OBSERVATIONS ON SECRET POISONS.

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Under the term 'Secret Poisons,' are to be understood all poisons which can be administered imperceptibly, and which gradually shorten life like a lingering disease. They appear to have been known from very ancient times, and accounts of their use have been handed down to us with much apparent authenticity from both Greek and Roman history. Modern times have also the credit of far exceeding in criminality and horror the ancient poisoners. ...

Theophrastus speaks of a poison which could be so managed as to have effect in two or three months, or at the end of one or two years, and remarks that the death the more lingering it was, became the more miserable. This poison, which was said to be prepared from aconite, was very much used at Rome about 200 years before the Christian era. As several persons of distinction died the same year at that period, and of the like distemper, upon an inquiry being made into the causes, a maid servant gave evidence against some ladies of the first families, who she said prepared and distributed poison, and above 150 were convicted and punished. As so many had learnt this destructive art, it could not be suppressed, and we find sufficient proofs in Roman history of a belief that it was continually preserved. Sejanus caused such a poison to be administered by an eunuch to Drusus, who gradually declined afterwards, as by a consumptive disorder, and at length died. Julia Agrippina being desirous of getting rid of Claudius, but not daring to dispatch him suddenly, and yet wishing not to leave him time to regulate the succession to the throne, made choice of a poison which should deprive him of his reason, and gradually consume him. This she caused to be prepared by the too celebrated Locusta, an expert poisoner, who had been condemned to death for her infamous actions, but saved to be employed as a state engine. The poison was given to the Emperor in a dish of *mushrooms*; but as on account of his irregular manner of living, it did not produce the desired effect, it was assisted by some of a stronger nature. She was also employed by Nero to despatch Britannicus, and when the first poison failed was compelled by blows and threats to prepare one more powerful, in the Emperor's presence; for this she was pardoned, liberally rewarded, and pupils allotted her, that the art might not be lost.

All these poisons were presumed to be prepared from plants, particularly aconite, hemlock, and poppy, or extracted from animal substances. With the stronger and now common mineral poisons the ancients do not appear to have been acquainted; their arsenic seems to have been what is called orpiment, and not that mineral preparation which in later times

was in Italy and France brought to such tremendous perfection. Thus Horace, when mentioning the poisonous drugs used by Canidia, particularly dwells upon wild fig trees, funeral cypresses, eggs besmeared with the blood of a loathsome toad, and the herbs brought from Iolchos and Iberia, "*Venenorum ferax.*"

No one has perhaps ever rendered a name more infamous than Toffana, a female who resided at Palermo, about the commencement of the eighteenth century, but who afterwards went to Naples. In Labat's travels through Italy much information is given illustrative of the history of Toffana. She distributed her poison in small glass phials, with this inscription, "*Manna of St. Nicholas, of Barri,*" and ornamented with the image of the saint. A miraculous oil said to drop from the tomb of this saint, is shewn at Bari, and was much lauded and sought after on account of its reputed medical virtues. It was the best name she could give it, as its sanctity prevented its being examined too closely. She suffered at length the punishment due to her crimes; but Keysler says, when he was at Naples, many years after her death, the poison was still secretly prepared and much employed.

The most authentic description of the Aqua Toffana ascribes its properties to arsenic. The dose was said to be from four to six drops. It was colourless, transparent, tasteless, just like water.

Hahnemann gives a very lucid detail of the symptoms: "They are," says he, "a gradual sinking of the powers of life without any violent symptoms—a nameless feeling of illness—failure of the strength—slight feverishness—want of sleep—an aversion to food and drink, and all other enjoyments of life—lividity of the countenance—dropsy closes the scene, along with black miliary eruptions, and convulsions."

It was observed at Rome, under the government of Pope Alexander VII., that many young married women were left widows, and many husbands died when they became disagreeable to their wives. The vigilance of government being excited, suspicion fell upon a society of young married females, whose president appeared to be an old woman, who pretended to foretell future events, and who had often predicted very exactly many deaths. The whole society was by a stratagem arrested, and being put to the torture confessed their crimes. Le Bret, who has furnished a succinct account of these things, says that the old woman, Spara, was a Sicilian, and acquired her knowledge from Toffana, at Palermo.

