Dyngia* and *Dy*. This shows it to be essentially Indo-Germanic in type, and fairly to be compared with the words "pedung" and "dung-rus" of Mr. Rockhill's manuscript.

In the country of Ur of the Chaldees, which was the home of Abraham (Gen. xi. 2), there reigned a king, "the father of Dungi." The exact meaning of the name "Dungi" has not been made known. The name of the king himself, strangely enough, was "Urea," or "Uri," — it is read both ways. His date has been fixed at 3,000 years B. C.

The information in preceding paragraph was furnished by Prof. Otis T. Mason, of the National Museum, Washington, D. C.

Lenormant makes him out as of high antiquity, — "the most ancient of the Babylonian kings," "kings who can vie in antiquity with the builders of the Egyptian pyramids, — Dungi, for instance." — ("Chaldean Magic," p. 333.)

Smith ascribes him to the date of at least 2,000 B. C. — ("Assyrian Discoveries," New York, 1876, p. 232.)

Mr. W. W. Rockhill, for six years secretary of the Legation of the United States, in Pekin, is a member of the Oriental Society, and a scholar of the highest attainments, more particularly in all that relates to the languages, customs, and religions of China and Thibet, in which countries he has travelled extensively.

The sacred pills presented by him to the author were enclosed in a silver reliquary, elaborately chased and ornamented; in size they were about as large as quail-shot; their color was almost orange, or between that and an ochreous red.

Through the kindness of Surgeon-General John Moore, U. S. Army, they were analyzed by Dr. Mew, U. S. Army, with the following results: —

"April 18, 1889.

"I have at length found time to examine the Grand Lama's ordure, and write to say that I find nothing at all remarkable in it. He had been feeding on a farinaceous diet, for I found by the microscope a large

amount of undigested starch in the field, the presence of which I verified by the usual iodine test, which gave an abundant reaction.

"There was also present much cellulose, or what appeared to be cellulose, from which I infer that the flour used (which was that of wheat) was of a coarse quality, and probably not made in Minnesota.

"A slight reaction for biliary matter seemed to show that there was no obstruction of the bile ducts. These tests about used up the four very small pills of the Lama's ordure.

"Very respectfully and sincerely yours,

(Signed) "W. M. Mew."

IX.

THE STERCORANISTES.

THAT Christian polemics have not been entirely free from such ideas may be shown satisfactorily to any one having the leisure to examine the various phases of the discussion upon the doctrine of the Eucharist.

The word "stercoranistes," or "stercorarians," is not to be found in the last edition of the *Encyclopædia Britannica*; but in the edition of 1841 the definition of the word is as follows: "Stercorarians, or Stercoranistes, formed from *stercus*, 'dung,' a name which those of the Romish church originally gave to such as held that the host was liable to digestion and all its consequences, like other food." This definition was copied verbatim in Rees's *Cyclopædia of Arts, Sciences, and Literature*, Philadelphia.

The dispute upon "Stercoranisme" began in 831, upon the appearance of a theological treatise by a monk named Paschasius Radbert. — (See the "Institutes of Ecclesiastical History," John Lawrence von Mosheim, translated by John Murdock, D.D., New Haven, 1832, vol. ii. p. 104 *et seq.*)

"The grossly sensual conception of the presence of the Lord's body in the sacrament, according to which that body is eaten, digested, and evacuated like ordinary food, is of ancient standing, though not found in Origen, nor perhaps in Rhabanus Maurus. It certainly originated with a class of false teachers contemporary with or earlier than Rhabanus Maurus, whom Paschasius Radbert condemns, — 'Frivolum est ergo in hoc mysterio cogitare in stercore ne commisceatur in digestionem alterius cibi' (De Corp. et Sanguin. Domin. cap. 20). He does not, however, apply the term "Stercoranistes" to his opponents. Cardinal Humbert is the first to so employ the word. This use was in a polemic against Nicetas Pectoratus, written in support of Azymitism, etc. From this source the word was adopted into common usage. — (Schrockli Kirchengesch. XXIII. ? 429, 499; Herzog, Real Encyclop. s. v.; Mc-

Clintock and Strong, *Cyclop. of Biblical, Theological, and Ecclesiastical Literature*, New York, 1880 ; see also Schaff-Herzog, "*Cyclopædia of Religious Knowledge*," New York, 1881, article "*Stercoranistes*."

(*Stercoranistes*.) (Hist. Eccles.) "Nom que quelques écrivains ont donné à ceux qui pensoient que les symboles eucharistiques étoient sujets à la digestion et à toutes ses suites de même que les autres nourritures corporelles. . . . Ce mot est dérivé du Latin, '*stercus*,' excrément. On ne convient pas généralement de l'existence de cette erreur. Le président Manguin l'attribue à Amalaire, auteur du neuvième siècle. . . . Et le cardinal Humbert dans sa réponse à Nicetas Pectoratus, l'appelle nettement *stercoraniste*, parceque celui-ci prétendoit que la perception de l'hostie rompoit le jeûne. Enfin, Alger attribue la même erreur aux Grecs. Mais ces accusations ne paroissent pas fondées, car ; . . . Amalaire propose à la vérité la question si les espèces eucharistiques se consomment comme les aliments ordinaires ; mais, il ne la décide pas. Nicetas prétend aussi que l'Eucharistique rompt le jeûne, soit qu'il reste dans les espèces quelque vertu nutritive, soit parce qu'après avoir reçu l'Eucharistique, on peut prendre autres aliments ; mais, il ne paroît pas avoir admis la conséquence que lui impute le Cardinal Humbert. Il ne paroît pas non plus que les autres Grecs soient tombés dans cette erreur. S. Jean Damascene les en dispulpe. Mais, soit que le *Stercoranisme* ait existé ou non, les protestans n'en peuvent tirer aucun avantage contre la présence réelle, que cette erreur suppose plutôt qu'elle ne l'ébranle." — (Voyez M. Wuitass, traité de l'Eucharistie, première partie, quest. 2, art. 1 ; p. 416 et suiv. *Encyclop. ou Diction. Raisson. des Sciences, des Arts, et des Metiers*, tome quinzième, Neufchatel, 1765, art. "*Stercoranistes*."

"Si qui fuerunt, fuere nonnulli nono sæculo, qui Corpus Christi quod in Eucharistia continetur secessui, ac defectioni obnoxium esse putabat ita ut corruptis speciebus et ipsum Corpus Christi corrumpatur." — ("*Dict. of Sects and Heresies*," etc., T. H. Blunt, Oxford, 1874, where a number of references are given.)

"*Stercorantistarum, nomen non sectæ, sed convitii fuit.*" — (Baronius, "*Annales*," Lucca, 1758.

Stercoranisme. Stercoranistes. Stercus. "Membre d'une secte qui souténait que les espèces de l'Eucharistie étoient digérées et transformées en excrément comme les autres aliments" (*Encyclop.*).

"On a désigné dans le XIX. siècle sous le nom de *Stercoranistes*, les théologiens qui niaient que la substance du pain et du vin fut changée dans l'Eucharistie au corps et au sang de Jesus Christ."

"Tout ce qui entre dans la bouche, descend la ventre et va au rétrait."

"Prétendirent que si le corps et le sang de Jesus Christ, avaient pris la place de la substance du pain et du vin, ils devraient subir les mêmes accidents qui seraient arrivés à cette substance si elle avait été reçue par le communiant." — (P. Lerousse, "Grand Dictionnaire Universel," Paris, 1875.)

Brand, in his "Encyclopædia of Science, Literature, and Art," article "Stercoranism," says: "A nickname which seems to have been applied in the Western churches in the fifth and sixth centuries to those who held the opinion that a change took place in the consecrated elements, so as to render the divine body subject to the act of digestion." He refers to Mosheim's "Ecclesiastical History" for a fuller account.

The same ideas obtained among the illiterate as a matter of course.

The First Gospel of the Infancy of Jesus Christ seems to have been received by the Gnostics of the second century as canonical, and accepted in the same sense by Eusebius, Athanasius, Chrysostom, and others of the Fathers and writers of the Church. Sozomen was told by travellers in Egypt that they had heard in that country of the miracles performed by the water in which the infant Jesus had been washed. According to Ahmed ben Idris, this gospel was used in parts of the East in common with the other gospels; while Ocobius de Castro asserts that in many churches of Asia and Africa it was recited exclusively. (See Introduction to the "Apocryphal New Testament," William Hone, London, 1820.) But, on the other hand, all the apocrypha were condemned by Pope Gelasius in the fifth century; and this interdict was not repealed until the time of Paul IV. in the sixteenth century. — (See Bunsen, "Analecta," Hamburg, 1703.)

In the following extracts it will be noted that the miracles recorded were wrought either by the swaddling-clothes themselves or by the water in which they had been cleansed; and the inference is that the excreta of Christ were believed, as in many other instances, to have the character of a panacea, as well as generally miraculous properties.

The Madonna gave one of the swaddling clothes of Christ to the Wise Men of the East who visited him; they took it home, "and having, according to the custom of their country, made a fire, they worshipped it. . . . And casting the swaddling cloth into the fire, the fire took it and kept it" (1 Inf. iii. 6, 7).

We read of the Finnish deity Wainemoinen that "the sweat which dropped from his body was a balm for all diseases." The very same virtues were possessed by the sweat of the Egyptian god Ra ("Chaldean Magic," Lenormant, p. 247, quoting the Kalewala, part 2, r. 14).

On arrival in Egypt after the Flight — "When the Lady Saint Mary had washed the swaddling clothes of the Lord Christ and hanged them out to dry upon a post . . . a certain boy . . . possessed with the devil, took down one of them and put it upon his head. And presently the devils began to come out of his mouth and fly away in the shape of crows and serpents. And from this time the boy was healed by the power of the Lord Christ." — (1 Inf. iv. 15, 16, 17.)

"On the return journey from Egypt, Christ had healed by a kiss a lady whom cursed Satan . . . had leaped upon . . . in the form of a serpent. On the morrow, the same woman brought perfumed water to wash the Lord Jesus; when she had washed him, she preserved the water. And there was a girl whose body was white with leprosy, who being sprinkled with this water was instantly cleansed from her leprosy." — (1 Inf. vi. 16, 17).

There is another example of exactly the same kind in 1 Inf. vi. 34. See, again, 1 Inf. ix. 1, 4, 5, 9; x. 2, 3; xii. 4, 5, 6. "And in Matarea the Lord Jesus caused a well to spring forth, in which Saint Mary washed his coat. And a balsam is produced or grown in that country from the sweat which ran down there from the Lord Jesus." — (Gospel of the Infancy, viii.: "The Apocryphal New Testament," William Hone, London, 1820, p. 47.)

"In Ireland, weakly children are taken to drink the ablution, that is, the water and wine with which the chalice is rinsed after the priest has taken the communion, — the efficacy arising from the cup having just before contained the body of our Lord." (See "Folk-Medicine," Black, London, 1883, p. 88.) The same cure was also in vogue in England, and in each case for the whooping-cough.

This has all the appearance of a commingling of two separate streams of thought; compare with it the notes on the expression from Juvenal, "Priapo ille bibit vitreo," page 428, as well as those in regard to the canons of Beauvais on page 429.

"An offshoot of the Khlysti, known as the "Shakouni," or Jumpers, openly professed debauchery and libertinism to excess . . . Others of their rites are abject and disgusting; their chief is the living Christ, and their communion consists in embracing his body, — ordinary dis-

ciples may kiss his hand or his foot; to those of a more fervent piety, he offers his tongue." — ("The Russian Church and Russian Dis-sent," Albert F. Heard, New York and London, 1887, pp. 261-262.)

The subjoined extract is from "Mélusine" (Gaidoz) Paris, May 5, 1888.

UN DALAI-LAMA IRLANDAIS.

"A l'occasion des reliques journalières du Dalai-Lama dont on fait des pilules pour les devots, histoire que les imprimeurs de cette Revue n'avaient pas voulu 'avalier' (voir plus haut, col. 24) Mr. Wh. Stokes nous a signalé un curieux passage des annales irlandaises. Nous croyons intéressant de la traduire ici. Cet 'acte de foi' se passait en l'an 605, et le héros en est le roi Aedh, surnomme Uairidhnach.¹

"Un jour il passa, n'étant encore que prince royale, par le territoire d'Othain-Muira; il lava ses mains à la rivière qui traversa le territoire de la ville. Othain est le nom de la rivière, et c'est de là que la ville a son nom. Il prit de l'eau pour s'en laver la figure. Un de ses gens l'arrêta. 'Roi, dit-il, ne mets pas cette eau sur ton visage.' 'Quoi donc?' dit le roi. 'J'ai honte de le dire,' dit-il. 'Quelle honte as-tu à dire la vérité?' dit le roi. 'Voici ce que c'est,' dit-il; 'c'est sur cette eau que se trouve le *water-closet* des clercs.' 'Est-ce ici, que vient le clerc lui-même' (c'est à dire le chef des clercs) 'pour se soulager?'

"'C'est ici même,' dit le page. 'Non seulement,' dit le roi, 'je mettrai cette eau sur ma figure, mais j'en mettrai dans ma bouche, et j'en boirai' (et il en but trois gorgées); 'car l'eau où il se soulage vaut pour moi l'eucharistie.'

"Cela fut raconté à Muira (le chef des clercs), et il rendit grâces à Dieu de ce que Aedh avait une semblable foi; et il appela auprès de lui Aedh et il lui dit: 'Cher fils, en récompense de ce respect que tu as montré à l'Église, je te promets, en présence de Dieu, que tu obtiendras bientôt la royauté d'Irlande, que tu auras victoire et triomphe sur tes ennemis, que tu ne mourras pas de mort subite,² que tu recevras le corps de Christ de ma main, et je prierai le Seigneur pour toi, pour que ce soit la vieillesse qui t'enlève de cette vie.'

¹ Lit. "de la maladie froide;" voy. O'Donovan, "Annals of the Four Masters," note à l'année 601, t. 1. p. 228.

² La mort subite est regardée comme le plus grand malheur, parce qu'elle ne laisse pas le temps de se confesser et de recevoir l'absolution de ses péchés.

"Ce fut peu de temps après cela qu'Aedh obtint la royauté d'Irlande et il donna des terres fertiles à Muira d'Othain.¹

"Comme le lecteur ne manquera pas de le remarquer, c'est par édification que l'annaliste, elere lui-même, raconte cette histoire. En effet, elle fait honneur à la piété du roi et elle prouve que 'le respect montré à l'Eglise . . . a obtenu sa récompense.' Ce qui vient des hommes de Dieu participe en effet au caractère sacré de Dieu qu'ils représentent.

"Si l'on cherchait à étendre cette enquête de scatologie hiératique on trouverait sans doute bien des croyances et des pratiques répugnantes à notre goût de civilisés, mais raisonnables en un sens quand on accepte le point de départ, quand on ne condamne pas la logique, et surtout quand on se rappelle que le dégoût pour les résidus de la digestion n'est devenu instinctif que pour la vie civilisée et les habitudes sociales. Les peuples qui ne se lavent pas doivent certainement sentir autrement que nous, et même ne pas sentir du tout ; et nos ancêtres de l'âge des cavernes n'avaient certainement l'odorat plus difficile. On assure que chez les Namas, tribu hottentote, le shaman qui célèbre un mariage asperge les conjoints de son urine. Cela remplace notre eau bénite. Le shaman est en effet 'un homme de Dieu,' par excellence ; car, lorsqu'il se livre à ces danses desordonnées qui sont une partie du culte, on croit que le dieu descend en lui, non en esprit, mais en réalité.

"C'est aussi le cas de rappeler un usage linguistique des habitants de Samoa dans la Polynésie. Lorsqu'une femme est sur le point d'accoucher, on adresse des prières au dieu ou génie de la famille du père et à celui de la famille de la mère. Quand l'enfant est né, la mère demande quel dieu on était en train de prier à ce moment. On en prend soigneusement note et ce dieu sera en quelque sorte le "patron" de l'enfant pendant le reste de sa vie.

"Par respect pour ce dieu, l'enfant est appelé son excrément et pendant son enfance on l'appelle réellement, comme 'petit-nom,' 'm — de Tongo,' ou de Satia, ou de tout autre dieu, suivant le cas. La formule est grossière, mais l'intention, sous une apparence tout matérielle, part d'un sentiment de respect et de piété à l'égard de la divinité.

The last two paragraphs of the above are taken from the work of the missionary Turner, who lived for seventeen years in the islands of

¹ O'Donovan, "Three Fragments of Irish Annals," Dublin, 1860, pp. 10-12. The bodies of Indian chiefs in Venezuela were incinerated, the ashes drunk in native liquor. "Tuestanlo, muelenlo, y echado en vino lo beben y esto es gran honra." — Gomara, "Historia de las Indias," p. 203.

Polynesia; they appear in his "Samoa," London, 1884, p. 79. But in the same book, issued under the title "Polynesia," London, 1861, it has been expunged.

The mother of the King of Uganda invited Speke to visit her and drink pombé, the native plantain wine; when she happened to spill some of this the servants "instantly fought over it, dabbing their noses on the ground, or grabbing it with their hands, that not one atom of the queen's favor might be lost; for everything must be adored that comes from royalty, whether by design or accident." (Speke, "Nile," London, 1863, vol. ii. p. 313.) This is the Grand Lama business over again and nothing else.

The people of Madagascar have an annual feast of the greatest solemnity, during which no cattle are allowed to be slaughtered; "which means that none can be eaten, as meat will not keep twenty-four hours in Madagascar." This festival is called "The Queen's Bath," and is arranged with much parade. "When the water was warm the queen stepped down and entered the curtained space. In a few moments salvos of artillery announced to the people that the queen was taking her bath. In a few minutes more she reappeared, sumptuously clothed with jewels. She carried a horn filled with the bath-water, with which she sprinkled the company." — (Evening Star," Washington, D. C., quoting from "Transcript," Boston, Massachusetts.)

That the ruler of a tribe or nation is in some manner connected with and representative of the deities adored by the tribe or nation, is a form of man-worship presenting its most perfect manifestation in the reverence accorded the Grand Lama; but no part of the world has been free from it, and among our own forefathers it obstinately held its ground in the opinion so long prevalent all over Europe that the touch of the king's hand would cure the scrofula. This remedial potency was also ascribed to women in a certain condition.

"Scrofulous sores were believed by some to be cured by the touch of a menstruating woman." — (Pliny, Bohn's edition, lib. 28, cap. 24.)

"The Hindu wife is in Paradise compared to the Hindu widow. The condition of the wife is bad enough. As the slave of her husband, she eats after he is through, and she eats what is left. She has no education to speak of, and her only hope of salvation is in him. She stands while he sits in the household; and she cannot, if she lives in the interior, go to the Ganges and bathe herself in the sacred water. I am told that in many cases she considers it a privilege to bathe her hus-

band's feet after he returns, and thinks that she gets some absolution from sin by drinking the water." — (Frank G. Carpenter, in "World," New York, June 30, 1889.)

"Pyrrhus, king of Epirus, possessed the power of curing individuals attacked by enlarged spleen by simply pressing his right foot upon that viscera." — ("The Physicians of the Middle Ages," T. C. Minor, M.D., Cincinnati, Ohio, 1889, p. 5. A translation of "Le Moyen Age Médicale," of Dr. Edmond Dupouy.)

X.

THE BACCHIC ORGIES OF THE GREEKS.

THE Bacchic orgies of the Greeks, while not strictly assimilated to the ur-orgies, can scarcely be overlooked in this connection.

Montfaucon describes the Omophagi of the Greeks : " Les Omophagies étoient une fête des Grecs qui passaient la fureur Bacchique ; ils s'entortilloient, dit Arnobe, de serpens et mangeoient des entrailles de Cabri crues, dont ils avaient la bouche toute ensanglantée ; cela est exprimée par le nom Omophage. Nous avons vu quelquefois des hommes tous entortillez de serpens et particulièrement dans Mithras." — (Montfaucon, " L'Antiquité expliquée," tome 2, book 4, p. 22.)

The references to serpent-worship are curious, in view of the fact that such ophic rites still are celebrated among the Mokis, the next-door neighbors of the Zuñis, and once existed among the Zuñis themselves. The allusion to *Mithras* would seem to imply that these orgies must have been known to the Persians as well as the Greeks.

Bryant, speaking of the Greek orgies, uses this language : " Both in the orgies of Bacchus and in the rites of Ceres, as well as of other deities, one part of the mysteries consisted in a ceremony (*omophagia*), at which time they ate the flesh quite crude with the blood. In Crete, at the Dionisiaca, they used to tear the flesh with their teeth from the animal when alive." — (Bryant, " Mythology," London, 1775, vol. ii. p. 12.)

And again, on p. 13 : " The Mænules and Bacchæ used to devour the raw limbs of animals which they had cut or torn asunder. . . . In the island of Chios it was a religious custom to tear a man limb from limb, by way of sacrifice to Dionysius. From all which we may learn one sad truth, that there is scarce anything so impious and unnatural as not, at times, to have prevailed." — (Idem.)

Faber tells us that : " The Cretans had an annual festival . . . in their frenzy they tore a living bull with their teeth, and brandished serpents in their hands." — (Faber, " Pagan Idolatry," London, 1816, vol. ii. p. 265.)

BACCHIC ORGIES IN NORTH AMERICA.

These orgies were duplicated among many of the tribes of North America. Paul Kane describes the inauguration of Clea-clach, a Clallum chief (northwest coast of British America): "He seized a small dog and began devouring it alive." He also bit pieces from the shoulders of the male by-standers. — (See "Artist's Wanderings in North America," London, 1859, p. 212; also, the same thing quoted by Herbert Spencer in "Descriptive Sociology.")

Speaking of these ceremonies, Dr. Franz Boas says: "Members of tribes practising the Hamatsa ceremonies show remarkable scars produced by biting. At certain festivals it is the duty of the Hamatsa to bite a piece of flesh out of the arms, leg, or breast of a man." ("Report on the North-Western Indians of Canada," in "Proceedings of the British Association for the Advancement of Science," Newcastle-upon-Tyne Meeting, 1889, p. 12.) Doctor Boas demonstrates that the actions of the Hamatsa are an example of Ritualistic Cannibalism. (See *idem*, p. 55.) And, speaking of the secret societies observed among the Indians of the British northwest coast, he remarks that each has its own ceremonies. "The Nutlematl must be as filthy as possible." — (*Idem*, p. 54.)

"Bernardin de Saint Pierre, in his '*Études de la Nature*' gives it as his opinion that to eat dog's-flesh is the first step towards cannibalism, and certainly, when I enumerate to myself the peoples whom I visited who actually, more or less, devoured human flesh, and find that among them dogs were invariably considered a delicacy, I cannot but believe that there is some truth in the hypothesis." (Schweinfurth, "Heart of Africa," London, 1872, vol. i. p. 191.) The Clallums, no doubt, in their frenzies, tore dogs to pieces as a substitute for the human victim of an earlier period in their culture.

Bancroft describes like orgies among the Chimsyans, of British North America. (See in "Native Races of the Pacific Slope," vol. i. p. 171.) While the Nootkas medicine men are said to have an orgy in which "live dogs and dead human bodies are seized and torn by their teeth; but, at least in later times, they seem not to attack the living, and their performances are somewhat less horrible and bloody than the wild orgies of the Northern tribes." — (*Idem*, vol. i. p. 202.)

The Haidahs, of the same coast, indulge in an orgy in which the performer "snatches up the first dog he can find, kills him, and tearing pieces of his flesh, eats them." — (Dall, quoting Dawson, in "Masks

and Labrets," Annual Report of the Bureau of Ethnology, Washington, D. C., 1886.)

In describing the six secret soldier societies or bands of the Mandans, Maximilian, of Wied, calls attention to the three leaders of one band, who were called dogs, who are "obliged, if any one throws a piece of meat into the ashes or on the ground, saying, 'There, dog, eat,' to fall upon it and devour it raw, like dogs or beasts of prey." — (Maximilian, Prince of Wied, "Travels," &c., London, 1843, pp. 356, 446.)

A further multiplication of references is unnecessary. The above would appear to be enough to establish the existence of almost identical orgies in Europe, America, and Asia — orgies in which were perpetuated the ritualistic use of foods no longer employed by the populace, and possibly commemorating a former condition of cannibalism.

THE SACRIFICE OF THE DOG A SUBSTITUTION FOR HUMAN SACRIFICE.

It would add much to the bulk of this chapter to show that the dog has almost invariably been employed as a substitute for man in sacrifice. Other animals have performed the same vicarious office, but none to the same extent, especially among the more savage races. To the American Indians and other peoples of a corresponding stage of development, the substitution presents no logical incongruity. Their religious conceptions are so strongly tinged with *zoölatry* that the assignment of animals to the rôle of deities or of victims is the most natural thing in the world; but their belief is not limited to the idea that the animal is sacred; it comprehends, additionally, a settled appreciation of the fact that *lycanthropy* is possible, and that the medicine-men possess the power of transforming men into animals or animals into men. Such a belief was expressed to the writer in the most forcible way, in the village of Zúñi, in 1881. The Indians were engaged in some one of their countless dances and ceremonies (and possibly not very far from the time of the urine dance), when the dancers seized a small dog and tore it limb from limb, venting upon it every torture that savage spite and malignity could devise. The explanation given was that the hapless cur was a "Navajo," a tribe to which the Zúñis have been spasmodically hostile for generations, and from whose ranks the fortunes of war must have enabled them to drag an occasional captive to be put to the torture and sacrificed.

Mrs. Eastman describes the "Dog Dance" of the Sioux, in which the dogs represented Chippewas, and had their hearts eaten raw by the Sioux.

XI.

POISONOUS MUSHROOMS USED IN UR-ORGIES.

THE Indians in and around Cape Flattery, on the Pacific coast of British North America, retain the urine dance in an unusually repulsive form. As was learned from Mr. Kennard, U. S. Coast Survey, whom the writer had the pleasure of meeting in Washington, D. C., in 1886, the medicine men distil, from potatoes and other ingredients, a vile liquor, which has an irritating and exciting effect upon the kidneys and bladder. Each one who has partaken of this dish immediately urinates and passes the result to his next neighbor, who drinks. The effect is as above, and likewise a temporary insanity or delirium, during which all sorts of mad capers are carried on. The last man who quaffs the poison, distilled through the persons of five or six comrades, is so completely overcome that he falls in a dead stupor.

Precisely the same use of a poisonous fungus has been described among the natives of the Pacific coast of Siberia, according to the learned Dr. J. W. Kingsley (of Brome Hall, Scole, England). Such a rite is outlined by Schultze. "The Shamans of Siberia drink a decoction of toad-stools or the urine of those who have become narcotized by that plant." — (Schultze, "Fetichism," New York, 1885, p. 52.)

The Ur-Orgy of the natives of Siberia should be found fully described by explorers in the employ of the Russian Government. Application was accordingly made by the author to the Hon. Lambert Tree, the American Minister at the Court of St. Petersburg, who evinced a warm interest in the work of unearthing from the Imperial archives all that bore upon the use of the mushroom as a urino-intoxicant. Unfortunately, the official term of Mr. Tree having expired, no information was obtained from him in time for incorporation in these pages.

Acknowledgment is due in this connection to Mr. Wurtz, the American Chargé d'Affaires at St. Petersburg, as well as to his Excellency the Russian Minister of Public Instruction, for courteous interest

manifested in the investigations made necessary by the amplification of the original pamphlet.

Conferences were also had with his Excellency the Chinese Minister and with Dr. H. T. Allen, Secretary of the Korean Legation, in Washington, but beyond developing the fact that in the minor medicine of those countries resort was still had to excrementitious curatives, the information deduced was meagre and unimportant.

Dependence was therefore necessarily placed upon the accounts of American or English explorers of undisputed authority.

George Kennan describes a wedding which he saw in one of the villages of Kamtchatka: "After the conclusion of the ceremony we removed to an adjacent tent, and were surprised as we came out into the open air to see three or four Koraks shouting and reeling in an advanced stage of intoxication, — celebrating, I suppose, the happy wedding which had just transpired. I knew that there was not a drop of alcoholic liquor in all Northern Kamtchatka, nor, so far as I knew, anything from which it could be made, and it was a mystery to me how they had succeeded in becoming so suddenly, thoroughly, hopelessly, undeniably drunk. Even Ross Browne's beloved Washoe, with its 'howling wilderness' saloons, could not have turned out more creditable specimens of intoxicated humanity than those before us.

"The exciting agent, whatever it might be, was certainly as quick in its operation and as effective in its results as any 'tanglefoot' or 'bottled lightning' known to modern civilization.

"Upon inquiry, we learned to our astonishment that they had been eating a species of the plant vulgarly known as 'toadstool.' There is a peculiar fungus of this class in Siberia, known to the natives as 'muk-a-moor,' and as it possesses active intoxicating properties, it is used as a stimulant by nearly all the Siberian tribes.

"Taken in large doses, it is a violent narcotic poison, but in small doses it produces all the effects of alcoholic liquor.

"Its habitual use, however, completely shatters the nervous system, and its sale by Russian traders to the natives has consequently been made a penal offence by the Russian law. In spite of all prohibitions the trade is still secretly carried on, and I have seen twenty dollars' worth of furs bought with a single fungus.

"The Koraks would gather it for themselves, but it requires the shelter of timber for its growth, and is not to be found on the barren steppes over which they wander; so that they are obliged for the most part to buy it at enormous prices from the Russian traders. It may

sound strangely to American ears, but the invitation which a convivial Korak extends to his passing friend is not 'Come in and have a drink,' but 'Won't you come in and take a toadstool?' — not a very alluring proposal perhaps to a civilized toper, but one which has a magical effect upon a dissipated Korak. As the supply of these toadstools is by no means equal to the demand, Korak ingenuity has been greatly exercised in the endeavor to economize the precious stimulant and make it go as far as possible.

"Sometimes in the course of human events it becomes imperatively necessary that a whole band should get drunk together, and they have only one toadstool to do it with. For a description of the manner in which this band gets drunk collectively and individually upon one fungus, and keeps drunk for a week, the curious reader is referred to Goldsmith's 'A Citizen of the World,' Letter 32.

"It is but just to say, however, that this horrible practice is almost entirely confined to the settled Koraks of Penzshink Gulf, — the lowest, most degraded portion of the whole tribe. It may prevail to a limited extent among the wandering natives, but I never heard of more than one such instance outside the Penzshink Gulf settlements." — ("Tent Life in Siberia," George Kennan, New York and London, 1887, pp. 202-204.)

Oliver Goldsmith speaks of "a curious custom" among "the Tartars of Koraki. . . . The Russians who trade with them carry thither a kind of mushroom. . . . These mushrooms the rich Tartars lay up in large quantities for the winter; and when a nobleman makes a mushroom feast all the neighbors around are invited. The mushrooms are prepared by boiling, by which the water acquires an intoxicating quality, and is a sort of drink which the Tartars prize beyond all other. When the nobility and ladies are assembled, and the ceremonies usual between people of distinction over, the mushroom broth goes freely round, and they laugh, talk *double-entendres*, grow fuddled, and become excellent company. The poorer sort, who love mushroom broth to distraction as well as the rich, but cannot afford it at first hand, post themselves on these occasions round the huts of the rich, and watch the opportunity of the ladies and gentlemen as they come down to pass their liquor, and holding a wooden bowl, catch the delicious fluid, very little altered by filtration, being still strongly tinctured with the intoxicating quality. Of this they drink with the utmost satisfaction, and thus they get as drunk and as jovial as their betters.

“ ‘ Happy nobility ! ’ cried my companion, ‘ who can fear no diminution of respect unless seized with strangury, and who when drunk are most useful ! Though we have not this custom among us, I foresee that if it were introduced, we might have many a toad-eater in England ready to drink from the wooden bowl on these occasions, and to praise the flavor of his lordship’s liquor. As we have different classes of gentry, who knows but we may see a lord holding the bowl to the minister, a knight holding it to his lordship, and a simple squire drinking it double-distilled from the loins of knighthood ? ’ ” — (Oliver Goldsmith, “ Letters from a Citizen of the World,” No. 32. This is based upon Philip Van Stralensburgh’s “ Histori-Geographical Description of the North and Eastern Part of Europe and Asia,” London, 1736, p. 397.)

“ The *Amanita muscaria* possesses an intoxicating property, and is employed by Northern nations as an inebriant. The following is the account of Langsdorf, as given by Greville : —

“ This variety of *Amanita muscaria* is used by the inhabitants of the northeastern parts of Asia in the same manner as wine, brandy, arrack, opium, etc., is by other nations. Such fungi are found most plentifully about Wischna, Kamtchatka, and Willowa Derecona, and are very abundant in some seasons, and scarce in others. They are collected in the hottest months, and hung up by a string to dry in the air ; some dry themselves on the ground, and are said to be far more narcotic than those artificially preserved. Small, deep-colored specimens, deeply covered with warts, are also said to be more powerful than those of a larger size and paler color.

“ The usual mode of taking the fungus is to roll it up like a bolus and swallow it without chewing, which the Kamtchkadales say would disorder the stomach.

“ It is sometimes eaten fresh in soups and sauces, and then loses much of its intoxicating property. When steeped in the juice of the berries of the *Vaccinium uliginosum*, its effects are those of a strong wine. One large and two small fungi are a common dose to produce a pleasant intoxication for a whole day, particularly if water be drunk after it, which augments the narcotic principle.

“ The desired effect comes in from one to two hours after taking the fungus. Giddiness and drunkenness result in the same manner as from wine or spirits ; cheerful emotions of the mind are first produced, the countenance becomes flushed, involuntary words and actions follow, and sometimes at last an entire loss of consciousness. It renders

some remarkably active, and proves highly stimulating to muscular exertion. By too large a dose violent spasmodic effects are produced. So very exciting to the nervous system in some individuals is this fungus that the effects are often very ludicrous. If a person under its influence wishes to step over a straw or a small stick, he takes a stride or a jump sufficient to clear the trunk of a tree. A talkative person cannot keep silence or secrets, and one fond of music is perpetually singing.

"The most singular effect of the *Amanita* is the influence it possesses over the urine. It is said that from time immemorial the inhabitants have known that the fungus imparts an intoxicating quality to that secretion, which continues for a considerable time after taking it. For instance, a man moderately intoxicated to-day will by the next morning have slept himself sober; but (as is the custom) by taking a cup of his urine he will be more powerfully intoxicated than he was the preceding day. It is therefore not uncommon for confirmed drunkards to preserve their urine as a precious liquor against a scarcity of the fungus.

"The intoxicating property of the urine is capable of being propagated, for every one who partakes of it has his urine similarly affected. Thus with a very few *Amanitæ* a party of drunkards may keep up their debauch for a week. Dr. Langsdorf mentions that by means of the second person taking the urine of the first, the third of the second, and so on, the intoxication may be propagated through five individuals." — (English Cyclop., London, 1854, vol ii., "Natural History," article "Fungi." London: Bradbury and Evans.)

"They make feasts when one village entertains another, either upon account of a wedding, or having had a plentiful fishing or hunting. The landlords entertain their guests with great bowls of oponga, till they are all set a-vomiting; sometimes they use a liquor made of a large mushroom, with which the Russians kill flies. This they prepare with the juice of epilobium or French willow. The first symptom of a man being affected with this liquor is a trembling in all his joints, and in half an hour he begins to rave as if in a fever; and is either merry or melancholy mad according to his peculiar constitution. Some jump, dance, and sing; others weep and are in terrible agonies, a small hole appearing to them as a great pit, and a spoonful of water as a lake; but this is to be understood of those who take it to excess; for, taken in small quantity, it raises their spirits, and makes them brisk, courageous, and cheerful.

"It is observed whenever they have eaten of this plant, they maintain that whatever foolish things they did, they only obeyed the commands of the mushroom; however, the use of it is so dangerous that unless they were well looked after, it would be the destruction of numbers of them. The Kamtchadales do not much care to relate these drunken frolics, and perhaps the continual use of it renders it less dangerous to them. One of our Cossacks resolved to eat of this mushroom in order to surprise his comrades, and this he actually did; but it was with great difficulty they preserved his life. Another of the inhabitants of Kamtchatka, by the use of this mushroom, imagined that he was upon the brink of hell ready to be thrown in, and that the mushroom ordered him to fall on his knees and make a full confession of all the sins he could remember, which he did before a great number of his comrades, to their no small diversion. It is related that a soldier of the garrison, having eaten a little of this mushroom, walked a great way without any fatigue; but at last, having taken too great a quantity, he died.

"My interpreter drank some of this juice without knowing of it, and became so mad that it was with difficulty we kept him from ripping open his belly, being, as he said, ordered to do so by the mushroom.

"The Kamtchadales and the Koreki eat of it when they resolve to murder anybody; and it is in such esteem among the Koreki that they do not allow any one that is drunk with it to make water upon the ground, but they give him a vessel to save his urine in, which they drink; and it has the same effect as the mushroom itself.

"None of this mushroom grows in their country, so that they are obliged to purchase it of the Kamtchadales. Three or four of them are a moderate dose, but when they want to get drunk they take ten. The women never use it, so that all their merriment consists in jesting, dancing, and singing."—"The History of Kamtchatka and the Kurile Islands," by James Grieve, M. D., Gloucester, England, 1764, pp. 207-209.)

"I do not think that the urine would keep very long, and decomposition would destroy the Amanitine, which I believe to be the intoxicating principle. If I remember aright, it has been obtained as an alkaloid."—(Personal letter from Dr. J. W. Kingsley, Cambridge, England, dated Aug. 18, 1888.)

"If the Yakut was a good and loving spouse, he would go directly home and eject the contents of his stomach into a vessel of water, which then he placed out of doors to cool and collect; and from the

rich, floating vomit his wife and children would afterwards enjoy a hearty meal. The lucky possessor of a stomach full of Vodki may, in a benevolent mood, similarly dispose of a part of his repletion, minus the water, and away to the Eastward, among the Tchuchees, families are often regaled even to inebriation with the natural fluid discharge from the bodies of fortunate tipplers. . . . Saving the natives themselves it is their most disgusting institution, and if any Christian missionary be earnestly seeking a fresh field to labor in, I can assure him that no soil is more desperately in need of cultivation than the Tchuchee Country." — ("In the Lena Delta," George W. Melville, Chief Engineer, U. S. Navy, Boston, Massachusetts, 1885, page 318.)

"*Amanita muscaria* has been employed as fly-poison, whence its vulgar name. M. Poquet states that climate does not modify its poisonous qualities. The Czar Alexis died from eating it, yet the Kamtchatkans eat it, or are said to do so, as also the Russians. In Siberia, it is used as an intoxicating agent. Cook says it is taken as a bolus, and that its effects combine those produced by alcohol and haschish. The property is imparted to the fluid secretion (urine) of rendering it intoxicating, which property it retains for a considerable time. A man, having been intoxicated on one day and slept himself sober the next, will, by drinking this liquor to the extent of about a cupful, become as much intoxicated as he was before. . . . Urine is preserved in Siberia to this end. . . . The intoxicating property may be communicated to any person who partakes . . . to the third, fourth, and even fifth distillation." — (M. C. Cook, "British Fungi," London, 1882, pp. 21, 22.)

Henry Lamsdell ("Through Siberia," London, 1882, vol. ii. p. 645) describes the "fly agaric." He says that it is used by the Koraks to produce intoxication. "So powerful is the fungus that the native who eats it remains drunk for several days; and by a process too disgusting to be described, half a dozen individuals may be successively intoxicated by the effects of a single mushroom, each in a less degree than his predecessor."

"The Koraks prepare the 'muk-a-moor' by steeping it. In a few minutes the fortunate ones get thoroughly intoxicated, and imbibe to such an extent that they are forced to relieve themselves of the superfluity, on which occasions the poorer people stand prepared with bowls to catch the liquid, which they quaff, and, in turn, become intoxicated. In this manner, a whole settlement will sometimes get drunk from liquor consumed by one individual." — (Richard J. Bush, "Reindeer Dogs and Snow-Shoes," London, no date, p. 357.)

Salverte gives two pages to a description of the effects of the "fly agaric" or "much-more" of the Russians; he shows how it leads men to the commission of murder, suicide, and other excesses, but makes no allusion to the drinking of urine, although he quotes from Gmelin, Krachenninikof and Beniowski, all of whom must have had some acquaintance with its peculiar properties. According to Salverte the use of this fungus might well be referred to the category of Sacred Intoxicants. — (See "Philosophy of Magic," Eusèbe Salverte, New York, 1862, vol. ii. pp. 19, 20.)

"Before the conquest, they seldom used anything for drink but water, but when they made merry they drank water which had stood for some time upon mushrooms; but of this more hereafter." — ("History of Kamtchatka and the Kurile Islands," James Grieve, M. D., Gloucester, England, 1764, p. 195.)

See previous citation from the same author.

A mere reference to the trade carried on by the Russians and Kamtchadales with the Koraks in *Agaricus muscarius* is to be found in "Langsdorf's Voyages," London, 1814, vol. ii. p. 318. "It is said that the sort of mushroom which they procure from Kamtchadales is preferred by them as a means of exhilaration or intoxication to brandy." (Idem, p. 320.) He adds: "Some remarks of mine upon this subject will be found in the Annals of the Society for promoting the Knowledge of Natural History." — (Idem, p. 321.)

"The use of the intoxicating fungus in Siberia, and that of the urine flavored by it, is mentioned in Steller's 'History of Kamtchatka,' which is, I believe, the earliest and best authority in reference to it." — (Personal letter from Hon. John S. Hittell, San Francisco, April 24, 1888.)

Although Grieve's account is, in the main, derived from Steller, every effort was made to find the latter author and examine his own language. The copy belonging to the Library of Congress had been mislaid, and it was not possible to find it; but the extensive Arctic Library of General A. W. Greely, U. S. Army, the polar explorer, was most kindly placed at the author's disposal, and there the long-coveted volume was, translated by Mr. Bunnemeyer, to whom the warmest acknowledgments are due.

George William Steller was born March 10, 1709, at Winsheim. In 1734, he went to Russia, where he became an adjunct and member of The Imperial Academy of Sciences. In 1758, he was delegated to explore Kamtchatka, especially its natural history. After

completing the task and making voyages to various other regions, he attempted twice to return to St. Petersburg, but each time received orders to return to Irkutsk to answer charges there brought against him. He did not reach Irkutsk the second time, but was frozen to death while his guard entered a way-side inn, and was buried at Tumen, in November, 1746. The following are his remarks about poisonous mushrooms: "Among the Champignons, the poisonous toad-stool, called mucha-moor in Russian, is held in greatest esteem. At the Russian ostrag it has long ago fallen into disfavor, but is used so much the more in the vicinity of the Tzil and towards the Korakian boundary. This mushroom is dried and swallowed in large pieces without mastication, followed by large draughts of cold water. In the course of half an hour, raging drunkenness and strange hallucinations result. The Korakians and Jukagiri are still more addicted to this vice, and buy the fungus from the Russians whenever they can. Those too poor to do so collect the urine of those under the influence of the drug and drink it, which makes them equally as drunk and raging.

"The urine is equally effective to the fourth and fifth man. Reindeer frequently devour these mushrooms with great avidity, becoming drunk and wild, and finally fall into a deep sleep. When found in this state, it is not killed until the effects of the drug have passed away, as otherwise its meat when eaten will cause the same frenzied intoxication as the mushroom itself."

"The dance and custom you describe as existing among the Siberians I know nothing of. I neither saw nor heard of it. I do not think there is any of the mushroom species in the Tchuktchi country. The land is absolutely barren. I lived in the tents of that people for seven or eight months, and they never paid any attention to me as a stranger, in the way of hiding their customs from me. They would have their drumming and medicine performances before me, just as though I was one of them. The custom you allude to may prevail among the Yakouts and Tchuktchi, nevertheless, but I think it more probable that it exists with the Northwest tribes, such as the Samoyeds or Osjaks." — (Personal letter from the Arctic explorer, W. H. Gilder, author of "Schwatka's Search," etc., dated New York, Oct. 15, 1889.)

"Captain Healey, of the revenue cutter 'Bear,' brought to this place, last autumn, a shipwrecked seaman, who had been rescued by the Siberian Tchuktchis, with whom he remained some two years.

He described their mode of making an intoxicating liquor thus: in the summer, mushrooms or fungi were collected in large quantity, and eaten by a man who, like our Indians, prepared himself by fasting for the feast. After eating enormous quantities of the fungi, he vomited into a receptacle, and again loaded up, time and again, and disgorged the stuff in a semi-fermented or half-digested condition. It was swallowed by those who were waiting for the drink; and his urine was also imbibed, to aid in producing a debauch, resulting in frenzied intoxication." — (Personal letter from Surgeon B. J. D. Irwin, U. S. army, dated San Francisco, Cal., April 28, 1888.)

"The seaman, J. B. Vincent, whom I found with the Tchuktchi last summer, says that they collect in their tents a species of fungi, and during their carnival season, corresponding to about our Christmas holidays, one man is selected, who masticates a quantity of it, and drinks an enormous supply of water; he then gets into his deer's team, and is driven from camp to camp, repeating the mastication and drinking at each camp, where his urine is drunk by the people with an effect of intoxication. The arrival of this man is hailed with much pomp and ceremony by the people. The seaman, Vincent, witnessed several of these ceremonies, and was pressed to join in the orgies, being called 'a boy,' when he declined to sustain his part." — (Personal letter from Capt. M. A. Healey, U. S. R. M. Steamer "Bear," dated San Francisco, Cal., May 19, 1888.)

Kamtchadales. — "These people formerly had no other drink than water, and to make themselves a little lively they used to drink an infusion of mushrooms." — ("From Paris to Peking," Meignan, London, 1885, p. 281.)

D'Auteroche, who made a journey from St. Petersburg to Tobolsk in Siberia, in compliance with an invitation from the Empress Catherine, in the middle of the last century, to observe the transit of Venus, makes no mention of the mushroom-orgies of the natives. His work was not of much value, in an ethnological sense, being largely restricted to descriptions of the mineral resources of the regions traversed, and only to a slight degree attending to the ethnology of the country.

It is strange that Maltebrun, although familiar with Steller, does not refer to the mushroom orgy. He does say of the Kamtchadales: "In summer, the women go into the woods to gather vegetables, and during this occupation they give way to a libertine frenzy like that

of the ancient Bacchantes." — ("Universal Geography," American edition, Boston, Mass., 1847, vol. i. p. 347, article "Siberia.")

Stanley's "Congo," New York, 1885, was examined carefully, but no reference to any use of urine or ordure was found in it.

An identical experience was had with the "Voyages" of John Struys, translated out of the Dutch, by John Morrison, London, 1683, and with Nordjenskold's Voyages, translated by Horgaard, London, 1882.

As the two latter travellers had entered Siberia, it seemed probable that they might have come upon traces of the Ur-orgies of some of the wild tribes like the Koraks, Tchuktchi, and others.

Salverte's opinion that this use of the mushroom may be included in the category of Sacred Intoxicants, is shown to be accurate by a comparison with the statement made by the shipwrecked sailor, Vincent, who undoubtedly may be accepted as the most competent witness who has ever presented himself.

According to him, there was a man "selected," who "prepared himself by fasting;" the "feast" took place "during their carnival season," "corresponding to about our Christmas holidays" (i. e., the winter solstice), and there was much attendant "pomp and ceremony." Add to this the statement made by Grieve, "they maintain that whatever foolish things they did, they only obeyed the commands of the mushroom," and we have the needed Personification to prove that the fungus was revered as a deity, much as on another page will be shown that certain African tribes apotheosized a member of the same vegetable family.

If not for Sacred Intoxication, then the question may be asked, For what reason did the Siberians and others use the poisonous fungus? The only answer possible is, that, in the absence of the cereals and under the pressure of a desire for stimulants, the aborigines resorted to all kinds of vegetable substances, as can be shown to have been the case from the history of many nations. Mythology is replete with examples of the occult virtues of plants, such as the mandrake and many others.

Certainly, the religious veneration with which they were regarded was not more fully deserved than by this wonderful toxic, — the *Amanita muscaria*. The thirst for stimulants has been very generally diffused all over the world; there is no reason to believe that any tribe has existed without an occasional use of something of the kind.

According to the Chinese, an alcoholic liquor called "Tsew" was

invented by Etoih, in the reign of To-ke, 2197 before the Christian era. See "Chinese Repository," Canton, 1841, vol. x. p. 126.

Mr. John McElhone, the stenographer of the House of Representatives and a scholar of no mean attainments, stated to the author that he remembered having read in an old volume, the name of which he could not recall, of a feast given some centuries ago at the coronation of one of the kings of Hungary, at which the nobles were regaled with the rarest wines, but the plebeians were content to drink the resulting urine. There may be in Hungary, whether we regard it as peopled by the Hun-oi, or, later, by the Turkish element, an infusion of the same race-traits as are to be found at this day in Kamtchatka and other portions of Siberia.

Salverte speaks of the intoxicating effects of the "muk-a-moor," but enters into no particulars. (See "Philosophy of Magic," Eusebe Salverte, New York, 1882, vol. ii. p. 19.)

The people of Kamtchatka make intoxicants out of certain herbs. (Steller, "Kamtchatka," translated by Mr. Bunnemeyer.) And we are further told that, while the people are gathering these herbs, much prostitution prevails, and everywhere there are willing girls in the grass.

"The settled Koraks" of Kamtchatka, "eat the intoxicating Siberian toadstool in inordinate quantities; and this habit alone will in time debase and brutalize any body of men to the last degree." — ("Tent Life in Siberia," George Kennan, twelfth edition, New York, 1887, p. 233.)

No allusion to the use of mushrooms as an intoxicant can be found in Sauer, "Expedition to the North Parts of Russia," London, 1862. Henry Seebohm ("Siberia in Asia," London, 1882) makes no mention of the urine-orgies of the inhabitants.

THE MUSHROOM DRINK OF THE BORGIE WELL.

The following paragraph deserves more than a passing mention:—

"The Borgie well, at Cambuslang, near Glasgow, is credited with making mad those who drink from it; according to the local rhyme,

‘ A drink of the Borgie, a bite of the weed,
Sets a’ the Cam’slang folk wrang in the head.’

The weed is the weedy fungi." — ("Folk-Medicine," Black, London, 1883, p. 104.)

Camden says that the Irish "delight in herbs, . . . especially cresses, mushrooms, and roots." — ("Britannia," edition of London, 1753, vol. ii. p. 1422.)

Other references to the Siberian fungus are inserted to afford students the fullest possible opportunity to understand all that was available to the author himself on this point.

"*Agaricus muscarius* is one of the most injurious, yet it is used as a means of intoxication by the Kamtchadales. One or two of them are sufficient to produce a slight intoxication, which is peculiar in its character. It stimulates the muscular powers and greatly excites the nervous system, leading the partakers into the most ridiculous extravagances." — (American Cyclopædia, New York, 1881, article "Fungi.")

Agaricus muscarius. "This is the 'mouche-more' of the Russians, Kamtchadales, and Koriars, who use it for intoxication. They sometimes eat it dry, and sometimes immerse it in a liquor made with the epilobium, and when they drink this liquor they are seized with convulsions in all their limbs, followed by that kind of raving which attends a burning fever. They personify this mushroom, and if they are urged by its effects to suicide or any dreadful crime, they pretend to obey its commands. To fit themselves for premeditated assassination they recur to the use of the 'mouche-more.' A powder of the root, or of that part of the stem which is covered by the earth, is recommended in epileptic cases, and externally applied for dissipating hard, globular swellings and for healing ulcers." — (Cyclopædia, Philadelphia, no date, Samuel Bradford, vol. i. article "Agaric.")

"One of the most poisonous species of the genus is the 'fly agaric,' so named because the fungus is often steeped and the solution used for the destruction of the house-fly. . . . It is as attractive and as poisonous as it is beautiful. In Kamtchatka, it is highly prized for its poisonous properties, producing, as it does, in the eater a peculiar intoxication. The fungus is gathered and dried; and when a native wishes to engage in a debauch, he has but to swallow a piece, when in a few hours he will be in his glory." — (Johnson's New Universal Cyclopædia, New York, 1878, article "Mushroom.")

Poisonous fungi. "Several of this natural order are poisonous, especially those belonging to the genera *Amanita* and *Agaricus*. . . . The sufferers are often relieved by vomiting." — (Encyclopædia Britannica, edition of 1841, article "Medical Jurisprudence," vol. xiv. pp. 506, 507.) Speaking of the poisonous fungi, the same authority says:

"The effects are singularly various, . . . among them being giddiness, confusion, delirium, stupor, coma, and convulsions." — (Idem, vol. xviii. p. 178, article "Poison.")

"The boletus mentioned by Juvenal on account of the death of the Emperor Claudius." — (Cyclopædia, Philadelphia, no date, vol. xxv. article "Mushroom.")

There are several allusions to the custom of poisoning with mushrooms to be found in Juvenal, — for example, in the first and fifth satires.

Tacitus says that when Claudius was poisoned the poison "was poured into a dish of mushrooms." — ("Annals," Oxford translation, Bohn, London, 1871, lib. 12.)

After the Emperor Claudius had been poisoned by mushrooms given by his wife Messalina, the Emperor Nero, his successor, was wont to call the boletus "the food of the gods." (See footnote to Rev. Lewis Evans's translation of the sixth satire of Juvenal, p. 64, edition of New York, 1860, citing Suetonius's "Nero" Tacitus's "Annals," and Martial's "Epigrams," I. epistle XXI.)

Plutarch says that it was a common opinion that "thunder engenders mushrooms." — ("Morals," Goodwin's English edition, Boston, 1870, vol. iii. p. 298.)

Gilder, who crossed over Siberia from Behring's Straits to St. Petersburg, stopping *en route* with many of the wild tribes, makes no allusion to the use of the "muck-a-moor" or to any Ur-orgy. (See "Ice-pack and Tundra," New York, 1883.)

"The *Agaricus muscarius* is used by the natives of Kamtchatka and Korea to produce intoxication." — (Ure's "Dictionary of Arts, Manufactures, and Mines," London, 1878, vol. ii. article "Fungi.")

"Their reputation as aphrodisiacs is thought to be unfounded, having its origin in the old doctrine of resemblances." (American Cyclopædia, New York, 1881, article "Fungi.") Probably from the appearance of the "phallus" fungus.

There seems to have been some superstition attaching to the elder dating from very remote times. It is said in Gerrard's "Herbal," Johnson's edition, page 1428, "that the *arbor Judæ* is thought to be that whereon Judas hanged himself, and not upon the elder-tree, as is vulgarly said." I am clear that the mushrooms or excrescences of the elder-tree, called *auriculæ Judæ* in Latin, and commonly rendered "Jew's-ears," ought to be translated "Judas's-ears," from the popular superstition above mentioned. Coles, in his "Adam in Eden," speak-

ing of "Jew's-ears," says: "It is called in Latin *Fungus Sambucinum* and *Auriculæ Judæ*, some having supposed the elder-tree to be that whereon Judas hanged himself, and that ever since these mushrooms like unto ears have grown thereon, which I will not persuade you to believe." In "Paradoxical Assertions," is a silly question, — "why Jews are said to stink naturally. Is it because the 'Jew's ears' grow on stinking elder, which tree the fox-headed Judas was supposed to have hanged himself on, so that natural stink hath been entailed on them and their posterity as it were *ex traduce*?" The elder seems to have been given in the time of Queen Elizabeth as a token of disgrace. It was credited with the power to cure epilepsy, to strengthen the loins of men, especially in riding, as it prevented all gall and chafing, etc., and had additionally the property of making horses stale." — (Brand, "Popular Antiquities," London, 1872, vol. iii. p. 283, article "Physical Charms.")

Sambucus (elder) is mentioned by Frommann as a remedy for epilepsy. — ("Tractatus de Fascinatione," Nuremberg, 1675, p. 270.)

Have we not a right to inquire why in primitive pharmacy certain remedies were employed? The principle of *similia similibus* is very old and deeply rooted. Perhaps the fungus of the elder may have once been employed in inducing intoxication and frenzy.

"The Ostiaks, the Kamtchadales, and other inhabitants of Asiatic Russia, find in one of the gild-bearing family — the *Amanita muscaria* — the exhilaration and madness that more civilized nations demand and receive of alcohol, and enjoy a narcotism from its extracts as seductive as that of opium. The Fiji Islanders are indebted to toadstools strung on a string for girdles which alone prevent them from being classed among the 'poor and naked,' and their sole æsthetic occupation lies in ornamenting their limited wardrobe. The Fiji fishermen especially value them highly because they are water-proof. Cerdier tells us that the negroes on the west coast of Africa exalt a certain kind of boletus to the sacredness of a god, and bow down in worship before it; for this reason Afzeltus has named this variety *boletus sacer*. A French chemist has extracted wax from the milk-giving kind, but has not stated the price of candles made from it. Others of the delving fraternity have shown that toadstools may be used in the manufacture of Prussian blue instead of blood, for, like certain animal matter, they furnish prussic acid. As fungi, after the manner of all animal life, breathe oxygen and throw off carbonic acid gas, their flesh partakes of animal rather than of vegetable nature.

"In their decomposition they are capital fertilizers of surrounding plants, and in seasons when they are plentiful it will repay the agriculturist to make use of them as manure.

"According to Linnæus, the Lapps delighted in the perfume of some species, and carried them upon their persons so that they might be the more attractive. Linnæus exclaims, 'O Venus! thou that scarcely sufficest thyself in other countries with jewels, diamonds, precious stones, gold, purple, music, and spectacle, art here satisfied with a simple toadstool!'

"A variety of boletus—a tube-bearing species—is powdered, and used as a protector of clothing against insects. The *Agaricus muscarius* constitutes a well-known poison to the common house-fly. It intoxicates them to such a degree that they can be swept up and destroyed.

"Certain polypori—those large, dry, corky growths found upon logs and trees—when properly seasoned, sliced, and beaten, engage large manufactories in producing from them the punk of commerce, used by the surgeon for the arrest of hemorrhage, the artist for his shading stump, and the Fourth of July urchin for his pyrotechnic purposes. A species of polyporus is used in Italy as scrubbing brushes. In countries where fire-producing is unknown or laborious, and the luxury of lucifers denied, the dried fungus enables the transportation of fire from one place to another over great distances.

"The inhabitants of Franconia use the hammered slices instead of chamois-skin for underclothing.

"Another polyporus takes its place among manufacturers as the highly necessary razor-strop. Northern nations make bottle-stoppers of them, as their corky nature suggests. The polyporus of the birch-tree (*Polyporus betulinus*) increases the delight of smokers by its delicious flavor when mixed with tobacco."—(Lippincott's Magazine, Philadelphia, Penn., 1888.)

Before going further we are confronted with the statement that the African negroes bow down in worship before a certain kind of boletus. It is much to be regretted that Cerdier did not discover for what toxic or other property it was thus apotheosized.

Similarly, scholars cannot remain satisfied with the assurance that the Fiji Islanders use toadstools for girdles only, or that the Lapps carried other varieties upon their persons to enhance their personal attractions. Some aphrodisiac potency is more likely to have been ascribed to them in each case, which would account for the care dis-

played in their preservation, and justify the suspicion that they were kept ready to hand as provocatives to lust.

Dr. J. H. Porter is authority for the statement that in one of the Sagas mention is made of a man bewitched by a Lapland witch, who gave him an infusion of poisonous mushroom, which set him crazy.

"Lichens," says De Candolle, "present two classes of properties, which are developed by different agents, and especially by maceration in urine." — (Encyclopædia Britannica, vol. v. edition of 1841.)

There is an example of the employment of mushrooms in medicine for the stoppage of hemorrhages of various kinds, which can be traced back to the writings of Hippocrates. — (See "Saxon Leechdoms," vol. iii. p. 143.)

"Some species of mushrooms, notably the *Agaricus volvaceus* contain sugar, which can be extracted in crystals, and is capable of undergoing the vinous fermentation." — (Encyclopædia Britannica, edition of 1841, vol. vi. pp. 473, 474, article "Chemistry.")

No instance of anything resembling the Ur-Orgy of the Siberians has been described among the Australians, but there is no knowing what further investigation may discover of the life and mode of thought of the wild tribes inhabiting that great continent, or island, as the reader pleases.

"The Australians will not eat 'the common mushroom,' although they eat almost all other kinds of fungus." — ("The Native Tribes of South Australia," Adelaide, 1879, received through the kindness of the Royal Society, Sydney, New South Wales, T. B. Kyngdon, Esq., Secretary.)

"Fungi, however, were used for food. The native truffle, — '*Mylitta Australis*,' — a subterranean fungus, — was much sought after by the natives. When cut, it is in appearance somewhat like unbaked brown bread. I have seen large pieces, weighing several pounds, and, in some localities, occasionally a fungus weighing fifty pounds is found." — ("Aborigines of Victoria," A. Brough Smyth, London, 1878, vol. i. p. 209.)

"Mushrooms, called by the Chinese 'stones' ears,' are gathered by some for the table, and form a part of the vegetable diet of the priests." — (Chinese Repository, Canton, 1835, vol. iii. p. 462.)

But why the diet of priests particularly? May there not be some mythical precept involved?

(Monbottoes of Africa.) "Mushrooms are also in common use for

the preparation of their sauces." — (Schweinfurth's "Heart of Africa," London, 1878, vol. ii. p. 42.)

"There is a great variety of mushrooms, most of which are eat. Some, indeed, are poisonous, and unlucky accidents happen frequently." — (Kemper, "History of Japan," in "Pinkerton's Voyages," London, 1814, vol. vii. p. 698.)

A. Brough Smyth, "Aborigines of Australia," p. 132, speaks of the use by the Australians of "a dry, white species of fungus, to kindle fire with rapidly."

Agaric. "It groweth in Fraunce, principally upon trees that bear mast, in manner of a white mushroom; of a sweet savour; very effectual in Physicke and used in many Antidotes and sovereigne confections. It groweth upon the head and top of trees, it shineth in the night, and by the light that it giveth in the dark men know when and how to gather it." — (Pliny, lib. xvi. cap. 8, Holland's translation.)

"On mange généralement en Russie toutes les espèces de champignons;" but the "champignon de mouche," and two other kinds, are excepted. — (See "Voyages," — Pallas, Paris, 1793, vol. i. p. 65.)

"The Ostiaks of Siberia make a 'moxa' of 'un morceau d'agaric du bouleau.'" — (Idem, vol. iv. p. 68.)

Bogle enumerates mushrooms among the articles of diet of the Lamas. — (See Markham's "Thibet," London, 1879, p. 105.)

"Mushrooms and fungi of all kinds are eaten by the Bongo of the Upper Nile region." — (See "Heart of Africa," Schweinfurth, London, 1878, vol. i. pp. 117-122.)

"The Niam-Niams of Central Africa use fungi for foods." — (Idem, p. 281.)

In a synopsis of the lecture delivered by the explorer Stanley before the Royal Geographical Society in London, he is represented as referring to the skill of the Niam-Niam in woodcraft, and the ability with which they detected the edible fungi from the poisonous. — (See "Tribune," Chicago, Ill., June 28, 1890.)

Agaric. Avicenna believed that the white, or "feminine," was good, the black, or "masculine," noxious; it was prescribed for epilepsy, fevers, sciatica, asthma, pulmonary troubles, etc. (Avicenna, vol. i. p. 278, improperly numbered in the book as p. 287, a 10, *et seq.*) It also entered into a number of panaceas, such as "Theriaca," "Theodoricon Magnum," "Mithradatum," and others.

It was a provocative of the menses, according to Avicenna, vol. i. p. 287, a 54.

Thurnberg mentions a plant — "*Bupleorum giganteum*" — found in Cape Colony, of which clothing was made, and which was also used for tinder. — (See Pinkerton's *Voyages*, London, 1814, vol. xvi: pp. 21, 22, quoting Thurnberg's "Account of the Cape of Good Hope.")

"Toadstool, or rotten fish and willow bark, which are delicacies among the Kamtchadals," — ("Russian Discoveries between Asia and America," William Coxe, London, 1803, p. 60, quoting Steller's account of the Behring Voyage.)

There are some varieties of agaric, notably that of the olive-tree, which at times emit by night a phosphorescent light. This peculiarity may well have caused them to be regarded with reverential awe by the ancients. On the subject of this effulgence, see "*Philosophy of Magic*," Eusèbe Salverte, New York, 1862, vol. i. p. 63.

Pope Clement VII. died of eating too many mushrooms. See Schurig's "*Chylologia*," Dresden, 1725, vol. i. p. 60.

(*Tierra del Fuego*.) "There is one vegetable production in this country which is worthy of mention, as it affords a staple article of food to the natives. It is a globular fungus, of a bright yellow color, and of about the size of a small apple, which adheres in vast numbers to the bark of the beech-trees. . . . It is eaten by the Fuegians in large quantities, uncooked, and when well chewed has a mucilaginous and slightly sweet taste, together with a faint odor like that of a mushroom. Excepting a few berries of a dwarf arbutus, which need hardly be taken into account, these poor savages never eat any other vegetable food besides this fungus." — (Darwin, in "*Voyage of Adventure and Beagle*," London, 1839, vol. iii. pp. 298, 299.)

"These Fuegians appeared to think the excrescences which grow on the birch-trees, like the gall-nuts on an oak, an estimable dainty." — (Idem, vol. i. p. 440; again, vol. ii. p. 185.)

Agaric, or toadstool, employed in medicine "to provoke to vomit" (see "*Most Excellent and Approved Medicines*," London, 1654, pp. 3 and 10); also given "for provoking the courses" (idem, p. 23); also "to loosen the body" (idem, p. 36).

To insure conception, the belief was that both man and woman should take a potion of hare's rennet in wine, — "then quickly she will be pregnant, and for meat she shall for some while eat mushrooms." — ("*Saxon Leechdoms*," vol. i. p. 347.)

The Bannocks and Shoshonees of the Rocky Mountains eat mushrooms, — "the kind that grows on a cottonwood stump; they know

that some kinds are bad." — (Interview with the Bannocks and Shoshonees, through the interpreters, Joe and Charlie Rainey, at Fort Hall, Idaho, 1881.

The Indians above mentioned had no knowledge of any dance in connection with the mushroom or fungus.

XII.

THE MUSHROOM IN CONNECTION WITH THE FAIRIES.

IN the opinion of the folk of Great Britain and Ireland, possibly of the Continent as well, the mushroom was intimately connected with the dwellers in the realm of sprites and fairies, as can be shown in a moment, and by simple reference.

The lore of the peasantry of those countries is replete with the uncanniness of the "Fairy Circles," which modern investigation has shown to be due to a species of fungus.

"Various theories were current among the peasantry to account for their existence. Some of them ascribed them to lightning; others to moles or other animals; and others again to the growth of a species of fungus. This is the more educated class. But the lower orders implicitly believed that they were the work of the fairies, and used by them for their nocturnal dancing. Woe to the poor mortal who ventured near at such moments. He was seized, forced to dance, soon lost all consciousness, and was truly in luck if he ever again succeeded in rejoining his mortal relatives." A very exhaustive account of these Circles, and the superstitions in reference to them, is to be found in the third volume of Brand's *Popular Antiquities*, London, 1854, article "Fairy Mythology," p. 476 *et seq.*

"The most clear and satisfactory remarks on the origin of fairy rings are probably those of Dr. Wollaston, Sec. R. S., printed in the second part of the "Philosophical Transactions" for 1807. . . . The cause of their appearance he ascribes to the growth of certain species of agaric, which so entirely absorbs all nutriment from the soil beneath that the herbage is for a while destroyed." — (Idem, p. 483.)

"In Northumberland, the common people call a certain fungus excrescence, sometimes found about the roots of old trees, Fairy Butter. After great rains, and in a certain degree of putrefaction, it is reduced to a consistency which, together with its color, makes it not unlike butter, and hence the name." — (Idem, p. 493.)

Lady Wilde's work, already quoted, makes no reference to the employment of either mushrooms or misletoe by the Irish peasantry.

The mixing, in the popular imagination, of Fairies and Druids, of Fairy Circles and the Druid Circles, is noticed on p. 505, Brand, art. "Fairy Mythology."

Perhaps in all this there may be a vague reminiscence of a former use of the agaric in potions not very dissimilar to those still to be found among the Koraks and Tchuktchi. We read that this Witches' Butter was associated with sorcery. It was believed in Sweden to have been "spewed up" by the cat which went with the witch. — (See Brand, "Popular Antiquities," London, 1872; vol. iii. p. 7, article "Sorcery.")

"No subject could be more interesting than an inquiry into the origin of the superstitions of uncivilized tribes." ("Philosophy of Magic," Salverte, vol. i. p. 138.) Salverte remarks that the Fairies "were supposed to be diminutive, aerial beings, beautiful, lively, and beneficent in their intercourse with mortals, inhabiting a region called Fairy Land, — Alf-Heiner, — commonly appearing on earth at intervals, when they left traces of their visits in beautiful green rings, where the dewy sward had been trodden in their moon-light dances. . . . The investigations of science have traced these rings to a species of fungus, — *Agaricus oreades*, — but imagination still leads us willingly back to the traditional appearance of these diminutive beings in the train of their queen; . . . and we also behold her tiny followers dancing away the midnight hours to the sound of the most enchanting music." — (Idem, vol. i. p. 138, footnote.)

There is the following memorandum in Hazlitt's "Fairy Tales" (London, 1875, p. 35): "Mem., that pigeon's-dung and nitre steeped in water will make the fayry circles; it draws to it the nitre of the air, and it will never weare out."

"The mushroom has always been associated with fairy-lore. It is mentioned as the fairy dining-table (p. 502); while in the list of foods partaken of by Oberon, we read: —

". . . with a wine,
Ne'er ravished with a clustered vine,
But gently strained from the side
Of a sweet and dainty bride;
Brought in a daizy chalice, which
He fully quaffed up to bewitch
His blood to height."

While Robin Goodfellow is represented as singing, —

“When lads and lasses merry be,
With possets and with juncates fine,
Unscene of all the company,
I eat their cakes and sip their wine;
And to make sport,
I fart and snort,
And out the candles I do blow.”

— (Brand, *Pop. Ant.*, London, 1872, pp. 476 *et seq.*, articles “Fairy Mythology,” and “Robin Goodfellow.”)

Herrick describes the food of fairies:—

“ . . . with a wine
Ne’er ravished from the flattering vine,
But gentle prest from the soft side
Of the most sweet and dainty bride.”

— (Herrick, “Hesperides;” also quoted in Hazlitt’s “Fairy Tales,” London, 1875, p. 300.)

The “wine” just described would seem to belong, in all fairness, to the classification of Ur-Orgies.

A careful search of Shakspeare shows that while perhaps he knew little directly to our purpose, he still had a knowledge that we may utilize; for example, he speaks of the “midnight mushroom,” showing that it was an element of midnight revels of the fairies; he alludes to customs which certainly suggest that slaves and criminals were in early days buried beneath dung-heaps as a punishment; and he can be adduced to prove that the epithet “dunghill” applied to a man, was a most deadly insult; but let the bard speak for himself, —

“*Prospero.* Ye elves of hills, brooks, standing lakes and groves;
And ye that on the sands with printless feet,
Do chase the ebbing Neptune and do fly him,
When he comes back; yon demi-puppets that
By moonshine do the green, sour ringlets make,
Whereof the ewe bites not; and you whose pastime
Is to make midnight mushrooms.” — (*Tempest*, act v. scene 1.)

“*Ajax.* Thou stool for a witch.” — (*Troilus and Cressida*, act ii. scene 1.)

The concordance consulted was that of the Clarkes.

The association of “toadstools” with witchcraft may have been due to the belief that toads were the constant companions and servants of the witches and fairies.

Gesner says that witches made use of toads as a charm, "*ut vim coeundi, ni fallor, in viris tollerunt.*"—(Brand, *Pop. Ant.* London, 1872, vol. ii. page 170, art. "Divination at Weddings.")

"Un crapaud noir de venin" was to be employed by those seeking favor of the witches of "Les Bourbonnais," "La Fascination."—(J. Tuchmann, in "*Mélusine*," Paris, July, August, 1890.)

May dew was considered a most beneficial application for the skin, but young maidens while gathering it were careful not "to put foot within the rings, lest they should be liable to the fairies' power."—("Illustrations of Shakspeare," Francis Douce, London, 1807, vol. i. p. 180.)

It would seem that the Saxons in England, at the time of the Norman Conquest, were fully aware of the deadly effects producible by the mushroom: "The old woman came back to her, ere she went to bed. 'I have found it all out and more. I know where to get scarlet toadstools and I put the juice in his men's ale. They are laughing and roaring now, merry-mad every one of them.'"

The effects of the potion are thus described: "His men were grouped outside of the gate, chattering like monkeys; the porter and the monks from the inside entreating them, vainly, to come in and go to bed quietly.

"But they would not. They vowed and swore that a great gulf had opened all down the road, and that one step more would tumble them in headlong. . . . In vain Hereward stormed; assured them that the supposed abyss was nothing but the gutter; proved the fact by kicking Martin over it. The men determined to believe their own eyes, and after a while fell asleep in heaps in the roadside, and lay there till morning, when they woke, declaring, as did the monks, that they had been bewitched. They knew not—and happily, the lower orders, both in England and on the Continent, do not yet know—the potent virtues of that strange fungus with which Lapps and Samoieds have, it is said, practised wonders for centuries past."—("Hereward, the last of the English," Charles Kingsley, New York, 1866, p. 111.)

See also under "Ordeals and Punishments," and "Insults."

XIII.

A USE OF POISONOUS FUNGI QUITE PROBABLY EXISTED
AMONG THE MEXICANS.

THAT some such use of poisonous fungi as has been shown exists among the tribes of Siberia was made by other nations, would be difficult to prove in the absence of direct testimony, but many incidental references are encountered which the reflective mind must consider with care before rejecting them as absolutely irrelevant in this connection. The Mexicans, as we learn from Sahagun, were not ignorant of the mushroom, which is described as the basis of one of their festivals. He says that they ate the *nanacatl*, a poisonous fungus which intoxicated as much as wine; after eating it, they assembled in a plain, where they danced and sang by night and by day to their fullest desire. This was on the first day, because on the following day they all wept bitterly, and they said that they were cleaning themselves and washing their eyes and faces with their tears.¹

It is true that Sahagun does not describe any specially revolting feature in this orgy, but it is equally patent that he is describing from hearsay, and, probably, he was not allowed to know too much. In a second reference to this fungus, which he now calls *teo-nanacatl*, he alludes to the toxic properties, which coincide closely with those of the mushrooms noted in Siberia and on the northwest coast of America.

"There are some mushrooms in this country which are called *teo-nanacatl*. They grow under the grass in the fields and plains; . . . they are hurtful to the throat and intoxicate; . . . those who eat

¹ *Nanacatl*, que son los hongos malos que emborrachan tan bien como el vino; y se juntaban en un llano despues de haberlo comido, donde bailaban y cantaban de noche y de dia á su placer; y esto el primer dia porque al dia siguiente lloraban todos mucho y decian que se limpiaban y lavaban los ojos y caras con sus lágrimas. — (Sahagun, in Kingsborough's "Mexican Antiquities," vol. vii. p. 308.)

them see visions and feel flutterings in the heart ; those who eat many of them are excited to lust, and even so if they eat but few.”¹

The proof is not at all conclusive that this intoxication was produced as among the Siberian and Cape Flattery tribes ; but it is very odd that the Aztecs should eat mushrooms for the same purpose ; that they should hold their dance out in a plain and by night (that is, in a place as remote as possible from Father Sahagun's inspection). On the second day, to trust Sahagun's explanation, they would appear to have bewailed their behavior on the first ; although it should be remarked here that ceremonial weeping has not been unknown to the American aborigines, and may, in this case, have been induced by causes not revealed to the stranger. Lastly, it is important to note that this poisonous fungus was a violent excitant, a nervous irritant, and an aphrodisiac.

Another early Spanish observer, also cited by Kingsborough, describes them in these terms :—

“They had another kind of drunkenness, . . . which was with small fungi or mushrooms, . . . which are eaten raw, and, on account of being bitter, they drink after them or eat with them a little honey of bees, and shortly after that they see a thousand visions, especially snakes.

“They went raving mad, running about the streets in a wild state (‘bestial embriaguez’). They called these fungi ‘teo-na-m-catl,’ a word meaning ‘bread of the gods.’”

This author does not allude to any effect upon the kidneys.²

This account can be compared, word for word, with those previously quoted from the Moqui Indian and from the descriptions of the Ur-Orgies of the Siberians.

¹ Hay unos honguillos en ésta tierra que se llaman teo-nanacatl ; crianse debajo del heno en los campos ó páramos . . . dañan la garganta y emborrachan . . . los que los comen ven visiones y sienten buscas en el corazon ; á los que comen muchos de ellos provocan á luxuria, y aunque sean pocos. — (Sahagun, in Kingsborough's “Mexican Antiquities,” vol. vii. p. 369.)

² Tenian otra manera de embriaguez . . . era con unos hongos ó setas pequeñas . . . que comidos crudos y por ser amargos, beben tras ellos ó comen con ellos un poco de miel de abejas, y de allí á poco rato, veían mil visiones y en especial culebras. — (By the author of “Ritos Antiguos, Sacrificios é idolatrias de los Indios en Nueva España,” Kingsborough, vol. ix. p. 17.)

This author seems to have been the Franciscan Fray Toribio de Benvento, commonly called by his Aztec nickname of “Motolinia, the Beggar.” He is designated by Kingsborough “the Unknown Franciscan,” because, through motives of humility, he declined to subscribe his name to his valuable writings.

The list of quotations is not yet complete. Tezozomoc, also an author of repute, relates that at the coronation of Montezuma the Mexicans gave wild mushrooms to the strangers to eat; that the strangers became drunk, and thereupon began to dance.¹ All of which is a terse description of a drunken orgy induced by poisonous mushrooms, but not represented with the disgusting sequences which would have served to establish a connection with urine dances.

Diego Duran also gives the particulars of the coronation of this Montezuma (the second of the name and the one on the throne at the date of the arrival of Cortés). He says that, after the usual human sacrifices had been offered up in the temples, all went to eat raw mushrooms, which caused them to lose their senses and affected them more than if they had drunk much wine. So utterly beside themselves were they that many of them killed themselves with their own hands, and by the potency of those mushrooms they saw visions and had revelations of the future, the devil speaking to them in their drunkenness.² Duran, of course, is not describing what he *saw*. Doubtless, in that case, his narrative would have been more animated and, possibly, more to our purpose.

MUSHROOMS AND TOADSTOOLS WORSHIPPED BY AMERICAN INDIANS.

Dorman is authority for the statement that mushrooms were worshipped by the Indians of the Antilles, and toadstools by those in Virginia,³ but for what toxic or therapeutic qualities, real or supposed, he does not say. The toxic properties of fungi would seem to have been known to the Algonkins: —

“Paused to rest beneath a pine tree,
From whose branches trail the mosses,
And whose trunk was coated over
With the Dead Man's Moccasin Leather,
With the fungus white and yellow.”

“Hiawatha,” Henry W. Longfellow, canto ix.

¹ A los extranjeros, les diéron á comer hongos montesinos que se embriagaban con ellos y con esto entráron á la danza. — (Tezozomoc, “Crónica Mexicana,” in Kingsborough, “Mexican Antiquities,” vol. ix. p. 153.)

² Ivan todos á comer hongos crudos, con la cual comida salian todos de juicio y quedaban peores que si hubieran bebido mucho vino; tan embriagados y fuera de sentido que muchos de ellos se mataban con propria mano; y con la fuerza de aquellos hongos vian visiones y tenian rebelaciones de lo porvenir hablandoles el Demonio en aquella embriaguez. — (Diego Duran, lib. 2, cap. 54, p. 564.)

³ Rushton M. Dorman, “Primitive Superstitions,” New York, 1881, p. 295.

A FORMER USE OF FUNGUS INDICATED IN THE MYTHS OF CEYLON,
AND IN THE LAWS OF THE BRAHMINS.

On the west shore of the Pacific Ocean, aside from the orgies of the Siberian Shamans, no instance is on record of the use of the mushroom, or other fungus in religious rites in the present day.

A former use of it is indicated in the Cingalese myths, which teach that "Chance produced a species of mushroom called *mattika*¹ or *jessathon*, on which they lived for sixty-five thousand years; but being determined to make an equal division of this, also, they lost it. Luckily for them, another creeping plant [mistletoe?] called *badrilata* grew up, on which they (the Brahmins) fed for thirty-five thousand years, but which they lost for the same reason as the former ones." — ("Asiatic Researches," Calcutta, 1807, vol. vii. p. 441.)

Among the Brahmins of the main land no such myth is related; but an English writer says:

"The ancient Hindus held the fungus in such detestation that Yama, a legislator, supposed now to be the judge of departed spirits, declares: 'Those who eat mushrooms, whether springing from the ground or growing on a tree, fully equal in guilt to the slayers of Brahmins and the most despicable of all deadly sinners.' — ("Asiatic Researches," Calcutta, 1795, vol. iv. p. 311.)

Dubois refers to the same subject. "The Brahmins," he says, "have also retrenched from their vegetable food, which is the great fund of their subsistence, all roots which form a head or bulb in the ground, such as onions,² and those also which assume the same shape above ground, like mushrooms and some others. . . . Are we to sup-

¹ The word "*mattika*" cannot be found in Forbes' English-Hindustani Dictionary (London, 1848). It may, perhaps, belong to an extinct dialect. The word "*matt*," meaning "drunk," would serve a good purpose for this article could a relationship be shown to exist between it and "*mattika*." This the author is of course unable to do, being totally ignorant of Hindustani. Neither does "*badrilata*" occur in Forbes, who interprets "mistletoe" as "*banda*." The contributor to the Asiatic Researches, who used the word, thought it meant "*agarie*."

² Higgins believes that the ancient Egyptians had discovered a similarity between the coats of an onion and the planetary spheres, and says that "it was called (by the Greeks), from being sacred to the father of ages, *oionoon* — onion. . . . The onion was adored (as the black stone in Westminster Abbey is by us) by the Egyptians for this property as a type of the eternal renewal of ages. . . . The onion is adored in India, and forbidden to be eaten." — (Quoting "Forster's Sketches of Hindoos," p. 35. Higgins' "Anacalypsis," vol. ii. p. 427.)

pose that they had discovered something unwholesome in the one species and proscribed the other on account of its fetid smell? This I cannot decide; all the information I have ever obtained from those among those whom I have consulted on the reasons of their abstinence from them being that it is customary to avoid such articles." — (Abbé Dubois, "People of India," London, 1817, p. 117.)

This inhibition, under such dire penalties, can have but one meaning. In primitive times the people of India must have been so addicted to the debauchery induced by potions into the composition of which entered poisonous fungi and mistletoe (the mushroom "growing on a tree"), and the effects of such debauchery must have been found so debasing and pernicious, that the priest-rulers were compelled to employ the same maledictions which Moses proved of efficacy in withdrawing the children of Israel from the worship of idols.¹

¹ But on the sixth day of the moon's age "women walk in the forests with a fan in one hand, and eat *certain vegetables*, in hope of beautiful children. See the account given by Pliny of the Druidical mistletoe or viscum, which was to be gathered when the moon was six days old, as a preservative from sterility." — (Sir William Jones in "Asiatic Researches," Calcutta, 1790, vol. iii. art. 12, p. 284, quoted by Edward Moor, "Hindu Pantheon," London, 1810, p. 134.)

XIV.

THE ONION ADORED BY THE EGYPTIANS.

THERE are examples of the ideas surrounding onions, leeks, garlic, and bulbous vegetables of different kinds, in many countries.

"The Egyptians likened the whole firmament to an onion with its varied shells and radiations; and this, together with the aphrodisiacal and fertilizing properties which this vegetable is almost universally held to possess, rendered it sacred." — ("Rivers of Life," Forlong, London, 1883, vol. i. p. 474.)

"The species of onion which the Egyptians abhorred was the squill or red squill, because consecrated to Typhon; the other kinds they ate indiscriminately." — (Fosbroke, "Cyclopædia of Antiquities," London, 1843, vol. ii. p. 109, article "Onion.")

"At Babylon, beside Memphis, they made an onion their god." — (Reginald Scot, "Discovery of Witchcraft," London, 1651, p. 376.)

"Beans the Egyptians do not sow at all in their country; neither do they eat those that happen to grow there, nor taste them when dressed. The priests indeed abhor the sight of that pulse, accounting it impure." — (Herodotus, "Euterpe," p. 36.)

Among the Romans, "the Flamen Dialis might not ride, or even touch, beans or ivy." — ("The Golden Bough," James G. Frazer, M.A., London, 1890, vol. i. p. 117.)

Pliny mentions the medicinal use of certain bulbs, difficult of dentification in our day. "The bulb of *Magara* acts as a strong aphrodisiac;" others "aid delivery;" others were used "for the cure of the sting of serpents." The ancients used to give bulb-seeds "to persons afflicted with madness, in drink." — (Pliny, Nat. Hist. lib. 20, cap. 40.)

Martial has the following: "XXXIV. Bulbs. If your wife is old and your members languid, bulbs can do no more for you than fill your belly" (edition of London, 1871). A footnote to the above says: "To what particular bulb provocative effects were attributed is unknown."

Acosta says of the Peruvians that before any of their great ceremonies, "to prepare themselves, all the people fasted two days, during which they did neyther company with their wives nor eate any meate with salt or garlick, nor drink any chicha." — (Acosta, "Historie of the Indies," edition of London, 1604, quoted by Lang, "Myth, Ritual, and Religion," London, 1887, vol. ii. p. 283.)

According to Avicenna, garlic was a provocative of the menses (vol. i. p. 276 a 52).

When a priest of the state religion of China is about to offer a sacrifice he must abstain from cohabitation with his wives and "from eating onions, leeks, or garlic." — ("Chinese Repository," Canton, 1835, vol. iii. p. 52.)

Juvenal says of the Egyptians: "It is an impious act to break with the teeth a leek or an onion." — (Satire xv., Rev. Lewis Evans's translation.)

By the Irish peasantry "garlic is planted in the thatch" to drive away fairies and witches. — ("Medical Mythology of Ireland," James Mooney, American Philosophical Society, 1887.)

The Danes placed garlic in the cradle of the new-born child to avert the maleficence of witches. — (See Brand, "Popular Antiquities," vol. ii. p. 73, article "Groaning Cakes and Cheese.")

In rustic England many good folk still believe that the house upon which grows the leek will never be struck by lightning. — (See Brand, "Popular Antiquities," vol. iii. p. 317, article "Rural Charms.")

Speaking of the Russian dissenters, known as the Raskol, Heard says: "They carried their resistance into all the details of daily life; as matters of conscience, they eschewed the use of tobacco, for 'the things which come out of him, those are they that defile the man' (Mark vii. 15); of the potato, as being the fruit with which the serpent tempted Eve." — ("The Russian Church and Russian Dissent," Albert F. Heard, New York and London, 1887, p. 194.)

The quotation from the New Testament seems applicable to the subject of urine dances, and the interdiction of the use of the potato may mean more than appears on the surface.

Possibly, the intention in Russia was to wean the sectaries away from the use of bulbs or fungi not to the liking of the more thoughtful leaders of the new movement.

"From the earliest times garlic has been an article of diet." — (Encyclopædia Britannica, mentioning Israelites, Egyptians, Greeks, and Romans.)

In the time of Shakspeare, "to smell of garlic was accounted a sign of vulgarity." — (Idem, referring to "Coriolanus," iv. 6, and "Measure for Measure," iii. 2.)

"Garlic was placed by the ancient Greeks on the piles of stones at cross-roads as a supper for Hecate." — (Idem.)

"According to Pliny, garlic and onions were invoked as deities by the Egyptians at the taking of oaths. The inhabitants of Pelusium, in Lower Egypt, who worshipped the onion, are said to have held both it and garlic in aversion as food." — (Encyc. Brit., article "Garlic.")

Garlic is "fastened to the caps of children, suspended from the sterns of vessels and from new houses, in the Levant, as, centuries ago, it was hung over the door in the more civilized parts of Europe." — ("Superstitions of Scotland," John Graham Dalyell, Edinburgh, 1834, p. 219.)

"The onion was among the earliest cultivated vegetables, and in Egypt was a sort of divinity." — (American Encyclopædia, New York, 1881, article "Onion.")

"A phallic importance seems to have attached to the onion. Burton, in his 'Anatomy of Melancholy,' edition of 1660, p. 538, speaks of 'cromnysmantia,' — a kind of divination with onions laid on the altar at Christmas Eve, practised by girls to know when they shall be married and how many husbands they shall have. This appears also to have been a German custom." — (Brand, "Popular Antiquities," vol. iii. pp. 356, 357.)

Sir Thomas More wrote the following (the original is in Latin; the translation is by Harington):—

" If leeks you leek, but do their smell disleek,
Eat onions, and you shall not smell the leek ;
If you of onions would the scent expel,
Eat garlic, that shall drown the onion's smell ;
But against garlic's savour, at one word,
I know but one receipt. What's that ? Go look."

The last line is left untranslated; in the original it reads, —

" Aut nihil, aut tantum, tollere merda potest."

(Harington, "Ajax," quoting Sir Thomas More.)

XV.

SACRED INTOXICATION AND PHALLISM.

TWO fundamental principles underlie the structure of primordial religion, — Intoxication and Phallism. All perversion of the cerebral functions, whether temporary estrangement or permanent alienation, is classified as Obsession; and the pranks and gibberish of the maniac or the idiot are solemnly treasured as outbursts of inspiration.

Where such temporary exaltation can be produced by an herb, bulb, liquid, or food, the knowledge of such excitant is kept as long as possible from the laity; and even after the general diffusion of a more enlightened intelligence has broadened the mental horizon of the devotee, these narcotics and irritants are "sacred," and the frenzies they induce are "sacred" also.

If the drug in question, whatever it be, possess the additional recommendation of acting upon the genito-urinary organs, and by arousing the sexual energies appeals to the phallic element in the religious nature, the apotheosis of the drug follows as a matter of course, no matter under what expression or symbolism it may be veiled; and as human nature feels the necessity of restraint upon the passions as well as a stimulus thereof, it follows that there are to be noted many cases in which a veneration is paid to plants and drugs which have just the opposite effect, — that is to say that where an aphrodisiac is held among the sacred essences or agents its counter or antagonist is held in almost equal esteem.

Mushroom, mistletoe, rue, ivy, mandrake, hemp, opium, the stramonium of the medicine-man of the Hualpai Indians of Arizona, — all may well be examined in the light of this proposition. Frazer says: "According to primitive notions, all abnormal states — such as intoxication or madness — are caused by the entrance of a spirit into the person; such mental states, in other words, are regarded as forms of possession or inspiration." — ("The Golden Bough," vol. i. p. 184.)

"Women who were addicted to Bacchanalian sports presently ran to the ivy and plucked it off, tearing it to pieces with their hands and gnawing it with their mouths. . . . It was reported . . . it hath a spirit that stirreth and moveth to madness, transporting and bereaving of the senses, and that alone by itself it introduceth drunkenness without wine to those that have an easy inclination to enthusiasm." — (Plutarch, "Morals," Goodwin's English translation, Boston, 1870, vol. ii. p. 264.)

An eternal drunkenness was the reward held out to the savage warrior in many regions of the world; the Scandinavians, as well as the Indians of the Pampas, had this belief. — (See "Les Primitifs," Élie Réclus, Paris, 1885, p. 123.)

Speaking of the Ur-Orgy of the Siberians, Dr. J. W. Kingsley comments in the following terms: "I remember being shown this fungus by an Englishman who was returning via the Central Pacific Railway from Siberia. He fully confirmed all that I had heard on the subject, having seen the orgy himself. . . . Nothing religious in this, you may say; but look at the question a little closer and you will see that these 'intoxicants,' which nowadays are used to produce mere excitement or brutal drunkenness, were at first looked upon as media able to raise the mere man up to a level with his gods, and enable him to communicate with them, as was certainly the case with the 'soma' of the Hindu ecstasies and the hashich I have seen used by some tribes of Arabs. It would be well worth while trying to ascertain whether the actors in the Ur-Orgy had eaten any particular kind of herb before its commencement, or whether they had any tradition of their ancestors having done so." — (Personal letter to Captain Bourke, dated Cambridge, England, May, 1888.)

For sacred intoxication among the Finns, see also "Chaldean Magic," Lenormant, p. 255, where there is a reference to "intoxicating drugs."

XVI.

AN INQUIRY INTO THE DRUIDICAL USE OF THE
MISTLETOE.

BUT the question at once presents itself, For what reason did the Celtic Druids employ the much venerated mistletoe? This question becomes of deep significance in the light of the learning shed by Godfrey Higgins and General Vallencey upon the derivation of the Druids from Buddhistic or Brahminical origin.

"Ajasson enumerates the following superstitions of ancient Britain, as bearing probable marks of an Oriental origin: . . . the ceremonials used in cutting the plants."—("Mistletoe," Pliny, Bohn, lib. 30, cap. 6, footnote.)

That the mistletoe was regarded as a medicine, and a very potent one, is easy enough to show. All the encyclopædias admit that much; but the accounts that have been preserved of the ideas associated with this worship are not complete or satisfactory.

"The mistletoe, which they (the Druids) called 'all-heal,' used to cure disease."—(McClintock and Strong's Encyclopædia, quoting Stukeley.)

"The British bards and Druids had an extraordinary veneration for the number three. 'The mistletoe,' says Vallencey, in his 'Grammar of the Irish Language,' 'was sacred to the Druids, because not only its berries, but its leaves also, grow in clusters of three united to one stock. The Christian Irish held the Seamroy sacred in like manner, because of three leaves united to one stock.'"—(Brand, "Popular Antiquities," London, 1872, vol. i, p. 109, article "St. Patrick's Day.")

"Within recent times the mistletoe has been regarded as a valuable remedy in epilepsy (query, on the principle of *similia similibus*?) and other diseases, but at present is not employed. . . . The leaves have been fed to sheep in time of scarcity of other forage (which shows at least that it is edible)."—(Appleton's American Encyclopædia.)

"Seems to possess no decided medical properties."—(International Encyclopædia.)

"It is now perhaps impossible to account for the veneration in which it was held and the wonderful qualities which it was supposed to possess." — ("The Druids," Rev. Richard Smiddy, Dublin, 1871, p. 90.)

Pliny mentions three varieties. Of these "the hyphar is useful for fattening cattle, if they are hardy enough to withstand the purgative effect it produces at first; the viscum is medicinally of value as an emollient, and in cases of tumors, ulcers, and the like."

Pliny is also quoted as saying that it was considered of benefit to women in childbirth, — "in conceptum feminarum adjuvare si omnino secum habeant."¹ Pliny is also authority for the reverence in which the mistletoe growing on the robur (Spanish *roble*, or evergreen oak) was held by the Druids. The robur, he says, is their sacred tree, and whatever is found growing upon it, they regard as sent from heaven and as the mark of a tree chosen by God. — (Encyclopædia Britannica.)

Brand ("Popular Antiquities," London, 1849, vol. i. article "Mistletoe") cites the opinion of various old authors that mistletoe was regarded "as a medicine very likely to subdue not only the epilepsy, but all other convulsive disorders. . . . The high veneration in which the Druids were held by the people of all ranks proceeded in a great measure from the wonderful cures they wrought by means of the mistletoe of the oak. . . . The mistletoe of the oak, which is very rare, is vulgarly said to be a cure for wind-ruptures in children; the kind which is found upon the apple is said to be good for fits."

"The Persians and Masagetæ thought the mistletoe something divine, as well as the Druids." — ("Antiquities of Cornwall," 1796, p. 63.)

After telling of the use of this plant among the Druids and their mode of gathering it, Fosbroke adds: "Mistletoe was not unknown in the religious ceremonies of the ancients, and was supposed to have magical and medicinal properties." — Fosbroke, Cyclopædia of Antiquities, vol. ii. p. 1047, article "Mistletoe," London, 1843.

Mr. W. Winwood Reade mentions, in his "Veil of Isis" (London, 1861), at page 69, that the missolding or mistletoe of the oak, still called in Wales "all-iach," or "all-heal," was the sovereign remedy of the Druids; and at page 71 he adds that a powder from its berries was

¹ As has already been shown on page 93, the sacrificial mistletoe was gathered by the Druids when the moon was six days old, that day being the first of the month, year, and cycle among the Druids.

considered a cure for sterility. He describes the effect of mistletoe as that of a strong purgative. — (Personal letter from Frank Rede Fowke, Esq., South Kensington Museum, London, England, June 18, 1888.)

“The Druids named it Uil-loc or All-Heal, because they said it promoted increase of species or prevented sterility.” — (“Rivers of Life,” Forlong, vol. ii. p. 331.)

“We shall probably never hear the whole truth in regard to this ancient religion (Druidism); for, as Mr. Davies says, ‘most of the offensive ceremonies must have been either retrenched or concealed,’ as the Roman laws and edicts had for ages (before the Bardic writings) restrained the more cruel and bloody sacrifices, and at the time of the Bards nothing remained but symbolic rites.” — (“Rivers of Life,” Forlong, vol. ii. p. 331.)

The plant (mistletoe) is one of world-wide fame. Masagætæ, Skythians, and the most ancient Persians called it the “Healer,” and Virgil calls it a “branch of gold;” while Charon was dumb in presence of such an augur of coming bliss; it was “the expectancy of all nations, longe post tempore visum, as betokening Sol’s return to earth.” — (“Rivers of Life,” Forlong, vol. i. p. 81.)

Borlase sees much similarity between the Magi and our Druids, and Strabo did the same. “Both carried in their hands, during the celebration of their rites, a bunch of plants; that of the Magi was of course the *Hom*, called Barsom, — Assyrian and Persepolis sculptures substantiate this. The *Hom* looks very much like the Mistletoe, and the learned Dr. Stukeley thinks that this parasite is meant as being on the tree mentioned by Isaiah, vi. 13.” — (“Rivers of Life,” Forlong, vol. i. p. 43.)

“But yet it shall be a tenth, and it shall return and shall be eaten; as a teil tree and as an oak, whose substance is in them, when they cast their leaves; so the holy seed shall be the substance thereof.” — (Isaiah, vi. 13.)

“The mistletoe wreath marks in one sense Venus’s temple, for any girl may be kissed if caught under its sprays, — a practice, though modified, which recalls to us that horrid one mentioned by Herodotus, where all women were for once at least the property of the man who sought them in Mylitta’s temple.” — (“Rivers of Life,” Forlong, London, 1883, vol. i. p. 91.)

The following are Frazer’s views on this subject: “The mistletoe was viewed as the seat of life of the oak. The conception of the mistle-

toe as the seat of life of the oak would naturally be suggested to primitive people by the observation that while the oak is deciduous, the mistletoe which grows on it is evergreen. In winter, the sight of its fresh foliage among the bare branches must have been hailed by the worshippers of the tree as a sign that the divine life which had ceased to animate the branches yet survived in the mistletoe, as the heart of the sleeper still beats when his body is motionless. Hence, when the god had to be killed, when the sacred tree had to be burnt, it was necessary to begin by breaking off the mistletoe, for so long as the mistletoe remained intact, the oak (so people thought) was invulnerable, — all the blows of their knives and axes would glance harmless from its surface. But once tear from the oak its sacred heart, the mistletoe, and the tree nodded to its fall." — ("The Golden Bough," James G. Frazer, M. A., London, 1890, vol. ii. pp. 295, 296.)

This train of reasoning would be irrefutable, as it is most logical, were we in a position to be able to say that the excision of the fungus was followed by the felling of the tree; but, unfortunately, that is just what we are not able to determine. As a surmise, there is no impropriety in believing that such excision may have marked the oak for destruction at some future day; but there is no authority that we can produce at this time to justify anything more than a surmise in the premises. That the sacred character of the oak was due to the properties discovered in the mistletoe is quite likely in view of all the facts already presented.

O'Curry, who appears to have known all that was to be learned on the subject of Druidism, admits that the world is in possession of very little that is reliable; he inclines to the view that Druidism was of Eastern origin. (See "Manners and Customs of the Ancient Irish," Eugene O'Curry, London, Edinburgh, Dublin, and New York, 1873.) He contends that "the Sacred Wand" of the Druids was made of the yew, and not of the oak or mistletoe. — (Idem, vol. ii. p. 194.)

Vallencey did not believe that the Persians were acquainted with the mistletoe; at least, he could not find any name for it in Persian. — (See Major Charles Vallencey, "Collectanea de Rebus Hibernicis," Dublin, 1774, vol. ii. p. 433.)

"In Cambodia, when a man perceives a certain parasitic plant growing on a tamarind-tree, he dresses in white and taking a new earthen pot climbs the tree at mid-day. He puts the plant in the pot and lets the whole fall to the ground. Then in the pot he makes a decoction which renders him invulnerable." — (Aymonier, "Notes sur les Coû-

tunes, etc., des Cambodgiens," quoted in "The Golden Bough," vol. ii. p. 286, footnote.)

"It was that only which is found upon the oak which the Druids employed; and being a parasitic plant, the seeds of which are not sown by the hand of man, it was well adapted for the purposes of superstition." — ("Philosophy of Magic," Salverte, vol. i. p. 229.)

Much testimony may be adduced to show that the mistletoe was valued as an aphrodisiac, as conducive to fertility, as sacred to love, and, in general terms, an excitant of the genito-urinary organs, which is the very purpose for which the Siberian and North American medicine-men employed the fungus, and perhaps the very reason for which both fungus and mistletoe were excluded from the Brahminical dietary.

Brand shows that mistletoe "was not unknown in the religious ceremonies of the ancients, particularly the Greeks," and that the use of it, savoring strongly of Druidism, prevailed at the Christmas service of York Cathedral down to our own day. — (See in Brand, "Popular Antiquities," London, 1849, vol. i. p. 524.)

The merry pastime of kissing pretty girls under the Christmas mistletoe seems to have a phallic derivation. "This very old custom has descended from feudal times, but its real origin and significance are lost." ("Appleton's American Encyclopædia.") Brand shows that the young men observed the custom of "plucking off a berry at each kiss." (Vol. i. p. 524.) Perhaps, in former times, they were required to swallow the berry. The deductions of a recent writer merit attention:—

"The mistletoe was dedicated to Mylitta, in whose worship every woman must once in her life submit to the sexual embrace of a stranger. When she concluded to perform this religious duty in honor of her acknowledged deity, she repaired to the temple and placed herself under the mistletoe, thus offering herself to the first stranger who solicited her favors. The modern modification of the ceremony is found in the practice among some people of hanging the mistletoe, at certain seasons of the year, in the parlor or over the door, when the woman entering that door, or found standing under the wreath, must kiss the first man who approaches her and solicits the privilege." ("Phallic Worship," Robert Allen Campbell, C. E., St. Louis, Mo., 1888, p. 202.)

A writer in "Notes and Queries" (Jan. 3, 1852, vol. v. p. 13) quotes Nares to the effect that "the maid who was not kissed under it at Christmas would not be married in that year." But another writer

(Feb. 28, 1852, same volume) points out that "we should refer the custom to the Scandinavian mythology, wherein the mistletoe is dedicated to Friga, the Venus of the Scandinavians."¹

Grimm speaks of Paltar (Balder) being killed by the stroke of a piece of mistletoe, but ventures upon no explanation. — ("Teutonic Mythology," vol. i. p. 220, article "Paltar.")

"Within the sanctuary at Nemi grew a certain tree of which no branch might be broken. Only a runaway slave was allowed to break off, if he could, one of its boughs. Success in the attempt entitled him to fight the priest in single combat, and if he slew him he reigned in his stead with the title of King of the Wood (Rex Nemorensis.) Tradition averred that the fatal branch was that 'golden bough' which at the Sibyl's bidding, Æneas plucked before he essayed the perilous journey to the world of the dead." — ("The Golden Bough," Frazer, vol. i. p. 4, article "The Arician Grove.")

"A plant associated with the death of one of their greatest and best-beloved gods must have been supremely sacred to all of Teutonic blood; and yet this opinion of its sacredness was shared by the Celtic nations." (Grimm, "Teutonic Mythology," vol. iii. p. 1205.) "Our herbals divide mistletoe into those of the oak, hazel, and pear tree; and none of them must be let touch the ground." — (Idem, p. 1207.)

Another writer ("Notes and Queries," 2d series, vol. iv. p. 506) says: "As it was supposed to possess the mystic power of giving fertility and a power to preserve from poison, the pleasant ceremony of kissing under the mistletoe may have some reference to this belief."

In vol. iii. p. 343, it is stated: "A Worcestershire farmer was accustomed to take down his bough of mistletoe and give it to the cow that calved first after New Year's Day. This was supposed to insure good luck to the whole dairy. Cows, it may be remarked, as well as sheep, will devour mistletoe with avidity."

And still another (in 2d series, vol. vi. p. 523) recognizes that "the mistletoe was sacred to the heathen Goddess of Beauty," and "it is certain that the mistletoe, though it formerly had a place among the evergreens employed in the Christian decorations, was subsequently excluded." This exclusion he accounts for thus: "It is also certain that, in the earlier ages of the church, many festivities not at all tending to edification (the practice of mutual kissing among the rest) had

¹ It was the only plant in the world which could harm Baldur, the son of Odin and Friga. When a branch of it struck him he fell dead. — (See in "Bulfinch's Mythology," revised by Rev. E. E. Hale, Boston, 1883, p. 428.)

gradually crept in and established themselves, so that, at a certain part of the service, 'statim clerus, ipseque populus per basia blande sese invicem oscularetur.' "

This author cites Hone, Hook, Moroni, Bescherelle, Ducange, and others. Finally (in the 3d series, vol. vii. p. 76), an inquirer asks, "How came it in Shakspeare's time to be considered 'baleful,' and, in our days, the most mirth-provoking of plants?" And still another correspondent, in the same series (vol. vii. p. 237), claims that "mistletoe will produce abortion in the female of the deer or dog."

"Sir John Ollbach, in his dissertation concerning mistletoe, which he strongly recommends as a medicine very likely to subdue not only the epilepsy, but all other convulsive disorders, observes that this beautiful plant must have been designed by the Almighty for other and more noble purposes than barely to feed thrushes or to be hung up superstitiously in houses to drive away evil spirits. He tells (p. 12) that 'the high veneration in which the Druids were anciently held by the people of all ranks proceeded in a great measure from the wonderful cures they wrought by means of the mistletoe of the oak; this tree being sacred to them, but none so that had not the mistletoe upon them.' Mr. F. Williams, dating from Pembroke, Jan. 28, 1791, tells us, in the 'Gentleman's Magazine' for February that year, that "'Guidhel," mistletoe, a magical shrub, appeared to be the forbidden tree in the middle of the trees of Eden; for, in the Edda, the mistletoe is said to be Balder's death, who yet perished through blindness and a woman.'"—(Brand, "Popular Antiquities," London, 1872, vol. i. p. 519, article "Evergreen-decking at Christmas.")

FORMER EMPLOYMENT OF AN INFUSION OR DECOCTION OF MISTLETOE.

That an infusion or decoction of the plant was once in use may be gathered from the fact narrated by John Eliot Howard: "Water, in which the sacred mistletoe had been immersed, was given to or sprinkled upon the people."—"The Druids and their Religion," John Eliot Howard, in "Transactions of Victoria Institute," vol. xiv. p. 118, quoting "Le gui de chêne et les Druides," E. Magdaleine, Paris, 1877.)

Montfaucon says of the Druids: "Ils croient que les animaux steriles deviennent féconds en buvant de l'eau de gui."—"L'antiquité Expliquée, Paris, 1722, tome 2, part 2, p. 436, quoting and translating Pliny.)

"The misselto, or 'Uil-ice,' was required to be taken, if possible, from the Jovine tree when in its prime; but it was rare to find it on

any oak. If obtained from one about thirty-five years old, and taken in a potion, it conferred fertility on men, women, and children." — ("Rivers of Life," Forlong, vol. ii. p. 355.)

Eugene O'Curry speaks of the Irish Druids having a "drink of oblivion," the composition of which has not, however, come down to us. (See "Manners and Customs of the Ancient Irish," vol. ii. p. 198.) O'Curry calls this drink of oblivion a "Druidical charm," and a "Druidical incantation." — (Idem, vol. ii. p. 226.)¹

See notes in this monograph on the Hindu Lingam.

THE MISTLETOE ALLEGED TO HAVE BEEN HELD SACRED BY THE MOUND-BUILDERS.

An American writer says that among the Mound-builders the mistletoe was "the holiest and most rare of evergreens," and that when human sacrifices were offered to sun and moon the victim was covered with mistletoe, which was burnt as an incense. (Pidgeon, "Dee-coodah," New York, 1853, p. 91 *et seq.*) Pidgeon claimed to receive his knowledge from Indians versed in the traditions and lore of their tribes.²

Mrs. Eastman presents a drawing of what may be taken as the altar of Haokah, the anti-natural god of the Sioux, in which is a representation of a "large fungus that grows on trees" (query, mistletoe?), which, if eaten by an animal, will cause its death.³

THE MISTLETOE FESTIVAL OF THE MEXICANS.

That the Mexicans had a reverence for the mistletoe would seem to be assured. They had a mistletoe festival. In October they celebrated the festival of the Neypachtly, or bad eye, which was a plant growing on trees and hanging from them, gray with the dampness of

¹ Lenormant speaks of "certain enchanted drinks, . . . which doubtless contained medicinal drugs, as a cure for diseases." — ("Chaldean Magic," London, 1877, p. 41.)

² See also Ellen Russell Emerson, "Indian Myths," Boston, 1884, p. 331, wherein Pidgeon is quoted.

³ "Legends of the Sioux," Eastman, New York, 1849, p. 210. Readers interested in the subject of Indian altars will find descriptions, with colored plates, in "The Snake Dance of the Moquis" (London and New York, 1884), by the author of this volume; and in the elaborate monograph by Surgeon Washington Matthews, in the Annual Report of the Bureau of Ethnology, Washington, D. C., 1888.

rain; especially did it grow on the different kinds of oak.¹ The informant says he can give no explanation of this festival.

VESTIGES OF DRUIDICAL RITES AT THE PRESENT DAY.

It may be interesting to detect vestiges of Druidical rites tenaciously adhering to the altered life of modern civilization.

In the department of Seine-et-Oise, twelve leagues from Paris (says a recent writer), when a child had a rupture (hernia) he was brought under a certain oak, and some women, who no doubt earned a living in that trade, danced around the oak, muttering spell-words till the child was cured, — that is, dead. — (“Notes and Queries,” 5th series, vol. vii. p. 163.)

It has already been shown that the Druids ascribed this very medical quality to the mistletoe of the oak.

“In Brittany a festival for the mistletoe is still kept. . . . The people there call it ‘touzou ar gros,’ — ‘the herb of the cross.’” — (“Commonplace Book,” Buckle, vol. ii. of his Works, p. 440, London, 1872.)

Mistletoe has been burned in England in love divinations. — (See Brand, “Popular Antiquities,” London, 1872, vol. iii. p. 358, article “Divination by Flowers.”)

Frommann enumerates mistletoe among “Recentiorum ad fascinum remedia. . . . *Viscum corylinum et tiliaceum*” (hazel or filbert and linden trees). The genitalia of the bewitched person were anointed with an ointment prepared from the hazel mistletoe to untie “ligatures.” (See Frommann, “Tractatus de Facinatione,” Nuremberg, 1675, pp. 938, 957, 958, 965.)

“We find that persons in Sweden who are afflicted with the falling sickness carry with them a knife having a handle of oak mistletoe, to ward off attacks. A piece of mistletoe hung round the neck would ward off other sicknesses. We have Culpepper’s authority for saying ‘it is excellent good for the grief of the sinew, itch, sores, and tooth-ache, the biting of mad dogs, and venomous beasts, and that it purgeth choler very gently.’ Grimm notes that it was with a branch of mistletoe that Balder was killed. . . . The Kadeir Taliasin says that

¹ “Neypachtly quiere decir ‘mal ojo;’ es una yerva que nace en los arboles y cuelga de ellos, parda con la humedad de las aguas, especialmente se cria en los encinales y robles.” — (Diego Duran, vol. iii. cap. 16, p. 391½, manuscript copy in the Library of Congress, Washington, D. C.)

the mistletoe was one of the ingredients in the *awen a gwybodeu*, or water of inspiration, science, and immortality, which the goddess Kod prepared in her cauldron. Witches were thought to have no power to hurt those who bore mistletoe round their neck. Sir Thomas Browne speaks of the virtues of mistletoe in cases of epilepsy." — ("Folk-Medicine," Black, London, 1883, p. 196.)

The same belief in Waters of Life, science, immortality, etc., seems to obtain among the Slav nations, who also speak in their myths of "the crazy weed," which may, perhaps, be classified with the weed of the Borgia well, which, as we have seen, "set a' the Camerslang fo'k wrang i' th' head." — (See "Myths and Folk-Tales of the Russians, Western Slavs, and Magyars," Jeremiah Curtin, Boston, Mass., 1890).

The mistletoe, especially that from the linden and the oak, was enumerated by Etmuller among the cures for epilepsy ("tiliaceum et quercinum"); others recommended that from the elder or willow. For the same disease, on the same page, "zibethum" was prescribed. (See Etmuller, "Opera Omnia," Lyons, 1690, vol. i. p. 198: "Comment. Ludovic.")

The mistletoe of the juniper, gathered in the month of May, was good for eye-water. "Maio mense instar musci adnascitur inservit aquæ ophthalmicæ." — (Etmuller, vol. i. p. 84, "Schroderi Dilucidati Phytologia.")

Fungi of different kinds dried were used as styptics. — (Idem, p. 70.)

The fungus of the oak was especially good for this purpose. — (Idem, p. 127.)

The mistletoe of the oak was regarded as of special value in all uterine troubles, hemorrhages, suppression of the menses, etc. — (Idem, p. 127.)

In the Myth of Kale-wala a young maiden is represented as becoming pregnant by eating a berry. (See "Myth, Ritual, and Religion," Andrew Lang, London, 1887, vol. ii. p. 179.)

We may ask the question, what kind of a berry this was. Reference may also be had to what Lang has to say on the mythical conceptions alleged to have been induced by juniper and other berries. — (Idem, p. 180.)

The "mistletoe of the oake" was administered internally against "epilepsie." — ("Most Excellent and Most Approved Remedies," London, 1654, p. 14.)

"A ring made of mistletoe is esteemed in Sweden as an amulet." — ("Folk-Medicine," Black, p. 173.)

In Murrayshire, Scotland, "at the full moon in March, the inhabitants cut withies of the mistletoe or ivy, make circles of them, keep them all the year, and pretend to cure hectics and other troubles with them." — (Brand, "Popular Antiquities," vol. iii. p. 151, article "Moon.")

"In North Germany, where the old Teutonic cult still lingers, the villagers run about on Christmas, striking the doors and windows with hammers, and shouting, 'Guthyl! Guthyl!' — plainly the Druidical name for mistletoe used by Pliny. In Holstein, the people call the mistletoe 'the branch of spectres;' . . . they think it cures fresh wounds and ensures success in hunting." Stukeley is quoted to show that the veneration for the plant prevailed at the Cathedral of York down to the most recent times. — (Encyclopædia Metropolitana.)

"Misseltœ of the oake drunk cureth certainly this disease" (epilepsy). — ("The Poor Man's Physician," John Moncrief, Edinburgh, 1716, p. 71.)

Still another writer reckons it a specific in epilepsy; also in apoplexy, vertigo, to prevent convulsions, and to assist children in teething, being worn round their necks. "We have accounts of strange superstitious customs used in gathering it, and that if they are not complied with it loses its virtue. This is by some conjectured to be the golden bough which Æneas made use of to introduce him to the Elysian regions, as is beautifully described in Virgil's sixth Æneid." — ("Complete English Dispensatory," John Quincy, M.D., London, 1730, p. 134.)

Culpepper wrote that the mistletoe, especially that growing upon the oak, was beneficial in the falling sickness, in apoplexy, and in palsy; also as a preventive of witchcraft; in the last-named case it should be worn about the neck. He did not seem to know anything of the origin of these ideas and practices. — (See Richard Culpepper, "The English Physician," London, 1765, p. 217.)

