assumption of the identity of the chemical nature of the viper and rattlesnake poisons, founded on Prince L. L. Bonaparte's analysis, made so far back as 1843. But Professor Weir Mitchell's parallel investigation, on which he relied as well, Dr. Badaloni replied, was made at a much later date (1861) and came to precisely similar results. Prince Bonaparte's work had, further, been cited by Poggiale in 1869 as being in advance of Mitchell's. Considering the purely qualitative nature of these analyses, he considered himself justified in relying upon them, and he believed the two poisons to be in every way identical, as De Lacerda himself admitted; the greater virulence of the *Crotalus* being due to the amount of poison which it is capable of injecting.

Whatever value should be given to the experiments made with permanganate of potash by different observers up to the present date, the question of an antidote to viper poison remained unsolved, for this substance had not yet answered the expectations of European experimenters as it had in the hands of Dr. de Lacerda.]

SPINAL MENINGITIS IN A CHILD FOLLOWING SPINAL CONCUSSION; RECOVERY.

By WILLIAM HENRY DAY, M.D.,

PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

M. T—, aged twelve, a well-made, healthy-looking girl, was admitted into the Samaritan Hospital, Nov. 18th, 1881, suffering from the effects of concussion of the spinal cord. Three months before admission she jumped, it was said, from the top of a heap of dirt, and on touching the ground struck the lower part of the spine, directly over the sacrum, her feet turning upwards at the same time, as she glided some distance along her back. I think there is little doubt, from what the girl said, that she was stunned at the time of the accident, as she was told she did not answer in reply to questions put to her. This is an interesting point, as in violent falls on the lower end of the spine the brain sometimes suffers from slight concussion. With the assistance of two school-fellows she got up, and was led home with difficulty. She suffered sharp pain over the seat of the accident, but, after remaining in bed two days, she resumed attendance at school. After two days as she could not sit up without pain at the bottom of the back, she gave up attempting to walk, and took to her bed till the time of her admission into hospital. On examination there was a distinct fulness over the sacral region, and the coccyx was tender, though on insertion of the finger into the rectum no fracture or dislocation of that bone could be detected. The whole spine was curved, owing no doubt to the position she had assumed in bed. She complained of pains down both legs; there was an inclination to draw them up, and there was a sensation of pins and needles, as if they were going to sleep. The patient walked with the face looking to the ground, the shoulders and head bent forward, and the nates prominently projected. On applying a needle to the legs, sensation in the right limb was much less than in the left. It was not recognised at four inches and a half apart as two pricks; in the left it was recognised at two inches. The temperature was normal, the tongue clean, the pulse quiet, and the bowels were regular. The urine was of a pale straw colour, alkaline, sp. gr. 1020. The child was kept in bed, a light nutritious diet ordered, and the following draught was given three times a day:—Iodide of potassium, two grains; tincture of belladonna, five minims; compound tincture of cinchona, half a drachm; to half an ounce of water.

On Dec. 1st Mr. William Adams was kind enough to see the patient and to report that the case appeared to be a genuine example of spinal concussion, followed by inflammation of the membranes, which might extend to the substance of the cord, but as yet there was no myelitis. He recommended repeated small blisters to the spine in the lumbar region, reaching as high as the eighth dorsal vertebra, so as to relieve congestion about the lumbar enlargement, and a moderate amount of counter-irritation kept up. He thought absolute rest in bed with this for a few months would arrest further mischief. Mr. Adams further wrote, "I believe you are quite right in suggesting chronic inflam-

mation with effusion, and the case should be very carefully watched for a long time, as possibly Pott's disease of the spine may become developed, or paralytic symptoms, preceded by pain; starting and drawing up of legs may show the extension of inflammation to the substance of the cord. Special symptoms were well marked at the time of the fall, as she could not get up, and was obliged to be carried home."—Jan. 20th, 1882: She is better, and makes no complaint of tingling in her legs; the puffiness and tenderness at the lower end of the back are less, but she cannot lie straight in bed. Urine clear, acid, non-albuminous. The blistering was repeated.—Feb. 10th: Has greatly improved since last report. She moves more easily in bed, and the pain and puffiness in the back are less. There is still some tenderness over the lower lumbar and sacral region, and she complains of occasional sensations of pins and needles, chiefly in the right leg. The medicine was omitted.—March 3rd: During the last week she has been walking about the ward for a short time; she is more upright, and the sensation of pins and needles has departed.—March 19th: She left the hospital with instructions to be kept lying on her back for three months.—Jan. 1883: A report from her friends reached me that she laid on her back as directed for three months, and then went to school. She is quite straight, and can walk well without limping, or feeling pain in her back or limbs. No spinal support has been worn throughout. No one would know from her gait that her back had been affected.

