*Zwelfer a declaré que les trochisques de crapaud l'avaient preservé de la peste ainsi que ses domestiques, et ses amis, et avaient soulagé, meme gueri des pestiferes. On sait que Van Helmont faisait appliquer sur le peau ce singulier remède.* "The epicures of King Charles the First's London ate frog pies with infinite gusto," says Jeaffreson.

## GALL.

THE Gall (*Fel*) of an animal is none other than its bile as secreted by the liver, and stored in the gall bladder for use during the digestion of food within the intestines after this has left the stomach. Such gall, or bile, is a viscid, dark, greenish-coloured secretion, of the consistence of thin black treacle, and proverbially most bitter of taste. It serves to saponify fats in the food, to prevent putrefactive changes therein, and to stimulate a proper activity of the bowels. Bile does not find its way into the stomach proper except as a symptom of upset.

Ox-gall, *Fel bovis tauri*, is prescribed remedially in cases where a deficiency of the natural bile seems to be indicated, and in some forms of chronic constipation, but too large a dose will bring on diarrhœa. As the drug would lose its character by first passing artificially through the acid stomach, mediciners protect its preparations by covering them with a horny coating of keratin, on which the gastric juice of the stomach does not act, and in this way the gall given remedially is not dissolved until it reaches its proper sphere within the highest intestines, of which the secretions are alkaline. The gall consists chemically of biliary matter, mucus, alimentary extract, chloride of sodium (*i.e.*, common salt), lactate, and phosphate of soda, and phosphate of lime.

It contains an excess of the sodium salts over

other mineral matters, being virtually sodium glycocholate and taurocholate. To give thus the natural bile of a healthy animal so as to restore the balance of organic health in a patient whose own biliary functions are impaired by disease, is another instance of the treatment by animal substances now in modern scientific vogue. Its use was known, however, as far back as in Saxon days, when the *Leechdoms* ordered "for sore and ache of ears, if the ears have a tendency to grow deaf, or if the hearing be ill, take boar's gall, bull's gall, buck's gall, and mix equal quantities of gall with honey; dress this on the ear." In the *Rich Storehouse of Medicines* (1650) it was ordered as "excellent good for the hearing, to take an ox-gall, and the urine of a male goat, and mingle them together, and put some of the same into the patient's deaf ear, and incontinently he shall be holpen." Again, Dr. Salmon said (1696) "Ox-gall cures noises and pain in the ears, mixt with breast milk, and dropt in, stopping them with cotton dipt in the same. The gall of a bull is hotter than that of an ox, and therefore more effectual to the same purposes; in plasters and balsams it is an excellent vulnerary."

When there is a continuous discharge of fetid matter from the ear, or where hard waxy concretion exists, ox-gall may be usefully dropped in to soften this wax; or mixed with balsam of Peru as a stimulating antiseptic, three drachms of ox-gall with one drachm of balsam of Peru. Taken in doses of from twenty to thirty drops fresh ox-gall promotes the female monthly flow.

At Paris, in 1858, Dr. Bonorden found the external application of ox-gall highly useful for reducing tumours, and hypertrophied enlargements, particularly of the

female breast. He contended that it has a special effect on the bloodvessels of the skin, and a surprisingly rapid reducing action on the size of the swelling, doing away, in many cases, with necessity for the knife. It was combined by him with olive oil, adding some extract of hemlock if there was pain, or some liquid ammonia if there was torpidity: three drachms of the thickened ox-gall, one drachm of hemlock extract, two drachms of soap (natronat), and one ounce of olive oil, mixed all together, and rubbed in four times a day; also, for enlarged tonsils the gall was rubbed up with water to a proper consistence, and applied with a brush twice a day, the patient soon becoming used to this.

In thickening of the outer coat of the eye (cornea) or for an outgrowth therefrom, a drop or two of the fresh gall was to be dropped into the eye twice or three times a day. Medicinally it has been likewise suggested for hypertrophy of the heart, because exercising a remarkable power in lessening the action of that organ.

For indurations of the womb this is an equally efficient remedy. Ox-gall has been further found of service to expel round worms from the intestines. There is an officinal preparation of the purified and thickened bile, *Fel bovis inspissat*, of which from three to six grains are given for a dose.

Experiments have recently shown (1897) that bile can prevent death through a fresh lethal snake bite; and there has now been separated from the bile of the ox a constituent which possesses anti-venomous qualities in a more powerful degree than the original bile; only very small quantities of this need be used.

Drs. Clay and Allnutt employed bile in open cancer of the breast, with fungous ulceration; both the pain

and the fœtor of the discharge abated after the gall was taken. This has proved equally useful to overcome obstinate constipation because of deficient natural bile, or in diarrhœa, with clay-coloured stools, from a like lack of such bile.

Snake venom, and the bile from another snake, when mixed together and injected beneath the skin are found to render the former innocuous, and the bile is so powerful an agent in doing this that a quantity smaller than the quantity of venom proves sufficient for the purpose. It has been similarly discovered that the gall or bile of the ox is able to antagonise the poisonous action of serpents' venom.

When injected under the skin or into a blood-vessel, the bile salts and bile pigments act as poisons; therefore it is of evident importance to maintain free excretion of bile by the liver. Again, many poisonous matters (called "toxins") find a way harmfully into the intestines, but probably at once lose their noxious power by coming into contact there with the fresh bile. For which reason, again, it is essential that the liver should form a sufficient quantity of healthy gall.

