

THE LANCET.

LONDON: SATURDAY, JULY 18, 1885.

OUR public men seem determined to show that if they have little power to mitigate the deep economic distress of the country, they have great ability in multiplying its pauperism and in removing the safeguards which keep men from it. The demoralising effect of the experiment of trying to govern the country by a minority is painfully apparent in the course which is being taken in various questions, but in none more strikingly than in that with reference to medical relief and disqualification. The Conservative Government does almost exactly the same as the Liberal Government, and sometimes exceeds it—out-Herods Herod. At present no person in a city or borough who within twelve months has received parochial relief or alms can vote. We are threatened with a Bill to make the receipt of medical relief no bar to the exercise of political privilege. This Bill is introduced, not by a Radical below the gangway, but by the Conservative Government. Henceforth a pauper is to be as good as any other man, and something better. That is, he is to be the favoured *protégé* of the State, and yet to exercise full political privileges except that of voting for the guardians who kindly make his allowance. We have already guarded ourselves against possible misconstruction on this question by expressing the deepest sympathy with the poor, and the greatest respect for those who, though poor, contrive to maintain their independence. The more their poverty, the more their credit; and so long as the humblest labourer contrives to maintain himself and his family by his own and their labour in sickness and in health we think he is entitled to political privileges. He may not be very wise or well informed, but he is nobly struggling with the problem of existence, and doing well under difficult circumstances. He has something to teach even a wealthy nation—namely, to live within its resources; and his views are entitled to expression and representation, even if they are wrong. But to make the pauper and the independent labourer alike is not good for either. It is not good for the pauper because it removes an inducement for him to escape from the disabilities of pauperism, and to put himself on the footing of an independent working-man. It is not good for the independent workman, for it suggests to him that he will be of equal account in the State whether he depends on himself or falls helplessly into the arms of the State. We do not see where this is to end. If the out-door pauper is to be a voter, why not the in-door? The theory at the root of this novel legislation is that pauperism is a misfortune; whether a man be an in-door or out-door pauper is a mere question of accident or of degree. Hitherto we have been accustomed to think that, with many honourable and painful exceptions, pauperism was, whether a misfortune or not, often a discredit, and not unfrequently the consequence of a man's own faults. Be this as it may, we want to know how men who are unable to manage their own affairs are going to help to manage the affairs of the country. Our contention is that nowadays, with a little thrift and

sobriety, even agricultural labourers can have their sick clubs and be independent of the parish for medical relief, and that the legislation with which we are threatened removes a great inducement to men to exercise this slight thrift and sobriety. We complain that, just at the moment when the labouring classes need a strong reminder by the State that they should cultivate providence in medical matters, the State is not going to give this reminder, but actually to aim a blow at the sounder notions which are springing up everywhere and most beneficially in the minds of the working classes. We protest against such miserable legislation as this, whether promoted by Liberals or Conservatives. It is *ad captandum* legislation, and not likely to do any good. It is not legislation on the lines that have made us as a nation what we are. It is pauperising legislation. And the least reflecting man must ask himself where it is going to end. If education, and medicine, and food are to be given to men without loss of political status, we shall be apt to become a nation of paupers, in which every man relies upon the State in sickness and in health, instead of relying on himself. The medical profession has deep reason to be dissatisfied with the Government for its Medical Relief Disqualification Bill. We are glad that this demoralising measure is to be opposed by Mr. COURTNEY, Mr. CLARE READ, and others. We entreat the support of members on all sides of the House who think more of the people than they do of the votes of the vulgar.

THE medical profession, from its numerous connexions with science and practice of other kinds, demands of its members almost more than any other calling a mind habituated to view any subject or question with which it has to deal in a continuous and comprehensive manner. It necessarily follows that the technical studies involved in it must each be cultivated within the bounds of reasonable time, in its length, breadth, and depth, its practice and theory, and that the student's intellect, in order to do this, must have gained expansion and agility by a habit of mental application acquired in the stages of general preliminary instruction. The foregoing remarks are only in accord with received ideas of thoroughness in education. They will be endorsed, we do not doubt, by the experience of every practitioner. They may also be said to summarise the *rationale* of a brochure by Mr. LAFFAN of Cashel, on the subject of medical training. This gentleman complains, not without reason, that there are grave shortcomings in our present system of secondary education. It is in many schools too unequal, and is overweighted at the classical end. He advises that more time should be given to mathematics, English, physics, and modern languages, and especially that examinations and cramming should be largely dispensed with in favour of more moderate measures and tests which would train and bring out rather the culture average of the many than the proficiency of a brilliant few. The influence of such arrangements on candidates for the medical profession, he expects would be such as to make the passing of such a preliminary examination as that of the London Degree in Medicine, an object requiring but little additional or special effort. This level he would fix as one to be arrived at by all students before admission to medical study. A degree in Arts taken at a

