AN ADDRESS ON CHANGE IN MEDICAL PRACTICE.

Delivered at the Annual Meeting of the Midland Branch.

By WILLIAM WEBB, M.D., F.R.C.S., J.P. Co. Derby,
President of the Branch.

GENTLEMEN,—You have paid me a great compliment and done me much honour in appointing me your President for this year; and I should be wanting in common gratitude if I did not, whilst offering to you all a most cordial and hearty welcome once more to Derbyshire, convey to you at the same time the expression of my most sincere thanks. You have on this occasion departed from the usual custom, and have been pleased to select as your President one who does not reside in the county town; and I am the first country doctor in Derbyshire who is the fortunate recipient of this honour. I do not owe it, I am sure, to any special merit of my own, but probably to my long connection with the British Medical Association. Having been a member of this society for the long period of thirty years, having attended during that time at least a third of its annual meetings and many of these Branch meetings, and having, by your favour, held for some years a place on the General Council—a body now almost *in articulo mortis*—it is, I think, due to this combination of circumstances that I occupy the position in which you have been so good as to place me this day; and, as I regard it as the highest position to which any medical practitioner resident in these four midland counties of Leicester, Lincoln, Nottingham, and Derby can hope to aspire, you will not be surprised when I say that I enter upon its duties with very great diffidence; and, indeed, I should shrink altogether from the responsibilities of such a position, were I not assured of your kind indulgence, sympathy, and support, during my year of office. Relying, therefore, most fully upon you in this respect (and I know that I shall not rely in vain), let me state at the outset that, whatever may be my own shortcomings, it will be the object of my most earnest endeavour to discharge the duties with which you have entrusted me to the best of my ability, and to emulate the excellencies of those eminent men who have preceded me in the work. I can well remember the first Branch meeting which I attended at Derby, in the year 1855—a meeting over which the late Dr. Heygate presided; and can call to mind, even at this distant period, the substance of some of the papers read at that time, and especially of one, an exceptionally able paper on Cerebral Pathology by my esteemed friend Dr. Hitchman, the accomplished physician of that day at the Derby County Asylum. I have a very pleasant recollection of that meeting—a recollection which has verified to me the prophecy of the well-known quotation from Virgil—

“Hæc olim meminisse juvabit.”

But, alas! there is a melancholy as well as a pleasant side to the picture before my mind's eye at this moment; for, looking round this room to-day for the faces of old members who were present at that meeting, I can see but very few. They have, with few exceptions, disappeared from amongst us; they are gone from us—gone, we trust, to reap their great reward, after a life-long devotion to the responsible duties of their calling.

There are many subjects to which I might with advantage direct your attention to-day, and the first that occur to me are the changed character of medical practice and the altered views in pathology in the present, as compared with those in the past generation of medical men. When I was serving an apprenticeship many years ago, it was a common practice to bleed, and to bleed largely from the arm in many diseases, especially in acute rheumatism, or, as it was then called, rheumatic fever, and in inflammations. In these days, a better acquaintance with the pathology of rheumatism, and the chemical as well as physical changes which we believe in a great measure produce it, thanks to the researches of Garrod, of Latham (of Cambridge), and others, has made us abandon this remedy altogether, and resort to a more rational treatment; and we now either give alkalies in large doses or try to cut short the disease by salicylic acid or the salicylates. Sydenham was a great hand at bleeding in rheumatism; for he says, after advising a single free bleeding in a case of acute rheumatism (Sydenham, Thomas,

Opera Unicursa, Section vi, Caput v): “Die sequente tantundem detrahi præcipio, atque intercalato die uno alterove pro ægri viribus tertio: dein interjecto trium quatuorve dierum intervallo (prout ægri vires, setas, constitutio, aliæque circumstantiæ, suadent momentæ) quarto atque ultimo, ut plurimum venæ sectionem repeto.” It appears, therefore, that Sydenham, two centuries ago, bled generally four times in a case of acute rheumatism; and so did he also in some other inflammatory diseases. Now, however, inflammations are often presented to our notice in such an adynamic type as to render the very reverse of the antiphlogistic the most approved treatment. It is true that we do see now and then a case of pneumonia in a young athletic subject, in which the dyspnoea is at once relieved, the distress mitigated, and the disease apparently cut short, by a single free bleeding from the arm; whilst other cases of pneumonia assume a typhoid form from the first, and present themselves in numbers at one place, as it were in an epidemic wave. I have seen four such epidemics of pneumonia in Derbyshire in the last two years. It is in these latter cases that depletion is altogether inadmissible, and we resort rather to a good supply of nutriment and stimulants, in the form of beef-tea, brandy, wine, and ammonia. There are, I think, very cogent reasons for believing that these are cases of true blood-poisoning.

