

THE USE OF THE UNICORN'S HORN, CORAL AND STONES IN MEDICINE

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UNICORN'S HORN

MANY things which were precious, rare or difficult to obtain were in past days deemed to possess some special curative property. It is easy, therefore, to understand why the horn of this animal came to be employed in medicine. Not only was the animal rare, but it dwelt in inaccessible places, and when provoked was fierce and formidable. To secure its horn was an undertaking of much time, trouble, danger and expense. The value that was attached to supposedly veritable examples of unicorn horns even in comparatively recent times was very great. During Queen Elizabeth's reign there was one at Windsor Castle which was valued at £10,000; in 1665 one was sold in Russia for £6000. Indeed the article was so costly that it could only be employed as a medicine for the rich. Unicorns' horns were sent as royal gifts: thus the Venetian senate presented one to Solyman, "The Magnificent," Sultan of Turkey (*ca.* 1560); while Pope Clement VII made a gift of one set in a silver stand, to Francis I, king of France.

There are several allusions to the unicorn in the Scriptures, where it is taken to represent power or strength. It is more than likely, however, that there has been a mistranslation of the Hebrew word. The translators have probably followed the Septuagint version, where the Greek words *mon kerós* were employed. The original writers may have meant a species of buffalo, as: "He hath as it were the strength of an unicorn."¹ "Will the unicorn be willing to serve thee, or abide by thy crib? Canst thou bind the unicorn with his band in the furrow? or will he harrow the valleys after thee? Wilt thou trust him, because his

strength is great?"² Such attributes were common to the cattle which could be tamed and used domestically. Primerose (1651) says: "The Jews do confesse that they do not understand many of the names of Birds whereof Moses speaks in Leviticus." Ctesias, the Greek historian, is the earliest writer who gives a description of the unicorn (400 B.C.). He says it was about the size of a horse, with a white body, a red head, blue eyes, with a horn a cubit (20 inches) long on its forehead. Towards the base the horn was white, black in the middle part and red towards the extremity. The animal was very swift and strong, and though not fierce by nature, it fought desperately when attacked, using horn, feet and teeth, so that it was not possible to take it alive. Drinking cups made from the horn preserved the drinkers from spasms, epilepsy and poisoning.

Aristotle describes it as the Indian ass (342 B.C.); while Pliny (100 A.D.) says that it has the head of a stag, the feet of an elephant, the tail of a boar and the body of a horse, while its single horn is black and two cubits in length. Without doubt Pliny was describing the Indian rhinoceros, while other observers may have been deceived by the appearance of the two almost straight horns of a certain antelope (*oxyinx*) which in profile appear as a single horn.

According to certain legends of the Middle Ages, the unicorn could only be caught by placing a virgin near his haunts. By his keen scent he soon finds out the maid, and running to her he lays his head on her lap, and sleeps beside her:

For there is in their nature, a certaine savor, wherewithall the unicornes are allured and delighted; for which occasion the Indian and Ethiopian hunters use this stratagem to take

¹ Numbers XXIII, 22.

² Job XXIX, 10-12.

the beast. They take a goodly, strong and beautifull young man, whom they dresse in the Apparell of a woman, besetting him with divers or odoriferous flowers and spices. The man so adorned they set in the Mountaines or Woods, where the Unicorne hunteth, so as the wind may carrie the savor of the beast. The Unicorne deceived with the outward shape of a woman, and sweete smells, cometh to the young man without feare, and so suffereth his head to bee covered and wrapped within his large sleeves, never stirring, but lying still and asleep. Then the hunters come upon him, and, by force, cut off his horne, and send him away alive.

There was also a belief that the unicorn could detect poison in a liquid by dipping his horn into it: "insomuch as the general Conceit is, that the wild Beasts of the Wilderness use not to drink of the Pools, for fear of the venemous Serpents there breeding, before the Unicorn hath stirred it with his Horn."

