

have any power of arresting phagedæna, it is an extremely useful application in these cases in destroying the offensive smell of the secretion, and in accelerating the separation of the slough. In several cases, this remedy was applied locally, all general treatment being avoided; and in no one instance was there sufficient evidence to justify one in assuming that it arrested the disease.

The transfusion of a stream of *chlorine gas* through the ward was tried in one or two instances, though not sufficiently often to establish any definite result. On August 6th, there were three cases of phagedæna in the Fitzwilliam Ward of this hospital. They were of different duration, and were all spreading, though in one there was some slight tendency to arrest. A gentle stream of chlorine gas was passed through the ward for eighteen hours, at the end of which time the phagedæna was arrested in all three cases. A man, having undergone amputation, was placed in a separate apartment. Two days after, he was attacked with phagedæna, which rapidly extended. A stream of chlorine was passed through the ward, and in forty-eight hours the disease was arrested. Though these facts are satisfactory, they are not conclusive, and are far too meagre to arrive at any just conclusions. Whether this remedy has any control over the disease, or not, there is no doubt that it must act beneficially, if in no other way, at least in destroying the disgusting effluvia, which it does in a preeminent degree, and is thus especially useful, particularly in hospitals, where so many sick are collected together in one room.

General Remedies. There is no doubt that *opium* is our sheet-anchor. After watching the wonderful effects of this drug, not in one or two cases, but in dozens, and after every other conceivable remedy had been tried and failed, I am confident that, if there is such a thing as a specific, opium is a specific for phagedæna, if properly administered, and in sufficient quantities. I have never seen it fail. The most obstinate case was that of William W., whose history is given above. He took laudanum in gradually increasing quantities for fifteen days, till at last he was taking nearly half an ounce in the twenty-four hours. This, however, subdued the disease. But this must not be regarded as a typical case. Instances have been seen in which a rapidly spreading sore has presented a perfectly clean and healthy surface under twenty-four hours' treatment by opium; and two or three days may be generally considered as ample time to stop the most rapidly spreading sore.

Chlorate of Potass. This remedy, from its known properties in checking unhealthy and gangrenous ulcerations, was largely tried in phagedæna, and with some amount of success; for, though it did not appear to arrest the disease, at all events not with the same certainty as opium, still it appeared to act beneficially in the cleaning of sores and the separation of sloughs; and, from a knowledge of its properties, it was supposed that it might act as a prophylactic, and prevent a recurrence of the disease, and was accordingly prescribed largely.

Ammonia possesses no power over the disease, but was often a necessary addition, on account of the very rapid prostration and the great deficiency of nervous power which is often observable in these cases.

Dr. Polli of Milan has lately introduced a class of medicines before the profession, as having the power of arresting putrefactive fermentation; viz., *sulphurous acid*, in combination with potass, soda, and lime. These remedies were tried in phagedæna; and the drug did not appear to exert any influence. It was given in several cases, and in no one instance was the slightest benefit obtained.

CASE. A man was admitted with a fracture of the

leg on August 26th. On September 4th, phagedæna set in. He was ordered to take fifteen grains of sulphate of soda in water every three hours; and to use, for a lotion, a drachm of sulphite of soda to four ounces of water. He went on steadily with this treatment till September 12th, the disease still progressing; on that day, he was ordered opium, and the disease was entirely arrested in forty-eight hours.

The treatment, then, that has been adopted during the late outbreak, has been in the main opium, sometimes combined with ammonia or chlorate of potass, at other times alone; and a liberal diet. And, whatever may be the result of treatment in other epidemics, there is no doubt that, in the one under consideration, this plan was followed by the best results; in fact, it was the only one which really subdued the disease. Of forty-seven cases of which accurate records are kept, the average time which the opium took to subdue the disease was forty-eight hours, the shortest being twenty-four hours.

British Medical Journal.

SATURDAY, MARCH 5TH, 1864.

GERMANIC MEDICAL EDUCATION.

