physical evidence. The laryngoscope aided also by excluding disease of the larynx and pressure upon the laryngeal nerves. Dr. R. would look upon this as an example of combined aortic valvular disease and aneurism induced from the constant over-exertion or strain of excessive gymnastic exercises.

Dr. Mills gave the following report of the laryngoscopic examination. The laryngoscope was used with a view of determining the cause of the altered breathing, and assist in locating if possible the aneurism. The position and movements of vocal cords found normal. The patient was asked to produce as much difficulty in breathing as he could. Upon doing so the position of the vocal cord remained practically unchanged. It was therefore clear that the cause of the dyspnœa was not in the larynx. Since the air seemed to enter each side of the chest equally well, pressure on the bronchi was excluded. The diagnosis therefore was tumor pressing on the trachea.

Upon holding a double stethoscope close to the open mouth, it was noticed that with both inspiration and expiration there was a wavy interruption of the breath current. This seemed to confirm the diagnosis. Dr. Mills thought this method of investigation might be of considerable value in doubtful cases.

At the autopsy the following condition was found. There was a small projecting tumor the size of a walnut beneath the manubrium. On sliting up aorta there was a circular orifice the size of a copper at the site of the innominate, and this opened into a saccular aneurism of this vessel which projected downward and backward between the arch and the trachea. A small extension of it passed anteriorly and appeared beneath the manubrium. The sac was lined with fibrin at the peripheral part. The subclavian and carotid arose from the upper part of the sac. The trachea was narrowed by the projection of the sac, and about an inch above the bifurcation a rupture the size of a five-cent piece had taken place. The aorta was atheromatous, and the valves thickened, curled and incompetent. Heart hypertrophied, particularly the left ventricle.

Dr. George Ross then read a paper on *two unusual forms of paralysis* under his care in the Montreal General Hospital.

I.—*Case of Paralysis of the Tongue, Lips and Soft Palate—Acute Onset.*

J. M., æt. 45, was admitted into the General Hospital on the 8th November, 1882. He has thick, indistinct utterance, and complains of dizziness and dull pain in the head. His trouble dates from July, 1881, and came on suddenly.

The following are the particulars obtained from him: He has been a hotel porter for 25 years, and always enjoyed excellent health and was strong and robust, used to drink pretty freely, but for two years has entirely abstained. Had gonorrhœa many years ago, but never had syphilis. Has had two attacks of inflammatory rheumatism, but both occurred many years ago.

One year ago last July, whilst driving a *bus*, he was suddenly seized with a *dizziness*, which was taken for sunstroke. Finding himself falling, he dropped the reins and held on to the seat. He broke into a profuse perspiration, and felt a most uncomfortable dizzy sensation in the back of his head. He was lifted from the *bus* and carried into a drug store. He was then unconscious, and remained so for some hours. When he came to he was carried home, for he could not walk. At home he felt very weak, found he could not speak, and felt very dizzy. He remained in bed and on a chair for three weeks, during which time he spoke so badly that he could barely make his friends understand what he wanted. By this time he could walk about the house. Power of articulation gradually improved. He remained weak and unable to work for about nine months.

Patient is a low-sized man, well-nourished. Presents a slightly dull expression of countenance. He speaks slowly, with hesitation and difficulty—all words are pronounced with varying degrees of thickness; there is no nasal intonation. His defective articulation resembles completely that of a man much intoxicated. When directed to protrude the tongue, he does so imperfectly, and with considerable effort. It trembles violently. When first projected, the tip is turned down over the lower lip but is almost immediately retracted; still he tries hard to hold it out, and shuts his teeth upon it in order to do so. It is observed that at the same time the lips become quite tremulous, and the lower jaw assumes a quivering movement. When he tries to whistle, he can only succeed in imperfectly closing the orbicularisoris muscle, short puffing expirations alone are produced, accompanied by a blubbering motion of the lips. He can masticate food well, and swallows without difficulty. On examining the soft palate, it is seen to be much relaxed, the uvula hangs loosely on the