

tions, and some difference of opinion, these two important things are very difficult to carry out. We have no desire to criticise the authorities; they are alive to the emergency, and are anxious to do what is best; but the system is not yet competent to deal thoroughly with this direful epidemic.

Mr. Lowe's recent speech on female education would have been well timed here. A lady, we may say exceptionally qualified as a suitable student of medicine, applied this term to enter for lectures at Queen's College. The majority of the professors were willing, and even desirous, that consent should be given; but, in deference to various opinions, separate classes were proposed. This, however, though acceptable to many in theory, is clearly impracticable for one student. On the other hand, the advanced proposition of mixed classes seemed to meet with the strongest possible opposition on the part of the students, and was objected to by others also.

The question was considered at a council meeting on Friday last, and the following resolution, proposed by Lord Lichfield, was passed: "That the Council, whilst fully recognising the right of women to occupy any field of employment for which they deem themselves qualified, and desirous to afford any facilities in its power towards the higher education of women, considers that it cannot, under existing arrangements, conveniently admit female students to any of its departments, and is not prepared, at present, to make such alterations as the admission of female students would require."

The matter has excited much interest, and I see to-day (May 20th), a letter in the local press from "a mother," advocating separate classes; there are "resolutions" also, of the students. It begins to remind one of Edinburgh, where one studies University affairs in the daily *Scotsman*. But seriously, it seems to many hard that this application should, almost by the necessity of things, have to be declined; it seems hard that ladies, however willing, however qualified, and, we may add, however much in request, should have to go to Paris, or to Zurich, to be taught. What is the best solution of the difficulty? Who will be the first to cut this Gordian knot?

The great success of our Hospital Saturday, which gave £4,700 in one day, "for the free benefit of the medical charities in Birmingham" was largely due to Mr. Gamgee. We are extremely glad to see that the subscriptions for a testimonial to him amount to upwards of £500; and moreover, a substantial acknowledgment of his valuable services in connection with the Queen's Hospital extension movement, is now ready for his acceptance. It is gratifying to record that his onerous and important public work is not suffered to go unrewarded.

The General Hospital dinner, last month, was a great success. It was to accomplish, and at the same time to celebrate, the paying off of a debt for building, in 1864, when the number of beds was largely increased. The Marquis of Hertford, who presided, spoke ably on behalf of this justly popular Hospital, "one of the best provincial hospitals extant," and headed a subscription list, to which our townsmen have contributed generously, Messrs. Chance & Kenrick offering £200 apiece, and not fewer than twenty other gentlemen £100 each; neither were the medical staff wanting in their contributions. £1,300 were wanted, and rather more than that sum was obtained.

## REPORTS AND ANALYSES

AND

### DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

#### CALVERT'S CARBOLIC VAPORISER.

MESSRS. CALVERT have introduced a vaporiser for the purpose of giving off fumes of carbolic acid when it is desired to employ "aerial disinfection". We have already given reasons for considering this to be a less satisfactory and trustworthy mode of disinfection than the actual application of the substance in solution; and we believe that aerial disinfection is a method on which medical officers are not justified in placing reliance—all official and semi-official directions to the contrary notwithstanding. In hospital wards and sick-rooms, we should consider this to be an especially delusive and objectionable mode of attempting to disinfect; nor do we believe that it is of any use in disinfecting rooms which have been in use by the sick. But, as a good many medical officers cling to the superstition of "fumes" of sulphur and of carbolic acid as agents of disinfection, they may be glad to know of this vaporiser, which is simple, effective, and acts cheaply on a large scale. Copious washings should, however, we think, always be preferred.

#### 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, MAY 31ST, 1873.

#### THE ASSOCIATION AND MEDICAL REFORM.

THE *Lancet* never has been, and, if past experience justifies any prediction as to the future, never can be otherwise than hostile to the British Medical Association. For many long years, it persistently omitted all notice of its meetings and proceedings; it was only when these attracted representative visitors from all parts of the civilised world, from the new as well as the old hemisphere, that the *Lancet* sent a special reporter to attend the meetings, and competed for the earliest publication of the addresses delivered at the annual gatherings of the Association.

The *Lancet* has never aided the Association while fighting the battle, and for a considerable time a very hopeless one it seemed, of medical reform. In the second year of the existence of the Association, an admirable paper was read on the subject, which was largely circulated among the profession. In 1852, a Medical Bill was drafted, on behalf of the Association, by Mr. Hastings, son of our revered founder; several distinguished statesmen and ministers—Sir James Graham in 1844, and again in 1845, Lord John Russell, Sir George Grey, Mr. Walpole, Mr. Cowper—had previously grappled with the subject, and had failed; private members of parliament, amongst them the late Mr. Wakley, had also attempted it, and equally without success. In 1853, Lord Palmerston, in the House of Commons, expressed the hope that the Government might be able to take it up, but without result. At this apparently hopeless conjuncture, when, owing to the inability to reconcile the conflicting interests of the various corporations, members of succeeding governments, alike with private members, had abandoned the task in despair, the Association again came to the rescue. It had appointed a special committee for the express purpose of preparing a Bill to secure uniformity of medical education and qualification throughout the United Kingdom; and on May 17th, 1855, a deputation waited on Sir George Grey to press upon his favourable consideration a measure which was the result of four years' laborious and persevering exertion. Sir Charles Hastings (Chairman of that Committee), Mr. Southam (now President of the Council of the Association), Dr. Sibson, Dr. Lankester, Dr. Webster, were present on that occasion, with several members of parliament; but above all, the deputation was introduced by Mr. Headlam, then, as now, the esteemed and valued advocate of the Bill of the Association. At that time, there were even more licensing bodies than at present; they were twenty-two in number, varying greatly in their requirements; there was then no registration by which those duly qualified to practise could be distinguished from ignorant pretenders. The object of that Bill of the Association was to provide for the establishment of one uniform system of medical examination, for perfect reciprocity of practice founded upon that uniformity, and for an efficient registration. The General Medical Council was to be elected partly by the colleges, partly by the universities, and partly by the whole body of the medical profession. The composition of a *British Pharmacopœia* was also indicated.

This Bill, which was the Bill of the Association, was introduced in

1855. It was again introduced by Mr. Headlam in 1856; but upon the motion to go into committee, was opposed by Sir G. Grey on the liberal, and by Mr. Walpole on the conservative side, and defeated, 116 voting for postponement, and 81 for going into committee. Notwithstanding this check, Mr. Headlam did not give up the struggle, but in 1857 again brought the measure forward; and, despite the opposition of the Government, on July 2nd, 1857, carried the second reading by the very large majority of 147, 225 voting for the Bill of the Association, and only 78 against it; then, as now, the Scottish universities were in strenuous opposition. In consequence of this vote, Mr. Cowper promised to take up the subject; and acknowledged the influence of the Association by writing to Sir C. Hastings on August 1st, 1857, stating his intention of bringing in a Bill in the ensuing session, and requesting an interview.

The present is an opportune period for reminding the profession of these facts; the tradition of success attached to Mr. Headlam and the Association, and the diatribes of irresponsible and inexperienced writers, will not weigh against the acknowledged ability, matured judgment, and ripe experience of Mr. Headlam, coupled with the respect and consideration which he and Sir H. Selwin-Ibbetson enjoy on both sides of the House.

It is also well to bear in mind, in no invidious spirit be it stated, that the *Lancet* in past days, no more than at present, lent the Association a helping hand. On the contrary, then, as now, its connection with impracticable measures only tended to mar the attainment of what was feasible. The Association, however, did succeed. The formation of a Medical Council, reciprocity of practice, a *Register* of the profession, and a *British Pharmacopœia*, objects secured by the Medical Act of 1858, were amongst the objects for which the Association strove, and for the attainment of which it bore down all opposition, even that of the Government of the day.

The present Bill of the Association has been framed with a just regard to the claims and rights of existing bodies: it is the work of men in whom the Association has for several years placed implicit confidence. Year after year have they come before the Association with a detailed report of their proceedings, and year by year have their proceedings been approved and their appointment renewed. The Bill of the Association is an improved edition of all that the Association would joyfully have accepted from the Government in 1870, and of the Bill which was prepared for introduction by Mr. Headlam in the session of 1871, but which he wisely refrained from introducing on account of the *Lancet* Bill being also pressed forward. It was held that rival measures would find no favour in the House of Commons, where the quarrels of doctors are simply held in horror. The field was left clear for the *Lancet* Bill, but it was not again heard of. In 1871, the *Lancet* again showed no sign of life; nor was this to be wondered at, considering the reception of a deputation in favour of it received by Mr. Forster in March 1871. On that occasion "one of the proprietors of the *Lancet*, with seven members of the staff and a reporter, were introduced by Mr. Mundella. Mr. R. Brudenell Carter made a statement, in which he explained and supported what is known as the *Lancet* Medical Bill. Mr. Forster, after hearing the remarks of the gentlemen present, replied that the observations made as to the Government Bill of last session and the General Medical Council, did not accord with his own opinion and information. It did not appear that the scheme laid before him had received any professional support; and if it reached the House of Commons, of course its promoters must, from its disfranchising tendencies, expect to have to combat with an overwhelming opposition. He could promise no support to it from the Government. They would be able to learn how much chance there was of a measure so little supported becoming law."