Pomet, in his "History of Drugs," London, 1737, describes agaric as an excrescence "found on the larch, oak, etc. . . . The best agaric is that from the Levant;" only that "which the antients used to call the female should be used in medicine." It was prescribed in "all distempers proceeding from gross humors and obstructions," — such as epilepsy, vertigo, mania, etc.; and this partly on the synpathetic or *similibus* principle.

In one of the preparations for epilepsy, said by Beckherius to have been recommended by Galen, occurs "Agaricus Viscus Querci." — (See Danielus Beckherius, "Medicus Microcosmus," London, 1660, p. 208.)

"When found growing on the oak, the mistletoe represented man."
— (Opinion of the French writer Reynaud, in his article "Druidism,"
quoted in the *Encyclopædia Britannica*.)

Notwithstanding this abundant proof, which might, if necessary, be swollen in volume, of the survival in domestic medicine, as well as in medical practice of a more pretentious character, of the use of the mistletoe, more particularly in cases of epilepsy, there is no instance of its employment noticed in "Saxon Leechdoms."

The explanation may be found in the fact that that compilation was rather exponential of the knowledge still possessed by the monks of classical therapeutics than of the skill attained by the Saxons themselves; there are pages of quotations from Sextus Placitus and other authorities, but scarcely anything to show that the ideas of the Saxons themselves were represented.

THE LINGUISTICS OF THE MISTLETOE.

Other curious instances of survival present themselves in the linguistics of the subject. The French word "gui," meaning mistletoe, is not of Latin, but of Druidical derivation, and so the Spanish "aguinaldo," meaning Christmas or New Year's present, conserves the cry, slightly altered, of the Druid priest to the "gui" at the opening of the new year.

"Aguillanneuf, et plus clairement, 'au gui, l'an neuf,' ou bien encore, 'l'anguil l'an neuf.'" — (Le Roux de Lincy, *Livre des Proverbes Français*, 1848, Paris, tome 1, p. 2, quoted in Buckle's "Commonplace Book," vol. ii. p. 440.)

"The next business was to arrange for the collection of the sacred plant, and bards were sent forth in all directions to summon the people to the great religious ceremony. The words of the proclamation are believed to survive in the custom which prevails, especially at Chartres, the old metropolis of the Druids, of soliciting presents on the New Year, with the words 'au gui l'an neuf.'" — ("Le Gui de Chêne et les Druides," Magdaleine, quoted by John Elliot Howard, in "Victoria Society Transactions," vol. xiv.)

"The Celtic name for the oak was 'guc,' or 'guy.'" — (Brand, *Pop. Ant.*, vol. i. p. 458.)

A writer in "Notes and Queries" shows (vol. ii. p. 163) that the word mistletoe is "le gui" in French; the continental Druid was called Gui, or a Guy, from "cuidare," whence "Guide." At the

present day, while the mistletoe itself is a charm, the name is a term of opprobium, — guy, in English.

M. C. H. Gaidoz takes exception to this interpretation. In his opinion, the words "aguinaldo" and "à gui l'an neuf" are to be derived from the Latin "ad calendas." — (Personal letter, dated Paris, France, March 11, 1889.)

XVII.

COW DUNG AND COW URINE IN RELIGION.

THE sacrificial value of cow dung and cow urine throughout India and Thibet is much greater than the reader might be led to infer from the brief citation already noted from Max Müller.

"Hindu merchants in Bokhara now lament loudly at the sight of a piece of cow's flesh, and at the same time mix with their food, that it may do them good, the urine of a sacred cow, kept in that place." — (Erman, "Siberia," London, 1848, vol. i. p. 384.)

Picart narrates that the Brahmins fed grain to a sacred cow, and afterward searched in the ordure for the sacred grains, which they picked out whole, drying and administering them to the sick, not merely as a medicine, but as a sacred thing.¹

Not only among the people of the lowlands, but among those of the foot-hills of the Himalayas as well, do these rites find place; "the very dung of the cow is eaten as an atonement for sin, and its urine is used in worship." — (Notes on the Hill Tribes of the Neilgherries, Short, Trans. Ethnol. Society, London, 1868, p. 268.)

"The greatest, or, at any rate, the most convenient of all purifiers is the urine of a cow; . . . Images are sprinkled with it. No man of any pretensions to piety or cleanliness would pass a cow in the act of staling without receiving the holy stream in his hand and sip-

¹ Après avoir donné du riz en pot, à manger aux vaches ils vont fouiller dans la bouze et en retirent les grains qu'ils trouvent entiers. Ils font sécher ces grains et les donnent à leurs malades, non seulement comme un remède mais encore comme une chose sainte. — (Picart, "Coûtumes et Cérémonies religieuses," etc., Amsterdam, 1729, vol. vii. p. 18.)

This is neither better nor worse than the custom of the Indians of Texas, Florida, and California, herein before described.

Chez les Indiens, la bouze de la vache est très-sainte. — (Picart, *idem*, vol. vi. part 2, pp. 191-193.)

Picart also discloses that the Banians swear by a cow. — (*Idem*, vol. vii. p. 16.)

A small quantity of the urine (of the cow) is daily sipped by some (of the Hindus.) — (Asiatic Researches, Calcutta, 1805, vol. viii. p. 81.)

ping a few drops. . . . If the animal be retentive, a pious expectant will impatiently apply his finger, and by judicious tickling excite the grateful flow." — (Moor's "Hindu Pantheon," London, 1810, p. 143.)

See, also, note from Forlong, under "Initiation," p. 164.

"It may be noted that, according to Lajarde, 'cow's-water' originally meant rain-water, the clouds being spoken of as cows. I give this for what it is worth. Your collection of facts goes strongly against the explanation." — (Personal letter from Prof. W. Robertson Smith, dated Christ College, Cambridge, England, August 11, 1888.)

Speaking of the sacrifice called Poojah, Maurice says: "The Brahman prepares a place, which is purified with dried cow-dung, with which the pavement is spread, and the room is sprinkled with the urine of the same animal." — (Maurice, "Indian Antiquities," London, 1800, vol. i. p. 77.)

"As in India, so in Persia, the urine of the cow is used in ceremonies of purification, during which it is drunk." — ("Zoölogical Mythology," Angelo de Gubernatis, London, 1872, vol. i. p. 95, quoting from Anquetil du Péron, "Zendavesta," ii. p. 245.)

Dubois, in his chapter "Restoration to the Caste," says that a Hindu penitent "must drink the *panchakaryam*, — a word which literally signifies the five things, namely, milk, butter, curd, dung, and urine, all mixed together." And he adds: —

"The urine of the cow is held to be the most efficacious of any for purifying all imaginable uncleanness. I have often seen the superstitious Hindu accompanying these animals when in the pasture, and watching the moment for receiving the urine as it fell, in vessels which he had brought for the purpose, to carry it home in a fresh state; or, catching it in the hollow of his hand, to bedew his face and all his body. When so used it removes all external impurity, and when taken internally, which is very common, it cleanses all within." — (Abbé Dubois, "People of India," London, 1817, p. 29.)

Very frequently the excrement is first reduced to ashes. The monks of Chivem, called Pandarones, smear their faces, breasts, and arms with the ashes of cow dung; they run through the streets demanding alms, very much as the Zuñi actors demanded a feast, and chant the praises of Chivem, while they carry a bundle of peacock feathers in the hand, and wear the *lingam* at the neck.¹

¹ "Les moines de Chivem sont nommés Pandarones. Ils se barbouillent le visage, la poitrine, et les bras avec des cendres de bouse de vache; ils parcourent les rues, demandent l'aumône et chantent les louanges de Chivem, en portant un pa-

COW DUNG ALSO USED BY THE ISRAELITES.

"The tribes had not many feelings in common when they came to be writers and told us what they thought of each other. As a rule, they bitterly reviled each other's gods and temples. . . . Judeans called the Samaritan temple, where calves and bulls were holy, in a word of Greek derivation, 'Pelethos Naos,' 'the dung-hill temple.' . . . The Samaritans, in return, called the temple of Jerusalem 'the house of dung.'" — ("Rivers of Life," Forlong, vol. i. p. 162.)

Commentators would be justified in believing that these terms preserve the fact of there having been in these places of worship the same veneration for dung that is to be found to this day among the peoples of the East Indies.

In another place Dulaure calls attention to the similar use among the Hebrews of the ashes of the dung of the red heifer as an expiatory sacrifice.¹

In one of the Hindu fasts the devotee adopts these disgusting excreta as his food. On the fourth day, "his disgusting beverage is the urine of the cow; the fifth, the excrement of that holy animal is his allotted food." — (Maurice, "Indian Antiquities," London, 1800, vol. v. p. 222.)

"I do not think that you can lay weight on the fact that in Israel, when a victim was entirely burned, the dung was not exempted from the fire. I think this only means that the victim was not cleared of offal, as in sacrifices that were eaten." — (Personal letter from Prof. W. Robertson Smith, Christ College, Cambridge, England.)

"Refert etiam Waltherus Schulzius ("Oest-Indianische Reise," lib. 3, cap. 10, l. m. 188, seq.) certam Indorum sectam Gioghi dictam nullum assumere cibum, nisi fimo vaccino coctum; capillos et faciem Croco et Stercore vaccino inungunt; nemo etiam in hanc societatem admittitur nisi antea per longum temporis spatium Corpus suum hoc stercore nutritur, etc." — (Schurig, "Chylogia," p. 783, quoted in "Bibliotheca Scatologica," pp. 93-96.)

Etmtiller, "Opera Omnia," Commentar. Ludovic., Lyons, 1690, vol.

quet de plumes de paon à la main et le lingam pendu au cou." — (Dulaure, "Des Divinités Génératrices," Paris, 1825, p. 105.)

¹ "Les Hébreux sacrifiaient et faisaient brûler la vache rousse, dont les cendres mêlées avec de l'eau servaient aux expiations." — (*Idem*, cap. i. pp. 23, 24.)

"They shall burn in the fire their dung." — (Levit. xvi. 27.)

"Her blood with her dung shall he burn." — (Numbers xix. 5.)

ii. pp. 171, 172, says that the Benjani, an Oriental sect, believers in the Transmigration of Souls, save the dung of their cows, gathering it up in their hands.

Rosinus Lentilius, in the "*Ephemeridum Physico-Medicorum*," Leipzig, 1694, quotes from the *Itinerary* of Tavernier, lib. 1, cap. 18, in regard to the *Scybolophagi Indorum*, who, in pursuance of vows to eat flesh only, scrape up the droppings of horses, bulls, cows, and sheep. "*Scybolophagi Indorum, de qua Tavernier, quod Benjanæ aliæque mulieres voto semet obstringant soli manducationi quisquiliarum, quas in pecorum, equorum, boum, vaccarum, stercorebus ruspatione sedula conquirunt. . . . Nec proprie de Homerda seu humanis excrementis, quibus Indorum nonnulli cibos condire, iisque ptarmici pulvere vice uti, quin et medicamentis, ceu panaceam, commiscere, non aversuntur.*"

No mention is made by Marco Polo of the use by the people of India of cow-dung or urine in any of their religious ceremonies, excepting one example cited under the head of "*Industries*." But the antiquity of the rite is demonstrated by the fact that it is frequently alluded to in the oldest of the canonical books of the people of India.

"Regarding the installation of Yudhisthira (the oldest son of Pandu and eldest brother of the Pandavas), who became Maharajah after the defeat and death of the Kauravas on the field of Kuruk-shetra, the Brahminical authors of the *Maha-Bharata*, in its present form, describe among the ceremonies used on the occasion the following one:" (Condensed from the text of J. Talboys Wheeler, "*History of India*," "*The Vedic Period and the Maha-Bharata*," vol. i. p. 371.) "After this, the five purifying articles which are produced from the sacred cow — namely, milk, the curds, ghee, the urine, and the ordure — were brought up by Krishna and the Maharaja and by the brothers of Yudhisthira, and poured by them over the heads of Yudhisthira and Draupadi."

"The appearance of Krishna here stamps the narrative with the characteristic cultus of a period far later than that in which the Vedic Aryans had used the cow as a religious symbol. The animal was now sacred to Vishnu, who held no place in the Vedic Pantheon, and his worship had been sufficiently developed to admit of his incarnation as Krishna." — (Personal letter from Dr. J. Hampden Porter, dated Washington, D. C., Sept. 29, 1888.)

De Gubernatis speaks of "the superstitious Hindoo custom of purifying one's self by means of the excrement of a cow. The same custom passed into Persia; and the *Khorda Avesta* has preserved the formula

to be recited by the devotee while he holds in his hand the urine of an ox or cow, preparatory to washing his face with it: 'Destroyed, destroyed, be the Demon Ahriman, whose actions and works are cursed.' — ("Zoölogical Mythology," *De Gubernatis*, pp. 99–100, vol. i.)

"We must complete the explanation of another myth, that of the excrement of the cow considered as purifying. The moon, as aurora, yields ambrosia. It is considered to be a cow; the urine of this cow is ambrosia or holy water; he who drinks this water purifies himself, as the ambrosia which rains from the lunar ray and the aurora purifies and makes clear the path of the sky, which the shadows of night darken and contaminate.

"The same virtue is attributed, moreover, to cow's dung, a conception also derived from the cow, and given to the moon as well as to the morning aurora. These two cows are considered as making the earth fruitful by means of their ambrosial excrements; these excrements being also luminous, both those of the moon and those of the aurora are considered as purifiers. The ashes of these cows which their friend the heroine preserves are not ashes, but golden powder or golden flour (the golden cake again occurs in that flour or powder of gold which the witch demands from the hero in Russian stories) which, mixed with excrement, brings good fortune to the cunning robber-hero.

"The ashes of the sacrificed, pregnant cow (i. e., the cow which dies after having given birth to a calf) were religiously preserved by the Romans in the Temple of Vesta with bean-stalks, which are used to fatten the earth sown with corn, as a means of expiation. Ovid mentions this rite. (*Fasti*, iv. 721.) "The ashes of a cow are preserved both as a symbol of resurrection and as a means of purification." — ("Zoöl. Mythol.," *De Gubernatis*, vol. i. pp. 275–277.)

The learned author overlooks in his argument that cows were sacrificed and worshipped in India before they were transferred to the Zodiac and to the symbolism of the elements.¹

¹ After the publication of his original pamphlet, the author became acquainted with the views of Mr. Lang upon this subject. An examination of them, as given in his "Myth, Ritual, and Religion," vol. ii. p. 137, will show that he perceives the defect in the explanation given by *De Gubernatis* in much the same manner as here expressed.

"The clouds in the atmosphere being often viewed as a herd of cows." — (Introduction to vol. iv. of "*Zendavesta*," p. 64, James Darmesteter, edition of Oxford, 1880: "*Sacred Books of the East*," edited by Max Müller.)

A personal letter received from W. S. Wyndham, Esq., Boyne Island, Queens-

"Religion, at its base, is the product of imagination working on early man's wants and fears, and is in no sense supernatural or the result of any preconceived and deliberate thought or desire to work out a system of morals. It arose in each case from what appeared to be the pressing needs of the day or season on the man or his tribe. The codification and expansion of faiths would then be merely the slow outcome of the cogitations and teachings of reflective minds, working usually with a refining tendency on the aforesaid primitive Nature-worship, and in elucidation of its ideas, symbolism, and legends. Early rude worshippers could not grasp abstractions, nor follow sermons even if they had been preached, and certainly not recondite theories on what the West designates 'Solar,' and other theories." — ("Rivers of Life," Forlong, vol. i. p. 36.)

"In the Shapast la Shayast (Sacred Books of the East, vol. v. part I.) much stress is laid on bull's urine as a purifier." — (Personal letter from Professor R. A. Oakes, Watertown, New York, April 20, 1888.)

"During the last few years we have been treated to a great deal of foolish gush about the beauty and nobility of Eastern religions. I don't deny that there are many commendable features about them, and that they often get near to the heart of true religion, as we understand it. But in their practical results they cannot be compared with Christianity. Take a concrete instance :—

"The Rev. T. W. Jex-Blake has this to say about Benares, with its three thousand Hindu temples: 'Step into the city,' he says; 'one temple swarms with fœtid apes; another is stercorous with cows. The stench in the passages leading to the temples is frightful; the filth beneath your feet is such that the keenest traveller would hardly care to face it twice. Everywhere, in the temples, in the little shrines in the street, the emblem of the Creator is phallic. Round one most picturesque temple, built apparently long since British occupation began, probably since the battle of Waterloo, runs an external frieze, about ten feet from the ground, too gross for the pen to describe, — scenes of vice, natural and unnatural, visible to all the world all day long, worse than anything in the Lupanar in Pompeii. Nothing that I saw in India roused me more to a sense of the need of religious renovation by the Gospel of Christ than what met the eye openly, right and left, at Benares.'" ("Tribune," New York, Nov. 11, 1888.)

land, Australia, relates that the tribes of Australia "have the stars laid out the same as we have, only, instead of the Great Bear, etc., they have the Emu, Kangaroo, Dog, and other things and men introduced."

"Forty years ago, during a stay of three months in Bombay, I saw frequently cows wandering in the streets, and Hindu devotees bowing, and lifting up the tails of the cows, rubbing the wombs of the aforesaid with the right hand, and afterwards rubbing their own faces with it." — (Personal letter from Captain Henri Jouan, French Navy, dated Cherbourg, France, July 29, 1888.)

Almost identical information was communicated by General J. J. Dana, U. S. Army, who, in the neighborhood of Calcutta, over forty years ago, had seen Hindu devotees besmeared from head to foot with human excrement.

Among the superstitious practices of the Greeks, Plutarch mentions "rolling themselves in dung-hills." ("Morals," Goodwin's trans., Boston, 1870, vol. i. p. 171, art. "Superstitions.") Plutarch also mentions "foul expiations," "vile methods of purgation," "bemirings at the temple," and speaks of "penitents wrapped up in foul and nasty rags," or "rolling naked in the mire," "vile and abject adorations," — (pp. 171-180.)

This veneration for the excrement of the cow is to be found among other races. The Hottentots "besmear their bodies with fat and other greasy substances over which they rub cow-dung, fat and similar substances." — (Thurnberg's "Account of the Cape of Good Hope," in Pinkerton, vol. xvi. pp. 25, 73, 139.)

"Every idea and thought of the Dinka is how to acquire and maintain cattle; a certain kind of reverence would seem to be paid them; even their offal is considered of high importance. The dung, which is burnt to ashes for sleeping in and for smearing their persons, and the urine, which is used for washing and as a substitute for salt, are their daily requisites." — (Schweinfurth, "Heart of Africa," vol. i. p. 58.)

In the religious ceremonies of the Calmuck Lamas, "Les pauvres jettent au commencement de l'office, qui dure toute la journée, un peu d'encens sur de la bouse de vache allumée et portée par un petit trépiéd de fer." — ("Voy. de Pallas," vol. i. p. 563.)

XVIII.

ORDURE ALLEGED TO HAVE BEEN USED IN FOOD BY THE ISRAELITES.

AMONG the Banians of India, proselytes are obliged by the Brahmins to eat cow-dung for six months. They begin with one pound daily, and diminish from day to day. A subtle commentator, says Picart, might institute a comparison between the nourishment of these fanatics and the dung of cows which the Lord ordered the prophet Ezekiel to mingle with his food.¹

This was the opinion held by Voltaire on this subject. Speaking of the prophet Ezekiel, he said : "He is to eat bread of barley, wheat, beans, lentils, and millet, and to cover it with human excrement."² It is thus, he says, that the "children of Israel shall eat their bread defiled among the nations among which they shall be banished." But "after having eaten this bread of affliction, God permits him to cover it with the excrement of cattle simply."

The view entertained by some biblical commentators is that the excrement was used for baking the bread ; but if this be true, why should human feces be used for such a purpose ? (Consult Lange's Commentaries, article "Ezekiel," and McClintock and Strong's Cyclopædia, article "Dung.")

¹ Disons un mot de la manière dont les Prosélytes des Banians sont obligés de vivre les premiers mois de leur conversion. Les Brahmines leur ordonnent de mêler de la fiente de la vache dans tout ce qu'ils mangent pendant ce tems de régénération. . . . Que ne diroit pas ici un commentateur subtil qui voudroit comparer la nourriture de ces prosélytes avec les ordres que Dieu donna autrefois à Ezechiel de mêler de la fiente de vache dans ses alimens. Ezekiel iv. — (Picart, "Coutumes et cérémonies religieuses," etc., Amsterdam, 1729, vol. vii. p. 15.)

² "Il doit manger du pain, du froment, d'orge, de fèves, de millets, et de couvrir d'excrémens humains," etc. — (Voltaire, "Essais sur les Mœurs," vol. i. p. 195, Paris, 1795).

"And thou shalt eat it as barley cakes, and thou shalt bake it with dung that cometh out of man in their sight." — (Ezekiel iv. 12.)

“For mere filth, what can be fouler than 2 Kings xviii. 27, Isaiah xxxvi. 12, and Ezekiel iv. 12–15 (where the Lord changes human ordure into ‘cow chips’)? ‘Ce qui excuse Dieu,’ said Henri Bayle, ‘ce qu’il n’existe pas.’ I add, as man has made him.”—(Richard F. Burton, “Terminal Essay” to his edition of the “Arabian Nights,” vol. x. p. 181, foot-note, London, 1886.)

Bayle does not allude to the baking of bread with ordure in his brief article upon the prophet Ezekiel; neither does Prof. J. Stuart Blaikie in his more comprehensive dissertation in the *Encyclopædia Britannica*, article “Ezekiel.”

“The use of dung by the ancient Israelites is collected incidentally from the passage in which the prophet Ezekiel, being commanded, as a symbolic action, to bake his bread with dung, excuses himself from the use of an unclean thing, and is permitted to employ cow’s dung instead.”—(Strong and McClintock’s “Cyclopædia of Biblical and Classical Literature,” New York, 1868, vol. ii. article “Dung.”)

“I fear that Voltaire cannot be taken as an authority on Hebrew matters. I believe that the passage from Ezekiel is correctly rendered in the revised edition, where at verse 15 ‘thereon’ is substituted for ‘therewith’ of the old version. The use of dried cow’s-dung as fuel is common among the poorer classes in the East; and in a siege, fuel, always scarce, would be so scarce that a man’s dung might have to be used. I do not think that one need look further for the explanation of verses 15–17; the words of verse 15 are not ambiguous, and that used for dung is the same as the Arabs still apply to the dried cakes of cow’s dung used for fuel. Voltaire and Picart both seem to have used the Vulgate, in which verse 12 is wrongly rendered.”—(Personal letter from Prof. W. Robertson Smith, Cambridge, England.)

“Les nombreux exemples qui précèdent rendent moins intéressante la question de savoir si Ezéchias stercus comederit; ce ne serait qu’un mangeur de plus. Pourtant on peut voir dans la Bible le verset 12 du chap. iv. de ce prophète: ‘et quasi sub cineribus hordaceum comedes illud et stercore quod egreditur de homine operies illud in oculis eorum;’ et les diverses interprétations données par les différents traducteurs et commentateurs.”—(*Bibliotheca Scatologica*, pp. 93–96.)

Schurig consacre un paragraphe à discuter si Ezechias stercus comederit.—(Idem, p. 39.)

Just exactly what Schurig thought on this subject may be stated in his own words. Although not positive, he inclines to the opinion that Ezekiel did eat excrement:—

"Denique, mandato divino, Propheta Ezechiel, cap. iv. ver. 12, placentam hordeaceam cum stercore humano parasse atque comedisso primo intuitu videtur, juxta versionem Lutheri. . . . Juxta Junium et Tremellium allegata verba sic sonant: Comedes cibum ut placentam hordeaceam, et ad orbes excrementi humani parabis placentam istam in oculis illorum. Juxta Sebastianum Schmidium: Sicut placentam hordeorum comedes eum; quod ad ipsum tamen, cum stercore fini hominis facies in oculis eorum. Bene etiam hunc locum explicat Textus Gallicus meæ editionis: Tu mangeras de fœnaces d'orge, et les cuiras avec la fiente qui sort hors de l'homme eux le voyans." — ("Chylologia," Dresden, 1725, pp. 782, 783.)

"Ezekiel says that his God told him to lie for three hundred and ninety days on his left side, and then forty days on his right side, when 'he would lay hands on him and turn him from one side to another;' also that during all this period he was only to eat barley bread baked in too disgusting a manner to be described." — ("Rivers of Life," Forlong, vol. ii. p. 597.)

"This last command was, however, so strongly resented that his Deity somewhat relaxed it." — (Idem.)

The most rational explanation of this much-disputed and ambiguous passage must necessarily be such as can be deduced from a consideration of Ezekiel's environment.

Giving due weight to every doubt, there remains this feature: the prophet unquestionably was influenced and actuated by the ideas of his day and generation, which looked upon the humiliations to which he subjected himself as the outward manifestations of an inward spirituality.

Psychologically speaking, there is no great difference between the consumption of human excrement and the act of lying on one's side for three hundred and ninety days; both are indications of the same perverted cerebration, mistaken with such frequency for piety and holiness.

"Isaiah had periods of indecent maniacal outbursts; for we are told that he once went about stark naked for three years, because so commanded by the Lord." — ("Rivers of Life," vol. ii. p. 537, quoting Isaiah xx. 2, 3.)

THE SACRED COW'S EXCRETA A SUBSTITUTE FOR HUMAN SACRIFICE.

The foregoing testimony, which could readily be swelled in volume, proves the sacred character of these excreta, which may be looked upon

as substitutes for a more perfect sacrifice. In the early life of the Hindus it is more than likely that the cow or the heifer was slaughtered by the knife or burnt; as population increased in density, domestic cattle became too costly to be offered as a frequent oblation, and on the principle that the part represents the whole, hair, milk, butter, urine, and ordure superseded the slain carcass, while the incinerated excrement was made to do duty as a burnt sacrifice.¹

It was hardly probable that such practices, or an explanation of the causes which led to their adoption and perpetuation, should have escaped the keen criticism of E. B. Tylor.

"For the means of some of his multifarious lustrations, the Hindu has recourse to the sacred cow. . . . The Parsi religion prescribes a system of lustration which well shows its common origin with that of Hinduism by its similar use of cow's urine and water. . . . Applications of *nirang*, washed off with water, form part of the daily religious rites, as well as of such special ceremonies as the naming of the newborn child, the putting on of the sacred cord, the purification of the mother after childbirth, and the purification of him who has touched a corpse." — (E. B. Tylor, "Primitive Culture," London, 1871, vol. ii. pp. 396, 397.)

"It will help us to realize how the sacrifice of an animal may atone for a human life, if we notice in South Africa how a Zulu will redeem a lost child from the finder by a bullock, or a Kimbunda will expiate the blood of a slave by the offering of an ox, whose blood will wash away the other. For instances of the animal substituted for man in sacrifice, the following may serve: Among the Khonds of Orissa, where Colonel MacPherson was engaged in putting down the sacrifice of human victims by the sect of the Earth-goddess, they at once began to discuss the plan of sacrificing cattle by way of substitutes. Now, there is some reason to think that this same course of ceremonial change may account for the following sacrificial practice in the other Khond sect. It appears that those who worship the Light-god hold a festival in his honor, when they slaughter a buffalo in commemoration of the time when, as they say, the Earth-goddess was prevailing on men to offer

¹ Such an economic tendency in the sacrificial practices of the Parsis is shown by Tylor. The Vedic sacrifice, Agnishtoma, required that animals should be slain and their flesh partly committed to the gods by fire, partly eaten by sacrificers and priests. The Parsi ceremony, *Izeshne*, formal successor of this bloody rite, requires no animal to be killed, but it suffices to place the hair of an ox in a vessel, and show it to the fire. — ("Primitive Culture," E. B. Tylor, New York, 1874, vol. ii. p. 400.)

human sacrifices to her, but the Light-god sent a tribe-deity who crushed the bloody-minded Earth-goddess under a mountain and dragged a buffalo out of the jungle, saying, 'Liberate the man, and sacrifice the buffalo.' It looks as though this legend, divested of its mythic garb, may really record a historical substitution of animal for human sacrifice. In Ceylon, the exorcist will demand the name of the demon possessing a demoniac, and the patient in frenzy answers, giving the demon's name, 'I am So-and-so; I demand a human sacrifice, and I will not go without.' The victim is promised, the patient comes to from the fit, and a few weeks later the sacrifice is made; but instead of a man they offer a fowl. Classic examples of a substitution of this sort may be found in the sacrifice of a doe for a virgin to Artemis in Laodicea, a goat for a boy to Dionysos at Potniæ.

"There appears to be a Semitic connection here, as there clearly is in the story of the Æolians of Tenedos sacrificing to Melikertes (Melkarth) instead of a new-born child a new-born calf, shoeing it with buskins and tending the mother cow as if a human mother." — (Idem, vol. ii. p. 366; or in New York edition, 1879, vol. ii. pp. 403, 404.)

"O Maker of the material world, thou Holy One! which is the urine wherewith the corpse-bearers shall wash their hair and their bodies? Is it of sheep or of oxen? Is it of man or of woman?

"Ahura Mazda answered: It is of sheep or of oxen, not of man nor of woman, except these two, the nearest kinsman (of the dead) or his nearest kinswoman. The worshippers of Mazda shall therefore procure the urine wherewith the corpse-bearers shall wash their hair and their bodies." — (Fargard vii., *Avendidad*, *Zendavesta*, Oxford, 1890, p. 96.)

"A prince may sacrifice his enemy, having first invoked the axe with holy texts, by substituting a buffalo or goat, calling the victim by the name of the enemy throughout the whole ceremony." — ("The Sanguinary Chapter," translated from the "*Calica Purana*," in vol. 5, "*Transactions Asiatic Society*," 4th edition, London, 1807, p. 386.)

"An interesting chapter of the *Aitareya-brahmanam*, on the sacrifice of animals, shows us how, next to man, the horse was the supreme sacrifice offered to the gods; how the cow afterwards took the place of the horse, the sheep of the cow, the goat of the sheep; and at last vegetable products were substituted for animals,—a substitution or cheating of the gods in the sacrifice, which perhaps explains even more the fraud of which, in popular stories, the simpleton is always the victim; the simpleton hero being the god himself, and the cheater man,

who changes, under a sacred pretext, the noblest and most valued animals for common and less valued ones, and finally for vegetables apparently of no value whatever. In Hindu codes of law we have the same fraudulent substitution of animals under a legal pretext. 'The killer of a cow,' says the code attributed to Yagnavalkyas, 'must stay a month in penitence, drinking the panchakaryam' (that is, the five good productions of the cow, which, according to Manus, are milk, curds, butter, urine, and dung), sleeping in a stable, and following the cows.' — ("Zööl. Mythol.," De Gubernatis, vol. i. pp. 44, 45.)

"The sacred books of the Hindus contain the most formal and detailed instructions about human sacrifices, and on what occasions and with what ceremonies they are to be offered; sometimes on an enormous scale, — as many as one hundred and fifty human victims at one sacrifice." — Ragozin, "Assyria," New York, 1887, pp. 127-128.

Continuing, Ragozin says: "When bloody sacrifices, even of animals, were in great part abolished, and offerings of cakes of rice and wheat were substituted, the humane change was authorized by a parable which told how the sacrificial virtue had left the highest and most valuable victim, man, and descended into the horse, from the horse into the steer, from the steer into the goat, from the goat into the sheep, and from that at last passed into the earth, where it was found abiding in the grains of rice and wheat laid in it for seed.

"This was an ingenious way of intimating that henceforth harmless offerings of rice and wheat cakes would be as acceptable to the deity as the living victims, human and animal, formerly were." — (Idem, p. 128.)

As the animal victim became more and more valuable, we have seen that its excreta were offered in its place.

The Celtic stock, it is now generally admitted, represents a very early migration from India. Exactly when this migration began and was completed we have no means of determining; but we may safely say, judging from the prominence in Celtic folk-lore of the chicken-dung, that it did not occur until the cultus of India was beginning to cast about for some suitable substitute for human sacrifice.¹

¹ Dubois declares that in the Atharvana Veda "bloody sacrifices of victims (human not excepted) are there prescribed." ("People of India," London, 1817, p. 341.) And in those parts of India where human sacrifice had been abolished a substitutive ceremony was practised "by forming a human figure of flour paste or clay, which they carry into the temple, and there cut off its head and mutilate it in various ways, in presence of the idols." — (Idem, p. 490.)

Inman takes the ground that the very same substitution occurred among the Hebrews. Commenting upon 1 Kings xix. 18, he says: "In the Vulgate the passage is thus rendered: 'They say to these, Sacrifice the men who adore the calves;' while the Septuagint renders the words, 'Sacrifice men, for the calves have come to an end,' indicating a reversion to human sacrifice."—(Inman, "Ancient Faiths Embodied in Ancient Names," London, 1878, article "Hosea.")

"He that killeth an ox as if he slew a man; he that sacrificeth a lamb as if he cut off a dog's neck; he that offereth an oblation as if he offered swine's blood; he that burneth incense as if he blessed an idol."—(Isaiah lxvi. 3. Reference given to the above by Prof. W. Robertson Smith.)

"In the earliest period the horse seems to have been the favorite animal for sacrifice."—("Teutonic Mythology," Jacob Grimm, vol. i. p. 47.)

"The Brahmans show how, in Hindostan, the lower animals became vicarious substitutes for man in sacrifice."—("Myth, Ritual, and Religion," Andrew Lang, vol. ii. p. 40, footnote.)

If the cow have displaced a human victim, may it not be within the limits of probability that the ordure and urine of the sacred bovine are substitutes, not only for the complete carcass, but that they symbolize a former use of human excreta?¹ The existence of ur-orgies has been indicated in Siberia, where the religion partakes of many of the characteristics of Buddhism.² The minatory phraseology of the Brahminical inhibition of the use of the fungi which enter into these orgies has been given *verbatim*; so that, even did no better evidence exist, enough has been presented to open up a wide range of discussion as to the former area of distribution of loathsome and disgusting ceremonials, which are now happily restricted to small and constantly diminishing zones.

HUMAN ORDURE AND URINE STILL USED IN INDIA.

It is well to remember, however, that in India the more generally recognized efficacy of cow urine and cow dung has not blinded the

¹ After the Jews had been humbled by the Lord, and made to mingle *human* ordure with their bread, the punishment was mitigated by substitution. "Then he said unto me, Lo! I have given thee cow's dung for man's dung, and thou shalt prepare thy bread therewith."—Ezekiel iv. 15.

² Pallas believed "que le lamaïsme des Kalmouks Mongols est originaire des Indes."—(Voy. de Pallas, vol. i. p. 535.)

fanatical devotee to the necessity of occasionally having recourse to the human product.

"At about ten leagues to the southward of Seringapatam there is a village called Nan-ja-na-gud, in which there is a temple famous all over the Mysore. Amongst the number of votaries of every caste who resort to it, a great proportion consists of barren women, who bring offerings to the god of the place, and pray for the gift of fruitfulness in return. But the object is not to be accomplished by the offerings and prayers alone, the disgusting part of the ceremony being still to follow. On retiring from the temple, the woman and her husband repair to the common sewer to which all the pilgrims resort in obedience to the calls of nature. There the husband and wife collect, with their hands, a quantity of the ordure, which they set apart, with a mark upon it, that it may not be touched by any one else; and with their fingers in this condition, they take the water of the sewer in the hollow of their hands and drink it. Then they perform ablution and retire. In two or three days they return to the place of filth to visit the mass of ordure which they left. They turn it over with their hands, break it, and examine it in every possible way; and, if they find that any insects or vermin are engendered in it, they consider it a favorable prognostic for the woman." — (Abbé Dubois, "People of India," London, 1817, p. 411.)¹

¹ Previous notes upon the Grand Lama of Thibet, and upon the abominable practices of the Agozis and Gurus seem to be pertinent in this connection. See pp. 40-42.

XIX.

EXCREMENT GODS OF ROMANS AND EGYPTIANS.

THE Romans and Egyptians went farther than this ; they had gods of excrement, whose special function was the care of latrines and those who frequented them. Torquemada, a Spanish author of high repute, expresses this in very plain language :—

“I assert that they used *to adore* (as St. Clement writes to St. James the Less) stinking and filthy privies and water-closets ; and, what is viler and yet more abominable, and an occasion for our tears and not to be borne with or so much as mentioned by name, they adored the noise and wind of the stomach when it expels from itself any cold or flatulence ; and other things of the same kind, which, according to the same saint, it would be a shame to name or describe.”¹

In the preceding lines Torquemada refers to the Egyptians only, but, as will be seen by examining the Spanish notes below, his language is almost the same when speaking of the Romans.² The Roman goddess was called Cloacina. She was one of the first of the Roman deities, and is believed to have been named by Romulus himself. Under her charge were the various cloacæ, sewers, privies, etc., of the Eternal City.³

¹ Digo que adoraban (segun San Clemente escribe á Santiago el mejor), las hediondas y sucias necesarias y latrinas ; y lo que es peor y mas abominable y digno de llorar y no de sufrir, ni nombrarle por su nombre, que adoraban, el estruendo y crugimiento, que hace el vientre quando despidе de sí alguna frialdad ó ventosidad y otras semejantes, que segun el mismo santo es vergüenza nombrarlas y decirlas. — (Torquemada, Monarchia Indiana, lib. vi. chap. 13, Madrid, 1723.)

² Los Romanos . . . constituieron Diosa á los hediondas necesarias ó latrinas y la adoraban y consagraban y ofrecian sacrificios. — (Idem, lib. vi. chap. 16, Madrid, 1723.)

³ There is another opinion concerning Cloacina — that she was one of the names given to a statue of Venus found in the Cloaca Maxima. Smith, in his Dictionary of Antiquities, London, 1850, expresses this view, and seems to be followed by the American and Britannic Encyclopædias. Lemprière defines Cloacina : “A goddess of Rome, who presided over the Cloacæ — some suppose her to be Venus — whose

"Les anciens avaient fait plusieurs divinités du Stercus ; 1. Stercus ou Sterces, père de Picus, inventeur de la méthode de fumer les terres (S. August. De Civ. Dei, lib. xviii. cap. 15). 2. Sterculius (Macrob., Saturn, lib. i. cap. 7) ; 3. Stercutius (Lactant. de fal. reb.), Stercutus, Sterquilinus, Sterquiline, divinités qui présidaient aux engrais. Quelques personnes croient que c'était un surnom de Saturne comme inventeur de l'agriculture ; d'autres y reconnaissent la terre elle-même. Pline dit que ce dieu était fils du dieu Faune et petit-fils de Picus, roi des Latins. — (Pline, lib. xvii. cap. 9, num. 40 ; Persius, sat. i. ver. 3.)

"On honore aussi Faunus avec les deux derniers surnoms." — (Pline, loc. cit. Bib. Scat.)

"Consultez sur cette déesse en l'honneur de laquelle on a frappé des médailles, Lactant. Instit. lib. i. cap. 20, p. 11 ; St. Cyp. Van. d. id. cap. 2, par. 6 ; Minutius Felix, Oct. cap. 25 ; Pline, Hist. Nat. lib. xiv. cap. 29 ; Tite Live, 3, 48 ; Banier, Myth. tome i. 348 ; iv. 329, 338 ;" — (Bib. Scat. p. 43, footnote.)

As far as possible, the above citations were verified ; the edition of St. Augustine consulted was that of the Reverend Maurice Dods, Edinburgh, 1871.

"Tatius both discovered and worshipped Cloacina." — (Minutius Felix, "Octavius," cap. xxv., edition of Edinburgh, 1869.)

"Colatina, alias Clocina, was goddess of the stools, the jakes, and the privy, to whom, as to every of the rest, there was a peculiar temple edified." — (Reginald Scot, "Discovery of Witchcraft," lib. 16, cap. 22, giving a list of the Roman gods.)

statue was found in the Cloacæ, whence the name." — (See, also, in Anthon's Classical Dictionary.)

Higgins says that "the famous statue of Venus Cloacina was found in them (the Cloacæ Maximæ) by Romulus." — (Anacalypsis, footnote to p. 624, London, 1836.)

Torquemada insists that the Romans borrowed this goddess from the Egyptians : "A esta diosa llamaron Cloacina, Diosa que presidia en sus albanares y los guardaba, que son los lugares donde van á parar todas las suciedades, inmundicias, y vascoidades de una Republica." — (Torquemada, lib. vi. chap. 17.)

Torquemada, who makes manifest in his writings an intimate acquaintance with Greek and Roman mythology, fortifies his position by references from St. Clement, Itinerar., lib. 5 ; Lactantius, Divinas Ejus, lib. 1, chap. 20 ; Epistle of St. Clement to St. James the Less, Eusebius, de Preparatione Evangel., chap. 1 ; St. Augustine, Civ. Dei, lib. 2, chap. 22 ; Diod. Sic., lib. 1, chap. 2, and lib. 2, chap. 4 ; Lucian, Dialogues, Cicero, de Nat. Deorum, Pliny, lib. 10, chap. 27, and lib. 11, chap. 21 ; Theodoret, lib. 3, de Evangelii veritatis cognitione.

The following epigram is taken from Harington's "Ajax," p. xviii. :

"The Romans, ever counted superstitious,
Adored with high titles of divinity,
Dame Cloacina and the Lord Stercutius, —
Two persons, in their state, of great affinity."

For further references to Cloacina, see p. 264.

"Stercus, Dieu particulier qui présidait à la garde-robe. Ce dernier nous rappelle qu'à l'art. Scopetarius, num. 111, nous avons dit quelques mots de Cloacine, déesse des égouts.

"On trouve encore dans Arnobe un dieu Latrinus duquel il dit : 'Quis Latrinus præsidem latrinis?' — (Adv. Gent. lib. 4.)

"Horace et tous les poètes du temps d'Auguste, parlent de Stercus et ses circonstances et dépendances en cent endroits de leurs ouvrages. Martial, Catulle, Pétrone, Macrobe, Lucrèce, en saupoudrent leurs poésies ; Homère, Pline, Lampride en parlent à ciel et à cœurs couverts ; Saint Jérôme et Saint Augustin ne dédaignent pas d'en entretenir leurs lecteurs." — (Bibliotheca Scatologica, pp. 1, 2.)

"Dans Plautus, Aristophane fait dire per Carion que le dieu Esculape aime et mange la merde : il est merdivore, comme écrit le traducteur latin ; Prave dieu, comme Sganarelle, qui a dit ce mot sacramental et profond, — 'La matière est-elle louable ?' Il trouve dans les excréments le secret des souffrances humaines. Son trépied prophétique et médical, c'est une chaise percée. — (Idem, p. 66.)

"Sterculius. (Myth.) surnom donné à Saturne, parcequ'il fut le premier qui apprit aux hommes à fumer les terres pour les rendre fertiles." — ("Encyc. Raisonné des Sciences," etc., Neufchatel, 1765, tome quinzisième, art. "Sterculius.")

The Romans "had a god of ordure named Stercutius ; one for other conveniences, Crepitus ; a goddess for the common sewers, Cloacina." — (Banier, "Mythology," vol. i. p. 199.)

"Sterculius was one of the surnames given to Saturn because he was the first that had laid dung upon lands to make them fertile." — (Idem, vol. ii. p. 540.)

THE ASSYRIAN VENUS HAD OFFERINGS OF DUNG PLACED UPON HER ALTARS.

Another authority states that "the zealous adorers of Siva rub the forehead, breast, and shoulders with ashes of cow-dung," and, further, he adds : "It is very remarkable that the Assyrian Venus, according to

Lucian, had also offerings of dung placed upon her altars." — (Maurice, "Indian Antiquities," London, 1800, vol. i. pp. 172, 173.)¹

THE MEXICAN GODDESS SUCHIQUECAL EATS ORDURE.

The Mexicans had a goddess, of whom we read the following:— Father Fabreya says, in his commentary on the Codex Borgianus, that the mother of the human race is there represented in a state of humiliation, eating *cuillatl* (*kopros*, Greek). The vessel in the left hand of Suchiquecal contains "*mierda*," according to the interpreter of these paintings. — (See note to p. 120, Kingsborough's "Mexican Antiquities," vol. iv.)

The Spanish *mierda*, like the Greek *kopros*, means *ordure*.

Besides Suchiquecal, the mother of the gods, who has been represented as eating excrement in token of humiliation, the Mexicans had other deities whose functions were more or less clearly complicated with alvine dejections. The most prominent of these was Ixcuina called, also, Tlaçolteotl, of whom Brasseur de Bourbourg speaks in these terms: The goddess of ordure, or Tlaçolquani, the *eater of ordure*, because she presided over loves and carnal pleasures.²

Mendieta mentions her as masculine, and in these terms: The god of vices and dirtinesses, whom they called Tlazulteotl.³

Bancroft speaks of "the Mexican goddess of carnal love, called Tlazoltecotl, Ixcuina, Tlaçolquani," etc., and says that she "had in her service a crowd of dwarfs, buffoons, and hunchbacks, who diverted her with their songs and dances and acted as messengers to such gods as she took a fancy to. The last name of this goddess means "eater of filthy things," referring, it is said, to her function of hearing and pardoning the confessions of men and women guilty of unclean and

¹ "Is Maurice's reference to Lucian correct? There is nothing of the kind in the *Deâ Syrâ*, nor can I find it elsewhere in his works, though the Index by Rentz is practically a Concordance. Still, I do not affirm that it is not there." — (Personal letter from Professor W. Robertson Smith, Christ College, Cambridge, England.)

By a reference to page 36, it will be seen that Sakya-muni eats his own excrement, and one of the Bourkans or gods of the Kalmucks is represented as addicted to the same filthy habit.

² Tlaçolteotl, la d  esse de l'ordure, ou Tlaçolquani, la mangeuse d'ordure, parce qu'elle pr  sidait aux amours et aux plaisirs lubriques. — (Brasseur de Bourbourg, introduction to Landa, French edition, Paris, 1864, p. 87.)

³ El dios de los vicios y suciedades que le decian Tlazulteotl. — (Mendieta, in Icazbalceta, Mexico, 1870, vol. i. p. 81.)

carnal crimes. — (Bancroft, H. H. "Native Races of the Pacific Slope," vol. iii. p. 380.)

In the manuscript explaining the *Codex Telleriano*, given in Kingsborough's "Mexican Antiquities," vol. v. p. 131, occurs the name of the goddess *Ochpaniztli*, whose feast fell on the 12th of September of our calendar. She was described as "the one who sinned by eating the fruit of the tree." The Spanish monks styled her, as well as another goddess, *Tlaçolteotl*, — "La diosa de basura ó pecado." But "basura" is not the alternative of sin (*pecado*); it means "dung; manure, ordure, excrement."¹ It is possible that, in their zeal to discover analogies between the Aztec and Christian religions, the early missionaries passed over a number of points now left to conjecture.

In the same volume of Kingsborough, p. 136, there is an allusion to the offerings or sacrifices made *Tepeololtec*, "que, en romance, quiere decir sacrificios de mierda," which, "in plain language, signifies sacrifices of excrement. Nothing further can be adduced upon the subject, although a note at the foot of this page, in Kingsborough, says that here several pages of the *Codex Telleriano* had been obliterated or mutilated, probably by some over-zealous expurgator.

Deities, created in the ignorance or superstitious fears of devotees, are essentially man-like in their attributes; where they are depicted as cruel and sanguinary toward their enemies, the nation adoring them, no matter how pacific to-day, was once cruel and sanguinary likewise. Anthropophagous gods are worshipped only by the descendants of

¹ According to Neumann and Baret's Velasquez, while, according to the Dictionary of the Spanish Academy, the meaning is "the dirt and refuse collected in sweeping, — the sweepings and dung of stables." The same idea has since been found in an extract from an ancient writer, given in "*Mélusine*," May 5, 1888. — (Paris, Gaidoz.)

"Les Esprits forts de l'Antiquité Classique. Eusèbe, dans sa 'Préparation Évangélique' (XIII. 13), cite quelques vers de Xénophane de Colephone sur l'unité et l'immortalité de Dieu qui ne peut ressembler aux hommes ni en forme ni en esprit. Ces vers se terminent ainsi :

'Mais si les bœufs et les lions avaient des mains, — s'ils savaient dessiner avec ces mains, et produire les mêmes œuvres que les hommes, — ils (les dieux) seraient semblables aux bœufs pour les bœufs et semblables aux chevaux pour les chevaux. Et ceux-ci dessineraient les figures des dieux et ils leur feraient des corps semblables à ceux qu'ils ont eux-mêmes.' — *Patrologie Grecque* de Migne, t. xxi. col. 1121, H. G. — Voir aussi J. Bizouard "Rapports de l'homme avec le démon," Paris, 1864, conçus dans le même esprit."

Andrew Lang regards *Tlazolteotl* as the "Aphrodite of Mexico." — ("Myth, Rit., and Relig." vol. ii. p. 42.)

cannibals, and excrement-eaters only by the progeny of those who were not unacquainted with human ordure as an article of food.

ISRAELITISH DUNG GODS.

Dulaure quotes from a number of authorities to show that the Israelites and Moabites had the same ridiculous and disgusting ceremonial in their worship of Bel-phegor. The devotee presented his naked posterior before the altar and relieved his entrails, making an offering to the idol of the foul emanations.¹ Dung gods are also mentioned as having been known to the chosen people during the time of their idolatry.²

Mr. John Frazer, LL.D., describing the ceremony of initiation, known to the Australians as the "Bora," and which he defines to be "certain ceremonies of initiation through which a youth passes when he reaches the age of puberty to qualify him for a place among the men of the tribe and for the privileges of manhood. By these ceremonies he is made acquainted with his father's gods, the mythical lore of the tribe

¹ L'adorateur présentait devant l'autel son postérieur nu, soulageait ses entrailles et faisait à l'idole une offrande de sa puante déjection. — (Dulaure, "Des Divinités Génératrices," Paris, 1825, p. 76.)

Philo says the devotee of Baal-Peor presented to the idol all the outward orifices of the body. Another authority says that the worshipper not only presented all these to the idol, but that the emanations or excretions were also presented, — tears from the eyes, wax from the ears, pus from the nose, saliva from the mouth, and urine and dejecta from the lower openings. This was the god to which the Jews joined themselves; and these, in all probability, were the ceremonies they practised in his worship. — (Robert Allen Campbell, *Phallic Worship*, St. Louis, 1888, p. 171.)

Still another authority says the worshipper, presenting his bare posterior to the altar, relieved his bowels, and offered the result to the idol: "Eo quod distendebant coram illo foramen podicis et stercus offerebant." — (Hargrave Jennings, *Phallicism*, London, 1884, quoting Rabbi Solomon Jarchi, in his *Commentary on Numbers* xxv.)

These two citations go to show that the worshipper intended making not a merely ceremonial offering of flatulence, but an actual oblation of excrement, such as has been stated, was placed upon the altars of their near neighbors, the Assyrians, in the devotions tendered their Venus.

² Ye have seen dung gods, wood and stone. — (Deut. xxix. 17. See Cruden's Concordance, Articles "Dung" and "Dungy," but no light is thrown upon the expression.)

And ye have seen their abominations and their idols (detestable things), wood and stone, silver and gold, which were among them. — (Lange's Commentary on Deuteronomy, edited by Dr. Philip Schaff, New York, 1879. But in footnote one reads: "Margin — dungy gods from the shape of the ordure, literally thin clods or balls, or that which can be rolled about. — A. G.")

and the duties required of him as a man. . . . The whole is under the tutelage of a high spirit called 'Dharamoolun.' . . . But, present at these ceremonies, although having no share in them, is an evil spirit called 'Gunungdhukhya,' 'eater of excrement,' whom the blacks greatly dread." Compare this word "Gunungdhukhya," with the Sanskrit root-word "Gu," "excrement;" "Dhuk" is the Australian "to eat." — (Personal letter from John Frazer, Esq., LL.D., dated Sydney, New South Wales, Dec. 24, 1889. Continuing his remarks upon the subject of the evil spirit "Gunungdhukhya," he says: "This being is certainly supposed to eat ordure; and such is the meaning of his name.")

King James gravely informs us that "Witches oftentimes confesse that in their worship of the Devil. . . . Their form of adoration to be the kissing of his hinder parts." — ("Dæmonologie," London, 1616, p. 113.) This book appeared with a commendatory preface from Hinton, one of the bishops of the English Church.

"Witches paid homage to the devil who was present, usually in the form of a goat, dog, or ape. To him they offered themselves, body and soul, and kissed him under the tail, holding a lighted candle." — ("History of the Inquisition," Henry C. Lea, New York, 1888, vol. iii., p. 500.)

Knowing of the existence of "dung gods" among Romans, Egyptians, Hebrews, and Moabites, it is not unreasonable to insist, in the present case, upon a rigid adherence to the text, and to assert that, where it speaks of a sacrifice as a sacrifice of excrement and designates a deity as an eater of excrement, it means what it says, and should not be distorted, under the plea of symbolism, into a perversion of facts and ideas.

Some writers made out the name of the god "Belzebul" to be identical with "Beelzebub," and to mean "Lord of Dung," but this interpretation is disputed by Schaff-Herzog. — ("Encyclopædia of Religious Knowledge," New York, article "Beelzebub.")

XX.

LATRINES.

THE mention of the Roman goddess Cloacina suggests an inquiry into the general history of latrines and urinals. Their introduction cannot be ascribed to purely hygienic considerations, since many nations of comparatively high development have managed to get along without them; while, on the other hand, tribes in low stages of culture have resorted to them.

In the chapter treating upon witchcraft and incantation enough testimony has been accumulated to convince the most sceptical that the belief was once widely diffused of the power possessed by sorcerers, *et id omne genus*, over the unfortunate wretches whose excreta, solid or liquid, fell into their hands; terror may, therefore, have been the impelling motive for scattering, secreting, or preserving in suitable receptacles the alvine dejections of a community. Afterwards, as experience taught men that in these egestæ were valuable fertilizers for the fields and vineyards, or fluids for bleaching and tanning, the political authorities made their preservation a matter of legal obligation.

The Trojans defecated in the full light of day, if we can credit the statement made to that effect in the "Bibliotheca Scatologica," p. 8, in which it is shown that a French author (name not given) wrote a facetious but erudite treatise upon this subject.

Captain Cook tells us that the New Zealanders had privies to every three or four of their houses; he also takes occasion to say that there were no privies in Madrid until 1760; that the determination of the king to introduce them and sewers, and to prohibit the throwing of human ordure out of windows after nightfall, as had been the custom, nearly precipitated a revolution. — (See in Hawkesworth's "Voyages," London, 1773, vol. ii. p. 314.)

"These were more cleanly than most savages about excrements. Every house had a concealed (if possible) privy near, and in large 'Pas' a pole was run out over the cliff to sit on sailor-fashion." —

("The Maoris of New Zealand," E. Tregear, in "Journal of the Anthropological Institute," London, November, 1889.)

Marquesas Islands. "They are peculiarly cleanly in regard to the egestæ. At the Society Islands the wanderer's eyes and nose are offended every morning in the midst of a path with the natural effects of a sound digestion; but the natives of the Marquesas are accustomed, after the manner of our cats, to bury the offensive objects in the earth. At Taheite, indeed, they depend on the friendly assistance of rats, who greedily devour these odoriferous dainties; nay, they seem to be convinced that their custom is the most proper in the world; for their witty countryman, Tupaya, found fault with our want of delicacy when he saw a small building appropriated to the rites of Cloacina, in every house at Batavia." — (Forster, "Voyage round the World," London, 1777, vol. ii. p. 28.)

Forster speaks of the traffic between the English sailors and the women of Tahiti, in which the latter parted with their personal favors in return for red feathers and fresh pork; in consequence of a too free indulgence in this heavy food, the ladies suffered from indigestion. "The goodness of their appetites and digestion, exposed them, however, to inconveniences of restlessness, and often disturbed those who wished to sleep after the fatigues of the day. On certain urgent occasions they always required the attendance of their lovers; but, as they were frequently refused, the decks were made to resemble the paths in the islands." — (Idem, vol. ii. p. 83.)

In ancient Rome there were public latrines, but no privies attached to houses. There were basins and tubs, which were emptied daily by servants detailed for the purpose. No closet-paper was in use, as may be imagined, none having yet been invented or introduced in Europe, but in each public latrine, there was a bucket filled with salt water, and a stick having a sponge tied to one end, with which the passer-by cleansed his person, and then replaced the stick in the tub.¹ Seneca, in his Epistle No. 70, describes the suicide of a German slave who rammed one of these sticks down his throat.

¹ There is a reference in Martial to this use of the sponge and stick (see Epigram XLVIII., in English translation, edition of London, 1871). Martial also speaks of a Roman lady whose close-stool was of gold, but her drinking-cup of glass, —

"Ventrīs onus puro, nec te pudet excipis auro;

Sed bibis in vitreo, chareus, ergo cacas." —

(Epigram XXXVI., quoted by Harington, "Ajax," p. 37.)

High officials of Corea urinate in public into brass bowls, which are carried by

The warning "Commit no nuisance," or in French "Il est défendu de faire ici des ordures," is traceable back to the time of the Romans, who devoted to the wrath of the twelve great gods, "and of Jupiter and Diana as well, all who did any indecency in the neighborhood of the temples or monuments." "On nous saura gré de rapporter ici une inscription qui se lisait autrefois sur les thermes de Titus; 'Duodecim Dios et Dianam et Jovem Optimum Maximum habeat iratos quisquis hic miuxerit aut cacarit.'" In Genoa, excommunication was threatened against all who infringed upon this same prohibition.

Privies were ordered for each house in Paris in 1513, whence we may infer that some house-builders had previously of their own impulse added such conveniences; as early as 1372, and again in 1395, there were royal ordinances forbidding the throwing of ordures out of the windows in Paris, which gives us the right to conclude that the custom must have been general and offensive; the same dispositions were taken for the city of Bordeaux in 1585.

Obscene poetry was known in latrines in Rome as in our own day, and some of the compositions have come down to us. — (See "Bibliotheca Scatologica," pp. 13–17.)

The Romans protected their walls "against such as commit nuisances . . . by consecrating the walls so exposed with the picture of a deity or some other hallowed emblem, and by denouncing the wrath of heaven against those who should be impious enough to pollute what it was their duty to reverence. The figure of a snake, it appears, was sometimes employed for this purpose. . . . The snake, it is well known, was reckoned among the gods of the heathens." — ("Vestiges of Ancient Manners and Customs," Rev. John James Blunt, London, 1823, p. 43.)

Herodotus informs his readers that the Egyptians "ease themselves in their houses, but eat out of doors, alleging that whatever is indecent, though necessary, ought to be done in private, but what is not indecent openly." — ("Enterpe," p. 35.)

Herodotus also speaks of the Egyptian king Amasis having made an idol out of a gold foot-pan, "in which the Egyptians formerly vomited, attendants in a sort of net or fillet and presented when required. — (Mr. W. W. Rockhill.

The monasteries and nunneries of Thibet were provided with latrines. Among the sins against which the nuns (Bhikshuni) were warned were, "Si une bhikshuni va seule aux lieux, et est," etc. — ("Pratikamoksha Sutra," Thibetan version, translated by W. W. Rockhill, Paris, 1884, p. 44, "École des langues Orientales vivantes.")

made water, and washed their feet" ("Euterpe"). Minutius Felix, in his "Octavius," refers to this, and takes umbrage that heathen idols made of such foul materials should be adored (see his chapter xxv.).

Tournefort mentions latrines in Marseilles. "They make advantage of the very excrements of the Gally-Slaves by placing at one end of the Gallies proper vessels for receiving a manure so necessary to the country." — ("A Voyage to the Levant," edition of London, 1718, vol. i. pp. 13–14.)

There must have been latrines in Scotland, because James I. of that kingdom was killed in one in the Monastery of the Black Friars, in Perth, in A. D. 1437; yet for many years later pedestrians in the streets of Edinburgh, after night-fall, took their own risks of the filthy deluge which house-maids were wont to pour down from the windows of the lofty houses.

"As in modern Edinburgh so in ancient Rome, night was the time observed by the careful housekeeper for throwing her slops from the upper windows into the open drain that ran through the street beneath." — (Footnote to page 146 of Edward Walford's (M.A. of Baliol, Oxford) ed. of Juvenal, in "Ancient Classics for English Readers," Philadelphia, 1872, quoting from Juvenal the line, "Clattering the storm descends from heights unknown," Satire III., line 274.)

" 'Tis want of sense to sup abroad too late
Unless thou first hast settled thy estate;
As many fates attend thy steps to meet
As there are waking windows in the street:
Bless the good gods and think thy chance is rare
To have a piss-pot only for thy share."

(Dryden's translation of the Third Satire of Juvenal.)

"And behold, there is nurra goaks in the whole kingdom (Scotland), nor anything for pore servants, but a barrel with a pair of tongs thrown across, and all the chairs of the family are emptied into this here barrel once a day; and at ten o'clock at night the whole cargo is flung out of a back windere that looks into some street or lane, and the maid calls, 'Gardy loo!' to the passengers, which signifies, 'Lord have mercy upon you!' and this is done every night in every house in Hadinborough." — ("Humphrey Clinker," Tobias Smollett, edition of London, 1872, p. 542.)

The above seems to have been a French expression, — "Gare de l'eau."

"The cry of all the South was that the public offices, the army, the

navy, were filled with high-cheeked Drummonds and Erskines and McGillivrays. . . . All the old jokes on hills without trees, girls without stockings, men eating the food of horses, pails emptied from the fourteenth story, were pointed against these lucky adventurers." — (T. B. Macaulay, "The Earl of Chatham," American edition, Appleton and Co., New York, 1874, p. 720.)

The addition of privies to the homes of the gentry would appear to have been an innovation in the time of Queen Elizabeth, else there would not have been so much comment made upon the action of Sir John Harington, her distant cousin, who erected one as a fitting convenience to his new house, near Bath, and published a very Rabelaisian volume upon the subject in London in 1596. The title of the book, being quite long, — "A Discourse on a Stale Subject, called the Metamorphosis of Ajax," — will in subsequent citations be given simply as Harington's "Ajax." From the description of the latrine in question there is no doubt that Harington anticipated nearly all the mechanism of modern days.

Richard III. is represented as having been seated in a latrine, "sitting on a draught," when he was "devising with Terril how to have his nephews privily murdered." — (Harington, "Ajax," p. 46.)

There is little reason to doubt that all houses in England, and all Continental Europe as well, were provided with receptacles for urine in the bed-chambers, even if no regular latrines existed outside of the monasteries and other community-houses. Dr. Robert Fletcher, U. S. Army, who has contributed the following, is of the opinion that these conveniences were provided for ladies only, and submits the following passages in support of his conclusions: —

"Hamjo, in the 'Wanderer,' part 2, by Sir Thomas Killigrew, describing to Senilia the probable manners of a rude husband, says that, on retiring to bed, 'the gyant stretches himself, yawns, and sighs a belch or two, stales in your pot, farts as loud as a musket for a jest,' etc.

In Douce's "Illustrations of Shakspeare" is a curious print of a bishop blessing a newly married pair in the bridal bed; on the lady's side a chamber-pot is ostentatiously displayed.

Douce quotes the following from a rare "Morality," entitled, "Le Condemnation des Banquets:" "Pause pour pisser le fol. Il prengt un coffinet en lieu de orinal et pisse dedans et tout coule par bas."

Hobbs, the Tanner of Tamworth, introduced by Heywood in his play of "King Edward the Fourth," the hero of the old ballad, furnished

his rooms with urinals suited to his trade. He says to his guests, the King and Sellinger: "Come, take away, and let's to bed. Ye shall have clean sheets, Ned; but they be coarse, good strong hemp, of my daughter's own spinning. And I tell thee your chamber-pot must be a fair horn, a badge of our occupation; for we buy no bending pewter nor breaking earth."—("1 King Edward the Fourth," iii. 2, Heywood, 1600.)

Additional references of the same tenor are to be found in the "Pilgrims," Beaumont and Fletcher, ii. 1: "The Scourge of Villanie," Marston, 1599, satire 2; and in the following, which does not accord with Dr. Fletcher's opinion that such utensils were provided solely for the female members of the household.

"*Host.* Hostlers, you knaves and commanders, take the horses of the knights and competitors; your honorable hulks have put into harbor; they'll take in fresh water here, and I have provided clean chamber-pots."—("The Merry Devil of Edmonton," 1608.)

Such vessels were in use in Ireland, where they were called "*omar-fuail*," from *omar*, a vessel, and *fuail*, urine. They must have been employed from the earliest centuries. "And they (the Sybarites) were the first people who introduced the custom of bringing chamber-pots into entertainments" (Athenaus, book xii. cap. 17).

It is not easy to detect any essential difference between the manners of the people of Iceland, as described by Bleekmans on another page, and those of the more polished Romans.

Bed-pans were used in France in the earliest days of the fifteenth century. They are noted in "The Farce of Master Pathelin" (A. D. 1480).—(See "*Le Moyen Age Médical*," Dupouy, Paris, 1888, p. 280 *et seq.*, and the translation of the same by Minor, Cincinnati, Ohio, 1890, p. 82.)

"Maids need no more their silver pisse-pots scour,

Presumptuous pisse-pot, how did'st thou offend?

Compelling females on their hams to bend?

To kings and queens we humbly bend the knee,

But queens themselves are forced to stoop to thee."

("On Melting down the Plate, or the Piss-Pot's Farewell,"

State Poems, vol. i. part 2, p. 215, A. D. 1697.)

"What need hath Nature of silver dishes or gold chamber-pots?"

("The Staple of News," Ben Jonson, iii. 2; London, 1628.)

"In the 'Chronicle of London,' written in the fifteenth century, a curious anecdote is related, to the effect that in A. D. 1258-60, a Jew, on Saturday, fell into a 'privy' at Tewksbury, but out of reverence for his Sabbath, would not allow himself to be drawn out. The next day being Sunday, the Earl of Gloucester would not let any one draw him out;" and so, says the Chronicle, "the Jew died in the privy." — ("A Chronicle of London from 1089 to 1483," London, 1827, p. 20, quoted by Buckle in "Commonplace Book," p. 507, in vol. ii. of his Works, London, 1872.)

"Heliogabalus' body was thrown into a jakes, as writeth Suetonius." — (Harington's "Ajax," p. 46.)

Heliogabalus was killed in one (latrine); Arins, the great heresiarch, and Pope Leo, his antagonist, had the same fate. Charles the Fifth, Emperor of Germany and Spain, was born in one in the palace of Ghent, of Jeanne of Aragon, in 1500; hence, they must have been introduced in the localities named. — (See Biblioth. Scatal. p. 17.)

"Urinary reservoirs were erected in the streets of Rome, either for the purpose of public cleanliness, or for the use of the fullers, who were accustomed to purchase their contents of the Roman government during the reign of Vespasian, and perhaps other emperors, at a certain annual impost, and which, prior to the invention or general use of soap, was the substance employed principally in their mills for cleansing cloths and stuffs previous to their being dyed." — (John Mason Good, translation of Lucretius' "De Natura Rerum," London, 1805, vol. ii. p. 154, footnote.)

"Vases, called Gastra, for the relief of passengers, were placed by the Romans upon the edges of roads and streets." — (Fosbroke, "Encyc. of Ant.," London, vol. i. p. 526, article "Urine.")

"Les Chinois semblent manquer d'engrais, car on trouve de tous côtés des lieux d'aisance pour les besoins des voyageurs." — ("Voyage à Pékin," De Guignes, Paris, 1808, vol. i. p. 284; and again, vol. iii. p. 322.)

"Large vases of stone-ware are sunk in the ground at convenient places for the use of passing travellers." — ("Chinese Repository," Canton, 1835, vol. iii. p. 134.)

"A traveller who lately returned from Pekin asserts that there is plenty to smell in that city, but very little to see. . . . The houses are all very low and mean, the streets are wholly unpaved, and are always very muddy and very dusty, and as there are no sewers or cess-

pools, the filthiness of the town is indescribable." — ("Chicago News," copied in the "Press," Philadelphia, Penn., May 14, 1889.)

"By the Mahometan law, the body becomes unclean after each evacuation . . . both greater and smaller . . . requires an ablution, according to circumstances. . . . If a drop of urine touches the clothes, they must be washed." For fear that their garments have been so defiled, "the Bokhariots frequently repeat their prayers stark naked." . . . The matter of cleaning the body after an evacuation of any kind is defined by religious ritual. "The law commands 'Istindjah' (removal), 'istinkah' (ablution), and 'istibra' (drying,)" — i. e., a small clod of earth is first used for the local cleansing, then water at least twice, and finally a piece of linen a yard in length. . . . In Turkey, Arabia, and Persia all are necessary, and pious men carry several clods of earth for the purpose in their turbans. "These acts of purification are also carried on quite publicly in the bazaars, from a desire to make a parade of their consistent piety." Vambéry saw "a teacher give to his pupils, boys and girls, instruction in the handling of the clod of earth, and so forth, by way of experiment." — ("Sketches of Central Asia," Arminius Vambéry, London, 1868, pp. 190, 191.)

Moslems urinate sitting down on their heels; "for a spray of urine would make hair and clothes ceremonially impure. . . . After urining, the Moslem wipes the os penis with one to three bits of stone, clay, or a handful of earth, and he must perform Wuzu before he can pray." Tournefort ("Voyage au Levant," vol. iii. p. 355) tells a pleasant story about certain Christians at Constantinople who powdered with poivre d'Inde the stones in a wall where the Moslems were in the habit of rubbing the os penis by way of wiping." — (Barton, "Arabian Nights," vol. ii. p. 326. Again, in footnote to p. 229, vol. iii., he says, "Scrupulous Moslems scratch the ground in front of their feet with a stick, to prevent spraying and consequent defilement.")

Marco Polo, in speaking of the Brahmins, says, "They ease themselves in the sands, and then disperse it, hither and thither, lest it should breed worms, which might die for want of food." — ("Travels," in Pinkerton, vol. vii. pp. 164, 165.)

Speaking of the Mahometans, Tournefort says, "When they make water, they squat down like women, for fear some drops of urine should fall into their breeches. To prevent this evil, they squeeze the part very carefully, and rub the head of it against the wall; and one may see the stones worn in several places by this custom. To make

themselves sport, the Christians smear the stones sometimes with Indian pepper and the root called 'Calf's-Foot,' or some other hot plants, which frequently causes an inflammation in such as happen to use the Stone. As the pain is very smart, the poor Turks commonly run for a cure to those very Christian surgeons who were the authors of all the mischief. They never fail to tell them it is a very dangerous case, and that they should be obliged, perhaps, to make an amputation. The Turks, on the contrary, protest and swear that they have had no communication with any sort of woman that could be suspected. In short, they wrap up the suffering part in a Linen dipped in Oxicrat tinctured with a little Bole-Armenic; and this they sell them as a great specifick for this kind of Mischief." — (Tournefort, "A Voyage to the Levant," London, 1718, vol. ii. p. 49.)

"Some of their doctors believe Circumcision was not taken from the Jews, but only for the better observing the Precept of Cleanness, by which they are forbidden to let any Urine fall upon their flesh. And it is certain that some drops are always apt to hang upon the Præputium, especially among the Arabians, with whom that skin is naturally much longer than in other men." — (Idem, vol. ii. p. 46.)

The Mahometans have "Two ablutions, the great and small. . . . The first is of the whole body, but this is enjoined only to" those "who have let some urine drop upon their flesh when they have made water." This he enumerates among "The Three great Defilements of the Mussulmans." — (Idem, vol. ii. p. 48.)

John Leo says of those "Arabians which inhabit in Barborie, or upon the Coast of the Mediterranean Sea. . . . Their churches they frequent very diligently, to the end they may repeat certain prescript and formall Praiers, most sperstitutionly perswading themselves that the same day wherein they make their praiers, it is not lawfull for them to wash certaine of their members, when, as at other times, they will wash their whole bodies." — ("Observations of Africa," in Purchas's "Pilgrims," vol. ii. p. 766.)

"Les lieux destinés à la décharge de la nature . . . sont toujours propres. . . . Les Turcs ne sont point assis comme nous quand ils sont en ces lieux-là, mais ils s'accroupissent sur le trou qui n'est relevé de terre que d'un demy-pied ou d'un peu plus. . . . Les Turcs et tous les Mahométans en général ne se servent point de papier à de vils usages, et quand ils vont à ces sortes de lieux ils portent un pot plein d'eau pour se laver." — (J. B. Tavernier, "Relation de l'intérieur du Sérail du Grand Seigneur," Paris, 1675, p. 194.)

"Nunquam Turcas seu papyro pro anistergio uti, sed pro magno ipsis delicti habere, et quidem ideo, quia fortasse Nomen Dei ipsi inscriptum sit vel inscribi possit, refert Thevenot, *Itinerar. Orient.* lib. 1, cap. 33, p. m. 60. Et juxta A. Bubeqv., *Ep.* 3, p. m. 184, Turcæ alvum excrementis non exonerant quin aquam secum portant, qua partes obscenas lavent." — (Schurig, "*Chylogogia*," Dresden, 1725, p. 796.)

Rabelais has written a characteristic chapter on the expedients to which men resorted before the general introduction of paper for use in latrines; see his chapter xiii., "*Anisterges*."

"Nothing could be more filthy than the state of the palace and all the lanes leading up to it. It was well, perhaps, that we were never expected to go there; for without stilts and respirators it would have been impracticable, such is the filthy nature of the people. The king's cows even are kept in his palace enclosure, the calves actually entering the hut, where, like a farmer, Kamresi walks among them, up to his ankles in filth, and inspecting them, issues his orders concerning them." — (Speke, "*Nile*," London, 1863, vol. ii. p. 526, describing the palace of King Kamresi, at the head of the Nile.)

"Shortly afterwards, a disturbance arose between some of my people and the natives, owing to one of my men who retired into a patch of cultivated ground having been discovered there by the owner. He demanded compensation for his land having been defiled, and had to be appeased by a present of cloth. If they were only half as particular about their dwellings as their fields, it would be a good thing, for their villages are filthy in the extreme, and would be even worse but for the presence of large numbers of pigs which act as scavengers." — ("*Across Africa*," Cameron, London, 1877, vol. ii. p. 200.)

"I was disgusted with the custom which prevailed in the houses like that in which I was lodged, of using the terrace as a sort of closet; and I had great difficulty in preventing my guide, Amer el Walati, who still stayed with me and made the terrace his usual residence, from indulging in the filthy practice." — (Dr. Henry Barth, "*Travels in North and Central Africa*," Philadelphia, 1859, p. 429, description of Timbuctoo.)

"They (the Tartars) hold it not good to abide long in one place, for they will say when they will curse any of their children, 'I would thou mightest tarry so long in one place that thou mightest smell thine own dung as the Christians do;' and this is the greatest curse they have." — ("*Notes of Richard Johnson, servant to Master Richard*

Chancellor," in Pinkerton, vol. i. p. 62. "Voyages of Sir Hugh Wil-
loughby and others to the Northern parts of Siberia and Russia.")

The Tungouses of Siberia told Sauer that "they knew no greater
curse than to live in one place like a Russian or Yakut, where filth
accumulates and fills the inhabitants with stench and disease." — (Sauer,
"Expedition to the North parts of Russia," London, 1802, p. 49.)

"It is a common obloquy that the Turks (who still keep the order
of Deuteronomy for their ordure) do object to Christians that they are
poisoned with their own dung." — (Harington, "Ajax," p. 115.)

"The aspect of the village itself is very neat, the ground being often
swept before the chief houses; but very bad odors abound, owing to
there being under each house a stinking mud-hole, formed by all waste
liquids and refuse matter poured down through the floor above. In
most other things, Malays are tolerably clean — in some scrupulously
so — and this peculiar and nasty custom, which is almost universal,
arises, I have little doubt, from their having been originally a water-
loving and maritime people, who built their houses on posts in the
water, and only migrated gradually inland, first up the rivers and
streams, and then into the dry interior.

"Habits which were once so convenient and cleanly, and which had
been so long practised as to become a part of the domestic life of the
nation, were of course continued when the first settlers built their
houses inland; and, without a regular system of drainage, the arrange-
ment of the villages is such that any other system would be very
inconvenient." — ("The Malay Archipelago," Alfred Russell Wallace,
London, 1869, vol. i. p. 126.)

Forster speaks of "an intolerable stench which arises from the many
tanks dispersed in the different quarters of the town, whose waters and
borders are appropriated to the common use of the inhabitants"
("Sketch of the Mythology of the Hindoos," George Forster, London,
1785, p. 7); but, he adds, "The filth alone which is indiscriminately
thrown into the street."

"There are some Guai, which . . . dawbe ouer their houses with Oxe-
dung. . . . They touch not their meat with the left hand, but use that
haud only to wipe and other unclean offices." — (Marco Polo, in Pur-
chas, vol. i. p. 105.)

"Having list at any time to ease themselves, the filthy lousels had
not the manners to withdraw themselves further from us than a Beane
can be cast. Yea, like vile slouens, they would lay their tails in our
presence, while they were yet talking with us." — (Friar William de

Rubruquis, the Franciscan, sent by Saint Louis, of France (King Louis IX.), as ambassador to the Grand Khan of Tartary in A.D. 1235, — in Purchas, vol. i. p. 11.)

"A great magnifico of Venice, being ambassador in France, and hearing a noble person was come to speak with him, made him stay till he had untied his points; and when he was new set upon his stool, sent for the nobleman to come to him at that time, as a very special favor." — (Harington, "Ajax," p. 30.)

"The French courtesy I spake of before came from the Romans; since in Martial's time, they shunned not one another's company at Monsieur Ajax." ("Ajax" as used by Harington, is a play upon the words "a Jakes.") — (See Harington, "Ajax," p. 38.)

Carl Lummholtz stated to the author that the Australians urinate in the presence of strangers, and while talking to them.

"Il n'est fonction physiologique ou besoin naturel qu'ils aient gêne à satisfaire en public. 'Une coutume n'a rien d'indécent quand elle est universelle,' remarque philosophiquement un de nos voyageurs. — ("Les Primitifs," Elie Réclus, Paris, 1885, p. 71, — "Les Inuits Occidentaux," quoting Dall.)

Padre Gumilla says that the Indians on the Orinoco have the same custom as the Jews and Turks have of digging holes with a hoe and covering up their evacuations. (See "Orinoco," Madrid, 1741, p. 109.) No such cleanliness can be attributed to the Indians of the Plains of North America or the nomadic tribes of the Southwest.

"And thou shalt have a paddle upon thy weapon; and it shall be, when thou wilt ease thyself abroad, thou shalt dig therewith, and shalt turn back and cover that which cometh from thee.

"For the Lord, thy God, walketh in the midst of thy camp, to deliver thee and to give up thine enemies before thee; therefore shall thy camp be holy; that he see no unclean thing in thee, and turn away from thee." — (Deuteronomy xxiii.)

Speaking of the Essenes, Josephus informs us: "On the seventh day . . . they will not even remove any vessel out of its place, nor perform the most pressing necessities of nature. Nay, on other days they dig a small pit, a foot deep, with a paddle (which kind of hatchet is given them when they first are admitted among them), and, covering themselves round with their garment, that they may not affront the divine rays of light, they ease themselves into that pit. After which they put the earth that was dug out again into that pit.

"And even this they do only in the most lonesome places, which they

choose for this purpose. And it is a rule with them to wash themselves afterwards, as if it were a defilement." — ("Wars of the Jews," edition of New York, 1821, p. 241.)

"The Rabbinical Jews believed that every privy was the abode of an unclean spirit of this kind" (i. e., an excrement-eating god), "which could be inhaled with the breath, and descending into the lower parts of the body, lodge there, and thus like the Bhutas of India, bring suffering and disease." (Personal letter from John Frazer, Esq., LL.D., Sydney, New South Wales, Dec. 24, 1889.)

In descriptions of Jerusalem, we read of the "Dung Gate," by or through which, all the fecal matter of the city had to be carried. — (See Harington, "Ajax," p. 87.)

"When an aborigine obeys a call of nature, he always carries a pointed instrument with which to turn up the ground, so that his fecal excreta may be hidden from the keen vision of the vagabond Bangals." ("Bangals" are the native witches or their parallels) — ("Aborigines of Victoria and Riverina," A. Brough-Smith, vol. i. p. 165.)

The same custom has been ascribed to the Dyaks of Borneo. It is by no means certain that this custom had its origin in any suggestion of cleanliness; on the contrary, it is fully as probable that the idea was to avert the maleficence of witchcraft by putting out of sight material the possession of which would give witches so much power over the former owner.

Mr. John F. Mann confirms from personal observation that the natives of Australia observed the injunction given to the Hebrews in Deuteronomy. "From personal observation, I can state that the natives, all over the country, as a rule, are particular in this matter, but it was many years before I ascertained the reasons for this care. Sorcery and witchcraft exist in every tribe; each tribe has its 'Kooradgee' or medicine-man; the natives imagine that any death, accident, or pain, is caused by the evil influence of some enemy. These 'Kooradgees' have the power not only of inflicting pain, but of causing all kinds of trouble. They are particular to always carry about with them, in a net bag, a 'charm' which is most ordinarily made of rock crystal, human excrement, and kidney fat. If one of these medicine-men can obtain possession of some of the excrement of his intended victim, or some of his hair, in fact anything belonging to his person, it is the most easy thing in the world to bewitch him." — (Personal letter from John F. Mann, Esq., Neutral Bay, New South Wales.)

"The disposal of excreta is not so much for the sake of cleanliness as to prevent any human substance from falling into the hands of an enemy." — (Idem.)

Schurig devotes a long paragraph to an exposition of the views entertained by learned physicians in regard to the effects to be expected from the deposition of the fecal matter upon plants that were either noxious or beneficial to the human organism ; in the former case, the worst results were to be dreaded from sympathy ; in the latter, only the most salutary. Rustics, in his opinion, enjoyed better health than the inhabitants of cities for the very peculiar reason that the latter evacuated in latrines and in the act were compelled to inhale the deleterious gases emanating from the foul deposits already accumulated ; whereas the countryman could go out to a comfortable place in the fields and evacuate without the danger and inconvenience to which the urban population were subject.

But he takes occasion to warn his readers that they must be careful not to defecate upon certain malignant herbs which might be the cause of virulent dysentery. "*Præterea cavendum est ne feces supra herbas malignas exulcerantes sive violenter purgantes deponamus hinc enim causa latente dysenteria periculosa inducitur quæ vix nisi herbis prorsus putrefactis ullis medicamentis cedit.*" — ("*Chylogogia*," p. 792, paragraph 66.)

Colonel Garrick Mallery, United States Army, reports having met with people of respectability and intelligence in the mountainous parts of Virginia who hold the same views upon the subject of latrines.

"Ye great ones, why will ye disdain
To pay your tribute on the plain ?
Why will you place in lazy pride ?
When from the homeliest earthenware
Are sent up offerings more sincere
Than where the haughty Duchess locks
Her silver vase in cedar box."

(Dean Swift.)

"Si une bhikshuni jette des excréments sur l'herbe croissante, c'est un *pacittiya*, etc." — ("*Pratimoksha Sutra*," translated by W. W. Rockhill, Paris, 1884. Soc. Asiatique.) These bhikshuni are the nuns of Thibet, and the word "*pacittiya*" means a sin.

The following beastly practices are related of the Capuchins : "*Tunica replicata, absque impedimento cacat et mingit, anum fune abster-*

git." — (Fosbroke, "British Monachism," quoting "Specimen Monchologiae.")

There are no latrines of any kind in Angola, West Africa; the negroes believe that it is very vile to frequent the same place for such purposes. They do not cover up their excrements, but deposit them out in the bushes. Sometimes it happens that a man will defecate inside the house, in which case he will be laughed at all the rest of his life, and be called "D'Kombe," which is a kind of leopard. — ("Muhongo," an African boy, translation by Rev. Mr. Chatelain.)

The following is the epigram of Martial "ad Furium": —

"A te sudor abest, abest saliva,
Mucusque et pituita mala nasi,
Hunc ad munditiam adde mundiozem,
Quod culus tibi purior salillo est,
Nec toto decies cacas in anno;
Atque id durius est faba et lapillis,
Quod tu si manibus teras fricesque,
Non unquam digitum inquinare possis."

The Hon. John F. Finerty called public attention to the fact that in the city of Mexico, ten years ago, beggars of the vilest caste invariably made a practice of defecating upon the marble steps of the main entrance to the grand cathedral.

Dr. J. H. Porter states that in some parts of the Mexican republic the women come out in front of their doors to urinate; the author has seen them doing this, and also defecating in the streets of Tucson, at that time the capital of Arizona; he has seen the same practice in several of the smaller hamlets of that territory and Sonora and New Mexico, but always at night.

The Mexicans living on our side of the border never constructed privies for their dwellings, a custom perhaps derived from Spain, where we have seen that even in Madrid the construction of such conveniences was unknown until after the middle of the last century.

POSTURE IN URINATION.

The Apache men in micturating always squat down, while the women, on the contrary, always stand up. Giraldus Cambrensis says of the Irish: "Præterea, viri in hac gente sedendo, mulieres stando, urinas emittunt." — ("Opera," edited by James Dimock, and published under the direction of the Master of the Rolls, London, 1867, vol. v. p. 172.)

The author has seen an Italian woman of the lower class urinating

in this manner in the street near San Pietro in Vinculis, Rome, in open daylight, in 1883.

French women were to be seen in the streets of Paris urinating while standing over gutters. — (Mr. W. W. Rockhill.)

"Among the Turks, it is an heresy, to p—s standing," — (Harington, "Ajax," in the chapter "Ulysses upon Ajax," p. 43.)

The Egyptian "women stand up when they make water, but the men sit down." — (Herodotus, "Euterpe," p. 35.)

Mr. Carl Lumboltz (author of "Among Cannibals," New York, 1889) also stated that the Australian men squatted while urinating; the women generally stood erect, but upon this point he was not quite sure.

"Mantegazza, in his 'Gli amori degli uomini,' describing the operation of splitting the male urethra, practised among Australian tribes, remarks: 'To urinate, they squat down like our women, lifting the penis slightly. It appears that, on the contrary, Australian women urinate standing.' (He is apparently quoting from Michluchs-Maclay.) Among the Kaffirs, etc., at the Cape, the usual practice, I understand, does not differ from ours." — (Personal letter from Havelock Ellis, Esq., editor of the Contemporary Science series, dated Red Hill, Surrey, Oct. 8, 1889. From this gentleman there was also received much matter of a most valuable character, from the early English dramatists, travellers, and others, which has been already quoted from these sources direct.)

"Behold the strutting Amazonian whore!
She stands in guard, with her right foot before:
Her coat tucked up, and all her motions just,
She stamps, and then cries, 'Hah!' at every thrust.
But laugh to see her, tired from many a bout,
Call for the pot, and like a man piss out."
(Juvenal, Satire VI., Dryden's translation.)

The Thibetan nuns are forbidden to adopt certain postures, as are the monks.

"110, 111. Ne pas se soulager debout, n'étant pas malade, est une règle qu'on doit apprendre." — ("Pratimoksha Sutra," translated by W. W. Rockhill, Paris, 1884, Soc. Asiatique.)

"Æsop, that great man, saw his master make water as he walked. 'What!' said he; 'must we, then, dung as we walk?'" — (Planudus, quoted by Montaigne, "Essays," Hazlitt's translation, New York, 1859, vol. iii. p. 467.)

The lazzaroni of Naples are more filthy in all these respects than the

wildest Maori, Bedouin, or Apache Indian, as the author can assert from disagreeable personal observation.

"It can be justly said that the inhabitants of Cadiack, if we except the women during their monthly periods and their lying-in, have not the least sense of cleanliness. They will not go a step out of the way for the most necessary purposes of nature; and vessels are placed at their very doors for the reception of the urinous fluid, which are resorted to alike by both sexes." — (Lisiansky, "*Voyages*," p. 214, quoted also in Bancroft's "*Native Races of the Pacific Slope*," vol. i. p. 81.)

"Par suite des ordures et du manque d'air, l'intérieur des huttes répand une puanteur presque insupportable." — ("*Les Primitifs*," Elie Réclus, Paris, 1885, "*Les Inuits Orientaux*.")

Old women in Switzerland urinate standing, especially in cold weather. — (Rev. Mr. Chatelain, himself a native of Switzerland, and now a Protestant missionary in Angola, Western Africa.)

The men of Angola, Africa, urinate standing; the women of the same tribes urinate standing, as a general thing, although there are some exceptions. It should be remembered that the Jesuits have had missions in that region for two hundred years, and some effect upon the ideas of the people, due to these ministrations as well as to the occupancy of the country by the Portuguese, should be perceptible.

Gomara says of the Indians of Nicaragua: "Mean todos do les toma la gana — ellos en cuclillas y ellas en pie." — ("*Historia de las Indias*," p. 283.)

The Mojaves of the Rio Colorado follow the same rule as the Apaches.

In Ounalashka, the houses are divided by partitions. "Each partition has a particular wooden reservoir for the urine, which is used both for dyeing the grass and for washing the hands, but after cleansing the latter in this manner, they rinse them in pure water." — (Sarytschew, in "*Phillip's Voyages*," London, 1807, vol. vi. p. 72.)

Dr. Porter communicates the information that he has often heard the Arctic explorer Dr. Hayes speak of the propensity of the Eskimo of the east coast of Greenland to use the trench to the hut as a latrine. He tried in vain to prevent this practice among his Eskimo attendants, but believed that they had a pride among themselves in leaving conspicuous traces of their presence.

For urinals among the Eskimo, see also notes from Egede, Egede Saabye, and Richardson, under "*Industries*," in this volume.

"Neither is it lawfull for any one to rise from the table to make

water ; but for this purpose the daughter of the house, or another maid or woman, attendeth always at the table, watchfull if any one beckon to them ; to him that beckoneth shee gives the chamber-pott under the table with her owne hands ; the rest in the meanwhile grunt like swine least any noise bee heard. The water being poured out, hee washeth the bason, and offereth his services to him that is willing ; and he is accounteth uncivill who abhorreth this fashion." — (Dittmar Bleecken's "Voyage to Iceland and Greenland," A. D. 1565, in Purchas, vol. i. pp. 636-647.)

Steller's account shows that in his time the people of Kamtchatka had no regular water-closets.

"The dogs steal food whenever they can, and even eat their straps. In their presencc no one is able to ease nature without the protection of a club for the purpose of keeping them at a distance. As soon as he leaves, the dogs rush to the spot, and under much snarling and snapping each seeks to grasp the deposit." — (Steller, translated by Bunnemeyer.)

In the Eskimo myths there is the story of the Eskimo boy, an orphan, who was abused by being made to carry out of the hut the large urine vessel. This would indicate a certain antiquity for the employment of these vessels. — (See "The Central Eskimo," Franz Boas, in "Sixth Annual Report," Bureau of Ethnology, Washington, D. C., 1888, p. 631.)

In the city of Bogota, Colombia, South America, the lower classes urinate openly in the streets ; in the city of Mexico, the same practice prevailed until recently.

In "The Snake Dance of the Moquis of Arizona," the author had something to say touching the practice of the Moquis, Zuñis, and others of the Pueblo tribes, of collecting urine in vessels of earthenware ; this was for the purpose of saving the fluid for use in dyeing the wool of which their blankets and other garments were to be made. It was noticed, however, that a particular place was assigned for such emergencies as might arise when the ordinary receptacles might not be within reach. Thus, in the town of Hualpi (on the eastern mesa in the northeast corner of the Territory of Arizona), one of the corners had been in such constant use, and for so long a time that the stream percolating down from the wall had eroded a channel for itself in the friable sandstone flooring, which would serve to demonstrate that the place had been so dedicated for a very extended number of years.

Latrines of some sort would seem to have been in use among the

natives of Australia, if we are to interpret literally the expression employed by A. Brough Smyth, which see under "Myths" in this volume. The Tonga Islanders, in the mortuary ceremonies of their great chiefs, are stated to have had them (see under "Mortuary Ceremonies" in this volume).

Carl Lumholtz did not observe latrines of any kind among such of the Australians as he visited.

Among the Chinese "it is usual for the princes, and even the people, to make water standing. Persons of dignity, as well as the vice-kings, and the principal officers, have gilded canes, a cubit long, which are bored through, and these they use as often as they make water, standing upright all the time; and by this means the tube carries the water to a good distance from them.¹ They are of opinion that all pains in the kidneys, the strangury, and even the stone, are caused by making water in a sitting posture; and that the reins cannot free themselves absolutely of these humors but by standing to evacuate; and that thus this posture contributes exceedingly to the preservation of health." — ("The Travels of Two Mahometans through India and China," in Pinkerton, vol. vii. p. 215.)

The Persian "must not pray before an overhanging wall, or in a room where there is a pot de chambre." — (Benjamin, "Persia," London, 1887, p. 444, quoting from the Shahr.)

In the Hawaiian Islands, if a man's shadow fall on a chief, the man is put to death. — (See "The Golden Bough," Frazer, vol. i. p. 190.)

"These natives (East Siberia) always preserve for use in their domesticity the urine of the whole family; it is preserved in a large tub or half-barrel, procured from the whale-ships or found in the drift that comes upon their shores. They use the warm water from their bodies for cleansing their bodies; the rim that gathers round the high-water mark of their cess-pool is used for smearing their bodies to kill the vermin. . . . The habits of these people are beastly in the extreme. . . . They seemed to have no aversion whatever to close contact with the feces of men or animals." — (Personal letter of Chief Engineer Melville, U. S. Navy, to Captain Bourke.)

Van Stralenberg says of the "Koræiki" (Koraks): "For their necessary occasions they make use of a tub, which they have with them in the hut, and when full they carry it out, and make use of the same

¹ This recalls the repugnance of the Mahometans to the spray of urine touching their persons or clothing, as already indicated.

tub to bring in water for other occasions." — ("Histori-Geographical Description of the North and East Parts of Europe and Asia," p. 397.)

By referring to page 390 of this volume, it will be seen that the Lapps, upon breaking camp, made it a point to burn the dung of their reindeer in cases where any of these animals had died of disease ; while it is also related that immigrants to California from the States of Missouri and Arkansas, for some reason not understood, had the singular custom of burning their own excrement in the camp-fire.

"When they ease themselves, they commonly go in the morning unto the Towne's end, where there is a place purposely made for them, that they may not bee seene, so also because men passing by should not be molested with the smell thereof. They also esteeme it a bad thing that men should ease themselves upon the ground, and therefore they make houses which are borne up above the ground, wherein they ease themselves upon the ground, and every time they do it they wipe ; or else they goe to the water's side to ease themselves in the sand ; and when the Priuie houses are full, they set fire to them, and let them burn to ashes ; they pisse by jobs as dogs doe, and not all at one time." — (Master Richard Jobson, A. D. 1620, "Gold Coast of Africa," in Purchas, vol. ii. p. 932.)

XXI.

AN INQUIRY INTO THE NATURE OF THE RITES CONNECTED WITH THE WORSHIP OF BEL-PHEGOR.

PRECISELY what ceremonial observances the ritual of Bel-Phegor demanded of the suppliant at his shrine is not likely ever to be known. It would be worse than useless to attempt in a treatise of this kind to affirm or deny the existence of the obscene usages alleged to have formed part of his worship; sufficient, at this moment, to lay before reflecting minds testimony on both sides of the question, with reasons for the belief that flatulence could be presented as an oblation, with examples of quaint customs which may partake of the nature of "survivals" from religious ceremonies of a nature not far removed from those supposed to have been associated with the rites of Bel-Phegor.

Well has an old author remarked: "Men have lost their reason in nothing so much as their religion, wherein stones and clouts make martyrs; and since the religion of one seems madness to another, to afford an account or rational of old rites requires no rigid reader." — (Sir Thomas Browne, "Religio Medici," edition of Boston, 1868, p. 329, article "Urn-Burial.")

"Le Pet était une divinité des anciens Égyptiens; elle était la personification d'une fonction naturelle. On la figurait par un enfant accroupi qui semble faire effort, et on peut en voir la représentation dans les ouvrages d'antiquité. Le poème Calotin, intitulé le Conseil de Momus (voyez aux Polygraphes) donne, contre la page 19, deux figures de ce dieu. L'une était en cornaline de trois couleurs; l'autre en terre cuite, se trouvait dans le cabinet du Marquis de Cospy, et la figure en a été donnée dans le Museum Cospianum. L'auteur de la Dissertation sur un ancien Usage (voyez le numéro 18) conteste que ces figurines se rapportant au Crepitus, et croit qu'elles ont été inventées dans un but plus solide.

"C'est de Minutius Felix que nous vient la reconnaissance du Crepitus, qui, lors même qu'il aurait été célébré réellement en Égypte, n'était peut-être qu'une caricature imaginée par les plaisants du jour. Ménage cependant affirme que les Pélusiens adoraient le Pet ; il dit que Baudelot en a donné la preuve dans les éditions de son premier vol., et qu'il en possédait une figure. (Voy. Menagiana, 1693, no. 397. St. Jerome dit la même chose sur Isaïe, xiii. 46. Voy. encore Klotz, act. littér. t. v., première partie, 1, Elmenhorst sur l'Octavius de Minutius Felix ; Mythol. de Banier, t. 1 ; Montfaucon, 'l'Antiquité expliquée,' t. iii. part 2, p. 336.)

"Quelques antiquaires ont cru pouvoir identifier le dieu Crepitus des Romains avec Bel-Phegor, Baal-Phegor ou Baal-Peor, dieu Syrien, — Phegor, assure-t-on, ayant ce sens en Hébreu. (Origen contra Celsus ; Minutius Felix.) Mais, sur cette dernière divinité les savants sont fort peu d'accord.

"Origène, St. Jerome, Salomon Ben Jarchi, lui donnent une signification qui la rendrait tout à fait indigne de figurer dans notre catalogue ; mais Maimonide (Moge Nevoch, cap. 46) et Salom. Ben Jarchi (Comment. 3, sur Nomb. ch. 25) prétendent que son culte était plus sale que obscène, et les traducteurs de ces rabbins pour exprimer le principal détail des cérémonies célébrées en l'honneur du dieu de Syrie, disent ; 'Distendere coram eo foramen podicis et stercus offerre.'

"Ajoutez que les pets étaient de bon augure chez les Grecs, de mauvais augure chez les Romains. — (Voy. Scaliger, Auson.)

"No one now supposes that the Rabbins had anything but their imaginations to go on in what they say about Baal-Peor ; they invented the story as a fanciful etymology of the name."¹ — (Personal letter from Prof. W. Robertson Smith to Captain Bourke.)

¹ Bel-Peor. "Very little is really known of the nature of his worship, but it is an almost universal opinion, which appears to be sustained by Numbers xxv., that it was licentious in its character. Human sacrifice appears to have been offered to him ; and it is conjectured, from Psalms cvi. 28, that the worshippers ate of the victims that had been offered to him." — ("Dictionary of Religious Knowledge," Abbott and Conant, New York, 1875, article "Baal and Baal-Peor.")

"In a story of Armagnac, Joan lou Pec runs after a man whom he believes to be a sage, and asks him when he will die. The man answers : 'Joan lou Pec mouriras au troisième pet de toun ase,' — The ass breaks wind twice, and the fool endeavors to prevent the third flatus. 'Cop sec s'en angone cerca un pau (stake) bien pounchut et l'enfoncee das un martet dans lou cou de l'ase. Mes l'ase s'enflee tant, e hasconc tant gran effort que lou pau sourtiscane comme no balo e tuec lou praube Joan lou Pec.'" — ("Contes et Proverbes Populaires," recueillis en

Citations have already been made from the *Bibliotheca Scatologica*, a curious collection of learning, no name and no place of publication of which can be found, but which seems to have been printed by Giraudet et Jouaust, 315 Rue Saint Honoré, Paris, granting that this title be not fictitious. In that work are to be seen the titles of no less than one hundred and thirty-three treatises upon Flatulence, some grotesque, some coarse, one or two of quaint erudition.

No. 88, entitled "Éloge du Pet, dissertation historique, anatomique et philosophique sur son origine, son antiquité, ses vertus, sa figure, les honneurs qu'on lui a rendus chez les peuples anciens, etc. ; avec une figure représentant le dieu Pet, et cette inscription : *Crepitui ventris conservatori deo propitio* (p. 38)," the stupendous work of Sclop-etarius, No. 111, of the *Bibliotheca* (Frankfort, 1628) seems to have been a monumental labor upon a subject not generally dissected. The same remark may be applied to "*Physiologia crepitus ventris*" of Rod. Goclenius, Frankfort and Leipsic, 1607, No. 123 of the *Bibliotheca*.

The earliest known work upon this curious topic is "*Le plaisant deuis du Pet*," Paris, 1540.

"Origen saith the name Baal-Peor signifieth filthiness, but what filthiness he knew not ; Salomon Ben Jarchi writeth they offered to him ordure, placing before his mouth the likeness of that place which Nature hath made for egestion." — (Purchas, vol. v. p. 85.)

A reference to the work of Bel-Phegor is to be found in the following couplet from a book entitled "*Conseil de Momus* :"

"*La deuxième moitié du premier chant est consacrée*

'A certains vents coulis

Jadis adorés à Memphis.' " — (*Bib. Scat.*, p. 7.)

"The antient Pelusiéens, a people of lower Egypt, did (amongst other whimsical, chimerical objects of veneration and worship) venerate a Fart, which they worshipped under the symbol of a swelled paunch." — ("*A View of the Levant*," Charles Perry, M. D., sm. fol., London, 1743, p. 419.

Armagnac, par J. F. Bladé, Paris, quoted by Angelo de Gubernatis, "*Zoöl. Mythol.*," vol. i. pp. 397, 398.)

The reader will please look under the heading of "Myths" in this volume, and will there see a similar adventure related of the Eskimo, or rather the Kamtchatkan, god Kutka.

"Wherefore my bowels shall sound like a harp for Moab, and mine inward parts for Kir-haresh." — (Isaiah xvi. 11.)

"Time has preserved to us a figure of this ridiculous Divinity, which represents a very young child in the posture of that indecent action whence this god has his name." — (Abbe Banier, "Mythology," English translation, 1740, vol. ii. pp. 52 *et seq.*)¹

"Their Beetle-gods out of their privies; yea, their Privies and Farts had their unsavory canonization and went for Egyptian deities. . . . So, Hierome derideth their dreadfull deitie, the Onion, and a stinking Fart, *Crepitus ventris inflati que Pelusiaco religio est*, which they worshipped at Pelusium." — (Purchas, vol. v. p. 641.)

It may be well to bear in mind that the heathen idea of the power of a god was entirely different from our own. The deities of the heathen were restricted in their powers and functions; they were assigned to the care of certain countries, districts, valleys, rivers, fountains, etc. Not only that, they were capable of aiding only certain trades, professions, etc. They were not able to cure all diseases, only particular kinds, each god being a specialist; consequently, each was supposed to take charge of a section of the human body. This was the case with the Greeks, Romans, Egyptians, and others. In mediæval times the same rule obtained, only in place of gods, we find saints assigned to these functions. Brand, *Pop. Antiq.* vol. i. p. 356, *et seq.*, gives a list of the saints, and the functions ascribed to each. On page 366 of the work just cited, it will be seen that Saint Erasmus was in charge of "the belly, with the entrayles." Keeping this in view, we can better understand the peculiar ceremonies connected with the worship of Bel-Phegor; he was, no doubt, the deity to whom the devotee resorted for the alleviation of ailments connected with the rectum and belly, much as he would, at a later date in the history of religion, have invoked Saint Phiaere to relieve him "of the phy or emeroids, of those especially which grow in the fundament." (See in Brand, *loc. cit.* p. 362.) On the same principle that the worshipper was wont to hang up in the temples of Esculapius wax and earthen representations of the sore arms, legs, and other members which gave him pain, the

¹ "The Eskimo call the better being 'Torngarsuk.' They don't all agree about his form or aspect. Some say he has no form at all; others describe him as a great bear, or as a great man with one arm, or as small as a finger. He is immortal, but might be killed by the intervention of the god *Crepitus*." — ("Myth, Ritual, and Religion," Andrew Lang, London, 1887, vol. ii. p. 48.) A footnote to the above adds, "The circumstances in which this is possible may be sought for in Crantz, 'History of Greenland,' London, 1767, vol. i. p. 206."

Crantz says of Torngarsuk: "He is immortal, and yet might be killed, if any one breaks wind in a house where witchcraft is carrying on." — (Crantz, as above.)

worshipper of Bel-Phegor would offer him the sacrifice of the flatulence and excrement, testimonies of the good health for which gratitude was due to the older deity.

"The Egyptians divided the human body into thirty-six parts, each of which they believed to be under the particular government of one of the decans or aerial demons who presided over the triple divisions of the twelve signs; and we have the authority of Origen for saying that when any part of the body was diseased, a cure was effected by invoking the demon to whose province it belonged." — ("Medical Superstitions," Pettigrew, Philadelphia, 1844, p. 47.)

The ascription of particular signs of the Zodiac to the care of different members of the human anatomy is in line with the same religious idea; because the signs of the Zodiac, especially the Animal signs, were once Animal Gods.

Hone, in his "Every-Day Book," has a therapeutical hagiology, too long to be here repeated.

"Melton says, 'The saints of the Romanists have usurped the place of the Zodiacal constellations in their governance of the parts of man's body,' and that 'for every limb they have a saint.' Thus Saint "Erasmus rules the belly with the entrayles in the place of Libra and Scorpius." — ("Medical Superstitions," Pettigrew, Philadelphia, 1844, p. 54.) Next follows a long list of saints, with the particular functions assigned to each, beginning first with the list to be found in Hone, which Pettigrew extends. — ("Saint Giles and Saint Hyacinth against Sterility," *idem*, pp. 55, 56.)

"In later times, according to Herodotus, a particular and minute division of labor characterized the Egyptians; the science of medicine was distributed into different parts; every physician was for one disease, not more; so that every place was full of physicians, for some were doctors for the eyes, others for the head; some for the teeth, others for the belly; and some for occult disorders. There were also physicians for female disorders. The sons followed the professions of their fathers, so that their numbers must necessarily have been very great." — (*Idem*, p. 44.)

As the Egyptian priests were the doctors of that country, it is perfectly in accord with the eternal fitness of things that we should find them, even after they had been differentiated into different professions, restricted to the treatment of special diseases, much as the gods whom the priests once represented had been restricted.¹

¹ Among the Chinese and Hindus an identical partition of responsibility will be found ascribed to the deities. It would require a special disquisition to enumerate

"The art of medicine is thus divided among them (Egyptians). Each physician applies himself to one disease only and not more. All

these gods and their functions, so far as known to us, but such an enumeration would do no good, because the accuracy of the statement will be admitted without dispute.

A clipping from the "Times," of India, copied in the "Sunday Herald," of Washington, D. C., June 2, 1889, bears upon this point :

"The general public are not aware of a ludicrous custom still followed in Hindu households of Bengal. The last day of Falgoon, that fell on the 12th ultimo, was observed in worshipping Ghantoo, the god of itches and the diseases of the skin which afflict the natives. Very early in the morning of the day the mistresses of the families, changing their nocturnal attire, put a useless, black earthen vessel outside the threshold of their back doors, with a handful of rice and masoor dal, four cowries, with a piece of rag smeared with turmeric. Wild flowers appearing in this season are offered in worship. (These flowers are called Ghantoo fool.) The young boys of the family stand in a semicircle before the mistress, with cudgels in their hands. When the conches are sounded by the female worshippers, as the signal of the poojah being over, the boys break the vessels into atoms. The mirthful children, in their anxiety to strike the first blow, sometimes break the fingers and hands of the matrons. The piece of rag is preserved over the doors of houses in the zenana. In the evening of the day, the boys of the lower order of the villages sing the songs of the occasion from door to door for pice."

Although the adoration of Flatulence cannot be found among the Chinese, religious customs equally revolting have been ascribed to them. "The Chinese are addicted to the abominable vice of Sodomy, and the filthy practice of it they number among the indifferent things they perform in honor of their idols."—("The Travels of Two Mahomedans through India and China," in Pinkerton, vol. vii. p. 195.) These Mahomedans travelled in the ninth century.

"The negroes of Guinea have a god of the small-pox." See "Fetichism," by Father P. Baudin, New York, 1885, p. 74.

According to the Guinea negroes, "Every man has three genii, or protecting spirits. The first is Eleda, who dwells in the head, which he guides. . . . This second genius (Ojehun) has his habitation in the region of the stomach. . . . Ipori, the third protecting genius, takes up his abode in the great toe."—(Idem, p. 43.)

"The Samoans supposed disease to be occasioned by the wrath of some particular deity. . . . The friends of the sick went to the high priest of the village. . . . Each disease had its particular physician."—(Turner, "Samoa," London, 1884, p. 140.) See, in this connection, Banier's "Mythology," English translation, vol. i. p. 196, *et seq.*

"They (the ancients) had gods and goddesses for all the necessaries of our life, from our cradles to our graves; viz., 1. for sucking; 2. for swathing; 3. for eating; 4. for drinking; 5. for sleeping; 6. for husbandry; 7. for venery; 8. for fighting; 9. for physic; 10. for marriage; 11. for child-bed; 12. for fire; 13. for water; 14. for the thresholds; 15. for the chimneys."—(Harrington, "Ajax," p. 27.)

Consult, for the Chaldeans, "The Chaldean Account of Genesis," George Smith,

places abound in physicians; some physicians are for the eyes, others for the teeth, others for the parts about the belly, and others for internal disorders." — (Herodotus, "Euterpe," p. 82.)

Hone shows that every joint of the fingers was dedicated to some saint. — (See his "Every-Day Book," vol. ii. p. 48.)

"But, under the venerated name of Hermes, were issued books of astronomical forecasts of diseases, setting forth the evil influence of malignant stars upon the unborn; telling how the right eye is under the sun, the left under the moon, the hearing under Saturn, the brain under Jupiter, the tongue and throat under Mercury, smelling and tasting under Venus, the parts that have blood under Mars. . . . The early centuries next after the Christian era produced a rank crop of literary forgeries." — (See "Saxon Leechdoms," vol. iii. pp. 11, 12.)

"The New Zealanders gave a separate deity to each part of the body." — ("Folk-Medicine," Black, p. 11.)

The interview between Moses and Jehovah, where the latter refused to allow the prophet to see the glory of his face, but made him content himself with a view of his posterior, indicates that the sacred writers of the earlier periods were living in an atmosphere of thought which accepted all such ideas as those surrounding the Bel-Phegorian ceremonies.

The Hebrews believed that Jehovah should be propitiated with sweet savors:¹ "Offer up a sweet savor unto the Lord." Bel-Phegor and other deities of the gentiles, who were the gods of particular parts of the human body, would, in all probability, be pleased with oblations coming especially from that particular part; thus, the god of Hunting

New York, 1880, pages 11 and 125. Dibbara, the god of pestilence, has the title of "The Darkening One," which recalls the passage in Psalm xci. 6, "The pestilence that walketh in darkness." . . . "Each of the Babylonian gods had a particular city." (Idem, p. 46.) "The Chaldeans had twelve great gods." (Idem, p. 47.) See, also, "Chaldean Magic," Lenormant, 35. It was written of the deceased (Egyptian), "There is not a limb of him without a god." ("Ritual of the Dead," cap. xliii., idem.) See "Le Moyen Age Medicale," Dupouy, for the list of saints and shrines to cure all afflictions, in Europe, Minor's translation, p. 83. Those possessed claimed to be in the power of a demon, who entered their body by one of the natural passages, sporting with their persons. (Idem, p. 50.) The Church recognized the truth of these beliefs (idem, p. 40); see, also, notes taken from Turner's "Samoa."

¹ These ideas remained among the early Christians: "an odor of a sweet smell; a sacrifice, acceptable, well-pleasing to God." — (Phil. iv. 18.)

So, among the Chaldeans: "The gods smelt the savor, the gods smelt the good savor." — ("Chaldean Account of Genesis," Smith, p. 286.)

had offerings of game; the gods of the Seas had sacrifices of fish; babies were offered to the deities of Childbirth; therefore the gods of the fundament should, naturally, be regaled with excrement and flatulence.

Harington calls attention to David's prophecy in the 77th Psalm: "Percussit inimicos suos in posteriores, opprobrium sempiternum dedit illis." "He smote his enemies in the hinder parts and put them to a perpetual shame." — ("Ajax," p. 25.)

The absence of unity is the characteristic of all primitive forms of religious thought; hence, the various differentiations mentioned above occur as a matter of religious necessity.

Among the practices prohibited by the Taoist religion: "A man must not sing and dance on the last day of the moon. . . . Must not weep, spit, or be guilty of other indecency towards the North." — (Legge, "Religions of China," p. 187.)

The Parsis have a curious idea suggestive of the Hebrew antagonism to the worship of Bel-Phegor: "14. The rule is that when one retains a prayer inwardly and wind shall come from below, or wind shall come from the mouth, it is all one." (Shayast la Shayast, Max Müller's edition, Oxford, 1880, cp. x. verse 14, p. 221. A footnote explains: "Literally, 'both are one,' that is, in either case the spell of the rag or prayer is broken.")

"The Bedawi, who eructates as a matter of civility, has a mortal hatred to a crepitus ventris; and were a by-stander to laugh at its accidental occurrence, he would be at once cut down as a 'pundonor.' The same is the custom among the Highlanders of Afghanistan. And its artificial nature suggests direct derivation; for the two regions are separated by a host of tribes, Persians and Beloch, who utterly ignore the pundonor and behave like Europeans. The raids of the pre-Ishmaelitish Arabs over the lands lying to the northeast of them are almost forgotten; still, there are traces, and this may be one of them." — (Burton, "Arabian Nights," vol. v. p. 137.)

According to Niebuhr, the voiding of wind is considered to be the gravest indecency among the Arabs; some tribes make a perpetual butt of the offender once guilty of such an infraction of decorum; the Bel-ludjages, upon the frontiers of Persia, expel the culprit from the tribe. Yet Niebuhr himself relates that a sheik of the tribe "Montesids" once had a contest of this kind among his henchmen, "avait autorisé un défi dans ce genre entre ses domestiques et couronne le vainqueur." (Niebuhr, "Description de l'arabie," Amsterdam, 1774, p. 27.) Snoring and Flatulence would seem to have been considered equally offensive

by the Tartars. See Marco Polo's reference to the mode of selecting wives for the Grand Khan (in Purchas, vol. i. p. 82). He says that the Grand Khan puts those deemed to be eligible under the care of "his Barons' wives," "to see if they snore not in their sleepe, if in smell or behaviour they bee not offensive."

"Yet it is holden a shame with them to let a fart, at which they wondered in the Hollanders, esteeming it a contempt."—("Negroes of Guinea," Purchas, vol. v. p. 718.)

On the Gold Coast of Africa, the negroes "are very careful not to let a fart, if anybody be by them; they wonder at our Netherlanders that use it so commonly, for they cannot abide that a man should fart before them, esteeming it to be a great shame and contempt done unto them."—(Master Richard Jobson, A. D. 1620, in Purchas, vol. ii. p. 936.) In the Russian sect of dissenters called the "Bezpopovtsi," "during the service of Holy Thursday, certain of them, known as 'gapers' or 'yawners,' sit for hours with their mouths wide open, waiting for ministering angels to quench their spiritual thirst from invisible chalices."—(Heard, "Russian Church and Russian Dissent," pp. 200, 201.)

Bastian, in "Allerlei aus Volks-und-Menschenkunde" (vol. i. p. 9), quotes from Kubary, "Religion of the Pelew Islands," to the effect that in cases of death, the vagina, urethra, rectum, nostrils, and all other orifices of the body are tightly closed with the fibres of certain roots or sponge, to prevent the escape of any of the liquids of the body, which seem to be of some use to the spirit of the deceased.—(Contributed in a Personal letter from Dr. Gatchett of the Bureau of Ethnology, Washington, D. C.)

