It may seem a little late in the day to refer to antiseptic surgery as one of the advances of the present time, but it is not out of place to do so in this University, where the principle was first enunciated, nor at this meeting where Sir Joseph Lister was expected to be present. It was while he held the chair of surgery here, from 1860 to 1869, that he made those observations by which the germ theory of putrefaction was established, and which culminated in the antiseptic treatment of wounds. Many have been the varieties of the substances used as antiseptic dressings, and many the methods of using them; some things at one time considered essential are now discarded; but the experiments and observations on which the system was founded are among the most ingenious and convincing of any in recent times.

The discovery in the later part of the period, which perhaps has caused most interest, is that of the bacillus of tubercle, not only because it shows the germ origin of a disease long believed to be constitutional, but because it betokens the probably similar origin of many allied affections, such as syphilis, cancer, etc. Of course a bacillus can only live in a suitable pabulum supplied by a peculiar constitution, so that it is to be considered only as an exciting cause acting on a predisposed part; still it is a newly discovered element of the pathological state, which must be taken into account in prophylactic as well as curative measures.

In pathological histology the researches into the local beginnings of cancer have greatly cleared the way for a more precise etiology than formerly; still it must be admitted that that dread disease still baffles the most skilful, both as to its origin and progress.

Recent events, which were and are of interest to us all, demonstrate to us how difficult is the diagnosis of malignant disease, even when discharges from the diseased surface are available for microscopic examination. How much more so when no histological examination is available till after the removal of the growth.

In operative surgery the advance has been no less remarkable. Operations on the head, chest, and abdomen are now daily practised, which twenty years ago would have been deemed unjustifiable. May I take the liberty, from my experience and from the position in which you have placed me, of saying that in some of these the limit of prudence has been reached, if not exceeded? Especially in cases of malignant disease, where it can be recognised, the utmost caution is required in determining for or against operation. And in this view it is not out of place to commend to your careful attention the views discussed by Mr. Butlin in his recent book *On the Operative Surgery of Malignant Disease*.

Gentlemen, I do not wish to take up your time with any further remarks. The executive of the Surgical Section co-operating with me have chosen, as the subject of general discussion, first, a surgical subject involving much interest to the physician as well as the surgeon—the operative treatment of suppurations in the chest. The other is more purely a surgical question—the operative surgery of club-foot. I trust that both of these subjects will afford ground for interchange of ideas between those who have experience of them. We have other papers of great value, and perhaps you will allow me to refer to one which vividly recalls to us that, though for practical purposes practitioners of medicine are divided into physicians and surgeons, yet the subject itself is one and indivisible. I allude to the paper to be read in the Surgical Section by the distinguished President of the Royal College of Physicians of London.

Before beginning the business of the Section I wish to call the attention of the members to the opportunity they have of examining the Pathological Museum bequeathed to this University by Dr. William Hunter, the brother of the still more celebrated John Hunter. Unfortunately, the circumstances of this University have not enabled the Senate to appropriate a place to this collection worthy of its value or of its founder; but though the room is not very easily accessible, they are sufficiently well seen to prove of interest to all who desire to see the starting-point of the great Hunterian collection in the College of Surgeons, London. I have also to state, on behalf of my fellow-surgeons in the Western and Royal Infirmarys, that every facility will be given to members to visit these institutions. The regular visit hour is 9 A.M., but arrangements can easily be made for admission at other hours. I have now to declare the Section open.

THE Italian Society of Obstetrics and Gynaecology will hold its fourth meeting at Naples from September 3rd to 8th.

AN ADDRESS

DELIVERED AT THE OPENING OF

THE SECTION OF OBSTETRIC MEDICINE,

At the Annual Meeting of the British Medical Association held in Glasgow, August, 1888.

By THOMAS MORE MADDEN M.D., F.R.C.S. Ed.,

President of the Section; Obstetric Physician to the Mater Misericordiae Hospital, Dublin; Ex-President of the Obstetric Section, Royal Academy of Medicine; Physician to St. Joseph's Hospital for Sick Children; Formerly Examiner in Obstetrics and Gynaecology at the Queen's University, etc.

RECENT PROGRESS IN OBSTETRICS AND GYNÆCOLOGY.

GENTLEMEN,—I gratefully appreciate the honour of my election to the Presidency of this important section of the British Medical Association, which I regard as a compliment to the Dublin School of Midwifery, with which I have been long connected, rather than as one offered to an individual otherwise so unqualified for the distinction as myself. I must therefore trust to your continued indulgence for condonance of any shortcomings observable in my attempt to discharge the duties now entrusted to me.

