AN ADDRESS

DELIVERED AT THE OPENING OF

THE SECTION OF LARYNGOLOGY
AND RHINOLOGY.*At the Annual Meeting of the British Medical Association, held
in Birmingham, July, 1890.*

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ON THE TEACHING OF LARYNGOLOGY.

I AM aware it is the unwritten law that the Presidents of Sections at the annual meeting of the British Medical Association should not deliver scientific treatises upon the subjects which are to be discussed by the Section over which they have the honour to preside. I do not intend to trouble you with a long address, lest I should stand between you and those interesting papers which will come before the Section. Long addresses, like long sermons, are only calculated to bore the listeners without adding to their stock of information. I think I may fairly say that, as years roll on, these addresses become more difficult to compose. One has to walk in a well-beaten track along which so many have trodden before, so that it becomes a matter of real difficulty to strike out a course for oneself which shall be novel in its subjects and unlikely to plagiarise the thoughts of others. How to obtain this new field for comment rather passes my comprehension, and my heart somewhat failed me in undertaking this task.

can only say that I must throw myself upon your generous consideration, and ask you to make every allowance for my deficiencies, however great they may be. I feel that whatever may be the shortcomings of your President, the excellence of the papers which will come before you will make ample reparation for any failure of my own. However that may be, I with much heartiness bid you one and all a most cordial welcome. To everyone who has assembled to join with me in the work of this Section I can say with thorough truthfulness that I am delighted to see them.

It is a characteristic of Birmingham men that, although we have our rough side and our angularities and sharp corners, we always endeavour to practise the virtue of hospitality with fullness and variety, and to offer to our guests the freest and most heartfelt welcome. I know that we are credited by many of our friends with being too intense in our municipal and political life, but our very intensity adds to our feelings of pleasure at receiving a visit from the many eminent gentlemen who I see before me. I think we may now conveniently call to mind that when the British Medical Association held its last meeting in Birmingham, now some eighteen years ago, as far as the profession generally were concerned, laryngology and rhinology were a sealed book; the dark places of the larynx were as yet unknown except to the few, and the nose, whether the aristocratic Roman or the more fascinating *nez retroussé*, was more regarded as a distinguishing feature of the face than a cavity which adventurous surgeons were yet to illuminate and probe to its inmost recesses. How these specialities have prospered since that meeting is well known to you all. In most of the great towns in England, Ireland, and Scotland, there are to be found surgeons who are experts in this branch of our profession. Two years ago laryngology and rhinology were raised to the full rank of a separate section at the meetings of this great and prosperous Association, and took their proper place as a recognised speciality. This has taken place in spite of the sneers and discouragements which at first greeted the pioneers of the instruments of precision which were destined to lend their aid in detecting and affording curative measures for the diseases which attack the organs in question. I can well remember when the laryngoscope was regarded as a sort of curious toy which was likely to afford a large fund of recreation and amusement to the profession, but very unlikely to be of any serious utility to the profession at large. Those who did not scoff regarded the matter generally with a languid kind of interest, and thus, like the priest and the Levite, passed by on the other

side. Our students had for some long time no opportunity to study the use of the laryngoscope, for there was no place where a knowledge of it could be obtained.

The large hospitals, both in London and the provinces, had no special department in which they could obtain information. Consequently, with a few exceptions, several generations of students obtained their diplomas and were licensed to practise without the slightest knowledge of diseases of the larynx and the instruments of precision with which their diagnosis may be made and appropriate treatment afforded. On these subjects it never entered into the minds of the examiners of the various licensing bodies to set a question or even to inquire if the student under examination was aware that the larynx was ever the subject of disease or was anything more than the anatomical passage from the mouth to the lungs. I am well aware, and I think that you will agree with me, that the mind of the ordinary Briton is ever slow to adopt new methods; and especially is this true of the medical profession—a profession whose instincts have always been eminently conservative, and which has, until the last seven or eight years, been rather suspicious of most novelties in the way of new lines of treatment. If this be true, it is not difficult to understand that the laryngoscope was for a long time unable to gain the confidence of the general body of the profession, and of obtaining that recognition which its merits so eminently deserve. All the greater credit is due to those earnest workers who stood firmly by this instrument, through good repute and evil repute, and who, by their dogged firmness, their great ability and tactile skill have raised laryngology and rhinology to the position which they occupy to-day—a position second to none of the various special branches of our profession. Now, gentlemen, it may not be out of place to remind you that it is only just to the memory of Mr. Frederick Ryland that a Birmingham man was one of the first writers on diseases of the larynx. In 1837 he published a book called *A Treatise on Diseases and Injuries of the Larynx*, founded on the essay to which was adjudged the Jacksonian prize for 1835. He of course had no instruments of precision at his command; he had no means of examining the interior of the larynx; he had none of the modern remedies employed in the treatment of their disease; but he must have had indomitable perseverance in recording and following up his cases and of making *post-mortem* examinations upon them when they ended fatally. His description of the symptoms of these diseases is as clear, definite, and truthful as any in the more modern books. Had he lived in the present day he would doubtless have become one of the leading professors of laryngoscopy.