In Wallachia, "No mode of execution is more disgraceful than the gallows. The reason alleged is that the soul of a man with a rope round his neck, cannot escape from his mouth."—(Maltebrun, "Universal Geography," Boston, 1847, vol. ii. p. 458, article "Hungary.")

"The soul is commonly supposed to escape by the natural openings of the body, especially the mouth and nostrils."—(Frazer, "The Golden Bough," vol. i. p. 125.)

"Caton appliquait à l'objet d'un de nos chapitres; 'Nullum mihi vitium facit.' . . . C'est ce que disait Caton lorsqu'un de ses esclaves pétoit en sa presence."—(Bib. Scat., "Oratio pro Guano Humano," p. 21.)

In Angola, West Coast of Africa, flatulence is freely permitted among the natives, but any license of this kind, taken while strangers are in the vicinity, is regarded as a most deadly insult.—("Mo-

hongo," an African boy from Angola; interpretation by Rev. Mr. Chatelain.)

The poet Horace "a consacré plusieurs vers au sujet qui nous occupe. On peut voir particulièrement la Satire VIII. qui contient le passage suivant :—

" 'Mentior, at si quid merdis caput inquinare albis
Corvorum, atque in me veniat mictum atque cacatum
Julius, et fragilis pedacia, furque Voranus.' " — (Bib. Scat. p. 76.)

The celebrated English orator, Charles James Fox, is credited with the authorship of "An Essay upon Wind," published anonymously in London, and numbered 91 in the Bib. Scat. (p. 39).

Martin Luther had many struggles and disputes with his Satanic Majesty, in all of which the latter came off second best. Melancthon is cited as describing one of these, in which there were results worthy of incorporation in this work : "Hoc dicto victus Dæmon, indignabundus secumque murmurans abiit, eliso crepitu, non exiguo, cujus fussimen tetri odoris dies aliquot redolebat hypocaustum." Vid. Joh. Wier, de Præstig. Dæmon. cap. 7, p. m. 54, in Schurig, "Chylologia," p. 795, article "De Crepitu Diaboli."

"Luther relates a story of a lady who 'Sathanum crepitu ventris fugavit.' " — ("Les Propos de Table de Luther," par G. Brunet, Paris, 1846, p. 22, quoted in Buckle's "Commonplace Book," p. 472, vol. ii. of his "Works." All the English editions of Luther's "Table Talk," so far as known to the author, are "expurgated.")

"Cicéron, considérant le Peditus comme une victime innocente, opprimée par la civilisation de son temps, poussait en sa faveur le cri de liberté et formulait ses droits." As a footnote to the foregoing we read the following extract from Cicero : "Crepitus æque liberos ac ructus esse oportere." — (Lib. 9, Epist. 22.)

"Memento quia ventus est vita mea." — (Job. vii. 9.)

"Pedere te mallet, namque hoc nec inutile, dicit Symmachus, et risum res movet ista simul." — (Martial, vii. 17, 9.)

" 'Le Tonnerre, ce n'est qu'un Pet ; ' c'est Aristophane qui le dit." *Βροντὴ καὶ πορδὴ, ὁμοίω* — ("Nuées.")

All the preceding from Bib. Scat., article, "Oratio pro Guano Humano."

Consult Aristophanes, "The Clouds," act v. scene 2.

"Dissertation sur le dieu Pet," par M. Claude Terrin. — This author is stated to have cited from Clemens Romanus and Saint Cæsar. — (See Bib. Scat., p. 37.)

Suetonius has the following remarks upon the Roman Emperor Claudius: "It is said too that he intended to publish an edict . . . allowing to all people the liberty of giving vent at table to any distension occasioned by flatulence." This was upon "hearing of a person whose modesty, under such circumstances, had nearly cost him his life." — ("Claudius," xxxii.)

Plutarch asks the question: "Question 95. Why was it ordained that they that were to live chaste should abstain from pulse? . . . Or rather was it because they should bring empty and slender bodies to their purifications and expiations? For pulse are windy and cause a great deal of excrements that require purging off. Or is it because they excite lechery by reason of their flatulent and windy nature?" ("Morals," Goodwin's English translation, Boston, 1870, vol. ii. p. 254.)

"The fact that in honor of the arrival of friends, the house is swept and strewn with sand, and that the people bathe at such occasions, shows that cleanliness is appreciated. The current expression is that the house is so cleaned that no bad smell remains to offend the guest. For the same reason the Indian takes repeated baths before praying, 'that he may be agreeable to the Deity.'" — ("Report on the Northwestern Tribes of Canada," Dr. Franz Boas, British Association for the Advancement of Science, Newcastle-upon-Tyne Meeting, 1889, p. 19.)

"Saul went into a cave 'ut purgaret ventrem.'" — (Harington, "Ajax," p. 25.)

XXII.

OBSCENE TENURES.

IN close connection with this worship of Bel-Phegor, if there ever was such a worship, may be examined the obscene tenures by which certain estates in England were held in "sergeantcy." No less an authority than Buckle, the historian, deemed an investigation of these not beneath the dignity of his intellect, as may be ascertained by a glance at his article "Contributions to the History of the Pet," in his "Commonplace Book," p. 472. He refers to "Miscellanea Antica Anglicana," Blount's "Ancient Tenures," Luther's "Table Talk" (as above), Dulaure's "Des Divinités Génératrices," Niebuhr's "Description of Arabia," Gifford's edition of Ben Jonson, "The Staple of News," by Ben Jonson, Wright's "Political Ballads," in vols. iii. and vii. of the Percy Society's publications. With the exception of the first named, all the above have been examined, and a transcription made of the notes, which will be found inserted in their proper place.

"The Lord of the Manor of Essington holds tenure from the lord of the Manor of Hilton in this way. He, the first named, must bring a goose each New Year to the hall of the Manor of Hilton, and drive it at least three times around the fire, 'while Jack of Hilton is blowing the fire.' This Jack of Hilton is an image of brass, of about twelve inches high, kneeling on his left knee, and holding his right hand upon his head, and his left upon pego, or his viretrum, erected, having a little hole at the mouth, at which, being filled with water, and set to a strong fire, which makes it evaporate like an aelopile, it vents itself in constant blast, so strongly that it is very audible, and blows the fire fiercely."—(Blount, "Tenures of Land and Customs of Manors," Hazlitt's edition, London, 1874, p. 118.)

This recalls the "mannikin" of Brussels, which may have superseded some long since forgotten local deity; it still serves political purposes occasionally.

Blount's work was first issued under the title of "Jocular Tenures."

The prevalence of phallic worship all over Flanders should be adverted to in mentioning the "mannikin" of Brussels.

Dulaure ("Des différents Cultes," Paris, 1825, vol. ii. p. 272 *et seq.*) describes the phallic shrines of Saints Foutin, Guerlichon *et al.* "Anne d'Autriche, épouse de Louis XIII., y alla en pèlerinage," — that is, to the shrine of Saint Foutin.

He also shows that the use of the "raclure" of these phallic saints prevailed in France until the opening years of the present century.

"Rowland, le Sarcere, holds one hundred and ten acres of land in Hemington, County of Suffolk, by serjeanteuy, for which on Christmas Day, every year, before our sovereign lord the King of England, he should perform altogether and at once a leap, a puff, and a fart." — (Idem p. 154.)

"One Baldwin also formerly held these lands by the same service, and was called by the nickname of Baldwin le Peteur, or Baldwin the Farter." — (Idem, p. 154.)

Dr. Fletcher, president of the Anthropological Society of Washington, D. C., called attention to the fact that reference to the above tenure of Baldwin, "per saltum, sufflatum, et pettum," is given in the Ingoldsby Legends, "The Spectre of Tappington," based upon Blount. Ducange, in his "Glossarium," proves the antiquity of these tenures, which go back, so far as known, to the earliest years of the fourteenth century." — (See Ducange, article "Bombus.")

Ducange also describes the peculiar custom governing the admission of "filia communis" into the "villa Montis Lucii," of which more anon.

"Barrington, in his 'Observations on the Statutes,' speaking of the people, says: 'They were also, by the customs prevailing in particular districts, subject to services not only of the most servile, but the most ludicrous nature.' 'Utpote Die Nativitatis Domini coram eo saltare. buccas cum sonitu inflare, et ventrum crepitum edere.' (Struvii Jurispr. Feud. p. 541.) Sir Richard Cox, in his 'History of Ireland,' likewise mentions some very ridiculous customs which continued in the year 1565." — (Brand, "Popular Antiquities," vol. i. p. 515, article "Fool-Plough and Sword-Dance.")

"Monstrelet, en décrivant une fête que donna en 1453 le duc de Bourgogne, dit qu'on y voyait; une pucelle qui, de sa mamelle, versait hypocras en grande largesse; à côté de la pucelle était un jeune enfant qui, de sa broquette, rendait eau rose." — (Chroniq. vol. iii.

fol. 55 v ; Dulaure, "Traité des Différens Cultes," vol. i. p. 324, footnote.)

That these customs, absurd, obscene, irrational, as they appear in the light of to-day, had their origin in the mists of antiquity is not at all improbable ; neither is it a violent assumption to attribute a religious origin to them. It is conceded that they had all the force of legalized customs ; and law was anciently part and parcel of religion's dower.

The remarks of Ducange are inserted because they may not be readily accessible to every reader. He quotes from Camden and Spellman.

Baldwin "*Qui tenuit terras in Comitatu Suffolciensi, per serjenciam pro qua debuit facere, singulis annis (die Natali Domini), coram Domino Rege, unum saltum, unum sufflatum, et unum bombulum.*"

"Hemingston, wherein Baldwin le Petteur (observe the name) held land by serjeantcy (thus an ancient book expresses it), for which he was obliged every Christmas Day to perform before our lord the King of England one saltus, one sufflatus, and one bumbulus ; or as it is read in another place, he held it by a saltus, a sufflus, and a pettus, — that is (if I apprehend it aright), he was to dance, make a noise with his cheeks, and let a fart. Such was the plain, jolly mirth of those days." — (Camden, "*Brittania*," edition of London, 1753, vol. i. p. 444.)

Grimm was impressed with the undeniable intermixture of the old religious doctrine with the system of law ; for the latter, "even after the adoption of the new faith, would not part with certain old forms and usages." ("*Teutonic Mythol.*," introduc. p. 12.) In another paragraph he says : "I shall try elsewhere to show in detail how a good deal in the gestures and attitudes prescribed for certain legal transactions savors of priestly ceremony at sacrifice and prayer." — (Idem, vol. i. p. 92.)

XXIII.

TOLLS OF FLATULENCE EXACTED OF PROSTITUTES
IN FRANCE.

ANOTHER odd usage of which no explanation has been transmitted is thus described by Ducange, Dulaure, and others :—

“En outre, chaque fille publique qui se livre à quelque homme que ce soit, lorsqu'elle entre pour la première fois dans la ville de Montluçon, doit payer sur le pont de cette ville quatre deniers, ou y faire un pet.”—(Dulaure, “des Divin. Générat.” p. 279, quoting from Ducange, “Glossarium,” article “Bombus.”)

In a work by the Abbé Roubaud, entitled “La Pététrade, poème en quatre chants,” we are informed, “Il renvoie à Ducange pour prouver qu'en France on admettait les pets comme monnaie de cours en paiement des péages. . . . Bombi pro scudis valebant.”—(“Bib. Scatalogica,” p. 48.)

If we may believe Victor Hugo, the custom of the “péage” at the bridge of Montluc was generally known to the people of France in the fifteenth century. Thus, in the first chapter of “Notre Dame,” the populace of Paris, at the Feast of Fools, are represented as indulging in much badinage, —

“Dr. Claude Choart, are you seeking Marie la Giffards?”

“She's in the Rue de Glatigny.”

“She's paying her four deniers, — quatuor denarios.”

“Aut unum bumbum.”

Dulaure again quotes Ducange in regard to the tolls demanded of public women first crossing the bridge at Montluc. He finds description of this peculiar toll in registers dating back to 1398 ; he also sees the resemblance between this toll and the tenure of the Manor of Essington. — (See “Traité des Dif. Cultes,” vol. ii. p. 315, footnote.)

Surgeon Robert M. O'Reilly, U. S. Army, states that among the Irish settlers who came to the United States in the closing hours of the last century the expression was common, in speaking of Flatulence, to term it “Sir-Reverence.”

"Sir-Reverence. In old writers, a common corruption of 'save reverence,' or 'saving your reverence,' — an apologetic phrase used when mentioning anything deemed improper or unseemly, and especially a euphemism for *stercus humanum*." 'Cagada,' a surreverence." — (Stevens's "Sp. Dict.," 1706.)

"Siege, stool, sir-reverence, excrement." — (Bishop Wilkins's "Essay towards a Philosophical Language," 1688, p. 241.)

"Thoo grins like a dog eating sir-reverence." (Holderness, "Glossary, English Dialect Society.") Compare Spanish *salvanor*, anus. (Stevens.) — ("Folk-Etymology," Rev. A. Smith Palmer, London, 1882.)

THE SACRED CHARACTER OF BRIDGE-BUILDING.

It is quite within the bounds of argument and proof to show that the Romans looked upon the building of a bridge as a sacred work. Upon no other hypothesis can we make clear why their chief priest was designated "the Greatest Bridge-BUILDER" (the Pontifex Maximus). That this idea was transmitted to the barbarians who occupied Continental and insular Europe would be a most plausible presumption, even were historical evidence lacking.

Concerning the tolls exacted from the prostitutes who crossed certain bridges in France, and the tenures by which certain estates were held in England, we have to bear in mind that during the Middle Ages bridges were erected by bodies or associations of bridge-builders, which seem to have been secret societies. "It seems not improbable that societies or lodges of bridge-builders existed at an early period, and that they were relics of the policy of Roman times; but the history of such societies is involved in obscurity. The Church appears to have taken them up and encouraged them in the twelfth century, and then they were endowed with a certain religious character. . . . The order of bridge-builders at Avignon, with the peculiar love of punning which characterized the Middle Ages, were called 'fratres pontificales,' and sometimes 'fratres pontis' and 'factores pontium.' . . . According to Ducange (Gloss. v. fratres pontis), their dress was a white vest with a sign of a bridge and cross of cloth on the breast." ("Essays on Archæological Subjects," Thomas Wright, London, 1861, vol. ii. p. 137 *et seq.*, article "Mediæval Bridge-Builders.") In this connection it may be just as well to remember that the Pope of Rome is still the Pontifex Maximus.

Knowing that bridges were constructed by secret societies, we have fought out half our battle; for these secret societies were un-

doubtedly under the patronage and protection of some god in heathen times, or of some saint in later days, reserving for the honor of the latter the same ritual which had been consecrated to the devotion of the heathen predecessor.

The following from Fosbroke is pertinent: "Plutarch derives the word 'Pontifex' from sacrifices made upon bridges, — a ceremony of the highest antiquity. These priests are said to have been commissioned to keep the bridges in repair, as an indispensable part of their office. This custom no doubt gave birth to the chapel on London bridge, and the offerings were of course for repairs." In another place he mentions "the annexation of chapels to almost all our bridges of note." — ("Cyclopædia of Antiquities," London, 1843, vol. i. pp. 62, 146, article "Bridges.")

"Gottling (Gesch. d. Rom. Staatsv. p. 173) thinks that 'Pontifex' is only another form for 'pompifex,' which would characterize the pontiffs only as the managers and conductors of public processions and solemnities. But it seems far more probable that the word is formed from *pons* and *facere*, . . . and that consequently it signifies the priest who offered sacrifices upon the bridge." — ("Dictionary of Greek and Roman Antiquities," William Smith, LL. D., Boston, 1849, article "Pontifex.")

"Les Romains avaient réuni en collège sacerdotale leurs constructeurs de ponts." — ("Les Primitifs," Élie Réclus, Paris, 1885, p. 116.)

Among the Romans — who were the great architects of the European world, and whose aqueducts, baths, roads, and bridges have never been approached in strength or beauty by those of any other nation about them — it was to be expected that the title of the great priest should be Pontifex Maximus, on the same principle that among the Todas of the Nilgherries, who are pre-eminently a pastoral race, the chief medicine man or priest is called Palal, "meaning the Great Milker." — (See for these statements "Les Primitifs," Réclus, p. 260, article "Les Monticules des Nilgherries.")

The legends of the Middle Ages, all over Europe, from South Germany to Scandinavia, are filled with references to bridges, mills, and churches, but especially bridges, built by the Devil exclusively or by his assistance; and in every case there is the suggestion of human sacrifice having been offered.

"As a rule, the victims were captive enemies, purchased slaves or great criminals. . . . Hence, in our own folk-tales, the first to cross the bridge, the first to enter the new building or the country, pays

with his life, which meant falls a sacrifice. . . . In folk-tales we find traces of the immolation of children ; they are killed as a cure for leprosy, they are walled up in basements. . . . Extraordinary events might demand the death of kings' sons and daughters, nay, of kings themselves." — ("Teutonic Mythology," Grimm, vol. i. p. 46.)

"When the Devil builds the bridge, he is either under compulsion from men or is hunting for a soul ; but he has to put up with the cock or chamois, which is purposely made to run first across the new bridge," or "they make a wolf scamper through the door" of the new church, or a goat. — (Idem, vol. iii. p. 102.)

"When the new bridge at Halle, finished in 1843, was building the common people fancied a child was wanted to be walled into the foundations." — (Idem, vol. iii. p. 1142.)

"In modern Greece, when the foundation of a new building is being laid, it is the custom to kill a cock, a ram, or a lamb, and to let its blood flow on the foundation-stone, under which the animal is afterwards buried. The object of the sacrifice is to give strength and stability to the building. But sometimes, instead of killing an animal, the builder entices a man to the foundation-stone, secretly measures his body or a part of it, or his shadow, and buries them under the foundation-stone, or he lays the foundation-stone on the man's shadow. It is believed that the man will die within a year." — ("The Golden Bough," Frazer, vol. i. p. 144.)

It is not our purpose to carry this part of the discussion farther. The curious may consult Grimm, who shows the frequency with which human victims were walled up alive in new castles, ramparts, bridges, and other structures. As time passed on and man grew wiser, there was a substitution of a coffin as a symbol of the human victim ; in stables a calf or a lamb was buried alive under the main door, sometimes a cock or a goat ; under altars, a live lamb ; in newly opened graveyards, a live horse. All this testimony points conclusively to the fact that every such structure was begun at least under auspices from which all traces and suggestions of heathenism had not yet been eliminated ; consequently we shall not be very much in error in deciding that there was some survival of a religious rite in the peculiar ceremony insisted upon at crossing the bridge of Montluc, or that it, as all others, was built by architects who still adhered to the old cultus, and had influence enough with the rustic population to secure the incorporation of certain features of a sacred character belonging to the superseded ritual, and which have come down to us, or almost to us, in a more or less mutilated and distorted condition.

A very interesting article is to be found in "Mélusine," Paris, May 5, 1888, which may be read with great profit at this moment ; it is entitled "Les Rites de la Construction," and relates the popular tradition of the failure to maintain a bridge at a place called Resporden, in Cornwall, as each was swept away by flood almost as soon as completed. The good people of the vicinity suspected sorcery and witchcraft, and consulted a witch, whose directions were couched in these terms : "Si les gens de Resporden veulent avoir un pont qui ne fasse plus la culbute, ils devront enterrer vivant dans les fondations un petit garçon de quatre ans. . . . On placera l'enfant dans une futaille défoncée, tout nu, et il tiendra d'une main une chandelle bénite, de l'autre nu morceau de pain."

An unnatural mother was found who gave her infant son for the sacrifice, receiving some compensation, and the poor victim was walled up alive as directed ; the bridge was completed, and has since withstood all the ravages of storm and freshet ; but the tale still repeats the last words of the hapless babe, —

" Ma chandelle est morte, ma mère,
Et de pain, il ne me reste miette."

The unnatural mother very properly went insane in a few days after the sacrifice ; and the wail of the abandoned babe is still to be heard in the moaning of the winds and the sobs of the rains that fall upon Resporden.

XXIV.

OBSCENE SURVIVALS IN THE GAMES OF THE
ENGLISH RUSTICS.

THE rough games of the English rustics are not altogether free from vestiges of the same nature as have been recorded of the Arabian sheik in preceding pages. For example, in Northumberland, England, there was a curious diversion called "F——g for the pig." Brand gives no explanation of the custom, which may be allied to the jocular tenures mentioned by Blount, and with them to the worship of Bel-Phegor. Brand says: "The ancient grossierete of our manners would almost exceed belief. In the stage directions to old Moralities we often find, 'Here Satan letteth a f——.'" — ('Popular Antiquities,' vol. ii. p. 9, article "Country Wakes.")

In London itself such "survivals" lingered down to very recent periods. "In former times the porters that plyed at Billingsgate used civilly to entreat and desire every man that passed that way to salute a post that stood there in a vacant place. If he refused to do this, they forthwith laid hold of him, and by main force bouped his —— against the post; but if he quietly submitted to kiss the same, and paid down sixpence, then they gave him a name, and chose some one of the gang for his godfather. I believe this was done in memory of some old image that formerly stood there, perhaps of Belius or Belin." — (Brand, "Popular Antiquities," vol. ii. p. 433, article "Kissing the Post.")

All these customs, absurd as they seem to us, may have been parts of the ritual of deities of the same class as Bel-Phegor, who looked after the excreta perhaps, and the organs connected therewith; some kind of a tribute was demanded, and none could be more appropriate than the offering of the parts or the submission to some pain inflicted upon them by those in charge of the shrine.

Crossing the Atlantic, a custom suspiciously like the preceding, was still to be heard of, as a rough boyish prank, in Philadelphia,

Penn., thirty or more years ago. Whenever it happened that any boy was guilty of flatulence, all the party of school-boys would cry, "Touch wood!" and run to touch the nearest tree-box; those who were slow in doing this were pounded by the more rapid ones.

"Then, lads and lasses, merry be,

And, to make sport,

I f—t and snort."

("The Pranks of Robin Goodfellow," supposed to be by Ben Jonson, quoted in Hazlitt's "Fairy Tales," London, 1875, p. 420.)

The following memoranda from Buckle, "Commonplace Book," seem to have no value beyond merely filthy stories:—

"Ludlow's f—— was a prophetic trump;

There never was anything so jump;

'T was a very type of a vote of this rump,

Which nobody can deny."

Ludlow is a stanch Republican. The incident alluded to was a subject of much merriment, and exercised the pen of some of the choicest poets of the latter half of the seventeenth century.— ("Ballad: A New Year's Gift for the Rump," Jan. 5, 1659, and footnote in Percy Society's "Early English Poetry," London, 1841, vol. iii. p. 176.)

"And then my poets,

The same that writ so subtly of the fart."

("The Alchemist," Ben Jonson, act ii. scene 1.)

"Who the author alluded to should be I cannot say. In the collection of poems called 'Musarum Deliciæ; or, The Muse's Recreation,' by Sir John Ennis and Dr. Smith, there is a poem called 'The Fart censured in the Parliament House.' It was occasioned by an escape of that kind in the House of Commons. I have seen part of this poem ascribed to an author in the time of Elizabeth, and possibly it may be the thing referred to by Jonson." (Whalley.) But Gifford, from whose later editions I have drawn my material, comments to the effect that "this escape, as Whalley calls it, took place in 1607, long after the time of Elizabeth. The ballad is among the Harleian Manuscripts, and is also printed in the State Poems; it contains about forty stanzas of the most wretched doggerel."— (Gifford's edition of Jonson, London, 1816.)

"The Fool of Cornwall." "I was told of a humorous knight dwelling in the same countrey (that is, Cornwall), who upon a time, having

gathered together in one open market-place a great assemblie of knights, squires, gentlemen, and yeomen, and whilst they stood expecting to heare some discourse or speech to proceed from him, he, in a foolish manner (not without laughter), began to use a thousand jestures, turning his eyes this way and then that way, seeming always as though presently he would have begun to speake, and at last, fetching a deepe sigh, with a grunt like a hogge, he let a beastly loud fart, and tould them that the occasion of this calling them together was to no other end but that so noble a fart might be honoured with so noble a company as there was." — ("Jack of Dover's Quest of Inquiry," in Percy Society, vol. vii. p. 30, London, 1852. "Jack of Dover," A. D. 1604.)

"The Foole of Lincoln." "There dwelleth of late a certaine poore labouring man in Lincoln, who, upon a time, after his wife had so reviled him with tongue nettle as the whole streete rung again for weariness thereof, at last he went out of the house, and sate him downe quietly upon a blocke before his owne doore; his wife, being more out of patience by his quietness and gentle sufferance, went up into the chamber, and out at the window powred downe a pisse-pot upon his head; which when the poor man sawe, in a merry moode he spake these words: 'Now, surely,' quoth he, 'I thought at last that after so great a thunder we should have some raine.'" — (Idem, vol. vii. p. 15.)

The preceding filthy pleasantry comes down from a very distinguished origin. Harington recalls the adventure of the "good Socrates, who, when Xantippe had crowned him with a chamber-pot, he bore it off single with his head and shoulders, and said to such as laughed at it, —

"It never yet was deemed a wonder
To see that rain should follow thunder."

("Ajax," p. 94.)

- "Nathanicl. They write from Libtzig (reverence to your ears)
The art of drawing farts from out of dead bodies
Is by the brotherhood of the Rosie Cross
Produced unto perfection, in so sweet
And rich a tincture."

("The Staple of News," Ben Jonson, Gifford's edition, London, 1816, act iii. scene 1, p. 240.)

XXV.

URINE AND ORDURE AS SIGNS OF MOURNING.

CARE should be taken to distinguish between the religious use of ordure and urine, and that in which they figure as outward signs of mourning, induced by a frenzy of grief, or where they have been utilized in the arts.

Lord Kingsborough (*Mexican Antiquities*, vol. viii. p. 237) briefly outlines such ritualistic defilement in the Mortuary Ceremonies of Hebrews and Aztecs, giving as references for the latter Diego Duran, and for the former the prophet Zechariah, chap. iii.: "Now Joshua was clothed with filthy garments, and stood before the angel," etc.

"The nearest relations cut their hair and blacken their faces, and the old women put human excrement on their heads,—the sign of the deepest mourning." — ("The Native Tribes of South Australia," Adelaide, 1879, pp. 200, received through the kindness of the Royal Society, New South Wales, T. B. Kyngdon, Secretary.)

XXVI.

URINE AND ORDURE IN INDUSTRIES.

THE economical value of human and animal excreta would seem to have obtained recognition among all races from the earliest ages. It is not venturing beyond limits to assert that a book could be written upon this phase of the subject alone. It is not essential to incorporate here all that could be compiled, but enough is submitted to substantiate the statement just made, and to cover every line of inquiry.

It might perhaps be well to consider whether or not the constant use of and familiarity with human urine and ordure in houses, arts, and industries of various kinds would have a tendency to blunt the sensibilities of rude races, so that in their rites we could look for the introduction of these loathsome materials; just as we find that all those races whose women are allowed to go naked place a very slight value upon chastity.

"It certainly is not possible to separate the religious uses of urine from its industrial and medical uses. . . . Probably nearly everywhere it has been the first soap known. Does not this aspect of the matter need to be insisted on, even from the religious point of view? . . . In England and France, and probably elsewhere, the custom of washing the hands in urine, with an idea of its softening and beautifying influence, still subsists among ladies, and I have known those who constantly made water on their hands with this idea." — (Havelock Ellis, "Contemporary Science Series," London, Personal letter.)

TANNING.

The inhabitants of Kodiak employ urine in preparing the skins of birds, according to Lisiansky. — ("Voyage round the World," London, 1814, p. 214.)

"Les gants, articles de grand luxe, et de haute élégance, faits pour recouvrir de blanches mains et des bras dodus, sont imbibé d'un jaune

d'œuf largement additionné dudit liquide ambré." — ("Les Primitifs," Réclus, p. 72.)

By the Eskimo urine is preserved for use in tanning skins,¹ while its employment in the preparation of leather, in both Europe and America, is too well understood to require any reference to authorities.

The Kioways of the Great Plains soaked their buffalo hides in urine to make them soft and flexible.²

Urine is employed by the Tchuktschi of Siberia "in curing or tanning skins." — ("In the Lena Delta," Melville, Boston, Mass., 1885, p. 318.)

Sauer says that the Yakuts tan deer and elk skins with cow-dung. — ("Expedition to the North parts of Russia," London, 1802, p. 131.

Dung is used in tanning by the Bongo of the upper Nile region. — (See Schweinfurth, "Heart of Africa," London, 1878, vol. i. p. 134.)

Bernal Diaz, in his enumeration of the articles for sale in the "tianguetz" or market-places of Tenochtitlan, uses this expression: "I must also mention human excrements, which were exposed for sale in canoes lying in the canals near this square, which is used for the tanning of leather; for, according to the assurances of the Mexicans, it is impossible to tan well without it." — (Bernal Diaz, "Conquest of Mexico," London, 1844, vol. i. p. 236.)

The same use of ordure in tanning bear-skins can be found among the nomadic Apaches of Arizona, although, preferentially, they use the ordure of the animal itself.

Gómara, who also tabulated the articles sold in the Mexican markets, does not mention ordure in direct terms; his words are more vague: "All these things which I speak of, with many that I do not know, and others about which I keep silent, are sold in this market of the Mexicans."³

Urine figures as the mordant for fixing the colors of blankets and other woollen fabrics woven by the Navajoes of New Mexico, by the Moquis of Arizona, by the Zuñis and other Pueblos of the Southwest,

¹ They also keep urine in tubs in their huts for use in dressing deer and seal skins. (Hans Egede; also quoted in Richardson's "Polar Regions," Edinburgh, 1861, p. 304.) The same custom has been noted in Alaska. The same thing mentioned by Egede's grand-nephew, Hans Egede Saabye. ("Greenland," London, 1816, p. 6.)

² The whole process was carefully observed by Captain Robert G. Carter, 4th Cavalry, U. S. Army.

³ "Todas estas cosas que digo y muchas que no sé y otras que callo se venden en este mercado destos de Mejico." — (Gómara, "Historia de la Conquista de Mejico," p. 349.)

by the Araucanians of Chili, by Mexicans, Peruvians, by some of the tribes of Afghanistan, and other nations, by all of whom it is carefully preserved.

BLEACHING.

"Roman fullers used human urine in their business, and Pliny says it was noticed that they never suffered from gout." — (Pliny, "Natural History," lib. xxviii. cap. 3 : Bohn).

Urine has also been employed as a detergent in cleaning wool. — (Encyclopædia Britannica, article "Bleaching.")

DYEING.

Urine is used in dyeing by the people of Ounalashka, according to Langsdorff, "Voyages" (vol. ii. p. 47) ; also, according to Sarytschew, in "Philip's Voyages" (vol. vi. p. 72).

The same use of it has been attributed to the Irish by Camden, in "Brittania," edition of London, 1753, vol. ii. p. 1419. His statement is quoted by Buckle : "In 1562, O'Neal, with some of his companions, came to London and astonished the citizens by their hair flowing in locks on their shoulders, on which were yellow surplices, dyed with saffron or stained with urine." — ("Commonplace Book," vol. ii. p. 236.)

"As a substitute for alum, urine was employed." — ("Folk-Lore of the Pennsylvania Germans," W. J. Hoffman, M. D., in "Journal of American Folk-Lore," 1889.)

"The preparation of blue, violet, and bluish-red coloring matters from lichens by the action of the ammonia of stale urine, seems to have been known at a very early period to the Mediterranean peoples, and the existence, down almost to the present day, of such a knowledge in the more remote parts of Ireland, Scotland, and Scandinavia, renders it not improbable that the art of making such dyes was not unknown to the northern nations of Europe also." — ("The Manners and Customs of the Ancient Irish," Eugene O'Curry, introduction by W. K. Sullivan, London, Dublin, Edinburgh, and New York, 1873, p. 450.)

PLASTER.

As a plaster for the interior of dwellings, cow-dung has been used with frequency ; that the employment of the ordure of an animal held sacred by so many peoples has a religious basis, is perhaps too much to say, but it will be shown, further on, that different ordures were

kept about houses to ensure good luck or to avert the maleficence of witchcraft.

Marco Polo has the following: (In Malabar) "there are some called Gaui, who eat such oxen as die of themselves, but may not kill them, and daub over their houses with cow-dung." — (Marco Polo, in Pinkerton, vol. vii. p. 162.)

The huts in Senegal were plastered "with cow-dung, which stunk abominably." — (Adamson, "Voyage to Senegal," in Pinkerton, vol. xvi. p. 611.)

"The cow-dung basements around the tents" of the Mongols are spoken of by Rev. James Gilmour. — ("Among the Mongols," London, 1883, p. 176.)

"A floor is next made of soft tufa and cow-dung." — (Livingston, "Zambesi," London, 1865, p. 293.)

Animal dung is used as a mortar by the inhabitants of Turkey in Asia living in the valley of the Tigris. — (See "Assyrian Discoveries," George Smith, New York, 1876, p. 82.)

The natives of the White Nile, the tribes of the Bari, make "a cement of ashes, cow-dung, and sand," with which "they plaster the floors and enclosures about their houses." — ("The Albert Nyanza," Sir Samuel Baker, Philadelphia, 1869, p. 58. See the same author for the Latookas, idem, p. 135; and for the statement that the Obbos plaster enclosures, walls, and floors alike, see pp. 203, 262.)

Pliny tells us that the threshing-floors of the Roman farmers were paved with cow-dung; in a footnote it is stated that the same rule obtains in France to this day. — (Pliny, lib. lxxviii. cap. 71 : Bohn.)

Horse-dung was considered very valuable as a luting for chemical stills and furnaces. — (See Schurig, "Chylologia," p. 815; also, as a "Digesting medium," idem.)

Of the Yakuts of Siberia it is related: "In dirtiness they yield to none; for a grave author assures us that the mortars which they use for bruising their dried fish are made of cow-dung hardened by the frost." — (Maltebrun, "Universal Geography," vol. i. p. 347.)

"The people of Jungeion . . . collected the dung of cows and sheep . . . dried it, roasted it on the fire, and afterwards used it for a bed." — (Mungo Park, "Travels in Africa," in Pinkerton, vol. xvi. p. 834.)

"The vessels in which they (the Yakuts) stamp their dried fish, Roots and Berries, are made of dried Oxen and Cow's dung." — (Van Stralenberg, p. 382.)

The Index to the first volume of Purchas has "Dung bought by sound of tabor, p. 270, l. 40;" and "Dung of Birds, a strange report of it;" but neither of these could be found in the main portion of the volume.

AS A CURE FOR TOBACCO.

The best varieties of Tobacco coming from America were arranged in bunches, tied to stakes, and suspended in privies, in order that the fumes arising from the human ordure and urine might correct the corrupt and noxious principles in the plant in the crude state. — (See Schurig, "Chylologia," p. 776. "Ex paxillo aliquandiu suspendere in Cloacis Tabacum," etc.)

"I heard lately from good authority that, in Havana, the female urine is used in cigar-manufacturing as a good maceration." — (Personal letter from Dr. Gustav Jaeger, Stuttgart, August 29, 1888.)

TO RESTORE THE ODOR OF MUSK AND THE COLOR OF CORAL.

The odor of musk and the color of coral could be restored by suspending them in a privy for a time. — (See Danielus Beckherius, "Medicus Microcosmus," London, 1600, p. 113.)

"Paracelsus scil. mediante digestionem stercus humanum ad odorem Moschi redigere voluit." — (Etmuller, "Opera Omnia," Comment. Ludovic. Lyons, 1690, vol. ii. pp. 171, 172.)

"Moschi odorem deperditum restitui posse, si in loco aliquo, ubi urina et excrementa alvina putrescunt, detineatur, apud autores legimus." — (Schurig, "Chylologia," p. 768.)

"Fit, ut Moschus longo tempore æmittat odorem, quem tamen recuperat si irroretur cum pueri urina, vel si suspendatur in latrina humana." — (Etmuller, vol. ii. p. 276.)

CHEESE MANUFACTURE.

"A storekeeper in Berlin was punished some years ago for having used the urine of young girls with a view to make his cheese richer and more piquant. Notwithstanding, people went, bought and ate his cheese with delight. What may be the cause of all these foolish and mysterious things? In human urine is the Anthropin." — (Personal letter from Dr. Gustav Jæger, Stuttgart, August 29, 1888.)

"En certaines fermes de Suisse on se sert, m-a-t'on-dit, de l'urine pour activer la fermentation de certaines fromages qu'on y plonge." —

(Personal letter from Dr. Bernard to Captain Bourke, dated Cannes, France, July 7, 1888.)

Whether or not the use of human urine to ripen cheese originated in the ancient practice of employing excrementitious matter to preserve the products of the dairy from the maleficence of witches; or, on the other hand, whether or not such an employment as an agent to defeat the efforts of the witches be traceable to the fact that stale urine was originally the active ferment to hasten the coagulation of the milk would scarcely be worth discussion.

OPIUM ADULTERATION.

The smoker of opium little imagines that, in using his deadly drug, he is often smoking an adulterated article, the adulterant being hen manure; he is thus placed on a par with the American Indian smoking the dried dung of the buffalo, and the African smoking that of the antelope or the rhinoceros.

EGG-HATCHING.

In the description of the province of Quang-tong, it is stated that the Chinese hatch eggs "in the Oven, or in Dung."—(Du Halde, "History of China," London, 1741, vol. i. p. 238.) See the same statement made in Purchas, vol. i. 270.

In China "their fish is chiefly nourished with the dung of Oxen that greatly fatteth it."—(Perera, in Purchas, vol. i. p. 205.)

TAXES ON URINE.

The Roman emperors imposed a tax and tolls upon urine because of its usefulness in many things.—("Dreck Apotheke," Paullini, p. 8. See previous statements in this volume and consult Suetonius "Vespasian.")

CHRYSOCOLLON.

There was a cement for fixing the precious metals, which cement was known as "Chrysocollon," and was made with much ceremony from the urine "of an innocent boy." There are various descriptions, but the following, while brief, contain all the material points.

Galen describes this Chrysocollon, or Gold-Glue, as prepared by some physicians from the urine of a boy, who had to void it into a mortar of red copper while a pestle of the same material was in motion, which urine carefully exposed to the sun until it had acquired the thickness

of honey, was considered capable of soldering gold and of curing obstinate diseases: "Attamen medicamentum quod ex urina pueri conficitur quod quidam vocant chrysocollon, quia eo ad anri glutinationem utuntur, ad ulcera difficilia sanatu optimum esse assero fit autem id figura phiali confecto mortario ex ære rubro habentem pistillum ejusdem materiæ in quod mejente puero pistillum circumages, identidem, ut non tantum a mortario deradedet, etc." ("Opera Omnia," Kuhn's edition, vol. xii. pp. 286, 287.)

Dioscorides describes the manufacture thus: "Quinetiam ex ea (i. e. 'pueri innocentis urina') et aere cyprio idoneum ferruminando glutea paratur." — ("Materia Medica," Kuhn's edition, vol. i. p. 227 *et seq.*)

If a boy's urine be rubbed up in a copper mortar with a copper pestle, it makes a sort of mucilage which can be used to fasten articles of gold together, as Sextus Placitus tells us: "Si pueri lotium cuprino mortario et cuprino pistello contritum fuerit, aurum solidat." — ("De Medicamentis ex Animalibus," edition of Lyons, 1537, pages not numbered, article, "De Puello et Puella Virgine.")

The definition given by Avicenna, the Arabian authority, is: "Quæ fit ex urina infantium mota in mortario aëro cum aceto in sole." — (Vol. i. p. 336, a 34 *et seq.*)

We also read of an "Alchymical Water," called "Diana," for transmuting metals into gold and silver; it was believed that this preparation was efficacious "ad mutandum Mercurium in Solem vel Lunam." ("Sol" was gold, "Luna" was silver; see notes from Paracelsus below.) This "Diana" was employed in the preparation of "Crocus Martis," as well as in that of "Oleum Martis," for giving metals the color of gold, for polishing gold plate, for giving a fine temper to the best iron or steel implements, and for making the "Chrysocolla" just described. — ("Medicus Microcosmus," Beckherius, pp. 103–108.)

Paracelsus, speaking of the metals says: "Sol, that is Gold; Luna, that is silver; Venus, that is Copper; Mercury, that is Quicksilver; Saturnus, that is Lead; Jupiter, that is Tinne; Mars, that is Iron." — ("The Secrets of Physicke," English translation, London, 1633, p. 117.)

FOR REMOVING INK STAINS.

Human urine was considered efficacious in the removal of ink-spots. — (See Pliny, Bohn, lib. v. and lib. xxviii.)

AS AN ARTICLE OF JEWELRY.

Fossilized excrement is used in the manufacture of jewelry, under the name of "Coprolite."

Lapland women carry a little case made from the bark of the birch tree, "which they usually carry under the girdle" in which is to be found reindeer dung, not as an amulet but to aid in weaning the young reindeer by smearing the udders of the dams." — (See Leems' "Account of Danish Lapland," in Pinkerton, vol. i. p. 405.)

But, from other sources, we have learned that the Laps attached the most potent influences to ordure and urine believing that their reindeer could be bewitched, that vessels could be hastened or retarded in their course, etc., by the use of such materials. Several examples of this belief are given in this volume; see under "Witchcraft."

TATTOOING.

Langsdorff noticed that urine entered into the domestic economy of the natives of Ounalashka. He tells us that the tattooing was performed with "a sort of coal dust mixed with urine, rubbed in" the punctures made in the skin ("Voyages," vol. ii. p. 40). That the tattooing with which savages decorate their bodies has a significance beyond a simple personal ornamentation cannot be gainsaid, although the degree of its degeneration from a primitive religious symbolism may now be impossible to determine. Even if regarded in no other light than as a means of clan-distinction, there is the suggestion of obsolete ceremonial, because the separation into castes and gentes is in every case described by the savages concerned as having been performed at the behest of some one of their innumerable deities, who assigned to each clan its appropriate "totem." Clan marks may be represented in the tattooing, the conventional signs of primitive races not having yet been sufficiently investigated; for example, among the Apaches three marks radiating out from a single stem represent a turkey, that being the form of the bird's foot. At the dances of the Indians of the pueblo of Santo Domingo, on the Rio Grande, New Mexico, the bodily decorations were, in nearly every case, associated with the clan "totem;" but this fact never would have been suspected unless explained by one of the initiated. In one of the dances of the Moquis the members of the Tejon or Badger clan appeared with white stripes down their faces; that is one of the marks of the badger, as they explained.

The author does not wish to say much on this topic, since his attention was not called to it until a comparatively late period in his investigations ; but he was surprised to learn that the Apaches, among whom he then was, although marking themselves very slightly, almost invariably made use of an emblemism of a sacred character ; moreover, it was very generally the work of some one of the " medicine men."

The tattooing of the people of Otaheite seen by Cook was surmised by him to have a religious significance, as it presented in many instances " squares, circles, crescents, and ill-designed representations of men and dogs." (In Hawkesworth's " Voyages," London, 1773, vol. ii. p. 190.) Every one of these people was tattooed upon reaching majority. (Idem, p. 191.) It is stated that certain chiefs in New Zealand, unable to write their names to a document presented to them for signature drew lines like those tattooed upon their faces and noses." — (See " Voyage of Adventure and Beagle," London, 1839, vol. ii. p. 586.)

Among the Dyaks of Borneo " all the married women are tattooed on the hands and feet, and sometimes on the thighs. The decoration is one of the privileges of matrimony, and is not permitted to unmarried girls." — (" Head-Hunters of Borneo," Carl Bock, London, 1881, p. 67.)

A recent writer has the following to say on this subject : " The tattoo marks make it possible to discover the remote connection between claus ; and this token has such a powerful influence upon the mind that there is no feud between tribes which are tattooed in the same way. The type of the marks must be referred to the animal kingdom ; yet we cannot discover any tradition or myth which relates to the custom. There is no reason for asserting that there is any connection between the tattoo marks and Totemism, although I am personally disposed to think that this is sometimes the case. The tattooing, which usually consists in the imitation of some animal forms, may lead to the worship of such animals as religious objects." (" The Primitive Family," C. N. Starcke, Ph. D., New York, 1889, p. 42.) Here is an example of putting the cart before the horse ; in all cases investigation will show that the animal was a god, and for that reason was imprinted on the person of the worshipper as a vow of supplication or prayer.

In another place the same writer says that tattooing had " to be performed by a priest." — (Idem, p. 241.)

The religious element in Totemism has been plainly revealed by W. Robertson Smith in *Encyclopædia Britannica*, article " Sacrifice," and by James G. Frazer, M.A., in his " Totemism," Edinburgh, 1887.

Andrew Lang devotes several chapters to the subject ("Myth, Ritual, and Religion," London, 1887, vol. i. cap. 3). He says of the Australian tribes: "There is some evidence that in certain tribes the wingong or totem of each man is indicated by a tattooed representation of it upon his flesh" (p. 65). On another page, quoting from Long's "Voyages," 1791, he says: "The ceremony of adoption was painful, beginning with a feast of dog's flesh, followed by a Turkish bath, and a prolonged process of tattooing." — (Idem, p. 71.)

A traveller of considerable intelligence comments in these terms upon the bodily ornamentation of the Burmese:—

"Burmah is the land of the tattooed man. . . . In my visit to the great prison here, which contains more than three thousand men, I saw six thousand tattooed legs. . . . The origin of the custom I have not been able to find out. It is here the Burmese sign of manhood, and there is as much ceremony about it as there is about the ear-piercing of girls which chronicles their entrance upon womanhood. There are professional tattooers, who go about with books of designs. . . . The people are superstitious about it; and certain kinds of tattooing are supposed to ward off disease. One kind wards off the snake-bite, and another prevents a man from drowning." — (Frank G. Carpenter, in the "Bee," Omaha, Nebraska, May 19, 1889.)

Surgeon Corbusier, U. S. Army, says of the Apache-Yumas of Arizona Territory, that "the married women are distinguished by seven narrow blue lines running from the lower lip down to the chin. . . . Tattooing is practised by the women, rarely by the men. . . . A young woman, when anxious to become a mother, tattoos the figure of a child on her forehead." — (In the "American Antiquarian," November, 1886.)

The "sectarial marks" of the Hindus are possibly vestiges of a former practice of tattooing. Coleman ("Mythology of the Hindus," London, 1832, p. 165) has a reference to them.

Squier, in his monograph upon "Manobosho," in "American Historical Review," 1848, says that the Mandans have a myth in which occurs the name of a god, "Tattooed Face."

Alice Oatman stated distinctly that "she was tattooed by two of their (Mojaves) physicians," and "marked, not as they marked their women, but as they marked their captives." Be that as it may, the four lines on her chin, as well as can be discerned from the indifferent woodcut, are the same as can be seen upon the chins of Mojave

women to-day. — (See Stratton's "Captivity of the Oatman Girls," San Francisco, 1857, pp. 151, 152.)

Maltebrun says of the inhabitants of the Island of Formosa : "Their skin is covered with indelible marks, representing trees, animals, and flowers of grotesque forms." — ("Universal Geography," American edition, Philadelphia, 1832, vol. ii. lib. 43, p. 79, article "China.")

"The practice of marking the skin with the figures of animals, flowers, or stars, which was in existence before the time of Mahomet, has still left traces among the Bedouin women." — (Idem, vol. i. lib. 30, p. 395.)

Speaking of the Persian ladies, the same authority says : "They stain their bodies with the figures of trees, birds, and beasts, sun, moon, and stars." — (Idem, vol. i. lib. 33, p. 428, article "Persia.")

In the "Transactions of the Ethnological Society of London," vol. vi., it is stated that the "Oraon boys (India) are marked when children on the arms by a rather severe process of puncturation, which they consider it manly to endure."

"Mojave girls, after they marry, tattoo the chin with vertical blue lines." — (Palmer, quoted by H. H. Bancroft in "Native Races," vol. i. p. 480.)

In the cannibal feast of the Tupis of the Amazon, Southey says, "The chief of the clan scarified the arms of the Matador above the elbow, so as to leave a permanent mark there ; and this was the Star and Garter of their ambition, the highest badge of honor. There were some who cut gashes in their breast, arms, and thighs on these occasions, and rubbed a black powder in, which left an indelible stain." — (Quoted by Herbert Spencer in "Descriptive Sociology.")

"A savage man meets a savage maid. She does not speak his language, nor he hers. How are they to know whether, according to the marriage laws of their race, they are lawful mates for each other? This important question is settled by an inspection of their tattoo marks. If a Thlinket man, of the Swan stock, meets an Iroquois maid, of the Swan stock, they cannot speak to each other, and the 'gesture language' is cumbrous. But if both are tattooed with the Swan, then the man knows that this daughter of the Swan is not for him. . . . The case of the Thlinket man and the Iroquois maid is extremely unlikely to occur, but I give it as an example of the practical use among savages of representative art." — ("Custom and Myth," Andrew Lang, New York, 1885, p. 292.)

"Tattooing is fetichistic in origin. Among all the tribes, almost

every Indian has the image of an animal tattooed on his breast or arm, which can charm away an evil spirit or prevent harm to them." — (Dorman, "Primitive Superstition," New York, 1881, p. 156.)

"The Eskimo wife has her face tattooed with lamp-black, and is regarded as a matron in society." — ("Schwatka's Search," William H. Gilder, New York, 1881, p. 250.) "I never saw any attempt at figure or animal drawing for personal ornamentation. The forms are generally geometrical in design and symmetrical in arrangement. . . . None of the men are tattooed." — (Idem, p. 251.)

"The Mojaves of the Rio Colorado tattoo, but the explanation of the marks was exceedingly vague and unsatisfactory. The women, upon attaining puberty, are tattooed upon the chin, and there seem to be four different patterns followed, probably representing as many different phratric or clan systems in former times." — (See the author's article in the "Journal of American Folk-Lore," Cambridge, Mass., July–September, 1888, entitled "Notes on the Cosmogony and Theogony of the Mojaves.")

Swan, in his notes upon the Indians of Cape Flattery, contents himself with observing that their tattooing is performed with coal and human urine.

"In order that the ghost may travel the ghost road in safety, it is necessary for each Lakota during his life to be tattooed either in the middle of the forehead or on the wrists. In that event, his spirit will go directly to the 'Many Lodges.' . . . An old woman sits in the road, and she examines each ghost that passes. If she cannot find the tattoo-marks on the forehead, wrists, or chin, the unhappy ghost is pushed from a cloud or cliff, and falls to this world." — (Dr. J. Owen Dorsey, in the "Journal of American Folk-Lore," April, 1889.)

Of the islands of the South Pacific, Kotzebue says, "I believe that tattooing in these islands is a religious custom; at least, they refused it to several of our gentlemen at Otdia, assuring them that it could only be done in Egerup." — ("Voyages." vol. ii. pp. 113, 135, London, 1821.)

"Tattooing is by no means confined to the Polynesians, but this 'dermal art' is certainly carried by them to an extent which is unequalled by any other people. . . . It is practised by all classes. . . . By the vast number of them it is adopted simply as a personal ornament, though there are some grounds for believing that the tattoo may, in a few cases and to a small extent, be looked upon as a badge of mourning or a memento of a departed friend. Like everything

else in Polynesia, its origin is related in a legend which credits its invention to the gods, and says it was first practised by the children of Tharoa, their principal deity. The sons of Tharoa and Apouvarou were the gods of tattooing, and their images were kept in the temples of those who practised the art as a profession, and to them petitions are offered that the figures might be handsome, attract attention, and otherwise accomplish the purpose for which they submitted themselves to this painful operation. . . . To show any signs of suffering under the operation is looked upon as disgraceful." — ("World," New York, May 10, 1890, quoting from "The Peoples of the World.")

"In the Tonga and Samoan Islands, the young men were all tattooed upon reaching manhood; before this, they could not think of marriage. . . . Tattooing is still kept up to some extent, and is a regular profession. . . . There are two gods, patrons of tattooing, — Taema and Tilfanga." — (See Turner's "Samoa.")

"One of the features of the Initiation among the Port Lincoln tribe was the tattooing of the young man and the conferring of a new name upon him." — ("The Native Tribes of South Australia," Adelaide, 1879, received through the kindness of the Royal Society, New South Wales, T. B. Kyngdon, Secretary.)

It is well to observe that each tribe in a given section has not only its own pattern of tattooing, but its own ideas of the parts of the person to which the tattooing should be applied. Thus, among the Indians of the northwest coast of British Columbia, "Tattoos are found on arms, breast, back, legs, and feet among the Haidas; on arms and feet among the Tshimshian, Kwakiutl, and Bilqula; on breast and arms among the Nootka; on the jaw among the coast Salish women." — ("Report on the Northwestern Tribes of Canada," Franz Boas, in "Trans. Brit. Assoc. Advancement of Science," Newcastle-upon-Tyne meeting, 1889, p. 12.)

Sullivan states that the custom of tattooing continued in England and Ireland down to the seventh century; this was the tattooing with woad. — (See his Introduction to O'Curry's "Manners and Customs of the Ancient Irish," p. 455.)

The Inuits believe that "*les femmes bien tatouées*" are sure of felicity in the world to come. — (See "*Les Primitifs*," Réclus, Paris, 1885, p. 120.)

"Although the practice of the art is so ancient that we have evidence of its existence in prehistoric times, and that the earliest chronicles of our race contain references to it, yet the term itself is

comparatively modern. . . . The universality as well as the great antiquity of the custom has been shown by a French author, Ernest Berchon, '*Histoire Médicale du Tatouage*,' Paris, 1869, which begins with a quotation from Leviticus xiv., which in the English version reads thus: 'Ye shall not make any cuttings in your flesh for the dead, nor print any marks upon you.' Don Calmet, in commenting upon this passage, says that the Hebrew literally means 'a writing of spots.' Many Italians have been tattooed at Loretto. Around this famous shrine are seen professional tattooers, '*Marcatori*,' who charge from half to three quarters of a lire for producing a design commemorative of the pilgrim's visit to the shrine of Our Lady of Loretto. A like profitable industry is pursued at Jerusalem . . . Religion has some influence (in the matter of tattooing) from its tendency to preserve ancient customs. At Loretto and Jerusalem tattooing is almost a sacred observance." — ("Tattooing among Civilized People," Dr. Robert Fletcher, Anthropological Society, Washington, D. C., 1883, pp. 4, 12, and 26.)

"Father Mathias G. says that in Oceania every royal or princely family has a family of tattooers especially devoted to their service, and that none other can be permitted to produce the necessary adornment." — (Idem, p. 24.)

"*Tatowiren, Narbenzeichnen und Körperbemalen*" (Tattooing, Cicatricial Marking and Body Painting), by Wilhelm Joest, Berlin, 1887, a superbly illustrated volume, has been reviewed by Surgeon Washington Matthews, U. S. Army, in the "*American Anthropologist*," Washington, D. C., ending in these words, "The author's opinion, however, that 'tattooing has nothing to do with the religion of savages, but is only a sport or means of adornment, which, at most, has connection with the attainment of maturity,' is one which will not be generally concurred in by those who have studied this practice as it exists among our American savages."

AGRICULTURE.

In the interior of China, travellers relate that copper receptacles along the roadsides rescue from loss a fertilizer whose value is fully recognized.

These copper receptacles recall the "*Gastra*," of the Romans, already referred to under the heading of "*Latrines*."

"*Les Chinois fument leurs terres autant que cela est en leur pou-*

voir ; ils emploient à cet usage toutes sortes d'engrais, mais principalement les excréments humains, qu'ils recueillent à cet effet avec grand soin. On trouve dans les villes, dans les villages, et sur les routes, des endroits faits exprès pour la commodité des passans, et dans les lieux où il n'y a pas de semblables facilités, des hommes vont ramasser soir et matin les ordures et les mettent dans des panniers à l'aide d'un croc de fer à trois pointes.

" On trafique dans ce pays de ce qu'on rejette ailleurs avec horreur et celui qui reçoit d'argent en France pour nettoyer une fosse, en donne au contraire en Chine pour avoir la liberté d'en faire autant. Les excréments sont portés dans de grands trous bien mastiqués, faits en plein campagne, dans lesquels on les délaye avec de l'eau et de l'urine et on les répand dans les champs à mesure qu'on a besoin. On rencontre souvent sur la rivière à Quanton des bateaux d'une forme particulière destinés au transport de ces ordures et ce n'est pas sans surprise qu'on en voit les conducteurs être aussi peu affectés qu'ils le paroissent de l'odeur agréable d'une pareille marchandise." — ("Voyage à Pekin," De Gignes, Paris, 1808, vol. iii. p. 322.)

"The dung of all animals is esteemed above any other kind of manure. It often becomes an article of commerce in the shape of small cakes, which are made by mixing it with a portion of loam and earth, and then thoroughly drying them. These cakes are even brought from Siam, and they also form an article of commerce between the provinces. They are never applied dry, but are diluted with as much animal water as can be procured." — ("Chinese Repository," Canton, 1835, vol. iii. p. 124.)

"They even make sale of that which is sent privately to some distance in Europe at midnight." (Du Halde, "History of China," London, 1736, vol. ii. p. 126.) This statement of Father Du Halde can be compared with what Bernal Diaz says of the markets of the city of Mexico at the time of Cortès : "There are in every province a great number of people who carry pails for this purpose ; in some places they go with their barks into the canals which run on the back side of the houses, and fill them at almost every hour of the day." — (Du Halde, *idem*, p. 126.)

Rosinus Lentilius, in "Ephemeridum Physico-Mediorum," Leipsig, 1694, states that the people of China and Java buy human ordure in exchange for tobacco and nuts. This was probably on account of its value in manuring their fields, which, he tells us (p. 170), was done three times a year with human ordure. This leads him to make the

reflection that man runs back to excrement, — “Unde stercus in alimentum et hoc rursum in stercus.”

“The Japanese manure their fields with human ordure. — (See Kemper’s “History of Japan,” in Pinkerton, vol. vii. p. 698.)

“Yea, the dung of men is there sold, and not the worse merchandise, that stink yielding sweet wealth to some who goe tabouring up and down the streetes to signifie what they woulde buy. Two or three hundred sayle are sometimes freighted with this lading in some Port of the Sea ; whence the fatted soyle yields three Haruests in a yeare.” — (Mendex Pinto, “Account of China,” in Purchas, vol. i. p. 270.)

“Heaps of manure in every field, at proper distances, ready to be scattered over the corn.” — (Turner, “Embassy to Tibet,” London, 1806, p. 62.)

The Persians used pigeon’s dung “to smoak their melons.” — (John Matthews Eaton, “Treatise on Breeding Pigeons,” London, no date, pp. 39, 40, quoting from Tavernier’s first volume of “Persian Travels.”)

The finest variety of melon, “the sugar melon,” “cultivated with the greatest care with the dung of pigeons kept for the purpose.” — (“Persia,” Benjamin, London, 1877, p. 428.)

Fosbroke cites Tavernier as saying that the King of Persia draws a greater revenue from “the dung than from the pigeons” belonging to him in Ispahan. The Persians are said to live on melons during the summer months, and “to use pigeons’ dung in raising them.” — (“Cyclopædia of Antiquities,” vol. ii.)

Human manure was best for fields, according to Pliny (Nat. Hist. lib. 17, cap. 9). Homer relates that King Laertes laid dung upon his fields. Augeas was the first king among the Greeks so to use it, and “Hercules divulged the practice thereof among the Italians.” — (Pliny, idem, Holland’s translation.)

Urine was considered one of the best manures for vines. “Wounds and incisions of trees are treated also with pigeon’s dung and swine manure. . . . If pomegranates are acid, the roots of the tree are cleared, and swine’s dung is applied to them ; the result is that in the first year the fruit will have a vinous flavor, but in the succeeding one it will be sweet. . . . The pomegranates should be watered four times a year with a mixture of human urine and water. . . . For the purpose of preventing animals from doing mischief by browsing upon the leaves, they should be sprinkled with cow-dung each time after rain.” — (Pliny, lib. 17, cap. 47.)

Schurig calls attention to the great value attached by farmers and viticulturists to human ordure, either alone or mixed with that of animals, in feeding hogs, in fertilizing fields, and in adding richness to the soil in which vines grow. See "Chylologia," p. 795.

In Germany and France, during the past century, farmers and gardeners were generally careful of this fertilizer.

"In the valley of Cuzco, Peru, and, indeed, in almost all parts of the Sierra, they used human manure for the maize crops, because they said it was the best." — (Garcillasso de la Vega, "Comentarios Reales," Clement C. Markham's translation, in Hakluyt Society, vol. xlv. p. 11.)

"Conocian tambien el uso de estercolar las tierras que ellos llamaban Vunnaltu." — ("Historia Civil del Reyno de Chile," Don Juan Ignacio Molina, edition of Madrid, 1788, p. 15.)

Amelie Rives, in her story "Virginia of Virginia," relates that a certain family of Virginia was taken down with the typhoid fever on account of "making fertilizer in the cellar." We may infer that this "fertilizer" was largely composed of manure. This is the interview between Mr. Scott and Miss Virginia Herrick: "'The tarryfied fever's a-ragin' up ter Annesville,' he announced presently. Virginia faced about for the first time. 'Is it?' she asked; 'who's down?' 'Nigh all of them Davises. The doctor says as how it's 'count o' their makin' fertilizer in their cellar.'" — (In "Harper's Magazine," New York, January, 1888, p. 223.)

Animal manure was known as a fertilizer to the Jews (2 Kings ix. 37; Jeremiah viii. 2, ix. 22, xvi. 4, and xxv. 33). Human manure also. (Consult McClintock and Strong's Encyclopædia, article "Dung.")

URINE USED IN THE MANUFACTURE OF SALT.

Gomara explains that, mixed with palm-scrappings, human urine served as salt to the Indians of Bogota, — "Hacen sal de raspaduras de palma y orinas de hombre." — ("Hist. de las Indias," p. 202.)

Salt is made by the Latookas of the White Nile from the ashes of goat's dung. — (See "The Albert Nyanza," Sir Samuel Baker, Philadelphia, 1869, p. 224.)

Pallas states that the Buriats of Siberia, in collecting salts from the shores of certain lakes in their country, are careful as to the taste of the same: "Ils n'emploient que ceux qui ont un goût d'Urine et d'alkali." ("Voyages," Paris, 1793, vol. iv. p. 246.) This shows that

they must once have used urine for salt, as so many other tribes have done.

The Siberians gave human urine to their reindeer: "Nothing is so acceptable to a reindeer as human urine, and I have even seen them run to get it as occasion offered." — (John Dundas Cochrane, "Pedestrian Journey Through Siberian Tartary," 1820–23, Philadelphia, 1824, p. 235.)

Melville also relates that he saw the drivers urinate into the mouths of their reindeer in the Lena Delta. — (Personal letter to Captain Bourke.)

Here the intent was evident; the animals needed salt, and no other method of obtaining it was feasible during the winter months. Cochrane is speaking of the Tchuktchi; but he was also among Yakuts and other tribes. He walked from St. Petersburg to Kamtschatka and from point to point in Siberia for a total distance of over six thousand miles. His pages are dark with censure of the filthy and disgusting habits of the savage nomads, as, of the Yakuts, "Their stench and filth are inconceivable. . . . The large tents (of the Tchuktchi) were disgustingly dirty and offensive, exhibiting every species of grossness and indelicacy." Inside the tents men, women, and girls were absolutely naked. "They drink only snow-water during the winter, to melt which, when no wood can be had, very disgusting and dirty means are resorted to," etc. But nowhere does he speak of the drinking of human urine, which, as has been learned from other sources, does obtain among them.

(Tchuktchees of Siberia.) "It would be impossible, with decency, to describe their habits, or explain how their very efforts towards cleanliness make them all the more disgusting. . . . It requires considerable habitude or terrible experience in the open air to find any degree of comfort in such abodes. The Augean stables or the stump-tail cow-sheds appear like Paradise in comparison." — ("Ice-Pack and Tundra," Gilder, New York, 1883, p. 105.)

PREPARATION OF SAL AMMONIAC, PHOSPHORUS, SOLUTION OF INDIGO.

Diderot and D'Alembert say that the sal ammoniac of the ancients was prepared with the urine of camels; that phosphorus, as then manufactured in England, was made with human urine, as was also saltpetre. — (Encyclopædia, Geneva, 1789, article "Urine.")

Sal ammoniac derives its name from having been first made in the

vicinity of the temple of Jupiter Ammon ; it would be of consequence to us to know whether or not the priests of that temple had administered urine in disease before they learned how to extract from it the medicinal salt which has come down to our own times.

Schurig devotes a chapter to the medicinal preparations made from human ordure. In every case the ordure had to be that of a youth from twenty-five to thirty years old. This manner of preparing chemicals from the human excreta, including phosphorus from urine, was carried to such a pitch that some philosophers believed the philosopher's stone was to be found by mixing the salts obtained from human urine with those obtained from human excrement. — (See "Chylogia," pp. 739-742.)

The method of obtaining sal ammoniac was not known to Pliny ; he knew of gum ammoniac, which he says distilled from a tree, called metopia, growing in the sands near the Temple of Jupiter Ammon, in Ethiopia. — (Nat. Hist. lib. 12, cap. 22.)

"A notion has prevailed that sal ammoniac was made of the sand on which camels had staled, and that a great number going to the temple of Jupiter Ammon gave occasion for the name of ammoniac, corrupted to armoniac. Whether it ever could be made by taking up the sand and preparing it with fire, as they do the dung at present, those who are best acquainted with the nature of these things will be best able to judge. I was informed that it was made of the soot which is caused by burning the dung of cows and other animals. The hotter it is the better it produces ; and for that reason the dung of pigeons is the best ; that of camels is also much esteemed." (Here follows a description of the method of distilling this soot.) — (Pocock's "Travels in Egypt," in Pinkerton, vol. xv. p. 381.)

"Purifiée, l'Urine sert dans les arts pour dégraisser les laines, dissoudre l'indigo, prépare le sel ammoniac." — (Personal letter from Prof. Frank Rede Fowke, South Kensington Museum, June 18, 1888.)

MANURE EMPLOYED AS FUEL.

The employment of manures as fuel for firing pottery among Moquis, Zuñis, and other Pueblos, and for general heating in Thibet, has been pointed out by the author in a former work. ("Snake Dance of the Moquis," London, 1884.) It was used for the same purpose in Africa, according to Mungo Park. ("Travels," etc., p. 119.) The dung of the buffalo served the same purpose in the domestic

economy of the Plains Indians. Camel dung is the fuel of the Bedouins; that of men and animals alike was saved and dried by the Syrians, Arabians, Egyptians, and people of West of England for fuel. Egyptians heated their lime-kilns with it. — (McClintock and Strong, "Dung." See, also, Kitto's Biblical Encyclopædia, article "Dung.")

Pocock says of camel dung: "In order to make fuel of it, they mix it, if I mistake not, with chopped straw, and, I think, sometimes with earth, and make it into cakes and dry it; and it is burnt by the common people in Egypt; for the wood they burn at Cairo is very dear, as it is brought from Asia Minor." — (Pocock, in Pinkerton, vol. xv. p. 381.)

Bruce does not allude to any of the filthy customs which are detailed by Schweinfurth, Sir Samuel Baker, and others; he does say that the Nuba of the villages called Daher, at the head of the White Nile, Abyssinia, "never eat their meat raw as in Abyssinia; but with the stalk of the dura or millet and the dung of camels they make ovens under ground, in which they roast their hogs whole, in a very cleanly and not disagreeable manner." — ("Nile," Dublin, 1791, vol. v. p. 172.)

"Argol, the dried dung of camels, is the common fuel of Mongolia." — ("Among the Mongols," Rev. James Gilmour, London, 1883, pp. 84, 146, 191, 296.)

The dung of camels is the fuel of the Kirghis. — (See "Oriental and Western Siberia," T. W. Atkinson, New York, 1865, pp. 218, 221.)

See also "From Paris to Pekin," Meignan, London, 1885, pp. 186, 306, 310, 333; Burton's edition of the "Arabian Nights," vol. iii. p. 51; Father Gerbillon's Account of Tartary, in Du Halde, vol. iv. p. 151.)

"Asses' dung used for fuel and other purposes, such as making Joss sticks." — (Burton's edition of the "Arabian Nights," vol. ii. p. 149, footnote.)

Cow-dung fuel and sheep-dung fuel alluded to by Huc, as used in Thibet. — (See also Manning, Bogle, and Della Penna, in Markham's "Thibet," London, 1879, p. 70.)

Friar William de Rubruquis, the Minorite, sent as ambassador to the Grand Khan of Tartary, by Saint Louis, King of France, in 1253, speaks of eating "Unleavened bread baked in Oxe-Dung or Horse-dung" (in Purchas, vol. i. p. 34). Cow dung used for the same pur-

pose in Thibet. — (See Turner's "Embassy to Thibet," London, 1806, p. 202.)

"Cowe-dung fewell," in Malta, mentioned by Master George Sandys, A.D. 1610 (in Purchas, vol. ii. 916). — ("Stereus bouinum," in Egypt, idem, vol. ii. p. 898.)

Yak manure used as fuel in Eastern Thibet, according to W. W. Rockhill in "Border Land of China," in "Century" Magazine, New York, 1890.

Cow manure employed for the same purpose by the people of Turkey in Asia, in the valley of the Tigris, near Mosul, according to George Smith. — ("Assyrian Discoveries," New York, 1876, p. 122.)

The "whole fuel" of the Mongols is "cow or horse dung dried in the sun." — (Father Gerbillon's Account of Tartary, in Du Halde, vol. iv. pp. 234, 270.)

The use of cow-dung as fuel in certain parts of the world would seem not to be entirely divested of the religious idea.

"Firewood at Seringapatam is a dear article, and the fuel most commonly used is cow-dung made up into cakes. This, indeed, is much used in every part of India, especially by men of rank; as, from the veneration paid the cow, it is considered as by far the most pure substance that can be employed. Every herd of cattle, when at pasture, is attended by women, and these often of high caste, who with their hands gather up the dung and carry it home in baskets.

"They then form it into cakes, about half an inch thick, and nine inches in diameter, and stick them on the walls to dry. So different indeed are Hindu notions of cleanliness from ours that the walls of their best houses are frequently bedaubed with these cakes; and every morning numerous females, from all parts of the neighborhood, bring for sale into Seringapatam baskets of this fuel. Many females who carry large baskets of cow-dung on their heads are well-dressed and elegantly formed girls." — ("A Journey through Mysore," Buchanan, Pinkerton, vol. viii. p. 612.)

SMUDGES.

Dried ordure is generally used for smudges, to drive away insects; the Indians of the Great Plains beyond the Missouri burned the "chips" of the buffalo with this object.

The natives of the White Nile "make tumuli of dung which are constantly on fire, fresh fuel being added constantly, to drive away the mosquitoes." — ("The Albert Nyanza," Baker, p. 53.)

"When they burn it (the dung of a camel) the smoke which proceeds from it destroys Gnats and all kinds of vermin." — (Chinese recipes given in Du Halde's "History of China," vol. iv. p. 34.)

Schweinfurth describes the Shillooks of the west bank of the Nile as "burning heaps of cow-dung to keep off the flies." — ("Heart of Africa," vol. i. p. 16. See also "Central Africa," Chaillé Long, New York, 1877, p. 215.)

Such smudges were employed by the Arabians to kill bed-bugs. "Effugatione Cimicum" effected by a "suffumigium" of "stercore vaccino." — ("Avicenna," vol. ii. p. 214, a 47.)

Rev. James Gilmour describes a mode of extinguishing a burning tent, observed among the Mongols, the counterpart of which is to be found in "Gulliver's Travels." — (See "Among the Mongols," p. 23.)

Lucius Cataline, accused by Marcus Cicero of raising a flame in the city of Rome, "I believe it," said he, "and, if I cannot extinguish it with water, I will with urine." — (Harington, "Ajax," cap. "Ulysses upon Ajax," p. 22.)

HUMAN AND ANIMAL EXCRETA TO PROMOTE THE GROWTH OF THE HAIR AND ERADICATE DANDRUFF.

For shampooing the hair, urine was the favorite medium among the Eskimo.¹

Sahagun, gives in detail the formula of the preparation applied by the Mexicans for the eradication of dandruff: "Cut the hair close to the root, wash head well with urine, and afterward take amole (soap-weed) and coixochitl leaves—the amole is the wormwood of this country [in this Sahagun is mistaken]—and then the kernels of aguacate ground up and mixed with the ashes already spoken of (wood ashes from the fire-place), and then rub on black mud with a quantity of the bark mentioned (mesquite)."²

A similar method of dressing the hair, but without urine, prevails among the Indians along the Rio Colorado and in Sonora, Mexico.

¹ See Graah, "Greenland," London, 1837, p. 111, and Hans Egede Saabye, "Greenland," London, 1818, p. 256.

² Contra la caspa será necesario cortar muy á raíz los cabellos y lavarse la cabeza con orinas y despues tomar las hojas de ciertas yerbas que en indio se llaman coioxochitl y amolli ó iztahuatl que es el agenjo de esta tierra, y con el cuesco del aguacate molido y mezclado con el cisco que está dicho arriba; y sobre esto se ha de poner, el barro negro que está referido, con cantidad de la corteza de lo dicho. — (Sahagun, in Kingsborough, vol. vii. p. 294.)

First, an application is made of a mixture of river mud ("blue mud," as it is called in Arizona) and pounded mesquite bark. After three days this is removed, and the hair thoroughly washed with water in which the saponaceous roots of the amole have been steeped. The hair is dyed a rich blue-black, and remains soft, smooth, and glossy.

Dove-dung was also applied externally in the treatment of baldness. — (Hippocrates, Kuhn, lib. 2, p. 854.)

The urine of the foal of an ass was supposed to thicken the hair. (See Pliny, lib. xxviii. cap. 11.) Camel's dung, reduced to ashes and mixed with oil, was said to curl and frizzle the hair (idem, lib. xxviii. cap. 8). The natives of the Nile above Khartoum have "their hair stained red by a plaster of ashes and cow's urine." — ("The Albert Nyanza," Sir Samuel Baker, p. 39.)

And the Shillooks of the west bank make "repeated applications of clay, gum, or dung," to their hair. — ("Heart of Africa," Schweinfurth, vol. i. p. 17; idem, the Nueirs, p. 32.)

L'aqua ex stercore distillata fait pousser les cheveux (Bib. Scat. p. 29), while Schurig (Chylologia, p. 760) says that the same preparation "promotes the growth of the hair and prevents its falling out."

Schurig further says that swallow-dung was of conceded efficacy as a hair-dye, and was applied frequently as an ointment. (Idem, p. 817.) He recommends the use of mouse-dung for scald head and dandruff, and even to excite the growth of the beard. (Idem, p. 823 *et seq.*) Ammonia, or, more properly speaking, "the ashes of hartshorn, burnt and applied with wine," was known to Pliny as a remedy for dandruff. (Pliny, lib. xxviii. cap. 11.) Possibly the use of hartshorn for this purpose sprang from the prior use of urine, from which hartshorn or ammonia was gradually manufactured.

For loss of hair, the dung of pigeons, cats, rats, mice, geese, swallows, rabbits, or goats, or human urine, applied externally, were highly recommended by Paullini, in his "Dreck Apothek," Frankfurt, 1696.

Cat-dung was highly recommended by Sextus Placitus.

AS A MEANS OF WASHING VESSELS.

Among the Shillooks, "ashes, dung, and the urine of cows are the indispensable requisites of the toilet. The item last named affects the nose of the stranger rather unpleasantly when he makes use of any of their milk vessels, as, according to a regular African habit, they are washed with it, probably to compensate for a lack of salt." — ("Heart of Africa," Schweinfurth, vol. i. p. 16.)

"The Obbo natives are similar to the Bari in some of their habits. I have had great difficulty in breaking my cow-keeper of his disgusting custom of washing the milk-bowl with cow's urine, and even mixing some with the milk. He declares that unless he washes his hands with such water before milking the cow will lose her milk. This filthy custom is unaccountable." — ("The Albert Nyanza," Baker, p. 240.)

A personal letter from Chief Engineer Melville, U. S. Navy, states that the natives of Eastern Siberia use urine "for cleansing their culinary materials."

By the tribes on Lake Albert Nyanza, the "butter was invariably packed in a plantain leaf, but frequently the package was plastered with cow-dung and clay." ("The Albert Nyanza," p. 363. See, also, extract from Paullini, on p. 316, and from Schurig, p. 121, of this volume.) There certainly seems to be a trace of superstition in the first case mentioned by Sir Samuel Baker.

In the County Cork, Ireland, rusty tin dishes are scoured with cow manure; the manure is blessed, and so will benefit the dishes and bring good luck. It is a not infrequent custom to bury "keelars" and other dishes for holding milk under a manure-heap during the winter and early spring (when cows are apt to be dry, and the milk-dishes empty), to protect them (the dishes) from persons evilly disposed, who might cast a spell on them, and so bewitch either the cows or the milk. Such an evil-eyed person could not harm a dish unless empty.

"The cow is believed to be a blessed animal, and hence the manure is sacred." (Personal letter from Mrs. Fanny D. Bergen, Cambridge, Mass.) This belief of the Celtic peasantry apparently connects itself with the religious veneration in which the cow is held by the people of India.

FILTHY HABITS IN COOKING.

The Eskimo relate stories of a people who preceded them in the Polar regions called the Tornit. Of these predecessors, they say, "Their way of preparing meat was disgusting, since they let it become putrid, and placed it between the thigh and the belly to warm it." — ("The Central Eskimo," Dr. Franz Boas, in Sixth Annual Report, Bureau of Ethnology, Washington, D. C., 1888, p. 635.)

This recalls the similar method of the Tartars, who used to seat themselves on their horses with their meat under them.

XXVII.

URINE IN CEREMONIAL ABLUTIONS.

WHERE urine is applied in bodily ablutions, the object sought is undoubtedly the procuring of ammonia by oxidation, and in no case of that kind is it sought to ascribe an association of religious ideas. But where the ablutions are attended with ceremonial observances, are incorporated in a ritual, or take place in chambers reserved for sacred purposes, it is not unfair to suggest that everything made use of, including the urine, has a sacred or a semi-sacred significance.

No difficulty is experienced in assigning to their proper categories the urinal ablutions of the Eskimo of Greenland (Hans Egede Saabye, p. 256); of the Alaskans (Sabytschew, in Phillips, vol. vi.); of the Indians of the northwest coast of America (Whymper's "Alaska," London, 1868, p. 142; H. H. Bancroft, "Nat. Races," vol. i. p. 83); of the Indians of Cape Flattery (Swan, in "Smithsonian Contrib."); of the people of Iceland (see below); of Siberia (see below); and of the savages of Lower California.

Pericuis of Lower California. "Mothers, to protect them against the weather, cover the entire bodies of their children with a varnish of coal and urine." — (Bancroft, vol. i. p. 559.)

Clavigero not only tells all that Bancroft does, but he adds that the women of California washed their own faces in urine. — ("Hist. de Baja California," Mexico, 1852, p. 28; see, also, Orozco y Berra and Baegert.)

"People of Iceland are reported to wash their faces and hands in pisse." (Hakluyt, "Voyages," vol. i. p. 664.) This report was, however, indignantly denied of all but the common people by Arugrianus Jonas, an Icelandic writer.

The inhabitants of Ounalashka "wash themselves first with their own urine, and afterwards with water." — ("Russian Discoveries," William Coxe, London, 1803, quoting Solovroof's "Voyage," 1764, p. 226.)

In the same volume is to be found the statement that in Alaska and the Fox Islands, the people "washed themselves, according to custom, first with urine, and then with water." — (p. 225, quoting "Voyage of Captain Krenitzin," 1768.)

When a child gets very dirty "with soot and grease," a Vancouver squaw uses "stale urine" to cleanse it. "This species of alkali as a substitute for soap is the general accompaniment of the morning toilet of both sexes, male and female. During winter they periodically scrub themselves with sand and urine." — (J. G. Swan, "Indians of Cape Flattery, Smithsonian Contributions to Knowledge," No. 220, p. 19.)

Among the Tchuktchees, urine "is a useful article in their household economy, being preserved in a special vessel, and employed as a soap or lye for cleansing bodies or clothing." — ("In the Lena Delta," Melville, p. 318.)

"But they also wash themselves, as well as their clothes, with it; and even in the hot bath, of which men and women are alike fond, because they love to perspire, it is with this fluid they sometimes make their ablutions." — (Lisiansky, "Voyage round the World," London, 1811, p. 214.)

Used as "a substitute for soap-lees, according to Langsdorff." — ("Voyages," London, 1814, vol. ii. p. 47.)

"By night, the Master of the house, with all his family, his wife and children, lye in one room. . . . All of them make water in one chamber-pot, with which, in the morning, they wash their face, mouth, teeth, and hands. They allege many reasons thereof, to wit, that it makes a faire face, maintaineth the strength, confirmeth the sinewes in the hands, and preserveth the teeth from putrefaction." — ("Dittmar Bleekens," in Purchas, vol. i. p. 647.)

After describing the double tent of skins used by the Tchuktchees, Mr. W. H. Gilder, author of "Schwatka's Search," says all food is served in the "yoronger," or inner tent, in which men and women sit, in a state of nudity, wearing only a small loin-cloth of seal-skin.

After finishing the meal, "a small, shallow pail or pan of wood is passed to any one who feels so inclined, to furnish the warm urine with which the board and knife are washed by the housewife. It is a matter of indifference who furnishes the fluid, whether the men, women, or children; and I have myself frequently supplied the landlady with the dish-water. In nearly every tent there is kept from the summer season a small supply of dried grass. A little bunch of this is dipped in the

warm urine and serves as a dish-rag and a napkin. These people are generally kind and hospitable, and were very attentive to my wants as a stranger, and regarded by them as more helpless than a native. The women would, therefore, often turn to me after washing the board and knife, and wash my fingers and wipe the grease from my mouth with the moistened grass. Any of the men or women in the tent who desired it would also ask for the wet grass, and use it in the same way.

"It was not done as a ceremony, but merely as a matter of course or of necessity.

"I do not think they would use urine for such purposes if they could get all the water, and especially the warm water, they needed. But all the water they have in winter is obtained by melting snow or ice over an oil lamp, — a very slow process; and the supply is therefore very limited, being scarcely more than is required for drinking purposes, or to boil such fresh meat as they may have.

"The urine, being warm and containing a small quantity of ammonia, is particularly well adapted for removing grease from the board and utensils, which would otherwise soon become foul, and to their taste much more disagreeable.

"The bottom of the 'yoronger' is generally carpeted with tanned seal-skins, and they too are frequently washed with the same fluid. The consequence is that there is ever a mingled odor of ammonia and rotten walrus-meat pervading a well-supplied and thrifty Tchouktchi dwelling." — (Personal letter to Captain Bourke, dated New York, October 15, 1889.)

"Vice-Admiral of the Narrow Seas." "A drunken man that pisses under the table into his companion's shoes." — (Grose, "Dictionary of Buckish Slang," London, 1811, article as above.)

This use of urine as a tooth-wash has had a very extensive diffusion; it is still to be found in many parts of Europe and America, of boasted enlightenment. The Celtiberii of Spain, "although they boasted of cleanliness both in their nourishment and in their dress, it was not unusual for them to wash their teeth and bodies in urine, — a custom which they considered favorable to health." — (Maltebrun, "Univ. Geog.," vol. v. book 137, p. 357, article "Spain.")

From Strabo we learn that the Iberians "do not attend to ease or luxury, unless any one considers it can add to the happiness of their lives to wash themselves and their wives in stale urine kept in tanks, and to rinse their teeth with it, which they say is the custom both

with the Cantabrians and their neighbors." (Strabo, "Geography," Bohn, lib. iii. cap. 4, par. 16, London, 1854. In a footnote it is stated that "Apuleius, Catullus, and Diodorus Siculus all speak of this singular custom.") The same practice is alluded to by Percy, and also by the "Encyclopédie and Dictionnaire Raisonné des Sciences," Neufchâtel, 1745, vol. xvii. p. 499; and the practice is said to obtain among the modern Spaniards as well. "Les Espagnols font grand usage de l'urine pour se nettoyer les dents. Les anciens Celtibériens faisoient la même chose." — (Received from Prof. Frank Rede Fowke, London, June 18, 1888.)

Bien que soigneux de leurs personnes et propre dans leur manière de vivre, les Celtibères se lavent tout le corps d'urine, s'en frottant même les dents, estimant cela un bon moyen pour entretenir la santé du corps." — (Diodore, v. 33.)

"Nunc Celtiber, in Celtiberia terra
Quod quisque minxit, hoc solet sibi manere
Dentem atque russam defricare ginginam."
(Catullus, "Epigrams," 39.)

The manners of the Celtiberians, as described by Strabo and others, have come down through many generations to their descendants in all parts of the world; all that he related of the use of human urine as a mouth-wash, as a means of ablution, and as a dentifrice, was transplanted to the shores of America by the Spanish colonists; and even in the present generation, according to Gen. S. V. Bénét, U. S. Army, traces of such customs were to be found among some of the settlers in Florida.

The same custom has been observed among the natives along the Upper Nile. "The Obbo natives wash out their mouths with their own urine. This habit may have originated in the total absence of salt in their country." — ("The Albert Nyanza," Sir Samuel Baker, p. 240.)

In England likewise there was a former employment of the same fluid as a dentifrice.

"Nettoyer ses dents avec de l'urine, mode espagnole," dit Erasme." — ("Les Primitifs," Élie Réclus, Paris, 1885, quoting Erasmus, "De Civilitate.")

Urine was employed as a tooth-wash, alone or mixed with orris powder. "Farina orobi (bitter vetch) permisceatur cum urina." — ("Medicus Microcosmus," Danielus Beckherius, pp. 62-64.)

A paragraph in Paullini's "Dreck Apothek," p. 74, would show that in Germany the same usages were not unknown. As a dentifrice he recommends urine as a wash ; or a powder made of pulverized gravel stone, mixed with urine.

Ivan Petroff states that the peasants of Portugal still wash their clothes in urine. — (Ivan Petroff, in "Trans. American Anthropological Society," 1882, vol. i.)

Urine is used on whaling vessels, when stale, for washing flannel shirts, which are then thrown overboard and towed after the ship. — (Dr. J. H. Porter.)

Dr. V. T. McGillicuddy, of Rapid City, Dakota, furnishes the information that Irish, German, and Scandinavian washerwomen who have immigrated to the United States persist in adding human urine to the water to be used for cleansing blankets.

"I have observed somewhere that the Basks and some Hindus clean their mouths with urine, but I do not remember the book." — (Dr. Alfred Gatchett, Bureau of Ethnology, Washington, D. C.)

Dr. Carl Lumholtz, of Christiania, Norway, states that he had seen the savages of Herbert River, Australia, in 18° south latitude, with whom he lived for some months, use their own urine to clean their hands after they had been gathering wild honey.

The statement concerning the Celtiberians may also be found in Clavigero. — ("Hist. de Baja California," p. 28, quoting Diodorus Siculus.)

Diderot and D'Alembert assert unequivocally that in the latter years of the last century the people of the Spanish Peninsula still used urine as a dentifrice. — ("Les Espagnols," etc., reading as above given from "Dict. Raisonné." See Encyclopédie, Geneva, 1789, article "Urine.")

XXVIII.

URINE IN CEREMONIAL OBSERVANCES.

BUT in the examples adduced from Whympers concerning the people of the village of Unlacheet, on Norton Sound, "the *dancers* of the Malemutes of Norton Sound bathed themselves in urine." (Whympers's "Alaska," London, 1868, pp. 142, 152.) Although, on another page, Whympers says that this was for want of soap, doubt may, with some reason, be entertained. Bathing is a frequent accompaniment, an integral part of the religious ceremonial among all the Indians of America, and no doubt among the Inuit or Eskimo as well; when this is performed by dancers, there is further reason to examine carefully for a religious complication, and especially if these dances be celebrated in sacred places, as Petroff relates they are.

"They never bathe or wash their bodies, but on certain occasions the men light a fire in the kashima, strip themselves, and dance and jump around until in a profuse perspiration. They then apply urine to their oily bodies and rub themselves until a lather appears, after which they plunge into the river." — (Ivan Petroff in "Transactions American Anthropological Society," vol. i. 1882.)

"In each village of the Kuskutchewak (of Alaska) there is a public building named the kashim, in which councils are held and festivals kept, and which must be large enough to contain all the grown men of the village. It has raised platforms around the walls, and a place in the centre for a fire, with an aperture in the roof for the admission of light." — (Richardson, "Arctic Searching Expedition," London, 1851, p. 365.)

Those kashima are identical with the estufas of Zuñis, Moquis, and Rio Grande Pueblos. Whympers himself describes them thus: "These buildings may be regarded as the natives' town hall; orations are made, festivals and feasts are held in them."

No room is left for doubt after reading the fuller description of these kashima, contained in Bancroft. He says the Eskimo dance in them,

"often *in puris naturalibus*," and make "burlesque imitations of birds and beasts." Dog or wolf tails hang to the rear of their garments. A sacred feast of fish and berries accompanies these dances, wherein the actors "elevate the provisions successively to the four cardinal points, and once to the skies above, when all partake of the feast." — (Bancroft, "Native Races," vol. i. p. 78.)

There is a description of one of these dances by an American, Mr. W. H. Gilder, an eyewitness. "The kashine (*sic*) is a sort of town hall for the male members of the tribe. . . . It is built almost entirely under ground, and with a roof deeply covered with earth. It is lighted through a skylight in the roof, and entered by a passage-way and an opening which can only be passed by crawling on hands and knees. . . . In the centre of the room is a deep pit, where in winter a fire is built to heat the building, after which it is closed, and the heat retained for an entire day. In this building the men live almost all the time. Here they sleep and eat, and they seldom rest in the bosom of their families." He further says that there was "a shelf which extends all round the room against the wall. . . . One young man prepared himself for the dance by stripping off all his clothing, except his trousers, and putting on a pair of reindeer mittens. . . . The dance had more of the character of Indian performances than any I had ever previously seen among the Esquimaux." — ("Ice-Pack and Tundra," pp. 56-58.)

The following information received from Victor Namoff, a Kadiak of mixed blood, relates to a ceremonial dance which he observed among the Aiga-lukamut Eskimo of the southern coast of Alaska. The informant, as his father had been before him, had for a number of years been employed by the Russians to visit the various tribes on the mainland to conduct trade for the collection of furs and peltries. Besides being perfectly familiar with the English and Russian languages, he had acquired considerable familiarity with quite a number of native dialects, and was thus enabled to mingle with the various peoples among whom much of his time was spent. The ceremony was conducted in a large partly underground chamber, of oblong shape, having a continuous platform or shelf, constructed so as to be used either as seats or for sleeping. The only light obtained was from native oil lamps. The participants, numbering about ten dozen, were entirely naked, and after being seated a short time several natives, detailed as musicians, began to sing. Then one of the natives arose, and performed the disgusting operation of urinating over the back and shoulders of the per-

son seated next him, after which he jumped down upon the ground, and began to dance, keeping time with the music. The one who had been subjected to the operation just mentioned, then subjected his nearest neighbor to a similar douche, and he in turn the next in order, and so on until the last person on the bench had been similarly dealt with, he in turn being obliged to accommodate the initiator of the movement, who ceases dancing for that purpose. In the meantime all those who have relieved themselves step down and join in the dance, which is furious and violent, inducing great perspiration and an intolerable stench. No additional information was given further than that the structure may have been used in this instance as a sudatory, the urine and violent movements being deemed sufficient to supply the necessary amount of moisture and heat to supply the participants with a sweat-bath." — (Personal letter from Dr. W. J. Hoffman, Bureau of Ethnology, Washington, D. C., June 16, 1890.)

Elliott describes the "Orgies" in the "Kashgas" as he styles them. "The fire is usually drawn from the hot stones on the hearth. . . . A kantog of chamber-lye poured over them, which, rising in dense clouds of vapor, gives notice by its presence and its horrible ammoniacal odor to the delighted inmates that the bath is on. The kashga is heated to suffocation ; it is full of smoke ; and the outside men run in from their huts with wisps of dry grass for towels and bunches of alder twigs to flog their naked bodies.

"They throw off their garments ; they shout and dance and whip themselves into profuse perspiration as they caper in the hot vapor. More of their disgusting substitute for soap is rubbed on, and produces a lather, which they rub off with cold water. . . . This is the most enjoyable occasion of an Indian's existence, as he solemnly affirms. Nothing else affords a tithe of the infinite pleasure which this orgy gives him. To us, however, there is nothing about him so offensive as that stench which such a performance arouses." — (Henry W. Elliott, "Our Arctic Province," New York, 1887, p. 387.)

"Quoique généralement malpropres, ces gens ont, comme les autres Inuits et la plupart des Indiens, la passion des bains de vapeur, pour lesquels le kachim a son installation toujours prêt.

"Avec l'urine qu'ils recueillent précieusement pour leurs opérations de tannage, ils se frottent le corps ; l'alcali, se mélangeant avec les transpirations et les huiles dont le corps est imprégné, nettoie la peau comme le ferait du savon ; l'odeur acre de cette liqueur putréfiée paraît leur être agréable, mais elle saisit à la gorge les étrangers qui reculent

suffoqués, et ont grand'peine à s'y faire. Horreur! horreur! oui, pour ceux qui ont un pain de savon sur leur table à toilette; mais pour ceux qui ne possèdent pas ce détersif?" — ("Les Primitifs," Réclus, p. 71, "Les Inuits Occidentaux.")

"Nul s'étonnera que les Ouhabites et les Ougagos de l'Afrique orientale en fassent toujours autant. Mais on a ses préférences. Ainsi Arabes et Bedouines recherchent l'urine des chamelles. Les Banianes de Momba se lavent la figure avec de l'Urine de vache, parceque, disent-ils, la vache est leur mère. Cette dernière substance est aussi employée par les Silésiennes contre les taches de rousseur. Les Chowseurs du Caucase la trouvent excellente pour entretenir la santé et développer la luxuriance de la chevelure. A cette fin, ils recueillent soigneusement le purin des étables, mais le liquide encore imprégné de chaleur vitale passe pour le plus énergique. Les trayeuses flattent la bête, lui sifflent un air, chatouillent certaine organe et au moment précis, avancent le crâne pour recevoir le flot qui s'épanche; la mère industrielle fait inonder la tête de son nourrisson en même temps que la sienne." — (Idem, p. 73.)

The "Estufa" of the Pueblos was no doubt, in the earlier ages of the tribal life, a communal dwelling similar to the "yourts" of the Siberians, like which it had but one large opening in the roof, for the entrance of members of the family, or clan, and the egress of smoke. An examination of the myths and folk-lore of Siberia might reveal to us the birth and the meaning of the visits of our good old Christmas friend, Santa Claus, who certainly never sprang from European soil. A god, loaded with gifts for good little children, could descend the ladders placed in the chimneys of "yourts" and "estufas," but such a feat would be an impossibility in the widest chimneys ever constructed in Germany or England for private houses.

The habitations of the natives of Ounalashka, according to Langsdorff, are made with the entrances through the roofs, precisely like those of the people of Kamtchatka. — ("Voyages," vol. ii. p. 32.)

The "Estufa" model was perpetuated in the Temples of India, exactly as the Imperial market-places of Rome supplied the type of the "Basilica" of the Christian Church.

An article in "Frazer's Magazine," signed F. P. C., gives the dimensions of the great Snake Temple of Nakhon-Vat in Cambodia: "Six hundred feet square at the base, . . . rises in the centre to the height of one hundred and eighty feet, . . . probably the grandest temple in the world. . . . In the inner court of this temple are 'tanks' in which

the living serpents dwelt and were adored. . . . The difference between these 'tanks' and the 'Public Estufas' is simply this: the latter are partially or almost completely roofed."

Some time after reaching the conclusion just expressed and much loss of study in a fruitless examination of *Encyclopædias*, which did not contain so much as the name of the patron of childhood, the work of Mr. George Kennan was perused in which the same views are anticipated by a number of years; it is by no means the least important fact in an extremely interesting volume.

"The houses, if houses they could be called, were about twenty feet in height, rudely constructed of drift-wood which had been thrown up by the sea, and could be compared in shape to nothing but hour-glasses. They had no doors or windows of any kind, and could only be entered by climbing up a pole on the outside, and slipping down another pole through the chimney, — a mode of entrance whose practicability depended entirely upon the activity and intensity of the fire which burned underneath.

"The smoke and sparks, although sufficiently disagreeable, were trifles of comparative insignificance. I remember being told, in early infancy, that Santa Claus always came into a house through the chimney; and, although I accepted the statement with the unreasoning faith of childhood, I could never understand how that singular feat of climbing down a chimney could be safely accomplished. . . . My first entrance into a Korak 'yourt,' however, at Kamenoi, solved all my childish difficulties, and proved the possibility of entering a house in the eccentric way which Santa Claus is supposed to adopt." — (George Kennan, "Tent Life in Siberia," 12th edition, New York, 1887, p. 222.)

Steller describes a Festival of the Kamtchatkans occurring at the end of November, after the winter provisions are in; in this, one party, on the outside of the house, attempts to lower a birch branch down through the chimney; the party on the inside attempts to capture it. — (Steller, "Kamtchatka," translated by Mr. Bunnemeyer.)

"Every time they make water, or other unclean exercise of nature, they wash those parts, little regarding who stands by. Before prayer, they wash both face and hands, sometimes the head and privities." — (Blount, "Voy. into the Levant," in Pinkerton, vol. x. p. 261.)

"Among the Negroes of Guinea, when a wife is pregnant for the first time, she must perform certain 'ceremonies,' among which is 'going to the sea-shore to be washed.' She is followed by a great number of

boys and girls, who fling all manner of dung and filth at her in her way to the sea, where she is ducked and made clean." — (Bosman, "Guinea," in Pinkerton, vol. xvi. p. 423.)

"In 1847, I was then twenty-six years old, once an old woman (in Cherbourg) came to me with a washing-pan, and asked me to piss into it, as the urine of a stout, healthy young man was required to wash the bosoms of a young woman who was just delivered of a child." — (Personal letter from Captain Henri Jouan, French Navy, to Captain Bourke, dated Cherbourg, France, July 29, 1888.)

In Scotland, the breasts of a young mother were washed with salt and water to ensure a good flow of milk. The practice is alluded to in the following couplet from "The Fortunate Shepherdess," by Alexander Ross, 1778.

"Jean's paps wi' sa't and water washen clean,
Reed that her milk get wrang, fen it was green."

(Quoted in Brand, "Pop. Ant." vol. ii. p. 80, art. "Christening Customs.")

This practice seems closely allied to the one immediately preceding. We shall have occasion to show that salt and water, holy water, and other liquids superseded human urine in several localities, Scotland among others.

"Being to wean one of their children, the father and mother lay him on the ground, and whilst they do that which modesty will not permit me to name, the father lifts him by the arm, and so holds him for some time, hanging in the air, falsely believing that by these means he will become more strong and robust." — (Father Merolla, "Voyage to the Congo," in Pinkerton, vol. xvi. p. 237, A. D. 1682.)

In the Bareshnun ceremony, the Parsee priest "has to undergo certain ablutions wherein he has to apply to his body cow's urine, and sand and clay, which seem to have been the common and cheapest disinfectant known to the ancient Iranians." — (Dr. J. W. Kingsley, Personal letter to Captain Bourke, apparently citing "The History of the Parsees," by Dosabhai Framje Karaka.)

The Manicheans bathed in urine. — (Picart, "Coûtumes," etc.; "Dissertation sur les Perses," p. 18.)

"Le lecteur le plus dégoûté s'en occupe presque à son insu ; quand il demande à son ami, Comment allez-vous ? s'il vous plaît si ce n'est là — où se fait ce que nous disons ? Dans un pays voisin on se salue en disant, La matière est-elle louable ? Et en Angleterre, c'est la

même pensée qu'on exprime lorsqu'on dit, en abordant quelqu'un, *How do you do? Comment faites-vous?* — (Bib. Scat. p. 21.)

"There is a place where whenever the King spits the greatest ladies of his court put out their hands to receive it; and another nation where the most eminent persons about him stop to take up his ordure in a linen cloth." — (Montaigne, *Essays*, "On Customs.")

"A few days after birth, or according to the fancy of the parents, an 'angekok,' who by relationship or long acquaintance with the family, has attained terms of great friendship, makes use of some vessel and with the urine of the mother washes the infant, while all the gossips around pour forth their good wishes for the little one to prove an active man, if a boy, or, if a girl, the mother of plenty of children. The ceremony, I believe, is never omitted, and is called *Gogsinariva*." — ("The Central Eskimo," Boas, p. 610, quoting G. F. Lyon, "Private Journal of H. M. S. Hecla, during the recent Voyage of Discovery under Captain Parry," London, 1824.)

The same custom is practised by the Eskimo of Cumberland Sound (*idem*).

"Buffalo dung I have seen carefully arranged in (Crow) Indian dance tepees, having apparently some connection with the ceremonies." — (Personal letter from Dr. A. B. Holder, Memphis, Tenn., to Captain Bourke, Feb. 6, 1890.)

"In one of the sacred dances of the Cheyennes, there is to be seen an altar surrounded by a semi-circle of buffalo chips. This dance or ceremony is celebrated for the purpose of getting an abundance of ponies." — (See the description in Dodge's "Wild Indians," pp. 127, 128.)

The sacred pipes used in the Sun Dance of the Sioux are so placed that the bowl rests upon a "buffalo chip." — ("The Sun Dance of the Ogallalla Sioux." Alice Fletcher, in "Proceed. American Association for the Advancement of Science," 1882.)

The drinking of the water in which a new-born babe had been bathed is intimated in the myths of the Samoans. When the first baby was born "Salevao provided water for washing the child, and made it Saor, sacred to Moa. The rocks and the earth said they wished to get some of that water to drink. Salevao replied that if they got a bamboo he would send them a streamlet through it, and hence the origin of springs." — ("Samoa," Turner, London, 1884, p. 10.)

Although it is not so stated in the text, yet from analogy with other cosmogonies we may entertain a suspicion as to how the god provided the water, — no doubt from his own person.

STERCORACEOUS CHAIR OF THE POPES.

"Stercoraire, Chaire (Hist. des Papes) ; c'est ainsi qu'on nommait à Rome, au rapport de M. L'Enfant, une chaire qui étoit autrefois devant le portique de la basilique, sur laquelle on faisait asseoir le Pape le jour de sa consécration. Le chœur de musique lui chantoit alors ces paroles du Psaume 113, selon l'Hébreu, et le 112, selon le Vulgate, v. 6, et suiv. ' Il tire de la poussière celui qui est dans l'indigence et il élève le pauvre de son avilissement pour le placer avec les princes de son peuple ;' c'étoit pour insinuer au Pape, dit cardinal Raspon, la vertu de l'humilité, qui doit être le compagne de sa grandeur. Cet usage fut aboli par Léon X, qui n'étoit pas né pour ces sortes de minuties." — (" Encyc. ou Dict. Raison. des Sciences," etc., Neufchatel, 1765, tome quinzième, article *as above*.)

Consult Ducange also, "*Stercoraria Sedes*," wherein it is stated that the use of this chair could be traced back to the tenth century.

"*Stercoraria sedes, in qua creati pontifices ad frangendos elatos spiritus considerent, unde dicta.*" — (Baronius, "*Annales*," Lucca, 1758.)

Read also the remarks upon the subject of Ducking Stools, from which this seems to have been derived, under "*Ordeals and Punishments.*"

Father Le Jeune relates, among the ceremonies observed by the Indians of Canada upon capturing a bear, that no women were allowed to remain in the lodge with the carcass, and that special care was taken to prevent dogs from licking the blood, gnawing the bones, or *eating the excrement*. — (See "*Relations*," 1634, vol. i., Quebec, 1858.)

XXIX.

ORDURE IN SMOKING.

AMONG all the observances of the every-day life of the American aborigines, none is so distinctly complicated with the religious idea as smoking; therefore, should the use of excrement, human or animal, be detected in this connection, full play should be given to the suspicion that a hidden meaning attaches to the ceremony. This would appear to be the view entertained by the indefatigable missionary, De Smet, who records such a custom among the Flatheads and Crows in 1846: "To render the odor of the pacific incense agreeable to their gods it is necessary that the tobacco and the herb (skwiltz), the usual ingredients, should be mixed with a small quantity of buffalo dung."¹

The Sioux, Cheyennes, Arapahoes, and others of the plains tribes, to whom the buffalo is a god, have the same or an almost similar custom.

The Hottentots, when in want of tobacco, "smoke the dung of the two-horned rhinoceros or of elephants." — (Thurnberg's Account of the Cape of Good Hope, quoted in Pinkerton, vol. xvi. p. 141.)

The followers of the Grand Lama, as already noted, make use of his dried excrements as snuff, and an analogous employment of the dried dung of swine retained a place in the medical practice of Europe until the beginning of the present century, and may, perhaps, still survive in the Folk-medicine of isolated villages.

The people of Achaia say "that the smoke of dried cow dung, that of the animal when grazing I mean, is remarkably good for phthisis, inhaled through a reed." — (Pliny, Nat. Hist. lib. xxviii. cap. 67.)

Dung is also used in Central Africa. "A huge bowl is filled with tobacco and clay and sometimes with a questionable mixture, the fumes are inhaled until the smoker falls stupefied or deadly sick — this effect alone being sought for." — ("Central Africa," Chaillé Long, p. 266.)

¹ Father De Smet, "Oregon Missions," New York, 1847, p. 383.

“In Algeria, gazelle droppings are put in snuff and smoking tobacco ; the Mongol Tartars mix the ashes of yak manure with their snuff.” — (Personal letter from W. W. Rockhill.)

Mr. Rudyard Kipling shows in his “Plain Tales from the Hills” (“Miss Youghal’s Sais”) that the native population of India is accustomed to use a mixture of one part of tobacco to three of cow-dung.

XXX.

COURTSHIP AND MARRIAGE.

"TO multiply and replenish the earth," was the first command given to man; to love, and to desire to be loved in return, is the strongest impulse of our nature, and therefore it need surprise no student who sets about investigating the occult properties attributed to the human and animal egestæ to find them in very general use in the composition of love-philters, as antidotes to such philters, as aphrodisiacs, as antiprophrodisiacs, and as aids to delivery.

ORDURE IN LOVE-PHILTERS.

Love-sick maidens in France stand accused of making as a philter a cake into whose composition entered "nameless ingredients," which confection, being eaten by the refractory lover, soon caused a revival of his waning affections.¹ This was considered to savor so strongly of witchcraft that it was interdicted by councils.

The witches and wizards of the Apache tribe make a confection or philter, one of the ingredients of which is generally human ordure, as the author learned from some of them a few years since. The Navajoes, of same blood and language as the Apaches, employ the dung of cows (as related in the "Snake Dance of the Moquis," p. 27.)

Frommann gives an instance of a woman who made love-philters out of her own excrement. As late as Frommann's day, the use of such philters was punishable with death. The remedies for love-philters were composed of human skull, coral, verbena flowers, secundines, or after-birth, and a copious flow of urine. He says that Paracelsus taught that when one person ate or drank anything given

¹ "Le maléfice amoureux ou le philtre" is defined as follows: "Telle est la pratique de certaines femmes et de certaines filles, qui, pour obliger leurs galans . . . de les aimer comme auparavant . . . les font manger du gâteau où elles ont mis des ordures que je ne veux pas nommer." — (Jean Baptiste Thiers, "Traité des Superstitions," Paris, 1741, p. 150.)

off by the skin of another, he would fall desperately in love with that other. "Quod illi, qui ederunt aut biberunt aliquid a scorte datum, in amorem alicujus conjiciantur et rapiantur." (Frommann, "Tractatus de Fascinatione," pp. 820, 826, 970, quoting Paracelsus, Tract. 1, de Morbis Amantium, cap. v.) He also cites Beckherius to the effect that some philters were made of perspiration, menses, or semen.—(Idem, quoting Beckherius, "Sapgyr. Microc.," p. 89.)

John Leo, in Purchas (vol. ii. p. 850), speaks of "the roote Surnay growing also upon the Western part of Mount Atlas. . . . The inhabitants of Mount Atlas doe commonly report that many of those damosels which keepe Cattell upon the said Mountaines, lose their Virginitie by no other occasion than by making water upon said Roote. . . . This roote is said to be comfortable and preseruatiue unto the priuie partes of man, and being drunk in an Electuary to stirre up Venereal lust."

Reginald Scot mentions a "Wolves yard" among the ingredients in a love-philter.—("Discoverie of Witchecraft," London, 1651, p. 62.)

Human ordure was in constant use in the manufacture of these philters, being administered both internally and externally. On this point it may be proper to give the exact words of Schurig, who explains that it was sometimes put in porridge, and in other cases in the shoes. In the last example, the man who made such use of the excrement of his lady love was completely cured of his infatuation, after wearing the defiled shoes one hour. "Contra Philtræ tam interne quam externe adhiberi solet amatæ puellæ stercus, ab exsiccatō enim atque in pulmento personæ philtratæ exhibitō amorem in maximam antipathiam mutatam annotavit Eberhardus Gockelius. . . . etiam Capitanei cujusdam meminit qui, postquam amasiæ stercus novis calceis imposuerat, posteaque iisdem per integram horam spatiat⁹ fuerat ab illius amore liberabatur."—("Chylologia," p. 774.)

Leopard-dung was in repute as an aphrodisiac.—(Idem, p. 820.)

"The urine that has been voided by a bull immediately after covering . . . taken in drink," as an aphrodisiac; and "the groin well rubbed with earth moistened with this urine."—(Pliny, Bohn, lib. xxviii. cap. 80.)

"The wizard, witch, sorcerer, druggist, doctor, or medicine man . . . played the part of an ochreous Cupid. Instead of smiles and bright eyes, his dealings were with some nasty stuff put into beer, or spread slyly upon bread. . . . In the Shroft book of Egbert, Archbishop of York, one of their methods is censured; and it is so filthy

that I must leave it in the obscurity of the original old English." — ("Saxon Leechdoms," vol. i. p. 45.)

An ointment of the gall of goats, incense, goat-dung, and nettle-seeds was applied to the privy parts previous to copulation to increase the amorousness of women. — (See "Saxon Leechdoms," vol. i. p. 351, quoting Sextus Placitus.)

"Love-charms are made of ingredients too disgusting to mention, and are given by the Mussulmans to women to persuade them to love them." — ("Indo-Mahomedan Folk-Lore," No. 3, H. C., p. 180, in "Notes and Queries," 3d series, vol. xi., London, 1867.)

Vambéry has this obscure passage: "The good woman had the happy idea to prescribe to the sick Khan five hundred doses of that medicine said to have worked such beneficial effects upon the renowned poet-monarch of ancient history. . . . The Khan of Khiva took from fifty to sixty of these pills 'for impuissance.'" — ("Travels in Central Asia," New York, 1865, p. 166.)

Besides these elements there were employed others equally disgusting; for example, the catamenial fluid, which seems to have been in high repute for such purposes: "Quædam auditæ sunt jactantes se sna excrementa propinasse, præcipue menstrua, quibus cogant se amari." — ("Saxon Leechdoms," vol. i. p. 45, quoting Cæsalpinus, "Dæmonum Investigatio," fol. 154 b. Cæsalpinus died in 1603.)

"He has taken the enchanted philter, and soiled my garment with it." — ("Chaldean Magic," Lenormant, London, 1877, p. 61, quoting an Incantation of the Chaldean sorcerers. It is, of course, a matter of impossibility to tell of what this philter was composed.)

"They say that if a man takes a frog, and transfixes it with a reed entering its body at the sexual parts, and coming out at the mouth, and then dips the reed in the menstrual discharge of his wife, she will be sure to conceive an aversion for all paramours." — (Pliny, lib. xxxii. cap. 13.)

"Sanguis menstruus, qui, a Paracelso vocatur Zenith Juvenularum; hic primus virginis impollutæ multa in se habet arcana non semper revelanda. Ut autem pauca adducam, extreme linteum a primo sanguine menstruo madidum et exsiccatum, hanc denuo humectatum et applicatum pedi podagræ, mirum quantum lenit dolores podagræ. Idem linteum, si applicetur parti Erysipelate affectæ, incontinenti erysipelas curat. In affectibus ab incantationibus et veneficiis oriundis multa præstat sanguis menstruus; nam et ipse sanguis menstruus ad veneficia adhibetur, et sunt mulieres, quæ pro philtris utuntur san-

guine suo menstruo." He instances such a philter, made with menstrual and a hare's blood, which drove the recipient to mania and suicide. It was further used to make people "impenetrable" to an enemy's weapon, and to cure burning sores. (See Michael Etmuller, "*Opera Omnia*," vol. ii. p. 270, art. "Schrod. Dilucid. Zoölogia.")

A medical student was frequently courted by his neighbor's daughter, but he disregarded her advances. At one time, however, he slept with the brother of the girl in her father's house, and after that was so infatuated that he would rise at midnight to kiss the jambs of the door of her house. Some time afterwards, he sent his clothes to a tailor to be mended, and, sewed up in his trousers, was found a little bundle of hair from an unmentionable part of the girl's body, containing the initials S. T. I. A. M., which were by some interpreted to mean "*Sathanas te trahat in amorem mei*." As soon as this little bunch of hair was burned, the poor fellow had rest. — (Paullini, pp. 258, 259.)

Human semen was equally used for the very same purpose. There is nothing to show whether male lovers used this ingredient, and maidens the menstrual liquid, or both indiscriminately; but it seems plausible to believe that each sex adhered to its own excretion.

"Semen, f. Sperma, non modo comperimus per se a nonnullis ad veneris scilicet ligaturam maleficam dissolvendam, sed et Momian magneticam inde fieri quæ amoris concilietur fervor. Quin et homunculum suum inde meditatur Paracelsus." — (Etmuller, "*Opera Omnia*," vol. ii. p. 266.)

Semen, Beckherius informs us, was used in breaking down "Ligatures" placed by witches or the devil, and in restoring impaired virility. But it was sometimes employed in a manner savoring so strongly of impiety that Beckherius preferred not to speak further. — ("*Medicus Microcosmus*," p. 122.)

Flemming tells us that we should not pass over in silence the fact that human seed has been employed by some persons as medicine. They believed that its magnetic power could be used in philters, and that by it a lover could feed the flame of his mistress's affections; hence from it was prepared what was known as "magnetic mummy," which, being given to a woman, threw her into an inextinguishable frenzy of love for the man or animal yielding it, — a suggestion of animal worship. Others credited it with a wonderful efficacy in relieving inveterate epilepsy, or restoring virility impaired by incantation or witchcraft; for which purpose it was used while still fresh,

before exposure to the air, in pottage, mixed with the powder of mace. Flemming alludes to a horrible use of relics, good and bad, upon which human semen had been ejaculated ; but this involved so much of the grossest impiety that he declined to enter into full details. — (“*De Remediis ex Corpore Humano desumtis*,” Samuel Augustus Flemming, Erfurt, 1738, p. 22.)

The love-philter described in the preceding paragraph recalls a somewhat analogous practice among the Manicheans, whose eucharistic bread was incorporated or sprinkled with human semen, possibly with the idea that the bread of life should be sprinkled with the life-giving excretion.¹

The Albigenes, or Catharistes, their descendants, are alleged to have degenerated into or to have preserved the same vile superstition.²

Understanding that these allegations proceed from hostile sources, their insertion in this category has been permitted only upon the theory that as the Manichean ethics and ritual present resemblances to both the Parsee and Buddhist religions (from which they may to some extent have originated), there is reason for supposing that ritualistic ablutions, aspersions, and other practices analogous to those of the great sect farther to the east, may have been transmitted to the younger religion in Europe.

The following is taken from an episcopal letter of Burchard, Bishop of Worms :—

“N’avez vous pas fait ce que certaines femmes ont coutume de faire ? Elles se dépouillent de leurs habits, oignent leur corps nu avec du miel, étendent à terre un drap, sur lequel elles répandent du bléd, se roulent dessus à plusieurs reprises ; puis elles recueillent avec soin tous

¹ Quâ occasione vel potius execrabilis superstitionis quadam necessitate coguntur electi eorum velut eucharistiam conspersam cum semine humano sumere. — (Saint Augustine, quoted by Bayle, “*Philosophical Dictionary*,” English edition, London, 1737, article “*Manicheans*.”)

