

An Account of the Medical Institutions of Berlin.
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MEDICAL men universally agree in the opinion, that none, but those who exercise the greatest industry, perseverance and regularity in the prosecution of their professional studies, can ever acquire that proficiency, which alone enables us to discharge effectually our responsible duties to our fellow-creatures. Of all the sciences and arts, to which the necessities of man have directed his attention, none are so intricate, extensive, and (I may add) important as the study and practice of medicine in its numerous branches; hence the origin of those numerous systems, which, from the time of Hippocrates down to the present period, have appeared, and have had for their object the abridgment of our labours, by simplifying our ideas of the action of the healthy and diseased body. In all medical schools some particular system is observed, otherwise it would be impossible either to teach or to learn such a science as medicine, composed, as it is, of so many different branches intimately linked together, but sufficiently distinct from each other to render it necessary that they should be taught separately. It is not sufficient for the student to visit hospitals, attend lectures, and toil over his book by the midnight lamp; he must also adopt a well digested system of study, which will introduce him, by regular gradations, from the more

simple to the more complicated branches of the profession. The student naturally looks to his teachers for a system; and this should be as simple as possible, otherwise it will prove more injurious than useful, by compelling him to consume much of his time in acquiring that, which ought to diminish, instead of augmenting his labours.

The medical school of Berlin ranks among the first in Europe, for the number and learning of its professors, the excellence of its hospital, and the superiority and number of its clinical classes. In no school whatever, are the professors more learned or indefatigable, and in none is more system observed.

The medical institutions of Berlin are, 1. A Faculty of Medicine, comprehending several professorships, at the Royal University; 2. The Hospital of the Charity, to which are attached the clinical professorships of Medicine, Surgery, and Obstetrics; 3. The Clinical Hospital of Medicine, Surgery and the diseases of the eyes; 4. The Royal Military Academy of Medicine; 5. A Medical Society of Physicians and Surgeons; 6. A Pharmaceutical Society; 7. Several public libraries; and 8. The Botanical Garden, the Museum of Anatomy and of Natural History.

The Royal University was founded by the present King of Prussia, and put into operation on the 15th Oct. 1810. It is one of the finest buildings that the city can boast of, being formerly the palace of Prince Henry of Prussia, brother of Frederick the Great. The basement story is entirely occupied by the classes, and the rest of the building, with the exception of a large magnificent hall, intended for public examinations, is filled by the museums of anatomy and natural history. The professors are distinguished into ordinary and extraordinary. Any member of the Royal Academy of Sciences, may officiate as a professor.

There are four faculties, viz. Theology, Jurisprudence, Medicine, and Philosophy. The professor of elocution publishes at the beginning of each course a list of the lectures, by order of the rector and academic senate of the

university. It is the duty of the rector to matriculate all those students who attach themselves to the university; but before he allows them to matriculate, he requires a promise of obedience to the statutes of the institution. Its students constitute a distinct class of the community, and are in most cases governed by a code of laws peculiar to it. A member of the Chamber of Justice of the town, is generally nominated judge of the university; he decides in all cases of duels, (except when some wounds or death are the result,) quarrels, and other disorders which may arise between the students; but if the condemned party wishes to appeal to the ordinary tribunals, he has the privilege of doing so. Each faculty has a deacon and two courses of lectures yearly, the winter course beginning on the 15th of October, and ending on the 20th of March; the spring course beginning on the 8th of April, and ending on the 17th of August. Each professor is compelled to deliver a public and gratuitous course every season, which, however, is generally very imperfect and uninteresting; but these defects are completely remedied in their private lectures, which all of them give in a perfectly systematic manner. Their private courses cost from one to four frederick d'ors each. The following branches are taught by the medical faculty:

WINTER COURSE.

- Professor GRAFE—*Publicly*, On diseases of the eyes. *Privately*, Surgical operations and demonstrations upon the dead body.
- Professor BERENDS—*Publicly*, Explanation of Celsus' writings. *Privately*, The remedies and cure of female complaints.
- Professor HORREL—*Publicly*, Animal electricity. *Privately*, General Physiology.
- Professor HUFELAND—Therapeutics.
- Professor KNAPE—*Publicly*, Syndesmology. *Privately*, Osteology, Splanchnology, Forensic medicine, and Anatomical demonstrations and dissections.
- Professor KOREFF—*Publicly*, Physiology. *Privately*, Natural History of man.