The present meeting of the Association should, I think, be especially valued by the members of this Section: for it is to Scotland and to the genius of her sons that the twin sciences of obstetrics and gynaecology, which we are here met to cultivate, owe their earliest development in Great Britain; and to a large extent their recent progress is traceable to the same source.

Long before there was any systematic teaching of midwifery, either in Dublin or in London, and fully twenty years before the foundation in the former city of the great maternity hospital (on the staff of which I served my apprenticeship to the obstetric art), a Professorship of Midwifery was in 1725 established in the University of Edinburgh. And I have had in my possession the ancient manuscript notes of the obstetric course delivered there in 1756 by Professor Young, as well as of the lectures of Dr. Hamilton, by whom he was succeeded. From that time the obstetric teaching of the Scottish schools has come down in an unbroken continuity of excellence to our own day, and its character has been amply maintained by the reputation of their alumni. Thus it was to William Smellie, a native of Lanarkshire, that our professional forefathers owed a *System of Midwifery* which was as far in advance of any that had preceded it as the obstetric science of these last twenty years of the nineteenth century has progressed beyond that taught by Smellie in 1752. To the same writer is more especially due the credit of the first real improvement on Chamberlen's original forceps, as well as directions for using that instrument, as he said, "on rational and mechanical principles," which even yet might be studied with some advantage by modern obstetricians.

It was in this country also that the mind of William Hunter received its early training in that obstetric art which he afterwards so successfully cultivated and practised in London, and of which he there became the most distinguished of all its older British teachers. Nor even in this brief retrospect can it be forgotten that in the city wherein we are now assembled, modern intra-peritoneal gynaecological surgery was first anticipated in 1701, by Dr. Houstoun, in the curative treatment of an ovarian tumour by abdominal section. Moreover, a century later it was to another Caledonian surgeon, Mr. Lizars, of Edinburgh, whose early ovariectomy cases were published in 1825, that the revival, although in a very different and improved form, of Houstoun's first laparotomy operation is mainly due. I shall not follow further the long history of the obligations of our art to the older Scottish school, or pause to offer my humble tribute of respect to the memory of the late Sir James Simpson, whose name should be recalled as long as suffering seeks relief in anaesthesia, and as long as obstetrics and gynaecology are cultivated. Nor need I here refer to the services to our branch of medicine of Dr. Matthews Duncan, who, at the last meeting of the Association in Edinburgh, filled the position which, *longo intervallo*, I now for a brief space occupy; or allude to the well-recognised obstetric or gynaecological work of Dr. Leishman and Dr. Keith, and that

accomplished by so many other no less distinguished living Scottish authorities.

Whilst willingly acknowledging how much we thus owe to Scotland, I cannot omit a briefer reference to the similar services of the Dublin school, although the credit of not a few of the advances that originated there has been elsewhere appropriated. Thus, for instance, the employment of version as a substitute for version as advocated by some modern German and English writers, was first suggested in 1752 by Sir Fielding Ould, the second Master of the Dublin Hospital, and was there revived a century later by the late Dr. McClintock, whose genius, erudition, and obstetric skill entitle him to remembrance even in our most oblivious of professions. In like manner the management of the third stage of labour, by the method which is claimed as his own in the late Dr. Spiegelberg's recently translated *Textbook of Midwifery*, is practically almost identical with that followed in the Rotunda from time immemorial, as described several years ago in my edition of *The Dublin Practice of Midwifery*. The resuscitation, moreover, of the use of the forceps, the prophylaxis of *post-partum* hæmorrhage, and many other improvements in the management of childbirth and the puerperal state, the introduction of which is claimed elsewhere, have, I may repeat, also emanated from the same practical school of midwifery.

The foregoing reference to the historic claims of the ancient Scotch and Irish centres of obstetric science might be readily expanded. Time, however, forbids my further trespassing either in this way or by any allusion to the better known services of the early fathers of English midwifery, such as Raynald, Willoughby, Harvey, Cook, Chamberlen, Chapman, Giffard, Denman, and the host of other pioneers of obstetric knowledge, many of whose lives and labours are so well chronicled in Dr. Aveling's erudite *Biographical Sketches of British Obstetricians*. I shall therefore devote the remaining portion of this address to the more practical consideration of the results of some of the recent developments of obstetric and gynaecological science.