² Les Catharistes qui étoient une espèce choisis de Manichéens, pétrissoient le pain Eucharistique avec la sémence humaine. — (Thiers, “*Superstitions*,” etc., Paris, 1741, vol. ii. lib. 2, chap. i. p. 216 ; and Picart, “*Coutumes et Cérémonies*, etc., Amsterdam, 1729, vol. viii. p. 79.)

E. B. Tylor says that “about A. D. 700 John of Osun, patriarch of Armenia, wrote a diatribe against the sect of Paulicians” (who were believed to be the descendants of the Manicheans, and in turn to have transmitted their doctrines to the Albigenes). In the course of the diatribe the patriarch declares that “they mix wheat flour with the blood of infants, and therewith celebrate their communion.” — (E. B. Tylor, “*Primitive Culture*,” London, 1871, vol. i. p. 69.)

les grains qui se sont attachés à leur corps, les mettent sur la meule qu'elles font tourner à rebours. Quand ils sont réduits en farine, elles en font un pain qu'elles donnent à manger à leurs maris afin qu'ils s'affaiblissent et qu'ils meurent. Si vous l'avez fait, vous ferez pénitence pendant quarante jours au pain et à l'eau. . . . Fecisti quod quædam mulieres facere solent? Tollunt menstruum suum sanguinem et immiscent cibo vel potui, et dant viris suis ad manducandum vel ad bibendum, ut plus diligentur ab eis. . . . Fecisti quod quædam mulieres facere solent? Prosternunt se in faciem, et discoopertis natibus, jubent ut supra nudas nates, conficiatur panis, et eo decocto tradunt maritis suis ad comedendum. Hoc ideo faciunt ut plus exardescant in amorem illarum. Si fecisti duos annos per legitimas ferias pœnitias. — (Dulaure, "Traité des Différens Cultes," vol. ii. p. 262 *et seq.*)

The method of divination by which maidens strove to rekindle the expiring flames of affection in the hearts of husbands and lovers by making cake from dough kneaded on the woman's posterior, as given in preceding paragraph, seems to have held on in England as a game among little girls, in which one lies down on the floor, on her back, rolling backwards and forwards, and repeating the following lines: —

" Cockledy bread, mistley cake,
When you do that for our sake."

While one of the party so lay down the rest of the party sat round; they lay down and rolled in this manner by turns.

Cockle Bread. This singular game is thus described by Anbray and Kennett: "Young wenches have a wanton sport which they call 'moulding of cockle bread,' viz.: they get upon a table-board, and then gather up their knees as high as they can, and then they wobble to and fro, as if they were kneading of dough, and say these words:

' My dame is sick, and gone to bed,
And I 'll go mould my cockle bread,
Up with my heels, and down with my head! —
And this is the way to mould cockle bread.'

— (Quoted in Brand, "Popular Antiquities," vol. ii. p. 414, article "Cockle Bread.")

These words "mistley" and "cockledy" were not to be found in any of the lexicons examined, or in the "Dictionary of Obsolete and Provincial English" of Thomas Wright, M. A., London, 1869, although in the last was the word "mizzly" meaning "mouldy." It may possibly mean mistletoe.

"Cockle is the unhappy 'lolium' of Virgil, thought, if mixed with bread, to produce vertigo and headache; therefore, at Easter, parties are made to pick it out from the wheat. They take with them cake, cider, and toasted cheese. The first person who picks the cockle from the wheat has the first kiss of the maid and the first slice of the cake." — (Fosbroke, "Encyclopædia of Antiquities," vol. ii. p. 1040.)

Vallencey describes a very curious ceremony among the Irish in the month of September. "On the eve of the full moon of September . . . straw is burnt to embers, and in the embers each swain in turn hides a grain, crying out, 'I'll tear you to pieces if you find my grain.' His maiden lover seeks, and great is her chagrin if she does not find it. On producing it, she is saluted by the company with shouts; her lover lays her first on her back, and draws her by the heels through the embers, then turning her on her face repeats the ceremony until her nudities are much scorched. This is called *posadamin*, or the meal-wedding. . . . When all the maidens have gone through this ceremony, they sit down and devour the roasted wheat, with which they are sometimes inebriated." — ("De Rebus Hibernicis," vol. ii. p. 559.)

He undoubtedly means ergot; he himself says that it is "a grain that is sometimes found growing amongst the wheat in Ireland." He also calls these "weddings" a "Druidical custom." — (Idem, p. 598.)

A similar phallic dance is alluded to in John Graham Dalyell's "Superstitions of Scotland," Edinburgh, 1834, p. 219.

In Sardinia "the village swains go about in a group . . . to wait for the girls who assemble on the public square to celebrate the festival. Here a great bonfire is kindled, round which they dance and make merry. Those who wish to be 'sweethearts of Saint John' act as follows: The young man stands on one side of the bonfire, and the girl on the other; and they, in a manner, join hands by each grasping a long stick, which they pass three times backwards and forwards across the fire, thus thrusting their hands thrice rapidly into the flames." At this dance, we read of "a Priapus-like figure, made of paste; but this custom, rigorously forbidden by the Church, has fallen into disuse." ("The Golden Bough," Frazer, vol. i. p. 291.) "In some parts of Germany young men and girls leap over midsummer bonfires for the express purpose of making the hemp or flax grow tall." — (Idem, p. 293.)

"Amongst the Kara-Kirghis barren women roll themselves on the ground under a solitary apple-tree in order to obtain offspring." (Idem,

vol. i. p. 73.) That this is a manifestation of tree worship, the author leaves us no room to doubt ; and a consultation of his text will be rewarded by several examples of a still more definite character, — such as marriage with trees, wearing the bark as a garment in the hope of progeny, etc.

Hoffman mentions a widow among the Pennsylvania Germans who “became impressed with a boatman with whom she casually became acquainted, and as he evinced no response to her numerous manifestations of regard, she adopted the following method to compel him to love her, even against his will. With the blade of a penknife she scraped her knee until she had secured a small quantity of the cuticle, baked it in a specially prepared cake, and sent it to him, though with what result is not known. The woman was known to have the utmost faith in the charm.” — (“Folk-Medicine of Pennsylvania Germans,” American Philosophical Society, 1889.)

“I was at Madrid in 1784. . . . A beggar, who generally took his stand at the door of a church, had employed his leisure in inventing and selling a species of powder to which he attributed miraculous effects. It was composed of ingredients the mention of which would make the reader blush. The beggar had drawn up some singular formularies to be repeated at the time of taking the powder, and required, to give it its effect, that those who took it should put themselves into certain postures more readily imagined than described. His composition was one of those amorous philtres in which our ignorant ancestors had so much faith ; his, he pretended, had the power of restoring a disgusted lover and of softening the heart of a cruel fair one.” — (Bourgoanne’s “Travels in Spain,” in Pinkerton, vol. v. p. 413.)

“When a young man is trying to win the love of a reluctant girl he consults the medicine-man, who then tries to find some of the urine and saliva which the girl has voided, as well as the sand upon which it has fallen. He mixes these with a few twigs of certain woods, and places them in a gourd, and gives them to the young man, who takes them home, and adds a portion of tobacco. In about an hour he takes out the tobacco and gives it to the girl to smoke ; this effects a complete transformation in her feelings.” — (“Conversation with Muhongo,” an African boy from Angola, translated by Rev. Mr. Chatelain.)

Lovers who wished to increase the affections of their mistresses were recommended to try a transfusion of their own blood into the loved one’s veins. — (Flemming, “De Remediis,” etc., p. 15.)

See notes taken from Flemming, under "Perspiration ;" also under "After-Birth and Woman's Milk," and under "Catamenial Fluid."

Beaumont and Fletcher may have had such customs in mind when writing "Wit without Money."

"*Ralph*. Pray, empty my right shoe, that you made your chamber-pot, and burn some rosemary in it." — (v. i.)

Rosemary, like juniper (q. v.), was extensively used for disinfecting sleeping apartments.

ANTI-PHILTERS.

To protect the population from the baleful effects of the love-philter, there was, fortunately, the anti-philter, in which, strangely enough, we come upon the same ingredients. Thus mouse-dung, applied in "the form of a liniment, acts as an antiphrodisiac," according to Pliny (lib. xxviii. cap. 80). "A lizard drowned in urine has the effect of an antiphrodisiac upon the man whose urine it is." (Idem, lib. xxx. cap. 49.) "The same property is to be attributed to the excrement of snails and pigeon's dung, taken with oil and wine." — (Idem.)

A powerful antiphrodisiac was made of the urine of a bull and the ashes of a plant called "brya." "The charcoal too of this wood is quenched in urine of a similar nature, and kept in a shady spot. When it is the intention of the party to rekindle the flames of desire, it is set on fire again. The magicians say that the urine of a eunuch will have a similar effect." — (Idem, lib. xxiv. cap. 42.)

"According to Osthanes . . . a woman will forget her former love by taking a he-goat's urine in drink." — (Idem, lib. xxviii. cap. 77.)

Hen-dung was an antidote against philters, especially those made of menstrual blood. "Contra Philtra magica, in specie ex sanguine menstruo femineo." ("Chylologia," p. 816, 817.) Dove-dung was also administered for the same purpose, but was not quite so efficacious.

A journeyman cabinet-maker had been given a love-potion by a young woman, so that he could n't keep away from her. His mother then bought a pair of new shoes for him, put into them certain herbs, and in them he had to run to a certain town. A can of urine was then put into his right shoe, out of which he drank, whereupon he perfectly desisted the object of his former affection.

A prostitute gave a love-potion to a captain in the army. Some of her ordure was placed in a new shoe, and after he had walked therein an hour, and had his fill of the smell, the spell was broken. Paullini here quotes Ovid, —

" Ille tuas redolens Phineu medicamina mensas
Non semel est stomacho nausea facta meo."

A man was given in his food some of the dried ordure of a woman whom he formerly loved, and that created a terrible antipathy toward her. — (Paullini, p. 258.)

"The seeds of the tamarisk mixed in a drink or meat with the urine of a castrated ox will put an end to Venus." — ("Saxon Leechdoms," vol. i. p. 43, quoting Pliny, lib. 21, c. 92.)

"Galenos says that the priests eat rue and agnus castus, it seems, as a refrigerative." — (Idem, p. 43.)

The herb rue was used by the Romans as an amulet against witchcraft, and was also employed in the exorcisms of the Roman Catholic Church. — (Brand, "Popular Antiquities," vol. iii. p. 315, article "Rural Charms.")

An examination of the best available authorities upon the properties of this plant disclosed the following: "It was formerly called 'herb of grace' (see Hamlet, act iv. scene 5), because it was used for sprinkling the people with holy water. It was in great repute among the ancients, having been hung about the neck as an amulet against witchcraft, in the time of Aristotle. . . . It is a powerful stimulant." (Chambers's Encyclopædia, article "Rue.") "Rue is stimulant and anti-spasmodic; . . . occasionally increases the secretions. . . . It appears to have a tendency to act upon the uterus; . . . in moderate doses proving emmenagogue, and in larger producing a degree of irritation in the organ which sometimes determines abortion; . . . taken by pregnant women, . . . miscarriage resulted; . . . used in amenorrhœa and in uterine hemorrhages." ("United States Dispensatory," Philadelphia, 1886, article "Ruta.") Here are presented almost the same conditions as were found in the mistletoe, — the plant had a direct, irritant action upon the genito-urinary organs, and in all probability was employed to induce the sacred urination and to asperse the congregation with the fluid for which holy water was afterwards substituted.

Rue and agnus castus are mentioned by Avicenna as medicines which "coitus desiderium sedant." (Vol. i. pp. 266, b 45, 406, a 60.) The same author (vol. i. p. 906, a 63) mentions rue with the testicles of a fox as an Aphrodisiac, and the testicles of the goat are mentioned in the same connection. — (Idem, p. 907, b 67.)

Dulaure ("Des Différens Cultes," vol. ii. p. 288) speaks of certain "fasciniers" or charlatans, who vended secretly love-philfers to bar-

ren women. "Ils prononçaient pour opérer leurs charmes des mots latins et avaient l'intention de fixer dans les alimens des époux une poudre provenant des parties sexuelles d'un loup."

Beckherius repeats the antidote for a love-philter of placing some of the woman's ordure in the man's shoe; "Si, in amantis calceum, ster-
cus amatæ ponatur;" and he also cites the couplet from Ovid already quoted, p. 225.

"Secundines" were also employed to render abortive the effects of philters. (See Etmuller, "Opera Omnia," Schroderi dilucidati Zoölogia, vol. ii. p. 265.) "In philtris curandis spiritus secundinæ vel pulvis secundinæ mirabilis facit." This was of great use in epilepsy, but should be, if possible, "secundinam mulieris sanæ, si potest esse primiparæ et quæ filium enixa fuit." — (Idem, vol. ii. p. 271.)

Against philters, as well as to counteract the efforts of witches attacking people just entering the married state, by such maleficent means as "ligatures," and other obstacles, ordure was facile princeps as a remedy. Likewise, to break up a love affair, nothing was superior to the simple charm of placing some of the ordure of the person seeking to break away from love's thralldom in the shoe of the one still faithful. It is within the bounds of possibility that this remedy would be found potential even in our own times, if faithfully applied. "Contra philtrea, item pro ligatis et maleficiatis a mulieribus sequens Johannes Jacobus Weckerus . . . pone de egestionem seu alvi excremento ipsius mulieris mane in fotulari dextro maleficiati et statim cum ipse sentiet foetorum solvitur maleficium. . . . Quod si in amantis calceum ster-
cus amatæ posueris, ubi odorem senserit, solvitur amor," etc. (several examples are given). — ("Chylologia," p. 791.)

Mr. Chrisfield, of the Library of Congress, Washington, D. C., imparts a fact which dovetails in with the foregoing item in a very interesting manner. He says that, in his youth, which was passed on the Eastern Shore of Maryland, he learned that, among the more ignorant classes of that section it was a rule that when a father observed the growing affection of his son for some young girl, he should endeavor to obtain a little of her excrement, and make the youth wear it under the left arm-pit; if he remained constant in his devotion after being subjected to this test, the father felt that it would be useless to interpose objection to the nuptials.

There is a case mentioned in Scotland in which "aversion was inspired on the part of the female." To remedy this "the man got a cake" (ingredients not mentioned) "to be put under his left arm, be-

twixt his shirt and his skin, observing silence, until the nuptial couch was sprinkled with water and the mystical cake withdrawn." — (*Superstitions of Scotland*, p. 305.)

One might safely wager guineas to shillings that, in the above example the mystical cake was the legitimate descendant of one formerly compounded of very unsavory ingredients, and that the water with which the nuptial couch was to be sprinkled, had replaced a fluid closely related to the liquid employed by the Hottentots on such occasions.

"To procure the dissolving of bewitched and constrained love, the party bewitched must make a jakes (i. e. privy) of the lover's shoe. And to enforce a man, how proper soever he be, to love an old hag, she gives unto him to eate (among other meates) her own dung." — (Scot's "*Discoverie*," p. 62.)

This subject of "*Nouer l'aiguillette*" is referred to by Dulaure. — ("*Traité des Dif. Cultes*," vol. ii. p. 288.)

"If a man makes water upon a dog's urine, he will become disinclined to copulation, they say." — (Pliny, lib. xxx. c. 49.)

"Beware thee that thou mie not where the hound mied; some men say that there a man's body changeth so that he may not, when he cometh to bed with his wife, bed along with her." — (*De Med. de Quad.* of Sextus Placitus, from "*Saxon Leechdoms*," vol. i. p. 365.)

XXXI.

SIBERIAN HOSPITALITY.

A CURIOUS manifestation of hospitality has been noticed among the Tchuktchi of Siberia: Les Tschuktschi offrent leurs femmes aux voyageurs; mais ceux-ci, pour s'en rendre dignes, doivent se soumettre à une épreuve dégoûtante. La fille ou la femme qui doit passer la nuit avec son nouvel hôte lui présente une tasse pleine de son urine; il faut qu'il s'en rince la bouche. S'il a ce courage, il est regardé comme un ami sincère; sinon, il est traité comme un ennemi de la famille. — (Dulaure, "Des Divinités Génératrices," Paris, 1825, p. 400.)

Among the Tchuktchees of Siberia, "it is a well known custom to use the urine of both parties as a libation in the ceremony; and likewise between confederates and allies, to pledge each other and swear eternal friendship." — ("In the Lena Delta," Melville, p. 318.)

The presentation of women to distinguished strangers is a mark of savage hospitality noted all over the world, but never in any other place with the above peculiar accompaniment; yet Mungo Park assures his readers that, during his travels in the interior of Africa, a wedding occurred among the Moors while he was asleep. He was awakened from his doze by an old woman bearing a wooden bowl, whose contents she discharged full in his face, saying it was a present from the bride.

Finding this to be the same sort of holy water with which a Hottentot priest is said to sprinkle a newly married couple, he supposed it to be a mischievous frolic, but was informed that it was a nuptial benediction from the bride's own person, and which, on such occasions, is always received by the young unmarried Moors as a mark of distinguished favor. — (Quoted in Brand, "Popular Antiquities," London, 1849, vol. ii. p. 152, article "Bride-Ales." See also Mungo Park's "Travels in Africa," New York, 1813, p. 109.)

In Hottentot marriages "the priest, who lives at the bride's kraal, enters the circle of the men, and coming up to the bridegroom, pisses

a little upon him. The bridegroom receiving the stream with eagerness rubs it all over his body, and makes furrows with his long nails that the urine may penetrate the farther. The priest then goes to the outer circle and evacuates a little upon the bride, who rubs it in with the same eagerness as the bridegroom. To him the priest then returns, and having streamed a little more, goes again to the bride and again scatters his water upon her. Thus he proceeds from one to the other until he has exhausted his whole stock, uttering from time to time to each of them the following wishes, till he has pronounced the whole upon both : 'May you live long and happily together. May you have a son before the end of the year. May this son live to be a comfort to you in your old age. May this son prove to be a man of courage and a good huntsman.'—(Peter Kolbein, *Voy. to the Cape of Good Hope*, in Knox, "Voyages," London, 1777, vol. ii. pp. 399, 400. This statement of Kolbein is cited by Maltebrun, *Univ. Geog.* vol. ii. article "Cape of Good Hope," but he also mentions Thurnberg, Sparmann and Foster as authorities. Pinkerton, vol. xvi. pp. 89 and 141, likewise quotes from Thurnberg on this subject.)

"Have I not drunk to your health, swallowed flap-dragons, eat glasses, drank wine, stabbed arms, and done all the offices of protested gallantry for your sake?"—(Marston's "Dutch Courtesan," London, 1605; see also footnote on the same point in the "Honest Whore," Thomas Dekkar, 1604, edition of London, 1825. "Dutch flap-dragons," "Healths in urine." See also "A New Way to Catch the Old One," Thomas Middleton, 1608, ed. of Rev. Alex. Dyce, London, 1840; footnote to above: "Drinking healths in urine was another and more disgusting feat of gallantry." Again, for flap-dragons, see in "Ram Alley," by Ludovick Barry, 1611, ed. of London, 1825.)

In the "*Histoire Secrète du Prince Croq' Êtron*," M^{lle} Laubert, Paris, 1790, Prince Constipati is entertained by the Princess Clysterine; elle lui donna de la limonade, de la façon d'Urinette" (p. 17).

Brand has a very interesting chapter, entitled "Drinking Wine in the Church at Marriages," in which it appears that the custom prevailed very generally among nations of the highest civilization, of having the bride, groom, and invited guests, share in a cup or chalice, filled with some intoxicant; in England, a country which has never raised the grape, this drink is wine; in Ireland, it was whiskey. Brand traces it back to a Gothic origin, but he himself calls attention to the

breaking of wine-glasses at the marriage ceremony among Hebrews, from which circumstance a still greater antiquity may be inferred.

"Cobbler's punch," urine with a cinder in it. — (Grose, "Dictionary of Buckish Slang," London, 1811.)

"A beautiful lady, bathing in a cold bath, one of her admirers, out of gallantry, drank some of the water." — (Idem, article "Toast.")

"We were told that the priest (of the Hottentots) certainly gives the nuptial benediction by sprinkling the bride and groom with his urine." — (Lieut. Cook, R. N., in "Hawkesworth's Voyages," London, 1773, vol. iii. p. 387.)

Similar statements are to be found in the writings of Hahn and others of the Dutch missionaries to the natives of South Africa.

The malevolence of witchcraft seems to have taken the greatest pleasure in subtle assaults upon those just entering the married state. Fortunately, amulets, talismans, and counter-charms were within reach of all who needed them. The best of all these was thought to be urination through the wedding-ring. — (See Brand, "Pop. Ant.," vol. iii. p. 305.)

The variants of this practice are innumerable, and are referred to by nearly all the old writers.

Beckherius tells his readers that to counteract the effects of witchcraft, and especially of "*Nouer l'Aiguillette*" . . . "*Si per nuptialem annulum sponsius mingat, fascina et Veneris impotentia solvetur, quia a maleficiis ligatus fuit.*" — ("*Med. Microcos.*" p. 66.)

"Pisse through a wedding-ring if you would know who is hurt in his privities by witchcraft." — (Reg. Scot, "*Discoverie*," p. 64.)

"*Si quis aliquo veneficio impotens ad usum veneris factus fuerit at quam primum mingat per annulum conjugalem.*" — (Frommann, "*Tract. de Fascinat.*" p. 997.)

Etmuller did not believe that witches could "*nouer l'aiguillette*;" he attributed that effect to excessive modesty; yet all the remedies mentioned by him, by which the testes of the bridegroom were to be anointed, contained "*Zibethum*" as an ingredient. — (See his "*Opera Omnia*," vol. i. p. 461 b, and 462 a.)

For loss of virility, Paullini recommends drinking the urine of a bull, immediately after he has covered a cow, and smear the pubis with the bull's excrements; also piss through the engagement ring (pp. 152, 153).

But when witches have been the occasion of such impotence, the victim should urinate through the wedding ring immediately after

discovering his misfortune; he also advises urination upon a broom; human ordure was also efficacious. Or, take castor-oil plant, put it into a pot, add some of the patient's urine, hermetically seal, boil slowly, and then bury in an unfrequented spot. By this method, the witches will either be made to piss blood, or have other tormenting pains until they relieve the bewitched one. — (Idem, pp. 264, 265.)

Etmuller describes another "sympathetic" cure for this infirmity: This prescribed that the bridegroom should catch a fish (the Latin word is "*lucium*," meaning probably our pike), forcibly open its mouth, urinate therein, and throw the fish back in the water, upstream; then try to copulate, taking care to urinate through the wedding-ring, both before and after. "*Si quis emat lucium piscem sexus masculini, huic per vim aperiatur os, et in os ejus immittatur urinam, maleficiati. Hic lucius ita vivus immittatur in fluvium, idque contra ejusdem cursum . . . subito namque tollitur maleficio si non sit nimis inveteratum, etc. . . . probatum etiam fuit si sponsus ante copulationem et etiam post eam mittat suam urinam per anulum sponsalitium quem accepit a sponsa.*" He gives another cure, of much the same kind, which, however, required that the micturation through the ring should be done in a cemetery while the patient was lying on his back on a tombstone. "*A vetula suppeditato dum scil. in cementerio quodam missit urinam per anulum ejusdam lapidis sepulchro incumbentis.*" — (Etmuller, vol. i. p. 462 a, 462 b.)

This remedy is believed in and practised by the peasantry in some parts of Germany to the present day. "A married man who has become impotent through evil influences can obtain relief by forming a ring with his thumb and forefinger, and urinating through it secretly." — ("*Sagen-marchen, Volkaberglauben, aus Schwaben*," Drs. Birlinger and Buck, Freiburg, 1861, p. 486.)

Grimm, in his "*Teutonic Mythology*" (vol. iii.) refers to "*Nouer l'aiguillette*," but adds nothing to what has been presented above.

There are certain quaint usages connected with weddings among the peasantry of Russia, as well as among the rustic population of England, which might excite the curiosity of antiquarians. In the first case, there is a "sprinkling" with water once used by the bride for the purpose of bathing her person; in the other, there is a "sale" of a liquid by the bride, this liquid being an intoxicant.

Wedding ceremonies of the peasantry of Samogitia: "The bride was led on the wedding-day three times round the fireplace of her future husband; it was then customary to wash her feet, and with the

same water that had been used for that purpose the bridal bed, the furniture, and all the guests were sprinkled."— (Maltebrun, "Univ. Geog.," vol. ii. p. 548, art. "Russia.")

By a reference back to page 60 of this volume, it will be seen that the Queen of Madagascar favored her subjects in the same way. This sprinkling with the water used as above may be a survival of a former practice, in which the aspersion was with the urine of the bride.

"Bride-Ale, Bride-Bush, and Bride-Stake are nearly synonymous terms, and are all derived from the circumstance of the bride's selling ale on the wedding-day, for which she received, by way of contribution, whatever handsome price the friends assembled on the occasion chose to pay her for it." (Brand, "Pop. Ant.," vol. ii. p. 143, art. "Bride-Ales.") In this article he introduces the story from Mungo Park already given in these pages, and seems to have a suspicion that the custom above described could be traced back to a rather unsavory origin.

The derivation of the English word "bridal" is very obscure; Fosbroke says that the word "bride-ale" comes from the bride's selling ale on her wedding-day, and the friends contributing what they liked in payment of it."— ("Cyclop. of Antiq.," vol. ii. p. 818, under "Marriage" and "Bride-Ales.")

The Latin name for beer or ale was "cerevisia," which would seem to be a derivative from the name of the goddess. It may, in earlier ages, have been a beverage dedicated to that goddess, employed in her libations, and held sacred as the means of producing the condition of inebriation, which in all nations has been looked upon as sacred. Reclus tells that there are still nations who regard their brewers as priests, and there are others who exalt their milkmen to that office: "Les Chevsoures du Caucase ont leurs prêtres brasseurs; les Todas des Neilgherries leurs divins fromagiers."— ("Les Primitifs," p. 116, article "Les Inoits Occidentaux.")

Hazlitt mentions the case where the Fairies, having a mock baptism and no water at hand, made use of strong beer."— ("Fairy Tales," London, 1875, p. 385.)

Beer would appear entitled to claim as old an origin as alcohol; it is mentioned in the sacred books of the Buddhists of Tibet: "La Bière d'hiver (dguntchang)."— ("Pratimoksha Sutra," translated by W. W. Rockhill, Paris, 1885, Société Asiatique.)

XXXII.

PARTURITION.

FOR the cure of sterility, Pliny says that "authors of the very highest repute . . . recommend the application of a pessary made of the fresh excrement voided by an infant at the moment of its birth." The urine of eunuchs was considered to be "highly beneficial as a promoter of fruitfulness in females." — (Lib. xxviii. cap. 18.)

"A hawk's dung, taken in honeyed wine, would appear to render females fruitful." — (Idem, lib. xxx. c. 44.)

"Ut mulier concipiat, infantis masculi stercus quod primum enatus emittet, suppositum locis mulieris conceptionem facit et præstat." — (Sextus Placitus, "*De Medicamentis ex Animalibus*," Lyons, 1537, pages not numbered, article "*De Puella et Puella Virgine*.")

Schurig recommends an application of bull-dung to the genitalia of women to facilitate pregnancy. ("*Chylogia*," vol. ii. p. 602.) The woman drank her own urine to ease the pains of pregnancy. (Idem, p. 535.) There is a method of inducing conception outlined in vol. ii. p. 712, by the use of a bath of urine poured over rusty old iron. Mouse-dung was applied as a pessary in pregnancy. (Idem, pp. 728, 729.) Hawk-dung drunk by a woman before coitus insured conception. (Idem, p. 748.) Goose or fox dung rubbed upon the pudenda of a woman aided in bringing about conception. (Idem, p. 748.) Leopard-dung was also supposed to facilitate conception; pastilles were made of it, and the sexual parts fumigated therewith; or a pessary was inserted and kept in place for three days and three nights: "*Ea quamvis antea sterilis fuit, deinceps tamen concipiet*." — (Idem, p. 820.)

But Schurig warns his readers that care must be exercised in the use of such remedies. He gives an instance of a woman who applied the dung of a wolf to her private parts, and soon after bearing a child, found him possessed of a wolfish appetite. — (Idem, lib. i. cap. 1, article "*De Bulimo Brutorum*," p. 24.)

"When ladies desire to know whether or not they are enceinte, Paullini recommends that they urinate in an earthen vessel wherein a needle has been thrown. Let it stand over night; should the needle become covered with small red spots, the woman is enceinte; but should it be black or rusty, she is not. To determine whether she is to have a son or daughter, dig two small pits; put barley in one, and wheat in the other; let the enceinte lady urinate into both; then cover up the vessels with earth; if the wheat sprout first, it is to be a son; if the barley sprout before the wheat, it is to be a daughter." — (Paullini, p. 163.)

Or, throw a pea into each parcel of urine; then the pea which germinates first, etc., etc. "Aut injiciatur lens in unius cujusque urina et cujus efflorescit, ille culpa caret," is the method suggested by Danielus Beckherius. — ("Med. Microcos. aut Spagyria Microcosmi," pp. 60, 61, quoting from still older authorities.)

He gives still another plan: "If you wish to determine whether a woman is to bear children, pour some of her urine upon marsh-mallows; if they be found dry on the third day, she'll not conceive. "Si explorare volueris, utrum mulier ad concipiendam sit idonea, tunc super malvam sylvestram urinam ejus funde; si ille tertio die arida fuerit, omnino minus idoneam illam habeto." — (Idem, p. 61.)

Paullini urges that the excrements of goats, hawks, horses, geese, and the urine of camels be taken to remedy sterility (p. 161).

And the very same remedies are given by Beckherius and still older writers.

English women, in some localities, drank the urine of their husbands to assist them in the hour of labor.

"In the collection entitled 'Sylon, or the Wood' (p. 130) we read that 'a few years ago, in this same village, the women in labor used to drinke the urine of their husbands, who were all the while stationcd, as I have seen the cows in St. James's Park, straining themselves to give as much as they can.'" — (Brand, "Popular Antiquities," London, 1849, vol. iii. article, "Lady in the Straw.")

"Mariti urina hausta partum difficilem facilitare dicitur." — (Etmuller, vol. ii. p. 265, Schroderi, "Dilucidati Zoölogia.")

An instance of the drinking of her own urine by a pregnant woman is to be read in Schurig (p. 45), art. "De Pica."

The warm urine of the husband was drunk for the same purpose: "Scil. Hartmannus commendat ut difficiliter pariens libat haustum urinæ mariti sui et ita si hic fuerit genuinus fœtus parientam illam ex

parti solvi putat; ast si urinæ aliquid subest erit illud sali volatili ad morem aliorum omnium volatilium, attribuendum." (Etmuller, vol. ii. pp. 171, 172.) Here we have the husband's urine employed not only as a medicine, but as a test of the wife's fidelity.

John Moncrief directs that, to facilitate conception, a pessary should be inserted in the vagina, of which hare's dung was to be a component. Horse's dung, drunk in water, aided a woman in childbirth. — ("The Poor Man's Physician," Edinburgh, 1716, p. 149.)

"Ut mulier post partum in secundis non laboret, de lotio hominis subtiliter gustet et secundæ statim sequuntur." — (Sextus Placitus.)

Dioscorides prescribed both human ordure and the dung of the vulture to bring about the expulsion of the fœtus. — (Materia Medica, edition of Kuhn, vol. i. p. 232 *et seq.*)

Goose-dung, in internal doses, was prescribed by Pliny for the same purpose. — (Lib. 30, c. 4.)

But the dung of the elephant or menstrual blood prevented conception, according to Avicenna: "Impregnationem prohibent . . . stercus elephantis," vol. i. p. 390, b 11; "Impregnationem prohibent . . . sanguis menstruus, si supponatus." — (Vol. i. pp. 330, a 35, 388, b 50.)

For accidents to pregnant women, apply rabbit's dung externally; for miscarriages, man's urine, internally; the excreta of lionesses, hawks, and chickens, internally; of horses and geese, externally and also internally; and of pigeons and cows, externally. For after-birth pains, the patient's own urine, externally; or the excrement of chickens, internally. — (Paullini.)

Schurig recommended the use of lion-dung, internally, in cases of difficult parturition. — ("Chylologia," p. 819.)

Etmuller says of secundines: "In partu difficili nil est præstantius" (p. 270).

Both Pliny and Hippocrates recommend hawk-dung in the treatment of sterility, and to aid in the expulsion of the fœtus in childbirth; it was to be drunk in wine; their prescription is copied by Etmuller: "Hippocrates et Plinius ad sterilitatem emendandam propinant." — (vol. ii. p. 285.)

For the expulsion of the dead fœtus, Pliny recommended a fumigation of horse-dung. — (Lib. xxviii. c. 77.)

And Sextus Placitus says: "Similiter, mortuum etiam partum ejicit. Idem facit ut mulier facile pariat si totum corpus suffumigaveris claudit et ventrem." — (Cap. "De Equo.")

Etmuller advises the use of these fumigations to aid in the expul-

sion of the fœtus and after-birth; a potion of the dung should also be administered in all such cases, being, in his opinion fully equal to the dung of dogs or swallows. — (Vol. ii. p. 263.)

A parturient woman in New Hampshire, drank the urine of her husband as a diuretic, forty or fifty years ago. — (Mrs. Fanny D. Bergen, Cambridge, Massachusetts.)

Flemming is another who recommends a draught of the husband's urine to aid in delivery: "Porro, in partu difficili, urinam mariti calidam calido haustam esse" (p. 23).

"A urine tub was held above the head of a woman in labor to ward off all manner of evil influences. — (Henry Rink, "Tales and Traditions of the Eskimo," Edinburgh, 1875, p. 55.)

"Gomez" (which is the "nirang" or urine of the ox) was prescribed to be drunk as a purifying libation by a woman who had miscarried. (See Fargard V. Avendidad, Zendavesta (Damesteter's translation), Max Müller's edition. "Sacred Books of the East," Oxford, 1880, p. 62.) "She shall drink gomez mixed with ashes, three cups of it, or six or nine, to wash over the grave within her womb. . . . When three nights have passed, she shall wash her body, she shall wash her clothes, with gomez and with water by the nine holes, and thus shall she be clean." — (Idem, pp. 63, 90.)

"Avec une tendre sollicitude, les bonnes amies versent sur la tête de la femme en travail le contenu d'un pot de chambre pour fortifier, disent-elles." — ("Les Primitifs," Élie Réclus, p. 43; "Les Inuits Orientaux.")

"The Commentaires of Bernard the Provincial, informs us" says Darenberg, "that certain practices, not only superstitious but disgusting, were common among the doctrines of Salerno; one, for instance, was to eat themselves, and also to oblige their husbands to eat, the excrements of an ass fried in a stove in order to prevent sterility." — ("The Physicians of the Middle Ages," Minor, Cincinnati, Ohio, p. 6, translated from Dupuoy's "Le Moyen Age Médicale.")

Mr. Havelock Ellis calls attention to the use of cow's urine after confinement by the women of the Cheosurs of the Caucasus. See also under "Witchcraft," "Therapeutics," "Divination," "Amulets and Talismans," "Cures by Transplantation," "Ceremonial Observances."

WEANING.

For an example of Urinal Aspersions, in connection with Weaning, see on page 211.

XXXIII.

INITIATION OF WARRIORS. — CONFIRMATION.

THE attainment by young men of the age of manhood is an event which among all primitive peoples has been signalized by peculiar ceremonies; in a number of instances ordure and urine have been employed, as for example: The observances connected with this event in the lives of Australian warriors are kept a profound secret, but, among the few learned is the fact that the neophyte is "plastered with goat dung." — (See "Aborigines of Australia," A. Brough Smyth, London, 1878, vol. i. p. 59, footnote.)

In some parts of Australia, Smyth says that the youth of fourteen or fifteen had to submit himself to the rite of "Tid-but," during which his head was shaved and plastered with mud ("the head is then daubed with clay") "and his body is daubed with clay, mud, and charcoal-powder and filth of every kind." (Smyth had previously specified goat-dung.) "He carries a basket under his arm, containing moist clay, charcoal, and filth. . . . He gathers filth as he goes, and places it in the basket." — (Idem, vol. i. p. 60.)

The young initiate throws this filth at all the men he meets, but not at the women or children, as these have been warned to keep out of his way. This is the account given by Smyth, but Featherman, from whom Smyth derived his information, makes no such restriction in his text, simply stating that the young man was considered to be "excommunicated *de facto*." (See A. Featherman, "Social History of the Races of Mankind," 2d Division, London, 1887, p. 152.) But, in either case, it is surely remarkable to stumble upon the counterpart of one of the proceedings of the Feast of Fools in such a remote corner of the globe.

"Among many of the tribes, the ceremony of introducing a native into manhood, is said to be accompanied with some horrible and disgusting practices." — ("The Nat. Tribes of S. Australia," Adelaide,

1879, Introduction, xviii, received through the kindness of the Royal Soc. of Sydney, N. S. Wales, T. B. Kyngdon, Secretary.)

"In order to infuse courage into boys, a warrior, Kerketegerkai, would take the eye and tongue of a dead man (probably of a slain enemy), and after mincing them and mixing with his urine, would administer the compound in the following manner. He would tell the boy to shut his eyes and not look, adding: 'I give you proper *kaikai*' ('*kaikai*' is an introduced word, being the jargon English for food). The warrior then stood up behind the sitting youth, and putting the latter's hand between his (the man's) legs, would feed him. After this dose, 'heart along, boy no fright.'"—(A. C. Haddon, "The Ethnography of the Western Tribes of Torres Straits," in *Journal of the Anthrop. Institute, Great Britain and Ireland*, xix. no. 3, 1890, p. 420. Received through the kindness of Professor H. C. Henshaw, U. S. Geol. Survey, Washington, D. C.)

"Some other customs are altogether so obscene and disgusting I must, even at the risk of leaving my subject incomplete, pass them over by only thus briefly referring to them."—("Nat. Tr. of S. Australia," p. 280.)

Monier Williams repeats almost what Müller says about the Parsis. A young Parsi undergoes a sort of confirmation, during which "he is made to drink a small quantity of the urine of a bull."—"Modern India," London, 1878, p. 178.)

FEARFUL RITE OF THE HOTTENTOTS.

A religious rite of still more fearful import occurs among the same people at the initiation of their young men into the rank of warriors—a ceremony which must be deferred until the postulant has attained his eighth or ninth year. It consists, principally, in depriving him of the left testicle, after which the medicine man voids his urine upon him.¹

"At eight or nine years of age, the young Hottentot is, with great ceremony deprived of his left testicle." (Kolbein, p. 402.) He says nothing about an aspersion with urine in this instance, but on the succeeding page he narrates that there is first a sermon from one of the old men, who afterwards "evacuates a smoking stream of urine all over him, having before reserved his water for that purpose. The youth receives the stream with eagerness and joy; and making furrows

¹ See in Picart, *Coutumes et Cérémonies Religieuses*, vol. vii. p. 47.

with the long nails in the fat upon his body, rubs in the briny fluid with the quickest action. The old man, having given him the last drop, utters aloud the following benediction: 'Good fortune attend thee; live to old age. Increase and multiply. May thy beard grow soon.' — (Idem, p. 403.)

"The young Hottentot, who has won the reputation of a hero by killing a lion, tiger, leopard, elephant, etc., is entitled to wear a bladder in his hair; he is formally congratulated by all his kraal. One of the medicine-men marches up to the hero and pours a plentiful stream over him from head to foot, — pronouncing over him certain terms which I could never get explained. The hero, as in other cases, rubs in the smoking stream upon his face and every other part with the greatest eagerness." — (Idem, p. 404.)

Rev. Theophilus Hahn cites Kolbein in "*Beiträge für Kunde der Hottentoten*," in *Jahrbuch für Erdkunde*, von Dresden, 1870, p. 9, as communicated by Dr. Gatchett of the Bureau of Ethnology, Washington, D. C. For further references to the Hottentot ceremony of Initiation, by sprinkling the young warrior with urine, consult Pinkerton's "*Voyages*," vol. xvi. pp. 89 and 141, where there is a quotation from Thurnberg's "*Account of the Cape of Good Hope*." See also Maltebrun, "*Univ. Geog.*" vol. ii. article "*The Cape of Good Hope*."

The Indians of California gave urine to newly-born children. "At time of childbirth, many singular observances obtained; for instance, the old women washed the child as soon as it was born, and drank of the water; the unhappy infant was forced to take a draught of urine medicinally." — (Bancroft, H. H. "*Native Races*," vol. i. p. 413.)

Forlong states that at the time of investiture of the Indian boy with the sacred thread, "the fire is kindled with the droppings of the sacred cow." — ("*Rivers of Life*," London, 1883, vol. i. p. 323.)

Valuable information was also received from Mr. Edward Palmer, of Brisbane, Queensland, Australia, especially in regard to the Kalkadoon tribe near Cloncurry, who are among those who split the urethra.

In order to bring up an Eskimo child to be an "Angerd-lartug-sick," — that is, "a man brought up in a peculiar manner, with a view to acquiring a certain faculty by means of which he might be called to life again and returned to land, in case he should be drowned," — "for this purpose the mother had to keep a strict fast and the child to be accustomed to the smell of urine." — (Rink, "*Tales and Traditions of the Eskimo*," p. 45.)

Réclus says of the Inuit child selected to be trained as an Angekok :

"Sitôt née, la petite créature sera aspergée d'urine de manière à l'imprégner de son odeur caractéristique; c'est décidément leur eau bénite. Ailleurs, la barbe, la chevelure, l'entière personne des rois et sacrificateurs sont ointes d'huile prise dans de saintes ampoules; ailleurs, elles sont beurrées et barbouillées de bouse soigneusement étendues." — ("Les Primitifs," p. 84, "Les Inuits Occidentaux.")

For initiation in witchcraft, "Dans la Hesse, le postulant se place sur du fumier en prononçant des formules magiques, et pique un crapaud avec un bâton blanc qu'il jette ensuite à l'eau." — ("La Fascination," J. Tuchmann, in "Mélusine," Paris, July-August, 1890, p. 93.)

"I am strongly inclined to the belief that all these rites are survivals or debased vestiges of the blood-covenant practice, by which the partaking of each other's selves (by whatever is a portion of one's self) is a form of covenanting by which two persons become as one. Are you aware of the fact that the habit of giving the urine of a healthy child to a new-born babe has prevailed down to the present day among rustic nurses in New England, if not elsewhere, in America? I can bear personal testimony to this fact from absolute knowledge. It is a noteworthy fact that the Hebrew word *chaneek*, which is translated 'trained' or 'initiated,' and which is used in the proverb, 'Train up a child,' etc., has as its root-idea (as shown in the corresponding Arabic word) the 'opening of the gullet' in a new-born child, the starting the child in its new life. Among some primitive peoples fresh blood, as added life, is thus given to a babe; and in other cases it is urine." — (Personal letter from Rev. H. K. Trumbull, editor of the "Sunday-School Times," Philadelphia, April 19, 1888.)

"The priesthood of the false gods is hereditary in the family. . . . Others may be introduced into the corps of fetich priests, but they have to pay dearly for the honor. . . . Every morning before sunrise and every evening at sunset the aspirants were heard singing in choir, directed by an old fetich priestess." These ceremonies of consecration "last several days. . . . The crinkled hair which is completely shaved off of some, and only from the crown of the head of others, the aspersion of lustral water, the imposition of the new name." — ("Fetichism," Rev. P. Baudin, New York, 1885, pp. 74, 75.)

"One observer of the customs of the blacks has stated in the journal of the Anthropological Society of London that in the Hunter River District of New South Wales, the catechumens at some parts of the Bora ceremonies are required to eat ordure; but I have made diligent inquiries in the same locality and elsewhere, but have found nothing

to corroborate his statement. Similarly, in one district in Queensland, it is said that the blacks, whether at the Bora or not I cannot say, make cup-like holes in the clay soil, collect their urine in them, and drink it afterwards. This latter statement may be true, but I have never been able to substantiate it by information from those who know. Various considerations, however, lead me to think it possible that our blacks, in some places at least (for their observances are not everywhere the same), may use ordure and urine in that way, thinking that the evil spirit will be propitiated by their eating in his honor that which he himself delights to eat; just as in Northwestern India a devotee may be seen going about with his body plastered all over with human dung in honor of his god. And our blacks have good reason to try to propitiate this unclean spirit (*Gunung-dhukhya*) in every possible way, for they believe that he can enter their bodies, and effecting a lodgment in their abdomen, feed there on the foulest of the contents, and thus cause cramps, fits, madness, and other serious disorders. The non-Aryan population of India have similar beliefs; for among the devil-worshippers of Western India there are certain malignant spirits called *Bhutas*; and these in their habits are similar to *Gunungdhudukhya*. They too cause mischief by taking possession of the body, and they delight to devour human beings; they too live in desert places, especially among tall trees. They take the forms of men and animals, and prowl about in burial-grounds, and eat the carcasses." — (Personal letter from John Frazer, LL.D., dated Sydney, New South Wales, December 24, 1889.)

This correspondent has struck the keynote of the curious behavior of the prophet Ezekiel and others. Believing, as was believed in their day, that deities ate excrement, why should not they, the representatives of the gods, eat it too? And if a god enter into a man's body to eat excrement, why should not the victim feed him on that which is so acceptable, and by gorging him free himself from pain?

See, under "War Customs," the use of the drink *wysocan* by the Indians of Virginia, in their ceremonies of initiation.

See, under "Ordeals and Punishments," page 254, in regard to the belief of the Australians.

WAR-CUSTOMS. — ARMS AND ARMOR.

It is remarkable that we should be able to adduce any example of the employment of excrementitious matter in war customs; not that

we should not suspect their existence, but because on occasions of such importance the medicine-men, who arrogate to themselves so much consequence in all military affairs, would naturally be more careful to conceal their performances from profane eyes. There is very little reason to doubt that a fuller examination would be rewarded with new facts of additional interest and value.

When the Dutch were besieging Batavia, in the Island of Java, in 1623, the natives daubed themselves with human ordure, in all likelihood for some vague religious purpose, — “a 1629, in obsidione Batavos obsessos, in defectu aliorum ad defensionem necessarium requisitorum hostes suos Indos stercore humano ex cloacis collecto, ollisque in ipsorum nuda corpora coniecto, fugasse.” — (“Chylologia,” p. 795.)

“Les Malais se servent de l’urine pour tremper leurs fameux criss. Ils enfoncent ces poignards dans la terre, et pendant un certain temps, ils viennent uriner de manière que cette terre soit toujours imbibée d’urine.” — (Personal letter from Dr. Bernard, Cannes, France, dated July 7, 1888.)

Against what was known in the Middle Ages as “magical impenetrability,” human ordure was in high repute. The sword or “machete” of the person exposed to attack from such an enemy should be rubbed in pig-dung. But let Schurig tell his own story: “Scilicet, priusquam cum adversario hujus rei suspecto congregiaris, cuspis machære vel gladii, stercore suillo infigatur; vel si minus agendum, globuli bombardis infarciendi per sphincterem ani ducantur; quod certissimum dicitur antidotum contra hanc non minus quam Diaboli Incantationes.” — (“Chylologia,” p. 791, par. 64.)

Frommann states that arms may be bewitched so that they can do harm; but he makes no mention of human or animal excreta in such connection. — (“Tract. de Fascinat.,” p. 654.)

“Dum gladio quo vulnus fuit inflictum sive cruento sive non cruento applicatur unguentum quod vocant magneticum armarium quo curatur vulnus.” (Etmuller, vol. i. p. 68.) This magnetic ointment was made of human ordure and human urine.

See also page 298 of this volume.

“The Scythians prefer mares for the purposes of war, because they can pass their urine without stopping in their career.” — (Pliny, lib. viii. cap. 66.)

The “black drink” of the Creeks and Seminoles was an emetic and cathartic of somewhat violent nature. It was used by the warriors of

those tribes when about to start out on the war-path or engage in any important deliberations. — (See Cornwallis Clay's dissertation upon the Seminoles of Florida, in "Annual Report of Bureau of Ethnology," Washington, D. C., 1888.)

The "black drink" of the Creeks was made from the *Iris Versicolor* (Natural order, Iridacæa), "an active emeto-cathartic, abundant in swampy grounds throughout the Southern States." — (See Brinton, "Myths of the New World," New York, 1868, p. 274.)

Beverly mentions "a mad potion," "the Wysoccan," used by the Indians of Virginia during "an initiatory ceremony called Huskansaw, which took place every sixteen or twenty years," which he calls "the water of Lethe," and by the use of which they "perfectly lose the remembrance of all former things, even of their parents, their treasure, and their language." — ("Golden Bough," vol. ii. p. 349, quoting Beverly's "History of Virginia," London, 1722, p. 177.)

See, under "Insults," p. 256, for the war customs of the Samoans. See also "Catamenia;" "Witchcraft."

XXXIV.

HUNTING AND FISHING.

THE African hunter in pursuit of game, such as elephants, anoints himself "all over with their dung." — (Father Merolla, in Pinkerton, vol. xvi. p. 251, "Voyage to Congo.") This, he says, is merely to deceive the animal with the smell.

Pliny relates that in Heraklea the country-people poisoned panthers with aconite. But the panthers had sense enough to know that human excrement was an antidote. (Lib. xxviii. c. 2.) Again in lib. viii. c. 41 he tells of the aconite-poisoned panther curing itself by eating human excrement. Knowing this fact, the peasants suspend human excrement in a pot so high in the air that the panther exhausts itself in jumping to reach it, and dies all the sooner.

Schurig ("Chylologia," p. 774) has the above tale, but has taken it from Claudius Æmilianus, as well as Pliny.

The reindeer Tchuktchi feign to be passing urine in order to catch their animals which they want to use with their sleds. The reindeer, horses, and cattle of the Siberian tribes are very fond of urine, probably on account of the salt it contains, and when they see a man walking out from the hut, as if for the purpose of relieving his bladder, they follow him up, and so closely that he finds the operation anything but pleasant.

"The Esquimaux of King William's Land and the adjacent peninsula often catch the wild reindeer by digging a pit in the deep snow, and covering it with thin blocks of snow, that would break with the weight of an animal. They then make a line of urine from several directions, leading to the centre of the cover of the pitfall, where an accumulation of snow, saturated with the urine of the dog, is deposited as bait. One or more animals are thereby led to their destruction." — (Personal letter from the Arctic explorer, W. H. Gilder, dated New York, October 15, 1889.)

"The dogs of the Esquimaux are equally fond of excrement, especially in cold weather, and when a resident of the Arctic desires to

relieve himself, he finds it necessary to take a whip or a stick to defend himself against the energy of the hungry dogs. Often, when a man wants to urge his dog-team to greater exertion, he sends his wife or one of the boys to run ahead, and when at a distance, to stoop down and make believe he is relieving himself. The dogs are thus spurred to furious exertion, and the boy runs on again, to repeat the delusion. This never fails of the desired effect, no matter how often repeated." — (Idem.)

"I only know one superstitious use of excrement, — that wherein the hooks were placed round some before the fishing incantations began." ("The Maoris of New Zealand," E. Tregear, in "Journal of the Anthropol. Institute," London, 1889.) This bears a very close resemblance to certain of the uses of cow-dung in India.

The people of Angola, west coast of Africa, when about to set out on a hunt, are careful to collect the dung of the elephant, antelope, and other kinds of wild animals, and hand them to the medicine-man, who makes a magical compound out of them, and places it in a horn. It then serves as an amulet, and will ensure success in the hunt. — ("Muhongo," an African boy from Angola; interpretation made by Rev. Mr. Chatelain.)

XXXV.

DIVINATION. — OMENS. — DREAMS.

AMONG the ancients there was a method of divination by excrementitious materials. — (See "Scatomancie," in *Bib. Scat.* p. 28.)

"Gaule, in his 'Mag-Astromancers Posed and Puzzled' (p. 165), enumerates as follows the several species of divination." (Here follows a list of fifty-three kinds.) One of the kinds enumerated is "Spatalomnacy, by skin, bones, excrement." — (Brand, "Pop. Ant.," pp. 329, 330.)

In the "Rhudhiradhyaya, or Sanguinary Chapter," translated from the Calica Puran, in the 4th vol. "Asiatic Researches," 4th ed., London, 1807, the following is stated in regard to human victims: "If, at the time of presenting the blood, the victim discharges fæces or urine, or turns about, it indicates certain death to the sacrificer."

The Peruvians had one class of wizards (i. e., medicine-men) who "told fortunes by maize and the dung of sheep." — ("Fables and Rites of the Yncas," Padre Cristoval de Molina, translated by Clement C. Markham, Hakluyt Society Transactions, London, 1873, vol. xlviii., p. 14. Molina resided in Cuzco, as a missionary, from 1570 to 1584.)

Les Hachus (a division of the Peruvian priesthood) consultaient l'avenir au moyen de grains de maïs ou des excréments des animaux. — (Balboa, "Histoire de Pérou," p. 29, in Ternaux, vol. xv.)

See, also, D. G. Brinton's "Myths of the New World," New York, 1868, pp. 278, 279.

Ducange, enumerating the pagan superstitions which still survived in Europe in A. D. 743, mentions divination or augury by the dung of horses, cattle, or birds: "De auguriis vel avium, vel equorum, vel boum stercoreacibus." — (Ducange, Glossary, article "Stercoraces.")

"What wise man would think that God would commit his counsel to a dog, an owle, a swine, or a toade; or that he would hide his secret purposes in the dung or bowels of beastes?" Reg. Scot ("Discoverie," p. 150), speaking of the omens consulted by Spaniards,

English, and others, says : " Among the rustics of France, to dream of ordure was regarded as a sign of good luck ; in like manner, to have a ball, or anything that one carried in the hand, fall in ordure, was also a sign of good fortune."

" To dream of ordure means that somebody is going to try to bewitch you." — (" Muhongo," a boy from Angola, Eastern Africa, in conversation with Captain Bourke ; translation by Rev. Mr. Chatelain.)

This belief in the good or bad prognostications to be derived from dreams about ordure, was very widely disseminated. " Luck, or Good Luck. To tread in Sir Reverence ; to be bewrayed ; an allusion to the proverb, ' Sh-tt-n luck is good luck.' " — (" Grose, Dict. of Buckish Slang," London, 1811.)

" Inasmuch as the sun of morning, or spring, comes out of the dark-blue bird of night, we can understand the popular Italian and German superstition, that when the excrement of a bird falls upon a man it is an omen of good luck. The excrement of the mythical bird of night, or winter, is the sun." — (" Zööl. Mythol.," Angelo de Gubernatis, vol. ii. p. 176, London, 1872.)

" When a Hindu child's horoscope portends misfortune or crime, he is born again from a cow, thus : being dressed in scarlet, and tied on a new sieve, he is passed between the hind legs of a cow, forward through the fore legs to the mouth, and again in the reverse direction, to simulate birth ; the ordinary birth ceremonies (aspersion, etc.) are then gone through, and the father smells his son as a cow smells her calf." — (Frazer, " Totemism," Edinburgh, 1887, p. 33.)

To put one's foot in dung is supposed by the French peasantry to imply the acquirement of wealth. — (Mr. W. W. Rockhill.)

Among the Kamtchatkans, if a child has been born in stormy weather, they believe that to be a bad omen, and that the child will cause storm and rain wherever it goes. As soon as it is grown and can speak, they purify it, and appease heaven by the following method : During a most violent storm of wind and rain, the child is compelled to walk naked, holding a cup or shell of Mytues high above its head, around the ostrag and all balagans and dog huts, and to say the following prayer to Billukai and his Kamuli : " Gsauga, set yourselves down and stop urinating or storming ; this shell it used to salty but not to sweet water ; you make me very wet, and I almost freeze to death ; besides, I have no clothing ; see how I tremble." — (Steller, translated by Bunne Meyer.)

Divination by urine seems to have been superseded by holy water

in a "chrySTALL." Scot, speaking of the latter mode, says: "They take a glass vial, full of holy water, . . . on the mouth of the vial or urinall," etc. — ("Discoverie," p. 188.)

There is among children in the United States and England, and possibly on the continent of Europe as well, a superstition to the effect that the one who plucks the dandelion will become addicted to the habit of urinating in bed during sleep. The author has been unable to trace the origin of the curious notion or to obtain any explanation of it.

"Leontodon. Dandelion. Children that eat it in the evening experience its diuretic effects in the night, which is the reason that other European nations as well as the British vulgarly call it piss-a-bed." — (Encyclopædia, Philadelphia, Penn., 1797, article "Leontodon.")

"The following compendious new way of magical divination, which we find so humorously described in Butler's 'Hudibras' as follows, is affirmed by M. Le Blanc, in his 'Travels,' to be used in the East Indies:—

" ' Your modern Indian magician
Makes but a hole in th' earth to pisse in,
And straight resolves all questions by it,
And seldom fails to be in th' right.' "

(Brand, "Popular Antiquities," vol. iii. p. 331, article "Divination.")

Cicero makes no mention of a method of divination by excrement, although, as shown by the references from the "Bib. Scat." and from Ducange, such methods must have been in vogue.

The Kamtchatkans believe that "if they ease nature during sleep, it signifies guests of their nation." — (Steller, translated by Bunnemeyer.)

Montfaucon says that the Roman Haruspices "observed in the beasts that were sacrificed not only the entrails in general, but also the gall and bladder in particular." — ("l'Antiquité expliquée," lib. i. part 1, cap. 6.)

See extract from Gilder's "Schwatka's Search," under "Mortuary Ceremonies," p. 262. See "Witchcraft," "Amulets and Talismans," "Urinoscropy," "Virginity," "Sterility," "Courtship and Marriage," "Childbirth."

XXXVI.

ORDEALS AND PUNISHMENTS, TERRESTRIAL AND
SUPERNAL.

IN beginning this chapter it is fair to say that oaths will herein be regarded as a modified form of the ancient ordeal, in which the affiant invokes upon himself, if proved to have sworn falsely, the tortures of the ordeal, mundane or celestial, which in an older form of civilization he would have been obliged to undergo as a preliminary trial.

The author learned while campaigning against the Sioux and Cheyennes, in 1876-1877, that the Sioux and Assinaboines had a form of oath sworn to while the affiant held in each hand a piece of buffalo chip.

Among the Hindus, "sometimes the trial was confined to swallowing the water in which the priest had bathed the image of one of the divinities. . . . The negroes of Issyny dare not drink the water into which the fetiches have been dipped when they affirm what is not the truth." — ("Phil. of Magic," Eusèbe Salverte, New York, 1862, vol. ii. p. 123.)

They formerly may have drunk the urine of the god or priest.

In "the 'Domesday Survey,' in the account of the city of Chester, vol. i. p. 262, we read : 'Vir sive mulier falsam mensuram in civitate faciens deprehensus, IIII solid. emendab. Similiter malam cervisiam faciens, aut in Cathedra ponebatur stercoris, aut IIII solid. de prepotis.'" — (Brand, "Popular Antiquities," vol. iii. p. 103, article "Cucking Stool."

"The ducking stool was a legal punishment. Roguish brewers and bakers were also liable to it, and they were to be ducked in stercore in the town ditch." — (Southey, "Commonplace Book," 1st series, p. 401, London, 1849.)

In Loango, Africa, "When a man is suspected of an offence he is carried before the king," and "is compelled to drink an infusion of a kind of root called 'imbando.' . . . The virtue of this root is that, if

they put too much into the water, the person that drinketh it cannot void urine. . . . The ordeal consists in drinking and then in urinating as a proof of innocence." — (See "Adv. of Andrew Battell," in Pinkerton's "Voyages," vol. xvi. p. 334.)

In Sierra Leone the natives have a curious custom to which they subject all of their tribe suspected of poisoning. They make the culprit drink a certain "red water; after which for twenty-four hours he is not allowed to ease nature by any evacuation; and should he not be able to restrain them, it would be considered as strong a proof of his guilt as if he had fallen a victim to the first draught." — (Lieutenant John Matthews, R. N., "Voyage to Sierra Leone," 1785, London, 1788, p. 126.)

In the Hindu mythology, "slanderers and calumniators, stretched upon beds of red-hot iron, shall be obliged to eat excrements." — (Southey, "Commonplace Book," 1st series, London, 1849, p. 249. He also refers to 2 Kings xviii. 27, and to Isaiah xxxvi. 12.)

"D'après le système religieuse de Brahme, la punition des calomnieux dans l'enfer, consiste à être nourris d'excréments." — (Majer. Dict. Mythol. en allemande, t. 2, p. 46; Bib. Scat., p. 12.)

Herodotus relates that Pheron, the son of Sesostris, conqueror of Egypt, became blind, and remained so for ten years.

"But in the eleventh year an oracle reached him from the city of Buto, importing that the time of his punishment was expired, and he should recover his sight by washing his eyes with the urine of a woman who had intercourse with her own husband only, and had known no other man." Herodotus goes on to relate that Pheron tried the urine of his own wife and that of many other women ineffectually; finally he was cured by the urine of a woman whom he took to wife; all the others he burnt to death. — ("Euterpe," part ii. cap. 3.)

In the "Histoire Secrète du Prince Croq' Êtron," par M^{lle} Laubert, Paris, 1790, King Petaud orders Prince Gadourd to be buried alive in ordure, — a punishment which would have suggested the author's acquaintance with Brahminical literature even had she not confessed it in these terms: "Genre de supplice qui n'était pas nouveau puisque d'après le système religieux de Brahme, la punition des calomnieux dans l'enfer, consiste à être nourri d'excréments."

The Africans have an ordeal, — "a superstitious ordeal, by drinking the poisonous Muave," which induces vomiting only, according to Livingston ("Zambesi," London, 1865, p. 120). This may or may not be the "red drink" of Lieutenant Matthews cited above.

Under the head of "Latrines," allusion has been made to the prohibition, in the laws of the Thibetan Buddhists, against throwing ordure upon growing plants, etc. There is another case mentioned by Rockhill, which may as well be inserted here: "Si une bhikshuni jette des excréments de l'autre côté d'un mur sans y avoir regardé, c'est un *pacittiya*." — ("*Pratimoksha Sutra*," translated by W. W. Rockhill, Soc. Asiatique, Paris, 1885.)

In the words just quoted we find the definition of the offence as a "*pacittiya*," or sin. The punishment for each sin or class of sins was carefully regulated and well understood in Thibetan nunneries.

"Cock-stool." "A seat of ignominy . . . in which scolding or immoral women used to be placed formerly as a punishment; . . . same as '*sedes Stercoraria*.'" — ("*Folk-Etymology*," Rev. A. Smythe-Palmer, London, 1882. See also Chambers's "*Book of Days*," vol. i. p. 211.)

The Chinese have a very curious and very horrible mode of punishment; criminals of certain classes are enclosed in barrels or boxes filled with building lime, and exposed in a public street to the rays of the noon-day sun; food in plenty is within reach of the unfortunate wretches, but it is salt fish, or other salt provision, with all the water needed to satisfy the thirst this food is certain to excite, but in the very alleviation of which the poor criminals are only adding to the torments to overtake them when by a more copious discharge from the kidneys the lime shall "quicken" and burn them to death.

In the famous bull of Ernulphus, Bishop of Rochester, cited in "*Tristram Shandy*," the delinquent was to be cursed, "*mingendo, cacando*." — (See "*Tristram Shandy*," Lawrence Sterne, ed. of London, 1873, vol. i. p. 188.)

"Fasting on bread and drinking water defiled by the excrement of a fowl" are among the disciplinary punishments cited in Fosbroke's "*Monachism*," London, 1817, p. 308, note.

This specimen of monastic discipline may be better understood when read between the lines. The veneration surrounding chicken-dung in the religious system of the Celts, prior to the introduction of the Christian religion, could be uprooted in no more complete manner than by making its use a matter of scorn and contempt; history is replete with examples wherein we are taught that the things which are held most sacred in one cult are the very ones upon which the fury and scorn of the superseding cultus are wreaked. On this point read the notes taken from the pamphlet of Mr. James Mooney, in regard to the superstitions attaching to the uses of chicken-dung among the Irish peasantry.

"I have mentioned the sacrifice of cocks by Kelts ; it was, and still is, all over Asia, the cheap, common, and very venial substitute for man." — ("Rivers of Life," Forlong, London, 1883, vol. ii. p. 274.)

We may reasonably infer that the dung of chickens as used by the Irish is a representative of, and a substitute for, human ordure.

The Easter season which has preserved and transmitted to our times so many pagan usages, has among its superstitions one to the effect that "every person must have some part of his dress new on Easter day, or he will have no good fortune that year. Another saying is that unless that condition be fulfilled, the birds are likely to spoil your clothes." — (Brand, "Pop. Antiq." vol. i. p. 165, art. "Easter Day.")

The Kalmucks believe in many places of future punishment, one of them being "un de ces séjours est couvert d'une nuée d'ordures et de vidanges." (Pallas, Paris, 1793, vol. i. p. 552.) This is the belief inculcated by their Lamas.

At the Lithuanian festival called "Sabarios," fowls were killed and eaten. "The bones were then given to the dog to eat ; if he did not eat them all up, the remains were buried under the dung in the cattle-stall." — ("The Golden Bough," vol. ii. p. 70.)

In cases of sickness "the inhabitants of a village are forbidden to wash themselves for a number of days, . . . and to clean their chamber-pots before sun-rise." — ("The Central Eskimo," Dr. Franz Boas, in Sixth An. Rep. Bur. of Ethnol. Wash. D. C. 1888, p. 593.)

"We have seen that in modern Europe, the person who cuts or binds or threshes the last sheaf is often exposed to rough treatment at the hands of his fellow-laborers. For example, he is bound up in the last sheaf and thus encased is carried or carted about, beaten, drenched with water, thrown on a dunghill, etc." — ("The Golden Bough," i. 367.)

In several parts of Germany, the Fool of the Carnival was buried under a dung-heap. (Idem, vol. i. p. 256.) Further on, is given this explanation : "The burying of the representative of the Carnival under a dung-heap is natural, if he is supposed to possess a quickening and fertilizing influence like that ascribed to the effigy of Death." — (Idem, vol. i. p. 270.)

"In Siam it was formerly the custom, on one day of the year, to single out a woman broken down by debauchery, and carry her on a litter through all the streets, to the music of drums and hautboys. The mob insulted her and pelted her with dirt ; and, after having carried her through the whole city, they threw her on a dunghill. . . . They believed that the woman thus drew upon herself all the malign influences of the air and of evil spirits." — (Idem, vol. ii. p. 196.)

In Suabia there is a rough harvest game in which one of the laborers takes the part of the sow; he is pursued by his comrades and if they catch him "they handle him roughly, beating him, blackening or dirtying his face, throwing him into filth. . . . At other times he is put in a wheelbarrow. . . . After being wheeled round the village, he is flung on a dunghill" — (*Idem*, vol. ii. pp. 27, 28.)

The negroes of Guinea are firm believers in the theory of Obsession, and have a god "Abiku" who "takes up his abode in the human body." He generally bothers little children, who sometimes die. "If the child dies, the body is thrown on the dirt-heap to be devoured by wild beasts." — ("Fetichism," Baudin, p. 57.)

"The Iroquois inaugurated the new year in January" with "a festival of dreams. . . . It was a time of general license. . . . Many seized the opportunity of paying off old scores by belaboring obnoxious persons, . . . covering them with filth and hot ashes." — ("The Golden Bough," vol. ii. p. 165, quoting Charlevoix, "*La Nouvelle France*.")

"During the madder harvest in the Dutch province of Zealand, a stranger passing by a field where the people are digging the madder roots, 'will sometimes call out to them, Koortspillers' (a term of reproach). Upon this, two of the fleetest runners make after him, and if they catch him, they bring him back to the madder field and bury him in the earth up to his middle at least, jeering at him all the while; they then ease nature before his face." — (*Idem*, vol. i. p. 379.)

"Now, it is an old superstition that by easing nature on the spot where a robbery is committed, the robbers secure themselves for a certain time against interruption. . . . The fact, therefore, that the madder-diggers resort to this proceeding in presence of the stranger proves that they consider themselves robbers and him as the person robbed." — (*Idem*, p. 380.)

In connection with the above, the following deserves consideration: "Reverence. An ancient custom which obliges any person easing himself near the highway or footpath, on the word 'reverence' being given him by a passenger, to take off his hat with his teeth, and, without moving from his station, to throw it over his head, by which it frequently falls into the excrement. This was considered as a punishment for the breach of delicacy. A person refusing to obey this law might be pushed backwards. Hence, perhaps, the term 'sir-reverence.'" — (Grose, "*Dict. of Buckish Slang*.")

It is more likely that the practice had some connection with the fear of witchcraft, or the evil eye of the stranger; we can hardly credit

that peasant y living in an age when the highest classes received their guests at bedside receptions, "ruelles," or in their "cabinets d'aisance," would be squeamish in the trifling matter just alluded to.

In Japan "When any of these panders die . . . their bodies are cast upon a dunghill." — (John Saris, in Purchas, i. 368, A. D. 1611.)

"The tricks of the fayry called Pach." "I smurch her face if it be cleane, but if it be durty, I wash it in the next pisse-pot I can finde." — ("Life of Robin Goodfellow," Black Letter, London, 1628, in Hazlitt's "Fairy Tales," London, 1875, p. 205.)

But the "women fayries," under similar circumstances, "wash their faces and hands with a gilded child's clout." — (Idem, p. 206.)

"Their own spirits too will have nothing but excrement to eat, if during life the rites of the Bora (Initiation) have not been duly performed. With this compare the declaration of the Indian Manes (xii. 71) that a Kahatya who has not done his duty, will, after death, have to live on ordure and carrion. And in the Melanesian Hades the ghosts of the wicked have nothing to eat but vile refuse and excrement." — (Personal Letter from John Frazer, LL.D., to Captain Bourke, dated Sydney, New South Wales, Dec. 24, 1889.)

The Australians believed that if a man did not allow the septum of the nose to be pierced, he would suffer in the next world. "As soon as ever the spirit Egowk left the body, it would be required, as a punishment, to eat Toorta-gwannang" (filth not proper for translation). — ("Aborigines of Victoria," Smyth, vol. i. p. 274.)

Among some of the Australian tribes is found a potent deity named "Pund-jel," whom Mr. Andrew Lang thinks may be the Eagle-Hawk. "As a punisher of wicked people, Pund-jel was once moved to drown the world, and this he did by a flood which he produced (as Dr. Brown says of another affair) by a familiar Gulliverian application of hydraulics." — ("Myth, Rit., and Relig.," Lang, London, 1887, ii. 5.)

Maurice cites five meritorious kinds of suicide, in the second of which the Hindu devotee is described as "covering himself with cowdung, setting it on fire, and consuming himself therein." — (Maurice, "Indian Antiquities," London, 1800, vol. ii. p. 49.)

"Throw this slave upon the dunghill." — (King Lear, act. iii. sc. 6.)

When Squire Iden killed Jack Kade he exclaimed :—

"Hence will I drag thee, headlong by the heels,
Unto a dunghill which shall be thy grave." — (2 K. Henry, vi. 10.)

"Steward. Out, dunghill." — (King Lear, act iv. sc. 6.)

"Forbearance from meat and work are also prescribed to a single woman in case the sun or moon (though we should rather call it a bird flying by) should let any uncleanness drop upon her; otherwise, she might be unfortunate, or even deprived of her life." — (Crantz, "History of Greenland," London, 1767, vol. i. p. 216.)

The "bitter water" of the Hebrew ordeals by which the woman accused of unfaithfulness was either proved innocent, or had her belly burst upon drinking, presents itself in this connection. — (See Numbers v.)

Dante, in his cap. xiii. speaks of those condemned for flattery: "a crowd immersed in ordure." — (Cary's translation.)

Ducange alludes to what may have been an ordeal or a punishment: "*Aquam sordidam et stercorem super sponsam jactare.*" — ("In Lege Longobardi," lib. i. tit. 16, c. 8.)

The Hebrew prophets sat on dunghoops while the recalcitrant people of Israel were warned: "Behold, I will spread dung upon your faces, even the dung of your solemn feasts, and one shall take you away with it." — (Malachi ii. 3.)

By reference to another portion of this volume, it will be seen that stercoreous matter was deemed potent in frustrating witchcraft. Thus a mother was ordered to throw a "changeling" child upon a dung-hill (p. 403.) The prostitutes of Amsterdam kept horse-dung in their houses for good luck, etc. Consequently, when we read of the corpses of criminals or witches having been thrown upon dunghills, we may let fancy indulge the idea that it was to render nugatory any schemes the ghost might cherish of wreaking revenge.

The historian Suetonius relates that the unfortunate Roman emperor Vitellius was pelted with excrement before being put to death.

Among the unlawful acts for Brahmans or Kshatriyas who are compelled to support themselves by following the occupations of Vaisyas, is selling sesamum, unless "they themselves have produced it by tillage. . . . If he applies sesamum to any other purpose but food, anointing, and charitable gifts, he will be born again as a worm, and together with his ancestors be plunged into his own ordure." — ("Vasishtha," cap. ii. 27-30. "Sacred Books of the East," Oxford, 1882, vol. xiv, edition of Max Müller. This is one of the oldest of the Sacred Books. The same prohibition is to be found in "Prasna" 11, "Adhyaya" 1, "Kandika" 2.)

XXXVII.

INSULTS.

IT is somewhat singular to find in the myths of the Zuñis — the very people among whom we have discovered the existence of this filthy rite of urine-drinking — an allusion to the fact that to throw urine upon persons or near their dwellings was to be looked upon as an insult of the gravest character. During the early winter of 1881 the author was at the Pueblo of Zuñi, New Mexico, while Mr. Frank H. Cushing was engaged in the researches which have since placed him at the head of American anthropologists, and then heard recited by the old men the long myth of the young boy who went to the Spirit Land to seek his father. One of the incidents upon which the story-tellers dwelt with much insistence was the degradation and ignominy in which the boy and his poor mother lived in their native village, as was shown by the fact that their neighbors were in the habit of emptying their urine vessels upon their roof and in front of their door.

The threat made against the Jews by Sennacherib (in Isaiah xxxvi. 12) deserves consideration in this connection; and also the threat in the Old Testament, "There shall not be left one that pisses against the wall."

"Connected with the Samoan wars, several other things may be noted, such as consulting the gods, . . . haranguing each other previous to a fight, the very counterpart of Abijah, King of Judah, and even word for word with the filthy-tongued Rabshakeh." — ("Samoa," Turner, p. 194.)

The people of Samoa have a myth relating a separation which occurred between the natives of several islands, due to the fact that the men and women living on Tutuila "began to make a dunghill of their floating island." — (Olosenga, *idem*, p. 225.)

"Nebuchadnezzar likewise gave Zedekiah (after he had made him dance and play before him a long while) a laxative drink, so that, like a beastly old fellow (as there are many such betwixt York and London),

totus deturpatus fuit, he smelt as ill as your Ajax." In a marginal reference, he adds: "According to an old ballad, —

' And all to b——n was he, was he.' "

— (Harington, "Ajax," p. 35.)

This behavior, disgusting as it appears to us in all its features, had its parallel in the conduct of a prominent member of European aristocracy, who was wont to indulge his anger in a manner strikingly similar to the above at such moments as seemed to be proper for the punishment of his servants. His name is suppressed at the request of the correspondent furnishing the item.

Niebuhr says that the grossest insult that can be offered to a man, especially a Mahometan, in Arabia, is to spit upon his beard, or to say "*De l'ordure sur ta barbe.*" — ("*Desc. de l'Arabie,*" Amsterdam, 1774, p. 26.)

Niebuhr's remarks in regard to the offence taken by the Bedouins at such an infraction of their etiquette as flatulence are repeated in a vague and guarded form by Maltebrun ("*Univ. Geog.,*" vol. ii. part "Arabia").

In Angola, Africa, the greatest insult is, "Go and eat s—t." — (Muhongo.)

"Dunghill. A coward. A cock-pit phrase, all but gamecocks being styled dunghills." — (Grose, "*Dictionary of Slang,*" London, 1811.)

Tailors who accepted the wages prescribed by law were styled "Dung" by the "Flints," who refused them. — (Idem.)

Among the rough games of English sailors was one, "The Galley," in which a mopful of excrement was thrust in a landsman's face. — (Idem.)

In Angola, Africa, flatulence is freely permitted among the natives; but any license of this kind taken while strangers are in the vicinity is regarded as a deadly insult. — ("*Muhongo,*" translated by Rev. Mr. Chatelain.)

In the report of one of the early American explorations to the Trans-Missouri region occurs the story that the Republican Pawnees, Nebraska, once (about 1780–90) violated the laws of hospitality by seizing a calumet-bearer of the Omahas who had entered their village, and, among other indignities, making him "drink urine mixed with bison gall." — ("*Long's Expedition,*" Philadelphia, 1823, vol. i. p. 300.)

Bison gall itself sprinkled upon raw liver, just warm from the carcass, was regarded as a delicacy. The expression "excrement eater"

is applied by the Mandans and others on the Upper Missouri as a term of the vilest opprobrium, according to Surgeon Washington Matthews, U. S. Army (author of "Hidatsa," and other ethnological works of authority), whose remarks are based upon an unusually extended and intelligent experience.

"They gave me the abuse of the Punjabi, . . . pelting me with sticks and cow-dung till I fell down and cried for mercy." — ("Gemini," Rudyard Kipling, in "Soldiers Three," New York, 1890.)

"May the garbage of the foundations of the city be thy food; may the drains of the city be thy drink." — ("The Chaldean Account of Genesis," George Smith, New York, 1880.)

Among the Cheyenne expressions of contempt is to be found one which recalls the objurgations of the Bedouins; namely, *natsi-viz*, or "s—t-mouth." — (Personal notes of September 25, 1878, interview with the chiefs of the Northern Cheyennes, Ben Clark, interpreter.)

Rev. J. Owen Dorsey, who has made such prolonged and careful studies of the manners and myths of the tribes of the Siouan stock, is authority for the statement that the worst insult that one Ponca can give another is to say, "You are an eater of dog-dung;" and it is noticeable that the words of the expression are rarely used in the language of every-day life. He gives other examples from myths, etc., and supplies a variant of the story narrated by Captain Long; but as all this is to appear in one of the Doctor's coming books, it is omitted from these pages.

The Kamchatkans say, "May you have one hundred burning lamps in your podex," "Eater of faeces with his fish-spawn," etc. — (Steller, translated by Bunnemeyer.)

"Stercus." As a term of abuse. — "Nolo stercus curiæ dici Glau-ciam." — (Cicero, "De Oratoribus," 3, 41, 164; Andrew's "Latin Dictionary," New York, 1879, article "Stercus.")

Caracalla put to death those who made water in front of his statues. "Damnati sunt eo tempore (that is, the end of his wars with the Germans) qui urinam in eo loco ferrant in quo statuæ aut imagines erant principis." — (Aelius Lampridius, "Life of the Emperor Caracalla," edition of Frankfort, 1588, p. 186, lines 43 and 44.)

There are some very singular laws of the ancient Burgundians in regard to abusive words. "Si quis alterum concagatum clamaverit, 120 denariis mulctetur." — (Barrington, "Obs. on the Statutes," London, 1775, p. 315.)

" I'll pick thy head upon my sword,
And piss in thy very visonomy."
("Ram Alley," Ludowick Barry, 1611, edition of London, 1825.)

" The devil's dung in thy teeth."
(" The Honest Whore," Thomas Dekkar, 1604, edition of London, 1825.)

"Again the coarsest word, *khara*. The allusion is to the vulgar saying, 'Thou eatest skitel' (that is, 'Thou talkest nonsense'). Decent English writers modify this to 'Thou eatest dirt;' and Lord Beaconsfield made it ridiculous by turning it into 'eating sand.'" — ("Arabian Nights," Burton's edition, vol. ii. pp. 222, 223.)

Readers of classical history will recall the incident of the outrage perpetrated by the mob of Tarentum upon the person of the Roman ambassador Posthumus, 282 B. C. A buffoon in the street threw filth upon his toga. The ambassador refused to be mollified, and tersely telling his assailants that many a drop of Tarentine blood would be required to wash out the stains, took out his departure. A cruel war followed, and the Tarentines were reduced to the rank of a conquered province. — (See "History of Rome," Victor Duruy, English translation, Boston, 1887, vol. i. p. 462.)

"When the multitude had come to Jerusalem, to the feast of unleavened bread, and the Roman cohort stood over the temple, . . . one of the soldiers pulled back his garment, and stooping down after an indecent manner, turned his posteriors to the Jews, and spake such words as might be expected upon such a posture." The narration describes the riot which followed as a result, and ten thousand people were killed. — (See Josephus, "Wars of the Jews," book ii. edition of New York, 1821.)

The dispute between Richard the Lion-Hearted and the Arch-Duke of Austria, which resulted afterwards in the incarceration of the English king in a dungeon, had its rise in the great insult of throwing the Austrian standard down into a privy. Matthew of Paris says distinctly that Richard himself did this. "Now he, being over well disposed to the cause of the Norman, waxed wroth with the Duke's train, and gave a headstrong, unseemly order for the Duke's banner to be cast into a cesspool." — (See "The Third Crusade and Richard the First," T. A. Archer, in "English History from Contemporary Writers," New York, 1889.)

"*Bigot*. Out, dunghill! Darest thou brave a nobleman?"
(*"King John,"* iv. 3.)

"*Gloster*. Shall I be flouted thus by dunghill grooms?"

("1 King Henry VI.," i. 3.)

"*Fork*. Base dunghill villain and mechanical."

("2 King Henry VI.," i. 3.)

"'Khara,' meaning dung, is the lowest possible insult. 'Ta-kara' is the commonest of insults, used also by modest women. I have heard a mother use it to her son." — (Burton, "Arabian Nights," vol. ii. p. 59, footnote.)

XXXVIII.

MORTUARY CEREMONIES.

A PARSI is defiled by touching a corpse. "And when he is in contact and does not move it, he is to be washed with bull's urine and water." — ("Shapast la Shayast," cap. 2.; "Sacred Books of the East," Max Müller, editor, Oxford, 1880, pp. 262, 269, 270, 272, 273, 279, 281, 282, 333, 349.)

In the cremation of a Hindu corpse at Bombay, the ashes of the pyre were sprinkled with water, a cake of cow-dung placed in the centre, and around it a small stream of cow-urine; upon this were placed plantain-leaves, rice-cakes, and flowers. — ("Modern India," Monier Williams, p. 65.)

"They who return from the funeral must touch the stone of Priapus, a fire, the excrement of a cow, a grain of sesame, and water, — all symbols of that fecundity which the contact with a corpse might have destroyed." — ("Zööl. Mythol.," De Gubernatis, p. 49.)

The followers of Zoroaster were enjoined to pull a dead body out of the water. "No sin attaches to him for any bone, hair, grass, flesh, dung, or blood that may drop back into the water." — (Fargard VI., Vendidad, Zendavesta, Darmesteter's edition; Max Müller's edition of the "Sacred Books of the East," Oxford, 1880, p. 70.)

"There dies a man in the depths of the vale; a bird takes flight from the top of the mountain down into the depths of the vale, and it eats up the corpse of the dead man there; then up it flies from the depths of the vale to the top of the mountain; it flies to some one of the trees there, — of the hard-wooded or the soft-wooded, and upon that tree it vomits, it deposits dung, it drops pieces from the corpse. . . . If a man chop any of that wood for a fire, he is not regarded as defiled because . . . Ahura-Mazda answered, 'There is no sin upon any man for any dead matter that has been brought by dogs, by birds, by wolves, by winds, or by flies.' " — (Fargard V., of same work.)

If a dog had died on a piece of ground, the ground had to lie fallow for a year; at the end of that time, "they shall look on the ground for any bones, hair, flesh, dung, or blood that may be there." — (Fargard VI.)

If the clothing of the dead "has not been defiled with seed or sweat or dirt or vomit, then the worshippers of Mazda shall wash it with gomez." — (Fargard VII. Gomez (bull-urine) again alluded to as the great purifier on pp. 78-80, 104, 117, 118, 122, 123, 128, 182, 183, 212.)

The sacred vessels that had been defiled by the touch of a corpse were to be cleaned with gomez. — (Idem, pp. 91, 92.)

The most efficacious gomez was that of "an ungelded bull." — (Idem, p. 212.)

"They shall cover the surface of the grave with ashes or cow-dung." — (Fargard VIII.)

"Let the worshippers of Mazda here bring the urine wherewith the corpse-bearers shall wash their hair and their bodies." — (Fargard VIII. See, also, p. 201 of this volume.)

In describing the funerals of the Eskimo, Gilder says: "The closing ceremony was a most touching one. After 'Papa' had returned from the grave, Armow went out of doors and brought in a piece of frozen something that it is not polite to specify, further than that the dogs had entirely done with it, and with it he touched every block of snow on a level with the beds of the igloo. The article was then taken out of doors and tossed up in the air, to fall at his feet; and by the manner in which it fell he could joyfully announce that there was no liability of further deaths in camp for some time to come." — ("Schwatka's Search," Gilder, p. 234.)

"The Africans have an evil spirit called 'Abiku,' who takes up his abode in the human body." This spirit is believed to cause the death of children. "If the child dies, the body is thrown on the dirt-heap." — ("Fetichism," Baudin, p. 57.)

There is also a purification of the soul of the dying by the same peculiar methods. In Coromandel,¹ the dying man is so placed that

¹ Au Coromandel, ils mettent le visage du mourant sur le derrière d'une vache, lèvent la queue de l'animal et l'excitent à lacher son urine sur le visage . . . si l'urine coule sur la face du malade, l'assemblée s'écrie de joie et le compte parmi les bienheureux, mais . . . si la vache n'est pas d'humeur d'uriner, on s'en aillige. — (Picart, "Coutumes et cérémonies religieuses," etc., Amsterdam, 1729, vol. vii. p. 28.)

his face will come under the tail of a cow ; the tail is lifted, and the cow excited to void her urine. If the urine fall on the face of the sick man, the people cry out with joy, considering him to be one of the blessed ; but if the sacred animal be in no humor to gratify their wishes, they are greatly afflicted.

"The inhabitants of the coast of Coromandel carried those of their sick who were on the point of death, as a last resource, to the back of a fat cow, whose tail they twisted to make her urinate ; if the cow's urine spread over the whole face of the patient, it was a very good sign to the dirty rascals." — (Paullini, pp. 80, 81.)

With equal solicitude does the Hottentot medicine-man follow the remains of his kinsmen to the grave, aspersing with the same sacred liquid the corpse of the dead and the persons of the mourners who bewail his fate.¹

At Hottentot funerals, "two old men, the friends or relations of the deceased, enter each circle and sparingly dispense their streams upon each person, so that all may have some ; all the company receive their water with eagerness and veneration. This being done, each steps into the hut, and taking up a handful of ashes from the hearth, comes out by the passage made by the corpse, and strews the ashes by little and little upon the whole company. This, they say, is done to humble their pride." — (Kolbein, p. 401.)

"It is a pity that men in a savage state should take delight in doing that which is nasty, but such is the fact. It is a very common custom for the tribe, or that portion of it who are related to the one who has died, to rub themselves with the moisture that comes from the dead friend. They rub themselves with it until the whole of them have the same smell as the corpse." — ("Aborigines of Victoria," Smyth, vol. i. p. 131.) But in a footnote he adds that some of the Australians will not touch a dead body with the naked hand.

In the mortuary ceremonies of the Encounter Bay tribe (South Australians), "the old women put human excrement on their heads, — the sign of deepest mourning." — (Idem, vol. i. p. 113.)

The corpse of an Australian chief was surrounded "with wailing women, smeared with filth and ashes." — ("Native Tribes of South Australia," Adelaide, 1879, p. 75, received through the kindness of the Royal Society, New South Wales, Sydney, T. B. Kyngdon, Secretary.)

¹ Picart, *Contumes et cérémonies religieuses, etc.*, Amsterdam, 1729, vol. vii., pp. 52, 57.

"In the burial ceremonies, the women of many tribes besmear or plaster their heads with excrement and pipe-clay." — (Personal letter from John F. Mann, Esq., dated Neutral Bay, Sydney, New South Wales.)

"When a child dies, women who carried it in their hands must throw their jackets away if the child has urinated on them. This is part of the custom that everything that has come in contact with a dead person must be destroyed." — ("The Central Eskimo," Boas, p. 612.)

The Kootenays of Canada have a ceremonial aspersion after funerals. "When those who have buried the body return, they take a thorn bush, dip it into a kettle of water, and sprinkle the doors of all lodges." — ("Report on the Northwest Tribes of Canada," Dr. Franz Boas, to the British Association for the Advancement of Science," Newcastle-upon-Tyne meeting, 1889, p. 46.)

Describing Italian funerals, Blunt says: "When the procession has reached the church, the bier is set down in the nave, and the officiating priest, in the course of the appointed service, sprinkles the body with holy water three times, — a rite in all probability ensuing from that practised by the Romans, of thrice sprinkling the bystanders with the same element." — ("Vestiges," p. 183.)

In the Tonga Islands, there are two principal personages, — Tooitonga and Veachi, — who are believed to be the living representatives of powerful gods. Upon the death of Tooitonga, certain ceremonies are practised, among which: "The men now approach the mount, i. e., the funeral mound, it being dark, and, if the phrase be allowable, perform the devotions to Cloacina, after which they retire. As soon as it is daylight the following morning, the women of the first rank, wives and daughters of the greatest chiefs, assemble with their female attendants, bringing baskets, one holding one side and one the other, advancing two and two, with large shells to clear up the depositions of the preceding night, and in this ceremonious act of humiliation, no female of the highest consequence refuses to take her part. Some of the mourners in the 'fytoca' generally come out to assist; so that, in a very little while, the place is made perfectly clean. This is repeated the fourteen following nights, and as punctually cleaned away by sunrise every morning. No persons but the agents are allowed to be witnesses of these extraordinary ceremonies; at least, it would be considered highly indecorous and irreligious to be so. On the sixteenth day, early in the morning, the same females again assemble; but now

they are dressed up in the finest 'gnatoo,' and most beautiful Hamao mats, decorated with ribbons, and with wreaths of flowers round their necks ; they also bring new baskets ornamented with flowers, and little brooms, very tastefully made. Thus equipped they approach, and act as if they had the same task to do as before, pretending to clear away the dirt, though no dirt is now there, and take it away in their blankets. . . . The natives themselves used to regret that the filthy part of these ceremonies was necessary to be performed, . . . and that it was the duty of the most exalted nobles, even of the most delicate females of rank, to perform the meanest and most disgusting offices, rather than that the sacred grounds in which he was buried should remain polluted." (Dillon's "Expedition in Search of La Perouse," London, 1829, vol. ii. pp. 57-59.) Dillon says that this "must be considered a religious rite, standing upon the foundation of very ancient customs."—(Idem, p. 57.)

XXXIX.

MYTHS.

"ALL peoples have invented myths to explain why they observed certain customs." — ("The Golden Bough," vol. ii. p. 128.)

"Myth changes while custom remains constant; men continue to do what their fathers did before them, though the reasons on which their fathers acted have long been forgotten. The history of religion is a long attempt to reconcile old custom with new reason; to find a sound theory for an absurd practice." — (Idem, p. 62.)

The Australians have a myth of the Creation of Man; it is given in Latin: "*Ningorope lætitiæ plena in latrina lutum amœne erubescens cernebat; hoc in hominis figuram formabat, quæ tactu divæ motum vitalem sumebat et douc ridebat.*" — ("Aborig. of Victoria," Smyth, vol. i. p. 425.)

This myth is given in English from another authority, on next page of this volume.

The Creation Myth of the Australians relates that the god "Bund-jil oceanum creavit minctione per plures dies in terrarum orbem. Bullarto Bulgo magnam lotii copiam indicat." (Idem, vol. i. p. 429.) (Bund-jil created the ocean by urinating for many days upon the orb of the earth.) The natives say that the god being angry "Bullarto Bulgo" upon the earth. Bullarto Bulgo indicates a great flow of urine.

The same myth has already been given from Andrew Lang, under "Ordeals and Punishments."

In the cosmogonical myths of the islanders of Kadiack, it is related that the first woman, "by making water, produced seas." — (Lisiansky, "Voy. round the World," London, 1814, p. 197.)

"In the fourth story" (i. e., stories told by the Kalmucks and Mongols) "it is under the excrement of a cow that the enchanted gem, lost by the daughter of the king, is found." — ("Zööl. Mythol." De Gubernatis, p. 129.)

In the mythic lore of the Hindus, the god Utanka sets out on a journey, protected by Indras. "On his way, he meets a gigantic bull, and

a horseman who bids him, if he would succeed, eat the excrement of the bull; he does so, rinsing his mouth afterwards." — (Idem, p. 80.)

Further on we learn that Utanka was told "the excrement of the bull was the ambrosia which made him immortal in the kingdom of the serpents." (Idem, pp. 81, 95.) Here we have the analogue of the use of excrement and urine in Europe to baffle witches, and of the drinking of the Siberian girl's urine, which in all probability was proffered to the guest as an assurance that no witchcraft was in contemplation, or else to baffle the witches, much as, in England, bridal couples urinated through the wedding ring.

The Chinese have a mythical animal which has been identified with the Tapir; it is called the Mih; to it they ascribe the power to eat iron and copper. "For this reason the urine of this animal is prescribed when a person has swallowed iron or copper; it will, in a short time, change them into water." — ("Chinese Repository," Canton, 1839, vol. vii. pp. 46, 47.)

"The story of Joa lo Praube is repeated almost word for word in the adventures of the Kamtchatkan god 'Kutka;' or, to be more exact, there is a myth in which it is narrated that that god had a great many tricks played upon him, in one of which he runs sticks into his gluteal region." — (Steller, translated by Bunnemeyer.)

This god Kutka was a great sodomite, and in some points, resembled the anti-natural god of the Sioux.

Speaking of the god "Aidowedo," the serpent in the Rainbow as believed by the Negroes of Guinea, Father Baudin says: "He who finds the excrement of this serpent is rich forever, for with this talisman he can change grains of corn into shells which pass for money." ("Fetichism," Rev. F. Baudin, New York, 1885, p. 47.) He goes on to narrate a very amusing tale to the effect that the negroes got the idea that a prism in his possession gave him the power to bring the Rainbow down into his room at will, and that he could obtain unlimited quantities of the precious excrement.

Another myth of the foolish god "Kutka" represents him as falling in love with his own excrement and wooing it as his bride; he takes it home in his sleigh, puts it in his bed, and is only restored to a sense of his absurd position by the vile smell. — (Steller, translated by Bunnemeyer.)

Possibly all this may be a myth to explain or to represent the state of mind into which those who indulged in the "muck-a-moor" were thrown, but even this interpretation seems far-fetched.

Sir John Moore, it is stated, fell in love with his own urine, and we have read from Montaigne the story of the French gentleman who preserved his egestæ to show to his visitors.

The tribes of the Narinyeri, Encounter Bay, South Australia, have a legend that difference in language was caused when certain of their ancestors "ate the contents of the intestines of the goddess 'Wurruri.'" — ("Nat. tribes of South Australia," Adelaide, 1879, p. 60, received through the kindness of the Roy. Soc., Sydney, N. S. Wales, T. B. Kyngdon, Secretary.)

In the same chapter we are told of the omission of one or two ceremonies "which were too indecent for general readers" (p. 61).

In the "Bachiller de Salamanca," Le Sage has a hero whose misfortunes would lead us to suspect that Le Sage had been reading of some of the doings of the Kamtchatkan god "Kutka," who, among the numerous pranks played upon him by his enemies, the mice, suffered the ignominy of having "a bag made of fish-skin attached to his orificium ani while he lay sound asleep. On his way home Kutka desired to relieve nature, but was much surprised, on leaving, at the insignificant deposit notwithstanding he had freed himself of so great a burden.

"Surprised at his cleanliness, he narrated the circumstances to Clachy (his wife), who soon discovered the true state of affairs, and pulling off Kutka's pantaloons, detached the heavily laden bag with great laughter." — (Steller, translated by Bunnemeyer.)

In the 14th century farce of "Le Muynier," the Miller has absorbed some of the popular ideas of his day, professed by certain philosophers of the time. He believes that, at the moment of death, the soul of a man escapes by the anus, and warns the priest to absolve him from his sins, saying: "Mon ventre trop se détermine. Hélas! Je ne scay que je face; ostez vous."

The priest answers: "Ha! sauf vostre grace!"

Then the miller remarks: "Ostez-vous, car je me conchyé."

The wife and the priest pull the sick man to the edge of the bed and place him in such a position that if the doctrine of soul-departure by the anus be true, they may witness the miller's final performance. The phenomenon of rectal flatulence is now observed, when suddenly, to the consternation of the wife and priest, a demon appears and placing a sack over the dying miller's anus, catches the rectal gas and flies off in sulphurous vapor. — ("Med. in the Middle Ages," Minor, p. 84, translated from "Le Moyen Age Médical," by Dupuoy.)

It was generally believed in Europe that the eggs of the Basilisk or

Cockatrice could only be hatched by a toad or by the heat of a manure-pile. — (See "Mélusine," Paris, January-February, 1890, p. 20.)

Ireland has been called the "Urinal of the Planets" from the constant and copious rains which visit it. — (See Grose, "Dict. of Buckish Slang," London, 1811.)

The Apaches have a myth, or story, the analogue of the "Fee-fum" of our own childhood; but the giant, instead of smelling the blood of an Englishman, in the words given in Spanish, "huele la cagada."

The Chinese myth concerning the wonderful digestive powers of the "Mih" has its counterpart in the ancient belief that the same power was possessed by the Ostrich.

"The Wangwana and Wanyumbo informed me . . . that if the elephant observes the excrement of the rhinoceros unscattered, he waxes furious, and proceeds instantly in search of the criminal, when woe befall him if he is sulky, and disposed to battle for the proud privilege of leaving his droppings as they fall. The elephant, in that case, breaks off a heavy branch of a tree, or uproots a stout sapling like a boat's mast, and belabors the unfortunate beast until he is glad to save himself by hurried flight. For this reason, the natives say, the rhinoceros always turns round and thoroughly scatters what he has dropped." — ("Through the Dark Continent," Henry M. Stanley, New York, 1878, vol. i. p. 477.)

"In other myths, in the Brahmanas, Prajapati creates man from his body, or rather the fluid of his body becomes a tortoise, the tortoise becomes a man, etc." — ("Myth, Ritual, and Religion," Andrew Lang, London, 1887, vol. ii. p. 248. See also under chapter on the Mistletoe, p. 99 of this volume.)

"Moffatt is astonished at the South African notion that the sea was accidentally created by a girl." ("Myth, Ritual, and Religion," Lang, vol. i. p. 91.) Perhaps this tale belongs to our series of myths.

"The Encounter Bay people have another myth, which might have been attributed by Dean Swift to the Yahoos, so foul an origin does it attribute to mankind." — (Idem, Lang, vol. i. p. 170.)

"As the mythology and traditions of other heathen nations are more or less immoral and obscene, so it is with these people." ("Nat. Trib. of S. Australia," p. 200.) "Mingarope having retired upon a natural occasion was highly pleased with the red color of her excrement, which she began to mould into the form of a man, and tickling it, it showed signs of life and began to laugh." — (Idem, p. 201.)

The myth relating that differences in language sprung up after certain of the tribes had eaten the excrement of the goddess "Wurruri" is given on p. 268; it has been recited in this volume on a previous page. There was another god, named Nurunduri, of whom the story is told that he once made water in a certain spot, "from which circumstance the place is called Kainjamin (to make water.)" — (Idem, p. 205.)

Among the Bilgula of British Columbia, there is a myth which relates that a certain stump of a tree was a cannibal and had captured a girl. Once, when he had gone out to fish for halibut, "he ordered his urinary vessel to call him if the girl should make an attempt to escape. When she did so, the vessel cried, 'Rota-gota, Rota-gota, gota.'" — (Personal letter from Dr. Franz Boas, Clark University, Worcester, Mass.)

There is a riddle among the Kamtchatkans in regard to human feces: "My father has numerous forms and dresses; my mother is warm and thin and bears every day. Before I am born, I like cold and warmth, but after I am born, only cold. In the cold I am strong, and in the warmth, weak; if cold, I am seen far; if warm, I am smelled far." — (Steller, translated by Bunnemeyer.)

Among some of the Eskimo tribes the Raven is represented as talking to its own excrement and consulting it; excrement occurs frequently in their legends. — (Personal letter from Dr. Boas, as above.)

From the preceding paragraph we see that the Eskimo must have formerly, even if they do not now, consulted excrement in their Divination; the extract from Gilder, given under "Mortuary Ceremonies" confirms this hypothesis.

The people of Kamtchatka believed that rain was the urine of Billutschi, one of their gods, and of his genii; but, after this god has urinated enough, he puts on a new dress made in the form of a sack, and provided with fringes of red seal hair, and variously colored strips of leather. These represent the origin of the Rainbow.

The Kamtchatkan god Kutka was once pursued by enemies, but saved himself "by ejecting from his bowels all kinds of berries, which detained his pursuers."

The myths of the Kamtchatkans offer a parallel to the stories that the presents of the devil always turned into dross. There is the story of the god Kutka, upon whom, as we have seen, many tricks were played. In one the food with which he supplied himself "turned into peat, rotten wood, and piss." — (Steller, translated by Bunnemeyer.)

"The Central Eskimo believe that rain is the urine of a deity." — ("See "The Central Eskimo," Boas, p. 600.)

"Amber (as some thinke) is made of whale's dung." — (John Leo, "Observ. of Africa," in Purchas, vol. ii. p. 772.)

Ambergris was anciently supposed to be the dung of the whale or other monster of the sea. — (Mr. W. W. Rockhill.)

This view about the origin of amber was not credited by Avicenna. "Ambram non esse stercus animalis maris." — (Vol. i. p. 273, b10.)

In the liturgy of the hill tribes of the Nilgherris, it is related —

"Mada a uriné dans le feu."

"Mada a fienté à la face du soleil."

— (Quoted in "Les Primitifs," p. 245.)

Réclus, in the same work, gives a fragment of an Orphic song: "Glorieux Jupiter, le plus grand des Olympiens, toi qui te plais dans les crottins des brebis, qui aimes à t'enfoncer dans les fientes des chevaux et des mulets." — (p. 246, quoting from "Fragmenta Orphæi," edited by Hermann.)

"The blessed Apostle Paul, being rapt in contemplation of divine blissfulness, compares all the chief felicities of the earth, esteeming them (to use his own words) as 'stercora,' most filthy dung in regard of the joys he hoped for." — (Harington, "Ajax," p. 26.)

"He is truly wise that accounteth all earthly things as dung that he may win Christ." — (Matt. xvii. 23, quoted in Thomas à Kempis, cap. iv., "Of the Doctrine of Truth.")

"It was current among the small boys at school some thirty-five years since, that were a man to make water whilst in connection with a woman she would die." — (Personal letter from Prof. Frank Rede Fowke, South Kensington Museum, London, England.)

The name of the city of Chicago has been traced by some philologist to the Indian word for skunk; and it is said to be "equal to *bestiola fœda mingens*." The urine of this little animal was believed by some of the Indian tribes to be capable of blinding the man in whose eyes it entered; the animal itself was deified by the Aztecs under the name of *Tezcatlipoca*.

For the interpretation given for the word "Chicago," see the work "Indian Names of Places near the Great Lakes," by Captain Dwight Kelton, U. S. Army, Chicago, Illinois, 1888.

XL.

URINOSCOPY, OR DIAGNOSIS BY URINE.

THE examination of the urine and feces of the sick seems to have obtained in all parts of the world, and among all sorts of people; but in the earlier stages of human progress it was complicated with ideas of divination and forecast, which would make it a religious observance.

The health of a patient was shown by the condition of his urine. — (Pliny, lib. xxviii. cap. 6.)

The Arabians used to bring to their doctors "the water of their sick in phials." — (Burton, "Arabian Nights," vol. iv. p. 11.)

In the index to the Works of Avicenna there are two hundred and seventy-five references to the appearance, etc., of the urine of the sick. — (Translation of Avicenna made by Gerard of Cremona, edition of Venice, 1595.)

"Apothecaries used to carry the water of their patients to the physician." — (Fosbroke, "Encyclopædia of Antiquities," vol. i. p. 526, article "Urine.")

To determine whether a man had an affection of the lungs or liver, some of his urine was cast upon wheat bran, which was then put aside in a cool place; if worms appeared, he was afflicted, etc. — (Beckherius, "Med. Microcosmus," p. 62.)

From an examination of the feces and urine of the patient to determine his present state of health, and if possible to make a prognosis of his future condition, was, in the minds of ignorant or half-educated men merely the first step in the direction of determining the future of the commonwealth by an inspection of the viscera and the excrement of the victims whose blood smoked upon its altars. The Romans were addicted to this mode of divination, which Schurig incorrectly styles "Anthropomancy." He relates that Heliogabalus was especially fond of this, and, indeed, he credits that voluptuary with its introduction, and expresses his gratification that he met his deserts in being killed

in a privy and left to die in ordure. The Saxons also were given to this method of consulting the future. — (See “Chylologia,” pp. 749, 750.)

“Uromantie. ff. (Med. et Divin.), mot formé de “ourom,” urine, et “manteia,” divination, qui signifie l’art de diviner par le moyen des urines l’état présent d’une maladie, et d’en prédire les événements futurs.” — (“Encyc. ou Dict. Rais. des Sciences,” etc., fol. Neufschatel, 1745, vol. xvii. p. 499, given in personal letter to Captain Bourke from Professor Frank Rede Fowke, South Kensington Museum, London, England.)

“*Falstaff*. Sirrah, you giant, what says the doctor to my water ?

“*Page*. He said, sir, the water itself was a good healthy water ; but for the party that owed it, he might have more diseases than he knew for.” — (Shakespeare, “2 King Henry IV.,” i. 2.)

Sir Thomas More was possessed of great wit and a fine flow of spirits, which even the approach of death could not dispel. Upon receiving notification that he had been condemned to death by his master, King Henry VIII., “he called for his urinal, and having made water in it, he cast it and viewed it (as physicians do) a pretty while ; at last he swore soberly that he saw nothing in that man’s water but that he might live if it pleased the king.” — (“*Ajax*,” p. 61.)

Thibetan doctors examine the urine of the patient ; then churn it and listen to the noise made by the bubbles. — (Mr. W. W. Rockhill.)

“How to vex her,
And make her cry so much that the physician,
If she fall sick upon it, shall want urine
To find the same by, and she, remediless,
Die in her heresy.”

(“*Scornful Lady*,” v. 1, Beaumont and Fletcher.)

The people of Europe did not restrict their examinations to the egestæ of human beings ; they were equally careful to scrutinize every day the droppings of the hounds, hawks, and other animals used in the chase. — (See “*Ajax*.”)

In the farce of “*Master Pathelin*” (A. D. 1480), the hero, “in his ravings abuses the doctors . . . for not understanding his urine. . . . Charlatans especially exploited in this field of medicine, practising it illegally in the country under the name of ‘water-jugglers’ and ‘water-judges.’ Such men still practise in Normandy and in certain northern provinces of France.” — (“*Med. in the Middle Ages*,” Minor, p. 82.)

"It is a common practice in these days, by a colourable derivation of supposed cunning from the urine, to foretell casualties, and the ordinary events of life, conceptions of a woman with child, and definite distinctions of the male and female in the womb." (Cotta, "Short Discovery," London, 1612, p. 104. He goes on to say that even as a mode of strict medical diagnosis, urinoscopy is not a certain test, the body, in every disease, being more or less disordered, and this disorder acting upon the urine.)

Montaigne tells the story of a gentleman who always kept for seven or eight days his excrements, in different basins, in order to talk about and show them. (Buckle, "Commonplace Book," vol. ii. p. 357, quoting from Montaigne's "Essais," lib. iii. cap. 9, p. 600.)

Speaking of melancholy people, Burton says, "Their urine is most part pale and low-colored, 'urina pauca, acris, biliosa' (Arctæus), and not much in quantity. . . . Their melancholy excrements, in some very much, in others little." — ("Anatomy of Melancholy," vol. i. p. 268.)

ON THE INFLUENCE OF THE EMOTIONS UPON THE EGESTÆ.

Reciprocally, the influence exerted by the emotions over functional disturbances has been made the subject of investigation by learned commentators.

"Aristote, dans les Problèmes Physiques, s'occupe des rapports qui lient les impressions de l'âme aux fonctions intestinales. Il recherche pourquoi une frayeur subite et violente cause presque toujours et incontinent la diarrhée." (Aule-Gelée, lib. xix. c. 4, "Bib. Scatolog." p. 66.)

Schurig gives numbers of instances of the power of the mind over the act of alvine dejection; evacuation may be caused by perturbation of mind, by fear, by insomnia, by thunder, by anger, etc. See "Chylogologia," p. 701. In a preceding chapter Schurig narrates several examples of people, principally women, who were never able to excite nature to the act of evacuation except by artificial aids addressed to some faculty of the mind, — imagination, laughing, etc.

Harington, in "Ajax," mentions the case of the Pope's Legate, "who brought the last jubilee into France; who, fearing the pages who by custom bustle about him to divide his canopie, and suspecting treason among them, suddenly laid you wot of in his breeches" (p. 16).

Dr. Fletcher, United States Army, has devoted considerable attention to this subject. He has kindly placed the results of his wide range of reading at the disposal of the author of this volume.

"The more you cry, the less you piss," — a vulgar saying of considerable antiquity. This saying is founded upon a correct physiological observation; an excess of one secretion results in a proportionate diminution of others.

The great Greek scholar, Porson, indulged his wit by transliterating into Hellenic characters the above homely saw, and thereby mystified the learned pundits who were called upon to read it.¹

"If love demands weeping, oh, why should I spare
Those floods which, of course, must be lavished elsewhere?"

"And midst their bawling and their hissing,
They cried, to keep themselves from p——g.
Finding their water would come out,
They thought it best, without dispute,
Rather than wet both breeks and thighs,
To let it bubble through their eyes."

(Homer Burlesqued, book xii.)

"I must call, from between thy thighs,
The urine back into thine eyes,
And make thee, when my tale thou hearest,
Channel thy cheeks with launt reversed."

(Musarum Deliciæ, i. p. 110.)

"Launt" is an obsolete word, meaning urine. See Cotgrave's Dictionary.

"What if she whine, shed tears, and frown?
Laugh at her folly, she'll have done;
Never dry up her tears with kisses,
The more she cries, the less she p——s."

(Reflections, Moral, Critical, and Cosmical, part iii. p. 23, A. D. 1707.)

This expression is to be found also in old French, — perhaps is derived from it: "Pleurez donc, et chiez bien des yeux, vous en pissez moins." — ("Moyen de Parvenir," A. D. 1610.)

"Juletta, how loath she was to talk, too, how she feared me!
I could now piss mine eyes out for mere anger."

("The Pilgrim," iii. 4, Beaumont and Fletcher.)

The converse of the adage is illustrated in the following epigram on a lady who shed her water at seeing the tragedy of "Cato:"

¹ Eloise seems here to allude to the well-known Greek inscription on an ancient marble, still to be seen in the Medicean gardens: "Θεμῶρ εὐχρὶ θέλες εὐπίς." Above it is an elegant figure in alto-relievo, supposed to be the representation of the melting Niobe, — Eloise, *en déshabillé*.

“ Whilst maudlin chiefs deplore their Cato’s fate,
 Still, with dry eyes, the Tory Celia sate ;
 But, though her pride forbade her eyes to flow,
 The gushing waters found a vent below.
 Tho’ n secret, yet with copious streams she mourns,
 Like twenty river-gods, with all their urns.
 Let others screw on hypocritic face,
 She shows her grief in a sincerer place ;
 Here Nature reigns, and passion, void of art,
 For this road leads directly to the heart.”

(Nick Rowe.)

‘ But Sandwich, though with vast surprise,
 He saw the monarch’s weeping eyes,
 Told him it would not be amiss, —
 The more he cryed, the less he pissed.”

(From “ The New Foundling Hospital of Wit,” vol. lv. p. 204.)

“ ‘ Boh,’ said to be the name of a Danish general, who so terrified his opponent, Foh, that he caused him to bewray himself.” — (Grose, Dict. of Buckish Slang, art. “ Boh.” See, also, in same volume, the account of the Puritan preacher who met with the same accident in his pulpit upon hearing that the royal troops were approaching, — art. “ Sh—t Sack.”)

XLI.

ORDURE AND URINE IN MEDICINE.

THE administration of urine as a curative opens the door to a flood of thought. Medicine, both in theory and practice, even among nations of the highest development and refinement, has not, until within the present century, cleared its skirts of the superstitious hand-prints of the dark ages. With tribes of a lower degree of culture it is still subordinate to the incantations and exorcisms of the "medicine man." It might not be going a step too far to assert that the science of therapeutics, pure and simple, has not yet taken form among savages; but to shorten discussion and avoid controversy, it will be assumed here that such a science does exist, but in an extremely rude and embryotic state; and to this can be referred all examples of the introduction of urine or ordure in the *materia medica*, where the aid of the "medicine man" does not seem to have been invoked, as in the method employed for the eradication of dandruff by Mexicans, Eskimo, and others, the Celtiberian dentifrice, etc.¹

When the compilation and correlation of data bearing upon this subject was first begun, the exceeding importance of the pharmaceutical division was manifest. In the opinion of the author, this part of the investigation should have been assumed by a student possessed of a preliminary training in medicine, and it was not until urged on by friendly correspondents that he concluded, upon resuming his labors, to augment these references by citations from the more prominent writers of ancient and modern times, who have demonstrated the importance of the subject by devoting to its consideration not passing sentences and scant allusions, but pregnant chapters and bulky volumes.

¹ "We have in the folk-medicine, which still exists, the unwritten record of the beginning of the practice of medicine and surgery. . . . The early history of medical science, as of all other developments of culture, can be studied more narrowly and more accurately in the folk-lore of this and other countries than some students of modern science and exact modern records may think possible." — ("Folk-Medicine," William George Black, London, 1883, pp. 2, 3.)

By great good fortune he was enabled to make the fullest use of the library of the Army Medical Museum, which, under the supervision of Surgeon John S. Billings, United States Army, has become the finest special bibliothèque in the world.

From Surgeon Billings, and his able assistants, Doctors Fletcher and Wise, were received, besides the courteous attentions which every student has the right to expect, an intelligent and sympathetic co-operation which cannot be too gratefully acknowledged.

In such an embarrassment of riches as now confronted him, he exercised the right of drawing only upon the authorities which would appeal to all critics as most entitled to prominence; to have followed any other course, and to have attempted to engraft all available material, would have swollen this chapter to hundreds, perhaps thousands of pages.

"Sprengel pense que Asclépiade, surnommé Pharmacion, est le premier qui ait conseillé les excréments humains; mais il est probable qu'il ne fit qu'ériger en préceptes écrits un usage déjà consacré en Orient, particulièrement en Egypte." — ("Bib. Scat.," pp. 29, 30.)

The earliest writer whose works have been consulted was Hippocrates, termed the "Father of Medicine," born 460 B. C. "He was a member of the family of the Asclepiadæ, . . . and a descendant of both Esculapius and Hercules. He was born of a family of priest-physicians, and was the first to throw superstition aside, and to base the practice of medicine on the principles of inductive philosophy." — ("Encyclopædia Britannica.")

Galen wrote a series of commentaries upon his writings. Medical commentators are not in accord as to how many of the works attributed to him are genuine; but the editions of the accepted and the suspected to be spurious are almost innumerable, and printed in every language of Europe.

In the edition by Francis Adams (Sydenham Society, London, 1849), there is no mention of the use of human or animal excreta in pharmacy. But in another edition can be read that ass's dung was given to restrain excessive catamenial flow. — (Kuhn's edition, Leipsig, 1829, vol. i. p. 481.)

