

of the Acts; and all had come to the conclusion long ago that it was absolutely essential that there should be some power to put the law in operation to the most rigorous extent. There should be a public department, able to bring the law into motion against the offenders, and compel them to conform to its provisions; and, till that was done, he did not see the smallest hope of having the sanitary regulations properly attended to.—The PRESIDENT suggested that the concluding paragraph, slightly amended, might form the basis of a resolution which might be passed in that Section on the subject of smoke-consumption, and which might be handed to the general body of the Association. He also suggested that they should not name the precise machinery to cure the evil. The question would be thoroughly considered by the Sanitary Commissioners, of whom Dr. Stokes was one.—Mr. ARMSTRONG moved the following proposition: “That, in future sanitary legislation, smoke-nuisance and other gaseous pollutions of the atmosphere must be dealt with by compulsory measures, to be carried into effect by authorities independent of the district, and instructed by competent inspectors unfettered by local interests and feeling.” Mr. Armstrong said he had himself been requested to be medical inspecting officer; but he felt himself compelled to decline the offer, because he felt convinced that, if he fulfilled his duties to the letter, he would have made himself hosts of enemies.—Dr. ROBINSON (Gateshead) had fought the same battle as the last speaker. He felt satisfied that the Acts would never work until magistrates on the judicial bench were deprived of the power of adjudicating in smoke-nuisance cases, as in many instances they were personally interested in a conviction. In the borough of Gateshead, the greatest nuisance-makers were those who had to adjudicate on their own cases. He seconded the motion.—Dr. REID (Newbiggen) said that at Newbiggen the authorities had appointed an inspector of police as inspector of smoke-nuisance; and it was found that he, being independent of all local authorities, had answered most admirably. For his own part, he was decidedly in favour of government authority.—The resolution was unanimously agreed to.

BRITISH MEDICAL JOURNAL.

SATURDAY, SEPTEMBER 17TH, 1870.

BEDSIDE EXAMINATIONS.

If there is one feature which distinguishes the regulations of the Examining Boards in the present day from those issued but a few years ago, it is the general recognition of the importance of compelling the candidate for qualifications to practise the medical profession to show that he has some direct acquaintance with the nature and treatment of disease. Formerly, it was in but very exceptional cases that anything further was required of candidates for diplomas than ability to answer a series of oral or written questions; now, happily, something more is demanded.

The abstracts of regulations which we last week presented, show how extensively the system of insisting on a practical test of the student's ability to recognise and treat disease is carried out; and some valuable information on the subject is also contained in a return from the various licensing bodies, obtained by Sir John Gray, and presented to the House of Commons last Session. Five questions were submitted to each of the bodies. The first three related to the numbers of diplomas, etc., granted by each body during five years, the fees payable, and the duration of the curriculum of study. The fourth and fifth subjects of inquiry were:—

“4. The number of years or months during which the candidate is required to have been engaged in the practical work of a Medical or Surgical Hospital as dresser, clinical clerk, or pupil, having the actual charge of patients under the medical or surgical officer of the institution; stating the dates at which such practical work was declared to be a requisite qualification for a candidate for a licence to practise.

“5. Is the candidate for any, and if for any, for which, of the qualifications to demonstrate at the bedside of a patient that he has acquired a practical acquaintance with disease, giving the date at which such rule was adopted, and the date since which it has been operative.”

Replies to the questions have been furnished by all the bodies except the University of Durham. These show that evidence of having held the

office of house-surgeon, dresser, or clinical clerk, or of having in some way had the charge of patients under superintendence, is required of candidates by the majority of the boards; some, as the Colleges of Physicians and Surgeons of England and the Apothecaries' Society, demanding certificates of clerkship or dressership; and others, as the Edinburgh Colleges, requiring the candidate to have attended the out-practice of a Dispensary, or to have acted as assistant to a registered practitioner. Some of the boards urge, more or less, the difficulty of compelling students to avail themselves of such opportunities of practical instruction. The College of Surgeons of Edinburgh pleads the limited number of appointments in the Royal Infirmary and the large number of students; the Queen's University in Ireland and the King and Queen's College of Physicians both object to the attempt on the ground of impracticability; and the Glasgow Faculty and the Apothecaries' Hall of Ireland simply acknowledge that they have no regulations bearing on the point.

More satisfactory still than the replies to the fourth question are those to the fifth, relative to the practical testing of the knowledge of candidates. Regarding this, the returns from which we quote show that, out of the nineteen licensing bodies, sixteen have either for some time required, or are about to require, that each candidate shall have his knowledge tested by the direct examination of patients. Among the bodies which have most recently adopted this course are the Royal College of Surgeons of England, which will subject candidates for the membership to a practical examination after March 31st, 1871; the University of Dublin (which has instituted practical examinations on the living subject from the beginning of the present year); and the Royal College of Surgeons in Ireland, which will require practical examination after January 1871. It is with special satisfaction that we notice the intended enforcement of clinical examination by the two Colleges of Surgeons of England and Ireland. Our London College especially, whose diploma of membership is held by so many members of the medical profession of the country, and which has shown itself so cautious in its advances towards improvement, is to be congratulated on the sound and wise determination to which it has come. One body alone—the King and Queen's College of Physicians—objects positively to clinical examination, on the ground that it “can only be carried out, and even then to a very limited extent, in the most unimportant cases; viz., chronic and non-painful cases”; and the Queen's University of Ireland, recognising the value of clinical examination, believes that it is not applicable in acute medical and surgical cases, and that it cannot be made a substitute for searching oral and paper examination. But surely that which sixteen boards—not all at once, but at various times in succession—have found to be practicable, cannot be impracticable to the remaining boards. The impossibility of applying utilising acute cases is not an argument of such value that it should lead to the entire omission of clinical examination. That a candidate should be able to recognise chronic cases—cases which, *pace* the Irish College of Physicians, are of importance in ordinary practice—is not a trifling matter: and, it seems to us, the object of clinical examination should be not only to find out that a student can give a correct diagnosis of disease, but also to ascertain whether he knows how to go to work to make his diagnosis.

As a consequence of the growing demand on the part of the licensing bodies for evidence of practical knowledge, the medical schools are year by year increasing the opportunities afforded to the students for practical instruction. Clerkships and dresserships, which were in times past confined to the few, are now more liberally distributed; and in several schools special provision is made that every pupil shall at some time hold these offices. In other ways, too, the means of acquiring a knowledge of disease are being extended; as, for instance, by the system in force at St. Mary's Hospital and at Leeds, where the students are assigned in detachments to the physicians and surgeons in rotation.

The medical student may, then, rest assured that something more than mere book-learning will be required of him; that he will be required, before he can obtain a qualification to practise, to show that he really has a knowledge of disease; and, at the same time, that he will

find the means of obtaining that knowledge ready at hand. To those who come prepared for their work by previous training in habits of accurate observation and correct reasoning, and fortified by a determination to use diligently the means offered to them, invaluable opportunities are afforded by our medical schools.

THE CREDENTIALS OF PSYCHOLOGY.

THE last comer to our Association and youngest sister among the sections claims a few words of welcome at our hands, and may be congratulated on having at once become an object of interest.

Whatever opinions may be entertained as to the new doctrines enunciated by Dr. Laycock in his introductory address to the Section of Psychology, which was delivered at Newcastle, and lately appeared in our columns, the members generally will concur with his expression of satisfaction that the Council has instituted the Section. The best-informed amongst us must have felt the need of that more definite knowledge of psychology which *vivâ voce* discussions will elicit, while not a few must often have had occasion to regret that they had not been enabled to study it theoretically and practically in connection with the kindred great departments of study—medicine, surgery, and midwifery. This departmental recognition of psychology by our great Association, and in the scheme of the proposed Academy of Medicine of London, cannot fail, we think, to compel a like recognition of it by the Examining Boards of the Universities and Medical Colleges, so that the next generation of practitioners may hope to be spared at least some of the difficulties and regrets of the existing.

But what is meant by psychology? What are its scope and limits—its principles and its procedure, as a science? What, too, its practical applications? Those who have to teach and examine, as well as those who study and discuss, must of necessity ask these questions. Dr. Laycock evidently aimed at the answers to them in his address, by showing, in the first place, what it was not.

It is not a mere department of medical science and art, any more than physiology or chemistry, but of natural science, capable, like these, of wide application to each and every department of medicine; nor is it a department of philosophy—the poetry of science—because a “true psychology must deal with the varying states of consciousness in their immediate relations to the organisation, and not apart therefrom, as is common with the speculative psychologist”. Further, although a knowledge of the laws of life and organisation (biology), and more especially of those laws as exemplified in the development, structure, and functions, of the brain and nervous system, be essential to psychology, it is not a mere department of either biology or physiology; for, dealing expressly with the human mind, it includes metaphysics on the one hand; and, examining the vital changes which go on coincidentally with human thought and feeling, it includes molecular physics on the other. Then, after all, come the practical applications of the science not only to insanity in all its forms, but to mental hygiene, and to therapeutics and the practice of medicine in general—in, short, all that has hitherto been included under *medical* psychology, so much is clearly shown by Dr. Laycock’s psychological work, the text-book of his class. [*Mind and Brain*; or, *the Correlations of Consciousness and Organisation*. Second edition.]

If now we turn to what is commonly included under “psychology”, we find statements of the most contradictory kind. A recent French writer [*La Psychologie Anglaise Contemporaine* (Ecole Expérimentale), par Th. Ribot: 1870] has divided English psychology into two “schools”—the thinking and the experimental; the former including such thinkers as Hamilton, Ferrier, and Whewell; the latter, James Mill, J. S. Mill, Herbert Spencer, Bain, Lewes, and Morell, who mix up more or less of natural science with their thinking. It is significant of the imperfect appreciation of what psychology includes, that psychologists like Laycock and Maudsley are not included in M. Ribot’s “experimental” school. When Magendie was on a visit to London, a physician, well known as a physiological writer, was introduced to

him as a physiologist. “A physiologist!” exclaimed Magendie, somewhat puzzled; “what experimental researches has he made?” M. Ribot’s experimental psychologists are for the most part unacquainted either scientifically or practically with the multitudinous experiments of Nature manifested in insanity and in the various brain-disorders which involve the intellect, or with the researches in the laboratory or at the bedside into the influence of chemical composition on physiological action, like those of Dr. B. W. Richardson, noted by Dr. Laycock. As compared with the pure “thinkers”, the writers enumerated, being more or less of the “sensational” school of philosophy, are experimental; but then the fact of there being “schools” in psychology, proves that with these at least it has not attained to the position of a true science, for schools deal with opinions, the sciences with facts.

The vastness and the inherent difficulties of the study of human nature (which psychology is) are the chief causes of its speculative character—so vast that one mind can hardly take in the whole range; so difficult, that while in every science it is more easy to think than to observe accurately, in psychology it is difficult even to think; and scientific observation, because of a false method, is well nigh impossible. This is shown by so common and comparatively simple a subject of inquiry as pain, its effects and its alleviation. Scientifically, all pain is mental, and depends on some state of the brain or nervous system. If it be mental in the metaphysical sense, as in grief and melancholia, both its seat and origin are in one portion of that system; if corporeal, as in neuralgia, its seat is in one portion, its origin in another. The “thinking” psychologists, however, not only exclude all consideration of the bodily correlatives of pain, but affirm that the pain of a neuralgia is not mental at all. Again, they say that pain causes this and that action, whereas it is the state of the brain at the moment which causes both the pain and the action. This is now well established from observation of the groans and other signs of pain manifested unconsciously by persons operated on surgically when anaesthetic. In short, a good criterion of a psychology professing to be scientific may be found in the way in which it deals scientifically and practically with pleasure and pain.

Not less is the connection of ideation with molecular changes illustrated by such research. Thinking philosophers have jangled interminably touching “the Infinite”, without any regard to the fundamental fact that their brains are the seat of all their thoughts thereon. How pregnant in instruction a glimpse at true psychological facts may be easily learned, when it is remembered that one particular form of insanity is characterised by insane ideation as to the Infinite, and that it may be artificially developed by certain chemical compounds. Let a De Quincey be able to discourse ever so lucidly on the infinite grandeur of his hallucinations, an atom of water taken from the morphia which excites them, so as to constitute it apomorpha, will change them into a prosaic nausea, to be followed speedily by irrepressible vomiting.

A true science offers another criterion of its validity. The thinking psychologists have had interminable discussions as to the “veracity” of consciousness. But in the face of facts like those referred to, what can any state of consciousness teach beyond that cerebral state on which it at the moment depends? And how can that be proved to be a true teaching, except by the scientific process termed verification? Those psychologists who place implicit reliance on the evidence of their senses and look confidently into the depth of their own consciousness for a knowledge of facts, would never learn, as they move so airily about, that they bear a pressure equal to fourteen pounds upon every square inch of their bodies, or that they are being constantly attracted towards the centre of the earth. The anecdote which Dr. Laycock told of Leibnitz is a charming illustration of fallacies which flow from this error. “I am a great friend of experimental philosophy,” that illustrious thinker patronisingly remarked; “but Newton deviates much from it when he pretends that all matter is heavy, or that each particle of matter attracts every other particle.” Dr. Laycock does not deny, nevertheless, the ultimate veracity of consciousness; on the contrary, he holds that the fundamental intuitions of the human mind are truths. For this reason he maintained in his address that the primary and

fundamental idea of force is as an adapting energy. Just as a man gets his primary idea of force and of its existence from the action of his own limbs, so the adaptation of the force to ends in an act of will gives both the primary idea of mind and the proof of its existence.

