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.

By JOHN BRYAN, Esq., Surgeon to the Northampton Victoria Dispensary.

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

fever for three or four days previously. The following remedies were used :—

Hirudines iv. gutturi statim. R. Vin. Ipecac., dr. vj.; Oxy. Scillæ, dr. ij. M. Capt. dim. statim.

This remedy having produced vomiting, in about two hours the following medicine was commenced :—

R. Cupri Sulph., gr. xij.; Syr. Simpl., dr. v.; Aq. Destillat., dr. vij. M. Capt. coch. min. omni vel bihor. To have a warm bath.

October 27th. There had been retching of thick mucus all the night without severe vomiting, and although the child was a good deal collapsed, the breathing was more free, but still there was some croaking sound. The bowels were freely opened. Warm bath repeated.

R. Cupri Sulph., gr. iv.; Syr. Tolut., Aquæ, utr., oz. ss. M. Capt. coch. min. quartis horis.

28th. Breathing better; croaking sound nearly left.

Rept. Mist. Cupr. Sulph. R. Mist. Oleos., dr. v.; Syr. Tolut. dr. iij.; Vin. Ipecac., dr. ss. M. Capt. coch. min. iij., quartis horis.; at intervals with the Cupri Sulph. mixture, which was now given only twice or three times in the twenty-four hours, or whenever the phlegm seemed at all accumulating.

30th. Improving. Continue medicine.

31st. Improving.

November 3rd. Left off the Cupri Sulphas, which had only been given once or twice the last two or three days. From this time the child rapidly improved.

Remarks. The case at first appearance seemed hopeless, the croup being fully confirmed, the breathing of a suffocating character, and the child, independently of being robust, disinclined to take anything in any quantity, therefore the small quantity required of the medicine answered perfectly well.

CASE II.

August 28, 1845. Mr. Wichens' little girl, aged 5, of Black Lion Hill, was taken ill on this day with catarrh or influenza, with slight hoarseness. The following remedies were prescribed :—

R. Pulv. Jacobi, gr. iij.; Hydr. Chlorid., gr. ij.; hora somni sumend. R. Liq. Ammon. Acet., Mist. Camph., Aquæ, sing. dr. x.; Spt. Æther. Nitr. dr. j.; Syr. Tolut., dr. iij.; Vin. Ipecac., Oxy. Scillæ, utr., dr. j.; Potas. Nitr., scr. j. M. Capt. coch. ampl. iss., quartis horis.

August 29th. The breathing at the chest appearing tightened a blister was applied to that part.

Rept. Mistura. R. Pulv. Jacobi, gr. iss.; Calom. gr. $\frac{1}{2}$; Pulv. Ipecac., gr. $\frac{1}{2}$. Fiat pulvis cum sing. dos. mist. sumendus.

30th. The symptoms took on the form of croup, with stridulous breathing, and the croaking noise so characteristic of that complaint.

The powders were continued, and at the same time—R. Cupri Sulph., gr. xij.; Syr. Simpl., dr. v.; Aquæ Destillat., dr. vij. M. Capt. coch. min. ij., secunda quaque hora.

Gentle retching of mucus and phlegm was immediately induced after each dose with great relief to the breathing. The Tinct. Iodin. Comp. was applied freely

to the throat over the situation of the larynx and trachea morning and evening.

Sept. 1st. Symptoms mitigated. Rept. Mist. Cupri Sulph. et Pulv.; et appl. Tinct. Iodini mane et vespere.

2nd. Improving. Rept. Med. et appl. Tinct. Iodini.

3rd. Improving. Repeat the medicine.

From this time the croaking sound in the breathing ceased, the Cupri Sulphas, therefore, which appeared to depress the powers considerably, was left off, and the mixture first prescribed given twice or thrice daily, the child all the time improving.

In this case, which was seen sooner than the first, the symptoms primarily indicated inflammation of the superior part of the chest, and were succeeded by inflammation of the larynx, which was speedily arrested by means of the Cupri Sulphas, with the application of Tinct. Iodini Comp. The child was of very weakly habit, and bleeding in any form appeared contraindicated.

CASE III.

Mr. Wilson's child, aged 11 months, Cow Lane, Northampton. I was sent for late at night to this child, who had been ill for a few days with what the mother thought to be a common sore throat, with hoarseness, and she had noticed the croaking breathing the preceding night, so that the symptoms of croup, when I first saw him, were quite confirmed. He was very plethoric, but considerably depressed, and at first sight I thought the case hopeless, the spasms in breathing being so severe as to threaten suffocation.

Empl. Lyttæ sterno admov., et Tinct. Iodini Co. gutturi. R. Pulv. Jacobi, gr. iss.; Calomel, gr. j.; Pulv. Ipecac., gr. ss. Fiat pulv. tertia quaque hora sumend. To have a warm bath. R. Cupri Sulph., gr. iv.; Syr. Tolut., Aquæ Destillat., sing., oz. ss. M. Capt. coch. min. tertiis horis.

Nov. 11th. 10 a.m. The symptoms were mitigated; retching of mucus and phlegm had quickly taken place after each dose of Cupri Sulphas, which relieved the breathing, very much; and although there was considerable uneasiness from the application of the tincture of iodine and the blister, the child slept at intervals.

Cont. Mist. et Pulv. R. Pulv. Scam. Co., gr. iv.; Calomel, gr. j. statim; the bowels not having been relieved. This acted well in two hours.

Nov. 12th. Improving. Cont. Mist. et Pulv. The application of the tincture of iodine having taken considerable effect on the throat in producing vesication, was not repeated.