The bile of a grazing ox is more watery than that of a man; the bile of a growing boy (who could digest any amount of meat) has been found to contain nearly double the amount of solids contained in that of an old woman, whose age would for this reason much limit her carnivorous powers.

Because of the known antagonism between the bile and the bacillary germ of tuberculous disease, it has been advised in pulmonary consumption to rub the chest systematically with fresh ox-gall. (That of the pig is supposed to be more analagous to human bile than the ox-gall.) This is also a very efficient remedy for

habitual constipation depending on atony of the intestines, with distension of the large bowel by flatulence; such as should never be restrained from escape merely because of doing outrage to the laws of good breeding; at least so thought the teachers of the Salernitan school (1608):—

> "Quatuor ex vento veniunt in ventre retento;
> Spasmus, hydrops, colicā, vertigo; quatuor ista."

> "So cramps, and dropsies, colicks, have their breeding,
> And mazèd braines—for want of vent behind!
> Besides, we find in stories worth the reading,
> A certain Roman Emperor was so kind,
> —Claudius, by name—he made a proclamation
> 'A scape to be no loss of reputation.'"

It is quite certain that, in doses of from half an ounce to an ounce, fresh ox-gall acts as a laxative; but that if persistence be made in its use it is very apt to excite a burning sensation in the lower bowel, and to induce piles. Equally familiar is the fact that, when from any casual cause bile gets into the stomach from the intestine, it occasions nausea, or even vomiting, with loss of appetite, mainly because, being alkaline, it neutralises the gastric juice of the stomach. "Some men,' wrote Bartholomœus Anglicus, in the thirteenth century, "ween that the spleen is cause of laughing. For by the spleen we are moved to laugh; by the gall we are wroth; by the heart we are wise; by the brain we feel; by the liver we love."

French physicians have found ox-gall of service for patients with digestions impaired by the abuse of alcoholic drinks. It must be a medicine of ancient date. Plantus, the Latin comic dramatist (150 B.C.), wrote concerning love, "*Amor melle et felle est fœcundissimus; gustum dat dulcem, et amarum.*"

> "Of honey mix't with gall in fullest share
> Love is a 'bitter-sweet' beyond compare."

## GELATINE (*see* ISINGLASS).

## GIZZARD.

THE Gizzard of our domestic fowl (*Ventriculus callosus gallinaceus*) or the strong muscular third stomach in grain-eating birds, affords a medicinal remedy which has received considerable attention from physicians, and which has been named Ingluvin. It acts as a substitute for pepsin, the digestive principle secreted by the stomach proper, and was originally found to be a specific remedy for the intractable sickness of pregnancy; in which respect it still serves most usefully. This Ingluvin is prepared as a yellowish grey powder, and is administered in a dose of from three to ten grains, dry, or on bread and butter, or in some simple liquid. Likewise for the wasting and sickness of children from mesenteric disease, this powder has proved signally beneficial; giving three grains, with the same quantity of sugar of milk, three or four times in the twenty-four hours. Pregnant women, to prevent sickness, should take the Ingluvin half-an-hour or so before a meal. Ostrich pepsin is ordered by doctors for like purposes in the Argentine Republic, being known there as "*Pepsina nostra.*"

Anything which a man cannot stomach is said to stick in his gizzard (French "*queuse,*" throat). Hudibras tells of "fretting the gizzard," or, being vexed.

## GLOWWORM (*see* MISCELLANEOUS).

## GLYCERINE (*see* OIL).

## GOAT.

THE Goat *(Capra hircus)* has been from early times associated more or less with medicine in the public

mind: and its general appearance has seemed uncanny to the superstitious. It was thought by our forefathers to be cunning in Simples, and the herbalist among quadrupeds, taking rank as the physician of its kind. A Billy, or Nanny, is still maintained in many a modern farm-yard, not for any real use, but because its odour is supposed to be good for the animals of the homestead generally. In the choice of wholesome herbs it is exceptionally wise.

Old Fuller in his *Book of Worthies* tells that "goats are called *capri, a carpendo* from cropping: their milk is accounted cordiall against consumption: yea! their very stench is used for a perfume in Arabia the Happy: and yea! if that ornamentall excrement which groweth beneath the chin be the standard of wisdome, they carry it from Aristotle himself."

Sextus Placitus, in *Saxon Leechdoms*, attributes various curative virtues to this animal; thus, "for blood running from the nose dry some goat's blood, and rub it down to dust, apply that to the nostril: it withstandeth! Also against the evil humour have him drink goat's blood; that will heal him. For cancer a goat's turd mingled with honey and applied to the wound; quickly it healeth. For sore of ears apply goat's nue (urine) to the ear, it relieveth the sore. If a man may not discharge his bowels, seethe together, and give him to drink goat's milk and honey, and salt. Also for cancer take goat's gall and honey, mingled together of both equal quantities, and apply to the wound: or burn a fresh hound's head to ashes, and apply to the wound. If the wound will not give way to that, take a man's dung, dry it thoroughly, rub it to dust, apply it. If with this thou art not able to cure him thou mayest never do it by any means." "To

get sleep a goat's horn laid under the head turneth waking into sleep." This must have been by the force of what is known to-day as hypnotic suggestion.

