balance with the excised, and 22 lbs. with the sound arm; or, roughly speaking, the excised arm in flexion is a quarter weaker than the other.

In extending the forearm from the semiflexed portion a pull of 7½ lbs. is indicated with the excised and 20 lbs. with the sound arm; or, roughly, in extension the excised arm is two-thirds weaker than the sound one. A comparison in excisions of the elbow in this way gives, I think, a better idea of the result obtained than by reporting it as "a useful limb," "almost as useful as ever," "very useful." etc., and would enable one to note the improvement from month to month after active motion has commenced.

## SHORT NOTES ON CARCINOMA OF THE LARYNX AND INJURIES OF THE SKULL.\*

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CARCINOMA OF THE LARYNX.

## Mr. President and Gentlemen:

In reporting to you a case of this disease, I do so more especially for the purpose of the statistician. I intended to record the case sooner, but let the opportunity go by. I do not know that there is anything of importance to the surgeon in the general history of the case. The symptoms at first were those of a chronic catarrhal laryngitis, with a suspicious carcinomatous formation on eighth vocal chord. These were in progress about a year before spasmodic symptoms developed. Tracheotomy was performed November 2nd, 1885. Death took place Nov. 20th, 1886. A short time before operating our patient had been examined by specialists. The diagnosis was confirmed and tracheotomy impressed upon him. The operation would have been performed somewhat earlier but for our patient procrastinating. severe spasm setting in, from which he thought he would not recover, caused him to procrastinate no longer. My patient was a robust-looking man, and it is little to be wondered at that one in this full vigor of manhood, with but little embarrassment of the breathing and free from anything like a severe spasm, should,

under the circumstances, postpone an operation that would certainly remind him of a not far distant fatal issue. At this crisis he decided to give himself the benefit of the palliative treatment of tracheotomy. Laryngectomy was carefully explained to him-as well as I could do so at that time—but he banished all thought of In reference to the operation of laryngectomy, my own views, in the light of the literature of the subject, have not changed. I certainly have not favored the operation. In this case I left my patient to choose for himself, to sum up for himself, presenting him simply with the record of the operation so far as I could up to that time. Tracheotomy was performed in this case at the last moment, and, from a surgeon's point of view, should have been performed earlier. At the time of the operation our patient, as mentioned, was in the full vigor of manhood, and but little prepared, physically, to leave this world. During his post-tracheotomy life, although he did his speaking mostly by slate, being scarcely able to utter any audible sounds, his life was fairly comfortable. He would ride to town, a distance of seven miles, with a considerable degree of pleasure. During the last two months, however, he became greatly emaciated. His expectoration was distressing, and his latter days have no redeeming feature except the presence of kind friends. He was prepared to leave this world physically. The danger of impending suffocation being removed, his system was left to the dire disease.

Whether excision of the larynx, with its record of deaths within the first few weeks, with its good results comparatively in a few cases, will take the place of the palliative treatment of tracheotomy, with immediate relief to all, and as a rule for some months at least, is a question which will no doubt at some distant day be answered. It is no doubt a most fascinating, if not almost a miraculous, thing for the surgeon to see one who, if left to himself or to a tracheotomy, can live but a short time, have all danger well-nigh removed and be able to speak intelligibly for years with an artificial larynx. But the question is: Which will give us, upon the whole, the largest sum of human comfort? INJURIES OF THE SKULL.

I wish to present you simply with the outlines of three cases of injuries to the skull, and

<sup>\*</sup> A paper read before the Ontario Medical Association, June, 1891.