

British Medical Journal.

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MEDICAL EDUCATION: PROPOSALS FOR AN IMPROVED METHOD.

WE have stated, in our recent numbers, what we consider to be the duties and powers of the Medical Council under the Medical Act; and we have pointed out the direction, although not the precise mode, in which those powers, in our opinion, might be most advantageously exercised. We have also drawn attention to the necessity for some uniform plan of education for the medical student, as manifested in the great diversity of subjects taught, and the varying number of lectures given on each, in the several medical schools of this metropolis; and we arrived at the unavoidable conclusion that the Medical Council ought to interfere, and at once.

We now purpose to offer some suggestions towards effecting that which we consider would be an improved system of medical education; and we hope to elicit, also, the opinions of others more experienced than ourselves in the matter of medical tuition.

In the first place, we consider it desirable for the guidance of the student, not only that a minimum be fixed both as regards the time to be devoted to, and the subjects to be comprised in, his professional education, but that there should be also some general agreement as to the order in which such subjects should be studied, and the methods by which a knowledge of them can best be acquired.

As regards *the time to be devoted to professional studies*, we think that four academic years should be the minimum, each year to consist of a winter session of five months, commencing in November, and a summer session of three months. The commencement of professional study should be understood to be the time of commencing professional studies at a medical school. And here we beg leave to express our dissent from a proposal which has been made to divide the academic year into two equal sessions of four months each; an arrangement which would needlessly curtail the time for dissection, which can only be carried on during the colder period of the year.

As regards *the subjects of professional study*, we would divide them into such as are especially *preparatory*—namely, Anatomy, Physiology, Chemistry, and *Materia Medica*; and those which may be termed *final* subjects of study, or which teach the student the actual practice of his art—namely, Medicine, Surgery, and Midwifery. To the former, he should devote his first two years; and to the latter, another two years—thus completing four years, at least, of

professional study. Botany, we are of opinion, should be included in general education; and Forensic Medicine should not be made the subject of a separate course of lectures. Our reason is this. Forensic Medicine is a special department of practice, and exercised by very few; whereas a plan of education should be adapted, not for the few, but for the many. If it be objected that a knowledge of this subject is required by every medical practitioner to aid in the detection of poisoning, or other criminal attempts, our answer is, that the knowledge which he must otherwise acquire of Chemistry, Surgery, Midwifery, and Morbid Anatomy, will or might be sufficient for that purpose.

Such being our views as to the time to be employed in professional study, and the subjects to be studied, dividing them into “preparatory” and “final”; let us state the number of examinations which the student should, in our opinion, be required to pass. In addition to regular class examinations, which we consider to be of primary importance both to teacher and pupil, as a means whereby the student's knowledge and progress may be ascertained, we think that every candidate for a qualification to practise should be required to pass at least two public professional examinations: one to be undergone after two years, and the other after four years of professional study. Should, however, any student fail to pass his first examination, he should not be permitted to present himself again for examination until after the expiration of an additional six months of study; nor should he be allowed to enter on the study of Medicine, Surgery, or Midwifery, until his first examination has been passed.

We are met here by the serious inconveniences which result from the existence of examining boards having different standards of a sufficient professional education, as tested by their examinations; and, although this is not publicly stated, the fact is sufficiently well known to students, who not unfrequently avail themselves of the greater facilities offered for passing an examination by one corporation, when disappointed in their hopes at some other, where higher attainments are required. This state of things is much to be deplored; but we trust that the corporations themselves, even without a suggestion from the Medical Council, will, before long, perceive that it is to their own interest, as well as to the students' advantage, to avail themselves of the power given in Section xix of the Medical Act, “to unite and co-operate in conducting the examinations required for qualifications to be registered under this Act.”

Another evil of no little importance in reference to the safety of the public, connected with this subject of examinations, is this. Each of the three great licensing medical corporations in London, the Royal College of Physicians, the Royal College of Surgeons, and the Society of Apothecaries, has a differently

constituted board of examiners; and the Pass Examination of each differs greatly in respect to the subjects it comprises.

At the College of Physicians, the final or Pass Examination comprises the Principles and Practice of Medicine, Surgery, and Midwifery; the Examiners on Medicine and Midwifery being chosen from the Fellows of the College, and the Examiners on Surgery from the Fellows of the College of Surgeons. It may, therefore, be inferred that candidates for the License are sufficiently tested on each of these departments of practice.