The over-literary naturalist, Gesner, says that the unicorn and lion are always like the cat and dog, and as soon as a lion sees his enemy he betakes him to a tree. The unicorn in his blind fury, running pell mell at his foe, darts his horn fast into the tree, and then the lion falls upon him and devours him.³ Spenser in his "Faerie Queene" describes this occurrence:

He slips aside; the whiles that furious beast
His precious horne, sought of his Enimyces,
Strikes in the stroke, ne thence can be released,
But to the victor yields a bounteous feast.

John Guillim, the famous herald who wrote "A Display of Heraldrie," (1610) says:

Some hath made Doubt whether there be any such Beast as this, or no. But the great esteem of his Horn (in many places to be seen) may take away that needless scruple. . . . His Vertue is no less famous than his strength, in that his Horn is supposed to be the most powerful Antidote against Poison. . . . It seemeth, by a Question moved by Farnesius, That the Unicorn is never taken alive; and the Reason being demanded, it is answered "That the greatness of his Mind is such, that he chuseth rather to die than to be taken alive; Wherein (saith he) the

³ *Historia Animalium*, 1550.

Unicorn and the valient minded Souldier are alike. Which both contemn Death, and rather than they will be compelled to undergo any base Servitude or Bondage, they will lose their Lives.

In "Timon of Athens," Shakespeare makes Timon say: "Wert thou the unicorn, pride and wrath would confound thee, and make thine own self the conquest of thy fury."⁴

Topsell, in his "Historie of foure-footed Beasts" (1607), devotes much attention to the unicorn. He writes:

These beasts are very swift, and their legges have no Articles [joints]. They keep for the most part in the desarts, and live solitary in the tops of the Mountaines. There is nothing more horrible than the voice or braying of it, for the voice is strain'd above measure. . . . It fighteth with his owne kind, yea even with the females unto death, except when it birneth in lust for procreation; . . . when once his flesh is tickled with lust, he groweth tame, gregall, and loving, and so continueth till she is filled and great with young, and then returneth to his former hostility.

From about the year 1500 the Scottish royal arms bore two unicorns rampant. At the union of England and Scotland in 1603, James I ordained that in place of the red dragon of Wales which had been introduced into the royal arms by Henry VII, the figure of a unicorn should be inscribed.

Turning now to medical writers who treat of the unicorn's horn, we find Ambroise Paré publishing in 1582 a "Discours, a sçavoir, de la mumie, des vénins, de la licorne et de la peste." He is sceptical as to the existence of such an animal and remarks that no traveller living at that time had seen one alive. If the Romans had been acquainted with it, he says, they would have engraved it on their coins or arms. Scarcely two writers, he continues, agree in the description of the unicorn. Cardan states that it lives in the deserts of Aethopia, a region squalid and filthy, abounding with toads and such-like venomous creatures. Others say it is a most gentle and amiable

⁴ Act IV, Sc. 3.

creature, but as it cannot feed on the ground because of the length of its horn it lives on the fruit that hangs from trees, sheaves of corn, and pulse. Vartoman denies that unicorns are fierce and says that he has seen two in captivity in Mecha, a city of Arabia Felix. Paré concludes:

I therefore think that this name unicorn is not the proper name of any beast in the world, and that it is an animal feigned by painters and writers to delight their beholders or readers. As regards the horn, Andrew Thevet thinks that they are the bones of elephants turned and fashioned like unicorn's horne, in the same way as crafty and cunning merchants soften the teeth of the fish called *Robard* (which lives in the Red and Aethopian sea) and draw them to what length they like. Being so fashioned they sell them as the horns of unicorns. If one grants that the unicorn exists, is its horn efficacious against poisons? I have often made trial thereof, yet could I never find any good success in the use thereof. A great number of physicians of reputation have long since bid it adieu, and have thus detracted from its supposed divine and admirable virtues.

Rondeletius says that the chief property of unicorn horn is that of drying; as it is very costly, he prescribed it for the rich while he gave ivory to the poor. Shavings or scrapings of unicorn horn were sold for their weight in gold and were employed against poisons and worms.

