removal. The patient being then in good health, the wound healed rapidly. He has since been discharged on pension.

The following note from Lieutenant Bacon is interesting, as it illustrates a point in the diagnosis of metallic substances by electrical means which I find is not generally understood in the profession, although it may readily occur to those who have practical acquaintance with electrical phenomena.

"The piece of metal extracted was subsequently tested with a view to determining the nature of the non-conductibility of the exterior with results that (1) when dry no circuit could be obtained by rubbing the ends of two bare copper wires over the surface; (2) considerable pressure with two soft iron points gave no circuit; (3) with two needle points considerable pressure was required to establish a circuit.

"To arrive at an estimate of the pressure required to force the needles into contact with the conducting portions of the metal, the piece of iron was placed between two needle points connected to a galvanometer and three secondary cells, and weights placed on the upper needle, when it was found that as much as 3 pounds weight was at times required to force the needles into contact with the iron.

"After soaking in warm water for an hour and a-half, the conductivity appeared to be slightly better in places where the iron had been previously rubbed, but still a weight of over 2 pounds was required to give a deflection of the galvanometer.

"These rough experiments point to the necessity of sharp points to electrical probes as well as a fair pressure being applied in working them, so that if no deflection is obtained it may be confidently known that no metal has been touched."

BULLET WOUND OF SKULL.

By HOWARD J. McC. TODD, M.R.C.S.,

Staff-Surgeon R.N.

[Communicated by the DIRECTOR-GENERAL OF THE MEDICAL DEPARTMENT R.N.]

T. T., aged 25, was shot in the right temple at 4 P.M., the weapon (a revolver 0.385) having been discharged close to the head. When seen one hour later he was lying on his back with his eyes closed, but on being spoken to answered readily, and moved all his limbs quite freely. The pulse was 80, the respirations 16, the pupils were equal and active. During the evening he rose from his bed to pass water and use the stool, and then walked to a room some distance off and conversed with his friends, who persuaded him to return to his bed, which he did, and remained quiet for the night.

On admission at 8 A.M. next day there was a small blackened aperture, from which cerebral matter and blood oozed, situated a quarter of an inch above and posterior to the right external angular process of the frontal bone. A probe could be easily passed through this for $3\frac{1}{2}$ inches backwards, upwards, and inwards into the brain. Under chloroform and with antiseptic precautions a V-shaped flap was reflected, and a large trephine applied immediately above and behind the hole in the skull. On removing the disc of bone the dura mater was seen to be contused; and on introducing my finger several pieces of bone were felt imbedded in the frontal lobe; these were removed. The wound was washed gently with a 1 in 5,000 perchloride, dressed with cyanide gauze, and an icebag to the head. The patient rallied well after the operation. The pulse was 68, the temperature 100.4° , and respirations 32. The pupils were active and equal. He answered questions intelligently, and drank iced soda and milk. During the night he was restless, frequently flexing and extending his legs.

On the third day the pulse was 48, regular; the temperature 100.4° . The bowels were confined, but acted to calomel, the patient using the bed slipper. There was very slight discharge of bloody fluid from the wound. The pupils were equal; he answered questions; and there was no paralysis.

On the fourth day the pulse was very rapid and irregular, and the temperature 103.2° . Cheyne-Stokes respiration was present; the patient was unconscious, the pupils equal and dilated. There was a good deal of cerebral matter on dressings. At 4 P.M. a marked change was noted. The tempera-

ture had risen to 105.2° , the teeth were tightly clenched, and there was paralysis of right arm and forearm. At 11 P.M. the right lower extremity was paralysed and the pupils widely dilated. At 2 A.M. the temperature was 108° , and the patient died at 4 A.M.

Post-mortem Examination.—The course of the bullet is shown in the accompanying sketch. Having traversed the

right frontal lobe, it cut a groove in the right corpus striatum, passed beneath the corpus callosum into the left lateral ventricle, grooved the left corpus striatum and optic thalamus, and passed out of the ventricle at the commencement of the left posterior cornu into the left occipital lobe, where it was found embedded in the white substance half an inch from the surface. There were no hæmorrhages.

Weight of bullet, 182 grains.

NOTE ON THE AFTER-TREATMENT OF GASTROSTOMY CASES.

By C. H. GOLDING-BIRD, F.R.C.S.,

Surgeon to Guy's Hospital.

THE greatest trouble that attaches to the after-treatment of a gastrostomy case is the prevention of leakage of stomach contents, and the digestion of the skin around the opening, causing, to say the least of it, very severe discomfort to the patient.

Many plans, both operative and mechanical, have been tried, and with varying success, by various surgeons; but having now under my care a man of middle age, on whom I did gastrostomy for epithelioma of the œsophagus more than two months ago, and in whom there has been no leakage whatever, though the patient is walking about and feeds himself, I think the method adopted should be recorded.

The plan on which I went was one that I am in the habit of adopting when desiring for any reason to examine a sinus to its bottom; it is to dilate the sinus with laminaria and sponge tents instead of incising it, and the result is that the inspection of the sinus or removal of a buried suture, or whatever may have hindered healing, being accomplished, the