ever known, became one of the most promising. The edges of the fistula were brought close together, and when I had pared them, performing the operation step by step at different times, I secured the union of the raw surfaces, and closure of the fistula even to the anus. The new anus was small and tight, and the patient could retain her motions with ease, consequently it was unnecessary to make a perineum. Since the completion of the operation, the patient has been quite well, and she now retains her urine and fæces with facility. You will see this case at the close of the lecture.

I need scarcely caution you, gentlemen, that before these operations are performed great care should be taken to place the patient in a fitting state. The same precautions should be taken as I mentioned in my lecture "On Ovarian Dropsy." The skin and all the organs should be attended to before you subject the patient to the knife. The chief fear in all these cases is pyæmia; and I believe that the danger of pyæmia supervening is augmented by an unhealthy condition of the skin, and certainly by an overloaded state of the liver and bowels.

Another case to which I would direct attention is this:—In January, 1861, Mrs. M—, aged sixty, married, was admitted into the Home. She had been delivered of her first child thirty-five years previously. Instruments were then used after she had been in labour twenty-four hours, but their first employment proved ineffectual. Twelve hours afterwards instruments were again used, and with a better result. The child was dead. Two days after delivery she found that all her motions came through the vagina, and through this passage the fæces ever afterwards continued to be ejected until she was operated upon by me in the Home. Six years after her first child, she was delivered of a second. In this instance also instruments were used after she had been in labour twenty-four hours. Mark, gentlemen, this was a case of recto-vaginal fistula of thirty-five years' duration. The patient holds the position of a bathing-woman in one of our watering places on the south eastern coast, but is a person of better education and better birth than her position would indicate. She kept herself singularly clean, although for thirty-five years all her motions had escaped per vaginam. The fistula was situated right in the centre of the vagina. Fortunately, there was no puckering of the passage; and the bladder and perineum had suffered no injury. The operation consisted in paring freely the edges of the opening as in vesico-vaginal fistula, then introducing needles, with the wire ready prepared, in the way I described in my last lecture. The whole of the opening was closed by several sutures. On the tenth day the sutures were removed, the pared edges had firmly united, and the motions were passing properly through the anus. In the short space of ten days, then, this poor creature was quite cured.

A question has been raised, which deserves a passing notice, respecting the comparative difficulty of the operations for recto-vaginal and vesico vaginal fistula. Now, the operation for recto-vaginal fistula is, comparatively speaking, simple and straightforward, and it is not complicated, as in the case of vesico-vaginal fistula, with after difficulties. There is no urine trickling through the fistula; and by keeping the bowels confined with opium (which is always done as part of the after-treatment) no fear need be entertained of the fæces passing through. The consequence is that the united edges are really passive all the time of healing. Then, again, recto-vaginal fistula does not need, as does vesico-vaginal fistula, the constant adaptation of an instrument during the reparative process. The latter lesion can only be dealt with after operation by keeping a catheter constantly in the bladder. It is important, however, always to draw the patient's urine frequently after operating for recto-vaginal fistula. I always insist upon the use of the catheter every six hours. The object of this interference is to prevent the patient moving and disturbing parts recently united. From these observations it will be seen that the operation for recto-vaginal fistula is much simpler than that for vesico-vaginal fistula.

A case lately came under my notice which was much worse than any of the cases I have hitherto described. The patient had a very large recto-vaginal fistula, and likewise an extensive vesico-vaginal fistula. The whole of the urethra and all the neck of the bladder had sloughed away. The opening into the rectum was completely across the vagina, and even up the sides of the rami of the ischium. The vagina was so puckered that the finger could not be introduced. There were three apparent cul-de-sacs when I first saw the case, each admitting the tip of the finger. I sliced the parts freely, and dilated them. Subsequently I closed the recto-vaginal and vesico-vaginal openings, and made the patient a perfectly new

urethra. After three months' treatment the patient was completely cured.