Paré ends by saying that he has no belief in the curative property of unicorn's horn "and if any do not approve of this, he shall do me a favour, if, for the public good, he shall freely oppose my opinion, while in the meantime take this in good part which I have done." As may readily be imagined, such an opinion was a medical heresy, and almost the whole of the medical faculty in Paris rose against him. Later, Paré had to publish a defense for his belief.

In 1651 Dr. James Primerose published his "Popular Errours," and in this he has a long account of the unicorn's horn:

It is not yet manifest what this Unicornie is properly, seeing hitherto it could not bee

certainly found out in any Indian voyages. . . . Amatus, the Portugal, says that the horne is of a blackish colour, and that if it bee too old it is of no vertue, and that there are many counterfeit and adulterate ones made up of chaulke and other things after the form of a horne; and that others doe sell the bone of a whale for it; yea and I have heard that seahorse teeth, and elephants teeth have been taken for it. . . . The hornes of the Unicornes which are brought unto us are very long and taken from that creature which the Scripture saith is very nimble. . . . I doe not say that the Unicornie is a fained creature, but it is very rare and not certainly known. Further Caesar in his sixth book makes mention of an oxe which hath but one horne. The water also hath its Unicornie monsters, which perhaps live both in the water and on the land, as Garcias ab Hortó reports of a monster about the Cape of Good Hope which has but one horne in the forehead, wherewith he boldly fights against the elephant. . . . Besides this Danial Sennertus mentions a certain horne which is found in Thuringia and other places of Germanie and digged out of the earth. It is taken for the Unicornie's horne to which they ascribe a great vertue against the epilepsie and malignant diseases. There are therefore divers sorts of Unicornes and yet they have not all vertue against the poyson. Aelian who describes the Unicornie does not attribute any Antidotary facultie thereunto, but onely to the Indian asse; for he writes that the wealthier sort among the Indians are wont to drinke out of these hornes, and that whosoever drinketh out of these is healed of incurable diseases, nor is hee taken with convulsions nor the Falling Sicknesse nor hurt with Poyson. Moreover if he drinks any deadly thing, he vomits it up and returns to his health againe. But the horne of the Indian Asse is very rare, the upper part of it is reddish, the lower white and the middle black, but the Unicorn's horne is all black. Ambrosius Pareus and other most famous physicians have found no effect at all of this horne, and he doeth not approve of that custome of touching the King's meat with the Unicornes horne, which custome I hear he hath abolished who is the chiefe physician-in-Ordinary to the King of France. Garcias reports of this monster that lives both in the sea and on the land, which resembles a horse in shape, that the horne thereof is very much commended for a counterpoyson.

All that have written of them doe prefer those that bee digged out of the earth, for they have an antidotary and preservative facultie and do mightily provoke sweat. The vertue of those medicaments can be found out no other way but by experience onely, it will bee easie for anyone that hath a piece of such bones to give some poyson to a dog or chicken and if it be preserved by taking some of the powder thereof, he may keepe it as an excellent antidote. If we allow of Harts horne, why shall not other hornes have the same vertue. Yea there are some that will have a certain wholesome qualitie to bee in all hornes even of oxen, and therefore the Ancients did drink out of hornes.

Wherefore I would not curiously enquire, whether it be a Unicornes horne, or some other creatures so it be good and efficacious. Cardanus saith that elephants teeth may be made so pliable by art that they can be made streight like hornes and so set out for the Unicornes horne. We must not give credit to those that say that if poyson or some venomous creature be neare unto Unicornes horne, it sweats, as if it did suffer with the poyson, and also they bid make a circle of the powder of it unto the middle of which or into an hollow horn they put a spider which if she pass over, they will have it to bee a counterfeit horn, but if she burst and die it is naturall, all which are false.

I fear greatly that much more than this was false, that indeed the belief in the virtues of the unicorn's horn was altogether false.

THE USE OF CORAL

From the earliest times all manner of precious stones have been employed as medicines. It is not surprising, therefore, to find that such a substance as coral was employed in the hope of curing diseases. In former times coral was difficult to obtain and cost much money. It therefore ranked amongst precious stones and was employed like them to cure the affections of the wealthy.

