ensure that success to our meeting which it has been our earnest wish and effort to obtain, and for the full attainment of which end your presence is the guarantee. For myself, if a zealous desire to do my part when called upon by the Council of this Association has emboldened me to accept the highly flattering invitation to preside over this Subsection, it has been none the less with full conviction of my feeble claim to such distinction that I have, with many misgivings, approached the undertaking. While, then, I would express my highest for the great compliment paid me, I would still more, if a stronger feeling than one of gratification were possible to me at this moment, crave your indugence for any shortcomings on my part. Though a certain anxiety thus mingles with the sense of pride which one more worthy than I might well experience on this the first occasion when our special branches have had their separate and distinctive place assigned to them in the varied sectional work of this annual gathering, yet such conscious doubting grows insignificant contrasted with the privilege T obtain in meeting here in conference with you, and in taking profit and advice from your united experiences.

To you whe have so contributed to the history of our specialty by your researches and through your written records, any allusions from me to details of progress would be ill-timed and even presumptuous. For all these stages, from the time when the laryngoscope first gave insight to the hidden workings of the larynx in song, and lent some hope of aid to the physician, to the day when, in the fuller fruition of such hope, laryngology has reached its present state of undenied importance for the clearer understanding and more rational and effectual treatment of disease, all these are known to you as household words. I would but touch upon the thought in passing, as one full of pleasing reflections, and beyond this, if I may be allowed to say it, as an incentive to all of us to further effort that, where so much has been done, more still may be attained.

Much towards the furtherance of this end, I would here venture to suggest, might be gained by still more concerted action, and by readier opportunities for the discussion of those questions which appeal more specially to us, than are afforded through the channel of the general medical societies only, while ever appreciating and gladly accepting the occasions presented by these. By such more frequent interchange of thought, mutual and great advantage must accrue to us, as workers in a common cause. Earnest as is the labour of each, the fruit of these labours must be too often lost to the rest; for though most perfect and complete records of all that is published are now so catalogued that means of reference is ever ready to hand, still the busiest worker, whose experience would be most valued, is not always the first to record this in print, but is often constrained, for want of leisure, to note his findings in his case book alone. So statistics are too apt to be based upon inconclusive evidence, from which assertions arise which lead to controversy, and end in fruitless argument, thus sometimes hindering that even progress of work which each and all would ardently desire to promote.

Again, working thus as it were apart and alone, may we not at times become perchance earnest enthusiasts following fascinating theories, from which open discussion would sift much that is of worth, putting more doubtful propositions to the test of further proof, until repeated investigation and experiment shall in the end establish truth.

The wisdom that obtains from the multitude of counsels needs not to be insisted upon; yet while others engaged in special researches in the great, work of medicine and surgery have proven their acceptance of this truth, by establishing centres for the advancement of their art, laryngology and its associated specialty rhinology have no such representation in England. Contrasted with this seemingly strange defect, the Laryngological Association of America is a bright example of the benefit of collective investigation, which has, even in the few years of its existence, given rich results, until the records of its annual *Transactions* have become an invaluable addition to our literature. The present occasion would then appear to me to be not inopportune to reflect upon the importance of emulating this worthy example; and I would, gentlemen, express the hope that some proposition for the founding of an association for this object in Great Britain may yet be brought forward, and steps be taken towards its accomplishment.

And here at once I would forestall the possible argument that this ascerted need is in no way real, in view of the required opportunity being supplied here in this special Subsection of the British Medical Association. I should indeed merit disapprobation could I be understood in any way to under estimate the value of these meetings under the bright auspices that surround them. I will plead second to no one in my sense of gratification at the establishment of this Subsection; but the time allotted to us here must, of necessity, be too limited, and the intervals between the sessions be too long for the

purpose I have alluded to. In the true sense of a subdivision of that science which is our common interest, we may here still most fitly consider those themes which have a direct and practical bearing upon the questions which engage the attention of those whose sphere in medicine and surgery is less restricted than our own, though the detailed consideration of more abstract questions in our specialty may more properly belong to the debates of a special society.

In, however, thus generalising, and applying the results of our researches here, we, on the one hand, may be saved from what might tend to too narrowed views, while, on the other, we link our special department more closely to the whole.

Gentlemen, if in the expression of these thoughts I have seemed to you to tread too boldly on what is possibly delicate ground, I pray you ascribe such boldness to zeal, and not to any desire of mine to be the critic of the past, already so enriched by work of yours, or to rush into the breach, when I am given permission to speak, as an adviser for the future. I have but ventured to utter an earnest wish.

However sincere, though, my expressions may be, it is my duty to curb their encroachment on that serious work which is the purpose of our meeting to-day. Let me not then further transgress upon your time, for you are not here to listen to a discourse from me, but I to hear and to heed your words.

AN ADD'RESS DELIVERED AT THE OPENING OF THE SUBSECTION OF OTOLOGY. At the Annual Macting of the British Medical Association held in Dublin, August, 1887. By EDWARD WOAKES, M.D., Aural Surgeon, London Hospital.