As the subject of medical education is at present exciting so much interest in the profession, our readers will be doubtless interested to know how they manage these things in foreign countries. We, therefore, introduce a summary of a report by Dr. Jaccoud, who was last year sent by the French Minister of Public Instruction into Germany to study the organisation of the Faculties of Medicine in that country. His report—the result of his labours in that direction—has just been published. In an introduction, he shows that the term of dreaminess no longer applies to Germany, in so far at least as the study of the sciences, and of medicine in particular, is concerned. Germany has thrown off the transcendentalism of Schelling and of Hegel, and is now steadily following in the footsteps of Locke and Condillac.

A German University is formed by the union of the four faculties—theology, law, medicine, and philosophy. Of such universities, Germany has now twenty-five; viz., six in Austria, six in Prussia, one in Hanover, two in Saxony, three in Bavaria, two in Baden, one in Würtemberg, one in Mecklenburg-Schwerin, one in Holstein, and two in Hesse.

In each Faculty of Medicine, the instructors consist of three kinds of masters: ordinary professors, extraordinary professors, and private masters.

The number of ordinary professors is limited. The highest number varies between twelve and fourteen, and is only found in Berlin, Vienna, Prague—that is, in first-class faculties.

The mode of nomination of an ordinary professor is the same in all universities. The presentation is made by the ordinary professors themselves, and the nomination made by the crown. The faculties are

proud and jealous of this privilege; and never has it happened that the sovereign has refused to ratify their choice.

The ordinary professors are nominated for life; and, at the end of thirty years' service, are entitled to a pension, which usually equals the professorial salary. The funds for payment of the professors are derived from fixed emoluments paid by the state, or by the university, if it be rich enough; from fees paid by the students; and from fees paid for lectures. The fixed salary varies with the importance of the university. At Vienna, it is 5,500 *francs* (£220). This sum is generally doubled or trebled by fees from the other sources of revenue indicated. Moreover, the fixed salary is increased every ten years from 500 to 1,500 *francs* (£20 to £60), according to the success and scientific value of the professor. With respect to this mode of payment, M. Jaccoud says:

"Through this variableness in the salary, the university and the state reserve to themselves the power of considering the personal value of the professor. Through that part of his salary which comes from fees paid by the student, the professor is materially interested in the prosperity and growth of his Faculty; and through the sums derived from the payment of his lectures, he is directly interested in the success of his course."

In Vienna, there are thirteen ordinary professorial chairs; viz., one of descriptive anatomy; one of physiology and microscopical anatomy; one of general pathology; one of pathological anatomy; one of pharmacology; two midwifery chairs; two of surgery, clinical and pathological; two of medicine; one of hygiene and legal medicine; one of ophthalmology. Berlin has twelve chairs.

M. Jaccoud remarks, that in Germany there are no chairs for specialities, with the exception of that of ophthalmology at Vienna; and he hereon says:

"Specialities, from a professional point of view, may be reasonable enough; but, from a scientific point of view, no Faculty should admit them. There is a chair of medicine and of surgery, and it is the business of the teachers thereof to satisfy all the eventualities of their programme. No special instruction is admitted into the classical and traditional circle of *ordinary instruction*. But then, on the other hand, the branches called special are largely represented in the instruction of the *extraordinary professors* and private masters."

The duties of the ordinary professors are heavy. All of them lecture during the two semesters, and none give less than five hours of lectures per week. The clinical professors have at least ten hours a week of lecturing, and sometimes fifteen or eighteen hours. Thus Virchow has seventeen hours a week of it!

The extraordinary chairs are not rigorously limited, as are the ordinary chairs. This system, under which several professors may hold forth on the same subject, leads to emulation—not always, we should think, of a desirable kind—between the professors. In Vienna, there are no less than thirteen extraordinary chairs; viz., dermatology; bandages, etc.; history of medi-

cine; histology; diseases of children; midwifery; psychology; comparative anatomy; veterinary surgery—each of which has one chair. Syphilis and ophthalmology have each two chairs. Odontology alone is wanting. These studies are all required of the student; at least, at their examinations, they have to prove their knowledge of these special subjects of instruction.

The extraordinary professors are nominated by the Minister, on the proposal of the Faculty. Their nomination is for life. For the most part, they have no fixed salary, touching merely the fees derived from their lectures, which fees they themselves fix. Exceptionally, when the course is not of an attractive character, a fixed allowance is made to the professor. Thus, for example, the extraordinary professor of medical history and the clinical professor of diseases of children have each 2,500 *francs* (£100) per annum. Like the ordinary professors, the extraordinary are called upon to lecture during ten months of the year.