The best criterion, however, of a true scientific psychology is that it is founded on unity of the sciences, and is thereby rendered of necessity both experimental and practical. Dr. Laycock dwelt specially upon this point, and showed how the breadth of view thus obtained gives clearness of comprehension to a subject so vast and comprehensive, and how, on the other hand, the severance of phenomena which are cognate gives rise to the "mysteries" of life and organisation and mind, so complacently dwelt upon by eminent physicists as well as "thinkers."

We have not discussed the particular doctrines which, in illustration of this breadth of view, Dr. Laycock enunciated in his address, for that would render necessary a reference to his more detailed exposition of them in the work already referred to, and published last year. The property of "adaptivity" as correlative with chemical affinity, and the increase in molecular weight without increase of absolute weight, or even with diminution, *pari passu* with adaptivity, as manifested in life, throw new life upon the nature of the vital forces and bring new kinds of experimental research to bear upon mental phenomena. Especially, that new science termed *Kinetics* or *Kinematics*, which investigates the motions of atoms and molecules with special reference to the atomic theories of chemical affinity, will be brought with biology to elucidate the direction, rapidity, and composition of the atomic vital motions in relation to function. Altogether, we may admit Dr. Laycock's assertion "that, so far from the relations of body and mind being too mysterious for investigation, it is a simple fact that the phenomena can be brought within the range of molecular physics and experimental research." And we may farther add that, in proportion as man knows the workings of his brain—that wondrous organ of his spiritual nature—in the same proportion he will assert his dominion over the vital forces, as he has done already over the physical, and make them subservient to his will.

HER Majesty the Queen has become patroness of the National Aid Society for the Sick and Wounded.

DR. JAMES SALMON, Inspector-General of Hospitals and Fleets, has been appointed to the vacant post of Physician-Extraordinary to Her Majesty the Queen.

WE have pleasure in announcing that our associate Mr. Spencer Wells has been recently elected an Honorary Fellow of the Société Royale des Sciences Médicales et Naturelles of Brussels, with the very encouraging assurance that this distinction has been conferred upon him "in consideration of the eminent services that he has rendered to science and humanity."

PRACTICAL CHEMISTRY.

THE facilities for the study of practical chemistry are increasing in London. Besides the extensive and complete laboratory which has recently been built at St. Bartholomew's Hospital, there will be a large one in the new St. Thomas's, and that at Charing Cross Hospital is to be enlarged.

ACCIDENTAL SELF-POISONING.

ANOTHER case of accidental self-poisoning has been lately recorded. A Mr. G. D. Lace, carman, of Ulverston, Lancashire, was passing the Sewage Works, where was standing near one of the tanks a two-gallon stone bottle containing carbolic acid, which the men are in the habit of using as a disinfectant. Mr. Lace, thinking it contained beer, drank from it, without observing that it was labelled "poison". He became seriously ill in a very short time. Drs. Anderson and Cranke were both called in immediately, and every remedial measure was resorted to; but the unfortunate man died in a few hours, after suffering great agony.

THE SANITARY GOVERNMENT OF PARIS.

By a decree of the French Provisional Government, dated September 10th, a "Central Committee of Hygiene and Salubrity", consisting of eight members, has been formed at the Hôtel-de-Ville. The members are, MM. Sainte-Claire Deville, Bouchardat, Chauveau-Lagarde, De Montmahon, Dr. Sée, and Dr. Onimus; with M. Jules Ferry as president, and M. Brisson, *adjoint* to the Mayor of Paris, as vice-president. The Hygienic Committee of each *arrondissement* of Paris, the Council of Hygiene and Salubrity of the Department of the Seine, and the Committee on Unhealthy Lodgings, are to be in direct communication with the Central Committee, which will make its reports to the Government.

THE NAVAL MEDICAL SERVICE.

WE are able to furnish the following abstract of the meritorious services which have recently secured promotion in the Naval Medical Service for Staff-Surgeons Henry Slade, William Bennett Dalby, and Ahmuty Irwin.

Staff-Surgeon Henry Slade entered the service on the 4th June, 1847, and was employed as Assistant-Surgeon on the Coast of Africa, Home, and East India Stations. He was promoted for services in the Burmese War; and served as Surgeon on the East Indian, Home, North America and West Indian, Baltic, South-East Coast of America, and Australian Stations. He distinguished himself on two occasions by his attention to the wounded after the actions of Pakehinahina and Gate Pah in New Zealand, in 1864 and 1865.

Staff-Surgeon William Bennett Dalby, M.D., entered the Navy on the 12th May, 1846, and served as Assistant-Surgeon on the Home and Mediterranean Stations and at Plymouth Hospital. As Surgeon, he was employed during the Russian War at Therapia Hospital, and subsequently on the Home, Cape of Good Hope, and West Coast of Africa Stations; at Haslar Hospital, and as Medical Officer in charge of the Naval Cadets' Sick Quarters at Dartmouth, where he is still serving. He has been specially commended for his services on several occasions.

Staff Surgeon Ahmuty Irwin entered the Navy on the 4th January, 1851, and served as Assistant-Surgeon at Plymouth Hospital, on the South-East Coast of America and the Mediterranean Stations, and with the Naval Brigade in the Crimea, where he was severely wounded. As Surgeon, he has been employed on the Mediterranean, Home, West Coast of Africa, East Indies and China, and North America and West India Stations. His name was mentioned in the *London Gazette* as being continually under fire when attending the wounded at the capture of Ningpo from the rebels in 1862. Mr. Irwin is now serving at Plymouth Hospital.

THE WAR AND THE BRITISH ARMY MEDICAL SERVICE.

WE last week mentioned that two army medical officers, Staff-Surgeon Dr. De Chaumont and Assistant-Surgeon Count Wollowicz, had for some time past received notice to hold themselves in readiness to proceed to the German forces in the field, with a view to observing and reporting upon the hospital and sanitary arrangements. The officers named were selected, it appears, not only on account of their known scientific acquirements, but also because they were thorough linguists, speaking both French and German fluently. We now understand, what appears to be scarcely credible, that at the last moment, after having received orders to proceed on their mission, they have been stopped, not by any difficulties abroad, but by difficulties created at our own Foreign Office. As soon as hostilities were declared between France and Germany, the Director-General of the Army Medical Department applied for permission to send some of his officers to the seat of war, for the good of the public service; and Mr. Cardwell, the Secretary of State for War, stated in the House of Commons that he would take steps to have the application carried into effect. This was two months ago. It seems unaccountable that the medical branch of the army should be the only one prevented from gaining improvement out of the extensive field of practical experience unhappily afforded by the vast number of casualties which have resulted from the conflicts of the contending armies. We hear that there are numerous officers of the British army—line, artillery, and others—watching the military operations of the German army, and, whether officially recognised by our own Government or not, openly received and hospitably entertained by the German authorities. We know also that the National

Society for aid to wounded soldiers has met with no difficulty in sending numerous civil surgeons to the seat of war, where they have been very actively and profitably employed. We cannot wonder, therefore, that the army medical officers should chafe under the restrictions which have been put upon them by the authorities. We are assured that numerous applications have been made by army medical officers to go to the seat of war at their own expense; but the necessary permission has in all cases been withheld. We trust that the subject will not be forgotten when Parliament meets; and that there will be a strict inquiry why a department of the public service which is notoriously very defective in much of its organisation has not been allowed to take advantage of the great opportunities of improvement in various directions which the present war has offered.

BRITISH PHARMACEUTICAL CONFERENCE.

THE seventh annual meeting was opened at the Royal Institution, Liverpool, on Tuesday. The address of the President, Mr. W. H. Stoddart, was the chief feature of Tuesday's proceedings. He discussed the present state of education among pharmacologists—a subject which occupied the attention of the members also yesterday. There is an exhibition of objects relating to pharmacy open at the Savings Bank buildings.

SPREAD OF SCARLATINA BY MILK.

A MEMBER of Parliament writes to the *Times* of Thursday, asserting that several outbreaks of scarlet fever in a bathing town in Scotland had been traced to the milk supplied. The woman who milked the cows was in attendance on her children who were suffering from scarlet fever, and the boy who was carrying the milk was just recovering from it. The inference to be drawn from these facts is, that the particles of the skin peeling off has become mixed with the milk. It is much more likely that the milk-boy carried the infection in his person from house to house. The question is one, however, of great interest and importance; and the whole circumstances of the cases mentioned should be thoroughly investigated by the medical men of the place.

THE FOOT-AND-MOUTH DISEASE.

IN a report of an inquiry made by Dr. Thorne Thorne, for the Medical Officer of the Privy Council, on the effect of the milk of animals suffering from the foot-and-mouth disease, it is stated that cases were observed where the milk of diseased animals seemed decidedly to have produced disease in man, but that in many cases no noticeable effects were produced. Dr. Thorne reports that in no instance has he heard that any disease in the human subject has been produced by the use of the flesh of animals which have been suffering from the foot-and-mouth disease.

THE SANITARY CONDITION OF WARWICK.

THE undue prevalence of continued fever at Warwick, as shown in the quarterly return of the Registrar-General, has resulted in an inquiry by Dr. Buchanan into the sanitary condition of the town. It appears that the Inspector found the drainage to be insufficient and inefficient, the sewers ill-ventilated and sewer-air forcing itself into the interior of dwellings, and the removal of house-refuse from premises conducted in a most unsatisfactory manner. In addition, the water-supply is described as being filthy in the extreme; it is derived from the Avon, which receives close to the water-works the sewage-liquor cast into the Leam by the A B C process for dealing with the sewage of Leamington, and also, fifteen miles higher up, the river the sewage of Coventry to the extent of 1,500,000 gallons a day. Probably much of the sickness in Warwick might have been prevented by the appointment of a local medical officer of health; but the most serious question here brought forward is that relating to the almost universal pollution of streams, and we can only regret that the recent Report of the Commissioners appointed to inquire into the value of the A B C process has resulted in the expression of a strong opinion adverse to this system. Irrigation seems at present to be the only safe and effectual plan of dealing with

the sewage difficulty. According to the *Warwick Advertiser*, the Local Board of Health of that town are directing their earnest attention to the removal of the many causes of preventable disease.

THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. THE fortieth annual meeting of the British Association commenced at Liverpool last Wednesday. Professor Huxley took the Chair as President, and delivered an introductory address. Instead of, as has generally been done by his predecessors, giving a general review of the progress made in all departments of science, he confined himself to a history of the rise and progress of a single biological question—that of the "spontaneous generation" of living from dead matter. Having briefly referred to the ancient opinions on the subject, he gave a sketch of the labours of Redi, Needham and Buffon, Spallanzani, Schultze and Schwann, Helmholtz, Pasteur, etc. Without asserting absolutely that "spontaneous generation" or *abiogenesis* (as he called it) was altogether impossible, he considered that Redi's doctrine of *biogenesis*, or the evolution of life from life, was victorious at the present day. The address concluded with some remarks on the mode of propagation of parasitic and zymotic diseases.

THE CASE OF MISS PRANKERD.

MR. HOPKINS, the House-Surgeon of the Royal United Hospital, Bath, informs us that one or two interesting facts have occurred in this case since our last report. From the first, the patient has not been able to open her mouth as widely as she did previously; and on each side of the jaw where the bullets entered there has been some swelling, which would account for this inability. When the swelling disappeared, it was found that the teeth of the upper and lower jaws did not approximate, and that the left side of the lower jaw was apparently displaced a little outwards. This displacement has, however, diminished within the last few days, and would not be noticed unless special attention were directed to it. On Monday morning, she coughed up a small piece of bone about the size of a grain of wheat. On Tuesday night, she complained slightly of a sore throat; and on Wednesday morning, she felt a little irritation at the upper part of her throat, which caused her to cough; at the same time she experienced a slight difficulty in breathing, and whilst coughing one of the bullets dropped into the back part of her mouth. There was no hæmorrhage. The bullet is flattened and grooved, clearly indicating its having been fired from a rifled barrel. The upper ridge of the bullet has in its passage carried away a small portion of bone, which is imbedded there. Its weight is fifty-three grains.

TEMPORARY SUSPENSION OF THE GAZETTE MÉDICALE DE PARIS.

THE *Gazette Médicale* of Saturday last contains a notice of which the following is a translation. During the siege of Paris, communication with the exterior being interrupted, and all hands in the interior being occupied in defending the city, we shall of necessity be obliged to suspend the publication of the *Gazette*. We shall resume it as soon as possible, and will make arrangements to prevent our subscribers from suffering any loss by the interruption.

CHOLERA EPIDEMIC IN ZANZIBAR.

TOWARDS the end of last November, the cholera which had been prevailing in the central parts of Africa was carried down to the eastern coast, and was thence conveyed to the island of Zanzibar, and prevailed for about five or six weeks in a very fatal form, as in that time, in the town and suburbs alone, it is estimated to have caused ten thousand deaths, being about a tenth part of the population. It then ceased in the town, but continued its ravages in other parts of the island and amongst the shipping. Last March it broke out again, and from that time to the end of April it continued to prevail with more or less severity. In the beginning of May, it had nearly ceased in the island, there occurring only one or two isolated cases amongst the slaves, though it was stated to be prevailing in some of the neighbouring French settlements.

VEGETABLE POISONS.

DR. MATTHIESSEN continues his researches on vegetable poisons in the laboratory of St. Bartholomew's Hospital. According to the *Athenæum*, he has obtained some startling results as to the fatal effects of certain vegetable extracts, and the impossibility of subsequent detection. A full account of his investigations will be published in the forthcoming volume of the *Hospital Reports*.