The Progressive Improvement of Midwifery Practice has been strikingly evinced during the past few years. Thus the pathology and preventive treatment of intra-uterine death and abortion have been freed from much of their former obscurity and difficulty by the recent writings of Dr. Priestley. The prevalence of puerperal septicæmia by epidemic outbursts—by which in my earlier days I have seen the crowded wards of a great maternity hospital decimated—has been largely diminished by the hygienic and antiseptic measures now adopted for its prevention; whilst, if septicæmia should still occur, we are now armed with more scientific means for the curative treatment of this disease, which some years ago was generally classed amongst the incurable *opprobria* of our art. In like manner, by the adoption of improved methods for the prevention and treatment of *post-partum* hæmorrhage, that once frequent source of obstetric mortality has been almost completely removed. At the same time the throes and pains of labour have been rendered more endurable by the employment of comparatively safe anesthetics, such as the mixture of two parts of ether and eau de Cologne with one of chloroform, which for nearly twenty years I have found a generally efficient and agreeable anæsthetic in such cases. Moreover, by more judicious instrumental assistance we may now in many instances safely abridge the duration of that formerly often long-protracted period of parturient suffering which, when a student, I have often seen allowed to continue unrelieved for forty, fifty, or even for eighty hours and upwards.

Lastly, the former appalling frequency of child-destroying operations has been reduced in an exact proportion to the increasing employment of the forceps. Nor have the limits of the utility of this instrument as a substitute for the cephalotrite, craniotomy forceps, cranioclast, *et hoc genus omne*, been even yet fully reached. The main reason why any embryotomic instruments are still included in the ordinary obstetric outfit appears to be that the compressive power of the long forceps is not sufficiently recognised generally, and also the fact that most midwifery practitioners rely exclusively on some one form of forceps, whether the head be above or within the pelvic cavity, and without reference to the kind of mechanical power—tractile, lever, or compressive—that may be specially required in each case. Desirable as it may be to carry as few implements as possible in the obstetric bag, it is, nevertheless, impossible to combine in any one instrument properties so distinct as those referred to. In operative midwifery there should be some definite proportion between the power employed and

the resistance to be overcome. Hence, it seems to me about as needless to resort to an instrument of such compressive and lever power as the double-curved long forceps to assist delivery in an ordinary case of delay in the second stage as it would be to employ a steam hammer to crack a walnut.

I have endeavoured to carry out these views in the two instruments now exhibited, which have been considerably modified and, as I think, improved, in the course of experience, since I first demonstrated the use of their original models. The first (Fig. 1) is a short, straight traction forceps, the blades of which are only six inches in length, and are so curved as to fit the foetal head very exactly, and so widely fenestrated as to allow the scalp to protrude when applied, and thus protect the maternal passage during extraction. This instrument, as may be seen, is very portable, and, locking readily, is easily applied, and being, moreover, a really efficient tractor, may be employed, as I have found in my own practice, in nine-tenths of the cases in which any instrumental assistance is required—namely, those in which delay arises simply from inertia in the second stage of labour.

Fig. 1.—DR. MORE MADDEN'S SHORT MIDWIFERY TRACTOR.

The second instrument (Fig. 2) shown is intended only for cases of difficulty from disproportion or pelvic flattening. The blades are, therefore, of considerable length and strength, and are approximated by a powerful screw, by which the amount of compressive force exercised may be exactly regulated. The appended traction rods are closed or separated by a novel and simple mechanical arrangement. They can be applied to any other forceps, and include in their handle a case for hypodermic syringe and discs. This instrument, as will be seen, is not only a tractor and lever, being convertible at will into a short forceps by removal of the compressing handles, but in its entirety, where these are affixed, is moreover a compressor of great power, by which the foetal head may be gradually moulded out or compressed, within the limits of viability, so as to admit of delivery through pelves from which living children could hardly be otherwise extracted. I need hardly add that such an instrument requires caution and skill in its use, and should be employed chiefly as a substitute for embryotomic implements.