In addition to these professors, ordinary and extraordinary, there are private teachers (*privat-docenten*) engaged in the medical instruction of the Faculty. The position of private teacher is open to all Doctors of Medicine, and is obtained after special examination. The nomination to the office is made by the Faculty. The private teachers are obliged to give courses of lectures, choosing any subject for their discourse which belongs to the particular branch of study to which they were appointed. They are not, however, allowed to give a gratuitous course on any subject upon which a professor gives a paid course. Their term of office is not fixed; and out of their number the extraordinary professors are selected. They have no fixed salary, their pay being derived from the fees paid by the students who attend their lectures. Their lectures are official, however, and are given in the lecture-rooms of the university. These private teachers are very numerous. The Faculty of Vienna possesses twenty-seven, and Berlin twenty-two. In Prague there are thirteen, twelve in Breslau, and so on.

The Faculties, it must be observed, have a complete monopoly of education. No one outside the three classes of instructors spoken of has the right of giving lectures on any branch of medical science. The Faculties alone have the privilege of granting degrees, and alone have the privilege of giving instruction. There is no such thing as extra-academical—no free teaching.

"To sum up," says M. Jaccoud, "ordinary professors nominated by the Sovereign, extraordinary professors nominated by the Minister, private masters nominated by the Faculty, form the three classes of professors, whose combination constitutes the official corps of instruction. All of them are obliged to lecture throughout the year, and all belong to the Faculty. The result of this organisation is to give to education a remarkable character of multiplicity and variety, and to excite an incessant activity in the

Faculty. Moreover, a constant emulation is excited by it amongst the different members of the educating body; and this emulation is the corner-stone of the building. What more could be desired? True, there is no free teaching; but then this official teaching, conceived in a spirit of perfect liberality, supplies all that can be desired."

The monopoly granted under the old conservative system to the professors alone has been thus in a great degree removed by the introduction of the other two classes—the extraordinary professors and the private teachers.

On another occasion we will give our readers an account of the organisation of the students for whom this system of instruction is prepared.

ST. THOMAS'S REDIVIVUS.

ST. THOMAS'S Hospital has at last arrived at a local habitation. The Court of Chancery has decided in favour of the Governors' site of Stangate. In some indefinite number of years from the present date, and when the foundations of the Stangate site have been laid in the muddy banks of the Thames, St. Thomas's Hospital will rise once again into an actual fact; we trust, a lasting monument of architectural skill and beauty, and perfect in its hygienic arrangements. Vice-Chancellor Wood does not seem to have had much difficulty in deciding upon Stangate site. It was impossible to withstand the certificates of the medical men who testified to its remarkable salubrity. Milbank Penitentiary and the *Dreadnought* Hospital were adduced as being healthy, even during the hot summers of 1857 and 1858. And then, again, it was said, is not the Hôtel Dieu on the banks of the Seine? One of the medical witnesses, indeed, went so far as to say:

"I regard Stangate as not only the best possible site to be procured in London, but also as the noblest site possessed by any hospital in Europe."

Besides, the river, when purified (according to future expectations), will be a splendid means of ventilation.

"After mature deliberation," said Mr. Rolt, for the Governors, "and relying upon the mass of medical testimony, not got up for the purpose, but given by their own officers and staff, who had examined and studied the hospitals all over Europe, the governors had come to the conclusion that the Stangate site was the best that could possibly be obtained for the new hospital. The objections to the Stangate site seemed to resolve themselves into the following: 1, that the hospital would be placed on the banks of a common sewer; and 2, that the banks of a tidal river, however unpolluted by sewage, were injurious as a place of residence, especially to hospital patients. As to the first objection, the answer was that the legislature would have cured the pollution of the Thames before the new hospital could be completed. As to the second, the theory of the unhealthiness of tidal rivers was now completely exploded. Without alluding to the case of the Hôtel Dieu at Paris, on the banks of the Seine, the healthy state of the *Dreadnought* at