BOERHAAVE MEDAL.

THE Dutch Society of Sciences of Haarlem has instituted, in addition to its ordinary prizes, a large gold medal of the value of 500 florins, in honour of Boerhaave. The Boerhaave medal is to be granted in 1872 to mineralogy and geology, in 1876 to botany, in 1882 to zoology, in 1884 to physiology, in 1888 to anthropology. The series will then recur.

PERILS OF EPICURES.

THOSE fascinating little foreign cheeses which make their appearance in foreign and fashionable provision stores, wrapped in tinfoil, are not, it seems, as safe as they are, to some people, attractive. The tinfoil contains lead; and the lactic acid of the cheese, favoured by the condition of moisture, leads to contamination of the outer layers especially with that poisonous metal. Soap, chocolate, and dry confectionery, so largely wrapped in the foil, were found, on recent examination by Auguste Vogel, to be quite free from contamination.

AMMONIA AND SNAKE-BITES.

SUBSCRIPTIONS are being at present raised in Victoria, Australia, with the object of presenting a testimonial to Dr. Halford for his discoveries in the treatment of snake-bites by ammonia. Dr. Day writes to say that, for the last two years and upwards, the ammonia-treatment has been the remedy for snake-bites in Victoria, and the means of saving a number of cases in an apparently hopeless state of collapse.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

DR. DUDFIELD has retired from the office of Secretary, which he has ably filled for some years; and, at a meeting of the Council on the 6th instant, the following resolution was moved by Dr. Dixon, seconded by Dr. Pinder, and carried unanimously: "That Dr. Dudfield's resignation be accepted with great regret; and that the best thanks of the Council be tendered to him for the able and willing services which he has at all times rendered to the Association, and also for the invariable courtesy and kindness which characterised the discharge of his duties as Honorary Secretary for the past four years." Mr. Wickham Barnes has been appointed Honorary Secretary to the Association.

BRITISH MEDICAL BENEVOLENT FUND.

BY the death of Sir James Clark, Bart., the British Medical Benevolent Fund has lost, not only its President, but one of its warmest friends and earliest supporters. Upon the announcement of his death, the Committee expressed to the surviving members of the family, through the present baronet, its deep regret and sympathy in their bereavement. Another loss has been sustained by the Society in the death of Mrs. Robinson of Bolton-le-Moors, one of the oldest of its lady collectors. Mrs. Robinson continued to the last to take the warmest interest in the affairs of the Fund, and only a few days before her death she requested that a five-pound note should be sent to the Honorary Secretary as her *last* donation. The applications for assistance to the Fund continue to be very numerous, and many of the cases are, as usual, of a most distressing character. At the last two meetings the large sum of £250 has been distributed in grants to about thirty different recipients, many of them being widows with families of young children. J. A. Locking, Esq., of Hull, and F. Thorne, Esq., of Leamington, have been elected Honorary Local Secretaries; and we are requested to state that the Committee will gladly avail itself of the services of any gentleman who is willing to act as such in places not already represented, or of ladies as collectors, if they will put themselves

in communication with Dr. Felce, or Dr. Thorne Thorne, the Honorary Secretaries in London. Among the donations received since our last notice are: Dr. Rogers, Exeter, £10; C. A. Newnham, Esq., Honorary Local Secretary Wolverhampton, £5 5s.; Mrs. Robinson (the late), Lady Collector Bolton (additional), £5; Dr. Shann, York, £5; Dr. G. S. Jenks, Bath, Vice-President British Medical Association (additional), £10 10s.; Dr. Burrows, F.R.S. (additional), £10; G. D. Pollock, Esq. (additional), £5; Bath and Bristol Branch of the British Medical Association, by Dr. Steele (additional), £3 3s.

SCOTLAND.

THE ROYAL INFIRMARY, EDINBURGH.

IT is stated that His Royal Highness the Prince of Wales will lay the foundation-stone of the New Infirmary, on October 12th. Preparations for a great public ceremonial are in progress.

CONVICTION UNDER THE SANITARY ACT.

PERSISTENCE in enforcing the sanitary laws will do something towards checking the spread of contagious disease. A Glasgow clerk has been fined for having put into a public cab a boy who was suffering from typhus fever. He intended to have the boy taken to the Fever Hospital, but did not say a word to the driver about the boy's condition.

THE UNIVERSITY OF EDINBURGH.

DR. WYVILLE THOMSON, Professor of Natural History in Queen's College, Belfast, and Dr. H. Alleyne Nicholson, Extra-academical Lecturer on Natural History, Edinburgh, are, we believe, candidates for the Chair of Natural History in the University of Edinburgh, rendered vacant by the resignation of Professor Allman from ill health.

MEDICO-CHIRURGICAL SOCIETY OF GLASGOW.

AT the meeting of this Society held on Friday, September 2nd, in the Hall of the Faculty of Physicians and Surgeons, the following gentlemen were elected office-bearers. *President*: James Adams, M.D. *Vice-Presidents*: J. Steven, M.D.; James Stewart, M.D. *Council*: D. Richmond, M.D.; M. H. Gibson, Esq.; T. Torrance, Esq.; H. Thomson, M.D.; James Gray, M.D.; R. Grieve, Esq.; J. Pollock, Esq.; R. Renfrew, M.D. *Secretaries*: R. Perry, M.D.; Alex. Robertson, M.D. *Treasurer*: H. R. Howatt, M.D.

NORTHERN COUNTIES MEDICAL SOCIETY.

THE annual meeting of this Society was held in Edgar's Hotel, Forres, on September 3rd, Dr. Grigor of Nairn, President, in the Chair. The Society, which was formed seven years ago by a number of medical men in the counties of Banff, Elgin, and Nairn, has met with the warm support, not only of practitioners in these counties, but not a few from distant parts have shown their interest in the objects and welfare of the Association by joining its ranks. It was, therefore, thought desirable to alter its name from that of the Banff, Moray, and Nairn Medical Association to that of the Northern Counties Medical Society, a course which is evidently calculated to lead to excellent results in the north of Scotland. The President delivered an excellent address. The subject of the late Medical Bill was discussed, and the action taken by the British Medical Association approved of. It was remitted to the Council to watch over any Bill which might be introduced next session, and to take what action might be thought necessary. Dr. Murray, of Forres, was elected President for the ensuing year. The members afterwards dined in Edgar's Hotel.

BEQUESTS, ETC.—The Darlington Hospital Dispensary has received £100 under the will of Mrs. John Pease.—Miss Elizabeth Champion, of Wandsworth Common, bequeathed £100 each to the Bethlem, London, and St. George's Hospitals.—"A Lady" has given £100 to the London Hospital.

NOTES CONCERNING THE PROVINCIAL AND SCOTCH HOSPITALS AND MEDICAL SCHOOLS.

BIRMINGHAM.—**QUEEN'S COLLEGE.**—Aggregate Fee for all Lectures required, £52 10s., payable in two instalments.—Separate Classes: *a, b, e, f*, single, £5 5s.; perpetual, £8 8s.; *c, d, h*, single, £4 4s.; perpetual, £6 6s.; *g, i, k, l*, single, £3 3s.; perpetual, £5 5s.; *m, o, p*, single, £3 3s.; two courses, £5 5s.—Fees for rooms and board of resident students, £50 *per annum*, payable in three instalments.—H.P.—*General Hospital*: Medical and Surgical Practice, 6 months, £10 10s.; a year, £15 15s.; perpetual, £31 10s.—*Queen's Hospital*: Fees the same as at the General Hospital.

Appointments. At the *General Hospital*: Resident Medical Assistant, and Resident Surgical Assistant, each for 12 months; two Resident Dresserships, tenable 6 months: all after examination, and with board and lodging in the Hospital. At the *Queen's Hospital*: Resident Physician's Assistant and Resident Surgeon's Assistant, every six months after competitive examination: board and lodging in Hospital. No fee for Clerkships or Dresserships.

Clinical Instruction. Clinical Lectures are given at both Hospitals. At the *Queen's Hospital*, there are special wards for Diseases of Children and Venereal Diseases.

Prizes.—Two Wainford Scholarships, annually after examination.—The Sands Cox Prize, of the value of £20, annually, awarded to Students who have completed their curriculum, after an examination in Medicine, Surgery, and Midwifery.—Warden's Prize, of £5 5s., to the most proficient Student of the first year.—The Percy Prize, Books of the value of £5 5s., for the best examination in German.—Silver Medals and Certificates of Honour, annually, in each class after examination.

Clinical Prizes—General Hospital: Surgery, first year, two prizes of £3 3s. and £2 2s.; Medicine, second and third years, one prize of £5 5s. each year.—*Queen's Hospital*: second year, two prizes of £3 3s. and £2 2s. in Medicine, and the same in Surgery; third and fourth years, two prizes of £5 5s. and £3 3s. in Medicine, and the same in Surgery.

BRISTOL MEDICAL SCHOOL.—Perpetual Fees to Lectures (except Comparative Anatomy), £52 10s. Separate Classes: *a, b*, single, £5 5s.; perpetual, £9 9s.; *d*, single, £5 5s.; perpetual, £7 7s.; *e, f, g, h*, single, £4 4s.; perpetual, £6 6s.; *i, k, l*, single, £3 3s.; perpetual, £5 5s.; *m*, single, £4 4s.—H.P.—*Royal Infirmary*. Surgeon's pupil, 1 year, £12 12s.; 2 years, £21; 3 years, £26 5s. Dresser (extra fee), 1 year, £12 12s.; 2 years, £21; 3 years, £26 5s. Physician's pupil, 6 months, £8; 1 year, £15; 18 months, £20; perpetual, £25. Entrance Fee, £5. Subscription to Library, £1 *per annum*. Apprenticeship to House-Surgeon, including five years' residence, and attendance on Hospital Practice, £315.—*General Hospital*. Medical or Surgical Practice, 6 months, £6; 1 year, £10; perpetual, £20. Extra Fee for Clinical Clerk or Dresser, £5 5s. for 6 months. Library Fee £1 1s. *per annum*. Resident pupils, £100 for the first year; £60 for each subsequent year; or 5 years, with apprenticeship, £260.

Clinical Instruction, etc. Clinical Lectures are delivered at the Royal Infirmary and the General Hospital.

The Royal Infirmary contains a Library of about 2,700 volumes; and a Museum, which contains, among numerous interesting and valuable specimens, a large series of preparations of diseased bones, and a remarkable collection of calculi. The General Hospital also has a Library with a commodious Reading-room and a Museum of numerous interesting and valuable specimens.

Prizes.—Prizes and Certificates of Honour will be distributed at the end of the Winter Session, after examination in all the subjects of each year.—Prize and Certificates of Honour for Practical Anatomy.—*Royal Infirmary*. Suple's Medical Prize, and Suple's Surgical Prize; each a gold medal value £5 5s., and about £7 7s. in money. The interest of £500, under the will of the late Henry Clark, Esq., to the prizeman of the third year in the medical school, if he have attended the Royal Infirmary.—*General Hospital*: a Medical Scholarship of £15, founded by the late Rev. Canon Guthrie; and a Surgical Scholarship of £15, founded by H. M. Clarke, Esq., of London, annually to the most diligent Students attending the medical and surgical practice respectively; also a Scholarship founded by the late J. N. Sanders, Esq., consisting of the interest of £500, awarded for proficiency in Medicine and Surgery.

LEEDS SCHOOL OF MEDICINE.—Aggregate Fee to Lectures required by Examining Bodies, £42. Entrance Fee to Library and Reading-

room, £1 1s. Separate Classes: *a, d, f*, 1st session, £4 4s.; 2nd session, £3 3s.; *b*, 1st session, £6 6s.; 2nd session, £5 5s.; *e*, 1st session, £5 5s.; 2nd session, £3 3s.; *g, h*, 1st session, £4 4s.; 2nd session, £2 2s.; *i, k*, 1st session, £3 3s.; 2nd session, £1 11s. 6d.; *l, m*, each course, £2 2s.—H.P.—Leeds Infirmary, Medical or Surgical, each—a Winter Session, £7 7s.; a Summer Session, £6 6s.; 12 months, £12 12s.; 18 months, £15 15s.; 3 years, £21.

Clinical Lectures are delivered by the Physicians and Surgeons of the Infirmary.—Demonstrations in Operative Surgery, and of Skin-Diseases, and Ophthalmoscopic Demonstrations, are given.—Instruction in the Use of the Microscope is given weekly.—The West Riding Lunatic Asylum at Wakefield is open to Students for the study of Mental Diseases.—Students can also attend the practice of the Leeds Public Dispensary, the Fever Hospital, and the Eye and Ear Infirmary.—There are several Resident Appointments at these Institutions. The school-buildings comprise Lecture-Rooms; Anatomical, Physiological, Pathological, Chemical, Botanical, and Materia Medica Museums; Laboratories; Dissecting Rooms; Library, etc.—The Library is well supplied, and is open to Students who have paid the entrance fee and to members of the Profession at an annual subscription of £1 1s. or nomination by a member of Council.—There is a private Dissecting-Room for the use of older pupils, in addition to a commodious room for general work.—There is a large and well-fitted Chemical Laboratory, where instruction in Practical Chemistry is given. The fees are: 1 month, £4 4s.; 2 months, £7 7s.; 3 months, £10 10s.; 4 months, £13 13s.; 5 months, £15 15s.; 6 months, £17 17s.; 9 months, £21.

