

practised, removing any remaining neoplasms. Particular attention was requested to the healthy condition presented by the vocal cords, there being no alteration of color, diminution of lustre, abrasion of surface, or impairment of movement perceptible. The writer attributed the satisfactory state of the patient to the spray of absolute alcohol and the employment of the quarter circle tube, which latter he considered less liable to produce tracheal disturbance than any of the many other makes in general use. The tube has not been withdrawn and good voice is produced.

(b) A female patient, aged 20, was first seen in October, 1885; complained of loss of voice, hoarse, and painful cough, and great general debility. The larynx was found to be intensely congested as also the trachea, which latter was of a raw-beef, purplish hue. The vocal cords were rough, granular-looking and swollen, showed no loss of surface, and there were no growths present. The case was treated locally by astringents, etc., until May, 1886, with little, if any, improvement, when attendance ceased, owing to the writer's absence in Germany.

In September, 1886, when the case was again seen, extensive papillomata of large size were found springing from the vocal cords in all directions and from the epiglottis. These growths were removed at two sittings, when local treatment was again resumed, with the satisfactory results demonstrated.

(c) A lady, aged 24 (a private patient), was referred by Dr. James Stewart of Pictou, Nova Scotia, in August, 1883, and so closely resembles the preceding one in several important particulars, that, although she could not be induced to be present, the history was recorded. When first seen in August, 1883, there was aphonia, or more correctly, dysphonia only. The history given was that of ordinary cold, and had so continued without improvement for two years. On laryngoscopic examination the vocal cords were thickened, red and granular-looking; there were no growths present. Local applications of a very thorough nature were employed over a period of two months, with but little benefit. In September, 1886, the patient, who meantime had passed through a number of hands, placed herself for the second time under treatment. On examination, papillomata were found on the laryngeal face of the epiglottis, and the vocal cords were completely obscured from view by them. There was now complete

aphonia, the breathing was much embarrassed, and coughing was almost incessant. The trachea presented an appearance such as described in the preceding history. The cords also showed at such points along their edges as were visible evidence of erosions and irregularities of surface. After the removal of these neoplasms by means of cutting and crushing forceps, cold iron snare, and V. Schrötter's guillotine, for no one method was in itself sufficient, a very unsatisfactory state of the vocal cords was found. Under local applications of powerful astringents, etc., improvement followed, and a very fair quality of voice has been established.

In the two latter cases nasal respiration was very much impeded, and it was only after the reduction of the hypertrophied turbinated tissue and the restoration of healthy nasal respiration that the local medication of the larynx showed any good result. This fact should not be lost sight of in the treatment of all chronic laryngeal disease. These were at first cases of chronic catarrhal laryngitis, and if nasal hypertrophies had been at first removed, convalescence would most probably have resulted without the transition to papillomata having first to be undergone. In this respect papillomata should form no exception to all other laryngeal conditions, and the dependence of a healthy larynx upon normal nasal respiration cannot be too strongly emphasized. The growths were examined by Dr. Wyatt Johnston, and on section were seen to be radiating papillæ covered with a thick layer of epithelium and having vessels in the centre. No hyperplasia of submucous tissues and no lymphoid nodules were to be seen. The epithelial cells in *c* were larger and more loosely arranged than in *b*.

Dr. Major also showed the following instruments:—

1. An improved nasal traction snare and écraseur.
2. A nasal spud or denuder.
3. An improved nasal écraseur.
4. A laryngometer. A laryngeal mirror engraved on its reflecting surface with a scale for the purpose of measuring movements or spaces in the larynx or composing them relatively.

The nasal snares are both angular, and among other improvements introduce a novel feature in a revolving wheel or pulley placed at the angle of junction of the canula with the shank over which the wire plays, thus reducing friction, increasing