will also show a phantom of the larynx and an instrument for opening the antrum of Highmore. Mr. T. Guthrie, whom we have had much pleasure in adding recently to the number of the collaborators on the staff of the JOURN. OF LARYNGOL., RHINOL., AND OTOL., will show diagrams illustrating the development of the middle ear. The following have signified their intention of taking part in the discussion: Dr. Kerr Love, Dr. Stanley Green, Mr. Macleod Yearsley, Dr. Smurthwaite, Mr. Hunter Tod, Mr. Lake, Dr. Fullerton, Mr. F. Spicer, Mr. Mark Hovell, Dr. Chevalier Jackson, Mr. Chichele Nourse, Mr. Stuart Low, Dr. Syme, Dr. Pegler, Mr. Heath, Mr. Guthrie, Dr. Tilley, Mr. Hugh Jones, Dr. A. Bronner, Mr. J. Bark, Dr. Stoddart Barr, Dr. Mérel, Dr. Dundas Grant, Dr. Cresswell Baber, Dr. Willinger, Dr. Birkett.

Among the most welcome visitors will be Dr. Chevalier Jackson, of Pittsburg, U.S.A., and our old and valued friend Dr. Birkett, of Montreal. None of the elements conducive to success are wanting, and we feel sure that those who attend will be amply repaid.

TRUE TUBERCULAR TUMOURS OF THE LARYNX AND TRACHEA.

WE have received a communication from our old and esteemed contributor, Dr. J. Nowland Mackenzie, on the above subject, expressing a desire that our readers should have before them some of the arguments on which he founds his claim to have been the first to report cases of true tubercular tumour of the larynx and trachea. Dr. Mackenzie claims that since the publication of his original paper several unsuccessful attempts have been made to deprive him of the credit due to the discovery of this form of tuberculosis in the upper air-tract. In the *British Medical Journal* of June 7, 1884; the *Centralblatt für Laryngologie*, etc., March 3, 1885, No. 9; the *Wiener med. Presse*, 1885, Bd. 26, pp. 473 and 976 (further reference may be made to an article by Percy Kidd in *St. Bartholomew's Hospital Reports* for 1885, vol. xxi), Dr. Mackenzie has placed his views before the profession as far as Professor Schnitzler's claims are concerned. Professor Ariza's alleged priority was dealt with in a review in the *Centralblatt für Laryngologie* for April, 1886. Dr. Mackenzie holds that from the illustrations and the accompanying text the first case was clearly a malignant growth, probably a sarcoma, and the second patient had suffered from pedunculated fibrous polyp. Unfortunately no *post-mortem* was obtained. Dr. Mackenzie's excellent work deserves the fullest recognition

on our part, and we have much pleasure in quoting the following portion of his letter to us:

"As some misapprehension on the above subject still exists in certain quarters, and as my attention has recently again been repeatedly called to this fact, I trust you will permit me, in the interests of historical accuracy and justice, to refer through the medium of your esteemed Journal as briefly as possible to the facts in the case.

"The first recorded cases of true tubercular tumour of the larynx and trachea were reported by me in the summer of 1882, in a paper read before the Clinical Society of Maryland. A full abstract of the article appeared in the current number of the *Maryland Medical Journal* (June 1, 1882), and the paper itself was subsequently published in full the following October in the *New York Archives of Medicine*[1]—a publication which, together with its brilliant editor, Seguin, has since passed out of existence.

"In this communication I pointed out the fact, which has since been too often overlooked, that the windpipe of the consumptive is the seat of various forms of outgrowths which may for the sake of accuracy and convenience be thrown into three distinct groups. Each of these groups, or forms, has certain anatomical peculiarities which justify us in placing them, clinically at least, in separate classes. In this way, too, may be ascribed the confusion which has existed on the subject from failure to discriminate clearly between the different forms of tumour found in the windpipe of the tubercular subject.

"The first group comprises the *granular hyperplasiæ* which deck the base and fringe the edges of the tubercular ulcer. They are anatomically allied to granulation tissue, and are to be looked upon as the representation of a conservative process—as a natural step to cicatrisation—and are the result of a protective inflammatory process. They consist, histologically, of a mass of newly-formed connective-tissue cells and nuclei, in which enlarged tortuous capillary vessels are sometimes developed.

