

Mr. EDGAR FLINN, in a paper on "*Glengariff as a Winter Health Resort*," speaks highly of this locality for patients suffering from bronchial affections, consumption, and asthma, and also for rheumatic and gouty persons requiring a high temperature, and minimum of variability of temperature.

Besides the papers here mentioned, a great number of contributions upon medical and surgical subjects of interest and importance will be found in the volume, which bears evidence of the highly important and scientific value of the work transacted at the Royal Irish Academy of Medicine in Ireland.

R. Norris Wolfenden.

GOUGUENHEIM et TISSIER.—*Phthisie Laryngée.* Paris, Masson, 1889. **Laryngeal Phthisis**—(with thirteen figures in the text, and five plates, of which three are chromo-lithographs.)

THIS is an important work, meriting detailed examination.

The authors deal first with a historical survey of the knowledge regarding laryngeal phthisis up to the time of Louis, since that time up to the period of the introduction of the laryngoscope, and from that event to the present. There follows a chapter upon pathological anatomy, and a description of the right way of removing the parts for examination so as to preserve the recurrent nerves and the glands.

The authors believe that more than a third of all patients succumbing to pulmonary phthisis present a laryngeal lesion variable in extent, intensity, and localisation.

The authors study these infiltrations which have nothing in common with true œdemas, as they occur on the epiglottis, the ary-epiglottic folds, the ventricular bands and ventricles, the arytenoid region, the true vocal cords, and the subglottic region and trachea. Ulcerations are very frequent. The authors state that it is not rare to meet with superficial ulcerations in acute laryngitis of whatever origin. Ulcerations of the inter-arytenoid fold are often very early in appearance, even when the rest of the larynx is apparently healthy and are typical of tuberculosis. Follicular ulcerations are most frequent in the trachea, when they generally occur at the level of the cricoid and epiglottis. A history of the recognition of tubercular tumours follows. These generally arise from the base of the epiglottis, the inter-arytenoid space, and subglottic region. They are cauliflower-like, pale red, very soft, and easily detached. In the subglottic region they occur commonly under the anterior commissure.

All cartilages of the larynx may be involved in the tubercular process. The arytenoids are those most commonly affected, then the cricoid, the epiglottis and thyroid cartilages, and most of these lesions (and perichondritis) are of bacillary origin. The authors think that on the base of an ulceration originally tubercular a secondary infection by the numerous schizomycetes of pulmonary expectoration may become developed, and the perichondritic suppurations seen in laryngeal tuberculosis may thus be of non-tubercular origin. Ankylosis of the crico-arytenoid joint is very rarely of tubercular origin, if by ankylosis is meant the adherence of the two articular surfaces. The authors insist upon a peculiar pallor of the

posterior crico-arytenoid muscles, which they have frequently observed in patients dead of advanced phthisis. The peri-tracheo-laryngeal glands are in most cases enlarged and tumefied, and the recurrent nerves are frequently altered. A study of the pathology of acute miliary tuberculosis of the larynx follows. A good deal of space is given to the histology of tuberculosis. A special characteristic of this process in the larynx is the diffusion of the lesions, the relative rarity of tubercles, and the predominance of infiltration with a tendency to sclerosis, so that in some cases only sclerous tissue infiltrated with small round cells is met with, making it difficult, in the absence of tubercles and bacilli, to determine the specific nature of the condition. Interstitial myositis of the posterior crico-arytenoidei is the most pronounced lesion of these muscles. The authors are of opinion that erosions are ordinarily specific, in phthisical patients, the result of epithelial effraction by bacilli, but may be also caused by schizomycetes. The authors classify the ulcerations of laryngeal phthisis as:—(1) *epithelial* (*a*), erosions (*b*), ulcerations; (2) *papillary*, fissured; (3) *glandular*, deep, with small surface; (3) *vascular*, large, extensive and shallow, with thick edges; (4) *caseous softening*, more or less extensive, deep, with irregular borders.

Speaking of the value of bacillary examinations of sputum, the authors rightly insist upon many examinations, when the results are of a negative character, previously to arriving at a definite opinion. Bacilli existant singly or in groups, and situated deeply, have many times enabled the authors to determine the tubercular invasion of the tissues when histology alone has rendered this doubtful. It is not exceptional to find bacilli between the epithelial cells in their interstices, especially in the region of pavement epithelium, principally in the catarrhal forms of tubercular laryngitis.

Speaking of the laryngitis of tubercular patients, which is regarded by some authors as non-specific and inflammatory, the author scarcely believed in a laryngitis of the tubercular, as opposed to tubercular laryngitis. Authors who, like Heinze, admit only vascular infection, are led to describe lesions and ulcerations, which they call non-specific. But modern observations, of the discovery of the bacillus between epithelial cells and the manner of development of tuberculosis of glands, compel us to return to the theory of Louis. Though, clinically, these erosions and ulcerations present nothing specific, we must admit their tubercular nature with some reservations. A tubercular subject may have a catarrhal process with erosions which are not specific, and only become so secondarily, but the event is rare, and the differentiation is more theoretical than practical, since the termination is the same.

