if applied to the bite, exercise a curative virtue and prevent hydrophobia. This dire disease has been overcome at times by profuse sweating. In a case where smothering by a feather bed was attempted, with a view to mercifully putting an end to the sufferer's existence, and where the man was left for dead, to the surprise and horror of all who saw it he crawled from beneath the feather bed; but relieved from his terrible malady. Likewise a man who, in despair, chose a hot bath as the readiest means of ending his life when victimized by hydrophobia, found to his astonishment his sensations becoming easier, and it proved the cause of restoring him to health. "A common cure in the country," says Burton, "for madness when bitten by a rabid dog, for such at least as dwell by the sea, is to duck them over head and ears in sea water. Some also use charms; every good wife can prescribe medicines."

DUCK (*see* MISCELLANEOUS).

EARWIG.

THE Earwig (*Auricularia*), has been named from the Saxon "*Ear wiega*," "Ear insect," because the hind wings resemble in appearance the human ear. (*Wiega* was a shorn bug, a beetle.) This well-known insect is called in Northamptonshire "arrawig," in Suffolk "arrawiggle," in the Eastern counties "narrow wriggle," in Leicestershire "wiggenear," in the West "yerriwig," and in the North "twitch bell." The Saxon leechdoms ordered: "For the synovia of the joints, if the synovia ooze out (*ut humore purulento, vel mucilento collecto aut viscoso generent poros quos nos transitus dicere poterimus*) take the netherward part of marche (smallage), and honey, and the smede (flour) of wheaten meal, and the

bowels of an earwig; rub them together and lay on." Robert Lovell (in 1661) told that "earwigge, being boiled in common ale, and then used to the arteries in the temples and wrists, they cause a feaver and so cure convulsions." These insects are vegetable feeders, and seek to hide themselves from the light. In the *London Pharmacopœia* (1696) it is stated that "Earwigs if dryed, and finely powdered, and mixt with hare's urine, and so put into the ears evening and morning, they do cure deafness." Pliny made mention of the ear-wax (*cerumen*) being used in medicine; and Galen thought it efficacious against "hang-nails" or "nail springs." A Saxon remedy "for stroke of viper," was "to remove from thine ears the wax, and smear around therewith, and say thrice the prayer of St. John." "Jasper Belga, a Jesuit," says Burton, "cured a mad woman by hanging St. John's Gospel about her neck." The tingling of the ears is supposed by many to signify that someone is talking of the owner, a belief which dates back as far as Pliny's time. He wrote, "When our ears do glow and tingle, some do speak of us in our absence." Again—

> "One ear tingles, some there be
> That are snarling now at me."
> —Herrick's *Hesperides*.

But it is quite a mistake to suppose that the insect will creep into the human ear, and can thence gain entrance to the brain. Dr. James Russell related, in 1879, the case of a person who became troubled with incessant sneezing, even to falling down, when the left ear was found to be blocked by an accumulation of wax in it. To be sent off "with a flea in the ear" signifies the infliction of a box or cuff on that part. Moquin Tandon said, "*Le cerumen guerissait la piqure des*

scorpions." In the South of Scotland the Earwig is a Coach-bell. For the amusement of young people the following riddle may not be out of place here :—

> "My first if lost is a disgrace,
> Unless misfortunes bear the blame;
> My second, though it can't efface
> The dreadful loss, yet hides the shame.
> My whole has life, and breathes the air,
> Delights in softness and repose;
> Oft, when unseen, attends the fair,
> And lives on honey and the rose."

In his *Tale of a Trumpet*, Hood describes Dame Eleanor Spearing as :—

> "Deaf to even the definite article;
> No verbal message was worth a pin
> Though you hired an earwig to carry it in."

EEL.

NATURALISTS know but little of the Eel's history. (*Anguila vulgaris.*) Very absurd notions prevailed of old as to how Eels were produced. They are oviparous (egg layers), have scales which are scarcely apparent, and they can live for a long time out of the water.

In the *Rich Storehouse of Medicines* (1650), as "a special remedy for the piles," it is ordered to "Take a great Silver eel, and slay it, and draw it, and let it touch neither water nor salt, but cut it in pieces, and roste it ; then (the first dripping being cast away) take the next dripping, and, with a fine linen cloth being dipped therein, the same being hot, bathe well the place grieved twice or thrice a day, and this will cure the piles if that they be never so sore:—*probatum est.*" Also, as "An approved good medicine for one that cannot hear, take a good Silver eel (if possibly she may be gotten), or else some other bright Eel, and roste her