In the large group of the Coelenterates, the community-loving madrepores are those which secrete the largest supporting skeleton. This consists almost entirely of lime, and the coral may be of almost any color:

usually white, we yet find blue, red, yellow, green or brown varieties. Any virtue which coral may have must be in the lime present in so large an amount, but whether the administration of lime, as such, would have any therapeutic value is open to grave doubt.

White coral is mainly obtained from the Red Sea, Indian Ocean or from the East Indies; while the true red coral (*corallium*) occurs in the banks off Algeria, Tunis, Sicily, Sardinia and Naples.

Most of the old writers of medicine extol the virtues of coral, classing it very often along with pearls and diamonds, but there are few who devote special attention to it. The following extracts from a work specially written to advocate the more extended use of coral in medicine may not be uninteresting:

THE ADMIRABLE VIRTUES AND WONDERFUL EFFECTS OF THE TRUE AND GENUINE TINCTURE OF CORAL IN PHYSICK

Founded upon Reason, established by Experience and confirmed by authentical authors in all ages never found out plainly till now.

By Theophilus Garencières, Doctor in Physick, Colleg. London.

London. Printed by W. R. for Samuel Sprint at the sign of the Bell in Little Britain 1676.

It is dedicated to the Hon. Sir Walter Long, Bart., and the treatise is prefaced by a dedicatory poem to the author by Petrus Cottereau. The first chapter treats of coral and the divers kinds thereof. The author says that it is a shrub which grows at the bottom of the sea and that it becomes stony when exposed to the air. This is really a translation from Ovid's "Metamorphosis," 4: "Sic Corallium, quo primum contigit auras Tempore, durescit; mollis fuit herba sub undis."

There is a red, black, green, yellowish ash-colored coral or a mixture of these; the red, which is called the male, is preferred above the others. Anselmus, physician to the Emperor Rodolphus, describes a coral

of several colors upon the same body; this body was coral and stony, whereas the branches were ligneous or woody. This is not improbable, for he says:

I have seen in the north of Ireland a Lake called Lake Neaugh wherein if a piece of wood be planted, that part which is in the ground is turned into iron, that which is in the water, into stone and that which remains above the water, remains wood. We may guess that coral under water is not altogether soft and flexible, and this happens to many stones also which lie newly digged out of the ground, are as soft as cheese but grow hard when exposed to air. Now whether Coral groweth out of the Petrifying Juyce or is at last altered by this Juyce is a question. For my part I believe that it does not petrifie until it dieth. Nature maketh use sometimes of the Petrifying piece for the producing of the Plant, for it hath been observed that Coral hath grown out of the pieces and fragments of Earthen pots. Now the reason why coral should petrifie and other plants not, is because of its peculiar disposition. No reason can be given for its colour, no more than for that of a Rose. God hath been pleased to adorn things with such colours. Many plants that I have seen that were not wholly petrified were of a Dusky, green or such colour as we see in Trees, and those only began to be red that had nothing woody in them, as we see in Apples and Pears; the Red colour is a sign of their ripeness. The best coral is found on coasts of Tunis and Tripoli. Theophrastus includes coral among precious stones. The author narrates the story of a captain of a vessel fishing for coral who affirmed from his own experience that coral while in the sea was as hard as when exposed to the air, and that when coral is broken, a milky fluid runs from it and that this produces coral on any substance on which it may fall, adducing the circumstance that he had seen the skull of a man in the cabinet of the great Duke of Pisa upon which was grown in the sea a great branch of coral. Though coral may be hard at the bottom of the sea, it is nothing so hard as when it hath been exposed a while to the air. According to Dioscorides and Matheolus, coral is moderately astringent and cooling, but his specifick qualities are so many and wonderful that I should show myself too prolix and tedious if I would treat of them one by one.