I must ask you to pardon this digression, as I felt that it was due to Birmingham and to the memory of a distinguished citizen now passed away from among us that credit should be accorded where it was due. Now, gentlemen, I feel you are entitled to ask what are the facilities for the study of laryngology and rhinology in Birmingham, and I frankly reply that they are unworthy of a town whose motto is "Forward." I blame no one for this state of affairs, because no one in particular is deserving of blame. It is due to a series of unfortunate circumstances, the greatest of which has been that very frequent curse of humanity from which I doubt not most of us at one time or other in our lives have all suffered. I mean impecuniosity.

For years two great hospitals—the General and the Queen's—and the General Dispensary dominated the town, and were the recipients of most of the gifts of the wealthy and charitable. Large as these gifts have been—for Birmingham people do take a lively and benevolent interest in their hospitals—the cry has always been for more. Moreover, I have no hesitation in saying that, had these donations and subscriptions been ten or even twenty-fold more in number, they could have been expended over and over again without extravagance for the further benefit of the sick and suffering. In these hospitals the beds are always full, and there are hundreds of poor sufferers waiting for admission; consequently they are comparatively poor, and are always wanting more money. You will see from this that for many years the special hospitals had but a poor chance of living a very luxurious existence, and they did not enjoy a very comfortable or easy financial position. What they were able to do, they did fairly well; but, crippled as they were for funds, they could not provide convenient hospitals with beds for the admission of in-patients, but had to be content with treating outdoor patients. This particularly applies to the one which is known as the Birmingham and Midland Ear and Throat Hospital, where a great and increasing number of cases are treated yearly. Last year 2,302

patients were seen by the medical officers. How we are hampered by the fact that we have not one single bed at our disposal, I leave you to imagine. This hospital was founded on Monday, November 4th, 1884, by Captain Moorsom, William Chance, Robert Martineau, and Mr. William Dimpton, who was its first surgeon, an office which he held till his death in 1859. After this the hospital passed through many vicissitudes, its premises being changed several times. In due course its usefulness was further extended by the treatment of cases of diseases of the throat. In 1884 it was removed to its present premises—7, Great Charles Street—premises a great improvement upon its previous habitation, but still far from being worthy of the great speciality which it represents. I should have said that in 1884 its staff consisted of four medical officers. The day is fast approaching when it will have a more suitable home, as a building is now being erected in the centre of the town to accommodate the increasing number of out-patients, and to provide for a small number of in-patients, for which, as our means grow larger, increased accommodation will be provided. So much for this hospital. The General Hospital has also a throat and ear department under the care of one of its assistant-physicians and one of its assistant-surgeons.

These, then, are the facilities which exist in Birmingham for the study and teaching of rhinology and laryngology at the present time. Unfortunately, for reasons into which I need not enter, the Ear and Throat Hospital is not used by the students of the Birmingham Medical School. This I regard as a great misfortune to our speciality, and to the medical officers themselves, as I believe that the presence of students lends aid to the zest and ability with which the medical officers of a hospital discharge their duties. Now, although I am quite ready to admit that it is to special hospitals that the advances made are principally due, and that to their officers more than to those in charge of special departments in general hospitals, the popularity of the laryngoscope was due, and that special hospitals were founded because general hospitals were too slow in meeting modern requirements, yet I sincerely trust that no more special hospitals will be founded, but general hospitals, which profess to educate students, shall have well equipped laryngological and rhinological departments, officered by competent specialists, who shall be placed on terms of equality with the physicians and surgeons.