"In the second group are included the *papillomatous excrescences, vegetations, and tumours* which are of less common occurrence than the foregoing, and are closely allied both macro- and microscopically to simple laryngeal papillomata, for which they are easily mistaken. These are the growths that are often the *avant courier* of laryngeal and pulmonary tuberculosis, and may remain for a long time as the solitary outward and visible sign of that disease. Their presence in the interarytænoid fold is often strong presumptive evidence of incipient consumption. They vary greatly in size, shape, and situation, sometimes projecting from under the anterior commissure of the larynx in the form and appearance of a spray of coral, at others filling the larynx with growths, macroscopically indistinguishable from simple papillomata, which are sometimes so abundant as to cause stenosis and call for tracheotomy. Their most characteristic seat is the posterior laryngeal wall, where they appear as warty, acuminate, or leaf-like outgrowths of pale greyish or pronounced reddish hue; or are banked at that situation in a solid mound either smooth in contour or bristling with multiple, acuminate projections. The histology of this class of tumour has been imperfectly studied, and may well bear in the future a more careful scrutiny.

[1] "Tubercular Tumours of the Windpipe—Tuberculosis of the Laryngeal Muscles. A Contribution to the Pathological Histology of Laryngo-Tracheal Phthisis," *Archives of Medicine*, October 1, 1882.

Stoerck,[1] following Rokitansky, regarded it as the result of an indurative proliferation of the connective tissue which occurs in the course of chronic tubercular disease of the mucous membrane in the neighbourhood of the arytænoid cartilages. Kundrat,[2] who examined Stoerck's specimen, pronounced them essentially papillomata and non-tubercular in origin. In my own limited observation reported in 1898 before the American Laryngological Association, and in Philadelphia in 1904 at the College of Physicians,[3] we had to do here with a tuberculosis of a papilloma—to put it in a few words, papillomatous tissue infective with tubercular tissue. Whether or not the growth is tubercular originally or becomes so secondarily through infection is a point to be determined by future observation. This part of the subject is not only of histological, but also of eminently practical, importance. My specimens were especially interesting from a diagnostic point of view in the microscopical differentiation of this form of outgrowth from the papillary variety of epithelioma, particularly when, as sometimes happens, the tubercle bacillus is only found after a prolonged and diligent search. Whether benign or tubercular, the very fact that this variety of tumour often heralds the approach or proclaims the presence of tuberculosis in the individual, only emphasises the importance of examining with care, not only clinically, but microscopically, all papillomata taken from the larynx and trachea. With regard to their mode of development, it is quite possible that in some cases at least they may have an origin analogous to the papillomata found in the urethra and vagina, which are probably produced by infection of the vesical and uterine discharge.

"In the third group we have to do with what I have called the *true tubercular tumours*, which consist of solitary tumours of the wind-pipe, which are composed, histologically, of a mass of closely aggregated, miliary tubercular nodules, and which occur independently of infiltration and ulceration of the mucous membrane. My two first cases were of this kind, and are histologically interesting inasmuch as they are the first cases on record of tumours of any kind in the wind-pipe shown microscopically to be tubercular. They represent, therefore, the earliest exact knowledge of this form of tuberculosis, and are the first to establish the separate existence of this previously unknown phase of that disease. Since they were reported cases have here and there found their way into medical literature, some without doubt examples of true tubercular tumour, whilst others, and they are probably in the majority, are extremely doubtful in nature and must be thrown into the category of localised infiltration or into the papillomatous group. This latter group is familiar to every laryngologist of experience, while the student began to recognise the granular hyperplasias in the alphabet of his special studies. The true tubercular tumour, on the other hand, is extremely rare; and by true tubercular tumour I mean a distinct, definite, characteristic tumour-formation covered by unbroken epithelium, and consisting of a congeries of miliary tubercles set in a vascular network of connective tissue and exhibiting all grades of tubercular degeneration to cavity-formation.

"The origin of these growths is obscure. In my original communication I suggested that they might have a similar origin to the so-called 'metastases' in the laryngeal membrane, which take their departure from old tubercular disease of other organs, as the kidney and bronchial glands."

[1] *Klinik d. Krankheiten des Kelhkopfes*, etc., Stuttgart, 1880, S. 282.
[2] Cited by Stoerck, *loc. cit.*
[3] Papers unpublished.