Etmuller says that Hippocrates prescribed hawk-dung to aid in the expulsion of the fœtus and as a remedy for sterility (vol. ii. p. 285). The general use of excrementitious material in the medical practice of Hippocrates' own day must be accepted from evidence deduced from outside sources. For example, Aristophanes, who was his contemporary

(born 446 B. C., *Encyc. Britan.*), stigmatized all the medical fraternity as "excrement-eaters;" and Xenocrates, another practitioner of the same date, of whose writings, however, nothing has come down to us beyond the meagre outline to be found in the commentaries of Galen, made constant employment not only of human and animal excreta, but of all the secretions and excretions as well. According to Appleton's *Encyclopædia*, Xenocrates was born 396 B. C.

Schurig relates of Aristophanes that he called doctors "*fecivores* . . . quod quidem adulateores fuerint quin excrementa Magnorum degustare voluerint." He also says: "Quare de illo non inepte dixit quidam, eum dignum fuisse Xenocrates Medico, qui excrementis variis animalium omnes morbos curare solitus erat." — ("*Chylogogia*," p. 82.)

"Xenocrates, who flourished sixty years before Galen, had also a good list of nasty prescriptions, for which the veil of a dead language is required." (*Saxon Leechdoms*," lib. i. p. xviii.) These included the urine of women and their catamenia.

Aristophanes called the physicians of his time *σκατοφάγους*, or excrement-eaters. "Ce qui était plus malin que vrai, car les compères en faisaient manger à leurs clients plus qu'ils n'en mangeaient eux-mêmes." — ("*Bibliotheca Scatologica*.")

Human excrements, under the name of "botryon," were used by Æschines of Athens, for the cure of quinsy. (Pliny, lib. xxviii. c. 10.) Æschines lived between 389–317 B. C.

"Serapion of Alexandria flourished B. C. 278, forty years after the date of Alexander the Great, and was one of the chiefs of the empiric school. . . . He in epilepsy prescribed . . . dung of crocodiles." — ("*Saxon Leechdoms*," vol. i. p. xiv.)

The next in chronological order would be Pliny, from whom can be extracted a veritable mine of information on this point; then Dioscorides, who lived in the latter years of the first and the opening ones of the second centuries of the Christian era; and then Galen, born at Pergamos, in Mysia, 130 A. D., "the most celebrated of ancient medical writers," and "appointed by the Emperor Marcus Aurelius to the position of medical guardian of his son, the young prince, and later on Emperor, Commodus." — (*Encyc. Brit.*)

The classical authorities will conclude with Sextus Placitus, from whose works much of importance has been extracted.

Each author will be allowed to speak in his own words, and the necessary deductions will be made afterwards; only the remarks bear-

ing upon love-philters and child-birth have been assigned to the chapters devoted to the treatment of those subjects, and this merely to reduce the chances of repetition.

The following remedies are taken from Pliny, from the books and chapters given opposite each case : —

“A plant that has been grown upon a dung-heap in a field is a very efficacious remedy, taken in water, for quinsy.” — (Lib. xxiv. c. 110.)

“A plant upon which a dog has watered, torn up by the roots, and not touched with iron, is a very speedy cure for sprains.” — (Idem, c. 111.)

“Camel’s dung, reduced into ashes, and incorporat with oile, doth curle and frizzle the hair of the head, and taken in drinke, as much as a man may comprehend with three fingers, cureth the dysenterie ; so doth it also the falling sickness. Camel’s piss, they say, is passing good for Fullers to scour their cloth withall ; and the same healeth any running sores which be bathed therein. It is well known that the barbarous nations keep this stale of theirs until it be five years old, and then a draught thereof to the quantity of one hermine is a good laxative potion.” — (Lib. xxviii. c. 8.)

Goat’s dung good for sore eyes. — (Idem, c. 11.)

For “Skals in the Head” the Romans used “Bul’s Urine.” Stale chamber-lye was also considered good. “The gall of buck goats, tempered with Bul’s stale, killeth lice.” Dog-dung and goat-dung also were prescribed. — (Idem, c. 11.)

Wolf’s dung is mentioned as good for cataract. — (Idem, c. 11.)

Hen’s dung, the white part, prescribed for the cure of poisonous mushrooms ; also to cure flatulence (but in any living creature it causes flatulence, says Pliny). Ashes of horse-dung fresh made and burned, the urine of a wild boar, the green dung of an ass, are among the medicaments mentioned for ear-ache (idem, c. 11) ; also “Urine of a Bul or a Goat, or stale chamber lye made hotte ;” also “Calfe’s Pisse, Calfe’s dung.” Goat and horse dung were employed to drive away snakes. — (Idem, c. 110.)

Human urine used in curing the bites of mad dogs. — (Idem, c. 18.)

Pliny notices that the Greeks used the scrapings of the bodies of athletes for emmenagogues, for uterine troubles, for sprains, muscular rheumatism, etc. “We find authors of the very highest repute proclaiming aloud that the seminal fluid is a sovereign remedy for the sting of the scorpion. In the case, too, of a woman afflicted with ster-

ility they recommend the application of a pessary made of the fresh excrement voided by an infant at the moment of its birth. . . . They have even gone so far, too, as to scrape the very filth from off the walls of the gymnasia, and to assert that this is possessed of certain calorific properties. . . . The urine has been the subject not only of numerous theories with authors, but of various religious observances as well, its properties being classified under several distinctive heads ; thus, for instance, the urine of eunuchs, they say, is highly beneficial as a promoter of fruitfulness in females." He mentions the urine of children as a sovereign remedy for the poisonous secretion of the asp, which "spits its venom into the eyes of human beings." Human urine was used in eye troubles, "albugo, films, and marks upon the eyes, white specks upon the pupils, and maladies of the eyelids." It was also used in the cure of burns, suppuration of the ears, as an emmenagogue, for sun-burn, and for taking out ink-spots. "Male urine cured Gout." Urine cured "eruptions on the bodies of infants, corrosive sores, running ulcers, chaps upon the body, stings inflicted by serpents, ulcers of the head, and cancerous sores of the generative organs. . . . Every person's urine is the best for his own case." — (Lib. xxviii. c. 18.)

The ashes of camel's dung were administered internally in epilepsy, and also for dysentery. — (Idem, c. 27.)

Camel's urine applied to running sores ; barbarous nations kept it for five years, and then used it as a purgative. — (Idem.)

The dung of the hippopotamus was used in fumigations, "for the cure of a cold ague." — (Idem, c. 31.)

The urine of the ounce (ounce) "helpeth the strangury ;" it was also taken internally for sore throat. — (Idem.)

Hyena-urine "is said to be useful in diseases of long standing" (idem, c. 27) ; also given in drink for dysentery ; also applied in liniments. — (Idem.)

Crocodile-dung used for eye troubles and for epilepsy ; used in form of a pessary, as an emmenagogue. — (Lib. xxviii. c. 29.)

Lynx-urine for strangury and pains in the chest. — (Idem, c. 32.)

Goat-urine an antidote for bites of serpents. — (Idem, c. 42.)

Goat-dung an antidote for bites of serpents. — (Idem.)

Horse-dung, taken from a horse on pasture, an antidote for the bites of serpents. — (Idem.)

Goat-dung for scorpion bites. — (Idem.)

Calves' dung for scorpion bites. — (Idem.)

She-goat's dung, bite of mad dog. — (Idem.)

Badger-dung, cuckoo-dung, swallow-dung, taken internally, bite of mad dog. — (Idem.)

Bull-dung, dandruff, applied locally. — (Idem, c. 46.)

Goat's dung, dandruff. — (Idem.)

Wolf-dung for cataract. — (Idem, c. 47.)

She-goat's dung for ophthalmia and eye-troubles generally ; internally. — (Idem.)

Wild-boar urine, ear-troubles. — (Idem, c. 48.)

Ass-dung, deafness. — (Idem.)

Horse-dung, deafness ; also used in liniments. — (Idem.)

Bull's urine, deafness. — (Idem.)

She-goat's urine, deafness. — (Idem.)

Calf-dung, deafness. — (Idem.)

Calf-urine, deafness. — (Idem.)

Asses' urine, internally, in elephantiasis. — (Lib. xxviii. c. 30.)

Cat-dung, rubbed on the neck, to remove bones from the throat. — (Idem, c. 51.)

Warm urine, cow-dung, and goat-dung applied to scrofulous sores. — (Idem.)

Goat urine and dung for cricks in neck. — (Idem, c. 52.)

Hare-dung, internally, for cough. — (Idem, c. 53.)

Boar's dung, swine's dung, internally, pains in loins. — (Idem, c. 56.)

Cow-dung, externally, sciatica. — (Idem, c. 56.)

Asses' dung, internally, affections of spleen. — (Idem, c. 57.)

Horse-dung, internally, bowel complaints. — (Idem, c. 58.)

Boar's or swine's dung, internally, dysentery. — (Idem, c. 59.)

Hare, ass, horse, or goat dung, internally, dysentery. — (Idem.)

Calf-dung, internally, flatulence. — (Idem.)

Hare-dung, internally, hernia. — (Idem.)

Ass-dung, internally, diseases of colon. — (Idem.)

Swine-dung, internally, diseases of colon. — (Idem.)

Wild-boar's urine, internally, diseases of bladder ; also used internally in treatment of urinary calculi. — (Idem, c. 60.)

Goat-dung, internally, urinary calculi. — (Idem.)

Goat-dung, externally, ulcers upon the generative organs. — (Idem.)

Wild-asses' urine, diseases of the genitalia, externally. — (Idem, c. 61.)

Goat-urine, diseases of the genitalia, externally. — (Idem.)

Goat-dung, diseases of the genitalia, externally; also, internally, for gout. — (Idem.)

Cow-dung, internally, gout. — (Idem.)

Calf-dung, internally, gout. — (Idem.)

Goat-dung, sciatica, externally. — (Idem.)

Wild-boar's dung, swine's dung, chaps, corns, callosities. — (Idem, c. 62.)

Asses' urine, applied to feet galled by travel. — (Idem.)

Calf-dung, burnt, applied to varicose veins. — (Idem.)

Wild-boar's urine, drunk, for epilepsy. — (Idem, c. 63.)

Horse's urine, drunk, for epilepsy; also for delirium. — (Idem.)

Asses' urine, externally, in paralysis. — (Idem.)

Dung of a new-born ass, internally, yellow jaundice. — (Idem, c. 64.)

Dung of a colt, internally, yellow jaundice. — (Idem.)

Goat-dung, externally, for broken bones. — (Idem, c. 65.)

Cow-dung, burnt, diluted with boys' urine, was rubbed on the toes of the patient in quartan fevers. — (Idem, c. 66.)

Calf-dung, internally, in melancholia. — (Idem, c. 67.)

Swine's dung, internally, consumption. — (Idem.)

Wild-boar's urine, internally, dropsy. — (Idem, c. 68.)

Cow-urine, internally, dropsy. — (Idem.)

Calf-urine, internally, dropsy. — (Idem.)

Bull-urine, internally, dropsy.¹ — (Idem.)

Calf-dung, cow-dung, swine's dung, asses' dung, all applied externally for the cure of erysipelas and purulent eruptions. — (Idem, c. 69.)

Wild-boar's dung, swine's dung, calf-dung, goat-dung, cow-dung, externally, for sprains, indurations, and boils. — (Idem, c. 70.)

Wild-boar's dung, swine's dung, hare-dung, goat-dung, externally, burns of all kinds. — (Idem, c. 71.)

Goat-dung, wild-boar's dung, externally, contusions, bruises, etc. — (Idem, c. 72.)

The Emperor Nero, being of scrofulous tendency, drank the ashes of wild-boar dung in water, to refresh himself. — (Idem.)

Asses' dung, burnt, externally, hemorrhages. — (Idem, c. 73.)

Calf's dung, burnt, externally, hemorrhages. — (Idem.)

Swine's dung, externally, to ulcers. — (Idem, c. 74.)

Goat-dung, externally, to ulcers. — (Idem.)

Swine's dung, fresh, externally, to wounds. — (Idem.)

¹ Bull-urine was given to men, cow-urine to women.

Horse's dung, cow-dung, fresh, externally, to wounds. — (Idem.)

Asses' dung, externally, itch. — (Idem, c. 75.)

Cow-dung, externally, itch. — (Idem.)

Cow-dung, she-goat's dung, applied externally to extract thorns. — (Idem, c. 76.)

Wild-boar's dung, or swine's dung, internally, in inflammation of the uterus. — (Idem, c. 77.)

Asses' dung, in plaster or powder, or as a fumigation, for all uterine troubles. — (Idem.)

Ox-dung as a fumigation, for falling of the womb. — (Idem, lib. xxviii. c. 77.)

Cat's dung, as a pessary, for uterine ulcerations. — (Idem.)

"She-goat's urine, taken internally, and the dung applied topically, will arrest uterine discharges, however much in excess." — (Idem.)

Swine's dung, as an injection, used to cure beasts of burden of voiding blood. — (Idem, c. 81.)

"The oxen in the Isle of Cyprus cure themselves of gripings in the abdomen, it is said, by swallowing human excrement." — (Idem.)

Dung of mice and the ashes of sheep-dung prescribed for dandruff. The dung of a peacock stated to be of great value in medicine, but for what not stated. — (Idem, c. 6.)

Sheep-dung, externally, in serpent bites. — (Idem, c. 15.)

"A most efficient remedy for wounds inflicted by the asp," was for "the person stung to drink his own urine." — (Idem, c. 18.)

"For the bite of all spiders . . . sheep's-dung, applied in vinegar." — (Idem, c. 27.)

Poultry-dung, good as an application for the sting of the scorpion. — (Idem, c. 29.)

"The dung of poultry, provided it is of a red color, is very useful, applied with vinegar." Also for bite of a mad dog. — (Idem, c. 32.)

The urine of a mad dog was believed to be injurious to those people who trod upon it, especially those persons with scrofulous sores. — (Idem.)

"The proper remedy in such cases is to apply horse-dung." — (Idem.)

"Whoever makes water where a dog has previously watered, will be susceptible of numbness in the loins." — (Idem, c. 32.)

"Poultry-dung, but the white part only, . . . is an excellent antidote to the poison of fungi and mushrooms; it is a cure also for flatulence and suffocations, — a thing the more to be wondered at, see-

ing that if any living creature only tastes this dung, it is immediately attacked with griping pains and flatulency." — (Idem, c. 33.)

"The dung of wood pigeons . . . an antidote to quicksilver." — (Idem.)

Sheep-dung, mouse-dung, poultry-dung, applied externally in the treatment of baldness or "alopœcia," so called from "alopex," a fox, "an animal very subject to the loss of its hair." — (Idem, c. 34.)

Mouse-dung, externally, "affections of the eyelids." — (Idem, c. 37.)

Poultry-dung as a liniment for short-sighted persons. — (Idem, c. 38.)

"Peacocks swallow their dung, it is said, as though they envied man the various uses of it." — (Idem.)

Pigeon's dung, externally, fistula. — (Idem.)

Hawk-dung, turtle-dove dung, externally, "albugo." — (Idem.)

Pigeon's dung, externally, imposthumes of the parotid gland. — (Lib. 29, 39.)

Mouse-dung, raven's dung, sparrow-dung. The ashes of these were plugged into carious teeth, and used externally for all tooth troubles. — (Lib. 30, c. 8.)

Mouse-dung, good to impart sweetness to sour breath (idem, c. 9); also prescribed for the stone. — (Idem, c. 8.)

"The dung of lambs before they have begun to graze . . . alleviated . . . affections of the uvula and pains in the fauces. It should be dried in the shade." — (Idem, c. 11.)

Pigeon's dung used as a gargle for sore throat (idem); used internally for quinsy (idem, c. 12); internally for dysentery (idem, c. 19); and externally for the cure of "iliac passion." — (Idem, c. 20.)

Mouse-dung, rubbed on the abdomen, was considered to be a cure for urinary calculi. — (Idem, c. 21.)

The flesh of a hedge-hog, killed before it had time to discharge its urine upon its body, was a cure for strangury; but, it would cause strangury if able to urinate upon itself before death. — (Idem, c. 21.)

Dove-dung, internally, for urinary calculi. — (Idem.)

Swallow-dung, as a suppository and purgative. — (Idem.)

Dog-dung, externally, fissure in ano. — (Idem, c. 22.)

Mouse-dung. — (Idem.)

Pigeon's dung, externally, in fissure in ano. — (Idem.)

Mouse-dung and pigeon's-dung, externally, for tumors. — (Idem.)

Sheep and poultry dung, externally, in gout. — (Idem.)

Ring-dove-dung, liniment for pains in the joints. — (Idem, c. 23.)

The ashes of pigeon's or of poultry dung, externally, for excoriations of the feet. — (Idem, c. 25.)

Mule-urine, sheep and poultry dung, externally, for corns on feet. — (Idem.)

Dog-urine, sheep and poultry dung, externally, for warts of all kinds. — (Idem.)

Swallow-dung, internally, cure of fevers. — (Idem, c. 30.)

Pigeon's, poultry, and sheep dung, externally, boils and carbuncles. — (Idem, caps. 33, 34.)

Sheep-dung, externally, burns. — (Idem, c. 35.)

Pigeon's dung, snuff made of for brain hemorrhage. — (Idem, c. 38.)

Horse-dung, externally, hemorrhages from wounds. — (Idem.)

Sheep-dung, ashes of, externally, carcinoma. — (Idem, c. 39.)

Sheep-dung, externally, wounds and fistulas. — (Idem.)

Mouse-dung, cautery. — (Idem.)

Weasel's dung, ashes of, cautery. — (Idem.)

Pigeon's-dung, ashes of, cautery. — (Idem.)

Poultry-dung and pigeon's dung, externally, old cicatrices. — (Idem, c. 40.)

Sheep's dung, externally, female complaints. — (Idem, c. 43.)

Mouse-dung, externally, swelled breasts. — (Idem.)

EXTRACTS FROM THE WRITINGS OF DIOSCORIDES.

Dioscorides devotes a chapter to the medicinal values of different ordures; a condensation only of the translation need be given, since the original is inserted.

The fresh dung of domestic cattle was considered good for inflamed wounds; for pains at extremity of spine; and, when made into a plaster with oil, it dissolved glandular and scrofulous swellings and tumors. The dung of bulls was a remedy for falling of the womb; when drunk with wine, was frequently given as a remedy in epilepsy; used also in the cure of suppressed menstruation and to expel the fetus in retarded delivery; administered in menstrual hemorrhages; for the alleviation of gout in the feet, serpent bites, erysipelas, etc. Goat and sheep dung was used for the same purposes.

Dried goat-dung, drunk in wine, checked hemorrhages, as did that of asses and horses. The dung of grass-fed kine taken in wine for scorpion bites.

Dove and poultry dung given to break up the old sores and scrofulous swellings.

Hen-dung believed to be almost a specific against the effects of poisonous mushrooms ; it was to be drunk in wine.

Stork-dung was another remedy for epilepsy ; it was also to be drunk in wine.

Vulture-dung expelled the fœtus ; mouse-dung expelled calculi.

Hen-dung, especially that laid during the dog-days, was good for dysentery.

Fresh human ordure was applied to inflamed wounds, and as a plaster in angina ; dog-dung was also used in such cases.

Crocodile-excrement was in high repute as a cosmetic. (See "Cosmetics.") Purchasers were warned that it was frequently adulterated with the excrement of starlings fed on rice.

The urine of the patient himself should be drunk in cases of serpent bites, poisons from drugs, bites of scorpions, mad dogs, etc. For old ulcers, cicatrices, "lepras," an excellent application ; also for ulcerations in the genitalia, sores in the ears, etc.

The urine of an undefiled boy was highly commended for various purposes, especially when triturated with honey in a brass mortar.

The "sediment of urine" (see "Mangeurs de Blanc") was regarded as of great value in erysipelas. Bull's urine was given for the cure of ulcerated ears.

Goat urine expelled stone from the bladder ; likewise, beneficial in dropsy, if drunk daily.

Asses' urine cured mania.

"Dioscoride, lib. ii. cap. 73, et ses commentateurs, P. Andr. Mathicle, fol. 238, et J. Cornarius, comment. cap. 69, fol. m. 134, permettent l'usage des stercoraria pour les paysans, et quand on n'a rien de mieux sous la main, mais ils l'interdisent pour les habitants des villes et les personnages honorati alicujus estimationis. Outre son grand ouvrage, de maître médical on attribue généralement à Dioscoride un traité désigné sous le titre de Euporista, ou des remèdes faciles à procurer." (This was published at Strasbourg and again at Frankfort in 1565 and 1598, respectively, from the original Greek.) "Dans l'Euporista, Dioscoride cherche à établir que les remèdes indigènes valent souvent mieux que ceux qu'on fait venir à grands frais des pays éloignés, et, à ce titre, il mentionne le stercus comme offrant de curieuses ressources." — ("Bib. Scatologica," p. 74.)

"Stercus bovis armentalis recens impositum, inflammationem ex vulneribus lenit ; foliis autem involutum in cineris calentis calefit, atque ita imponuntur. Simili modo fotu applicitum coxendicis cruci-

atus mitigat. Ex aceto vero cataplasmatibus vice impositum duritias, strumas et glandarum tumores discutit. Speciatim vero bovis masculi finus prolapsum uterum suffitu restituit, accensi quoque nidore culices abiguntur. Cuprarum præsertim in montibus degentium, stercus ex vino bibitum regium morbum emendat, cum aromatibus vero potum menses ciet et fœtus ejiciet.

“Siccum, tritumque et cum turre in velleræ appositum, fluxum muliebrem cohibet aliasque sanguinis eruptiones ex aceto compescit. Ustum ac cum aceto aut oxymelite illitum calvitiei medetur. Cum axungia vero cataplasmata adhibitum podagracis opitulatur. Decoctum in aceto, aut vino imponitur ad serpentis morsum, herpetas, erysipelata, parotides. Quin et ischiadicis ustis eorum ope administratur utiliter hunc in modum; in eo cavo, quod est inter pollicem et indicem qua parte pollex committitur, lanæ oleo imbuta prius substernitur, ac dein singulatim imponuntur fimi caprini ferventes pilulæ, donec sensus per brachium ad coxendicem perveniat doloremque mitiget atque adustus talis arabica appellatur.

“At vero stercus ovillum ex aceto impositum sanat epinyctidas, clavos, verrucas, quæ thymi vocantur, et quæ pensiles sunt . . . Aprinum autem aridum in aqua aut vino potum, sanguinis rejectionem sistit ac diuturnum sedat lateris dolorem. Sed ad rapta convulsaque, ex aceto bibitur; luxatis vero exceptum cûrato rosaceo medetur. Porro tam asinorum quam equorum finum, sive crudum sive crematum, addito aceto, sanguinis eruptiones cohibet. Armentinorum vero, qui herba pascuntur, siccum stercus vino imbutum et bibitum a scorpiione ictis magnopere auxiliatur.

“Columbinum quoniam vehementer calefacit ac urit, farinæ crudæ admiscetur, et ex aceto quidem strumas discutit. Carbunculos vero emarginat cum melle, lini seminæ, et oleo tritum, nec non ambustis quoque medetur. Gallinaceum eadem, sed malignis, præstat. Speciatim tamen contra letales fongos et colicos dolores confert, si ex aceto aut vino bibatur. Ciconæ vero finium ex aqua potum comitialibus prodesse creditur. Vulturis suffumigatum fœtum excutere traditur. Murium cum aceto tritum illitumque calvitiei medetur, cum turre vero et mulso potum calculos expellit. Sed et subditæ infantibus muscerdæ alvum ad dejectionem lacessunt. Caninum stercus, quod per caniculæ ardores exceptum fuerit, aridum cum vino aut aqua potum, alvum cohibet. Ad humanum recens cataplasmatibus vice impositum vulnera ab inflammatione vindicat, simul vero glutinat. Siccum autem cum melle perunctum anginosos auxiliari traditur.

"*Stercus crocodilis terrestris mulieribus confert ad colorem faciei nitoremque producendum.*

"Optimum vero quod candidissimum et friabile amyli modo leve in humore statim eliquescit, atque dum teritur, subacidum est et fermentum redolet. Sunt qui id vendant adulterant fimo non dissimili sturnorum quos oryza paverunt. Alii amyllum aut cimoliam subigunt, et adescito, colore, per rarum cribrum, paullatim percolant et siccant, ut vermiculorum specie loco genuini vendant. Ceterum humanum stercus siccum melle subactum, et gutturi impositum sicut et caninum, anginosi opitulari in arcanis, aut turpibus etiam inveniunt." — (Dioscorides, "*Materia Medica*," Latin-Greek edit. of Kuhu, Leipsig, 1829, vol. i., pp. 222 *et seq.*)

"Humanam urinam suum cuique bibere prodest contra viperæ morsus et letalia pharmaca, hydropemque incipientem; prodest etiam ea fovere echinorum marinorum scorpionis itidem marini draconisque ictus. Canina rabidi canis morsibus perfundendis idonea est; lepras quoque et pruritus, nitro addito, exterit. Vetus etiam achoras, furfures, scabiem, fervidasque eruptiones potentius extergit, quin et ulcera depascentia, etiam genitalium coarctet. Purulentis quoque auribus infusa pus condensat, et in malicordio cocta animalcula (quæ forte in aures irrepsirent) ejicit. Pueri innocentis absorta urina anhelantibus confert, cocta vero in aereo vaso cum melle cicatrices albugines et caligines emendat.

"Quin etiam ex ea et aere cyprio idoneum auro ferruminando glutea paratur. Sedimentum urinæ erysipelata illita mitigat. Fervefactum cum cyprino appositumque uteri dolorem demulcet ex utero, strangulata levat, palpebras deterget et oculorum cicatrices expurgat. Taurinum lotium cum myrrha tritum et instillatum dolores aurium lenit.

"Aprinum iisdem viribus præditum est sed peculiariter vesicæ calculos potu comminuit et expellit. Caprinum traditur ad hydropem inter cutem cum spica nardi binisque aquæ cyathis quotidie bibiti urinas ducere et alvum instillatum, vero aurium doloribus mederi. Asinino denique ferunt nephreticos sanari." — (Dioscorides, *idem*, vol. i. pp. 227 *et seq.*)

On p. 228 Dioscorides speaks of the use of a medicine known as "*lynx urine*," but which he says was a variety of amber.

THE VIEWS OF GALEN.

Galen disapproved of the pharmaceutical use of human ordure on account of its abominable smell, but he assented to the employment

of that of domestic cattle, goats, crocodiles, and dogs; he makes known, moreover, that human ordure was taken internally, as a medicine, by very many persons.

"De Copro, Stercore, Copros, sive Copron, sive Apoptema, apellari velis perinde est. Scito autem hanc substantiam vim habere vel maxime digerentem. Verum stercus humanum ob fœtorem abominandum est, at bubulum, caprinum, crocodilorum terrestrium, et canum, ubi in ossibus duntaxat vescuntur neque graviter olet, et multa experientia non tantum nobis, sed et aliis medicis me natu majoribus comprobatum est. Siquidem Asclepiades cui cognomentum erat Pharmaceon, et alia omnia medicamenta collegit, ut multos impleret libros, et stercore ad multos sæpe affectus utitur non modo medicamentis, quæ focis imponuntur commiscens, sed iis quoque quæ intro in os sumuntur."—(Galenii Claudii, "*Opera Omnia*," edit. of Dr. Carl Gottlieb Kuhn, Leipsig, 1826, vol. xii., pp. 290, 291.)

Dog-dung, especially of an animal "sola ossa cani edenda exhibens duobus continuo diebus, ex quibus durum, candidum, ac minime fœtorum stercus proveniebat." Such dog-dung was administered in angina, dysentery, inveterate ulcers, etc., in milk or other convenient menstruum."—(Idem, vol. xii. p. 291.)

The urine of boys was drunk by patients suffering from the plague in Syria, but the year is not given. —(See idem, vol. xii. p. 285.)

Galen did not believe that calculi had the slightest value for effecting a reduction of calculi. —(Idem, lib. xii. p. 290.)

Galen could not bring himself to agree with Xenocrates, who recommended the internal and external employment of sweat, urine, catamenial fluid, and ear-wax in medicine. (Idem, lib. xii. p. 249.) "At potis sudoris aut urinæ aut mensium mulieris abominanda detestandaque est, atque horum in primis stercus, quod tamen scribit Xenocrates, si oris ac gutturis partibus inungatur et in ventrem devoretur, quid præstare valeat.—Scripsit etiam de aurium sordis devorandis. At ego ne has quidem morbo deinceps liber degerem. Atque his etiam magis abominandum puto stercus. Estque probrum gravius homini modesto audire stercorivorum quam fellatorum aut cinædum.

He shows that it was used by some physicians in "psoras," and in "lepras," in the washing of ulcers, affections of the ears and genitalia, as an embrocation and a liniment for scald and scabby head, and by rustics in the alleviation of the pains of sore feet. (Galen, lib. xii. p. 285 *et seq.*)

Galen instances the ordure of a boy, dried, mixed with Attic honey,

given as a cure for consumption. "*Stercus pueri siccum cum melle Attico ad lævorem tritum.*" (Idem, lib. xii. p. 294.) The boy was to be fed on vegetables and well-cooked bread, leavened, made with a little salt, in a small oven (Clibanus, Dutch oven?). The boy was also to be temperate in drink, using only a small quantity of good wine. — (Idem, lib. xii. p. 294.)

Wolf-dung was given in drink, in the intervals between the paroxysms of colic; the white excrement ejected after eating bones was regarded as the stronger, and especially that which had not touched the ground, — a thing not difficult to find, because he says the wolf has the same disposition as the dog; that is, to eject its urine and ordure upon rocks, stones, thorns, and bushes, whenever possible, etc. — (Galen, "*Opera Omnia*," Kuhn's edition, lib. xii. pp. 295-297.)

Goat-dung was useful in the reduction of inveterate hard tumors and boils. Galen used it with great success when made into a cataplasm with barley meal. "We also use it," he adds, "in dropsy" ("*aquam inter cutem*"). It was also employed in "*lepras*," "*psoras*," and other skin affections. It was applied as a plaster in tumors and other swellings and in abscesses of the ear; also in bites of vipers and other wild beasts ("*aliorum bestiarum*"). It was drunk in wine as a cure for the yellow jaundice, and applied as a suppository, mixed with incense, in uterine hemorrhages. But Galen thought that the internal employment at least of such disgusting curatives is of questionable expediency, especially when more agreeable remedies may be available. This objection would, of course, apply with special force in cities, although he admits that travellers, country people, and those suffering from poison, must use the first thing within reach (vol. xii. p. 299). Bull-dung was regarded by Galen as of value in the cure of the stings of bees and wasps (see notes on the same subject taken in the State of New Jersey). In Mysia, a country near the Hellespont, physicians ordered it to be smeared on the skins of dropsical patients in the sun. The same treatment was supposed to help consumptive patients, if the dung was that of grass-fed stock; but he repeats that such remedies are better adapted for rustics than for the inhabitants of cities (lib. xii. p. 301).

Sheep-dung was used for all kinds of warty and excrescential growths externally, either raw or burnt, and in the latter case was often mixed with, or superseded by, goat-dung (lib. xii. p. 302).

The dung of wild doves was preferred to the excrement of the domestic pigeon; administered internally, generally mixed with the seed

of the nasturtium, in all inveterate pains affecting sides, shoulders, skull, loins, kidneys, in vertigo, head-aches, etc. It was used just as frequently in cities as in rural communities (lib. xii. p. 302).

Mouse-dung seems to have been extensively used in medical practice, although Galen ridicules the fact, and does not mention the purposes of its employment (lib. xii. p. 307).

The dung of barn-yard fowl was used for the same purposes as dove-dung. Some people thought that the dung was more efficacious if dropped by a fowl that had been stuffed with mushrooms. Galen here takes occasion to remark that all animals must differ in the character of their excreta as they do in their food ; the same animal, by a change of habitat, and consequent change of food, must cause a perceptible variation in the qualities of its excrement (lib. xii. p. 304). Galen flatly expresses his disbelief in the medicinal value of the excrement of the goose, stork, eagle, or hawk, although he admits that they were used internally by many practitioners of good standing, in difficulties of the respiratory organs ; but he says these same authorities are wont to extol the merits, in the treatment of the same diseases, of such absurd remedies as night-owl's blood, human urine, etc. — (Galen, lib. 12, p. 305.)

Lucian, in his treatise upon remedies for the cure of gout ("tragopodagra"), makes mention in several places of excrementitious remedies, — as, for example, "dung of mountain-goat and man,"

"And Bones, and Skin, and Fat, and Blood, and Dung,
Marrow, Milk, Urine, to the fight are brought."

— (Edition of William Tooke, F. R. S., London, 1820, vol. i. p. 741.)

SEXTUS PLACITUS.

This author is supposed to have lived in the beginning of the fourth century after Christ.

The edition of his work, "*De Medicamentis ex Animalibus*," was printed in Lyons, in 1537. The pages are not numbered, and the citations are consequently by chapter.

Goat-urine was given as a drink to dropsical patients ("*De Capro*"). This urine was also drunk by women to relieve suppression of the menses.

For inflammation of the joints, goat-dung was dried and applied as a fine powder ; for colic, a fomentation of hot goat-dung was applied to the abdomen ; for serpent bites it was applied as a plaster, and also

drunk in some convenient liquor. For tumors goat-dung was to be applied externally.

For ear troubles goat-urine was applied as a lotion. "Ad aures nimis bene audientium, Apri lotium in nitro repositum tepefactum, auribus instillatur audire facit" ("De Apro").

For burns, whether by water or fire, burnt cow-dung was to be sprinkled on. "Ad combusturam sive ab aqua, sive ab igne factam, Taurinus finus combustus et aspersus sanat" ("De Tauro").

"Ad profluvium mulierum, Taurus ibicunque pastus fuerit folia ulmi arboris de fimo ipsius facias siccari et terre in pollinem tenuissimum, mitte ipsum in carbones in quodam testo, et deponas in vaso et sedeat mulier quae patitur encatesma diligenter co-operta (well covered up), et sanabitur ut mireris" ("De Tauro").

Testo means the "lid of a pot;" *encatesma* means a "sitting-bath;" and the sense seems to be that the woman was to take the dung of a bull which had been eating the leaves of an elm-tree, dry, reduce to fine powder, throw on hot coals on the lid of a pot, and let the woman sit on this, well covered up, and have a steam-bath.

For all kinds of tumors, as well as for every kind of head-ache, the dung of elephants was applied externally. "De Elephantis.") He makes no mention of the use of asses' dung, but strongly recommends the use of the excrement of the horse. "Ad sanguinem e naribus profluentem, equi sterces siccum et aspersum, sanguinem fluentem retinet, maxime naribus suffumigatum." He also recommends the use of horse-dung externally in the treatment of ear-ache, and for retention of the menses internally. "Ad aurium dolorem, sterces equi siccum et rosaceo succo liquefactum et collatum, auribus instillatur aurium dolorem perfecte tollit. . . . Ad ventrem non fluentem, nimiumque tumescentem, Equi sterces aqua liquefactum, et percolatum, postea bibitum, mox faciet egressum." — ("De Equo.")

Cat-dung was used in the eradication of dandruff and of scald in the head; for excessive after-birth hemorrhages in the form of fumigation or bath. For the relief of a person who had swallowed a bone or thorn, his fauces were rubbed with cat-dung. For the relief of the quartan ague, hang cat-dung and cow horn or hoof to the patient's arm; after the seventh attack the fever will leave him for good. — (Idem. See under "Witchcraft," extract from Etmüller, p. 267.)

Vulture-dung, mixed with the white dung of dog, cured dropsy and palsy, especially if from a vulture which had lived on human flesh; to be taken internally. — ("De Vulture.")

The urine of a virgin boy or girl was an invaluable application for affections of the eyes; also for stings of bees, wasps, and other insects. As a cure for elephantiasis, the urine of boys was to be drunk freely. "*Ad elephantiam puerorum, pueri lotium si puer biberit liberaliter.*"

The crust from human urine was useful in burns and in bites of mad dogs. (*Idem.* See notes on the Parisian "*Mangeurs du blanc.*") For cancers man's ordure was burnt and sprinkled over the sore places; for tertian fevers, it had to be that of the patient himself; and to be held in the left hand while burning, then placed in a rag, and tied to his left arm before the hour of the recurrence of the fever. "*Ad tertianas, ipsius ægri sterces sinistra manu sublatum comburunt et in sinistro brachio ante horam accessionis suspendunt.*" — ("*De Puello et Puella Virgine.*")

Hawk-dung, boiled in oil, made an excellent application for sore eyes. "*De Accipitro.*") Crow-dung was given to children to cure coughs, and was placed in carious teeth to cure tooth-ache. — ("*De Corvi.*")

Dove-dung was applied externally to tumors. — ("*De Columba.*")

"SAXON LEECHDOMS."

In "*Saxon Leechdoms,*" is arranged the medical lore of the early centuries of the Saxon occupancy and conquest of England.

"Alexander of Tralles (A. D. 550) . . . guarantees, of his own experience and the approval of almost all the best doctors, dung of a wolf with bits of bone in it" for colic. — ("*Saxon Leechdoms,*" lib. i. c. 18.)

"Bull's dung was good for dropsical men; cow's dung for women" (vol. i. c. 12, quoting Pliny, lib. xxviii. c. 68).

Swine-dung was applied to warts (vol. i. p. 101).

"For bite of any serpent, melt goat's grease and her turd and wax, and mingle together; work it up, so that a man may swallow it whole" (vol. i. p. 355, quoting Sextus Flacitus).

For dropsy, "Let him drink buck's mie . . . best is the mie. . . . For sore of ears, apply goat's mie to the ear. . . . Against churnels, mingle a goat's turd with honey . . . smear therewith."

"For thigh pains," "for sore joints," "for cancer," "against swellings," "tugging of sinews," "carbuncle," "smear with goat's dung" (vol. i. pp. 355, 357).

"For every sore . . . let one drink bull's urine in hot water; soon

it healeth. . . . For a breach or fracture . . . lay bull's dung warm on the breach. . . . For waters burning or fires, burn bull's dung and shed thereon." (*Idem*, p. 369.) The word "shed" as here employed means to urinate, apparently.

"For swerecothe or quinsy," the Saxons used an external application of the white "thost" or dung of a dog which had been gnawing a bone before defecation (vol. ii. p. 49).

"Against shoulder pains, mingle a tord of an old swine." — (*Idem*, p. 63.)

"If a sinew shrank . . . take a she-goat's tord" (p. 69).

"Against swelling, take goat's treadles sodden in sharp vinegar" (p. 73).

For a leper, boil in urine hornbeam, elder, and other barks and roots. — (*Idem*, p. 79.)

"A wound salve for lung diseases," — of this the dung of goose was an important ingredient (p. 93).

"A salve for every wound. . . . Collect cow-dung, cow-stale, work up a large kettle full into a batter, as a man worketh soap, then take apple-tree rind" and other rinds mentioned, and make a lotion (p. 99).

For felons, leg diseases, and erysipelas, calf and bullock dungs were applied as a fomentation (p. 101).

"For a dew worm, some take warm, thin ordure of man, they bind it on for the space of a night" (vol. ii. p. 125).

"Against a burn, work a salve; take goate turd," etc. — (*Idem*, p. 131.)

"For a horse's leprosy . . . take piss, heat it with stones, wash the horse with the piss so hot." — (*Idem*, p. 157.)

"If there be mist before the eyes, take a child's urine and virgin honey; mingle together. . . . Smear the eyes therewith on the inside" (vol. ii. p. 309).

"For joint pain . . . take dove's dung and a goat's turd," externally (vol. ii. p. 323).

"For warts . . . take hound's mie and a mouse's blood," externally. — (*Idem*, p. 323.)

"Against cancer . . . take a man's dung, dry it thoroughly, rub to dust, apply it. If with this thou were not able to cure him, thou mayst never do it by any means." — (*Idem*, p. 329.)

"Si muliebra nimis fluunt . . . take a fresh horse's tord, lay it on hot glades, make it reek strongly between the thighs, up under the raiment, that the woman may sweat much." — (*Idem*, pp. 332, 333.)

"A smearing for a penetrating worm" was made with "two buckets of bullock's mie," among many other ingredients. — (Idem, p. 333.)

"If a thorn or a reed prick a man in the foot, and will not be gone, let him take a fresh goose tord and green yarrow . . . paste them on the wound." — (Idem, p. 337.)

"Against a penetrating worm . . . smear with thy spittle . . . and bathe with hot cow-stale" (vol. iii. p. 11).

"Against a warty eruption. . . . Warm and apply the sharn or dung of a calf or of an old ox." — (Idem, p. 45.)

"An asses tord was recommended to be applied to weak eyes." — (Idem, p. 99.)

AVICENNA.

A careful examination of a Latin edition of "Averrhoes," Lyons, 1537, discovered nothing in regard to the medicinal use of human or animal egestæ.

But, on the contrary, the works of Avicenna teem with such references; there is hardly a page of the index to his portly volumes that does not contain mention of stercoraceous remedies. Out of all this abundance these selections will show that the Arabian physicians made of such medicaments the same free use as their older brethren of the subverted Roman empire: "Matricem mundant," "Urina" (vol. i. p. 330, a 38); "Sanguinem sistunt," "Urina hominis cum cinere vitis" (vol. i. p. 466, a 26); "Scabei," "Scabiei ulcerosa conferunt," "Urina" (vol. i. p. 330, a 8); "Sciatica conferunt," "Stercus vacarum et Caprarum cum adipe porci" (vol. i. p. 390, a 5); for scrofula "Stercus Caprarum" (vol. i. p. 388, a 11); "Lentiginibus conferunt," "stercus lupi" (vol. i. p. 387, b 66); "Erysipelati conferunt," "fex urinæ hominis" (vol. i. p. 330, a 11); while for the same disease, as well as for "excoriationi conferunt" were prescribed "stercus cameli et pecudis" (vol. i. p. 388, a 11); "Urinæ fex," (idem, vol. i. p. 408, a 39); "Lapidi conferunt," "Stercus muris cum thure" (vol. i. p. 390, b 2); again (vol. i. p. 361, a 60); "urina porci" (vol. i. p. 408, a 66).

Lizard-dung an ingredient in a collyrium (vol. ii. p. 322, a 34).

"Matricis dolores conferunt," "urina hominis decocta cum porris" (vol. i. p. 408, b 1). Goat-dung "Matrici fluxui conferunt," "stercus caprarum siccum" (vol. i. p. 388, a 15, and vol. i. p. 390, a 50).

For epilepsy, one of the remedies was "stercus cameli" (vol. i. p. 338, a 6). Yellow jaundice, "Icteritias conferunt," "urina mulieris cum aqua mellis" (vol. i. p. 330, a 31); for burns, "Stercus caprarum et ovium cum aceto" (vol. i. p. 389, b 62). Another remedy

for burns was, "*Stercus columbarum cum melle et semine lini*" (vol. i. p. 389, b 65).

"*Impetigine conferunt*," "*urina*" (vol. i. p. 330, a 10); for ulcers, "*Stercus cameli et pecudis*" (vol. i. p. 388, a 9); also for the same, "*stercus canis ab ossibus cum mellis*" (vol. i. p. 390, a 2); also "*urina asini et hominis*" (vol. i. p. 408, a 31); human urine again prescribed for ulcers, in vol. i. p. 231, 646.

"*Stercoris muris decoctio*" alleviated difficulty in urination (vol. i. p. 361, a 63). "*Impetigine conferunt*," "*stercus columbarum et turdorum*" (vol. i. p. 390 a 1).

As a cure for the wounds of Armenian arrows (9, "*De sagittis Armenis*") Avicenna says: "*Jam parvenit ad me quod potus stercoris humani est theriaca ad illud*" (vol. i. p. 305, a 5). ("*Theriaca*" means literary a remedy for the bites of serpents and wild beasts, but in the present case it is used to mean a panacea.)

For poisonous bites, "*ad morsum viperarum et omnium venenosorum animalium*" "*et iterum quæ bonæ sunt*" ("*Medicinæ*" understood) "*est stercus caprinum commixtum in vino et detur in potu*" (vol. ii. p. 227, b 36); "*Urina hominis*" also prescribed for the same in the same paragraph. The dung of goats, mixed with pepper and cinnamon, a provocative of the menses (vol. i. p. 390, a 49).

The dung of mice prescribed internally for the cure of running from the ears, to aid in the expulsion of the after-birth, calculus, poison of venomous reptiles, etc. (vol. i. pp. 361, a 58).

"*Matrici fluxui conferunt*," "*stercus caprarum siccum*" (vol. i. p. 388, a 15, and vol. i. pp. 390, a 50).

"*Spasma conferunt*," "*Urina*" (vol. i. p. 408, a 40); "*Splenis duritie* conferunt," "*Stercus caprarum*" (vol. i. p. 30, a 50.)

"*Ano conferunt*," "*Urina infantium lactentium*" (vol. i. p. 408, a 55.)

"*Stercus pecudis adustum cum aceto*" was prescribed for the bite of a mad dog (vol. i. pp. 388, a 21); "*Urina cum nitro*" (idem, vol. i. p. 408, b 7), "*Canis stercus pro anginæ curatione*" (vol. i. p. 616, a 59).

MISCELLANEOUS.

Marco Polo mentions that in the province of Carazan (Khorassan?), the common sort of people carried poison about their persons, so that if taken prisoners by the Tartars, they might commit suicide; but the Tartars compelled them to swallow dog's dung as an antidote. — (See Marco Polo, in Pinkerton, vol. vii. p. 143.)

"In cases of sickness, the Eskimo of Cumberland Sound are not allowed to clean their chambers before sunrise."—("The Central Eskimo," Boas, p. 593.)

The writings of the best medical authorities for the first two centuries after the discovery of the art of printing teem with copious dissertations upon the value of these medicaments in all diseases, and as potent means of frustrating the maleficence of witches; the best of these writings will be selected and arranged in chronological order.

"A dram of a shepe's tyrdle,
And good Saint Francis gyrdle,
With the hamlet of a hyrdle,
Are wholsom for the pyppe."

(Brand, "Pop. Ant." vol. iii.

p. 311, art. "Rural Charms," quoting Bale, "Interlude concerning the Laws of Nature, Moses, and Christ." 4to. 1562.)

"An oyle drawne out of the excrements of Chyldren" and "An Oyle drawne out of Manne's Ordure," described as medicines in the "Newe Jewell of Health," by George Baker, Chirurgeon, London, 1576 (Black Letter), pp. 171, 172, was prescribed for fistula and several other ailments.

"Water distilled from Manne's Ordure" was given internally for the falling sickness, dropsy, etc. . . . There was also an "Oyle drawne out of the Excrements of Chyldren," as well as one from "Manne's Ordure" (see "Doctor Gesnerus, faithfully Englished," p. 76). In the same work we read of "Water of Doue's dung . . . which helpeth the stone" when taken internally. — (Idem p. 77.)

Paracelsus seems to be entitled to more credit than is generally accorded him; he was a chemist, in the early stages of that science, groping in the dark, but he was not the mere quack so many are anxious to make him out to have been. He condemns the old practice of medicine:—"The olde Physitians made very many medicines of most filthy things, as of the filth of the eares, sweat of the body, of women's menstrues (and that which it is horrible to be spoken), of the Dung of man and other beastes, spittle, urine, flies, mice, the ashes of an owle's head, etc. . . . Truly, when I consider with myself the pride of these fooles which disdaine this metalline part of Physicke (which after their manner, contumeliously they call Chymerican, and therefore can neither helpe their owne nor many other diseases), I call to mind a storie . . . of Herachio Ephesio, which being sick of a leprosie, despising the help of Physitians, anoynting himself over with

cow-dung, set himself in the sun to drie, and falling asleepe was torn to pieces by dogges."— (Paracelsus, "Experiments," translation of 1596, p. 59.)

This last statement should be compared with the description of the suicides of the East Indian fanatics, given under "Ordeals and Punishments."

Dr. Fletcher, United States Army, states that in old medical practice in England, from the time of Queen Elizabeth down to comparatively modern days, consumptive patients were directed to inhale the fumes of ordure. "Some physicians say that the smell of a jakes is good against the plague."— ("Ajax," p. 74.)

Urine was one of the ingredients from which Paracelsus prepared his "Crocus or Tincture of Metals."— (See "Archidoxes," English translation, London, 1661, p. 59.)

Further on he says, "The salt of man's urine hath an excellent quality to cleanse; it is made thus," etc. (p. 74). He also says: "Man's dung, or excrement, hath very great virtues, because it contains in it all the noble essences, viz. : of the Food and Drink, concerning which wonderful things might be written."— ("Archidoxes," lib. v. p. 74.)

"To distill Oyle of a Man's Excrements, . . . Take the Dounge of a young, sanguine child, or man, as much as you will. . . This helpeth the Canker and mollifieth fistulas; comforteth those that are troubled with Alopecia."— ("The Secrets of Physicke," London, 1633, p. 98.)

"For any manner of Ache . . . a plaister of Pigeon's dung" (see "A Rich Storehouse or Treasurie for the Diseased," Ralph Blower, London, 1616, black letter, p. 3); also, "Hen's Dung" (idem, p. 4); to provoke urine, a plaster of Horse dung was applied to the patient. (p. 25.)

"For spitting of blood . . . the dung of mice was drunk in wine (idem, p. 29); for sore breasts of women, a plaster of Goose dung (p. 33); "for Burns and Scalds . . . a Plaster of Sheepe's dounge," (p. 38); also, "the Dounge of Geese" (p. 39).

"For deafe ears . . . the pisse of a pale Goat" was poured into them (p. 67); horse-dung was used as a face-lotion (p. 106); for the bloody flux soak the feet in water in which "Doue's Dounge has been seethed" (p. 119). For the gout, "Stale pisse" was an ingredient in a composition for external application (p. 119). For stitch in the side and back "Pigeon's Dounge" was use externally (p. 172); for sciatica, "Oxe-Dounge and Pigeon's Dounge" in equal parts, were applied as a plaster (p. 173). Cow-dung was used internally in hydrocele ("The

Chyrurgeon's Closet," London, 1632, p. 38) ; The urine of boys was used as an application to ulcers in the legs (*idem*, p. 24) ; again, the urine of immaculate boys was employed for the cure of all inveterate ulcers (p. 27) ; goat-dung was applied externally for the cure of auricular abscesses and for ulcers (pp. 35 and 42) ; cow-dung and dove-dung were used in the same manner (*idem* p. 42) ; dove-dung was also used externally in the treatment of sciatica (p. 48), and for "Shingles" (*idem* p. 51). Goat-dung, externally, for tumors (p. 49) ; goose-dung, externally, for canker in the breasts of women (p. 50) ; swallow-dung, externally, for angina ; chicken-dung for the same (p. 58) ; cow-dung, externally, for tumors in the feet (p. 56) ; cow and goat dung, externally, in dropsy (p. 222) ; and many others throughout the volume.

In a black letter copy of "The Englishman's Treasure," London, 1641, is given a cure for wounds, in which it is directed "To wash the wounde very cleane with urine."— (In Toner Collection, Library of Congress, Washington, D. C.)

To restrain excessive menstrual flow, apply hot plasters of horse-dung, between the navel and the privy parts. — (See "The Englishman's Treasure," by Thomas Vicary, Surgeon to King Henry VIII., Queen Mary, and Queen Elizabeth ; London, 1641, p. 184 ; this little volume contains nothing else of value to this work.)

Horse-dung was used internally for pleurisy ("Secrets in Physicke," by the Comtesse of Kent, London, 1654, pp. 26, 27) ; goose-dung, internally, for yellow jaundice (*idem*, p. 37) ; "Hound's Turd," externally, "to cure the bleeding of a Wound" (*idem*, p. 46) ; peacock's dung, internally, for the falling sickness or convulsions (*idem*, p. 56) ; "The patient's own water," externally, for pains in the breast (p. 64) ; pigeon's dung, both internally and externally, in child-birth pains (p. 68) ; goose-dung, externally, for burns (p. 96) ; hen's dung, externally, for burns (p. 152) ; and for sore eyes (p. 174) ; "stale urine," externally, for sore feet (p. 163).

"The stale of a cow and the furring of a chamber-pot" to be given, applied locally and externally, for scald head ("Most excellent and most approved Remedies," London, 1652, p. 80). "The Urine of him that is sick," externally, for stitch in the side (p. 115) ; goose dung, externally, for canker in woman's breast (p. 129) ; "Urin of a Man Child (he beeing not aboue 3 years of age)" was a component in a salve for the king's evil (p. 132). For patients sick of the plague, "Let them drink twice a day a draught of their own urin" (p. 143).

"A certain countryman at Antwerp was an example of this, who, when he came into a shop of sweet smells, he began to faint, but one presently clapt some fresh smoking horse-dung under his nose and fetched him to again." — (Levinus Lemnius, "The Secret Miracles of Nature," Eng. translation, London, 1658, p. 107, speaking of the effects of sweet and nasty smells upon different persons.)

"The urine of a Lizard, . . . the dung of an elephant," were in medical use, according to Montaigne ("Essays," Hazlitt's translation, New York, 1859, vol. iii. p. 23; art. "On the Resemblance of Children to their Parents"). Also, "the excrement of rats beaten to powder" (*idem*). The above remedies were for the stone.

Doctor Garrett mentions "water of amber made by Paracelsus out of cow-dung," and gives the recipe for its distillation, as well as for that of its near relative, "water of dung," the formula for which begins with the words, "Take any kind of dung you please."¹

The work of Daniel Beckherius, "*Medicus Microcosmus*," published in London, in 1660, is full of the value of excrementitious remedial agents.

Urine alone was applied to eradicate lice from the human head; but a secondary application of dove's dung was then plastered on (p. 62). Urine was drunk as a remedy for epilepsy, used as an eye-wash, and various other ocular affections, and dropped into the ears for various abscesses and for deafness (pp. 63, 64).

A lotion of one's own urine was good for the palsy; but where this had been occasioned by venery, excessive drinking, or mercury, the urine of a boy was preferable (p. 64). A drink of one's own urine, taken while fasting, was commended in obstructions of the liver and spleen, and in dropsy and yellow jaundice (*idem*); but some preferred the urine of a young boy (p. 65). For jaundice the remedy should be drunk every morning, and the treatment continued for some time (*idem*).

For retention of urine the remedy was to drink the urine of a young girl (p. 66). Urine was drunk as a remedy for long-continued constipation (*idem*); for falling of the womb stale urine was applied as a fomentation (*idem*); for hysteria human ordure and stale urine were applied to the nostrils (*idem*); the urine of the patient was drunk as a cure for worms (*idem*); urine was used as a wash for chapped hands, also for all cutaneous disorders (*idem*); also for "*ficus ani*" (p. 67). For gout

¹ Garrett, *Myths in Medicine*, New York, 1884, pp. 143, 149.

in the feet the patient should bathe them in his own urine, also for travel sores, as he would then be able to resume his journey next day (*idem*).

One's own urine was drunk as a preservative from the plague. Beckherius says he knew of his own knowledge that it had been used with wonderful success between 1620 and 1630 for this purpose.

Urine was recommended as a drink in lues veneris; while a sufferer from cancer was bathed in his own urine and Roman vitriol; ulcers were likewise bathed with the patient's own urine (p. 68). Urine was applied as a lotion to wounds, bruises, and contusions (p. 69). Beckherius recites the case of a laborer who was buried under a falling mass of earth, in 1522, but, being protected by some obstruction, nourished himself for seven days on his own urine. Besides being used alone in the above cases, urine entered as an ingredient into medicines for old sores (p. 72); against the growth of "wild hairs," ocular affections, throat troubles as gargle (p. 73), affections of the spleen (p. 74). The urine of a boy was to be employed in paralysis and in erysipelas (*idem*); the urine of a boy was also prescribed in suppression of the menses, and the urine of a man in podagra (75). The urine of undefiled boys entered into the composition of *aqua opthalmica*, and was used externally in rheumatism of the legs (p. 74).

The urine of boys was used as an ointment in some fevers; also as a fomentation in tympanitis, as a plaster in dropsy, for gangrene and podagra, in various clysters, in the cure of calculi and cachexy (pp. 78, 79); in some of the plasters cow and dove dung also entered. For the treatment of anasarca there was a "spagyric preparation of urine." To make the spirit of urine by distillation, some took the urine of a healthy man, some that of a wine-drinking boy of twelve years (pp. 81, 82). This spirit was administered in lung troubles, in dropsy, suppression of the menses, all kinds of fevers, retention of urine, calculus, etc. (p. 85); also in eye troubles, strangury, diabetes, podagra, catarrh, melancholia, phrensy, cardialgia, syncope, dysentery, plague, malignant fevers (p. 86).

The "spirit of urine" was again distilled with vitriol to make an anti-podagric remedy (85).

Salt of urine was made by distilling the urine of a boy and collecting the saline residuum; it was administered in cardiac troubles and to aid in the expulsion of the dead fœtus; from it were made various empirical remedies, — moon salt, the salt of Jove, salt of Mercury, spirit of Orion, mercurius microcosmicus, which were used for all kinds of

physical infirmities (p. 87). The quintessence of urine was distilled from the urine of a strong, healthy, chaste man of thirty years, who had drunk heavily of wine for the occasion; by another authority it is recommended that this happen while the sun and Jupiter may be in 'Piscibus.' This was used in calculi of the kidneys and bladder and in all ulcerations of those parts; externally, as a lotion in gonorrhœa and external ulcers of the private parts, for wounds and lesions of all sorts, urinary troubles, worms, putrid fevers, and as a preservative against the plague, for hard tumors, etc. (p. 97).

An "anti-epileptic spirit" had the urine of boys as its main component (p. 95); there was an "anti-epileptic extract of the moon" (p. 96); an "anti-podagric medicament" of the same components almost. A "panacea solaris" had for its principal ingredient the urine of a boy who had been drinking freely of wine (p. 97).

HUMAN ORDURE.

Beckherius cites a case where its use for three days cured a man of yellow jaundice; dried, powdered, and drunk in wine, it cured febrile paroxysms (p. 112); it was recommended to be that of a boy fed for some time on bread and beans.

To smell human ordure in the morning, fasting, protected from plague (pp. 112, 113).

He also gives the mode of preparing "zibethum," or "occidental sulphur" (p. 116).

As a cure for angina a mixture was prescribed containing the white dung of dogs; also human ordure, swallow-dung, licorice, and candy (p. 113). In cancer, human ordure was applied as a plaster, mixed with turpentine, tobacco, antimony, powdered litharge, powdered crabs, etc. (pp. 113, 114).

He also gives the formulas for preparing *aqua* and *oleum ex stercore humano* (p. 114). In other places the use of ordure and urine in medicine is mentioned as a matter of course. — (See p. 274; also under the headings of "Ass," "Mouse," "Horse," etc.; again, pp. 114, 192 *et seq.*)

Beckherius gives a list of a number of preparations which to our more enlightened view of such things must appear trivial, and need not be repeated here in detail,—such as one for "extracting the vitriol of metals," etc. Into the preparation of all these human urine entered.

Potable gold was made with a menstruum of spirits of wine and

human urine, half and half (pp. 100–102); there was an “oil of sulphur” prepared from human urine (103); there was a “precipitate of mercury and urine” (idem); there was finally a *ludum urinæ*, the residuum after the distillation of the *aqua* or the *spiritus* respectively, which was prescribed medicinally in the same way as these were (pp. 109, 110).

Von Helmont called the salt obtained by the distillation of human urine “duelech.” (See “Oritrike, or Physicke Refined,” John Baptist von Helmont, English translation, London, 1662, pp. 847–849.) This was the name generally given by Paracelsus to the stone in the bladder. Von Helmont instances a cure of tympanitis or dropsy by a belly-plaster of hot cow-dung, and adds, “Neither, therefore, doth Paracelsus vainly commend dnngs, seeing that they are the salts of putrefied meats” (p. 520).

“Petraeus (Henricus) Nosolog. Harmon. lib. i. dissertat. 13, p. 252, et Joh. Schæderas, pharmacop. med. chym. lib. v. p. 829, “stercus siccatum tritum et cum melle illitum ad anguinam curandam magni usus esse dicunt.” — (“Bib. Scatologica,” p. 84.)

The ponderous tomes of Michael Etmuller contain all that was known or believed in on this subject at the time of their publication, A. D. 1690. He gives reasons for the employment of each excrement, solid or liquid, human or animal, which need not be detailed at this moment.

Human urine. “Urina calif. exsiccat, resolvit, abstergit, discutit, mundificat, putredini resistit, ideoque usus est præcipue intrinsecus in obstructione epatis, lienis, vesicæ, biliaræ, pestis preservatione, hydropæ, ictero. . . . Extrinsecus siccatur scabiem, resolvit tumores, mundificat vulnera etiam venenata, arcet gangrænam, solvit alvum (in clysmata) abstergit furfures capitis. . . . compescit febriles insullus (pulsui applicata) exulceratas anres sanat (instillata pueri urina) oculorum tubedine subvenit (instillata) artuum tremorem tollit (lotione) uvulæ tumorem discutit (gargas), lienis dolores sedat (cum cinere cataplasmata).”

From the urine of a wine-drinking boy, “urina pueri (ann. 12) vinum bibentis,” distilled over human ordure, was made “spiritus urinæ” of great value in the expulsion of calculi, although it stunk abominably, “sed valde fœtet.” This was employed in the treatment of gout, asthma, calculi, and diseases of the bladder. (Etmuller, “Schroderi Diluc.,” vol. ii. p. 265.) There are several other methods given of obtaining this “spiritus urinæ per distillationem.”

Then there was a "*spiritus urinæ per putrefactionem*." To make this, the urine of a boy twelve years old, who had been drinking wine, was placed in a receptacle, surrounded by horse-dung for forty days, allowed to putrefy, then decanted upon human ordure, and distilled in an alembic, etc. There were other methods for making this also, but this one will suffice. The resulting fluid was looked upon as a great "*anodyne*" for all sorts of pains, and given both internally and externally, as well as in scurvy, hypochondria, cachexy, yellow and black jaundice, calculi of the kidneys and bladder, epilepsy, and mania.

"Potable gold" was made from this spirit. "*Idem spiritus optime purificatus (scil. aliquoties) in aqua pluvia solvendo et distillando cumque spiritus vini analytice unitus solvit aurum, unde aurum potabile*" (vol ii. p. 266).

A urine bath was good for gout in the feet. A drink of one's own urine was highly praised as a preservative from the plague. "*Urinæ: Potus urinæ propriæ laudatur in preservanda et curanda peste.*" Such a draught was also used by women in labor. "*Urinæ hausta a mulieribus parturientibus partum faciliat.*" Clysters of urine were administered in tympanites, or dropsy of the belly. Urine was applied in ulcerations of the ears.

Saltpetre was formerly made from earth, lime, etc., saturated with human urine, ordure, etc.

The "*spiritus urinæ*" obtained by the distillation of urine, removed obstructions from the bladder, meatus, etc., expelled calculi, and was a diaphoretic and an anti-scorbutic; it was likewise used in the cure of hypochondria, cachexy, chlorosis, etc., taken internally.

From the distillation of vitriol and urine an anti-epileptic medicine was obtained. — (*Idem*, vol. ii. p. 271.)

From the above-mentioned "*spiritus urinæ per distillationem*" was prepared "*magisterium urinæ seu microcosmi*," useful in cases of atrophy; it also prevented the pains of the stone, if taken monthly before the new moon. — (*Etmuller*, vol. ii. p. 266.)

Human ordure. "*Stercus (carbon humanum Paracelsi, aliis sulph. occiden.) emollit, maturat, anodynum est. Ea propter magni usus ad mitigandum dolores incantatione introductos (impositum) ad anthraces pestilenciales maturandos, ad phlegmonem, v. g. gutturi seu anginam curandam (siccatum, tritum et cum melle illitum) ad inflammationem vulnere arcendam. Quin et intrinsecus a nonnullis adhibetur in angina (crematum et potui datum), in febribus ad paroxysmos prof-*

ligandos (eodem modo propinatum dos. 32), in epilepsia, quam stercus primum infantuli siccatum et pulverisatum, et ad complures dies exhibitum, radicitus evelire aiunt" (vol. ii. p. 266).

He alludes to the "aqua" and the "oleum" "ex stercore distillatum," both used in ophthalmic diseases, as cosmetics to restore color to the face, to restore and produce hair, to cure tumors and fistulas, and remove cicatrices, and for the cure of epilepsy. "Interne prodesse aiunt comitialibus et hydropicis, lapidemque renum et vesicæ pellere, morsibusque canis rabidi, venenatorumque animalium subvenire." The "oleum ex stercore" had to be prepared from the ordure of a young man, not a boy, "juvenis, non pueri" (vol. ii. p. 266).

Etmuller tells the same story we have already had from so many other sources, in regard to the medicinal properties ascribed to human ordure. It was looked upon as a valuable remedy, applied as a poultice for all inflammations and suppurations, carbuncles and pest-buboes, administered for the cure of bites of serpents, and all venomous animals. It should be taken raw, dried, or in drink. It was the only specific against the bites of the serpents of India, especially the "nappellus," whose bite kills in four hours unless the patient adopts this method of cure. It was considered a specific against the plague, and of great use in effecting "magico-magnetic" or "sympathetic or transplantation" cures. It was also in high repute for baffling the efforts of witches.

Water distilled from ordure was good for sore eyes, especially if the man whose ordure was used had been fed only on bread and wine. This was administered internally for dropsy, calculus, epilepsy, bites of mad dogs, carbuncles, etc." (vol. ii. p. 272).

"Zibetta occidentalis nihil est aliud quam stercus mediante digestionem ad snavolentiam redactum, qua Zibettam mentitur; vid. Agricola," vol. ii. p. 266.

Of the value of this "zibethum" Etmuller quotes from an older authority: "Rosencranzerus in Astron. inferior (p. 232), dicit quod zibethum humanum . . . si illinatur parti genitali mulieris fœmina attrahat fœtum et precaveatur abortus" (vol. ii. p. 272).

Human ordure, containing as it does "an anodyne sulphur, . . . destructive of acids," was supposed to be beneficial in burns, inflammations, and as a plaster for the dispersal of plague buboes. . . . In insulis Botiis dictis, gens quoddam serpentis repiriri, cujus morsum mors sequatur, nisi stercus proprium demorsi mox assumatur. Tandem aqua stercoreis humani cosmetica, ab aliis ophthalmica censetur

sic ut et ejusdem oleum contra cancerum mammarum specificè commendatur" (vol. ii. p. 171).

"In stercoribus animalium magna latet vis medica, ratione scilicet salis volatilil; in specie stercus porcinum omnes hæmorrhagias ad miraculum sistit, sive in forma pulveris ad 3 i., sive in forma electuarii adhibens; annus est quo rustica quædam post abortum insigne patiebatur mensium profluvium cui cum meo suasu maritus inscie propinasset stercus suillum, fluxus cessavit et mulier pristinæ reddita sanitati. Stercus equinum summum est remedium in passione hysterica, et doloribus colicis, si succus expressus cum cerevisia vel vino propinetur; sic quoque conducit in variolis et morbilis infantum, propinatus cum cerevisia calida, qui optime per sudorem expellit ut taceam de effectu quem præstat in pleuritide laudando.

Ut ita licet volatilia in uno puncto convenire videantur, diversis tamen, ratione diversæ et specificæ cujuslibet craseus medeantur morbos" (vol. ii. sect. 3, "Pyrotechnia Rationalis," — "de Animalibus," Etmuller, "Opera Omnia," xx.)

"Animalium omnium participant de natura salis ammoniaci constant quippe (are certainly known) ex acido et alcali oleoso volatili indeque, auræ beneficio alterantur in nitro, præsertim avium excrementa quicquid igitur præstant, operantur ex vi salis ammoniacali" (vol. ii. p. 171).

The use of animal dungs was noted, but not unqualifiedly commended by Etmuller, in the following cases: dog-dung, mixed with honey, for inflammation of the throat; wolf-dung, in form of powder, as an anti-colic.

Dog-dung (*album Græcum officinalis*) was regarded as useful in dysentery, epilepsy, colic; was applied externally in angina, malignant ulcers, hard tumors, warty growths, etc. Especial value was attached to such dung gathered in the month of July, from a bone-fed dog, because it was whiter, purer, and less fetid. Dog-urine was employed as a lotion for warty growths, ulcers on the head, etc. (vol. ii. p. 253).

"Dicitur in officinis semper album Græcum, nunquam stercus." The dog "debite nutriatur cum ossibus solis, cum nullo vel paucopotu" (vol. ii. p. 254).

Goat-dung was used in hard tumors of the spleen and other parts of the body; in buboes, ear-abscesses, inveterate ulcers, dropsy, scabby head, lichen, etc. (p. 254). In all these its use was external, but for other troubles of the spleen, yellow jaundice, retention of the menses, and similar ailments, it was given internally. Goat-urine was given internally in removal of calculi, urinary troubles, and (after distilla-

tion) for dropsy. The egestae of the wild goat were used for almost identically the same disorders (vol. ii. p. 254).

The juice of horse-dung was used by the English in colic, pleurisy, and hysteria. — (Etmuller, vol. ii. p. 254.)

Pig-dung, dried, snuffed up into the nostrils, cured nasal hemorrhages. Compare this with the use made of the dried excrement of the Grand Lama as a sternutatory and general curative.

Hyena-dung was used in medicine, but the diseases are not mentioned.

Sparrow-dung and mouse-dung, if made into pills, and taken to the number of nine, would bring on the menses of women.

Cow-dung was recommended as a fomentation in gout.

The use of cow-dung, internally, was highly commended for expelling calculi and for the cure of retention of urine, on account of the "volatile nitrous salts which ascended in the alembic, and which had a good effect upon the kidneys."

The common people drank the juice expressed from this dung in all cases of colic and pleurisy, for which they found it a beneficial medicine. "*Uterius valde convenit ad pellendum calculum et ciendam urinam propter sal. vol. nitrosum qui ascendit per alembicam unde ad nephritidem et ciendam urinam valde commendatur a potorio. . . . Plebii in colico dolore succum ex stercore propinant, quod verum est, non solum in colico sed etiam in pleuritide præsentaneum remedium*" (vol. ii. pp. 249, 250).

The juice of young geese, gathered in the month of March, was used in jaundice and cachexy. . . . Hen-dung was sometimes employed as a substitute for goose-dung. Peacock-dung was employed in all cases of vertigo. . . . Swallow-dung was used in cases of angina and inflammation of the tonsils (vol. ii. p. 171).

Hawk-dung was used for sore eyes. Duck-dung "*fimus morsui venenatorum animalium imponitur*" (vol. ii. p. 286).

Goat-dung, drunk in cases of hemorrhage. . . . Goat-urine considered a specific for the expulsion of calculi of the bladder. Asses' urine drunk for diseases of the kidneys, atrophy, paralysis, consumption, etc. Asses' dung taken internally in form of powder or potion, and applied also externally in all cases of hemorrhage, excessive uterine flow, and troubles of that nature (vol. ii. p. 247). It was thought by some to be best when gathered in the month of May; others thought that dog-dung should be substituted. Cow-urine was a beneficial application to sore eyes.

Cow-dung was used in all cases of burns, inflammations, rheumatism, etc., "*apum ac vesparum morsibus.*" (We have already seen that it has been used for bee stings in the State of New Jersey.) "*Suffitu reprimat uterum prolapsum.*" Finally, it was used as a plaster in dropsy. — (Etmuller, vol. ii. p. 248.)

Dove-dung was applied generally in cataplasms and rubefacient plasters for the cure of rheumatism, headache, vertigo, colic pains, apoplexy; also in boils, scorbutic swellings, etc., and drunk as a cure for dropsy. — (Etmuller, vol. ii. p. 287.)

Quail-dung, "*finum in vino potum, dysenteriam sanare tradit Kynarides*" (vol. ii. p. 288).

Fresh calf-dung was rubbed on the skin for the cure of erysipelas.

Fox-dung was applied externally for the cure of all cutaneous disorders (vol. ii. pp. 283–285).

Kid-dung (*Capreolus* or *Chevreul*) was drunk as a cure for yellow jaundice (vol. ii. p. 257).

Cat-dung was applied as a poultice to scab in the head and to gout in the feet (vol. ii. p. 259).

Horse-dung, fresh or burnt to ashes, was applied externally as a styptic, used as a fumigation to aid in the expulsion of the fœtus and after-birth; also drunk as a potion for colic pains, strangulation of the uterus, expulsion of the fœtus and after-birth, and for pleurisy. "*Stercus equinum est medicina magni et multi usus. . . . Interne succus ex stercore recenti expressus.*" For the certain cure of pleurisy, it should be the dung of a young stallion, especially if oat-fed. "*In Angina certe stercus equinum non cedit stercore hirundinum . . . et canis*" (vol. ii. p. 263).

Lion-dung, taken internally, was an anti-epileptic.

Hare-dung was administered internally in calculus and dysentery, and externally for burns.

Hare-urine was applied in ear troubles.

Wolf-dung was found efficacious, taken internally, in colic.

Musk was frequently given, mixed with zibethum, as a carminative; also as a nervine and a cardiac.

Mouse-dung found its advocates as a remedy, given internally, in the constipation of children, calculi, used in enemata.

The internal administration of rat-dung removed catamenial obstructions.

Mouse-dung was styled "*album nigrum*;" dog-dung, "*album Græcum.*"

Sheep-dung was administered internally in yellow jaundice; "*maximi usus in aurigine, sumptum cum petroselinio*" (rock-parsley), — while, externally, it was applied to hard tumors, swellings, boils, burns, etc.

The urine of red or black sheep was given internally in dropsy. "*Urina (nigrae vel rubrae ovis) sumpta, aquam inter cutem abigit.*" The dose was from five to six ounces.

Hog-dung, externally, in cutaneous disorders, bites of venomous animals, nasal hemorrhage, — for the cure of this last even the odor was sufficient; "*sufficit etiam odor.*"

Michaelus Etmuller, "*Opera Omnia*," "*Schroderi dilucidati Zoölogia*," Lyons, 1690, vol. ii. pp. 263–279, inclusive.

Quail-dung was administered for epilepsy when the bird had been fed on hellebore. — (Etmuller, "*Opera Omnia*," "*Schrod. Diluc. Zoöl.*" vol. ii. p. 288.)

Cuckoo-dung, taken in drink, cured the bites of mad dogs. — (Idem.)

White hen-dung was preferred for medicinal purposes. It was employed for the same ailments as dove-dung, but was not believed to be so efficacious. It was especially valuable in colic and uterine pains, in yellow jaundice, calculus, abscesses in the side, suppression of urine, etc. (vol. ii. p. 289).

There was another cure for the bites of mad dogs, — the dung of the swallow taken internally. It was also considered to be a cure for colic pains and kidney troubles, and was made into a suppository in cases of irritation of the rectum (vol. ii. p. 290).

Kite-dung was sometimes applied externally in pains of the joints (vol. ii. p. 291).

As a purgative, starling dung is enumerated in this strange list of filthy medicaments (vol. ii. p. 292).

The egestae of wild oxen was used for the same therapeutical purposes as the excrement of the domesticated bovines (vol. ii. p. 252).

Peacock-dung. "*Stercus proprietate vertiginem et epilepsiam sanat (in dies multos exhibitum).*" It should be administered in wine, and the treatment was to be persisted in from the new until the full moon, or longer. "*Continuando a novilunio usque ad plenilunium, aut amplius. . . . In epilepsiam est specificum magno usu expertum.*" It was likewise considered of great value in the cure of vertigo, but the dung of the cock should be given to men; that of the hen, to women. Etmuller, however, did not think this distinction to be necessary (vol. ii. pp. 292, 293).

The dung of geese, old or young, was employed in the treatment of yellow jaundice, for which it was believed to be a specific. The dose was one scruple. The geese should have been fed on "*herba chelidonii*." Next to the yellow jaundice, it was of special value in scurvy, taken either in the form of a powder or a decoction. For the cure of dropsy it was the main ingredient in several of the remedies prescribed. It was also the principal component in the manufacture of "*aqua ophthalmica Imperatoris Maximiliani*," to prepare which, the dung of young geese was gathered in the months of April and May (vol. ii. p. 287).

Stork-dung, *stercus ciconiae*. Believed to be potential in epilepsy and diseases of the same type. "*Stercus, si ex aqua hauritur, comitialibus aliisque morbis capitis prodesse credunt.*" — (Etmuller, vol. ii. p. 287.)

The laxative properties of mouse-dung were extolled by Dr. Jacob Augustine Hunerwolf, in "*Ephemeridum Physico-Medicarum*," Leipzig, 1694, vol. i. p. 189.

Rosinus Lentilius relates that there was a certain old hypochondriac, of fifty or more, who, in order to ease himself of an obstinate constipation, for more than a month drank copious draughts of his own urine, fresh and hot, but with the worst results, "*Per mensem circiter urinam suam statim a mictu calentem ipsa matuta hauriret.*" — (In "*Ephem. Physico-Medicarum*," Leipzig, 1694, vol. ii. p. 169.)

On the page just cited and those immediately following, can be found some ten or twelve pages of fine print, quarto, elucidative of the uses of the human excreta, medicinally, and as a matter of morbid appetite.

To the *Ephemeridum*, Dr. Lentilius also contributed a careful résumé of all that was at that time known of the medicinal or other form of the internal employment of the human excreta; he premised his remarks by saying that while some persons sent to foreign countries and ransacked their woods and forests for medicines, there were others who sought their remedies nearer home, and did not disdain the employment of the vilest excrements. "I am not speaking now," he remarks, "of the excrements of animals, but of human ordure and human urine. We know," he continues, "that horse-dung is used for the cure of colic, pig-dung for checking internal hemorrhages, dog-dung or album Græcum for angina, goose-dung for yellow jaundice, peacock-dung for vertigo, and goat-dung, in Courland beer, for malignant fevers. The Mexicans used human ordure as an antidote against

serpent bites in two-scruple doses, drunk in some convenient liquor: "De homerda contra venenatos Mexicano—serpentis ictus—ad 3 ii. in convenienti liquore hausta" (p. 170). The same mixture was drunk by the Japanese, as a remedy against the wounds made by poisoned weapons: "De eadem mixtura sed e stercore proprio confusa contra telorum venena Japonensibus pota." Observe that in this last case the ordure had to be that of the wounded man himself.

Etmuller recommends its use in expelling from the system the virus of "napelli" whatever that may have been. To cure the plague, the patient was to consume a quantity equal in size to a filbert. To frustrate the effects of incantation and witchcraft, it had to be drunk in oil. Used in the same manner, it was supposed to be of use in expelling worms: "De eadem mixtura, sed a stercore proprio," etc., as already quoted. "De stercore humano, seu recente seu arido, adsunto ad expugnandum napelli virus, etiam a nostratibus commendato, de quo vid. Etmuller, etc. . . . In peste fuganda mane ad avellanas quantitatem devorando, . . . ad morbos e fascino ex aceto propinato . . . ad expellendos vermes eodem modo usurpato." He alludes also to "Oletum" and the medicines made with it, as an ingredient; but says he will leave "Zibethum" and "Occidental Sulphur" to Paracelsus and the members of his school. He quotes Galen as recommending the drinking of the urine of a stout, healthy boy, as a preventive of the plague. "Urina pueri sani bibita . . . preservans a peste," quoting Galen, lib. x. "De Simp. Med. Fac." A draught of her husband's urine was of great assistance to a woman in uterine troubles: "Sic, in δυσοχία urinæ maritalis haustum concelebrant alii." The urine of a chaste boy was much commended by many writers for internal use in dropsy, splenic inflammation, etc. "Sic urinam impolluti pueri quotidie potum, esse medicamentum laudabile et præsentaneum, ad lienis morbos et hydropem." It would be useless to quote further in the words of the original. Lentilius goes on to say that a potion of one's own urine was extolled in the treatment of the bites of snakes, wounds by deadly weapons, incipient dropsy and consumption.

To drink one's own urine for the space of three days was a sure cure for the yellow jaundice, also in preserving from the plague. But Von Helmont was of the opinion that in this last case its virtues were derived from the fact that it was a stimulant and served to keep up the spirits. By Etmuller, its use was strongly recommended in the treatment of the yellow jaundice, etc. (citing Etmuller). It was likewise highly extolled by Avicenna.

We are next treated to a feast of big words, in which we learn that on account of its "nitrosity" and "volatility," it was regarded as a "detersive," and "penetrative," while, on account of the alkali it contained, it was a neutralizer of the "fermenting acids," and therefore applicable in cardialgia, anorexia, gout, toothache, colic, yellow jaundice, and intermittent fevers, either the urine "of the patient himself or that of a wine-drinking boy."

Boyle, the eminent philosopher, is quoted as saying that, in his opinion, the virtues of human urine, as a medicine, internally and externally, would require a volume by themselves. Boyle is also credited with having published a tract on this subject, in Leipzig, 1692, over the signature "B."

Lentilius devotes a number of pages of close, logical reasoning to demonstrate the fallacy of supposing that human excreta can be of any possible utility in therapeutics. According to his opinion, Nature voided them from the body because the body had no further use for them; therefore, their re-absorption could scarcely be other than deleterious; this was all the more true in disease, because the patient being in a morbid state, that which he ejected could by no process of correct reasoning be regarded as healthy. This argument, although of great interest and value, is very long and pertains rather to the history of medicine proper than to this essay.

Lentilius concludes by saying that no more cruel threat could be made than that of Sennacherib against the Jews that he would make them eat their own excrement and drink the water which bathed his feet: "*Quam futurum esse, ut quisquis sua stercora voraturus, et aquam pedum suorum bibiturus sit.*" Esa. 36, ver. 12. "*Vae miserris ægrotis, quo rumores ad urinæ potum rediit.*"—(In "*Ephem. Phys. Medic.*" Leipzig, 1694, vol. ii. pp. 169 to 176, inclusive; the pages are quarto, the number of words to the page about 375.)

Lentilius has either stolen bodily from Paullini, or anticipated him; he has all of Paullini's facts, but seems, in addition, to have been much of a philosopher, which Paullini was not.

Christian Franz Paullini's "*Filth Pharmacy*," Frankfort, 1696, is better known than any other of the works cited, being in German, of small size, and confining itself almost exclusively to a recapitulation of diseases, with the appropriate excrementitious curative opposite each.

Six different editions are contained in the Library of the U. S. Army Medical Museum, in Washington; of these, that of Frankfort, 1696 (268 pages, duodecimo), was selected, and the work of translation en-

trusted to Messrs. Smith and Pratz ; being perfectly familiar with English and German, their interpretation, made slowly and carefully, may be relied on as minutely correct.

Paullini has done nothing beyond collecting his ample list of cases in which the human and animal excreta were employed in the treatment of diseases ; he has in no instance ventured upon an explanation of the reason for such use, such as Etmuller supplied.

He treats of the employment of human ordure and urine, and animal excreta, in the following diseases : headache, insomnia, vertigo, dementia, melancholia, mania, gout, convulsions, palsy, epilepsy, sore eyes, cataract, ophthalmia, ear troubles, bleeding of the nose, nasal polypi, carious teeth, dropsy of the head, wens, asthmatic troubles, coughs, spitting of blood, consumption, pleurisy, fainting spells, diseases of the mammary glands, tumors, colic, abnormal appetite, worms, hernia, sciatica, ulceration of the bowels, constipation, diarrhœa, dysentery, obstructions of the liver, dropsy, jaundice, kidney troubles, gravel, stone, retention of urine, excessive flow of urine, impaired virility, swelling of the testicles, uterine displacements, menstrual troubles, sterility, accidents to pregnant women, miscarriages, difficult labor, pains after childbirth, gout of feet, rheumatism, fevers of all kinds, poisons, plague, syphilitic and venereal diseases, abscesses, sprains, contusions, bruises, wounds, ring-worm, felons, itch, freckles, as a cosmetic, for rash, tetter, loss of hair, lice, gangrene, colds, warts, fissure of the rectum, fistulas, corns, bunions, love-potions, and to baffle witchcraft.

For headache, pigeon-dung was used internally, and the dung of a red cow and of the peacock, externally.

Insomnia, donkey-dung, internally ; gout and pigeon dung, externally. Human urine was also used for the same purpose (pp. 28, 29).

Vertigo. Pigeon, peacock, and squirrel dung, all used internally.

Dementia. Donkey-dung, externally.

Melancholia. Calf or ox dung, internally ; owl-dung, externally.

Mania. Human ordure, internally ; boy's urine, internally, and also owl's and chicken's dung, internally.

Gout. Boy's urine, externally, and owl's, jenny's, horse's, cow's, deer's, and sow's dung, externally.

Convulsions. Peacock and horse dung, externally.

Palsy. Let the patient wash with his own urine or that of a young boy (pp. 28, 29) ; administer peacock's or horse's dung internally.

For the cure of the dread disease, epilepsy, human ordure and the urine of boys were administered internally, and there were likewise in-

ternal applications of the dung of horses, peacocks, mice, dogs, black cows, lions, storks, and wild hogs ; no external applications are noted for this disease (pp. 28, 29, 42, 43).

Another remedy for epilepsy was to take the excrements of a fine, healthy youth, dry them, and extract the oil by means of heat ; rectify this oil and take inwardly (pp. 42, 43).

For inflamed and running eyes make a collyrium of the warm urine of young boys, mingled with other ingredients. Make an external application of boys' urine, or of the dung of swallows, pigeons, cows, goats, prairie hens, horses, lizards, doves. There was no internal administration of any of the above suggested.

For ophthalmic troubles, the same treatment as the above.

Cataract. Make an external application of human ordure, of boy's urine, or of the dung of wolves, green lizards, or geese.

Earache or ringing in the ear, or abscesses. Apply the urine of young boys mixed with honey, or apply fresh human urine.

Other ear troubles. External application of boy's urine or of the patient's own urine ; external application of the dung of the white goat, or pigeon's, cat's, deer's, rabbit's, jenny's, wild hog's or wolf's dung.

Bleeding at the nose. External application of dog's urine, of horse urine, or of the dung of calf, donkey, hog, cow, horse, camel, or rabbit.

Nasal polypi. Dung of dog or donkey, externally.

Toothache or carious teeth. One's own ordure, or the dung of wolf, dog, raven, mouse, or horse, in all cases externally (pp. 52, 53).

Toothache. Apply a poultice of human excrement, mixed with camomile-flowers, to the cheek.

Dropsy of the head. Take boy's urine internally.

Croup and throat troubles generally. Boys' urine, both internally and externally ; a gargle and a potion of one's own urine ; and both internal and external applications of the white dung of dogs, gathered in July ; or the dung of geese, pigeons, eagles, goats, owls, hens, or wolves.

Asthmatic troubles. Salts of urine or pigeon's dung, externally.

Coughs. The dung of dogs, internally, or the dung of geese ; the dung of ravens, deer, or sparrows, externally.

Spitting of blood. The excreta of wild sows, doves, sheep, cows, horses, mice, dogs, or peacocks, internally.

Consumption. The patient's ordure, internally; his own or a boy's urine, or mice-dung, internally (pp. 74, 75).

Another remedy for consumption was to let the patient drink a mixture of his own urine beaten up with fresh egg; repeat for several successive mornings; also, let him eat his own excrement (pp. 74, 76).

For pleurisy, we read that there was an external application of the patient's own urine, or that the dung of donkeys, horses, stallions, mares, hens, pigeons, and dogs was given internally.

Fainting-spells. Human ordure, externally; one's own urine, internally; cow-urine or the dung of horses, sheep, or birds, externally.

Diseases of the mammary glands. The dung of cows or mice, internally, and also an external application of that of oxen, goats, hogs, dogs, cows, or pigeons.

Cancer of the breast. The patient's own ordure internally, with external applications of the dung of geese, cows, goats, or rabbits.

Wens. External applications of the dung of cows, rats, mice, goats, sheep, geese, pigeons, or jennies.

Colic. Human ordure, internally; "Eau de Millefleurs," internally (we know that "Eau de Millefleurs" was itself a composition of cow-dung); take bees internally (the only instance recorded of such a use of this insect), or the dung of horses, cats, swallows, or chickens, externally.

A youth in Leyden fell madly in love with a young girl, but could not get the consent of his parents to marry her. He was seized with a violent fever and constipation. In this desperate condition he imagined that a drink of fresh urine from his beloved would benefit him; he accordingly wrote to her, begging her to satisfy his longing, which she accordingly granted, and after drinking of the beverage to his heart's content, he found immediate relief (whether from the constipation or the passion Paullini neglects to state). — (Paullini, pp. 106, 107.)

Abnormal appetite. The same remedies as are enumerated for colic, q. v.

Worms. The patient's own urine, internally; the dung of horses or cows or hogs, internally.

Hernia. Rabbit-dung, internally.

Sciatica. External application of the dung of goats, pigeons, horses, or chickens.

Constipation. Human ordure, internally; human urine, internally;

or the excreta of sows, mice, chickens, geese, sparrows, magpies, or pigeons internally.

Diarrhœa. Dog-dung, internally; sow, donkey, or cow dung, externally.

Dysentery. The patient's own ordure or that of a boy, internally; human urine, internally; or the excreta of dogs, horses, hogs, crows, rabbits, donkeys, mules, or elephants, internally.

Obstructions of the liver. Salts of urine, internally; or the dung of geese, swallows, or deer, internally.

Dropsy. Human ordure, internally; the patient's own urine or that of a boy, internally; or external applications of dung of geese, chickens, goats, donkeys, dogs, deer, horses, or sheep, internally.

Kidney troubles. Human urine, both internally and externally; goose-dung, internally; sheep-dung, externally; donkey or deer dung, internally.

Kidney diseases, stone in the bladder. Take internally human urine or water, distilled over human ordure, or the dried catamenia of women, or the scrapings of chamber-pots taken in brandy. — (Paullini, pp. 142, 143.)

Gravel. The patient's own urine, internally; or the dung of pigeons, rats, chickens, mice, wild hogs, or donkeys, both internally and externally.

Excessive urination. The dung of goats, mice, or wild hog, internally.

Difficult urination. The urine of a girl, internally; the urine of the patient, both internally and externally; the dung of sparrows, internally; or the dung of donkeys, goats, chickens, geese, roosters, or pigeons, externally.

Impaired virility and swelling of the testicles. The dung of prairie hens, or that of sparrows, internally; or the dung of rabbits, bulls, cows, or goats, externally.

Uterine displacements. Human ordure, internally; the dung of falcons, horses, or bulls, internally, or the dung of sows, donkeys, or sheep. Human excrement was applied outwardly in treatment of falling of the womb; this was also considered a good method of treating inflammation of the vagina; stale urine and the steam of old socks, and asses' dung, was applied outwardly. The scrapings of chamber vessels was taken inwardly, mixed with other ingredients (pp. 154, 155).

For menstrual troubles menstrual blood was administered internally; the urine of boys, internally; the excreta of donkeys and rabbits,

both internally and externally ; and those of hogs, rats, and horses, externally.

For cessation of the menses. Take internally pulverized menses dried, and wear a chemise smeared with human blood (most probably the chemise of a woman who had been more fortunate in her purgation) ; or boil boys' urine and garlic together, and inhale the steam (p. 158).

Gout, rheumatism. The patient's own urine, both internally and externally ; the urine of boys, externally ; the dung of mice or rabbits, internally ; the excreta of cows, bulls, calves, donkeys, pigeons, peacocks, storks, dogs, goats, or wild hogs, externally.

Another remedy for gout and rheumatism was the excreta of chickens, dogs, or cocks, internally.

Tertiary fever. Human ordure and urine, internally ; the excreta of sows, donkeys, chickens, and swallows, and the white dung of dogs, internally.

Quaternary fever. The ordure of infants, internally ; the urine of an old woman, mixed with donkey-dung, externally ; the dung of geese gathered in May, of dogs, of sparrows, chickens, and sheep, internally ; and cat-dung, externally.

Malignant fevers. The urine of the patient, internally ; the urine of a jenny, internally ; the dung of a red cow, of a reindeer, horse, sheep, or goat, internally ; no external applications in this case.

Antidotes for poisons. Human ordure internally, and human urine both internally and externally ; the excreta of hogs, ducks, swallows, goats, calves, or chickens, internally ; of pigeons, cows, sheep, donkeys, and horses, externally.

Plague. Human ordure and urine, internally ; bull-dung, internally ; the dung of cows, chickens, or pigeons, externally.

Syphilis and venereal diseases. Human urine, internally, also externally ; and the excreta of horses and dogs, externally.

Abscesses and sprains. The urine of boys, externally ; the excreta of cows, goats, dogs, pigeons, chickens, camels, geese, externally ; or of the wild hog, both internally and externally.

Boils. Human ordure and urine, externally ; the dung of chickens, pigeons, goats, dogs, cows, bulls, sheep, or foxes, externally.

Wounds. Human ordure and urine, externally ; the excreta of dogs and goats, internally ; or of cows, pigeons, chickens, donkeys, and sheep, externally.

Ring-worm, felons. Human ordure, externally ; menstrual blood,

externally; the excreta of geese, cows, sows, cats, sheep, goats, or chickens, externally.

Itch, freckles, rash, tetter, etc. Geese-dung, internally; the excreta of donkeys, dogs, chickens, crocodiles, foxes, or pigeons, externally.

Loss of hair, lice. Human urine, externally; the excreta of pigeons, cats, rats, mice, swallows, geese, rabbits, or goats, externally.

Gangrene. The urine of a virgin, externally; the white dung of chickens, or horse-dung, externally.

Colds. Human ordure and urine, externally; the excreta of sheep, cows, bulls, chickens, hogs, pigeons, or horses, externally.

Warts. The patients own urine, externally; the excreta of dogs, sheep, camels, goats, cows, calves, or of a black dog, externally.

Fissure of the rectum, bunions, corns. The excreta of dogs, hogs, sheep, pigeons, chickens, goats, mice, or of cows, gathered in May, externally.

Fistula. Human ordure, externally; the dung of dogs and mice, internally.

Yellow jaundice. Take internally the oil of human excrements, or drink human urine for nine days (pp. 132, 133).

Bloody flux. Human excrements dried, taken internally, are of great benefit (pp. 108, 109).

Insomnia. Take the "*Spiritus Urinae*" internally.

Fits or spasms. Take the urine of young boys internally (pp. 28 and 29.)

"Take an old rusty piece of iron, be it a horse-shoe or anything else; lay it on the fire until it be red-hot; then take it out of the fire and let the patient make water upon it and take the fume thereof at his nose and mouth, using this three days together, and it will cure him (of yellow jaundice)." — ("*The Poor Man's Physician*," John Moncrief, Edinburgh, 1716, p. 174.)

"For running ulcers of the head . . . bathe the whole head with old urine." — (Idem, p. 66.)

"To provoke flow of urine . . . neat's dung, mixt with honey, made hot, applied to the share bone." — (Idem, p. 133.)

For stone in bladder, "mouce-dung drunk." — (Idem, p. 134.)

"The dung, flesh, and haire of a hare drunk." — (Idem, p. 131.)

"Goat's-dung drunk . . . for the space of three days." (Jaundice.) — (Idem, p. 116.)

"Goat's-dung, if drunk, brought back the catamenia." — (Idem, p. 141.)

"Goose and hen dung, drunk with the best wine, miraculously cureth sudden suffocations of the mother." — (Idem, p. 144.)

"For a perverse or froward mother (i. e., womb), apply stinking smells to the privities, and sweet smells to the nose." — (Idem, pp. 144, 151.)

"For the squinsy . . . take the dung of a hog, newly made and as hot as you can get it, . . . apply to the place, and it cureth." — (Idem, p. 172.)

"For all imposthemes . . . the dung of a goose which had first fasted three days, and then fed on an eel before being killed," was applied externally. — (Idem, p. 180.)

"For swellings behind the ears, . . . goat-dung, boiled," was applied as a plaster. — (Idem, p. 84.)

For boils, carbuncles, etc., "an emplaister made of the dung of a peacock cureth faithfully." — (Idem, p. 163.)

"For the cure of fistula, 'man's-dung and pepper' were to be applied externally; goat's-dung externally; dove's-dung was to be drunk in goat's-milk; the juice of cow-dung, in wine, was to be cast into the fistula, and a plaster of the same was to be applied." — (Idem, pp. 165, 166.)

"Qui mane jejune, per novem dies, bibit propriam urinam non patitur epilepsiam, paralysem, nec colicam, et qui bibit propriam urinam sanabitur a sumpto veneno." — (Idem, pp. 169, 170.)

"D'après le témoignage de Charles Lancilotti, l'acqua di sterco humano pigliata in una calante por lo spation di nuove giorni sana quelli che patiscono il male caduco." (Voyez Guida alla Chimica.) — ("Bib. Scatalogica," p. 29.)

Schurig's "*Chylologia*," published in Dresden, 1725, contains citations from nearly seven hundred authorities. As these are nearly all of very ancient date, and only in a few cases accessible to scholars restricted to American libraries, this learned work of Schurig becomes all the more valuable to such as desire to study intelligently and profoundly this subject of the use of human and animal excreta in religious rites or in religious medicine.

Some of the writers quoted by Schurig favor, others oppose the medical employment of the human excretions. Among those in favor of it, according to him, may be seen the names of Galen and Dioscorides. In Schurig's day there seems to have been much opposition developing, especially when other remedies were available; although Schurig says that the Dutch soldiers returning from the Indies spoke

in praise of what they had seen there of the use of such medicaments. Among European practitioners, human ordure was employed alone, mixed with water or other ingredients, or a water and an oil were distilled from it.

It would be a useless task to repeat the names of all the authorities mentioned by this learned German, or to give in detail all the prescriptions in which the alvine dejecta figure as components. Their insertion here would add nothing to the value of these notes, as they are strictly pharmaceutical in their spirit; it may, however, be of some interest to the student to learn just what diseases were supposed to be amenable to this course of treatment, and just how the curatives were to be administered.

For angina pectoris, the ordure passed by a young boy after eating lupines, to be taken internally (p. 758). For the same disease there were other recipes for ordure in pills, plasters, and decoctions, as well as for electuaries of ordure, to be blended with honey (p. 756).

For bringing boils, ulcers, etc., to a head, for sprains, luxations, etc., a poultice of human ordure, applied hot, was considered the best specific (p. 757).

For rheumatic gout, a hot poultice of human ordure was considered of value (p. 757).

Renal calculi. "*Aqua ex stercore distillata*" was given internally (p. 757). For cancers and malign ulcers, human ordure was used as a local poultice; also given internally, in pills or powders. Pope Benedict was cured of a cancer by this treatment (pp. 758, 759).

Epilepsy. Peacock-dung was used internally in conjunction with human ordure (p. 762).

Erysipelas was treated with a poultice of human ordure (p. 762). "*Oleum ex stercore distillatum*" was also given internally (p. 762).

Cicatrices, small-pox pustules. Bathe with "*aqua ex stercore distillata*" (p. 760).

Gangrene, cured by application of warm ordure and urine (p. 763).

Dropsy; use "*aqua ex stercore distillata*" internally (p. 764).

Yellow jaundice, by human ordure drunk in wine (p. 764). Here he quotes Paullini, and others with whom we are already familiar.

Piles. Plaster of human ordure (p. 766). The same method of treatment for tumors (p. 777).

Ring-worm and other skin diseases. Use "*oleum ex stercore*" internally (p. 766).

Inflammation of the breasts of young mothers ; local application of human ordure (p. 767).

Burns and scalds. "Aqua ex stercore" locally (p. 760). Inflammations, ditto (p. 766).

Dysentery. "Aqua ex stercore" internally (p. 761), quoting Paullini.

Emphyematis. "Oleum ex stercore," internally (p. 761).

Epilepsy. "Cured and prevented by "excrement. infantis," internally (p. 761).

For all fevers. Ordure, mixed with honey, internally, quoting Paullini (pp. 762, 763).

Fistula in ano or in lachryma. Local application of human ordure (p. 763).

Birth-marks were effaced by a plaster of human ordure, or of meconium (p. 771).

Ophthalmia, cataract, etc. Human ordure, applied as a plaster. Also, "aqua ex stercore distillata," internally (p. 771).

Toothache. Plaster of human ordure, mixed with powdered chamomile flowers, quoting Paullini (p. 772).

Edema. Plaster of human ordure and of cow-dung (p. 772).

Felons. Plaster of human ordure. Also, one of the same, mixed with assafoetida, quoting Paullini (p. 772).

Hysteria. Human ordure, drunk in wine (p. 773).

Bites of mad dogs, serpents, and all wild animals. Ordure, or "oleum ex stercore distillatum," or "aqua ex stercore distillata," internally (pp. 767, 768).

In the island of Manilla, human ordure was held in such high estimation as a remedy for the cure of the bites of all venomous animals, that it was carried fresh, or dessicated, in little pyxes or pouches suspended from the neck, ready for instant use. An example is given, on the authority of a Franciscan friar, for years a missionary in that country, of a man so bitten, and so near death that he could not open his mouth, whose teeth were pried asunder, and this remedy inserted. He recovered immediately.

Human ordure was also used internally, in Mexico, for the cure of serpent bites, as we have learned previously from other sources. (p. 767.)

For worms in the head. "Oleum ex stercore distillatum," applied locally (p. 777).

Poisons. Human ordure, internally (pp. 777, 778).

For wounds occasioned by poisoned weapons, in the island of Macassar, human ordure was administered internally, until vomiting was induced. The same treatment was observed in Armenia, while in Celebes it was the recognized antidote against vegetable poisons, quoting Paullini (pp. 778, 779).

Plague. Human ordure and human urine were mixed together, and taken internally, to cure or prevent the plague. Human ordure was also taken alone, in the form of pills, and applied to plague buboes as a plaster. Schurig says he personally knew a certain clergyman in Dresden, in 1680, who took such pills with good effect (p. 775).

Scabs and tetter, local applications of "*oleum ex stercore distil.*" (p. 776).

Pleurisy, "*Ol. ex sterc. dist.,*" internally (p. 774).

Gout. Human ordure as a plaster, and also internally (p. 775); here he again cites Paullini, among others not known to us.

SCHURIG'S IDEAS REGARDING THE USE IN MEDICINE OF THE EGESTÆ OF ANIMALS.

Schurig devotes the fourteenth chapter of his work to a treatise "*De Stercoribus Brutorum.*" It is unnecessary to enter much into detail upon this point; it will be sufficient to give only a small number of the recipes, with notes upon the manner of administering, and, where possible, the opinions expressed in regard to their efficacy.

From these we may be enabled to form some idea of the line of medical thought of the ancient practitioners.

Beginning with goose-dung, we find it commended as warm and drying in its effects; an aperient and endowed with power over the menses; also over the after-birth and urine; and hence of value in jaundice, scurvy, and dropsy. It was also employed in many other diseases, principally in fevers, in whooping-cough, in cachexy, liver troubles, and when applied externally as a plaster, was of such value in the treatment of sore eyes that the Emperor Maximilian resorted to its use with the greatest advantage; again, applied as a plaster, it was used in angina and in mammary cancer. The dung of young geese was regarded as the best, and it should be gathered when possible in the early spring, preferably in the month of March, while still "green," on the meadows; most of the old prescriptions insist upon this, as will be seen from the sample given in this paragraph.

The dose of the dried powder was from half a dram to a full dram,

and it was administered in wine, or mixed with cinnamon and sugar. It was frequently combined with hen-dung, or diluted with the urine of she-goats or he-calves. Some practitioners doubted whether it was superior to dove-dung for the same diseases. When used in whooping-cough or throat swellings, it was placed under the tongue of the patient. The following are the words with which Schurig begins his panegyric upon its virtues:—

“Calefacit et siccat vehementer; incidit, aperit; menses, secundinas, et urinas potenter movet; hinc maximi usus est in morbo regio, scorbuto, et hydropo.”

R:

Stercor. Anserin. vern. temp. collect. et in Sole exsic.

Pull. Gallinac. — ana. ʒi.

Absinth. ʒii.

Cinnamoni. ʒi.

Sacchar. ʒi½.

— M. ft. Pulv. subtiliss.

Asses' dung was considered by Schurig to be an especially good remedy in all diseases of hemorrhage. “Singulare remedium contra quamvis haemorrhagias” (p. 800); but it had to be collected in the month of May; “Stercus asininum in Majo collectum.” It was to be taken in doses of one or more drachms, or only the juice squeezed from it into some medicinal water.

Dried in the sun, or in a warm place, it was good for bleeding at the nose; “ad solem vel in loco calido exsiccetur et fiat pulvis qui per nares attractus subito illarum haemorrhagias compescit.” It was regarded as an infallible remedy for restraining an excessive menstrual flow. “Infallibile remedium ad constringendum fluxum menstruum esse stercus asininum . . . asserit Johannes Petrus Albrechtus.”

This dung was also in great vogue in all cases of uterine inflammation, applied locally as a plaster. It was administered both internally and externally for gout of the feet, and used as a component of a plaster for dropsy. It was given internally for colic. Collected in the month of May, it was administered internally to dissolve calculi. “Stercus bubulum mense Majo collectum miram præbet aquam adversus Calculos, quos solvit et una urinam movet, quam nigram prima die pellit, calculis vehementer attritis. Hæc aqua in officinis vocatur omnium florum.” This water, known officinally as “water of all-flowers,” was used in attacks of plague, and in cases of gangrene, inflammation, rheumatism, etc.; also in dropsy and in cancerous ulcers (p. 800 *et seq.*).

Schurig devotes considerable space to the dung of dogs, called by some "Flowers of Melampus," and by others by the "more honest name of album Græcum." "*Stercus caninum, quod nonnulli flores Melampi, pharnacopœi autem honestiore nomine album Græcum vocant* (to differentiate it from the black, which was the dung of mice), *ad differentiam nigri, quod est muscerda*" (p. 803).

He believed that it was in its effects "drying, cleansing, solvent, an aperient, a dissipater of swellings, such as carbuncles, a solver of ulcers, — hence useful in dysentery, in epilepsy, colic, and such complaints, as well as in angina, guttæ, malignant ulcers, hard tumors, dropsy, warts, etc." "*Siccat, abstergit, discutit, aperit, apostemata rumpit, exulceratione abstergit, hinc utile est in Dysenteria, quin etiam in Epilepsia, dolore colico, et similibus*;" also "*in anginæ, gutturi, ulceribus malignis, tumores duros, hydropicas, verrucas, etc.*" Also in fistulas, inflammation of the tonsils, etc. It was applied externally to malignant ulcers by being sprinkled upon them, or as a plaster; applied also as a plaster in dropsy. It was used in combination with the dung of swallows ("*stercus hirundinum*"), or of owls ("*noctuæ*") Used as a gargle in throat trouble (pp. 803–807).

"Album Græcum" was considered best when obtained from "white" dogs, as they were supposed to have the soundest constitutions. This was especially the case in the treatment of epilepsy (p. 80). Here we have a very decided trace of "Color Symbolism."

"Album Græcum" was taken, preferentially, from dogs which, for at least three days previously, had been nourished on hard bones, with the least possible amount of water to drink; such dung was hard, white, and of faint odor, "*durum, album, nec graviter olet.*" Some of the prescriptions call for the dung of a fasting dog; "*stercum canis per jejuniū emaciati*" (p. 806).

Schurig tells us that the dung of the goat was used both internally and externally in medicine. It was believed to be efficacious in the expulsion of calculi, in the reduction of hard tumors, in the dissipation of tetter, ring-worm, scald, leprosy, abscesses behind the ears, bites of serpents and other wild animals, in the restriction of excessive catamenial flow, etc. It was applied as a plaster in the treatment of tumors in the limbs, swellings of the testicles, in gout, œdema, cancer, inflammatory rheumatism, carbuncles, atrophy of the muscles, tumors in the mammæ, etc. But when made into a plaster, was frequently mixed with the patient's own urine (p. 809).

Schurig pronounces it a rubefacient; it was of use in alleviating

rheumatic pains, headache, vertigo, pains in side, shoulders, brain, and loins, colic, apoplexy, lethargy ; it was supposed to be able to dissolve scrofulous and all other tumors, and was beneficial in the treatment of gout ; used internally, it expelled dropsical water through the urine and also dissolved calculi ; as a plaster, it was used in the cure of the bites of mad dogs ; likewise for scald head ; internally, the Austrian midwives employed it in the treatment of hysteria ; while, throughout Germany, it was administered in cases of suppression of the menses (p. 809 *et seq.*).

As to horse-dung, Schurig has to say that either it or the juice extracted from it was drunk to aid in easing the pains of colic, to assist in the expulsion of the placenta, or of a dead fœtus, or in cases of strangulation of the uterus ; externally, it was believed to be serviceable in restraining eruptions of the blood. To be of the greatest medicinal value, this dung should be taken from a stallion fed on oats. It was regarded as of great value in developing small-pox pustules upon women and children (p. 812 *et seq.*).

A rustic remedy which seems to have had a wide dissemination, for the alleviation of the cramp-colic, was composed of the juice expressed from horse-dung, mixed with warm beer, taken internally, while at the same time there was applied to the region of the umbilicus a plaster of warm horse-dung and hot ashes ; such a plaster was employed in the cure of pleurisy among the English. In the same disease a mixture of warm horse-dung and beer was taken both internally and externally.

Cat-dung, in wine, formed the remedy in cases of vertigo and epilepsy. While its use was recommended principally in external applications, there were not wanting those who relied upon it mainly in internal application. It was reputed to possess especial efficacy in loss of hair, and supposed to be serviceable in preventing baldness, applied as an unguent. Administered internally, it suppressed immoderate menstrual flow. For the cure of felons, which so many in those days believed to be occasioned by a small worm, it was of certain efficacy, if bound round the afflicted thumb or finger. Paullini is quoted as having had personal experience with felons thus cured. But Paulini himself was of opinion that the dung of the goose was of equal value with that of the cat in this case (p. 815).

Hen-dung was recommended for use in burns. It was regarded as beneficial against magic philters, "*in specie ex sanguine menstruo fœmineo.*" It was considered good for all those ailments for which

dove-dung was prescribed, but was not quite so efficacious. It was excellent for colic, for uterine pangs, yellow jaundice, calculus, suppression of urine, for all pains in the bowels, for strangling of the womb and pains therein, for poison, witchcraft, for seat-worms, etc. Externally, it was applied for all sores in the eyes, ulcers, warts, cicatrices, piles, pains in the feet and arms (pp. 816, 817).

Swallow-dung is mentioned as of internal and external application. It was regarded of great efficacy in the treatment of mad-dog bites, quarternary fevers, colic, inflammation of the kidneys, etc. It was applied as a plaster in cases of headache, angina, inflammation of the tonsils, and as a suppository in relaxation of the rectum. Its efficacy was conceded in dyeing the hair, being invaluable when used frequently as an unguent. Etmuller is quoted as expressing the opinion that they owe their action to the presence of "Armoniacal" salts. The swallow's nest, with all its contents, was also sometimes ground up into a plaster, and swallow-dung itself was occasionally substituted for "album Græcum" (pp. 817 *et seq.*).

Lion-dung exerted its potency in cases of difficult labor, and it was the panacea against epilepsy and apoplexy. One of the Grand Dukes of Austria was cured of epilepsy by its use. Preference was given to the excrement of a female lion, except where she had just brought forth young. An anti-epileptic remedy of great repute was composed of burnt crow's-nest, burnt tortoise, burnt human skulls, linden-tree bark, and lion-dung, made into an infusion by long digestion in spirits of wine (pp. 819, 820).

Leopard's dung dissolved calculi; was taken as a potion for the cure of dysentery; applied as a plaster for the cure of burns; hernia was cured by a bolus composed of leopard's dung, human mummy, burnt worms, syrup, and other ingredients. The ashes of the dung, skin, and hair of the leopard, in combination, expelled calculi. This remedy should be drunk, dissolved in wine; it was also a sure remedy for the most obstinate cases of colic. It was applied externally in sciatica, also in constriction of the vulva, and was employed to facilitate conception. In the last-named instance pastilles (trochisci) were likewise made and the parts fumigated. Or a pessary was inserted and kept in place for three days and nights; "et quamvis antea sterilis fuerit, deinceps tamen concipiet." To prevent falling out of eyelashes and eye-brows, an ointment was prepared of which the dung of the leopard was an ingredient. Finally, it was in esteem as an aphrodisiac, and to expel wind from the womb (p. 820).

Wolf-dung, drunk in wine, or taken as a powder, in doses of one scruple or more, was used in the treatment of the colic. Paullini is quoted as recommending its use in fevers. The dung of wolves, as of dogs, should, if possible, be that which is white in color, dejected by animals which have been feeding upon bones, and deposited upon rocks, thorns, bushes, or the lower branches of trees, but not on the ground. It was employed internally in pains in the limbs, and administered, also internally, in form of powder, in attacks of vertigo. Desiccated, it was blown into eyes afflicted with cataract. The cavities of carious teeth were filled with wolf-dung, to ease the pains of tooth-ache. For nasal hemorrhage, the smoke of burning wolf-dung was snuffed up into the nostrils; but another prescription was to drink an infusion of wolf-dung in red wine. If sheep detected the odor of wolf-dung about their paddocks, or folds, they would behave as if bewitched, running from side to side, bleating and showing as much terror as if their arch-enemy, the wolf, was himself at hand. Knowing this fact, rascally mountebanks were wont to perpetrate tricks upon the ignorant and unsuspecting rustics, by secreting some of this dung in the stable with the ewes and lambs, frightening them out of their wits, and then persuading their masters that their flocks were suffering from some hidden ailment for the cure of which they would demand a big fee in money or fat sheep.

Schurig recommends the use of mouse-dung, both internally and externally, for various disorders, for constipation in children, for scald head, and dandruff, in which cases it was applied as an ointment, for the elimination of calculi in kidneys and bladder, for all swellings in the fundament, piles, warts, tumors in ano, hemorrhages of the lungs, for the suppression of the menses, and even to excite the growth of the beard. When taken internally, it was administered in broth, milk, or panada; externally, it was made into a plaster with butter and such ingredients. It was at times mixed with the dung of sparrows (p. 823 *et seq.*).

Sheep-dung figures in medicinal preparations, to be used either internally or externally. Internally, as a decoction, in yellow jaundice, obstructions and constipation of the bowels, and in small-pox. Also as a specific in the cure of gonorrhœa, when given in form of pills. For pains in the intestines, for swellings, burns, and ingrowing toenails, it was applied as a plaster (p. 826 *et seq.*).

Peacock-dung, the great specific in all cases of epilepsy and vertigo, was administered in doses of one dram, and in France was held in

high repute for such purposes. It should be used from the new to the full moon, and be taken in white wine (p. 828).

This paragraph about the medicinal value of the droppings of the peacock deserves more than a cursory glance; in it we have a strong suggestion of the former association of this bird with moon worship. The peacock, we know, was the bird that drew the car of Juno, and that goddess was as much a lunar deity as Diana.

Pig-dung or swine-dung appears as one of the remedies, of both internal and external application, for nasal hemorrhage, and uterine flux. For nasal hemorrhages, it was dried and reduced to powder, and drawn up into the nostrils as a sort of snuff. Applied, externally, warm, to the vulva, it was regarded as an aid in hemorrhage of the uterus; it was also given internally for the same purpose. It was not used exclusively for such hemorrhages, but had a great repute as a styptic in general, and was applied to wounds of all descriptions. It was therefore used both externally and internally for the suppression of excessive menstrual flow, and taken internally to restrain spitting of blood. It was of general use in the treatment of felons, and was also regarded as an invaluable febrifuge.

For nasal hemorrhage, it was occasionally bound round the temples. Oddly enough, it was believed to be a remedy for fetor of breath. "*Alii miscent stercus porcinum exsiccatum, cum pulvere rosarum pro corrigendo fœtore*" (p. 830 *et seq.*).

As an external application for tumors of all kinds, cow-dung had a host of advocates, who likewise extended its use to the cure of scrofulous sores. For scrofulous wens, there was a cataplasm made of a composition of various dungs, — those of the cow, goat, and doves, among others. This was also to be taken internally, in white wine.