The Reform Committee do not deem it prudent to endorse this Bill. They seek two objects: first, the realisation of direct representation in the General Medical Council in the proportion of which the

Association has declared its approval; and secondly, the compulsory formation of conjoint boards of examination, with equal fees and equal qualifications for each division of the kingdom. The *Lancet* asks, How can seven English and five Irish and five Scotch corporations combine? To this the Association replies, that the English corporations are prepared to combine, that the Irish are inclined to combine, and that proper measures will end in effecting combination in Scotland also. Very little persuasion will be required on the part of any member of the Medical Reform Committee to make corporations drink at the waters of conjunction, once the Bill of the Association becomes law.

#### EFFECTS OF BLOOD-LETTING.

OF late years blood-letting has fallen much into disuse; and, to the younger generation of medical practitioners, the extent to which it was carried thirty or forty years ago seems hardly credible. This revolution in practice is due in no small degree to Marshall Hall, who pointed out with the utmost clearness, in his work on the subject, the injurious and even fatal effects of excessive loss of blood, although he still held it to be "the remedy, and the only remedy, for inflammation". It is somewhat astonishing to us that he could still regard it with any favour whatever after the disastrous results which attended it in a case of a friend of his own. This gentleman, himself a medical man, had two of his ribs broken by his horse falling upon him when riding. For the relief of his pain he was bled and purged, and bled again time after time, till he had lost within four days no less than a hundred and twenty ounces of blood. Further bleeding was proposed once or twice afterwards, but, on consideration, his medical attendants thought better of it, and gave him stimulants instead. But these came too late, and the unfortunate man expired, a victim to his own and his friends' belief in the lancet. Such a case could hardly occur in the present day—in this country at least—without the medical men in attendance being charged with manslaughter; but the question can hardly fail to be asked by thinking minds, whether the reaction against the practice is not too great, and a valuable remedy allowed to lie unused because it was formerly abused? In this state of doubt we gladly welcome such researches as have been lately published by Bauer in the *Zeitschrift für Biologie*, for they give us some insight into the changes which are produced in the organism by abstracting blood from it, and enable us to form a better judgment regarding the cases in which it may or may not be employed. The experiments which he relates were made for the purpose of discovering what changes occur in the metamorphosis of albumen and fat in the body after venesection. One would expect *à priori* that the withdrawal of a quantity of blood, by merely lessening the amount of albuminous substances in the body, would be followed by a diminution in the daily metamorphosis. So far from this being the case, however, Bauer finds that the quantity of albuminous bodies decomposed daily in the organism is invariably increased by blood-letting, and the excretion of the urea which is formed by their decomposition is consequently augmented. Notwithstanding this, however, much less oxygen is consumed than before, so that the substances into which albumen splits up cannot undergo such perfect combustion as before the venesection. One may readily understand this, for it is the red blood-corpuscles which carry oxygen throughout the body; and when their number is lessened by blood-letting, combustion in the tissues can hardly go on so rapidly as before. The decomposition of albumen in the body is altogether independent of the oxygen consumed in it. Now, fat is one of the substances formed by this decomposition; and, as its formation is increased and its combustion lessened, to say nothing of the fat taken as food, it must accumulate in the body: and this it actually does, as was well known to the phlebotomists of former days, whose writings con-

tain many a record of cases where patients became enormously fat after copious blood-lettings. The same thing is seen in a milder form almost every day in the case of chlorotic girls, on whose bodies fat becomes deposited, because they have too few red blood-corpuscles to carry to it the oxygen required for its combustion. In many localities, too, cattle-breeders have become acquainted with the fact, and they increase the quantity of fat formed by their animals either in the shape of butter yielded by their milch-cows, or accumulated on the bodies of the oxen they wish to fatten by bleeding them from time to time.

In diseases such as pneumonia, blood may be drawn for the purpose of diminishing temperature or of lessening dyspnoea. It may be supposed that Bauer's experiments support the use of blood-letting for the former purpose; but this is not the case, for the fall of temperature which blood-letting produces takes place immediately, and is soon over, while combustion does not diminish till some hours have elapsed. The fall of temperature is, therefore, due to another cause—viz., the relaxation of the superficial vessels allowing the blood to cool more readily; but temperature can be reduced much more quickly and effectively by the cold douche or a wet sheet; and increased transformation of albumen, with diminished oxidation, is not unlikely to lead to fatty degeneration of important organs.

The relief which venesection generally affords in dyspnoea probably depends in part on its effect in cooling the body, for Fick and Goldstein have shown that increased temperature of the blood is sufficient to produce dyspnoea. This is a real benefit; but it would be attained as well by the use of the wet sheet, and a second cause of the subjective relief after blood-letting is by no means so desirable. The loss of blood, according to Traube, diminishes the irritability of the medulla oblongata, which is the centre of innervation for the respiratory muscles, and, by thus producing a sort of narcosis in this part of the nervous system, deprives it of its power to appreciate rightly the respiratory wants of the body. A third way in which it may prove useful in dyspnoea is by lessening the resistance, which hinders the right ventricle from emptying itself completely, and, by thus facilitating the circulation in the lungs, may assist respiration. The author considers that this condition will only last until as much fluid has been absorbed into the vessels from the tissues as will restore the blood to its former volume; but of this we are not quite sure.

Lastly, he says it is not to be denied that the danger arising from serous exudations in important organs, as well as of congestion of the brain or lungs, may be temporarily averted by general blood-letting, in consequence of the absorption of fluid into the vessels which it occasions. This observation has been too often made to leave any doubt upon the subject; but as often has it been noticed that the danger of these conditions recurring increased after every venesection. Oedema is to a great extent dependent on weakness of the vaso-motor nerves (see this JOURNAL, June 15th, 1872, p. 644); and, this weakness being increased by blood-letting, the oedema is of course more likely to recur. Bauer, however, gives a case which shows most strikingly the immediate benefit produced by blood-letting, in a case of oedema of the lungs; and we are inclined to think that the weakness of the vaso-motor nerves which might lead to a recurrence of the oedema might be successfully combated by a vaso-motor tonic, such as digitalis. While this shows that immense benefit may be derived from its use, in proper cases, the effects which it produces on the tissue-change in the organism teach us that it is not a remedy to be thoughtlessly used, but one which must be employed only after due consideration and with watchful care.

#### INFECTION AND INFECTIOUS DISEASES.

THE following abstract of some of the researches made by German observers to solve the problem of infection and infectious diseases will be of interest, in connection with the paper lately read by Dr. Burdon

Sanderson before the Royal Medical and Chirurgical Society. We have already published an account of the observations of Hueter and Greveler (BRITISH MEDICAL JOURNAL, December 7th, 1872; Feb. 15th, 1873), and Senator (*Ibid.*, March 1st).

It has been stated by Bastian, Ferrier, and others, that spores have been found in the blood of healthy as well as of diseased persons. On this point, Klebs, at the meeting of German Naturalists and Physicians in 1872, gave an account of some interesting observations (*Allgemeine Medizin. Central-Zeitung*, December 18th, 1872). Glass tubes, closed at one end, were exposed for hours to a high temperature, the open end then fused. They were next introduced into the heart of living animals, one end broken off, and blood allowed to enter. Were the animals healthy, the blood formed a dark-red, opaque, crystalline pap, which remained unaltered for six months. The blood of animals into whom microsporion septicum had been injected also crystallised. When exposed to a temperature of 89.6 deg. Fahr., it liquefied, and was found to contain spores, single or united into masses. The report states, also, that "the distribution of the microsporion in sepsis, variola, and rinderpest, presents such characteristic differences that a specific distinction of them must be accepted."

Reiss (*Reichert u. Du Bois-Reymond's Arch.*, 1872; *Centralblatt*, 1872, No. 55) examines the blood of living persons in case of disease. In scarlatina, minute round bodies are seen, strongly refracting light, in part isolated, in part joined together in chains, again lying in large groups and masses. Their nature is considered infectious, because inoculation of such blood produces the death of rabbits, in whose blood similar bodies were afterwards found. (As will be seen later, the results of such experiments can hardly justify the conclusions). Other bodies were found in the blood of scarlatina and other exanthemata, typhoid, acute rheumatism, puerperal fever, pneumonia, etc., similar, as Reiss thinks, to those observed by Max Schultze, Hüter, and Hallier. He finds them in greatest numbers during the retrogression of the disease; the more numerous, the greater the general anemia and exhaustion. They were also found in various chronic diseases, accompanied by anemia or cachexia. He regards them as derived from the retrograde metamorphosis of white blood-corpuscles. Inoculation with blood containing them gave negative results.