Greenwich, and especially of the Milbank Penitentiary, immediately opposite to the bone-boiling and other works, proved conclusively that any objections from proximity to the river were wholly unfounded. As to Bethlehem Hospital, the cost was more than double that of Stangate; and the governors were not agreed on the question of selling it. The Surrey Gardens were sunk in a well and in a most inaccessible position, the only advantage being a larger quantity of ground, which could hardly be utilised for hospital purposes. It was submitted, therefore, that on the grounds of accessibility and suitability for persons requiring the benefit of the hospital, convenience to the medical staff, and suitability for the health of the inmates, the Stangate site was the best that could be procured, and that the choice made by the acting governors ought to be sanctioned by the court."

"The proposed sites were reduced by elimination to four: 1. The Stangate site, between Lambeth Palace and Westminster Bridge, immediately fronting the river, comprising about 8½ acres, at a price of £95,000; 2. The site of Bethlehem Hospital, in St. George's Fields, comprising 11 acres, at the price of providing an equally good hospital, or £200,000; 3. The Surrey Gardens, of about 14½ acres, for £77,500, with immediate possession; 4. A tract of ground, partially built upon, at the back of Newington Church."

But the Vice-Chancellor remarked:

"The real question was between the Surrey Gardens and Stangate; for the much larger price asked for Bethelam, without any corresponding advantages, put the site out of consideration." . . . The Governors, "with the unanimous consent of the Grand Committee and of their medical officers, had come to the conclusion that Stangate would be a proper situation for the new hospital. It was not, therefore, the function of the court to interfere with a choice thus deliberately and unanimously made, when no improper motive or influence could be shown to have prevailed. His Honour then proceeded to consider the evidence and the objections raised to Stangate, and came to the conclusion that the objections raised were not sufficient to show that that site ought not to be sanctioned. The Milbank Penitentiary, immediately opposite the bone nuisance and on the banks of the Thames, showed, by its healthy state, the results that might be obtained in such a situation by good management. The death-rate proved that Stangate was rather more healthy than other parts of the metropolis. The situation was very accessible, and would have the large river area in front, which could never be built over. The objection to the river situation was also answered by the success of the Hôtel Dieu on the banks of the Seine, one of the largest hospitals in Europe. It appeared upon the evidence that, although a model hospital had been recently established in Paris with a much larger area around it, the Hôtel Dieu had still retained its rank and success.* No doubt, as to size, cheapness, proximity to the original hospital, and more immediate occupation, there was evidence in favour of the Surrey Gardens; but, unless persuaded that the Stangate site was absolutely improper, and that there were overwhelming reasons for preferring the Surrey Gardens, he ought not to disturb the deliberate choice of the governors. He was not so persuaded, and the choice of the Stangate site would therefore be sanctioned by the Court."

* We should be curious to see the data upon which the Vice-Chancellor has been led to make a comparison between the salubrity of Stangate and the salubrity of the Hôtel Dieu of Paris. It reminds us of the resemblance between Monmouth and Macedon: "There is a river at Monmouth and a river a Macedon." Error.

THE BRITISH PHARMACOPŒIA.

THE *British Pharmacopœia* does not appear to have taken by storm the hearts of the profession, of pharmacutists, and of chemists. Whether this is a good or a bad sign of its merits, we cannot say: time will show. At present, the novelties and recommendations of this national drug-compendium meet with little favour. Critics are abundant, and friendly spirits few. Physicians who have been bred up in one certain alphabet of pharmacy naturally do not feel inclined to go to school a second time to learn their A, B, C. They seem to think that they already possessed sufficiently numerous and sufficiently powerful weapons before the days of the *British Pharmacopœia*; and being accustomed, in their attacks upon disease, to the use of the old *London Pharmacopœia* instruments, having taken their measure and felt their weight, and thus got the hand broken in to the handling of them, they may well be pardoned if they hesitate in resorting to novelties. If we may judge from what we hear to be the experience of respectable druggists in this matter, it will be a long day indeed before the *London Pharmacopœia* preparations are forgotten for the new British ones. And when we find the torrent of adverse criticisms with which the *British Pharmacopœia* is assailed on all sides, we need not be surprised at this. If the meaning of all this opposition were closely investigated, there would perhaps be found to lie at the bottom of it something much more serious than appears *primò facie*. It strikes us that the profession, as a scientific body, view this *Pharmacopœia* as somewhat of an anomaly at the present moment. At the moment when men are all crying out for information as to the near effects and actual virtues and mode of operation of some of our most honoured, best known, and favourite remedies, they naturally regard with suspicion and hesitation what one may call the "last new thing" in the drug line. Every one knows that the more experienced a practitioner becomes, the fewer are the articles of the *Pharmacopœia* which he employs, or to which he pins his faith. What the practitioner really wants is a better knowledge of the weapons he already possesses, and not the introduction of a heap of new and doubtful articles into his *Pharmacopœia*.