upon a spit, and let the dripping of her be kept very clean in some earthen vessel. When you do go to bed put the quantity of a quarter of a spoonful thereof at a time into your eare, and then stop it close with a little of the wooll that groweth between the two eares of a black sheep, and let him lie on the same side; and the next night following use the contrary eare, and lie on the other side; and so let him alter this course each night, and so continue this for the space of eight or nine days, and it will help you. In *A Thousand Notable Things*, "The grease of an Eel" is commended, "with the juice of singreen (house-leek) mixed together, of each a like quantity boiled a little, and a little thereof put into the deaf ear nine nights together." Robert Lovell (1661) declared: "Eels loosen the belly, but cause fluxes; they open the windpipe, but stop the liver; they clear the voice, but infect the lungs; they increase sperme, but not good; lastly, they cause agues, hurt the stomach and kidneys, engender gravel, cause the strangury, sharpen the gout, and fill the body with many diseases; they are worst in summer, but never wholesome." "Though the Eel when dressed," writes Izaak Walton, "be excellent good, yet it is certain that physicians account it dangerous meat; and let me add this, that the uncharitable Italian bids us "give Eels, and no Wine to our enemies." Also, Old Fuller told the same story: "Eels be found in all shires of England, yet are most properly related of throughout Cambridge as most, first and best, the Courts of the Kings of England being thence anciently supplied therewith. I know the Silver eels are generally preferred; and I could wish they loved men but as well as men love them, that I myself might be comprised within the compass of that desire. The biggest Eels are ever

esteemed the best." "Eels," says Paulus Jovius, in *Burton*, "he abhorreth, in all places, and at all times; all physicians detest them, especially about the solstice."

> "What have you ate to-day, Billy, my son?
> What have you ate to-day, my only man?
> I've ate an eel pie, Mother; make my bed soon,
> For I'm sick at heart, and shall die before noon."

Eel blood contains a highly poisonous principle, as was discovered by the brothers Mosso, in Italy, twelve years ago; but this toxic poison is quite destroyed in the process of digestion after partaking of Eels as food. It can only assert its dangerous properties when inoculated beneath the skin, or injected into the blood: about a dozen drops thus inoculated will kill a dog (of about fourteen pounds weight) in less than ten minutes. The toxic substance contained in eel serum was originally called by the Mosso brothers "itio-tossina." Heat exposure to a temperature of 172° Fah. entirely destroys its virus. Diluted eel serum will serve, if injected into the blood, to protect an animal from viper venom; but eels are not of themselves endowed with any power which enables them to resist snake venom.

Scotch boys used to wear an Eel's skin round the leg whilst swimming, so as to get protection against cramp. To cure a sprain, an Eel's skin, wet and slimy as taken off the Eel, is said to be applied in Ulster. It is a custom in the north to rub warts with Eel's blood. Together with other matters, the Eel was reputed, of old, to cause hoarseness:—

> "Nux, oleum, frigus capitis, anguilaque potens,
> Ac pomum crudum faciunt hominem fore raucum."

The Conger-eel is credited with forming the chief ingredient often in turtle soup; but a special poison (or toxin) has been recently attributed to it, which at

certain times induces a choleraic attack, although at other times this soup may be taken with impunity. The Conger-eel is constantly served at foreign *tables d'hôte*; and Sir Henry Thompson has striven, amid a storm of opposition on the part of the pastrycooks, to prove that much of their choicest potage is made from the Conger-eel. Hot Eel soup was hawked in former days under the archway in Clement's Inn. This is the most glutinous fish there is; good to the navel, all below being bony, and forming the locomotive apparatus. For *Alice in Wonderland* an old Conger-eel was the drawling master who came once a week "to teach drawling, stretching, and fainting in coils." Monsieur Louis Eustache Ude, in his receipt for a matelotte of eels, says lightly: "Take one or two live eels and throw them into the fire; then, as they are twisting about on all sides, lay hold of them with a towel in your hand, and skin them from head to tail. This method is best, as it is the means of drawing out the oil. The blue skin and the oil which remain when they are skinned without being burnt are highly indigestible." Dr. Samuel Johnson, it is told in Boswell's Life, as he was passing by the shop of a fishmonger who was skinning an Eel alive, heard him curse it because it would not lie still. The Eel is proverbially tenacious of life; it is of little use for the angler who wants to kill it to knock it on the head; he should strike its *tail* two or three smart blows against something hard. In the neighbourhood of Ely (Eely?) marshes, where very large eels were formerly taken, it was a common superstition that these fish first came there through the transformation of the wives and children of certain recusant priests in the district into Eels. "How few cooks and fishermen know that, to

reduce the writhing creature to perfect stillness, it is only necessary to cut off the tip of the tail; stricken then with paralysis it is heedless even of music, and a child may handle it. Otherwise, so powerful is music over its species that Eels may be lured into nets by the melodies of fishermen." Frank Buckland speaks of an old Irish angler who used to set his Eel nets, and then beat a drum. The reason he gave was this: "Bedad, sorr, it's just to make them run; they think its a thundery night." The heart of the Eel is in its tail, probably to enable it to live long out of the water when migrating. Furthermore, the animal has spectacles of a transparent membrane to protect the eyes against mud, sand, and stones, which membrane it sheds with its skin. This is the case also with the common snake.