GENTLEMEN,—The first duty of the occupant of this chair is to open the work of the session by some preliminary observations which every consideration necessitates should be of the briefest. I need not say with what gratification I find myself on this auspicious occasion in the position which the authorities of the Association, and especially of its Irish contingent, have been courteous enough to assign to me: a gratification which would be complete were it not for the sense of responsibility which the situation involves, and which my own consciousness assures me will comple a large share of forbearance on your part in discharging the duties of this post. In this respect, however, I am relieved by the assurance of the cordial co-operation of every gentleman who may take part in our proceedings.

It is not without reason that I refer to this meeting in the capital city of Dublin as one of a peculiarly auspicious character for the department of otology. Because it may be within the memory of some of you that it was in Ireland, at the meeting of the Association in Cork, in the year 1879, that the special department of the ear received its first public recognition at the hands of the profession, by being constituted a Subsection in conjunction with ophthalmology. After an interval of eight years, we find ourselves again in Ireland. I would submit to you, gentlemen, that this is a suitable time to review the position we occupy to-day, and to encourage each other for the arduous work of the future.

All true knowledge is good for all time, but it is inherent in the acquisition of such knowledge that it is gained slowly, and as it were by prayer and fasting. It will not be denied that in the field of our special labours we have to contend with one of the most intricate organs of the body, and the most important region of which, the perceptive portion of the auditory apparatus, is placed in an inaccessible recess of bone; so that its condition can be arrived at with difficulty, and the conclusions based thereon are oftentimes surrounded wish uncertainty. Herein doubtless resides one reason for the slow rate at which the science of otology has progressed, and perhaps for not a little of the contempt which at a period not long distant it was the ungracious custom to pour upon this particular branch of specialism. We may, hewever, congratulate ourselves that the methods of interrogating the labyrinth are becoming more exact and yield more certain information year by year, so that this basis of animadversion is already a thing of the past.

The one fact that strikes me in this relationship, as it doubtless does many of those now present, is that eight years ago we began as a Subsection, and we meet here to day as a Subsection still. Many complaints have reached me on this point?" and it has been affirmed that due consideration has not been exercised in this respect on our behalf. It may be that those who preside over the Councils of this Association, are not satisfied that enough has been accomplished in the name of otology to warrant its elevation to the status of a full Section. But whatever motive may have dictated the policy complained of, I am compelled to believe that the fault was due to ignorance of the extent and character of the labours in which we are engaged, rather than to the intention of depreciating those labours.

While, therefore, we will be thankful for the smaller mercy accorded us, we may rest assured that the time has passed in which it would be possible to repeat an occurrence which happened at the beginning of the present decade. At the time to which I allude, a gentleman became a candidate for the post of aural surgeon to one of the large London hospitals. A friend solicited the support of a senior member of the hospital staff in his interest, and received for answer: "Oh, yes; I daresay he will do very well to look into that little hole !"-meaning the external meature.

little hole !"-meaning the external meature. But, gentlemen, we have emerged from the era of depreciation, and may take consolation for the past in the contemplation of the record which can justly be claimed for otology to-day. For the work of its disciples has made it abundantly clear that, amongst other diseases, many forms of infantile convulsions and meningitis associated with dentition, as also some most rapidly fatal tendencies developed during the course of the exanthemata, owe their gravity to implication of the ear-organ; and that the otherwise fatal results of this complication may be avoided by judicious treatment directed to it. Further, that nearly all forms of vertigo, with its alarming concomitants, are pri-marily or secondarily aural in their seat, and can only be effectually treated by the recognition of this fact. The intimate anatomical and physiological relations of the nose to the auditory apparatus introduce all the diseases of the nasal organ and its accessory cavities to the aural practitioner. A large proportion of cases of abscess of the brain, and nearly all cases of mastoid disease, as well as many of facial paralysis, originate in the ear. Deafness, the impairment or loss of one special sense, goes without saying. And, lastly, there is that intricate class of symptoms called tinnitus, which is to receive the light of your collective experience in the discussion of to-day. Thus, it would seem that the organ of hearing is one of paramount importance in the economy, whilst rightly to understand its complicated operations in health and disease may well tax the highest faculties of the intellect.

And yet, gentlemen-strange though the anomaly may seem-it is nevertheless true that the examining boards of medicine throughout the country decline to make the subject of ear-disease a compulsory one in the curriculum of the medical student, and except in the most perfunctory way to suggest to him that the ear and its diseases have any particular interest for the medical man or his patients. Surely it is time that this state of things should cease.