- Professor LINK—*Publicly*, on Cryptogamous plants.
Privately, Pharmacologia.
- Professor RUDOLPHI—*Publicly*, Anatomy of the organs of sense. *Privately*, Anatomy of the healthy body, Pathological Anatomy, and anatomical demonstrations.
- Professor SIEBOLD—*Publicly*, History of Midwifery. *Privately*, Theory and Practice of Midwifery.
- Professor WOLFFART—*Publicly*, The art of prescribing. *Privately*, Animal Magnetism.

In addition to the above private and public courses, by the ordinary professors, there are many others delivered during the winter session, by the extraordinary professors, F. Hufeland, E. Osann, G. H. Reich, G. A. Richter, J. N. Rush, G. Wagner, and C. F. Wilberg. The ordinary professors rank higher, and receive larger salaries than the extraordinary; from the latter, the former are selected as vacancies occur.

The same ordinary and extraordinary professors, whom we have named, deliver the spring courses, which are merely continuations of those of the preceding winter. The classification of medical studies, as adopted in Berlin, it has been seen, differs materially from that we have been accustomed to; and I must confess that I do not approve of it as much as of that which is adopted in the American and English schools. The former is too complicated; its divisions and subdivisions are too numerous, and by no means well defined; a circumstance that must distract the attention greatly, and thereby prove a very serious obstacle to the progress of the student. A foreigner would find the classification of the Berlin school, very tedious and perplexing; but the Germans appear not to be much incommoded by it, at least not sufficiently so as to attempt any innovation. It is unnecessary for me to speak of the merits of the professors; their reputations are well known to the medical world to be inferior to none; and I can confidently assert, that a Hufeland, a Graëfe, a Berends, and a Rudolphi, are, of themselves, without the assistance of their learned colleagues,

sufficient to render the University of Berlin as celebrated as any of the present day. This institution stands unrivalled in its clinical professorships and establishments, which are conducted with more system and regularity than those of France or England. The clinical professors of Berlin, duly appreciate the importance of their duties, which they discharge with the greatest honour to themselves and advantage to their pupils. None, who are at all attentive to this essential branch of their profession, can possibly fail of becoming tolerably conversant with the most approved mode of practice in every department of physic, which the best and most learned medical men of Berlin pursue. There are two clinical professorships at the University, three at the Hospital of Charity, and two at the Clinical hospital. In this place, I shall merely notice those at the University, reserving my remarks upon the others, until I treat of the establishments of which they form a part. The clinical professorships of the university consist in one of medicine and one of surgery. Professor Hufeland fills the medical chair, and Professor Bernstein the surgical; both of these gentlemen are advantageously known abroad, through their excellent works upon medical and surgical science. A lecture is delivered daily, by each professor, throughout these courses, which continue eight or nine months, and are equally useful to the public at large, and to the students, as they dispense health and comfort to the former, and instruction to the latter. With the exception, that the professor explains the nature and symptoms of the disease of each patient, the clinical courses resemble much the dispensaries of England, but they are infinitely more instructive. At a regular hour daily, each professor meets his pupils in the class-room, where they place themselves around a large table, leaving a seat for the patients, who are introduced separately from an antichamber, to which they repair at the lecture hour. When the patient is seated, the professor calls upon any one pupil to examine him, and ascertain the disease, which being done, the

pupil declares aloud, in the Latin tongue, his diagnostic, prognostic, and *methodus curandi*, when the professor, if necessary, interrogates both the patient and pupil, and explains the disease in all its bearings; after which, the pupil writes the prescription, reads it to the class, and hands it to the professor for his signature, who gives it to the patient to carry to the apothecary of the university. The same patient is directed to attend every morning, to be examined in the same way by the same pupil, until the cure be completed.

All the pupils take a patient in rotation, and are expected to attend every morning, in order to report the state of the patient under their charge. If the patients are unable to attend, after having been at the university, the pupils under whose care they were placed in the first instance, are required to visit them at their houses, and report their situations to the professors, who authorize them to prescribe, and send their prescriptions to any of the apothecaries appointed to furnish the poor. We are not to conclude that the poor of Berlin are maltreated, by being placed under the direction of the students; for none but those who have made considerable professional progress, are intrusted with such important duties. Every student must have passed through the above clinical discipline, before he can become a candidate for graduation. It is obvious, from what we have stated, that no physician of the University of Berlin, can be ignorant of the practical part of his profession; but that, on the contrary, all of them must, before graduation, have been practitioners on a small scale, under the immediate direction of their teacher.