The same remarks apply to some extent to typhoid fever. There are cases of this disease, in which the Peyer's glands do not proceed either to the sloughing or the ulcerative stage; whilst there are others of extreme gravity from the first invasion of the disease. There is in these latter cases serious disturbance of the nervous centres, and rapid destruction of tissue; and these are the cases, I think, which require the most judicious management. The incautious removal from bed, the administration of other than a milk-diet, or the neglect of stimulation at the proper time, may place the sufferer from typhoid in a condition of imminent peril. As a rule, I believe, the more delirium in typhoid fever, the more brandy. In these cases, good nursing is our sheet-anchor; and happily, now-a-days, we have not to rely upon the “Betsy Prigs” and “Sairey Gamps” of the last generation; but, thanks to the large-heartedness of Dr. Ogle, in this county, and others of our profession, as well as of many benevolent persons in this and the neighbouring counties, we have now nursing institutions from which competent, skilled, and well-trained nurses can generally be obtained. Pardon me, whilst I acknowledge with gratitude in this place, the indebtedness of our profession to one who was certainly the pioneer of this great movement: whose self-denying labours for the benefit of the sick and injured in the Crimea have now become a matter of history, and will be remembered for all time; whose efforts to provide skilled nurses for our hospitals and other public institutions, and whose interest in every good work which has for its object the welfare of her suffering fellow-creatures, continue unabated. You know to whom I refer. It is to one whom it is my privilege to call my friend; after whom has been named the new wing of this hospital—our own Derbyshire heroine, Florence Nightingale.

The localisation of the functions of the brain has marked a new era in the progress of medicine. Ferrier has shown by experiments upon animals, and by watching cases of disease and injury, that special functions reside in, or belong to, certain parts of the grey matter of the encephalon. This knowledge is, I take it, but yet in its infancy; and there has been work cut out for the present, and perhaps the next, generation of practical observers. Notwithstanding the obstruction occasioned by the prevention of experiments on animals on the part of the legislature, I look for important results in this matter, as well as in clearing up many disputed points in reference to acute and zymotic diseases, to the Collective Investigation Committee of this Association. For changes of a practical kind, which the gradual advance of pathological research has made in our knowledge, I might refer you to a hundred examples; but I shall be content to refer you to one only—viz., Bright's disease of the kidneys. We now recognise various changes in these organs, having as a common symptom, albumen in the urine; and it is only by reference to the history of the patient, and a careful microscopical, as well as chemical examination of this secretion, that we are enabled to determine the specific organic change with which we have to deal. There is the kidney of acute desquamative nephritis, or acute Bright's kidney, so often an associate of scarlet fever—indeed, I may say, its constant associate; and the various forms of chronic Bright's disease: as the large white kidney, the common result of the acute affection; the amyloid, so frequently noted in strumous disease, and in necrosis of bone with long-continued discharge; and the contracted granular, or gouty kidney. The contemporaneous changes, which are now, mainly through the labours of Dr. George Johnson, known

to take place in the heart and arteries in chronic kidney disease, have also formed matter for interesting pathological research. These changes have been called an *arterio-capillary fibrosis* by some authorities; but, as they probably owe their origin to the increased specific weight of the blood, from the defective excretion of the urea, I am inclined myself to the general belief that they consist mainly in a hypertrophy of the muscular coat of the arteries, and of the left ventricle of the heart, by reason of the difficult work thrown upon these parts of the organism by the poisoned blood. There may also be a condition of *fibrosis* in some cases, especially in those who have indulged largely in spirit-drinking. Be this as it may, the retention of urea, and the changes to which it undoubtedly gives rise, go far to explain the tendency to death in chronic Bright's disease by coma and apoplexy. The examination of the retina by the ophthalmoscope has given us another help in our diagnosis in Bright's disease. Certain changes in the retina—such as “an ill-defined disc, the presence of ecchymoses, of white spots, and subretinal effusions”—in other words, the existence of albuminuric retinitis, affords very strong presumptive evidence of the coexistence of chronic Bright's kidney. I need not ask if such an aid to our diagnosis had ever been suggested, or even thought of, a quarter of a century ago.

I might go on to enumerate the changes which have taken place in our pathological knowledge in reference to all the other organs. I might talk of tubercle being an inflammatory disease, having its primary origin in an organism or bacillus, and of the close alliance between the breaking up of lung-tissue in phthisis, and of the softening of a pneumonic consolidation; or I might tell you of cases of diabetes which have fallen under my own observation, and which have resulted from over-work of the brain, or to the damage which that organ has sustained by accident, causing by this brain-damage some change in the portal blood, and consequent interference with the glycogenic function of the liver; but I have said enough, I think, to prove that medicine has made marked progress in the last quarter of a century.