SEVEN CASES OF COLOTOMY, WITH REMARKS.

By GEORGE ELDER, M.D.,

SURGEON TO THE HOSPITAL FOR WOMEN, NOTTINGHAM.

CASE 1.—Three years ago I saw in consultation a case of absolute intestinal obstruction due to malignant disease of the rectum, when colotomy was advised and performed with the result of giving immediate relief to the patient's suffering and prolonging life for thirteen months. During the last two years six other cases have occurred in my own practice, of which the histories are briefly as follows:—

CASE 2.—The patient was a woman, between thirty and forty years of age, suffering from syphilitic stricture and ulceration of the rectum. As a hospital out-patient she had had both general and local medical treatment without avail, and with the view of diminishing the intensity of her sufferings, if nothing else, the operation was performed on Jan. 29th, 1881. Three weeks subsequently she was discharged—a gainer in comfort, flesh, and strength. From time to time she appears amongst my out-patients, very different from the prematurely old-looking, suffering woman of two years ago.

CASE 3.—On Feb. 10th, 1881, I performed colotomy upon a woman with a recto-vaginal fistula due to syphilitic diseases; an opening into the descending colon was made. The exceeding debility of the patient, induced by a recent acute illness, made the case a very unpromising one; but the loathsome nature of her rectal disease, with its ever-present depressing effect upon her, decided me to operate. Her recovery was fairly good, and on March 16th she left the hospital, entirely relieved of her sufferings. On Dec. 9th of the same year she died, as I was informed, from exhaustion due to the original disease.

CASE 4.—On February 17th, 1881, left colotomy was performed upon a lady from Sheffield who had been under me at various times for several years suffering from many of the phases of syphilis. Mercury locally and constitutionally, the iodides in very large doses (one drachm and a half daily), medicated bougies, &c., had been long and fairly tried, until at length her sufferings from the constant tenesmus became so intense that she implored me, even at the risk of losing her life, to relieve her. Fifteen days after the operation she was able to undertake the journey home, and in a letter which I had from Mr. Pye-Smith of Sheffield (to whom the patient applied last year to have the artificial anus closed because of its discomfort), he informed me that before making this attempt the rectum was examined, and the ulceration by lapse of time and absence of faecal irritation was found to have healed. He concludes his letter by saying that doubtless her life has been prolonged and pain alleviated by the colotomy.

CASE 5.—On May 19th, 1881, I performed the operation on a male with malignant rectal disease. The local distress had caused him to seek relief. Fifteen days after the operation the patient returned to his home, ten miles off, and when heard of last summer he was following his occupation of engine tenting, and although feeling acutely the disagreeable incident to an artificial anus, still free in a great degree from the distressing and almost constant bowel pains.

CASE 6.—On June 9th, 1882, in a case of pelvic tumour, which had developed malignancy, and almost entirely occluded the bowel, I formed an artificial opening. The patient had become so exhausted from the local distress, coupled with the ravages the disease had inflicted on her general nutrition, that when the operation was agreed to death seemed imminent. The shock of the operation almost killed the patient, and although she lived for sixteen days perfectly freed from pain, still the wound never put on healing action.

CASE 7.—Four days after the above case, I again did the operation on a woman between sixty and seventy years of age for malignant rectal obstruction. Her recovery was interrupted and rapid, and relief from suffering most marked. The other day she called on me, grateful for what had been done for her.

