

whether by operation or otherwise, was followed by the disappearance of the mania. Unfortunately, there was no discussion on this paper, as the Section adjourned for the evening at the close of the paper.

#### SURGICAL SECTION.

Dr. Edwards, of London, was elected Chairman.

Dr. Carstens, of Detroit, read an account of a fibroid removed by laparotomy.

Dr. Fulton, of Toronto, read a paper on Subperiosteal Amputation, and cited a number of cases in which he had practised this method of amputation during the past six years, both in hospital and private practice, with most satisfactory results. This method was first advocated by Walther seventy years ago, but was first put into practice by Ollier in 1859. With the introduction of antiseptic surgery the operation was revived, and now promises to take a prominent place amongst surgical operations. Dr. Fulton described the operation in detail, and stated its advantages, the chief of which are: 1st. The cut end of the bone is covered by the tissue physiologically fitted to protect it. 2nd. The bone does not become adherent to the end of the stump. 3rd. The medullary cavity is closed in rapidly and effectually by new bone. 4th. Danger from the spread of inflammation or suppuration to the bone is guarded against. Experiments on animals have shown that a flap of periosteum rapidly closes the medullary canal and prevents the occurrence of osteo-myelitis. The operation is especially adapted to cases in which the medullary canal is in a soft and unhealthy condition, such as frequently met with in amputation for diseased bones and joints. The reader of the paper was strongly convinced of the utility and value of this method of amputation.

Dr. Shepherd, of Montreal, read a paper on Excision of the Tongue by Scissors, with preliminary Ligature of the Lingual Arteries. He said that in excising the tongue for malignant disease, besides the necessity for avoiding hemorrhage, it was important that diseased structures in the neighborhood should be removed, and he held that the operation of excision of the tongue with preliminary ligature of the linguals facilitated this removal without

adding much to the risk of the operation. It was now the opinion of surgeons of experience that whatever operation for excision of the tongue was practised the mortality was the same, the result of the operation depending more on the after-treatment than the particular method of operating. Still, certain operations enabled the surgeon to more completely remove the diseased structures than others, and thus the disease was less liable to recur. He considered that in excision of the tongue it was as important to remove diseased glands in the neck as it was to remove diseased axillary glands in extirpation of the breast, and felt strongly that the operation of the future was the one which provided for the removal of the diseased glands. The reader of the paper then described the operation, and particularly dwelt on the various steps in the ligature of the lingual artery, and described the difficulties and dangers that the operator was liable to meet with. Three cases of malignant disease of the tongue with involvement of the sub-maxillary and cervical glands were reported, in which the operation described had been put in practice. One died of gangrene of the lung, the other two made good recoveries, case three living for nearly a year and a half after a most extensive dissection of the neck and sub-maxillary region.

Dr. Shepherd said that the after treatment was most important. In his cases the patients had been fed entirely by the bowel for four days after the operation, and the mouth in all the cases was drained through the neck incisions by a large rubber tube. Billroth's method of stuffing the mouth with iodoform gauze was strongly recommended as offering the best chance of escape from the great danger in excision of the tongue, viz., septic disease of the lungs.

The advantages of the operation were summed up as follows:

1. The diseased structures, and especially the glands, are easily discovered and removed through neck incisions.
2. The removal of the tongue is bloodless, and there is little fear of secondary hemorrhage.
3. Drainage of the mouth can be more thoroughly carried out.