Likewise as exemplifying a rude practical acquaintance in former times with the healing power to a sick organ of the same organ taken from a healthy animal as medicine, it is given as an old recipe in *A Thousand Notable Things*, "To dry a goat, sheep, or neat's bladder, and make powder thereof, and let them drink thereof with vinegar and water when they go to bed that cannot hold their water, and it will help them."

In the *London Pharmacopœia* (1696), goats' milk was held to be cleansing, "It nourisheth much, and is good in consumptions, and hecticks, and strengthens the stomach, but is nothing near so fat as cows' milk. The marrow is accounted the strongest of all marrows; dissolved into an oyl, and mixt with oyl of amber it cures deafness." Gall of goat was an evil charm put into the cauldron of hellbroth by the third Witch in Macbeth. Goats' flesh formed a staple article of food among the Jews, and is now eaten in Italy; whilst from the milk is made a kind of cream cheese, ricotta, which is sold in the streets, and being sweet and palatable, is much appreciated. Vendors carry it on their heads like our muffin sellers, and retail it, at so much a centime, to poor purchasers. Goats' milk is richer in solids than that of the woman, the cow, or the ass, containing the largest proportions of nitrogenous (casein) and fatty constituents, as well as of salts, but it is comparatively poor in sugar. It also affords a peculiar smelling acid, hircin, or hircic.

This is the most highly nutritious of the several milks, but not the most digestible. It often proves of use in checking obstinate diarrhœa. Whey made from

goats' milk is curative of scrofulous affections; an account of the treatment by this whey was given by Dr. Lee in the *American Medical Times*. He tells that it first came into vogue now more than ninety years ago (1863) in Switzerland because some high personage recovered under its use; and the cure was chiefly carried on at Gais, one of the highest of the Apenzell Alps. The goats' milk is heated to 86° F., and then rennet is added, whilst agitating it constantly; next the serum is pressed out from the curds, and carried away while yet warm to the different establishments. It has a greenish tint, being sweetish, balsamic and agreeable, consisting of a solution of sugar, lactic acid, and animal extractive matter which is made up of osmazome and different salts. These comprise the chlorides of potassium and sodium, sulphate of soda, and phosphate and carbonate of lime. Its sensible properties are very different from those of the goats' whey which is offered for sale in London and Paris. The whey is drunk warm between six and eight in the morning, pure, and to the extent of seven or eight tumblersful, the patients walking about for several minutes between each cup. Generally between the third and fourth glassful a serous diarrhœa comes on, accompanied with borborygmi (flatulent rumblings), but no colic, or griping: some farinaceous soup is then given, and very rarely are there any more discharges from the bowels for the next twenty-four hours. After a few days the tongue becomes white, and the mouth clammy, with more or less constipation, for which a mixture containing equal parts of sugar, rhubarb, and cream of tartar is given, this acting as a gentle laxative. Some of the patients take, moreover, baths of goats' or cows' milk, which are said to have a very beneficial effect, when the skin is hot and dry, the

pulse frequent, and the nervous system irritable. In scrofulous affections, particularly of children, the effects of this goats' whey cure are found to be simply wonderful: it is specially commended for diseases of the chest, and for those of the bowels; considerable help being given in the former by the restorative atmospheric and climatic influences which are brought to bear.

Again, in habitual torpor and constipation of the bowels this treatment effects admirable results, the viscera becoming energised and disgorged, whilst the appetite is increased. The average length of cure is three or four weeks: and the best time for pursuing it is at the beginning of summer, by which season the sun has sufficiently developed in the herbage those juices, and peculiar proximate principles which give the milk its curative properties: hence it is that the whey must be made from milk derived from animals which range and browse on the high mountains of Switzerland.

The establishments of Germany are not so favourably situated: Meren in the Tyrol is especially famous for this cure.

A goat thrives on shipboard better than any other animal, and is of much value there for its milk.

But Kirby, *Entomology*, tells of a Lady Penruddock, who swarmed from head to foot with maggots (*Acari lactis*), supposed to have become engendered from her drinking goats' milk too copiously. These terrible mites consumed all the flesh off her body.

Satirists say that the grave dignity of our Law Courts—Bench and Bar—is mainly attributable to goats' hair, the person who wears a legal wig being a very different looking man when he puts it off.

Of old this animal was regarded as the favourite steed of witches, wizards, and demons: and the devil

was thought to assume its form when visiting the earth. It is found to be figured beneath Church Stalls as a thing of abhorrence, especially to priests taking a vow of chastity.

The life of a goat lasts about eight years. It appears to prefer before every other kind of green food the leaves of the white bryony, which no other animal will touch; and it eats with impunity the poisonous tops of the yew. An old proverb puts it that "a piece of a kid is worth two of a cat." Reverting to some of its ancient uses, the Southern Irish peasantry have long looked upon the goat's dung as a sovereign remedy in scarlet fever, and measles: whilst in the *Pathway to Health* (Peter Levens, 1664) it is ordered to "take the hot lights of the goat, and clap it to the head of a patient that is vexed with the frenzie, and it taketh it away presently." The ancients believed, says Sprengel, that goats will operate upon themselves for a cataract by pressing a thorn into the eye: and that men learnt the proceeding from them.