Practical Surgery.—It is proposed to carry out a Course of Practical Surgery under the charge of Mr. Wheelhouse, Mr. Teale, and Mr. Jessop, in the following manner. The first period will be devoted to the consideration of the practical details of Minor Surgery, such as (*a*) Surgical Manipulations; (*b*) Incisions and the Use of Knives; (*c*) Use of Needles, Sutures, Ligatures, Setons, Knots, Torsion, Acupressure; (*d*) Anæsthetics and the various modes of their Administration; (*e*) Hypodermic Injections; (*f*) The general principles of Bandaging and varieties of Bandages; etc. This will be followed by the Special Surgery of the Head, Neck, and Chest, including the Demonstration, on the Dead Body, of all the operations appertaining to these regions. The Operations will be performed by the Third Year's Students, assisted by those of the Second Year, under the guidance of the Teacher, in the presence of the remainder of the Class. The after-application of all necessary bandages and appliances will form part of this portion of the work. The second period will be occupied in like manner by the consideration of the Surgical Anatomy and Surgery of the Abdomen and Perinæum, and of the Pelvic Organs, Male and Female; and the third period by the same consideration of the Surgery of the Limbs. For the illustration of all portions of the Course, one or more men will be present to be used as "models". On them every bandage described will be applied before the class; the methods of Physical Examination, by palpation, measurement, percussion, by the aid of transmitted light, etc., will be demonstrated. The "Surface-markings" of the Body, and their bearings upon Surgery, will be explained; the courses of the principal Arteries, Veins, and Nerves, will be chalked out; the normal configuration of Joints will be examined and discussed; and the altered relation of the various prominences in Dislocations will be pointed out. The principles involved in the use of external appliances and supports, such as Orthopædic Apparatus, Trusses, etc., will be demonstrated. At the close of every third week a written and *vivâ voce* examination will be given. This will consist of written and oral descriptions of pathological specimens from the *post mortem* room and museum, with an account of the probable symptoms that would be caused by, and the mode of treatment that would be required by, each specimen. The last six weeks of the Session will be devoted to the personal Examination of each Student, with a view to elicit his knowledge of the subjects of which the whole course has consisted. Each Student will be required—(*a*) To show his knowledge of the use of all varieties of Surgical Instruments, External Appliances, Splints, Bandages, etc., demonstrating them before the Class upon the "Models"; (*b*) To perform any required Operation; (*c*) To describe the means which he would adopt to ascertain the existence of any given disease or injury; (*d*) To Diagnose a few cases at the Bedside.

Hospital Appointments.—Every Student in turn must pass through the offices of Clinical Clerk and Dresser. Four House-Surgeons are elected from among the senior Students who have shown industry and skill as Dressers and Clinical Clerks.

Prizes.—At the close of each Session, Silver and Bronze Medals, Books, and Certificates of Honour, are presented according to merit.—The Hardwicke Clinical Prize, value not less than £10, is given annually for the best set of reports of medical cases in the Hospital during the Winter Session.—The Surgeons' Clinical Prize of £10 in money is

given annually by the Surgeons of the Hospital for the best set of reports of surgical cases during the Winter Session.—The Thorp Scholarship in Forensic Medicine (£10) at the close of each Summer Session.—Two Chemical Scholarships are offered annually for proficiency in Chemistry.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.—Aggregate Fee for Lectures (not including hospital practice), £42. Separate classes: *a, b, c, f, g, h*, one course, £4 4s.; *c*, £2 2s. to Students who have not a composition ticket; *d*, one course, £5 5s.; *i, k, l, n, q*, each course, £3 3s.; *m, o, p*, each course, £2 2s. Vaccination, £1 1s. Practical Pharmacy, £2 2s. Dental Mechanics, £2 2s.—H.P.—*Royal Infirmary*, Medical or Surgical, each—6 months, £5 5s.; 12 months, £6 6s.; perpetual to both, £31 10s. Lock Hospital attached to the Infirmary: 6 months, £2 2s.; 12 months, £3 3s.—*Northern Hospital*: perpetual, £31 10s.; a year, £12 12s.; 6 months, £9 9s.; 3 months, £6 6s. For either the Medical or the Surgical Practice separately, half the above Fees.

Appointments.—Six Dressers and six Clinical Clerks are elected quarterly from the Students of the Infirmary. Two *Post Mortem* Clerks are appointed at the Infirmary for 6 months. Four Apprentices are admitted to reside and board in the Infirmary for 1, 2, and 3 years, on payment of 70, 130, or 190 guineas, including library and lecture fees, but not hospital practice.

The Museum is open daily; it contains a large number of specimens of Morbid and Comparative Anatomy, and an excellent collection of Wax Models, illustrating the Anatomy of the Eye, the Internal Ear, etc. There is also a collection of *Materia Medica*, which has recently been largely extended.—The Library contains a good selection of standard works on Medical, Surgical, and the allied Sciences, which may be taken out under certain regulations. The Reading Room is supplied with the leading medical periodicals.

Exhibitions and Prizes.—Royal Infirmary Medical Scholarship, value £42, consisting of a Gold Medal, value £10 10s., and six months' free Board and Residence, with Dressership and Clerkship in the Royal Infirmary.—Four Exhibitions, value £31 10s. each, consisting of free Board and Residence in the Royal Infirmary for six months, with Dressership.—Silver Medals, Book Prizes, and Certificates of Honour, in the various classes.—Clinical Prize in May 1871, £5 for the best report of twelve surgical cases in the Infirmary.

MANCHESTER ROYAL SCHOOL OF MEDICINE.—Aggregate fee for Lectures, £42 (not including hospital practice). Separate classes, for one course, *a, b, d, e, f, g, h, k, l, n*, £4 4s.; *c, i*, £3 3s.; *p*, £2 2s. [In Practical Chemistry, there is an additional charge of 10s. 6d. for chemicals.]—H.P., Royal Infirmary, Composition Fee, £42; Medical and Surgical Clinical Fee, £1 1s.; Library and Museum Fee £1 1s.

Connected with the School are Museums of Human and Comparative Anatomy and of *Materia Medica*, and a Chemical Laboratory.

Prizes.—In addition to three Scholarships, value £20, £15, and £10, for Perpetual Students, Prizes for General Proficiency, and Certificates of Honour for regularity of attendance and general good conduct, will be given at the end of each session.

SHEFFIELD MEDICAL SCHOOL.—Aggregate Fee for Lectures, £40. Separate classes: *a* and *b*, 1st course, £6 6s., second course, £4 4s.; *d*, each course, £4 4s.; *e, f*, 1st course, £4 4s., 2nd course, £2 2s.; *g, h, i, k, l*, each course, £3 3s.—H.P., Sheffield General Infirmary, Medical or Surgical, 6 months, £6 6s., 12 months, £10 10s.; Perpetual—Medical, £15 15s.; Surgical, £21.

Further opportunities for practice may be obtained at the Sheffield Public Hospital and Dispensary, and at the Sheffield Hospital for Diseases of Women.

The *Infirmary* contains a Museum of Pathology, a Library, and a *Post Mortem* Theatre, with Microscopes and all the appliances for Clinical Research.—The Library of the Medical School is open to Students.

UNIVERSITY OF DURHAM COLLEGE OF MEDICINE, NEWCASTLE-ON-TYNE.—Fee for all the Lectures (except Practical Pharmacy): one payment, £46 4s.; two payments, each £25 4s.; three payments, each £18 18s. Single courses, £4 4s. each. Vaccination, £1 1s.—H.P., Newcastle Infirmary: 3 months, £4 4s.; 6 months, £5 5s.; 12 months, £7 7s. Perpetual Fee, £17 17s.; or by instalments, 1st year, £7 7s.; 2nd year, £6 6s.; 3rd year, £5 5s.

Two Resident Clerks, and four Resident Dressers and four Non-resident Dressers are elected half-yearly. They are provided with Board and Apartments free.

Midwifery can be attended at the Newcastle Lying-in Hospital, and

Diseases of the Eye at the Eye Infirmary.—Lectures on Psychological Medicine will be given at the Borough Asylum.—The Chemical Laboratories are open daily throughout the year, from 10 to 5 o'clock. Students can attend Laboratory Practice and receive instruction in Analysis for—6 days weekly, £31 10s. *per annum*; 4 days, £21 *per annum*; shorter periods, by arrangement.—The Libraries and Museums are open daily.

Pharmacy.—Special arrangements have been made for instruction in Pharmacy. The curriculum will consist of courses of Lectures in Botany, *Materia Medica*, Chemistry, and Pharmacy. Fee for curriculum, perpetual, £6 6s.; separate courses, each £4 4s.

Prizes.—A *Medical Scholarship*, annual value £25, for four years, in October 1870, to Students who have been registered at Durham.*—The Dickinson Memorial Scholarship, value £15 annually, after the first Examination of a Licensing Board.—A Silver Medal and Certificates of Honour in each Class.

UNIVERSITY OF ABERDEEN.—The Fee to each Class in the Faculty of Medicine is £3 3s., except Practical Anatomy and Demonstrations, for which the Fee in each Session is £2 2s. Matriculation Fee, both Sessions, £1; Summer Session alone, 10s. [This is additional to the Lectures on Anatomy.]

ROYAL INFIRMARY, ABERDEEN.—Perpetual Fee, £6; or 1st year, £3 10s.; 2nd year, £3. Clinical Medicine and Clinical Surgery, each £3 3s. Pathological Anatomy £2 2s.—A three months' course of Practical Ophthalmology is given in summer by Dr. A. Ogston.—The General Dispensary and the Lying-in and Vaccine Institution, and the Eye Institution, are open daily.—Clinical Instruction is given in the Royal Lunatic Asylum for three months in the year.

UNIVERSITY OF EDINBURGH.—The Annual Fee for each subject required in the ordinary curricula is £4 4s., except Anatomical Demonstrations, £1 1s.; Practical Pharmacy and Dispensing, each, £2 2s.; Practical Anatomy and Practical Chemistry, each £3 3s. The Fee for Histology is £3 3s.; and that for Medical Psychology and Insanity £2 2s. (both courses being delivered in the Summer Session).—Every Student, before entering with any Professor, must produce a matriculation ticket for the ensuing session. Tickets will be issued at the Matriculation Office at the College, every lawful day, on and after October 3rd, from 10 till 4 o'clock.—Enrolment in the general album is the only legal record of attendance in the University.—The Library will be open for the purpose of giving out books to Students, either on loan or for reference, every lawful day during the Winter Session, from 10 A.M. till 4 P.M.; on Saturdays, till 1 o'clock.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH.—The courses qualify for Examination for various diplomas and licences, and for degrees in those years in which University residence is not required.

Practical Instruction.—Royal Infirmary, 12 Noon; perpetual, £10; annual, £5 5s.; half-yearly, £3 3s.; quarterly, £1 11s. 6d. Separate payments for two years entitle the Student to a perpetual ticket.—Sick Children's Hospital: three months, £1 1s.; perpetual, £2 2s.—Dispensary: Royal Public Dispensary and New Town Dispensary, each, first six months, £3 3s.; three months, £2 2s.; each subsequent three months, £1 1s.—Practical Midwifery: Royal Maternity Hospital, Royal Public Dispensary, £1 1s.; New Town Dispensary, £1 3s.—Diseases of the Eye, Ear, and Teeth: Dispensaries, and the Edinburgh Eye Infirmary.—Practical Pharmacy: Royal Public Dispensary, New Town Dispensary, six months, £3 3s.

Fees.—For the first of each Winter Course of Lectures, £3 5s.; second, £2 4s.; perpetual, £5 5s. To those who have already attended a first course in Edinburgh, the perpetual fee is £2 4s. Second Course of Midwifery, £1 3s. Practical Chemistry and Practical Anatomy, £3 3s. Anatomical Demonstrations, £2 2s.; when taken along with Practical Anatomy, £1 1s.; perpetual, £4 4s. Analytical Chemistry, £2 2s. a month, £5 for three months, or £10 for the session of six months. Vaccination, £1 1s. Summer Courses of Clinical Surgery, Clinical Medicine, Practical Anatomy, Operative Surgery, and Diseases of the Eye, each £2 2s.—The minimum fee for the education for the double qualification of Physician and Surgeon from the Royal Colleges of Physicians and Surgeons of Edinburgh, including the examination fee, is £90 4s., payable by yearly instalments; for the single diploma of either Physician or Surgeon, including the examination fee, £80.

[Continued at p. 317.]

* The Subjects of Examination will be:—1. The Gospel of St. Mark in Greek. 2. Latin Grammar. 3. Caesar, *De Bello Gallico*, Book IV. 4. Arithmetic and Algebra. 5. Euclid, Books I and II. 6. History of England to the end of the Reign of Henry II.

TABLE OF THE MEDICAL OFFICERS, PROFESSORS, AND LECTURERS IN
MEDICAL SCHOOLS OF SCOTLAND.

For further particulars regarding each Hospital and Medical School, see p. 314. The letters (W.) and (S.) in this Table denote respectively Winter and Summer Courses.