Reginald Scott gives a story of a priest who went out o' nights with his companions to steal the Eels from a miller's weir. The poor miller made his complaint, unwittingly, to the same priest, who undertook to denounce the thieves by bell, book, and candle. So, on the next Sunday at mass he chanted forth the following high-sounding lines:—

> "All you that have stolen the miller's eels,
> Laudate Dominum de cœlis!
> And all they that have consented thereto,
> Benedicamus Domino!"

"There," said he, "is a sauce for your Eels, my masters!"

In our juvenile days a jingling rhyme of Latin semblance taught two useful scraps of knowledge by running thus:—

> "Infirtaris, inoaknonis;
> Inmudeelis, inclanonis."

Says the Fool to King Lear, "Cry to it (your heart),

Nuncle, as the cockney did to the eels when she put them i' the paste alive." In the *Forme of Cury* is described "Ballock broth concocted from Eelys, with gynger, galyngale, canel, and peper." The Neapolitans make their Christmas fare, not of turkey, roast beef, and plum pudding, but of Eels. Formerly a large Eel was called a Fausen; and an old recipe for Eel pie was, to season the dish with sweetmeats, and a handful of currants; or sometimes the Eel was roasted. "To skin an Eel by the tail" signifies to do things the wrong way about.

An important variety of the Eel is the *gymnotus*, or Electrical eel, which may well be discussd as possessing curative powers capable of practical application to the human subject. This and the allied Torpedo were described by Professor Matteuci, of Pisa, in the *Lancet* of August 7th, 1847.

Faraday found that a shock given by the fish equals that of a battery of fifteen jars, or three thousand and five hundred inches of armed surface. Like the Torpedo (or Electric Ray, or Skate found in English seas), it owns a natural battery of cells, connected by large nerves with the brain, and kills small fish as its prey by the shocks which it generates, employing the artifice of curving itself round a fish so as to enclose it in the cavity formed by its body. The two opposite surfaces of the body are the poles, and a shock may be obtained by touching the back and the breast of the fish in salt water. Frogs distributed over many points of this (or the Torpedo's) surface give jumps at each discharge from the fish; but when often excited the discharge quickly becomes weaker, though it is soon restored again by repose. The head is the positive pole, and the tail the negative. Our common Jellyfish owns a similar

power, but in a far less degree; and its stinging properties have been employed with success for medical ends The teeth of the Torpedo are exceedingly small; and the fish found within this animal, having been eaten as food, are without blemish, their death being evidently due to the electric force employed. The apparatus inside consists of a mass of soft structure resembling "size," with a series of white columns (or cells) divided by transverse plates, between which is a fluid containing albumen and common salt. The brain itself is very small.

Seeing that the jellyfish (which Sir Spencer Wells wrote about, *vide* "Jellyfish"), has been practically employed for the relief of neuralgia and rheumatism by its minor amount of electrical force exercised when handled, stronger arguments certainly hold good for applying the Electric eel, and the Torpedo, to similar uses on a somewhat larger scale.

In May, 1859, Dr. Routh explained that "Whiting soup (for increasing the flow of breast milk) had at that time a notoriety among women, but that its effects were somewhat exaggerated. As far as my own experience goes," said he, "I give very much the preference to Conger-eel soup, which is peculiarly nourishing, and signally improves both the appetite and the strength. Like lentil powder it will often be retained by the stomach when food of any other sort is rejected." "If eels and cheese you eat, they make you hoarse," was a Salernitan precept. "The eel," says Holt, "is the very scavenger of the water; there is no filth it will not swallow." An old Welsh maxim of the thirteenth century ran: "An eel in a pie, lampreys in salt." Ely was famous for its eels, and is said to have got its name from its rents being formerly paid in eels.

EGG.

THE Egg (*Ovum*) was in Anglo-Saxon *Aie*=ey. "*Quæ bona sunt ova, hæc candida, longa, nova;*" said the Salernitan School. The *London Pharmacopœia* (1696) spoke of "Eggs in their whole substance" as "nutritive, the chief of all meats, and restorative in consumptions. The shells, either in fine powder or calcined, or made into a salt, breaks the stone, and expels it."