In the case of stables on fire a goat will face the flames to make good its escape: and then the horses will follow.

## GOLD (*see* ASS).

As "a good medicine to be used by one that is in a consumption," asses' milk (which *see*) has been ordered of old (1650) to be concocted with rosewater, and hen-eggs: being presently drunk warm with a cake or two of *manus Christi* made of Gold, or pearls. This precious metal has played so important a part in curative medicine from the most ancient times, and continues to be so highly remedial in its present uses, that some length of consideration may fairly be given it

here in alliance with *Animal Simples.* Gold was used medicinally by the Chinese two thousand five hundred years before Christ.

Paracelsus employed it as a universal panacea, and called it a solution of the sun. He tells how to prepare his Sal Philosophorum, or "Sapientia," from powdered gold, "calcined most carefully with washing, boyling, and vinegar, the salt to be kept in a close glasse vessel, for it is a most excellent medicine against all diseases of the body: for it will leave nothing in a man that shall hurt him, but it doth drive it forth by sweat, and maketh the patient as sound and whole as ever he was in his life: it healeth all outward sores, as the Canker, the Wolfe, Fistulæs, and such like. Ye shall take a phial full of wine, and put therein two or three graines of that salt, for it is sufficient for any sicke person for any kind of diseases. Then stop that phial, and set it on warme water until the salt be dissolved; then give the sicke person to drink thereof warme, and let him down to sweat, for it will cause him to sweat wonderfully; the sweat will bring him to health again although he were a leaper; other sicknesses although they were never so evill, or sore it will helpe them; when thou wilt helpe any outward sore thou shalt lay thereon a wound plaister, and let him drinke the said salt with wine morning and evening as said before, and in short space they shall be holpen: and you shall lay upon the sore a cool leafe, or lint, and you shall see what aboundance of foule and rotten blood, and such like come forth. The which is scant to be believed; and then those holes, or sores will incarnat and heal of themselves without fault."

The first known trituration of gold was made by Moses out of the remains of the golden calf of the

Israelites, and he compelled the children of Israel to drink it in water.

Bartholomœus Anglicus (1250) wrote, "and among metals there is none fairer in sight than gold; and therefore among painters gold is chief, and fairest in sight, and so it embellisheth colour and shape, and colour of other metals: also among metals nothing is so effectual in virtue as gold; Plato describeth the virtue thereof, and saith that it is more temperate and pure than other metals: for it hath virtue to comfort, and cleanse superfluities gathered in bodies, and therefore it helpeth against leprosy, and meselry (measles). The peelings of gold taken in meat, or in drink, or in medicine preserve and let breeding of leperhood, or namely hideth it, and maketh it unknown."

In the *Rich Storehouse of Medicines* (1650), was given "a sovereign drink for any infected person": "Take a piece of fine gold, or the leaves of pure beaten gold, and put it into the juyce of lemmons, and let it ly therein for the space of twenty-four hours, then take the same juyce, and put to it powder of angelica root; and then mingle them with white wine, and let the patient drink a good draught thereof. This is a most pretious drink, and it is greatly to be wondered at what help and remedy some that have used this drink have had thereby, although it hath been supposed by many learned physicians that the sick persons were past all hope of remedy, yet by God's Providence they have recovered again."

*The New London Dispensatory* (1695), ordered Gold, or "Sol" in several forms, such as Thundering gold, Sweating gold, Potable gold, Flowers of gold, Salt of gold, Transparent glasse of gold, Faber's tincture of

gold, and Dye of gold. Evidently much curative value and importance were attached to this leading metal at that time.

Dr. Salmon, who compiled this Dispensatory, authoritatively ascribed superlative virtues to Gold as a universal remedy against all diseases, as a sudorifick, and counterpoyson, restorative in consumption, curing the plague, all sorts of fevers, epilepsies, apoplexies, palsies, megrims, leprosy, scabs, itch, ulcers, fistulas, and old virulent sores which are hard to heal, reviving such as are almost dead; given in Canary it will revive such as are senseless, and stupid (how excellent for pedagogues!); it takes away the malignity of cancers, causing their speedy healing. "It exceeds," says Horstius, "all other secrets in strengthening the hart, brain, liver, and all other parts of the humane body which serve for the conservation of life: it keeps back old age, and renews the radical moisture. It may be taken at any time in cinnamon-water, or broth, or milk, upon any occasion, or in any disease; *cujus virtutes infinitæ sunt, nec libro integro comprehendi possunt: beatissimus est medicus qui eo uti potest, ut honoris culmen acquirat, et oculos omnium, et linguas, laudes, et encomia prædicantes, in se convertat.*" Again, "*materia lætificans, et in juventute corpus conservans.*" So Prince Henry is made by Shakespeare to speak of gold as "preserving life in medicine potable," because of the opinion which anciently prevailed that the incorruptibility of gold might be communicated to the body impregnated therewith.

As far back as in the eighth century Arabian physicians were given to use a fine powder of metallic gold: and in 1811 Chretien revived its administration in Paris, especially for syphilis, scrofula, and cancer of the womb. "*Das gold hat grosse unersetzlich arznei*

*kräfte.*" "Gold has great curative powers such as no other can confer," wrote Hahnemann (1805): "*aurum medicina catholica in senibus et juvenibus.*"

Provings of the metal when given experimentally to healthy persons in varying doses have shown that its toxic effects are: burning, and boring pains in the bones, sometimes accompanied with redness, and swelling (especially in the face and feet), sometimes as on the head with bony knots (nodes): producing also often a marked action on the nose, which becomes inflamed externally, whilst the nostrils are blocked with ulcers and internal crusts, the smell being putrid to the patient.