LECTURES, ETC.	ABERDEEN UNIVERSITY.	EDINBURGH UNIVERSITY. (d.)	ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH. (g.)	GLASGOW UNIVERSITY. (m)	GLASGOW, ANDERSON'S UNIVERSITY. (q.)
ANATOMY	Dr. Struthers, 11 (W.)	Mr. Turner, 1	Dr. Handyside, 1 (W.)	Dr. A. Thomson, 11, (W. and S.)	Dr. G. Buchanan, 5 (W.)
ANATOMICAL DEMONSTRATIONS	Dr. Struthers, and Demonstrator, 9 (W.); 2 (S.)	Mr. Turner, 4	Dr. Handyside, 4 (W.); 9 to 5 (S.)	Dr. A. Thomson, and Demonstrator, 2 (W.)	Dr. G. Buchanan, 1 (W.) ^r
DISSECTIONS	9 to 4 (W. and S.)	Daily (W. and S.)	9 to 4 (W.); 9 to 6 (S.)	9 to 4 (W.); (S.)	Daily (W. and S.)
PHYSIOLOGY OR INSTITUTES OF MEDICINE	Dr. Ogilvie, 4 (W.)	Dr. Bennett, 11 (W.)	Dr. A. Gamgee, 11 (W.)	Dr. Buchanan, 4 (W.)	Dr. E. Watson, 4 (W.)
CHEMISTRY	Mr. Brazier, 3 (W.)	Dr. Crum Brown, 10 (W.)	Dr. S. Macadam, 10 (W.)	Dr. Anderson, 10 (W.)	Dr. Thorpe, 12 (W.)
PRACTICAL CHEMISTRY	Mr. Brazier, 10 A.M. (S.)	Dr. Crum Brown (W. and S.)	Dr. Macadam, 9 to 5 (W. and S.)	Dr. Anderson, 12 (W.); 10 (S.) ⁿ	Dr. Thorpe, 10 to 4 (S.)
MATERIA MEDICA	Dr. Harvey, 3 and 4 (S.)	Dr. Christison, 9 (W.) ^e	Dr. T. R. Fraser, 9 (S.)	Dr. Cowan, 11 (W.)	Dr. Morton, 3 (W.)
BOTANY	Dr. Dickie, 9 (S.)	Dr. Balfour (S.)	Dr. H. A. Nicholson, (W. and S.)	Dr. Dickson, Dr. Young, <i>Zoology</i> (S.)	Mr. Hennedy, 10 (S.)
NATURAL HISTORY	Mr. Nicol, 2 (W.); 11 (S.) ^a	Dr. Allman, 2 (Win.); also in Summer ^f	Dr. R. Haldane, 3 (W.)	Dr. Gairdner, 12 (W.) ^o	Dr. McCall Anderson, 12 (W.)
MEDICINE	Dr. Macrobin, 3 (W.)	Dr. Laycock, 3 (W.)	Dr. P. H. Watson, Dr. J. Bell, and Mr. Annandale, 10 (W.) ^h	Dr. G. H. B. Macleod, 1 (W.)	Dr. Dunlop, 11 (W.)
SURGERY	Dr. Pirrie, 10 (W.)	Mr. Spence, 10 (W.)	Dr. Keiller, 11 (W.); 11 (W.); Dr. A. Macdonald, 10 (S.) ⁱ	Dr. Leishman, 3 (W.)	Dr. J. G. Wilson, 3 (S.)
MIDWIFERY	Dr. Inglis, 2 (W.)	Dr. A. Simpson, 11 (W.)	Dr. Littlejohn, 2 (W.); 11 (S.)	Dr. Rainy, 4 (W.)	Dr. P. A. Simpson, 11 (S.)
FORENSIC MEDICINE	Dr. Ogston, 9 (W.) ^b	Dr. D. Maclagan (S.)	Dr. A. Gamgee (S.)
PRACTICAL PHYSIOLOGY & HISTOLOGY	...	Dr. Bennett (W. and S.)
GENERAL PATHOLOGY	Dr. Rodger	Dr. Sanders, 2 (W.); and in Summer ^f	Dr. John Wyllie, 4 (W.); 9 (S.)
HOSPITAL PRACTICE	Royal Infirmary, <i>c.</i>	Royal Infirmary	Royal Infirmary, <i>k</i>	Royal Infirmary, <i>p</i>	Royal Infirmary, 9.30 A.M.
CLINICAL MEDICINE	Dr. Harvey and Dr. Smith	Drs. Bennett, Laycock, Maclagan, & Sanders, Tu., F., 12 to 2	Drs. R. Haldane, G. W. Balfour, and Grainger Stewart, 12 (W.); Tu., F., 12 (S.) ^l	Physicians of Royal Infirmary, M. Th., (W.)	Physicians of Royal Infirmary, twice weekly, 9 (W. and S.)
CLINICAL SURGERY	Dr. Pirrie, Dr. Kerr, and Dr. Fiddes	Mr. Lister, M. Th., 12 (W.); also in Sum.	Dr. Gillespie, 12 (W.); M. Th., 12 (S.)	Surgeons of Infirmary, Tu. F., 8.30 (W.)	Surgeons of Infirmary, twice weekly, 9 (W. and S.)

a. Zoology with Comparative Anatomy.

b. With Medical Logic.

c. ROYAL INFIRMARY, ABERDEEN: *Physicians*—Dr. A. Harvey, Dr. J. W. F. Smith, Dr. Beveridge; *Surgeons*—Dr. Pirrie, Dr. D. Kerr, Dr. Fiddes; *Junior Surgeon*—Dr. A. Ogston; *Dental Surgeon*—Mr. Williamson.

d. Medical Psychology and Mental Diseases, with Practical Instruction, Dr. Laycock (S.)

e. With Dietetics.

f. Mr. Turner lectures on Comparative Anatomy in the Summer.

g. Vaccination, six weeks' courses in Winter and Summer, Dr. Husband. Diseases of Children (Hospital for Sick Children), Drs. Stephenson, Ritchie, Linton, and Gamgee (W. and S.) Diseases of the Eye, Dr. A. Robertson (S.)

h. Operative Surgery and Surgical Appliances, Drs. Watson, Miller, and J. Bell (S.); Orthopædic Surgery and Operative Surgery, Mr. Annandale (S.); Operative Surgery, Dr. Chiene (S.)

i. Practical Midwifery, Female and Infantile Diseases, Drs. Keiller and C. Bell (W. and S.)

k. EDINBURGH ROYAL INFIRMARY: *Physicians*—Dr. Bennett, Dr. Laycock, Dr. Maclagan, Dr. J. M. Duncan, Dr. Sanders, Dr. R. Haldane, Dr. G. W. Balfour, and Dr. T. Grainger Stewart; *Assistant-Physicians*—Dr. C. Muirhead and Dr. T. R. Fraser; *Consulting Surgeon*—Dr. J. Dunsmure; *Surgeons*—Mr. J. Spence, Dr. J. D. Gillespie, Dr. P. H. Watson, and Mr. Annandale; *Ophthalmic Surgeons*—Mr. Walker and Dr. D. A. Robertson; *Assistant-Surgeons*—Dr. J. Bell and Dr. John Duncan; *Dental Surgeon*—Dr. J. Smith; *Pathologist*—Dr. J. B. Pettigrew.

l. Dr. M. Duncan gives Clinical Lectures on Diseases of Women.

m. Lectures on Eye; Dr. G. Rainy.

n. Chemical Laboratory from 9.30 A.M. to 4.30 P.M. (W. and S.)

o. Dr. Gairdner gives a special course on two days in the week during summer.

p. GLASGOW ROYAL INFIRMARY: *Physicians*—Dr. Gairdner, Dr. Steven, Dr. Perry, Dr. McCall Anderson, and Dr. Scott Orr; *Surgeons*—Dr. E. Watson, Dr. Dewar, Dr. Macleod, Dr. G. Buchanan, and Dr. Morton; *Fever-Physician*—Dr. M'Laren;

q. Ophthalmic Medicine and Surgery, Dr. J. R. Wolfe.

r. Surgical Anatomy, Dr. Buchanan, 12 (S.) Osteology for Beginners, Dr. Buchanan (S.)

[Concluded from p. 314.]

EDINBURGH ROYAL INFIRMARY.—Fees: 6 months, £3 3s.; 1 year, £5 5s.; perpetual, £10 10s. Clinical Medicine and Clinical Surgery, each £4 4s. for the Course.—No fees for any medical or surgical appointment. Four Resident Physicians and four Resident Surgeons are appointed; they live in the house for six months free of charge. Candidates must be registered as legally qualified practitioners. Non-resident Clinical Clerks are appointed. Each surgeon appoints from four to nine Dressers for six months. Assistants in the Pathological Department are appointed by the Pathologist.—Instruction is given in special departments.

UNIVERSITY OF GLASGOW.—Fees, each course, £3 3s.; except Lectures on the Eye, £1 1s.

GLASGOW—ANDERSON'S UNIVERSITY.—Fees for all the Lectures and Hospital Practice required for the Diplomas of Physician and Surgeon, £45. Class Fees for each Course of Lectures: 1st session, £2 2s.; 2nd session, £1 1s.; afterwards free. Anatomy Class Fees, for Lectures and Demonstrations: 1st session, £4 4s.; 2nd session, £4 4s.; perpetual, £8 8s. The Dissecting-room is free for two sessions to those who attend both courses of Anatomy. After the second year, the fee for admission to the Dissecting-room is £1 1s. per session. There is a Matriculation Fee of £1 1s. at the beginning of each Winter Session.

GLASGOW ROYAL INFIRMARY.—Fees, admitting to all departments of the Hospital and the Clinical Lectures, perpetual, £10 10s.; 1 year, £5 5s.

GLASGOW EYE INFIRMARY.—Fee, 6 months, £2 2s.; for Students who are attending or have attended the Lectures on the Eye in the University, £1 1s.

NOTES OF THE WAR.

DR. GEORGE KORN, private teacher in the University of Breslau, was killed at Metz on August 18th.

SOME of the wounded at Reichshoffen have arrived at the military hospital of Versailles, and more are expected. The ordinary patients of the hospital have been sent to Alençon and other places.

LISTS of the wounded on both sides have hitherto been exchanged between the German and French Aid Committees by way of Geneva. An arrangement, however, has been decided on, by which the transmission will be direct.

THE *Journal des Connaissances Médicales Pratiques* says that in future, whenever time allows, the wounded will be transported on straw in open luggage-wagons, instead of, as hitherto, being shut up in closed compartments.

THE medical department of the Prussian Ministry, says the *Wiener Medizin. Wochenschrift*, has sent a large supply of disinfectants, as well as of medicines, to the districts around Metz. It is intended, when Metz has surrendered, to send away to distant healthy places the sick and wounded who are shut up there, after disinfection has been applied. The Prussian medical department has also sent to the army a supply of medicines for diarrhoea, which usually prevails at this season of the year. The state of the health of the German troops in France continues to be very favourable.

THE JOHANNITER CORPS.

A SPECIAL correspondent of the *Daily Telegraph* passes some severe strictures on the Johanniter Corps, which tally in every respect with reports which have come to us from other quarters, and they are the opinions of the German people themselves. "This corps is composed of gentlemen, many of whom have served in the army, but the greater number of them are civilians who have undergone their three years' regulation service. In order to qualify a gentleman to become a Johanniter, he must be able to show fourteen quarters upon his coat of arms, and an unblemished descent of many years; he is then entitled to wear a white enamelled Maltese cross, suspended by a green ribbon to his neck, and an uniform of the same description as the Prussian infantry, except that the buttons have a Maltese cross upon them, and the white badge with the red cross is worn upon the left arm. Under their care, for the purpose of distribution, are placed all the medical comforts—wine, provisions, and bedding—that are sent by individuals or communities for the use of the sick and wounded; and without a special order from them

none of these things can be taken even by medical men. Now, I am not going to say that all are alike; but the conduct of these gentlemen, for the most part, is beneath contempt. They live upon the fat of the land; they never know what it is to want a meal, and they take care it is a good one. The medical staff are continually at loggerheads with them, because they cannot get what has been sent out for the special benefit of the sick and wounded soldiers. They are always in the best quarters, and never where they are wanted." There are, however, some noble exceptions.

THE GENEVA CONVENTION.

COMPLAINTS of infraction of the Geneva Convention are, says the *Wiener Medizin. Wochenschrift*, made by both the belligerent armies. The Prussians and the French accuse each other of firing on the dressing-stations and field-hospitals, and of treating the surgeons and their helpers as combatants. Such complaints will be constantly heard; for, notwithstanding the best intentions of rulers and commanders in the field, excesses of this kind are not to be restrained in the heat of battle. The paragraphs of the Geneva Convention may be unknown to many officers and most subalterns of both armies—nay, they may be ignorant of the Convention itself; to say nothing of the natural savageness of a heated and raging soldiery. In spite of all, the blessings of the Convention have come to light in many points in this terrible contest; and, having been so far recognised, it will certainly attain its proper value.

LOAFERS UNDER THE RED CROSS.

A CORRESPONDENT at Berlin writes that communications received from the theatre of war complain of the great crowd following the army under the sign of the Geneva cross: only a minority of them are able and willing really to help, the rest coming for curiosity, and using the shelter and food intended for the sufferers. The soldiers have nicknamed such persons "battle-loafers." The Royal German Commissary for voluntary aid has, up to this day, distributed cards for more than 12,000 persons: it is evident that among this number there may be many unfit for the purpose, because, in the short space of time, a careful selection and examination of the competitors was not possible. The voluntary aid might perhaps be still more closely connected with and subordinated to the military medical service. Similar complaints couched in the warmest terms are made by other correspondents at the seat of war. They are in many cases not without truth; and one of our special correspondents says that several persons (happily not English) wearing the Geneva badge have been found robbing the dead and wounded.

THE WAR HOSPITALS.

THE following notes have been sent us by Dr. J. Ford Anderson, who has recently returned from a tour through some of the hospitals in the rear of the German armies.