Hospital of Charity. This building is admirably well calculated for the purposes of an hospital; it forms the four sides of a square, enclosing a large piece of land laid out in gardens, gravel walks, and grass plats, for the recreation and exercise of the convalescents. It is three stories high; its basement story is appropriated for bathing-rooms, store, wash-rooms, and kitchen. The second and third stories

are divided into rooms of various sizes, for the accommodation of from two to thirty or forty patients. Each room or ward, (except those which are very small,) is furnished with two attentive nurses, who sleep and eat in their respective wards, and keep a regular night and day watch. Each ward has two or more closets, for the reception and safe keeping of its bed-linen, blankets, hospital dresses, plates, knives, forks, &c. All these articles are distributed to the wards, in exact proportion to the number of beds in each. At the side of each bed, there is a small table and chair, for the use of the patient of that bed. Some of the bedsteads are made of iron, but the greater proportion are of wood. All the beds are filled with barley-straw, which is burnt and replaced, before new patients make use of them, with the view of cleanliness, and preventing the appearance of contagious diseases. The hospital is divided into five distinct departments, viz. medical, surgical, cutaneous and venereal, obstetric and lunatic. Each of these is again subdivided into male and female departments; and in the medical, two wards are exclusively appropriated to males and females afflicted by contagious febrile diseases. The hospital can accommodate about eight hundred patients; but there are rarely more than seven hundred in it at any one time. It is supported by government and small sums which some of the patients pay monthly. The indigent are admitted, and cured gratis, upon the recommendation of the dispensary physicians of the town; and those inhabitants of Berlin, and strangers, who are not actually destitute, are required to pay from one to three Prussian dollars per month, for the benefit of the house. The poor, or gratuitous patients, are placed in the longer wards, and those who pay, in the smaller; but there is no difference whatever in the medical attention of the two classes, and very little in their nourishment and indulgences. The king's apothecary furnishes all the medicines required by the hospital, at the expense of government. All students of medicine and surgery, and female pupils of midwifery, are

allowed to attend the practice of the hospital, upon paying the fee of the respective clinical professors.

There are three clinical professorships at this hospital, all of which are attached to the university, and form a part of it. A first and second physician, a first and second surgeon, four pensioners, or assistant surgeons, and nineteen house pupils, are attached to the service of the hospital. The first physician and first surgeon, are the clinical professors of medicine and surgery. The assistant surgeons are young surgeons of the army, who have been educated in the military academy of medicine, and sent to the hospital for six months as house pupils, and then to the army one or two years, as surgeons' mates; after which service, they are returned to the hospital as assistant surgeons and physicians; and after serving some time as such, are nominated regimental surgeons and physicians. The house pupils are young men who are educated at the king's expense, in the military academy of medicine, where they remain four years, and attend lectures upon every branch of learning and medicine; after this they are examined, and if found competent, sent to the hospital as house pupils. The duty of the assistant physicians and surgeons, is to attend the usual visits of the physicians and surgeons, and also to assist them, if required, in the performance of their duty. The house pupils likewise attend the visits of the physicians and surgeons, write down the prescriptions, and administer the remedies. They also note the symptoms of the patients of their wards, and report the same to the physician or surgeon, at their regular visits. In the medical and surgical departments, a male and female ward are selected for the purpose of instruction. In these wards the most interesting and important cases are placed; over the head of each bed, a black board, a foot square, is hung, upon which are written the name of the patient,—his age,—the day of attack and of admission; the symptoms,—diagnostic, and lastly, the remedies administered; all these particulars are rigidly observed, and every change that takes place, from day to day,

is put upon the board, so that at a glance the physician and pupils can recall to their memories, every thing regarding the state of the patient on the preceding day, and compare it with his present situation. At eight o'clock every morning, (Sunday excepted,) Dr. Neumann, the clinical professor of medicine, meets his class in the medical clinical ward, where he lectures upon each case, more or less particularly, according to its importance. Every patient of the clinical ward is put under the immediate management of an out-door pupil: Whenever a new patient is admitted, Dr. N. calls upon one of the out-door pupils to interrogate and examine him, and to give a diagnostic of the disease and its *methodus curandi*, which he confirms, alters, or disapproves of, after having discussed the subject in all its bearings. The same pupil is compelled to perform the above office to the patient throughout his malady, and to keep an account upon the black board, of all the symptoms appearing, and the remedies used from day to day. Dr. Rush, the professor of clinical surgery, and Dr. Klugel, professor of midwifery, exercise their out-door pupils in the same manner every morning, at separate hours, so that any individual may attend all the clinical lectures and exercises, (if desirable,) during the season. The professor of clinical surgery instructs his pupils to operate both upon the dead and living subject. The professor of midwifery, makes his pupils deliver, in rotation, all the women of the obstetric department.