Many will probably think, as we feel inclined to do, that the concoction of the *British Pharmacopœia* has been too much in the hands of those who are over deeply versed in the nature and qualities, chemical and botanical, of our *materia medica*; and that the presence amongst them of a few professors of medicine would have been of service. The eagerness of a certain number of the profession after new remedies (as they are called) is really marvellous at this advanced age of pathology and physiology; and still more marvellous is the ready credence which is often given, and on the most insufficient evidence, as to their

alleged virtues. Who does not remember the tale of that romantic production from the backwoods of America—pucoon—and the clever Yankee cancer-curer? Then lately, again, we had the full assurance of an arrival from the same quarter of a positive cure for small-pox. Epilepsy, also, not long ago had its perfect counterblast discovered (for the three hundredth time) by a house of religious sisters in France; and the cure, or a knowledge of it, was duly imparted for our instruction.

What seems to us so much to be desired is, not an enormous compendium of the modes of manufacture and elegant preparations of all the remedies or supposed remedies which doctors have employed and patients swallowed, but a careful and solid investigation into the actual properties of the leading pharmaceutical articles which we employ. It is very well for the systematic writer to tell the student all about the history, chemical and physical properties, modes of preparation, etc., of any item of the *Pharmacopœia*, and to detail its *uses*, just as if he were doing a simple sum in arithmetic; but this is not what the practitioner requires. The practitioner of 1864 wants to get at the actual uses—not the mere book-descriptive uses—of the aforesaid articles. He soon discovers, when he gets to the bedside of the patient, that the remedies he employs do not in actual use exactly answer the description given of their operation in his books. The fact is, that, as regards the instruments of our attacks upon diseases, we are at present somewhat in the same position as our men of war seem to be in the matter of artillery. We have an overabundance of weapons, but a defective knowledge of their real and relative value. What a happy thing it would be, if the Medical Council would expend a few thousands in ascertaining the effects of all the splendid category of drugs which it now offers to the consideration of the nation.

THE thanks of the profession are due to the Edinburgh College of Physicians for attempting to secure to medical men proper protection in the performance of their duty of signing certificates of lunacy. At a meeting of the College on February 19th, the following resolutions were agreed to:

"1. That the Royal College of Physicians of Edinburgh recognises it to be its duty, in accordance with its original Charter (1681), to promote medical science, and also to protect the interests of the medical profession and of the public; and that, accordingly, the College has endeavoured, on various occasions, to establish a sound relation between the profession and the public in the matter of certificates in lunacy.

"2. That the duty of signing certificates in lunacy is one at all times painful and disagreeable, and one peculiarly liable to bring the medical man discharging it into collision with the patient or his friends; and, therefore, one of which, were it practicable, the Col-

lege feels satisfied the profession would gladly be relieved.

"3. That the duty of signing certificates in lunacy appears, nevertheless, to the College, indispensable as a part of medical practice; and that both the public interest and the welfare of the insane themselves require that it shall be performed as freely as is consistent with proper securities against abuse.

"4. That the peculiarity of the position of medical men in signing such certificates is, that they are thereby brought in contact with persons who are not in full possession of their senses, and who, even after their discharge from an asylum, frequently retain a prejudiced or revengeful feeling against those by whom they were placed under treatment.

