

into very small pieces, each piece floated, and no degree of compression could make them sink. The diaphragm was moderately arched.

The foramen ovale was completely open. The ductus arteriosus was collapsed and empty, five-eighths of an inch long, its diameter less than half that of the pulmonary artery, and somewhat smaller than that of either of its lateral branches; it was a little contracted at a point one-third distant from the pulmonary artery. The ductus venosus, umbilical vein, and umbilical arteries, were collapsed throughout their extent, but still pervious. The veins in the body generally were filled with fluid blood.

The lips, and the mucous membrane lining the interior of the mouth, were of an extremely dark-red colour, the latter being covered with what appeared to be a thick white secretion; the tongue was protruded against the inner surface of the lips, and partially between them; its base, as also the soft palate and upper portion of the œsophagus and larynx, were extremely vascular; the epiglottis was œdematous; the lower portion of the œsophagus was healthy, with its epithelium entire; the stomach was collapsed, extremely soft or gelatinous, and contained only a very small quantity of a thin, reddish fluid. On chemical examination this fluid gave no reason to suspect the existence of any corrosive or poisonous substance. The duodenum was in nearly the same condition as the stomach; the gall-bladder was collapsed and nearly empty, its internal surface being only thinly coated with a thick dark-brown fluid, not at all resembling bile; the small intestines were much less softened than the stomach and duodenum, they were throughout contracted and wrinkled, and contained only a very small quantity of a mass resembling meconium in consistence, but of a dull, pale, straw colour; the large intestines, from the cœcum to the commencement of the sigmoid closure of the colon, were completely filled with a similar pale, dull, straw-coloured viscons mass. At the spot last mentioned this mass abruptly assumed the usual dark-green colour of meconium; it was rather more fluid, and filled to distention the remaining portion of the large intestines to the anus; at the external orifice of the anus there was a small quantity of meconium. The bladder was empty and contracted.

On raising the calvarium, the brain was found extremely soft, the sinuses contained fluid blood; the membranes of the left hemisphere were very vascular; there was slight extravasation of blood on its surface, and a small quantity of blood was effused into the bony fossa which supports the middle lobe; the membranes of the right hemisphere were less vascular; the cerebellum, medulla oblongata, and medulla spinalis, exhibited no unusual appearances.

No. 819.

The more important inferences to be drawn from the above description are the following:—

1. That the period from the birth of the child to the finding of the body may have been several weeks.
2. That the child had obtained the full period of its foetal existence.
3. That the child was born alive.
4. That the child was perfectly formed, and that although its chest and lungs were somewhat smaller in proportion to its bulk and weight than the usual average, it was, nevertheless, healthy and vigorous.
5. That no educated midwife was present at its birth.
6. That it lived but a very short time.
7. That it did not die from hæmorrhage, or from the effects of cold.
8. That the appearances are quite compatible with death from suffocation.
9. That some of the appearances on the exterior of the body and about the lips and mouth, lead to a supposition that it had been scalded with water, or some other fluid, during life, but that it is by no means certain that they were not the result of putrefaction.

HENRY ANCELL.

39, Albion-street, Hyde-park,
April 26, 1839.

HYDROPHOBIA TWENTY-SEVEN MONTHS AFTER THE BITE.

ENORMOUS DOSES OF CROTON OIL AND PRUSSIC ACID.

SIR:—As hydrophobia is, happily, a disease of anything but frequent occurrence, and, as from the mysteriousness of its character, its treatment has been, almost necessarily, conducted on principles empirical rather than philosophical, I cannot help thinking that it becomes the duty of every practitioner who meets with a case, to give his professional brethren the results of the treatment, whether successful or otherwise; and especially if that treatment possess anything of novelty; and still more so, if it appear to have imparted any new or peculiar features to the phenomena which ordinarily characterise this awful malady. If, therefore, you deem the following case deserving a place in your pages its insertion will oblige yours very truly,

FREDERICK CRIPPS.

113, Dale-street, Liverpool,
April, 1839.

Mrs. H. (a respectable innkeeper's wife) was bitten on the face in the November of 1836, by a little terrier dog, which, from a variety of circumstances, there is every reason to believe was mad. The wound was

washed with salt and water; after some little difficulty it healed up and nothing more was thought about it.

