

In a paper on the subject published in Virchow's *Archiv*, vol. lxxviii, part I (*Allgemeine Medicin. Central-Zeitung*, August 2), he states that, having given it to seventy-five patients, he has arrived at the conclusion that it is a remedy which he can confidently recommend not only in phthical sweating, but also in that which attends other diseased conditions, such as acute articular rheumatism and convalescence from trichinosis. Among the 75 patients were 15 cases of more or less recent cheesy pneumonia, of whom all had more or less fever with night-sweats; 48 of distinct pulmonary phthisis, of whom 42 had hectic; 1 of acute articular rheumatism with high fever, 2 of ulcerative endocarditis, and 2 of trichinosis. In the first 15 patients, the sweating was in 6 completely arrested, in 7 much diminished; in 2 there was no change. In the 48 phthical cases, the medicine had no effect in 5, in 21 the sweating was remarkably abated, and in 22 it disappeared entirely. Several of the patients in whom the atropine failed were near death when it was given. In the eight cases of rheumatism, the atropia gave permanent relief in 5, in 2 it produced a marked diminution of the sweats, in 1 it was useless. In one of the cases of ulcerative endocarditis, it proved useful; not so in the other. In the two cases of trichinosis, the cessation of the acute stage of the disease and of the hectic fever attending it was followed, without any rise of temperature, by profuse night-sweats. Sulphate of atropia, in doses of a *milligramme* (.015 grain), was given two hours before the expected access of sweating daily, for five days in succession in one case, and for three days in the other; the result being, that the sweats entirely disappeared from the first evening when it was given. In one of the cases of rheumatism, in a man aged 32, nearly all the large joints of the upper and lower limbs had been severely affected during five days; the patient was covered with sudamina, and, when seen by Dr. Fräntzel, was bathed in sweat. A *milligramme* of sulphate of atropia was given immediately; and very soon there was an abatement of the sweating, which in two hours disappeared. It returned in the night, but ceased the next forenoon after the administration of a similar dose. The atropia was thenceforth given regularly night and morning, with the effect of completely preventing the sweating. The fever lasted fourteen days. In another case of acute articular rheumatism, atropia was given, first in doses of one, then of two *milligrammes*, with a similar result; and it is remarked that, on two days in the course of the disease on which it was omitted, the sweating returned. The atropia was given according to the following formula: Sulphate of atropia, 6 *milligrammes* (9-100ths of a grain); extract of gentian, sufficient to make ten pills. Dr. Fräntzel has never given larger doses than 1.2 *milligrammes* (a little less than one-fiftieth of a grain), from fear of producing toxic symptoms. Even doses of 0.6 and 1.2 *milligrammes*, though unattended with any mischief, have produced slight symptoms of poisoning. In not a few cases, after taking the medicine, the patients felt itching in the neck, which, however, disappeared in one or two hours; the pupils not infrequently acted slowly, and were sometimes dilated; and in some cases there were *muscæ volitantes*. The atropia had to be stopped in four cases on account of diarrhoea; that this was due to the medicine, was proved by the fact that it ceased when the atropia was discontinued, and reappeared when it was resumed. What the physiological action of atropia is in arresting perspiration, Dr. Fräntzel says it is difficult to determine. He is, however, inclined to believe that the profuse sweats arise from relaxation of the walls of the vessels supplied to the sudoriparous glands; and he remarks that the researches of Meuriot, Fleming, Jones, Hayden, and Brown-Séguard, have shown that atropia contracts the smallest vessels. To this are to be ascribed both the diminution of sweat and the dryness of the mouth and skin observed in cases of poisoning with belladonna and with atropia.

**BROMIDE OF POTASSIUM IN CHOLERA.**—Dr. William Pepper (*Philadelphia Medical Times*, July 12th, 1873) recommends the use of bromide of potassium in the collapse of cholera. He advises it given in doses of forty-five grains in three ounces of water every twenty minutes, by mouth or injection. This drug, he thinks, has a wonderful power in quieting irritation of the sympathetic nerve, which irritation he regards as the source of the symptoms of collapse.