Vogt (*Centralblatt*, 1872, No. 44) examined the fluids from joints, where metastatic inflammations had occurred, with reference to the presence of spores. The joint of the living person being punctured, and the fluid observed, innumerable monads, possessing lively movements, were found. The corresponding uninflamed joint, and the blood in general, contained but few of these. He could not find the rod-like bacteria seen by Klebs under similar circumstances, and is inclined to regard this observation as the result of faulty method. The patient having died, the moving monads could not be found after a lapse of twenty-four hours. Rabbits were inoculated with the fluid from the diseased joint; death occurred in eight days; and in the pus taken from the point of inoculation, also in the muscular fibrils, numerous monads were seen. Inoculation of the fluid from the healthy joint produced no result.

There being little or no opposition to the fact that the inoculation of certain fluids produces infection, and it being also granted that such fluids contain spores, it becomes desirable to ascertain whether the presence of spores in infectious fluids is essential. Zülzer, at a meeting of the Berlin Medical Society, November, 1872 (*Allg. Med. Centr. Zeit.*, 1873, No. 7), after repeatedly filtering vaccine lymph, was finally able to obtain a fluid almost entirely free from bacteria. Attempting to vaccinate with this, he found that its activity was lost.

Wolff (*Centralblatt*, February 15th and 22nd, 1873) could not entirely free a fluid from germs, either by filtering, freezing, or other methods. At the same time, he ascertained that putrid blood acts wholly differently from its filtrate, even when bacteria are added to the latter. His inference is, that the active principle of the putrid blood must be some other morphological or chemical constituent than bacteria. The filtrate, in addition to relatively few bacteria, contained scarcely any odorous principle and no sulphuretted hydrogen, while the residuum had a horrible odour and gave distinct evidence of the gas just named. He attempted to produce infection by the introduction of fluids containing bacteria and micrococci into the lungs of guinea-pigs and rabbits. Twenty experiments were made, in eight of which disease of the lungs was found, mostly in the form of bronchopneumonic nodules, varying in size from a bean to a pea, rarely in the form of red or yellow hepatisation of an entire lobe; in some cases, there were circumscribed deposits with diffuse pneumonic infiltration. Large accumulations of micrococci were not found. Similar appearances were observed in animals who died from other causes, where the introduction of fungi could not be proven. Putrid alterations of the lungs, diphtheritis,

miliary abscesses, containing colonies of bacteria, could not be produced by the introduction of fluids containing large amounts of fungi.

In the three other cases, where the bronchial mucous membrane was irritated previous to the introduction of the fungi, no alterations were found.

In some of the animals, an excretion of the fungi, by means of the kidneys, could be proven, though metastatic nodules could not be found in these or in other organs. In the lungs of the animals who died within six days, fungi were found to a slight extent; the lungs of those who lived six weeks contained either none at all, or very few.

These results accord with those of Sanderson, and have been confirmed by Vulpian in his contributions to the discussion on septicæmia, commenced by Davaine in the French Academy.

Birch-Hirschfeld (*Arch. d. Heilkunde*, 1872, p. 389) gives, as the results of experiments, that when moderate amounts of fluids containing micrococci are injected into the blood, the white blood corpuscles take them up in large numbers. After a while, probably depending on the amount injected, a progressive increase of the free cocci takes place until death occurs. In the pulp cells of the spleen, a part of the micrococci are retained, and when a large number are present, a distinct swelling of the organ occurs. If putrid fluids are injected into the serous cavities, a local inflammation results, and the animal may die before the micrococci enter the blood in large amounts; in such cases no splenic tumour is found. He has observed that in the septicæmic forms of puerperal fever, the appearances are similar to those occurring in animals in whose blood putrid fluids have been injected. Hence, where the patient dies with a splenic tumour, the infectious material must enter the circulation early; while, in the other series, the infection advances rather by way of the lymphatics, though both forms may occur.

[For the preceding portions of abstract, we are indebted in great part to an able report by Dr. R. R. Fitz in the *Boston Medical and Surgical Journal* of April 17th.]

Popoff (*Wiener Medizin. Jahrb.*, 1872, part iv, quoted in *Centralblatt für die Medizin. Wissenschaften*, March 29th) states that he found micrococci in large numbers in pus contained in the bronchi and alveoli of the lungs in putrid bronchitis; they were found in the alveolar cells and epithelium and in the interalveolar tissue. He found micrococci in the same situations, and also within the blood-vessels, in a case of variola hæmorrhagica and in one of laryngeal diphtheria. In the portions of lung rendered gangrenous by embolism in putrid bronchitis, the micrococci were found only in the capillaries, while the air-passages were free from them. The results of examination were negative in a case of measles, in several of acute and chronic hepatisation of the lungs, and in many of simple bronchopneumonia; but micrococci were abundant in the contents of caverns.

After the injection of putrid fluid containing micrococci into the lungs of rabbits, he could not find bacteria, though fever and more or less extensive bronchitis and pneumonia were induced. He also injected ammonia into the blood of three dogs, and then introduced an infusion of putrid animal matters into the jugular vein. In one of the animals, symptoms of circumscribed pneumonia appeared before the injection into the blood; and, after its death on the nineteenth day, the right lung presented a large suppurating cavity containing greenish shreds of tissue and innumerable micrococci, while the blood was entirely free from them. The liver contained numerous whitish deposits of the size of pins' heads, in which no micrococci could be found.

Eberth, of Zurich, gives (in the *Centralblatt für die Medizin. Wissenschaften*, February 15th, 1873) the results of experiments in which he applied various purulent and other fluids to the cornea of rabbits, with the result of inducing a diphtheritic condition of the part. In using the pus taken from a wound, which to the naked eye presented no appearance of diphtheritis, or the purulent contents of the vein, he produced diphtheria of the cornea, even when the number of bacteria in the pus used was very small. The inoculation of the exudation found in child-bearing women who had died of peritonitis produced diphtheria, even though the inner surface of the uterus presented no diphtheritic deposit. The result in this case he attributes to a rapid development of bacteria. Diphtheria of the cornea was also induced by the application of the blood of child-bearing women who had died of septicæmia, if the blood in the heart and the fluid in the uterus contained bacteria, whether there were diphtheritic exudation in the uterus or not. Eberth believes that there are diphtheritic bacteria and septic bacteria; and that it is to the latter, rather than to the former, that septic changes are due. Both forms of bacteria, however, excite inflammation; and both, when they become localised, give rise to abscesses. Hence, he says, pyæmia is, for the most part, a diphtheria; and many forms of septicopyæmia are the combined result of septic and diphtheritic bacteria. Similar changes in the cornea may also be induced, but with less certainty and intensity, by the application of the bacteria found in the

mouth, and of the micrococci found in putrefied meat, blood, and urine.

In a subsequent communication (*Centralblatt*, April 26th) Eberth says that the introduction of a clean needle for a distance of three or five millimeters into the cornea of a rabbit is merely followed by some cellular infiltration, even though the needle be left for six or ten days. On the other hand, if a fine thread of silk or hemp be introduced, the result is not only violent suppuration, but more or less extensive mycosis, in no respect distinguishable from diphtheria, and characterised by the presence of micrococci, some of which are large and of a brownish grey colour, while others are smaller. Both these forms, he says, are also met with in diphtheria affecting the throat.

In another brief communication in the *Centralblatt*, of May 3rd, Eberth remarks that Kühne has attributed the colour in blue sweat and pus to the presence of vibriones; but that he has found that normal sweat contains bacteria, though in varying amount. The bacteria are small, oval in form, generally arranged in chains of two or three links, and manifest rather active movements. In the hairy parts they are attached to the hairs, often in a thick layer, and even penetrate their interior. By colouring with logwood, both single bacteria and colonies can be readily perceived on the hairs.

Leber, of Göttingen, referring to the remarks of Eberth, gives (*Centralblatt*, February 22nd) the results of some similar experiments which he has made. He found that intense keratitis and hypopyon, with a tendency to extension to the entire eye, is produced by the inoculation of masses of *leptothrix buccalis* from the healthy mouth into the cornea of rabbits. When the injection was made into the anterior chamber, the change was more rapid; the eye was soon destroyed by suppurative panophthalmitis, attended with a very foul odour. No development of the leptothrix could be found with any certainty in the pus.

Obermeier contributes an article on moving particles in the blood in relapsing fever to the *Centralblatt* for March 1st. He first made the observation in 1868, but, as the epidemic came to an end, he was unable to prosecute his researches. The prevalence of the disease in Berlin for more than a year has, however, given him an opportunity of continuing his observations, which have been carried on in Professor Virchow's wards. On examining under the microscope blood taken from a puncture in a patient suffering from recurrent fever, there are observed, he says, filaments varying in length from one-and-a-half to six blood-corpuscles, and about the diameter of a filament of fibrin. As long as the blood is fresh, they exhibit rapid movements of two kinds. In the first place, they present undulating movements, and sometimes four joints and knots. They also exhibit movements of locomotion, assuming a bent, circular, or spiral form. These last named movements last one or two hours; the undulations continue for six or eight hours. These bodies have been found by Obermeier only in the height of the fever; not during the remission, or shortly before or during the crisis. He does not attempt to decide whether they are specific to recurrent fever; but as yet he has not found them in the blood of healthy persons or in other diseases.