At the College of Surgeons, the final or Pass Examination comprises Pathology, Surgery, and Surgical Anatomy; the Examiners being Fellows of the College. Neither Medicine nor Midwifery forms part of the Examination for the Diploma of Member; but there is a separate Examination for a qualification to practise Midwifery; two Fellows of the College of Physicians forming part of the Examining Board. This Examination is not, however, compulsory on the candidate for the Diploma of Member.

At the Society of Apothecaries, the final or Pass Examination comprises the Practice of Medicine and Pathology; Midwifery, including the Diseases of Women and Children; Forensic Medicine and Toxicology; the Examiners possessing, for the most part, the Diploma of Member of the College of Surgeons and the License to practise as an Apothecary; four of the twelve Examiners being Members of the London College of Physicians. Surgery, be it observed, forms professedly no part of the Examination for the License to practise as an Apothecary.

Here, then, we have three Corporations, the Licentiates of each being submitted to very different examinations as regards the subjects comprised in them, understood legally to possess very different privileges of practice, "according to their qualification or qualifications," yet practising, without let or hindrance, Medicine, Surgery, and Midwifery, at their discretion, although their sufficiency on certain of these subjects may not have been, as we have shewn, in the least degree tested. *It is well known that hundreds of Members of the College of Surgeons, who have never been examined as to their proficiency in Medicine or Midwifery, are, notwithstanding, engaged in such practice. Numbers, who have no other qualification than the License of the Apothecaries' Society, are practising Surgery, although this forms no part of the examination to which they have been subjected.* Such dangerous irregularities surely ought not to be allowed. Some measures should be taken to provide that those who practise these three branches of physic should be sufficiently tested on each; and that the public should be protected against the ill consequences which cannot fail to arise from such a state of things.

Before we offer any remarks on the order in

which the subjects of professional education should be studied, and on the methods by which we consider that a knowledge of them can best be acquired, let us draw attention to what, in our opinion, would be a great advantage to the student, if the division of subjects into "preparatory" and "final", each occupying a period of two years, were adopted. It must be apparent that Anatomy and Chemistry can only be successfully studied in those schools which are provided with the necessary dissecting-rooms and a suitable laboratory; in those schools, in fact, whether London or provincial, at present "recognised" by the examining bodies. The first two years of professional study would, therefore, still have to be passed at one or other of these schools. Such is by no means, however, a necessity as regards the two years to be devoted to the final subjects of study; these subjects can be studied as well—nay, probably better—at some sufficiently large institution for the sick, to which no so-called school is attached; for the number of students attending the physician or surgeon during his visit to the patients in a hospital with which a school is connected, precludes of necessity a great majority from any participation in the practical instruction given at such times; so that the facilities for acquiring this the most essential, because the most practical, part of a student's knowledge of his "final" subjects of study, are less at such hospitals, although the opportunities afforded him for learning his "preparatory" subjects are greater.

Why should not the student be permitted to enter at these schools for his first two years only, leaving him free, after having passed his first examination, to select the institution, either in London or in the provinces, in which to study Medicine, Surgery, and Midwifery, provided always, that the institution chosen offer sufficient opportunities for this purpose? Why should his experience be derived from one institution only? Why should so many of our country hospitals and infirmaries, places in every way well adapted for studying Medicine and Surgery, be useless in this respect, solely because they have no so-called school attached? There are many institutions in the large towns of this country receiving annually hundreds of patients, attended by physicians and surgeons both competent and willing to aid in the practical instruction of students on these subjects. Opportunities for acquiring a practical knowledge of Midwifery, under the direction and advice of experienced members of the profession, are quite as favourable in large provincial towns as in London. Any arrangement of the kind now suggested would, we are aware, tend to diminish the emoluments of London lecturers and teachers; but is it right, is it reputable, that a system recognised as faulty, and capable of improvement, should be suffered to continue on that account?