Recent Progress of Gynaecology.—The development of this branch of medicine since our Association last met in Scotland has been still more remarkable than that effected in the practice of midwifery during this period. Thus, for example, only a few years ago many of the most frequent forms of endo-uterine and peri-uterine disease were beyond the diagnostic and remedial reach of gynaecologists, then unprovided with any efficient means of rapidly and thoroughly dilating the cervical canal, or with those other methods of direct investigation by the aid of which every well-educated practitioner may now recognise and treat utero-ovarian, tubal, and other intra-peritoneal and pelvic complaints that previously baffled detection or treatment. Nor in those pre-antiseptic days could have been anticipated the wonderfully successful results since realised from laparotomy operations, and more especially ovariectomy, as well in some still more recent developments of

intraperitoneal surgery, in tubal and other diseases, including tubercular peritonitis and cancer of the uterus—the latter a subject which has been ably elucidated in Dr. J. Williams's Harveian Lectures. In the last-named cases, however, it is a very debatable question whether we should persevere further with the intraperitoneal method for the removal of the uterus introduced by Freund, in view of the better results obtained from the vaginal method advocated by Dr. Martin, of Berlin; and also whether, in the latter case, the operation should be limited, as recommended by Dr. Braithwaite, to the removal of the cancerous portion, and not be extended to the extirpation of the entire uterus.

Only within the time referred to has the general correctness of Dr. Graily Hewitt's views with regard to the importance and treatment of uterine displacements and flexions become commonly accepted. Neither were the symptoms and appropriate treatment of ovarian displacements understood until a more recent period, when attention was directed to them by Dr. Barnes's able paper on this subject in the *American Journal of Obstetrics* and in a minor degree, perhaps, also by a memoir of mine on the same topic in the *Transactions of the Irish Academy of Medicine*. Nor is it so very long since the bearing of cervical lacerations on pelvic pathology, as first demonstrated by Dr. Emmet, of New York, has become recognised in this country. Finally, the diagnosis, importance, and curability of diseases of the uterine appendages, such as hydro- and pyo-salpinx, together with many other of the causes of female suffering and death, were practically ignored by gynaecologists until within the recent period now referred to.

FIG. 2.—DR. MORE MADDEN'S COMPRESSING DOUBLE FORCEPS

Influences of Prejudice and Fashion on Gynaecological Progress.

—In the history of many of the successful developments of gynaecology just alluded to we may observe proofs not only of the progress of our own art, but also of two of the causes which have temporarily retarded its advancement. The first is the opposition generally offered in matters medical, as in most others, to all innovations, and the consequent reaction by which the pendulum of professional opinion is swung back from one extreme to the other, exaggerated over-estimation thus generally succeeding to earlier adverse prejudices. The second is the potent influence of fashion or medical opinion and practice; for strange as it may be why this should be the case it is nevertheless true that:—

In physic as in fashion we find
The newest is ever the rage of mankind.

This is strikingly illustrated in gynaecological practice, in which

it now seems almost as much the fashion to ascribe all obscure female complaints to ovarian and tubal disorders as a few years ago it was to attribute similar ailments to uterine flexions and displacements; or, as ten years earlier, it was the mode to credit them to chronic inflammation, and what was then regarded as ulceration of the neck of the womb; or yet a century previously to set them down, in the phraseology of our professional ancestors, to "the spleen" or "the vapours."

Gynaecological Specialism and Woman's Place therein.—In this connection I may venture to observe that I cannot agree with those who are opposed to the admission of women into the practice of our department of medicine, for which their sex should apparently render them especially adapted. I can see no valid reason why any well qualified practitioner should not be welcomed amongst us. Nor does it seem fair, if there are women who prefer the medical attendance of their own sex, that in this age of free trade they should not be afforded every opportunity of exercising their discretion in a matter so personal to themselves. For my own part, I greatly doubt that, in these countries "the lady doctors" will ever replace the ruder sex in the general estimation of their sick sisters. But if not here, elsewhere at least there is unquestionably an ample field for female practitioners, and more especially in India and other Oriental countries, where millions of suffering women and children are fanatically excluded from the possibility of any other skilled European medical assistance. I therefore venture to think that such practitioners are fully entitled to admission into our ranks in the British Medical Association.

Laparotomy in Relation to Gynaecology.—Foremost amongst the proofs of modern gynaecological progress the most signal is that afforded by the results of abdominal surgery in the treatment of ovarian tumours, as demonstrated in countless cases at home and abroad, and in this country more especially in the practice of Sir Spencer Wells, Dr. Keith, Mr. Lawson Tait, Dr. Bantock, and numerous other specialists in this department of operative surgery, which not very many years since was so unjustly derided. Whether this should encourage the present frequency of resort to laparotomy in the various other intraperitoneal morbid conditions in which it is now advocated or not, is, however, another question, and one which, I think, may still be very advantageously reconsidered.

