



A WEEKLY ILLUSTRATED JOURNAL OF SCIENCE

*"To the solid ground
Of Nature trusts the mind which builds for aye."*—WORDSWORTH

THURSDAY, MAY 4, 1871

THE SMALLER LECTURESHIPS AT THE LONDON MEDICAL SCHOOLS

I.—THE CONSERVATION OF FORCE

ABOUT sixty years ago the student who determined to enter the medical profession was usually bound as an apprentice to some respectable country practitioner, and spent several years in acquiring the rudiments of his profession, by bandaging bad legs, dressing simple wounds, bleeding freely everybody that presented himself and prescribing and dispensing for the poor. He then came to London, or attended one of the larger provincial towns provided with a hospital, and followed the practice of some celebrity, hearing an occasional lecture and much clinical discussion, and finally presented himself for examination before the Master and Court of Assistants of the College of Surgeons, and started in practice. Such training was solid and good; practice went before, and theory followed after; some thought, indeed, the cart went before the horse; yet the excellence of the plan was shown in the high scientific position and lucrative practice obtained by many a well-known name. As Shakespeare knew little Latin and less Greek, our student knew little anatomy and less physiology, but what he did know was substantial, and served him in good stead.

A few years after the time we are speaking of, systematic courses of lectures upon various subjects, as upon chemistry, botany, anatomy and physiology, medicine and surgery, began to be delivered at the larger schools, at the instigation of the Society of Apothecaries, who were constituted by the Act of 1815 the guardians of "general practice," two or even three subjects being given by the same lecturer; and attendance upon these soon came to be regarded as an important part of the student's education. So far all was well. The several subjects mentioned above were treated broadly by such men as Abernethy, Cooper, Babington, and others, generally speaking with direct reference to medicine or surgery; and the student underwent a training that possessed considerable value in relation to his future profession, whilst

it furnished him with the rudiments of various sciences that he could pursue and extend in his leisure moments. A few years more passed away, and the advances made in every department of knowledge rendered it impossible for any man to undertake singly to lecture upon two different sciences, such as chemistry and botany, or even upon two such cognate subjects as anatomy and physiology. Each required its separate professor, who delivered from thirty to ninety lectures upon his special science, and attendance upon them was rigorously enforced both by the lecturer himself and by the examining bodies.

And now ensued a period that was undoubtedly opposed to all true intellectual training. The student, as soon as he entered the profession, saw little practice, but was everlastingly in attendance upon lectures. No mental effort was required, and, except in the case of first-rate lecturers, none, we are convinced, was ever exerted in acquiring and assimilating the information conveyed. Here and there a good lecturer, thoroughly master of his subject, chained his audience; but the substance of four out of five lectures either entered at one ear to pass out at the other, or was altogether refused admission to the brain by the locked portals of the slumbering student. The horses were indeed put before the cart, but the team was so strong that they often ran away with the cart before anything useful had been put into it. The requirements of the examining bodies in regard to these lectures rendered it imperative for every school, however small, to have as numerous a staff of lecturers as the largest. The senior officers of the medical staff consequently took the more important subjects of medicine and surgery, anatomy and physiology, whilst the younger ones divided amongst them chemistry and botany, materia medica, forensic medicine, and midwifery. In many instances these latter posts were filled by gentlemen who had received no special training, but who accepted them and often worked at them with praiseworthy energy, merely to secure the succession to the medical staff, upon obtaining which the minor lectureship was at once given up.

It is obvious that lectureships so obtained and so held must have been in many instances valueless alike to the lecturer himself and to the student who sat under him, yielding to the former a barren honour, and to

the latter a signed schedule,—the advantage of the professor and not the advancement of the student being the point considered. During the last few years a reaction has been setting in against this perpetual lecturing, and the number required to be attended has been considerably reduced. The University of London deserves the credit of having been the first to break through this absurd system, by requiring attendance on only one or two courses, and this rather as evidence of the student being really engaged in the study of medicine than for any other purpose, leaving him free to acquire his information as best he can, but testing its extent and value by a searching examination.

No doubt many of the posts above alluded to are filled by men of great talent and ability, but their powers are crippled by the small means at their disposal, which prevents many illustrations or experiments from being exhibited which are almost essential for thorough teaching.

