6. On removing the excitable cortex from one hemisphere and stimulating the cortex of the other side, in two of the cases no movements were obtained on the same side as that of the cortex stimulated. In one experiment, where movements of interosseal flexion of the fingers, flexion of wrist and pronation were obtained on the opposite side, the most frequent movement on the same side was slow flexion of the fingers under deep narcosis, but under slighter narcosis the movements were the same as on the opposite side. In another experiment the only movement obtained on the same side was slow flexion of the elbow, whether the stimulation was applied to the "arm centre" or to the "leg centre." Also in this animal, when the internal capsule was exposed and stimulated, very slow flexion of the elbow was obtained on the same side when extension of the wrist and flexion of the fingers were obtained on the side opposite to the stimulated capsule; also very slight extension of the hip and knee were obtained on the same side when marked extension of the toes and flexion of the thigh and knee were obtained on the opposite side.

7. No epilepsy was obtained on the same side as the cortex stimulated, when the opposite cortex was removed.

The above experiments are hardly sufficient in number to prove for certain whether the movements occurring on the same side of the body as the cortex stimulated are evoked from the opposite cortex by means of the corpus callosum or from the endings of the pyramidal tract through the commissural fibres of the spinal cord. In two of the cases, after removing the left motor cortex, there was no movement at all in the right arm on stimulating the right cortex, although there was marked movement in the whole of the left side, and even in one case epilepsy. In another case the same movement—slow flexion of the elbow—was produced on the same side irrespective of the place stimulated, and in only one case was there any correspondence of movement between the two sides.

On the whole the experiments, as far as they go, are in favour of the theory that in the monkey the movements obtained on the same side as the cortex stimulated are produced from the opposite cortex through the corpus callosum rather than through the commissural fibres of the spinal cord, and that epilepsy is not obtained in the same side of the body as the cortex stimulated if the opposite cortex be removed.

I cannot conclude without expressing the hope that all students of anatomy may some day be taught on the living person and not on the cadaver the movements in which muscles take part.

REFERENCES.

- The Works of John Hunter, F.R.S.*, edited by James F. Palmer, p. 245. 1837. ² Loc. cit., p. 248. ³ Loc. cit., p. 676. ⁴ *Arch. f. klin. Chir.*, Bd. xxvii, Heft 3, p. 660. ⁵ *Pediatrics*, vol. XI, No. iii, 1901. ⁶ *BRITISH MEDICAL JOURNAL*, September 7th, 1901. ⁷ *Proc. Roy. Soc.*, 1886, vol. xli. ⁸ Schäfer's *Textbook of Physiology*, vol. ii, p. 795. ⁹ *Phil. Trans.*, 1897, vol. clxxxviii. B. ¹⁰ *Ibid.*, 1898, vol. cxc. B. ¹¹ Schäfer's *Textbook of Physiology*, p. 816. ¹² Schäfer's *Textbook of Physiology*, vol. ii, p. 304. ¹³ *Festschrift der med. Fac. d. Würzburg*, 1882. ¹⁴ *Proc. Roy. Soc.*, 1895, vol. lvii. ¹⁵ *Phil. Trans.*, vol. clxxviii, p. 1887, and vol. clxxix, B. 1888. ¹⁶ *Ibid.*, vol. clxxxi, B. 1890. ¹⁷ *Proc. Roy. Soc.*, vol. lxxix. ¹⁸ *Phil. Trans.*, 1890. ¹⁹ *Arch. f. Physiol.*, 1898. ²⁰ *Phil. Trans.*, 1887. ²¹ Schiff, *Arch. f. exp. Path. u. Pharm.*, Bd. iii, 1874. ²² *Phil. Trans.*, 1890, B., p. 73. ²³ *Arch. f. Psych.*, 1895, Bd. xxvii. ²⁴ *Proc. Phys. Soc., Journ. of Phys.*, 1899, vol. xxiv. ²⁵ *Phil. Trans.*, B., 1890. ²⁶ *Ibid.*, B., 1891. ²⁷ Du Bois-Reymond's *Archiv.*, 1870. ²⁸ *Leçons sur les Fonctions Motrices du Cerveau*, Paris, 1887. ²⁹ *Volkmann's klin. Vortr. innere Medicin.*, Nr. 55 to 78, 1867-1890.

PROTRUDING AURICLES TREATED BY OPERATION.