The authors insist in cases where pulmonary signs are indistinct, upon the value of small vegetations with or without erosions, in the arytenoid regions, as signs of tuberculosis lesions of the peribronchial glands may occur very early, giving rise to alarming stenosis of recurrent origin. If the slight signs of involvement of one apex exist these signs assure the diagnosis of phthisis. Speaking of the possibility of a primary laryngeal phthisis, while Progrebinski, Souvenbourg, Orth, and Fraenkel, have undoubtedly proved its occurrence, agreeing thus with the older views of

Trousseau, Belloc, Waldenburg, and Mandl, the authors strongly insist on the fact that primary laryngeal phthisis is sooner or later accompanied with pulmonary tuberculosis. The polypoid vegetations, which so often occur in scrofulous subjects, whose lungs are yet intact, is at first primary and of slow march before the lungs become involved. Cases under the authors' care prove, however, that these vegetations may be cured, and the onset of pulmonary symptoms may be delayed for at least three or five years. Louis's old view was that laryngeal infection arose from sputa secreted from pulmonary cavities stagnating in the larynx. This view does not serve, however, for all cases, for, as is well-known, deep infiltrations occur in the larynges of patients with very slight expectoration, and others who have large cavities and expectorate much have the larynx unaffected. Heinze's views of infection by means of vessels, arterial or lymphatic, and the fact that tubercles are deposited under an unaltered epithelial membrane, are in opposition to this older theory. Gouguenheim and Tissier admit the possibility of direct inoculation upon the laryngeal mucous membrane, especially if there be a slight erosion. They illustrate this by a case in which a young woman was supposed to have contracted laryngeal phthisis by contagion from her husband. In the case of primary polypoid phthisis, it is sought to explain the laryngeal condition by hereditary infection, manifested by infantile scrofula, and the authors compare these vegetations to white swellings and cold abscesses. In some cases the authors believe laryngeal infection to be carried by vessels. At first peri-vascular tubercles are formed, then diffuse infiltration by fusion of a number of follicles, or invasion of neighbouring tissues by the bacilli. Necrosis of these follicles occur, ending in ulceration. They also admit the probability of infection through the epithelium in some cases. While many writers regard the superficial erosions and ulcerations as non-tubercular, it is interesting to note that the authors have found bacilli on the surface of these lesions, affirming their tubercular nature, and they explain the slow development and ready cure of these conditions by the resistance of the limiting membrane underneath preventing extension of the process. The discoveries of Villemin and Koch lend support to the old view of Louis. They maintain the view of propagation of the tubercular process in many cases from infection through the epithelium, of which, in most cases, vascular infection is the sequel.

The authors deal minutely with the symptomatology of the disorder. In speaking of perichondritis, they emit the opinion that a certain number of the cases described under the name of hypoglottic laryngitis by Ziemssen are of this nature, and are due to perichondritis of the cricoid cartilage. The high degree of aphonia met with in this disease is not found in any other laryngeal condition, except very rarely in cancer. The authors refer to their observations on restoration of the voice by formation of "supplementary glottides," in which cases the soft parts left after destruction of the vocal cord (ventricular bands, epiglottis, ary-epiglottic folds) take on a vibratory function and action like the vocal cords. Whether the term "glottis" applied to such a mechanism is not a misnomer is a matter of opinion. The authors draw attention to an overlooked observation of Barth and Beau—namely, the modification which takes place in pulmonary-auscultatory signs, in cases of stenosis from tubercular infiltration. The vesicular murmur is enfeebled, and there often exists besides, a propagation of the laryngo-tracheal souffle, which it is necessary to bear in mind in estimating the extent of the pulmonary change. As to cough, while oftenest of broncho-pulmonary origin, it may be laryngeal. Attacks like whooping cough are observed in cases where the recurrences or vagi are pressed upon by caseous glands.

The authors refer to a case of acute pharyngo-laryngeal miliary tuber-

culosis previously reported at the *Société Médicale des Hôpitaux*, in which the lesion was localised and initial, and which was cured. A year afterwards the patient was without any chest symptom. We are accustomed to believe in the absolute incurability of this condition. The authors deal in detail with glottic stenoses in the tubercular, namely those due to lesions of the mucous membrane and subjacent connective tissue, those due to lesions of the cartilages, those of articular origin, those of muscular origin, and neuropathic stenoses.