The after-treatment of recto-vaginal fistula differs in some respects from that required in vesico-vaginal fistula. Opium must be given night and morning, and a liberal allowance of wine is needed. In vesico-vaginal fistula it is best not to give wine, unless there is some special necessity for its use. In recto-vaginal fistula, also, a generous diet is required *ab initio*, so as to maintain the vital power of the patient, and thereby ensure a quicker firm union.

PARTICULARS OF THE TREATMENT OF A CASE OF TETANUS IN WHICH THE CALABAR BEAN WAS FREELY ADMINISTERED.

By HOLMES COOTE, F.R.C.S.,
SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

I TAKE no credit whatever to myself for the treatment of the following case. The patient was seen shortly after the manifestation of the first indications of trismus; the symptoms did not advance rapidly; the man was always hopeful, and endowed with great moral courage; he received during his stay in the hospital the greatest possible attention. But I publish the case that it may serve to illustrate the action of certain medicines in the treatment of this unmanageable affection—viz., croton oil, calomel, the Calabar bean; morphine by hypodermic injection, and quinine; and these, too, in no small doses, but fully administered and in quick succession, as is necessary in the treatment of a disease in which the symptoms of every hour possess an untold value for good or for evil.

It may not be out of place to remark that a previous case of tetanus under my care likewise recovered. He was a lad, also with a crushed finger. In this case I amputated the member; administered croton oil; and produced rapid salivation. The after-treatment consisted in the exhibition of sulphate of quinine.

For the particulars of the following case I am indebted to Mr. Nash, my house-surgeon:—

William P—, aged thirty-five, a healthy-looking man, crushed the last joint of the right forefinger on Feb. 11th, 1864, with a heavy iron roller. A fortnight afterwards (Feb. 25th) he applied at the hospital, when he was seen by Mr. Nash, who found the whole of the last phalanx exposed, denuded of periosteum, and dead, and who very properly removed it by operation and closed the wound. In doing this the usual silver-wire sutures were employed. No unpleasant symptoms ensued until two days afterwards, when the patient complained of stiffness of the lower jaw, a condition which he attributed to cold, and which, he added, had existed in a slighter degree from the former date (the 25th). When seen on the 28th he exhibited unmistakable evidences of trismus: the mouth could not be more than half opened, and there was some difficulty in the act of swallowing. He was admitted into the hospital, and, as the bowels were confined, one minim of croton oil was immediately administered. He was ordered essence of beef and six ounces of port wine daily.—Seven P.M.: The croton oil has acted freely. To take twenty-five minims of Battley's sedative solution at night.

Feb. 29th.—He slept well; bowels not open since last night; pulse 85. He thinks that he can open his mouth a little better, but the difficulty in swallowing is the same. His jaws "snapped" on several occasions during the night. One minim of croton oil to be repeated. I saw the patient at two P.M., and, as the bowels were still inactive, ordered two minims of croton oil immediately.—Seven P.M.: The bowels acted twice freely; the motions dark-coloured and offensive.—Half past ten P.M.: Has been purged since seven. He says that whenever he drops to sleep, the jaws "snap."

March 1st.—Slept badly, having been disturbed by a delirious patient. Bowels not open since last note. Abdominal muscles tense.—Two P.M.: I ordered two grains of calomel and a third of a grain of opium every three hours until salivation was produced.—Seven P.M.: The bowels have acted twice. He says that he should be quite comfortable except for the difficulty in swallowing.

2nd.—Slept well; pulse 88; bowels open; abdominal muscles

less rigid; the jaws open more freely; the gums touched by the mercury.

3rd.—The “snapping” of the jaws disturbed his rest; abdominal muscles less rigid; pulse 88.—Seven P.M.: Altogether not so well; the tongue is very sore; wound in the finger healthy and suppurating; pulse 96.

