

substance remains unchanged. Further analysis, as conducted by Dr. Bacon, showed that this matter was lime, but in what form it is impossible to ascertain. They may be crystals of some unknown salt of lime, into which the coloring matter of the blood has been taken up, just as frequently results when crystallization occurs in colored solutions of various sorts; or it may be the sole chemical compound of the base, a minute quantity only being sufficient to determine their formation, so little, in fact, that their shape and structure remain unchanged when it is driven off.

In so complex a mixture as is present in that laboratory, the stomach, it is difficult to say what compounds may not be formed, and especially so in a pathological case like the following. Here, in addition to the secretions from the healthy portions of the cavity, were mingled the purulent discharges from the ulcerating surfaces, large quantities of blood poured out from corroded vessels, food, medicine, and masses of penicilium and torula, and the spores of *sarcina ventriculi*, disposing the whole to fermentation. The food consisted exclusively of milk, and the only drug given was nitrate of bismuth. But the crystals separating from this maze of matter are nothing we might expect to result from its decomposition. They are neither lactate, butyrate, oxalate, carbonate, nor a fatty salt of lime, nor do they at all correspond to the re-actions of hæmatine. The vomitus itself had that pungent acid character so often present in this disease.

The only other instance on record of crystals occurring in the fluid of the stomach, is one described by Neale in the *Medical Times*, in which case uric acid [?] was found. In some vomitus which I examined not long since, oxalate of lime in its usual octahedral form was present, and must have been formed in the stomach, for no food containing it could have been eaten for a long time previously. Crystals of hæmatoidin have been observed by Rokitsky in cases of so-called "infaret," or apoplectic deposits in the walls of the stomach, but their occurrence in its cavity, or the presence of crystals tinged by the coloring matter of the blood, is something hitherto unobserved.

TOBACCO SMOKE IN HYDROPHOBIA.

[Communicated for the Boston Medical and Surgical Journal.]

MESSRS. EDITORS,—I am induced to recur to the subject of hydrophobia once more in your pages, from reading in *Braithwaite*, No. 38, an account of a case of poisoning by strychnia, treated by Dr. T. O'Reilly, of St. Louis, Mo. The chief points of interest in the case are its presenting a striking resemblance to a case of hydrophobia previously witnessed by Dr. O., and its cure by nicotine. It may also be mentioned incidentally, that the writer seems to be impressed with the conviction that his is the first case of the

successful treatment of poisoning by strychnia with nicotine, and gives credit for its suggestion to the experiments of Dr. Haughton, of Dublin.

In the Appendix to my pamphlet on the Nervous System is some account of a case of poisoning by the same substance, treated by me, in 1845, with tobacco *smoke* per rectum, with an equally successful result, and without any of the untoward symptoms following, which attended his case. It was the happy effects of this agent *so applied*, together with the strong resemblance in the symptoms then witnessed by me with those I had seen described as pertaining to rabies, that induced me to recommend it as the remedy that promised most in the latter disease. The conviction has forced itself on my mind, both by reading and conversation with other physicians, that the profession is not alive to the great value of this remedy, and its safety compared with the infusion. Whether its volatilization in conjunction with free carbon modifies its effects, as animal charcoal is known to do with other poisons, or it loses some deleterious quality by the intense heat to which it has been exposed, or whatever may be the explanation, most certain it is, that its action is as unlike that of the infusion, as the effects of any two medicines that spring from a common origin, and possess certain properties in common, can well be. It would perhaps be saying too much, to declare that they differed as much as calomel and corrosive sublimate; but I can affirm with confidence that during the last twenty years I have made use of tobacco-smoke upward of twenty times, in the way mentioned above, without having once witnessed the severe prostrating effects mentioned by authors as due to tobacco *per se*, while their inferences have been drawn from observing the consequences of the infusion. In ileus, intussusception, and strangulated hernia, I have uniformly found it manageable and successful. In one case, supposed to be the former, after inflammation had progressed so far as to subsequently give rise to an abscess which opened externally, and finally communicated with the bowels, exhausting life, the patient exclaimed, in the midst of the operation, that he felt the wind pass through the seat of the stricture, having before had a sensation of its passing down to that spot, while nothing could be felt beyond. This was followed in about twelve hours by a free movement of the bowels, although cathartics of turpentine and oil, injections, bloodletting, calomel and opium, &c., had been freely employed during the week before, without success. In this instance, as in every other in which I have used it, not a sign of collapse, not even sickness at the stomach, followed its exhibition.

