LARYNGOLOGY.

The telegraphic reports of the condition of the Crown Prince of Germany, appearing regularly in our daily papers, have created amongst all classes, a profound interest in the case, on this side of the Atlantic. Those reports have gradually become more serious until now it appears to be most generally conceded that the disease is of a cancerous nature, and it has been suggested by some eminent physicians that *laryngectomy* should be performed. The deep interest which we know the medical men of Canada take in the case and the anxiety which they feel for the welfare of so eminently popular and prominent a man as the Crown Prince, lead us to give a brief outline of the operation which has been suggested and the statistics bearing upon it.

The operation, though a modern one, was conceived of even as far back as the beginning of the present century, and in 1829, by way of experiment, Albers removed the entire larynx from two dogs. Czerny of Heidelberg, was the first to completely demonstrate that not only was it possible to remove the entire larynx in dogs but that it was practicable on man. This was in 1870 and three years later, Billroth found opportunity, in his Vienna clinic, to make the first attempt on a living patient. The operation was quite successful, the patient recovering and in due time one of Gussenbauer's artificial substitutes supplied.

This patient died one year afterwards from cancer returning in the cervical glands. Heine, Maas, Schmidt, Schonbrum and many others have since performed the operation until now it has been done nearly a hundred times, and of this number over thirty have survived the operation more than two months and of these some have lived for years, others for only a few months but all much longer than would otherwise have been possible.

The Operation.—If tracheotomy has not already been rendered necessary, evidence seems strongly in favor of postponing this operation or of merging it in the graver one the surgeon being prepared to do it at any moment should the emergency arise. The preliminary skin incision should be a long one, extending even from near the chin to the sternum along the line of safety. By this long incision any lateral cutting is unnecessary. From above the hyoid bone to a level below the larynx, this incision should be deepened until the deep fascia covering the respiratory tract be divided. The lateral attachments of the muscles are now to be separated by the handle of the knife or by an elevator and any spouting vessels to be caught by the hæmostatic forceps. When necessary any vessels of sufficient size must be ligated twice before cutting. The isthmus of the thyroid should be treated in the same way before cutting. The larynx is now freed anteriorly and laterally but to free it posteriorly is probably the most difficult part of the operation. Remembering that the anterior wall of the œsophagus commences at the level of the cricoid cartilage the separation must be made with extreme care and probably the fingernails are the best instruments te be used for this.

The larynx having now been completely loosened, the thyro-hyoid membrane exposed and all hæmorrhage checked, the next step in the operation is its removal either from above or below. To proceed from below seems to have the preference, as it provides for the proper care of the trachea at once. Having decided at what height the division shall be made, whether just below the cricoid, or between some of the upper tracheal rings, as circumstances will dictate, the section is made quickly, the upper portion lifted out of the way and a tracheal cannula inserted.

This is well packed around to prevent blood from entering the trachea and the anæsthetic continued at this point. The surgeon must now quickly decide how far up he shall go. It is usually deemed advisable to remove the epiglottis as it is afterwards found to be a detriment rather than an advantage. The thyro-hyoid membrane is now divided, also the folds connecting the epiglottis with parts above, as well as any remaining connections, and the diseased mass lifted out.

The surrounding tissues are carefully examined and any that may be diseased, removed, e.g., part of hyoid, base of tongue, cervical glands, thyroid gland, etc. Hæmorrhage is not usually severe and if kept out of the trachea will not give much difficulty.

The wound is a very large and formidable looking one, presenting a large pharyngeal opening, the upper gaping end of the œsophagus and the divided trachea. The edges of the wound should not be brought together but left to close naturally, the trachea being prevented from retracting by suturing it to the margin of the wound.