**ATROPIA IN CHOLERA.**—Dr. Hodgen (*St. Louis Medical Journal*) states a plan which he had used in treating cholera in 1866. He was so encouraged by its results, as to present it to the St. Louis Medical Society as worthy of their consideration. He injected subcutaneously, during the stage of collapse, from a sixtieth to a thirtieth of a grain of sulphate of atropia. In addition, he injected salt water into the bowels. The action of atropia in paralysing the peripheral extremities of the spinal nerves, in stimulating the contraction of the arterioles, and in increasing the beats of the heart, is well known.

BRITISH MEDICAL ASSOCIATION:  
SUBSCRIPTIONS FOR 1873.

SUBSCRIPTIONS to the Association for 1873 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 37, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, NOVEMBER 29TH, 1873.

A LIBERAL EDUCATION.

THE addresses delivered by Mr. Brudenell Carter and Mr. Henry Morris, at the opening of their respective medical schools, have received the well merited honour of a reprint, and may be commended to the notice of the enlarged circle of readers. The training of the mind in the study of medicine is, in effect, the subject of both of them. That is a subject which affords to an accomplished rhetorician ample scope for his powers, and we may say at once that, in so far as these addresses are hortatory, they will excite deserved admiration and approval. No sounder advice can be given to a student of medicine than to be told to cultivate the faculty of observation and to discriminate carefully between facts and inferences; to learn to suspend his judgment; to maintain a grasp of principles, so as apply them in any given case; and, in general, to emancipate himself from the dominion of rule of thumb. In this spirit, students are to bring their intellectual powers to bear on the subject-matter of their profession; and it is reassuring to find that Mr. Carter and Mr. Morris were able to congratulate their audiences on their ability, acquired from preliminary studies, to approach the study of medicine in the scientific spirit. Thanks to "a liberal education," says Mr. Carter, you come to the study of medicine with well disciplined minds. It was a happy day for medicine, thinks Mr. Morris, when "a mixed classical and mathematical education" was made the portal to the profession.

In using the expression "a liberal education," Mr. Carter no doubt had in his mind those modernised school studies with which the name has recently come to be associated. After much controversy and much eloquent declamation, we have at length become more or less familiar with the notion that a liberal education is something more than the "mixed classical and mathematical" training of former days. We have even got the length of a series of science primers adapted for the discipline of juvenile intellects. But we doubt very much if the time has already come to congratulate the new generation of students on being in possession of the full fruits of those reformed school duties. Mr. Carter, indeed, did not pass from the subject without expressing politely certain misgivings that he felt as to those well disciplined faculties that were to be applied to the study of medicine. Let students examine themselves, and if, perchance, they were still somewhat deficient in the faculty—for example, of accurate observation—let them make use of the opportunities that were still open to them, and cultivate that faculty in their studies of botany and osteology, and even in the study of diseases of the skin. That is no doubt as good advice as an orator at the opening of the medical session could give.

By means of those preliminary studies that are in this country still retained in the medical curriculum, a student may acquire that scientific training of his faculties which a too exclusive devotion to the humanities had left him unprovided with, and he may consider himself fortunate if he profit by this opportunity. Nay, a student may still be called fortunate if, at the end of all his studies, skin-diseases and all the rest, he have acquired even a modicum of those desirable qualities of the scientific mind which Mr. Carter supposes him to have started with. With a very large number of students, even this consummation is never reached; the shortest road is taken to acquire so much pro-