Careful observation of these particular effects has led to the highly successful use of gold in much reduced doses for curing syphilis (tertiary), scrofulous or venereal ulceration inside the nose, disease of the nasal bones, with concomitant suicidal melancholy, and obstructed liver. It has further shown itself an admirable medicine for constitutions broken down by mercury. Dr. Hughes (Brighton) once gave to a poor fellow thus afflicted a trituration of gold with powdered sugar of milk, one part of the metal in a hundred. This patient came back in a week's time looking quite another man, and exclaimed "Surely you have given me the elixir of life!" And in chronic jaundice the same remedy has been found equally useful.

Rushes of blood to the head, and giddiness were also experienced by the provers of gold, together with confusion of sight: the testicles were made painful and swollen: profuse nightly perspirations were found to be induced. In man full doses of the metal cause sexual excitations, and in woman an immoderate monthly flow. Furthermore, gold in toxic quantities makes the gums

sore and the teeth loose : and one noted dentist, zealous for the usages of his craft, has claimed that its attenuated dosings from wearing false sets fixed with, or largely composed of the metal (which would be chemically acted on more or less by the sulpho-cyanogen of the saliva) far from hurting the teeth, make them firm again when loose, and may tend to build up the general health.

Large harmful doses of gold have been followed by tightness of the chest, with difficult constrictive breathing, and the symptoms of breast pang. Erastus said, as quoted by Burton, about gold : "it maketh the heart merry, though in no other sense than as it is in a miser's chest." *Simul ac nummos contemplor in arcâ.* The chloride of gold is prescribed medicinally in the present day, besides the powdered leaf (H.) made of the finest metal. This chloride, when exceedingly diminished in strength, is injected beneath the skin for ulceration of the face, if of the scrofulous sort, and destructive in its ravages.

Again, the bromide of gold is frequently found to completely control epilepsy : and a combination of gold with soda (the auro-terchloride of sodium) is doing marvellous things as a drink cure, producing a harmless repugnance to alcohol which no other treatment has yet achieved. This salt is made according to a formula of Dr. Clarke, University of Michigan, and being given in doses at first of a quarter of a grain can shortly be reduced to a twenty-fourth of a grain.

As Chaucer saith :—

> "For gold in physic is a cordiall
> Therefore he loved gold in special."

> "Pharmaca das œgroto : aurum tibi porrigit œger
> Tu morbum curas illius ; iste tuum."

Dr. J. C. Burnett (*Gold as a Remedy in Disease*) says: "Having used it in practice for many years I cannot do without it: to my mind there are varieties of disease that gold, and gold only, will cure; and others that gold, and gold only will alleviate to the full extent of the possible, and not a few of these varieties of disease are of the greatest nature. "As a heart remedy alone it claims the most earnest attention of every doctor." Dr. Burnett highly commends gold leaf triturated to a second or third centesimal dilution, and given in four grain doses, for the laboured breathing, and troubled heart action of old age.

It is a well known popular custom for a stye in the eyelids to rub it with a gold ring first wetted with fasting spittle: and as long ago as in Pliny's day gold was declared to be a cure for warts by applying it thereto. In 1854 the chloride of gold and sodium was introduced as of a special value for reducing enlarged glands of children's necks, or their scrofulous mesenteric glands, one twenty-fourth of a grain being mixed with orris root, and rubbed on the tongue by a piece of wood covered with wash leather: as also for disease of the hip, being rubbed on the tongue in the same manner twice a day. Again, gold is thought to possess a special elective affinity for glandular tumours.

Nevertheless we are admonished in classic lines:—

> "Non domus, et fundus, non œris acervus, et auri,
> Œgroto possunt domino deducere febres."

It has been recently alleged that in America the transmutation of silver into gold by continued hammering, with the use of cold, has been at last accomplished, and, so to speak, the philosopher's stone of alchemical research realised: but as yet the process is laborious, and costs half the value of the gold produced.

In the fabled Seven Champions of Christendom the Golden Fountain would convert any base metal into gold within twenty-four hours.

Pious George Herbert in "*The Church*" quaintly sings that the true *elixir* is to "see God in all things."

> "This is the famous stone
> That turneth all to gold;
> For that which God doth touch and own
> Cannot for lesse be told.
> A servant with this clause
> Makes drudgerie divine:
> Who sweeps a room as for Thy laws,
> Makes that, and th' action fine."

Poor Thomas Hood, of lifelong sickness and domestic straits, knew but little, we must fear, about the curative virtues of gold in any respect: thus plaintively does he sing on the subject:—

> "Gold may soothe Adversity's smart,
> Nay, help to repair a broken heart:
> But to try it on any other part
> Were as certain a disappointment
> As to try and rub the dish and plate
> Taken out of a Staffordshire crate—
> In the hope of a Golden Service of State—
> With Singleton's Golden Ointment."