On Monday, March 11th, 1839 (consequently *two and a half years* after the infliction of the bite), I had occasion to visit a grandson of Mrs. H. On asking Mrs. H. how she was, she said, "Very well, but my throat feels queer, though not sore." On the Wednesday this uneasy sensation had increased; she then told me she felt hot and feverish, but "thought it was only a cold and would, therefore, take nothing for it, as she should be well in a day or two." On Thursday evening her husband sent for me to see her; she was then in a state of high nervous excitement, not unlike that which presents itself in the earlier stages of delirium tremens; the face flushed; eyes suffused; skin dry, but not much above its natural temperature; pulse 102. She had had no sleep for two previous nights. The countenance was expressive of the deepest anxiety; she made great efforts to compose herself and be quiet, but said she felt as though she "must move about and talk;" indeed, the disposition to loquaciousness which has been mentioned by writers as incidental to hydrophobia, was well marked in this case. She was constantly using a cloth to remove a thick viscid mucus which collected, in large quantities, in her mouth, and very much plagued her. She expressed great fear lest the air in the room should be disturbed by the rustling of the curtains, opening the door, &c.; she dreaded the sight of water, nor could she even bear to hear its name. On asking her if she would try to swallow a little she shuddered; a small quantity, in a glass, was brought near to her, when she became convulsed; on pouring it into a basin she kicked, fell back in the bed, and the true hydrophobic spasm now manifested itself. On blowing into her face the same effect followed; indeed, she seemed to dread it, if possible, more than the water, and begged, "for God's sake," that that might not be repeated. Dr. O'Donnell, who had been sent for, had now arrived, previous to which I had administered a dose of camphor and opium.

The question now to be determined was,—What line of treatment should be adopted? Unfortunately, the past experience of others assisted us but little in determining this point; to combat symptoms, then, was the only alternative.

Now, had such a case never before been witnessed? Could such a series of symptoms have been attributed to a specific cause? In fact, if the existence of such a disease as hydrophobia had never before been known, there could have been no hesitation in declaring the phenomena before us to be dependent upon an inflammatory or highly irritable state of the nervous system, to allay which, would, of course, be the ob-

vious indication. Now, to effect this, bleeding would, probably, first suggest itself; but if any reasoning could have led to the conclusion that the abstraction of blood would be of no avail (and such is the position which all practical precedent establishes), we should naturally seek, first, for some other depressing agent which might have the effect of allaying the inordinate excitement, and then endeavour to maintain that effect by some powerful sedative. With these views it was determined to employ two therapeutical agents, the activity of which, in their respective departments, is unquestionable, viz., croton oil and prussic acid. It will be seen that the doses of each that were taken, were truly enormous. With respect to their purity, I may observe, that the oil was "Short's," and the acid, Scheele's strength, made by myself from Laming's formulæ; and, in order to insure accuracy in the exhibition of the medicine, I, or one of my assistants, remained with her night and day.

Thursday, 7 P.M. One drop of the oil was given and continued every hour, until 15 drops had been taken. These caused about 17 or 18 motions, each successive one becoming less fecal in its appearance, until at length the evacuations assumed a character precisely similar to the rice-water dejections of cholera; in fact, in almost all respects she resembled a person in the collapsed stage of that disease. There were the sunken features; the leaden hue; the clammy cold; the pulseless wrist; and, as before observed, the characteristic stools. She complained of great thirst, still there remained the abhorrence of anything which associated the idea of fluid; the spasms, however, were by no means so violent or so frequent.

Friday, 9 A.M. Dr. Brandreth accompanied us to see the case. It being thought that the oil had been carried to a sufficient extent, we proceeded to give the acid; two drops were accordingly administered in a little moist sugar; the dose was increased hourly.

2 P.M. The pulse became perceptible at the wrist, and ranged, during the exhibition of the medicine, from 96 to 120; the surface of the body felt warmer, and she expressed herself as being "much more comfortable." She said she "could think of water without shuddering, and thought she could drink a little;" but on trying to do so, a convulsion ensued, though much less violent than on the preceding evening.