Having thus fully expressed our views on the chief points relating to the time and subjects of study, and having pointed out some of the advantages of the changes we suggest, let us proceed to offer, with all deference, our opinions on *the methods by which a knowledge of the subjects of study can best be acquired.*

Anatomy is divided by teachers into six species or varieties; namely, Anatomy, descriptive and surgical; physiological and general; comparative; histological and minute; morbid; pathological: and these are taught by separate courses of lectures. We do not question the accuracy of this subdivision in a scientific point of view; but we consider it an unnecessary and inconvenient arrangement for the student. Comparative and Histological or Minute Anatomy should form part of the lectures on Physiology; and Morbid and Pathological Anatomy should be included in the teaching of Medicine and Surgery. Anatomy, moreover, should be learnt, not taught. It is in the dissecting-room only that a real knowledge of this subject can be acquired; it is best learnt by demonstrations, and the student ought to demonstrate for himself. Official "demonstrators" may be appointed; but their duty should be to direct the student in his work; to explain away difficulties as they arise; to examine him from time to time; and to ascertain that he is learning as he ought. Knowledge would be thus gained practically; and it would make a deep and lasting impression on the mind. This would make a clean sweep of nearly a hundred lectures at once; and time now occupied by these would be at the student's disposal for other purposes.

Physiology must, of necessity, be in part taught by lectures; they should not, however, in our opinion, be more than two a week. They should be explanatory of general principles rather than of minute details; and be supplemented by frequent class examinations. These lectures should, as we have said, include also just so much of Comparative and Histological or Minute Anatomy as may be essential for teaching the functions of the several organs of the body.

Chemistry is now divided and taught as Chemistry proper, practical, and experimental. We would suggest that the student should learn Chemistry in the laboratory, and not in the lecture-room. It must be remembered that chemistry is not to be the occupation of his life; and, although we admit that he may study with advantage the physical forces as explanatory of chemical changes and as bearing on vital actions, one lecture a week on this subject would, we think, be amply sufficient. On this subject, also, class examinations should be held.

Materia Medica lectures we hold to be of very doubtful advantage. As regards the general appearances and physical characters of drugs, these can be learnt by an examination of specimens which

the museum of the school ought to contain. A knowledge of their chemical composition affords very little aid in determining their medicinal action; and as to their uses and effects, these surely are better learnt at the bedside of the patient. We discountenance, therefore, a separate course of lectures on this subject; and we have less compunction in doing so, because the study of practical pharmacy will afford the student better opportunity of familiarising himself with the characters of drugs; and the class examinations on Medicine and Surgery will test his knowledge of their uses and effect.

Such are the subjects which should occupy the student's first two years of study. Anatomy must, of necessity, be learnt during the winter. Physiology should be taught during the summer; and Chemistry and *Materia Medica* may be studied at any period of the year.

The suggestions now made neither necessitate the discontinuance of those courses of lectures at present given, nor a diminution in the number of lectures. Teachers who are enamoured of the employment may pursue their favourite pastime; but attendance on lectures by the student ought to be voluntary, and not compulsory. And this rule would determine, we imagine, the question of their continuance, or the contrary.

Under the present system, not fewer than eleven lectures in each week are to be attended by the student during the six months of the winter session, and nine in each week during the three months of the summer session; amounting, in the aggregate, to about eight hundred and sixty lectures during the first two years of his professional study. This number would be reduced by the plan we have proposed to about one hundred and sixty lectures during the same period; and we believe that the student would obtain more useful knowledge, take more pleasure in its acquisition, and have more time to spare. This time, however, saved by a better system, may be applied with advantage in many ways. The student should attend every operation; and a portion of every week day should be set apart for hospital attendance. Not that it is intended he should commence systematically to learn diseases, medical or surgical, at this early period of his career; but there is much more to be learnt in the wards of a hospital than is implied in the word disease. The habit of observing, comparing, reflecting, reasoning, comes only by degrees; and there is no better place for acquiring this habit than that now mentioned.

After the student has passed his first examination, he ought, as we have stated, to be free to choose whether he will continue his studies at the school where they were commenced, or pursue them at some institution where a knowledge of the *Practice of Medicine, Surgery, and Midwifery* can be acquired. The

instruction given by the physicians and surgeons of such institutions should be entirely clinical. Diseases, being objective in their nature, are better studied and understood when seen than when described. Three hours of lectures a week on *Medicine* and three on *Surgery* are, to our minds, so much time lost. If lectures relating to these subjects be given, they should have reference to the causes and means of prevention, and not to the signs and symptoms, of diseases. The teaching of *Pathological Anatomy* naturally forms a part of the teaching of medicine and surgery; and, in addition to diseases being made the subjects of clinical study and teaching during life, fatal cases should be made the subject of a short explanatory lecture, illustrated by the diseased organs or tissues, and other specimens or drawings. These demonstrations would teach the student the consequences of disease; and he would thus more certainly learn both morbid anatomy and pathology. The division of *Surgery* into *Aural*, *Dental*, *Ophthalmic*, etc., may be convenient for grouping together diseases of the same parts, and for clinical teaching; but courses of lectures on each of these parts of surgery cannot be needed, for very few students become specialists; and, as we have already said, a plan of education should be adapted, not for the few, but for the many.