Dr. Quincy wrote (1728): "Many tinctures of a yellow colour are now-a-days the "golden tincture" of something or other: this name being used to enhance the price of worthless preparations: for there are still *Juglers*, and *Quacks*, who amuse, and impose upon weak people with their *Golden Medicaments*."

## GOOSE.

CÆSAR wrote (in his *Commentaries*) that the ancient Britons did not think it lawful to eat the hare, the cock, or the Goose (*Anser*), these animals being held sacred; and among the Romans Geese, having saved the Capitol, were set apart and kept for sacrifice. Artificial means

were employed in those days for enlarging the livers, which were as highly esteemed then as they now are by lovers of *paté de foie gras*. Horace describes how—

> "The slaves behind in mighty charger bore
> A Crane, in pieces torn, and powdered o'er
> With salt and flour; whilst a white Gander's liver
> Stuff'd fat with figs, bespoke the curious giver."

A yearly Roman festival was held with the Goose carried in procession to commemorate its vigilant services. Also the learned German, Noek, sees in our Michaelmas bird traces of the goose offered of old to Prosperina, the infernal goddess of death; on which account the figure of this homely creature is so often seen on modern monumental remains.

As to its medicinal attributes, John Taylor, the Water Poet (1620), said:—

> "Her lungs and liver into powder dried,
> And fasting in an ass's milk applied,
> Is an experienced cordial for the spleen."

And again:—

> "Her brains with salt and pepper if you blend
> And eat, they will the understanding mend."

The flesh of this bird, declared the *London Pharmacopœia* (1696), is exceedingly hard of digestion, but being digested nourishes well; the liver is of great nutriment; the grease is exceeding hot and of thin parts, piercing and dissolving. It cures baldness, chaps in the lips and other parts, helps deafness, and pain, and noise in the ears, and loosens the bowels. The dung is excellent against the scurvy, gout, jaundice, and green sickness. You may give from one to two drachms in Rhenish wine; it provokes urine and the terms powerfully.

Much curative importance seems to have been attached to goose-dung by all our early writers on

medicinal remedies, though modern critical ridicule makes a jocular tilt against "the green end of a goose-dropping as given in times past for the falling sickness." In *Saxon Leechdoms* it was directed: "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; let him pound them thoroughly together, paste them on the wound, soon it will be well." "For a canker," said the *Rich Storehouse of Medicines*, "take goose dung and celandine, bray them well together, and lay it on the canker two nights."

Again, "As an excellent good oyntment for the gout, take a fat goose, and pluck her, and dress her as if she should be eaten; then stuff the belly of her with three or four young cats well chopped into small pieces (which in these days the society for preventing cruelty to animals would quickly make a subject for prosecution), with a handful of bay salt and twenty snails, and then sew up her belly again and roste her at a small fire, and save all the dripping of her; and keep it for a pretious oyntment, as well as for the gout, as also for all other kind of diseases in the joynts, *probatum est.*"

And, "An excellent good remedy for the black jaundise: take wheat straw, and lay it abroad upon a fair floor in a close house, and put geese into the place where the straw is, and watch when they do dung and take it up whole, and with a knife scrape off the white that is about it, and keep the same white until you have a good quantity thereof; then dry it in an oven and make it into powder, and let the patient drink it in ale or beer, both first and last, warm; and it will cure both the black and yellow jaundise." Also, as: "A very good remedy for any burning or scalding, either with a hand gun or otherwise, take a good

quantity of the dung of geese (which is of one night's making), and a good quantity of butter unsalted, and else sheeps' suet clarified, and fry them in a fryingpan until the butter or suet be almost consumed; then put the same stuff in a coarse linnen cloth that is clean, and strain it into a gallypot: then take a feather and dip it in the liquor, and anoynt the place therewith that is burned or scalded; and when you have so done, take a fine linnen cloth and wet it well in the same liquor, and lay it upon the place grieved to cover it withall. Do this twice every day until it be whole, which (by God's help) will be in a short space."

But Dr. Quincy pronounced (1728) as to Goose dung, *Stercus Anseris*, that "though reckoned useful as a detergent for distempers of the Head, it had been introduced more from Fancy than good Reason.

"There were three days in the year called 'Ægyptiaci,' that is, in our tongue, 'Dangerous days,' in which by no means, on no occasion, neither beasts' nor man's blood should be diminished, that is the last Monday in April, the first Monday in August, and the first Monday in January (curiously resembling our modern bank holidays as to the dates). If any man drinks any medicinal drinks on these three days he will end his life within fifteen days; and whosoever on these three days tastes flesh of *goose* will end his life within forty days' time."

Theophrastus gave comfort by assuring his countrymen: "He that keeps geese about his house need not fear thieves, and hath always those that will tell him assuredly what weather will ensue; for the goose, by watchfulness and clamour, will give the alarm against thieves, or by their eagerness of feeding and fluttering in the water they do presage a storm at hand." The

Goose is said to be the only bird prescient of approaching earthquakes.

An old receipt for the web, or spot in the eye, was to: "Take the great bone of the goose wing, the older the better, for, though it be a year old, it is not the worse; break it and take out the marrow that is within it, then put some of this upon the web or spot, and it will break it and save the sight."

Goose grease (*Adeps anseris*), obtained from a roasted goose, is highly emollient, and very useful in clysters; it readily proves emetic. "The Puritans," says Butler, in *Hudibras*, "opposed fat goose as bitterly as they did fat pig; and the Italians, from time-honoured respect, still deny themselves the luxury of roast goose."

