

and carefully searched with a needle or platinum wire loop for caseous or solid looking particles. These are to be picked out, as free from mucus as possible, and put on a cover glass. Another cover is put over this and the two worked gently together, between the finger and thumb, so that the material may be crushed and evenly distributed. The covers are now slid apart, and allowed to dry, at the air temperature. The coating is then to be fixed, so that it may not be removed by the subsequent operations of staining and washing. This may be done by taking one of the covers between the finger and thumb, and holding it horizontally, coated side up, over a flame, testing it from time to time by putting it in contact with the back of the left hand. It should not be so hot as to occasion pain. The usual plan is, however, to take up the cover with forceps, and pass it three times through the flame of an alcohol lamp, or Bunsen, counting one, two, three, rather slowly—say, taking up two seconds in all. The heat should not be such as to burn or discolor the film.

A few drops of Ziehl's solution are now to be applied; the cover being held over the lamp until steam is observed near the surface, and then withdrawn, the operation being repeated three times, with intervals of about a minute between the steams. The specimen is now ready for decolorization, which is effected by washing with a gentle stream of water, (a spritz is very handy) and then treating with a few drops of the hydrochloric acid solution, and repeating the dose until the red color has disappeared. The acid is then removed by water, and a few drops of methylene blue put on. After a minute or so this may be removed by water, and the cover dried by putting it, film side up, on a piece of blotting paper, and folding over one thickness, passing the finger lightly over the surface. If a permanent preparation is desired, the cover should be very gently warmed, or allowed a few minutes to become thoroughly dry, and then attached to a slide by a drop of balsam. If for mere examination, a drop of water will be all that is required. It is to be understood that all the operations of staining and washing are to be performed while the cover is held horizontally by the forceps. For this purpose those of the Cernet pattern will be found a comfort.

The bacilli will, of course, be red on a blue ground. The microscopic examination must be

careful and thorough and should not be hurried. It is well to examine at least three cover-glass preparations before forming conclusions. As far as power is concerned there is no doubt but a one-twelfth inch oil immersion lens will give the most satisfactory results, and is indeed indispensable for almost any kind of bacteriological work. For this purpose a one-eighth dry objective will, however, answer very nicely, and even a one-fourth inch can be used. The bacilli, if well stained, are visible with a good lens of seven-tenths, with a strong ocular, as it is a case of differentiation of color more than form. A one-fourth inch, with a medium eye-piece, is as low a power as can be safely employed, even in experienced hands.

INTRACRANIAL NEURECTOMY OF THE SECOND AND THIRD DIVISIONS OF THE FIFTH NERVE IMMEDIATELY IN FRONT OF THE GASSERIAN GANGLION.

BY JOHN B. ROBERTS, M.D.

I report this case partly on account of its novelty and partly on account of the apparent success of the operation. The patient is a man seventy-six years of age, on whom I operated about two years ago for frightful neuralgia, which affected the first and second branches of the fifth cranial nerve. He had been operated on previously without success. I removed the supra-orbital and infra-orbital nerves at their anterior foramina, chiselling away the lower part of the orbit in order to tear off the latter nerve as far back as possible. He had a period of comfort for perhaps a year, when the disease returned. He was then operated on, I think, by Dr. John B. Deaver. I do not know what Dr. Deaver did, but I believe that he cut out the cicatrix. The man came to see me again a year ago, and I decided to ligate the primitive carotid, which has been recommended in some of these cases, and which I had found satisfactory in a case operated on six months previously. I operated last November, tying the primitive carotid with catgut. He was discharged at the end of three weeks suffering no pain.

He again began to suffer and has appeared at my office two or three times in the last three or four months. His pain was so great that I de-