14th. Omitt. Cupri Sulph., et Pulv. cum Hydrarg. Chlorid. R. Pulv. Ipecac., gr. ss.; Pulv. Jacobi, gr. iss.; ter die sumend. R. Mist. Oleos., dr. ix.; Syr. Tolut., dr. ij.; Vin. Ipecac., Tinct. Camph. Co. utr., dr. j. M. Capt. coch. med. ter die.

The symptoms now continued improving, with the exception of rather a hard cough, which ceased in two or three days.

Remarks.—Two of these cases were such, as I had, previous to trying the Cupri Sulphas, found intractable under the usual remedies, as leeches and blisters, with

ipecacuanha and squill emetics, and calomel and James's powder; and I have every reason to think that the Cupri Sulphas was the main remedy in effecting a speedy cure; but it seems to me to require constant watching, (as of course does also the complaint itself,) for there appears to be great collapse and paleness induced, with retching and usually purging of green stools. I first received the hint respecting this remedy from "Braithwaite's Retrospect," vol. 8, Art. 28, by Dr. Schwabe, and found the effects exactly the same as they are described in this article. I am disposed, however, also to attach some importance to the application of the tincture of iodine at the same time with the other remedies.

CASE OF POISONING BY EXTRACT OF BELLADONNA.

By JOHN M. BANNER, Esq., F.R.C.S., Senior Surgeon to the Northern Hospital, Liverpool.

T. N., aged nine, was affected, on the 27th of October, 1846, with mild scarlatina. The fever ran its course in about eight days. On the third day after the disappearance of the eruption, jaundice presented itself; the skin was highly tinged, the stools white, and the urine highly impregnated with bile. Although the eruption disappeared, it was not until the 27th of December that the process of desquamation was completed.

At the latter end of December (the 20th,) I was requested to see Master N., in consequence of the obstinacy of the jaundice, and considered it necessary to prescribe an ounce of extract of dandelion, to which was to be added two wine-glassfuls of water. Of this mixture he was ordered to take three tea-spoonfuls three times a day, and did so regularly until the 4th of January, when the pot which contained the extract was again sent to the druggist to be re-filled, and at night the water added as usual. For some reason unassigned, the night dose was not administered.

At eleven, a.m., of the 5th, the first dose of the mixture or fluid extract was given by the mother, at which time the boy was in good spirits, and in every respect much better; the secretion of bile was passing into the bowels; his appetite was improved, and we had good reason to consider him fast approaching to recovery. The mother left the patient in the charge of her maid for a few hours, having occasion to absent herself for that length of time. She had not been gone more than half an hour, when the servant states that she observed a strange and unnatural appearance about the boy, but did not feel any alarm, nor did she think it necessary to state the circumstance to the family until about half an hour later, (twelve o'clock,) when the boy began to talk very incoherently, and was extremely restless; the delirium became very high, but quickly passed off, when he became quiet, though constantly affected with twitchings in the arms. Not knowing what to do, and ascribing the state to exhaustion for the want of food, she administered a large quantity of hot tea, which caused *great sickness*.

When I saw the case at three o'clock, I was told that the boy had vomited twice after taking the tea, and had thrown from the stomach a large quantity, which had

not been preserved. The patient appeared in a comatose state; the breathing was slow; the eyes fixed; the pupils dilated to the fullest extent, and insensible to the admission of light; the hands and feet were cold and moist; the pulse was remarkably quick and weak, and slightly intermittent. If roused the patient tried to seize hold of the person touching him, and would shout, and occasionally laugh loudly, and would throw out the arms as if striking at an object; he could not articulate, though he often muttered as if attempting to express something; there was twitching of the flexor muscles of the arms, particularly of the left; he frequently seized hold of the bed-clothes, and attempted to draw them up, as if to cover his head. I ordered wine and hot water to be given freely; warmth to be applied to the surface, and cold-spirit wash to the head, and a large enema of salt and gruel was administered. After this injection the patient became very restless, constantly trying to get up. Thinking it probable that he wanted to pass stool, we carried him to the chair, when he passed large evacuations, which would prove some degree of consciousness. There was great disinclination to swallow fluid; it required more than ordinary force to effect this object. After a considerable excitement, for a minute or two he would fall into a quiet state, scarcely moving; he would suddenly begin to throw about his arms, and strike them forcibly from him, and then seize the bed-clothes, and endeavour to draw them over his face and head. The arms occasionally twitched convulsively. I remained with the patient for a considerable time; the first impression was that he had taken some narcotic poison, contained either in an embrocation or cough mixture. We carefully examined the room, but could not find anything confirmatory of this.

Having explained to the family the great danger the child appeared to be in, and the difficulty I felt in assigning a cause for the sudden change in the case, Dr. Duncan was requested to meet me in consultation. We met at five o'clock, five hours after the first attack, at which time the symptoms continued as before related, with the exception that the surface generally was warmer. The wine and water had been *forced* into the mouth, and he had swallowed a considerable quantity, on various occasions.

Dr. Duncan was equally at a loss with myself as to the cause of the symptoms; at first he was inclined to attribute them to the jaundice, or some intestinal irritation, but from the fact that the child had been so much better, and the bile beginning to pass into the bowel, at once did away with the first supposition. On questioning the mother (who had by this time returned home,) we for the first time learnt that fresh medicine had been procured on the previous night, and she did not at the time of mixing it think it quite the same as before. On examining the extract we immediately considered it a wrong medicine, and pronounced it either belladonna or henbane. To make ourselves fully satisfied we visited the druggist who had furnished it, as well as the former pots of extract. He unhesitatingly acknowledged that he had sent the extract of belladonna, and for the moment did not appear aware of