University, or satisfactory proof of careful study directed on the same lines at a school during three or four years, would necessarily cover the necessity for a special entrance examination. With these recommendations we heartily agree. Nothing is more important than that the intending medical student should approach the proper studies of his calling at an age and at a stage of thought when his faculties have been consolidated by pressure of work and are able to grapple earnestly and hopefully with that body of knowledge on which alone he must rely for success in after-life. Much would be gained, we believe, in the actual result of medical work, if the age at which the professional curriculum should begin were fixed at twenty or twenty-one years. The time previously spent in arts and physical science would be by no means wasted. With respect to the qualifying entrance examination itself, an innovation for the relief of pressure might be very suitably introduced by making it possible for candidates to pass in the preliminary subjects on two separate occasions, each implying equal, or nearly equal, sections of study. Thoroughness and depth might thus be gained without contraction of surface; and it would be fairly possible to raise the standard of marks and of implied proficiency required for even the London degree above its present rather low level. As we go on to the curriculum of medical study itself other considerations present themselves. We need hardly fear that in colleges or hospitals of established reputation the theory of our art will suffer serious damage from neglect in teaching. There is plenty of theory, sometimes too much; but the practical side, from want of time or material for instruction, or from the student's thirst for honours, is often apt to sink out of sight. In no department of his work can the medical student afford to be unpractical, and least of all in acquainting himself with the actual details of medical and surgical treatment. As a means of fortifying him in his grasp of these essentials, Mr. LAFFAN and others with him have suggested a revival of the system of apprenticeship with a practitioner. They would have the apprentice form this early connexion with his future work in the year or so immediately preceding his entrance on systematic medical study. Compounding drugs and minor practice of different kinds would constitute the work of this period, during which a steady habit of life would also be formed, and the ice broken for future progress by elementary readings in anatomy, pharmacy, or other subjects. The plan might prove practically successful if committed to conscientious hands. It is, however, we think, more comprehensive than at first sight appears, and is capable of greater development than it would attain to if simply revived on the old basis without some definite regulation as to kind and quantity of work implied by the process of initiation. The apprentice in medicine is not like a trade apprentice. His learning facilities are not equal. His insight into practice must in many cases depend on the wish of patients quite as much as on that of his professional master. If the latter were a man of method, principle, and scientific training, with some dispensary or hospital practice, his pupil would probably have full compensation for the time devoted to this informal introduction to his future duties. In other cases again, and these not quite exceptional, he would have little exercise for his energies beyond the superficial study and manipulation of a somewhat limited stock of drugs, and

of this work he might possibly have more than enough. But, further, we may doubt whether this period of initiation would not be better used by following out the same line of teaching within the walls of a medical school. He might or might not be resident at the school. In either case, if a willing pupil, he need not lack the opportunity of insight. We do not speak thus in the interest of any hospital or hospitals, in London or the provinces. We quite agree with Mr. LAFFAN that all available provincial means of instruction would have to be similarly utilised.

