

AUSTRALASIAN MEDICAL GAZETTE

No. 338.

SYDNEY, NOVEMBER 20TH, 1909.

VOL. XXVIII., No. 11

INAUGURAL ADDRESS.

Delivered at the official opening of the Sydney Hospital Clinical School for Medical Students on the 20th October, 1909.

By Thomas Fiaschi, M.D. (Pisa and Florence),
Sydney.

ONE of the oldest institutions in this young country is the Sydney Hospital. It is much older than any person here present, for institutions, fortunately, live longer than men. On the 30th of this month ninety-eight years shall have passed from the day in which a beneficent Governor, his Excellency Lachlan Macquarie, laid here the foundations of what was then called the Sydney Infirmary. Our Sydney Hospital is legally and practically the same institution, though changed in name and incorporated by Act of Parliament in 1881. The land on which our present palatial structures are erected is still the same unrivalled spot on which the more modest buildings of Governor Macquarie arose. Our Board of Directors is the direct successor of the governing body which under the name of Sydney Dispensary administered our institution as far back as 1826. Also, the objects and work done, with due allowance to progress, have been consistently the same for all these long years—that is, first, the affording of medical and surgical relief to the poor; second, the education of medical students; third, the training of nurses for attendance on the sick.

That from an early time the Sydney Infirmary made provision for the education of medical students is certain, for as far back as 1850 medical students were here enrolled. I can support this statement by the best of all proofs, a living proof, in the person of Dr. James Cox, here present, who for many years filled the positions of honorary physician and honorary consulting physician on our staff. This gentleman, in a very interesting memoir of his life, which he recently read to a meeting of old friends, and from which I am kindly allowed to quote, told us that he joined the Sydney Hospital as a medical student in the year 1850. He met here four other students, Messrs. Lumsden, Grills, Phelps and Milford. These all remained for three years, studying anatomy, physiology, materia medica and

pharmacy, and they also acted as clinical clerks and surgical dressers. At the end of that time they all went to Great Britain and there graduated. Dr. Lumsden and Grills joined the medical department of the army in India, Dr. Phelps took part, with distinction, in the Crimean war, and ultimately was killed in the New Zealand war. Dr. Milford was for many years a respected medical practitioner in Sydney, occupying the position of honorary surgeon to St. Vincent's Hospital.

The tuition received at the Sydney Hospital is described by Dr. Cox as very good, and he particularly mentions Dr. Donald McEwan, a very able surgeon, to whom he acted as dresser, and Dr. Alleyne, a physician who later on became Government medical officer for New South Wales. That the Sydney Hospital medical staff were progressive even then is shown by the following incident which I shall quote in Dr. Cox's own words:—

“I assisted Drs. McEwan and Alleyne in Phillip-street to distil the first chloroform that was ever in Australia. The distillation was most successful, and I was present and assisted at an operation on a young girl to whom this chloroform was administered by Dr. Alleyne at the Sydney Hospital, for the first time in Australia.”

This enterprising experiment has not been the only one of its kind; many important operations and new methods of treatment, that I need not now quote, have first been tried in Australia at the Sydney Hospital.

Dr. Cox and the gentlemen mentioned were followed by many other students, who remained for their first three years in the Sydney Hospital and then went abroad to complete their studies and graduate. This practice continued far into the seventies. I remember having visited the Sydney Hospital in 1876 to witness an operation by our respected friend the Chancellor, who was then honorary surgeon, and I saw then several young men who were undoubtedly students.

How did it happen that our hospital, having partially educated medical students

for nearly thirty years, and having amongst its objects the education of students, remained without them for such a long period? My explanation is that the Sydney Infirmary had become too small and unfit for the times. In 1811, the year of its foundation, the total population of Australia was 11,875 inhabitants, and the citizens of Sydney were only 4895. After the fifties, with the discovery of gold and the great flow of immigration, the population and prosperity of Australia immensely increased. Those buildings that had answered their purpose well, whilst Australia was a Crown colony and the community was small, were utterly inadequate to the wants of the new times. Our directors realised this important fact, and resolved to completely reconstruct the hospital; but financial difficulties, political wavering and opposition, and the rising of other interests retarded the execution of their plans for thirty years.

The eighties was a very critical period for our hospital; its very existence was at one time in question. Proposals were freely discussed in the newspapers that the valuable land on which the old hospital was standing should be resumed by the Government and put to other public use. I remember having been present at a meeting of medical men in which a petition was sent to the Government of the day requesting that the Sydney Hospital should be left in its old beautiful site.