The white of an egg consists chiefly of albumen dissolved in water; it contains small portions of free soda and sulphur, whilst showing traces of benzoic acid. With some persons certainly, if not in all, the white of egg if taken uncooked in any considerable quantity will cause albumen to be passed in the urine; but ordinary cooking of the eggs will usually prevent this. A distinction, however, must be drawn between such form of apparent Bright's disease (systemic albumen), and actual serum albumen from true mischief of the kidneys. Any excess in albuminous food may produce the former condition, which is comparatively harmless. Abstinence from table-salt, by temporarily affecting the quality of the blood, is said to induce some systemic albuminuria for the time being, by increasing the oxidation of the albuminous food, and the excretion of urea.

The yolk of an egg contains oil, some albumen, gelatin, and water; its constituent vitellin (which is closely related to the casein of milk) forming from sixteen to eighteen per cent. of the whole. The yolk of the Egg, because of the amount of lethicin it affords, is considered unsuitable in any abundance for those liable to uric acid, gravel, or rheumatism. Eggs are forbidden also by many physicians in Bright's disease. Egg flip is valuable as a restorative in exhausted states

of the body. It is prepared by rubbing up (for each occasion) the yolk of an egg with a quarter of an ounce of fine white sugar, then adding two fluid ounces of brandy, and another of cinnamon water, and beating them all up together. Also, *lait de poule* for the debilitated or convalescent person is prepared by beating up the yolk of an egg in hot water, with sugar added, and some flavouring aromatic substance, cognac, rum, or orange-flower water. Eggs as a whole are rich in sodium, iron, and phosphoric acid. An *Esprit des œufs* was commended officially in 1878, similar to that described above, but which contained also the desiccated egg shells.

The contents of a raw egg, if swallowed at once, will effectually detach from the throat a fish bone which has stuck there; and to take straightway the white of two eggs will make an otherwise deadly dose of corrosive sublimate (perchloride of mercury) comparatively harmless. Eggs strengthen the consumptive, invigorate the feeble, and render persons who are susceptible to jaundice all but proof against it in its aggravated forms. The yolks of raw eggs are gently laxative, but hard-boiled eggs constipate. Patients have been frequently cured of obstinate jaundice by taking a raw egg on one or more mornings when fasting. Dr. Paris taught that a special oil may be extracted from (the yolks only of) hard-boiled eggs roasted in pieces in a frying-pan until the oil begins to exude, and then pressed hard. Old eggs furnish this oil most abundantly.

The composition of an egg-shell is estimated at ninety-one per cent. of carbonate of lime, six per cent. of phosphate of lime, and three per cent. of magnesia, with organic matter, and traces of sulphur and iron.

Its thin lining membrane was at one time thought efficacious in ague. Egg shells have served, when finely triturated, to cure by their potentialized lime some forms of cancer. In 1874 Dr. Grauvogl, of St. Petersburg, introduced a remedy (the nature of which was kept secret for a while) for certain kinds of cancer, giving this the name of Lapis albus. Several cases of true and incurable carcinoma (pronounced to be such by competent surgeons) were without doubt thoroughly and enduringly cured with this remedy. He then announced its character and source, *viz.*, as triturations of gneiss (primitive calcium, or lime), of the sixth or seventh potencies, decimal scale. This gneiss may be got from the mineral springs of Gastein in the valley of the Ache, which, starting from the foot of the Tauern mountains, flows in its precipitous course over formations of gneiss. The inhabitants of the valley along the river have thick necks and often goitres of immense size. Dr. Grauvogl found that the thermal springs, gushing out from the depths of the gneiss formations, seriously aggravated all carcinomatous (cancerous) growths. He therefore proved his attenuated dilutions on the sufferers, both men and women, with most astonishing curative results, though not as yet on open cancers. Indurations of the lymphatic glands were dispersed with wonderful success, provided always the patient's blood had not become seriously impaired by malarious disease.

In 1696 the Honourable Richard Boyle advised, "To make an easie diuretick, peel off the inner skin of an egg shell; then beat the shell to a very fine powder, and give about a scruple of it at a time in any convenient vehicle."

Theophrastus Paracelsus, as translated by Dr. Hester

(1633), ordered: "To make oil of eggs, take eggs, and seethe them hard; then take foorth the yelks, and stamp them in a mortar; then put them in a frying-panne and set them over the fire, and continually stirre them until you see them turne to oyle; then take them forth and put them into a canvas bagge, and presse it forth. This oyle helps wounds with great speed; it makes the hayre of the head, or beard, black; it takes away the paines of the emerodes (piles); it is excellent against burning with fire, or scalding with water. You shall understand this oyle may be made very perfect by the art of distillation without impression, as I have proved divers times." Scripture tells us (first book of *Samuel*) that the Philistines were smitten with emerods in their secret parts, and that they made golden emerods, *i.e.*, images of diseased veins, or hemorrhoids, in commemoration of delivery from this plague.