It would be contrary to the experience of mundane affairs if the interval to which my remarks have reference did not show some blanks -if we had not to record the disappearance from our midst of some who took honourable position therein. In particular I would remind you that Dr. Cassells, of Glasgow, who at the meeting in Cork in 1879 occupied the chair, has since that time resigned the turmoil of life to enter upon rest. The mention of Dr. Cassells' name will, to those who knew him, revive the recollection of one who was in many respects a man of mark. Paralysed in his lower limbs by a railway accident almost at the outset of his professional career, he devoted the remainder of his life to the practice and advancement of aural work. This he did with a courage and pertinacity that would have been creditable to one endowed with an unimpaired and vigorous constitution. Besides numerous contributions to otology, he just managed to com-plete the translation of Politzer's large work on the ear, when the pen alipped from his failing fingers, and his shattered frame refused to obey the further mandates of his will. It is meet and fitting that we should on this occasion do honour to the memory of our departed contrère, if only to learn from his example-

> That it becomes no man to nurse despair, But in the face of clenched antagonisms Worthily to follow up the noblest till he die.

Before resuming my seat, I have yet to discharge the pleasurable duty of welcoming you in the name of our Irish hosts to the cultivated intercourse and refined hospitality of the city of Dublin. Speaking from personal recollection of this aspect of the Cork meeting, I can assure you of a welcome at once hearty and sincere--one which will mark an epoch in the long list of memorable gatherings which it is the happy feature of our Association to provide for the annual delecta. tion of its members.

A FURTHER DESCRIPTION OF THE BACILLUS SCARLATINÆ.

BY ALEXANDER EDINGTON, M.B., C.M., Assistant, Surgical Department Edinburgh University.

SINCE the publication of my previous report (JOURNAL, June 11th, 1887) containing a detailed list of various micro-organisms which had been isolated from the blood and desquamation of scarlatinal patients, I have been asked by several friends for further details of the so-called bacillus scarlatinæ. I have been intending to do this sooner or later, but it is more urgently called for now from the fact that the size of the bacillus has been wrongly reported, as no doubt many have seen who have examined the coloured plate and compared it with B. arborescens. This bacillus, as seen on cover-glass preparations of freshly-drawn blood, stained with a watery solution of methyl blue, measures from 2μ to 5μ in length and $.4\mu$ to $.5\mu$ in breadth. One does not as a rule find many bacilli, and they have to be carefully looked for ; it may even happen that the most careful examination may fail to show them, and yet, if some of the blood be used to inoculate tubes of Koch's jelly in the manner I have previously described, a plentiful cultivation may result. In cases where such cultivation is resorted to, it is advisable to examine the cultivation twenty-four hours after it has been placed in the incubator, when the bacilli, if present, will be found holding themselves for the most part to the upper layers of the liquid. In such original cultivations one is not to expect much of a pellicle at this time, as there will merely be seen a slight film on the surface. If it be blood taken on the third day of the fever, cocci may be present, but not invariably so. As far as I have been able to make out, there are two conditions, namely, where within the first two or three days bacilli are present, and from the fourth to the fifth day there may be nothing at all to be obtained from the blood, cocci, however, appearing later; while in other cases with the bacilli there are cocci also present; whether in these cases the cocci have been present from the period of infection or not I have not been able to make out. If one has obtained after twenty-four hours a cultivation of bacilli and cocci, it is well to make at once a second cultivation, taking care to charge the needle merely from the surface of the liquid jelly, as by so doing one is able to start the second tube with seed material in which bacilli predominate. In this second tube, at the end of twenty-four hours, we shall find a better pellicle, and if this transplanting process be carried on it will be seen that in each successive tube the pellicle is more quickly formed than in its predecessor. If we were to leave the original tube alone for ten days, at the end of that period it would be seen that the bacilli had almost entirely disappeared, but cocci would be present in great numbers. The progressive activity of the bacilli I have alluded to is well seen if one makes plate cultivations from the original cultivation ; in such a case it may take nearly a week for the colonies to make their appearance, whereas if a plate be made from a tube in which the pellicle is quicker in forming, the colonies will show themselves in less than twenty-four hours. The bacilli form in jelly much more quickly when incubated than when not so treated. Heat seems to have a marvellous influence on the growth-rate, for plates grown at 16° C. may be comparatively slow; for example, the whole jelly may be liquefied in three or four days, but at 19° C. the same result will be obtained in thirty six hours. In test-tubes of Koch's jelly, growth is only evinced after the first twenty-four to thirty-six hours as a spreading haze in the line of the needle-track : but in twenty-four hours afterwards, the whole needle-track may be liquefied, the area of liquefied jelly measuring from a quarter to half an inch in diameter at the surface, and usually terminating in a sharp point at the lower part. It must be noted that the rate of growth varies greatly with the activity of the culture, for if one makes a succession of inoculations from tube to tube, it will be noticed that the later generations cause liquefaction much more rapidly than the former. Whether in such cases the pathogenic activity is increased

or diminished I am not as yet able precisely to state. At the bottom of the liquid zone, in tubes grown in the cold, a fluffy sediment may frequently be seen, looking exactly as if a small piece of cotton-wool had been deposited, and if this be examined, it will be found to consist mostly of leptothrix filaments. In tubes of jelly one inch to one inch and a half in diameter incubated, the pellicle is quickly formed, and is peculiarly coherent, the coherency being due, not to any viscosity, but simply to the felting or inter-