It was just at this time that the Sydney University established its medical school, and that a new and modern hospital was built on a magnificent scale close to the University—the Royal Prince Alfred Hospital. The students, who before had to go and graduate abroad, now that means of a complete curriculum were given to them in the Sydney University, very properly stayed at home and graduated at their own university. In the early years of the medical school, when the number of students was not great, it was also natural that they should do the clinical portion of their curriculum at the hospital close to the university.

Times have changed now. The Sydney Hospital has successfully battled through the storms that beset it, thanks to devoted friends and to the unflinching determination of our directors and of our lamented late president, Sir Arthur Renwick. With the opening of the Renwick pavilion on the 5th of September, 1907, the reconstruction of the Sydney Hospital has been completed. With

this renovation our hospital is not only in harmony with the requirements of modern medicine and surgery, but is fit to deal with the enormous material of medical, surgical and special cases that here flock for treatment. Remember, that as regards in-patients and average daily number of occupied beds, we are second only to the Melbourne Hospital, and as regards the number of out-patients the Sydney Hospital by a long way surpasses any other hospital in Australia.

Our Board of Directors, in the calm that followed the long struggle, and in the consciousness of all the enormous advantages that the Sydney Hospital possesses, considered that the time was ripe for the fulfilment of that long-cherished object, the education of medical students. This had never been lost sight of, and even in the list of plans and objects framed by them in pursuance of the 1881 Sydney Hospital Act, one of them is a clinical school for the instruction of students in medicine, surgery, etc.

Accordingly a request was again made this year to the Senate of the Sydney University that the Sydney Hospital be recognised as a clinical school, and that medical students beginning their clinical course be allowed, if they wished, to follow it at the Sydney Hospital. This request was graciously granted, and in publicly thanking the Senate for this act of justice done by them to the Sydney Hospital, I think that we can congratulate them on the wisdom they have thus displayed.

On looking over the various methods of clinical teaching, one finds that these can, with a little squeezing, be reduced to two. One is the collective or comparative method, in which the clinician singles out a certain disease and gathers together patients suffering from it in all possible forms. He thus will present at one time the typical form of that disease in all its various stages and the aberrant exceptional varieties, so that in one lecture and almost at one glance the audience gets a complete picture of that disease. This is the method adopted by many great clinicians in the large medical schools of Europe and America. It is specially suitable for a large class of students and particularly for advanced students, such as those of a post-graduate class. It has one great defect, that the student has everything done for him by the clinician and his assistants, so that as a didactic method for beginners, who should

be taught how to move their first steps in clinical art and science, it is insufficient. Furthermore, it is too authoritative, and trains the student to implicitly believe his teacher's statement.

The other method is the individual or natural method. The clinician goes with his students to the bed of one patient, begins to examine him from the beginning, showing to them the pitfalls to which a medical man is exposed in gathering up a correct history of the patient's illness and of his previous health and family antecedents. He then proceeds in a thorough and systematic way to examine the patient, using all the means of investigation that modern clinical science supplies. Having made out clearly all the alterations from the normal standard that are present in the organs and functions, he discusses all the various diseases that may cause them, and by eliminating the less probable ones, he comes to one or two diseases which explain the present condition of the patient. The diagnosis thus established, he discusses the probabilities of the patient's recovery and, when possible, points out to the student what the most advisable course of treatment should be. By this method the students follow step by step the mental work of their teacher, and are placed in the same position in which they shall find themselves when in actual practice face to face with a new case.

This method is by far the most instructive for students, but to be successful it requires small classes and many patients. Hence it follows that a medical school having a large number of students should be endowed with more than one clinical hospital, so as to give to every student repeated chances of coming in direct contact not only with the sick, but with his clinical teachers during their investigations.

For this reason, if for no other, the Senate of the Sydney University should be congratulated on their wise step when they granted a full clinical curriculum to the Sydney Hospital. They have at one stroke enriched the Sydney University Medical School with two magnificent hospitals for the purpose of clinical instruction, and have widely opened the opportunities of clinical instruction to the students of each hospital.

It thus happens that 29 of you students are now here beginning your clinical studies.

Allow me, gentlemen, to bid you welcome amongst us in the name of the whole Sydney Hospital, and to thank you particularly on

behalf of the medical staff for the confidence that you have unreservedly placed in us. We are proud of having you here, and if your appearance does not deceive us, we consider you to be first-class material for the purpose of clinical education.