In the *Rich Storehouse of Medicines* (1650), "A very good remedy" is advised, "to cause one to make water that cannot. Take a newlaid eg, and make a hole in the greatest end of it, and take forth both the yolk and the white, and lay the hole of the eg downwards upon a hot brick stone, and let it remain so until it be so well purged that you may make powder thereof; then beat it to powder and drink it in white wine twice a day, first and last, and it will help you. This was much used by one Mr. Rose, who eased many therewith: also, it is marvellous good against the stone."

In the same *Storehouse* is given, "An experienced medicine for the procuration of nature if it be decayed (either in man or woman): Take half a nutmeg and grate it very fine, and then take a newlaid egge and set it to the fire and let it stand thus till it be blood warm, and then put therein a pretty quantity of fine

sugar, and a pretty portion of rose-water, and the grated nutmeg; and then blend all these together in the yoke of your egge, and so sup it off. Use this every morning fasting, and this will profit you very much."

When shaken up with alum the white of an egg coagulates, and makes a convenient, grateful poultice for bruises, burns, excoriations, bites and stings of insects, and local swellings. If confined in a thin muslin bag this is a popular and useful application for an inflamed eye. Also, the fresh yolk of an egg is sometimes employed with benefit as a dressing for burns, scalds, and abrasions; likewise to remove the hard crusts of skin eruptions, or to soften troublesome wax in the ear.

One condition in which eggs as food are of great service is that of cancer affecting the lower bowel, since, because they are entirely absorbed in the alimentary canal, disturbance of the lower bowel by the presence there of excrementitious matter to be voided is not incurred. A good mixture under these circumstances is that of three eggs (the whites), two eggs (the yolks), and a quarter of a pint of properly made beef tea, the eggs being first beaten up separately, and then all mixed together. After keeping the mixture in hot water until cooled enough to set, it may be given in two or three portions. Eggs are sometimes predigested with a little pancreatin, and injected as food into the lower bowel when wishing to save the stomach from use.

The ancient Welsh physician had for his medical guidance the following curious table of measurement :—

"Four grains of wheat make one pea:
Four peas make one acorn:
Four acorns make one pigeon's egg:
Four pigeon's eggs make one hen's egg:
Four hen's eggs make one goose's egg:
Four goose's eggs make one swan's egg."

Byron, in *Don Juan*, has declared :—

" Eggs, oysters too, are amatory food ;
But who is their purveyor from above
Heaven knows ; it may be Neptune, Pan, or Jove."

Dr. Stacey Jones, of Philadelphia, has commended, for abrasion of the feet and raw heels after long walking, "To apply white of egg, or wrap the sore foot in a soft greasy cloth, break an egg in the shoe, and march on." Said the *Welsh Red Book*, in the thirteenth century, "One egg is economy, two are gentility, three greediness, and the fourth is wastefulness."

Egg shells, first browned *in vacuo*, and triturated with sugar of milk to the third decimal strength, are highly extolled in America for the cure of "whites" (leucorrhœa) in women. Dr. Edsor tells of seventy cases treated consecutively in this way, and without a failure—especially when a feeling is complained of as if the back were being broken in two and tied up with a string.

In patients suffering from sore throat, when swallowing is difficult, but concentrated nourishment is necessary, the yolk of a raw egg may be turned whole into a teacup, whilst discarding the white ; now add to the yolk a pinch of salt, with a dash of vinegar or lemon-juice. It is to be swallowed entire like an oyster; and as the yolk generally breaks at the moment of swallowing, in addition to the nutriment there is thus made a soothing emollient application to the throat. Ovid alludes to the ancient, and probably earliest method of cooking eggs—on live ashes :—

"Ovaque non acri leviter versata favillâ."

Nowadays the peasant who bakes his egg in hot wood embers piled about the shell knows by a sure sign when

the inside is sufficiently cooked: as soon as a clear dewdrop exudes from the shell's top visible above the embers then the egg is done to the perfection of softness. Pope has put it on poetical record: "The vulgar boil, the learned roast an egg." And we are asked in *Job* (chap. vi., ver. 6): "Is there any taste in the white of an egg?" The shell of an egg is porous, and will absorb the smell or flavour of anything offensive placed near it. "An egg and to bed," is proverbial; but why a man should take an egg before going to bed, or should go to bed immediately after taking an egg, is a question yet to be answered. Lord Dundreary suggested, "Perhaps that he may hatch it." Eggs which are at all putrescent give special disgust to ourselves, and will sometimes provoke violent diarrhœa if eaten inadvertently. Yet the Chinese are credited with a fondness for eggs half rotten. But a really good, home-laid, fresh egg well merits the description here accorded to it.—

> "In marble walls as white as milk,
> Lined with a skin as soft as silk;
> Within a fountain crystal clear
> A golden apple doth appear.
> No doors there are to this stronghold,
> Yet thieves break in and steal the gold."