4th.—He was ordered one minim of the extract of the Calabar bean (Messrs. Bell and Co.) in glycerine (equal to four grains of the powdered bean), every hour or every two hours, according to the effect.

5th.—Jaw tightly closed; pulse 104; abdominal muscles tense. Owing to some mistake of orders, he discontinued the use of the Calabar bean after the third dose.—Noon: He was directed to resume the employment of the Calabar bean, one grain of the extract in glycerine every hour. He took one dose every hour till eight P.M.—equal to *thirty-two grains* of the powder. No perceptible effect, but he dropped off to sleep.—Twenty minutes past ten P.M.: He awoke and took another minim.

6th.—One A.M.: Awoke again, and says he feels easier. Ordered two drops of the extract of Calabar bean, equal to eight grains of the powder.—Half-past eight A.M.: Spasms of the limbs; pain in the pit of the stomach; pulse 104.—Ten A.M.: Has taken since noon of March 5th fourteen minims of the extract of Calabar bean, equal to fifty six grains of the powder. (One bean weighs about a drachm.) No marked improvement.—Eleven A.M.: Ordered to discontinue the use of the Calabar bean. To produce continued sleep, half a grain of the acetate of morphia was injected beneath the skin; also the same quantity at one P.M. and four P.M. respectively. At one P.M. an enema of beef tea and brandy was administered.—Eight P.M.: In a deep sleep.—Ten P.M.: Pupils much contracted; still asleep.—Forty minutes past ten: He awoke, and drank twelve ounces of strong beef-tea and two ounces of brandy. He says he feels better. Pulse 136. Injection of half a grain of acetate of morphia.

7th.—He awoke and took some beef-tea and brandy. At ten minutes past two A.M., and again at half past eight and eleven, one grain of the morphia was injected hypodermically.—Forty-five minutes past five P.M.: Has slept continuously. Motions passed of a light colour; has taken nourishment.—Twenty minutes past seven P.M.: Feels more comfortable. The morphia injection (half a grain) was repeated.

8th.—Ten A.M.: Injection of a grain of acetate of morphia; pulse 128.—Five minutes past two P.M.: The spasms are much diminished; he lies in a comfortable sleep; pulse 120, and feeble. Ordered five grains of disulphate of quinine to be administered three times a day at proper intervals.—Quarter past eleven P.M.: Injection of half a grain of the morphia.

9th.—One grain of the acetate of morphia injected. The “snapping” of the jaws diminished, and he moves his arms and speaks with ease.—Five P.M.: One grain and a half of the acetate injected.—Eight P.M.: One grain of the morphia injected.

10th.—Passed a good night. At fifty minutes past two, one grain, and at a quarter past eight two grains, of the acetate were injected.

11th.—He seems quite comfortable.—Quarter past eleven: Injection (two grains) repeated.

12th.—Convalescent.

22nd.—The medicines have been gradually discontinued.

Queen Anne-street, March, 1864.

On the 26th of June, 1863, at half-past seven A.M., I was requested to see Mr. S—, a gentleman sixty-two years old, who, it was stated, had suddenly manifested symptoms of mental derangement, and required immediate attention. On my arrival I found him in bed, in a state of delirium, talking incoherently in a confused jargon of Latin, French, and English, the meaning of which was quite unintelligible. He had a wild, excited expression of countenance, with frequent knitting of the brow, and when interrogated, replied sharply that he did not understand the question. There was much confusion of thought, and he often applied the hand to his forehead and complained of an uneasy feeling in that region.

