that is necessary for the education of the higher cerebral centres but I maintain that it deserves far more consideration than it usually receives and that the two are very closely bound up together. At the cost of again repeating myself I would remind you that any sound method of educational discipline of the lower nerve centres in children must take cognisance of the three fundamental principles to which I have already referred—namely, the avoidance of super-maximal stimulation, the prevention of the acquisition of explosive neuroses through the habit of over-action, and the education of each centre in its natural order of development.

South Kensington, S.W.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A CASE OF ASCITES TAPPED SIXTY-NINE TIMES.

BY FREDERICK H. MABERLY, M.R.C.S. ENG.,
L.R.C.P. EDIN., L.S.A. & L.M.

THE patient, a man, aged 52 years, consulted me first in March, 1901. He was then suffering from an enlarged, flabby, and very irregular heart, a liver reaching three inches below the ribs, and on boiling some urine in a test tube the deposited albumin reached about half way up the column of fluid. During the next few months four of our Birmingham consultants saw him with me and all felt that he had only a short time to live. His legs became very oedematous (for this I used acupuncture with very good results) but on March 11th, 1902, I had to relieve the abdomen which had gradually filled; this I did in the ordinary way with the usual trocar and cannula, but finding how exhausted he was after the operation I concluded that the very rapid extraction of heat contained in two gallons of fluid was the cause and determined to adopt another method, so on the next occasion, March 27th, I used a small exploring needle the cannula of which had a diameter of only one-sixteenth of an inch. The drawing off of the fluid this time gave him no inconvenience, but, on the contrary, he was greatly relieved and felt perfectly comfortable on the next day. I tapped him 24 times in 1902, 21 times in 1903, 10 times in 1904, and 14 times in 1905, in all, 69 times, which I think is a record. The *modus operandi* was as follows. First I sterilised my instruments by placing them in a solution of formalin, sponged the skin, and washed my own and the nurse's hands with the same; then I injected hypodermically half a grain of cocaine deeply, allowing seven or eight minutes to elapse, when after emptying the bladder, I punctured through the linea alba, midway between the umbilicus and pubes, then removed the trocar and left the abdomen to drain, which generally took about one and a half hours. The patient's sister, who nursed him most assiduously throughout his illness, attended to the draining, then removed the cannula, and applied a small piece of sterilised wool, with adhesive plaster to the puncture and the operation was over. A belt was worn to support the abdominal walls. After adopting this plan the patient never suffered the slightest pain during the operation, nor had he any depression afterwards but was always much better and more cheerful on the next day, although the usual quantity of fluid removed was about two gallons.

I report this case thinking that it may be a help to my professional brethren in treating similar cases. The patient died from coma on March 14th, 1906, but until shortly before his end he had a very comfortable existence during the four years during which the treatment undoubtedly prolonged his life.

Birmingham.

A NEW METHOD OF OPERATING IN PANNUS.

BY WILLIAM PRIMROSE, M.B., C.M. GLASG., M.R.C.S. ENG.

FOR some time I have been employing a new method of operating in cases of pannus which is so simple and satisfactory that I think it deserves to be better known. The

operation consists in causing an extravasation of blood into the subconjunctival tissue around the cornea. This by its mechanical pressure and by acting as an irritant foreign body setting up a localised inflammation, causes the obliteration of the vessels which vascularise the cornea. The only instrument required is a small sharp-pointed knife—a Beer's cataract knife does very well for the purpose. The point of the knife is passed through the conjunctiva at a distance of two or three millimetres from the cornea and made to puncture one of the larger blood-vessels. The knife is then withdrawn. The conjunctival wound should be as small as possible and made obliquely by holding the knife at an acute angle with that part of the surface of the eyeball which is being operated upon. In this way there is no external hæmorrhage; but bleeding takes place into the subconjunctival tissues and is arrested automatically by the pressure of the extravasated blood upon the vessel walls. In like manner many of the smaller vessels in the vicinity are mechanically closed. This mechanical action is increased by the formation of a coagulum, the fibrinous part of which shrinks and makes the whole mass smaller. Extravasated blood acts as an irritant, probably chemical as well as mechanical, so a non-infective inflammation is set up which results in the absorption of the blood clot. This process acts as a counter irritation to the inflammation of the corneal tissues and so tends to remove the seat of inflammation and the supply of blood from the diseased cornea to the clot, where the effects of the inflammation are comparatively trivial. By the time the blood clot has disappeared the blood-vessels in the cornea affected by the operation have shrivelled up and the cornea has regained much of its transparency. The whole pannus may be treated in this way at one time or the operation may be repeated from time to time, only a part of the pannus being treated each time. The latter is always advisable when the pannus is marked, as the inflammatory reaction is sometimes very severe and accompanied by a good deal of pain. Although the structures in the anterior part of the eyeball are all more or less affected by the inflammation this is easily controlled and subsides in a few days with the application of suitable remedies.

A patient, 35 years of age, recovering from trachoma had pannus equally marked in both eyes. He had one eye treated by the new method and the other by peritomy. Although the process of cure was attended by much greater suffering in the eye treated by the new method, the result of the operation was much more satisfactory than was that in the eye on which peritomy was performed.

Glasgow.

A CASE OF RUPTURE OF THE SAC IN ECTOPIC GESTATION.

BY JOHN H. TONKING, M.B. LOND.

MY excuse for publishing this case is the paucity of symptoms on which reliance had to be placed in order to arrive at a diagnosis.

The patient was a woman, 39 years of age, who had had 12 pregnancies, in the ninth of which she was delivered of twins. Her twelfth child was born on July 2nd, 1905, and was not nursed by the patient. Menstruation recommenced early in October and continued regular until early in January, 1906, when it stopped, but came on early in February. Instead, however, of ceasing as usual at the end of a few days it continued intermittently and not profusely until March 10th, when the patient was seized with violent abdominal pain causing vomiting. She was seen by a colleague who found her with no rise of temperature but with a pulse-rate of 120. Opium pills were given and on March 11th my colleague reported that she had less pain but that her pulse was still quick. The place of greatest pain was over the region of the gall-bladder. On March 12th at 6 P.M. I was requested to see her and found her in an attack of great pain, with no rise of temperature and a pulse-rate varying from 120 to 140. She was very anæmic. A diagnosis of internal hæmorrhage was considered probable and the patient was removed to the Women's Hospital at Redruth. After a consultation with Dr. Frank Hitchens, ether was administered by Dr. William Blackwood, my partner, and I performed laparotomy at 10 P.M. the same night. As the patient was collapsed during the operation two and a half pints of saline solution were injected into the median basilic