"5. That the Royal College of Physicians approves of every reasonable security being given to patients and their friends, in regard to confinement in asylums; and, therefore, was in favour of Section xxxviii of the Lunacy Act (Vict. 20 and 21, cap. 71) which provides that, "If any person shall grant any such certificate or statement as aforesaid without having seen and carefully examined the person to whom it relates, at the time and in the manner specified in such certificate, with a view to ascertain the condition of such person to the best of his knowledge and power, he shall be guilty of an offence, and shall for every such offence be liable in a penalty not exceeding fifty pounds; and if any person shall wilfully and falsely grant any such certificate, to the effect of any person being a lunatic, the person so granting such certificate shall be guilty of an offence, and for every such offence be liable in a penalty not exceeding three hundred pounds, or be liable to imprisonment for any period not exceeding twelve months." Prosecutions for these offences would be undertaken by a public prosecutor, who may be supposed to act without prejudice in the matter.

"6. That the Royal College of Physicians has repeatedly endeavoured, during the progress of recent legislation in lunacy, to secure the introduction into bills before Parliament, of clauses extending to medical men some protection, unless in cases where they have signed certificates in lunacy without 'probable cause.'

"7. That the Royal College of Physicians is still of opinion that the legislature, which imposes by statute on medical men the duty of signing certificates in lunacy, is bound to give them some protection in honestly endeavouring to discharge that duty. The College, therefore, instructs the Council to spare no efforts to secure the introduction of a clause affording some protection, into any measure which may be brought before Parliament during the present session."

THE Committee appointed to manage the fund collected for the purpose of defraying the expenses of the late trial, in which Dr. Lingen was so unjustly made defendant, have resolved, after paying all the legal costs, to expend the balance of the sum collected in the purchase of a valuable piece of plate, to be presented to Dr. Lingen. We must say, that we regret this decision of the Committee, for two reasons especially; first, because we cannot think that this is the occasion on which to present a testimonial to Dr. Lingen; and, secondly, because such an expenditure of money may operate in future in deterring the profession from assisting their medical brethren on occasions of this kind. The managers of

the Fraser Fund have, as we deem it, much more wisely given the balance of their subscriptions to the Fund of the Widows and Orphans. The present occasion would have been an excellent one for the establishing of a fund for the purpose of assisting any of our medical brethren who may, on any future occasions, fall into such cruel difficulties as those referred to.

THE Council of the Royal College of Surgeons has, as is stated in an advertisement which appears in this day's JOURNAL, rescinded the regulation under which graduates in medicine of Oxford, Cambridge, and London, were admitted to the fellowship after an examination in surgery only. Consequently, all university graduates who intend to present themselves at the next examination for the fellowship diploma, must be prepared for having their knowledge tested in all the other subjects, an acquaintance with which is required from other candidates for the diploma. The change appears to have been made very suddenly, and will doubtless cause much agitation among university men who have been intending to compete for the fellowship under the hitherto existing regulations.

IN 1862, 19,545 soldiers of the Prussian army were vaccinated. Of these, 16,669 had cicatrices of former vaccinations; 1852 indistinct traces of cicatrices; and 1024 no trace at all. The vaccination was regular and normal in 12,272 soldiers; irregular in 2738; and unsuccessful in 4534.

M. Delpech has been elected a member of the Section of Hygiene of the Academy of Medicine.

The journals announce the death of M. Ribes, Professor of Hygiene, at Montpellier.

MM. Demarquay and Lecomte, as the result of the second part of their researches concerning the effects of oxygen, tell us—that oxygen, when applied to old or recent wounds, produces little pain, but that it eventually gives rise to considerable reaction; that it may be injected into the mucous or serous cavities without causing any accidents; that it may be respired for a long time in doses of from twenty to forty litres per day without causing accidents; and that its peculiar properties are to increase the animal forces—exciting the assimilating powers and increasing the appetite.

Every one has heard of the industrious fleas; and now we are told, in *Cosmos*, of the industrious spiders. M. Duchesne-Thoureau has so managed these animals as to make them weave a piece of tissue, of which he sends a fragment to the *Cosmos*. "The specimen sent us," says *Cosmos*, "considerably resembles amadon." M. Thoureau is certain that, by the aid of these animals, warm and soft carpets, equal to our largest ones, may be obtained!