He then goes on to quote from Anselmus de Booth, "De Gemmis et Lapidibus":

Who testified that by taking six drops of the tincture of coral he was cured of a pestilential fever which had almost killed him, and this it did by a certain Celestial power that eradicated all diseases out of the internal parts. It cureth the Falling sickness in a few weeks and is commended above all against the immoderate Fluxes of Women. In a word, Coral strengthens the Heart and therefore is a sovereign Remedy against the Plague and all venemous contagious and malignant Diseases. *Arnaldus Villanovus* relateth, that if ten grains of the Tincture of Coral be given to a child newly born mixed with some of the mother's milk, before the child hath taken any other Meal or Drink, the said child shall never be troubled with the Falling sickness.

Crollius the Prince of Chymists says that the secrets that are in Coral are altogether admirable and its Faculties beyond expression. [He then gives a long list of diseases which it cures.]

Our worthy Countreyman, Roger Bacon, in his learned Treatise *De Retardanda Senectute* commendeth Coral as of a wonderful virtue against the infirmities of old age.

I could bring the authority of all the best Physicians in all ages that have made mention of coral. Many grave and authentical authors did not stick to say that Coral was an Amulet or Charm against Fearfulness, Bewitchings, Sorceries, Poysons, Falling Sickness, Assaults of the Devil, Lightnings, Sea-storms and other dangers whatsoever. Anciently, it was among the Indians almost of an equal value with Pearls of the same bigness. It is also certain that Red Coral, if worn by a Man, hath and preserveth its colour better than that which is worn by a Woman; perhaps because the heat of a man is greater than that of a Woman; and the vapours that exhale out of his Body are purer. Moreover it is an undoubted truth that Red Coral will grow pale, blewish, and maculated with several spots, when it is worn by one that is nigh death or dangerously sick and will foretel diseases by the changing of its colour. This I found by a sad experience of my own: for having a girl about twelve moneths old that wore a Bracelet of Coral, she fell into a pestilential Fever; so that when I spied the Coral quite altered, I began presently to despair of her recovery,

which I would not have done, if I had known then the Tincture of Coral, as I do now. She lived but two days in that case. After her death I would have taken the Bracelet from her, and tried whether I could have brought it to its former colour again; but the Mother would never suffer it, and would have it buried with her, and so deprived me of so just a curiosity. What affliction it is to Parents to see their young children sick, whereas a spoonful of this tincture may preserve them alive to the honor and glory of God and the satisfaction and joy of their Parents and Relations.

The Tincture or Essence of Coral is the most secret and internal substance that Nature had enclosed and concealed in the Intrals of it, to preserve it from all external injuries and accidents.

He explains the method of making the Tincture of Coral and says:

[What] remaineth in the Viol is not to be thrown away, for out of it by chymical art may be extracted the Salt of Coral which in all respects emulateth and cometh very near the Tincture except in the curing of malignant and pestilential diseases.

I do undertake (with the Grace of God) to cure the fiercest Plague with Venice Treacle and my Tincture of Coral.

Seeing that there is no member in an Humane body but hath its proper and peculiar infirmities, the most High provided Remedies against them all; seeing also that there be members hidden and concealed in the most retired places of the Body, where there was no access for Herbs and Plants to come to, He hath given them like as it were Beams of Light, spreading themselves round like those of the Sun which passing through all the Body, do by their Actinobolism or Irradiation penetrate to that member which is correspondent to them and hath need of their Faculties and Virtues. Thus all cordials by their actinobolism do not meddle with the liver, Brains or spleen, but with the Heart. The Actinobolism of the Catharticks and Diaphoreticks gather together into the Intrals all the choler lurking in the Body and from thence carry it away as a superfluous and noxious thing. The biting of a Mad-Dog giveth to a man the Dogs manners; and that of a Mad-Cat imparteth the Cats manners. Skenkius relateth of a Maid that had eaten of a Cats Brains and did perfectly

imitate a Cats manners, expressing its voice and hunting after Mice with her crooked fingers and Nails.