MR. JOHN MARSHALL, F.R.S., has been elected Professor of Anatomy to the Royal Academy, succeeding the late Mr. Partridge.

DR. KLEIN, of the Brown Institute, has been appointed Lecturer on Practical Histology at St. Bartholomew's Hospital.

DR. POORE is about to give a practical course, in the evening, of Electro-Therapeutics, at Charing Cross Hospital.

AN important meeting is to be held to-day in Manchester, on the subject of the abuse of medical charities. We shall report the proceedings in our next issue.

#### THE WESTMINSTER HOSPITAL.

DR. RADCLIFFE has been elected Consulting Physician, Dr. Anstie Physician, and Dr. Allchin Assistant-Physician, to the Westminster Hospital. Mr. Thomas Bond is a candidate for the vacant appointment of Assistant-Surgeon to the Hospital.

#### MEDICAL OFFICERSHIP OF CHELMSFORD, ESSEX.

DR. CORNELIUS FOX of Scarborough is, we understand, a candidate for the appointment of Medical Officer of Health to the combined rural districts of Chelmsford, Maldon, and Billericay, in Essex. Dr. Fox is well known to the profession as a painstaking and earnest worker in sanitary science, and especially in questions relating to meteorology.

## CAUTION TO WINE-BIBBERS.

"LOOK not on the wine when it is red, when it giveth its colour in the cup." Habitual drinkers of Burgundy and other red wines are cautioned to abstain in time, before they are poisoned. Dr. Charvet, a French chemist (*Druggists' Advocate*), states that rosaniline, which is used for colouring red wines, contains arsenic; and that, if taken constantly, it will give rise, by accumulation, to poisoning. This is a cheerful prospect for invalids, who are ordered to drink claret regularly.

## MARINE ZOOLOGY.

THE fourth edition of the handbook of the Marine Aquarium at Sydenham, by Mr. W. A. Lloyd, Superintendent of the Aquarium, has just been issued at the commencement of the official year in May. It has grown to three times the dimensions of its earliest predecessor issued in 1871, and is a little handbook of more interest than its name implies. It not only affords a very clear and well-thought statement of the history and principles of construction and management of marine aquaria, and a good account of the well devised and well-managed establishment at the Crystal Palace, but it may well serve as a little handbook of the marine (aquarium) zoology of the British Fauna. The model establishment to which it is the official guide has well maintained its character of scientific and financial success to the close of the official year. Its population is more numerous, more healthy, and more fully representative, than ever. The mortality has been very small, and the three hundred and three species of marine creatures which may be seen there are in excellent health. The results attained at Sydenham—and it is on this that the superintendent especially prides himself, and justly, as we think—are remarkable, in that they are not attained by the evasion of any of the difficulties of marine zooculture, by the introduction of lung-breathing animals, such as turtles, porpoises, otters, etc, which, however interesting in themselves, do not require the solution of the problem of efficiently and economically maintaining water in a respirable condition, which is the true problem to be solved in aquaria, and which has here been successfully solved. Just at this moment, the aquarium has many objects of special interest. A large proportion of the animals now exhibited have lived in the aquarium since its opening in the summer of 1871. Many of these have largely increased in size, and they have multiplied in numbers. The sea-water has not been changed, but is in bulk the same which was first brought there, and is at the present time in a better state for the maintenance of the population of the aquarium than at the outset. A small portion has been added, to make up accidental losses; but these additions have been found rather prejudicial than advantageous at the time to the inhabitants of the aquarium; so perfectly successful is the simple system of purification by atmospheric oxidation—the *ermacausis* of Liebig, who was deeply interested and greatly delighted with this aquarium. During the past year, the constructors of marine aquaria in progress at Naples, Vienna, Manchester, Southport, Yarmouth, Torquay, Jersey, and other places, have applied to the authorities at Sydenham to permit Mr. Lloyd to furnish information as to the best mode of construction to be followed in their establishments; and this has in each case been readily accorded. Thus the experiment at Sydenham is furnishing data for a great number of marine aquaria throughout Europe. It may be expected that soon these islands will be girdled with a series of public marine aquaria, successfully arranged on principles of scientific simplicity. The last novelty in aquaria is a ship-aquarium which is projected by Mr. Catt of Ramsgate, who has also drawn inspiration from the Sydenham experience. He is fitting a ship of between two and three hundred tons, which will sail from port to port, satisfying the curiosity of populations not favoured with establishments of the kind, and will introduce into aquarium management the element which Mr. Wombwell popularised in general zoological collections. The most important work of the kind in progress is that at Naples, belonging to Dr. Dohrn. This will have, as we have explained, high zoological aims, and will be a training place and station for observation, to which students of all countries will resort. The

University of Cambridge has already appropriated £100 a year towards a travelling studentship for this purpose. Drawing upon the exceptionally rich stores of the Mediterranean for its treasures, this station will be nobly supplied; and, in recognition of the liberality with which the Sydenham managers and superintendent have supplied the plans and prepared the fittings, Dr. Dohrn has arranged to supply the Crystal Palace aquarium with animals from the Mediterranean; and two firms of ship-owners trading from London to Naples—Messrs. Pickernell Brothers, and S. Laming and Co—have with the greatest kindness permitted travelling aquaria, each containing one ton weight (2,000 lbs.) of water, to be placed in four of their ships, and travel backward and forward without charge. Already several consignments have been safely received, and are flourishing; and Mediterranean crabs and molluscs of considerable interest may be seen living in the tanks of the North Room. Norwegian and Hamburg ship-owners—Messrs. Drolenvaux and Bremner, and Pearson and Langlese—have been equally kind in permitting the free transport of some very interesting Norwegian stone-crabs (*lithodes*) from the extreme north of Norway, near Hammerfest. It is right to add, that the British collectors on the English and Welsh coasts show not less marked interest in the cause, and transmit living specimens with great success, in spite of many and complicated difficulties. A collector in the Channel Islands has recently come into active work; and, as this is the richest locality in the British Fauna, he has already done much to improve existing collections, and will be able to do yet more. Naples and Vienna will both draw largely on British aquaria for their richest treasures—sea-anemones, which have been more fully studied and described by British zoologists than by any others.

## THE CLINICAL SOCIETY.

THE last meeting of the session took place on Friday of last week, when several papers were read which gave rise to considerable discussion. A contribution by Dr. Greenhow, on the treatment of a case of diabetes by means of skimmed milk, was followed by a sharp passage of arms between Dr. Pavy and Dr. Donkin, which led to the protest of the President. Dr. Pavy expressed his utter disbelief in the skimmed milk treatment of the disease; and said that, after a lengthened trial, he had come to doubt the good results alleged by Dr. Donkin to have been obtained in that gentleman's hands. He questioned the propriety of the author of the paper in lending his position to countenance the treatment by skimmed milk. Dr. Donkin, in reply, offered facilities for inquiry into the cases which had been cured or alleviated by the method of treatment which he advocated.

## THE ETIOLOGY OF ALBUMINURIA.

AT the meeting of the Royal Medical and Chirurgical Society on Tuesday, Dr. George Johnson read a paper on the Etiology of Albuminuria, deduced from the analysis of two hundred consecutive cases, in which he presented details showing the relative frequency of albuminuria from various causes. Amongst these causes, alcoholic excess accounted for 29 per cent.; exposure to cold and wet, for 25 per cent.; scarlet fever, for 12 per cent.; other causes, under thirty heads, for the remaining 40 per cent. The first two causes were in many instances combined. This subject has acquired a good deal of interest in connexion with the recent discussions on the influence of alcohol in the production of kidney-disease which have been conducted at the Royal Medical and Chirurgical Society, *à propos* of the paper of Dr. Dickinson, and subsequently in our columns by Dr. Roberts, Dr. George Johnson, Dr. Dickinson, and others. A very lively discussion followed the paper, in which Dr. Dickinson spoke with some bitterness, and described the paper as an attack upon himself; and Sir William Gull, with some show of excitement, asserted his astonishment to hear so old-fashioned a terminology as albuminuria employed in the discussion of kidney-disease, and announced his continued adherence to his recently published views of the morbid anatomy of Bright's disease (arterio-capillary fibrosis); while he considered Dr. Johnson to be

supremely happy in being so well able to indicate the causes of Bright's disease, which for his own part he believed to be, in a great proportion of cases, beyond our knowledge. The discussion was, however, polemical rather than scientific, and betokened strong feeling. In some respects, both Dr. Dickinson and Sir William Gull transgressed the ordinary rules of good taste; they introduced elements of personality which had been better avoided, and offended the feeling of the Society. Dr. Dickinson did us the honour of frequently referring to our columns, and, with a singular want of propriety, entertained the Society with his own opinions as to the authorship of the articles impugning his views on the innocence of alcohol in respect to the etiology of kidney-disease, which appeared in the columns of this JOURNAL, and to which he published his replies at length at the time.