In surgery, as in medicine, rapid strides have likewise been made. The antiseptic method in the dressing of wounds and the use of the Listerian spray have done much to advance the surgical art, and decreased, I believe, the mortality after severe injuries and operations. The practice of excision of joints, long since advocated by Ferguson, was an important step in conservative surgery, as it can be done in many cases in which amputation would otherwise be called for; whilst the use of anesthetics enables us now to cut down upon, and remove, either piecemeal or in their entirety, without suffering to the patient, bones undergoing the processes of caries or necrosis. In these days, we do not hesitate to open the large serous cavities, and remove organs, which, in the event of their being retained much longer, would be certain death to the sufferer. Witness the interesting case of the successful removal of one of the kidneys by Dr. Elder of Nottingham, brought before our notice at the last annual meeting of this Branch; and also a case of resection of a portion of bowel, reported by Mr. Treves a short time since; and, in cases of empyema, numberless instances have proved the wisdom of making a free incision into the cavity of the pleura, evacuating the pus, and washing out the pleural cavity twice a day, or as often as may be required, with a weak solution of carbolic acid and water; whilst in cases of simple pleuritic effusion, the serous fluid is now readily removed by aspiration, without the least risk of the introduction of air, or, in other words, of the carrying in of germs with the atmosphere, and so converting a case of simple effusion into one of empyema.

I may just allude to the many improvements in the methods of amputation with which the names of Carden, Teale, and Furneaux Jordan are connected; to the treatment of irritable growths by the external application of ethylate of sodium, and of *nævi* by electrolysis, so ably brought before our notice and illustrated by many successful cases by Dr. Newman of Stamford, and to the many improvements in the treatment of diseases of the urinary organs, associated with the names of Sir H. Thompson and Harrison of Liverpool. The radical cure of hernia by exciting adhesive inflammation, and so blocking the inguinal and crural canals, and preventing the subsequent escape of the intestine into its abnormal position, practised at first by Wutzer, by Wood, and by Redfern Davies, has latterly received important additions, and been rendered, I think, more simple and secure, by the ingenious contrivances of Mr. Spanton, of the North Stafford Infirmary.

In the practice of midwifery, and the diseases of women, there has also been exhibited marked progress. Practitioners do not wait now, as they formerly did, in cases of lingering and protracted labour, without manifest reason for doing so, till the strength of

the patient is well nigh exhausted; but the forceps is applied in good time with very little risk to either the mother or child; and the danger arising through long continued pressure from sloughing, of vesico-vaginal fistula, and other serious consequences, is immeasurably lessened. There is no department of the profession in which the doctrine of antisepticism is of more signal service than it is in midwifery practice. By the use of carbolic acid, terebene, and other well known antiseptic fluids, the germs which arise in putrid animal secretions are destroyed, and are no longer in danger of multiplying themselves indefinitely. Dr. W. Roberts¹ has quoted from some authority (who, I forget at this moment) “that bacteria doubled themselves in twenty minutes, and that in a fortnight they had a thousand successive generations, which was equivalent to a thousand years in the life of the wheat plant, and thirty thousand in the life of a man.” The expression of Shakespeare, “the life of all the blood is touched corruptibly,” aptly illustrates the manner in which puerperal fever is induced by living germs locked up in the cavity of the uterus, and absorbed therefrom into the circulation. The doctrine, therefore, of “*omne vivum de vivo*” appears to be as true in reference to bacteria, or the germs of putrid animal secretions, as it is in reference to other organic bodies. Is it too much to expect, that by care and attention, as well as by Listerian helps, puerperal fever will become by-and-by a thing of the past?

The operation of ovariotomy, so much dreaded thirty years ago, and then undertaken only in well selected cases, is now performed daily with the most favourable results, thanks to the aid which Listerism gives; and also to the improvements in the operation itself made by Sir Spencer Wells, Keith of Edinburgh, and others. But I am bound in justice to say in this place, that the statistics of Lawson Tait are equally good without any Listerian precautions, but with the most rigid attention to every detail, and the utmost cleanliness. I must not detain you longer on this point; but I think I have said enough to show that every branch of medicine has made decided progress in our time, and that this progress has been brought about by a better understanding of the minute microscopical and cellular structure of tissues and organs, and by a truer pathology, or, in other words, a better knowledge of the changes which these cells of tissues and organs undergo in disease.