In Malignant and Pestilential Disease, Bleeding and Purgation are not to be admitted unless there be an extraordinary fulness of Humours. As little significant is the new way they go about by Blistering. This practice seemeth only to be invented to beget apothecaries practise and Physicians something to say when they are at their wits end. But Cordials go directly to the Heart, cheer it up and fight against the Malignity.

He then goes over the method of taking the Tincture of Coral as "set down in our Book of the last great Plague 1665. The book however is hard to be had, there having been three impressions dispersed in six weeks time and none to be had at present." In brief, a dose of the Tincture is to be given, then the patient is to be put in a hot moist pack for three or four hours. This course of sweating twice a day must be continued for four or five days together and in this space of time all the Malignity and Pestilential poison will expire. The dose is to be continued four times each day. He then demonstrates the "dangerous and poysonous quality and Use of Blistering Playsters which contain Cantharides." He quotes many authorities to show the poisonous properties of this blistering agent. He applied a Vesicatory of Cantharides to the neck of his own daughter, aged fourteen, to cure her inflamed eyes. Within three or four hours she fell "stark lame of her right hip, and this continued for three or four weeks. It is thus apparent what a dangerous thing Cantharides is." He ends by giving a long list of all the diseases which Tincture of Coral will cure and concludes by thinking:

This list will be sufficient for any reasonable and ingenuous person. Those that will know more may advise with the author, advising them seriously that if they receive no benefit by this Remedy in those Diseases they can hardly expect it in any other. The Author also having a peculiar Talent to judge of diseases and the Remedies thereof, by the Inspection of urines, desireth those that will save charges or lives afar off, to

send their water; by the examination of which, they shall receive all reasonable satisfaction and for these purposes and others, he shall give his constant attendance at his own House from eight of the clock in the morning, till eleven; and from three in the afternoon, till five. The rest of the time it will be known where he is and when he will be at home again.

As for the said Tincture of Coral with the vehicles proper for it, they are only to be had and ministered by him, to prevent all supposition, falsification or mistakes, the world at present being so full of Envy, Backbiting and Deceitfulness that he dares trust nobody with it, but is resolved as he is the sole Author of it, so to have all the praises of it, and bear all the blame alone, if any be.

Garencières

From my House in Clarckenwel close
the second on the left hand

THE USE OF STONES

In all times and amongst all peoples certain stones have had a magical power attributed to them. Hung round the neck they acted as charms to ward off evil influences, to protect the wearer against witchcraft, to preserve the health, to prevent infection, to relieve pain or to cure disease.

In the very last letter which our unfortunate Queen Mary of Scotland wrote from Fotheringay on the day of her execution, February 8, 1587, to her brother-in-law, Henry III, King of France, she sends him two stones, rare for the health, and wishes him perfect health, together with a happy and long life. ("I'ay pris la hardiesse de vous envoyer deulx pierres rares pour la santé, vous la desirant parfaite, avec heureuse et longue vie.")

To go back to the early dawn of human history, in many of the caves once inhabited by Magdalenian men, curious spotted, striped or painted stones are found. It is of course not known to what use these were put, unless, as is most probable, some magical property was attributed to them. In the Grottes de Grimaldi in Italy, a small smooth stone had been placed in the mouth of each of the bodies found there.

These skeletons belonged to the type of the negroid race of the Cromagnon period; and in the graves of a neolithic cemetery found at Monte Carlo, these stones, placed in the mouth, were small and round and either white or black in color.

Whether these stones had been placed in the mouth of the deceased for a magical purpose, we know not. The practice might adumbrate some such superstitious belief as that of the Romans and Greeks during their early period. These classic peoples placed a small coin (an obolus of the value of three halfpence) in the mouth of the dead body. This was to pay the fare of Charon, who ferried them across the river Styx to the Elysian fields. Prehistoric man may perhaps have had some such object in placing the stone in the mouth of his dead relation or slave.

In Australia and Melanesia, the witch doctor told the patient that his illness was due to a stone which was situated at the sore part. He pretended to suck it out, and exhibited to the afflicted one a stone which he had secreted in his mouth as the one which had been the source of the illness.