THE report of the French Commission—MM. BROUARDEL, CHARRIN, and ALBARRAN—upon Dr. FERRAN'S method of cholera vaccination is in great part published in the current number of our contemporary, *Le Progrès Médical*, and it certainly goes far to discredit the whole proceedings. At the outset of their inquiry the Commissioners were met by the refusal of Dr. FERRAN to demonstrate the methods of attenuation of the virus, on the ground that he had nothing to gain by so doing. Nor would he permit the Commissioners to examine the vaccinal fluid, except in his laboratory. He proposed that they should prepare a cultivation of comma bacilli and hand it over to him in a sealed box, and that in three days he would ask them to witness vaccinations from the products of these cultures. The Commissioners urged that such a proceeding was contrary to the practice of any scientific commission, and added that Dr. FERRAN was assuming a terrible responsibility in declining to divulge his methods. The members felt that their duty had ended, but obtained permission in their private capacity to see the laboratory and materials. The former is very ill supplied with the apparatus required for research: e.g., no staining reagents are used at all; and two microscopes, with powers of from 700 to 800 diameters, and without any special means of illumination, appear to have been the only instruments whereby Dr. FERRAN "discovered" the spores, muriform bodies, and other forms which he declares to be stages in the life history of the cholera organism, and upon which he renamed it "peronospora." They were shown some of these alleged spores, and found that Dr. FERRAN had somewhat altered his original views; but they could not obtain a sight of the "muriform bodies," only a promise to show them in five or six days. In fact all they saw "was not new, and everything that was new we did not see." They then inquired about the experiments, and were surprised not to see any in progress. Dr. FERRAN said that he had completed the scientific part of his work, and was now only occupied with the practical part—namely, vaccination. The statements he made about the effects of inoculation of guinea-pigs seemed to them to point to septicæmia and not cholera, for characteristic choleraic symptoms were wanting. They were present at the vaccination of about twenty Sisters of Charity, and they describe the proceeding as one in which there is a notable absence of antiseptic precautions, and the effects as not exhibiting anything in common with cholera. They then proceeded to investigate the statistical results, which they find untrustworthy as regards the actual general mortality, whilst those special to the inoculation series are as yet unpublished. Again, whereas at first the vaccination was performed *gratis*, a fee is now demanded from most of the

applicants, ranging from five francs to twelve francs and a half—a fact which may influence the statistics, as the very poor will naturally be excluded from the list of the inoculated. Unable, then, to test the value of the processes employed by Dr. FERRAN or to obtain the attenuated virus; finding that his views on the morphology of the bacillus and other points have undergone changes; that his laboratory is incompletely equipped for research; that inoculations in animals and man produce no choleraic symptoms; and that no means exist for getting at the truth about statistics,—the members of this Commission felt justified in concluding that Dr. FERRAN has been far too hasty in his declaration of the efficacy of his method, and in abandoning scientific study and experiment for the practical application of incompletely confirmed theories. There is no sufficient proof that these inoculations have any prophylactic value; and it is regrettable that the great doctrine of the attenuation of virus which we owe to PASTEUR should be compromised by such ill-judged and misdirected enthusiasm. Advices from Spain state that Dr. FERRAN has protested against these strictures, and that he was never opposed to any inquiry into the merits of his system; moreover, that he has inoculated more than 20,000 persons free of charge. It is also said that Dr. BROUARDEL “adopted anything but a conciliatory attitude towards his Spanish colleague.” No doubt we shall witness a prolonged and probably a fruitless controversy upon this question, the direct outcome of the bacillary doctrine of the disease. That doctrine, as our readers well know, is in itself still a matter of dispute; but even if it be true, it by no means follows that Dr. FERRAN has not deluded himself in the extension he has given to it. Meanwhile the grim reality remains in the persistence of the epidemic, with its increasing roll of victims.

DR. LEWIS STIMSON has published in the *Medical News* a valuable paper which he recently read at a meeting of the New York Surgical Society, in which he discusses the mode of production, the signs and the appropriate treatment, of rupture of large bloodvessels in the axilla in connexion with dislocation of the shoulder-joint. The cases on which the paper is founded number forty-four, and include all he could find accurately recorded. They show that rupture of large vessels may be caused by the original injury of the dislocation, and before any attempt at reduction has been made. Possibly some of the cases in which the symptoms of ruptured artery have supervened upon reduction of a dislocation have been really of this nature, the displaced bone having by compression prevented the escape of blood from the torn vessel. However this may be, the more frequent cause has been the reduction of the dislocation. In a few of these cases a booted heel has been thrust into the axilla; many of them have been cases of old dislocations, in which the vessels have become adherent to the bone in its false position, and have been torn across in replacing it. Unquestionably atheroma renders the vessels more liable to rupture from violence of this kind, and the statistics show that age has a marked influence; more than two-thirds of the cases were over forty years of age, and many of the patients were of an advanced age. The most practical lesson to be enforced by considerations of the mode of production of the injury is that the accident is most likely to

arise from extreme abduction and elevation of the limb, which forces the head down towards the axilla, and may stretch some vessel over its convexity until it tears. The modes of reduction of dislocations which do not occasion this abduction are clearly to be preferred, and this is a special merit in KOCHER'S plan. It is needless to add that it is only by extreme carelessness that the booted foot is ever placed in the axilla.