By T. G. OUSTON, F.R.C.S.,

Surgeon, Throat and Ear Hospital; and Assistant Surgeon, Hospital for Sick Children, Newcastle-upon-Tyne.

A. B., aged about 11, was brought with the request that the appearance of his ears should be improved. The condition was stated to be congenital. The margins of the pinnae curled forward considerably anterior to a vertical transverse plane taken through the centres of the external meati, and their posterior surfaces were smooth convexities instead of presenting the normal depressions. They had a large amount of spring when pressed forcibly backwards, the cartilages not even allowing of a temporary moulding into a normal shape. Under either the following methods were adopted, each ear being operated upon on a separate occasion:

A D-shaped piece of skin $\frac{3}{4}$ in. by $\frac{1}{2}$ in., was dissected up

and removed over the most prominent convexity of the posterior surface, separating easily except where the small transversus and obliquus intrinsic muscles were attached; these latter appeared to be fibrous tissue rather than muscle. The corresponding underlying piece of cartilage was cut round vertically to its surface, and the separation of its anterior surface from the front skin effected by a small periosteal separator and knife, the attachment being more intimate than on the posterior side, and the avoidance of

Before treatment.

After treatment.

button-holing the skin difficult. The pinna was now flaccid, and on pressing it backwards on to the skin over the mastoid process an accurate impression of the rawed surface was mapped out in blood; this area of skin was removed, and the posterior edges of the two raw areas united by fine sutures. In the case of the left ear the above removal of one piece of skin and cartilage proved sufficient; in that of the right sickle-shaped strips of skin and cartilage had subsequently to be removed from the still overhanging upper margin.

In a severe case anything less than free removal to the extent of taking all spring out of the auricle will result in failure.

NOTE ON THE OPERATION FOR CLEFT PALATE.

By CHARLES P. CHILDE, B.A., F.R.C.S.,

Assistant Surgeon, Royal Portsmouth Hospital.

So many complicated and ingenious methods of passing the sutures in the operation for cleft palate have been described that I may be pardoned if I draw attention to a method which is simple, easy, and requires no special instruments.

The patient is placed in the horizontal position, with the head steadied over a firm pillow at the end of the table, the surgeon standing behind. An electric hand-light, or, better still, an electric forehead light, is requisite. The objection urged to this position is that it causes more bleeding than the

propped-up position in front of a good light. I do not think this objection need be seriously considered, and it is outweighed by the far more easy access to the parts. The secret of avoiding troublesome hæmorrhage is found in separating the muco-periosteal flaps rapidly, an assistant meanwhile deftly sponging the blood out of the pharynx. When the flaps are separated the hæmorrhage soon ceases with the aid of a little pressure. The flaps having been separated freely and pared, all that is necessary for passing the sutures is a small Hagedorn's needle-holder and a very small semicircular needle. Fishing gut—of the fineness of horsehair for the uvula and stouter for the palate—answers admirably for the sutures, and is passed in the following way: The tip of the right half of the uvula is lightly held in a pair of long forceps, and a small semicircular needle in a small Hagedorn's needle-holder, threaded with the finest silkworm gut, is passed from before backwards through its base and brought out in the cleft; the needle is released from the holder and drawn through; it is then readjusted in the holder, the tip of the left half of the uvula is similarly held on the stretch with forceps, the needle is passed again into the cleft and brought out from behind forwards, transfixing the base of the left half of the uvula. This suture and the next passed in similar fashion serve to steady and stretch the flaps and to bring them together, while the rest are introduced from behind forward. After two or three sutures have been passed in this way, the lips of the flaps, if sufficiently separated—a *sine qua non* to success in this operation—can be held so close together by drawing gently on them that the remaining sutures can be passed right across both flaps, as in stitching any other wound with an interrupted suture, and without bringing the needle out in the cleft. The needle must be very small, semicircular, and very sharp.

The method is easy, requires no special instruments, and there is no rough handling of the flaps whatever. I have adopted this method recently in two cases with perfect success. Both my patients were between 3 and 4 years of age, and the clefts involved both hard and soft palates.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

PARAFFIN NOSE.

A. W., aged 42, female was about ten years ago kicked by a cow on the nose, and as a result there was a marked depression. The scar was not adherent to the subjacent tissues, and so the case appeared suitable for the paraffin method. B.P. paraffin was used and the melting point brought down to 104° by mixing with it with paroline. A serum syringe with a platino-iridium pointed needle was used for the injection

and this was heated by means of a spirit lamp. About 3 iij. in all of the preparation was injected. The mass was then moulded into shape. For a short time afterwards the nose remained inflamed and angry looking, but this gradually disappeared and now the skin is of the normal colour, and the appearance of the woman greatly improved.

