

being supplied by the external branch of the superior laryngeal), the recurrent laryngeal innervates all the laryngeal muscles proper, that is the antagonistic groups of the abductor and adductor muscles of the vocal cords. The former (*abductors*) are represented by the *posterior crico-arytenoid muscles* only, the latter (*adductors*) by the *lateral crico-arytenoid*, the *external and internal thyro-arytenoid* and the *inter-arytenoid muscles*. The statement of several German authorities that the superior laryngeal nerve takes part in motor innervation of all the laryngeal muscles proper has been strongly opposed by late observers. The ultimate derivation of the recurrent laryngeal nerve is, however, warmly contested. Many anatomists and physiologists considered the spinal accessory nerve the source of laryngeal innervation, but recently, Grossman, Spencer and others, by experiments, held that the true source of this impulse was the lower bundle of vagus roots. The question is not definitely settled. Dr. R. Russell has split up the recurrent laryngeal nerve throughout its peripheral length into three different bundles of fibres, one of which supplies the abductors and another the adductors, whilst from the third, no motor effect can be produced in the larynx. We, therefore, know now definitely that the fibres going to the antagonistic groups of laryngeal muscles are differentiated throughout their peripheral course. These fibres ultimately supplying the abductor of the cords are situated on the inner side of the recurrent laryngeal nerve. I now show you a plate illustrating, first, what is beyond question the ordinary respiratory position of the vocal cords, and 2nd, what is the cadaveric position of them. The question arises, what is the greater width of the glottis in life due to? The reply is, the abductor muscles of the cords are endowed with a special reflex tonus, by means of which the glottis during life is kept open during both phases of respiration to such a degree that that type of respiration which we call "ordinary" is rendered possible. In this degree of respiration, we breathe by the aid of diaphragm and intercostal muscles only. As soon as during life the glottis is narrowed to the same degree as we see it after death, we find that with every unusual muscular exertion dyspnoea begins, shown by very quick and shallow or by very deep and labored inspiration,