At the luncheon partaken of by George the Fourth, when a king's messenger boarded the royal yacht in Kingstown harbour to tell him that Queen Caroline was dead, a goose pie was the staple dish, with Dublin whiskey. "Is she? by Jove!" exclaimed the amiable monarch, and went on eating his goose pie.

In Manchester a favourite tit-bit at table is that spongy lining of a Stubble goose's brain known to epicures as "the soul." But through eating a stuffed goose kept too long, a dozen persons met their death of late because of the developed products of corruption (ptomaines); whilst from one of the victims an alkaloid liquid was extracted after death which "smelt like the urine of mice, and resembled the poisonous alkaloid of hemlock; at the same time, the presence of similar cadaveric products were found in the *débris* of the goose.

To "cry 'Boh' to a goose" refers to a noted Gothic general, Odin's invincible son, once terrible to warriors and women, a dread captain who commanded the

Persian hosts. His fearsome name after serving as a rallying cry to armies whose foes it filled with fright, became a menace to fractious children, and presently a jest of nurses, losing its alarming significance altogether; the child was as foolish as a goose if "boh" could alarm him! Likewise, when crying "Peep-boh" in play to the babe in her arms, the nurse really utters the name of this doughty general.

"A tripthong," says the *Comic English Grammar*, "is a union of three vowels in one sound, as *eau* in the word *beau*,—a term applied to a dandy, and addressed to geese, probably because they are both birds of a feather."

In the year 1661 Surat was pillaged and burnt by a certain robber named Bogie. He was the original of another mythical being who has for many years served to terrorise unruly children in the nursery.

Ferrara geese were famous for the large size of their livers, one of which is said to have weighed more than two pounds. "With this food," tells Smollett, in *Peregrine Pickle*, "exquisite as it was, did Heliogabalus regale his hounds." Modern poetry leads us in pleasant fancy to look for *paté de foie gras* as a natural product about the realms of Romance:—

"In the sweetly impossible land of Cocaigne,
That Elysium of everything happy and nice,
Where for hail they have bon-bons, and Claret for rain,
And the skaters in winter show off on cream ice.

"Where so ready all nature its cookery yields,
Macaroni au Parmesan grows in the fields;
Little birds fly about with the true pheasant taint,
And *the geese are all born with a liver complaint.*"

Gerarde believed in the Barnacle goose as a metamorphosis of the barnacle shell produced by a fructifying tree. In his famous *Herbal* he gives an account, which he could personally vouch for, of the fruit of the goose-tree, when ripe, falling into the water as an

embryo bird, and duly obtaining its feathers. But this was founded altogether on a mistake, and must have originated in the fact that "the sea barnacle (*Lepas cirripede*) possesses, when its shell is open, a plume-like cluster of curling limbs, and owes its specific name, '*anatifera*': 'goose-bearing,' to this feathery adjunct."

Galen commended only the giblets, stomach, and liver of a goose sodden in broth. The Polish method of showing a suitor that a maiden rejects him is to serve at dinner a goose with black gravy. "To get goose" is, in Northamptonshire, to be well scolded; and a quaint old proverb runs: "Full of fun and fooster, like Mooney's goose":—

"Lady St. Ubbs, a proud, patrician dame,
Of ancient family and haughty name,
Grown fat, and fidgety, and forty-five,
Began with sickness which was strange to strive.

"At once her head, her heart, her eyes, her ears,
Her spine, and limbs suggested fretful fears;
But yet in appetite she little ailed,
Nor strength, nor stoutness of her sinews failed.

"Anon the doctor came, and went and came,
A rough practitioner, of rural fame,
Who, soon discerning nothing grave amiss
Save stress of years, abruptly told her this.

"Whereat her ladyship, no more content
With such plain skill, demanded to be sent
In stately fuss to London, there to see
A Court physician for a costly fee.

"But first suspecting something kept behind
Of dread forebodings in the doctor's mind,
She bade him write a statement of her case,
Which she before the titled sage might place.

"The note was penned, marked 'private;' but the dame,
Inquisitive beyond all sense of shame,
Burning to know what things it might reveal
Forgot her dignity, and broke the seal.

"With eager eyes she scanned the scribbled page,
When great her wrath, though impotent her rage,
These were the only words it served to tell:
'A plump old goose I send you, pluck her well.'"

## GRASSHOPPER.

THE Grasshopper (*Cicada*) is a well known, happy, summer insect, of the Hemipterous classified order, "than which," says Kirby, "none has made more noise in the world." From the time of Homer, the *Cicadæ* (Grasshopper tribe) formed the theme of every Greek poet in regard to both tunefulness of their note, and their delicate flavour when brought to table.

Anacreon inscribed to them a beautiful little Ode. Homer compared the simple garrulity of old age to their chirping. Aristotle says they were eaten by the polished Greeks, and were found very delicious. Likewise, other classic authors, Aristophanes, Œlian, and Pliny, mention their being eaten as a favourite food.

Moses (*Leviticus* xi., 21, 22) conveyed to the children of Israel the Divine permission: "Ye may eat of every flying creeping thing that goeth upon all four, which have legs above their feet, to leap withal upon the earth; even these of them ye may eat, the locust after his kind, the bald locust after his kind, and the beetle after his kind, and the grasshopper after his kind."