With regard to the much disputed question of adductor spasm versus abductor paralysis, the authors offer some very sensible criticism. The original ideas of Rosenbach, appropriated and formulated as a kind of law by Semon, as to abductor paralysis, do not meet all cases, according to the authors, of neuropathic stenosis, and they do not accept as conclusive the observation of B. Fraenkel, which he latterly recorded as an event for laryngology. The generalisation of this theory of abductor paresis into an absolute law is directly assailable. Gouguenheim and Tissier conclude that cases of stenosis exist which are due to contraction of the adductors, just as there are others due to paralysis of abductors. The upper air passages, in their double capacity of phonatory and respiratory mechanisms, have come to have a perfectly co-ordinated series of acts. As regards the movements of muscles requisite for phonation, a special nerve influence of the spinal accessory is predominant. In order to maintain an open glottis permeable to air, outside all phonatory requirements, a reflex tonic action by means of the vagus is constant, both during respiration and expiration. These actions are in some degree antagonistic, but if the sound-producing mechanism is interfered with the glottis assumes a position intermediary between extremes, and under the influence of respiratory current notably impede respiration if the lesion is bilateral. If the lesion, however, affects mostly the reflex influence of the vagus, the predominant influence of the spinal accessory brings the cords into the mid-line. It is the diminution of the respiratory tonus which brings the cords into the mid-line. Why should peripheral degeneration of the recurrenents or pressure upon them act selectively upon the vagus tonic reflex action? Disassociation is not impossible, and we see cases—hysteria (Gerhardt), laryngeal phthisis (Mackenzie), lead or arsenical poisoning—in which the opposite condition obtains, in which the dilator influence predominates, and the cords are in extreme abduction. The action may be brought about by compression and irritation of the recurrenents (pleura, glands), as proved by Krause's experiments, and sustained by the experiments of Zederbau, the first effect of compression being to suppress reflex excitation, preserving motor excitation. The first effect of compression of the recurrent or vagus will be, therefore, to suppress continuous reflex tonic excitation of this nerve, and to produce glottic closure. Bernard proved that the vagus lost its excitability more quickly than the spinal accessory. The vagus fibres in the recurrent are much less numerous than the spinal, and are of somewhat more special structure, and the pathology of the vagus (tracheo-bronchial adenopathy, Baritz, Guéneau de Mussy, Bourdon, etc.), demonstrates how great is its susceptibility. This theory explains also the relief obtained in these stenotic conditions by administration of anaesthetics, and it accords perfectly with the physiological experiments of Bernard, Chauveau, Fr. Hooper, and Krause, and with clinical facts. A short chapter follows upon Lupus of the Larynx, and its relation to tubercle, and some detail is given in the succeeding chapter to the diagnosis of laryngeal phthisis. The condition of the larynx is the best differential sign between tubercular and syphilitic pulmonary phthisis. That the latter is not rare is proved by Pancritius, who in 1881 related 109 cases. As to prognosis, the authors think that phthical ulcers may be cured under treatment, or even spontaneously;

but this is exceptional. Recurrence is sure to take place. Very truly they remark that since one cannot speak of a cure of pulmonary phthisis, one can only expect amelioration and palliation. We naturally turn to the chapter on treatment which closes the book, with much interest in view of recent literature of the subject.

The authors, quoting the observations of Heryng, state laryngeal phthisis to be curable beyond doubt in a certain number of cases. This result may, however, be often obtained under hygienic treatment. The authors speak well of insufflations and inhalations of medicated vapours, but condemn sprays. Menthol they do not think preferable to cocaine. Sub-mucous injections of iodoform have given good results, but these are not permanent. Iodoform cannot be replaced satisfactorily, according to the authors, by iodol, salol, or boric acid. Iodine and caustics are passed under review, and of the latter the most interesting remarks are those concerning lactic acid, with the employment of which the authors are satisfied that cures can be obtained in some cases. The authors have used the galvano-cautery largely for the treatment of vegetations and hypertrophies. They advocate tracheotomy in patients whose lungs are little affected, temperature nearly normal, and general condition satisfactory. Extensive disease of the lung does not contra-indicate the operation if the temperature be not high and digestion be good. Ranging themselves on the side of Moritz Schmidt as opposed to the pessimistic views of Isambert, Morell Mackenzie, Solis-Cohen, Lennox Browne, &c., they regard the operation (from an experience of ten years) as one likely to prolong life. Some remarks on general treatment close this chapter. The book is illustrated with a number of cuts, very well executed and with three chromo-lithographs, representing the laryngoscopic appearances in laryngeal phthisis. Of these we are compelled to say that they are no better, if perhaps no worse, than most of such illustrations usually are. The colouring is too high, and the larynx is seldom or never of the fiery redness depicted in these pictures in phthisis. This, and in parts a certain redundancy of language, with perhaps too frequent reference in connection with points under discussion, to pages before or to follow, are, the only faults we can find with the work, which is an important one, and indeed, as the authors remark in their preface, the only complete monograph upon laryngeal phthisis since the classical treatise of Trousseau and Belloc. It is a work which must be read by every specialist, and should be read by every physician, and we congratulate the authors upon having produced a very readable and instructive work, not the less valuable for the very numerous original observations and remarks which are to be found in every chapter.

R. Norris Wolfenden.

NOTE.

WE are requested to state that amongst the list of Fellows attending the meeting of the British Laryngological and Rhinological Association on November 14th, the name of "Dr. WARREN," which appears on p. 462, Vol. II., December, 1888, should have been "Dr. CHARLES WARDEN." We beg to assure Dr. WARDEN that this was a printer's error, which we regret.