Remarks.—Up till date these seven cases complete my experience of colotomy. In all the left lumbar operation was performed and the incision was oblique, running from the margin of the last rib across the quadratus lumborum to and in front of the anterior superior iliac spine. No particular difficulty was experienced in any of my cases, and the loss of blood was but trifling. In one instance a fold of sub-peritoneal fat so simulated the flaccid bowel that I had actually transixed it before finding out my mistake. There is a danger of making the incision too far forward. This I did in Case 6, and in consequence wounded the reflected peritoneum, but no harm was done the patient thereby. Carbolised catgut was used in my first two cases to fix the edges of the opening to the skin, but because of its solution before firm union had taken place it was abandoned for Chinese silk. Colotomy is not practised so often as it ought to be. By diverting the fæces and so giving rest to diseased parts it may be directly curative in its action, as illustrated by Case 4. For such cases its more general adoption would prove a great gain in the treatment of cases which otherwise are intractable to treatment. The repugnance which patients frequently manifest even at the thought of such an operation would in great measure be removed when the temporary character of the artificial opening was explained, and the strong reasons for its production. When cure is altogether out of the question, owing to the malignant nature of the disease, we can replace intense, even in many cases incessant, pain by comparative comfort, and, unless the operation is delayed too long, prolong life. This is abundantly shown in the cases above recorded, and by an operation the mortality from which is very small. If patients suffering from malignant disease were seen sufficiently early, a combination of colotomy, as a temporary measure until healing of the parts had taken place, and excision of the diseased portion of bowel would offer the best chance of ultimate recovery. But unfortunately such patients as a rule come too late.

Nottingham.

A RAPID METHOD OF DEMONSTRATING THE TUBERCLE BACILLUS WITHOUT THE USE OF NITRIC ACID.

By HENEAGE GIBBES, M.D.,

CURATOR OF THE ANATOMICAL MUSEUM, KING'S COLLEGE.

THE following method, which I have used for some time with great success, will I think prove useful to those requiring the demonstration of the tubercle bacillus for diagnostic purposes in a rapid manner. The great advantage consists in doing away with the use of nitric acid. The stain is made as follows: Take of rosanilin hydrochloride two grammes, methyl blue one gramme; rub them up in a glass mortar. Then dissolve anilin oil 3 c.c. in rectified spirit 15 c.c.; add the spirit slowly to the stains until all is dissolved, then slowly add distilled water 15 c.c.; keep in a stoppered bottle.

To use the stain: The sputum having been dried on the cover-glass in the usual manner, a few drops of the stain are poured into a test tube and warmed; as soon as steam rises pour into a watch-glass, and place the cover-glass on the stain. Allow it to remain for four or five minutes, then wash in methylated spirit until no more colour comes away; drain thoroughly and dry, either in the air or over a spirit-lamp. Mount in Canada balsam. The whole process, after the sputum is dried, need not take more than six or seven minutes. This process is also valuable for sections of tissue containing bacilli, as they can be doubly stained without the least trouble. I have not tried to do this against time, but have merely placed the sections in the stain and allowed them to remain for some hours, and then transferred them to methylated spirit, where they have been left as long as the colour came out. In this way beautiful specimens have been made, without the shrinking which always occurs in the nitric acid process. The stains may be procured from Messrs. R. and J. Beck, 68, Cornhill, E.C., either in crystals or in solution, ready for use.

AN INTERESTING MIDWIFERY CASE.

By FRED. C. CORY, M.D.

A SHORT record of the following complex case of midwifery may be interesting to the readers of THE LANCET.

A poor woman (multipara), the wife of a mechanic, was being attended by an uncertificated midwife for two days prior to my seeing the case. I could not get from this woman any clear statement of how such a condition of things had taken place. She was confused in her mind, having a constant craving for stimulating her nerve centres, which rendered her incapable of answering any questions, or even taking care of herself, much more of the patient. Of course this votary of Bacchus was very quickly dismissed from her post. The accompanying woodcut presents a rough

sketch of the position of each child in and out of the uterus, as far as I could ascertain by their external appearances. These children were in a high state of hæmic congestion, amounting almost to blackness. The child whose head was expelled, and whom I shall for the sake of distinction call No. 1, had the face towards the maternal pubes, the chin resting thereon, with its neck pressed closely under the arch by the back and shoulders of No. 2; the body was above the brim. No. 2 had the body from the arms and shoulders downwards expelled; the chin of this child rested on the brim of the maternal pelvis by the right sacro-iliac synchondrosis, the occiput impinging on the upper edge of the pubis to the right of the symphysis. The greatest difficulty was experienced in getting the index-finger upwards, so that