A plaster of cow-dung was used in gout of the feet. The dung of grass-fed cows was considered excellent for tumors, etc.; but its efficacy was increased when mixed with cow-urine or the urine of the patient himself; this was also in request for the treatment of œdema. For the stings of bees and wasps, a plaster of cow-dung was frequently used: "*Contra apum et vesparum ictus, stercus vaccinum cum aceto utiliter adhibetur*" (p. 837). The dung of a black cow, burned and given in scruple doses to a newly born child, preserved it from epilepsy and consumption; it was also employed to mitigate the pains of dentition. The dung of bulls and cows, collected in the month of May, distilled with water, made a panacea for kidney diseases; it also expelled calculi and induced a flow of urine.

"Hæc aqua vocatur aqua omnium florum," was employed both internally and externally in gangrene, inflammations, rheumatism, spasms, dropsy, suppression of urine, etc., and was used externally to remove freckles and as a general cosmetic. — ("Chylologia," p. 835 *et seq.*)

In the "Complete English Physician," London, 1730, there are recipes which include the dung of geese, dogs, doves, horses, peacocks, hogs, and cows.

In the "Complete English Dispensatory" of John Quincy, London, 1730, p. 307, under the head "Distillation of Urine," it is alleged that the salts obtained from the urine "of a sound young man, newly made," was beneficial in rheumatism and arthritis. "Urina hominis, — urine of a man. Some have got a notion of this being good for the scurvy, and drink their own water for that end, but I cannot see with what reason. Some commend it boiled into the consistence of honey, for rheumatic paint, rubbing it onto the part affected; in which case it may do good, because it cannot but be very penetratiug. . . . Urina vaccæ, — cow piss. Some drink this as a purge. It will operate violently, but it is practised only amoug the ordinary people, and has nothing in its virtues to prefer it to more convenient and cleauly medicines, any more than the former" (pp. 248, 249).

Father Du Halde says of camel's dung: "When it is dried and reduced to a powder, it will stop bleeding of the nose by being blown into it." — (Chinese recipes given iu Du Halde's "History of China," London, 1736, vol. iv. p. 34.)

"The dung (of sheep) is a prevalent medicine against the jaundice, dropsy, cholick, pleurisy, spleen, stone, gravel, scurvy, etc., taken either in powder, tincture, or decoction. The dung, made into a cataplasm with camphire, sal armoniack, and a little wine, opens, digests, attenuates and eases pain. It is excellent in abscesses about the ears and other emunctories, swellings in women's breasts, pain of the spleen, and gout." — (Pomet, "History of Drugs," English translation, London, 1738, p. 256.)

The rare and erudite pamphlet of Samuel Augustus Flemming, "De Remediis ex Corpore Humano desumtis," Erfurt, 1738, although containing not more than thirty-two pages, is filled with a mass of curious information upon subjects generally disregarded. Flemming remarks that those who could use urine, calculi, and things of that kind in medical practice, should not shrink from the employment of ordure as well. "And it is truly wonderful," he says, "that a substance, the very aspect and odor of which are sufficient to induce an inevitable

nausea, should be regarded not merely as a matter of curiosity and study, but held in the highest repute as a unique and most precious treasure for the preservation of health."

Yet Paracelsus, and others of his school, knowing the natural repugnance to the acceptance of such medicines, prepared it under the name of "*Zibethum Occidentalis*," and administered it in doses of from one to two drams, given in honey or wine, to ward off attacks of fever; by others, it was employed as a plaster in cases of throat-inflammation, being then called "*Aureum*." Others again were of the opinion, from an examination of its chemical nature, that it was fairly entitled to a place in the *Materia Medica*. An oil and water were distilled from it, and used in ocular sores, corrosive ulcers, and all sorts of fistulas; for affections of the scalp, for the ulcers of erysipelas, for ring-worm and tetter, and especially the pains of gout. Finally, it was believed by many to be of exceptional efficacy in the cure of the plague, being taken internally.

"*Qui urina, calculi et aliis delectantur, non a stercore ipso abhorrebunt*," etc. The full citation in Latin need not be repeated, as it is expressed in much the same manner as the views of Schurig, Paulini, Etmuller, Beckherius, and others on the same subject. He cites Zacutus Lusitanus Poterus and Johannes Anglicanus, neither of whose writings are to be found in America.

Speaking of human urine, Flemming says that physicians boasted not only of their ability to diagnose disease from urine, but to use the fluid itself in the treatment of disease. It was employed in two ways: either in the raw state, as emitted from the person in due course of nature, or in chemical preparations extracted from it. It was often administered with beneficial results in dropsy as an enema. In difficult labor, a draught of the husband's urine taken warm brought easy and safe delivery.

A drink of the patient's own urine was highly commended in hysteria. As an external application for the eradication of dandruff, scab, and other scalp troubles, it was held in high esteem among the common people.

A salt and a spirit were prepared from urine by distillation, and highly spoken of in the treatment of frenzy, mania, and kindred mental infirmities of a grave type.

Flemming quotes from Beckherius, whose writings have already been presented, and from Quercetanus, in "*Pharmac. dogmat.*," p. 119.

("De Remediis ex Corpore Humano desumtis," Samuel Augustus Flemming, Erfurt, p. 24 *et seq.*)

In the "Physiological Memoirs of Surgeon-General Hammond, U. S. Army," New York, 1863, a chapter is devoted to uræmic intoxication, or the exhilaration produced by the entrance into the blood of urine, either injected or abnormally absorbed. This part of the subject should be carefully scrutinized by medical experts, whose determinations may make known whether or not the drunken frenzy of the Zuñi dancers could be attributed to the unnatural beverage exclusively or to that in combination with other intoxicants.

Dunglison says: "Human urine was at one time considered aperient; and was given in jaundice in the dose of one or two ounces. Cow's urine, *urina vaccæ*, all-flower water, was once used, warm from the cow, as a purge." — ("Dunglison's Medical Dictionary," Philadelphia, Pa., 1860, article "Urine.")

In the "Lancet," October, 1880, p. 56, Mr. G. F. Masterman draws attention to the chemical analysis of beef tea, and shows that it is analogous to urine, excepting that it contains less urea and uric acid. "Many writers have endeavored to impress the public and the profession with the true value of beef tea, viz., that it is not a nutrient but a stimulant, and that it mainly contains excrementitious materials." — ("Beef Tea, Liebig's Extract, *Extractum Carnis*, and Urine," Richard Neale, M. D., in the "Practitioner," London, November, 1881, p. 343 *et seq.*)

"In South America urine is a common vehicle for medicine, and the urine of little boys is spoken highly of as a stimulant in malignant small-pox. Among the Chinese and Malays of Batavia urine is very freely used. One of the worst cases of epistaxis ceased after a pint of fresh urine was drunk, although it had for thirty-six hours or more resisted every form of European medicine. This was by no means an unusual result of the use of urine, as I was informed by many of the natives. . . . As a stimulant and general pick-up, I have frequently seen a glass of child's or a young girl's urine tossed off with great gusto and apparent benefit. The use of urate of ammonia and guano was noticed by Bauer in 1852, who found their external use of value in phthisis, lepra, *morphoæ*, and other obstinate skin diseases. Dr. Hasting's report of the value of the excreta of reptiles in 1862, in the treatment of phthisis, will also be fresh in the recollection of the older members of the profession." — (*Idem.*)

Some of the tribes of Central Africa use human urine as an invigor-

ant during the fever season, much as Europeans employ quinine. — (Rev. Mr. Chatelain, missionary in Angola, Africa.)

“The people of Angola apply fresh urine to all cuts and bruises.” — (“Muhongo,” African boy from Angola, West Africa, in personal interview with Captain Bourke, translated by Rev. Mr. Chatelain, missionary.)

ORDURE AND URINE IN FOLK-MEDICINE.

Excrementitious remedies are still to be met with in the folk-medicine of various countries; indeed, the problem would be to determine in what country of the world at the present day the more ignorant classes do not still use them. The extracts to be now given will show that folk-medicine still retains a hold upon medicaments the use of which is generally believed to have passed away with the centuries.

“I never had an opportunity of seeing the following deed, but it was many times asserted to me by serious persons: In our province, Brittany, when somebody in the peasantry has a cheek swollen by the effects of toothache, a very good remedy is to apply upon the swollen cheek, as a poultice, freshly expelled cow-dung, and even human dung, just expelled and still smoking, which is considered as much more efficient.” — (Personal letter from Captain Henri Jouan, French Navy, Cherbourg, France, July 29, 1888.)

“Dans nos pays, on ne connaît pas, contre les piqures, de guêpes et autres insectes, vénimeux, et contre les brûlures caustiques, de l’Urtica Urens, de meilleur remède que l’application de l’urine.” — (Personal letter from Dr. Bernard, Cannes, France, August, 1888.)

In describing the medicine of the Samoans, Turner says: “On some occasions mud and even the most unmentionable filth was mixed up and taken as an emetic draught.” — (London, 1884, p. 139, “Samoa.”)

“Maw-wallop. A filthy composition, sufficient to provoke vomiting.” — (Grose, “Dict. of Buckish Slang,” London, 1811.)

“In Fayette County an emetic for croup is made by mixing urine and goose-grease, and administering internally, and also rubbing some of the mixture over the throat and breast.” — (“Folk-Lore of the Pennsylvania Germans,” Hoffman, in “Journal of American Folk-Lore,” Cambridge, Mass., January–March, 1889, p. 28.)

For incised wounds use human urine as a lotion; for lacerated wounds apply human excrement. — (Sagen-Marchen, Volksaberglauben, aus Schwaben, Freiburg, 1861, p. 487.)

“Horse-dung and beer” are mentioned as the remedy used in Eng-

land and France for the cure of "exceeding faintness." — (See Black, "Folk-Medicine," London, 1883, pp. 152, 153, quoting Floyer and De La Pryne.)

Among the many quaint recipes preserved in the *Materia Medica* of English physicians down almost to our own day we find that pigeon's dung was used "to make a cataplasm against scrophulous and other like hard tumors; . . . for an ointment against baldness; . . . for a cataplasm to ripen a plague sore; . . . to make a powder against the stone." — (John Mathews Eaton, "Treatise on Breeding Pigeons," London, pp. 39, 40, quoting Dr. Salmon.)

Wolf-dung recommended in the treatment of colic. — (Black, "Folk-Medicine," p. 54.)

"A decoction of sheep's dung and water was used in recent times in Scotland for whooping-cough and in cases of jaundice." — (Idem, p. 167.)

On the same page Black shows that the same remedy was extensively employed in Ireland in the treatment of the measles.

"In the south of Hampshire a plaster of warm cow-dung is applied to open wounds." — (Idem, p. 161.)

"Water of cow-dung," collected in May and June, used as a purge by people in England. — (Southey, "Commonplace Book," p. 554.)

On the same page he says that "man's excrement which had been some days discharged, thinned with so much ale," was given to horses with the blind staggers, — "a common experiment." — (Idem.)

A poultice of pigeon's dung and pounded rose-leaves was in use for a stitch in the side. — (Southey, "The Doctor," London, 1848, p. 59.)

Swine's dung as a remedy for dysentery in Ireland, alluded to in terms of high approval by Borlase, quoted by Southey in "Commonplace Book," p. 149.

Hon. E. W. P. Smith, secretary of the United States Legation in the Republic of Colombia, South America, states that among the San Blas Indians of that country, and the lower classes generally, the patient's own urine is applied warm for sore eyes.

Mrs. Fanny D. Bergen, of Cambridge, Mass., has for some years devoted time and intelligent study to the acquisition of data bearing upon the superstitions connected with the human saliva. While making this valuable and curious collection she has also been fortunate enough to encounter much relating to kindred superstitions, and has very generously placed at the disposal of the author of this volume all that related to the employment of human and animal egestæ.

Urine a cure for chapped hands, on Deer Isle.

Urine into your shoe to keep it from squeaking, on Deer Isle.

Sheep-dung tea, a cure for measles, is extensively used on Deer Isle.

Boys urinate on their legs to prevent cramp. This practice was common in eastern Maine twenty to thirty years ago.

Water standing in the depressions of cow-dung was formerly recommended as a certain cure for pulmonary consumption, in New York.

Oil tried from the penis of the hog and applied to the loins of a child suffering from weakness of kidneys or bladder cured such diseases, in northern parts of the United States and in parts of Nova Scotia.

One's own urine was administered for gravel in Staffordshire, England, within the past ten years.

A woman in England was given her own urine to drink, after a severe illness, to prevent "fits," in the present generation. A poultice of fresh, warm cow-dung cured a man of rheumatism in New York. Measles were cured by giving the patient a decoction of lamb's excrements (locally called "nanny-beads"), in Brunswick, N. Y., about 1825. A newly born child was given a spoonful of woman's urine as a laxative, in 1814, in St. Albans, Vt. The white, limy part of hen-manure was used for canker-sores in mouth, in Abingdon, Ill. Cow-manure was used for swelled breasts in County Cork, Ireland. Sheep-manure tea was used for measles in County Cork, Ireland, and by the negroes of Chestertown, Md. Sheep-dung tea for measles all over New England, Ohio, and Cape Breton. Cow-dung, as fresh as possible, plastered on inflamed breasts, commonly known as "bealed" breasts, within the last twenty-five years, on Cape Breton.

Similar excrementitious remedies are in use among the Pennsylvania Germans. Cow-dung poultices are applied in the treatment of diphtheria, or as lenitives in cases of sore or gathered breasts. "Tea made of sheep-cherries (*Gen. et spec.?*) is given for measles." — ("Folk-Medicine of the Pennsylvania Germans," in "Trans. Amer. Phil. Soc.," 1889.)

For reasons not ascertained, the use of these revolting medicaments has nearly always been veiled under the language of euphemism. Sheep-dung is rarely called by its own name, but always, as has been shown in the preceding remarks, "sheep-nanny tea," etc. In the same manner, the use of human excreta was veiled under the high-sounding designations of "zibethum," "oriental sulphur," etc.

This use of sheep-dung in the treatment of measles must be very

ancient and wide-spread. Surgeon Washington Matthews notes its existence among the Navajoes, who learned it from the Spaniards.

"Slight wounds are cured" by the application of dirt to the part affected. — ("Nat. trib. of S. Australia," p. 284, received through the kindness of the Roy. Soc. Sydney, N. S. Wales, T. B. Kyngdon, Secretary.)

Mr. Chrisfield, of the Library of Congress, Washington, D. C., states that urine was a remedy for earache among people on eastern shore of Maryland and Virginia; while for the cure of jaundice, in New England, "the spider, and even a more disagreeable remedy, is administered in a spoonful of molasses." — ("Folk-Medicine," Black, London, 1883, p. 61, quoting Napier, "Folk-Lore," p. 95, and "Folk-Lore Record," vol. i. p. 45.)

"I am impressed to tell you of a custom that prevailed to some extent among the people of this State (Iowa); this was the use of sheep-dung for measles. The dung was made into what the old women denominated 'tea,' and was familiarly known as 'sheep-nanny tea.' It was believed to be singularly efficacious in bringing out the eruption. The mixture was sweetened with sugar, and thus disguised was given to children. This practice was kept up among certain classes until about twenty years ago; I have not heard of it, at least in recent years. I can trace the custom through the origin of the families in which it was practised here to Indiana and North Carolina." — (Personal letter from Prof. S. B. Evans, Ottumwa, Iowa, to Captain Bourke, April 16, 1888.)

"I was told by an old person, now dead, that some fifty years since the urine of a cow was given internally as a remedy for chlorosis, in the counties of Norfolk and Suffolk." — (Personal letter from Prof. Frank Rede Fowke to Captain Bourke, dated London, England, June 18, 1888.)

"In the country where I was born I have seen several times, when a cow or an ox had one of its horns knocked away by a shock or any other cause, people pissing into the horn before putting it again over its root. This was supposed necessary to cause the horn to stick firmly against the root." — (Personal letter from Captain Henri Jouan, French Navy, Cherbourg, July 29, 1888.)

"The presence of ammonia in the secretions (whose power of neutralizing acids may have been accidentally discovered) may have had something to do with the repute of the excretions of the kidneys. I remember to have been told as a little boy of the virtues of urine as a

relief to chapped hands, also as a counter-irritant for inflamed eyes. In the former case the ammonia would soften as an alkali ; in the latter, the salts present would act to reduce congestion, like common salt, by endosmosis." — (Personal letter from Prof. E. N. Horsford, Harvard University, to Captain Bourke, April 19, 1888.)

"I have been recently informed, by a man who is acquainted with the peculiarities of Parisian life, that there are men who are in the habit of swallowing the scum which they obtain from the street urinals, and that they are known as '*Les mangeurs du blanc*.'" (Prof. Frank Rede Fowke.) According to Parent du Chatelet, a "*mangeur du blanc*" meant in Paris, until 1810, "a man who lived off the earnings of a strumpet." The name has since been changed to "*paillason*." (See "*La Prostitution*," Paris, 1857, vol. i. p. 138.)

"When I was a boy we had in my father's house a gang of cats, and I remember that frequently the people of Cherbourg came and asked permission to search in our garrets for cat's dung, which, they said, mixed and infused in white wine, produced a very efficient drink against periodical fits of fever." — (Captain Henri Jouan, French Navy.)

Lye-tea, made of human urine and lime-water, was used for colds by the "old people" in the rural parts of Central New York." — (Conversation with Colonel Pierce, Dr. Pangborn, and Lieutenant W. G. Elliott, U. S. Army, at San Carlos Agency, Arizona.)

The savages of Australia apply to wounds the resin of the eucalyptus, and also the bark of the same tree, previously steeped in human urine. (Personal letter from John Mathew, Esq., M. A., to Captain Bourke, dated "*The Manse*," Coburg, Victoria, November, 1889.) The same thing is referred to in "*The Australian Race*," E. M. Curr, Melbourne, 1886, vol. i. p. 256. In regard to the uses of the crust of latrines, in connection with "*mangeurs du blanc*," see other pages of this volume.

"Philos. ; hermet. ; urine du vin, le vinaigre. Urine des jeunes colériques *Le Mercure Philosophe*." *Dict. Nationale*, par M. Boucherel, aîné, Paris, 1857, sub voc. Urine (p. 1573).

We have already been informed from Marco Polo that the prisoners taken by the Tartars often poisoned themselves ; "for which reason the great lords haue dogs' dung ready, which they force them to swallow, and that forceth them to vomit the poyson" (in Purchas, vol. i. p. 92) ; and we have also learned, from many sources, — Etmuller, Schurig, Levinus Lemnius, Flemming, Paullini, Beckherius, Len-

tilius, — of the antidotal powers of the excreta. The existence of the very same belief was detected among the natives of America.

Padre Inamma, whose interesting researches upon rattlesnake bites and their remedies (made in Lower California, some time before the expulsion of the Jesuits, in 1767) are published in *Clavigero*,¹ says that the most usual and most efficacious antidote was human ordure, fresh and dissolved in water, drunk by the person bitten.

Along the Isthmus of Darien the belief was prevalent among the aborigines that the most efficacious remedy for poisoned arrows was that which required the wounded man to swallow pills of his own excrement.²

So in Peru, "when sucking infants were taken ill, especially if their ailment was of a feverish nature, they washed them in urine in the mornings, and when they could get some of the urine of the child, they gave it a drink."³

OCCULT INFLUENCES ASCRIBED TO ORDURE AND URINE.

In Canada, human urine was drunk as a medicine. Father Sagard witnessed a dance of the Hurons in which the young men, women, and girls danced naked around a sick woman, into whose mouth one of the young men urinated, she swallowing the disgusting draught in the hope of being cured.⁴

Analogous medicaments may be hinted at in Smith's account of the Araucanians of Chili: "Their remedies are principally if not entirely, vegetable matter, though they administer many disgusting compounds

¹ El remedio mas usual y eficaz es el de la triaca humana, así llamada, para mayor decencia, el excremento humano, fresco y disuelto en agua que hacen beber al mordido. — (*Clavigero*, "Historia de la Baja California," Mexico, 1852.)

² Decian que era el antidoto de esta ponçona el Fuego i el agua del mar, la dieta y continencia. Y otra dicen que la hez del herido tomada en pildoras o en otra forma. (*Herrera*, "Decades," 2, lib. i. pp. 3, 9, 10.) They used to say that the antidotes for this poison were fire, sea-water, fasting, and continence. Another of which they speak was the excrement of the wounded man, taken in form of pill or otherwise.

³ Garcilasso de la Vega, "Comentarios Reales," Markham's translation, Hakluyt Society, vol. xli. p. 186.

⁴ Il se fit un jour une dance de tous les jeunes hommes, femmes et filles toutes nues, en la présence d'une malade à la quelle il fallut (traict que je ne sçay comment excuser ou passer sous silence), qu'un de ces jeunes hommes luy pissast dans la bouche et qu'elle auallast et beust cette eau, ce qu'elle fit avec un grand courage, esperant en reccuoir guérison. — (*Sagard*, "Histoire du Canada," edition of Paris, 1885, p. 107.)

of animal matter, which they pretend are endowed with miraculous powers." — (Smith, "Araucanians," New York, 1855, p. 234.)

Brand enumerates obsolete recipes, one of which (disease not mentioned) directed the patient to take "five spoonfuls of knave child urine of an innocent." — (Brand, "Pop. Ant.," London, 1849, vol. iii. p. 282.)

The Crees apply the dung of animals lately killed to sprains. — (See "Mackenzie's Voyages," etc., to the Arctic Circle, London, 1800, introd. p. 106.)

Henry M. Stanley says that, for the cure of certain ulcers due to fly-blow, from which his men suffered, "Safeni, my coxswain on the Victoria Nyanza, . . . adopted a very singular treatment, which I must confess was also wonderfully successful. . . . This medicine consisted of a powder of copper and child's urine, painted over the wound with a feather twice a day." — ("Through the Dark Continent," New York, 1878, vol. ii. p. 369.)

"It appeared that the dung of the donkey, rubbed on the skin, was supposed to be a cure for rheumatism, and that this rare specific was brought from a distant country in the East, where such animals exist. — ("The Albert Nyanza," Sir Samuel Baker, Philadelphia, 1869, p. 372.)

"The Mandingoes of Africa dress abscesses with cow's dung. — (See Mungo Park's "Travels in Africa," in Pinkerton, vol. xvii. p. 877. See, also, the edition of his works, "Travels in Africa," New York, etc.)

The author has seen cow-manure plastered with soothing effect upon bee-stings in New Jersey.

"Pro remedio, in pluribus morbis urina fœminæ externe applicata, in eximia estimatione habetur." — ("The Native Tribes of South Australia, Adelaide, 1879, introduction, xvi. See, also, Eyre, "Expedition into Central Australia," London, 1845, ii. 300.)

"Pilgrim's Salve. A Sir-Reverence; human excrement." — (Grose, "Dictionary of Buckish Slang," London, 1811.)

"The medicine-men of the Ove-herero, who live south of Angola (which is on the west coast of Africa), urinate over the sick, in order to cure them." — ("Muhongo," interpretation by Rev. Mr. Chatelain.)

The Inuit medicine-man asperses the sick with human urine, "le goupillone avec de vieilles urines, à l'instar des docteurs à poison bochimans . . . les Cambodgiens aspergent également le démon de la petite-vérole avec de l'urine, mais cette urine est celle d'un cheval blanc." — (Réclus, "Les Primitifs," p. 98.)

"There are few complaints that the natives do not attempt to cure, either by charms or by specific applications. Of the latter, a very singular one is the application personally of the urine from a female, — a very general remedy, and considered a sovereign one for most disorders." — (Eyre, "Expedition into Central Australia," London, 1845, vol. ii. p. 300; contributed by Prof. H. C. Henshaw, Bureau of Ethnology, Smithsonian Institution, Washington, D. C.)

(See previous references to the therapeutics of the native Australians in this volume.

"Plasters of mixed grass, butter, and cow-dung were placed on the wounds" of sore-backed animals in Abyssinia. — ("A Visit to Abyssinia," W. Winstanley, London, 1881, vol. ii. p. 3.)

Cameron employed a native medicine-man, near Lake Tanganyika, to treat one of his men who had injured his eye. "His treatment consisted of a plaster of mud and dirt, and his fee was forty strings of beads." — ("Across Africa," London, 1877, vol. i. p. 322. The word "dirt," as used by Cameron in the above sentence, no doubt means ordure.)

Mr. Stewart Culin, of Philadelphia, Penn., who has been making careful investigations into the Chinese materia medica, states that "frequent directions for the use of urine" are to be seen "among the official remedies in the herbal." Only a few pages back, reference was had to the use by the Chinese in Batavia of all kinds of excrementitious remedies.¹

The Reverend Maurice J. Bywater writes from Nassau, Bahamas, that during the seven years he was on missionary duty in the island of Borneo, he witnessed several very curious and remarkable instances of the restorative and stimulating effects of human urine, as used by the Chinese immigrants in cases of accident.

The Koreans use the same system of medicine as the Chinese. Both employ plasters of human excrement for bites, erysipelas, inflammations, etc. They use the urine of a healthy boy as a tonic. — (Dr. H. T. Allen, Secretary of Legation, Korean Embassy, Washington, D. C., 1888.)²

Our knowledge of the Thibetans is still so limited that we must not

¹ "The urine of young children, mixed with lime and evaporated until a solid is formed, cures general debility, and, made into a liquid, is most usefully applied as a lotion for the eyes." (China.) — ("Evening Star," Washington, D. C., Oct. 11, 1890.)

² This is confirmed by Mr. Frank G. Carpenter, who has visited Corea.

attach too much importance to the little we have so far gained; there is still much to be learned concerning that singular, isolated race.

The strange veneration accorded the excrement of the Grand Lama has been fully discussed, but their sacred books do not show that the employment of stercoraceous medicaments is carried any farther.

According to the translation of the "Pratimoksha Sutra" made by Mr. W. W. Rockhill, sick Buddhist monks were ordered to employ the following remedies: "Le beurre fondu, l'huile, la mélasse, le miel, l'écume de mélasse." — ("Asiatic Society," Paris, 1885, p. 22.)

Dr. Francis Parkman, in his "Jesuits in North America," Boston, 1867, introduction, p. xl, speaks of the "revolting remedies" employed by the Huron, Iroquois, and Algonquin tribes.

The following are among many of the curious recipes given in the "Tragedy of the Gout," written by Blambeauseant, in 1600:—

"Ther's the odorous sheep's dung, given always on the sly."

"A little blue ointment, mixed with man's ordure."

"Virgin's urine, as a cure for all the men in town."

("Medicine in the Middle Ages," Minor, p. 88.)

Further references can be found in the following list, taken from the "Bibliotheca Scatologica," which likewise contains several of those from which citations have already been made.

"Cet emploi des stercora, et en particulier, de ceux de l'homme, pour les usages pharmaceutiques, est très réel. On nommait médecins stercoraires ceux qui les prescrivaient, et on dissimulait l'origine de la substance sous diverses dénominations bizarres ou ridicules (carbon humanum, oletum, sulphur occidentale). Suivant Paracelse, les excréments humains pouvaient par une certaine préparation, acquérir l'odeur du musc et de la civette; de là le nom qu'on leur donnait de civette ou musc occidental." — ("Bib. Scat.," p. 29.)

Ganin, De Simplic. Medicament. facultat. lib. x. fol. m. 75, seq. "An stercoris usus licitur? Conceditur." — (No. 200 of the "Bib. Scat.," p. 77.)

"202. Gufer, Joh. Medicin. domest. tab. 3, p. 11, et Joh. phil. Gieswein, De Mater. Medic. p. 292, imprimis laudant stercus hominis qui lupinos comedit." — (Idem, p. 78.)

"203. Helvetius, Joh. Freder, Diribitor. med. p. 112, seq., recommande le stercus humanum recens et adhuc calidum." — (Idem.)

Hérodote, lib. ii.; Hésiode, "Opera et Dies."

Sheep-dung, boiled in milk, recommended for the cure of the whoop-

ing cough by the Swedish physician Hjoort, as well as by the French doctor Baumer. — ("Bib. Scat." p. 78.)

Hoffmann, Fred. annot. in Petr. poter, Pharmacop. Spagyric (lib. i. p. 445), dit que excrementa alvina magnam vim possident.

Homère, Odyssée, lib. vi. — ("Bib. Scat." p. 78.)

Kircher, Podronus Ægypticus, cap. ult.

Laerce (Diogène) in Pythagor.

Langius (Christ.), Oper. Medic., regarde les médicaments stercoraux ut res indigna et execrabilis, cependant il en permet l'usage contra desperatissimos morbos" (p. 79).

Lotichus, Johan. De casei nequitia, Francof. 1640, "sordidi medicastri et σκατοφάγοι excrementis frui solent; sed homo vero cordatus et bonæ mentis se abstinere" (p. 81).

"M. Gustave Brunet a inséré dans sa traduction des propos de table de Martin Luther" (Paris, 1844, p. 377), "quelques pensées du célèbre réformateur qui appartiennent à notre sujet. L'une roule sur la transformation des excréments en nouveaux aliments; l'autre sur les propriétés de la fiente," etc. (p. 81).

Macrobian Saturnal. lib. iii.; Martialis, Epigrammata, iv. 88; vii. 18; xii. 40, 77, et ailleurs" (p. 81).

Mayern, Theodor. de Prax. Medic. syntagm. alter mêle le stercus à la poudre d'œillets" (gilly-flowers).

Menangiana. Paris, 1715, 4 vols. in 12. On trouve dans ce livre divers passages relatifs à notre sujet. Voy. t. 1, pp. 9, 180, 222; t. 2, p. 198; t. 3, p. 239.

Clemens d'Alexandrie, Recogn. lib. v. p. 71.

Denne, Ludovic. Pharmac. dissert. l. p. m. 411, seq. "Il blâme l'usage médical des excréments humains" (p. 73).

Diodore de Sicile, lib. i. cap. 8, p. 73.

Damian, P. Opuscula, c. 2, p. 73.

Praterius, Praxis, lib. iii. p. 330, recommande surtout l'huile et l'eau extraite de stercore humano. Suivant Belleste, Chirurg. d'hôpital, part 3, p. 248, chap. 4, le sel extrait des excréments du malade atteint de dysentère le guérit."

Plutarque, Apoph. Laconic, p. 232. Petrus Pharmacop. Spagiric. p. m. 445, regarde le stercus comme pouvant fournir rara et perfecta remedia. Reference is had to the thirteenth chapter of Rabelais "sur les anisterges." Rivinus (Augustus Quirinus) Censur. Medicament. officinal. cap. 2, p. 10, et seq. et 15 et seq., "strenue contra stercorum usum pugnat." There are other old medical authorities cited, some

fully, others only partially in favor of the medicinal use of the excreta; and one or two in antagonism thereto. — (“Bib. Scat.” p. 38 *et seq.*).

“On a appelé album nigrum les crottes des souris et des rats, jadis employés comme purgatif par les médecins stercoraires. Merde du diable, stercus diaboli, c’est l’assafœtida, espèce de gomme.” (“Bib. Scat.” p. 128. See also Grose, Dict. of Buckish Slang, Lond. 1811, Assafœt.) On the principle of “lucus a non lucendo,” the works of Swieten, “Commentariorum,” etc., Lyons, 1776, are worthy of special mention; careful examination fails to discover any allusion to the use of excreta, human or animal, in pharmacy or therapeutics, and no mention is made of witchcraft. Therefore the works of this author mark a new stage in the development of scientific and religious thought.

In Warner’s “Topographical Remarks relating to the southwestern parts of Hampshire,” 1793 (vol. ii. p. 131), speaking of the old register of Christ Church, that author tells us, “The same register affords, also, several very curious receipts, or modes of cure in some singular cases of indisposition; they are, apparently, of the beginning of the seventeenth century, and couched in the uncouth phraseology of that time.” I forbear, however, to insert them, from motives of delicacy. — (Brand, “Pop. Ant.” vol. iii. p. 306, article “Physical Charms.”)

“A new-born babe was not considered fully prepared for life’s journey until its stomach had been filled and emptied by a potation of molasses diluted with the vesical secretions of the first youngster that could be secured for the purpose.” — (“Professional Reminiscences,” Benjamin Eddy Cutting, M. D., Curator of the Lowell Institute, Boston, Mass., 1888, p. 40.)

OTHER EXCREMENTITIOUS REMEDIES.

It was not enough that the urine and ordure of men and animals should be employed in pharmacy; everything that could be taken from the bodies of men or animals, wild or domesticated, living or dead, was culled to swell the dread list of filth remedies.

Etmuller supplies the following list of remedies; “sumuntur ex corpore vivente:” Hair, nails, saliva, ear-wax, sweat, milk, menses, after-birth, urine, ordure, semen, blood, calculi, worms, lice, caul (of infant), . . . and these “ex partibus corporis demortui.” . . . The whole corpse, flesh, skin, fat, bones, skull, moss growing on a skull, brain, gall, heart. Gall of animals has been used by the Indians of North

America as a stimulant. (See Etmuller, Michaelus, "Opera Omnia," vol. ii. p. 265, Schrod. "Dil. Zoöl.")

He also recites that the following parts of domestic kine were used in medical practice: horns, bile, liver, spleen, blood, marrow, tallow, fat, hoofs, urine, ordure, testicles, milk, butter, cheese, phallus, and bones. — (Idem, vol. ii. p. 248 *et seq.*)

HAIR.

"The first hair cut from an infant's head will modify the attacks of gout. . . . The hair of a man torn down from the cross is good for quartan fevers." — (Pliny, lib. xxviii. cap. 7.)

"The smell of a woman's hair, burnt, will drive away serpents, and hysterical suffocations, it is said, may be dispelled thereby. The ashes of a woman's hair, burnt in an earthen vessel, will cure eruptions and porrigo of the eyes . . . warts and ulcers upon infants . . . wounds upon the head . . . corrosive ulcers . . . inflammatory tumors and gout . . . erysipelas and hemorrhages, and itching pimples." — (Pliny, lib. xxviii. c. 20.)

Schurig commends the use of human hair in cases of baldness, applied externally in salve, chopped fine or in ashes; for the cure of yellow jaundice, it was powdered and drunk in some suitable menstruum; it was employed in luxation of the joints, for hemorrhage from wounds: "Ad canis morsuum, infantis capilli cum aceto impositu morsum sine tumore sanant et capitis ulcera emendant." — (Sextus Placitus, art. "De Puello et Puella Virgine.")

Flemming advised that it be powdered and drunk in wine as a cure for yellow jaundice; woman's hair, powdered and made into a salve, with lard, was of general efficacy; men's hair was burned under the nostrils of those suffering from lethargy; and was drunk for "suffocation of the womb." — ("De Remediis," etc. p. 8.)

A medicinal oil was distilled from the hair of a full beard, and an ointment made from the same. Powdered human hair was drunk as a potion in a cure for yellow jaundice; the ashes of burnt hair were made into an unguent with mutton tallow, and applied to the nostrils of people in a state of lethargy; in "suffocation of the uterus," this ointment was applied to the pudenda. The hair of a patient was frequently used in affecting "sympathetic cures," or in what were called "Cures by Transplantation," but the names of the diseases are not given by Flemming (p. 21). (But see under "Cures by Transplantation" in this volume.)

In China, the shavings of the hair, which must amount to a considerable quantity, since hundreds of millions of people shave the head close daily, are preserved for manuring the land. — (See "Bingham's Exped. to China," London, 1842, vol. ii. p. 7.)

In China, everything connected with the tilling of the fields is still a religious rite. Probably no country in the world of equal advancement has adhered with more tenacity to old usages in all that pertains to the turning-up of the soil; there are ceremonies in which the Emperor himself must lead with a plough. How much all this may have to do with the utilization of a refuse which has been so generally regarded as possessed of "magical" or "medicinal" properties, is, in all likelihood, never to be ascertained; but attention should be attracted to the fact, in the same manner that it was found worth while to make an examination into the history of latrines.

"Among ourselves, it is a Devonshire belief that you can give a neighbor ague by burying a dead man's hair under his threshold." — ("Folk-Medicine," Black, p. 27.)

"In Devonshire and in Scotland alike, when a child has whooping-cough, a hair is taken from its head, put between slices of bread and butter, and given to a dog, and if in eating it the dog cough, as naturally he will, the whooping-cough will be transferred to the animal, and the child will go free." The same method of cure is practised in Ireland, but the animal selected is an ass. — (Idem, p. 35.)

"Certain oak-trees at Berkhamstead, in Hertfordshire, were long famous for the cure of ague. The transference was simple, but painful. A lock of hair was pegged into an oak, and then, by a sudden wrench, transferred from the head of the patient to the tree." — (Idem, p. 39.)

Clippings of hair and rags are offered to holy wells in Ireland, Borneo, Malabar, etc., not merely as offerings to deities, but in order to effect a "transference" of diseases to the people who may take hold of them. — (Idem, pp. 39, 40; quoting from Tylor, "Primitive Culture," vol. ii., and others.)

"In New England, to cure a child of the rickets, a lock of its hair is buried at cross-roads, and if at full moon, so much the better." — (Idem, p. 56.)

It is believed in parts of England that the hairs from a donkey's back, wrapped up in bread, and given to a sick child, will cure the whooping-cough; another remedy of the same kind is to take clippings from the child's own head, mix them in butter, and give to a dog, which will

take the disease from the child ; still another was to mount the sufferer upon the back of an ass, and lead him nine times round an oak-tree. — (See Brand, "Pop. Ant." vol. iii. p. 288, art. "Physical Charms.")

The Romans attached certain omens to the manner, time, and place of cutting the nails and hair. — (See Pliny, lib. xxviii. c. 5.)

The ancients believed that "no person in a ship must pare his nails, or cut his hair except in a storm." — (Brand, "Pop. Ant.," vol. iii. p. 239, art. "Omens Among Sailors," quoting Petronius Arbiter.)

"When a man has his hair cut, he is careful to burn it, or bury it secretly, lest falling into the hands of some one who has an evil eye, or is a witch, it should be used as a charm to afflict him with a headache." — (Livingston, "Zambesi," London, 1865, p. 47.)

Etmuller relates that in his time women suffering from retention of the menses were in the habit of plucking the hair growing on the pubis, which would promptly cause their reappearance, but whether by the irritation or by taking the hair internally, is not clear : — "*Mulieres suffocatae ex utero soleant vellicare in pilis pubis, ut citius et felicius ad se redeant.*" Finger-nail clippings were drunk as an emetic, especially by soldiers while on campaign : — "*Ungues infusi in vinum vel potum cum vehementia cient vomitum et purgant per fecesum . . . propinavit pro vomitorio et purgante militibus ungues proprios infusos per noctem in vinum calidum*" — (Etmuller, vol. ii. p. 269).

"The hair and nails are cut at the full moon." — (Grimm, "Teutonic Mythology," Stallybrass, London, 1882, vol. ii, p. 712 *et seq.*)

The Patagonians "all believe that the witches and wizards can injure whom they choose, even to deprivation of life, if they can possess themselves of some part of their intended victim's body, or that which has proceeded thence, such as hair, pieces of nails, etc. . . . And this superstition is the more curious from its exact accordance with that so prevalent in Polynesia." — ("Voyage of the Adventure and Beagle," London, 1839, vol. ii. p. 163, quoting the Jesuit Faulkner.)

"Which is the most deadly deed whereby a man increases most the baleful strength of the Dævas, as he would by offering them a sacrifice ?"

"Ahura Mazda answered : — 'It is when a man here below combing his hair or shaving it off, or paring off his nails, drops them in a hole or in a crack.' " — (Fargard XVII. Avendidad, Zendavesta, Oxford, 1880, p. 186.)

Beckherius states that the clippings of the finger-nails made an ex-

cellent emetic. "*Vomitorium non inelegans ex iis paratur.*" — ("Med. Mic.")

Flemming goes more into detail ; he says that the finely ground clippings of the hoof of the elk, stag, goat, bull, etc., were employed as a vomitory, but in their absence, human finger-nails were substituted ; "*istam ungulorum speciem quæ ab homine desumitur, substitui.*" Human finger-nail clippings were also recommended in "sympathetic" cures. — (Flemming, "*De Remediis*," p. 21.)

"He who trims his nails and buries the parings is a pious man ; he who burns them is a righteous man ; but he who throws them away is a wicked man, for mischance might follow should a female step over them." — (Paul Isaac Hershon, "*Talmudic Miscellany*," Boston, 1880, p. 49 ; footnote to above, "The orthodox Jews in Poland are to this day careful to bury away or burn their nail-parings.")

On a fragment of a Chaldean tablet occurs this curious passage : —

"A son to his mother,
(if) he has said to her, Thou art not my mother
His hair and nails shall be cut off,
In the town he shall be banished from land and water."
("*Chaldean Magic*," Francois Lenormant, London, 1873, p. 382.)

In the province of Moray, Scotland, "In hectic fevers and consumptive diseases they pare the nails of the fingers and toes of the patient, put these in a bag made of a rag from his clothes, . . . then wave their hand with the rag thrice round his head, crying '*Deas Soil*,' after which they bury the rag in some unknown place." Pliny, in his Natural History, mentions it as practised by the magicians or Druids of his time. — (Brand, "*Pop. Ant.*," vol. iii. p. 286, art. "*Physical Charms*.")

SUPERSTITIONS CONNECTED WITH THE HUMAN SALIVA.

The most recent work on this subject is the extended monograph of Mrs. Fanny D. Bergen, of Cambridge, Massachusetts, now in press, and to the pages of which the author of this volume has contributed his own collection of data.

Reference may also be had, with advantage, to Brand's *Popular Antiquities*, Reginald Scot's "*Discoverie of Witchcraft*," Black's "*Folk-Medicine*," Samuel Augustus Flemming's "*De Remediis ex Corpore Humano desumtis*," Lenormant's "*Le Magie chez les Chaldiens*," and to the works of Pliny, Galen, "*Saxon Leechdoms*," Levinus Lemnius, Beckherius, Etmuller, and many others.

John Graham Dalyell, "Superstitions of Scotland," Edinburgh, 1834, has a chapter on the occult influences attributed to human saliva. When the Khonds of Orissa were about to sacrifice a human victim, they were wont to solicit the favor of having him spit in their faces; "sollicitent un crachat qu'ils s'étendront soigneusement." — ("Les Primitifs," Réclus, p. 368.)

In the ritual of the Hill Tribes of the Nilgherris, it is related: —

"Mada a craché dans les fontaines."

(Quoted in "Les Primitifs," p. 244.)

Frommann, in his "Tractatus de Fascinatione," Nuremburg, 1675, speaks of the anointing of eyes with saliva, to cure blindness; this he compares to the use made by our Saviour of the same (p. 196).

"The Kirghis tribes apply to their sorcerers, or Baksy, to chase away demons, and thus to cure the diseases they are supposed to produce. To this end they whip the invalid until the blood comes, and then spit in his face." — ("Chaldean Magic," François Lenormant, London, 1873, p. 212.)

Many interesting practices connected with the human saliva, are given in Lady Wilde's "Ancient Legends and Superstitions of Ireland," Boston, 1888. See also "The Golden Bough," James G. Frazer, M.A., London, 1890, vol. i. pp. 385, 386.

CERUMEN OR EAR-WAX.

Pliny speaks of its use in medicine (lib. xxviii. cap. 7); Galen does also. Flemming recommended its internal use in colic and cramps; and externally as an application to wounds. — ("De Remediis," etc., p. 22.)

Paullini was of the opinion that a good salve for sore eyes could be prepared from cerumen (pp. 42, 43).

"The excrement of the ears, like unto a yellow ointment, is a great comfort in the pricking of the sinews." — (Von Helmont, "Oritrika," English translation, London, 1662, p. 247.)

Galen thought that ear-wax was efficacious in the cure of whit-nails; the other "sordes" were also employed, but he would not write about them, on account of the difficulty of obtaining them, — such as the perspiration flowing in the bath, or scraped from the body after severe exercise; and, finally, the fatty matter of wool was of medicinal value, and seemed to have the same properties as butter. — (Galen, "Opera Omnia," lib. xii. p. 309, Kuhn's edition, Leipzig, 1829.)

WOMAN'S MILK.

Woman's milk mitigated redness of eyes and inflammation of the lachrymal glands; it should be used with vitriol. For "gutta serena" it was applied as an ointment; in cases of atrophy it was regarded by many as of commendable utility, especially if drawn from the woman's breast; the same treatment was a specific in obstinate hiccough.

A butter prepared from woman's milk was used in diseases of children, especially colic, and in ocular affections. (See Flemming, "De Remediis," etc., p. 18.) Its remedial efficacy forms the basis of Pliny's c. 21, lib. xxviii.; if possible, it should be that of a woman who had just borne male twins. "If a person is rubbed at the same time with the milk of both mother and daughter, he will be proof for all the rest of his life against all affections of the eyes. . . . Mixed with the urine of a youth who has not yet arrived at puberty, it removes ringing in the ears." — (Idem.)

"*Matricis vulneribus confert. . . . lac mulieris.*" — (Avicenna, vol. i. p. 337, a 36.)

The Empress of China took the milk of sixty wet nurses to keep herself alive, according to Mr. Frank G. Carpenter.

Woman's milk is still used in the rude trephining of the African Kabyles as a dressing. — (See "Prehistoric Trephining," by Dr. Robert Fletcher, in vol. v. "Contributions to North American Ethnology," Washington, D. C., 1882.)

HUMAN SWEAT.

Human perspiration was believed to be valuable not only as a means of prognosis in some diseases, but its appearance was dreaded in others. If the perspiration of a fever-stricken patient was mixed with dough, baked into bread, and given to a dog, the dog would catch the fever, and the man recover. It was efficacious in driving away scrofulous wens, and in rendering philters abortive. It was narrated that if a man, who under the influence of a philter, was forced to love a girl against his will, would put on a pair of new shoes, and wear them out by walking in them, and then drink wine out of the right shoe, where it could mingle with the perspiration already there, he would promptly be cured of his love, and hate take its place.

This corresponds closely to the urine case already noted; and it is proper to repeat Flemming's own words on the matter: "*Narrant quod, si quis philtro fasciatus era fuerit, ad amandam præter volun-*

tatem virginem, ut is novus induat calces, miliareque unum obambulando conficiat, quo sudor animadvertatur postque vinum e calceo dextri pedis sudore madido, hauriat, sic ab illicito amore liberari amoremque in odium converti dicunt." — ("De Remediis," p. 19.)

See Etmuller, who used it in scrofula, lib. ii. p. 265 ; Pliny, lib. 28 ; Galen and Avicenna (sweat of gladiators), vol. i. p. 398, a 17, and elsewhere.

SUPERSTITIONS CONNECTED WITH THE CATAMENIAL FLUID.

For the opinions entertained by the ancients regarding its occult powers, read Pliny (Bohn's edition), lib. xxviii. cap. 23, and again lib. viii. cap. 13. "On the approach of a woman in this state, must will become sour, seeds which are touched by her become sterile, grafts wither away, garden-plants are parched up, and the fruit will fall from the tree beneath which she sits ; . . . a swarm of bees if looked upon by her will die immediately, brass and iron will immediately become rusty. . . . Dogs tasting the catamenial fluid will go mad. . . . In addition to this, the bitumen which is found at certain periods of the year floating on the Lake of Judea, known as Asphaltites, — a substance which is peculiarly tenacious, and adheres to everything it touches, — can only be divided into separate pieces by a thread which has been dipped into this virulent matter." (Lib. vii. cap. 13, and again lib. xxviii. cap. 23.) In a footnote it is stated that both Josephus ("Bell. Jnd.," lib. iv. cap. 9) and Tacitus (lib. v. cap. 6) give an account of this supposed action of this fluid on the bitumen of Lake Asphaltites. "Hail-storms, they say, whirlwinds, and lightning even, will be scared away by a woman uncovering her body merely, even though menstruating at the time." (Lib. xxviii. cap. 23.) Menstruating women, in Cappadocia, perambulated the fields of grain to preserve them from worms and caterpillars. (Idem.) "Young vines, too, it is said, are injured irremediably by the touch of a woman in this state ; and both rue and ivy plants, possessed of highly medicinal virtues, will die instantly upon being touched by her. . . . The edge of a razor will become blunted on coming in contact with her." — (Idem.)

"All plants will turn pale upon the approach of a woman who has the menstrual discharge upon her." (Pliny, lib. xix. cap. 57.) The same opinion prevailed in France down to our own times. (Idem, footnote.)

"Expiations were made with the menstrual discharge, . . . not only by midwives, but even by harlots as well" (lib. xxviii. cap. 20).

Frommann cites Aristotle and Pliny in reference to the maleficent

effects of the menses and of the uncanniness of a menstruating woman. Aristotle said her glance took the polish out of a mirror, and the next person looking into it would be bewitched. Frommann quotes a man who said he saw a tree in Goa which had withered because a catamenial napkin had been hung in it. — (“*Tractatus de Fascinatione*,” Nuremberg, 1675, pp. 17, 18.)

“Stains upon a garment made with the catamenial fluid can only be removed by the agency of the urine of the same female.” — (Pliny, lib. xxviii. cap. 24.)

“An Australian black fellow who discovered that his wife had lain on his blanket at her menstrual period, killed her, and died of terror himself within a fortnight. Hence Australian women at these times are forbidden under pain of death to touch anything that men use.” (“*The Golden Bough*,” Frazer, vol. i. p. 170. He supplies other examples from the Eskimo and the Indians of North America. “*Tinneh*,” etc., p. 170). In the following example we are not certain that the young women selected were undergoing purgation, but there is some reason for believing that such was the case, especially in view of the general dissemination of the ideas connected with the catamenia. “In a district of Transylvania, when the ground is parched with drought, some girls strip themselves naked, and, led by an older woman, who is also naked, they steal a harrow and carry it across the field to a brook, where they set it afloat. Next they sit on the harrow, and keep a tiny flame burning on each corner of it for an hour; then they leave the harrow and go home. A similar rain-charm is resorted to in India; naked women drag a plough across the field by night.” — (“*The Golden Bough*,” Frazer, vol. i. p. 17.)

For all bites of centipedes the people of Angola, Portuguese and negroes, apply the catamenial fluid. This remedy is implicitly believed in by all concerned. — (Rev. Mr. Chatelain, missionary to Angola, Africa.)

For the Inuit, see “*Les Primitifs*,” Réclus, Paris, 1885.

The dread felt by the American Indians on this subject is too well known to need much attention in these pages; it corresponds in every respect to the particulars recited by Pliny. Squaws, at the time of menstrual purgation, are obliged to seclude themselves; in most tribes they are compelled to occupy isolated lodges; and in all are forbidden to prepare food for any one but themselves.

It is believed that were a menstruating woman to step astride of a rifle or a bow or a lance, the weapon would have no further utility.

Medicine-men are in the habit of making a saving clause, whenever they proceed to make "medicine;" this is to the effect that the "medicine" will be all right provided no woman in this peculiar condition be allowed to approach the tent or lodge of the officiating charlatan.

Among the Navajoes of Arizona it is customary for the women to wear a strip of sheep-skin, called a "chogan;" when the necessity for its use has disappeared, the woman goes outside of the village and conceals it in the forks of one of the cedar or juniper trees so numerous in the mountains. The author once found one of these; but the people with him were impressed with the idea that no good would come from being near it. At another time he knew of a young boy who had been hit by a "chogan" which had been dislodged by a wind-storm. He was almost frantic with terror, and devoted three or four days to singing and to washing in a "sweat-bath."

The Ostiaks of Siberia would seem to have the same ideas on this subject as the Apaches and Navajoes have. — (See Pallas, "Voyages," vol. iv. p. 95.)

Danielus Beckherius informs his readers that menstrual blood was used in medicine (pp. 23 *et seq.*); philters were prepared from it (*idem*, p. 341). "Zenith juvenearum sc. sanguines menstruum" were given for epilepsy, — that is, the first menses of a girl (*idem*, p. 42). The lint of the napkin itself was thus given also (*idem*), — "*litura pannorum menstruorum datur patienti sanari morbum comitialium.*" The first napkin used by a healthy virgin was preserved for use in cases of plague, malignant carbuncles, etc., dampened with water and laid on the part affected; also used in erysipelas (*idem*, p. 43, "*Med. Microcosmus*"). Dried catamenia were given internally for calculi, epilepsy, etc., and externally for podagra; they were also used in treatment of the plague, for carbuncles, aposthumes, being placed thereon with a rag wet with rosewater or oil, into which menstrual fluid had been poured; it was good as a cosmetic to drive away pimples (p. 265).

To restrain an immoderate flow of the menses a napkin was saturated with menstrual blood, and then kept for a certain time in an aperture made in the bark of a cherry-tree. "*Ad immodicum menstruorum fluxum cohibendum sunt qui pannum menstruum sanguine imbutum certo tempore cerasi radice in cortice apertæ indunt, incisuramque iterum operiunt.*" — (Etmuller, "Op. Omnia;" Schrod. "*Dil. Zoöl.*" vol. ii. p. 265.)

Paullini prescribes the "dried catamenia of women" for the cure of kidney diseases (pp. 142, 143), also for ring-worm, felons, menstrual

troubles. Frommann gives the same cure for immoderate menses, by placing the napkin in a cherry-tree. — (See "Tract. de Fascinatione," p. 1006.)

"Excoriationi conferunt. . . sanguis menstruus." — (Avicenna, vol. i. p. 388.)

According to Flemming, menstrual blood was believed to be so powerful that the mere touch of a menstruating woman would render vines and all kinds of fruit-trees sterile (herein he seems to be following Pliny). It was believed to be valuable medicinally in relieving obstructions to the menstrual flow of other women; even the soiled smock of a woman who had menstruated happily was efficacious in assisting another woman whose menses for any cause were retarded. A small portion of the menses, dried and taken internally, mitigated the ailment known as dysmenorrhœa. Flemming states that, while in his time this remedy had been gradually superseded, its use was still kept up among the poor and ignorant, in erysipelas, face-blotches, and as an ingredient in an ointment for podagra or gout. — ("De Remediis," pp. 16, 17.)

The Laplanders "say that they can stop a vessel in the middle of its course, and that the only remedy against the power of this charm is the sprinkling of female purgations, the odor of which is insupportable to evil spirits." — ("Regnard's Journey to Lapland," in Pinkerton, vol. i. p. 180).

"To cure a young woman of consumption she was given monthly discharges to drink." — ("Dutchess County, New York," 1832, Mr. Joseph Y. Bergen, Jr., Cambridge, Mass.)

"Isaiah compareth our justice "panno menstruatæ." — (Harington, "Ajax," p. 24.)

"Crines fœminæ menstruosæ, the haire of a meustruous woman are turned into serpents within short space." — (Scot, "Discoverie," p. 221.)

"Men have a special objection to see the blood of women at certain times; they say that if they were to see it they would not be able to fight against their enemies and would be killed." (Mrs. James Smith, "The Roandik Tribes," p. 5.) Hence, although bleeding is a common Australian cure among men, women are not allowed to be bled. (Angas, vol. i. p. 3.) This aversion is perhaps the explanation of that seclusion of women at puberty, childbirth, etc., which has assumed different forms in many parts of the world." — ("Totemism," Frazer, p. 54, footnote.)

Old women were suspected of using the first menstrual flow of a young girl in love-philters. — (Samuel Augustus Flemming, "De Remediis.")

"For colic take the scrapings of the nails of a catemenial virgin, mix with water, and take." — (Sagen-Märchen, Volksaberglauben aus Schwaben, Freiburg, 1861, p. 487.)

There were many curious ideas prevalent in olden times as to the manner in which the basilisk or cockatrice could be engendered. "Si l'on place dans une gourde de verre du sang menstruel, et si l'on fait putrifier celui-ci dans le ventre d'un cheval, il en nait un basilic." — ("Mélusine," Paris, January-February, 1890, p. 19.)

Although the Israelites had many notions in common with the American Indians on the subject of the catamenial fluid, and the seclusion of women undergoing purgation, there does not seem to have been any effort made to preserve or to hide the cloths used on such occasions. Thus the Prophet Isaiah (lxiv. 6) says of the idols of the Gentiles that they must be cast aside as the napkins soiled with the menses. "Hoc est disperges ea (de idolis loquitur) sicut immunditionem menstruatae." — (Contributed by Doctor Robert Fletcher.)

References to use of the catamenial fluid in witchcraft will be found in Beckherius, quoting Josephus

"Hiawatha, wise and thoughtful,
You shall bless to-night the corn-fields,
Draw a magic circle round them,
To protect them from destruction.

"Rise up from your bed in silence,
Lay aside your garments wholly,
Walk around the fields you planted,

"Covered with your tresses only,
Robed with darkness as a garment."

("Hiawatha," Longfellow, canto xiii., "Blessing the Corn-Fields.")

Menstruating women were excluded from the Jewish synagogues and from the communion table of the early Christian Church: "Menstruatæ mulieres superstitiose exclusæ ab ecclesia." — (Baronius, "Annales," Lucca, 1758, tome 3, 266, xi.)

AFTER-BIRTH AND LOCHIÆ.

Both of these were used medicinally; the lochiæ were useful in restraining uterine hemorrhages; after-birth, dried and powdered, de-

prived love-philters of their power; it was used as an anti-epileptic, to relieve retention of the menses, etc. (See Flemming, "De Remediis," p. 17.) Secundines were used in the treatment of epilepsy. — (See Etmuller, vol ii. p. 265).

HUMAN SEMEN.

Etmuller knew nothing of the remedial value of human semen beyond the fact that Paracelsus had recommended its use in some cases (vol. ii. p. 272).

Pliny mentions the use of human semen as a medicine (lib. xxviii. c. 10).

The savage Australians have "a last and most disgusting remedy . . . deemed infallible in the most extreme cases." . . . "*Mulierem ob juventutem firmitatemque corporis lectam sex vel plures viri in locum haud procul a castris remotum deducant. Ibique omnes deinceps in illa libidinem explent. Tum mulier ad pedes surgere jubetur quo facilius id quod maribus excepit effluere possit. Quod in vase collectum ægrotanti ebibendum præbent.*" The aborigines have unbounded faith in this truly horrible dose, and enumerate many, many instances where it has effected marvellous cures. We, however, have known of its having been administered in several cases without the remotest revivifying result. It may be that this fluid is — in fact some savants positively assert that it is so — the very essence of life, as well as containing the germs thereof, and that administering a draught thereof to a patient slowly but surely dying from exhaustion, consequent upon a long fit of illness (the illness itself having died out or been cured) might have the wonderful effect detailed so positively by the natives; but this is a question for physicians to decide." — ("The Abor. of Victoria and Riverina," Melbourne, 1889, p. 55, P. Beveridge, received through the kindness of the Royal Soc., Sydney, N. S. Wales, F. B. Kyngdon, Secretary.)

"*Impetigine conferunt . . . sperma.*" — (Avicenna, vol. i. p. 330, a 10.)

For gout Avicenna prescribed "*Sanguis menstruus*," "*Sperma hominis*" (vol. i. p. 330, a 12; idem, a 13); "*Sanguis menstruus calidus*" (vol. i. p. 388, b 9); also "*Stercus caprarum*" (vol. i. p. 390, a 13). Consult also what has been said of this secretion under "Love-philters."

HUMAN BLOOD.

The medicinal employment of human blood is described by Pliny (lib. xxviii. cap. 105).

Beckherius says that human blood was employed in the treatment of epilepsy. Faustina, the wife of the philosophical emperor, Marcus Antoninus, anxious to have a child, drank the warm blood of a dying gladiator, and then shared her husband's bed, and at once became pregnant, and brought forth the cruel Commodus. Human blood was also used in effecting "sympathetic cures." — ("Medic. Microcos." pp. 122, 128.)

But it was essential that the human blood so employed should be pure and undefiled; lovers who wished to increase the affection of their mistresses, were recommended to try an infusion of their own blood into the loved one's veins. The blood of man and also that of some animals, notably the dog, sheep, etc., were employed in mania, delirium, cancer, etc. The method of transfusion was preferred. Epileptics would sometimes drink a draught of the warm blood caught gushing from the neck of a decapitated criminal; the blood of a man, just decapitated, drunk warm, cured epilepsy and restrained uterine hemorrhage. — (Etmuller, vol. ii. p. 272.)

Grimm alludes to the fact that the blood of innocent maids and boys was used as a remedy for leprosy; that of malefactors, in epilepsy. — ("Teut. Mythol." vol. iii. p. 1173.)

See the discussion of this matter under the caption of "Human Skulls." Consult the work "Blood-Covenant," by Dr. H. C. Trumbull.

In regard to the conduct of the empress Faustina, see "History of the Inquisition," Henry C. Lea, N. Y. 1889, vol. iii. p. 391.

HUMAN SKIN, FLESH, AND TALLOW.

Girdles of human skin were regarded as efficacious in helping women in labor; Etmuller, in his "Comment. Ludovic." disapproves of their use, but, in another part of his works, describes how and for what purposes they were to be employed.

"Corium humanum et ex inde paratum cingulum magni est usu in suffocatione uterina arcenda, uti etiam in pellendo fœtu mortuo, item in partu difficile" (vol. ii. p. 272).

References to such girdles or belts, called "cingulæ" or "chiro-

theæ" are to be found in the writings of Samuel Augustus Flemming and others.

Human flesh, of corpses, was administered under the name of "Mummy." (See Beckherius, "*Med. Microcos.*" p. 263 *et seq.*) He enumerates no less than fifty prescriptions for all sorts of ailments. The "mummy" should be from a malefactor, hanged on a gibbet, never buried, and the age should have been between 25 and 40, of good constitution, without organic or other diseases, and gathered in clear weather.

Human flesh occurs in recipes in "The Chyrurgeon's Closet," London, 1632, pp. 6, 53.

Andrew Lang refers to the use of "mummy powder" by the physicians of the Court of Charles II. — ("Myth," etc. vol. i. p. 96.)

Human tallow was employed in medicine, rendered from the skin and other parts. It was regarded as efficacious in eradicating small-pox pustules, while an "oleum Philosophorum" was distilled from it and held in high repute for tumors, catarrhal troubles, affections of the ear, etc. — (Flemming, "*De Remediis*," p. 9.)

Human flesh "mumia," was recommended in the preparation of the best "Paracelsus salve. . . . Recommended for cure of bruises and against congealed blood. . . . Most excellent and most approved medicines."

HUMAN SKULL. — BRAIN. — MOSS GROWING ON HUMAN SKULL. — MOSS GROWING ON STATUE. — LICE.

Democritus thought, in his Memoirs, quoted by Pliny, that "the skull of a malefactor is most efficacious. . . . While, for the treatment of others, that of one who has been a friend or guest is required." (Pliny, lib. xxviii. c. 2.) . . . Skull of a man who has been slain," and "whose body remains unburnt. . . . Skull of a man who has been hanged." — (Idem.)

"Xenocrates, who, says Galen, flourished two generations or sixty years before him, writes with an air of confidence on the good effects to be obtained by eating of the human brain, flesh, or liver; by swallowing in drink the burnt or unburnt bones of the head, shin, or fingers of a man, or the blood." — ("Saxon Leechdoms," lib. i. p. 18.)

"Against a boring worm . . . burn to ashes a man's head-bone or skull; put it on with a pipe." — (Idem, vol. ii. p. 127, article "Leech Book.")

Paracelsus gives the recipe for distilling "The Oyle of the Skull of a

Man. . . . Take the skull of a man that was never buried, and beate it into powder. ("The Secrets of Physicke," Theophrastus Paracelsus, Eng. transl. London, 1633, p. 97.) "The dose is three grains against the falling sickness." — (Idem.)

Schurig notes that the human skull is a remedy for the falling sickness. — (See "Chylologia.")

The skull of a man was used for diseases of men; that of a woman, for diseases of women. — (See "Rare Secrets in Physicke," collected by the Comtesse of Kent, London, 1654, p. 3.)

Beckherius prescribed it in cephalic affections, epilepsy, paralysis, apoplexy, vertigo, etc., taken in powder, or raw, simply or in combination. — ("Medicus Microcosmus," p. 199 *et seq.*)

But the skull was, preferentially, "*Cranii humani nunquam sepulti*" (p. 217); or, "*Cranii, humani violenter mortui*" (p. 266). Moss from such a skull was also used medicinally (*idem*, p. 237). If possible, it should be that of a man who had been executed on a scaffold, "*patibula*."

"Powder of a man's bones, burnt, chiefly of the skull that is found in the earth, given, cureth the epilepsy. The bones of a man cureth a man, the bones of a woman, cureth a woman." But the patient had to abstain from wine for nine days. — ("The Poor Man's Physician," John Moncrief, Edin. 1716, p. 70.)

"*Os hominis adustum*," a cure for epilepsy (Avicenna, vol. i. p. 330 a 18); "*Mumia*" (*idem*, vol. i. p. 357, a 55); "*Ossa hominis in potu data*" (*idem*, vol. i. p. 371, a 6).

Epilepsie. "Take pilles made of the skull of one that is hanged." — (Reg. Scot. "Discoverie," p. 175.)

The skulls of ancestors were used as drinking cups by the Tibetans, according to Rubruquis, in Purchas (vol. i. p. 23).

"Among primitive people the head is peculiarly sacred." — ("The Golden Bough," Frazer, vol. i. p. 187.)

Dr. Bernard Schaff gives the following formula for the cure of fevers: "Take a human skull from among those not enclosed in tombs, and calcine it in a crucible or in the open fire; administer in doses of from one scruple to half a dram an hour or two before the paroxysm of the fever." He adds that among the common people the belief prevailed that the skull should be obtained at the early dawn of day, about the time of the winter solstice, and with the ceremonies (*sacris*) peculiar to that season, that it should be picked up in silence; but for his part he does not believe in such things.

"Recipitur cranium humanum ex ipsis quoque sepulchrorum claustris depromptum (vulgus addit tempore matutino ante Solis ortum sub sacris angeronæ, hoc est, ore tacito, auferatur, quod tamen, cum aliquam sapere videatur superstitionem, imitari nolui) et vel igne aperto, vel in crucibulo, calcinatur, usquedem colorem acquirat cineritum pulverisatum hocce cranium adhibetur a Θ i. ad $\Im$; i. vel ii. horas ante paroxysmi principio." — ("Ephem. Phys. Medic.," Leipzig, 1694, vol. ii. p. 93.)

The skull of a malefactor who had died on the scaffold or wheel, and which had been exposed in the open air long enough to make it perfectly dry and white, was considered a specific in epilepsy, being much superior for that purpose to the skulls obtained from graveyards.

Soldiers thought that if they drank from a human skull before going into battle they would secure immunity from the weapons of the enemy. This belief undoubtedly came into Europe with the Scythians.

"Milites putant, si quis ex cranio humano hauriat potum fore ut sit immunis ab insultis armorum." — (Etmuller, vol. ii. p. 268, 269.)

Etmuller also shows that these skulls were ground up and administered to epileptic patients, many modes of preparation and administration being given.

Flemming wrote that human skull was considered a potent remedy in all ailments for which practitioners would administer human brain, — that is, in nerve troubles and in epilepsy. Preferably, the skull should be taken from a corpse which had died a violent death, — "*Quæ e cadavere violenta morte extincto est desumta.*" It was an ingredient in many preparations bearing the high-sounding titles of "*majesterium epilepticum*," "*specificum cephalicum*," etc. As a powder, ground raw or calcined, it was sometimes administered as a febrifuge and in paralysis. — ("De Remediis," p. 10.)

Mr. W. W. Rockhill states that the Lamas of Thibet use skulls in their religious ceremonies, but reject those which smell like human urine. "Blood of a dead man's skull" used to check hemorrhage. — (Pettigrew, "Med. Superst.," p. 113.)

"There is a divination-bowl, — an uncanny object, made of the inverted cranium of a Buddhist priest." — ("Tidbits from Tibet," in the "Evening Star," Washington, D. C., Nov. 3, 1888, describing the W. W. Rockhill collection in the National Museum.)

Before the coming of the whites the savages of Australia employed human skulls as drinking-vessels, — "human skulls with the sutures stopped up with a resinous gum." — ("Native Tribes of S. Australia,"

Adelaide, 1879, received through the kindness of the Royal Society, Sydney, New South Wales, F. B. Kyngdon, Secretary.)

"The powder of a man's bones, and particularly that made from a skull found in the earth, was esteemed in Scotland as a cure for epilepsy. As usual, the form runs that the bones of a man will cure a man, and the bones of a woman will cure a woman. Grose notes the merits of the moss found growing upon a human skull, if dried and powdered and taken as snuff, in cases of headache." (Black, "Folk-Medicine," p. 96.) He also informs us that the same beliefs and the same remedy obtained in England and Ireland.

"Among the articles which may be regarded more as household furniture . . . are the dried human skulls, which are found wrapped in banana-leaves in the habitation of nearly every well-regulated Dyak family. They are hung up on the wall, or depend from the roof. The lower jaw is always wanting, as the Dyak finds it more convenient to decapitate his victim below the occiput, leaving the lower jaw attached to his body." — ("Head-Hunters of Borneo," Carl Bock, London, 1881, p. 199.)

The careful manner in which the Mandans preserved the skulls of their dead, as narrated by Catlin, is recalled to mind.

MOSS GROWING ON HUMAN SKULLS.

The medicinal use of the moss growing on the skulls of those who had died violent deaths is mentioned by Von Helmont. — ("Oritrika," p. 768.)

Etnuller speaks of the *usnea*, or moss, growing on the skull of a malefactor, which was given in cases of epilepsy (vol. ii. p. 273).

Flemming regarded such moss, if taken from the skull of a malefactor, who had been hanged or broken on the wheel, as of great efficacy in epilepsy, in brain troubles, and as a styptic for hemorrhages (p. 11).

Such a moss, if dried, powdered, and taken as snuff, will cure the headache." — (Brand, "Popular Antiquities," vol. iii. p. 277, article "Physical Charms," quoting Grose. The same reference is given by Pettigrew, "Medical Superstitions," p. 86.)

HUMAN BRAIN.

The human brain, dissolved or distilled in spirits of wine, was employed in nerve troubles and as an anti-epileptic. — (Flemming, "De Remediis ex Corpore Humano desumptis," p. 10.)

LICE.

One might infer that habits of personal cleanliness did not prevail in England two centuries ago, judging from the terms of the following prescription, which seemingly takes as a matter of course that the patient could at any time obtain the insects needed : —

“For the cure of sore eyes . . . take two or three lice out of one’s head ; put them under the lid.” — (“Rare Secrets in Physicke,” collected by the Comtesse of Kent, London, 1654, p. 75.)

The author of this work knows, from disagreeable personal experience and observation, that the Indians of North America very generally were addicted to the disgusting practice of cleaning each other’s heads and putting all captured prey in their mouths. Such an office was considered a very delicate attention to be paid by a woman to her husband or lover, or from male friend to male friend, while on a campaign. No instance was noted of the use in a medical sense of these troublesome parasites.

MOSS GROWING ON THE HEAD OF A STATUE.

“It is asserted that a plant growing on the head of a statue gathered in the lappet of any one of the garments, and then attached with a red string to the neck, is an instantaneous cure for the headache.” (Pliny, lib. xxiv. c. 106.) This would seem to be germane to the idea of moss growing on the human skull.

WOOL.

“The ancient Romans attributed to wool a degree of religious importance even ; and it was in this spirit that they enjoined that the bride should touch the door-posts of her husband’s house with wool.” — (Pliny, lib. xxix. cap. 10.)

“In Cumberland, England, a reputed cure for earache is the application of a bit of wool from a black sheep, moistened in cow’s urine. Possibly it is a modified form of this latter notion that is found at Mount Desert, where it is said that the wool must be wet in new milk ; while in Vermont, to be efficacious, it is thought that the wool must be gathered from the left side of the neck of a perfectly black sheep. In other localities, negro’s wool is a reputed cure for the same pain.

It seems almost incredible, whatever their origin, that remedies of so offensive a character as many of those above given can still retain a

place even in the rudest traditional pharmacopœia ; but there seems to be in the uneducated human mind a sort of reverence for or faith in that which is in itself disagreeable or repulsive. This idea apparently rules instead of rational judgment in the selection of many popular remedies in the shape of oils of the most loathsome description, such as "skunk-oil," "angle-worm oil" (made by slowly rendering earth-worms in the sun), "snake-oil" of various kinds, etc. — ("Animal and Plant Lore," Mrs. Fanny D. Bergen, in "Popular Science Monthly," New York, September, 1888, p. 658.)

In the application of human blood and human skulls just presented, one feature must be patent to the most superficial student ; in the treatment of epilepsy, the blood or the skull was, preferentially, to be that of a dying gladiator or a criminal. There was evidently a reason for this, beyond mere expediency.

Gladiatorial games were instituted as sacred games, in which the victims to be offered in sacrifice were determined by the destiny of the combat. Long after man's better reason and better nature had revolted against the loathsome rites of human sacrifice, religion and custom still held him in their clutches. He would not offer up his own progeny, as of yore, but he still continued to immolate captives taken in war, as so many gladiators had been, or offenders against the laws.

The victim generally shared with the sacrificing priest the honor of representing the deity in whose name his life was to be taken. Consequently he became holy ; everything belonging to him became "medicine," and in no disease could it be administered more efficaciously than in epilepsy, — the essentially "sacred disease" (*morbus sacer*) sent direct from the gods.

Moreover, criminals executed for violations of the laws of conquering nations, or for infractions of the discipline, or contempt of the doctrines of a triumphant religion, might, by the conquered rustics, who still cherished a half-concealed veneration for the old rulers and supplanted rites, be looked upon as martyrs, whose bones, blood, and crania would relieve disease and drive away misfortune.

The idea of sanctity, too, attached to "innocent maids and boys," whose undefiled blood might rectify the polluted fluid that coursed languidly through the veins of the leper.

The belief that the gods are to be gratified and propitiated by the spectacle of human suffering, especially when self-inflicted, has been

current from the first ages of the world, and will most probably last, in one form or another, as long as the world shall last. It has cropped out in every shape, from the rigorous abstinence of the ascetic to the brutal flagellation of the fanatical devotee, and from that to the emasculation of the Galli, the Khlysthi, and the Hottentot, and the self-immolation of the servant of Juggernath. Maurice enumerates five different kinds of meritorious suicide yet recognized in Hindostan, and we have no reason for refusing to believe that our own ancestors were saturated with the same false notions, which, retaining their hold upon the minds of an illiterate peasantry, would surround with the mystery of holiness any act of self-destruction attributable to mania or other impulse supposed to be from on high.

BONES AND TEETH. — MARROW.

"If a circle is traced round an ulcer with a human bone, it will be effectually prevented from spreading." — (Pliny, lib. xxviii. c. 11.)

Etmuller believed that by the use of an unbroken human bone it was possible to induce as copious a purgation as might be desired. "*Beneficio ossis humani integri potest fieri purgatio artificialis tanta quantum volumus,*" etc. — (Etmuller, vol. ii. p. 273.)

"'Holy oyle of dead men's bones,' good for the 'falling sickness.'" — ("The Newe Jewell of Health," George Baker, Chirurgeon, London, 1576, black letter, p. 170.

Beckherius prescribed human bones in medicine. — (See "*Med. Microcos.*," p. 252 *et seq.*)

Etmuller, not content with prescribing the bones ground into powder, also directed the administration of human marrow (vol. ii. p. 268).

HUMAN TEETH.

"A tooth taken from a body before burial," worn as an amulet, cured toothache. — (Pliny, lib. xxviii. c. 12.)

"The first tooth that a child has shed," worn as an amulet, protects from pain in the uterus. — (Idem, lib. xxviii. c. 7.)

Pounded dead men's teeth were used in fumigating the genitalia of persons "ligated" by witchcraft. — (See Frommann, "*Tract. de Fascin.*," p. 965.)

Etmuller taught that the teeth were similar to the bones, and used in the alleviation of the same infirmities. Those drawn from the jaws of a man who had died a violent death were highly commended for

all sickness brought on by witchcraft, as well as for loss of virility. "Ossibus similes sunt dentes, qui ipsi ex homine imprimis violenta morte interempto commendatur ad morbos per veneficiū, si nimium et illis fiat suffitus; item in impotentia" (vol. ii. p. 273).

"Si dentes pueri, imprimis cum cadunt, suspendantur antequam ad terram deveniant et ponantur in lamina argenti et suspendantur supra mulieres eas prohibent impregnari et parere" (idem, p. 263).

Teeth are worn as amulets by pregnant women or ground into powder, and taken in a potion; in both forms, believed to be useful in averting the plague. Powdered teeth, drunk in wine, cured epilepsy, and restored impaired virility. — (Flemming, "De Remediis," p. 13.)

"Knock a tooth that is pulled out into the bark of a young tree." — (Grimm, "Teutonic Mythology," vol. iii. p. 1173.)

Human teeth, bones, and other parts of dead bodies are still used by the negroes in our Southern States in their "voodoo" ceremonies, and as charms, in the old-time belief that their possession secures a man invisibility. See an article on this subject in the "Evening Star," of Washington, D. C., January 1, 1889.

"In North Hants, a tooth taken from the mouth of a corpse is often enveloped in a little bag and worn around the neck to secure the wearer against headache. . . . In the northeast of Scotland, the sufferer was required to pull with his own teeth a tooth from the skull." — ("Folk-Medicine," Black, p. 98.)

The use of human teeth and fingers as "charms," "amulets," and "medicine," will be treated of in another work, at greater length. At present it will be sufficient to call attention to the great potency associated in the minds of the American aborigines with such relics. The author obtained, in one of General Crook's campaigns, in a battle with the Northern Cheyennes, in northern Wyoming, in the winter of 1876, a necklace of human fingers, the prized adornment and "medicine" of the chief medicine-man. This curious link between the savagery of America and the superstitions of Europe is now in the National Museum, Washington, D. C.

Flemming prescribed the ground bones of criminals (raw or burnt), as an internal medicine for gout, dysentery, etc.; but he did not limit himself to human bones, as he expressly states that, as a substitute, the bones of horses, asses, or other beasts could be employed. ("De Remediis," p. 12.)

TARTAR IMPURITIES FROM THE TEETH.

Paullini goes so far as to recommend the use of the tartar impurities from the teeth, and the dirt from soiled stockings, as a remedy for nose-bleed. (Paullini, p. 52.)

In this he most probably follows an ancient line of practice, of which other authors have neglected to give a detailed account. Galen and others have shown that the scrapings from the body, and all other "sordes" were used medicinally, and there was no reason why dental tartar should not be added to the *materia medica*.

RENAL AND BILIARY CALCULI. — HUMAN BILE.

Calculi were used in the treatment of calculary troubles and in childbirth. — (Pliny, lib. xxvii. cap. 9. See also Galen.)

Prescribed for stone in the bladder or kidneys by Beckherius. — ("Med. Microcosmus," pp. 167–170.)

Flemming advocates the same use of them. — ("De Remediis," p. 23.)

"A man's stone, drunk fasting, is most powerful of any to break the stone and expel it with the urine." — "The Poor Man's Physician," Moncrief, p. 131.)

Flemming also used biliary calculi in the cure of yellow jaundice. — ("De Remediis," p. 14.)

Human bile was used internally in epilepsy, and externally in deafness and ulcerations of the ear. — (Idem.)

BEZOAR STONES. — LYNCURIUS.

From the most ancient times there were used in the medical practice of Europe certain stones, known as belemnites, thunder-stones, lyncurius, etc., believed to be efficacious in treatment of stone in the bladder. This lyncurius was regarded as the coagulated urine of the lynx, and under that phase of the case properly comes within the scope of this volume. — (See "Pomet on Drugs," English translation, London, 1738, p. 408.)

The "bezoar" stone, so frequently alluded to by old writers, was simply excrementitious matter hardened in an animal's stomach.

COSMETICS.

Pigeon's dung was applied externally for all spots and blemishes on the face. (Pliny, lib. xxx. cap. 9.) Mouse-dung, externally, for lichens.

(Idem.) "Brand Marks" (stigmata) were removed by using pigeon's dung diluted in vinegar. (Idem, lib. xxx. cap 10.) Crocodile-dung, or "crocodilea," removed blemishes from the face. (Idem, lib. xxxviii. caps. 29, 50.) It also removed freckles.

"An application of bull-dung, they say, will impart a rosy tint to the cheeks, and not even crocodilea is better for the purpose." — (Idem, lib. xxviii. cap. 50.)

Galen alludes to the extensive use as a cosmetic, by the Greek and Roman ladies, of the dung of the crocodile; in the same manner, the dung of starlings that had been fed on rice alone was employed. — (Galen, "Opera Omnia," Kuhn's edition, lib. xxx. p. 308.)

Dioscorides prescribed crocodile-dung as a beautifier of the faces of women. — ("Mat. Med.," vol. i. p. 222 *et seq.*)

Bull-dung was used by women as a cosmetic to remove all facial blemishes. — (Sextus Placitus, "De Med. ex Animal.," article "De Tauro.")

The urine of a boy took away freckles from a face washed with it. "Ad profluvium mulieris, si locum sæpe lotio viri laverit." For birth-marks on children take the crust which gathers on urine standing in chamber-pots, break up and bake; place the child in the bath, and rub the marks well. "Ad maculas infantium, matellæ quæ crustem ex lotio duxerint, fractæ et coctæ, in balneo infantem, si ex eo unxeris omnia supra-scripta emendat." — (Idem, "De Puella et Puella Virgine.")

Beckherius approved of the use of the meconium of infants to erase birthmarks. — ("Med. Microcos.," p. 113.)

Etmuller states that from cow-dung, as well as from human ordure, by repeated digestion and distillation and sublimation, was prepared "Zibethum Occidentale," so named by Paracelsus. From this was distilled the "water of all flowers," so termed because the cattle had eaten so many flowers in their pasturage. This was passing good as a cosmetic to remove pimples and all kinds of blotches.

Human ordure itself was made use of for the same purpose (vol. ii. p. 171).

"'Tis stale to have a coxcomb kiss your hands
While yet the chamber-lye is scarce wiped off."

("Ram Alley," Ludowick Barry, London, 1611, edition of London, 1825.)

Dog-urine was prescribed to restore the color of the hair. — (Avicenna, vol. ii. p. 333, a 50.)

"Alopecia" (baldness) was cured by mouse-dung (idem, vol. i. p. 360, b 50), and by "stercus caprarum." — (Idem, vol. i. p. 389, b 53.)

"Urina canis putrefacta conservat nigredinem capillorum." — (Idem, vol. ii. p. 333, a 50.)

Réclus says that even now, in Paris, many people who have within reach the best of toilet waters prefer to use urine as a detersive. — (See "Les Primitifs," p. 72, "Les Inuits Occidentaux.")

The Ove-herero, living south of Angola, West Africa, rub their bodies with dry cow-dung to impart lustre. — ("Muhongo," interpreted by Rev. Mr. Chatelain.)

"Aqua omnium florum" was distilled from the dung of cows dropped in the month of May. "Verno sen Maiali tempore . . . ex stercore recenti vaccæ herbas depascentis." (Etmuller, vol. ii. p. 249.) "Ex hoc ipso stercore, eodem modo atque ex stercore humano per digestionem et sublimationem, repetitam potest preparari Zibethum Occidentale, sic dictum a Paracelso, quoniam suavem spirat instar Zibethi. Destillatur aqua ex hoc stercore quæ vocatur aqua omnium florum, quia bos innumeris floribus vescitur; hæc aqua omnium florum est singulare cosmeticum applicatum externe delendis nævis et maculis in facie." — (Etmuller, vol. ii. pp. 249, 250.)

Some people added to this a "water distilled from the sperm of frogs." — (Idem, vol. ii. p. 171, 172.)

Catamenial blood was supposed to be a remedy for pimples on the face. (Idem, p. 265.) In portions of Northern Mexico the women apply it to their faces as a beautifier.

Cow-dung was very generally relied upon in this sense. The dung of a black cow entered into the composition of the celebrated "Eau de Mille Fleurs." The ordure of small lizards was also used to smooth out the wrinkles from the faces of old women.

Fox-dung and the dung of sparrows and starlings were in use for softening the hands. Arabian women use as a cosmetic a mixture of saffron and chicken-dung. Cow-dung is sometimes as aromatic as musk. It used to be employed to restore the odor to old and faded musk, or to hang the latter in a privy, where it would re-acquire its former strength; but would not retain it long (see under "Latrines").

To improve the complexion Paullini recommended a water distilled from human excrements; also the worms that grow therein distilled to a water. The cosmetic of country wenches is their own urine.

Human excrements have peculiar salts more strengthening and useful than soap. A young girl improved her complexion wonderfully by washing her face in cow-dung and drinking her brother's urine fresh and warm, while fasting (pp. 263, 264).

Other cosmetics commended by Paullini were human ordure, externally; the ordure of a young boy, internally; "Eau de Millefleurs," the excreta of lizards, crocodiles, foxes, sparrows, starlings, chickens, or of cows gathered in May, externally.

See also pages 172, 207.

For the eradication of freckles Paullini also recommended the external application of the excrement of donkeys, dogs, chickens, crocodiles, foxes, or pigeons.

Schurig was a champion of "Aqua ex stercore distillata," for all facial embellishment. — ("Chylogogia," p. 762.)

"Il y a plus; les femmes les plus belles s'en sont barbouillé le visage, et Saint Jérôme le reproche durement aux dames de son temps." In a footnote is added this explanation: "On a employé des excréments de quelques lézards d'Egypte comme cosmétique, à cause de leur odeur musquée." ("Bib. Scat.," p. 21.) "Merde de Léopard c'est le cordilea, excrément du stellion du Levant, employé comme cosmétique." — (Idem, p. 123.)

"Wash the face with the diaper on which a new-born babe has urinated for the first time, it will remove freckles." — (Cape Breton, Mrs. Fanny D. Bergen, Cambridge, Mass.)

This belief in the cosmetic power of the first renal discharge of a child is generally diffused all over the United States.

"Enfin, les nourrices entre nous, ont l'habitude de frotter la figure de leurs nourrissans avec les langes imbibés de leur urine. Cela les fait venir beau, disent-elles, cela combat en tout cas, certaines efflorescences cutanées chez les enfants, par l'ammoniaque." — (Personal letter from Doctor Bernard, Cannes, France.)

Prof. Patrice de Janon states that the ladies of his native place, Carthagera, South America, to his personal knowledge, were in the habit of using their own urine as a face lotion, and to beautify and soften the skin.

Horse-dung was another face lotion. — ("A Rich Storehouse or Treasury for the Diseased," Ralph Blower, London, 1616, p. 106.)

Goose-dung is in repute in the State of Indiana for removing pimples. — (Mrs. Bergen.)

Mr. Sylvester Baxter says that young women in Massachusetts, at

least until very recently, have employed human urine as a wash for the preservation of the complexion.

“ Water that stands in the concavity of a patch of cow-dung ” is the belief in Walden, Mass., according to Mrs. Bergen, who thus shows a transplantation of the same belief which has lingered in Europe from remote ages.

XLII.

AMULETS AND TALISMANS.

AS a connecting link between pharmacy proper and the antidotes to the effects of witchcraft, and at the same time fully deserving of a separate place on its own merits, may be inserted a chapter upon talismans and amulets made of excrementitious materials.

"From the cradle, modern Englishmen are taught to fight an angry battle against superstition, and they treat a talisman or charm with some disdain and contempt. But let us reflect that those playthings tended to quiet and reassure the patient, to calm his temper, and soothe his nerves, — objects, which, if we are not misinformed, the best practitioners of our own day willingly obtain by such means as are left them.

Whether a wise physician will deprive a humble patient of his roll of magic words or take from his neck the fairy stone, I do not know; but this is certain, that the Christian church of that early day, and the medical science of the empire by no means refused the employment of these arts of healing, these balms of superstitious origin.

"The reader may enjoy his laugh at such devices, but let him remember that dread of death and wakeful anxiety must be hushed by some means, for they are very unfriendly to recovery from disease." — ("Saxon Leechdoms," vol. i. p. 11.)

Cat-dung, "to be attached to the body with the toe of a horned owl" and "not to be removed until the seventh paroxysm is passed," was the amulet recommended by Pliny for the cure of the quartan fever. — (Lib. xxviii. c. 66.)

Sextus Placitus, "*De Puello et Puella Virgine*," recommends the use of calculi to aid in the expulsion of calculi, either ground into a powder or hung about the patient's neck as an amulet; in the latter case, he says, the cure is more gradual.

Roman matrons used a small stone found in the excrement of a hind "attached to the body as an amulet," as "a preventive of abortion." — (Pliny, lib. xxviii. c. 77.)

In retarded dentition, there was a bag suspended from the infant's neck, in which was a powder, made of equal parts of the dung of hares, wolves, and crows. — (Schurig, "Chylologia," p. 820).

"Wolf's dung, borne with one, helps the colic." — (Burton, "Anatomy of Melancholy," vol. ii. p. 134.)

Burton, in his "Anatomy of Melancholy," 1621, p. 476, has the following passage on this subject: "Amulets I find prescribed; taxed by some, approved by others." — (Quoted by Brand, "Pop. Ant." vol. ii. p. 324, article "Amulets.")

No explanation can be ventured upon for the following charm, which had a very extended dissemination throughout Europe, and can be traced back to "Saxon Leechdoms," vol. x. p. 33.

"Many magic writings are simply invocations of the devil . . . A woman obtained an amulet to cure sore eyes. She refrained from shedding tears and her eyes recovered. On a zealous friend opening the paper, these words were found: "Der teufel kratze dir die augen aus, und scheisse dir in die löcher," and, naturally, when the woman saw that it was in this she had trusted, she lost faith, began to weep again, and in due time found her eyes as bad as ever. ("Folk Medicine," Black, p. 171.) The same charm was also, in other places, written in Latin, in this form: "Diabolus effodiat tibi oculos, impleat foramina stercoribus." It is quoted by Pettigrew, in "Medical Superstitions," p. 102; also by Brand, "Pop. Ant." vol. iii. p. 324, article "Characts."

Translated into English it is thus rendered by Reginald Scot: —

"The devil pull out both thine eyes,
And etihis in the holes likewise."

"Spell the word backward and you shall see this charm." — ("Discoverie of witchcraft," London, 1651, p. 178.)

"For diphtheria, a poultice consisting of the fresh excrement of the hog, is worn about the neck for one night. (Fayette County.) — ("Folk-Lore of the Penn'a Germans," in "Journal of American Folk-Lore," 1889, p. 29, W. J. Hoffman, M. D.)

For diseases in the kidneys, as an amulet *χαρὰβρωθ*, which means "viscera" in Hebrew: "In cubili canis urinam faciat qui urinam non potest continere, dicatque dum facit, ne in cubili suo urinam ut canis faciat." — ("Saxon Leechdoms," vol. i. p. 31. See also under Grand Lama, love-philters, mistletoe, witchcraft.)

Each and every one of the remedies inserted here under the title of

"Witchcraft," might with perfect propriety have been comprehended under the caption of "Pharmacy," but the intention was to differentiate the two in the hope of attaining greater clearness in treatment. Under "Pharmacy," therefore, have been retained all remedies for the alleviation of known disorders, while under "Witchcraft" are tabulated all that were to be administered or applied for the amelioration of ailments of an obscure type, the origin of which the ignorant sufferer would unhesitatingly seek in the malevolence of supernatural beings or in the machinations of human foes possessed of occult influences. Side by side with these, very properly go all such aids as were believed to insure better fortune in money-making, travelling, etc.

"A mixture of ape's-dung and chameleon-dung was applied to the doors of one's enemy. . . . He will, through its agency, become the object of universal hatred." — (Pliny, lib. xxviii. c. 29.)

"The excrements (i. e. of the hyena) which have been voided by the animal at the moment when killed, are looked upon as counter-charms to magic spells." — (Idem, c. 27.)

"For young girls they (i. e. the magicians) prescribe nine pellets of hare's dung to ensure a durable firmness to the breasts." — (Idem, c. 77.)

Doctor Dupouy believes that when the Druids "were forced to take refuge in dense forests far removed from the people, persecuted by the Romans, barbarians, and Christians, they progressively became magicians, enchanters, prophets, and charmers, condemned by the Councils and banished by the civil authority. It is at this epoch that evil spirits were noticed prowling around in the shadows of night and indulging in acts of obscene depravity. . . . In the seventh century Druidism disappeared, but the practice of magic, occult art, and the mysterious science of spirits were transmitted from generation to generation but lessened in losing the philosophical character of ancient times." — ("Le Moyen Age Médical," or its translation, "Physicians in the Middle Ages," T. C. Minor, M. D., Cincinnati, Ohio, p. 38.)

XLIII.

WITCHCRAFT. — SORCERY. — CHARMS. — SPELLS. — INCANTATIONS. — MAGIC.

THERE is but one method of arriving at a correct understanding of what witchcraft was, as known to civilized communities, and that is by placing it under the lens of investigation as a mutilated and distorted survival of a displaced religion.

The very earliest records of man's thought, the alabaster and earthen tablets of Chaldea and Assyria, allude to the evil eye, to incantations, and to the fear of evil spirits, witches, and sorcerers.

"Nevertheless, the Chaldean tablets do not leave us without any insight into witchcraft, as their formulæ were destined to counteract the effects of the sorceries of this impious art, as well as the spontaneous action of demons." — ("Chaldean Magic," François Lenormant, London, 1877, p. 59; for the Chaldean's dread of the Evil Eye, see the same work, p. 61.)

"One fine series (i. e. of Chaldean tablets) deals with remedies against witchcraft." — ("The Chaldean Account of Genesis," George Smith, New York, 1880, p. 28.)

"There is finally a third species of magic, thoroughly diabolical in character, and openly acknowledging itself as such. This kind helps to perpetuate. . . by still believing in their power and transforming them into dark practices, the rites of adoration of the ancient gods, considered as demons after the triumph of the new religion, the exclusive spirit of which repudiates all association with the remains of the old worship. The enchanter in this case, far from considering himself an inspired and divine personage, consents, provided he reaps all the benefit of his magic practices, to be nothing more than the tool of the bad and infernal powers. He himself sees devils in the ancient gods evoked by his spells, but he nevertheless remains confident of their protection; he engages himself in their service by compacts, and fancies himself going to a witch-dance in their company. The greater

part of the magic of the Middle Ages bears this character and perpetuates the popular and superstitious rites of paganism in the mysterious and diabolical operations of sorcery. It is the same with the magic of most Mussulman countries. In Ceylon, since the complete conversion of the island to Buddhism, the ancient gods of Sivaism have become demons, and their worship a guilty sorcery practised only by enchanterers." — ("Chaldean Magic," Lenormant, p. 77.)

Human and animal filth are mentioned in nearly every treatise upon witchcraft, under three different heads:—

Firstly, as the means by which the sorcery is accomplished.

Secondly, as the antidote by which such machinations are frustrated.

Thirdly, as the means of detecting the witch's personality.

Much that might have been included within this chapter has been arranged under the caption of "Love-Philthers" and "Child-Birth," and should be examined under those heads.

The subject of amulets and talismans is another that is so closely connected with the matter of which we are now treating, that it must be included in any investigation made in reference to it.

Exactly where the science of medicine ended, and the science of witchcraft began, there is no means of knowing; like Astrology and Astronomy, they were twin sisters, issuing from the same womb, and travelling amicably hand in hand for many years down the trail of civilization's development; long after medicine had won for herself a proud position in the world of thought and felt compelled through shame to repudiate her less-favored comrade in public, the strictest and closest relations were maintained in the seclusion of private life.

Among the counter-charms too are reckoned the practice of spitting into the urine the moment it is voided." — (Pliny, lib. xxviii. cap. 7.)

"Goat's dung attached to infants, in a piece of cloth, prevents them from being restless, female infants in particular." (Idem, cap. 78.) This was probably a survival from times still more ancient, when infants were sometimes suckled by goats, and it was a good plan to have them thoroughly familiarized with the smell, — the hircine or caprine odor.

"In cases of fire, if some of the dung can be brought away from the stalls, both sheep and oxen may be got out all the more easily, and will make no attempt to return." — (Idem, cap. 81.)

The adepts in magic expressly forbid a person, when about to make water, to uncover the body in the face of the sun or moon, or to sprinkle with his urine the shadow of any object whatsoever. Hesiod

gives a precept recommending persons to make water against an object standing full before them, that no divinity may be offended by their nakedness being uncovered. Osthanes maintains that every one who drops some urine upon his foot in the morning will be proof against all noxious medicaments." — (Idem, lib. xxviii. cap. 19.)

The adepts in the magical art also believed that "it is improper to spit into the sea, or to profane that element by any other of the evacuations that are inseparable from the infirmities of human nature." — (Idem, lib. xxx. cap. 6, speaking of the disinclination of the Armenian magician, Tiridates, to visit the Emperor Nero by sea.)

The Thibetans' share these scruples. Among the things prohibited to their "Bhikshuni," or monks and nuns, are: "Ne pas se soulager dans de l'eau quand on n'est pas malade, n'y cracher, n'y moucher y vomir, ni y jeter quoi que soit de sale." — ("Pratimoksha Sutra," translated by W. W. Rockhill, Paris, 1884, Soc. Asiatique.)

It was believed that a dog would not bark at a man who carried hare's dung about his person. — (See Pliny, lib. xxx. cap. 53.)

"The therionaca . . . has the effect of striking wild beasts of all kinds with a torpor which can only be dispelled by sprinkling them with the urine of the hyena." (Idem, lib. xxiv. cap. 102.) The hyena was regarded as an especially "magical" animal. — (Idem, lib. xxviii.)

"The magicians tell us that, after taking the ashes of a wild-boar's genitals in urine, the patient must make water in a dog-kennel, and repeat the following formula: "This I do that I may not wet my bed, as a dog does.'" — (Idem, lib. xxviii. cap. 60.)

Some of these ideas would appear to have crossed the Atlantic. In the United States, a generation or less ago, boys were wont to urinate "criss-cross" for good luck, and were careful not to let any of their urine fall on their own shadows. — (Col. F. A. Seelye, Anthropological Society, and others, Washington, D. C.)

In Minden, Westphalia, Germany, boys will urinate criss-cross, and say, "Kreuspissen, morgenstirbstein-Jude" ("Let us piss criss-cross, a Jew will die to-morrow"). — (Personal letter from Dr. Franz Boas, Clark University, Worcester, Mass.)

"Nor ever defile the currents of rivers flowing seaward, nor fountains, but specially avoid it." — ("Opera et Dies," Rev. J. Banks, London, 1856, p. 115.)

"Sorcerers try to procure some of a man's excrement, and put it in his food in order to kill him." — ("Muhongo," a boy from Angola, Africa, personal interview, interpretation by Rev. Mr. Chatelain.)

"Muhongo" also said that to "add one's urine, even unintentionally, to the food of another bewitches that other, and does him grievous harm."

Democritus says of the stone "aspisatis:" "Patients should wear it attached to the body with camel's dung." (Quoted in Pliny, lib. xxvii. cap. 54.) The same book tells us that stones of this kind were worn generally by gladiators, Milo of Crotona being mentioned as one. What "aspisatis" was cannot be learned.

"Another thing universally acknowledged, and one which I am ready to believe with the greatest pleasure, is the fact that if the door-posts are only touched with the menstuous fluid, all spells of the magicians will be neutralized." — (Pliny, lib. xxviii. cap. 24.)

"Osthanes, who accompanied Xerxes, the Persian king, in his expedition against Greece, . . . the first person, so far as I can ascertain, who wrote upon magic." (Idem, lib. xxx. cap. 3.) He adds, speaking of magic: "Britannia still cultivates this art, and that with ceremonials so august that she might almost seem to have been the first to communicate them to Persia." — (Idem, lib. xxx. cap. 4.)

For the relief of infants from phantasm, wrap some goat-dung in a cloth and hang it about the child's neck. "Ad infantes qui fantasmatibus vexantur, capræ stercus in panno involutum, et collo suspensum remedium est infantibus qui fantasmata patiuntur." — (Sextus Placitus, "De Capro.")

"With Plinius was contemporary Joseph or Josephus. The tales about the mandrake, much later on, and found in the Saxon herbarium, are traceable to what he says of the Baaras, — an herb that runs away from the man that wants to gather it, and won't stop until one throws on it *οὐρον γυναικὸς ἢ τὸ ἐμμηνοῦν αἶμα*, for nastiness is often an element of mysteries; and even then it kills the dog that draws it out. It is not certain that mandrake berries are meant in Genesis, xxx. 14." — ("Saxon Leechdoms," vol. i. p. 16.)

Dulaure says that the repute in which mandrake was held was due to its resemblance to the human form, and to the lies told to the superstitious about it, one being that "ils disent qu'il est engendré dessous un gibet de l'urine d'un larron pendu." — ("Des Différens Cultes," Paris, 1825, vol. ii. p. 255, footnote.)

"For a man haunted by apparitions work a drink of a white hound's thost or dung in bitter ley; wonderfully it healeth." ("Saxon Leechdoms," vol. i. p. 365.) This same "thost," or dung, was recommended in the treatment of nits and other insects on children, for dropsy (in-

ternally), and to drive away the "Dwarves," who were believed to have seized upon the patient afflicted with convulsions.

"Doors of houses are smeared with cow-dung and nimba-leaves, as a preservative from poisonous reptiles." — (Moor's "Hindu Pantheon," London, 1810, p. 23.)

"In some parts of Western Africa, when a man returns home after a long absence, before he is allowed to visit his wife he must wash his person with a particular fluid, and receive from the sorcerer a certain mark on his forehead, in order to counteract any magic spell which a stranger woman may have cast upon him in his absence, and which might be communicated through him to the women of his village," — ("The Golden Bough," Frazer, vol. i. p. 157.)

We are not informed what this "particular fluid" was, but enough has been adduced concerning the African's belief in the potency of human urine in cases similar to the above to warrant the insertion at this point.

"On returning from an attempted ascent of the great African mountain, Kilimanjaro, which is believed by the neighboring tribes to be tenanted by dangerous demons, Mr. New and his party, as soon as they reached the borders of the inhabited country, were disenchanted by the inhabitants, being sprinkled with 'a professionally prepared liquor, supposed to possess the potency of neutralizing evil influences, and removing the spell of wicked spirits.'" — (Idem, vol. i. p. 151, quoting Charles New, "Life, Wanderings, and Labors in Eastern Africa.")

That the Eskimo believed in the power of human ordure to baffle witchcraft would seem to be intimated in the following from Boas: "Though the Angekok understood the schemes of the old hag, he followed the boy, and sat down with her. She feigned to be very glad to see him and gave him a dishful of soup, which he began to eat. But by the help of his tornaq [that is, the magical influence which aided him] the food fell right through him into a vessel which he had put between his feet on the floor of the hut. This he gave to the old witch, and compelled her to eat it. She died as soon as she had brought the first spoonful to her mouth." — ("The Central Eskimo," Franz Boas, in "Sixth Annual Report" Bureau of Ethnology, Washington.)

"Osthanes, the magician, prescribed the dipping of our feet, in the morning, in human urine, as a preventative against charms." — (Brand, "Pop. Ant.," vol. iii. p. 286.)

Frommann writes that human ordure, menses, and semen were

mixed in the food of the person to be bewitched. — (“*Tractatus de Fascinatione*,” p. 683.)

On another page this list is increased to read that human ordure, urine, blood, hair, nails, bones, skulls, and the moss growing on the last-named, as well as animal excrement, were among the materials employed in witchcraft.” — (*Idem*, p. 684.)

If fried beans be thrown into excrement, for each bean thus wasted a pustule will appear on the fundament of the thrower. “*Pisa frixa injecta excrementis tot pustulas in podice excitant quot pisa.*” (*Idem*, p. 1023.) The following passage is not fully understood: “*Vesicatorio excrementis adhuc calentibus imposito intestina corrosione afficiuntur.*” It seems to mean that the entrails will be affected with corrosion when hot excrement is placed in a bladder, probably after the manner of some of the sausages of which we have elsewhere taken notes. Hot ashes or cinders thrown upon recently voided excrement will cause inflammation and pustules in ano. For the same reason we can cause those who are absent to purge without using medicine upon them. “*Cineres calidi, vel prunæ candentes scybalis recentibus injecta inflammationem et pustulas in ano excitant. . . . Eadem ratione absentes sine medicamentis purgari posse, scribit Tilemannus de Mater. Medic. p. 251. (Idem, p. 1623.)*” Frommann also adds that this fact was well known to the English and French, as well as to the Germans.” — (*Idem*, p. 1037.)

Human ordure and urine were burned with live coals as a potent charm. The person whose excreta had been burned would suffer terrible pains in the rectum. But this could be used in two ways, for love as well as hatred could be induced by this means, between married people and between old friends. — (*Paullini*, pp. 264, 265.)

For the use of urine by the Eskimo to ward off the maleficence of witches, turn back to citations taken from Rink’s “*Tales and Traditions of the Eskimo*,” where it is shown that they still use it with this object in cases of childbirth. See, also, the notes taken from the writings of Dr. Franz Boas.

A bone from the leg or thigh of a man who had died a violent death, emptied of its marrow, and then filled with human ordure, closed up with wax, and placed in boiling water, compelled the unfortunate ejector of the excrement to evacuate just as long as the bone was kept in the water, and it could even be so used that he would be compelled to defile his bed every night. “*Os ex pede, vel brachio, vel femore hominis violenta morte interempti, et hoc exempta medulla*

impletur cum stercore alicujus hominis, foramina obturantur cum cera et sic in aquam calidam immittitur, hoc quamdiu jacet in aqua calida, tamdiu expurgatur iste, cujus stercus fuit inclusum, adeo ut sic aliquem usque ad mortem purgare possimus, potest etiam fieri alio modo ut quis omni nocte lectum suum maculet, sed est ludicrum." — (Et-muller, vol. ii. pp. 272, 273.)

The small bones of the human leg are used in the sorcery of the Australians. (See "Native Tribes of South Australia," Adelaide, 1879, p. 276; received through the kindness of the Royal Society, Sydney, New South Wales, F. B. Kyngdon, Secretary.)

"In order to produce a flux in the belly, it was only necessary to put a patient's excrement into a human bone, and throw it into a stream of water." The above is quoted from the medical writings of "Peter of Spain, who was archbishop, and afterwards pope, under the name of John XXI." — ("Physicians of the Middle Ages," T. C. Minor, p. 6.)

Schurig names many authors to show that in cases of "incivility," such as the placing of excrement at the door of one's neighbor, the person offended had a sure remedy in his own hands. He was to take some of the excrement of the offending party, mix it with live coals or hot ashes, and throw it out in the street; or he could burn pepper and wine together, with such fecal matter; or he could heat an iron to white heat, insert it in the excrement, and as fast as it cooled repeat the operation; as often as this was done, so often would the guilty one suffer pains in the anus. Other remedies were, to mix spirits of wine and salt together, sprinkle upon the offensive matter, then place a red-hot iron above it, and confer the same pains, which would not leave the offending person's anus during the whole of that day, unless he cured himself with new milk. Or small peas could be heated in a frying-pan, and then thrown out with fresh excrement; as many as there were peas, so many would be the pains endured by the delinquent. The following are some of the paragraphs in the original from Schurig: "Contra incivilitatem quorundam qui loca consueta et fores aliorum stercoribus suis commaculant, pro correctione inservire potest, si finus eorundem simpliciter prunis aut cineribus calidis injectus vel etiam vino adusto et pipere simul insperso uratur vel cremetur; aut si vero vel aliud ferrum in ignem ut ignescat, immittatur, ac dein ferrum illud candens in excrementa illa infigatur; frige factum denuo calefiat eademque opera sæpe repetatur; tunc tantis cruciatibus nates depositoris illius incivilito vexabit, quantas vix prunæ ipsæ

partibus iisdem admotæ inuississent. . . . Excrementis hominis recentibus prunas candentes vel cineres calidos injectos inflammationem, tenesimum, et pustulas excitare, non Anglis et Gallis tantum sed et Germanis atque ex his nostratibus etiam est notissimum," etc. The names of the authorities cited by Schurig are not repeated. — ("Chylogia," pp. 790, 791.)

"The Australians believe that their magicians 'possess the power' to create disease and death by burning what is called 'nahak.' Nahak means rubbish, but principally, refuse of food. Everything of the kind they bury or throw into the sea, lest the disease-makers should get hold of it." ("Native Tribes of South Australia," Adelaide, 1879, p. 23.) Reference to "Nahak" is to be found in "Samoa," Turner, p. 320.

The old home of the Cheyennes of Dakota was in the Black Hills; and there the Sioux believed that the Cheyennes were invincible, because their medicine-men could make everything out of buffalo manure. — (Personal Notes of Captain Bourke.)

Although Livingston's "Zambesi" is filled with allusions to witchcraft, there is no instance given of the employment of any of the remedies herein described.

"The belief in witchcraft, and in the efficacy of charms and incantations, was strong among the middle and lower classes of Germany about forty years ago. . . . In the winter of 1845-46, I attended a night-school in my native town, Schorndorf, in the little kingdom of Wurtemberg. There was a blacksmith-shop in the near neighborhood of the school, where work was kept up until a late hour of the night. The miniature fireworks created by the sparks flying from the blows of the immense hammers wielded by the dusky and weird-like forms of the sons of Vulcan, were one of the principal amusements of the schoolboys, and we used to stand at a distance in the dark, before school opened, gazing with awe and wonderment at the brilliant and noisy scene before us. The master blacksmith, on account of his irascible disposition, was not much in favor with us, and it was agreed upon to play him a trick. So one evening while the smiths were at their supper and the smithy unattended, two of the boys smeared the hammer-handles with excrement. The indignation of the smiths was of course great, and with curses and imprecations on the guilty parties they commenced to clean their implements, when suddenly stopped by the master, who, with a fiendish smile on his face, declared that he had concluded to make an example of the offenders. He bade the apprentice to work at the

bellows, and then, one after the other, he held the smeared hammer-handles over the forge fire, turning and twisting them the while, and uttering some unintelligible incantations in a low and solemn voice, the workmen standing round him with awe and terror on their sooty countenances. When the ceremony was over, the master declared that it was rather hard on the culprits, whose rectums must be in a frightful condition, but that, unless an example were made, such dirty tricks might be repeated, and this would serve as a warning to the boys in general. We boys had been tremblingly watching the whole proceedings, expecting that some fearful catastrophe would befall us, and I need not state that we were somewhat disappointed when we found ourselves unscathed, although it upset our belief in humbugs of this kind." — (Personal letter from Mr. Charles Smith, Washington, D. C.)

"Amongst some of the Brazilian Indians, when a girl attains puberty, . . . if she have a call of nature, a female relative takes the girl on her back and carries her out, taking with her a live coal, to prevent evil influences from entering the girl's body." — ("The Golden Bough," Frazer, vol. ii. p. 231.)

"To unbewitch the bewitched, you must spit into the pisse-pot where you have made water." — (Reg. Scot, "Disc. of Witchcraft," p. 62.)

"The Shamans of the Thlinkeets of Alaska keep their urine until its smell is so strong that the spirits cannot endure it." — (Franz Boas, in "Journal of American Folk-Lore," vol. i. p. 218.)

In the third volume of the "History of the Inquisition," by Henry C. Lea, New York, 1888, there is a chapter on "Sorcery and Occult Arts," but there is no allusion to the use of excrement in any form. Neither is there anything to be found in Dalzell's "Superstitions of Scotland," Edinburgh, 1834.

The sacred drink, "hum," of the Parsis, has "the urine of a young, pure cow" as one of the ingredients. (See Max Müller's "Biographies of Words," London, 1888, p. 237.) This sacred drink is also used "as an offering during incantations." — (Idem.)

Schurig ("Chylogologia," p. 815) states that horse-dung was sometimes used in "sympathetic magic:" "Interdum etiam ad Sympathiam magicam adhibetur;" and he recites an instance wherein a certain farmer, whose meadows were overrun by the horses of his neighbors, was enabled by taking a portion of the dung they had dropped and hanging it up in his chimney, to drive them all into a consumption.

The following seems to have been in the nature of an incantation closely allied to the above. Two Yakut chiefs contended for supremacy; one, named Onagai, defeated and banished his rival, who escaped with only his wife and two mares. This second chief, Aley, collected carefully the dung of his mares, and when the wind blew towards Onagai's dwelling, made fires of the dung, the smell of which allured the strayed cattle to his dwelling."—(Sauer, "Exped. to the N. parts of Russia," London, 1802, p. 133. This "Aley," according to Tartar tradition, was skilled in magic art. See *idem*, p. 135.)

"He who wishes to revenge himself by witchcraft endeavors to procure either the saliva, urine, or excrements of his enemy, and after mixing them with a powder, and putting them into a bag woven in a particular form, he buries them."—(Krusenstern's "Voy. round the World," Eng. trans., London, 1813, vol. i. p. 174, speaking of the island of Nukahiva.)

Langsdorff says that in the Washington islands, when a man desires to bewitch an enemy, he endeavors to procure "some of his hair, the remains of something he has been eating, and some earth on which he has spit or made water."—("Voyages," London, 1813, p. 156.)

The Rev. W. Ellis, speaking of the Tahitians, says: "The parings of nails, a lock of the hair, the saliva from the mouth, or other secretions from the body, or else a portion of the food which the person was to eat, this was considered as the vehicle by which the demon entered the person who afterwards became possessed. . . . The sorcerer took the hair, saliva, or other substance, which had belonged to his victim, to his house, or marae, performed his incantations over it, and offered his prayers; the demon was then supposed to enter the substance (called tubu), and through it to the individual who had suffered from the enchantment."—("Polynesian Researches," vol. ii. p. 228, quoted in "The Nat. Trib. of S. Australia," p. 25.)

"If the death of any obnoxious person is desired to be procured by sorcery, the malevolent native secures a portion of his enemy's hair, refuse of food, or excrement; these substances are carried in a bag specially reserved for the artillery of witchcraft, a little wallet which is slung over the shoulders. The refuse of food is subjected to special treatment, part of which is scorching and melting before a fire; but, in the case of excrement, my information is to the effect that it is just allowed to moulder away, and as it decays the health and strength of the enemy is supposed to decline contemporaneously. Excrement is thus employed in the south of Queensland."—(Personal letter from

John Matthew, Esq., M. A., dated "The Manse," Coburg, Victoria, Nov. 29, 1889. This correspondent has had a great deal of experience with the savages of Australia.)

The Patagonians have the belief that their witches can do harm to those from whom they obtain any exuvie or excrement, — "if they can possess themselves of some part of their intended victim's body, or that which has proceeded from it, such as hair, pieces of nails, etc.; and this superstition is the more curious from its exact accordance with that so prevalent in Polynesia." — ("Voyage of the Adventure and Beagle," quoting the Jesuit Falkner, vol. ii. p. 163.)

There was some ill-defined relation between the power of urination and virginity. Burton speaks of "such strange, absurd trials in Albertus Magnus. . . by stones, perfumes, to make them piss and confess I know not what in their sleep." — ("Anat. of Melancholy," vol. ii. p. 451.)

Speaking of the Australians, Smith says: "The only remarkable custom (differing from other savages) in their fighting expeditions, is the adoption of the custom commanded to the Israelites on going out to war. (Deut. c. 23, ver. 12-14, — about hiding excrement.) The natives believe that if the enemy discovered it, they would burn it in the fire, and thus ensure their collective destruction, or that, individually, they would pine away and die." — ("Aborigines of Victoria," vol. i. p. 165.)

"In the middle of the hall . . . was a vase, of which the contents were at least as varied as those of the caldron of Macbeth; a mixture, in part, composed of nameless ingredients." — ("Dictionnaire Universel du XIXme Siècle," by P. Larousse, quoted in "Reports of Voodoo Worship in Hayti and Louisiana," by W. W. Newell, in "Jour. of Amer. Folk-Lore," Jan.-March, 1889, p. 43.)