Socially, I think, the prospects of the profession are brighter. The poor-law doctor still remains, however, a very hard-worked and ill-paid individual. He is at the beck and call of any person, by night as well as by day, who can get an order for his attendance, and he is often severely handled by those in authority, and who know, or ought to know, the many difficulties with which he has to contend. Such an officer is expected, both by the poor and the authorities, to be almost ubiquitous; and if he be a public vaccinator, he is often made responsible for any strumous peculiarities in the children he vaccinates. There is a better look-out even for him, for the Poor-Law Medical Officers' Association, and its indefatigable chairman, Dr. Rogers, will not rest until they have materially improved his position. Taking Derbyshire as a standard, the salaries of the poor-law medical officers ought to be at least doubled, and to be made dependent upon the area, population, and pauperism of the districts. It is not satisfactory to us to note the low salaries in Derbyshire, as compared with the salaries in many other counties.

The passing of the “Public Health Acts,” the formation of areas, and the appointment of medical officers of health throughout the country, have been, I think, productive of much benefit to the public, inasmuch as the general and zymotic death-rates are certainly lower; it is estimated that men have gained about 4, and women about 6 or 7 per cent. of life.² There is still much to be done before zymotic diseases are effectually stamped out. Public opinion, and a supposed interference with the liberty of the subject, often oppose themselves to the legitimate work of the health-officer, and necessarily cripple his efforts, as well for the public as for individual good.

It is an opprobrium to sanitary science, that we should ever again see another case of typhoid fever: essentially a filth fever, and owing its origin to germs, present always in the secretions of a typhoid patient, and probably, during the process of decomposition, in all decomposing and putrid matter, germs which enter the body from without, whether through the medium of the water we drink, the food, or the air being charged with them. It would be better were officers of health appointed uniformly over a large area, well paid for their services, and debarred from practice. This would

¹ Transactions of the International Medical Congress, London.

² Noel Humphreys.

prevent the public interest clashing in any way with private professional work.

There is only one other point to which I beg leave to refer, and that is, the abolition of the system of apprenticeship in the medical profession. This question was well discussed, you will remember, at a Branch meeting held at Matlock Bath some years ago; and I then advocated, as I do now, a return to a modified apprenticeship of about two years. Any medical practitioner who has been in the habit of employing assistants in his work, will bear me out in the truth of what I now say, that those men are the most useful, in the country at least (I had almost said the only useful men), who have spent some time in a surgery under experienced eyes, and are practically conversant with the details of general practice.

In conclusion, gentlemen, I think you will admit that we belong to a profession which is largely unselfish, and which is doing an amount of gratuitous work amongst the poor (and also, I fear, amongst those who can afford to pay for it), the benefit of which cannot be estimated. The members of it, often regardless of remuneration, work hard by night and by day, and for what? Wealth and position? Most emphatically, no. These rewards fall to the lot of but few of our *confrères*; witness the records of the Medical Benevolent Fund and the Medical Benevolent College, two institutions which I recommend most strongly to your support. Medical men are placed daily and hourly in positions of imminent peril. A cut at a *post-mortem* examination, or the contraction of germs of disease, may either kill them outright, or prostrate them for weeks and months upon a sick-bed, and in the end imperil their usefulness. The late lamented Dr. Anstie, a man whom the profession could ill afford to lose, died, you will remember, six days after an injury at a *post-mortem* examination. Notwithstanding these dangers and perils, which are always before him, the doctor never hesitates, but, like a brave and gallant soldier as he is, he goes boldly to the front, and wages incessant war against those enemies of our race, disease and death.

"A wise physician, skilled our wounds to heal,
Is more than armies to the public weal."

The services of the profession of medicine are not, I think, recognised as they ought to be. There are scarcely half a dozen members of it at present occupying seats in the House of Commons, and not a single member has as yet found his way into the House of Lords. Would that august assembly, think you, lose one jot or one tittle of its dignity by adding to its ranks a Paget, or a Jenner?