The next point to notice is that in at least two cases the axillary vein has been the sole vessel ruptured; in two other cases the axillary artery and vein have both been torn; but in the majority of cases the injury has been limited to the axillary artery or one of its branches. This last is a very important point, for it modifies the symptoms and may mislead in the diagnosis. When the main artery is ruptured, the pulse in the radial artery is lost altogether, or but faintly felt; when, however, the injury is inflicted upon one of the branches of the axillary artery—and it is most often the subscapular or the posterior circumflex,—the radial pulse is not lost, and, indeed, may be as strong as on the opposite side.

The diagnosis of the condition rests primarily upon the recognition of a rapidly produced swelling filling out the axilla, coming on very quickly after the occurrence of a dislocation or an attempt at its reduction, and independently of inflammation. A pulsation or a thrill, more or less distinct, may be present, but is not to be relied upon for diagnosis. Where the radial pulse is lost or greatly weakened, an injury to the main vessel may be inferred; where, on the other hand, the pulse in the artery beyond the swelling is not thus markedly affected, an injury to the vein, or more probably a tear in a large arterial branch, is to be diagnosed. There is no means at present known of diagnosing with certainty in all cases between these conditions, but the dissection of cases shows conclusively that the arteries are more liable to rupture than the veins.

The most important point, however, is the line of treatment to be followed in these cases. The great surgical rule of applying a ligature at once to both ends of a torn artery has been put into practice in two cases at least, and at a later stage in five other cases, and in all with a fatal result, so that Dr. STIMSON decides against this plan of treatment. The operation may prove to be one of very considerable difficulty, and a good deal of blood may be lost in its execution; to lay open, too, a cavity filled with loose blood-clot, and possibly communicating with the shoulder-joint, exposes the patient to great risk of blood-poisoning—a risk, however, which can be successfully guarded against by a proper use of our present means. If this treatment be rejected, what can be substituted for it? The surgeon may temporise, he may tie the subclavian artery, or he may amputate the limb at the shoulder-joint. The last is such an extreme measure that everyone would shrink from resorting to it until its absolute necessity had been proved; this happily is not yet the case. The subclavian artery has been ligatured in fourteen cases: in five the patients recovered, in eight death ensued, and in one the result is unknown. Out of twenty cases in which non-operative treatment has been adopted throughout, there have been six cases of recovery and fourteen deaths, and in other cases an operation—ligature

or amputation—has been subsequently adopted. The most important outcome of these statistics is that recovery may occur without operation, a fact quite in harmony with the results of the subcutaneous injury of arteries in other situations. The best practice, therefore, in any case of this kind, is first of all to try to attempt a cure by these natural means: The limb should be fixed to the side, and a pad of cotton-wool should be firmly bandaged over the shoulder and axilla; outside all a large ice-bag may be applied. The progress of the case must then be carefully watched. If the swelling do not increase, and the circulation be maintained in the arm and hand, the treatment should be continued. If, however, the hæmorrhage increase, and the swelling become more tense and threaten to burst, it should at once be discontinued, and a ligature applied to the subclavian artery. If there be signs of gangrene in the limb, it would be better to amputate at the shoulder-joint. Surgeons will no doubt always feel tempted to apply a ligature to the wounded vessel, and follow out the well-attested surgical rule; at present, however, statistics are entirely opposed to this line of practice, and ligature of the subclavian trunk appears to be the better course to follow where an operation is required.

Annotations.

“*Ne quid nimis.*”

THE CHOLERA IN SPAIN.