6 P.M. No spasm since 3 P.M.; could now suck the corner of a cloth dipped in water.

12 P.M. Much the same, had had an hour's sleep; less thirst; pulse 102; no spasms.

Saturday, 6 A.M. No spasms during the night excepting a slight one produced by an attempt to swallow a little brandy and water, small portions of which she could take out of a teaspoon. The dose of the acid was now twelve drops per hour; this produced

no obvious effect, with the exception of the reduction of the pulse both in force and frequency, about six minutes after it had been taken.

12 A.M. The last dose that had been administered was 18 drops; I now gave 20, and the full effect of the poison developed itself. A few seconds after it had been swallowed, she gasped deeply, placed her hand near the precordia, and said "I am dying." Her eyes became fixed; the extremities rigid; a violent convulsive effort raised her head some distance from the bed, on which it again fell heavily; a quantity of frothy saliva escaped from her mouth; I could detect no pulsation in the carotid, and I really feared life was extinct. I immediately dashed some cold water in her face; this caused a convulsive movement, and she again began to respire; for about half an hour she remained in a state of the greatest prostration, but eventually regained her former state.

From this period the spasms almost entirely ceased; indeed, the only indication of their existence was what, under other circumstances, would be considered an hurried attempt at deglutition. She complained of no pain; her intellect appeared clear; bowels not relieved since last evening, and croton oil was again given, which soon produced an effect; pulse 96, and very feeble. The acid was again exhibited, but of course in diminished doses. Towards evening the debility was excessive, and appeared to be increased by each dose of the medicine; it was therefore suspended. She ate part of a biscuit and drank small quantities of weak brandy and water at intervals with the greatest facility.

During the night she had quiet dozes.

On the following morning (Monday) she appeared to be very calm; no return of the spasms; but though she drank freely, she still carried it up to her mouth with a slight jerk; quarter-grain doses of cyanuret of potass were substituted for the acid.

Towards evening she complained of a burning sensation at the pit of the stomach, but this ceased on diminishing the dose of the medicine. A copious perspiration broke out during the night; she slept soundly at intervals.

On the following morning (Tuesday) a fresh series of symptoms manifested themselves; the pulse became quick, skin hot, tongue dry and much furred.

I need not, however, further detail the case, inasmuch as the symptoms were now in every respect analogous to those of typhus fever;* and this identity was preserved

until the following Friday, when, notwithstanding the greatest care and the most cautious employment of stimulants and other appropriate means, she died in a perfectly typhoid condition.

After the *complete cessation*, on the Tuesday, of all the symptoms of hydrophobia, and the substitution of the adynamic state, we had anxiously hoped to be enabled to place upon record, at least one successful termination of that awfully mysterious malady which, I fear, is still destined to baffle the skill of "Æsculapian science."

THE LANCET.

London, Saturday, May 11, 1839.

WE have already examined the more remarkable facts in the Army Medical Reports upon the West Indies, the United Kingdom, and British America; and have found the West Indies producing an annual loss of life which throws into the shade any commercial advantages that they may be supposed to yield, while the Canadas are as salubrious as the soil of England itself was in the same state of cultivation. The establishment of this fact is important, and encouraging to British emigrants, who are again likely to flock in thousands to the untenanted, unsubjugated, acres of America. It would appear from Lord DURHAM's able Report that the typhus fever which prevails in Lower Canada is introduced to a considerable extent by the emigrant ships from this country; as many as forty have died by contagious disease in a voyage of six weeks; and it is notorious that the number of poor emigrants, who perish on the passage has, for a long time, been three or four times as great as the number of convicts who die on the long voyage to New South Wales. The emigrant ships are bound, by Act of Parliament, to have a surgeon on board; but the owners select their surgeons upon the principle hitherto upheld by the Poor-Law Commissioners, and the result has not been very dissimilar; disease has neither been prevented nor skilfully treated by the counterfeit Tender-surgeons.

* We regret extremely that Mr. Cripps has omitted the details of the symptoms so analogous to those of typhus fever; and also to inform us of the post-mortem appearances in this interesting case.