professional skill, and rule of thumb becomes the ready substitute for a basis of scientific principles. What else is possible for a student who, in the course of three or four years, has to bring into exercise faculties hitherto unused, and at the same time to acquire and hold intelligently a vast complexity of technical details? When a youth presents himself for the study of medicine, it usually happens that he is fresh from a protracted course of Greek and Latin vocables, and from the manipulation of those still more terrible abstractions *x* and *y*. The objective characters of things are strange to him, and the faculty of scientific observation has not only to be cultivated, but it has to be awakened. Even the elementary problems of chemistry and physiology are sufficient to preoccupy him for an entire session, while such principles as form the subject, for example, of Dr. Odling's *Animal Chemistry*—principles that are in their nature introductory to the study of medicine—the time fails him to attain to. We observe that Mr. Morris is of opinion that a student who has been brought up on the mixed classical and mathematical system is in a position to learn in six weeks all the natural science that its advocates demand. That is certainly not so, making all allowance for the rhetorical nature of the remark; and we venture to say that not less than years of leisurely drill in the natural sciences will suffice to make schoolboys quite familiar with their methods and their elementary propositions. There is no need to depreciate the study of the humanities, but at the same time we are not all alike capable of that as a systematic study. The aptitude of some leads them rather towards the study of nature; and, if there be anything in aptitude at all, it is from youths of the latter class that the medical profession comes to be recruited. Art is vastly longer, while life is short; and it may well be made a question of expediency with those who are marked out for the medical profession, whether they should not leave the humanities to take care of themselves, and direct their school studies in such a way that they may approach the study of their profession with some prospect of doing it justice.

#### SURGERY AT THE BAR.

THE remarkable series of lectures by Mr. Callender "On the Treatment of Operation-Wounds," recently published in this JOURNAL, cannot be passed over by us without some words of comment; for, although perhaps no remark of ours is needed to attract to them all the interest they merit from surgeons who are engaged in operative practice, yet they have a bearing, far beyond the technical details of surgery, upon questions of the most vital interest both to the medical profession, to the general public, and to all who are studying the phenomena of life and disease.

We shall, however, speak of them chiefly with regard to the question mooted some time since by Sir J. Simpson, and recently revived by Mr. Erichsen. Mr. Callender's experience comes in most appropriately on the other side, to show that in a large hospital, and in the centre of the largest city in the world, surgery may be as safely and as successfully pursued as in the isolated country cottages which were the ideal of Simpson's fancy. And Mr. W. Stokes's recently published inaugural address confirms Mr. Callender in this particular, referring as it does to a continuous series of thirty-eight amputations, with only two deaths. It is quite open to any one to argue that these excellent results are obtained by virtue of the greater skill and greater care of the surgeons in question; but if this were conceded (and no one would deny the eminent skill of either gentleman), it would be equally fatal to the allegation founded on Simpson's figures, which was, that a morbid quality was generated in the air of a large hospital by the aggregation of the patients, and that this was the cause of a greatly increased mortality. Now, neither Mr. Callender nor Mr. Stokes claims anything in the way of precaution against aggregation of patients (beyond the ordinary hygienic care which is as possible in a large hospital as in a small one), or takes any steps to act upon the air of the hospital. In fact, one of Mr. Callender's main rules is, that the air

shall be as freely admitted to the patient as possible, so that the bed shall be thoroughly ventilated and no smell be perceptible when the clothes are removed from the part operated on. This experience shows, then, that there is no necessary unhealthiness in the air of a hospital, however large; and that, in favourable cases, great operations, if properly conducted and treated, terminate in recovery as often as the formidable nature of the operation itself permits us to expect. Still there is no question, that the results announced by Mr. Callender and Mr. Stokes are very much above the average of success which is obtained by most surgeons in their hospital practice. We have never heard that the accuracy of Simpson's statistics, as far as they related to hospitals, was questioned; in fact, the data were supplied by the hospitals themselves, and they have been accepted as probably a fair representation of the results of average hospital practice. To what shall we attribute the difference? Even if we repudiate Sir J. Simpson's conclusion that there is a necessary contamination of the air of a large hospital, we may fairly admit that accidental contamination is neither improbable, nor in fact unfrequent, and that something might probably be done in the way of saving life (not after operations only) by stricter attention to the well known principles of hospital hygiene on the part of physicians and surgeons. But clearly this cannot account for all, or even much, of the difference. The management of St. Bartholomew's Hospital has not probably changed in any appreciable degree since Sir J. Simpson published the statistics of that institution, showing in 262 amputations of all kinds a mortality of 36.6 per cent. Obviously the nature of the cases must have a very large influence on the result. Mr. Callender's series has been rendered more favourable in this respect by the small number of the more dangerous primary amputations; and it would be interesting to know the particulars of the diseases and injuries for which these amputations were performed. But the great point which is enforced by Mr. Callender's papers, is the extreme importance of personal attention on the part of the surgeon himself to the details which many surgeons pass over as hardly worth their attention, and leave to their dressers or nurses.