In looking back to the past the members of the Sydney Hospital Medical Staff have no reason to be ashamed of their work. Alone most of the time, or in company only of their resident medical officer and of the nurses, they have fulfilled the charitable purposes and have all the time well kept up the scientific reputation of the hospital. This, under no other stimulus than the love of their art for its own sake. Your presence here will be a vivifying influence to them and shall spur them on to obtain greater scientific accuracy, and to study fully those rare cases that occasionally present themselves in the great wealth of clinical material that the Sydney Hospital possesses.

We are aware that you are placed under certain disadvantages as regards time table, but in all innovations it is impossible to have everything working smoothly from the beginning. You are pioneers in this respect, and I have no doubt that you will not be lacking in that sturdy spirit of patience and perseverance always characteristic of Australian pioneers. Be assured that anything your teachers or any member of the medical staff can do to compensate these little disadvantages shall be willingly done. We can only hope that at the end of your first year you will be pleased with your experience of the Sydney Hospital Clinical School, and say: *hic manebimus optime*, here we shall remain happily.

Coming now to our work: What is clinical teaching? When did it begin? What has it done in the past and what do we expect from it in the future?

Etymologically, clinical comes from the Greek word *κλινη*, bed, and *κλινικος*, pertaining to a bed. Narrowly it means the study of disease at the bedside; broadly, the application of anatomy, physiology and pathology to the recognition of disease, to the understanding of its causes, dangers and consequences, and to the best manner of treatment.

When did clinical teaching begin? We may say, without error, that the first clinician was Hippocrates, the father of medicine. Free from prejudice, ever so fatal to the progress of medicine, he based all his knowledge

of the sick on the accurate observation of their symptoms. He laid great stress on prognosis, how to foresee the ultimate issue of the illness, and in the treatment of the sick was guided by broad commonsense, ever remembering the "vis medicatrix naturae," that is, the tendency or effort of nature to bring about a recovery. Had his followers continued in his footsteps, clinical science might have been anticipated by two thousand years. Unfortunately they were carried away by speculations and engulfed themselves in a slough of fantastic systems, such as dogmatism, methodism, empyricism, eclecticism and others; these kept medicine in a state of frothy vacuity for 20 centuries. It was only after the renaissance, after the revival of anatomy and of the physical and natural sciences, that an attempt to develop clinical medicine occurred in various parts of Europe. We find that at the end of the sixteenth century Marco Degli Oddi and Albertino Bottoni gave clinical instruction in Padua, and that about the same time the philosopher Ramus tried to persuade Charles IX. to establish in Paris schools for clinical teaching, such as already existed at Padua; but these are single instances not followed by much success. In England there had been more than one distinguished physician, particularly amongst the Hippocratices, who in the study of their cases may be said to have closely approached our clinical methods, such as Sir Theodore Turquet de Mayerne, the physician of Charles I., and the great Sydenham, justly called the English Hippocratices. These flourished about the middle of the seventeenth century, but the vast majority of physicians all through Europe continued to believe implicitly in the words of Galen, and wasted their energies in theoretical disputes. The real beginning of modern clinical teaching must be traced to Holland, and was due to the happy rivalry between two Dutch Universities—of Utrecht and Leyden. The heroic Leyden, known to you for its gallant defence from the armies of Spain, was famed also for its University, which boasted on its roll great names, such as Gronovius and Scaliger, the greatest scholar of his time. Utrecht founded a new University, which soon flourished, and medical students flocked to it from all sides. Not to lose ground, the University of Leyden opened up 12 beds in the City Hospital as a school in which students could go and study disease on the patients. Several clinicians

succeeded each other, but being more or less systematic, particularly Francis de Boe, a celebrated man known to you in your studies of anatomy as Sylvius, the clinical school was not a success. It was only when one of the greatest heroes of medicine, Boerhaave, took charge of the clinic that a true clinical school was founded. He abandoned the intro-chemical system of Sylvius and based himself absolutely on observation, taking as helps in his examination of patients all available physical and chemical means. He for the first availed himself of the recently-discovered microscopical anatomy.

Boerhaave, as a teacher, is one of the links between the old scholastic and modern medicine, and to his clinic medical men flocked from all parts of Europe, and his influence on the progress of medicine was very great. His teaching, as could be expected in a man representing a period of transition, did not long survive him, but his methods remained. Boerhaave had an able and grateful pupil—a fortune not given to all teachers—and this was Gerhardt Van Swieten, who was called to Vienna by the Empress Maria Theresa to establish a clinical school. Van Swieten was a man of great knowledge and noble character, and supported by the favour of such a great empress as Maria Theresa, had a rare opportunity before him, of which he fully availed himself, and he carried to Vienna the clinical methods of Boerhaave. In 1746 he erected new buildings and established a complete medical and surgical clinical school. His example was followed by all the leading medical schools of Europe, and for the last century and a half disease has been studied in a clinical way all through the civilised world.