At Aix-la-Chapelle I first saw the wounded. There, the existing hospitals being insufficient to accommodate the wounded, a large wooden hospital, on the pavilion system, was in course of erection. One wing was completed, and its sixty beds were occupied with patients suffering from wounds of every part of the body. There was a case of perforation of the wind-pipe and pharynx. The patient declined the use of the stomach-pump; and he was supported by nourishing enemata. In another case, a single ball had perforated both thighs and the external genitals. In a third case, the ball entering the external ear had passed out through the antrum, crushing in its course forward the temporal and malar bones. Most of the wounds, however, were in the extremities, and in many of these cases there was fracture of the bone. The patients were all Prussians, and their wounds were caused by the chassépot.

Through the kindness of Dr. Brandis I was enabled to see and assist in the treatment of these cases during my short stay. The treatment of wounds was by irrigation with a weak solution of Condy's fluid, followed by a dressing of charpie dipped in carbolic oil and covered with impermeable paper. This was done twice daily. In cases of fracture, the limb was enveloped in plaster of Paris. The mode of application was as follows. The limb was first bandaged with pressed cotton-wool, four laths were then laid lengthways, along the limb, and the whole was bound down with a bandage which was smeared thickly with plaster of Paris. The apertures of entrance and exit were left exposed for the purpose of irrigation and for removing portions of bone which were loose. The surgery was decidedly conservative. Several cases of fracture in joints were intended for resection. At that time (three weeks ago) Dr. Brandis had amputated in one case only.

As the hospital at Aix-la-Chapelle was not likely to be ready for a fortnight, and there was a sufficient number of assistants to do the work there, I resolved to go nearer the seat of war. On my way through Coblenz and Saarbrück I visited the larger lazarets. Everywhere I

found the same conservatism in surgery. Resections of the elbow, shoulder, and knee will be numerous for some weeks to come. On the day I visited Saarbrück, three of these resections were performed in the tent of the Amsterdam Aid Society. I did not find the irrigation treatment of wounds so usual as I went on. Instead of it, baths of sheet-zinc filled with water were used; and in these the wounded limbs were immersed. This treatment is less troublesome, but appears to make the granulations soft and flabby. From Saarbrück I went into France, travelling by that slowest of conveyances, a *militair-zug*. At last, however, I reached Remilly and Courcelles, in time to aid in the dressing and preparation for transport of four or five hundred of the soldiers wounded in the battle at Metz, on August 31st. The wounded were brought down to these stations and laid on straw in sheds. All of them had been attended to in some way on the field, but here their cases were revised. Bad cases are treated in the local hospitals until they can bear being transported to Germany. I was much struck with the desire of the wounded soldiers to be considered by the doctor able to travel homewards. The German love for the Fatherland is intense; and I saw many a strong man stealthily dash the tears from his eyes when his sentence, "Hier bleiben", was pronounced. And when it is possible, the surgeon, who has to decide whether the wounded man shall go or stay, respects his feelings. Apart from sentiment, the disappointment of remaining and consequent depression must often have a retarding effect on the recovery.

Much of the dressing of wounds is done by non-professional volunteer helpers of the different Aid Societies—German and foreign. I have heard of sixty of these societies, and probably there are more. Their object is to assist in every way the sick and wounded. They carry them off the field of battle. They give them stores with which they are entrusted. They dress their lighter wounds, and call a surgeon for the severer wounds, and so on. Many of them are educated men, who leave their professions to do this work. The usefulness of these assistants individually cannot be over-estimated. But as each society acts independently, it often happens that helpers are in excess in one place, while another place is shorthanded. Many of the societies live in camp at their own expense, and provide comforts for the wounded, and ask for nothing but information as to where their services are required, but this they can with difficulty obtain. There is a general disposition to blame, as obstructive to their usefulness, the Knights of St. John (Johanniter). This order is composed of men of good social position and ample means, and theoretically they are supposed to look after the wounded; but the humbler workers complain that these gentlemen confine themselves to the light duties of verbal comfort, and the distribution of small delicacies, and rather discourage than assist others in doing the hard work which I have indicated. However it arises, the fact remains that much labour and philanthropy is wasted, and much suffering is unrelieved from want of a proper organising head. Two examples occur to me. A well educated member of the Hamburg Krankenflegers told me that, after the battle of the 31st August, at Metz, the detachments of his Society went on the field to remove the wounded. Having worked till nightfall, when complete exhaustion compelled them to desist from their labour, they rested for a few hours, leaving many wounded on the field who were still alive. At dawn it was found that all of these had died during the night; and who can say they would not have recovered with proper attention? And yet, hundreds of able volunteers—longing for work—might have been collected in a few hours from towns and villages where their services were no longer urgently required. Again, from want of organisation, it often happens that the wounded despatched homewards, travel for four and five days without having their wounds dressed. Yet, imperfect as is the action of isolated societies, they have better means of knowing where help is needed than individuals; therefore I would recommend any surgeon going abroad to attach himself to some society, and to go where it sends him; and none is better than our National Aid Society.

Of course my personal observation does not amount to much; but I may say that I did not see or hear of a bayonet-wound or a sabre-cut.

Another correspondent, writing from St. Marie aux Chênes on August 22nd, provides the following notes.

Although I left London on the 15th, I am still far from my destination—head-quarters. Travelling is indeed slow and wearisome. The endless trains of wounded one meets with testify to the cost which Prussia has paid for her unexpected successes. I passed through Saarbrücken and Hery, Falquemont, and Remilly, and everywhere the houses and hospitals were crowded to overflowing. These, of course, represented the least severe cases—mostly flesh-wounds; though among them were many who were in a poor condition to undertake a long, tiresome journey. It was, however, absolutely necessary to transport

them somewhere, and the men were equally anxious to go home to their friends.

It was in Remilly that I first saw anything serious. I chanced to have quarters allotted to me in the Chateau Rolland, which had been fitted up as a lazarette, and was really very comfortable, but very short of surgical appliances. There was a poor fellow who had been shot in the head. The ball had struck him about the juncture of the parietal and occipital bones behind, and had made a complete furrow, tearing away scalp, and bone, and brain, altogether. He was of course *in extremis*. The Chassepot bullets make a very clean-cut wound. The calibre of the bullet is very small; and, being conical, I suppose it cuts more freely and with less laceration of the surrounding soft parts, especially near its exit. The exit, in many cases, is as small as the entrance hole, and it is often difficult to distinguish them. The balls sometimes make strange circuits. One patient was struck in the middle of the calf of the leg, and the bullet passed upwards and forwards, splintered the femur just above the knee-joint, and came out on the upper and outer surface of the thigh.

I only stayed one night at Remilly. I had to hurry on to St. Marie-aux-Chênes, where they had been fighting very hard for two or three days. We passed through several villages on our way—Gorse, St. Privat, and others. It was three days after the fighting; and it was said, officially, that there were upwards of 70,000 dead and wounded. I could well imagine that to be true, for they were lying even on the roadsides, every house, and stable, and church, and barn, being crammed to overflowing; and from the fields around for two or three miles there arose such a stench as must be smelt in order to be appreciated. In St. Marie, whence I write, there is a very large number of wounded; and it is more especially of these that I can speak, as a section was kindly handed over to me. In a barn, there were twenty-six men; of these, two had bullets through the lungs, one in front, one behind; three had compound fracture of the femur; two had bullets in the knee, either in or near the joint; one had a severe head-wound; and the remainder were cases of simple shot-wounds. This is a large proportion of serious cases; and I believe I speak truly when I say that in other houses and places the proportion is equally great.

There were no primary amputations under treatment. The medical staff and appliances were so utterly inadequate to the demand, that for the first five or six days nothing was done but arrange the men and get them under cover. On the 22nd (to-day), a few operations were performed—amputations—the circular method being chosen in each case. The surgeons seem unwilling to operate much, thinking it too late. I expect that in either case the mortality will be exceedingly great, as the greater number of the cases now remaining are of a very serious nature. My stay here will be much too short to give any detailed account either of the results or of the operations which may ultimately be performed. To make matters worse, there is a great want of water. The great demand made on the wells and the dry weather together somewhat account for this. Cold applications seemed to be the most agreeable; but water could not be had, not even enough for drinking purposes. There is a want of cleanliness. The charpie and other dressing from the wounds, now beginning to suppurate vigorously, are simply hidden beneath the straw, there to ferment and give rise to odours far from agreeable, and such as will not in any way conduce to the well-being of the patients who cannot get out of the way. I believe that this was the cause of a rather severe kind of diarrhoea, which troubled the poor fellows very much—the more so as they were lying on straw, and bed-pans were not to be had. Compound fractures of the leg are put up in plaster of Paris bandages, with a window opposite the wound. I am very curious to see the result of this treatment.

The same correspondent, writing from Pont-à-Mousson on August 26th, says:

I have just returned from a visit to one of the field-hospitals, and, thanks to the kindness of Staff-Surgeon Dr. D. E. Müller, I saw a good deal in a short time. I happened to reach the place just in time to see an excision of the right ankle-joint. The man had been shot through the joint obliquely, from without inwards. The extremity of the fibula was completely broken through, and a portion of the lower end of the tibia was also gone. It was eight days after the injury had been received. An incision had been made for the escape of some pus which had collected; and it was through this opening that the real condition of the joint was ascertained. A counter-opening was made over the inner ankle, through which a chain-saw was introduced. The lower ends of the tibia and fibula were removed, with the upper surface of the astragalus. The foot was then put up in plaster of Paris.

The next case was ligature of the femoral artery. The man had been shot through the calf of the leg, and the posterior tibial artery was injured. Bleeding had come on repeatedly in spite of styptics and ligatures, and

so the artery was tied. The man was simply put back to bed without further application of either wool or warmth of any kind to the limb.

I next saw exarticulation of the femur for a compound comminuted fracture of the thigh, very high up. The bullet could not be found. The patient had been sent from some one of the villages in the neighbourhood of the battle-field: he had been put up in a plaster of Paris bandage extending well round the hip, and had certainly borne the journey fairly well.

These were the only operations which I saw performed. We then went round the wards, in which were some interesting cases. There was a man on whom tracheotomy had been performed five days previously. He had been wounded in the throat: the ball had not passed through, but there was very great œdema; and respiration was so difficult that tracheotomy was determined on. He was doing very well, and it was proposed to take out the tube on the following day. I also saw three cases of excision of the elbow-joint. They were being dressed much as we do them in England. Instead of resting on cushions, they were suspended and swung about easily, according as the patient himself moved. We then came to a man who had been shot in the upper part of the chest. The clavicle had been considerably damaged. It was feared the splinters might injure or cut the vein or artery, and so nearly the whole clavicle had been extirpated. The patient was doing well. Dr. Müller showed me also a case of excision of the shoulder-joint. It had been done in consequence of a complicated injury involving the whole joint. He had performed several amputations both of the thigh and leg; but it was too soon to say much about them.

I endeavoured to find out whether there was much or any difference in the wound produced by the Chassepot and the Prussian bullet, but could learn nothing. The Prussian bullets, I think, are somewhat larger, and are egg-shaped, and are perhaps just a little heavier.

The hospital had been extemporised out of a large French barrack. The wards were large and airy, and the patients seemed to be very comfortable.

I cannot speak too highly of Dr. Müller's kindness and courtesy to me, a perfect stranger, who had to introduce himself as best he could. I leave here to-morrow for Commercy.

TENT-HOSPITALS.

The following notes on tent-hospitals are from a German physician of London, who is at present in the neighbourhood of the Rhine.

The experiments which have been made in the war of 1866, and since, to treat the wounded and sick in tents or in wooden houses, have led to the adoption of this plan on a larger scale in the present war. A tent-hospital, containing at present two hundred and forty beds, is in full working order at Cologne. The tents, beds, and bedding are the gift of the German Association in London in aid of the sick and wounded in the present war. Twenty of the tents are already open; and there is a supplement of fifteen, which will either be used in the same place or forwarded to some other locality where they are more urgently needed. The tents were furnished by Messrs. Paget, Piggot, and Edgington; and the bedding by Messrs. Heal and Co., in London. Each tent contains ten beds; but, the superficial area being only sixteen by thirty feet, it appeared to us that the beds were too near each other, and that eight would be quite a sufficient number for each tent. It is worthy of notice, however, that even in those tents that were quite full of patients with suppurating wounds, the air was perfectly sweet. This is, no doubt, in part also due to the excellent system of disinfection which is carried out, and of which we shall have to say a few words hereafter. At one end of the tent, a portion about four feet wide is separated from the rest by a curtain drawn across, and opening in the middle, behind which, on one side, a table with different hospital appliances, and on the other a Müller-Schür's closet (earth-closet, with a disinfectant powder instead of the earth), are placed. Gas and water are laid on. In every tent are suspended one or two of Professor Esmarch's irrigators—tin cans holding about two pints of water, which flows out through an India-rubber tube of sufficient length to be used for all the beds. For each patient there is a separate nozzle of hard rubber; and this is kept, during the time between the dressings, in a glass filled with Condy's fluid. These irrigators are simply used for syringing the wounds; and Condy's fluid is used for this purpose.