There is on record the confession of a young French witch, Jeanne Bosdean, at Bordeaux, 1594, wherein is described a witches' mass, at which the devil appeared in the disguise of a black buck, with a candle between his horns. When holy water was needed, the buck urinated in a hole in the ground and the officiating witch aspersed it upon the congregation with a black sprinkler. Jeanne Bosdean adhered to her story even when in the flames.¹

One of the ceremonies of the initiation of the neophytes into witch-

¹ Pour faire de l'eau fénite le Bouc pissoit dans un trou à terre et celui qui faisoit l'office en arrosoit les assistants avec un asperge noir. — (Thiers, Superstitions, etc., vol. ii. book 4, cap. 1, p. 367. See the same story in Picart, vol. viii. p. 69.)

craft was "kissing the devil's bare buttocks." (Reg. Scot. "Discovery," pp. 36, 37.) Pope Gregory IX., in a letter addressed to several German bishops in 1234, describes the initiation of sorcerers as follows: The novices, on being introduced into the assembly, "see a toad of enormous size. . . . Some kiss its mouth, others its rear." Next, "a black cat is presented . . . The novice kisses the rear anatomy of the cat, after which he salutes in a similar manner those who preside at the feast, and others worthy of the honor." ("Med. in Middle Ages," Minor, p. 41.) Again, "At witches' reunions, the possessed kissed the devil's rear, kissing it goat fashion, in a butting attitude." (Idem, p. 50.) "Le baiser d'hommage est donné au derrière du Diable parce qu'il n'a été permis à Moïse, selon l'Exode, de voir que la derrière de Dieu." — (Mélusine, Paris, July-August, 1890, p. 90, art. "La Fascination," by J. Tuchmann.)

The devil hates nothing more than human ordure. (On this point, see Luther's Table Talk.) The devil cannot be more completely frustrated than by placing upon some of his works human ordure, or hauging it in the smoke of the chimney. The Laplanders were reputed to be able to detain a ship in full sail; yet when such a vessel had been besmeared along its seams in the interior with the ordure of virgins, then the efforts of the witches were of no avail. (Paullini, p. 260.) "A certain man bewitched a boy, nine years old, by placing the boy's ordure in a hog's bladder and hanging the 'sausage' in the chimney. (Idem, p. 261.) But some believed that by this smoking of ordure the evil often became worse; that the diseased person gradually dried up until at last he died, as he experienced in the case of his own father-in-law. . . . Farmers' wives, to make the butter come in spite of the witches, poured fresh cow's milk upon human ordure, or down into the privy, and the witches were thereupon rendered powerless." — (Idem, p. 263. See also citation from Schurig, "Chylologia.")

The Magi also taught to drink the ashes of a pig's pizzle in sweet wine, and so to make water into a dog's kennel, adding the words, "Lest he, like a hound, should make urine in his own bed." If a man, in the morning, made water a little on his own foot, it would be a preservative against mala medicamenta, doses meant to do him harm." — ("Saxon Leechdoms," lib. i. p. 12, quoting Pliny. See citations already made from that author.)

Beckherius ("Med. Microcosmus, p. 114) tells the story of the Lapland witches being able to hold a ship in its course, except when the

inner seams of the vessel had been calked with the ordure of a virgin ; see extract already entered.

Again, Beckherius quotes Josephus as narrating that a certain lake, near Jericho, ejected asphalt which adhered so tenaciously to a ship that it was in danger of wreck, had not the asphalt been loosened by an application of menstrual blood and human urine. — (Idem, p. 43, quoting Josephus, "De Bello Judaico," lib. iv. c. 47.)

Beckherius, "Med. Microcosmus," p. 43, cites Josephus in regard to a certain plant to which magical properties were ascribed, but only to be brought out by watering it with menstrual blood and the urine of a woman. — (Josephus, "De Bell. Jud." lib. vii. c. 23, p. 146.)

Dittmar Bleekens, speaking of the "Islanders" (Icelanders), says : "And truly, it is a wonder that Satan so sporteth with them, for hee hath shewed them a remedie in staying of their ships, to wit, the excrements of a maide being a Virgin ; if they anoynt the Prow and certaine plancks of the ship hee hath taught them that the spirit is put to flight and driven away with this stinke." — (In Purchas, vol. i. p. 646.)

Josephus says (his remarks have already been given in quotation, but are repeated to show exactly what he did say) : The bitumen of Lake Asphaltites "is so tenacious as to make the ship hang upon the clods till they set it loose with blood and with urine, to which alone it yields." — ("Wars of the Jews," Eng. trans., New York, 1821, book 4, c. 7.)

The people of the Island of Mota, or Banks Island, "have a kind of individual totem, called tamaniu. It is some object, generally an animal, as a lizard or snake, but sometimes a stone, with which the person imagines that his life is bound up ; if it dies or is broken or lost, he will die. Fancy dictates the choice of a tamaniu ; or it may be found by drinking an infusion of "certain kinds of herbs and heaping together the dregs. Whatever living thing is first seen in or upon the heap is the tamaniu. It is watched, but not fed or worshipped." — (Frazer, "Totemism," Edinburgh, 1887, p. 56.)

Compare the preceding paragraph with the practice, elsewhere noted, of determining whether or not a woman is pregnant by pouring some of her urine upon bran and allowing it to ferment and then watching the appearance of animal life. Also, the method of determining whether or not a man was stricken with leprosy.

To determine whether a woman be pregnant of a boy or a girl, make two small holes in the ground ; in one, put wheat ; in the other,

barley; let her urinate on both; if the wheat sprout first, she will have a boy; if the barley, a girl. To determine whether a man had been attacked by leprosy (elephantiasis), the ashes of burnt lead (plumbi usti cineres) were thrown into his urine; if they fell to the bottom, he was well; if they floated on top, he was in danger.

To tell whether a man had been bewitched, "*Coque in olla nova, ad ignem, urinam hominis quæ si ebullierit, liber erit a veneficio.*" — (Beckherius, "*Med. Microcosmus*," pp. 61, 62.)

To determine whether a sick man was to die during the current month, some of his urine was shaken up in a glass vessel until it foamed; then the observer took some of his own earwax (cerumen) and placed it in this foam; if it separated, the man was to recover; if not, not. — (Idem, p. 62.)

"It is said that King Louis Philippe before mounting on horseback never failed to urinate against the left hind leg of his horse, according to an old tradition in cavalry that such a proceeding had the effect of strengthening the leg of the beast and rendering the animal more apt to sustain the effort made by the rider when jumping upon the saddle. I tell you the fact as I heard it reported by one of the king's sons, Prince of Joinville, forty-five years ago when I was sailing in a frigate — '*La Belle Poule*' — under his command." — (Personal letter from Captain Henri Jouan, French Navy.)

The people of Lake Ubidjwi, near Lake Tanganyika, are thus described: "Both sexes of all classes carry little carved images round their necks or tied to the upper part of their arms as a charm against evil spirits. They are usually hollow, and filled with filth by the medicine-men." — ("*Across Africa*," Cameron, London, 1877, vol. i. p. 336.)

In the incantations made by the medicine-men to avert disaster from fire and preserve his expedition, Cameron notes, among other features, "a ball made of shreds of bark, mud, and filth." (Idem, vol. ii. p. 118.) The term "filth," as here employed, can have but one meaning.

"Poor Robin, in his Almanac for 1695 . . . ridicules the following indelicate fooleries then in use, which must surely have been either of Dutch or Flemish extraction. They who when they make water go streaking the walls with their urine, as if they were planning some antic figures or making some curious delineations, or shall piss in the dust, making I know not what scattering angles and circles, or some chink in a wall, or a little hole in the ground, to be brought in, after

two or three admonitions, as incurable fools." (Brand, "Popular Antiquities," vol. iii. p. 175, article "Nose and Mouth Omens.") This was possibly a survival from some old method of divining.

Cameron, describing the dance of a medicine-man in the village of Kwinhata, near the head of the Congo, and the humble deference shown to these Mganga by the women, says of one of the women: "She soon went away quite happy, the chief Mganga having honored her by spitting in her face and giving her a ball of beastliness as a charm. This she hastened to place in safety in her hut." — ("Across Africa," vol. ii. p. 82.)

An article in "Table Talk," copied in the "Evening Star," Washington, D. C., of Dec. 17, 1888, entitled "Christmas under the Polar Star," says that "in Southern Lapland, should the householder neglect to provide an ample store of fuel for the season's needs, in popular belief, the disgusted Yule-swains or Christmas goblins would so befoul the wood-pile that there would be no getting at its contents."

Frommann devotes a long article to a refutation of the popular idea of his day that from the urine or seed of a man innocently hanged for theft, could be generated "homunculi." "Anile istud placitum, ex urina vel semine hominis innocenter ad suspendium furti crimine damnati homunculum generari." — ("Tract. de Fascinat.," p. 672.)

"Butler's description in his 'Hudibras' of 'a cunning man or fortune-teller,' is fraught with a great deal of his usual pleasantry, —

" 'To him, with questions and with urine,
They for discovery flock, or curing.'"

— (Brand, "Popular Antiquities," vol. iii. p. 62, article "Sorcerer.")

"There were Etruscan wizards who made rain or discovered springs of water, it is not certain which. They were thought to bring the rain or water out of their bellies." — ("The Golden Bough," Frazer, vol. i. p. 22.)

The bed-chamber of Munza, King of the Mombottoes, was "painted with many geometrical designs . . . the white from dog's dung (album Græcum)." — ("Heart of Africa," Schweinfurth, London, 1878, vol. ii. p. 36.)

It is quite safe to assert that these "geometrical designs" were "magical."

"Witches are supposed to acquire influence over any one by becoming possessed of anything belonging to the intended victim, — such as a hair, a piece of wearing apparel, or a pin. The influence

acquired by the witch is greater if such an article be voluntarily or unconsciously handed to her by the person asked for it. . . . A witch can be disabled by securing a hair of her head, wrapping it in a piece of paper, and placing it against a tree as a target into which a silver bullet is to be fired from a gun. . . . When the patient reaches the age of adolescence, the alleged relief (from incontinence of urine) is obtained by urinating into a newly-made grave ; the corpse must be of the opposite sex to that of the experimenter." — ("Folk-Lore of the Pennsylvania Germans," Hoffman, in "Journal of American Folk-Lore," January-March, 1889, pp. 28-32.)

Black alludes to the same ideas. See his "Folk-Medicine," p. 16.

To frustrate the effects of witchcraft, Dr. Rosinus Lentilius recommended that the patient take a quantity of his own ordure, the size of a filbert, and drink it in oil. (See "Ephem. Medic.," Leipsig, 1694, p. 170.) According to Paullini, the antidotes were to take human ordure both internally and externally, and human urine externally. Schurig, for the same purpose, recommended the human urine and ordure, but both to be taken internally, mixed with hyoseyamus. — ("Chylologia," pp. 765, 766.)

In France witches were transformed into animals, and vice versa, "by washing their hands in a certain water which they kept in a pot." Reference is also made to "a basin of anything but holy water with which the initiated were sprinkled." — ("Sorcery and Magic," Thomas Wright, London, 1851, vol. i. pp. 310, 311, 328, 329.)

Reginald Scot tells the story of "a mass-priest" who was tormented by an incubus ; after all other remedies had failed, he was advised by "a cunning witch . . . that the next morning, about the dawning of the day, I should pisse, and immediately should cover the pisse-pot, or stop it with my right nether-stock." — ("Discoverie," p. 65.)

The Thlinket of the northwest coast of America believe that a drowned man can be restored to life by cutting his skin and applying a medicine made of certain roots infused in the urine of a child, which has been kept for three moons. Drowned men, according to their medicine-men, are turned into otters. — (See Franz Boas, in "Journal of American Folk-Lore," vol. i. p. 218.)

"It was a supposed remedy against witchcraft to put some of the bewitched person's water, with a quantity of pins, needles, and nails, into a bottle, cork them up, and set them before the fire, in order to confine the spirit ; but this sometimes did not prove sufficient, as it would often force the cork out with a loud noise, like that of a pistol,

and cast the contents to a considerable height." — (Brand, "Popular Antiquities," vol. iii. p. 13, article "Sorcerers.")

Where the limbs of a man had been bewitched, he should bathe them with his own urine; some recommended an addition of garlic or assafoetida. — (Frommann, "Tract. de Fascinat.," pp. 961, 962.)

"Jorden, in his curious treatise, 'Of the Suffocation of the Mother,' 1603, p. 24, says: 'Another policie Marcellus Donatus tells us of, which a physitian used toward the Countesse of Mantua, who, being in that disease which we call melancholia hypochondriaca, did verily believe that she was bewitched, and was cured by conveying of nayles, needles, feathers, and such like things, into her close-stool when she took physicke, making her believe that they came out of her bodie.' " — (Brand, "Popular Antiquities," vol. iii. p. 13, article "Sorcerers.")

Schurig prescribed hen and dove dung for the cure of the bewitched. — ("Chylologia," p. 817.)

Beckherius highly extolled human ordure for the same purpose. — ("Med. Microcosmus," p. 113.)

"The catamenial blood of women was looked upon as efficacious in chasing away demons." — (Black, "Folk-Medicine," p. 154, quoting Sinistrari.)

In Scotland, "they put a small quantity of salt into the first milk of a cow, after calving, that is given to any person to drink. This is done with a view to prevent skaith (harm), if it should happen that the person is not canny." — (Brand, "Pop. Ant.," vol. iii. p. 165, art. "Salt-Falling." Compare the foregoing with what Sir Samuel Baker tells us about African superstitions on the same subject.)

"On line 160, Reinerstein's and Retz's edition of Lucian's 'Dea Syra,' 4vo, vol. iii. p. 654, you will find human dung mentioned as a medicine or charm, and urine some lines lower." — (Personal letter from Prof. W. Robertson Smith, dated Christ College, Cambridge, England, August 11, 1888.)

One of the most curious features about Grimm's "Teutonic Mythology" (Stallybrass' translation, London, 1882), is the absence of any mention of the use of human or animal ordure or urine in any manner, either medicinally or religiously, or to baffle witchcraft. He may have issued a supplement, in which all this may have been corrected; but if he did not, then his work is most singularly defective.

Mr. Sylvester Baxter states that in a recent conversation with Mr. Frank H. Cushing, near Tempe, Arizona, he learned that in Mr. Cushing's youth, people in Central and Western New York were still

using charms against witchcraft, and that Mr. Cushing was personally acquainted with a family which had prepared a decoction, one of whose ingredients was human urine; this as a preventive of witchcraft. The locality referred to was about eighteen miles from Rochester, N. Y.

"Spitting into recently voided urine prevents one from getting 'warrle' ou his eyes." (Mrs. Fanny D. Bergen, Cambridge, Mass.) This remedy goes back to Pliny.

"To unbewitch the bewitched, you must spit in the pot where you have made water."—(Brand, "Pop. Ant.," vol. iii. p. 263, art. "Saliva," quoting from Reginald Scot's "Discoverie.")

"Several fetid and stinking matters, such as old urine, are excellent means for keeping away all kinds of evil-intentioned spirits and ghosts."—(Rink, "Tales and Traditions of the Eskimo," Edinburgh, 1875, pp. 50, 452.)

"The Manxmen still place a vessel full of water outside their doors at night, to enable the fairies (who, they say, were the first inhabitants of their island,) to wash themselves, and prevent them from doing harm."—(Brand, "Pop. Ant." vol. ii. p. 494, art. "Fairy Mythology.")

It is certainly singular to find here a trace of the custom noted as existing among the Laplanders and the people of Siberia, who placed tubs of urine for the same purpose, urine being used in ordinary ablutions.

In England, there was a superstition that the woman who made water upon nettles would be "peevish for a whole day."—(Brand, "Pop. Ant.," vol. iii. p. 359, art. "Divination by Flowers.")

Fosbroke ("Encyclopædia of Antiquities," vol. ii.) says that this proverb is ancient. "Nettles were in ancient times regarded as an aphrodisiac."

Schurig ("Chylologia," p. 795) repeats the story to the effect that the Laplanders calked the inner seams of their ships with the ordure of virgins to increase their speed. The Laplanders, when any of their reindeer die of disease, abandon their camp, being careful "to burn all the excrement of the animal before they depart."—(Leem's "Account of Danish Lapland," in Pinkerton, vol. i. p. 484. See previous citations from Sauer in regard to the Yakuts of Siberia.)

The story was current in California, about twenty years since, that the immigrants to that state from Missouri and Arkansas, in the gold-mining days, had the custom of depositing their evacuations, before starting on the march of the day, in the camp-fires of the preceding

night. Nothing was learned of the meaning, if any, of the custom. Nursing women sprinkled a few drops of their milk on the burning coals in the fireplace, to ensure an abundant flow. — (Etmuller, vol. i. p. 68.)

The author has been fortunate in obtaining a copy of the address of Mr. James Mooney, of the Bureau of Ethnology, Washington, D. C., upon the "Medical Mythology of Ireland."

This interesting and extremely valuable contribution, which can be found in the "Transactions of the American Philosophical Society for 1887," leaves no uncertainty in regard to the mystic powers ascribed by the Celtic peasantry to both urine and ordure. Urine and chicken-dung are shown to be potent in frustrating the mischief of fairies; "fire, iron, and dung" are spoken of as the "three great safeguards against the influence of fairies and the infernal spirits." Dung is carried about the person, as part of the contents of amulets; and children suffering from convulsions are, as a last resort, bathed from head to foot in urine, to rescue them from the clutches of their fairy persecutors. See also p. 377, in regard to the "dwarves," who, in England, seem to be the same as fairies.

Du Chaillu, in his "Land of the Midnight Sun," makes no reference to the use, in any manner, by the inhabitants of that region, of excrementitious materials for any purposes. His stay was of such an extremely short duration, that his observations cannot be compared with those made by Leems and others, from whom information has already been extracted.

A curious survival, in France, of the Parsi custom of the "Nirang" is demonstrated in the May number of "Mélusine," Paris, 1888, entitled "Le Nirang des Parsis, en Basse Bretagne."

"J'ai passé mon enfance, jusqu'à l'âge de quatorze ans, dans un vieux manoir breton, du nom de Keramborgne, dans la commune de Plouarte, arrondissement de Lannion. Le manoir paternel était bien connu des malheureux et des mendiants errants . . . qui venaient demander le vivre et le couvert pour la nuit . . . Parmi les pauvres errants qui étaient les hôtes les plus assidus de Keramborgne . . . se trouvait une vieille femme nommée Gillette Kerlohiou, qui connaissait toutes les nouvelles du pays . . . et, de plus, avait la réputation d'être quelque peu sorcière, et de guérir certaines maladies par des oraisons et des herbes dont elle seule avait le secret. . . . Un matin que Gillette avait passé la nuit à l'étable . . . elle marmottait des prières. . . . Une vache s'étant mise à uriner, la vieille mendiant

se précipita vers elle, recû de l'urine dans le creux de sa main et s'en frotta la figure à plusieurs reprises. . . . Ce que voyant le vacher, il la traita de salope et de vieille folle. Mais Gillette lui dit, sans s'émouvoir : ' Rien n'est meilleur, mon fils, que de se laver la figure, le matin, en se levant, avec de l'urine de la vache, et même avec sa propre urine si l'on ne peut se procurer de celle de vache. Quand vous avez fait cette ablution, le matin, vous êtes, pour toute la journée, à l'abri des embuches et des méchancetés du diable, car vous devenez invisible pour lui.' "

The writer of the above, M. F.-M. Luzel, learned from the other peasants and beggars standing about that the belief expressed by the old woman was fully concurred in by her comrades.

" Nos paysannes de France se lavaient les mains dans leur urine ou dans celle de leurs maris, ou de leurs enfants, pour détourner les malefices ou en empêcher l'effet." — (Réclus, " Les Primitifs," p. 98.)

Father Le Jeune must have been on the track of something corresponding to an ur-orgy among the Hurons when he learned that the devil imposed upon the sick, in dreams, the duty of wallowing in ordure if they hoped for restoration to health.¹

This penitential wallowing was retained by nations of a high order of advancement, the ordure of primitive times being generally superseded by clay and other less filthy matter.

" Let it suffice to display the points where Greek found itself in harmony with Australian and American and African practice. . . . 3. The habit of daubing persons about to be initiated with clay, . . . or anything else that is sordid, and of washing this off, apparently by way of showing that old guilt is removed, and a new life entered upon." — (" Myth, Ritual, and Religion," Andrew Lang, London, 1887, vol. ii. p. 282.)

" Plutarch, in his essay on superstition, represents the guilty man who would be purified actually rolling in clay." — (Idem, p. 286.)

The following is described as the Abyssinian method of exorcising a woman : The exorcist " lays an amulet on the patient's heaving bosom, makes her smell of some vile compound, and the moment her madness is somewhat abated begins a dialogue with the Bouda (demon), who answers in a woman's voice. The devil is invited to come out in the name of all the saints ; but a threat to treat him with some red-hot

¹ Leur faisant voir en songe, qu'ils ne sçauoient guérir qu'en se veautant dans toutes sortes d'ordures. — (Père Le Jeune, " Jesuit Relations," 1636, published by Canadian Government, Quebec, 1858.)

coals is usually more potent, and after he has promised to obey, he seeks to delay his exit by asking for something to eat. *Filth and dirt* are mixed and hidden under a bush, when the woman crawls to the sickening repast and gulps it down with avidity." — (From an article entitled "Abyssinian Women," in the "Evening Star," Washington, D. C., October 17, 1885.)

"A Pretty Charme or Conclusion for one Possessed. . . . The possessed body must go upon his or her knees to church, . . . and so must creep without going out of the way, being the common highway, in that sort how foul and dirty soever the same may be, or whatsoever lie in the way, not shunning anything whatsoever, untill he come to the church, where he must heare masse devoutly." — (Scot, "Discoverie," p. 178.)

By the Irish peasantry urine was sprinkled upon sick children.¹

American boys urinate upon their legs to prevent cramp while swimming.

In Stirling, Scotland, "a certain quantity of cow-dung is forced into the mouth of a calf immediately after it is calved, or at least before it has received any meat; owing to this, the vulgar believe that witches and fairies can have no power ever after to injure the calf." — (Brand, "Popular Antiquities," vol. iii. p. 257, article "Rural Charms.")

Frommann gives a preparation of twenty-five ingredients for freeing infants from witchcraft (*fascinatio*); but neither human nor animal egestæ are mentioned. — ("Tract. de Fascinat.," p. 449, 450.)

Cox, in his history of Ireland, gives a description of the trial of Lady Alice Kettle, of Ossory, charged with being a witch, and with sacrificing to a familiar spirit at night, at cross-roads, nine red cocks and nine peacock's eyes, and with sweeping the streets of Kilkenny, "raking all the filth towards the doors of her son, William Outlaw, murmuring and muttering secretly with herself these words:—

" 'To the House of William, my son,
Hie all the Wealth of Kilkenny town.' "

— ("History of Ireland," London, 1639, vol. i. p. 102. The date of the above was about 1325.)

This story is quoted by Vallancey, "Collect. de Rebus Hibernicis,"

¹ Brand quotes Camden as relating of the Irish that, "if a child is at any time out of order, they sprinkle it with the stalest urine they can get." — (Brand, "Popular Antiquities," article "Christening Customs," London, 1849, vol. ii. p. 86.)

Dublin, 1774, vol. ii. p. 369, and by Henry C. Lea, "History of the Inquisition," New York, 1888, vol. iii. p. 457; it is originally to be found in Camden.

In the Island of Guernsey, within the present generation, "John Lane, of Anneville, Lane Parish," has been tried on the charge of "having practised necromancy," and "induced many persons in the country parishes to believe that they were bewitched," and that he could drive away the devil and other bad spirits "by boiling herbs to produce a certain perfume not at all grateful to the olfactory nerves of demons, . . . and the sprinkling of celestial water." — (Brand, "Popular Antiquities," vol. iii. p. 66, article "Sorcerers.")

In the valuable compilation of superstitious practices interdicted by Roman Catholic councils Thiers includes the persons who bathe their hands with urine in the morning to avert witchcraft or nullify its effect. He says, too, that Saint Lucy was reputed to be a witch, for which reason the Roman Judge, Paschasius, at her trial sprinkled her with urine.¹

See the extract just quoted from "Mélusine."

The Romans had a feast to the mother of all the gods, Berecinthia, in which the matrons took their idol and sprinkled it with their urine.²

Berecinthia was one of the names under which Cybele or Rhea, the primal earth goddess, was worshipped by the Romans and by many nations in the East. Her priests, the Galli, emasculated themselves in orgies whose frenzy was of the same general type as the Omophagi of the Greeks, previously described.

The emasculation of the priests of Cybele was performed with a piece of Samian pottery. — (See footnote to Rev. Lewis Evans' translation of the Satires of Lucilius, lib. vii., edition of New York, 1860.)

The priests of Cybele were by some supposed to have received the name of Galli from the River Gallus, "near which these priests inflicted upon themselves the punishment we are speaking of. . . . The

¹ Ceux qui lavent leurs mains le matin avec de l'urine pour détourner les maléfices ou pour en empêcher l'effet. C'est pour cela que le juge Paschase fit arroser d'urine Sainte Luce, parce qu'il s'imaginoit qu'elle étoit sorcière. — (Thiers, "Traité des Superstitions," Paris, 1741, vol. i. cap. 5, p. 471.)

This statement is repeated verbatim by Picart ("Coutumes et Cérémonies," etc., Amsterdam, 1729, p. 35), and he adds that the judge believed that he would by this precaution disable her from evading the torments in store for her. John of Saalsbury, bishop of Chartres, with good reason cast ridicule upon this charm.

² La rociaba con sus orinas. — (Torquemada, "Monarchia Indiana," lib. x. cap. 23.)

effect of the water of that river was to throw them into fits of enthusiasm, — ‘qui bibit, inde furit,’ as Ovid has it.” — (Abbé Banier, “Mythology,” English translation, London, 1740, vol. ii. p. 563.)

“Here they set down their litters at night and bedew the very image of the goddess with copious irrigations, while the chaste moon witnesses their abominations.” — (Juvenal, Sixth Satire, describing the rites of Bona Dea, translated by Rev. Lewis Evans, M.A., Wadhams College, Oxford, New York, 1860.)

Father Baudin speaks of the secret society called the “Ogbuni:” “From what I have been able to learn, this society is simply an institution similar to the secret societies of the pagan people of ancient times, where the members were initiated into the infamous mysteries of the great goddess.” (Negroes of Guinea.) — (“Fetichism and Fetich-worshippers,” Baudin, New York, 1885, p. 64.)

The Eskimo living near Point Barrow have a yearly ceremony for driving out an evil spirit which they call Tuna. Among the ceremonies incident to the occasion is this: One of the performers “brought a vessel of urine and flung it on the fire.” — (“The Golden Bough,” Frazer, vol. ii. p. 164, quoting “Report of the International Polar Expedition to Point Barrow,” Washington, 1885, p. 42.)

It is strange to encounter in races so diverse apparently as the Greeks and the Hottentots the same rites of emasculation and urine sprinkling.

The sect of the “Skoptsi” or the “Eunuchs,” in Russia, “base their peculiar tenets on Christ’s saying, ‘There are some eunuchs which were born so from their mother’s womb, and there are some eunuchs which were made eunuchs of men, and there be eunuchs which have made themselves eunuchs for the kingdom of heaven’s sake. He that is able to receive it let him receive it’ (Matt. xix. 12).” — (Heard, “Russian Creed and Russian Dissent,” p. 265.)

“This heresy, which is the most modern of all, probably owes its origin to influences from the East slowly filtering through the lower ranks of the population.” — (Idem, p. 267.)

Reginald Scot tells the story of a quack who preyed upon the fears of patients suffering from tympanitis, telling them they had vipers in their bellies, which vipers he would try to smuggle into the patient’s “ordure or excrement, after his purgations.” — (“Discoverie,” p. 198.)

Schurig relates that the countrywomen in Germany, if after milking their cows for a long time they were unable to bring the proper quantity

of butter, suspected that they were under the spell of a witch ; to undo this spell it was only necessary to mix some fresh milk with human ordure and throw the mixture down the privy ; or human ordure was applied to the teats of the cows, much as Sir Samuel Baker has shown the Africans will do in our day. "Quippe quæ, siquando in confi-ciendo butyro, per tempus frustra laborarunt, suspicione veneficii cujusdam seductæ lac vaccinum recens emulsum stercore humano commixtum cloacæ simul infundunt, atque sic illico a Veneficio liberan-tur. . . . Si ferrum ignitum una stercore humano lacte vaccino con-sperso inseras, veneficæ pustulas inducet. . . . Contra magicam lactis vaccarum ablationem, ipsarum ubera stercore humano aliquamdiu inungi solent." And he ends his paragraph by quoting the dictum of Johannis Michaelis, "Sine omni fascinatione et superstitione proprio stercore efficere possit." — (Schurig, "Chylologia," pp. 788, 789, par. 62.)

Compare with the information derived from Paullini.

The above practice seems to have been transplanted to Pennsylvania, with its more objectionable features omitted.

"The housewife sometimes finds difficulty in butter-making, the spell being believed to be the work of a witch. . . . The remedy was to plunge a red-hot poker into the contents of the churn, when the spell was broken, and the butter immediately began to form." — ("Folk-Lore of the Penn'a Germans." — (Hoffman, in "Jour. of Amer. Folk-Lore," 1889.)

From all this it would appear plausible to assume that the "ripening of cheese" in human urine was originally induced by a desire to avert the evils of witchcraft. Refer also to the notes from Sir Samuel Baker.

In "South Mountain Magic," Mrs. M. V. Dahlgren, Boston, Mass. 1882, may be found references to the bewitching of milk and cream, and to the remedy employed of putting in hot stones or "a wedge of hot iron" (pp. 165-167). In this partial "survival," we see the disappearance of the more objectionable features of the practices of the old country. Mrs. Dahlgren's book treats of the superstitions of the Pennsylvania Germans living close to the Maryland border.

"The urine casters, a set of quacks almost within our own recollection, had a peculiar jargon, which it is not necessary to attend to." — ("Medical Dictionary," Bartholomew Parr, M. D., Philadelphia, Penn'a, 1819, art. "Urine.")

When cattle had been killed by witchcraft, Reginald Scot gave a long

formula for detecting the culprit; among other things, the farmer was directed to "traile the bowels of the beast unto your house. . . . into the kitchen, and there make a fire, and set ouer the same a grediron, and thereupon lay the inwards or bowels, and as they wax hot, so shall the witches' entrails be molested with extreme heat and pain." — ("Discoverie," p. 198. It should be observed that there are no directions about "cleaning" the bowels of the animal.)

Among the modes of detecting witches in England, were "by shaving off every hair of the witch's body. They were also detected by putting hair, parings of the nails, and urine of any person bewitched into a stone bottle, and hanging it up in the chimney." — (Cotta, in his "Short Discovery of the Unobserved Dangers," p. 54) speaks of "the burning of the dung or urine of such as are bewitched." In "A Pleasant Grove of New Fancies," by H. R. 8vo, London, 1857, p. 76, we have : —

"A charm to bring in the witch,
To house the hag you must do this :
Commix with meal, a little p—
Of him bewitched; then forthwith make
A little wafer or a cake;
And this rarely baked, will bring
The old hag in; no surer thing."

Among other methods given for baffling witches and making their evil deeds turn upon themselves, we find : "taking some of the thatch from over the door; or a tyle, if the house be tyled . . . sprinkle it over with the patient's water. . . . Put salt into the patient's water and dash it upon the red hot tyle." Another: heat a horse-shoe red hot and "quench him in the patient's urine. . . . Having the patient's urine, set it over the fire. . . . Put into it three horse-nails and a little salt. . . . Or, heat a horse-shoe red hot" and "quench him several times in the urine." Still another: "stop the urine of the patient close up in a bottle, and put into it three nails, pins, or needles, with a little white salt, keeping the urine always warm." — (Brand, "Pop. Ant." vol. iii. pp. 170 *et seq.* art. "Sorcery and Witchcraft.")

"To ascertain if one be bewitched, take his urine and boil it in a new, unused pot; if it foam up, he is not bewitched; if not, it is uncertain. Or, take clean ashes, put them in a new pot, let the patient urinate thereon. Tie up the pot, and let it stand in the sun; then break the ashes apart; if the person be bewitched, hairs will be found therein." — (Paullini, pp. 260, 261.)

"Neither can I believe (I speak it with reuerence unto graue judgments) that . . . the burning of the dung or vrine of such as are bewitched, or floating bodies aboue the water, or the like, are any trial of a witch." — ("A Short Discouerie of the Unobserved Dangers of Seuerall sorts of Ignorant and Vnconsiderate Practisers of Physicke in England," John Cotta, London, 1612, p. 54.)

Beckherius inclined to believe that human teeth, taken medicinally, would break down witchcraft: "*Contra maleficia et veneficia prodesse scribit.*" — ("*Med. Microcosmus,*" p. 265.)

On New Year's Day they (the Highlanders) burn juniper before their cattle, and on the first Monday in every quarter, sprinkle them with urine." — ("Pennant's Tour in Scotland," in Pinkerton, vol. iii. p. 90.)

"Les rustres slaves secouaient sur leur bétail des herbes de la Saint Jean, bouillies dans de l'urine pour le préserver des mauvais sorts." — ("*Les Primitifs,*" Réclus, p. 98.)

We should not forget that from the earliest recorded times the cedar and juniper have been devoted to sacred offices. "The god of the cedar, to which tree was ascribed a peculiar power to avert fatal influences and sorcery." (This, among the Accadians, the earliest known inhabitants of Mesopotamia.) — See "*Chaldean Magic,*" Lenormant, p. 178.)

From a very early date, urine seems to have been symbolized or superseded by holy water, salt and water, "celestial water," "fore-spoken water," juniper water, or wine or water, according to circumstances. "For lung disorders in cattle. . . . take fennel and hassock, etc. . . . make five crosses of hassuck-grass, set them on four sides of the cattle, and one in the middle; sing about the cattle *Benedicam*, etc. . . . Sprinkle holy water upon them, burn about them incense." — ("*Saxon Leechdoms,*" vol. iii. p. 57; the same remedy for diseased sheep, *idem*, p. 57.)

"If a horse or other beast be shot (elf-shot) take seed of dock and Scotch wax, let a mass priest sing twelve masses over them, and put holy water on the horse." — (*Idem*, vol. iii. p. 47; again, vol. iii. p. 157.)

"When a contagious disease enters among cattle, the fire is extinguished in some villages round; then they force fire with a wheel, or by rubbing a piece of dry wood upon another, and therewith burn juniper in the stalls of the cattle that the smoke may purify the air about them; they likewise boil juniper in water which they sprinkle

upon the cattle."—(Brand, "Pop. Ant." vol. iii. p. 286, art. "Physical Charms," quoting Shaw's "History of the Province of Moray in Scotland." Brand thinks that "this is, no doubt, a Druid custom.")

Scot, in his "Discoverie" (p. 157), says: "Men are preserved from witchcraft by sprinkling of holy water," etc. (Idem, vol. i. p. 19, art. "Sorcery.") "For the devils are observed to have delicate nostrils, abominating and flying some kind of stinks; witness the flight of the evil spirit into the remote parts of Egypt, driven by the smell of the fish's liver, burnt by Tobit." Conjurors are reported as always careful to "first exorcise the wine and water which they sprinkle on their circle."—(Idem, vol. iii. pp. 55, 57, art. "Sorcery.")

The foul condition of the atmosphere of sleeping-apartments was supposed to be rectified by the burning of juniper, sometimes of rosemary. "He doth sacrifice two pence in juniper to her every morning." ("Every Man out of his Humor," Ben Jonson) "Then put fresh water into both the bough-pots, and burn a little juniper in the hall chimney, Like a beast, as I was, I pissed out the fire last night." ("Mayor of Tumborough," Beaumont and Fletcher.) "Burn a little juniper in my murrin; the maid made it in her chamber-pot."—("Cupid's Rev." Beaumont and Fletcher, iv. 3; contributed by Dr. Fletcher.)

The diuretic effects of juniper berries are well known; we may conjecture that the "water of juniper" superseded another fluid induced by the use of the berries.

The "fore-spoken water" with which sick cattle are sprinkled in the Orkneys, is still to be noted in places in the Highlands.—(See Brand, "Pop. Ant." vol. iii. p. 274, art. "Physical Charms.")

The following spell is from Herrick's "Hesperides," p. 304:—

"Holy water come and bring;
Cast in salt for seasoning;
Set the brush for sprinkling."

(Idem, vol. iii. p. 58, art. "Sorcerer.")

"The charmer muttered some words over water, in imitation of Catholic priests consecrating holy water."—("Phil. of Magic," Salverte, p. 52. Shetland Islands.)

According to Dalryell, this "fore-spoken water" was made of water, salt, and the saliva of the conjurer.—(See "Superstitions of Scotland," p. 98.)

"For information of a cherished relative and his fate, in the other

world, they apply to the fetich-priest, who takes a little child and bathes his face with lustral-water." — ("Fetichism," Baudin, p. 65.)

The "lustral water" of the foregoing paragraph, is made of "snails and vegetable butter." — (Idem, p. 88.)

Reginald Scot gives a "cure" for one "possessed," one point of which is that the victim "must mingle holy water with his meate and his drink, and holy salt also must be a portion of the mixture." ("Discoverie," p. 178.) Witches were required to drink holy water at their trials. — (Idem, p. 21.)

Salt was called "divine" by the ancients. — (See "Morals," Plutarch, Goodwin's English edit., Boston, 1870, vol. iii. p. 338.)

"Both Greeks and Romans mixed salt with their sacrificial cakes; in their lustrations, also, they made use of salt and water, which gave rise, in after times, to the superstition of holy water." — (Brand "Pop. Ant." vol. iii. p. 161, art. "Salt Falling.")

The Scottish use of salt and water, as already noted, is described by Black ("Folk Medicine," p. 23); and by Napier ("Folk-Lore," pp. 36, 37.)

Salt is put in the cradle of a new-born babe in Holland. — ("Times," New York, Nov. 10, 1889.) "No one will go out on any material affairs without putting some salt in their pockets; much less remove from one house to another, marry, put out a child, or take one to nurse, without salt being interchanged." (Dalyell, "Superst. of Scotland," p. 96.) Salt is not used by the Eastern Inuit: "Le sel leur répugne, peut-être parceque l'atmosphère et les poissons crus en sont déjà saturés." — ("Les Primitifs," Réclus, p. 33.)

Having shown that witches were exorcised in France, England, Scotland, etc., by sprinkling with urine, we have reason to claim the following treatment to be at least cousin-german to our subject. In the west of Scotland, a peasant suffering from a mysterious and obstinate disease, was reputed to be under the influence of the "evil eye." The following remedy was then resorted to: "An old sixpence is borrowed from some neighbor, without telling the object to which it is to be applied; as much salt as can be lifted upon the sixpence is put into a tablespoonful of water and melted; the sixpence is then put into the solution, and the soles of the feet and palms of the hands of the patient are moistened three times with the salt water; it is then tasted three times, and the patient 'scored about the breath,' that is, by the operator dipping the fore-finger into the salt water and drawing it along the brow. When this is done, the contents of the spoon are

thrown behind and right over the fire, the throwers at the same time saying: 'Lord preserve us from all scathe.' — (Brand, "Pop. Ant." vol. iii. p. 47, art. "Fascination of Witches.")

Wright calls attention to the fact that at the meetings of witches, "at times, every article of luxury was placed before them, and they feasted in the most sumptuous manner. Often, however, the meats served on the table were nothing but toads and rats, and other articles of a revolting nature. In general they had no salt, and but seldom bread." After these feasts came "wild and uproarious dancing and revelry. . . . Their backs, instead of their faces, were turned inwards. . . . It may be observed, as a curious circumstance, that the modern waltz is first traced among the meetings of the witches and their imps. . . . The songs were generally obscene or vulgar, or ridiculous." — ("Sorcery and Magic," Thomas Wright, London, 1851, pp. 310, 311, 328, 329.)

Reginald Scot also states that the waltz was derived from the dance of the witches. — (See "Discoverie," p. 36.)

The presents which the devil gave to witches all turned into filth the next morning. — (See Grimm, "Teut. Mythol.," vol. iii. p. 1070.)

For a specimen of the filthy in literature, read the dream of Zador of Vera Cruz, who wished to sell his soul to the devil, in "El Bachiller de Salamanca," Le Sage, Paris, 1847, part iv. cap. 2, p. 129.

The best explanation of the above story — which represents Zador as making a compact with his satanic majesty whereby in exchange for Zador's soul the devil discloses a gold mine in a graveyard, from which the poor dupe extracts enough for his present needs, and then marks the locality by an ingenious method, only to be awakened by his angry wife to the mortifying consciousness that he has defiled his own bed — is that it reflects the current opinion of the Spaniards of Le Sage's era in regard to the transmutability of the gifts received from the evil one. See the story of the god "Kutka."

"Popular tales, which most frequently arise from traditions . . . are remnants of olden times, and illustrate them. . . . When a vicious or evil spirit is mentioned in any tale or popular tradition, I consider it always implies a reminiscence of some being who formerly, during the supremacy of a religion now rejected, was worshipped as a god. He is considered to benefit his worshippers, but to molest those who hold another belief. Mankind, when in a rude state, often attribute their own intolerance to their gods. Thus mankind creates his own god after his own image." — (Seven Nillson, "The Primitive Inhabi-

tants of Scandinavia," edited by Sir John Lubbock, London, 1868, Preface, liii.)

Speculation would lead to no profitable result were we to endeavor by its aid — the only means now left us — to fathom the obscurity surrounding the rites and dances, and especially the foods of those witches' gatherings.

Doctor Dupuoy, in "*Le Moyen Age Médical*," to which special attention is due, advances an opinion which seems to cover much of the ground in a logical manner. This in one word, amounts to the belief that the witches' gatherings of Europe were not figments of the imagination, but really existed, and were the conventions of votaries of the cults stamped out of existence, and only traceable in the distorted and outlandish features which would most naturally commend themselves to an ignorant peasantry. "Among these sorcerers there were old panders, who knew from personal experience all practices of debauchery, and who gave the name of 'vigils' to the saturnalia indulged in among villagers on certain nights, — gatherings composed of bawds and pimps, to which were invited numerous novices in libidinousness. These sorcerers and witches also knew the remedies that young girls must take when they wish to destroy the physiological results of their own imprudence, and what old men needed to restore their virility. They knew the medicinal qualities of plants, especially those that stupefied." — (Translated by T. C. Minor, M.D., under title of "*Medicine in the Middle Ages*," p. 40.)

The initiates in witchcraft may have been compelled to adopt loathsome foods as a test of the sincerity of their purposes, or they may have taken them to induce an intoxication such as that of the Zuñis of New Mexico and the wild tribes of Siberia. There is still another hypothesis to be considered before relinquishing this topic. The best food, we know, was always offered to the deities of the ruling sect, and the use of any of the appurtenants of the rites of the ruling religion in the ceremonial of a superseded cult was looked upon as the veriest sacrilege and blasphemy. For example, the use of holy water at the witches' sabbath was considered a worse crime than that of being a witch. Therefore we may conclude that, as the votaries of the superseded religion did not dare to employ the best, they necessarily had to fall back upon inferior material out of which to construct their oblations; and as they assembled generally in mountain recesses, in caves, etc., where nothing better could be had, they offered themselves in sacrifice, — that is, they recurred to the old practices of human sacrifice, if indeed

they had ever abandoned them, and gave the pledges of their own hair, saliva, urine, and egestæ.

“ Pure prayer ascends to Him that High doth sit,
Down falls the filth for fiends of Hell more fit.”

Such was the answer made to the father of lies by a venerable monk, —

“ A godly father sitting on a draught,
To do as need and nature hath us taught.”

The devil had reproached him for saying his prayers at such a moment. — (Harington, “ Ajax,” pp. 33, 34.)

Mooney relates an instance of the abduction of an Irishwoman by fairies. She managed to impart to her husband the knowledge of the means by which her rescue could be accomplished : “ He must be ready with some urine and some chicken-dung, which he must throw upon her, and then seize her. . . . Soon he heard the fairies approaching, and when the noise came in front of him he threw the dung and urine in the direction of the sound, and saw his wife fall from her horse.” (“ The Medical Mythology of Ireland,” James Mooney, Amer. Phil. Society, 1887.) The Irish peasantry firmly believe in the power of the fairies to carry off their children ; to effect a restoration, “ a wise woman ” is summoned, whose method is to “ heat the shovel in the fireplace, place the changeling upon it, and put it out upon the dung-hill.” (Idem.) “ Fire, iron, and dung, the three great safeguards against the influence of fairies and the infernal spirits.” — (Idem.)

The peasantry of Ireland carry about the person “ medicine bags ” very much like those in use among the North American Indians. Among the contents of these bags “ are usually found tobacco, garlic, salt, chicken-dung, lus-crea, and some dust from the roadside.” (Idem.) This is “ carried as a protection against the fairies ; . . . also as a protection against the evil eye ; and something of the same nature is sewed into the clothing of the bride when her friends are preparing her for the marriage ceremony.” — (Idem.)

“ A charm to be said each morning by a witch fasting, or at least before she goes abroad : ‘ The fire bite, the fire bite ; hog’s turd over it, hog’s turd over it, hog’s turd over it ! The Father with thee ; the Son with thee ; the Holy Ghost between us both to be ! ’ This last refrain three times ; then spit over one shoulder, and then over the other, and then three times right forward.” — (Scot, “ Discoverie,” p. 177)

"Item. They hang . . . garlicke in the roof of the house for to keep away witches and spirits, . . . and so they do alicium likewise." — (Idem, p. 192.)

Garlic was put in the cradle of a new-born babe in Holland. — ("Times," New York, Nov. 10, 1889.)

Garlic could not be eaten by the monks or nuns of Thibet (Bhikshuni); to eat it was considered a sin. "140. Si une Bhikshuni mange de l'ail," etc. But in a footnote it is stated that it might be eaten when it was the only remedy for some disease or infirmity; but even then the patient should not enter a dormitory, a latrine, could not expound the law, mingle with brahmîns, enter a park, a market, or a temple until he had undergone a three days' purification, been bathed and fumigated. — (See "Pratimoksha Sutra," translated by W. W. Rockhill, Paris, 1885, Société Asiatique.)

XLIV.

A FEW REMARKS UPON TEMPLE OR SACRED PROSTITUTION, AND UPON THE HORNS OF CUCKOLDS.

“THE bawds of Amsterdam believed (in 1637) that horse’s dung dropped before the house and put fresh behind the door . . . would bring good luck to their houses.” — (“*Le Putanisme d’Amsterdam*,” p. 56, quoted in Brand, “*Popular Antiquities*,” vol. iii. p. 18, article “*Sorcery*.”)

While a sacred origin cannot be claimed for prostitution in general, all, or nearly all, temples must in the early ages of mankind have been provided with prostitutes. The necessity for such a provision is obvious. Man’s superstition and ignorance invested certain localities, or the guardian spirits of those localities, with the power to work him weal or woe, unless kept in good humor by oblations and sacrifices. Temples were erected on such foundations, tended by priests, who waxed fat and enriched themselves, because the right of asylum attached to their position, although such a right did not absolutely attach to the little communities which insensibly grew up around these temples. The necessities of national administration and of international or inter-tribal arbitration, would naturally attract periodically to those temples the law-makers, the great chiefs and their followers, perhaps to settle their disputes or arrange their treaties by personal discussion, perhaps by the decision of the arch-priest.

At such gatherings, no inconsiderable amount of barter and traffic would spring up, and many, of a mercantile turn of mind, would realize the advantages of a permanent residence. The sailors and merchants from foreign parts could not always be expected to behave with propriety; they might, at times, be as anxious to “paint the town red” as the western cowboy is whenever he is paid off. The women of the city would be in constant danger of insult; hence, as a wise precaution, a certain class of young and attractive females were reserved for the service of the temples, — that is, for the gratification of the sexual passions of strangers and the enrichment of the priests.

Indeed, until some such mode of detail had been devised and carried into effect, and perhaps long after that, it seems to have been the custom for all the women of the city to share in this duty; we read that, at the temple of Mylitta, it was incumbent upon each woman to prostitute herself with a stranger at least once in her life, at the temple of that goddess.

The priests would impart to the prostitutes a knowledge of charms intended to secure good fortune; these charms would, in course of time, be adopted by prostitutes in general, who had no connection with the temple at all. Similar survivals can be traced among gamblers. Gambling was at one time a sacred method of divination. Those who cast omens were always on the lookout for good signs and bad. One of the best signs was to meet a man with a hump-back. Gamblers to-day consider themselves fortunate when they can rub the hump of a cripple.

This sacred prostitution was by no means confined to the Babylonians. The Hebrews had, attached to their temples, a class of persons of both sexes termed "Kadeshim," to whom the opprobrious office of public prostitution has been attributed; and in numerous other parts of the world the same sort of personal degradation has been reported. The women devoted to this service wore a certain uniform. (See Du-laure, "*Des Différents Cultes*," vol. ii. p. 75, speaking of the "Kadeshoth." See also Smith's "*Dictionary of the Bible*," New York, 1871, articles, "Harlot" and "Sodomite.")

"The sons of Eli lay with the women that assembled at the door of the tabernacle of the congregation." — (1 Samuel ii. 22.)

"Throughout India, and also through the densely inhabited parts of Asia and modern Turkey, there is a class of females who dedicate themselves to the service of the Deity whom they adore, and the rewards accruing from their prostitution are devoted to the service of the temple and the priests officiating therein. The temples of the Hindus in the Dekkan possessed these establishments. They had bands of consecrated dancing-girls, called "women of the idol," selected in their infancy by the priests for the beauty of their persons, and trained up with every elegant accomplishment that could render them attractive." — ("The Masculine Cross," privately printed, 1886, p. 31.)

Réclus has a dissertation upon this subject, which concludes in these words: "*Aussi Juvénal se permettait de demander, . . . Quel est le temple où les femmes ne se prostituent pas?*" — ("*Les Primitifs*," p. 79.)

Lenormant speaks of "the sacred prostitution, which was imposed once, at least, in a lifetime, upon all women, even those who were free." — ("Chaldean Magic," François Lenormant, p. 386.)

"Caidu is an heathenish nation, where, in honor of their idols, they prostitute their wives, sisters, and daughters to the lust of travellers." — (Purchas, vol. v. p. 430. Caidu seems to have been a territory adjacent to Thibet.)

"Sometimes, at the command of a wizard, a man orders his wife to go to an appointed place, usually a wood, and abandon herself to the first person she meets. Yet there are women who refuse to comply with such orders." — (Patagonia, "Voyage of Adventure and Beagle," vol. ii. p. 154.)

"The people of Khasrowan, a Christian province in the Libanus, inhabited by a peculiarly prurient race, also hold high festival under the far-famed cedars, and their women sacrifice to Venus, like the 'Kadeshah' of the Phœnicians. This survival of old superstition is unknown to missionary 'hand-books,' but amply deserves the study of the anthropologist." — (Burton, "Arabian Nights," terminal essay, vol. x. 230.)

The religious prostitution of the ancient Babylonians seems also to survive, in a small degree, in the petty hamlets of Kesfin and Martauan, near Aleppo, in Syria. "The women carry their hospitality as far as those of Babylon of old. This authorized prostitution seems to be a remnant of the old Asiatic superstitions." — (Maltebrun, "Universal Geography," vol. i. p. 353, lib. 28.) Dulaure cites the case of Martuon, and also quotes Marco Polo in evidence of the existence of the same practices in Kamul, near Tanguth. — ("Des Dif. Cultes," vol. ii. pp. 598, 599.)

"Most eastern temples, and especially those connected with the solar cult, had, and for the most part still have, 'Deva-Dasis' temple, or 'God's women,' the followers of Mylitta, though generally not seated so confessedly nor so prominently as those whom Herodotus describes. They were doubtless the women with mirrors (Ezek. viii. 14) who wept for Tamuz, the sun-god." ("Rivers of Life," Forlong, vol. i. p. 329.) The African goddess Odudua promised protection "to all those who would establish themselves in this place, and erect to her a temple in place of the cabin. Many persons came and established themselves here, and thus was founded Ado, which means prostitution in memory of the goddess." — ("Fetichism," Baudin, p. 17.) "The temple erected in this city is celebrated among the blacks.

The neighboring kings offer an ox to the goddess on her feast-day, and, in accordance with the legend, impure games are celebrated in her honor." — (Idem.)

"In the Babylonian worship of the goddess Mylitta, the women who offered themselves for a price to the stranger at the door of the temple were distinguished by a peculiar apparel, according to Baruch. . . . The women sit in the ways, girded with cordes of rushes and burnt straw," and "their resting-places distinguished with cords." — (Purchas's "Pilgrims," vol. v. p. 56, art. "Hondius' Babylonia.")

In Ireland, at the present day, the peasantry make use, in divination and witchcraft, of "Saint Bridget's cord," made of rushes, and corresponding closely to the cord of the goddess Mylitta.

We are not informed that horns were assumed as a distinctive feature of such uniform, but we are constantly kept in mind of the fact that many, if not all, of the deities of the countries adjacent to the Mediterranean were at one time or another represented with horns as symbols of power. What, therefore, is more reasonable than to suppose that the woman thus employed was decked with a head-dress of horns? Or that her husband, without whose permission such prostitution would have been impossible, and for whom it must have been an act of equal religious importance, was similarly decorated?

When new religions had succeeded in trampling into the dust the sacred usages of the past, the fierce intolerance of the fanatic would have had no greater delight than in ridiculing that which had been the distinctive feature, perhaps, of the cult so recently overthrown. Therefore the association of horns, formerly the typical attribute of the heathen gods, would be transferred to the betrayed husband, and what had been the outward sign of the most devout self-negation would be turned into ridicule and opprobrium.

Brand, "Pop. Ant.," vol. ii. pp. 181 *et seq.* gives a perfect flood of information on this subject, but nothing very satisfactory or definite, — art. "Cornutes."

"Actæon, a cuckold; from the horns placed on the head of Actæon by Diana." (Grose, "Diet. of Buckish Slang," London, 1811.) This myth may conceal the story of the intrusion of Actæon upon sacred ceremonies of prostitution or his personal association therewith.

"Highgate; sworn at Highgate. A ridiculous custom formerly prevailed at the public houses in Highgate, to administer a ludicrous oath to all travellers of the middling class who stopped there. The party was sworn on a pair of horns, fastened on a stick; the substance

of the oath was never to kiss the maid when he could kiss the mistress; never to drink small beer when he could get strong; with many other injunctions of the same kind, to all of which was added the saving clause, — ‘unless you like it best.’ The person administering the oath was always to be called father by the juror, and he, in return, was to style him son, under penalty of a bottle.” — (Grose, “Dictionary of Buckish Slang.”)

“Horn Fair; an annual fair, held at Carlton, in Kent, on Saint Luke’s day, the 18th of October. It consists of a riotous mob, who, after a printed summons, dispersed through the adjacent towns, meet at Cuckold’s Point, near Deptford, and march from thence in procession through that town and Greenwich to Charlton, with horns of different kinds upon their heads; and at the fair there are sold rams’ horns and every sort of toy made of horn; even the gingerbread figures have horns. The vulgar tradition gives the following history of the origin of this fair. King John, or some other of our ancient kings, being at the palace of Eltham in this neighborhood, and having been out hunting one day, rambled from his company to this place, then a mean hamlet, when, entering a cottage to inquire his way, he was struck with the beauty of the mistress, whom he found alone; and having prevailed over her modesty, the husband, returning suddenly, surprised them together, and threatening to kill them both, the king was obliged to discover himself, and to compound for his safety with a purse of gold, and a grant of the land from this place to Cuckold’s Point, besides making the husband master of the hamlet. It is added that, in memory of this, the fair was established for the sale of horns, and all sorts of goods made of that material.” — (Grose, *idem*.)

“In Minorca, the inhabitants have as much hatred of the word ‘cuerno’ as they have of ‘diablo.’” (See Brand, “Pop. Ant.,” vol. ii. p. 186, art. “Cornutes.”) Possibly we have here an example of the influence of the early Christian church exerted to make detestable everything connected with the deposed religion of the Mediterranean.

The horn still figures among the African tribes. Whenever one of the petty kings at the head of the Nile “wishes to communicate with another, he sends on the messenger’s neck a horn, . . . which serves both for credentials and security. . . . No one dare touch a Mbakka with one of these horns upon his neck.” — (Speke, “Nile,” London, 1863, vol. ii. pp. 509, 521.)

Bruce says that, after a victory, the Abyssinian commanders wear a

head-dress, surmounted by a horn, — a conical piece of silver, — gilt, about four inches long, much in the shape of our common candle-extinguishers. This is called kern, or horn, and is only worn in parades or reviews after victory. This, I apprehend, like all other of their usages, is taken from the Hebrews, and the several allusions made in Scripture to arise from this practice. “I said unto fools, Deal not foolishly, and to the wicked, Lift not up the horn.” And so in many other places throughout the Psalms. — (Bruce, “Nile,” Dublin, 1791, vol. iii. p. 551. See also “Encyclopædia of Geography,” Philadelphia, 1845, vol. ii. p. 588, art. “Abyssinia.” See also under “Mistletoe;” “Milk,” and “Semen,” under “Pharmacy;” extract from Pliny; extract from Lentilius; extract from Etmuller; “Perspiration,” under “Pharmacy,” and others.)

A “black letter” copy of “*Malleus Maleficarum*,” one of the “incunabula” from the press of Peter Schœffer, Mayence, 1487, was carefully examined; but besides being very dim and extremely hard to decipher, it contained nothing not already given from other authorities.

XLV.

CURES BY TRANSPLANTATION.

THE most curious method of alleviating physical and mental disorders was that termed by various writers: "Cures by Transplantation," by "Translation," by "Sympathy," and by "Magnetic Transference."

There is a perfect embarrassment of riches on this division of our subject, and the difficulty has been not to select, but to know what to reject.

Etmuller enumerates five different kinds of cures by transplantation: 1. Insemination, wherein "*magnes mumia*" (the spirit distilled from mummy flesh) was used to water the rich earth in which certain seed had been planted; but care must be taken in the selection of the plant, some being beneficial, others noxious; 2. Implantatio, where a plant, already growing, or the root only of such a plant is selected, and watered as above described; 3. Impositio, where some of the skin of the diseased member, or some of the patient's excrement, or anything else intimately connected with him, "*aut ejus excrementum aut utrumque*," is inserted between the bark and body of a tree, and the opening then tamped with mud. But in every case bear in mind that if a slow, gradual cure is to be brought about, a slow-growing tree must be selected; but for a speedy recovery, a quick-growing tree; 4. Inoratio, in which daily certain trees or plants, until cure results, are to be watered with the "*urina, sudore, fecibus alvi vel lotura membri aut totius corporis*;" but it is recommended that each irrigation be covered up with earth, to keep out the air; 5. Inescatio, where "mummy" is given to an animal to eat; the animal will die, the patient recover.

Human ordure was a frequent addition to the "*spiritus mumiaë*."

Frommann opens the way to a clearer understanding of the principles upon which these cures depended. He states that not all diseases were thus curable; only those which in themselves were "movable." Poi-

son could not be so cured, because its lethal action was effected too quickly for the slow-moving remedial agency of transplantation. Injuries to the "vital faculties," such as "aneurisms of the aorta," etc., were not transplantable. Worms ditto, although they were able to move of their own will. "Lipothymia" or syncope, was not transferable. All "transplantable" diseases were called "saline" diseases, because, according to the medical theories prevailing in those days, they originated in some defect of the "salts" of the body. — (See Frommann, "Tract. de Fascinatione," pp. 1017, 1018.)

Among the strongest "magnetic" medicines, according to Paracelsus, was the one "ex stercore humano." — (See Etmuller, vol. i. p. 69.)

There was another: "Take a sufficient quantity of the ordure of a healthy man, and make it into a poultice with human urine, to which add sweat gathered from the body with a sponge; place this in a clean place in the shade until it dries, and when needed for use, moisten with human blood. "Recipe copiosum sterces hominis sani, et hoc cum urina ejusdem misce, redige in consistentiam pultis, adde quantum habere potes sudoris ex hominibus sanis a linteo aut spongia collecti, ponantur simul in loco mundo in umbra donec siccentur, hinc adde sanguinem recentem, misce, sicca, et ad usum reserva."

Etmuller also mentions a "sympathetic" cure for quartan ague, in which the hair of the patient was to be mixed with food and thrown to birds, which, swallowing the food, took away the fever.

Another method was to take the clippings of the toe and finger nails of the sick person, place them in an egg and throw them to the birds; others again wrap them up in wax and early in the morning, before the rising of the sun, affix the parcel to the door of a neighbor's house, or else tie it to the back of a living crab, and throw the crab back into the stream: "Sunt cui ad curandam febrem segmenta e manibus et pedibus ovo includunt, avibusque devoranda objiciunt; alii eadem ceræ involvunt, matutinoque tempore ante solis ortum januæ affigunt, alii dorso cancri vivi alligant, cancrumque fluenti committunt." — (Idem, vol. ii. p. 265.)

The first excrement of a man sick with dysentery was mixed with salt as a "magnetic" cure; to this, some people added the powder of eel-skins (Frommann, "Tractatus," p. 1012, *et seq.*). Yellow jaundice patients urinated upon clean linen sheets; if they succeeded in dyeing them yellow they would recover soon; if not, not (p. 1012); roots wet with the patient's urine were burned as a cure for the yellow jaundice (p. 1013); all the clothing of an epileptic patient was burned, and the ashes

thrown in a stream, down-stream (p. 1013); especially was this the case if any of it had been defiled by alvine dejections voided in one of the paroxysms; and the same care was taken to burn this excrement (p. 1013). (Note that epilepsy was always regarded as the sacred disease; here we have a suggestion of human sacrifice.)

The method of curing by digging up the ground, depositing some plant and enriching the surrounding soil with the patient's egestæ is given by Frommann (p. 1016); but the trees or plants to be selected for this purpose were to be those of forests or those which bore edible fruits, "*ut fraxinus, quercus, betula, tilia, fagus, alnus,*" etc. (Ash, oak, birch, linden, beech, alder, etc.) The animals had to be such as did not eat human flesh, as "*canes, feles, equi, lupi, vulpes;*" others could be used on occasion, but the results were not so sure (*idem*, p. 1017). There were two general methods: one, in which the "*sanguis, pili, excrementa*" of the patient himself were offered; the other, in which crabs, meat, eggs, lard, apples, and other things, were rubbed to the affected parts and then offered (*idem*.)

Beckherius gives the recipe for effecting a "sympathetic cure" of fever by clipping the finger and toe-nails of the patient and tying these clippings in a rag to the door of a neighbor's house. "*Si resegrmine unguium e manibus et pedibus deprompta, cera involvantur, matutinoque tempore ante solis exortum alienæ januæ affiguntur.*" And wicked people were in the habit of preparing a draught composed of equal parts of their dirty finger-nails and cantharides, and whoever drank that in his liquor fell into a condition of atrophy (*Med. mic.* pp. 15, 16). When the patient's own hair was used in these cures, it was placed in an egg and thrown to chickens. — (*Idem*, p. 8.)

Frommann speaks of enclosing fragments of the patient's nails and clippings of his hair in knots and throwing these in the road to be untied by some curious person who would catch the disease. — ("*Tract. de Fascinatione,*" p. 1003.)

The blood, urine, or excrement of the patient was to be placed in an egg-shell and fed to barn-yard fowl. — (*Idem*.)

"*Id quod alio modo per urinam ægri quoque fieri valet; qua ratione cum sanguine, urina, excrementis, ægrotantis multæ sympatheticæ curæ fieri possunt;*" and to this class belong such remedies as cutting an apple or a piece of bacon in half, then hanging the piece up in the chimney to melt or rot; as fast as this was effected, the disease disappeared. Speaking of transplantation, he says: "*Prioris exemplum est dum applicato stercore humano ad certam aliquam partem trans-*

plantatur eo ipso morbo in plantam cujus semen in terram hoc stercore mistam inferitur." The first example is where the ordure of the patient is applied to a certain plant, and thus transfers the disease from the patient to the plant. — (Etmuller, "Opera Omnia," vol. i. p. 69, Lyons, 1696.)

Etmuller teaches that clippings of the toe and finger nails tied to the back of a living crab, which was then to be thrown into a stream by a man who would perform the duty and return home without speaking would effect cures; similarly, for the alleviation of gout, he recommends that these clippings be buried in a hole made in the bark of an oak which should then be closed with a wedge: "Abscinduntur ungues manuum et pedum, alligantur dorso cancri viventis, et cancer istis unguibus oneratus, immittitur in flumen retrofaciem redeundo sine loquela, donec in domum facta fuerit reversio. Instituuntur qq. transplantationes pro viribus recuperandis per ungues. Sic in podagræ. . . . R.; Ungues pedis, atque immittuntur in foramen excavatum in quercum et super foramen ponunt cuneum ex quo subito fit, ut remittat dolor ac desinat Podagra" (vol. ii. p. 270.)

Etmuller mentions the cure by tying the fragments of finger and toe nails to a crab, in another place in his works. For the recovery of impaired strength, these clippings should be buried in the bark of a cherry-tree, which should then be closed with ordure: "Ad recuperandos vires abscissos ungues et capillos cerasi radici incisæ imponunt, vulnusque fimo co-operiunt." — (Idem, vol. ii. p. 265.)

"Denique si quid aliud singulare est si quis accipiat ovum recens, hoc coquat cum urina propria ad assumptionem medietatis, quo facto urina superstes projiciatur in flumen secundum ejusdem cursum, ovum vel ita coctum leviter apertur immittatur in acervum formicarum. Unde quando formicæ assumpserunt ovum solutem erit fascinum" (idem, vol. i. p. 462). "Finally, there is this singular method of taking a fresh egg and putting it in some of the patient's own urine, which is boiled down one half; the supernatant urine is then to be thrown into a stream (down current) and the egg itself buried in an ant-heap; as fast as the ants consume the egg, the effects of the witchcraft vanish."

Again, for the cure of gout, toe and finger nails were to be cut and placed in an aperture in the bark of an oak-tree: "Vel dum ungues pedum abscissi et in quercum terebratam inclusi, hominem liberum reddunt a podagra." — (Idem, p. 69, vol. i.)

Urine was of great use in curing people bitten by serpents. "Per

urinam solent fieri curationes magico-magneticæ morborum, si scillicet lardum vel potius caro porcina coquatur ter in urina ægri et caro ista incoctionis urinæ postmodum propinetur cani vel porco devoranda, sic enim sit, ut quam plurimi morbi curentur per transplantationem in animalia quæ devorant carnem et urinam." — (Etmuller, p. 271.)

Hog-lard or a lardy hog-skin, rubbed on warts and then suspended in the chimney or buried in horse-dung, caused the warts to disappear as fast as it decayed. "Suspendatur in camino furni, vel in fimo equino sepeliatur. . . Sicut exsiccatur in fumo, vel putrescit in fimo lardum ita exsicceatur et putrescat verruca." (Idem.) Half a dozen methods of employing hog-dung are given.

Frommann quotes Ratray as saying from his own observation that there was a "sympathy" between the patient's urine when enclosed in a glass vial and the condition of the patient himself, — a sort of "barometrical" sympathy, as we would term it. At an earlier period of culture the urine would have been placed in the horn of a goat, or in the bladder of a hog.

The methods of effecting these cures by placing the patient's urine in an ants' nest, in any manner, are all given by Johannes Christianus Frommann ("Tract. de Fascinat.," pp. 1004 *et seq.*); also the method by boiling an egg in the urine and placing the egg in the nest of ants (p. 1005); also the method of making bread with the patient's urine, and giving the bread to a dog to eat (p. 1005). In Italy there was a variant of this custom, consisting in giving bread made with the urine of a male patient to a male dog, and that made with the urine of a sick woman to a bitch (idem). Yellow jaundice was cured by boiling a piece of meat in the patient's urine and giving said meat to a dog (idem); for the cure of rupture the patient should soak some barley in his urine, and then bury the barley in the bark of a tree (p. 1007). Another mode of cure by transplantation was for the patient to urinate in a vial of glass, stop it up with a linen rag or a paper wad, and bury it in the earth (p. 1010). For the cure of yellow jaundice, the patient dug a hole in the ground and urinated therein before sunrise (pp. 1010, 1011); for the cure of dysentery the patient deposited his excrement on a piece of ash and left it in a hole (p. 1011); fever patients threw their excrement in a stream (idem). Other modes were to make a mixture of the urine of the sick man, mixed with ashes, let the mass dry in the sun, and then put it by the embers of the kitchen fire to bake (p. 1012); the ordure of a man sick from "incantation" was applied

to the place of the spell, and then hung up (enclosed in a hog's bladder) for three days in the smoke of the chimney (*idem*).

In his long and most interesting chapter upon the cure of diseases by the use of human ordure, "magically or sympathetically," Schurig relates many quaint and curious methods of employment of the alvine dejections of those supposed to be almost *in articulo mortis*. For example, the ordure of the patient was taken, placed in the hollow of a dead man's bone, which was then thrown into boiling water. This remedy, if we can trust Schurig, seems to have been of the highest efficacy. Another mode was to mix the ordure with the lees of wine and the pounce of cherries, and let the mass ferment together; or the ordure was collected and thrown into running water. — (See Schurig, "Chylogogia," pp. 783, 784. The whole chapter "De Stercoris Humani Usu Magico seu Sympathetico," No. xiii. should be read.)

Goat-urine was applied to sore eyes; but a more certain cure in grave cases was additionally effected by hanging some of it in a goat's horn for twenty days. "Si cum cornu capræ suspenditur diebus viginti." — (Sextus Placitus, "De Med. ex Animal.," article "De Capro.")

Beckherius has a "sympathetic" cure for the yellow jaundice. Make a poultice of horse-dung and the patient's own urine, and hang it up in the chimney. "Fimum equinum cum urina ægri sic misce, ut pultis referat consistentiam, hæc linteolo excipe, et in camino suspende ut fumo semper sunt exposita." ("Med. Microcos.," p. 65.) Another was to hang the urine of the patient in a bladder in the chimney; as the urine evaporated the patient was to recover. "Propriam urinam vesica suilla excerpisse et hanc in fumo exposuisse seque observasse ad exsiccationem. Urina in vesica ipsum quoque icteritiam evanuisse." (*Idem*, p. 65.) Another cure of yellow jaundice was a dose, morning and evening, of a mixture of human urine and horse-radish. (*Idem*, p. 66.) There was still another "sympathetic" cure: the patient urinated in a vessel, which was allowed to evaporate by the fire, and this was continued for nine days. — (*Idem*, p. 66.)

For consumption Beckherius gives a "sympathetic" cure (already noted from other sources) of boiling an egg in the patient's urine until it hardens, and then burying it in an ant-hill. (*Idem*, p. 75.) The same cure was employed in fevers. (*Idem*.)

A pinch of salt, the size of a big bean, was wrapped in a linen rag, and dipped in the urine of the patient for a whole day; then heated in

the fire until it became reddish in color ; some of this was sprinkled on bread, and the patient rubbed with it morning and evening. — (“*Medicus Microcosmus*,” pp. 75, 76.)

A fresh egg was boiled in the sick person’s urine, and then thrown to the fishes. “*Recens ovum in urina ægri quod in piscinam ubi pisces sunt conjiciatur, et momento febrem cessare dicunt.*” — (Idem, p. 78.)

Still another was to make a cake out of flour moistened with the urine of the sick ; throw this to the fishes. The fishes who ate it would take the disease, and the patient recover. “*Subige farinam cum urina ægri ad formam placentulæ ; coque hæc in forno, instar panis objice piscibus, ut ab iis devoretur ; abit febris, maxime quartana.*” — (Idem.)

Frommann devotes a long chapter to cures by “transplantation.” He cites from Pliny the method of curing a bad cough by spitting into the mouth of a toad (tree-toad ; see notes already taken), and also gives another in which the urine of the patient made into a dough with flour, was given to a dog or hog. — (“*Tract. de Fascinat.*” p. 1002.)

Frommann believed with Von Helmont that there was nothing superstitious about such cures, because there were no rites and no incantations used. (Idem, p. 1033.) But later on, he mentions having heard a woman (who was trying one of these cures by rolling some of her son’s hair in wax and burying the wax ball in an incision in an apple-tree) recite certain words, which she declined to repeat for him when asked ; hence he was in some doubt about her particular ease (p. 1034). He quotes the English Count of Digby as stating that he knew of a nurse who carelessly allowed some of a baby’s excrement to be burned up in a fire ; the result was the child suffered terribly from excoriation of the fundament (p. 1038). The way in which a cure was effected in this case was the “sympathetic” one of placing the baby’s excrements for three days in a basin filled with cold water, and exposing in a cold place (p. 1039).

Dropsy was cured by hanging the patient’s urine (enclosed in a pig’s bladder) up in a chimney, and neglecting all other remedies. “*Urinam ejus recentem vesica suilla conclusam in camino suspendi, curavi.* (Idem, p. 1047.) A young virgin was cured of a tertian fever by giving to a hen bread made with the urine voided during the paroxysms. The girl recovered ; the hen died. “*Virginis cujusdam febre intermittente tertiana laborantis urinam calidam in paroxysmo*

redditam gallinæ familiæ cum pane mistam exhiberi curavi" (p. 1047).

See also notes from Samuel Augustus Flemming, under "Perspiration."

Dr. Joseph Lanzoni did not believe that any good results followed the suspension above the earth, in a sow's bladder, of human urine in cases of suppression of urine, as was often to be noticed among Jews and some of the religious orders. "*Urinæ suppressionem minime referare vesicam suis suspensam, quæ non tetigit terram, quod nonnulli volunt, observavi in quodam Religioso et Hebræo.*" — ("Phemer. Physic-Medic.," Leipsig, 1694, vol. i. p. 49.)

Paullini taught that fevers of all kinds could be cured by pouring the patient's urine into a fish-pond. "Such of the fish as drink of that water," he says, "will receive the fever, which will leave the sick man."

For the "sympathetic" cure of epilepsy, all the clothing worn by the patient during the paroxysm, even his shoes, were to be carefully burned, and the ashes cast into flowing water. More than this; if, during the attack, the patient had defecated, the ordure was collected, and with everything touched by it, burned up with the same care. "*Hominis epilepticum insultum primum patientis sive junior sit, sive senior indumenta omnia et vestes indusium, calcei, tibialis, et similia sub dio comburantur, et in cinerem redigantur; cinis vero in aquam fluvialem secundum flumen projiciatur. Si autem jam ante homo epilepsia laboravit, ad alvi excrementa in ipso paroxysmo reddita attendatur; quæ si adest res commaculata cum ipsis excrementis modo jam dicto comburatur.*" — (Schurig, "Chylologia," p. 1013, quoting Frommann.)

Schurig gives the recipe of Johannes Philippus ab Hertodt for the preparation of a "sympathetic" powder, which serves to inform us as to the incoherent ideas of the practitioners of a couple of centuries ago. Freely translated, it reads, "Take of a healthy human mummy, moistened with a little urine; let it be dried in a place exposed to an east wind, but not to the sun, until it shall be reduced to powder; this is to be mixed with an equal weight of cream of tartar, and the 'sympathetic powder of vitriol,' prepared according to formula, in the dog-days; or of the salt of Hungarian vitriol, heated to whiteness in a furnace. A pinch of this sympathetic powder should be sprinkled upon the feces of the sick person, or upon a cloth dipped in his urine, and then preserved in a cool place. Its efficacy was vouched for in

the highest terms: "Effective curat omnia vulnera, ulcera, febres petechiales, et urina fabulum, periculosissimas hæmorrhagias puerperarum, arthritidem quæcunque, podagram et illam vagam dictam, pulmonis apostemata, hæmorrhoides nimias, narium fluxus immodicos, capitis dolores, catarrhos, fluxos albos mulierum, menstrua copiosa, morsus canis rabidi, vel alterium cujuscunque animalis, item mammas ulceratas." — (Schurig, pp. 775, 776.)

Schurig adds a number of these cures for dysentery, such as placing the dejecta in the retort used for the distillation of vitriol, . . . sprinkling such dejecta with salt, or with vitriol, or mixing them with hot ashes and live coals; preferably, the excrement to be thus employed should be the first ejected having a bloody tinge.

"The various modes of application of these remedies are too long for insertion here, but are valuable to the student as showing how deep-seated was the belief in the occult properties of the excreta themselves." — ("Chylologia," pp. 785, 786.)

The following is an old French "sympathetic" recipe for the cure of all kinds of colic: "Pour la colique ce sera ici la recette d'un vilain remède, mais pourtant sympathique en ceux qui sont tourmentés de la colique, car s'ils mettent sous la selle percée bien fermée de la fiente de vache fraîchement recueillie, et qu'ils pissent et déchargent les excréments de leur ventre dessus, par sympathie sans difficulté ils auront du soulagement." — (Lazarus Neyssonier, quoted by Schurig, "Chylologia," pp. 784, 785.)

For the "sympathetic" cure of hernia, the root of the herb "wall-wort" was smeared with the ordure of the patient, and then buried in the ground. "Radicem Symphti Oleto Proprio delibutam et in terram defossam." — (Idem, p. 787.)

To stop hemorrhage "sympathetically," whether from wounds or other injuries, some of the flowing blood was taken, and mixed with the ordure of the patient, and the mixture then exposed in a jar to the action of the air. "Contra hæmorrhagias, sive in læsonibus et vulneribus, ut sanguis sistatur, misce sanguinem ex sanguine profluentem cum proprio stercore et in olla ad dessicandum aeri libero expone." — (Idem, p. 787.)

A patient suffering from yellow jaundice should urinate upon horse-dung while warm. This same remedy seems to have been in vogue in helping women in the expulsion of the placenta. One of the prescriptions given by Schurig states that the horse-dung must be from

an animal that was not tired at the time of the evacuation, — “non defatigati.” — (Idem, p. 812 *et seq.*)

A “sympathetic” cure by the use of the dung of horses seems to be implied in the case of infants’ small-pox, where we find it suspended in beer; “pendatur in cerevisiam . . . propterea ne fauces affligantur a variolis quod alias solet esse casus periculosissimus.” — (Etmuller, vol. ii. p. 264.)

“There is no doubt that the practice was at one time very general, but it would now be a waste of time to go into particulars respecting the various compositions of the sympathetical curers; the manner in which their vitriol was to be prepared by exposure for three hundred and sixty-five days to the sun, the unguents of human fat and blood, mummy, moss of dead man’s skull, bull’s blood and fat, and other disgusting ingredients.” — (“Medical Superstitions,” Pettigrew, Philadelphia, 1844, p. 206.)

For ague, “let the urine of the sick body, made early in the morning, be softly heated nine daies continually untill all be consumed into vapour.” — (Reginald Scot, “Discoverie,” p. 196.)

In Great Britain and Ireland, “ague in a boy is cured by a cake made of barley-meal and his urine, and given to a dog to eat; the dog, in the case cited, had a shaking fit, and the boy was cured.” (“Folk-Medicine,” Black, p. 35. In a footnote there is added, “Pettigrew, ‘Superstitions connected with the practice of Medicine and Surgery,’ p. 77.”) Madame de Scudery mentions a similar cure for fever in a letter of date 20th of October, 1677, to the Comte de Bussy. Speaking of an abbé of fame, “On dit qu’il ne fait que prendre pour toutes les fièvres de l’urine des malades dans laquelle il fait durcir un œuf hors de sa coque, après quoi il le donne à manger à un chien qui prend en même temps la fièvre du malade qui par ce moien en guérit. C’est une question de fait que je n’ay pas éprouvée.” — (“Notes and Queries,” 5th series, vol. viii. p. 126.)

The following are given as cures by “transplantation.” “Seven or nine — it must be an odd number — cakes, made of the newly emitted urine of the patient, with the ashes of ash wood, and buried for some days in a dunghill, will, according to Paracelsus, cure the yellow jaundice.” In the journal of Dr. Edward Browne, transmitted to his father, Sir Thomas Browne, we read of “a magical cure for the jaundice: Burn wood under a laden vessel filled with water; take the ashes of that wood, and boyle it with the patient’s urine; then lay nine long heaps of the boyled ashes upon a board in a rank, and upon every heap

lay nine spears of crocus." — ("Medical Superstitions," Pettigrew, Philadelphia, Penn., 1844, p. 103.)

We are likewise informed of "the cure of jaundice by the burying in a dunghill a cake made of ashes and the patient's urine. Ague in a boy was cured by a similar cake made of barley-meal and his urine, and given to a dog to eat; the dog had a shaking fit, and the boy was cured."

"Boys were cured of warts by taking an elder-stick and cutting as many notches in it as there were warts, and then rubbing it upon the warts, and burying it in a dunghill." — (Idem, p. 104.)

"Blisters on the tongue are caused by telling fibs. When they show no disposition to leave, the following process is adopted. Three small sticks are cut from a tree, each about the length of a finger, and as thick as a pencil; these are inserted in the mouth, and buried in a dung-hill; the next day the operation is repeated, as well as on the third day; after which the three sets of sticks are allowed to remain in the manure, and as they decay the complaint will disappear." — ("Folk-Lore of the Pennsylvania Germans," Hoffman, p. 28.)

"The following procedure for the cure of bronchitis is still practised in Berks County. Make a gimlet hole in the door-frame, at the exact height of the patient's head, into which insert a small tuft of his hair, and close the hole with a peg of wood; then cut off the projecting portion of the peg. As the patient grows in height beyond the peg, so will the disease be outgrown." — (Idem, p. 28.)

"Gout may be transferred from a man to a tree, thus: Pare the nails of the sufferer's fingers, and clip some hair from his legs. Bore a hole in an oak, stuff the nails and hair in the hole, stop up the hole again, and smear it with cow's dung." — ("The Golden Bough," Frazer, vol. ii. p. 153, quoting Grimm. Bavaria.)

A curious method of relieving and eradicating all kinds of colic by "transplantation" is related and described by Schurig. The excrement voided during one of the paroxysms should be buried in an unfrequented spot. The grass growing on the soil where the ordure had been deposited would be eaten by domestic cattle, which would acquire the disease, relieving the sufferer. "*Excrementa tempore paroxysmi reddita sepeliantur in locum a viatorum frequentia separatum. Gramen quod enascitur super terram cui stercore commissa fuerint, bovi vel agno pabuli loco offertur, quod ubi comederit, colica transplantatur ab homine in brutum, et nunquam ipsum reaffliget.*" (Schurig, "Chylogogia," p. 785.) Other people took the patient's excrement,

dried it in the open air, mixed it with sweet wine, and gave it to the sick man to drink. "*Sunt qui illud idem exceptum in aere exsiccant, cum vino edulcorant et patienti propinant.*" — (Idem, p. 785.)

Nurses were cautioned not to let the excrement of the babies under their care touch the hot coals or cinders of the fire; they should throw all the excrement in at once, or not at all. If we are to understand that this excrement was to be habitually thrown into the kitchen fire, a most charming idea is conveyed of the Arcadian simplicity of European life several centuries back.

"*Hoc loco monendæ quoque sunt nutrices vel aliæ mulierculæ infantulis administrantes ne infantum excrementibus contegat, aut post modum omnia simul in ignem projiciunt. Exinde enim plurima symptomata exoriri solent.*" — (Schurig, p. 995.)

The case is cited of a physician suffering from marasmus, or emaciation. "He took an egg and boiled it hard in his own urine; he then with a bodkin perforated the shell in many places and buried it in an ant-hill, where it was to be kept to be devoured by the emmets; and as they wasted the egg he found his distemper to abate." — (Pettigrew, "Med. Superstitions," p. 102.)

"Among medical men . . . the Galenist of much repute, of whom Boyle writes, was induced, when other means of cure failed, to boil an egg in his own urine. The egg was afterwards buried in an ant-hill, and as the egg wasted the physician found his distemper go and his strength increase. In Staffordshire a correspondent says that to cure jaundice a bladder is often filled with the patient's urine and placed near the fire; as the water dries up the jaundice goes, and, were it necessary, other instances could be given of this superstition." — (Black, "Folk-Medicine," p. 56.)

The following "sympathetic" cure is from Steller's "*Kamtchatka*" (pp. 362 and 367): When a man is suffering from incontinence of urine, a wreath is made of the soft herb "*cheu*;" in the centre of this some fish-spawn is placed, and then the sufferer makes his water upon it. — (Translated by Mr. Bunnemeyer.)

Ordure alone or mixed with urine, made into a sausage by being put into a hog's bladder, and hung up in the chimney, was of "magical use" in the treatment of yellow jaundice. Christian Franz Paullini's own son was cured by mixing his own ordure with asses' urine in this manner. The following are some of the extracts from Schurig referred to in this paragraph: "*Ab Incantatione introductis doloribus externe impositum sulphur hoc occidentale magni usus esse dicitur. . . . Alii*

addunt allium, atque elapsis post impositionem viginti quatuor horis fumo culinari hæc committunt. . . . Contra ejusmodi dolores a veneficio alliis placent cataplasmata ex stercore maleficiati in vesicam porcinam injecto et in Caminum ad suffumigandum suspensio. . . . In veneficio arcendo notum est, quod sterces humanum sit magni usus si scilicet parti ex veneficio dolenti applicetur sterces humanum vel solum, vel cum allio, vel asafœtida; sic enim est ut alii qui perpetravit veneficium sapiant omnia sterces humanum et allium, adeo ut necessum habeant solvere veneficium. . . . Pro icteri cura magica sterces, vel perse, vel cum urina mixtum, vesicæ suillæ induunt atque in camino suspendunt, Christianus Franciscus Paullini cujusdam meminit, qui filii sui icterici sterces cum urina asini commixtum modo tractavit." — (Schurig, "Chylologia," pp. 787, 788.)

When cures were to be effected by the method called by some authors "insemination" each disease seemed to require its special plant. Thus yellow jaundice required swallow-wort and juniper berries; dropsy, absinthe (worm-wood) and box-elder; pleurisy, the poppy; the plague, the plant known as scordium (this plant smells like garlic), etc. — (Frommann, "Tract. de Fascinat.," p. 1030.)

The following problem is presented for solution or for such explanation as competent scholars may find it possible to give.

We know that every disease was looked upon as an infliction from some angry god; on the other hand, we know also that for each disease there was some god, in later days some saint, to whom the afflicted might appeal; we know also that certain plants were sacred to certain divinities. Therefore the question to be answered is, Were the plants hereinbefore specified those which were sacred to those gods who had charge of those diseases respectively? The examination to be complete should include all that may now survive among European peasantry of the worship of Roman, Phœnician, Celtic, Teutonic, or even Egyptian or Etruscan, deities.

Grimm recites the names of the trees employed for the cure of different diseases, — epilepsy, peach-blossoms; ague, elder-tree; gout, fir-tree; ague, willow; gout, young pine-tree. — ("Teut. Mythology.")

Why was Apollo supposed to love the laurel and the cornel cherry, "Pluto the cypress and the maiden-hair, — a moisture-loving fern, which we may take for granted could not be very plentiful in his chosen realm, — Luna the dittany, Ceres the daffodil, Jupiter the oak, Minerva the olive, Bacchus the vine, and Venus the myrtle-shade?"

— (Extract from an article entitled "Flowers as Emblems," in "Standard," London, copied in "Sun," New York, May 12, 1889.)

"A sick man's perspiration from the brow wiped off with bread, and given to a dog, will cure the patient." — (Sagen-Märchen, "Volksaberglauben aus Schwaben," Freiburg, 1861, p. 494.)

As a certain cure for witchcraft take the excrement of the patient, put it in a pig's bladder, and hang it up in the chimney; or let him take some of his own excrement, inwardly, dissolved in vinegar; or apply human excrement to the bewitched part, then put that excrement in a pig's bladder, and hang it up in the chimney to smoke for three or four days. — (Paullini, pp. 260, 261.)

By the French, urine was considered a certain cure for fever. Such an amount of superstition attached to the panacea that the prescription may well be given in full: —

"Knead a small loaf with urine voided in the worst stage of his fever by a person having the quaternary ague. Bake the loaf, let it cool, and give it to be eaten by another person. Repeat the same during three different attacks, and the fever will leave the patient and go to the person who has eaten the bread."

Another one runs in these terms: —

"Take an egg, boil it hard, and break off the shell. Prick the egg in different places with a needle, steep it in the urine of a person afflicted with fever, and then give it to a man if the patient be a man, to a woman if a woman, and the recipient will acquire the fever, which will abandon the patient." ¹

This remedy Thiers traces back to the Romans, quoting from Horace in support of his assertion.

The second recipe finds its parallel in the "Chinook olives," described in the first pages of this work.

The fact that human ordure was the panacea by which all the effects of witchcraft could be undone, and all charms and incantations frustrated, can easily be shown from the citations to be found in Schnurig.

¹ Pétrir un petit pain avec l'urine qu'une personne malade de la fièvre quarte aura rendue dans le fort de son accès, le faire cuire, le laisser refroidir, le donner à manger à un . . . et faire trois fois la même chose pendant trois accès, le . . . prendra la fièvre quarte et elle quittera la personne malade.

Faire durcir un œuf, le peler, le piquer de divers coups d'aiguille, le tremper dans l'urine d'une personne qui a la fièvre . . . puis le donner à un . . . si le malade est un mâle, ou à une . . . si le malade est une femelle et la fièvre s'en ira. — (Thiers, "Traité des Superstitions, Paris, 1745, vol. i. lib. v. cap. iv. p. 386, copied in Picart, "Coutumes et Cérémonies," etc., Amsterdam, 1729, vol. x. p. 80.)

"Occidental sulphur," applied externally to the pains occasioned by incantations was said to be very efficacious. Others added garlic, and twenty-four hours after exposed the mixture to the smoke of the kitchen-fire. Others again took the ordure of the bewitched person, made sausage of it, and hung it up to be smoked in the kitchen-fire.

Various instances are given of the efficacy of human ordure in undoing the work of witches; it was to be applied alone or mixed with garlic or assafœtida.

Take a liver, cut in pieces, and secretly place in the urinal of the patient; if the patient unconsciously use the chamber for defecation he will recover — ("Sagen-Märchen, Volksaberglauben," etc., Drs. Birlinger and Buck, p. 481.)

The method of curing fevers by imbedding clippings of the finger and toe nails of the patient in wax and affixing to another person's door-post, is mentioned by Pliny (lib. xxxviii. c. 24).

The same are given, with the others 'already noted, by Frommann. — ("Tractatus de Fascinatione," p. 1003 *et seq.*)

Etmuller says that the oak was the tree most highly commended; to secure a good set of teeth, one of the milk teeth was buried in an oak; to restore falling hair, some of the patient's hair; to cure gout, some of his toe-nail clippings, etc. — (Etmuller, vol. i. p. 127.)

"In Donegal, the sufferer should seek a straw with nine knees, and cut the knots that form the joints of every one of them, any superfluous knots being thrown away; then bury the knot in a midden or dung-heap; and as the joints rot, so will the warts." — ("Folk-Medicine," p. 57.)

Grose says, "To cure warts, steal a piece of beef from a butcher's shop and rub your warts with it; then throw it down the necessary-house, or bury it; and as the beef rots, your warts will decay." — (Brand, "Pop. Ant." vol. iii. p. 276, art. "Physical Charms.")

The American cures for warts in which the sufferer is enjoined to steal a piece of meat, etc., are a perfect "survival" from the above, while the "cure" given by Mark Twain, in his story of "Huckleberry Finn" —

"Barley-corn, barley-corn, Indian meal shorts,
Spunk water, spunk water, swallow these warts,"

may be classed as a "distorted survival."

"A piece of meat is cut from one of the arms of the menaced man (i. e. menaced with death), and a lock of hair from the opposite side of his head, and cast into the fire; and he is rubbed with artemisia,

dipped in water, as this plant is the food of the ghosts. These rites, omitting the cutting of the flesh and hair, must be performed on four successive nights." — ("Death and Funeral Customs among the Onahas," Francis La Flesche, in "Jour. of Amer. Folk-Lore," Jan. March, 1889, p. 4.)

"The Orkney islanders will wash a sick person and then throw the water down a gateway in the belief that the sickness will leave the patient and be transferred to the first person who passes through the gate." — ("The Golden Bough," Frazer, vol. ii. p. 153.)

These cures by "transplantation" are still to be found in full vigor among the descendants of the immigrants from Westphalia and the Palatinate who made their homes in the State of Pennsylvania.

For the cure of jaundice: "Hollow out a carrot, fill it with the patient's urine, and hang it, by means of a string, in the fireplace. As the urine is evaporated, and the carrot becomes shrivelled, the disease will leave the patient. In this there is an evident belief in the connection between the properties and color of the carrot and the yellow skin of the patient having jaundice. To this class may belong the belief respecting the use of a band of red flannel for diphtheria, and yellow or amber beads for purulent discharges from the ears." — ("Folk-Med. of the Penn'a Germans," Hoffman, Amer. Phil. Society, 1889.)

Reference should be had to Black's notes upon a similar custom in Staffordshire, where, instead of a carrot, a bladder is filled." — ("Folk-Medicine," p. 56.)

"Convulsions in a child are sometimes due to the influence of the fairies." Mooney describes a cure effected by a mother who "picked from the roadside ten small white pebbles, known as 'fairy stones.' On reaching home, she put nine of these stones into a vessel of urine and threw the tenth into the fire. She also put into the vessel some chicken-dung and three sprigs of a plant (probably ivy or garlic) which grew on the roof above the door. She then stripped the child and threw into the fire the shirt and other garments which were worn next the skin. The child was then washed from head to foot, wrapped in a blanket and put to bed. There were nine hens and a rooster on the rafters above the door. In a short time the child had a violent fit and the nine hens dropped dead upon the floor. The rooster dropped down from his perch, crew three times, and then flew again to the rafters. If the woman had put the tenth stone with the others, he would have dropped dead with the hens. The child was cured." — ("Med. Mythol. of Ireland," James Mooney, "Amer. Phil. Soc." 1887.)

Mooney remarks upon the above: "This single instance combines in itself a number of important features in connection with the popular mythology; the dung, the urine, the plant above the door, the chickens, the fire and the garment worn next the skin, and introduces also a new element into the popular theory of disease, viz.: the idea of vicarious cure, or rather of vicarious sacrifice. This belief, which is general, is that no one can be cured of a dangerous illness, unless, as the people express it, 'something is left in its place' to suffer the sickness and death." — (Idem.)

In the case of a "changeling child," the mother was ordered to leave it "on the dung-hill to cry and not to pity it." — (Hazlitt's edition of "Fairy Tales," London, 1875, p. 372.)

"At Sucla-Tirtha, in India, an earthen pot containing the accumulated sins of the people, is annually set adrift on the river." — ("The Golden Bough," Frazer, p. 192, vol. ii.)

See notes under "Catamenial Fluid," from Etmuller.

XLVI.

THE USE OF THE LINGAM IN INDIA.

IN connection with the Lingamic ritual in India, there remain usages now degenerated into symbolism, which cannot be interpreted in any other sense than as "survivals" of very obscene and disgusting practices in the primitive life of that region. In describing the sacrifice called Poojah, Maurice says: "The Abichegam makes a part of the Poojah. This ceremony consists in pouring milk upon the lingam. This liquor is afterwards kept with great care, and some drops are given to dying people that they may merit the delights of the Calaison." The "salagram of the Vishnuites is the same as the lingam of the Seevites." "Happy are those favored devotees who can quaff the sanctified water in which either has been bathed." — ("Ind. Ant." vol. v. pp. 146, 179.)

Dulaure describes the rites of the Cochi-couris, in which the sacred water of the Ganges is first poured upon the lingam; it is then preserved to be dealt out in drops to the faithful; it is specially serviceable in soothing the last hours of the dying. The Lingam is the Phallic symbol. The water or milk sanctified by it may represent a former employment of urine, such, as will be shown, as prevailed all over Europe. The use of lingam water is perhaps analogous to that of mistletoe water, previously noted.

In speaking of the "mysteries" of the goddess "Cotitta," a popular Venus of the isle of Chios, Dulaure says: "Les initiés, qui se livraient à tous les excès de la débauche, y employaient le Phallus d'une manière particulière; ils étaient de verre et servaient de vases à boire." He quotes Juvenal, satire 2, verse 95, as saying of the extreme license of these mysteries: "vitreo bibit ille Priapo." — ("Des Divinités Génératrices.")

Does not the preceding paragraph, in the lines from the Roman satirist, conceal under a very gauzy veil, a dirty proceeding akin to the urine dance of the Zuñis?

Frommann quotes the above lines from Juvenal, without attempting to enter upon an explanation of them. (See "Tract. de Fascinatione," p. 333.) Rev. Lewis Evans, a Fellow of Wadham's College, Oxford, translates them as follows in his edition of "Juvenal : " —

"Another drains a Priapus-shaped glass."

But Gifford renders it : —

"Swill from huge glasses of immodest mould."

Montfaucon says that in the Festivals of Priapus "celebrated by the women . . . the priestess sprinkles Priapus with water. — (*l'Antiquité expliquée*," lib. i. part 2, c. xxviii. ; in the first volume is a representation of a phallic vase with human ears attached.)

"Verser quelques gouttes sur la tête dans la bouche des agonisants." — ("Dulaure, Des. Div. Generat.," Paris, 1825, pp. 105, 106, 111.)

"In a manuscript of the church of Beauvais about the year 500, it is said that the chanter and canons shall stand before the gates of the church, which were shut, holding each of them urns full of wine with glass cups, of whom one canon shall begin the Kalends of January." — (Fosbroke, "British Monachism," p. 81.)

In out of the way nooks and corners in Europe, intelligent observers may still stumble upon traces of the religious observances alluded to in Juvenal ; Mr. Macaulay, of Philadelphia, Penn'a, who lived for a time near Monaco, in the Riviera, imparts the information that, in that section of Italy he had personally noticed such a peculiar custom ; i. e. that of assembling each family on Christmas eve, in a semicircle, round the fire ; the youngest boy urinated on the blazing log ; then the father took a glass goblet, filled with white wine, and sprinkled the log with an olive branch ; finally, all sipped from the goblet, the contents of which Mr. Macaulay said he had been told were undoubtedly symbolical of urine.

Among people farther to the north, the same worship of fire by offering food and drinking a libation still obtains without any offensive features.

In Sweden and Norway "early in the morning, the good wife has been up, making her fire and baking ; she now assembles her servants in a half-circle before the oven door, they all bend the knee, take one bit of cake, and drink the fire's health ; what is left of cake or drink is cast into the flame." — (Grimm, "Teut. Mythol." vol. ii. p. 629.)

"Our German sagen and märchen have retained the feature of kneel-

ing before the oven and praying to it. . . . The unfortunate, the persecuted, resort to the oven and bewail their woe, they reveal to it some secret which they dare not confess to the world." — (Idem, p. 629.)

"A leur Coleda, les Serbes font brûler une bûche de chêne, l'arrosent de vin, la frappent en faisant voler les étincelles, et crient: 'Autant d'étincelles, autant de chèvres et de brebis.'" — ("Les Primitifs," Réclus, p. 111.)

The resemblance to the customs of the East Indies was, in places, even closer than as above indicated.

Inman tells of sterile women who drank "priapic wine," i. e. wine poured upon an upright conical stone representing the lingam, and then collected and allowed to turn sour. — (Inman, "Ancient Faiths," etc., vol. i. p. 305, article "Asher.")

The same statement is to be found in Hargrave Jennings' work, "Phallicism," London, 1884, p. 256, but it seems to be repeated from Inman and Dulaure. Campbell reports that "among the principal relics of the Church at Embrun was the statue of Saint Foutin. The worshippers of this idol poured libations of wine upon its extremity, which was reddened by the practice. This wine was caught in a jar and allowed to turn sour. It was then called 'holy vinegar,' and was used by the women as a lotion to anoint the yoni." — ("Phallic Worship," Robert Allen Campbell, St. Louis, Mo., 1888, p. 197.)

Among the Apache Indians of Arizona, the Zuñis, Moquis, and Pueblos, the author has seen large arrow or spear shaped pieces of flint which had been obtained under peculiar circumstances, were regarded as possessed of great virtues, and were worn round the necks by the women, generally by those who professed "medicine" powers. Fragments of these flints were ground to fine powder, and administered to women while pregnant, to ensure safe delivery; all that was learned of these stones will be presented in another work; the veneration paid them seems to be closely associated with the worship of lightning. Vallancey, in his "Collectanea de Rebus Hibernicis," No. xiii. 17, says: "In the Highlands of Scotland, a large chrystal, of a figure somewhat oval, was kept by the priests to work charms by; water poured upon it at this day is given to cattle against diseases; these stones are now preserved by the oldest and most superstitious in the country." — (Brand, "Pop. Antiq." vol. iii. p. 60, art. "Sorcerer.")

XLVII.

PHALLIC SUPERSTITIONS IN FRANCE AND OTHER PARTS OF EUROPE.

AMONG the peasantry of Ireland there are in use certain pre-historic arrow-heads, believed by them to be fairy darts. "When an illness is supposed to be due to the influence of the fairies, . . . this 'fairy dart' . . . is put into a tumbler and covered with water, which the patient then drinks, and if the fairies are responsible for his sickness, he at once recovers." — ("Medical Mythology of Ireland," Mooney, Amer. Phil. Soc., 1887.)

And in like manner, — as has already been shown of the sacred character attaching, among the people of the far East, to water, wine, or milk which had been poured over the lingam, — the women of France solaced themselves with the hope that children would come to those who drank an infusion containing scrapings from the phalli, existing until the outbreak of the French revolution, at Puy en Velay, in the church of Saint Foutin, in the shrine of Saint Guerlichon, near Bruges, in the shrine of Guignolles, near Brest; and in that of an ancient statue of Priapus, at Antwerp.¹

¹ See Dulaure's "Des Divinités Génératrices," Paris, 1825, pp. 271, 277, 278, 280, 283. He says that this vestige of phallic worship was discernible in France "à une époque très-rapprochée de la nôtre," and that women "raclaient une énorme branche phallique que présentait la statue du saint; elles croyaient que la raclure enfusée dans un boisson, les rendrait fécondes."

But Davenport, who has probed deeply into the question of phallic worship, contends that such vestiges existed in some of the communities of France, Sicily, and Belgium, not only down to the Reformation, but even to the opening decades of the nineteenth century. — (See Davenport, "On the Powers of Reproduction," London (privately printed), 1869, pp. 10-20.)

E. Payne Knight speaks of this same instance of survival at Isernia, in Sicily. It was known at that place as late as 1805.

See also "The Masculine Cross and ancient Sex Worship," Sha Rocco, New York, 1874, etc.

Dulaure, however, admits that he knew of no example in antiquity of scraping the phallus and drinking an infusion of the powder. "L'usage de racler le phallus et d'avalier de cette raclure avec de l'eau, usage dont je ne connais point d'exemple dans l'antiquité."

Dulaure, as above, p. 300.

XLVIII.

BURLESQUE SURVIVALS.

A NEW task now presents itself, the examination into burlesque survivals of rites and usages no longer countenanced as matters of religious importance.

Religion is not content with being tenacious of its ceremonial; it often goes so far as to sanctify reversions to usages and modes of thought which have passed out of the recollection of the people; in doing this, it is frequently necessary that some explanation be invented, as the hierophants themselves are generally ignorant of the true reasons for their conduct; but more ordinarily mankind accepts and complies with ritualistic precepts without inquiry, and even with a vague belief that the more archaic a practice may be, the more efficacy it must necessarily have in securing protection and good fortune.

The Hindu festival of Holi, Huli, or Hulica, familiar to most readers, has thus been outlined by a recent witness as celebrated in the provinces near Oudeypore.¹ The proceedings are characterized as saturnalia, attended with much freedom and excessive drunkenness:

"The importance of the study of popular traditions, though recognized by men of science, is not yet understood by the general public. It is evident, however, that the mental tokens which belong to one intellectual stock, which bear the stamp of successive ages, which connect the intelligence of our day with all periods of human activity, are

¹ See, in Rousselet's "India," London, 1876, pp. 173, 343. It has been identified as our April Fool's Day. See in "Asiatic Researches," Calcutta, 1790, vol. ii. p. 334; also, in Moor's "Hindu Pantheon," London, 1810, pp. 156, 157; also, the Encyclopædia Britannica, and Appleton's Encyclopædia, article "April."

On the Sunday and Monday preceding Lent people are privileged at Lisbon to play the fool; it is thought very jocose to *pour water* on any person who passes, or *throw powder* in his face; but to do both is the perfection of wit. — (Southey, quoted in Hone's "Every-Day Book," vol. i. p. 206, London, 1825. See Brand's "Popular Antiquities," London, 1849, vol. i., p. 131, article "April Fool's Day.")

worthy of serious consideration. Much of this time-honored currency is rude and shapeless, it may be ore scarcely marked by the die ; but among the treasures silver and gold are not wanting. An American superstition may require for its explanation reference to Teutonic mythology, or may be directly associated with the philosophy, monuments, and arts of Hellas. . . . It is, however, now a recognized principle that higher forms can only be comprehended by the help of the lower forms out of which they grew. . . . The only truly scientific habit of mind is that wide and generous spirit of modern research which, without disdain and without indifference, embraces all aspects of human thought, and endeavors in all to find a whole."—(Prof. W. W. Newell, in "Journal of American Folk-Lore," Jan.-March, 1889.)

"It is not too much to assert, once for all, that meaningless customs must be survivals ; that they had a practical, or at least ceremonial intention when and where they first arose ; but are now fallen into absurdity from having been carried on in a new state of society, where their original sense has been discarded."—("Primitive Culture," E. B. Tylor, New York, 1874, vol. i. p. 85.)

"I believe that no custom which we find among early races was initiated without some very good reason why, though those who practise it may long have lost it, and even have been obliged to invent a new one, utterly different from the original, to explain the rite which they ignorantly practise."—(Personal letter from J. W. Kingsley, Esq., M. D., Brome Hall, Scole, England.)

"The serious business of ancient society may be seen to sink into the sport of later generations, and its serious belief to linger on in nursery folk-lore, while superseded habits of old-world life may be modified into new-world forms, still powerful for good and evil."—("Primitive Culture," E. B. Tylor, London, 1871, vol. i. p. 15.)

And again : "Religion holds on, with the tenacity of superstition, to all that has ever been practised."—("Custom and Myth," Andrew Lang, New York, 1885, p. 241)

A brighter light will be thrown upon future investigations by regarding folk-lore and folk-usage, especially folk-medicine, as the crystallization of primordial religious thought and practice.

"It can hardly be too often repeated, since it is not yet generally recognized, that, in spite of their fragmentary character, the popular superstitions and customs of the peasantry are by far the fullest and most trustworthy evidence we possess as to the primitive religion of the Aryans. Indeed, the primitive Aryan, in all that regards his

mental fibre and texture, is not extinct. He is amongst us to this day. The great intellectual and moral forces which have revolutionized the educated world, have scarcely affected the peasant. In his inmost beliefs, he is what his forefathers were in the days when forest trees still grew, and squirrels played on the ground where Rome and London now stand.

"Hence every inquiry into the primitive religion of the Aryans should either start from the superstitious beliefs and observances of the peasantry, or should at least be constantly checked and controlled by reference to them. Compared with the evidence afforded by living tradition, the testimony of ancient books on the subject of ancient religion is worth very little. For literature accelerates the advance of thought at a rate which leaves the slow progress of opinion by word of mouth at an immeasurable distance behind. Two or three generations of literature may do more to change thought than two or three thousand years of traditional life. But the mass of the people, who do not read books, remain unaffected by the mental revolution wrought by literature; and so it has come about that in Europe, at the present day, the superstitious beliefs and practices which have been handed down by word of mouth are generally of a far more archaic type than the religion depicted in the most ancient literature of the Aryan race." — ("The Golden Bough," James G. Frazer, M. A., London, 1890, Preface, viii, ix.)

The people of Rangoon, Siam, observe a peculiar usage at the time of their New Year. Every man, woman, boy, or girl is armed with a "squirt-gun," with which all people on the street are drenched.¹

Elliott, apparently quoting from Zagoskin (a Russian explorer, *temp.* 1843), says that the Alaskans have "entertainments" in the "kashga." "It sometimes happens, on these occasions, that lovers of fun sprinkle the women with oil, or with that fluid which they use in place of soap, squirted from small bladders concealed about their persons, and such jokes are never resented." — ("Our Arctic Province," Henry W. Elliott, New York, 1887, p. 392.)

"From the very beginning effigies of the most revolting indecency are set up in the gates of the town and in the principal thoroughfares.

"Troops of men and women, wreathed with flowers and drunk with bang, crowd the streets, carrying sacks full of a bright red vegetable powder. With this they assail the passers-by, covering them with

¹ The authority for this statement will be found in "The Press," of Philadelphia, Penn., copied in the "Evening Star," of Washington, July 26, 1890.

clouds of dust, which soon dyes their clothes a startling color. Groups of people standing at the windows retaliate with the same projectile, or squirt with *wooden syringes red and yellow streams of water into the streets below.*"

The Nautch dances reach the acme of voluptuousness, and the accompanying chants are filled with suggestiveness. The author here quoted says that Holica was the Indian Venus.

An eminent authority says that "this red powder (*gulâl*) is a sign of a bad design of an adulterous character. During the holi holidays the Maharaj throws *gulâl* on the breasts of female and male devotees, and directs the current of some water of a yellow color from a syringe upon the breasts of females." — (Inmau, "Ancient Faiths embodied in Ancient Names," p. 393.)

This "yellow water" may be a survival of and a refinement upon urine. The Apaches and Navajoes, close neighbors of the Zuñis, have had until very recently (and may still celebrate) the dance of the Joshkân, in which clowns scatter upon the spectators, from bladders wound round their bodies, water, said to be representative of urine.

Among the Aztecs there was a festival allowing the fullest license to clowns, armed with bladders filled with red powder or fine pieces of maguey paper attached by strings to short poles. With these bladders all persons caught in the streets, especially women and girls, were mercilessly buffeted. — (Sahagun, vol. ii. in Kingsborough's "Mexican Antiquities," vol. vi. p. 33, and again vol. vii. p. 83.)

His account says that in the seventeenth month, which was called "Tititl," and corresponded almost to our winter solstice, the Mexican year being divided into eighteen months of twenty days each, beginning with our February, the Aztec populace played a game called "nechichiquavilo."

All the men and boys who wished to play this game made little bags or nets, filled with the pollen of the rush, called "espadaña," or with paper cut in fine pieces. These were attached to cords or ribbons half a yard long, in such a manner that a blow could be struck with them. Others made these bags like gloves, which they stuffed as above stated, or with leaves of green maize. No one was allowed, under penalty, to put into these bags any stones, or anything else which could hurt.

The boys at once began to play this game, in the way of a sham-battle, hitting each other on the head, or wherever else they could. As the fun increased the more mischievous of the boys began to beat the young maidens passing along the street. At times three or four

young boys would attack one girl, and beat her so hard as to weary her and make her cry. The more prudent of the young girls, in going from point to point, carried a club with which to defend themselves. Some of the boys concealed the bag, and when any old women carelessly approached they would suddenly begin to beat them, crying out, "Chichiquatzinte mantze!" — which means, "Our mother, this is the bag of the game!"¹

The following is Torquemada's description: —

"In the festival in honor of the goddess Yamatecuiltli, or "principal old woman," in the seventeenth month of the Mexican calendar, all the people of the city made bags after the manner of purses, and stuffed them full of hay and straw and other things, which would have no weight and do no harm, and, attaching them to a cord, carried them hidden under their cloaks. With these bags they buffeted all the women they met on the street."² — (Torquemada, "Monarchia Indiana," lib. x. cap. 29.)

He recognizes the similarity between this and the blind-man's-buff games of other countries.

¹ Para este juego, todos los hombres y muchachos que querian jugar hacian taleguillas ó redcecillos llenos de flor de las espadañas ó de algunos papeles rotos; ataban estos con unos cordeles ó cintas de media vara de largo, de tal manera que pudiese hacer golpe; otros hacian á manera de guantes las taleguillas é hinchabanlos de lo arriba dicho ó de ojas de maiz verde; ponian pena á todos estos que nadie echase piedra ó cosa que pudiese lastimar dentro las taleguillos. Comenzaban luego los muchachos á jugar este juego á manera de escaramuza y dabanse de talegazos en la cabeza y por donde acertaban y de poco en poco se iban multiplicando de los muchachos y los mas traviesos daban de talegazos á las muchachas que pasaban por la calle; á las veces, se juntaban tres ó quatro para dar á una de tal manera que la fatigaban y la hacian llorar.

Algunas muchachas que eran mas discretas, si habian de ir á alguna parte, entonces llevaban un palo ú otra cosa que hiciese temer para defenderse. Algunos muchachos escondian la talega y quando pasaba alguna mujer descuidadamente, dabanla de talegazos y quando la daban un golpe, decian Chichiquatzinto mantze, que quiere decir, "Madre Nuestra, és la talega de este juego." Las mugeres andaban muy recatadas quando iban á alguna parte. — (Salvagin, in "Kingsborough," vol. vii. p. 83.)

At the feast of the goddess Tona the same game was played. — (See idem, vol. vi. p. 33.)

² Hacia toda la gente de el Pueblo nnas talegas, á manera de bolsas, y henchianles de heno y paja y otras cosas que no hacen golpe ni tienen peso y colgavanlas de un cordel y traianlas escondidas debajo de los mantos que les servian de capas. Con estas talegas daban de Talegazos á todas las mugeres que encontraban por las calles.

A contributor to "Asiatic Researches" calls this powder of the Huli festival a "purple powder," and claims that the idea is to represent the return of spring, which the Romans call "purple."¹

In some parts of North America the 1st of April is observed like Saint Valentine's Day, with this difference, that the boys are allowed to chastise the girls, if they think fit, either with words or blows. — (Brand, "Popular Antiquities," vol. i. p. 141, article "April Fool's Day.")

A FEW REMARKS UPON THE USE OF BLADDERS IN RELIGIOUS CEREMONIES.

Whether or not primitive man, excited by his insatiate, omnivorous appetite for gods, under the impulses of which he deified winds, waters, trees, and stones, and looked with a veneration not far removed from devotion itself, upon the holy graals, chalices, and other paraphernalia of his ritual, should have associated a mysterious power with the bladders he employed to hold his urine and ordure is a question which no one can to-day determine.

For our own cow-worshipping Aryan ancestry bladders were a natural means of transporting liquids, exactly as they remain among the Apaches and other Indian tribes of America.

Introduced of necessity into religious ceremonial, they would, with the advance of years, and in spite of the improvement which might be brought about in the domestic comfort of the people at large, gain a certain "medicine" value, strictly parallel to that which we know has been gained by the gourd-rattle, which, in not a few cases, has been consulted as an oracle, and adored as a god.²

The author has observed a number of instances of the use by Sioux, Apache, and other Indians, of bladders tied in the hair as an "ornament" long after traders had placed within reach glass beads, feathers, and other means of decoration. The Hottentots kept drinking-water in "the intestines of animals." — (Thurnberg, in Pinkerton, vol. xvi. pp. 38, 73, 141.)

Of the Patagonians we are informed that "the only vessels they use for carrying water are bladders." — ("Adventure and Beagle," vol. i. p. 93.)

¹ R. Patterson, in "Asiatic Researches," Calcutta, 1805, vol. viii. p. 78.

² The African deity, Obatala, is symbolized by a whitened gourd provided with a cover, which is placed in the temples. — ("Fetichism," Rev. P. Baudin, New York, 1885, p. 14.)

We are informed that the Shamans of Alaska throw into the sea inflated bladders and watch them sink, as a means of divination. — (“Our Arctic Province,” Elliott, p. 393.)

In some parts of rural England there were kept up even to our own day certain feasts or ceremonies, connected with the ploughing of the land. These “fool-plough” days varied in different sections from early in January to Shrove Tuesday. They partook of the nature of a frolic, the plough being driven by a clown armed with a bladder, with which he urged his team. There were certain peculiarities connected with this custom indicative of a Pagan origin. The clown was attired as a woman, there was music, the plough was drawn three times round a fire, the blacksmith received “sharpening corn” for sharpening the plough-irons, and the whole ended with feasting, in which the cock figured as one of the articles of food. All this suggested to the writer in Brand a relationship with the “Compitalia” of the Romans and “the three sacred ploughings” of the Athenians; also the sacred ceremonial ploughing of the Chinese. — (Brand, “Popular Antiquities,” vol. i. pp. 505 *et seq.*, article “Fool-Ploughs.”)