No, gentlemen, we cannot, like the clergyman, however meritorious our services may have been, whether in a public or private capacity, or whatever help we may have given to the progress of our art, see, even in a far-off view, a place on the episcopal bench, or anything corresponding to it, or a seat in the House of Lords, as a reward for our work; neither can we, like the lawyer, behold—it may be, looming in the far distance—the wooll sack as the "ultima Thule" of our ambition. No, these rewards are not for us; these honours descend not to the votaries of physic; but other rewards and other honours we can and do obtain; not the least of which, I take it, are the pleasure and delight which arise in every well-regulated mind from the conscious knowledge of work well done, of labour honestly performed; and there is not, I believe, a single medical practitioner, whatever may be his position, whether he be practising his profession in any of the great centres of population, in the which he may have achieved a far and wide fame—a fame extending far beyond the area of the town or even the county in which he lives—or whether he be pursuing his more arduous and certainly not less responsible work in a much more humble sphere, perhaps in a remote country village, having secured, by dint of his own industry, skill, and perseverance, a reputation equally sound, but limited and confined within a very narrow circle—I say, there is not a single practitioner who may not derive pleasure, and comfort, and satisfaction—a satisfaction far greater than that arising at any time from the acquisition of either gold or place—from a knowledge of the fact that he has endeavoured, and is endeavouring, through evil report and through good report (however much he may have fallen short of his own hopes, wishes, and aspirations in this respect), faithfully, honestly, and conscientiously to fulfil the duties and the obligations which belong to the responsible position and station in life in which Almighty God has been pleased to place him.

BEQUESTS.—The late Mr. James Carlisle, J.P., of Belfast, among other bequests, has left £500 to the Belfast Charitable Society; £500 to the Belfast Royal Hospital; £200 to the Belfast Hospital for Sick Children; and £200 to the Belfast Ophthalmic Hospital.

AN ADDRESS ON THE GERM THEORY OF DISEASE.

Delivered at the Annual Meeting of the East Anglian Branch.

By JOHN LOWE, M.D.,

Consulting Surgeon to the West Norfolk and Lynn Hospital; President of the Branch.

GENTLEMEN,—In occupying the honourable position which I do to-day, through your good-will and suzerainty, my first and most pleasing duty is to offer you on my own behalf, and on that of my professional brethren in this town, a most cordial and hearty welcome to the "ancient and loyal borough" of King's Lynn, and to assure you that we value highly the honour you do us in coming amongst us. We do not doubt that the annual interchange of kindly feeling, promoted by these meetings, tends greatly to keep alive in our midst that healthy professional life and zeal which our great Association has done so much to foster. We have one advantage over some other societies and congresses, that the topics brought under our notice are never old and effete; there is always something new in theory or fact to add interest to or throw fresh light on subjects which seem to have become exhausted. Each busy practitioner, whose arduous duties leave no time for original investigation, has yet the opportunity of gleanings important items of knowledge and practical detail to add to the general fund; while we have the advantage also of more extended observation from some whose lives are given to more deliberate study and research. The names of those who have consented to come and read papers to-day will prove that our time will be usefully employed. It is now fifteen years since the first visit of our Association to Lynn, under the presidency of my late respected colleague, Dr. Hawkins. Many have passed from among us since that time; but I rejoice to see present to-day, and to be able to welcome, some who were here on that occasion also. I would venture to express a hope that so long a period may not be allowed to elapse before our next meeting within these walls.

At our last annual meeting, you had the advantage of hearing, from our ex-President, Dr. Crowfoot, a most able and instructive address on the Germ-Theory of Disease, in which you had presented to you an admirable *résumé* (since published) of the present aspect of a theory which has had, and will have in the future, an influence on medical thought and medical treatment which it is impossible yet to measure justly, which in many respects has revolutionised both practice and theory in some forms of disease, and which, in its startling revelations and important bearings on the health of the community, is full of interest to us all.

In thinking over a subject on which to address you to-day, it seemed to me that some points of practical utility might be elicited from the same topic in its relation to surgery. I would thus avoid, as far as possible, travelling over the same ground so well worked by Dr. Crowfoot. Though it is so wide and comprehensive a subject, and familiar as it must be to many amongst you, there are certain features in it which seem to require greater prominence than they have generally received, and from a consideration of which I think we may possibly derive some practical advantage, though there may be nothing novel or original in what I have to bring before your notice.

The germ-theory of disease naturally gave rise to the antiseptic theory of treatment, and to the brilliant results which the experiments of Mr. Lister, and his practice, with that of his followers, have brought about, and which have, in the last twenty years, worked so striking a change in surgery. The two theories are so closely connected, that it would seem, at first sight, if one be true, the other must be true also; and no doubt this is so in fact, though it is possible for the antiseptic treatment to show points of failure, or to be proved in a measure unnecessary, without invalidating the germ-theory of disease.

But if we arrive at a point at which it is fully proved that all fermentation is the result of germs; that all septic poison in wounds is produced by germs; that within the body there is no sepsis, and without the body no putrefaction, where germs are excluded; and, finally, that antiseptic treatment prevents putrefaction and septic poisoning,—it would not be unreasonable to conclude that both