Treatment of Fallopian Tube Diseases.—With respect to the tubal diseases, to the operative treatment of which so much attention is now devoted, and which I have elsewhere discussed, I shall only here again observe that, whilst recognising the fact that in some instances of pyo-salpinx and hydro-salpinx the removal of the diseased uterine appendages affords the only available means of treatment, and fully appreciating the surgical skill by which operations for this purpose have been brought to their present perfection, I have not, in my own experience, found laparotomy operations by any means so generally necessary in such cases as they are apparently now deemed by others. On the contrary, I am confirmed by increasing experience in the belief that in some instances these tubal diseases, more especially in cases of hydro-salpinx, may terminate favourably without any surgical treatment, and, moreover, that in other cases such collections, whether purulent or serous, may be evacuated by cautious aspiration through the vaginal roof. Very recently I had again an opportunity of proving the advantages of this method of treatment in the case of a lady who, after many months of suffering, was sent to me from a distant country to have the affected uterine appendages removed, but whom I succeeded in relieving of her trouble, with the assistance of my friend Dr. Duke, by simply aspirating the Fallopian tube, and thus removing about ten drachms of fluid from the distended duct. I would therefore again urge the expediency of a fair trial of other less serious and, as I believe at least, equally effectual methods of treatment before resorting to the extirpation of the uterine appendages in these cases generally.

Operative Treatment of Uterine Tumours.—It would be impossible, within the limits of this address, to enter at length on the consideration of questions so large and so controversial as the general necessity for surgical interposition in the treatment of uterine fibromata. This topic, however, I am glad to see, will be brought before you during this meeting by those eminently qualified to speak on the subject. And I trust that in the course of the ensuing discussion some new light may be thrown on the comparative value of the various intra-peri-

toneal and vaginal surgical procedures advocated in such cases, as well as on the value of electrolytical treatment. With regard to the former, I may venture to repeat that in the majority of cases of interstitial and subperitoneal uterine tumours no active treatment whatever appears to me essential, inasmuch as such growths seldom if ever directly destroy life, and in many cases become arrested in their development and quiescent in their symptoms at the menopause, or may even possibly disappear altogether in the course of time. The latter event is, however, too exceptional to have much influence in determining the expediency of surgical treatment, and more especially that by oöphorectomy, which is unquestionably called for in the case of fast-growing fibroids giving rise to otherwise uncontrollable urgent hæmorrhagic or pressure troubles, particularly when occurring in young patients.

With regard to hysterectomy, although exceptional cases may also be met with in which this procedure is necessitated, the average mortality that has followed its performance is such as to forbid its general employment as an operation of election in a disease the average mortality of which, when left to Nature, is so comparatively insignificant. Whilst as to myotomy, in view of its too common results, I can only repeat that it would appear to be a method by which a patient may be effectually removed from a tumour, rather than an operation by which a tumour may be safely removed from a patient.

Treatment of Uterine Fibroids by Electricity.—Although I have so nearly exhausted the allotted limits of this address, I cannot in this connection omit a few words in reference to the latest and apparently most promising of the methods available in the treatment of uterine fibromata, namely, that by electricity. Within the past year and a half I have had occasion to try this method in some ten instances in my hospital and private practice; and, so far as the arrest of hæmorrhage is concerned, the result was most satisfactory, the bleeding being thus arrested in six of these cases. With regard, however, to the cure of the disease by this treatment, the possibility of which in this way had been demonstrated by the experience of Dr. Apostoli and others, who had employed it on a larger scale, I can only say that whilst I have not as yet seen the complete subsidence of the tumour effected in any of the cases so treated by myself, in several of them its apparent bulk became distinctly diminished even after six weeks' or two months' treatment of this kind. It should, perhaps, be added that in all these cases I used Dr. Apostoli's original plastic abdominal electrode, the current used being, of course, unipolar, and acting directly on the growth by the intra-uterine pole, and was obtained from an ordinary twenty-celled Leclanché battery, of an estimated maximum current strength of 200 milliampères. In the first of these cases I employed the electrolytic negative current, but, after a little experience, I abandoned this, and in the subsequent cases used only the positive current, which, although non-energetic as a galvanic-caustic, is far less liable to give rise to trouble, and, from its decided hæmostatic action, is more suitable to those cases of large hæmorrhage-producing tumours, in which alone this or any other active treatment seems to me generally necessary.