"Erbolat," says the *Forme of Cury* (1780), "was in old times a confection of herbs and eggs." Egg shells filled with scented water were used as missiles at Italian carnivals by sportive ladies who threw them about in the public ways. King John is related to have shut Maud Fitz-Walter the Fair in the highest, chilliest den of the Tower; and when neither cold, nor hunger, nor solitude broke her strength, when she still disdained his shameful suit, he foisted on her a poisoned egg, which she ate and died. Dr. King Chambers playfully alleges

that on the East coast the best plover's eggs are usually laid by gulls.

Liebig found cholesterin and iron in the yellow oil of the egg's yolk; about which still another old recipe may be given as, "A medicine for burning or scalding in any place wheresoever; take four eggs and rost them, and then take the yolks out of them, and fry them in a pan softly upon the embers till they be black; and thereof will come an oyl (which you must put in a gally-pot to be kept safe), and when you will use it take a feather and anoynt the sore therewith." The white of an Egg is a most efficacious modern remedy against burns.

It is told that once upon a time three Capuchin friars, when travelling, reached an inn which was so poorly furnished as to its larder that only a single egg and one pinch of salt could be produced for their refreshment. At first they disputed about this small meal, but at last agreed that it should become the prize of him who could quote from his breviary the most appropriate phrase. Accordingly the first friar took the egg, and struck off its top, saying: "*Sic conteret caput tuum*": "He shall bruise thy head." The second then took the decapitated egg, and putting in the salt, said: "*Accipe sal sapientiæ*": "Have salt in yourselves." It was then passed on to the third, who swallowed its contents, saying, "*Intra in gaudium Domini*": "Enter thou into the joy of thy Lord." Hasselquist writes that the women in Egypt put eggs under their armpits, and have the patience to keep them there till the eggs are hatched by the heat of the body.

Some persons are specially liable to egg-poisoning, particularly with respect to the eggs of certain birds, or eggs under extraordinary conditions of cookery or keeping.

ELEPHANT.

THE Elephant is *Elephas* (Asiatic and African), of which the well-known Eastern Elephant is a noble creature, with the highest intelligence among animals. Southey, quoting from oriental fragments, wrote: "There is a something in the half-reasoning Elephant, independent of its bulk, which distinguishes it from other quadrupeds. No person would commit any act of gross indelicacy or indecency in the presence of an Elephant more than in the presence of the wholly-reasoning being. Yet the same feeling would not prevail respecting the onlooking of a stupid rhinoceros, almost as bulky." It is of very slow growth, and goes with young till the third year, living the longest among mammals. "*Quod cito fit, cito perit.*

Du Chaillu described a royal feast which was given to him by King Obindji in Equatorial Africa. The first course was boiled Elephant, which had been cooking since the day before to make it tender. This was served to the uproarious beating of drums by some of the king's wives; but it proved abominably tough. Robert Lovell (1661) wrote about the beast: "Only the trunk, lips, and marrow of their horns are edible; yet the Ethiopians feed on their hinder parts." But the foot is really the tit-bit.

The substance of the Elephant's tusks is ivory (*ebur*; "*è barrus*" from "the Elephant"). These grow frequently to the length of six or seven feet, being proportionately thick; and one will sometimes weigh a hundred and sixty pounds. The African ivory turns yellow by keeping, but that from Ceylon preserves its whiteness longer.

Its shavings are boiled in water to make a jelly, which resembles that from hartshorn (which *see*). The African

Ivory abounds most with oil and salt, the qualities of which do not differ from those possessed by hartshorn. When burnt to blackness the tusks make "Ivory black," or "Animal charcoal," with properties already described under that heading; and another name for which is "Spodium arabum" (*spodos* = ashes). In *Saxon Leechdoms*—we quote from Sextus Placitus (1538)—"For any ill spot to take it from the body, apply elephant bone, or ivory, pounded with honey; wonderfully it removes the disfiguring marks." Again, for blemishes, "To remove them from the face, if a woman with the same dust daily smeareth her face, she will purge away the spots."

Bartholomœus Anglicus (1250) remarked, "When the elephants be sick they gather good herbs, and ere they use the herbs they heave up the head, and look up toward heaven, and pray for help of God in a certain religion."

"Among the Ethiopians elephants be hunted in this wise. There go in the desert two maidens all naked and bare, with open hair of the head; and one of them beareth a vessel, and the other a sword; and these maidens begin to sing alone; and the beast hath liking when he heareth their song, and cometh to them, and licketh them (their teats), and falleth asleep anon on liking of the song; and then the one maid sticketh him in the throat or in the side with the sword, and the other taketh his blood in the vessel, and with that blood the people of the same country dye cloth, and do colour it therewith."