A most extensive use is made of carbolic acid, dissolved either in water or in oil, for dressing the wounds. All articles of dressing which are not worth washing are burnt; the others are kept for twelve hours in a disinfecting fluid containing chlorinated soda, before washing them. The tents are pitched in a beautiful garden, and a conservatory has been fitted up as a washhouse; whilst a washhouse and stable have been admirably transformed into a kitchen and larder. The administration of the whole hospital is in the hands of the indefatigable

Mr. Deichmann of London. The medical service is performed by several practitioners of Cologne, of whom Dr. Servais, one of the leading men at Cologne, is day and night on the premises, besides two assistants. The household department and the nursing are in the hands of several ladies belonging to the first families of the town. Upon the whole, nothing could make a better impression than the order and cleanliness of this hospital. The diet is very liberal. Every patient gets meat twice a day, plenty of beef-tea, eggs, and beer; in fact, the only limit seems to be his capacity for digesting. If the military world has been astonished at the complete change which Germany has undergone in military matters within the last few years, the medical world may not be the less surprised at the complete overthrow of the notions which not long ago were prevailing in Germany as to diet, dressing of wounds, and ventilation. Open windows are now the order of the day; or the patients are kept under tents, or they are carried in their beds in the open air whenever the weather allows it. Condy's fluid, carbolic acid, and chloride of lime, are used in all hospitals extensively.

Three tents at Cologne are of a somewhat different shape from the English ones, being somewhat wider. They are the regulation tents of the Prussian Army Medical Service, and were bought at Cologne. It will be gratifying for the English makers to learn that their tents stood the drenching rains prevailing lately better than those made at Cologne, although they also let a little rain pass through, especially over the ventilator at the top, the arrangement of which might be somewhat improved.

At Bonn there are altogether fifteen hospitals for the wounded; and several magnificent villas—among others, the house of Professor Busch—have been fitted up for the reception of patients. We saw many severe cases; about a dozen where the arm had been amputated; several amputations of the thigh; one case of resection of the humerus, and several of the elbow-joint. Most of the patients were doing remarkably well; all whom we saw were under the care of Dr. von Mosengeil. There were several curious cases of bullets having entered the pelvis, and where symptoms on the part of the bladder or rectum had been present, and in which there could hardly be a doubt of the peritoneum being wounded; and yet the patients were doing well, and no peritonitis had set in. The surgeons are under the impression that the wounds, upon the whole, heal more quickly in the French; but that the Germans bear pain better. There is a good deal of dysentery among the wounded coming from the front.

A tent-hospital similar to that at Cologne is about being established at Bingen. The tents (for two hundred and fifty to three hundred patients), with all the furniture and bedding, are also given by the German Association in London. Dr. Thudichum is at the head of the undertaking; and Mr. John Simon, who is spending his holiday at Bingen, is also taking a most active part in it, and his co-operation will prove most valuable. Eleven young English surgeons from different London hospitals are engaged to act as dressers and assistants. We learn that the National Society in London bears the expenses of the latter, and that this Society has also supplied instruments. A site has already been found on the Rochneberg; and we trust that, before another week has passed, white flags with the red cross will indicate the existence of this truly international hospital.

MEDICAL SYSTEM OF THE GERMAN ARMY DURING WAR.

The following is from our Special Correspondent, dated Berlin, September 7, 1870.

In my last letter (see JOURNAL, Sept. 3rd, p. 254) I gave a sketch of the organisation of the military medical service; and I still have to complete it in several points. Part of the places are filled by the military surgeons, whose number in peace is sufficient for all demands; when the army is mobilised through the whole country the medical men, as well as all other men of certain ages, are bound to military service, but in general their number, together with that of the military surgeons, does not fully make up the full medical staff of the mobile army (amounting to more than 3,000). The deficiency is made good, as far as possible, by medical volunteers taken partly from among the elder students. Any vacancies that remain are in general among the troops; the field-hospitals, the sanitary detachments, and the hospital reserve of every army corps are made complete, these bodies being destined for the first hospital treatment of the wounded. On the average, the proportion of the *personnel* among them is this: one surgeon for thirty-three patients, one Lazarethgehülfe (hospital helper) for twenty-five, and one nurse for thirteen patients. In the whole army, there is about one surgeon for each two hundred and fifty men.

The *reserve hospitals* are established either in garrison hospitals or in other buildings approved of by the provincial general surgeon. Their

administration is under the military medical service. Their medical staff is furnished from the surgeons of the town; for one hundred patients there are an ordinary and two assistant surgeons. Every patient ought to have at least 1,200 cubic feet of air.

A change in the military medical service, first made in the war of 1866, then worked so well that it has been renewed in the present war—I mean the institution of consulting general surgeons. They are nominated in case of war, and are selected mostly from the professors of surgery; they have to work in the dressing stations and in the field-hospitals, and may, without having anything to do with the administration, devote themselves entirely to scientific work, and advise the surgeons and the chiefs of the hospitals. The present circumstances, as well as the experience of 1866, have proved the advantage of this institution, not only to the wounded soldiers, but also to the surgeons of the field-hospitals, which are made thus a most excellent school of surgery. The present consulting surgeons are—Von Langenbeck, Wilms, Bardeleben, Busch, Roser, Wegner, Wagner, Stromeyer, and Esmarch. As in all probability the present war will give occasion to epidemics, Professor Frerichs has been made general consulting physician, in order that there may be a scientific authority to watch, and if possible to avoid, the outbreak of contagious disease in the army. The materials of medicine, instruments, and bandages, in the sanitary detachments and the field-hospitals, are very complete. In addition, in case of need on the battle-field, every soldier has, according to a new regulation, material for the first dressing sewed in his left pocket (in order that it may be found easily); namely, a piece of old linen, a linen bandage four yards long, half an ounce of charpie, and a piece of oiled linen.

[Instead of the bandage, Professor Esmarch proposes for the future (I think not wrongly) a triangular piece of linen, as more fit for the various kinds of bandaging. He thinks that by a woodcut printed on the cloth and representing these bandages, the men might be enabled to bandage themselves in case of need.]

To supply the field-hospitals with stores in proportion to what has been used after a battle, there are hospital reserve-depôts, one of which belongs to every army-corps and follows it as closely as possible. They are under the direction of the *General-Etappen-Inspection*, and are supplied by this board from the large depôts at home. But, however extensive the official arrangements may be, the experience of these last years has taught that they always remain insufficient in a certain degree and for certain times, particularly after great battles; and that will happen especially in Germany, where the army is a proportionally much larger part of the nation than anywhere else. Already, in 1866, when the extension and usefulness of voluntary aid were for the first time put to a severe proof, and where it had for the most part to be created, an endeavour was made to centralise it, in order to avoid confusion and waste. The speedy end of the war stopped the full realisation of the plan; but since, in the reform of the military medical service, every attention has been paid to voluntary aid. The official chief (royal commissary and military inspector) of voluntary aid is nominated by the King at the beginning of the war: in 1866 Count Stolberg held the office; in 1870 it is held by Prince Pless. He is in communication with the various aid societies and with the war-office; by delegates (chosen in a great part among the Knights of St. John) he is represented at different places in the country, as well as in the field-hospitals and on the theatre of war.

In general, the special functions of the voluntary aid department are to collect the voluntary gifts and distribute them to the field-hospitals and troops, where they are wanted; to establish and support reserve-hospitals, and, if necessary, to offer private quarters; and to prepare male and female nurses for the hospitals and for the transport of the wounded. Direct relief to the fighting troops is furnished as much as possible by the staff of the army, and only exceptionally by the volunteers. This restriction is evidently demanded by a regard to tactic operations; which, however, does not prevent voluntary aid from coming into action after a battle, and particularly after a victorious one. Thus, in the days after the great fights near Metz, a great number of volunteers were exceedingly useful by their personal help and the materials which they brought with them. Directions as to the places and hospitals where they are wanted are given to the volunteers by the royal commissary and by his delegates. Up to the 24th August 2,702 persons were sent in this way by the royal commissary to the hospitals and battle-fields. They came from various parts of Germany, and were of different stations in life (students, clerks, tradesmen, etc.); most of them were under the guidance of medical men.

Private societies may assist hospitals by undertaking certain branches of the administration; for instance, the provision of food, cooking, nursing, etc.; or by establishing new hospitals. Such hospitals are superintended, as regards their hygiene, by a military surgeon; and they must be provided for at least twenty patients, as, otherwise, mili-

tary control over the men would be impossible. A further explanation of the aid societies I delay to my next letter, preferring to give a short description of the large barrack hospital now established near Berlin on the field of Tempelhof. Besides the other buildings, there are fifty barracks, each fitted for thirty patients, the whole hospital containing 1,500 beds. One third of the expense of building it is borne by the military exchequer, one third by the city of Berlin, and one third by the Berlin Aid Society. Each department has its own administration, the dispensary and operating room alone being in common. The barracks form a w , or rather a \sqrt{v} , with the base from north to south. Kitchens, laundries, administration and store rooms, are situated between the open ends of the wings of the v 's. Each barrack is an oblong quadrangle, with its long diameter from east to west, forty paces long and ten paces broad. At one end are four small rooms, one for the bath, one for the clothes, a small kitchen, and a room for the nurse; at the other end, outside the barrack, but connected to it by the roof, is the closet. The ward itself has doors at the two opposite ends and ten windows on each side. The building material in all the barracks is wood oiled on the inside. The roofs are covered with fire-proof pasteboard, and have a ventilator, the openings of which can be closed. For the sake of experiment the various groups of barracks differ as to the height of their base above the ground, the shape and construction of the ventilators, the manner of preparing the floor (in some the latter is covered with asphalt), etc. Some of the barracks are surrounded with galleries, which can be closed by curtains; here the windows are not of glass, but of wire-gauze. At first sight, the greater obscurity of the interior seems to be a disadvantage. Every building has gas and water, the latter being given gratuitously by the liberality of the Berlin water-works. Rails are laid down within the barracks, so as to bring the soldiers thither directly; a telegraph communicates with the town. At present the barrack-hospitals are nearly finished, and contain some hundred patients already. It is to be hoped that the severity of the winter may not put a too early end to the utilisation of this well constructed hospital.

THE WOUNDED IN BERLIN.

UNDER date September 4th, our Special Correspondent writes as follows.

There are in Berlin and its suburbs at present twenty-eight hospitals of different sizes, with accommodation for 3,700 sick and wounded soldiers; a number which will be increased in a few days by 900 with the completion of the barracks. On September 1st, 2,503 of the beds were occupied by patients, viz., 1,960 Germans, and 543 French. A few days ago the number of the latter was much larger; but expecting a still larger number of patients, the administration sent away all the slightly wounded who could be removed without damage. Of severely wounded, there are in Berlin at present 303 Prussians, 100 French; of slightly wounded, 957 Prussians and 303 French. Of the whole number of beds above named, not quite half are furnished by the military administration, the rest by voluntary aid societies.

ARRANGEMENTS IN GERMANY FOR THE SICK AND WOUNDED IN WAR.

DR. GEISSÉ of Ems has furnished us with the following interesting information in continuation of his note published in the JOURNAL of September 3rd.

Voluntary Medical Department.—There never has been a war in which the sanitary arrangements have been sufficient to meet all the wants of the sick and wounded. Miss Nightingale has made her name immortal by laying the foundation to a system of private help; and Durant, taking up these ideas, became the father of the Geneva Convention, the most noble creation of our century. The white flag with the red cross covers the place where loving Christian hearts and noble hands rivalise in self-sacrificing zeal to soothe the sufferings of sick and wounded, whatever their name or nation may be. The first condition of making voluntary help useful in war time consists in a thorough organisation, and submission to the military sanitary department. The necessity of this was seen in 1866; and it has been still more apparent in the present war. Since 1866, the Association for the Relief of the Sick and Wounded in War has spread all over Germany. Both in large and in small towns societies have been formed for the purposes of collecting money, educating nurses, preparing hospital requisites, etc. All these small societies have joined the general association. Each member pays an annual subscription, of which one-third is delivered to the central fund, the remaining two-thirds being used as each society considers best. The association, in war time, acts in dependence on the military sanitary department. The war had not been declared many days when the central committee from Berlin sent their order to all the branch societies, desiring them to provide what

was urgently wanted, and the call was answered well and quickly. Minute details had been given as to the kind, size, and form of everything required in the shape of lint, bandages, etc. Thousands of persons collected money, blankets, wine, brandy, preserves, extract of meat, etc. Hospitals to contain from twenty to two hundred beds sprang up; barracks were built; a medical staff was prepared; well trained nurses appeared in numbers; companies of young men volunteered to carry the wounded from the battle-field, and went out well equipped for their purpose under the guidance of medical men. They were all trained, and had some lessons in applying the tourniquet and bandaging. As soon as they appeared in the field, they had to place themselves under the command of the army-surgeons. Hundreds of medical men went to the battle-fields and into the hospitals, either to help there or to accompany the trains with the sick and wounded to the different hospitals. Wherever such a train was telegraphed to stop a short time, all the medical men of the neighbourhood were ready to do their duty in renewing the bandages, and hundreds of hands were stretched out to give refreshments of all kinds. If our railway communication from the battle-fields had been better, no wounded soldier would have been lying on the field for so long as, I am sorry to say, they did in the beginning of the war.

VOLUNTEERS FOR THE NATIONAL AID SOCIETY FOR THE SICK AND WOUNDED.

We are enabled to state that the Society does not intend at present to accept any additional applications for service; at all events, from none but those who can speak French and German fluently, and who are prepared to give their services during the continuance of the war.

HOW SCARLATINA IS SPREAD.

THE remarks which have been recently made in the JOURNAL on the manner in which the infection of scarlatina is communicated from person to person, as a result of ignorance and neglect, have had the effect of eliciting some valuable information. We have received several important communications on the subject, which are here subjoined. One is from Dr. George Johnson, the Professor of Medicine in King's College; the second from Dr. James Russell, Physician to the Birmingham General Hospital; and the third from Dr. L. O. Fox of Broughton.

Dr. Johnson writes as follows.