In regard to these details, Mr. Callender's lectures will no doubt be carefully studied by our surgical readers, and we can only refer to the originals for a precise account of them. It is sufficient to say that, though ingenious and minutely cautious, Mr. Callender's plans do not (as he is careful to impress on us) even aim at any originality. He uses carbolic acid freely, but is sceptical as to the theory on which Mr. Lister bases his recommendation of it, and takes no such precautions as Mr. Lister declares to be necessary for success in the pursuit of "antiseptic surgery." What he tells us is, in his own words, "not the story of any new plan of treatment, but what we may reasonably expect to accomplish by strictly adhering to the well known principles and practice of surgery." Mr. Callender has, in fact, shown that amputation is less formidable in itself than the statistics of amputation have led us to believe it. His uniform success must, we conceive, be an exceptional circumstance in the experience of any surgeon, however dexterous and cautious; since cases must occur in which it would be wrong to refuse to a patient suffering from serious disease or injury the faint chance of recovery which amputation will afford, and of such cases a large proportion must prove fatal. It is these cases, as we believe, which largely swell the mortality returns of amputation in our large hospitals. And we confess to a very strong impression that a great deal too much has been made of the morbid influence of hospital air. Without denying the reality of that influence, we believe that there are other causes, much more readily detected and much more easily removed, which tend to swell the death-rate of all the cases, and particularly of operations. Mr. Callender has exposed (and, as far as his own practice goes, has effectually corrected) what is, we believe, the most important of these cases; we mean the absence of that personal care of the case, on the part of the physician or surgeon in

nominal charge of it, which is so frequent a defect in our present system. This defect is, no doubt, balanced and even overbalanced by the many advantages of placing our city hospitals under the care of busy private practitioners; and it is to a great extent remediable by care and conscientiousness in the discharge of duties so important; but it is a very prevalent one. We have heard that a celebrated surgeon, now deceased, used hardly ever to enter his wards or to look at his cases after operating upon them; and we have also heard that the results of his hospital practice were not such as corresponded with his wide fame as a surgeon. Had Sir J. Simpson's attention been directed to that hospital, he would have spoken about aggregation, about the vices inherent in the atmosphere of a hospital containing more than a certain number of beds, and about the propriety of shutting up or taking away the staircases, and getting into the wards by the windows. Mr. Callender, on the contrary, would have advised the surgeon to employ the same care on the details of the after-treatment as on those of the operation; not to undertake hospital practice if he had not the time to give to it; but, if he did undertake it, to carry out all its minutiae as far as possible himself, and to have all, at any rate, under his own eye. We leave our readers to judge which advice is most to the purpose. Slovenly nursing, slovenly cleaning, and slovenly dressing, are sure to follow the withdrawal of the master's eye; and these, though not necessarily connected with any hospital arrangements, are, we fear, fruitful sources of failure in hospital practice. Mr. Callender's teaching is as practical and as suggestive of the way in which real improvement is to be found, as the other is theoretical, and, we believe, delusive.

#### THE ELASTIC LIGATURE.

OUR hospital reports contain an account of an interesting operation performed at University College Hospital by Sir Henry Thompson, in which that surgeon used, for the removal of a mammary tumour, the elastic ligature, as recommended by Dr. Dittel of Vienna. The proceeding is one of those which indicate the tendency of modern surgery to endeavour to obtain complete results by bloodless means. In the hands of Dr. Dittel, who has made extensive application of the India-rubber thread, the use of this material as a substitute for the knife has proved very successful; and this proceeding is one which, although of limited application, will doubtless find favour in many cases with surgeons, and no less so with patients.