Now I fear that to some members of the Section these may appear very heretical opinions, which ought to consign me to the laryngological stake. But with all due deference to my opponents, I am prepared to defend this statement with what I believe to be competent arguments. I think you will all grant that every student, before he obtains the diploma which permits him to practise, should at least have a fairly proficient knowledge of the use of the laryngoscope and rhinoscope—a knowledge which should be tested (I do not say severely) at his final examination. Now how is he to obtain this proficiency? The answer suggests itself—by attending a course of instruction upon these subjects, under the care of a competent teacher. Now, as President of the Clinical Board of this town which has charge of the clinical teaching at the Amalgamated Hospital, and as a lecturer at Queen's College, I know that the burden laid upon the back of the student is as much, or even more, than he can bear. The number of lectures he is compelled to attend, the amount of clinical work he has to perform, the increased and increasing severity of the examinations, leave little time upon his hands in which to visit special hospitals. If, when attending at his general hospital, he finds the speciality upon the spot, he is able to give his attention to it without waste of time in going from one hospital to the other. I would not wish for one moment to detract from the value of special hospitals, but I would ask their officers to give their powerful aid in impressing upon the hospital authorities the necessity, in the interest of the public, of providing special departments where the students may gain the necessary information; and upon the examining bodies the absolute importance of compelling students to attend a short course on laryngology and rhinology which shall render them competent to treat those diseases in which a knowledge of the laryngoscope and rhinoscope are absolutely necessary. It must have been the lot of almost every member of this Section to have met with cases in which a little knowledge on the part of the practitioner in the outset of the disease would have spared the patient weeks, possibly months, of suffering.

In conclusion, I again offer you all a most hearty welcome, and I will no longer stand between you and the interesting papers which will now be read and, I hope, receive a full and adequate discussion in this Section.

AN ADDRESS ON THE PRESENT POSITION OF ANTISEPTIC SURGERY.

Delivered before the International Medical Congress at Berlin, August, 1890.

BY SIR JOSEPH LISTER, BART., F.R.S.,
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MR. PRESIDENT AND GENTLEMEN,—At the International Congress in London, in 1881, Robert Koch demonstrated in King's College, his then new method of cultivating microbes upon solid media. The illustrious veteran Pasteur was present at the demonstration; and at its conclusion exclaimed "C'est un grand progrès, Monsieur." How vast have been the extensions of our knowledge which have resulted from that great step in advance! Of these none perhaps have been more striking than Koch's own brilliant discovery of the cholera microbe—picked out with unerring precision by his beautiful method from among the multitude of bacteric forms that people the intestinal contents, and grown and studied with as much definiteness as if it were a cabbage or a rose.

But while we have during the last nine years learned so much more of the nature and habits of the micro-organisms which invade our bodies, a new and surprising light has been thrown within the same period upon the means by which the living animal defends itself against their assaults. This we owe to the eminent naturalist Metchnikoff, who, having long carefully studied intracellular digestion in the amoeboid cells which form the main mass of the bodies of sponges and other humble organisms, was prepared to observe and rate at its true value an analogous process in the wandering leucocytes of vertebrata. He found that these migratory cells, with whose amoeboid movement we have been long familiar, feed also like amoebæ, and while almost omnivorous in their appetites, have a special fondness for bacteria; taking them into their protoplasmic substance and digesting them, thus preventing their indefinite propagation among the tissues. The cells which exercise this devouring function he termed phagocytes.

Various objections have been urged against Metchnikoff's views; but so far as I am able to judge, he has met these effectively by his masterly series of researches; and his observations have been confirmed and extended by several independent investigators.¹ For the sake of those among my audience who may chance not to be familiar with Metchnikoff's work, I am tempted to relate briefly some of his experiments. The green frog, below the temperature of 20° C. (68° F.) is incapable of taking anthrax: the bacilli of that disease cannot grow when introduced under the skin of that animal. To what was this immunity of the frog to anthrax due? Were its juices an unfit pabulum for the microbe, or was the phagocytic action of its leucocytes the explanation? In the hope of solving this question Metchnikoff formed a tiny bag out of the pith of the reed, and having placed in it some spores of anthrax, closed the bag and inserted it beneath a frog's skin. The pith wall of the bag allowed the animal's lymph to penetrate by diffusion, but excluded the leucocytes: and the result was that the spores sprouted and grew into luxuriant threads of anthrax in the lymph, which was thus proved to be a suitable medium for the growth of the bacillus. Meanwhile under another part of the skin of the same frog had been placed a small piece of the spleen of an animal that had just died of anthrax and contained the microbe in its most virulent form; but there, the leucocytes having free access, no growth occurred.

Another experiment on the same principle was still more instructive. It consisted in introducing the spores of anthrax into the anterior chamber of the eye of a frog, which, as we have seen, is naturally insusceptible of the disease; and also into that of a sheep and of a rabbit rendered insusceptible artificially by "vaccination" with Pasteur's attenuated virus. The aqueous

¹ See for example Dr. Tschistovitch, *Annales de l'Institut Pasteur*, 25e Juillet 1890, and Dr. Armand Ruffer, *BRITISH MEDICAL JOURNAL*, May 24th, 1890.