But the art of poisoning never excited more attention than it did in France about the year 1670. The Marchioness of Brinvilliers, a beautiful but infamous woman, having formed a licentious attachment with a young officer named Godeau de St. Croix, by the influence of her father he was arrested and thrown into the Bastille. He there got acquainted with an Italian named Exili, who understood the art of poisoning, and from whom he learnt it. In this he afterwards

instructed the Marchioness, who was sunk by dissipation into a low condition, in order that she might employ it in bettering their circumstances. The whole of this terrible and curious history may be read in the *Siècle of Louis XIV.*, (Voltaire.) Suffice it here to say, that St. Croix, when preparing his poison, was accustomed to wear a glass mask, but this happening to fall off, he was suffocated, and found dead in his laboratory. (On this I shall have to make a few remarks presently.) To such an extent was this system of poisoning carried, that a particular court, called the "*Chambre de poison*," or "*Chambre ardente*," was at length established; but it is a considerable question whether it was not made use of in a time of public panic or delusion for a political inquisition. It seems certain that only two women were discovered to be the principal perpetrators; and as these furnished a list of several of the first rank who had recourse to their services and sought the use of their remedies, there may be shrewd reason to suspect they furnished other modes of *secret poisoning*.

That mankind were, in an early stage of their existence, not only acquainted with the deadly effects of certain natural substances, when applied in minute quantities, and that they availed themselves of such knowledge for the accomplishment of the worst purposes, the records of history shew; but with respect to the secret modes in which such substances have been supposed capable of acting, the most extravagant credulity has been displayed. Such tales as have been reported of Parysatis poisoning Statira, by dividing a bird with a knife poisoned on one side;—of Livia poisoning the figs which her husband chose to gather himself;—of the kings and potentates who have been destroyed by poisoned boots, gloves, the fumes of a taper or a wassail bowl contaminated with matter extracted from a living toad, may well be consigned to the imagination of a wonder-seeking age, and, perhaps, were invented and related for some purpose of inducing fear or exciting suspicion. They certainly did continue for a long period to alarm mankind, and to perplex and baffle judicial investigation. Indeed, considering how frequently poisons were administered under the insidious forms of charms and incantations, and the difficulty of delivering the mind from superstition, we may, perhaps, less wonder at the strong expressions of the writers of those periods.

It appears to me difficult to believe that in a period of the history of Rome, renowned for the austerity of its virtue, and simplicity of its manners, a set of females should have applied themselves to the knowledge of poisons, and assembled to compose them. Livy himself does not appear to have believed it. He says there was a mortality caused by the temperature of the air, or by human malice, and the story seems as much a fable as the embassy to *Æsculapius*, and the voluntary embarking of the serpent.

All poets and romancers have taken secret poisons, charms, and incantations, under their most especial protection, and excellent use have they made of their materials. From Shakespeare's "*juice of cursed Hebenon*," down to Sir Walter Scott's admirable management of them, they have been employed for their various uses. In "*Kenilworth*" the Earl of Sussex is supposed to have been played upon, and the description given of him while labouring under the malady, accords exactly with the early symptoms I have quoted from Hahnemann; but a more powerful use is made in the novel of the "*Fair Maid of Perth*," where the death of Dr. Dwining is thus described.

"You see this trifling instrument, said the criminal, shewing a silver pen; by means of this I can escape the power even of the Black Douglas. Give him no ink nor paper, said the Baron hastily, he will draw a spell. Not so, please your Valiancy, said Dwining, with his usual chuckle, as he unscrewed the top of the pen, within which was a piece of sponge, no bigger than a pea. Now, mark this! said the prisoner, and drew it between his lips. The effect was instantaneous, he lay a dead corpse before them, the sneer still on his countenance."

Poisons long continued to be secret because there were no means known of detecting them. In the casket of St. Croix, were found sublimate, opium, regulus of antimony, vitriol, and a large quantity of poison ready prepared, the principal ingredients of which the physicians were not able to distinguish. Many have affirmed that sugar of lead was the principal ingredient, but the consequences of the poison do not seem to have indicated the use of that metal. From information obtained by the Abbe Gagliani, it was at one time generally believed to be opium and cantharides, and many presume that there have been different kinds of these Stygian waters; but Dr. Hahnemann's conjecture of their being arsenical neutral salts, seems most probable.

It has been said that St. Croix wore a glass mask during his manipulations. There is no doubt that the fumes of arsenic incautiously breathed may be of very dangerous tendency. Dr. Christison quotes many cases in his work on poisons. He quotes also an anecdote from Balthazar Timæus,—viz., that the famous Paracelsus, being one day put out of temper by an acquaintance, made him hold his nose over an alembic in which arsenic was subliming, and that the subject of this severe joke nearly lost his life in consequence. It would appear, also, that the poison acts with great rapidity when its fumes are respired. Poisoning through the lining membrane of the nose has also occurred. One case is quoted by Dr. Christison, where an arsenical lotion had been used by mistake. The individual was attacked with profuse discharge from the nostrils, and then with stupor, approaching to coma. Weakness of sight and of memory continued

after sensibility had returned, and he died two years afterwards, death having been preceded for some time by convulsions.