#### A CASE OF HYDROPHOBIA

AN inquest was held this week at Hampstead by Dr. Lankester on the body of Mrs. Revitt, aged 29, who had died of hydrophobia. The husband of the deceased, a butcher, said that one Saturday morning, a few weeks ago, he left home about six o'clock to attend market, leaving the door leading from the shop to the staircase ajar, so that his wife could hear when the shopman arrived. On his return, his wife told him that she was awakened by a slight noise, and saw a dog licking the face of a child which was asleep in a crib by her bedside. She tried to drive the dog away, and it bit her hand. She then seized the dog, carried him to the window on the second-floor landing, and threw him out into the yard. Dr. Cooper Rose stated that he attended the deceased on the morning the dog bit her. She had a lacerated wound on the left thumb and scratches about the hand, which he cauterised. The wound healed up, but the thumb was torn under the nail, and was very troublesome. On Saturday week last he was again sent for, but did not exactly know what was the matter, but on the following day the symptoms were fully developed. She died from hydrophobia. The jury returned a verdict in accordance with the evidence, and desired the coroner to forward to the police authorities a requisition, calling their attention to the large number of stray dogs, which are a source of great and increasing danger to the public, in order that the necessary steps may be taken to put an end to the danger and nuisance.

#### EMIGRANT SHIPS.

THE following important communication is from Dr. R. H. Bakewell from the Cape of Good Hope, under date January 6th, 1873.

"I write this from the deck of the emigrant ship, *Charlotte Gladstone*, 1304 tons, *en route* for Otago. We have been obliged to put in here for water, coals, disinfectants, and drugs, and for medical comforts.

"When I took charge of this ship, I was under the pleasing delusion that the duties of a surgeon-superintendent of an emigrant ship would form an agreeable relief to the monotony of a long sea-voyage. I was told that there was generally very little illness on board these ships, and that the rate of mortality was actually below that of England and Wales. When I saw at Gravesend, for the first time, the lot of sickly, anæmic, underfed people, many of them evidently phthisical, with their pale flabby babies, I thought to myself that, if there were not a good deal of sickness among such people, I should be most agreeably surprised; and my prognostications have been fulfilled.

"From the very commencement of the voyage, we have had nothing but one epidemic after another. First, there was diarrhoea, chiefly among the children, which became dysenteric in some of them. Of this four died, and two more will die. Then came measles, which, however, fortunately did not attack us until we had reached the warm latitudes. We have had thirty-four cases so far, and not a single death, nor has a single dose of medicine been given to any one of them. The treatment has been purely expectant, with wine as the rash faded. Then we had thrush, then inflammatory sore throat, and last of all typhoid fever. The latter has attacked ten adults and one child. One of the adults, a man of phthisical habit, and two of whose brothers have died of consumption, had double pneumonia, which proved fatal. The others have all recovered, or are in a fair way.

"Besides these, to keep one's hand in, there has been an immense number of minor cases, amounting in all to upwards of three hundred, among three hundred and fifty souls. This amount of sickness, of which, of course, we have not seen the last, as we have still between

thirty and forty days between here and New Zealand, is so extraordinary that it deserves a little consideration.

"The primary cause is unquestionably overcrowding. The government allowance of space is eighteen superficial feet per statute adult. A 'statute adult' may be one human being, or two or three. For instance, a father, mother, two children under twelve, and a baby under a year old, would count only as two adults; if the child were above a year old and under twelve, they would count as two and a half adults. By this ingenious plan it will be seen that the very persons who most require pure air, the infants, are not supposed to require any. From the gross space has to be deducted that required for the hospital and dispensary. These are wooden erections built up in the 'tween decks, instead of being, as they ought to be, in the upper decks. They are dark, and the hospitals each contain eight berths in two tiers. When I first saw them, I was aghast, until I was informed that they were seldom occupied, and then only two or three at a time. There has never been a time when I could not have filled twenty such berths if I had had them, even in the married compartment alone.

"The berths of the married people are three feet wide for two adults, and six feet long. They are placed side by side athwart ships, all along the ship's side. This stupid plan prevents any air from entering at the back of the berths; and as there are two tiers, the only aperture by which air can enter is a space in front three feet wide by three feet six inches high. It is quite obvious that no amount of ventilation in the 'tween decks will properly ventilate the insides of these berths. To make matters worse, a curtain is put, for decency's sake, over even this aperture. The berths are, in fact, large pigeon-holes, with a curtain over the opening. The smell in them is of that abominable frouzy, fusty smell, which can only be smelt in perfection in the attic story of country cottages, or in the lower houses in large towns. It reminds me of early midwifery experiences when I was a 'Middlesex student,' and learnt obstetrics in the purlieus of St. Pancras and St. Giles's. To make matters worse, when the weather is at all cold, numbers of the married couple hang up their clothes in front of their berths, so as to stop up even the small amount of air that would enter.

"Personally, the emigrants entertain a horror of soap and water. I made an order that on three afternoons in the week the married men were all to leave their compartments for an hour and a half in order to allow the women to bathe. The women, however, would not avail themselves of this order; and, except on the first occasion, when I turned the men out myself, they have never bathed since they embarked. Only a few did then. Lice are abundant; and as we stand on the poop, the interesting spectacle is to be seen, of an affectionate mother with one breast hanging out suckling a baby, while she amuses herself with hunting lice in another child's head. The women are lazier and dirtier than the men, which is saying a good deal. The greater number of them evidently make nursing a baby a mere excuse for dawdling about all day and doing nothing. Whether a child is asleep or awake, the mother always has it in her arms. They will not get up before breakfast in the mornings, and the husbands cannot get them up. It is perfectly useless to talk to them; I have exhausted the language of vituperation, short of absolute swearing, without effect. I can make them clean the decks, tables, and berths, but I cannot make them wash their clothes or their skins.

"That the diarrhoea depends wholly on this filth and overcrowding, is shown by the fact that it is almost confined to the married compartment. If it had been caused by the water or the food, it would have prevailed equally over all. Those cases which have occurred among the single men and women may fairly be attributed to overfeeding and complete idleness; and the proof of this is that even several days of such diarrhoea do not produce any serious debility. Measles may be easily accounted for, as there were two children convalescent from this disease on board for two days in the docks. They were not taken in with us, but they remained on board unknown to me for those two days. Fourteen days afterwards the first cases appeared; and fourteen days after the commencement of the epidemic the second batch showed the eruption. After this they came on irregularly. The first batch consisted of three cases; the second of eight. This observation is worthy of notice, as it fixes the normal incubation period. But it is evident that when the contagious force is very powerful, the period of incubation may be shortened. Cases are still occurring, and, although every child in the ship has now been exposed to the contagion for a month, some have escaped so far.

"It is worthy of note that there was *no catarrh* among those cases which were at their height in the tropics. The conjunctivæ were congested; there was cough, but there was no running of the eyes or nose; the eruption was copious, fading away in nearly every case on the fourth day. Nearly all had diarrhoea, but, as there was so much diarrhoea epidemic, it was difficult to say whether this arose from measles or not.

"Nearly all the children have been attacked by thrush, and there has been an extraordinary quantity of inflammatory sore throat among the adults. This I treated by the perchloride of iron, until all in the medicine chest has been used. It acted very well.

"The outbreak of typhoid commenced with one case, a man who had been drunk for some days after he came on board. During the period of invasion it was masked by an attack of measles, but when this passed off the fever did not diminish, and violent delirium came on. I have not time or space to discuss fully the measures I took to isolate this case; the man was placed under a sail in the fore-castle, but a few days after some other cases occurred. I shall trouble you with an account of this outbreak, as it presents many points of remarkable interest, particularly as to the effect of treatment in the open air modifying the temperature. We have had up to to-day fourteen cases of typhoid, and several (I am not sure how many) of ephemeral fever. Of all I have got temperature charts; and the latter I may publish, as they differ in some respects from Wunderlich's.

"Since the cases have been placed in the fever-tent in their very earliest stage, they have been milder. The treatment has been the same that I have always adopted—Dr. King Chambers's. Out of eleven cases which have passed the dangerous period, only one has died, from the cause mentioned above. Even he would not have died, but for his own obstinacy in insisting on moving out of bed to the night-stool, instead of using the bed-pan. Syncope, with extensively rapid breathing, came on, and he died in half an hour. This was at 7 A.M. At 1 A.M. the same morning he was doing well, and the number of respirations had fallen.

"I am at a loss to what to attribute the typhoid, unless to the bedding. The beds were stuffed with a quantity of most filthy old rags, pieces of old hats, trousers, coats, crinolines; even an umbrella handle has been found in one of them. I never saw such rubbish. Probably some of this stuff contained the contagion. Unfortunately the supply of disinfectants was quite inadequate, and one of our reasons for putting in here is to obtain an additional quantity.

"I have had fourteen fresh cases of fever during the last two days, *i.e.*, since the above was written."

#### THE ORDER OF THE BATH.

THE following is a list of army and navy medical officers decorated on the occasion of the Queen's birth-day. To be K.C.B.: Surgeon-General W. M. Muir, M.D., C.B. To be C.B.: Inspector-General of Hospitals and Fleets J. Rees, M.D. (retired); Inspector-General of Hospitals R. Dane, M.D. (half-pay); Inspector-General of Hospitals B. W. Marlow, M.D. (half-pay); Surgeon-Major J. Wyatt, Coldstream Guards.