"I am rejoiced to find that you are directing the attention of your readers to the preventable causes of scarlet fever, for I am sure that in doing so you will confer a great benefit upon the public. I have long been convinced that the spread of this formidable disease is, in a vast number of instances, the result of gross, culpable, and even criminal negligence. It is universally acknowledged that scarlet fever is highly contagious: it is doubtful whether it ever results from any other cause, although, as with other contagious diseases, it is not possible in every case to trace the source of infection. Over-crowding and defective ventilation unquestionably favour the rapid spread of the disease through schools and other large establishments, but there is no reason to suppose any special connection between scarlatina and filth, bad drainage, or impure water.

"I have known the case of several families becoming infected by scarlatina within a few days after going into lodgings by the sea-side. The explanation of this is not difficult to find. A case of scarlatina occurs, perhaps, in a London family. As soon as the patient is convalescent, but while the skin is still peeling and thus throwing off poisonous epidermis, he goes by cab and railway to the sea-side, infecting the public carriages on his way, and finally infecting the bedding and furniture of his lodging. The proprietor of the lodging knows nothing of any infection; therefore no disinfecting process is adopted, and the next occupants of the lodgings take the disease.

"It is obviously the duty of persons who take a convalescent into a lodging while there is still risk of infection, to state the facts of the case before-hand, and to make arrangements for the subsequent disinfection of the bedding and furniture. A lodging-house keeper who neglects disinfection, knowing it to be necessary, not only incurs great moral guilt, but is liable to a penalty of twenty pounds.

"In a sea-side town, where a few years since scarlatina was very prevalent, this occurred, as I was told by the residents on the spot. A child died of the fever in a lodging-house, and the day after the funeral of that child another family, ignorant of what had happened, entered the very same apartments.

"You have mentioned the case of a laundress's child taking the fever in consequence of infected clothes being sent without warning, and, there-

fore, without the adoption of needful precautions. I believe that this is a frequent source of infection. The baskets used to convey the foul linen, and the covers, which are commonly made of woollen, become infected, and thus the infection may be communicated to the clean linen on its way home.

"The clothing and bedding of a scarlatina patient before it is sent to the wash should be scalded and then disinfected with carbolic acid.

"Quite recently I saw in consultation a child suffering from scarlatina, his sister having died the day before of the same disease. These were the children of a tailor, whose workshop adjoined and opened into the room occupied by the sick child. This affords an illustration of the way in which new clothes may become infected.

"A few days afterwards I saw another child suffering from a malignant form of scarlatina, and lying in a room at the back of a greengrocer's shop. The family, who were in attendance upon the child, were continually passing from the sick room into the shop to distribute fruit and vegetables to their customers.

"Some time since I was consulted about a young lady who had albuminuria consequent on scarlatina. A few days before this lady had sickened with the fever, her pianoforte had been tuned by a man who was obviously unwell, and who, it was afterwards ascertained, had been suffering from scarlatina.

"When scarlatina is in a house, casual visitors should be warned and excluded. In the early part of the present year, a young lady was admitted as a visitor at a house where several members were ill. She afterwards learnt that the illness was scarlatina, and a fortnight afterwards she sickened with the disease. A younger brother of this young lady, some months before, was seized with scarlatina five days after returning to school after the holidays. On inquiry, it was found that the boy with whom he slept had suffered from scarlatina during the holidays.

"The master of a large school told me quite recently that one of his pupils while at home at the end of the holidays had symptoms which excited a suspicion of scarlatina; nevertheless, his parents sent him back to school. Fortunately, the disease proved not to be scarlatina.

"About two years since, an Oxford undergraduate sickened with scarlatina; and, in obedience to orders from his parents, he returned home, travelling in a first-class carriage with five other passengers, while the eruption was fully out upon him.

"Medical attendants, especially those who practise midwifery, should be careful to avoid conveying the disease to others, washing and disinfecting the hands after touching a patient, and driving, or better, walking, in the open air are obvious precautions. A friend of mine, Dr. B., attributes the illness and death of one of his own children to his having taken the child with him in his brougham when he was visiting a succession of cases of scarlatina.

"It is notorious that articles of furniture or clothing, if shut up without being cleansed and disinfected, may be a source of danger for an indefinite period. Some years ago the following illustration of this came to my knowledge. A child, on a visit to an unmarried aunt in the country, sickened with scarlatina immediately after her arrival, and it is probable that she took the disease with her. The child died of the disease. More than a year afterwards, another niece on a visit to the same house took scarlatina and died. On careful inquiry as to the probable source of infection, it was found that a dressed doll which had been nursed by the first child during her illness, and which since her death had been put away in a drawer, had been taken out and given to the second child some days before she became ill. What renders it the more probable that the doll's clothes were the source of infection, is the fact that in the interval between the deaths of the two children some older children who had visited the house, but who had neither seen nor touched the doll, remained well."

Dr. James Russell has addressed to us the following communication.

"It is greatly to be desired that the highly practical remarks you make respecting the propagation of scarlet fever may attract general attention. I apprehend that an important feature in the poison of scarlet fever is the tenacity with which it attaches itself to articles of clothing, particularly those of a woollen nature. The following occurrences raise a collateral question: How long will the contagium of scarlet fever retain its vitality, or, to speak without theory, continue able to generate the disease? I mention the first case simply as showing the curious manner in which this question may present itself. It would, of course, require very strong corroborative evidence to remove it from the category of coincidences. The other two cases have a directly practical bearing. A former physician to the General Hospital in this town, intimately known to myself, lost a sister from scarlet fever in early life. The death occurred at a boarding-school. The clothes were packed up in a carpet-bag, and sent in that state to the young

lady's home. For five years at least (I think for a longer period) these clothes were not unpacked. The bag was then opened; and the clothes were given to a younger sister, then going to school, who speedily afterwards fell ill with scarlet fever. A well known surgeon of this town, now deceased, went with his wife and only daughter to the house of a friend in a distant city. The family of this friend had been attacked with scarlet fever, but the disease had ceased entirely for six months. My friend's daughter was seized with the disease; and it was then ascertained that the blanket of her bed had covered the scarlet-fever patient, and had been put by in a closet unwashed. My own son slept for some nights in a bed which had been occupied by a patient, attended by myself, who had a *second* attack of scarlet fever, in which the eruption (and, if I remember rightly, the desquamation) was confined to the palms of the hands and to a small patch on the front of the chest. The bed-clothes had not been purified, and he broke out with the disease. The occurrence took place several years ago, and I am not certain about the interval of time. I know it was over three months; I believe it exceeded six."

Dr. L. O. Fox of Broughton, near Winchester, writes as follows.

"Twenty cases of scarlet fever at West Titherly, Hants, have been caused by carelessness and indifference to results.

"A servant girl took the disorder at the house of her master, four miles distant. To save trouble, she was sent home, where there was a family of five children, all of whom were attacked, together with eight others living adjoining. The disease was carried on by contact at school; and a woman recently delivered caught the disorder and died.

"There are no means of enforcing preventive measures, and so death and misery result."

In connection with this subject, we would also call attention to the valuable paper, published at another page, by Mr. Davies, the Medical Officer of Health for Bristol. Mr. Davies gives an excellent summary of the various circumstances which favour the propagation of scarlatina.

ASSOCIATION INTELLIGENCE.

THE ANNUAL MUSEUM, 1871.

THE following gentlemen have been appointed by the Local Committee at Plymouth as managers of departments. *Physiological and Pathological Anatomy*—W. P. Swain, Esq., F.R.C.S. *Medical and Surgical Appliances*—H. Greenway, Esq.; M.R.C.S. *Literature*—R. Hogarth Clay, M.D.

WEST SOMERSET BRANCH.

THE autumnal meeting of the above Branch will be held at the Royal Clarence Hotel, Bridgwater, on Thursday, October 13th, at 5 P.M.; J. CORNWALL, Esq., of Ashcott, President, will be in the Chair.

Gentlemen intending to be present at the dinner, or to read papers after, are requested to give notice to the Honorary Secretary.

W. M. KELLY, M.D., *Honorary Secretary*.

Taunton, September 13th, 1870.

MEDICAL NEWS.

THE LIVERPOOL FEVER HOSPITAL.

THE following Report of the Fever Hospital for the week ending September 10th, 1870, has been forwarded to us:—Remaining per last report, 774; admitted since, 268; discharged, 150; died, 7; remaining under treatment, 885.

VOLUNTEER MEDICAL ORGANISATION.

WE understand that at a Meeting of the Committee of the Volunteer Medical Association, held on Wednesday, a scheme for the organisation of the volunteer medical staff was prepared, which will be presented for consideration to a general meeting of volunteer medical officers, the date of which has not yet been fixed. In consequence of the absence from town of so many volunteer surgeons, it was thought expedient to defer the day of meeting until some time next month. A deputation will probably afterwards wait upon Mr. Cardwell, to request that some organisation of the volunteer medical staff be carried out; and, at the same time, to present the scheme as finally agreed upon by the volunteer medical officers.

UNIVERSITY OF LONDON.—First B.Sc. and Preliminary M.B. conjointly.—Chemistry.

Second Class.

Hetley, Henry (Prel. Sci.), Guy's Hospital
Carpenter, Philip Herbert (First B.Sc. and Prel. Sci.), University College and Royal School of Mines

Third Class.

Palmer, F. John Morton (Prel. Sci.), Guy's Hospital } equal
White, Ernest William (Prel. Sci.), King's College }
Créin, Eugene (Prel. Sci.), St. Bartholomew's Hospital } equal
Rogers, Thomas King (Prel. Sci.), University College }
Groves, H. Joseph Firth (Prel. Sci.), Guy's Hospital }

Zoology.

First Class.

Keetley, Charles Robert (Prel. Sci.), St. Bartholomew's Hospital
Hetley Henry (Prel. Sci.), Guy's Hospital
Batterbury, George Henry (Prel. Sci.), King's College

Second Class.

Wackerbarth, Edward (Prel. Sci.), University College

Third Class.

Vines, Sydney Howard (Prel. Sci.), Guy's Hospital
Lamb, William Henry (Prel. Sci.), Guy's Hospital

Experimental Physics.

Second Class.

Lowe, John Landor (First B.Sc.), King's College

Botany.

First Class.

Maclean, Thomas Edwin (Prel. Sci.—Exhibition), University College
Vines, Sydney Howard (Prel. Sci.), Guy's Hospital

Third Class.

Batterbury, George Henry (Prel. Sci.), King's College

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received their certificates to practise, on Thursday, September 1st, 1870.

Parker, Alfred Henry, 36, Queen's Road, Dalston
Warner, Francis, 15, Highbury Crescent
Walton, Walter George, 112, Westbourne Grove

The following gentleman passed on September 8th.
Smart, David, Cranbrook, Kent

MEDICAL VACANCIES.

THE following vacancies are announced:—

BILLERICAY UNION, Essex—Medical Officer for the Great Burstead District: applications, 17th; election, 20th; duties, 29th.
BOLTON INFIRMARY & DISPENSARY—House-Surgeon: applications, 22nd.
ENNISKILLEN UNION, co. Fermanagh—Medical Officer for the Lisbellaw Dispensary District: 30th.
HASTINGS UNION, Sussex—Medical Officer for District No. 3.
KELLS UNION, co. Meath—Medical Officer for the Nobber Dispensary District: October 7th.
KIDDERMINSTER INFIRMARY—House-Surgeon: applications, Oct. 5th; election, 12th.
KIRKCALDY, Fifeshire—Medical Officer of Health.
LEICESTER INFIRMARY AND FEVER HOUSE—Physician: applications, 10th; election, 28th.
LETTERKENNY UNION—Medical Officer to the Workhouse: 23rd.
LIMERICK UNION—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Annacotty Dispensary District: 19th.
LIVERPOOL DISPENSARIES—Assistant Resident House-Surgeon: applications, 28th; Medical Board, 29th.
MALMESBURY UNION, Wilts—Medical Officer for District No. 1.
MALMESBURY, Wilts—Certifying Factory Surgeon for District of.
MIDLAND RAILWAY COMPANY—Medical Officer for the Derby District.
MORVEN, Argyshire—Parochial Medical Officer.
NEATH UNION, Glamorganshire—Medical Officer and Public Vaccinator for the Llangonydd District: applications, 10th; election, 20th.
ST. BARTHOLOMEW'S HOSPITAL, Rochester—Assistant-Surgeon: Oct. 13th.
ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, Manchester—Medical Officer for Out-Patients: applications, 30th.
SHETLAND—Medical Officer: applications, Oct. 18th.
SOUTHAMPTON DISPENSARY and HUMANE SOCIETY—Acting Medical Officer.
STOURBRIDGE DISPENSARY—Surgeon and Secretary: applications, 26th.
SURREY DISPENSARY, Great Dover Road—House-Surgeon: applications, 26th; Committee, 27th; election, Oct. 6th.
TREDGAR IRONWORKS, Monmouthshire—Assistant-Surgeon.
UNIVERSITY OF ABERDEEN—Three Examiners for Graduation in Medicine: applications, Oct. 1st.
WARRINGTON DISPENSARY—Resident Surgeon; Apothecary: applications, 19th.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BUSBY, A. R., Esq., appointed Resident Medical Officer to the Bath Royal United Hospital, *vice* R. Carter, M.D., resigned.
*RAWLINGS, John Adams, L.R.C.P., appointed Medical Officer to the Out-door Patients of the Swansea Hospital.
SECCOMB, E. H., M.B. Lond., appointed Assistant Medical Superintendent to the Royal India Lunatic Asylum, Ealing.