With regard to the history of the case, I may state that the patient, who holds an appointment in the Civil Service, and is of strictly temperate habits, always enjoyed good health until about two months previously, when he consulted me for an attack of bilious dyspepsia, which, however, soon yielded to treatment. In the course of a few weeks he again saw me, when he complained of difficulty of breathing, which came on in paroxysms, but without cough. He also said his spirits were depressed; that he took little interest in passing events, and that his memory began to fail him. He looked anæmic, and appeared to have lost flesh. His conjunctivæ, which during the previous illness were of a yellowish tinge, had again acquired their natural hue. The urine, on analysis, was found healthy: its specific gravity was 1023. Having carefully examined the chest and abdomen without discovering any traces of organic lesion, I regarded the case as one of anæmia, and, accordingly, while I advised cessation from duty for a short time, prescribed iron and quinine. Leave of absence was shortly obtained, but I subsequently learned that so devoted was my patient to his duties that he did not allow the time allotted to him to expire before he returned to his office, in which he was engaged many hours daily, while he also omitted taking regularly the medicine prescribed. Though the paroxysms of dyspnoea became more frequent, and the languor increased, he still continued in the pursuit of his daily avocation till the 25th of June, on the night of which he retired to rest with his mental faculties sound, though obtuse.

When he awoke on the 26th, at six A.M., it was stated that he complained of pain in the head and limbs, and exclaimed that he was “going out of his mind.” He soon jumped out of bed, and walked wildly about the room for some minutes, until he was prevailed upon by his wife to return to bed, where he remained until I saw him. When the agitation consequent on my entering the room had subsided, I noted, in addition to the delirium, the following particulars:—Pulse 92, small and compressible; tongue clean and moist; breath foul; bowels confined; no nausea or vomiting; skin cool; pupils *somewhat dilated*, but contractile; hearing *considerably impaired*; carotids visibly pulsating; sighing respiration about every five minutes; countenance slightly livid. Considering the symptoms indicative of nervous exhaustion, I administered a draught containing compound tincture of valerian and sulphuric ether.—Twelve o'clock, noon: There is less disposition to talk incoherently, but still confusion of ideas combined with inability to recognise any of his family. Dr. Smith, who now saw the patient in consultation with me, stethoscopically examined his chest, and pronounced both lungs and heart healthy. As he concurred with me in opinion with regard to the etiology of the symptoms, the following medicaments were ordered:—A draught, consisting of sesquicarbonate of ammonia, compound tincture of valerian, and Hoffman's anodyne, to be taken every fourth hour; a blister to be applied to the nape of the neck, and a purgative pill, containing podophyllin, to be taken at bedtime. A liberal supply of beef tea and eggs throughout the day was also recommended.

27th.—Eleven A.M.: Dr. Smith again saw the patient, who was in the following condition:—Bowels relieved; pulse 96, very feeble and fluttering; spasmodic breathing more frequent; expression of countenance ghastly, presenting general pallor, relieved by lividity of the cheeks and lips. During the paroxysm of dyspnoea the pulse was scarcely perceptible. He occasionally talked incoherently, but looked dull and drowsy. The mixture to be repeated, and a glass of port wine to be taken every fourth hour; the beef tea and eggs to be continued.—Nine P.M.: The patient has not spoken since noon, but lies in a state of stupor, with occasional yawning and panting for breath. When the dyspnoea is very urgent, he suddenly raises himself up in bed, and sits there for a few moments. Ordered sinapisms to be applied to the calves of the legs.

28th.—Ten A.M.: Pulse 92, quite thready; stupor more profound, and dyspnoea more frequent and distressing; pupils, though sluggish, yet contractile; tongue clean. The mixture

ON A CASE OF SPURIOUS ENCEPHALITIS.

WITH REMARKS.

By J. MOORHEAD, M.A., M.D., Weymouth.

OF all the diseases in the wide domain of pathology there are none more interesting or important than those of the nervous system. But though they have been made the subject of clinical research and experimental investigation, it will be admitted that as regards their intrinsic nature they are still involved in much obscurity. The treatment of these affections, it will also be conceded, is often empirical and unsatisfactory. I am, therefore, induced to submit to the notice of the profession the following case, which, by its favourable termination, shows the importance of correct diagnosis in all cerebral affections attended with delirium and coma, while it also exhibits in a striking light the great value of the stimulating plan of treatment.