#### UNIVERSITY COLLEGE, LONDON.

TWO handsome tablets have just been erected, one on each side of the entrance to the Arts Library. They are inscribed to the memory of Alexander Bruce and James Stanton Cluff, very promising students of the College, who met with an untimely fate some years ago. The tablets were designed in most excellent taste by Signor Monti. That of Mr. Bruce is ornamented with a very good medallion portrait in high relief by the same artist.

#### THE ADULTERATION ACT.

DR. CORFIELD has presented his first report as Food Analyst to the Vestry of St. George's Hanover Square. Of fifteen samples of ground coffee only four were genuine, while nine were adulterated with chicory, caramel, etc. He had analysed twenty samples of milk, and found five only genuine. Two or three were deteriorated, some were adulterated with water, besides having been skimmed. He proposed to send notice of the adulteration to the seller. The report was ordered to be printed. In reply to a question in Parliament on this report, the Attorney-General has stated that the Act seemed clearly to lay down that when an analyst had cases of adulteration brought before him it was his duty to lay them before the magistrate, who would issue a summons, and with whom the matter would then rest. Dr. Corfield has explained that by the 1st, 2nd, and 3rd sections of the Act of 1872 proof is required that the sellers of an adulterated article knew that it was adulterated, and unless such knowledge is proved no conviction can legally take place. The plan which he has adopted to overcome this difficulty

is as follows. The inspector, or some one employed by him, procures samples of an article at various shops, without saying what use is to be made of them, and brings them to him; he examines them and gives the inspector a list of the numbers of those samples which are found to be adulterated; he then sends a formal notice to each of the persons from whom the articles so numbered were procured, stating that such and such an article bought at his shop has been found to be adulterated. At some future time another sample will be brought under his direction at each of these shops, the precautions required by the Acts being taken in the case of this second sample; and then it will be the inspector's duty to apply for a summons against those persons who are found still to be selling an adulterated article, and proof will be forthcoming that they had been previously warned they were doing so. The advantages of this plan are obvious. From the samples that are obtained without any formality, and about which there could not be a prosecution, we gain the most certain information as to the persons who are, knowingly or unknowingly, selling adulterated articles; by warning these persons we deprive them of the excuse of ignorance, and as our object is to prevent adulteration, and only to prosecute where it can be shown to be necessary, we believe that we shall attain it best in the way indicated.

#### A GENEROUS GIFT.

WE learn from an American contemporary that Mr. John Anderson, of New York, learning that Professor Agassiz proposed establishing a school at Nantucket for the instruction of naturalists during the coming summer vacation, generously offered the professor the fee-simple of Renekese Island, and further appropriated the sum of fifty thousand dollars as a permanent endowment for the school. It is proposed to carry on this school in close connection with the museum at Cambridge. The island is situated in Buzzard's Bay, and is the most easterly of the western group of the Elizabeth Islands. Its extent is about one hundred acres. It has sufficient buildings upon it for present use, and is well supplied with fresh water. No doubt the island will become a favourite resort for naturalists from all parts of the country, who wish to spend a few weeks or months of their summer vacations in studying marine life.

#### ADULTERATION OF COCOA.

MR. F. CAVE, a grocer, was summoned before the Richmond magistrates this week for selling a packet of adulterated cocoa as an unadulterated substance. The cocoa had been analysed by Dr. Stevenson, who stated that it contained an admixture of sago and sugar, but nothing injurious to health. The packet was labelled "Fry's Soluble Cocoa, manufactured by J. S. Fry and Sons from cocoa, combined with other perfectly pure and wholesome ingredients, according to Act of Parliament." The packet was wrapped in a trade cover of Mr. Cave, on which was also printed—"This is an admixture in which no injurious ingredient has been used. Vic. 35 and 36, c. 7." It was contended for the defence that the labels formed a sufficient declaration of the article sold. A declaration need not be *verba vocis*. It only meant a proper explanation of the thing sold. The magistrates, after consulting a few minutes, said it was not their opinion that this was a case for conviction. In the face of the notices upon the cocoa, it was doubtless the presumption in Mr. Cave's mind that his customers knew what they were buying. But it should be borne in mind that in the case of those who could not read, the attention of purchasers should be called to any manufactured article, even if it should be all the better for the admixture. This requirement of the Act was imperative, and if not carried out by Mr. Cave in a similar case, a conviction must follow.

THE LEEDS AND WEST RIDING MEDICO-SURGICAL SOCIETY. THE first annual general meeting of this Society was held last week in the board-room of the Leeds Infirmary; Dr. Chadwick, President, in the chair. A large number of members were present. In the report, the Committee congratulated the members of the Society on its prosperous condition. At the preliminary meeting of members of the medi-

cal profession residing in Leeds and the neighbourhood, held on November 29th, 1872, under the presidency of Dr. Chadwick (who convened the meeting), 113 gentlemen enrolled themselves as original members, and since that time 34 ordinary members and 1 honorary member had been elected, making the total number of members 148. Four ordinary meetings of the Society had been held, the average attendance of members being fifty-four. Numerous valuable communications had been brought under the consideration of the Society. The Treasurer (Dr. Heaton) reported that the financial condition of the Society was highly satisfactory. The following gentlemen were elected office-bearers for the ensuing year. *President*: Mr. Samuel Hey. *Vice-Presidents*: Dr. Heaton and Mr. Wheelhouse. *Treasurer*: Dr. Heaton. *Secretaries*: Mr. A. F. McGill and Dr. E. W. Symes. *Committee*: Dr. Clifford Allbutt, Mr. E. Atkinson, Dr. Bell (Bradford), Mr. Bramley (Halifax), Dr. Crichton Browne (Wakefield), Dr. Chadwick, Dr. Eddison, Mr. Jessop, Mr. Knaggs (Huddersfield), Dr. Myrtle (Harrogate), Mr. Nunneley, and Mr. Scattergood. The meeting terminated with a vote of thanks to Dr. Chadwick, the retiring President.

## IRELAND.

### ROYAL COLLEGE OF SURGEONS.

In July next, a revised scheme of examination, which was adopted by the Council in 1871, will commence for medical students who entered on their studies after October 1871. The new examination will comprise the following subjects. *Anatomy*: Bones, muscles, articulations; and descriptive anatomy of the abdomen, chest, urinary and genital organs. *Chemistry*: Chemistry and physics, as applied to pharmacy and medicine. *Materia Medica and Pharmacy*, not including therapeutics. *Surgery*: Fractures and dislocations. The fees for this examination will be five guineas for registration, and the same amount for examination.

### QUEEN'S COLLEGE, CORK.

SIR ROBERT KANE, the celebrated chemist, has sent in his resignation to the Government as President of this College; and the vacancy, it is expected, will be filled up by the appointment of Dr. Ryall, Vice-President, son of the late Surgeon Ryall, an oculist of considerable fame, who practised in Dublin, and at one time held the post of Surgeon in Ordinary to the Duke of Kent.

### CASE OF NÆVUS.

MR. PORTER, of the Meath Hospital, Dublin, has at present under his care a man aged about 50, with an enormous nævus, involving the right side of the face, so as almost to close the eye on that side, and the upper lip, especially on the left side. A plaster cast, taken when first admitted, showed that the upper lip altogether excluded from view the lower lip; but at present the swelling of the lip has gone down considerably, also the right side of the face has diminished very much. Mr. Porter is using an injection into the affected parts of the solution of persulphate of iron, which he considers preferable to the tincture of the perchloride, the dose being four drops. The patient has already undergone this subcutaneous injection about twenty-four times; and, although the treatment is painful and seems tedious, yet the alteration in the man's appearance from that when admitted makes us feel convinced that a cure will result when the treatment has been sufficiently carried out.

### THE FUNDS OF THE IRISH COLLEGE OF SURGEONS.

THE Council of the Irish College of Surgeons are placed, apparently, in a somewhat uncomfortable position. They have for some years past been in the habit of from time to time testifying their regard for retiring members of long and distinguished service by granting sums of money for presentations out of the funds of the College. They were about to adopt a similar course now towards Drs. Hargrave and

Benson, very strong compulsion having at last sufficed to induce the same gentlemen to retire; but some one, it appears, has thought it wise to inquire whether this liberal expenditure of the Council towards each other out of the College funds was legal. The opinion of the Attorney-General has been taken; and, sad to say, he decides that any such grants are quite unauthorised, illegal, contrary to the bye-laws, and without justification in the Charter. It further appears that the Council has been in the habit of paying a fee of 5s. 6d. each to two members of the Council attending examinations for every student passed at such examinations. It is now discovered that these payments also constitute a quite unauthorised expenditure of the funds of the College. What with the sale of hospital appointments and the grants from college funds, there is a good deal of room for political and social reform in the corporations and hospitals of Dublin.