Early in the present century a quack medicine bearing the pretentious title of "Elephant's Milk" had a considerable sale in England, under the hand and seal of a Dr. Campbell. It was professedly "An

effectual cure, with the caveat of Government, for debility, faded complexions, grey hairs, nightly disturbances, spasmodic complaints, bald head, stiffness of joints, premature waste, etc., etc.; being obtained in the first instance by a cunning stratagem. Elephants giving suck were entrapped beneath trees, from which ropes were let down by a windlass. The animals were then fearlessly milked and afterwards set free to rejoin the herd, and the precious milk was imported at much cost!"

However, presently the matter-of-fact analysis of an educated expert disabused the public mind by showing that the alleged lacteal fluid from Africa was merely a solution of gum mastic in spirit of wine, which when water was added thereto became milky in appearance. The ten-shilling bottle was actually worth about two pence. Southey well pronounced man "a dupeable animal, as quacks know, and act on the knowledge." "There is scarcely any one," added he, "who may not, like a trout, be taken by tickling."

When Darwin's *Descent of Man* first appeared, it was held to teach that:—

> "A very tall pig with a very long nose
> Puts forth a proboscis right down to its toes,
> And then by the name of an elephant goes."

EXCREMENTS.

THE medicine of former times, even down to the last few centuries, has attributed many curative virtues to the excrements of animals and reptiles.

Most of such supposed virtues have become exploded, chiefly because of the disgusting and nasty nature of the substances containing them. And recent pathologists have shown (Bouchard, for instance) that putrefactive

materials of an alkaloid character exist in the fæces, especially of man, which are more or less poisonous if the excrement undergo any decomposition, their toxicity being largely due to potash and ammonia, with other salts, as cadaveric products.

Captain Bourke has lately written in full concerning the Scatologic rites of all nations,—in other words, about their excrements, and the practices pursued with regard thereto. Likewise we read in *Brand's Popular Antiquities* concerning extravagancies habitual in old England amid the orgies and wild revelry of the Carnival on Shrove Tuesday :—

> "But others bear a torde that on a cushion soft they lay.
> And one there is that with a flap doth keepe the flies away;
> I would there might another be—an officer of those,
> Whose roome might serve to take away the scent from every nose."

About human ordure it was said by James (1743), "*Stercus emollit, maturat, et anodynum est.*"

In the seventeenth century the old pharmacies of Germany contained, as medicines, mouse dung; the urine of a child newborn ; the dung of screech owls, prescribed for melancholy ; also the dung of doves, and of calves boiled in urine ; ox-dung, etc. ; whilst dog dung and fleas boiled with sage were a remedy for gout, and death sweat was used as a cure for warts. The *Zebethum Occidentale* of Paracelsus was human dung, "of a good colour and consistence, dried slowly till it be pulverized." "To distill oyle of a man's excrement," said he, "take the dung of a young sanguine child, or man, as much as you will, and distill it twice in a Limbecke of glasse ; this healeth the canker and mollifieth fistulæs, comforting those that are troubled with allopecia (premature baldness)." Dioscorides devoted a chapter to the medicinal values of different ordures.

Human excrements, under the name of "bothyron," were commended by Œschines of Athens for the cure of quinsy; and Pliny gave many medicines of cow's dung, goat's dung, camel's dung, horse's dung, mouse's dung, peacock's, dog's, pigeon's, and swallow's dung. "Pills," says Captain Bourke, "prepared from the dung of the grand Lama of Thibet, are employed as infallible antidotes to disease. This dung is offered by the Lama as a precious remedy, and provided by him with great and solemn ceremonies and many prayers. It is considered a symbolical excrement of miraculous virtue. Some of the pills made therefrom had been preserved in a silver reliquary, elaborately chased and ornamented, and came into the possession of Mr. Rockhill, Secretary to the Legation of the United States in Pekin, who sent them to Dr. Mew." From Pliny's time the dung of almost every kind of animal has been used in medicine; dog's dung with honey was prescribed for a sore throat, and wolf's dung as anti-colic; goat's dung was considered of great value in tumour of the spleen, and cat's dung for gout in the feet; lion's dung was anti-epileptic, and mouse's dung excellent for the constipation of children. The Emperor Nero, being of a scrofulous tendency, drank the ashes of wild boar's dung in water to refresh himself. "But," said Hieronymus, "*Qui Christum curat, non multum curat quam de pretiosis cibis stercus conficiat*": "If only I be a Christian what care I of what stuffe my excrements be made?"