The situations of assistants and house pupils of the hospital, are filled by individuals intended for the army, who have been educated for that particular purpose, at the expense of government; thus, those very instructive situations are completely beyond the reach of the civil or out-door pupils, who, however, as we have seen, have a most excellent opportunity of informing themselves thoroughly in every branch of medicine; as they may, by attending a couple of courses of the clinical lectures of the hospital, acquire a good idea of disease in all its forms, and the proper

method of treating them. About 3000 patients are received annually in the hospital, 500 of whom die. The bill of mortality is very great; and it may be accounted for, in a way more creditable to German practice, than appears at first sight. I have already stated that the poor are admitted to the hospital upon the recommendation of the dispensary, or poor-physicians of the city, who, of course, cure all the slighter diseases, without separating their patients from their homes and friends, and only send those severely afflicted, to the hospital, where they are better nursed, dieted, and attended to, than they possibly could be at home.

Clinical hospital of medicine, surgery, and the diseases of the eyes. This excellent institution is under the direction of Dr. Berends, professor of clinical medicine, and Dr. Græfe, professor of surgery and the diseases of the eyes; it contains about thirty beds, which are equally divided between the medical and surgical wards. This hospital may be regarded both as a hospital and dispensary, as it partakes of the character of the two. As to the clinical institution of the university, the poor inhabitants of Berlin repair to this at a certain hour every day, for advice and medicines. If they are not able to visit the hospital every day, a bed is allotted them in the male or female ward of either department, as the case may be; but no incurable, and very few chronic cases are admitted, otherwise the limited number of beds might be entirely engrossed by them, to the exclusion of others more instructive and important. All those who require operations, are operated upon in the surgical amphitheatre, and in the presence of the whole class. Professor Berends exercises his pupils precisely in the same manner as Professor Hufeland at the university, and Professor Neumann at the Charity. Those patients who are retained in the house, are each attended by the student who examined him in the first instance, twice a day, and he reports the state of his patient every morning to the professor, who then visits him, and makes those remarks which he may deem proper, at the bed-side before the class. Those pupils only, who

have previously attended Professor Berends' lectures, and evinced a sufficient degree of talents and information, are entrusted with the care of the patients. Professor Graefe observes the same plan with his students, always preferring those who display the most learning, industry and skill; he allows them to perform operations of any kind, under his immediate direction and the observation of their colleagues. Before the student operates, he gives a short description of the disease, its diagnostic, prognostic, and explains the method and necessity of the operation, after which he takes charge of the patient till cured, visiting him twice a day, and reporting his case to Dr. Graefe every morning before Dr. G. pays his visit. Although there are but thirty beds in this institution, a vast number of out and in-door patients are treated there annually, and a great number of operations are performed by Dr. Graefe and his pupils. The surgical skill of the professor attracts multitudes who require operations, which he performs with as much dexterity and success as the first French or English surgeons. A house physician and surgeon reside in the clinical hospital, who direct and superintend the pupils, nurses, &c. in the performance of their respective duties. The expenses of the house are defrayed by government. The professors are not remunerated for their services, as physicians and surgeons, but receive a fee from each pupil, except those who belong to the Military Academy of Medicine, for whom they are paid by the king.

The Royal Military Academy of Medicine and Surgery, is an institution entirely independent of those already spoken of; it was founded, not many years past, for the exclusive purpose of boarding, lodging, and educating youths for the profession, to serve in the army. The sons of officers are most generally selected to receive the benefits of the academy, where they are taught all the branches of a general and professional education. A regular set of professors is attached to it, who examine their pupils every year publicly. After having remained in the academy four years, they are

(if found sufficiently well informed) sent to the Hospital of Charity to act as house pupils for the term of six months, and are then divided between the professors of clinical medicine, surgery, and obstetrics, but more particularly the two former: no one pupil continues the whole six months under either of them; on the contrary, that time is equally divided between them, so that the students have an equal opportunity of acquiring practical information in medicine and surgery.

The military academy is placed under the direction of the surgeon-general of the army. During a part of the four years that the students remain in the academy, they frequent as out-door pupils, the clinical lectures of the university, hospital, and clinical institution, where they enjoy all the opportunities offered to the civil pupils. The military academy furnishes all the medical officers of the army, and I believe that civil physicians or surgeons, are never or rarely appointed to serve in that body. In a government so perfectly military, as that of Prussia, the army must necessarily be an object of primary consideration; hence it is that the government is so very solicitous to procure it the best informed medical men, who receive gratuitously their support, general and professional education, together with all the practical advantages of the hospital, from many of which, citizens are entirely excluded. Notwithstanding, however, that government takes so much pains to instruct the pupils of the academy, it is said that after having served in the army four or five years as regimental surgeons, they are at liberty to resign.