Allied to grasshoppers are locusts, as thus mentioned by Moses; and on which, with wild honey, John the Baptist is recorded to have lived long afterwards in the desert. "Our English grasshoppers," says Vincent Holt in his little book on edible insects, "quite fairly represent Eastern locusts, which are cooked and eaten in many ways throughout Arabia and Persia, Africa and India, being exposed for sale in regular locust shops; and among the Moors they appear at the best tables." It has been aptly suggested that their very name, "Gryllus," is an invitation to cook them. The method of doing so is to pluck off the head, wings, and

legs, to boil for half-an-hour, to flavour them with pepper and salt, and fry in butter. At other times they are powdered and baked into cakes; or again, they may be boiled, turning red like lobsters in the process. Indian cooks curry these insects.

Vincent Holt further tells us he can bear personal witness that our English grasshoppers when treated in either of the above fashions are most tasty morsels. "I foresee the day," says he, "when a dish of grasshoppers fried in butter will be as much relished by the English peasant as a similarly treated dish of locusts is by an Arab, or a Hottentot. I have eaten grasshoppers raw, and I have eaten them cooked; raw they are pleasant to the taste, cooked they are delicious." He suggests to the epicure, "Grasshoppers *au gratin*," or "*Acridæ sautés a la maitre d'Hotel.*"

The Africans, far from dreading invasions of locusts (which formed one of the plagues in Egypt when sent in hordes as a punishment), look upon a dense cloud of these insects as we should on so much bread and butter in the air. They smoke them, salt them, boil them, or stew them, or grind them down as corn and get fat on the provender. St. Francis de Sales says they who discouraged the Israelites from going into the promised land, told them that the natives were such giants (sons of Anak), that they "ate up other men like grasshoppers." Nevertheless, Joshua and Caleb protested that the land was good and beautiful; also, that the acquisition of it would be easy and pleasant. Turning the tables, we may, with benefit, "eat grasshoppers like men" throughout sunny England, which gives a delightful promise in this respect. "Socrates told fair Phœdrus," says Burton, "at noon when it was hot, and the grasshoppers made a noise, the sweet tale

how these grasshoppers were once scholars, musicians, poets, etc., before the muses were born; and they lived without meat or drink, and for that cause were turned by Jupiter into grasshoppers." Incidentally may be quoted in this regard what Hufeland, when writing on longevity, has said about mankind as to eating and drinking: "Nourishment includes not only meat and drink, but much rather that influx from the atmosphere of subtle, spiritual, vital nourishment which seems in a particular manner to contribute towards the support of the vital power. In a word, not that alone which passes through the mouth and the stomach serves to sustain life, since our lungs and skin receive from without an abundance of vital nourishment, and for spiritual support are of much greater importance than the stomach."

The aborigines of New South Wales eat grasshoppers raw, and call the sounds made by the males "galang, galang." This chirping is produced by the insect drawing its springy legs over the rigid, resonant wing covers, just as a bow is drawn over tight violin strings; but the females are said to make no noise. So Lenarchus wittily sang:—

> "Happy the Cicada lives,
> Since they all have voiceless wives."

Medicinally the powder of dried grasshoppers, given to six grains with pepper, "helps the cholick and difficulty of urine." The *London Pharmacopœia* (1696) tells of the *Cicada* as "A creature having no mouth, only a pipe in the breast, by which it sucks dew, on which it lives." "It is reported," as we read in Izaak Walton's *Compleat Angler*, "that grasshoppers and some fish have no mouths, but are nourished and take breath by the porousness of their gills, man knows not

how; and the same may be believed of the Fordidge trout (in Kent, near to Canterbury), none of which has been known to be caught with an angle, unless it were one that was caught by Sir George Hastings, an excellent angler, and now with God, which feeds in the sea nine months in the year, and fasts three in the river of Fordidge." "Grasshoppers," wrote Robert Lovell (1661), "are begotten of putrefaction, love men, and live not long." The grasshopper, as the sign of a grocer, was the crest of Sir Thomas Gresham, the merchant of that calling. Before the fires in London of 1666 and 1838 the Royal Gresham Exchange used to be profusely decorated with grasshoppers, and now the brass one still displays itself there. But winter comes, alas, at length to the merry improvident insect: as La Fontaine pathetically puts it :—

> "La cigale ayant chanté
> Tout l'eté,
> Se trouva fort depourvue
> Quand la bise fut venue."

And so with ourselves when the winter of life draws on, "Fears shall be in the way, and the almond tree shall flourish, and the grasshopper shall be a burden, and desire shall fail" (*Ecclesiastes* xii., 5). Dr. Richard Mead, in *Medica Sacra* (1749), *de morbis insignioribus qui in Bibliis memorantur*, says of old age, or *Senectus morbus*: the grasshopper shall be a burden, shall grow big, "*pinguescet locusta*" (signifying that old age shall bring about a hernia or rupture, or descent of some of the bowel through its confines into the scrotum); "*in scrotum devolutus intestinus, et hic morbus infestus cum locustâ comparatus; deforme autem animalculum est locusta, ex solo fere abdomine constans, quam imprimis cum ovulis suis gravescit; scrotum herniâ tumefactum cum parte virili referre quodam modo dici potest.*"