Bruce describes the commander-in-chief of the Abyssinian army on an expedition against the Gallas while in the act of making his toilet. “A man was then finishing his head-dress by plaiting it with some of the long and small guts of an ox, which I did not perceive had ever been cleaned.” — (Bruce, “Nile,” vol. iv. p. 212.)

The Gallas of Abyssinia, upon slaughtering an ox, “hang the entrails round their necks, or interweave them with their hair.” — (Maltebrun, “Un. Geography,” Boston, 1847, vol. ii. p. 47, article “Abyssinia.”)

Bruce describes a chief of the Gallas as having “his long hair plaited and interwoven with the bowels of oxen, and so knotted and twisted together as to render it impossible to distinguish the hair from the bowels. . . . He had likewise a wreath of guts hung about his neck, and several rounds of the same about his middle.” — (“Nile,” vol. iv. p. 560.)

“Their favorite ornament is composed of the entrails of their oxen, which, without superfluous care in cleansing them, are plaited in the hair and tied as girdles round the waist.” — (“Encyc. of Geog.,” Philadelphia, 1855, vol. ii. p. 588, article “Abyssinia.”)

“A Norwegian witch has boasted of sinking a ship by opening a bag in which she had shut up a wind. Ulysses received the winds in a leather bag from Æolus, king of the winds.” — (“The Golden Bough,” Frazer, vol. i. p. 27.)

An examination of the examples just adduced, as well as of those introduced under "Cures by Transplantation," would seem to show that bladders were used in preference to material just as available and convenient, and that when a substitution was made it was always by a horn or a glass, clear as the entrail which it no doubt was supposed to resemble. The god Crepitus, as we have shown, was symbolized as a swollen paunch. The clowns of the circuses of the present day are armed with bladders ; but why no antiquarian has yet arisen to explain to us.

Brand ("Popular Antiquities," vol. i. p. 261 *et seq.*, article "Fools") contains no information on this point.

The use of the bladder is to be noted in the festivals of the Inuits. "Après un superbe vacarme, ils suspendent à des cordes une centaine des vessies, prises à des animaux tous tués à coups de flèche." — ("Les Primitifs," Réclus, p. 110, "Les Inuits Occidentaux.")

The explanation given by Réclus is as follows : "Faut-il expliquer que les vessies, échauffées par la flamme, symbolisent les souffles du printemps ? . . . Qu'elles symbolisent l'esprit de vie qui entre dans les narines ?" — (Idem.)

It may be enough to point out the care with which these bladders must be selected ; not every bladder will do, — only those from animals killed with arrows.

XLIX.

THE WORSHIP OF COCKS AND HENS.

ONLY such matter has been admitted into this volume as could *prima facie* be considered as having the right of entry ; the greatest care has been taken to avoid distortion or mutilation of authorities, and much has been excluded that might have been presented without running a risk of being accused of unfairness.

For example, as old an authority as John de Laet calls attention to the great prevalence of intoxication and debauchery among the Indians of Vextipa, near Mexico, who on feast days had the ancient custom of becoming drunk as beasts and committing enormous excesses.¹ And in like manner the first missionaries in Canada complained of the brutal orgies of the natives, in which, under cover of darkness and the cloak of their superstitions, deeds were committed which the pen dared not describe. Ample reference to these has been preserved in the Jesuit relations, and in the exact and interesting American treatises dependent so largely upon them.² It is more likely, however, that the Huron and Algonkin saturnalia were, in general terms, scenes of promiscuous licentiousness.

Only two authorities can be cited, Fathers Le Jeune and Sagard, who instance the use of human urine or ordure under spiritual direction ; all others leave the inference that the bacchanalia of which they were the reluctant and disgusted observers had no other peculiarity than that of unrestrained sexual intercourse.

It would be hard to find a better example of the tenacity of superstition than that which the subjoined extract from the "Evening Star," of Washington, D. C., shows as existing under our own noses.

¹ John de Laet, lib. vi. chap. vii. p. 202.

² See Francis Parkman's "Jesuits in North America," the works of John Gilmary Shea, and Kipp's "Jesuit Missions."

"A CURIOUS HUNGARIAN SUPERSTITION."

"A correspondent of the 'Philadelphia Press,' at Pottsville, Pa., tells of a curious scene he witnessed in the Hungarian quarter. A number of children were running round barefooted, beating tin pans and boxes. In the midst of the circle they were describing was a live baby buried up to the neck in the cold ground with a shawl wound round its throat for protection. It was learned that the object of putting the baby in this peculiar position was to cure it of a skin disease, the Huns having the same faith in the curative properties of mother earth that is characteristic of many savage tribes.

"While the child was thus experiencing the medicinal virtues of the earth packed round its body, the boys beat upon the pans in order to frighten away the evil spirit that had caused the disease."

A retrospective glance at the long list of excrementitious remedies collected shows that both the disease to be treated and the remedy by which the cure was to be effected were regarded as entirely beyond the domain of human science. Even in these cases, where medicines, pure and simple, as we should now recognize them, were to be administered, there was a complication of mysterious mummerly and ceremony, the first vestige of the former power of the medicine-man. Thus felons could be treated by tracing a circle round them with a dead man's bone; but the circle, we should remember, was pre-eminently the line of magic.¹

Teeth were worn as amulets, or given as medicine in disease, but it was essential that they should be drawn from the jaw before the burial of the body; or that they should be the first shed by a child; that they should be those of a man who had died a violent death; or that they should be caught before they touched the ground.

If they were not to be used immediately, they were not to be carried about, but were to be buried in the bark of a tree.

The skull of a man was a remedy for the diseases of men only; that of a woman, for those of the female sex.

There were combinations of numbers; no medicine was to be admin-

¹ Pliny contains a number of references to plants to which mystic properties were attached, which could only be dug up after a circle had been traced about them with a sword, prayers recited in certain postures, etc. — (See among others, the "Mandragora," in lib. xxv. c. 94.)

istered an even number of times ; of color¹ based upon the doctrine of signatures which taught among other things, that red medicines cured red diseases, and saffron-tinted ones, those of the jaundice type. There were iron-clad formulæ for gathering medicinal plants in which the hour of the day, the season of the year, the age of the moon, the position of the planets, the hand to be used in plucking, the silence to be observed, were all sedulously inculcated and enjoined.

There were charms and counter-charms, such as the Dea-soil and the Badershin of the Druids, in which the same magical incantation, used in different manners, i. e. going with or against the sun, induced contrary results.

Traces of all these superstitious ideas are to be looked for in² close

¹ Copious references to color-symbolism will be found in the works of Von Helmont (p. 1060) ; Frazer, "Totemism ;" J. Owen Dorsey ; Dr. W. J. Hoffman ; Black, "Folk-Medicine ;" Pettigrew, "Medical Superstitions ;" Andrew Lang, "Myth, Ritual, and Religion ;" Garrick Mallery, and many others ; also in an article entitled "Notes on the Cosmogony and Theogony of the Mojaves of the Colorado River," published in the "Journal of American Folk-Lore," July-September, 1889, by the author of this volume. In the last it is shown that the idea in the aboriginal mind is that each color is a medicine, and that the rainbow, being a combination of them all, is a panacea ; but it should be pointed out that, even in the days of Dr. Joseph Lanzoni (1694) there were some bold medical scholars who openly derided such notions as absurd and irrational.

² There can scarcely be a doubt that pharmacy was, in its incipency, distinctly and unequivocally religious in character. Grimm is full of the matter. He tells us that "the culling and fetching of herbs had to be done at particular times and according to long-established forms. . . . Shortly before sunrise when the day is young. . . . The viscum was gathered at new moon, Prima Luna. . . . Some had to be gathered in darkness, others plucked by the light of the moon, generally the new moon ; others by a person fasting ; others before hearing thunder that year. . . . In digging up an herb, the Roman custom was first to pour mead and honey round it, as if to propitiate the earth, then cut round the root with a sword, looking towards the east (or west), and the moment it is pulled out, to lift it on high without letting it touch the ground. . . . A great point was to guard against cold iron touching the root ; hence gold or red-hot iron was used in cutting. . . . In picking or pulling up, the operator used the left hand in certain cases ; he had to do it unbelted and unshod, and to state for whom and for what purpose it was done." Grimm complains of the scantiness of German tradition on this point ; yet, he finds that the "hyoscyamus," or henbane, had to be taken from the ground by a naked virgin, using the little finger of the right hand and standing on the right foot. The French formulæ for such purposes require : "Quelques uns pour se garantir de maléfices ou de charmes vont cueillir de grand matin, à jeun, sans avoir lavé leurs mains, sans avoir prié Dieu, sans parler à personne, et sans saluer personne en leur chemin, une certaine plante, et la mettent ensuite sur la personne maléficiée ou

association with the administration of excrementitious remedial agents, or the incantations in which such agents appear.

The method of curing incontinence of urine by micturating into a dog kennel probably belongs to the class of the Druidic Badershin or Widershin, to which also we might be able to refer, did we know more about it, the very ancient and widely-disseminated charact or charm, "Diabolus effodiat," etc.

Thus, in making use of lion-dung, it was recommended that it should be that of a lioness which had brought forth young; and, to continue the subject, we find the dung of black cows, the dung of bulls and cows "collected in the month of May," "water of cow-dung collected in May and June," etc., specially enjoined in the compounding of prescriptions.

Questions of the deepest interest spring up like weeds as we re-examine our text. Of these, it is impossible to enumerate all, or to

ensorcelée. Ils portent sur eux une racine de chicorée, qu'ils ont touché à genoux avec de l'or et de l'argent le jour de la Nativité de Saint Jean Baptiste un peu avant le soleil levé, et qu'ils ont ensuite arrachée de terre avec un serrement et beaucoup de cérémonies, après l'avoir exorcisée avec l'épée de Judas Machabée." The herb was to be "neither fretted nor squashed." "The Romans had a strange custom of laying a sieve in the road, and using the stalks of grass that grew up through it for medical purposes." (Grimm, "Teut. Mythol." vol. iii. p. 1195 *et seq.*) He fully describes the ceremony for gathering the mandrake, and also refers to the mistletoe, but adds nothing to the information in these pages. In many of the prescriptions given by Marcellus, which prescriptions were generally of a magical character (tempus, A.D. 380), there are injunctions to "observe chastity."—(See "Saxon Leechdoms," lib. i. pp. 20, 29.)

Again, in "Saxon Leechdoms," vol. i. p. 11, we learn that certain medicinal plants were to be pulled in a prescribed manner, the name of the patient to be murmured at the same moment (quoting from Pliny, lib. xxi., xxii.; again, *idem*, vol. i. p. 14, quoting Pliny, lib. xii. c. 16.)

The herb mandrake could not be pulled for medicinal purposes except by a pure man. "Its virtue is so mickle and famous that it will immediately flee from an unclean man" (*idem*, vol. i. p. 245); again, in gathering the periwinkle, "when thou shalt pluck this wort, thou shalt be free from every uncleanness" (vol. i. p. 313).

The belief in regard to the manner of pulling the mandrake exists among the Turks: "The pacha told me of a curiosity to be seen at Orfa. . . . This curiosity consisted of two small figures, made of a peculiar shrub, partly trained and partly twisted and partly cut into the form of a man and woman, very rudely done, and stained over to give them the appearance of having grown in that shape. . . . The inhabitants, in order to obtain them, tied a dog by a string to each figure, and then went a long distance off. As soon as the dog pulled the string, and drew the creature out of the ground, the noise it made killed the dog."—("Assyrian Discoveries," George Smith, New York, 1876, p. 161.)

elaborate these remarks into a disquisition upon religio-medical botany ; one or two, however, will be named. Why was hyoscyamus (henbane) added to human ordure and human urine for the frustration of witchcraft? Was it because this plant was able to kill the chicken-god sacred to so many European peoples, and still to be detected upon the spires of our churches? Was the chicken-god, or to adopt modern language, was the god of whom the chicken was the symbol, friendly to witches? Being one of the principal deities of a supplanted cultus, he must necessarily have been the power, or one of the powers, invoked by the witches who were the secret adherents of the old order of things spiritual.

Again, we read that in treating the bewitched, their limbs were bathed in their own urine; to which, Frommann says, some added asafœtida and others garlic; but assafœtida was called "merde du Diable." ("Bib. Scat." p. 128.) Was this fetid gum sacred to some god, and was this dung-god, or were dung-gods in general, the powers to be invoked for rendering nugatory the assaults of witches?

In our quotations we have shown that, in the opinion of old authors nothing equalled human ordure for baffling witches, and Luther has been cited as expressing the belief that Satan fled in dismay from human flatulence.

This belief has been transplanted to American soil with the German immigrants settled in the State of Pennsylvania.

Hoffman speaks of a "quack" who gave a credulous dupe "some charms and vile-smelling herbs, which he was directed to burn in his house so as to drive out the evil and remove the visitor" (i. e. the spirit which was troubling the dupe).—"Folk-Med. of the Penn'a Germans," in Trans. Amer. Phil. Soc. 1889.)

A marked peculiarity of the list of animals is the absence of those belonging to the fauna of the New World; there is no reference to the excrement of the turkey, a bird unknown to the nations migrating into Europe; but there are to be found the names of nearly all the birds and beasts known to Egyptian, Greek, Roman, Celtic, or Teutonic races, with, however, some notable exceptions; there is no mention of the excreta of the bear, the swan, the wren, the parrot, and a few others; the complete list contained in this work is repeated for convenience: Hare, camel, goat, wild goat, bull, cow and calf, wolf, hen, chickens and cock, boar, wild and tame, horse, ass, hippopotamus, lynx, badger, cuckoo, swallow, cat, hawk, mouse, peacock, pigeon, domestic, wood-pigeon, turtle dove, raven, sparrow, hedge-hog, dog, ring-

dove, mule, weasel, stork, vulture, crocodile, starling, eagle, owl, elephant, goose, lizard, rat, duck, kid, chameleon, quail, kite, rabbit, deer, magpie, crow, ape, hyena, reindeer, fox, lion, leopard.

A closer examination will discover that the ordure and urine so prescribed were not to be taken indiscriminately from each and every animal, but that each was assigned as a remedy appropriate for some special physical disturbance.

Unfortunately, modern knowledge of the medical lore, of the botanical, mineralogical, and chemical attainments and hagiology of the ancients is not so thorough that we can venture, with the positiveness warranted by the suspicion to which a close study of this subject gives rise, to assert that the dung or urine of a given animal was most suitable to palliate the pangs of the disease traceable to the offended dignity of the deity of which the particular animal was the representative or symbol; but it is a fact deserving of scrutiny that such an association is unmistakably indicated in a number of cases.

Pliny says that goat-dung could be applied with benefit to ulcers upon the generative organs. Was not the goat sacred to Pan (i. e., was not Pan himself, in primitive days, the deified goat)? And was not Pan the god to whose care the generative organs were, under certain circumstances, confided?

When the feet of travellers became blistered, they were bathed with the urine of asses. Was the ass, the burden-bearer, at any time, or in any place under the domination of the Romans, regarded as the god of travellers? Fosbroke says, "An ass carried the utensils and statues in the sacrifices of Cybele and at the birth of Bacchus, the god newly born, but he was only sacrificed to Mars or Priapus." — ("Encyclopædia of Antiquities," London, 1843, vol. ii. p. 1009.)

Pliny also prescribed asses' dung for uterine troubles, — a clear recognition of the animal's priapic association.

Hippopotamus-dung was given as a remedy for fever and ague. This monster pachyderm lives in swamps, which are the hotbeds of malaria. By a mistaken analogy, the animal would have been credited with the origin of the disease always to be dreaded by intruders upon its lair.

Without desiring to enter into unnecessary controversy upon the meaning of terms, it would seem to be perfectly reasonable to assert that the majority of the deities of paganism had been zoömorphich before man's increasing intellectuality anthropomorphized them, and relegated the animal first to the subordinate position of being the

head or limbs of the god, and then to the still more ancillary one of being simply the companion or symbol.

To consider an animal a god, the messenger, attendant, companion, or representative of that god; to offer it up as the most delectable sacrifice to that deity, and afterwards restrict the oblation to a part only of the animal, such as its horns, hoofs, excreta, — are all links in the same psycho-religious chain of reasoning.

Mrs. Fanny D. Bergen shrewdly observes, "There seems to be the best of reason for believing that, to seek the origin of the popular delusion concerning the curative properties of certain animal excreta, we must study the mythology of our long-ago Aryan ancestors." And again: "It has often happened that substances, as well as ceremonies, which originally had a religious signification, in later ages degenerated into fancied cures for diseases; so it is more than probable that the employment of animal excreta as remedies among the less intelligent classes of Europe, in both earlier and later times, as well as in our own newest offshoot from the Indo-European stem, is a survival of early Aryan religious observance." — ("Animal and Plant Lore," in *Popular Science Monthly*, New York, September, 1888.)

"Car, dans la conception vraiment orthodoxe du sacrifice, l'hostie, qu'elle soit homme, femme ou vierge, agneau ou génisse, coq ou colombe, représente la divinité elle-même." — ("Les Primitifs," *Réclus*, p. 366.)

"Our general ignorance of the popular superstitions and customs of the ancients has already been confessed." — ("The Golden Bough," Frazer, vol. i. p. 363.)

"Frazer's remarks make very interesting reading in support of the theory of Zoötheistic pharmacy. He not only shows that the animals enumerated in this chapter were the deities in charge of the corn, rye, and other cereals, but that to them recourse was had for the cure of wounds, hurts, and aches happening to the reapers during harvest. In one example the cat which is introduced into the field is made to lick the laborer's wounds; in another, the goat — which is decked with ribbons, and afterwards killed with much ceremony, and eaten at the end of the harvest — has its skin converted into a cloak, which the farmer is required to put over his shoulders during the coming harvest . . . but if a reaper gets pains in his back, the farmer gives him the goat-skin to wear." — (*Idem*, vol. ii. p. 16.)

"Amongst the animals whose forms the corn-spirit is supposed to

take, are the wolf, dog, hare, cock, goose, cat, goat, cow (ox), bull, pig, and horse. (Idem, vol. ii. p. 1.) "Other animal forms assumed by the corn-spirit are the stag, roe, sheep, bear, ass, fox, mouse, stork, swan, and kite." — (Idem, vol. ii. p. 33.)

Here we have pretty nearly all our list of animals, and the excrement of every one here mentioned has been and is used in the prescriptions of folk-medicine, excepting the excreta of the bear and swan.

"Remembering that in European folk-lore the pig is a common embodiment of the corn-spirit, we may now ask, May not the pig, which was so closely associated with Demeter, be nothing but the goddess herself in animal form? The pig was sacred to her; in art she was represented carrying or accompanied by a pig; and the pig was regularly sacrificed in her mysteries, the reason assigned being that the pig injures the corn, and is therefore an enemy of the goddess. But after an animal has been conceived as a god, or a god as an animal, it sometimes happens, as we have seen, that the god sloughs off his animal form, and becomes purely anthropomorphic; and that then the animal, which at first had been slain in the character of the god, comes to be the victim offered to the god, on the ground of its hostility to the deity; in short, that the god is sacrificed to himself, on the ground that he is his own enemy. . . . As men emerge from savagery, the tendency to anthropomorphize or humanize their divinities gains strength." — ("The Golden Bough," Frazer, vol. i. p. 360.)

"A man would eat freely of what was regarded as the incarnation of the god of another man, but the incarnation of his own particular god he would consider it death to injure or eat. The god was supposed to avenge the insult by taking up his abode in that person's body, and causing to generate there the very thing which he had eaten, until it produced death." — ("Samoa," Turner, p. 17.)

"The ram was Ammon himself. On the monuments, it is true, Ammon appears in semi-human form, with the body of a man, and the head of a ram. But this only shows that he was in the usual chrysalis state through which beast-gods regularly pass before they emerge as full-fledged anthropomorphic gods." — ("The Golden Bough," Frazer, vol. ii. p. 93.)

"Each god has his favorite animal, which is dedicated to him, and serves him as messenger." — ("Fetichism," Baudin, p. 68.)

To write what may be designated the hagiology of animal life, as known to the ancients, would be impossible. Our knowledge is too

fragmentary and too confused, from the inextricable blending of the ideas of different races and cults, due to the conquests by and the subversion of the Roman empire, when victor and vanquished reciprocally exchanged gods, or added to the attributes of the victorious deities those of the defeated.

Religion, in the last years of the Roman empire, was a kaleidoscopic jumble of the tenets and rituals of many races, adopting without caring to fully understand, whatever struck the fancy in the religion of their neighbors.

Hence it is impossible to demonstrate, what at first sight seemed to be an easy task, that the excreta of any particular animal was applied in the treatment of the diseases over which the god to whom the animal was assigned stood guard. We are not absolutely without light upon the subject, — just enough to discover that no animal was insignificant enough to be absolutely without adoration, but not sufficiently clear to define exactly what functions each quadruped or bird god exercised.

"The representation of the devil in the shape of a he-goat goes back to a remote antiquity. What can have given it such a vigorous growth among heretics and witches? The witches all imagine their master as a black he-goat, to whom, at festival-gatherings, they pay divine honors; conversely, the white goat atoned for and defeated diabolic influence. . . . In oaths and curses of the fifteenth and sixteenth centuries, the he-goat apes the true god." (Grimm, "Teutonic Mythology," vol. iii. p. 395.) "The devil, in retiring, is compelled unawares to let his foot be seen." (Idem, p. 994.) "A kobold (horse-sprite) is also horse-footed. . . . To the water-sprite, the whole or half of a horse's figure is attributed. . . . That is why horses are sacrificed to rivers. . . . A British demon, Grant, . . . shewed himself as a foal. . . . Loki changed himself into a mare. . . . The devil appears as a horse in the stories of Zeno and Brother Rausch. . . . In legends, black steeds fetch away the damned. . . . Next to the goat, . . . the boar is a devil's animal." (Idem, pp. 994-996.) "A soul-snatching wolf, the devil was already to the fathers." (Idem, p. 996.) "A canine conformation of the devil is supported by many authorities." (Idem, p. 996.) "Foremost among birds comes the raven, whose form the devil is fond of assuming." (Idem, p. 997.) "Within the last few centuries only I find the vulture put for the devil. . . . Still more frequently the cuckoo." (Idem, p. 997.) "Another bird whose figure is assumed is the cock." (Idem, p. 997),

"When stag-beetles and dung-beetles are taken as devils, . . . it gives assurance of a heathen point of view." — (p. 999.)

"In Norway, lambs and kids, mostly black ones, were offered to the water-sprite." — (Idem, p. 1009.)

"It is a natural and well-known fact, that the gods of one nation become the devils of their conquerors or successors." — (Black, "Folk-Medicine," p. 12.)

Gladiators wore camel's dung as a charm; it is not at all unlikely that to the Bedouin nomad the "ship of the desert" was the god of fortitude.

Fosbroke says that it was the "symbol of Arabia." — ("Antiquities," p. 1011.)

The sacredness of the domestic cattle in India and elsewhere is too well known to require remark; so is that of the crocodile in parts of ancient Egypt.

The hare was sacred in China, and is as sacred to-day to certain tribes of American Indians as it was to the Britons when Boadicea drew one from her bosom to consult as an omen before joining battle with the Roman legions.

The rabbit and hare figured upon ancient Spanish coins. — (Fosbroke, "Antiquities," vol. ii. p. 1022.)

The dung of hawks, eagles, and vultures was administered to expel the fœtus from the womb. This may have been on the principle of *similia similibus*, because these rapacious birds tore the young of other birds from their nests and devoured them. However, the eagle was worshipped by the Romans, Persians, and Babylonians, upon whose standards it perched. — (See Fosbroke, "Antiquities," vol. ii. pp. 1024, 1025, article "Eagle.")

"It was the common symbol of Jupiter." — (Idem.)

The cat was a moon-goddess symbol to the Egyptians, as well as to many others. — (Idem, p. 1011.)

The dog was sacred to Mercury as being the protector of shepherds. — (Idem, p. 1012.)

The dove, as well known, was one of the symbols of Venus.

The dove was also worshipped by the Assyrians. — (Idem, p. 1024.)

The stork "accompanies filial piety . . . upon coins." — (Idem, vol. i. p. 215.)

The swallow was the emblem of Isis. — (Idem, p. 216.)

The ancient Britons, the English down to modern days, the ancient Romans, the Hungarians, the Scotch, and many other nations, drew

omens from the crossing of a man's path by a hare. It is related of Queen Boadicea that before joining battle with the Romans she drew from her bosom a hare, which she released, and from its gambols the priests drew the augury that success was to rest with her. — (See in Brand, "Popular Antiquities," vol. iii. pp. 201 *et seq.*, article "Hare, Wolf, or Sow.")

Says Plinius: "There must be something in the general persuasion that after seeing a hare a man is good-looking for nine days." — ("Saxon Leechdoms," vol. i. p. 14.)

"The sun was represented by the Persians under the form of a lion, which they called Mithra; and his priests were called lions, and the priestesses hyenas." — (Fosbroke, "Antiquities," vol. ii. p. 1020.)

The hyena, according to Pliny, was an especially "magic" animal. — (Lib. xxviii.)

The ape was "worshipped in Egypt, and is now in India." — (Fosbroke, "Antiquities," vol. ii. p. 1008.)

"The Greeks of Pythsecusa worshipped this animal" (monkey). — (Idem, p. 1020.)

The wolf. "The Hebrews venerated this animal." — (Idem, p. 1023.)

The wolf was "consecrated to Apollo." — (Idem.)

The ancient belief all over Europe was that it was lucky to have one's path crossed by a wolf. This corresponds to the idea of the Apache in regard to the bear. — (See Brand, "Popular Antiquities," vol. iii. p. 202, article "Hare, Wolf, or Sow.")

The Irish veneration for the wolf is well known.

The lynx "accompanied Bacchus." — (Fosbroke, "Antiquities," vol. ii. p. 1020.)

The pig was "sacrificed in the Eleusinian mysteries." — (Idem, p. 1021.)

The cow, among the Egyptians, "was the symbol of Venus." — (Idem, p. 1011.)

The elephant was "peculiar to the cars of Bacchus." — (Idem, p. 1014.)

The goat. "Maimonides says . . . that the Zabii worshipped demons under the figure of goats." — (Idem, vol. ii. p. 1015.)

"Steeds were consecrated to the sun." — (Idem, p. 1016.)

The crow, "anciently the symbol of Venus," was "superseded by the owl." — (Idem, p. 1024.)

The cock was "the symbol of courage, . . . consecrated to Mars;

also to Minerva, to Bellona, to Mercury, to Esculapius." — (Idem, p. 1029.)

A flock of geese was kept on the Capitoline Hill in memory of the story that they had saved Rome, — a story which it is safe to say had no foundation in fact.

The raven "was the ensign of the Danes." — (Idem, p. 1030.)

"So revered is he (the fox) that no place in a Mantchurian temple is too high for him." — (H. E. M. James, "The Long White Mountain," London, 1888, p. 190.)

"The serpent also is greatly feared and worshipped ; so is the hare." — (Idem, p. 192.)

The peacock was sacred to Juno, whose car was drawn by those birds. Pliny says that the peacock was reported to swallow its own excrement, as if envying man the possession of a treasure so precious. When the dung of the peacock was administered in epilepsy, vertigo, etc., the medicine was to be taken from the new moon to the full. Juno was a lunar deity.

"It was an ancient and wide-spread custom in Europe to bestow names of honor on these three" (bear, wolf, and fox). — (Grimm, "Tentonic Mythology," vol. ii. p. 667.)

"The Gypsies call the bear 'vieux,' or 'grand-père.'" — (Idem, foot-note, quoting Victor Hugo's "Notre Dame de Paris.")

The blood of a hare was regarded as one of the finest remedies for erysipelas and bloody flux, and this by a certain "sympathetic power." A towel dipped in hare's blood and allowed to dry was kept to be touched to an epileptic patient. — (See Von Helmont, "Orotrika," English translation, London, 1662, pp. 114, 475.)

The Ostiaiks of Siberia "regardent comme sacré l'arbre où un aigle a fait sa ponte plusieurs années de suite ; et ils ont aussi beaucoup d'égards pour cette aigle. On ne peut les offenser plus cruellement qu'en tuant cette aigle ou en détruisant son nid." — ("Voyages de Pallas," vol. iv. pp. 81, 82.)

The very name of owl (*googue*) was considered unlucky by the Abyssinians for use as the watchword, although we are told that it was so used. — (See Bruce, "Nile," vol. iv. p. 698.)

That a belief in the sinister character of the hooting of the owl by night prevailed all over Europe, especially among the Romans, in the period of their greatest civilization, and that this credulity was transmitted down almost to our own times, see in Brand, "Popular Antiquities," vol. iii. p. 206 *et seq.*, article "Owl." He quotes from

Suetonius, Pliny, Ovid, Lucan, Claudia, and from various old English authors, — "The cryinge of the owle by night betokeneth deathe, as divinours conjeete and deme," and

"Then screech-owls croak upon the chimney-tops
It's certain then you of a corse shall hear."

In Egypt, "it is said that in whatever house a cat died all the family shaved the eyebrows." — (Idem, vol. iii. p. 38, article "Sorcery.")

"In the earliest period the horse seems to have been the favorite animal for sacrifice." — ("Tent. Mythol.," Grimm, vol. i. p. 47.)

The crow was always a bird of bad omen among the Romans. — (See Brand, "Popular Antiquities," vol. iii. p. 213, article "The Crow.")

Roman magicians asserted "that the heart of a horned owl applied to the left breast of a woman, while asleep, will make her disclose all her secret thoughts. . . . Persons who have it about them in battle will be sure to display valor;" but "it was ominous to see the bird itself." — (Pliny, lib. xxix, c. 26.)

The crocodile seems to take in Borneo the place occupied so generally elsewhere by the serpent; although we know that in Central America the alligator was revered, and along the Nile in many districts the crocodile. — (See Bock's "Head-Hunters of Borneo," London, 1881, *passim*.)

"The hare, which shares with the cat the reputation of being the familiar of witches, has naturally some virtues attributed to it. Thus that the right forefoot worn in the pocket will infallibly ward off rheumatism is a common belief in Northamptonshire, and generally over England." ("Folk-Medicine," Black, p. 154.) The Chinese say that a hare sits at the foot of the cassia-tree in the moon pounding out the drugs of which the elixir of immortality is compounded. In a poem of Tu-fu, a bard of the T'ang dynasty, the fame of this hare is sung, —

"The frog is not drowned in the river;
The medicine hare lives forever."

"The devil's mark was said to sometimes resemble the impression of a hare's foot. . . . Seeing a hare was thought in Ireland to produce a hare-lip in the child to be born; and, as a charm, the woman who unfortunately saw the hare was recommended to make a small rent immediately in some part of her dress." — (Idem, p. 155.)

"It is held extremely unlucky, says Grose, to kill a cricket, a ladybug, a swallow, martin, robin red-breast, or wren, — perhaps from the idea of its being a breach of hospitality, all these birds and insects alike taking refuge in our houses. . . . Persons killing any of the above-mentioned birds or insects, or destroying their nests, will infallibly, within the course of the year, break a bone, or meet with some other dreadful misfortune. . . . On the contrary, it was deemed lucky to have martins or swallows build their nests in the eaves of a house or in the chimneys. . . . Its being accounted unlucky to destroy swallows is probably a pagan relic. We read in *Ælian* that these birds were sacred to the penates or household gods of the ancients, and therefore were preserved. They were honored anciently as the nuncios of the spring. The Rhodians are said to have had a solemn anniversary song to welcome in the swallow. Anacreon's ode to that bird is well known." Brand also alludes to the still surviving omens attaching to the swallow, — such as "the swallow falling down the chimney," and others. — ("Popular Antiquities," vol. iii. p. 193.)

THE SPANISH-AMERICAN SPORT OF "CORRER EL GALLO" AND THE ENGLISH PASTIME OF "THROWING AT 'SHROVE-COCKS.'"

The Spaniards brought with them to the New World a cruel form of sport, which consisted in burying a cock or hen in the earth up to its neck, and then allowing the young men of the village to mount their horses, and charging down at full speed upon the hapless bird, reach down from their saddles and endeavor to seize it and wring its neck. This sport (as seen by the author in the Indian Pueblo of Santo Domingo, New Mexico, in 1881, and described by him in "The Snake Dance of the Moquis") is evidently a distorted form of the sacrifice of the chicken deity, which is to be discovered in many parts of Europe, always under the guise of brutal sport.

In England there was a modification. A goose was hung up by the feet, and then the villagers ran and attempted to seize its head, which was finally pulled off. There was still another of the same series in which a cat was put in a barrel, and the barrel was then beaten to pieces. — (See Brand, "Popular Antiquities," vol. iii. p. 40, article "Sorcery.")

There was another English pastime, "Throwing at Shrove-Cocks," much of the same nature. — (See *idem*, vol. i. p. 101, article "Ash-Wednesday," and p. 72, article "Shrove-Tuesday.")

Grimm describes the "heathen custom of tying cocks to the tops of holy-trees," which prevailed very generally over Europe in Pagan times. "The Wends erected cross-trees, but still secretly heathen at heart, they contrived to fix at the very top of the poles a weather-cock." — (Grimm, "Teutonic Mythology," London, vol. ii. p. 672.)

"In parts of Germany, Hungary, Poland, and Picardy, the reapers place a live cock in the corn which is to be cut last, and chase it over the field, or bury it up to the neck in the ground; afterwards they strike off its neck with a sickle or a scythe." — ("The Golden Bough," Frazer, vol. ii. p. 9. He gives still other examples from Westphalia, Transylvania, etc.)

See also Grose, "Dictionary of Buckish Slang," London, 1811, article "Goose Riding," in which it is stated that this game was practised "in Derbyshire within the memory of persons now living."

THE SCARABÆUS OF EGYPT.

The radical divergence of opinion among scholars as to the basis of the veneration accorded by the inhabitants of the Nile delta to the scarabæus has been an occasion of much perplexity; no two authors can be found to agree upon the subject.

In the absence of anything which can be considered conclusive, it is not worth while to more than allude to the fact that it was the dung-beetle to which this adoration was manifested, and possibly because it associated itself with material so intimately connected with the living organism.

The dung-beetle "scarabæus . . . worn as an amulet for the cure of fever." — (Pliny, lib. xxx. cap. 30.)

See also "Saxon Leechdoms," vol. i. p. 16, in which the preceding paragraph from Pliny is quoted.

"To the Egyptians the beetle (scarabæus) was sacred, being an emblem of inmost life and mysterious self-generation. They believed that he proceeded out of matter which he rolled into globules and buried in manure." — (Grimm, "Teut. Mythol.," vol. ii. p. 692.)

"The Thebaic beetle, the first animal that is seen alive after the Nile retires from the land." Bruce thinks that the scarabæus was the symbol of "the land which had been overflowed and from which the water had soon retired, and has nothing to do with the resurrection or immortality, neither of which were at that time in contemplation." — ("Nile," Bruce, Dublin, 1790, vol. i. p. 129.)

Sir Samuel Baker says: "It appears shortly after the commencement of the wet season, its labors continuing until the cessation of the rains, at which time it disappears. Was it not worshipped by the ancients as the harbinger of the high Nile?"—"The Albert Nyanza," pp. 240, 241.)

"On sait que l'escarbot ou fouille-merde, qui nait dedans et qui s'en nourrit, était pour les Égyptiens l'image du monde, du soleil, d'Isis, d'Osiris."—"Bib. Scat.," pp. 1 and 2, quoting Pliny, lib. xxx. cap. 11; lib. ii. cap. 30; Kircher, *Prodrom. Egypt. cap. ult.*)

The beetle was not killed by the peasantry of Ireland, according to Lady Wilde. See her book, page 175.

Scholars will understand that the remarks submitted upon the veneration attaching to all these animals have been introduced merely as aids to memory in the consideration of this matter, and not as completely covering all that could be advanced on the subject.

L.

THE PERSISTENCE OF FILTH REMEDIES

ANOTHER feature deserving of attention is the persistence with which the same remedies have been perpetuated through the centuries; from Hippocrates, perhaps, certainly from Pliny to Sextus Placitus, then to "Saxon Leechdoms," and thence to the authorities prepared immediately after the discovery of printing, there is a transmittal of the same prescriptions for the same diseases.

Avicenna, the Arabian, has unmistakably drawn the inspiration of his knowledge from the broken fountains of Latin-Christian civilization.

EPILEPSY.

The dung of the peacock was one of the favorite prescriptions for the alleviation of epilepsy, the disease so pre-eminently of divine origin that by the Romans it was termed the Divine Disease¹ (*Morbus sacer*).

Epilepsy was likewise called the "comitial disease," because, according to the different authorities consulted upon the subject, the moment a Roman was attacked by it, the "comitia," if in session, were dissolved. The "comitia . . . were the assemblies of the clans for deliberating upon such important matters as the appointment of judges, etc."² Of exactly what transpired afterwards we have no knowledge; it

¹ Hippocrates did not believe that epilepsy was a "divine" disease, sent by the gods; such an idea was, in his opinion, fostered by quacks for personal advantage. — (See the edition of his work by Francis Adams, Sydenham Society, London, 1849.)

"Nothing could tend more to retard the progress of medicine, and paralyze all efforts for its improvement, than the opinion, once so generally entertained, of the celestial origin of disease, which, if admitted, appears necessarily to demand divine interposition for its relief. Religion and medicine were both brought into contempt by the adoption of sacrifices and incantations and the mercenary practices of the priests to insure intercession with the gods." — ("Medic. Superstitions," Pettigrew, p. 45.)

² Epilepsy was called the comitial disease "because the comitia were prorogued in the event of any ominous case of this disorder." — (White-Ridley, *Latin-English Dict.* See also Lemprière's "Classical Dictionary," article "Comitia.")

is most likely that the assembled clans devoted themselves to supplicating the gods to take mercy upon an afflicted kinsman. It is not at all beyond the limits of probability that the patient was, in early days, sacrificed to appease the wrath of the deity inflicting the punishment, or disease as we should designate it. This, at least, is the only rational inference to be drawn from the action taken with the clothing worn during the fit, and the excrement voided at the same time, both of which, as we have seen, were burned, — a reminiscence of the earlier practice when such a fate was meted out to the victim himself.

But we do find that the belief in transference or transplantation was one of the underlying principles of all medical practice in ancient and mediæval times; and, by a reference to the examples cited, it will be noted that special stress was laid upon the employment of clippings of the hair or nails of the patient, or his urine, ordure, or, in rarer instances, his saliva or perspiration; these were to be placed in egg-shells and then buried in ant-hills, thrown into fish-ponds, given to dogs or chickens, or thrown out in the cross-roads, in the hope that some traveller, impelled by curiosity, would pick up the strange package and with it take the disease from the original sufferer.

All diseases were believed to be punishments inflicted by angry gods; therefore, all medicines were originally charms, i. e. oblations or sacrifices to propitiate the offended spirits or to secure the interposition of still more powerful gods who should render nugatory the malevolent work of the minor. Sometimes, the charms employed suggest unmistakably the prior existence of human sacrifice; the trembling victim was ordered to sacrifice himself or one of his household. But, on the principle that the part represents the whole, in other words, that the actual sacrifice could be deferred in consideration of the presentation of a pledge, such a pledge was offered in the shape of hair, nails, skin, blood, excrements, saliva, or shreds of the clothing belonging to the interested devotee, the supposition, of course, being that the propitiated Deity could, at a future time, insist upon the execution of the contract, or the consummation of the sacrifice the pledge guaranteed.

Therefore, when we find in "sympathetic" cures, that human exuviae, excrements, etc., are thrown into ponds, we may without difficulty infer that the fishes or water gods, in accepting the oblation, accepted the sacrifice as symbolized, and, being appeased, took back to themselves the disease they had in their wrath inflicted.

The same is the underlying principle when such "charms," as we very properly call them, were hung upon trees, or stones, or around

holy wells; it was the guardian spirits of those localities which had been offended and must be mollified by the "carmen" or ode of incantation which was an inseparable adjunct of all such votive offerings, — from which comes our own word "charm."¹

When the "charm" was thrown to a dog, or placed in a field, where cattle, horses, or sheep, or wild beasts might pasture upon it, an animal god had to be propitiated; and where it was simply thrown out on the road, or, better still, at a cross-roads, the "earth-spirits," or some goblins not definitely determined upon, in the mind of the sacrificer, were believed to be the authors of his infirmity.

Hanging these charms up in the chimney of one's own house was clearly an invocation to clan or family spirits to withdraw their wrath from an afflicted kinsman, or hasten to his assistance. Viewed in this light, the "charms" that to us seem so trivial, the rags, tufts of hair, etc., may, in the mind of the person offering them, have been oblations of the most sacred character.

¹ The word "carmen" shown to be the origin of "charm," by Grimm. — ("Teut. Mythology," vol. iii. p. 1035.)

The same derivation is given by Webster and other authorities.

In the Samoan islands "When offerings were eaten in the night by dogs or rats, it was supposed that the god chose to become incarnate for the time being in the form of such living creatures." — ("Samoa," G. Turner, London, 1884, p. 25.)

II.

AN EXPLANATION OF THE REASON WHY HUMAN ORDURE AND HUMAN URINE WERE EMPLOYED IN MEDICINE AND RELIGIOUS CEREMONIES.

ANCESTOR-WORSHIP. — MAN-WORSHIP. — THE GRAND LAMA.

“**H**OMO est medicus, et ex homine medicina paratur,” said Fleming, in his “*De Remediis ex corpore humano desumtis*,” that is to say, man being a doctor, from man medicine is prepared.

The savage, with all his fear of the vague and undefinable, had still a wonderful belief in himself as the greatest of nature's works; all his great gods he created in his own image and likeness; he went even further, and ascribed to the priests or representatives of the gods, the same respect and veneration as were supposed to be due to the gods themselves; hence arose man-worship, still existing in Thibet in its most pronounced form, and surviving in Europe down to the present generation almost, in the modification known as “touching for the king's evil,” which touching derived its efficacy from the double belief that all ailments were sent from some supernatural, and, generally, maleficent, source, and could, therefore, best be cured by the imposition of the hands of an individual whom the inunction of a little consecrated fat had bound more closely to the Omnipotent.¹

This belief cropped out in charms and talismans, which were nothing more nor less than medicines to avert bad luck and remedy disease, itself a manifestation of bad luck; or, to express the idea still more clearly, medicines themselves were nothing but charms originally, in the application of which our forefathers paid less attention to pharmaceutical properties than they did to those of an occult or “sympathetic” nature which their own ignorance attributed to them.

¹ The anointing of kings is a survival of Pagan usages; anointed monarchs are alluded to in the sacred books of Thibet: “du monarque oint . . . Pratimoksha Sutra.” — (W. W. Rockhill, *Société Asiatique*, Paris, 1885.)

Animals and plants and stones, being objects of worship, were naturally enough called upon to furnish remedies for all ailments, and palliatives for every misfortune. The grandest animal of all, man, could not well be omitted from the *Materia Medica*; every thing that pertains to either sex, either in structure or in function, must have impressed the untutored mind with a sense of awe; all excretions, solid or fluid, were invested with mystic properties, and called into requisition upon occasions of special import.

On the subject of man-worship, consult Frazer, "*The Golden Bough*," vol. i. c. 2, pp. 8, 9.

"Among the negroes, royalty is deified; kings are supposed to be of the race of gods, and, after death, become demi-gods."— ("*Fetichism*," Baudin, p. 24.)

Saliva, the ordure, urine, catamenial fluid, blood, bile, calculi, bones, skulls, — all were mysterious, and therefore were "medicine," especially when obtained from a saint or lama.

This belief subsisted among tribes and communities long after civilization of a high type had been attained, and is probably what Saint Mark alludes to in an ambiguous passage, when he says, "It is not the things which enter a man's body, but those which come out of it, which defile him."

Again, it is not from the bodies of the living alone, but from the corpses of the dead likewise, that medicinal preparations were derived; but in the latter case there enters into the question another expression of thought, shared by primitive man in all countries and in all ages; i. e., that the part is ever the representative of the whole, and that when the whole cannot be obtained, the part will be equally efficacious. Hence the precious care with which, in all communities in a low state of culture, the bones, teeth, rags of clothing, and other exuvæ of the sacred dead have been treasured.

LII.

EASTER EGGS.

THE constant use of the egg in effecting these cures by transplantation awakens a suspicion that the origin of the pretty custom of giving away Easter eggs, beautifully colored, was induced by something more than charitable impulse. Nearly every usage that remains among us as a game or a play derives from a serious ancestry. Easter was pre-eminently the festival of the Christian church which most tenaciously preserved the rites of paganism. It was, for some reason, looked upon as the season when the human body, as well as the house occupied by that body, should undergo a thorough cleansing, and get rid of all its ailments. The coloring of the eggs suggests color-symbolism, an essentially heathen idea, still retained among ourselves in full vigor, under many Protean disguises.

When the Puritans gained control of the government of Great Britain, the coloring of eggs, as we may imagine, was temporarily discontinued. The "picking" of the eggs is a survival from one of the innumerable forms of divination by lot in which the pagan mind of Rome and elsewhere delighted.

Therefore we may reasonably conclude that the custom, as transmitted to us, is a "survival" from a religious usage intended to effect the transference by lot of the diseases with which the egg-players were afflicted.

"The oldest, most familiar, and most universal of all Easter customs are those associated with eggs. Hundreds of years before Christ, eggs held an important place in the theology and philosophy of the Egyptians, Persians, Gauls, Greeks, and Romans, among all of whom an egg was the emblem of the universe, and the art of coloring it was profoundly studied. The sight of street boys striking their eggs together to see which is the stronger and shall win the other, was as common in the streets of Rome and Athens, two thousand years ago, if we are to believe antiquarians, as it is in any of our American cities

to-day. These eggs, now called Easter eggs, were originally known as Pasche eggs, corrupted to paste eggs, because connected with the Paschal or Passover feast. One reason for associating the egg with the day on which our Saviour rose from the dead may be, that the little chicks entombed, so to speak, in the egg, rising from it into life, was regarded as typical of an ascension from the grave.

"In the north of England it is customary to exchange presents of Easter eggs among the children of families who are on intimate terms, a custom which also prevailed largely among the ancients, and to which the sending of Easter cards and other offerings, which has become so popular here of late years, may be traced."—(From the "Press," Philadelphia, Penn., April 21, 1889.)

"Thirty years ago, it was a common practice for all elderly people to be bled or cupped each spring."—("Folk-Medicine of the Pennsylvania Germans," Hoffman, in Trans. Amer. Phil. Soc., 1889.)

"To hang an egg laid on Ascension Day in the roof of the house, preserveth the same from all hurt."—(Scot, "Discoverie," p. 193.)

"The modern custom, practised in Tripoli, of a widow transferring her misfortunes from herself by delivering four eggs to the first stranger she meets."—(Dalyell, "Superstitions of Scotland," p. 110.)

"It comes to be thought desirable to have a general riddance of evil spirits at fixed times, usually once a year, in order that the people may make a fresh start in life, freed from all the malign influences which have been long accumulating among them."—("The Golden Bough," Frazer, vol. ii. p. 163.)

"Modern Jews sacrifice a white cock on the eve of the Festival of Expiation, nine days after the beginning of their new year. The father of the family knocks the cock thrice against his own head, saying, 'Let this cock be a substitute for me,' etc."—(Idem, vol. ii. p. 195.)

The negroes of Guinea seem to entertain notions on this subject worthy of incorporation in this chapter: "The sending of the parrot's egg signifies, Choose the kind of death which would be easiest to you; otherwise, we will choose for you."—("Fetichism," Baudin, p. 23.)

In many portions of Europe there are still in existence rustic observances which, under the mask of games, preserve to the mind of the anthropologist the former rite of human sacrifice. Among these may be mentioned one from Sweden, in which a boy—who in the past ages was evidently the victim selected for sacrifice, and to bear to the gods the messages of the community,—goes about from house to

house, carrying a basket, in which he collects gifts of eggs and the like." (Frazer, "The Golden Bough," vol. i. p. 78.) It seems to be logical to imagine that these gifts, sent to the deities to propitiate them, also served the purpose of carrying away from the donors any ailments with which they were afflicted, — the same purpose for which Easter eggs were broken, and the transfer of illness brought about by lot. The insignificance of the egg as an offering, in comparison with the benefits to be expected, offers no argument in rebuttal of the opinions just expressed. We should bear in mind the proneness of the devotee to reduce the money value of his sacrifice or oblations to the minimum. This is peculiar to no cultus, confined to no latitude. The worship of the chicken-god was apparently very widely ramified, especially among the divisions and subdivisions of what we have chosen to call the Aryan family. To several of these branches, notably the Wendish and the Celtic, the chicken was, perhaps, the principal god; and he remains to this day in his proud position, whence the first missionaries were unable to dislodge him, at the summit of the sacred tree or spire of the village church.

Naturally enough, what we should expect to see upon the recurrence among these tribes of a festival in which their principal spiritual powers were to be invoked to expel all forms of disease and evil from among their worshippers, would be the sacrifice of chickens; but the poverty or the niggardliness of the suppliant in many cases suggested a substitution of the cheaper offering, the egg, which may, in its turn, have been replaced by the feathers of the bird.

In parts of India, to this day, the scapegoat of the community is a cock. "In southern Konkau, on the appearance of cholera, the villagers went in procession from the temple to the extreme boundaries of the village, carrying a basket of cooked rice, covered with red powder, a wooden doll, representing the pestilence, and a cock. The head of the cock was cut off at the village boundary, and the body was thrown away. When cholera was thus transferred from one village to another, the second village observed the same ceremony, and passed the scourge on to its neighbors." — ("The Golden Bough," Frazer, vol. ii. p. 191.)

"When spring comes," said Pantagruel to Panurge, "I will take a purge."

"Les œufs sont partout fatidiques." — ("Les Primitifs," Réclus, p. 356, art. "Les Kolariens du Bengalous.")

LIII.

THE USE OF BLADDERS IN MAKING EXCREMENT
SAUSAGES.

IT was believed to be peculiarly necessary that the urine or ordure of those suffering from epilepsy, yellow jaundice, quartan fevers, etc., should be placed in a pig's bladder, and hung up in the chimney; in other words, they were made into an excrement sausage.

Traces of the employment of these sausages appear from the most remote times. Galen has a paragraph which reads as if he had some such practice in mind. Speaking of human ordure, he says: "Utitur non modo medicamenti quæ focus imponuntur commiscens, sed iis quoque quæ intro in os sumuntur." It would seem that he was alluding to mixtures in domestic medicine when some such preparations were placed on the hearths (focus).

For the potency of these excrement sausages in rescuing victims from the clutches of witches, from the yellow jaundice, from fevers, and other troubles we have the assurances of such grave and reputable writers as Schurig, Paullini, Etmuller, Frommann, and others of ages past; while Black certifies to their use in Staffordshire; and Hoffman tells us of customs among the Germans of Pennsylvania which are distinctly and undeniably modifications of those transmitted from the mother-country. Reference to the words of these authorities, as herein quoted, is recommended; among them the following may be found worthy of remark.

"The entrails will be affected with corrosion when hot excrement is placed in a bladder." — (Frommann, p. 1023.)

Schurig instances a farmer who by hanging up in his chimney the dung of his neighbor's horses drove them all into a consumption. — ("Chylologia," p. 815.)

In the Island of Nukahiva the witch was n't content with getting the excrement of the victim; it had to be put in a "bag woven in a particular manner," and buried. — (Krusenstern.)

The devil cannot be more completely frustrated than by placing upon some of his works human ordure, or by hanging human ordure in the smoke of the chimney. — (Paullini, p. 260.)

“A certain man bewitched a boy nine years old by placing the boy’s ordure in a hog’s bladder and hanging the sausage in a chimney.” — (Idem, p. 261.)

In Staffordshire, to cure the yellow jaundice, a bladder was often filled with the urine of the patient and placed near the fire. (Black, “Folk-Medicine.”) It is strange to encounter among the Australians the very same ideas, expressed in identical terms, in regard to effecting enchantments by means of the victim’s ordure, wrapped in a roll or bundle not altogether unlike the sausages of European occult art.

“Should a Bangal in the course of his wanderings drop across an old encampment of Bukeens, he searches about for some *débris* (such as bones) of the food they have eaten ; but should his search for bones or some other kindred *débris* be unsuccessful, as frequently happens (from the fact of its being a habit common to all the aboriginal tribes to consume by fire the bones of the game upon which they have fed before they abandon a camp), he anxiously scans the ground all round the abandoned camp for feculent excrement ; and should any of the Bukeens, from laziness or other cause, have omitted to use his paddle, or to have used it carelessly, the vigilant Bangal pounces upon the unhidden feces as a miser would upon a treasure.

After he has secured his savory find, he lubricates a piece of opossum-skin with the kidney-fat of some of his victims, and carefully wraps it round his treasure, after which yards of twine are wound round and round, each wind being what sailors term a ‘half-hitch.’ . . . At night, when all in camp are quiet, the Bangal carefully takes his prize from the bag, beginning a low, monotonous chant, while he thrusts one end of the prepared roll into the fire (the fire is small by design) ; during the process of gradual combustion the chant is continued. . . . Should it be his wish to kill the Bukeen outright in one night, he keeps up the chant, and pushes the burning roll forward into the glowing embers as it consumes, and when the last vestige of it has dispersed in unsavory smoke the life of the Bangal’s victim has ceased. . . . Should the Bangal, however, wish to prolong the dying agonies of his foe, he merely burns a small portion of the roll nightly, chanting his incantation during the process, and should months pass before the roll is totally consumed so long will the torture of his victim continue. — (“The Aborig. of Vict. and Riverina,” Beveridge,

Adelaide, 1889, p. 169, received through the kindness of the Royal Society, Sydney, New South Wales, F. B. Kyngdon, secretary.)

"In Thuringia a sausage is stuck in the last sheaf at threshing, and thrown with the sheaf on the threshing-floor. It is called the "barrenwurst," and is eaten by all the threshers. After they have eaten it, a man is encased in pease straw, and thus attired is led through the village." — ("The Golden Bough," Frazer, vol. i. p. 371.)

Attaching to this array of facts the value which properly belongs to each and every one of them, and no more, it seems that the Feast of Fools may be better understood by regarding it as the burlesque and distorted "survival" of a sacred, comital gathering of the gens or community, in which the excrement sausage served a now completely forgotten purpose in eliminating from the people the baleful curse of witchcraft, epilepsy, jaundice, fevers, and other disorders which would not yield promptly to the simple medicaments of primitive therapeutics.

LIV.

CONCLUSION.

LASTLY, it may be urged that the thoughtful consideration of this subject will not be without results of importance to science. It shows us, if we may employ a mathematical expression, that by integrating the equation of man's development between the limits zero, in which these disgusting practices had full sway, and the limit of A. D. 1891, the precise extent of his advancement in all that we call civilization can better be understood.

The biologist and psychologist may find material to demonstrate to what extent primitive man, in corresponding environment in different regions of the world, will display the same instincts and act under identical impulses.

The student of comparative mythology will certainly discover much to interest and instruct him.

The student of folk-lore should find here a field promising the most prolific results. Folk-usage, especially in folk-medicine, — which is simply the crystallization of the mythology and religious medicine of the most primitive ages, — should respond most generously to any demands that may be made upon this and other points which the ordinary writer believes to be too unclean for his pen.

To the author it has been a work involving apparently endless research, much of it barren of result, and a correspondence with scholars in all countries, whose contributions have been of the first importance in determining that the filthy rite of urine-drinking as seen among the Zuñis of the United States was paralleled by the orgies of other savages, and had its counterparts and imitations in the "survivals," often distorted into burlesque, of nations of high enlightenment.

Verily, it may be said in concluding, as in beginning this volume, the proper study of mankind is man ; the study of man is the study of man's religion.

ADDENDA.

DR. THOMAS G. MORTON, of Philadelphia, imparts the information that not only is the use of human urine still general among ignorant women during pregnancy, but that it has been learned that female abortionists have been in the habit of vending a nostrum for defeating pregnancy, one of the components of which was the catamenial discharge.

Referring to previous remarks, on page 162, it may be noticed that a curious instance of survival by contrariety is to be detected in what Picart relates of the Hebrew ceremonial of the present day. He says of the behavior of the Hebrew while praying, that he should carefully avoid gaping, spitting, blowing his nose, or emitting any exhalations: "Il doit éviter autant qu'il se peut de bailler, de cracher, de se moucher, de laisser aller des vents. (Picart, "*Coutumes et Cérémonies*," &c., vol. i. p. 126). All this information seems to be taken from the work of the Rabbi Leon, of Modena.

In the above are seen the antipodes of the practices characteristic of the worship of Baal-Peor which the prophets had so much trouble in eradicating from the minds of the chosen people.

BIBLIOGRAPHY

OF THE PRINCIPAL AUTHORITIES CONSULTED.

-
- Abbot, The, Sir Walter Scott
 Aborigines of Victoria and Riverina,
 Beveridge, Adelaide
 Abyssinia, A Visit to, W. Winstanley,
 London, 1881.
 Abyssinian Women (in Evening Star,
 Washington, D. C.).
 Acosta, Historie of the Indies, edition of
 London, 1604.
 Adanson, Voyage to Senegal, in Pink-
 erton.
 Adventure and Beagle, Voyage of, Lon-
 don, 1830.
 Æschines of Athens (389-317 B. C.).
 Africa, Across, Cameron, London, 1877.
 Africa, Observations of, John Leo, in
 Purchas.
 Afrida, King, in Arabian Nights.
 Ajax, Sir John Harington.
 Alaska, Whympers, London, 1868.
 Allen, H. T., Doctor, Secretary of the
 Korean Legation.
 American Anthropological Society,
 Transactions, Washington, D. C.
 American Anthropologist, Washington,
 D. C.
 American Association for the Advance-
 ment of Science.
 American Historical Review.
 American Philosophical Society's Trans-
 actions.
 Anacalypsis, Godfrey Higgins, London.
 Anatomy of Melancholy, Burton, edi-
 tion of London, 1806.
 Ancient Classics for English Readers,
 Philadelphia, 1872.
 Ancient Faiths, Inman, London, 1878.
 Ancient Mysteries Described, Hone,
 London, 1823.
 Andrews, Latin Dictionary.
 Animal and Plant Lore, Mrs. Fanny
 D. Bergen, in Popular Science
 Monthly.
 Anthropological Institute of G. Britain,
 Antiquarian, American, Chicago, Illi-
 nois.
 Antiquité Expliquée, L', Montfaucon.
 Antiquities, Popular, Brand.
 Apocryphal New Testament, William
 Hone, London, 1820.
 Apologia adversus Phil. et Med. Cal-
 umniatores, Pellegrini.
 Apuleius, quoted.
 Arabia, Description of, Niebuhr, Am-
 sterдам.
 Arabian Nights, Burton's edition.
 Araucanians, Smith, New York, 1885.
 Archer, T. A., Third Crusade and Rich-
 ard the First, New York, 1889.
 Arctic Province, Our, Elliott, W. H.,
 New York, 1887.
 An Artist's Wanderings in British
 North America, Paul Kane, Lon-
 don, 1859.
 Asiatic Researches, Calcutta, 1800.
 Asiatic Society.
 Assyria, Ragozin, New York, 1887.
 Assyrian Discoveries, George Smith,
 London, 1877.
 Athanasius, Saint.
 Atkinson, T. W., Oriental and Western
 Siberia, New York, 1865.
 Augustine, Saint, Civitas Dei.
 Australia, Nat. Tribes of S., Adelaide.
 Australian Race, E. M. Carr, Melbourne.
 Auroche, D', the Russian explorer.
 Averrhoes, Latin edition of, Lyons,
 1537.
 Avicenna.
 Baegert, Jacob (S. J.)
 Baker, George, Newe Jewell of Health,
 London, 1576 (Black Letter), trans-
 lated from Gesnerus.

- Baker, Sir Samuel, *The Albert Nyanza*, Philadelphia, 1869.
- Balboa, *Histoire de Perou*, in Ternaux, Paris.
- Bancroft, H. H., *Native Races of the Pacific Slope*.
- Bandelier, Professor A. E.
- Banier, Abbé, *Mythology*, English translation, London, 1740.
- Banks, J., Reverend, edition of Hesiod, *Opera et Dies*, London, 1885.
- Barbary, *Travels in*, Shaw, in Pinkerton.
- Baronius, *Annales*, Lucca, 1758.
- Barrington, *Observations on the Statutes*, London, 1775.
- Barrow Point, *Report on International Expedition to*.
- Barry, Ludowick, *Ram Alley*, London, 1611.
- Barth, Henry, Doctor, *Travels in Africa*, Philadelphia, 1839.
- Basil, Christian Father.
- Bastian, *Allerlei aus Volks und Menschenkunde*.
- Baudin, P., Reverend, *Fetichism and Fetich Worshipers*, New York, 1885.
- Baudin, Reverend Father P., *Fetichism*, New York, 1885.
- Bauer, Dr., *Report on Urates of Ammonia in treatment of Phthisis*.
- Baxter, Sylvester, Boston, Massachusetts.
- Bayle, Henri, *Philosophical Dictionary*, edition of 1737.
- Beadle, J. H., *Western Wilds*, Cincinnati, Ohio, 1878.
- Beaumont and Fletcher.
- Beckherius, Daniel, *Medicus Microcosmus*, London, 1660.
- Bee, of Omaha, Nebraska.
- Beef Tea, Liebig's Ext. and Urine, Dr. Neale, in *Practitioner*, London, 1881.
- Beletus, quoted.
- Bell, *Travels in Asia*, in Pinkerton, vol. 7.
- Beniowski, Russian explorer.
- Benjamin, G. W., Honorable, Persia, New York, 1888.
- Berchon, Ernest, *Histoire Médicale du Tatouage*, Paris, 1867, quoted.
- Bergen, F. D., Mrs., Cambridge, Mass.
- Bergen, Joseph Y., Jr., Cambridge, Mass.
- Bergen, Mrs. Fanny D.
- Bernard, Doctor, Cannes, France.
- Bescherelle's French Dictionary.
- Beveridge, *Aborigines of Victoria and Riverina*, Adelaide.
- Beverly, Virginia.
- Bible.
- Bibliotheca Scatologica (anonymous).
- Billings, John S., Surgeon U. S. A.
- Biography of Words, Max Müller, London, 1888.
- Bizouard, J., *Rapports de l'Homme avec le Démon*, Paris, 1864.
- Black, William George, *Folk-Medicine*, London, 1883.
- Blade, J. F., *Contes et Proverbes populaires*, quoted.
- Blambeausant, *Tragedy of the Gout* (A. D. 1600).
- Bleekens, Dittmar, in *Purchas*.
- Blount, *Tenures of Land and Customs of Manors* (Hazlitt's edition, London, 1874). Previous edition of same work was called *Jocular Tenures*.
- Blount, *Voyage into the Levant*, in Pinkerton.
- Blower, Ralph, *A Rich Storehouse or Treasure for the Diseased* (black letter), London, 1616.
- Blunt, *Vestiges*.
- Boas, Franz, *Thlinkeets*, in *Journal of American Folk-Lore*; also *Cent. Eskimo*, Rep. on N. W. Tribes, etc.
- Bochart, quoted.
- Bock, Carl, *Head-Hunters of Borneo*, London, 1881.
- Bogle, Thibet.
- Boniface, letters of.
- Border Land of China, W. W. Rockhill, in *Century*.
- Borellus, P., *Obser. Medic.*, quoted.
- Borlase, *Antiquities of Cornwall*, quoted.
- Borneo, *Head-Hunters of*, Carl Bock, London, 1881.
- Boscana, Geronimo, Fray.
- Bourke, John G., *Snake Dance of the Moquis*, London and New York, 1884; *Notes on the Theogony and Cosmogony of the Mojave Indians of the Colorado River*.
- Boyer's French Dictionary.
- Boyle, the philosopher.
- Brand, *Popular Antiquities*.
- Brand, *Encyclopædia of Science, Literature, and Art*.
- Brasseur de Bourbourg, introduction to *Landa*.
- Brinton, D. G., Dr., *Myths of the New World*, New York, 1868.
- British Association for Advancement of Science.
- British Monachism, Reverend Thomas Dudley Fosbroke, London, 1817.
- Browne, J. Ross, Washoe, quoted.
- Browne, Sir Thomas, *Religio Medici*.
- Bruce, James, *Travels to Discover Source of Nile*, Dublin, 1790.

- Bryant, Jacob, *Mythology*, London, 1775.
- Buchanan, *Journey through Mysore*, in *Pinkerton's Voyages*.
- Buckish Slang, *Dictionary of*, Grose, London, 1811.
- Buckle, H. T., *Commonplace Book*; *Contributions to History of the Pet. Bullfinch's Mythology* (edited by Rev. E. E. Hale), Boston, 1883.
- Buntemeyer, translation of Steller.
- Bunsen, *Analecta*, Hamburg.
- Bureau of Ethnology, Washington, D. C.
- Burton, *Anatomy of Melancholy*.
- Burton, Richard F., *Arabian Nights*.
- Bush, Richard J., *Reindeer, Dogs, and Snow-shoes*, London.
- Butler, *Hudibras*.
- Kalika Purana, *Sacred Book of the Hindus*.
- California, A. A. Robinson, New York, 1850.
- California, *Historia de Baja*, Clavigero, Mexico, 1852.
- Calmet, Dom, quoted.
- Camden, *Britannia*, edition of London, 1753.
- Cameron, *Across Africa*, London, 1877.
- Campbell, Robert Allen, *Phallic Worship*.
- Canada, *Histoire du*, Sagard, edition of Paris, 1885.
- Canada, *Report on the Tribes of N. W.*, Boas.
- Caracalla, *Life of*, Lampridius.
- Carden, J. B.
- Carpenter, Frank G., *Letters in Omaha Bee*; also in *New York World*.
- Carr, E. M., *The Australian Race*, Melbourne, 1886.
- Carter, Robert G., *Captain U. S. Army*.
- Castañeda, in *Ternaux*.
- Catalline.
- Catlin, George, artist and author.
- Catullus, *Epigrams*.
- Cedranus, the historian.
- Central Africa, Chailié Long, New York, 1877.
- Central Eskimo, Boas, in *Rep. of Bur. of Ethnology*, Washington, D. C.
- Century Magazine.
- Chaldean Account of Genesis, George Smith, New York, 1880.
- Chaldean Magic, François Lénormant, London, 1873.
- Chambers's *Book of Days*.
- Charlevoix, *La Nouvelle France*.
- Chatelain, Reverend Mr.
- Chatelet, Parent du, *La Prostitution*, Paris.
- Chile, *Historia Civil del Reyno de*, Don Juan Ignacio Molina, edition of Madrid, 1788.
- China, Bispham's expedition to, London, 1842.
- China, *Border Land of*, Rockhill.
- China, *History of*, Father Du Halde, (S. J.), London, 1786.
- China Illustrata, Father Kircher, S. J., quoted.
- China, *Religions of*, Legge.
- Chinese Minister to the United States, Chang Yen Mun.
- Chinese Repository, Canton, 1840, and other years.
- Chinichinich, Father Geronimo Boscana, in A. A. Robinson's *California*, New York, 1850.
- Chips from a German Workshop, Max Müller.
- Chrisfield, Mr., *Congressional Library*, Washington, D. C.
- Chronicle of London (A. D. 14—), quoted.
- Chrysostom, Saint, the Christian Father.
- Chylogia, Schurig, Dresden, 1725.
- Chyrurgeon's Closet, London, 1632.
- Cicero.
- Cicero, *De Natura Deorum*.
- Clarke, Ben, *Cheyenne interpreter*.
- Clavigero, *Historia de la Baja California*, Mexico, 1852.
- Clay, Cornwallis, *Seminole of Florida*.
- Clemens, Samuel (Mark Twain), *Huckleberry Finn*.
- Cochrane, John Dundas, *Pedestrian Journey through Siberian Tartary*, Philadelphia, 1820.
- Coleman, *Mythology of the Hindus*, London, 1832.
- Complete English Dispensatory, John Quincy, M. D., London, 1730.
- Complete English Physician, London, 1730.
- Concordances and Commentaries, Cowden Clark, of Shakespeare; Camden, of Scriptures; Lange's Commentaries (Dr. Philip Schaff).
- Congo, Father Merolla's *Voyage to*, in *Pinkerton's Voyages*.
- Congo, Henry M. Stanley, New York, 1885.
- Congressional Library, Washington, D. C.
- Cook, Captain, Royal Navy, in *Hawkesworth's Voyages*, London, 1773.
- Cook, Lieutenant, R. N.
- Cook, M. C., *British Fungi*, London, 1862.

- Corbusier, William H., Surgeon, U. S. A.
 Cotgreave's English Dictionary.
 Cotta, John, A Short Discoverie of the
 Vnobserved Dangers of several sortes
 of Ignorant and Vnconsiderate Prac-
 tices of Physicke in England, Lon-
 don, 1612.
 Cotting, Benjamin Eddy, M. D., Pro-
 fessional Reminiscences, Boston,
 1888.
 Coutumes et Cérémonies Religieuses de
 Toutes les Nations du Monde, Picart,
 Amsterdam, 1729, nine volumes.
 Cox, Sir Richard, History of Ireland.
 Cox, William, Russian Discoveries,
 London, 1803.
 Croq' Étron, Prince, Hist. Secrète du,
 M^{lle} Laubert, Paris, 1790.
 Cross, Masculine, 1886.
 Crusade, the Third, and Richard the
 First, T. A. Archer, New York, 1889.
 Culin, Stewart (Philadelphia), Notes on
 Chiuese Therapeutics.
 Culpepper, Nicholas, The English Phy-
 sician, London, 1765.
 Cultes, Traité des Differens, Dulaure.
 Culture, Primitive, E. B. Tylor.
 Cupid's Revenge, Beaumont and
 Fletcher.
 Cushing, Frank H., Ethnologist.
 Cyclopædia, American, New York, 1881.
 Cyclopædia, Bradford's, Philadelphia,
 no date.
 Cyclopædia, Johnson's New Universal,
 New York, 1873.
 Cyclopædia of Antiquities, Reverend
 Thomas Dudley Fosbroke, London,
 1843.
 Cyprian, Saint, the Christian Father.
 Cyril, Saint, the Christian Father.
 Dadabhai-Nadrosi, Description of the
 Parsis.
 Dahlgren, M. V., Mrs., South Mountain
 Magic.
 Dall, Masks and Labrets, Ethnological
 Bureau, Washington, D. C., Annual
 Reports.
 Dalzell, John Graham, Superstitions of
 Scotland, Edinburgh.
 Damsteter, translation of the Zend-
 avesta.
 Dana, J. J.
 Daniel Eremita, quoted.
 Dante, Inferno, Carey's Translation.
 Darwin, Charles, in Voyage of Adven-
 turer and Beagle, London, 1839.
 Davenport, On the Powers of Repro-
 duction, London (privately printed).
 Days, Book of, Chambers.
 Dead, Egyptian Ritual of the.
 De Bry, Indias Orientales, in Purchas'
 Pilgrims.
 De Candolle, botanist.
 De Janon, Patricio.
 Dekkar, Thomas, The Honest Whore,
 London, 1604.
 De Laet, John.
 Democritus, quoted by Pliny.
 Description of the Parsees, Dadabhai-
 Nadrosi.
 Descriptive Sociology, Herbert Spencer.
 De Smet, Father, missionary and ex-
 plorer, Oregon Missions, New York,
 1847.
 Deuteronomy.
 Diaz, Bernal, Conquest of Mexico, Lon-
 don, 1844.
 Diaz, Melchior, Spanish explorer.
 Dictionary, Cotgreave's English.
 Dictionary of Buckish Slang, Grose,
 London, 1811.
 Dictionary of Sects and Heresies, Ox-
 ford, 1874.
 Dictionaries quoted: — United States
 Dispensatory, Wood and Bache
 (Philadelphia, Pa., 1886); London
 Medical, edition of Bartholomev
 Parr, M. D. (Philadelphia, 1819);
 Webster's English; Worcester's Eng-
 lish; of Antiquities (London, 1850),
 Smith; Classical, Anthon's; Lem-
 priere's Classical; Neumann and Ba-
 retti's (Valasquez) Spanish-English;
 of the Spanish Academy; Stevens'
 Spanish-English (1706); Of Obsolete
 and Provincial English, Thomas
 Wright (London, 1869); Medical,
 Dunglison (Philadelphia, 1860); Dic-
 tionnaire National, Bescherelle
 (Paris, 1857); Dictionnaire Univer-
 sel du XIX. Siècle, P. Larousse;
 White-Ridley, Latin-English; of Re-
 ligious Knowledge, Abbot and Co-
 nant (New York, 1875); of the
 Bible, William Smith (New York,
 1871); of Greek and Roman An-
 tiquities, William Smith, LL.D.
 (Boston, 1849); of Sects and Her-
 esies (Oxford, 1874); Gasc, F. G. A.,
 French and English. See also under
 Cyclopædia and Encyclopædia.
 Diderot and D'Alembert, Encyclopædia.
 Dillon, Expedition in search of La
 Perouse, London, 1829.
 Dioscorus Siculus.
 Dioscorides, Materia Medica, Kuhn's edi-
 tion, Leipsig, 1829.
 Discoverie of Witchcraft, Reginald
 Scot.

- Dissertation sur le dieu Pet, M. Claude Terrain, quoted.
- Dodge, R. L., *Our Wild Indians*.
- Domenech, Abbé, *Deserts*.
- Domesday Book, quoted.
- Dorman, Rushton, *Primitive Superstitions*, New York, 1881.
- Dorsey, J. Owen, Reverend, Ethnologist, Bureau of Ethnology, U. S. A., *Teton Folk-Lore*, in *Journal of American Folk-Lore*.
- Dosabhai Framje Karaka.
- Douce, Francis, *Illustrations of Sake-speare*, London, 1807.
- Dramatists, English. See Shakespeare, Jonson, Dryden, Beaumont and Fletcher, Ludowick Barry, Middleton, Gifford.
- Dreck Apotheke, Christian Franz Paulini, Frankfort, 1696.
- Druids and their Religion, John Eliot Howard.
- Druids, Rev. Richard Smiddy, Dublin, 1871.
- Dryden, Juvenal's Satires.
- Dubois, Abbé, *People of India*, London, 1817.
- Ducange, *Glossarium, Notes on Tenures of Land by Flatulence; Notes on Toll of Flatulence exacted from Prostitutes; on Bridge-building*.
- Du Halde, Father (S. J.), *History of China*.
- Dulaure, J. B., *Des Différens Cultes; Des Divinités Génératrices*.
- Dupouy, Dr., *Le Moyen Age Médical*. See under Minor.
- Duran, Fray Diego.
- Dutch Courtesan, Marston, London, 1605.
- Eastman, Mrs., *Legends of the Sioux*, New York, 1849.
- Eaton, John Matthews, *Treatise on Breeding Pigeons*, London, no date.
- Egede, Hans, missionary and author, *Greenland*, London, 1816.
- Egede, Saabye, missionary and author, *Greenland*, London, 1816.
- Elliott, Henry W., *Our Arctic Province*, New York, 1887.
- Ellis, Havelock.
- Ellis, Polynesian Researches, quoted.
- Embassy to Thibet, Turner, London, 1806.
- Emerson, Ellen Russell, *Indian Myths*, Boston, 1884.
- Encyclopædia Britannica, edition of 1841, and other editions.
- Encyclopædias, in addition to the Britannica, examined during the preparation of this work:—
- Encyclopédie Raisonné des Sciences, etc., Neufchatel, 1765.
- Encyclopædia, Philadelphia, 1797.
- Encyclopédie, Diderot and D'Alembert, Geneva, 1779.
- Encyclopædia, International.
- Encyclopædia Metropolitana.
- Encyclopædia of Geography, Philadelphia, 1845.
- Encyclopædia of Religious Knowledge, Schaff-Herzog, New York.
- Encyclopædia, Chambers's, edition of Philadelphia, 1866.
- Encyclopædia, Bradbury and Evans, London, 1854.
- English History from Contemporary Writers, New York, 1839.
- English Reformation, Francis Charles Massingberd.
- Englishman's Treasure, The (black letter), London, 1641 (in the Toner collection, Library of Congress), written by Thomas Vicary, Surgeon to King Henry VIII., Queen Mary, and Queen Elizabeth.
- Ephemeridum Physico-Medicorum, Leipsig (printed in A. D. 1694).
- Erasmus, *De Civilitate*, quoted.
- Erlemmeyer, A., Doctor.
- Eskimo, Central, Franz Boaz, in *Ann. Rep. of Bur. of Ethnol.*
- Eskimo, *Tales and Traditions of the*, Henry Rink, Edinburgh, 1875.
- Ethnology, Bureau of, Washington, D. C., Annual Report.
- Ethnography of the Western Tribes of Torres Straits, A. C. Haddan, in *Journal of the Anthropological Institute of Great Britain*.
- Ethnological Society, London, Transactions.
- Etmuller, Michael, *Opera Omnia*, Lyons, 1690, including Comment. Ludov. and Schroderii Dilucidati, etc.
- Études de la Nature, Bernardin de Saint Pierre, quoted.
- Eusebius, *De Præparatione Evangelii*, quoted.
- Evans, Lewis, Reverend, *Translation of Juvenal*, New York, 1860.
- Evans, S. B., Doctor, Ottumwa, Iowa.
- Evening Star, Washington, D. C.
- Every Man out of his Humor, Ben Jonson.
- Exodus.
- Eyre, *Journal of the Expedition into Central Australia*, London, 1845.
- Ezekiel, Hebrew Dramatist.

- Faber, Pagan Idolatry.
 Fairy Tales, Hazlitt.
 Family, the Primitive, C. N. Starke, Ph.D., New York, 1889.
 Farce of Master Pathelin (A. D. 1480).
 Fargards, of Zendavesta.
 Fascination, La, J. Tuchmann, in Melusine.
 Featherman, A., Social History of the Races of Mankind, London, 1887.
 Fergusson, A. W.
 Ferry, Major.
 Fetishism, Schultze, New York, 1835.
 Fetishism, Father P. Baudin, New York, 1885.
 Finerty, John F., Honorable.
 Flemming, Samuel Augustus, De Remediis ex Corpore Humano desuntis, Erfurt, 1738.
 Fletcher, Alice, Sun Dance of the Ogalalla Sioux, Am. Ass. Scien.
 Fletcher, Robert, Dr., U. S. Army, Tattooing among Civilized People.
 Fletcher, Robert, M. D., President of the Anthropological Society, Washington, D. C.
 Folk-Etymology, Reverend A. Smythe-Palmer.
 Folk-Etymology, Rev. A. Smith Palmer, London, 1882.
 Folk-Lore, American Journal of.
 Folk-Lore, in Indo-Mahomedan Folk-Lore; Folk-Lore of the Pennsylvania Germans, Hoffman, in Journal of American Folk-Lore; Folk-Medicine of the Pennsylvania Germans, American Philosophical Society.
 Folk-Lore Journal (of America).
 Folk-Lore, Napier, London.
 Folk-Lore Record, London.
 Folk-Medicine, William George Black, London, 1883.
 Forbes, English-Hindustani Dictionary, London, 1848.
 Forster, Sketches of the Hindus, quoted.
 Forster's Voyages around the World, London, 1777.
 Fosbroke, Rev. Thomas Dudley, Encyclopædia of Antiquities, British Monachism, London, 1843.
 Foulke, Lieutenant, U. S. Navy.
 Fowke, Frank Rede, South Kensington Museum.
 France, La Nouvelle, Charlevoix.
 Fraser's Magazine, London.
 Frazer, James, G. M. A., The Golden Bough, London, 1890.
 Frazer, J. G., M. A., Totemism, Edinburgh, 1887.
 Frazer, John, LL.D., Australia.
 Frommann, Johannes Christianus, Tractatus de Fascinatione, Nuremberg, 1675.
 Fungi, British, M. C. Cook, London, 1862.
 Furlong, J. G., Major-General, H. B. M. A., Rivers of Life, London.
 Gaidoz, M. H., editor of Melusine.
 Galen, Opera Omnia (Kuhn's edition, Leipsig, 1829).
 Ganin, De Simplic. Medicament. quoted.
 Gatchett, Alfred, Doctor, Bureau of Ethnology, Washington, D. C.
 Genesis, Chaldean Account of, George Smith, New York, 1880.
 Geografia de las Lenguas de Mejico, Orozco y Berria, Mexico, 1854.
 Gerard of Cremona, edition of Avicenna. See Avicenna.
 Gesnerus, Dr., Newe Jewell of Health, London, 1576 (black letter). See also under Baker, George.
 Gibbon, Edward, the historian.
 Giessein, De Mater. Medic. quoted.
 Gifford's translation of Juvenal See Juvenal.
 Gilder, William H., Schwatka's Search, New York, 1881; Ice-Pack and Tundra, New York, 1883; Personal Letters from.
 Gilmour, James, Rev., Among the Mongols, London, 1883.
 Glossarium, Duçange.
 Gmelin, Russian explorer.
 Goclenius, Roderick, Physiol. Crepitus Ventris, Frankfort, 1607, quoted.
 Goldsmith, Oliver, Letters from a Citizen of the World, edition of 1854.
 Gómara, Historia de las Indias.
 Goodwin's Translation of Plutarch's Morals, Boston, 1870.
 Googe, Barnaby, Translation of Naegorgus, quoted.
 Gorcus, medical writer, quoted.
 Gospel of the Infancy.
 Greenland, History of, Crantz, London, 1767.
 Greenland, Graah, London, 1837.
 Greenland, Hans Egede.
 Greenland, Hans Egede Saabye, London, 1816.
 Gregory IX., Pope.
 Grievé, James, Journal.
 Grimm, Jacob, Teutonic Mythology.
 Grose, Dictionary of Buckish Slang, London, 1811.
 Gufer, John, Medicin. Domestic. quoted.
 Guida alla Chimica, quoted.

- Guignas, de, *Voyage de Pekin à Paris*, Paris, 1808.
- Guinea, Bosman, in Pinkerton.
- Gulliver's Travels, Jonathan Swift.
- Haddon, A. C., *Ethnography of the Western Tribes of Torres Straits*, in *Journal of Anthropological Institute of Great Britain*.
- Hagendornius, Ehrenfreid, quoted.
- Hahan, Theophilus, Reverend.
- Hahn, Theophilus, missionary.
- Hakluyt Society Publications, London.
- Hakluyt, Voyages.
- Hammond, ex-Surgeon, General U. S. Army, *Physiological Memoirs*, New York, 1863.
- Harington, Sir John, Ajax, London, 1596.
- Harman's Journal, Andover, Massachusetts, 1820.
- Harper's New Monthly Magazine, New York.
- Hastings, Dr., *On the Medical Value of the excreta of Reptiles in the treatment of Phthisis*.
- Hawkesworth's Voyages, London, 1773.
- Hayes, Doctor, Arctic explorer.
- Hazlitt, Fairy Tales.
- Heath, Perry S.
- Healey, Michael, Captain, U. S. R. M. Cutter "Bear."
- Heard, Albert F., *Russian Creed and Russian Dissent*, New York and London, 1887.
- Heart of Africa, Schweinfurth, London, 1872.
- Helvetius, John Freder., Diribitor, quoted.
- Henshaw, H. C., Professor, Bureau of Ethnology, Smithsonian.
- Herald, Sunday, Washington, D. C.
- Hermann, edition of *Orphei Fragmenta*.
- Herodotus.
- Herrera, Antonio, *Decades*, Madrid.
- Hershon, Paul Isaac, *Talmudic Miscellany*, Boston, 1880.
- Hesiod, *Opera et Dies*, Rev. J. Banks, London, 1857.
- Hibernicis, De Rebus, Vallencey.
- Hidatsa, Surgeon Washington Matthews, U. S. Army.
- Higgins, Godfrey, *Anacalypsis*, Celtic Druids.
- Hindus, *Mythology of the*, Coleman, London, 1832.
- Hippocrates, Adams' edition, Sydenham Society, London, 1849; Kuhn's edition, Leipzig, 1825.
- Histoire de Paris*, Dulaure, 1825.
- Histoire Médicale du Tatouage*, Ernest Berclion, Paris, 1867.
- Histoire Secrète du Prince Croq' Etron*, M^{lle} Laubert, Paris, 1790.
- Historia de las Indias*, Gomara.
- Hittell, John S., San Francisco, Cal.
- Hoffman, Dr. W. J., Bureau of Ethnology, Washington, D. C.
- Hoffman, W. J., M. D., *Folk-Lore of the Pennsylvania Germans*, *Folk-Medicine of the Pennsylvania Germans*, (American Phil. Society).
- Holder, A. B., Dr., *The Bote*, in *New York Medical Journal*.
- Homcr.
- Homer Burlesqued.
- Homœopathic Journal.
- Hone, William, *Ancient Mysteries*, *Apocryphal Gospels*, London, 1820; *Every Day Book*, London, 18—.
- Honest Whore, The, Thomas Dekkar, London, 1605.
- Hoosier in Russia, Perry S. Heath.
- Horace, Latin poet, *Satires*.
- Horsford, E. N., Professor, Harvard University.
- Hospinian, de *Origine Festorum Christianorum*, quoted.
- Howard, John Eliot, *The Druids and their Religion*.
- Huc, Abbé, *Travels*, etc.
- Hudibras, Butler.
- Huien-Tsang, a Buddhist traveller.
- Humphrey Clinker, Tobias Smollett.
- Hunerwolf, Jacob Augustine, Doctor (1694).
- Ice-Pack and Tundra, W. H. Gilder, New York, 1881.
- Inamma, Padre (S. J.), missionary to Lower California.
- Incas, *Fables and Rites of the*, Padre Cristoval de Molina (translated by Clements C. Markham), Hakluyt Society Transactions.
- India, Rousselet, London, 1876.
- India, Modern, Monier Williams, London, 1878.
- Indian Names of Places near the Great Lakes, Kelton.
- Indias, *Historia de las*, Gomara.
- Indo-Mahomedan Folk-Lore.
- Ingoldsby Legends, American edition.
- Inman, *Ancient Faiths embodied in Ancient Names*, London, 1878.
- International Polar Expedition to Point Barrow, Report of, Washington.
- Ireland, *Ancient Legends and Superstitions of*, Lady Wilde, Boston, 1888.
- Ireland, *History of*, Sir Richard Cox.

- Ireland, Medical Mythology of, James Mooney.
- Irish, Manners and Customs of the Ancient, Eugene O'Curry, New York, London, Edinburgh, and Dublin, 1873.
- Irwin, B. J. D., Surgeon, U. S. Army.
- Jack of Dover's Quest of Inquiry, in Percy Soc. Publications.
- Jaeger, Gustav, Doctor, Stuttgart, Germany.
- Jahrbuch für Erdkunde, Dresden, 1870.
- James, H. E. M., The Long White Mountain, London, 1888.
- Japan, History of, Kemper, in Pinkerton.
- Jarchi, Solomon Ben, Rabbi, Commentaries, quoted.
- Jennings, Hargrave, Phallicism, London, 1884.
- Jesuit Missions, Bishop Kip.
- Jesuit Relations.
- Jesuits in North America, Francis Parkman, Boston, 1867.
- Jews, Wars of the, Josephus.
- Jex-Blake, Reverend, his account of Hindu temples.
- Joest, Wilhelm, Tatowinen, Narbenzeichnen und Körper-bemalen, Berlin, 1887.
- John XXI., Pope, medical writings of, quoted.
- Johnson, Richard, Master, in Purchas.
- Johnstonus, J., Thaum. admirand. homin., quoted.
- Jones, Sir William.
- Jonson, Ben, dramatist.
- Jonson, Ben, Works of, Gifford's edition; The Staple of News.
- Josephus, De Bello Judaico.
- Josephus, Wars of the Jews.
- Jouan, Henri, Captain, French Navy.
- Journal of American Folk-Lore, Boston, Mass.
- Journal of the Anthropological Institute of Great Britain, London.
- Juvenal. The following editions have been examined: Translation by Rev. Lewis Evans, Oxford, New York, 1860; Gifford's Translation; Edward Walford, M. A., Baliol, Oxford.
- Juvenal, Satires of, translations of Evans, Dryden, and Gifford.
- Kalevala, Scandinavian saga.
- Kamtchatka, Steller (Bunnemeyer's translation.)
- Kamtchatka and the Kurile Islands, James Grieve, Gloucester, Eng., 1764.
- Kamtchatka, History of, Steller. See Steller.
- Kane, Paul, Artist's Wanderings in North America, London, 1850.
- Kelton, Dwight H., Indian Names of Places near the Great Lakes.
- Kemper, History of Japan, in Pinkerton's Voyages.
- Kennard, Mr., U. S. Coast Survey, describes a urine orgie.
- Kennon, George, Tent Life in Siberia, New York, 1885.
- Kingsborough, Lord, Mexican Antiquities.
- Kingsley, J. W., Doctor, Cambridge, England.
- Kipling, Rudyard, Soldiers Three, New York, 1890; Plain Tales.
- Kircher, Father, (S. J.), China Illustrata, quoted.
- Knight, R. Payne.
- Knox, Voyages and Travels, series, London, 1777.
- Kolben, Peter, Voyage to the Cape of Good Hope, in Knox, Voyage, London, 1777.
- Kotzebue, Voyages, etc., London, 1821.
- Krachenninikoff, a Russian explorer.
- Krenitzin, Voyage, etc., quoted in Coxe's Russian Discoveries.
- Krusenstern, Voyage round the World (English translation), London, 1813.
- Kubary, Religion of the Pelew Islands, quoted.
- Kyngdon, F. B., Secretary of Royal Society, Sydney, New South Wales.
- Lactantius, Divinarum Institutionum, Institutes, Divinas ejus, etc., quoted.
- Lafitau, Père.
- La Flesche, Francis, American Anthropological Society.
- Lampridius, Life of Caracalla.
- Lampridius, Life of the Emperor Commodus.
- Lancet, London.
- Landa, Cosas de Yucatan (French edition), Paris, 1864.
- Lang, Andrew, Myth, Ritual, and Religion, London, 1887.
- Lang, Professor, of Germany.
- Langsdorf, Voyages, etc., London, 1814.
- Lansdell, Henry, Through Siberia, London, 1882.
- Lanzoni, Joseph, Doctor (A. D. 1694).
- Lapland, Danish, Account of, Leems, in Pinkerton.
- Laubert, M^{lle}, Histoire Secrète du Prince Croq Étron, Paris, 1790.
- Leechdoms, Saxon.

- Leem, Danish Lapland, in Pinkerton.
 Legge, Religions of China.
 Le Jeune, Father, missionary.
 Lemnius, Levinus, Secret Miracles of Nature (English translation), London, 1658.
 Lemprière, Classical Dictionary.
 Lena Delta, In the, George W. Melville, Chief Engineer, U. S. Navy, Boston, Mass., 1885.
 Lenormant, François, Chaldean Magic.
 Leo, John, Observations of Africa, in Purchas.
 Leon of Modena, Rabbi, quoted.
 Lerousse, P., Grand Dictionnaire Universel, Paris, 1875.
 Le Roux de Lincy, Livres des Proverbes Français, Paris, 1848.
 Le Sage, El Bachiller de Salamanca.
 Leviticus.
 Lewis and Clark, explorers.
 Liebig's Extract, Beef Tea, and Urine, Richard M. Ncale, M. D., in the Practitioner, London.
 Linnaeus.
 Lippincott's Magazine, Philadelphia, Penn.
 Lisiansky, Voyages around the World, London, 1814.
 Littre, French Dictionary.
 Livingston, Zambesi, London, 1865.
 Long, Chaillé, Central Africa, New York, 1877.
 Long, Voyages; Expedition, Philadelphia, 1823.
 Lucian, Dialogues, quoted; De Dea Syra, quoted; Tragopodagra, quoted, (edition of William Tooke, F. R. S.), London, 1820.
 Lucian, Tragopodagra, edition of William Tooke, F. R. S., London, 1820.
 Lucilius, Satires, translated by Rev. Lewis Evans, edition of New York, 1860.
 Lucretius, De Natura Rerum, translation of John Mason Goode.
 Lumholtz, Carl.
 Lyon, G. F., Journal.
 Macaulay, Mr., (of Philadelphia, Penn.), his description of a Phallic survival in the Riviera, Italy.
 Macaulay, T. B., Essays.
 McClintock and Strong, Cyclopædia of Biblical, Theological, and Ecclesiastical Literature, New York, 1880.
 McElhone, Mr., stenographer of the House of Representatives, Washington, D. C.
 McFeely, Robert.
 McGillicuddy, V. T., Doctor, Dakota.
 Magdeleine, E., Le Gui de Chêne et les Druides, Paris, 1877.
 Magic, Chaldean, Lenormant, London, 1872.
 Magic, South Mountain, Mrs M. V. Dahlgren, Boston, 1882.
 Mallory, Garrick, Colonel.
 Malleus Maleficarum (Incunabula), Press of Peter Schoeffer, Mayence, 1487.
 Maltebrun, Universal Geography, American edition, Philadelphia, Penn., 1832.
 Mandeville, Sir John, Travels.
 Mann, John F., Australia.
 Manners and Customs of the Ancient Irish, Eugene O'Curry, London, New York, Dublin, and Edinburgh, 1873.
 Manning, Letters on Thibet. See in Markham.
 Mantegazza, Gli amori degli uomini.
 Maoris of New Zealand, E. T. Tregear, in Journal of Anthropological Institute, London.
 Marco Polo.
 Markham, Clements C., translation of the Commentaries of Garcilasso de la Vega; his work on Thibet, London, 1879.
 Marston, Dutch Courtesan, London.
 Martial, Epigrams, edition of, London, 1871.
 Masculine Cross, 1886.
 Masks and Labrets, Dall.
 Massingberd, Francis Charles.
 Matthew of Paris, Chronicles.
 Matthews, John, Esq., Victoria, Australia.
 Matthews, John, Lieutenant, Royal Navy, Voyage to Sierra Leone in 1785, London, 1788.
 Matthews, Washington, Surgeon, U. S. Army, Hidatasa.
 Maurice, Indian Antiquities, London, 1800.
 Maximilian, Prince of Wied, Travels, etc., London, 1843.
 Max Müller, Sacred Books of the East, Oxford, 1880.
 Mayor of Tamborough, Beaumont and Fletcher.
 Medical Journal, New York.
 Medical Writings of Pope John XXI., quoted.
 Medicines, Most Exalted and most Improved, London, 1652.
 Meignan, Paris to Pekin, London, 1885.
 Melusine (Gaidoz), Paris.
 Melville, George W., Chief Engineer, U. S. Navy.
 Mendieta, in Icazbalceta, Mexico, 1870.

- Merolla, Father, Voyage to the Congo, in Pinkerton.
- Mew, W. M., Surgeon, U. S. Army, Analysis of ordure pills.
- Mexican Antiquities, Lord Kingsborough, London.
- Mexico, Conquest of, Bernal Diaz, London, 1844.
- Michaud, the historian.
- Michluchs-Maclay.
- Middle Ages, The Physicians of, T. C. Minor, M. D., Cincinnati, Ohio, 1889.
- Middleton, Thomas, A New Way to catch the Old One, London, 1608.
- Mindeleff, Victor.
- Minor, T. C., M. D., Physicians of the Middle Ages, Cincinnati, Ohio, 1889.
- Minutius Felix, Octavius.
- Miscellanea Antica Anglicana, quoted.
- Miscellaneous Writings upon Drama and Fiction, Wharton.
- Molina Don Juan Ignacio, Historia Civil de Chile, edition of Madrid, 1788.
- Molina, Padre Cristoval de, Fables and Rites of the Yncas (translation by Clements C. Markham), Hakluyt Society Transactions, London.
- Monarchia Indiana, Torquemada, Madrid, 1723.
- Mongols, Among the, Rev. James Gilmore, London, 1883.
- Montaigne, Michel, Essays.
- Montfaucon. L'Antiquité expliquée, Bernard Montfaucon, Benedictine Monk, called the "Learned Benedictine."
- Mooney, James, Bureau of Ethnology, Washington, D. C.
- Moor, Edward, Hindu Pantheon, London, 1810.
- Moore, John, Surgeon General.
- Moore, Sir John.
- Moore, Sturtevant, Past Assistant Engineer, U. S. Navy.
- Morals, Plutarch, Goodwin's English translation, Boston.
- More, Sir Thomas
- Mosheim, Ecclesiastical History.
- Motolinia, Fray Toribio de Benvento, The unknown Franciscan.
- Moyen Age Médical, Le, Dupouy, Paris, 1888. See Physicians of the Middle Ages, Minor.
- Moyen de Parvenir (A. D. 1610).
- Müller, Max.
- Musarum Deliciae.
- Museum, Army Medical, Washington, D. C.
- Museum, National, Washington, D. C.
- Mynier, Le, a Farce of the 14th century.
- Myth, Ritual, and Religion, Andrew Lang, London, 1887.
- Mythology, Banier. See Banier.
- Mythology, Bryant, Jacob, London, 1775.
- Mythology, Bulfinch (revised by the Rev. E. E. Hale), Boston, 1883.
- Myths in Medicine, Garrett, New York, 1884.
- Myths of the New World, D. G. Brington, New York, 1868.
- Nannoff, Victor, Alaska.
- Nares, quoted.
- National Museum, Washington, D. C.
- Native Races of the Pacific Slope, H. H. Bancroft.
- Native Tribes of South Australia.
- Neale, Richard, M. D., Beef Tea, Liebig's Extract, and Urine, in the Practitioner, London.
- Neilgherries, Hill Tribes of the, Short, in Ethnol. Soc. Transactions, London, 1881.
- New, Charles, Life and Wanderings in East Africa, quoted.
- New South Wales, Royal Society, Sydney.
- New Zealand, Maoris of, Tregear, in Journal of the Anthropological Institute of Great Britain.
- Newell, W. W., Voodoo Worship in Hayti and Louisiana.
- News, Chicago, Illinois.
- Niebuhr, Description of Arabia, Amsterdam, 1774.
- Nile, Speke, London, 1863.
- Nolan, Nicholas, Major, U. S. Army.
- Nordenskjöld, Voyages, London, 1882.
- Notes and Queries, London, 1850.
- Notre Dame, Victor Hugo.
- Nouvelle France, La, Charlevoix.
- Nyanza, The Albert, Sir Samuel Baker, Philadelphia, Penn., 1869.
- Oakes, R. A., Professor.
- Oatman, Alice, Captivity of the Oatman Girls, San Francisco.
- Obersteiner, H. B., Doctor.
- O'Curry, Eugene, Manners and Customs of the Ancient Irish, New York, London, Dublin, and Edinburgh, 1873.
- O'Donovan, Three Fragments of Irish Annals, quoted.
- Omahas, Death and Funeral Customs among the, Francis La Flesche, in Journal of American Folk-Lore.
- O'Reilly, Robert M.
- Origen, early Christian writer.

- Orinoco, Padre Gumilla, Madrid, 1741.
 Oritrika, Von Helmout, London, 1662, English translation.
 Orozco y Berra, Geografía de las Lenguas de Mejico, Mexico, 1854.
 Orphei Fragmenta, Hermann's edition.
 O'Sullivan, Introductory to O'Curry. See O'Curry.
 Ovid, Fasti, quoted.
 Ovid, quoted.
 Pagan Idolatry, Faber, London, 1816.
 Pallas, Voyages.
 Palmer, Smythie, Rev. A., Dictionary of Folk-Etymology, London, 1882.
 Palmer, Edward, Esq., Brisbane, Queensland.
 Palmer, W. J., quoted by H. H. Bancroft.
 Pangborn, Dr., San Carlos Agency, Arizona.
 Paracelsus, Experiments, etc., English translation, London, 1596; Archidoxes, English edition of, London, 1661; Secrets of Physicke, English edition, London, 1633.
 Paris to Pekin, Meignan, London, 1885.
 Park, Mungo, Travels in Africa, in Pinkerton.
 Parkman, Francis, Jesuits in North America, edition of Boston, 1837.
 Parry, Captain, R. N.
 Pathelin, Master, the Farce of (A. D. 480).
 Paullini, Franz Christian, Dreck Apothek (Fifth Pharmacy), edition of Frankfurt, 1696.
 Peirce, Colonel.
 Pennant's Tour in Scotland, in Pinkerton.
 Pennsylvania Germans, Folk-Lore of the, Hoffman; Folk-Medicine of the, Hoffman.
 Percy, Charles, M. D., A View of the Levant, London, 1743.
 Percy Society Publications.
 Persia, Benjamin, London, 1887.
 Peru, Histoire de, Balboa, in Ternaux.
 Petraeus, Henricus, Nosolog. Harmon.
 Petroff, Ivan.
 Pettigrew, Medical Superstitions, Philadelphia, Penn., 1844.
 Pfanner, Tob., quoted.
 Phallic Worship, Robert Allen Campbell, Saint Louis, 1888.
 Phallicism, Hargrave Jennings, London, 1884.
 Phillips' Voyages, London, 1807.
 Philosophy of Magic, Salverte, New York.
 Philosophical Transactions.
 Physicians of the Middle Ages T. C. Minor, M. D. See under Minor and Dupouy.
 Picart, Coûtumes et Cérémonies Religieuses, etc.
 Pidgeon, Dee-coo-dah, New York, 1853.
 Pigeons, Treatise on Breeding, John Matthews Eaton, London (no date).
 Pinkerton's Voyages, 1814.
 Pliny, Natural History (Bohn's translation).
 Plutarch, Essays on Superstition, Morals.
 Plutarch, Morals, Goodwin's edition.
 Pocock, Travels in Egypt, in Pinkerton.
 Polo, Marco, the Venetian traveller, lived among the Tartars in the 13th century.
 Polydorus, Virgil.
 Polynesian Researches, Ellis, quoted.
 Pomet, History of Drugs, London, 1737.
 Poor Man's Physician, John Moncrief, Edinburgh, 1716.
 Pope Gregory IX.
 Pope John XX., medical writings quoted.
 Popular Antiquities, Brand, London, 1873.
 Popular Science Monthly.
 Porson, the Greek scholar.
 Porter, J. H. Doctor, notes on Witchcraft, on Mushrooms, on the Mahā-Bhārata and the Vedas, on the lack of Latrines in Mexico, on Latrines in Alaska, on washing Clothes with Human Urine.
 Practitioner, The, London, 1881.
 Pratimoksha Sutra, translation of W. W. Rockhill (Soc. Asiatique).
 Pratz, Mr., translations of German works referred to in this volume.
 Press, Philadelphia, Penn.
 Primitifs, Les, Élie Réclus, Paris, 1885.
 Primitive Culture, E. B. Tylor.
 Prostitution, La, Parent du Chatelet, 1857.
 Psychiatrisches Centralblatt, Vienna.
 Purchas, Pilgrims.
 Putnam, F. W., Professor.
 Rabelais.
 Rabelais, Thirteenth Chapter, Anis-terges.
 Ragozin, Assyria, New York, 1887.
 Rainey, Charles and Joe, Bannock Indians.
 Ram Alley, Ludowick Barry, London, 1611.
 Rau, Charles F., Dr., Smithsonian Institution.

- Reads, W. Winwood, *Veil of Isis*, London, 1861.
- Réclus, Elie, *Les Primitifs*, Paris, 1885.
- Record of Living Officers of the U. S. Army, Hamersley.
- Rees' Cyclopædia of Arts, Sciences, and Literature, Philadelphia, no date.
- Reflections, Moral and Cosmical, A. D. 1707.
- Regnard, Journey to Lapland, in Pinkerton.
- Religious Sects of the Hindus, in Asiatic Researches, vol. xvii.
- Report of the International Polar Expedition to Barrow Point, Washington, D. C., March, 1885.
- Reports of the U. S. Bureau of Ethnology, See Ethnology.
- Report on the North West Tribes of Canada, Franz Boas.
- Rhabanus Maurus, a theological writer.
- Richardson, Dr., Arctic explorer, Polar Regions, Edinburgh; Arctic Searching Expedition, London, 1851.
- Riedlinus, Linear. Medic., 1697, quoted.
- Rink, Henry, Tales and Traditions of the Eskimo, Edinburgh, 1875.
- Ritos antiguos, etc., Motolinia, in Kingsborough.
- Ritual of the Dead (Egypt).
- Rivers of Life, Major General Forlong.
- Rives, Amelie, Virginia of Virginians, New York, 1886.
- Rochevoucauld, Maxims.
- Rockhill, W. W., Oriental scholar and Tibetan explorer.
- Rockhill, W. W., translator of the Pratimoksha Sutra, which see.
- Rome, History of, Victor Duruy (English translation), Boston, 1887.
- Romelius, P., quoted.
- Rosinus, Lentilius, Doctor, 1694.
- Roubaud, Abbé, Le Pétrade, quoted.
- Royal Society, Sydney, New South Wales.
- Rubruquis, William de, a Franciscan monk, sent by King Louis on a mission to the Grand Khan of Tartary, in 1253.
- Russian Church and Russian Dissent, Albert F. Heard, New York and London, 1887.
- Russian Discoveries, William Coxe, London, 1803.
- Sagen-Märchen, Volksaberglauben aus Schwaben, Drs. Birlinger and Buck, Freiburg, 1861.
- Sahagun, Bernardo, Fray, in Kingsborough.
- Saint James Gazette, London.
- Saint John, Spencer, Life in the East, London, 1842.
- Saint Pierre, Bernardin, Études de la Nature.
- Salamanca, Bachiller de, Le Sage.
- Salverte, Eusebe, Philosophy of Magic, New York, 1862.
- Samoa, Turner, London, 1884.
- Sarytschew, Gavril, in Phillips' Voyages.
- Satires of Juvenal. See Juvenal.
- Sauer, Expedition to the North Parts of Russia, London, 1802.
- Saul, Hebrew King.
- Sauvage, Nosologie Méthodique, quoted.
- Saxon Leechdoms.
- Scandinavia, the Primitive Inhabitants of, Sven Nilson, edited by Sir John Lubbock, London, 1868.
- Schæderas, John, Pharmacop. Med. Chym., quoted.
- Schaff-Herzog, Encyclopædia of Religious Knowledge, New York.
- Scharf, Benjamin, Doctor (A. D. 1694).
- Schultze, Fetishism, New York, 1885.
- Schurig, Chylogologia, Dresden, 1725.
- Schwatka's Search, William H. Gilder, New York, 1881.
- Schweinfurth, Heart of Africa, London, 1872.
- Science, American Association for the Advancement of.
- Scopetarius, quoted.
- Scot, Reginald, Discoverie of Witchcraft.
- Scott, Sir Walter.
- Secrets, Rare, in Physicke, by the Comtesse of Kent, London, 1654.
- Seeborn, Henry, Siberia in Russia, London, 1882.
- Seelye, F. A., Anthropological Society, Washington, D. C.
- Seneca, Roman author.
- Sesostrius.
- Sextus Placitus, a medical writer of 250-300 A. D., De Medicamentis ex Animalibus, edition of Lyons, 1537.
- Shakespeare.
- Shakespeare, Illustrations of, Francis Douce, London, 1807.
- Shapast la Shayast (Sacred Books of the East) Max Müller's edition, Oxford, 1880.
- Sha Rocco, The Masculine Cross and Ancient Sex Worship, New York, 1874.

- Shea, John Gilmary.
 Siberia, Erman, London, 1848.
 Siberia, T. W. Atkinson, New York, 1865.
 Siberia, Tent Life in, George Kennon, New York, 1885, 12th edition.
 Siberia, Through, Henry Lansdell, London, 1882.
 Sioux, Legends of the, Mrs. Eastman, New York, 1849.
 Sioux, Sun Dance of the Ogallalla, Alice Fletcher.
 Smiddy, Rev. Richard, The Druids, Dublin, 1871.
 Smith, Charles, Mr., translated many of the German works cited in this volume.
 Smith, Honorable E. W. P.
 Smith, George, Assyrian Discoveries, New York, 1876; Chaldean Account of Genesis.
 Smith, Mrs. James, The Roandik Tribes (Australia), quoted.
 Smith, W. Robertson, editor Encyclopædia Britannica.
 Smithsonian Institution.
 Smithsonian Contributions.
 Smollett, Tobias, Humphrey Clinker.
 Smyth, Brough, Aborigines of Australia, London, 1878.
 Snake Dance, The, of the Moquis, Bourke, London and New York, 1884.
 Société Asiatique. See Fratimokshia Sutra.
 Socrates.
 Soldiers Three, Kipling.
 Solovof, Voyages, quoted in Cox's Russian Discoveries.
 Solomon Ben Jarchi.
 South Mountain Magic, Mrs. M. V. Dahlgren, Boston, 1882.
 Sorcery and Magic, Thomas Wright, London, 1831.
 Southey, Robert, Commonplace Book, London, 1849. The Doctor, London, 1848.
 Spain, Travels in, Bourganne, in Pinkerton.
 Sparrmann, Account of Africa, in Maltebrun, and in Pinkerton.
 Speke, Nile.
 Spellman, quoted.
 Spencer, Herbert.
 Spiers and Surenné, French and English Dictionary.
 Squier, E. G.
 Standard, of London.
 Stanley, Henry M., Congo, New York, 1885; Through the Dark Continent, N. Y., 1878.
 Staple of News, Ben Jonson.
 Star, Evening, Washington, D. C.
 Steller, History of Kamitchatka.
 Steller, Kamitchatka, Bunnemeyer's translation.
 Stephens, Robert.
 Sterne, Laurence, Tristram Shandy, edition of London, 1873.
 Stillingfleet, Defence of Discourse concerning Idolatry in Church of Rome, quoted.
 Strabo, believed the Magi and the Druids were the same; his account of the Celtiberii.
 Stratton, Captivity of the Oatman Girls, San Francisco, Cal., 1857.
 Strutt, Sports and Pastimes of the English People, London, 1855.
 Struys, John, Voyages, etc., London, 1633.
 Stukeley, Account of Druidical remains, quoted.
 Suetonius.
 Sun, New York.
 Sun Dance of the Ogallalla Sioux, Alice Fletcher.
 Superstitions of Scotland, John Graham Dalyell.
 Swan, J. G., Indians of Cape Flaterry, in Smithsonian Contributions.
 Swietwn, Commentariorum, Lyons, 1776.
 Swift, Jonathan, Dean, Works.
 Tacitus, Annals (Oxford trans., London, 1871).
 Tales and Traditions of the Eskimo, Rink.
 Talmud.
 Talmudic Miscellany, Paul Isaac Hershon, Boston, 1880.
 Tattooing among civilized People, Dr. Robert Fletcher.
 Tavernier, J. B., Travels, Nouvelle relation de l'intérieur du Sérail du Grand Seigneur, Paris, 1675.
 Terence, Latin Poet.
 Ternaux Campan, Voyages, etc., Paris.
 Tertullian, Christian Father.
 Teutonic Mythology, Jacob Grimm (Stallybrass translation), London, 1882.
 Tezozomoc, Cronica Mexicana, in Kingsborough.
 Theodoret, De Evangelii veritatis cognitione, quoted.
 Thevenot, Itinerar. Orient.
 Thibet, a Description of, in Pinkerton, vol. vii., London, 1814.
 Thibet, Clements C. Markham, London.

- Thiers, J. B., *Traité des Superstitions*, Paris, 1741.
- Thurnberg, Account of the Cape of Good Hope, in Pinkerton.
- Times of India, quoted.
- Times, of New York.
- Titus Livius, quoted.
- Tollius, P., quoted.
- Tooke, William, edition of Lucian's *Tragopodagra*, London, 1820.
- Torquemada, *Monarchia Indiana*, Madrid, 1723.
- Totemism.
- Totemism, James G. Frazer, M.A., Edinburgh, 1887.
- Tournefort, *Voyage to the Levant*, ed. of London, 1718.
- Tragedy of the Gout, Blambeauseant (A.D. 1600).
- Tree, Lambert, Honorable, U. S. Minister to Russia, 40.
- Tregear, E. T., *Maoris of New Zealand*. Tribune, New York.
- Trumbull, Henry Clay, editor of *Sunday School Times*, Philadelphia, Pa., his views on Initiation by Urine, *The Blood Covenant*, Philadelphia, 1885.
- Tuchmann, J., *La Fascination*, in *Mélu-sine*, Paris.
- Turnbull, Reverend H. Clay.
- Turner's Embassy to Thibet, London, 1806.
- Turner, Samoa.
- Tylor, E. B., *Primitive Culture*, London, 1871.
- Ure's Dictionary of Arts, Manufactures and Mines, London, 1878.
- Urine Dances and Ur-Orgies, John G. Bourke, Pamphlet distributed by Smithsonian Institution, Washington, D. C., 1888.
- Valentin, Mich., quoted.
- Vallencey, General, *Grammar of the Irish Language*, *Collectanea de Rebus Hibernicis*.
- Vambéry, Arminius, *Sketches of Central Asia*, London, 1868.
- Van Stralenburgh, *Historico-Geographical Description of the Northern and Eastern parts of Europe and Asia*, London, 1736.
- Vega, Garcilaso de la, *Comentarios Reales* (Markham's Translation in the Proceedings of Hakluyt Society).
- Vestiges, Blunt.
- Victoria, *Aborigines of*, Brough Smyth, London, 1878.
- Victoria and Riverina, *Aborigines of*, Beveridge, Adelaide, 1889.
- Victoria Institute, *Transactions of*.
- Vincent, J. B., seaman, describes the Ur-Orgies of the Tchuktchi.
- Virey, *Nouvelle Dictionnaire d'Histoire Naturelle*, quoted.
- Virginia of Virginians, Amélie Rives, New York, 1888.
- Voltaire, *Essais sur les Mœurs*, Paris, 1785.
- Voodoo Worship in Hayti and Louisiana, W. W. Newell, in *Journal of American Folk-Lore*.
- Voyage of the Adventure and Beagle. Vulgate. See Bible.
- Wars of the Jews, Josephus. See Josephus.
- Washoe, J. Ross Browne.
- Webster, Noah, *English Dictionary*.
- Welford, Edward (M. A. of Baliol, Oxford), edition of Juvenal.
- Wepffer, J. J., a medical writer, quoted.
- Wharton, *Miscellaneous Writings*.
- Wheeler, J. Talboys, *History of India*.
- Whympier, Frederick, *Alaska*, London, 1868.
- Wied, Maximilian, Prince of, *Travels*, London, 1843.
- Wilde, Lady (Speranza), *Ancient Legends and Superstitions of Ireland*, Boston, 1888.
- Willoughby, Sir Hugh and others, *Voyage to Siberia*, in Pinkerton.
- Wilson, Posey, Mr.
- Winstanley, W., *A Visit to Abyssinia*, London, 1881.
- Wise, Dr.
- Wit, New Foundling Hospital of.
- Wit without Money, Beaumont and Fletcher.
- Witchcraft, *Discoverie of*, Reginald Scot.
- Wollaston, Dr., his theory of the Origin of Fairy Circles.
- Words, *Biography of*, Max Müller, London, 1888.
- World, New York.
- Wright's Political Ballads, in Percy Society Publications.
- Wright, Thomas, *Essays on Archæological Subjects*, London, 1861. *Dictionary of Obsolete and Provincial English*, London. *Sorcery and Magic*, London, 1851.

Wurtz, Mr., chargé d'affaires of the United States at Saint Petersburg. - Xenocrates, born 396 B.C. ; he employed human and animal ordure and urine, as well as all human and animal secretions and excretions in Medicine.	Zacutus Lusitanus, a medical writer, quoted. Zagoskin, Russian explorer. Zambesi, Livingston, London, 1865. Zendavesta. See Fargards. Zoological Mythology, Angelo de Gubernatis, London, 1872.

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