The Medical Society of Berlin, is composed of resident and foreign members, who may be, indiscriminately, physicians or surgeons. Professor Hufeland and Dr. Heim, are its president and vice-president. It meets every fortnight at the house of the president, to converse upon medical subjects, and to hear a dissertation read by a member, who performs the task in rotation. Strangers may be introduced to the sitting, by a member.

The Pharmaceutical Society, is composed of apothecaries and chemists. It meets twice a week, when a lecture is delivered upon pharmacy or chemistry. The celebrated Klaproth and Bergmann, are presidents of this society. A complete course of lectures upon pharmacy, chemistry, and botany, is delivered during the sittings of the society. A large library, complete herbarium, and a large collection of specimens of drugs and medicines, belong to it. A fund is raised and reserved by the society, for the purpose of relieving those of its members, who may have been overtaken by misfortune, without any misconduct on their part. An influential member is appointed to obtain situations for young druggists out of employment; to him applications may be made by those who wish assistants, as well as those who are in want of employment.

Libraries.—There are several very extensive public libraries in Berlin, in which all students are allowed to read at certain hours every day; and if recommended by any one of the professors, they are permitted to take the books to their lodgings, upon condition that they return them uninjured.

The Anatomical Museum of the University, is principally formed by the vast and beautiful museum of the celebrated anatomist Walther, who sold it to the king for the use of the university. It is particularly remarkable for a great number of beautiful preparations of the nerves and blood-vessels, and contains numerous pathological preparations, and a large collection of rare monstrosities. Professor Rudolphi has added to the museum, his very valuable and unique collection of intestinal worms. The anatomical museum is open twice a week, for the benefit of the students, and once for the gratification of public curiosity. All the preparations are in an excellent state of preservation, and well arranged, each being furnished with a label explaining its nature.

The Museum of Zoology of the University, contains, 1st, the fishes and amphibious animals, which belonged to the

celebrated naturalist Block. 2d, The collection of birds and insects of Dr. Reimer. 3d, The beautiful collection of crustaceæ of Mr. Herbel. 4th. The zoophyta of Mr. Gerresheim. 5th, A great number of South American quadrupeds and birds, presented by Count Hoffmensegg. 6th, A great number of Siberian birds, collected by the celebrated naturalist, Pallas,—of animals brought from the Cape of Good Hope, by Professor Lichtenstein; and lastly, a fine assemblage of insects. The whole forms a very large and complete museum, tastefully arranged, and fully adequate to the purpose of enabling the student to acquire a precise knowledge of zoology.

The Museum of Mineralogy, is very large, and formed of two distinct collections, viz. a systematic and a topographical. The first contains all the classes, orders, genera, species, and varieties of mineral productions, properly classed, according to the system of Werner. In the second, we find the minerals of Prussia, Germany, Russia, England, Sweden, and Norway, arranged separately.

The manner of graduating at the University of Berlin, differs very materially from that observed in other universities; being more difficult and much more perfect. He, who obtains from the university, a diploma, and a license to practise, must be well acquainted with his profession, both theoretically and practically; as the examinations which he undergoes previously, prove, beyond all doubt, his capacity. I have often heard it asserted, and believed, that no academic trials could sufficiently test the capability of any medical man to perform the responsible duties of the healing art; and the opinion is certainly correct, if we restrict it merely to the examinations of the schools of this country, and of almost all those of Europe; but I am perfectly satisfied that the manner of examining students in Berlin, is fully calculated to reveal their real talents. By the statutes of the university, students are obliged to study four years, during which, they must have attended, at least, one course on each branch of medicine taught in the university, certi-

ificates of which, they must be furnished with from the professors. The four years being completed, and certificates obtained, the student petitions the deacon of the faculty for examination; upon which the deacon examines him on every branch of medicine, in the latin tongue. Some questions must be answered verbally, others in writing. If, from this preparatory examination, the deacon judge the candidate capable, he appoints a day for his appearance before the faculty; but if he be not capable, the deacon decides the length of time he shall continue his studies, before appearing again. The candidate, having been permitted by the deacon to continue his trials, is examined by four or more of the professors, upon any branch of medicine; after which he is authorized to print his thesis, which may be defended publicly; and if successful in this, he obtains his diploma; but the mere fact of possessing a diploma, does not, of itself, entitle the graduate to practise medicine or surgery within the Prussian dominions. