

he could raise his heels well off the bed, and could retain the limbs in that position for some seconds, but the effort was followed by jogging movements of the limbs, and, when these subsided, by clonic contractions of the gastrocnemii muscles. The latter were still more highly marked after pinching the skin of the feet. There was slight tremulous movement of the lower lip, with drawing downwards of the angles of the mouth; the patient said he felt as if his tongue were drawn downwards, but he swallowed with perfect ease. The strychnia was omitted, and two days later the drawing of the mouth had entirely disappeared. On May 12th—i. e., the seventy-second day from admission—strychnia was recommenced in doses of one-twentieth of a grain twice daily, and the interrupted (magneto-electric) current was applied every morning. His improvement in voluntary power had gone on continuously up to this period, and now progressed steadily; early in June he could walk briskly across the ward, and at the end of the month appeared quite well and left the hospital.

The notabilia in this case are the following:—The pain in the spine; the suddenness of the paralytic symptoms; the absence of all other changes in nervous functions; the retention of balancing power with loss of locomotive capacity; the intermittent course of the symptoms; the presence of distortion in the bones of the spinal column; the temporary alkalinity of the urine; the definite improvement, and also retrogression, while taking strychnia; the subsequent amendment while taking the same drug; the appearance of toxic effects from a known dose of this medicine; their rapid diminution and cessation when the medicine was discontinued; and, finally, the complete restoration to health.

(To be continued.)

REPORT OF A CASE OF WOUNDED ABDOMEN AND INTESTINES. By S. S. DYER, M.D.

WM. C—, aged sixty-four, a butcher by trade, of intemperate habits, occasionally desponding and subject to melancholia. Twenty years ago he attempted self-destruction by cutting his throat. On the 13th of October, 1861, whilst in a state of melancholy, he stabbed himself with a long-bladed sharp-pointed knife in the abdomen, about midway between the umbilicus and the anterior superior spine of the left ilium. On the protrusion of the intestines he wounded them, and in this condition was found in the water-closet close by his house, whence he was at once removed to bed. I saw him within an hour, and found four pieces of small intestine protruding from the abdominal wound, varying in length from two to five inches, and each having a recently cut or open end—as if, two coils or convolutions having escaped, a portion had been cut from each. Such proved to be the case; as two pieces, one measuring two inches and a half and the other one inch in length, were found in the water-closet. I had to enlarge the wound slightly before I could replace the bowels; having done this, and returned three parts entirely within the abdomen, I replaced the fourth until its wounded extremity was on a level with the abdominal wound, to which I fixed it by four sutures of silver wire, with the idea that death would soon terminate the case. I did this more with a view to keep the rest of the bowels within the abdominal walls than for any ulterior good. I administered a full dose of sedative solution of opium; and having given directions for his management during the night, I left him.

Oct. 14th.—Passed a tolerable night. No excitement, fever, or thirst; pulse 96. No distension of abdomen, which is but slightly tender; wound discharging. To continue the opium every four hours, and have beef-tea and wine.

15th.—Quite comfortable; has passed an evacuation per anum. Wound discharging fecal matter.

16th.—To all appearance going on well; the bowels have again acted by their natural passage.

18th.—Slept well last night. Very little abdominal tenderness, and no distension; pulse 86; skin cool; tongue clean and moist. Takes all his nourishment, the feces passing by the artificial anus.

21st.—Removed the sutures, the wound having healed.

27th.—(A fortnight since the injury to the bowel was inflicted.)—He makes no complaint; sleeps well; suffers no pain; takes his wine and nourishment. Fecal matter escapes con-

tinually by the wound, which has irritated the skin of the surrounding parts. I desired that this should be lubricated with glycerine every day, and a soft bread-and-water poultic applied.

30th.—Weaker since the last report; is evidently losing flesh. In other respects much the same.

Nov. 2nd.—Exhaustion and cachexia increasing.

4th.—Still greater wasting and weakness.

He died on the morning of the 5th, three weeks and two days from the time of his wounding himself.

Autopsy, thirty hours after death (made by Mr. Pridham and myself). Body much emaciated; the skin immediately around the artificial anus to the extent of two inches excoriated. Upon opening the abdomen, there was but little evidence of any peritoneal inflammation. The part of the small intestine (end of jejunum or commencement of ileum), which was adherent to the abdominal walls, was a little more than two yards from the pylorus. The other wounded portion of the bowels, agglutinated by effused lymph to omentum and to each other, were in the pelvis, lying to the left of the bladder and rectum. All the bowels were empty. There was no sign that any hæmorrhage or escape of fecal matter into the peritoneal cavity had taken place.

Remarks.—The following I consider to be the points of interest in connexion with this case:—It must be very rare in civil practice to witness such a serious and extensive wound of intestines, and it is consequently more important that such should be reported. It gives us a good opportunity for noticing how much less prone is the peritoneum to take on inflammation than has been supposed. Recent cases of ovariectomy and such like surgical operations tend to verify this belief. Absence of shock to the nervous system is a marked feature in this case, which is, no doubt, to be attributed to the mental condition of the patient, rendering him less sensitive to any such impression than a person of sound mind would be. A speedy fatal termination might have been expected from internal hæmorrhage, shock, or peritonitis. Having escaped these dangers, and on receiving daily proof that the proper descending portion of bowel had luckily been selected for fixing to the wound, another point of interest arose in the question as to how the assimilative functions would be carried on by such impaired machinery. It was soon evident, by rapid and continuous wasting, that there was not a sufficient length of small intestine below the stomach for the due absorption of chyle. It is interesting to notice the wonderful *vis medicatrix nature* as displayed in the closing and agglutination of the divided ends of bowel returned within the abdomen; and whilst giving due acknowledgment to the curative powers of nature, we must claim some for therapeutics, for no doubt a prolongation of life was greatly due to the beneficial effects of opium, calming and soothing the entire system, and especially keeping at rest the wounded bowel.

Ringwood, Hants, 1863.

A Mirror OF THE PRACTICE OF MEDICINE AND SURGERY IN THE HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum, et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proæmium.

ST. MARY'S HOSPITAL. (OPHTHALMIC DEPARTMENT.)

PROLAPSE OF THE IRIS THROUGH A WOUND OF THE CORNEA;
DILATATION OF THE PUPIL WITH $\frac{1}{100000}$ OF A GRAIN OF
ATROPINE, AND RECONTRACTION WITH THE EXTRACT OF
THE CALABAR BEAN.

(Cases under the care of Mr. ERNEST HART.)

THE earliest experience of the power which the Calabar bean possesses of contracting the pupil caused its application to prolapse of the iris in corneal wound and to the recontraction of a dilated pupil to be at once indicated. In many cases of

prolapsed iris it has proved of singular benefit, and in one very marked case last week at St. Mary's Hospital, it saved from excision a large portion of iris which must have been removed. A little boy had received a clean cut, which had opened the cornea freely near the sclerotic junction, and without inflicting other injury. The lad was placed under chloroform in the theatre, and the eye carefully examined, which, as he was so excessively restless, could not otherwise be satisfactorily accomplished. The wound proved to be so shaped as to leave loose a small triangular flap of cornea. Fully a fourth of the iris prolapsed. A small square of Calabar bean paper had an hour previously been introduced under the eyelids, and all the pupil was firmly contracted except the prolapsed part; the traction was not sufficient to draw this in. It was returned by a probe, and a further drop of the glycerine extract of J. Bell and Co. (one drop equal to four grains of the extract) was introduced. The lid was closed, and a pad strapped over it. All went well next morning when the eye was examined, but as the effect of the bean wore off the prolapse again occurred, as the small corneal flap had not united. Fresh instillation of the Calabar bean was made, and the eye rebandaged. By continuing this treatment, reduction has been fully established.

Mr. Hart has also been carrying out a somewhat lengthened series of observations on patients submitted to the ophthalmoscope, of which the object has been to ascertain the smallest quantity of atropine which will effect the dilatation of the pupil. The reason for wishing to ascertain this, he states, is twofold. The atropine paper prepared by Mr. Squire for Mr. Streatfeild he had found by far too strong for ordinary ophthalmoscopic purposes, and far stronger, indeed, than is generally required. Thus it not only rapidly dilates the pupil, but paralyzes completely the accommodation of the eye; and these very inconvenient conditions, with the consequent disturbance of vision, often last as long as five, six, or more days after the use of this paper. Moreover, the Calabar bean paper hitherto prepared has not proved sufficiently strong to counterbalance the degree of dilatation. The square of an eighth of an inch of this paper contains $\frac{1}{240}$ of a grain of sulphate of atropia. Mr. Hart has been using paper so prepared that one square contains as little as $\frac{1}{20000}$ or $\frac{1}{100000}$ of a grain, and he finds that dilatation is very effectually procured with the latter. The dilatation is more rapid when the eye is kept in the dark immediately after the introduction of the paper, but it takes place quickly enough when the eye is exposed to the light, and lasts nearly twenty-four hours. The accommodation is very slightly affected when this paper is used, and recontraction may then be effectually obtained with the Calabar bean paper. Mr. Hart is continuing the experiments, which will enable him to fix the lowest available strength of the atropine paper or solution, and the relative strength of the Calabar bean paper or solution. Meantime it is evident that the problem of concurrent dilatation and recontraction is solved, and that surgeons wishing to dilate the pupil will find an advantage in employing the extremely dilute strength above mentioned. The papers used in the above experiments were supplied by Messrs. Savory and Moore.