## THE ARMY MEDICAL WARRANT.

### REPRESENTATIONS OF ARMY MEDICAL OFFICERS.

THE Right Honourable the Secretary of State for War having been pleased to state, in reply to a question in the House of Commons, that any grievances under which army medical officers feel they labour, if properly represented, would be "duly taken into consideration, with a view to explanation, or, if necessary, to alteration"—it was unanimously resolved at a meeting of army medical officers (numbering upwards of forty), held at Aldershot on the 14th of May, 1873—with the sanction of the Surgeon-General Principal Medical Officer, and the permission of the General commanding the Division—to respectfully request that the following representations may be forwarded, through the prescribed channel, for the favourable consideration of the Right Honourable the Secretary of State for War.

A. ROYAL WARRANT, DATED 1ST MARCH, 1873. Para. 3. *Rank and Rate of Pay* (*vide* BRITISH MEDICAL JOURNAL, May 24th, 1873, p. 599).—By the terms of this paragraph, no provision is made for the increased rate of pay after fifteen years' full-pay service, allowed by the warrant of 1st April, 1867, under which medical officers have been serving; and it is suggested that this privilege may be restored, or that the term for the promotion of all qualified surgeons do not, in any instance, exceed fifteen years.

Para. 4. *Relative Rank*.—I. A surgeon-general shall rank as brigadier-general, according to the date of his commission; if with an army in the field or after three years' full-pay service as surgeon-general, he shall rank as major-general from the date of his joining such army in the field, or according to the date of the completion of such service. II. A deputy surgeon-general shall rank as lieutenant-colonel, according to the date of his commission; after five years' pull-pay service as deputy surgeon-general, he shall rank as colonel, according to the date of the completion of such service. III. A surgeon-major shall rank as major, according to the date of his commission; after twenty years' full-pay service as surgeon and surgeon-major, he shall rank as lieutenant-colonel, but junior of the latter rank. IV. A surgeon shall rank as lieutenant, according to the date of his commission; and, after six years' full pay service, as captain, according to the date of the completion of such service.—It is suggested that the relative rank of the three higher grades of medical officers should stand as follows:—Surgeon-general as major-general, according to the date of his commission; deputy surgeon-general as colonel, according to the date of his commission; surgeon-major, after twenty years' full-pay service, as lieutenant-colonel, according to the date of his commission. It is further suggested that all surgeons-major, after twenty years' full-pay service, be designated senior surgeons-major.

Para. 6. *Forage* (*see* JOURNAL, *ut supra*).—By this, forage is not now allowed as an appanage to rank, and medical officers may be deprived at any moment of a privilege enjoyed since the formation of their department, and suffer much pecuniary loss by the frequent purchase and sale of horses and appointments. It is suggested that forage, or allowances in lieu thereof, should be continued to all medical officers hitherto entitled to it; and that those medical officers attached to cavalry and horse artillery, who draw no extra pay equivalent to that received by combatant officers in these corps, should not be subjected to any stoppages.

Para. 12. *Surgeon-major* (*see* JOURNAL, *ut supra*).—With reference



to this, it is proposed that all promotions of qualified surgeons to the rank of surgeon-major should be strictly by seniority.

Para. 13. *Promotion for Distinguished Service* (see JOURNAL, *ut supra*).—By this, promotion for distinguished service is at the expense of the officers passed over. It is suggested that when distinguished service is rewarded by promotion, the officer so promoted should remain as supernumerary in his rank until the date on which he would have been promoted, according to his seniority.

Para. 15 (see JOURNAL, *ut supra*).—It is suggested that the appointment of a medical officer to a regiment should be at least for five years, and that he should be eligible for reappointment.

Para. 20. *Retirement* (see JOURNAL, *ut supra*).—With a view to secure a reasonable flow of promotion, it is suggested that all officers of the administrative ranks shall be placed on the retired list at the age of sixty years, or on completion of thirty-five years full-pay service; unless, in any special case, it would be for the good of the service that they should continue in employment.

Para. 28. *Non-effective Pay* (see JOURNAL, *ut supra*).—It is suggested that the rates of half-pay under these circumstances be, in the case of surgeons-major with twenty-five years' service on full pay, £1 *is. per diem*, and of surgeons-major with twenty years' full-pay service, 18s. *per diem*.

Para. 29. *Half-pay* (see JOURNAL, *ut supra*, p. 600).—It is suggested that, in the case of a surgeon-major retiring for his own convenience, who has served twenty years on full pay, including eight years on foreign service, or two years with an army in the field, the rate of half-pay be 16s. 6d. *per diem*.

Para. 30. *Retirement* (see JOURNAL, *ut supra*).—It is suggested that, in consideration of the greatly increased duties of a very onerous and responsible character which have been imposed on executive medical officers by recent regulations, as well as in view of the fact that only a small proportion of such officers can reasonably expect to be promoted to the administrative ranks, surgeons-major of twenty-five years' full-pay service, including ten years abroad or three years with an army in the field, be entitled to retire on the lowest rate of half-pay of the higher grade, viz., £1 *is. per diem*. It also suggested that, as in other branches of the service, a certain number of retirements at an increased rate of pay be offered annually to the three higher ranks of the department.

*Memorandum*.—With a view to prevent the ever-recurring "block in promotion", and to provide for the emergency of sudden war, the organisation of a medical reserve, composed of officers over twenty years' full-pay service, is suggested; such officers to receive £1 *per diem*, and be available in time of war, for all home duties, up to the age of fifty-five years, and, when so employed, to receive the full pay and allowances of their rank.

B. ARMY CIRCULAR (SPECIAL), DATED 6TH MARCH, 1873.—With regard to the duties referred to in this circular, it is felt that they will impose on medical officers a serious pecuniary liability, without any compensatory advantages; and further, that they will interfere with their professional duties, especially during war.

It is suggested that the Medical Department should have no direct responsibility regarding anything outside the hospital and not actually in use in the wards or surgery; nor for the care of any non-medical stores, further than duly to represent any defects or deficiencies in the same; nor for tents or tent equipage not actually in use. The Department should not be responsible for the cooking of the diets for the sick, further than to represent defects in the same.

C. OTHER GRIEVANCES.—1. All regimental medical officers have suffered pecuniary loss, in some instances of a serious nature, by being deprived, in consequence of the system introduced in November 1871, of the power of exchanging on their own terms as formerly.

The recent warrant, by abruptly removing the late regimental assistant-surgeons from their corps, has inflicted a further pecuniary loss on these officers; and it is suggested that they should be reinstated in their respective regiments, and so remain as long as the exigencies of the service shall permit.

2. *Sick-leave*.—The present orders regarding sick-leave are, that a medical officer who obtains sick-leave either from abroad or otherwise, must be placed on half-pay, if not reported fit for duty after a period of six months from the date of his medical board; whereas a regimental combatant officer is entitled to receive a further extension of sick-leave beyond that period, should the nature of his case require it.

With reference to the above, it is suggested that medical officers who are called upon to expose their lives in all climates may be placed on the same footing regarding sick-leave as regimental officers.

3. *Leave of Absence*.—It is suggested that all medical officers should be entitled to sixty-one days' leave of absence yearly, without any deduction whatever, and that, in addition, they be granted the same advantages as regards short leave as regimental officers.

We have great pleasure in laying this important document before our readers, and in expressing our satisfaction with the very temperate manner in which it is drawn up. It cannot be otherwise than gratifying to us to note how closely in all essential respects its views coincide with those recently adopted by our Parliamentary Bills Committee; and this independent expression of opinion on the part of forty experienced army medical officers will materially strengthen the hands of the deputation which we have no doubt Mr. Cardwell is willing to receive.

In dealing with the many intricate questions of detail raised by the altered warrant, it is necessary that very precise notions should be popularised concerning the real wants of the Department, without dwelling too much on generalities and vague grievances. The report of the Aldershot meeting comes as a fitting corollary to our published statements of last week, and clearly shows how small an amount of consolation can be derived from the Director-General's efforts to meet the gravity of the case.

#### REPORT OF THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

A COMMITTEE of the King and Queen's College of Physicians in Ireland on the Army Medical Warrant of March 12th, 1873, have very carefully and ably analysed and discussed the Warrant and the further Circulars relating to the organisation of the Army Hospital Corps, and the Circular dated the 6th of March last. After pointing out the defects in these documents, the Report which they have issued concludes by recommending "that the College should use its best efforts to obtain such alteration in the existing regulations which apply to the medical officers of the army as will effect the following changes. 1. The publication in the *Army List* of the names of all medical officers attached to regiments or battalions. 2. Full compensation for expenses or pecuniary losses occasioned by the removal of officers from those regiments or battalions. 3. Surgeon-generals to rank with major-generals; the director-general with lieutenant-general. 4. The retirement of surgeon-generals of five years' standing to be compulsory on full pay. 5. The pay of surgeons of fifteen years' standing to be 17s. 6d. per day. 6. The pay of surgeon-generals to be increased. 7. The pay of the director-general to be fixed at £2,000 *per annum*. 8. Medical officers to have a right to allowance for forage, stable, and groom. 9. The military hospitals to be placed in the sole charge of medical officers."