To the accounts of the operation given by Sir Henry Thompson and our reporter, we have to add a few words on the history of the subject. While to Dr. Dittel is unquestionably due the merit of having made a most ingenious application of the result of an unfortunate accident, and of having called the attention of surgeons to a mode of operation which may prove to be of much value, it would be an error to suppose that he is the first surgeon who has used the elastic ligature in the way recommended by him. More than three years ago, Mr. Henry Lee read a paper before the Royal Medical and Chirurgical Society, in which he described an operation that he had practised for the removal of *nævi* by the use of elastic ligatures (*BRITISH MEDICAL JOURNAL*, vol. ii, 1870, p. 99). And Professor Vanzetti of Padua, in an article in the *Gazzetta Medica Italiana (Provincia Veneta)*, for June 7, while he speaks in complimentary terms of Dr. Dittel, points out that, as long ago as 1862, Dr. Grandesso Silvestri of that city published in the above-named journal an essay on the use of the elastic ligature, in which he recommended its use for the removal of tumours, and described cases of *nævus*, vaginal polypus, and scirrhus of the breast, on which he had thus operated. In a second paper, published in the same Italian journal in 1871, Dr. Silvestri repeats his advocacy of the elastic ligature, and describes additional cases of *nævus*, uterine fibroid, and tumour of the vulva, in which he had used it with success. He was also aware of the fact that it would cut through bone. Dr. Vanzetti further directs attention to Mr. Henry Lee's paper above-mentioned, and

to the fact that, in 1863, M. Richard of Paris, at the suggestion of M. Trousseau, used the elastic ligature in several cases for the removal of pedunculated tumours. Dr. Dittel has since written to Dr. Vanzetti a letter, in which he honourably states that "he has no doubt that the priority of using the elastic ligature belongs to Dr. Grandesso Silvestri; and he has no hesitation in acknowledging this, although he was quite independently led by an accident to his discovery." The use of the elastic ligature has, therefore, already a good amount of evidence in its favour, and it is well deserving the attention of surgeons.

#### PAYMENT FOR RETURNS OF SICKNESS AND DEATH.

WE have already pointed out that, amongst the numberless absurdities, errors, and omissions of the Public Health Act, 1872, was a total omission to provide the medical officers of health with the means of procuring the particulars as to sickness and death in their districts, for the purpose of their own information, and for filling up the returns which they are required to make to the Local Government Board. The omission was altogether inexcusable. It betrayed even ignorance of the fundamental facts of public health administration, and blind neglect of the information furnished to the Minister by the State Medicine Committee of the British Medical and Social Science Associations. The results have been brought out very strongly in our columns. Some registrars refuse to furnish the information; others are willing to give it if paid for it. Sanitary authorities are required to obtain the information for their officers: some are willing to do so, and to pay for it, if it be legal; others are quite unwilling to do so. In this comedy of errors, the Local Government Board are now endeavouring to introduce very partial order, by obtaining from the law-officers of the Crown an opinion whether it is lawful for those sanitary authorities who are willing to pay the registrars (at the rate of 2d. per case returned). We beg to call the attention of medical practitioners to the fact that it is proposed to pay the registrars for their returns, which are mere transcripts of existing official documents.

THE President of the Obstetrical Society has issued cards for a *conversazione* on the evening of December 5th.

THE offices of the Medical Department of the Local Government Board are now being pulled down, and the staff have removed to the new official buildings in the same square as the India Office.

WE desire, although tardily, to tender our warm congratulations to Dr. Lyon Playfair on his appointment to a high position in the Government. Dr. Playfair has been conspicuous for several years in Parliament for his great administrative power and unwearied attention to the least inviting subjects of parliamentary discussion. He will prove a source of strength to any Government. We fear that medical and sanitary interests will greatly miss his independent advocacy in the House.

#### EXCESSIVE MORTALITY FROM MEASLES.

DURING the week ending last Saturday, 130 deaths from measles were registered in London; the highest mortality from the disease which has ever been returned since the beginning of 1840, when the weekly returns of deaths were first published. We remarked a fortnight ago that the epidemic was showing a partiality for the north, east, and south groups of registration districts; such is still the case. Of the 130 deaths, 114 were pretty evenly distributed in those three districts; and the remaining 16 deaths were equally divided between the central and west districts. Children are the special victims of the malady; 121 of the 130 deaths of last week occurred in children under five years of age, whilst the death of only one adult was due to the disease. Notwithstanding the frequency with which measles terminates in bronchitis, it does not appear that any particular tendency of the two diseases to prevail together has at any time been demonstrated. In the present case, the