If, however, the results obtained by Dr. Cutter, and still more conspicuously those recorded by Dr. Apostoli from the employment of electricity, namely, permanent benefit in 95 per cent. of the cases of fibromata thus treated by him, should be confirmed, as I hope may be possibly the case, by the experience of those who are here about to discuss this disease, then we may well congratulate ourselves on having at last arrived within sight of the long sought-for safe and effectual curative treatment of uterine tumours.

In conclusion, Gentlemen,—it only remains for me again to thank you for the honour you have conferred upon me, as well as for the patience with which you have listened to this address; and I may venture to hope that you will agree with me in thinking that the foregoing summary of some of the recent developments of gynecological science, imperfect as it is, affords a sufficient vindication of our branch of medicine from the aspersions which have been poured upon its followers. These advances and their results are surely more than enough to show at least that those by whom so much has been accomplished are engaged in no narrow specialism, but on the contrary, should rank high in that noble and ever progressive Profession of Medicine whose great objects are the prolongation of life and the relief of every form of human suffering.

BEQUEST.—Mr. Fleetwood Pellew Wilson, of Portman Square and of Wappingham Manor, bequeathed £2,000 to St. Mary's Hospital.

AN ADDRESS

DELIVERED AT THE OPENING OF

THE SECTION OF ANATOMY AND PHYSIOLOGY.

At the Annual Meeting of the British Medical Association, held in Glasgow, August, 1888.

By JOHN CLELAND, M.D., LL.D., F.R.S.

Professor of Anatomy in the University of Glasgow; President of the Section.

RATIONAL TERATOLOGY.

APPRECIATING as I do the honour conferred upon me in being asked to preside over this Section, I shall endeavour to comply with the request which has been issued that Presidents of Sections shall be brief in their opening remarks.

I am glad that in this Association there is a Section of Anatomy and Physiology, and I think it well that two subjects so closely allied that they are in many respects one should be dealt with together. Specialisation, though a good thing in its own place, is liable to go too far. It may be possible to find a surgeon who knows nothing of the medical conditions with which the surgical affections of his patients are complicated, and oculists who forget the constitutional causes in limiting and defining the topographic peculiarities of diseases of the eye; and in like manner it is possible to make too broad a distinction between anatomy and physiology. Yet you will agree with me that he is no all round physiologist who neglects any of the three subjects—*anatomy, chemistry, and physics*—forming the tripod on which physiology securely rests.

It is, moreover, mainly in its physiological relations that anatomy can claim a place at a meeting of a medical association, for, when most strictly human, anatomy becomes most especially physiological. Structure, when not looked at purely physiologically, must be studied in its morphological relations, and these can only be established by embryology and comparative anatomy. Thus the true anatomist is carried far above the mere technicalities immediately useful to the practitioner, and anatomy asserts itself as the highest branch of biology; and, absorbed into the larger conception of the study of structure and functions of living bodies in all time, anatomy and physiology again united may boldly claim their place among the most ennobling pursuits that can engage the human faculties, and among the best suited to evolve them and liberalise the mind.

To you then, anatomists and physiologists, we in Scotland about to enter, as it seems, on an era of university reform—brave in its talk but perhaps too indefinite in its aims—look for support to give to natural science its proper place in the education of the country. We have educationalists who are incompetent to describe with accuracy the simplest object before their eyes, and philosophers with theories of the universe, but untrained to investigate or learn the phenomena which the world around them presents; and it is precisely because literature and philosophy are important, that this is a state of matters which ought not so to be. But, whilst I thus protest that it is pernicious and ignorant folly which fails to see that the *studium generale* of centuries long gone-by is no longer fit to be the *studium generale* of the universities of to-day, and that biology must take its place in the higher general education, as a branch of knowledge important to all, and not of a merely professional interest, I claim the attention of medical men particularly to the necessity, from a sanitary point of view, of having diffused among the community at large a greater acquaintance with anatomy and physiology. I cannot help thinking that parents would bring up their children better, that many lives of misery would be prevented, and that temptations to prurience would be taken away, were more accurate notions prevalent of the functions of the body and, within the bounds of reason and judgment, imparted to the young.

The neutral ground between anatomy and physiology is embryology. It is anatomical structure which is developed, and the development takes place by physiological processes. The examination of the specimens is mostly anatomical, while the means by which they are obtained belong more to physiological method. This is a study, the relations of which to medicine are often very imperfectly appreciated, and yet by it alone can we hope to understand the nature of anomalies and monsters. Disease, after the