Would such a system as that now proposed, it may be asked, secure to the student a sufficient knowledge of all those subjects which ought to form part of his professional education? We answer unhesitatingly, in our opinion, certainly. His study would be practical and real. There would be more learning, and less teaching; more education, and less sham; more time for reading, for observation, and for thought.

In the remarks we have now made, we have not hesitated to criticise freely, but we trust fairly, the system of education as at present followed in the schools. We may be charged with ignorance and presumption in speaking thus of a system approved by the medical corporations and by custom; but we know how slowly and how unwillingly corporate bodies originate or even accept reforms, and how custom at last assumes the force of law. We deliberately, therefore, risk such accusations as may be brought against us, convinced that the present system of medical education is not only faulty, but capable of improvement; and that if the Medical Council will exercise its moral influence, and, if necessary, its legal powers, the medical corporations will lend their powerful aid also towards effecting such improvement; and we may then hope to see a system of medical education worthy of the name—a system which will tend both to the interest of the public and to the honour and respectability of the profession.

MORTALITY IN THE VIENNA LYING-IN HOSPITAL.

PROFESSOR SPAETH of Vienna has given a sketch of the Lying-in Hospital at Vienna from 1784 to 1863. The hospital was established by Joseph II, in 1784. From 1784 to 1822, it was under the direction of Simon Zeller and J. L. Boër. The number of births during that period were 71,395, and the number of deaths 897; the mortality being about 1.25 per cent. The epidemics during this period of thirty-seven years were not severe. From 1822 to 1833—the time when the second clinical lying-in department was established—32,336 women were delivered; and of these 1714 died, being a mortality of 5.30 per cent. During these eleven years, epidemics were almost constantly present. From 1833 to 1839, Klein and Bartsch directed the hospital; and during this period there were in the first clinique, 12,253 births and 902 deaths, and in the second clinique 9353 births and 620 deaths; consequently, the mortality of women was 7.36 and 6.62 per cent. Puerperal diseases were almost constantly present; but were most fatal in the year 1836-37. During the next period, 1839 to 1847, the management of the two cliniques was altered, the physicians having exclusive charge of the first clinique, and the second clinique being chiefly under the management of midwives. The effect of this change was well marked. The mortality in the second clinique diminished; of 21,155 women confined, 810, or 3.82 per cent., died; whilst under the fearful epidemic of 1842-43, the mortality in the first clinique increased to a terrible height, 2482, or 10.14 per cent., dying, out of 24,455 confined. The greatest mortality occurred in December 1842, reaching, in fact, to 31.3 per cent. In 1847, Dr. Semmelweiss called attention to the origin of puerperal diseases, through infection from decomposed animal matters, and took measures for furthering cleanliness; ordering all students to wash their hand in chlorine water before attending the women. Hereupon, the mortality rapidly diminished; and up to 1849 (when Semmelweiss gave up the direction), of 6589, only 142 died, or 2.15 per cent. At the same time, in the second clinique, the mortality was also low. From this time up to 1864, the mortality has never been so great as in former times; although the hospital has been visited by severe epidemics. In 1854 and 1855, there was a mortality of 9.1 per cent. and 5.4 per cent. in the two cliniques. The last epidemic occurred in the winter of 1861-62, and produced a mortality of 7.7 and 10 per cent.

