

**ON TRACHEOTOMY:
ESPECIALLY IN RELATION
TO DISEASES OF THE
LARYNX AND TRACHEA**

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On tracheotomy: especially in relation to diseases of the larynx and trachea by W. Pugin Thornton

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W. PUGIN THORNTON

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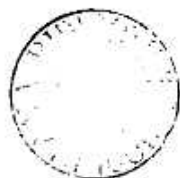
ESPECIALLY IN RELATION TO

DISEASES OF THE LARYNX AND TRACHEA.

BY

W. PUGIN THORNTON,

SURGEON TO THE HOSPITAL FOR DISEASES OF THE THROAT, AND TO THE
ST. MARYLBONE GENERAL DISPENSARY.



J. & A. CHURCHILL,
NEW BURLINGTON STREET.

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ON
TRACHEOTOMY

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I.—INTRODUCTION.

THE operations which are adopted for the purpose of opening the windpipe include Laryngotomy, Laryngo-tracheotomy, and Tracheotomy. Laryngotomy signifies division of the crico-thyroid membrane, and it is a remarkably easy operation, owing to the superficial position of the membrane, and from there being but one vessel of any consequence which comes in the way, namely, the crico-thyroid, a small branch of the superior thyroid artery. Though laryngotomy commends itself by the simplicity and ease of its performance, the tube is particularly liable, after it has been worn for some time, to cause necrosis of the laryngeal cartilages; and coming into such close contact with the vocal organs, vocalization is likely to be permanently impaired. For these reasons it is an undesirable operation, unless some very special requirement demands its adoption. In Laryngo-tracheotomy the cricoid cartilage is cut through along with the first ring of the trachea. This operation may also be considered inexpedient, on account of the danger of the canula setting up disease of the cricoid cartilage, and also because by dividing this ring the strength of the laryngeal canal is materially diminished. In very few cases is it desirable to operate in this manner, but it may be necessary in consequence

of the extreme shortness of the windpipe. Tracheotomy constitutes the operation of opening the windpipe by an incision through the tracheal rings, and will be the only operation further referred to in this work. By the insertion of the canula below the cricoid cartilage, all risk of suffocation from any disease of the larynx is obviated; and, furthermore, the operator is better enabled in this situation to cope with any obstruction that may exist in the trachea. In the course of my remarks it may be deemed desirable to allude to other modes of treatment applicable to some of the more important diseases, with the view of obviating the necessity of having recourse to tracheotomy.

Until within the last quarter of a century no surgeon was able accurately to ascertain the cause of dyspnoea for which he was called upon to open the windpipe, and tracheotomy was performed as a *dernier ressort*, when the breathing of the patient had become so impeded that suffocation was imminent. Since the laryngoscope has come into practical use, however, any condition of the larynx interfering with respiration can be recognized with certainty and precision. By means of this instrument not only can the seat, extent, and nature of the disease be determined, but also, for the most part, the constitutional condition on which it depends; and thus not only the desirability of operating, but likewise in many cases the time at which the operation should be performed, may be fixed; and, moreover, a decided opinion can be arrived at as to the future course of events. Thus, should the disease be either carcinomatous or associated with phthisis, it can be determined that tracheotomy would be undesirable, except in the instances to which reference will be made when discussing these diseases. Should the affection be either chronic laryngitis or syphilitic laryngitis, the necessity of performing tracheotomy may be recognized; and, further, it may be prognosticated that in the former disease life will be prolonged for some months, but not for a term beyond two years, and that the tracheal canula will always have to be worn; on the contrary, that in syphilitic laryngitis life may be prolonged for any natural period, and also—especially in the most recent forms of the disease, where there is no great distortion of the laryngeal structures, that after a few weeks or months it will be