#### ARMY MEDICAL EXPLANATIONS.

SIR,—The copy of the official memorandum furnished to the Secretary at War by the Medical Department, and published by you as Mr. Cardwell's explanation of the objectionable clauses of the New Medical Warrant, is a remarkable document. Permit me to show how absurd are the excuses made for a warrant which every one affected by its provisions has condemned.

1. If it be *intended* to give promotion a few weeks after or before the completion of fifteen years' service, what objection can there be to state that in the warrant? In the absence of such a statement, medical officers justly claim the restoration of their half-crown a day. They have had sufficient experience of War-Office intentions to know their value.

2. The standard of rank by which forage was granted to medical officers by clause 17 of the Royal Warrant, October 1st, 1858, was the combatant officer of corresponding grade, not the *departmental officer*. These last officers did not receive this allowance until long after medical officers. The allowance was granted to surgeons ranking with combatant field-officers in 1858, as an appanage of their rank, and as only just to them. As such, they may justly claim its continuance. It is a distinct portion of income, and without it a medical field-officer loses his status in the army.

3. Whoever heard of a *bonus* being given to stimulate promotion in the Army Medical Service? If, as is stated, it be *intended* to promote after fifteen years, a bonus would be unnecessary, and such an explanation as a reason for substituting selection *in any form* for seniority is absurd on the face of it.

4. Regimental surgeons have not been removed from their regiments in a manner causing "the least difficulty to them." They have been treated with scant courtesy, and should have been shown in the *Army List* with their regiments until required for other duties. They have uniform, equipment, etc., thrown upon their hands, and feel keenly the position in which they have been placed.

5. The tenure of the rank of field-officer was limited in the combatant

ranks, in order to give promotion. This does not hold good with the Medical Department. Again, "with power of reappointment" occurs in the combatant warrant, not in the medical. It is most unfair to grant a military medical officer (a professional man) relative rank according to date of army commission, and then place him, for the good of the public service, in a regiment where he must rank junior of all its field-officers, and lose his choice of quarters and lodging money.

6. Junior officers do not reap "considerable benefit" either as junior officers or otherwise; for, the moment they are promoted, they are at once deprived of their former right to the appanages and privileges of their relative rank solemnly guaranteed in former warrants, without which that relative rank is valueless. An indefinite promise of promotion after fifteen years' service is no recompense for the deprivation of a right to £45 *per annum*.

No explanation has been given in this remarkable document as to why medical officers, against their wishes and the recommendations of a previous War Office Committee, have been saddled with a large responsibility for stores and equipment, the loss of which may cause them serious pecuniary embarrassment. Neither has it been explained why the ages fixed for compulsory retirement have been enlarged, or why medical officers specially attached to regiments are to pay all regimental subscriptions without being accorded the status of regimental officers. If a medical officer be only attached to a regiment, it is unfair to ask him to pay to band and mess funds. If he pay to these, he should be gazetted to his regiment, wear the uniform of his corps as other field-officers, and be considered in every way as a regimental officer until he leaves it.

I am, etc.,

May 1873.

ESPRIT DE CORPS.

## MEDICAL INTERESTS IN PARLIAMENT.

### REMUNERATION OF POOR-LAW MEDICAL OFFICERS UNDER THE PUBLIC HEALTH BILL.

DR. PHILIPSON of Newcastle-on-Tyne, Honorary Secretary of the Northern Branch, informs us that, in accordance with the request of the last meeting of the Parliamentary Bills Committee, a petition from the Branch in respect of the thirteenth clause of the Public Health Bill, praying that Poor-law medical officers may be adequately remunerated for any work which they may be called upon to do under the provisions of that Bill, was presented on May 22nd by the Hon. H. G. Liddell.—A similar petition was also presented on Friday, May 23rd, by Mr. Donald Dalrymple, M.P., on behalf of the Parliamentary Bills Committee of the Association. Mr. Dalrymple took the opportunity of reading the petition from his seat, with the view of calling the attention of the House to the importance of the subject. Dr. Bryan of Northampton has forwarded to the local members a petition from the Midland Branch; and we have received from Mr. Fowler of Bath a petition signed by Poor-law medical officers in Bath and its neighbourhood, which has been since presented by Mr. Dalrymple.

Some forty other petitions to the like effect appear in the Parliamentary notices as having been forwarded. Mr. Dalrymple has further consented to put on the notice paper of the House of Commons, a notice of motion, to add at the end of Clause 13: "Provided that for such reports of particulars of sickness medical officers appointed under the laws for the relief of the poor shall receive payment according to a scale to be settled by the Local Government Board, and out of the funds provided by Parliament."

### CERTIFICATES UNDER THE REGISTRATION OF BIRTHS AND DEATHS BILL.

Dr. William Reeves of Carlisle writes to us on this subject as follows.

"If not too late, I wish you would direct a passing thought to the subject of gratuitous death-certificates—made so by Act of Parliament. Are there any other bodies of men, or any individuals, who are called upon by Act of Parliament to perform gratuitous services to the State? Out of the raw material thus extorted from medical men, large salaries accrue; for registrars and others, both local and general, make handsome livings. Local registrars get medical certificates gratuitously, and are authorised to sell to benefit societies and burial clubs, etc., copies; so that I have known ten shillings or more made out of a death-certificate in the first instance granted gratuitously by a poor doctor for science sake and for the good of the state. No one connected with the handling of these death-certificates does his work without pay, except the doctor. Will you not say a word? and will not the profession rebel against this injustice?"

\*\*\* This subject has not escaped attention. It is one of considerable difficulty. The Chairman of the Parliamentary Bills Committee has been in communication with influential members of Parliament, with a view to the protection of medical interests. The opposition of the Government to any clause providing payment is to be feared; but an effort will be made to obtain such a clause. The precedent for requiring gratuitous death-certificates, on which stress will be laid, is the Scottish Act. The reason urged will be, that the state has granted to the medical profession certain privileges under the Medical Act—only registered practitioners can sue for fees or hold public appointments; and that it has a right to require at their hands a certain essential service to the state without payment, as a return for this monopoly. The argument does not seem to us a sound one; for a similar monopoly has been granted to pharmaceutical chemists and other bodies without exacting any such services in return. Moreover, such monopoly was not granted for the benefit of the profession—and it would be difficult to show that it does in any way benefit them—but for the benefit of the public, and to protect them from the assumption by ignorant persons of deceptive medical titles. The Pharmaceutical Act confers an actual monopoly: the Medical Act does not, but only guards a distinctive title, which it is desired to protect, in order to save the public from frauds. Moreover, any such condition or return should have been exacted as a previous, and not a subsequent, condition of the Act. The considerations have been urged by the Chairman of the Parliamentary Bills Committee on members; and Mr. Dalrymple has consented to put on the notice paper a clause to provide payment for certificates, on which he will take the opinion of the House. We shall take the opportunity of urging our members at the proper time to secure parliamentary support for Mr. Dalrymple's important motion on the subject.

### THE CASE OF THE MILITIA SURGEONS.

A correspondent writes to us as follows.

"May I ask your powerful aid in advocating the just claims of militia surgeons in our JOURNAL? At the meeting of the Association at Birmingham, a conference of militia surgeons took place, where it was resolved to call a meeting in London at an early date. Since then, nothing has been done. Mr. Cardwell, in reply to questions in the House, has never admitted that we are entitled to compensation, but has said that individual claims should be taken into consideration. In reply to Mr. Arbuthnot, he lately said that the appointments of medical officers to the depot centres will greatly relieve the dissatisfaction of army surgeons in the new warrants. What is gain to them is destruction to many of us. I fear that, without organisation, we shall do nothing. I feel morally certain that, unless we take some decided steps, we shall be quietly ordered to discontinue our duties, and personal remonstrance will avail us nothing. In the new regulations, militia surgeons will not examine recruits or attend the permanent staff. Consequently, all that is remunerative will be taken from us; and, as all practices must have been to a considerable extent sacrificed by attending to its duties, more especially in recruiting away from home, the loss to all must be great, and to some surgeons very serious. The medical profession must be very grateful to you for fighting the battle of the army surgeons; and I hope you will forgive my calling your attention to militia surgeons, whose grievances are far more serious."

We can only say that if our correspondent, or any others interested in the matter, with whom he can place himself in communication, will address the Chairman of the Parliamentary Bills Committee of the British Medical Association, with a communication detailing the grievances complained of, and suggesting the remedies desired, the subject matter of the communication will be immediately brought before that Committee, in which every Branch of the Association has a representative voice; and the Committee will, we do not doubt, give careful attention to the matter, and at once take steps to sift it, and to see what can be done, by adequately influential proceedings with the Government or in Parliament, towards procuring satisfaction for just claims.

THE LATE MR. FARR, OF SWINTON.—At a recent weekly meeting of the Manchester Board of Guardians, the following resolution was passed:—"That this Board desires to record its sincere regret at the death of Mr. C. J. Farr, the Medical Officer of the Industrial Schools at Swinton, belonging to the township of Manchester, and its appreciation of the valuable services which he rendered to that institution during the period of twenty-four years for which he held the office in question. That this Board desires, at the same time, to tender to Mrs. Farr the expression of its deep sympathy with her in the irreparable loss which she has sustained."