One of the difficulties of making Calabar bean paper of considerable strength arises from the fact that at present the alcoholic extract is the most condensed preparation yet obtained, containing its active principle; and this is of course far more bulky than the alkaloid atropine. Dr. Christison has for some time, Mr. Hart observed, been endeavouring to extract from the Calabar bean an alkaloid or other active principle. This, however, has not yet been isolated, and it seems difficult to ascertain even what is the nature of this active principle. The bean does not yield it to acid solutions; and hence Dr. Squire has suggested that it is probably not an alkaloid, or some salt of it would be soluble in water, which appears not to be the case, as aqueous solutions of the Calabar bean are inert. Hence it seems probable that it is some body of the nature of santonine or piperine, which belong to the class of neutral or slightly acid bodies; or it may even be a resin. But it is hardly probable that the bean will yield an alkaloid; it yields a beautiful gum.

WESTMINSTER HOSPITAL.

INTESTINAL OBSTRUCTION PRODUCED BY A CONGENITAL DIVERTICULUM PROCEEDING FROM THE ILEUM, STRANGULATING A COIL OF INTESTINE.

(Under the care of Dr. RADCLIFFE.)

For the notes of the following case we are indebted to Mr. Gandy, the house-physician:—

Charles C—, aged eight years, was admitted on the 19th of February, 1862. His father stated that six days previous, after partaking of supper, he retired to bed, and in the night awoke complaining of cramps in the inside and pain in the hypogastric region; he shrieked and cried at intervals, and became very feverish and thirsty. The next day he is reported to have drunk an immense quantity of cold water, which however returned as fast as he took it; the vomiting was constant up to the time of his admission, the ejecta being clear and limpid, with an offensive odour; the urine had been free, and he had eaten nothing since the time of the attack. Mustard and bran poultices had been applied to the abdomen, and he had had some powders and medicine to take; but there had been no action of the bowels from the 13th to the 19th. At the time of admission his countenance was anxious and pale; the eyes seemed deep-set, and the pupils were dilated. He dozed off every few minutes. The eyelids remaining half open, and the eyes being turned up, he presented a very cadaveric appearance. The tongue was somewhat dry, pasty, and covered with brown fur; the abdomen was very much distended, with prominent veins on the surface. Decubitus dorsal, with his knees drawn up. He breathed almost exclusively with the upper part of the chest. Since this morning he has been vomiting a yellowish-brown fluid, with a disagreeable, sour, feculent smell; the skin rather cold; pulse 117, wiry; respiration 28; urine free. An enema was administered, and returned directly, without bringing away any feculent matter.

Feb. 20th.—The enemata were continued every four hours during the night, but without producing any effect. He passed a restless night, and seemed in great pain. He vomited stercoraceous matter about five A.M., and twice since. His feet and hands are cold; the abdomen swollen, but not very tense; pain is referred to no particular spot on pressure; eyes sunken; tongue brown and somewhat dry; surface of the body cold and pale; pulse 90, very feeble—scarcely perceptible at wrist; lips dry; teeth covered with sordes. He is very thirsty; takes nothing but cold water. No tumour of any kind in the ordinary situation of hernia. The vomiting continued the whole day; the symptoms were unrelieved, no fecal matter returning with the injections. At a quarter to six P.M. he became delirious, and rapidly died.

Autopsy, twenty hours after death.—Body emaciated; eyes sunken and hollow; rigor mortis present; abdomen distended, and of a dark, dusky, bluish hue. On making a section through the abdominal parietes, the coils of the small intestine, which were very much distended, at once protruded themselves; their vessels were congested, but there was no appearance of any inflammatory action. In the right lumbar and iliac regions, the distended intestine was found suddenly to terminate, being firmly constricted by a diverticulum, proceeding from the ileum; from this point the small intestine was collapsed, and of a dark, unhealthy aspect as far as its entrance into the cæcum, at which spot the unhealthy appearance ceased, and the cæcum and colon, though empty, were quite natural in appearance. On further examination, the constriction was found to be in the ileum, about twelve inches prior to its termination. In the cæcum, a coil of it was firmly held by the diverticulum. On cutting it open, two ulcerated surfaces were observable in the ileum, but no perforation had taken place. The intestine above the seat of stricture contained much yellowish-brown, feculent matter, of a sourish, offensive odour, similar to some found in the stomach, and identical with that which had been vomited during life. The mesenteric glands were enlarged; the gall-bladder was distended, and full of black bile; the liver was healthy, its abdominal surface being discoloured black. The other viscera were healthy.

ST. GEORGE'S HOSPITAL.

ULCERATION OF THE VERMIFORM APPENDIX, PROCEEDING TO PERFORATION AND FATAL PERITONITIS.

(Under the care of Dr. BARCLAY.)

JAMES N—, aged thirty-one, was admitted on the 27th of May last. According to the patient's account, he was in excellent health three days before admission, but on that day he had taken some aperient medicine because he thought his bowels were a little sluggish. The next day, after dinner, he was attacked with most acute pain in the abdomen, which he attributed to the beer he had just drunk. The pain, however, did not yield to any of the common remedies for colic; and on the 27th of May he was brought to the hospital.