Beckman concludes one part of his history of secret poisons with these words:—"The more it is to be wished that preventives and antidotes were found out, and that the symptoms were ascertained; but this is hardly possible, as long as it is not known of what the poison properly consists." Much of what was thus wanted has in later times been supplied by the intelligence and industry of various persons, and perhaps splendid as are the discoveries of modern chemistry, nothing has aided more than the labours of Orfila upon this particular subject. It is only since toxicology began to assume an accurate and systematic form, that the physician can be truly said to be in possession of antidotes. It is to very recent times that he owes the discovery of the virtues of albumen as an antidote for corrosive sublimate and verdigris;—of bark for tartar emetic,—of the alkaline sulphates for sugar of lead,—of the alkaline and earthy chlorides for hepar sulphuris, (sulphuret of potass,)—of ammonia and chlorine for prussic acid;—also for ascertaining the superiority of magnesia and chalk over other antidotes for the mineral acids and oxalic acid; and the superiority of vinegar or oil for the mineral alkalis.

To those who have watched the rapid strides with which physiology has advanced within the last twenty years, it will at once be apparent, how powerful an instrument of research that science has found in the effects of poisons on the animal body. The observation of these effects has led in a peculiar manner to our present enlarged knowledge of the laws of absorption; it has greatly aided the experimentalist in ascertaining the respective part performed by the veins and the lymphatics in the discharge of this function; it has contributed to the discovery of the permeability of the living tissues, and the influence which this property has in producing many of the phenomena of absorption; it has helped to unfold the power exercised by absorption in the development of many vital actions, formerly ascribed to nervous operations. In short, it has been one of the principal guides by which Brodie, in this country, and Majendie, in France, have been directed in the progress of their brilliant discoveries; so that by a curious transition, what formerly was dreaded as the exterminator of life, and made available for acts of tyranny and deeds of infamous oppression, has now, by the guidance of a sound philosophy and active industry, become the means of investigating the laws of life, and of improving the art of preventing and curing disease.

If, however, they were employed in former days, as instruments of terror and distress, I grieve to say, that in these times, they can be, and have been, made available for the basest purposes of selfishness and dishonesty. I believe there is little doubt that race-horses have

been drugged previously to running; morphine is said to be the article used; horses like it, and a small quantity is sufficient for the required purpose. A friend of mine told me, that having to ride a very unruly horse in a procession, a small quantity of opium was given it, and he went through his work with as much lazy indifference as if he had drawn a state carriage all the days of his life. It is from this source, perhaps, that whisperers and other horse-magi derive their power of taming.

I have mentioned that some of the ancient poisons were said to be extracted from animal matters, and it is certain that a poison can be generated from such substances.

I have thus run over cursorily the subject of secret poisons, with some reasons for my disbelief of their frequent use, arising from the superstition, the ignorance, and the want of scientific research belonging to those days. I will conclude with two observations, which may be considered as aphoristic deductions. At a time when a preparation of gold was strongly extolled for its various powers, particularly as a poison, Dr. Fordyce said he believed gold to be only a cordial for the pocket, but a poison for the mind. An ignorant physician, and even a learned but inattentive one, is often a poisoner; and a good cook is a certain slow poisoner, if temperance does not regulate our obedience to her mandates. Mr. Addison concludes one of his papers with the following observations—"That secret poisons were much in request, and sought to be employed in former days, I think there seems to be no doubt, and even excellent and well-judging writers appear to have believed in them. Whether in this time of greater knowledge they are not likely to be so employed, or whether the farther advance of science will lead to such a discovery of them as to baffle their use, I will not determine, but one poison has been handed down from an early age of civil society, has been used through most conditions of life, and yet continues its operations; its only antidote is a more genuine love, and practical action of examining before believing,—I mean the poison of secret defamation."

CASES OF CYNANCHE STRIDULA, TREATED WITH THE SULPHATE OF COPPER.

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CASE I.

John Penn's child, aged 18 months, living at Ecton, five miles from Northampton. October 26th, 1844, I was called in to this child, who was exceedingly robust, at ten in the evening, and found her with stridulous breathing and severe exacerbations, with spasm, threatening suffocation, and having all the characters of confirmed croup. She had been ill with hoarseness and