Professor Spaeth discusses the cause of these visitations. They cannot, he says, be cosmical or telluric; because outside the hospital, in the neighbourhood, no such mortality has occurred. Neither does it appear that these visitations had any connexion with epidemics of typhus, scarlatina, measles, etc.; for it

often happened that, when these diseases were raging, the Lying-in Hospital was in a healthy condition. Nor does it appear that cold has any direct influence on the health of puerperal women; and if these diseases are more common in winter, the cause is to be ascribed to the want of opening the windows. For these and other reasons, the Professor is convinced that the cause of puerperal epidemics lies in the hospital itself, and that its influence is exerted either during labour or within an hour after its completion. The chief, and probably the sole, agent of puerperal fever is decomposing animal matter, whether arising in the hospital or brought into it from without. The cure for the evil is, therefore, evident; great cleanliness, good ventilation, and separation of the sick from the sound. Semmelweiss was too exclusive in considering that the puerperal fever was caused solely by the infected fingers of the dissecting student.

AN esteemed correspondent's arguments on education rest on a series of suppositions, which, we believe, are quite fallacious. True, the courses of medical lectures in Germany are very extensive; but, unless we are mistaken, the ordinary run of German medical men is inferior to the British medical man as an educated practitioner in medicine. If scientific medicine be more advanced in Germany than in Great Britain, the reason is this, that in Germany the government so arranges the scientific chairs as to make it worth a man's while to devote himself to science. The competition of the schools here, as a rule, prevents a man from giving himself up to the illustration and scientific investigation of any one special subject. In this country, and especially in London, men give lectures in order to get (indirectly, of course) private practice, not to advance the study of science. Lecturers here keep an eye ever on the main chance. Can three medical lecturers in London be named who are not lecturing with the view of private practice in their eye? Dr. Beale has fallen into the same error with some of Mr. Syme's indiscriminating critics; viz., that because we have endeavoured to get scientific study put into its proper place, and administered in the right form and at the proper moment, therefore we are enemies to scientific medical study. Our critics seem to forget that a child must learn to walk before he can run; and that just so must the student learn the A B C of medical knowledge before he can dabble successfully in the unknown x y z of scientific medical researches. A wise teacher takes his pupil gradually upwards from the simple to the compound. What we complain of is, that students are sometimes crammed not only with the compound, but the supradecomposed, before they have yet mastered the simple terms of their business. There surely must be some limit to the powers of a student's mental digestion; and what we

want to get at is, the fitting amount and the proper quality of nutritive matter adapted to them in his pupil state. Dr. Beale seems to think there is no limit to the voracity and capacity of the student. The quantity which must be forced down him is, he says, ever more and more; his appetite for science must be like that increase of love "which grows by what it feeds on". Examinations are more diffuse and extensive, and therefore more diffuse and extensive must be the student's powers of answering questions. Instead of indulging in prophetic and possibly wrong assurances of what may happen if all our suggestions were carried out, why does not so well known and capable a teacher as Dr. Beale lay down for us some kind of education course which he considers fitting for the student? We should prefer his opinion down in black and white on these particulars, to all the many generalities of assumption and assertion of which he treats, and which may be right, or may be wrong.

THE Manchester Medico-Ethical Association has issued its Sixteenth Annual Report. We are glad to find so laudable a society lives and flourishes. It cannot fail to be an useful beacon in the midst of the professional ethical immorality which we see going on amongst us. The report tells us that "no town in England has fewer medical squabbles than Manchester"; and, naturally enough, the reporter attributes the fact to the existence of the Association. The Association also at its meetings discusses most important questions affecting the practice of medicine. Its manifest tendency, therefore, is to discourage quackery and to advance the social position of the profession. May its efforts not be without their due reward.

DR. RADFORD, Honorary Consulting Physician to St. Mary's Hospital, Manchester, a veteran still energetic in the furtherance of medical knowledge, is endeavouring to gain for his town the benefits of a reception-house or hospital for the treatment of the contagious diseases of children. If he accomplish his object, he will leave behind him the memorial of another great good done by him to the society in which he lives. We need hardly speak to medical men of the advantages of such an institution in a large and densely populated town. The removal of a child attacked with scarlet fever from the crowded room in which it lies sick, may prevent the spread of the disease through the whole family, and through the district in which the family lives; it may, in truth, be the means of saving the life of the parent, and consequently of preventing all his family from being pauperised. If society were wise, it would quickly see that its pecuniary interests are, in this case, intimately bound up with its moral obligations. To heal the sick—to take charge

of children affected with contagious diseases—is manifestly, in numerous instances, to save the father's life, and so to prevent his widow and children becoming a burthen on the ratepayer. On the low ground, therefore, of self-interest, the erection of such hospitals is most desirable. We sincerely trust that Dr. Radford's efforts will be successful; and that his success may produce many imitators.