THE course which the outbreak of cholera in Spain is now following was certainly not anticipated when it first became evident that the disease was about to assume an epidemic form; indeed, it was generally feared that as the summer weather progressed the outbreak would become more widely diffused, both as regards the area of incidence and the numbers attacked. But within the past week a considerable change has taken place, and this without any diminution in the temperature. Towards the close of last week the daily number of attacks had reached between 1500 and 1600, and no less than some 650 of them terminated fatally. Since then, although there has been some increase in special localities, yet throughout the affected districts generally there has been a steady and substantial diminution, there having been a fall of nearly 400 cases and some 70 to 80 deaths per diem. The constantly recurring daily mortality from cholera in Madrid was also expected soon to develop larger proportions, and the fate of the capital has been watched with extreme anxiety; but, so far, the extension which was so much feared has not been brought about, although there has as yet been no diminution in the daily number of attacks and deaths in the city itself. Cholera often moves forward by sudden bounds, which are interrupted by brief intermissions, but the experience derived from the Spanish epidemic during the past week is rather that of a sustained and continuing diminution in severity, and this in face of the fact that the present is the season which is most favourable to an extension of the epidemic. The circumstance is so unusual that we feel it would be unwise as yet to draw any inference from it as to the course of the outbreak during the coming month. The worst anticipations may be still be realised; but there is now at least reason to hope that the experience of the past six days may indicate

that the epidemic is about to run an unusual course, and that it may continue to subside even during such a month as August.

The following is extracted from a letter from Dr. Sereñana to the *Independencia Médica* of Barcelona of July 11th:—

“The epidemic is increasing. From five o'clock yesterday afternoon to the same hour to-day there have been in the capital 200 deaths. The panic is great and the streets of Valencia deserted. The medical profession has given proofs of its humanity and its love of science; confident of the efficacy of the prophylactic remedy of our immortal Ferrán, it has submitted, almost without exception, to inoculation of the microbe—not once only, but twice, and in some cases three times, which we consider affords a complete protection. There scarcely remains a single doctor in Valencia who has not been inoculated, and Dr. Peset, who, without being opposed to the remedy, did not wish to be operated on himself, died a few days ago of cholera.....The consulting-room laboratory of Dr. Ferrán, situated in one of the new streets of Valencia, is becoming a perfect Babel. It is open every day from 8 A.M. to 11 P.M., and two relays of three doctors at a time scarcely lay down their injecting syringes, so continually do people keep pouring into the inoculation-room.”

He then describes the scene at another place, where Ferrán's agents went to inoculate the inhabitants:—

“More than 400 persons of both sexes assembled in the spacious hall (of the school), with as many more in the street, all wishing to have two centimetres of anti-cholera preparation injected. The confusion was so great that it became necessary to call in the aid of the police to keep order amongst those who were to be operated on, as they kept on disputing with one another as to who should be first inoculated. From half-past three to seven we performed 674 inoculations. The men presented themselves with bared arms, and the women had taken the precaution of cutting a hole in each sleeve of their dress.”

MR. ERICHSEN AND THE UNIVERSITIES OF EDINBURGH AND ST. ANDREWS.

ONE or two preliminary meetings of graduates favourable to the election of Mr. Erichsen have been held in London. These included Sir Risdon Bennett, Dr. Lauder Brunton, Dr. George Harley, Dr. Ogilvy, Mr. Raleigh, Dr. Farquharson, Dr. Glover, Dr. Potter, &c. There is a very general feeling that the University seat should be given to a representative of science, and especially of medical science, as that science is the one in which the University has sent forth her most distinguished sons for generations. No doubt Mr. Erichsen's claim would have been much stronger had he had more intimate relations with the University; but no candidate has perfect claims; and we can imagine few things better for the University, for the medical profession, and for medical education in England, than that one of the foremost teachers and professors of England should, by election to Parliament, be compelled to study the Scotch system of university teaching. Mr. Erichsen has been in Scotland this week, and has had the opportunity of conferring with his supporters in Edinburgh. We have received numerous letters on the subject of the election and of Mr. Erichsen's candidature, some of them by medical graduates, who, respecting Mr. Erichsen greatly, cannot lay aside their strong political proclivities. Perhaps these gentlemen will reconsider their views. They cannot suspect Mr. Erichsen of being likely to refuse to conserve anything that is good, and they must admit that his presence in the new House of Commons will be a better omen for the public and the new Parliament than any number of respectable lawyers, who abound most painfully in both Houses.