

required on inspiration. During mental or physical excitement the number of respirations per minute increases in order that the pulse-respiration ratio may be maintained. This increase means additional work thrown upon heart and larynx alike. In affections of the heart, organic and functional, we are most careful to avoid everything that will tend in any way to increase the amount of work the central organ of circulation is called upon to perform. In laryngeal disease many of us have yet to learn this lesson. Phonation, unlike respiration, is immediately under our personal control, and every effort in that direction, whatever its intensity or quality, involves to a greater or less extent the approach of the vocal bands. The amount of movement and tension necessary is in direct proportion to the intensity of the effort and the length of time through which it is sustained. The injury resulting from this movement will depend largely upon the diseased condition and the parts involved. In public speakers, where, as a rule, only the vocal bands are affected (thickened), the hoarseness of tone gradually disappears on using the voice, but not without leaving an after sense of fatigue. This, perhaps, argues in favour of a certain amount of exercise. Where, however, pain is evinced, absolute rest, of course, suggests itself.

It might be as well here to call attention to the fact that whispering is not rest, but, on the contrary, involves much more fatigue, distress, and effort, than speaking in an undertone. In the production of a whisper, the vocal bands are held in a position midway between adduction and abduction sufficiently close to produce a rushing sound when the current of expired air meets them, but not near enough to permit of vibration of the bands. Over-rest, on the contrary, might, on general principles, be regarded as detrimental. No joint can sustain absolute rest for a very prolonged period without detriment: the articular surfaces become changed, less elastic, and more vascular, giving rise to pain in motion. This latter statement might be held to apply to the articular surfaces of the laryngeal cartilages, where pain and a tired feeling result after use. There is a difference between laryngeal and other articular surfaces: that whereas, in the latter, mechanical appliances aim at and attain perfect