SINCE last week, Garibaldi has himself declared that his prime object in coming to England was to "thank the people". It must have been clear to himself and to every one else that there was nothing either for medicine or surgery to do in reference to his leg. This visit, therefore, in its medical aspect, has been simply a pretence. We do not for a moment accuse the high and simple-minded hero of being any party thereto; but, as many persons imagine, he has been made use of by others—has been what the French call *exploité*—in the business. If all we have heard be true in reference to the offers made, directly and indirectly, by various medical men, of their services (uncalled for and unnecessary) to Garibaldi, our profession will not shine overmuch in the General's eyes, or in the eyes of any of those whose guest he has been. We ask the question again: What was there for surgery to do in his case? What single thing has surgery actually done for Garibaldi since he came to England? Common sense must have convinced all reasonable men that Garibaldi's proposed "progress" through England would have been simply ridiculous; and that his cup of honour was filled to overflowing in London. But we are sorry to say that we believe there are very few people in the country who are convinced that his state of health unfitted him for going through the anticipated fatigue. As we last week said, English surgery has not been happy in its dealings with Garibaldi. We cannot but feel that Garibaldi has been made use of by the profession, rather than the profession by Garibaldi.

THE army authorities have been advertising during the past week for contracts for lemon-juice, knives and forks, blacking, groceries, rape and other oils, and tin mess-cans; and this week they advertise for doctors to do "temporary service". Any gentleman qualified to practise medicine and surgery under the Medical Act may apply (if he like) to the Director-General—"army assistant-surgeons being required." Pay to be at the rate of ten shillings per day, and allowances equal to those of a staff assistant-surgeon. No one over forty years of age need apply. We have only space this week to make this remark upon the advertisement: that any gentleman who accepts office under the above terms will assist the Director-General in seriously injuring the position of the army medical officers, and will also aid in dragging down

his profession one degree lower than it at present occupies in the social scale. We shall take an early opportunity of asking who are they who represent our profession at head quarters, and under whose management it is that things have been brought to such a pass as this?

THE position so often assumed in this JOURNAL, that the King and Queen's College of Physicians of Ireland had no right to grant the degree or title of Doctor of Medicine, has received its full justification in the judgment of the Master of the Rolls. On the 26th instant, his Honour decided that the College had no right to grant the degree of M.D.

KING'S COLLEGE has at last determined—taught by experience and the necessity of the case—to act wisely; viz., to elect its assistant-physicians and assistant-surgeons for life, instead, as of late, for a short term of years.

OUR Medical Council has decided to admit reporters to its sittings. We, therefore, give a summary of the debates and doings of that body up to the time of going to press. The first day's meeting was occupied in deciding the question of the admission of reporters. The profession will, no doubt, reap occasional amusement, if not advantage, from a perusal of the Council's discussions. It certainly has a right to expect something for its money. As each day's sitting costs the profession about £120, and as more than one sitting has been devoted, at different times, to the settlement of the reporting question, we may safely say, that the decision has cost us at least £250. We hope it will turn out that we have not bought the article of publicity at too heavy a cost in the present instance. We trust that we shall be pardoned for taking occasionally a mercantile view of the Council's labours; but it is certainly well to remind our "Friends in Council" that their minutes are golden ones. Eleven or twelve shillings is, we believe, the cost of every minute spent in Council—a fact which will, we trust, not be lost upon the speakers there.

IF Miss Garrett fail in her application to the College of Physicians, she can, it appears from the following, obtain a degree on the other side of the Atlantic:

"*A Female Medical College.* The Legislature of the State of New York has passed an Act authorising the New York Infirmary for Women to confer the degree of M.D. This institution is under the charge of Miss Blackwell. The New York Infirmary has thus far done nothing in education except to train nurses. It is now the purpose to organise a systematic course of medical instruction, and give diplomas. The course of instruction will be the same as in other colleges. The faculty is not yet chosen, but it is designed to select the lecturers from the best class in the profession."