Dr. Paine, in his defence of bloodletting (*vide Principles of Medicine*, page 716, first edition), quotes Dr. Jacob Bigelow as countenancing the use of tobacco in hydrophobia, and although he himself considers any experiment justifiable in this disorder, seems hardly to acquiesce in the latter's qualified approval of it. Neither

gentleman discriminates between the modes of preparation. Dr. Paine has done good service in resisting the inroads of mechanical and chemical science on medicine, as well as in vindicating determining principles; in opposition to empiricism; but his zeal for bloodletting has carried him too far in condemnation of opium, tobacco, and the class of narcotics generally. Even in strangulated hernia he would discard tobacco altogether. "We possess," says he, "in tartarized antimony, or even in lobelia, far better and safer means for establishing a relaxation of the muscular system." Now I do not hesitate to assert from experience, that neither agent is so safe and efficient as tobacco smoke; and in reply to his statement that surgeons had greatly forsaken it as an enema in strangulated hernia, I venture to say that they had better continue it in the form mentioned, and forsake the operation; for, in nine cases out of ten where the operation is resorted to, it is an unnecessary procedure. When I commenced practice in this locality, now twenty years since, I had occasion to see, in consultation with two others, a case of strangulated hernia of over a week's standing, in which, from the age of the patient and the late period of the disease, no active interference was thought best, and the patient died. The next year I saw another, which was operated on. Since then, though I have attended others fully as severe, I think, none have required an operation. Whenever bloodletting, nauseating medicines, and large doses of opium failed, recourse has been had to this remedy with uniform success.

It was remarked by the senior physician in consultation in the first case (Dr. John Manning, who had then successfully practised more than fifty years on this Cape), that he was not sure that tobacco smoke would not help the patient, even now. This remark, although it bore no fruit then, nor in the next subsequent case, made an impression on my mind which I trust has not been without a good influence on my patients. Place this by the side of the statement of Dr. Bigelow, which Dr. Paine quotes and contradicts, viz., "At the present day, tobacco does not seem to be extensively in use, having passed into neglect, rather because more fashionable remedies have superseded it than because it has really been weighed and found wanting," and we shall have reason to believe that all of the innovations of late years have not been improvements. Among the different remedies of the *materia medica*, there is generally one agent that stands a head and shoulders above the others in its capability of fulfilling the general indication of that class. Opium is the prince of anodynes, rhubarb is chief among cathartics, ipecac ditto among emetics; and so will it be found that no remedy is worth a trial with tobacco, for the relief of spasm, general or local. I do not mean to assert that the smoke cannot be pushed so far as to occasion collapse; but if it is introduced slowly, as it must be when blown from a common pipe through a gum-elastic tube into the colon, it may be continued until

a manifest effect is produced, and that effect will be, according to my experience, relief of the urgent symptoms, without a sign of prostration worth mentioning. A second instance is now recorded in which it has relieved symptoms like those of hydrophobia; and when it is considered that the deaths which have resulted of late from this disease have been brought about rather by the remedies administered than by its own violence, at least in some instances, the physician who may be called to treat it need have no fear of increasing the mortality by the use of this potent agent, even if he is justified in neglecting to avail himself of its powers.

Rockport, Feb. 15, 1859.

B. HASKELL.

THE CASE OF EPHRAIM BUCK, M.D.

BY JAMES AYER, M.D.

[Read before the Suffolk District Medical Society, and communicated for the Boston Med. and Surg. Journal.]

No minutes were taken at the daily visits, and the following statements are drawn from memory. The most important facts are stated accurately;—some minutiae, both of symptoms and treatment, have doubtless escaped recollection.

On Monday eve, Dec. 13th, 1858, Dr. Ayer was first called to visit Dr. Buck. He had been ill since the preceding Friday, though he had visited patients on that and the following day. On Saturday he took his chamber and prescribed for himself. The original attack, he described, as one of acute gastritis, with severe pain of the epigastrium, and over the margin of the right lower ribs, with constant inclination to bilious vomiting. His treatment, he remarked, was an heroic one for an old man, namely, four leeches to epigastrium, and pil. hydrarg. followed by a mild cathartic. A blister was applied after the leeches, and an alterative course of calomel and opium commenced.

At the first visit he appeared to be very comfortable, and free from pain. Skin moderately cool, thin bilious fur on the tongue, pulso 85 per minute, irritable or sharp, with mercurial breath, and tenderness of the gums. There was anorexia, with acidity of the primæ viæ, and troublesome flatulency. The bowels had been freely moved; the skin was jaundiced throughout, particularly dark in the face; the urine was scanty but of natural color; the prepuce and scrotum highly œdematous—this affection he had been subject to. At an earlier period, the patient remarked that the urine had been extremely high colored. There was little or no appetite; occasional febrile exacerbations and great restlessness at night. Arrowroot gruel and tea constituted his diet. His mind was clear, spirits cheerful, and he gave a minute history of all his symptoms and treatment. The acute stage, he judged, had passed off favorably; and the only question in his mind was, whether the vital forces would rally sufficiently to effect a healthy