That our predecessors in the practice of medicine had a complete confidence in the value of stones of various kinds as absolutely reliable therapeutic agents is well known. We have only to glance at the prescriptions of many of the older writers to see that their materia medica included practically all the known precious stones. These were believed to have been dewdrops which had been condensed and hardened by the sun's rays, and were consequently endowed with special properties in the cure of disease. Lapis lazuli in doses of 30 to 60 grains of the powder produced emesis and evacuation and was good in epilepsy and fever. Margarites or pearls were employed, but seldom alone. The coarse, rough or very small ones were used. "A confection of Perles of Doctor Nicholas called *Diamargaritum calidum* was made up of twenty-eight ingredients." Amongst these were "little balles of roses, little balles of violets, one drachm

of perles, the bone of the heart of the red deere. It comforteth the lively partes of those whiche be pensifful and sad, sighing or be in a consumption."

To another Confection of Perles, we find ivory, gold, sapphire, jacinth and emerald are added. Jasper was the *lapis sanguinaria* and was employed to staunch the flow of blood from wounds. Michael Psellus (1020-1105) describes the healing property of precious stones. He recommends amethyst in the treatment of mania induced by over-indulgence in alcohol; amber for fevers and diseases of the genitourinary system; jasper for epilepsy and beryl for jaundice.

At a much later date we find the *Electuarium de Gemmis* prescribed by many writers. This consisted of a mixture of pearls, coral, emerald, jacinth, cornelian and many other ingredients. It was reputed to cure diseases of the brain, heart, stomach and matrix. Nicholas Praepositus (1140) says that kings and noblemen have used it for their great comfort: "It causeth them to be bolde and spyrtded, the body to smell wel and engendreth good colour."

Restricting our observations however to single stones, we find that our ancestors made use of a stone which was found in the nest of the eagle. It was called by the Greeks *aetivus* or the eagle-stone, and they believed that the eagle could not lay her eggs without this stone being present in the nest. This stone was really only a lump of argillaceous oxide of iron, often hollow in the center. Sir Thomas Browne in his "Vulgar Errors" (11, 5) says: "Whether the aetivus or eagle stone hath that eminent property to promote delivery or restrain abortion, respectively applied to lower or upward parts of the body, we shall not discourage common practice by our question." This stone was used for a variety of purposes but perhaps its most successful application was when it was bound to the thigh of a parturient woman in order to facilitate the birth. It might indeed accomplish this, the mere idea of its efficacy lending greater power to the patient's efforts. To ward

off the attacks of epilepsy, the stone was also hung around the neck.

The bezoar stone has had from the earliest times an immense reputation. Large sums of money were paid for what were considered veritable stones, as the potency of these was implicitly believed in. Really they were any calculi found in the bladder or intestines of a herbivorous animal, e.g. wild goat, ox, antelope, llama. The "Oriental bezoar stone" often consisted of a ball of felted hair or vegetable fiber, consolidated to a solid mass. This *lapis occidentalis* was obtained from the stag or wild goat of Persia; the *lapis simiae* came from a Brazilian monkey and cost much money as it had great potency; the *lapis porcinus* was very bitter, being found in the gall-bladder. Primerose in 1651 says that this stone was supposed to have:

. . . an admirable vertue of corroborating the heart and of being a very strong cordiall to which people flew as to some sacred anchor. Some would have it called Belzaar, which in the Moore's language signifies the *Lord of Poyson*, or as we call *Antidote*, as did Averrhoes and Avicenna. It is a stone which comes out of India. The Arabians do highly commend it against poysons, the plague, jaundice and all obstructions of the body and bowels. Avenzoar says that he saved one that had taken deadly poyson with three graines of Bezaar, but if we read his own book, we find that it is not our stone, but the teare of an Hart of which he talkes so much. The Hart, as Plinie also testifies, by the breath of his nostrils drawes serpents out of their holes and eats them, immediately he is taken with a grievous thirst, for the quenching whereof he runs to some standing poole, in which he plunges himself up to the neck, but through nature's instinct, hee drinks not, for if he should, he would fall down dead presently. Then a certain humour distils to his eyes, which by degrees thickens, unites and compacts together, and growes to the bignesse of an acorne, which afterwards being come out of the water, the Hart shakes off, and is fought for by men which some call the Bezaar stone. But this stone of ours is not the teare of an Hart which is too rare if even there was such a stone, but this stone which wee use is very