A VERY remarkable fact was mentioned in the House of Commons by Major O'Reilly, when treating of the comparative expenses of the French and English armies. He showed that, as a rule, the expenditure per soldier in the French army was greatly less—on an average, about one-half less—than in the English army. But he found that, in one particular item, the expenditure in both armies was about equal; and that was in the medical department. Have we not here a clue to the notorious discontent existing in this department in our army? Does it not indicate that niggardness and cutting down go on in this department in a way unknown in other departments.

"Regimental pay and allowances for food cost in England £41:15 per man, and in France £20. The French soldier was as well clothed as the English; but, while the cost of the former was only £2:2:6, the latter cost £4:6. Martial law in England cost 6s. per man, and in France only 2s. 6d. Stores cost in the French army £1:10 per man, in the English army about £8:10. Small arms in England cost £1:6, and in France 7s. 2d.; gunpowder, £1:8 and 16s. French military education was quite equal to ours; and yet the cost there was 6s., as against £1:4 here."

A long list of this kind is given; and in all items the marked difference prevails, except in the one referred to.

"But the cost of medical attendance was more nearly alike, being £1:16 in the English army, and £1:10 in the French."

Perhaps some of our army brethren can give us an explanation of what seems to us a very remarkable fact, when tried by the light of the universal discontent prevailing in the medical department of the army.

WE recommend the following extract from a leading article of the *Times*, to the consideration of those many medical gentlemen who are busy in supplying the working classes with medical advice gratis. The statement of the *Times* is one which we have repeated again and again. Perhaps, from the mouth of the great popular expounder, it may receive the attention it deserves.

"But one thing is certain. The working classes of this metropolis spend in stimulants of one sort or another, not only to recruit their strength, but to enliven the idle hour, an immense aggregate, sufficient to maintain on the voluntary principle all the institutions for religion, for education, for charity, for the promotion of art and science, and even for more costly material improvements, in this metropolis."

From the last report of the Cotswold Village Hospital, we learn that thirty-eight patients were treated in it during the past year. And that of £96 received during the year, £23 were paid by the patients. Amongst the items of expenditure, we note no charge for medicines. The whole expenses of the establishment for the year were £97. Again, we must ask, why should the medical officer do all this business of

society without pay? We see his name amongst the list of subscribers. Why should he, after performing his duty as a generous member of society, also do the work of society?

MR. GAMGEE of Birmingham, on the 20th instant, presented to the Academy of Medicine an account of a case of operation for ovariotomy which he had performed a few days before at Paris. He also presented the multilocular cyst which he had extracted.

Professor Boeckel of Strasburg relates a case of thyroidean laryngotomy, which he lately performed, in order to remove a number of polypoid vegetations situated behind in the glottis in a young girl. He turned back the pieces of the thyroid cartilages, "like opening a book", and in this way readily removed them. The wound was cauterised with nitrate of mercury. The tissues slowly healed; and the young girl was sent back to the country "perfectly cured", to all appearance; the fits of suffocation to which she had been previously subject having entirely vanished. Her voice, however, was completely gone. Some time after this, she died of a disease of which M. Boeckel could get no account. By this method of operating, the polypous growths may be wholly removed and destroyed, he said. "Of course, thereby the voice is destroyed; but better to lose the voice than life."

Professor Tardieu, in his medico-legal report on the famous case of M. Armand, says that the only signs of injury found on the man Roux, three hours after he was discovered, were the deep burns which had been made on his arms and the calves of his legs, "to bring him back to life". He was conveyed to the hospital, to be cured of these burns; and there the wounds became inflamed, so that for a time his life was in danger.

Rooms are to be established in all the Parisian hospitals, wherein the patients who are not confined to bed can meet and talk and amuse themselves—an example well worthy of being followed in our own hospitals.

NEW CURE FOR SMALL-POX. Dr. Lord of New York, whether in jest or earnest we know not, writes as follows: "In connection with the use of *sarracenia purpurea* in variola, I would call attention to a statement, that a great discovery is reported to have been recently made by a surgeon in the English army in China, in the way of an effectual cure for small-pox. The mode of treatment is as follows. When the fever is at its height, and just before the eruption appears, the chest is rubbed with croton oil and tartar emetic ointment. This causes the whole of the eruption to appear on that part of the body, to the relief of the rest. It also secures a full and complete eruption, and thus prevents the disease from attacking the internal organs. This is said to be now the established mode of treatment in the English army in China, by general orders, and is regarded as a perfect cure."