mauve) about even the smallest axis cylinders. This is due to the neurokeratin contents of the youngest fibre.

Two histological points are to be noted even in the youngest fibrils of adults or embryo; one is the cones, barbs, *renflements biconiques*, or whatever they be called, and the other is the so-called vacuoles, *gonflements* of myelin moniliform appearance of the fibrils, due to the neurokeratin framework. They show so clearly with my neurokeratin stain that the photographs I am preparing will speak better than words.

There is one fact that should be noted, however—that is, that stretching or compressing a nerve draws out this neurokeratin support into cone-shaped form, leaving the point finely drawn out along the axis cylinder, which it ensheaths, and the base toward the sheath of Schwann, each cone being from 10 to 40 μ long, depending on the amount of stretch. The base appears more deeply stained—not so; it is merely that, being at the wider attachment, there is a greater amount of it stained at the point viewed; this masses the pigment.

There are a number of interesting points that one can explain, and work is now in progress to put a correct interpretation on many long and acrimoniously discussed questions.

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THREE CASES OF MELAENA NEONATORUM SUCCESSFULLY TREATED BY THE INJECTION OF WHOLE BLOOD OR BLOOD SERUM.

By ROBERT HUTCHISON, M.D., F.R.C.P.

THERE is, of course, nothing new in the treatment of the haemorrhagic disease of the newly born by the injection of human blood or blood serum. It was introduced, I believe, by J. E. Welch in the year 1910, and many successful cases have been recorded since, especially in America. In this country, however, it does not appear to be very generally known yet, so it seems worth while to put on record the three cases described below, which occurred consecutively.

CASE I.

A female child, aged 2 days. The day after birth began to pass blood from the bowel; no haematemesis nor bleeding elsewhere.

On admission the child was blanched and profuse melaena was present. The same evening 5 c.cm. of human serum obtained from the blood of a patient with erythraemia was injected *sub cutem*. Next day there was a small attack of epistaxis but no further bleeding from the bowel, and the child was discharged a week later apparently well.

CASE II.

A male child, aged 4 days. Two days after birth several haemorrhages from the bowel took place, the last just before admission. The child was well nourished but pale and slightly icteric. Two hours after admission 5 c.cm. of serum, obtained from the same patient with erythraemia as in the first case, was injected under the skin of the back. Six hours later the

child looked much better and only one further slight attack of bleeding had occurred. Next day the stools were normal and three days later the child was discharged.

CASE III.

A male child, aged 30 hours; a healthy-looking well-developed child of normal colour. Blood was noticed in the first action of the bowels after birth and four tarry stools had been passed since. There had been no haematemesis. The napkins showed typical melaena of considerable amount. On the afternoon of admission 8 c.cm. of whole blood furnished by the ward sister were injected into the subscapular region. In the next twenty-four hours there were four more small tarry stools, after which the haemorrhage ceased, and the child was sent home well three days later.

How the serum acts it is impossible to say with certainty; but it seems probable that it supplies some constituent which is lacking in the infant's blood and which is essential for clotting. I used human blood or blood serum in all the cases described, but normal horse serum or antidiphtheritic serum would probably do as well.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

THE TECHNIQUE OF NERVE SUTURE.

THE device here described may be strongly recommended for revivifying the neuromatous ends of divided nerves. It is simple, cheap, and effective. The essential point is the use of a safety razor blade, held in a pair of Halsted artery forceps, for division of the nerve. The blade—as supplied for a Gillette or other brand of safety razor—must be gripped quite firmly by the forceps, when it will be found more satisfactory than the sharpest scalpel. This device is used extensively at the orthopaedic centre, Blackrock, by Colonel Wheeler, who now prefers it to any other type of instrument for this purpose. The technique is as follows: The neuromatous end to be freshened is grasped by its fibrous sheath by two artery forceps clipped directly opposite one another, and the end of the nerve is divided by the razor blade until the brush-like ends of the healthy funiculi appear. A catgut suture is then inserted, and the two ends are approximated. The second suture is then inserted, and the first is cut. In like manner the other sutures are inserted, and the nerve ends are brought together accurately, and, if possible, the funiculi themselves are placed in apposition. The advantages of the razor blade are: (1) A sharp edge can always be obtained; (2) the nerve fibres can be cut horizontally with the least bruising of the structures. This device, therefore, seems worthy of bringing to the notice of neurological surgeons in other stations. Incidentally, I might add that the employment of tissue, such as Cargile membrane, etc., has been given up, for, as far as can be judged, it increases rather than diminishes the subsequent fibrosis near the sutured nerve.

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PARAFFIN AND BISMUTH FOR GASTRIC ULCER.

I HAVE found a mixture of bismuth subnitrate and liquid paraffin of use in the treatment of gastric ulcer. The bismuth salt may be rubbed up with ordinary liquid paraffin to form a smooth cream. It is taken thus without producing much nausea, and with increasing tolerance.

The liquid paraffin is a good vehicle for bismuth, undoing its constipating effect. The patient is more comfortable, and less flatulent than when taking bismuth alone.

The action of the combination may be supposed to resemble that of bipp in the treatment of external wounds. The special electrical effects of paraffin on wounds, mentioned in your issue of October 20th, are unfamiliar ground to me. Apart from that, the combination deserves a trial.

Holmes Chapel, Cheshire.

LIONEL JAS. PICTON.

AN official statement has been published denouncing the bad treatment of Italian prisoners by the Austrians. Their food is altogether insufficient for the maintenance of health. The conditions in concentration camps with regard to the accumulation of prisoners and the exhausting labour demanded are extremely bad, and the amount of sickness and the mortality extremely high.