common. It is of different colours, but the yellow is the best. Rhazes writes that it is a soft stone, of a yellow colour without any tast, and he used it with success against wolfsbane. Garcias, Physician to the Viceroy of India will have it to be dark green colour and saith that all must be brought to the King of the country and that they cannot without much difficulty bee had from thence, and now seeing they are so common, much doubt is to be made touching their goodnesse.

One sort of this stone is brought out of the East from Persia which is found in a certain kind of goat; the other brought from the West, from America, which is found in divers creatures. Bezaar is not to be relied upon, for some authors write that they provoke sweat and sometimes vomit, which thing if a man make triall of ours, he shall not finde to be alwayes true. I have very often given it to my patients, but I never perceived any of the effects. Vallesius, a most learned man, chief Physician to Philip, the second, King of Spaine, thinks there is not a true Bezaar in Spaine, and if so it is lesse likely that there should bee a true one sold among us, and if true then its very probable ours are all sophisticate. He thinks there would not be sufficient animals to provide all the stones sold in this and in other countries. There are no sure and infallible tokens whereby the true may be distinguished from the false. Stones are found very like the Bezaar in divers creatures, as horses or swine, which are of no vertue at all. Some would have it that the stone is temperate, others cold, but none hot. It is therefore more probable that it works by an occult property, to wit, in corroborating the heart and fortifying it against the malignity of poyson, and unless this be present it doth no good.

The dose may be three graines as given by Avenzoar, but Garcias gave thirty. Now because the right Bezaar is seldome found, and that which wee have is sold at too deare a rate, my counsell is that it be prescribed only for rich men and that a large dose bee given."

One writer, however, wisely asks that if the stone cut out of the bladder of a goat be used, would it not be wiser to use that cut out of the bladder of a man as being a more noble creature, fed with meat and his spirits warmed with wine, than that of a goat starving on the mountains.

Another writer says that he has no faith in its virtues, but that his rich patients would not be contented without it.

The above idea seems to have been actually put into practice, because we find it stated that "a man's stone drunk fasting is most powerful of any to break the stone and expel it with the urine." It had also the power of acting as a sudorific or as a diuretic. ("The Poor Man's Physician," 1716.)

Concretions found in the alimentary tracts of birds and other animals also found a place in ancient materia medica. A work published in 1582 gives a prescription for breaking the stone in the bladder:

You must give the poudered stone which is founde in the bellies of ryng doves. These birdes are so subject to this stone, that if kept in cages they soon dye, because their meate can not passe through them and that is because the poore birde can not goe and helpe hym selfe with that medicine which Nature hath taught hym. For those al likeilie flie unto the sea side and there finde a certaine kinde of small stone very harde, the whiche stone has vertue to dissolve the stone in the belie of the birde.

Truely the vertues of stones are very greate unto those that knowe them. I saw once in Rome two stones of inestimable vertue. One beyng laied upon the flesh of a man or woman, it causeth them to pisse out greate aboundance so that it were to bee wondered at. The other was of suche vertue that beyng laied upon a wounde, presently the bloud stened so that there fell not doune one droppe. [J.Hester.]

In the Highlands of Scotland belief in the miraculous property of certain stones to cure disease was common until a very recent period, and indeed, it very likely still persists in certain localities. One of these magic cure stones was called *Clach Leighis* or the "little subduer of pain," which property it exerted when placed on the painful part. When not in use, it was kept rolled up in a rich piece of cloth and placed in the best chest in the house. In many cases the stone was immersed in water for some time, and the patient then drank the water which had thus acquired the magical property of the stone.