As a means of improving the system of education by supplying a better class of lectures on some subjects than those at present given, and at the same time obtaining better remuneration for the lecturers themselves, a scheme has recently been advanced by which it is proposed that certain medical schools in the metropolis should be amalgamated, a reduction in the number of lecturers being thus effected, whilst the pecuniary value of those that remain will undergo considerable augmentation. It is hoped that the value of these posts would then be sufficient to lead to their being accepted not by those who only use them as a stepping-stone for advancement, but by gentlemen who have devoted themselves exclusively to the study of the department of science on which they lecture.

At the present moment the lectureships in several of the smaller schools yield such small returns to their holders as would astonish many of their hearers. As a matter of fact we could mention an instance where the proceeds of an entire summer course of lectures has amounted on the average for the past three years to a sum not exceeding 6*l*. Can this for a moment be regarded as in any way proportionate to the intellectual labour, the time, and the money expended in their preparation, illustration, and delivery? It might be considered to be a moderate recompense for one lecture, but as payment for a course it is simply monstrous. Is it surprising that the lectures are often given without animation, and listened to without interest?

By amalgamating several schools, however, such chairs might, it is hoped, be so far increased in value as not only to lead men of high ability, and distinguished for their knowledge in particular branches of science, to accept them, but to provide ample funds to admit of their copious illustration, and for the purchase of expensive apparatus—apparatus which the smaller schools now find it difficult or impossible to procure. It would not be difficult, we imagine, to find room for those who at present hold appointments as demonstrators, with lighter but not less important duties than they have hitherto performed. At all events it seems to us that the amalgamation scheme, if fairly carried out, would prove the most splendid example of the Conservation of Force with which we are acquainted, and on that ground alone should receive the cordial support of the medical teachers through-

out the metropolis. In a future article we shall suggest what appears to us a desirable and practical scheme for medical education.

THE LITERATURE OF CHEMISTRY

THE appearance of the April number of the "Journal of the Chemical Society" marks the commencement of a new era in English Chemical Literature, containing, as it does, besides the papers which have been read before the Society, the first instalment of the promised "abstracts." The papers selected for this purpose by the accomplished editor are ninety-one in number, comprising every branch of Chemical Science, Technology included, and are classified under six various headings, as "Physical Chemistry," "Inorganic Chemistry," &c. The abstracts themselves, made by the gentlemen whose names appear on the wrapper of the journal, are naturally of different degrees of literary merit, but seem to be carefully and conscientiously done; all the points of essential importance in the original papers being retained. The reader will thus not only have a good general notion of the extent of the researches made by any particular author, but also be able to repeat any of the experiments, or prepare any of the substances from the directions given. These abstracts are therefore really what they profess to be, and not merely notices of a few lines in length, from which but little more information can be gleaned than from the title of the paper.

The Council of the Chemical Society is to be congratulated on the energetic way in which it has endeavoured to supply a great defect in our scientific literature, by affording us the means of obtaining a general view of the progress of Chemistry both here and on the Continent. Chemists have hitherto had to depend chiefly on Will's "Jahresbericht," which, although useful in its way, has the double disadvantage incident upon its method of arrangement, first, in not being published until long after the end of the year, and, secondly, of being rather a *résumé* of the chemical work done, than a condensed account of particular researches. There is no doubt that these abstracts, if furnished with a full and comprehensive index, both of the subject-matter and the names of the authors, will become a standard work of reference, not only here but on the Continent.

It is to be hoped that other Scientific Societies will be induced to follow the example of the Chemical Society, and, by publishing abstracts of all papers connected with their particular branch of science, give an impetus to its cultivation, and render a knowledge of its general progress easily attainable. The value of such abstracts is greater than might at first sight appear; for the study of Science, both for its own sake, and in its application to the Arts, is extending so rapidly that it requires a considerable expenditure of time to acquire a knowledge of the numerous researches and discoveries which are now being made in any particular science, and leaves but little for the study of the sciences allied to it. If, then, each of the learned societies were to publish abstracts similar to those of the Chemical Society, it would render it comparatively easy for the workers in any one department of science to acquire something more than a superficial knowledge of the discoveries made in the others.