Human ordure is supposed to be, in a Chinaman's estimation, the only perfect fertilizer. With him stable-yard manure is at a discount. So the Chinese defecate in open, doorless latrines, with a solemnity which savours of an observed religious rite.

It was believed in former days to be peculiarly

requisite that the ordure or urine of those suffering from epilepsy, yellow jaundice, quartan fevers, etc., should be put into a pig's bladder, and hung up in the chimney; in other words, they were made into an excrement sausage: Galen makes mention of this. Human fæces were at one time called "pope"; cow dung in the North was "shard," and "sleet" in Yorkshire; sheep's dung, as pellets, in the East was "thrattles"; hare's dung in the South, "treddle"; goat's dung, "trindles," and "trinnel"; sheep's dung in Lincolnshire, "trottles"; and a badger's dung "warderebe." About Devon sheep's dung is called "buttons" or "cades," and in the North "daglings."

In 1862 Dr. John Hastings, of London, published *A Medical Enquiry into the Medicinal Value of the Excreta of Reptiles in Phthisis and some other Diseases.* He says, "Of the excreta of the Boa Constrictor (it being remembered that serpents, having no intestinal canal, do not pass ordure, but only solid excrementitious urine), a gallon of water will scarcely dissolve two grains; yet half-a-teaspoonful of this solution rubbed over the chest of a consumptive patient will afford instantaneous relief to his breathing."

Dr. Hastings gives a long list of nine snakes, five lizards, and two tortoises whose excrement he has administered as medicine, all of these proving extremely useful to consumptives, in singularly small doses. The so-called "dung" consists of urate of ammonia, plus some special animal matter which is thought to confer the virtue. Bromine increases the solubility of the excrement, and heightens its efficacy, the dose being grain $\frac{1}{200}$, with about an equal quantity of bromine. A reviewer at the time added: "The excreta of reptiles comprises their urinary secretion, of which the

chief ingredient is urate of ammonia, with a certain quantity also of phosphate of lime, and some hair; perhaps also some infinitely small residue of fæcal matter which is of wonderful virtue."

Fossilized excrement is employed in jewellry under the name of "coprolite."

"By the several kinds of fowl," observes Izaak Walton in the *Compleat Angler*, "the curious palate of mankind is pleased by day; which with their very excrements afford him a soft lodging at night." Of late guano, which consists of the partially decomposed excrements of the penguin and other sea birds, chiefly off the coast of Peru, has been made into a syrup and given internally. Its principal constituents are uric acid, urate of ammonium, and various oxalates with phosphate of lime.

As a fact it cannot be doubted that the natural excrements of wild graminivorous creatures may be vindicated for possessing certain medicinal virtues. But when animals are domesticated, and acquire habits of preter-natural feeding, their fæcal excretions contain harmful products; as is likewise the case with human beings, especially those who eat freely of meats. Quoth old Burton in his *Anatomy of Melancholy*, "Sordes vitiant": "Nastiness defiles and dejects any man; it dulleth the spirits." Boswell says that some quack administered to James the First an elixir to preserve him from all sickness ever after, which he told Buckinghan was "extracted out of a turd." Hutchinson writes: "I have seen about a quart of man's excrements, which had been some days discharged, when thinned with as much ale, poured into a horse stark mad in that violent distemper they call the "staggers," of which they commonly die in a few hours, and the distemper abated, and the horse recovered. Southey,

quoting from Batchelor, notes that Sir Edward Lyttleton, when a mad dog had bitten several of his foxhounds, was advised to turn a flock of geese into the kennel. His dogs lapt up the dung of the birds, which was thought to be a sure preventative, or cure for canine madness.

Before summarily rejecting with aversion or scorn the thought of including some of the Animal excrements among present medicinal remedies, it will be worth while to note that these vary, in no small degree, according to the nature of the food and the digestive powers of the individual creature. Such excrements contain useful ferments in many instances. Unless contaminated with preter-natural bacteria, they have no stinking or offensive odour. Even the fæces voided by the pig (an omnivorous, dirty animal), which are usually most loathsome, become comparatively odourless and sweet when he is fed exclusively on barley meal. We have seen above that the excrementitious urine of serpents certainly has its recognized curative uses.

FINGER.

FINGERS, and hands have from the earliest times been the subjects of superstition, and enjoyed a curative reputation. The touch of the third or ring finger has been long supposed to exercise a healing effect, and the ancient physicians mixed their medicines therewith. "The ring finger," says an old writer, "stroked along any sore or wound will soon heal it. All the other fingers are poisonous, especially the forefinger." In Lancashire the forefinger of the right hand is thought to be specially harmful.

For consumptive patients in the province of Moray, Scotland, the nails of the fingers and toes are pared, and the parings are put in a rag cut from the clothes of each sufferer, the hand holding this rag being next