death—all seem to me to point to death from pure shock; whilst, on the other hand, the absence of all struggling, as also of noisy respiration and blue countenance, point equally away from death by the inhalation of ether.

A METHOD OF EXTRACTING THE PETROUS BONE FOR A *POST MORTEM* EXAMINATION OF THE EAR.

By ARCHIBALD CLERK, M.B., Glasgow.

THE method which I am about to describe was practised on a boy eight years of age, who died in a fit, after nine days' illness. He had measles when two years of age, and since that time he suffered more or less from chronic purulent inflammation of the ear; but, apart from this, his health was quite good till his last illness, when the inflammation became acute, and extended, as the *post mortem* examination showed, into the interior of the cranium.

I was very anxious to see the exact state of matters; but, as permission was granted to make a local examination only, I was thus prevented from following the method described by Dr. Foulis in the *BRITISH MEDICAL JOURNAL*, or, indeed, any method which involved the removal of the scalp. In these circumstances, I planned and carried out the following operation, by which the petrous bone actually shelled out, and left the dura mater *in situ* and intact. The operation is as follows. 1. Remove the soft tissues in a flap, whose anterior border is made by an incision along the posterior margin of the ramus of the inferior maxilla. 2. Make another incision about half an inch behind the mastoid process, and nearly parallel to the former. 3. Connect these by a transverse cut above the ear. 4. Dissect this flap downwards and close to the bone, and with the ear attached. The limits of these sections will be easily understood when the bony sections are described. These should be made as follows. 1. The articular end of the jaw-bone being pressed slightly forwards, pass the chisel through the thin bony roof of the articular cavity, and continue the line upwards through the posterior root of the zygoma. 2. Cut then transversely in a line parallel to the zygomatic root, and about a quarter of an inch above it. Continue this line backwards through the parietomastoid suture till it meets the posterior section. 3. This posterior section is indicated by a line drawn through the posterior mastoid foramen above to the posterior edge of the jugular foramen below, or, roughly, one quarter inch behind the digastric fossa. This will nearly complete the section. 4. The chisel should now be used as a lever, and the bone pressed out from above, and also at the sides. Lastly pass the chisel between the styloid and spinous processes, and against the root of the latter. This last point of connection being separated, the bone can easily be levered out, and with this the operation is complete. The ear can then be examined at once, or, what is better, if circumstances permit, the bone can be kept for future examination. If the bone is not returned, then fill up its place with a sponge, and when the flap is replaced hardly a trace of interference is visible, as the stitches are mostly covered by the hair. In private practice this much, as in my own case, will often be allowed, when an operation by saw and chisel will not. The chisel must be narrow. The one I used was three-eighths of an inch wide, and eight inches long.

The case itself is interesting. The patient's last illness is said to have followed on a blow received on the ear. Pain behind the ear and fever followed (105° when I saw him), but no delirium or stupor till his sudden death in a fit.

Post Mortem Examination: Extracranial changes.—The periosteum was separated from the bone over the whole surface of the external meatus, and also from a semicircular area of half an inch radius above meatus, but continuous with the latter. A patch of the size of a shilling in the same condition was found over the region of the posterior mastoid foramen, but completely isolated from the ear portion. The formation of this suppurating spot is very curious, and will be explained after. The middle ear was disorganised. Of the ossicles the stapes alone remained. The inner ear was unchanged. The suppurative process had formed a large tunnel backwards through the mastoid cells, and the roof of this tunnel and of the middle ear was reduced to a mere shell. *Intracranial changes.* This shell on its upper or intracranial aspect was roughened, and the dura mater covering it was involved in an inflammatory process. This inflammation passed backwards over the ridge of the petrous bone, and was prolonged into the coats of the lateral sinus, roughening the groove, between which and the coats of the vessel were found pus, and what looked like an ulceration of the sinus. From this the inspection was carried through the posterior

mastoid foramen, and formed on the outside of the cranium the isolated spot already mentioned. The lateral sinus itself was plugged by a large and firm clot, and this was probably the immediate cause of the sudden death.

SURGICAL MEMORANDA.

TREATMENT OF WEBBED FINGERS.

IN cases of webbed fingers, I believe that the method of treatment suggested by Liston is the best; viz., "of making a perforation through the web towards the proximal extremity of the finger; and, by the introduction of some foreign body, as a piece of thick firm cord, preventing its healing. After the edges have cicatrised, then the remainder of the web might be cut at one sweep, and the fingers dressed separately for a sufficient time". It appears to me obvious that the best form of "foreign body" for producing the desired result is an imitation of what has proved in so many thousand cases to be very successful in producing a patent opening through the lobe of the ear, and that a ring of gold or silver would be better than the various clamps in common use.

Having inquired at several instrument-makers, and being unable to obtain a ring for the treatment of these cases, I instructed Messrs. Arnold and Sons of Smithfield to make the one represented in the woodcut. It will be seen to consist of a piece of wire, with a point at one end, and a hollowed portion at the other large enough to receive it. The point having been thrust through the web, the ring is bent, and the point will be found to remain in the hollow part of the wire that has been made for receiving it. It will be seen that, there being no hinge in the middle of the ring, there is no opportunity for matter to collect near the wound.

HENRY F. BAKER.

THERAPEUTIC MEMORANDA.

THE TREATMENT OF ASTHMA.

I AM very glad to see Dr. Marshall's record of his success with the iodine treatment. The following case has occurred in my practice since my former communication, and is a good illustration of the beneficial results of the method. II. H. had suffered for the last six or seven years from attacks of dyspnoea, coming on in the night about 3 A.M., which formerly occurred only in June or July, but latterly throughout the year. I painted the lines of both pneumogastrics with a mixture of equal parts of the liniment and tincture of iodine, and ordered him to repeat it every night. The next time I saw him he told me that "he had not had such a good night's sleep for twelvemonths;" he slept all night, and was so surprised on waking in the morning that he got out of bed to look at his watch before he would believe it. He discontinued the iodine after a few applications, as the skin became sore, but he has had no return of the attacks.

ROBERT SAUNDY, M.D.

71, New Hall Street, Birmingham, Jan. 1st, 1881.

THE PHARMACOLOGY OF CHLORAL-HYDRATE.—M. Dmitrieff, in a recent inaugural dissertation published at St. Petersburg, states that he has tested the effect of chloral-hydrate, both clinically and experimentally, on unhealthy, badly granulating, wounds. By excision of a piece of skin in dogs, and infection of the wound with putrefying matter, he produced unhealthy ulcerating surfaces. Some of these he dressed with one or two per cent. solution of chloral-hydrate, while the rest were simply covered with a moist cloth. The first very soon became healthy, and cicatrised before the others. The ulcers, on microscopic examination, were found covered with a layer of micrococci, which disappeared after two or three days' dressing with chloral-hydrate. These results were confirmed clinically; and the writer has also shown that an equal quantity of a one per cent. solution of chloral-hydrate destroyed, in twenty minutes, all mobility of the bacteria in a putrefying infusion of flesh.