Great Britain early felt Boerhaave's influence, and as far back as 1741 had a Chair of Clinical Medicine in Edinburgh, occupied by John Rutherford. Later on she produced such clinicians as Bright, Addison, Brodie, Stokes, Graves and Jenner; Austria gave us Auenbrugger, Skoda, Oppoltzer and Billroth; France, Laennec, Louis, Trousseau, Charcot, and so on, but with all the respect due to these great names, remember that they are only mileposts on the road of clinical progress. The great mass of modern clinical knowledge has been gathered by the thousands of minor clinicians working modestly and indefatigably in their hospitals.

What has clinical medicine achieved in this century and a half of active life? To begin,

it has banished all the fantastic systems and tyrannous dogma of the ancients, of the Arabs and of the middle ages. By studying the natural history of a disease, just as a Botanist studies that of a plant, and above all, by not interfering with disease in the heroic and meddling way of the older physicians, we have been able to understand and record what the true course of it is. We now know better which are the diseases that are incurable, and which are those amenable to our means of treatment. True, at first the natural consequence of clinical science was therapeutical nihilism, but that was a passing stage. Our improved knowledge of physical, chemical, and pharmaceutical modes of treatment has given us greater confidence to do something for the sick. Above all, the great improvement in operative surgery owing to anaesthetics and asepsis have enabled us to treat a large proportion of even internal diseases by surgical operations. Enough to mention, as samples, the removal of malignant growths from various viscera, of parasitic growths such as hydatid cysts; the surgical treatment of appendicitis, intussusception, and of all the various forms of obstruction of the bowels; the removal of uterine and ovarian tumours; the emptying of abscesses of the brain, the lungs, the liver, the pancreas, and of ever so many other organs; and the radical treatment of chronic suppurative disease of the ear. The clinicians have ever been ready to avail themselves of all the discoveries of natural philosophers and physiologists. Hardly had Pasteur made public his discovery of the various agents of putrid fermentation, than a great surgical clinician, Lord Lister, took it up and found a ready application of it for the prevention of sepsis in compound fractures, and thus opened up for us the whole enormous field of antiseptic and aseptic surgery. I need not remind you of all the means that physicians, chemists and pathologists have given to us for the observation and treatment of disease, beginning far back with the clinical thermometer and coming down to the recent Röntgen Rays and serum diagnosis.

What do we expect from clinical teaching in the future? Have we come to our acme of development? I do not think so. First of all we hope still further to reduce the number of those diseases that are called incurable. Secondly, we want to make clinical medicine a science, more than it is now. We want to

separate the practical portions of it, what we call the art, from those parts that are really the elements of a pure science, and these ought to be classed with the pure sciences of medicine, such as physiology, pathology, and bacteriology. The cultivation of this scientific portion should be entrusted to special men, who should be absolutely free from the trammels and worries of practice.

Gentlemen, from the little I have said to you, you can gather that there is plenty of work for you to do. Not only have you to acquire what is now the ascertained and general patrimony of all the members of our profession, but you must heed a cry that we have heard more than once, demanding from the Sydney University alumni original research and ideas. It is not an unreasonable demand. What a great honour for the young Australian profession, if the members of it could repay even in a small amount the enormous debt of knowledge that they owe to the old seats of learning in Europe and America, and to the great men of the past! The generation of Australian medical men now passing has been too busy with practical work to have left either energy or time for original research. Many of you will, from a scientific point, have greater advantages than any of us ever had, so you must be equal to the occasion. Your success in this direction will depend on enthusiasm and on persistent indefatigable work; if you possess these, I have no doubt that some of you may rank, in the future, amongst the great thinkers of medicine.

As regards your teachers in the Sydney Hospital Clinical School, be sure that they will encourage you to think for yourselves, and will avoid any spurious method that may stuff you with knowledge and not enable you to make it an integral and living part of your mind. We admit that the first duty of our school shall be to give you the necessary education, as required by the Sydney University, and to turn you out well informed and sound medical practitioners. We shall, however, aim to something higher than that; we want to give you every facility that you may avail yourselves of the enormous material for study our hospital possesses, and train yourselves for the future to original research. If there may be amongst you one with the mind of a Sydenham, a Morgagni, or a Laennec, *in embryo*, it will not be through want of our help and inspiration, if he will fall short of his high destinies.