L. HERSCHEL HARRIS, M.B., Ch.M.Syd.,
Honorary Assistant Surgeon, Sydney Hospital.

CHOREA (?) GRAVIDARUM.

MRS. P., aged 28, consulted me because of continuous and involuntary movements of the left leg and arm, which she said had come on quite suddenly about a fortnight previously, and were rapidly becoming intolerable, interfering as they did with eating and entirely preventing sleep. She was looking ill and "worn-out," and was herself convinced that her complaint had some connexion with a small tender swelling situated in the "front passage," which had for some months caused her great agony, especially on micturition, whilst her husband thought it to be the result of a bad fright she had had about two months previously, which, to use his own words, "put her all of a shake" for some hours afterwards.

It was perfectly evident that the woman was suffering from a severe though unilateral attack of chorea. On making an examination I found her also three months pregnant, and there was to be seen a small vascular caruncle the size of a pea, exquisitely tender to the touch, situated at the edge of the meatus urinarius. Here then were three possible factors in the causation of the disease. She had never previously during childhood had any symptoms of chorea, nor had she ever suffered from rheumatism, unless it be that a sharp attack of tonsillitis for which I had attended her some months before, and which had yielded rapidly to small doses of sodium salicylate, but during which no articular symptoms manifested themselves, was really of rheumatic origin. There were no physical signs of endocarditis.

I ordered the patient to bed to have a light diet and absolute quietude, and prescribed a mixture of potassium bromide and liquor arsenicalis, preferring the exhibition of the bromides to that of chloral on account of her pregnant condition. A few days later, after anaesthetising the parts with 10 per solution of cocaine, I removed the caruncle, cauterizing the stump with nitric acid. She obtained a great and immediate relief to her symptoms after the operation, and the jactatory movements a fortnight after first seeing her were practically quiescent, and only set up on the occasion of any little excitement, such as the arrival of a visitor, or a screaming fit on the part of one of her two children. The interest of this case lies chiefly in the immediate improvement brought about by the removal of the painful caruncle, which had been causing her great mental as well as physical suffering. The improvement, indeed, was so sudden that one was strongly tempted to regard the caruncle as the principal factor in determining the attack. On the other hand, if her condition is to be attributed to the pregnancy, it is interesting to note that the symptoms did not supervene until she was three months gone in her third pregnancy, whereas Dr. Risien Russell in Clifford Allbutt's *System of Medicine* refers to such an event as most improbable, "no properly authenticated case being on record of chorea in a third pregnancy." Under the circumstances it is an interesting problem as to whether this was really a case of chorea gravidarum or whether her present attack should be attributed to one of its supposed more ordinary causes, and the pregnancy regarded as a mere accidental complication.

Cowes, Isle of Wight.

A. H. COPEMAN, M.A., M.D.

CASE OF CONGENITAL SINGLE KIDNEY.

A. S., female, aged 50, single, was admitted on June 26th, 1901, suffering from chronic mania. She was very restless and incoherent, with delusions of a religious nature and hallucinations of sight. Her bodily health was good, and, except for an unimportant indisposition at the end of November, 1901, it continued so until shortly before her death. On the night of May 4th, 1903, she was noticed to be very weak. Cavertous breathing was heard at the left apex, but, owing to her mental state, a satisfactory examination was impossible. She was removed to hospital, but gradually got worse and died at 6 a.m. on May 6th. She never complained of feeling unwell. A necropsy was made on May 8th, at 4 p.m. Rigor mortis had passed off in the upper extremities but was present in the lower. The brain weighed 49½ oz.; the meninges and brain substance appeared healthy. The heart weighed 9 oz., and was normal. The right lung was very emphysematous, but otherwise fairly healthy; the left lung showed great congestion of the base, and the upper lobe was broken down, being practically one large cavity. The liver weighed 42 oz. and the spleen 3½ oz.; both were normal. On searching the usual site for the kidneys, they could not be found, but lying on the vertebrae immediately below the pancreas was one large kidney, fully 9 in. long and horseshoe-shaped. There were two distinct sets of vessels, with separate connexions at the aorta and the inferior vena cava respectively;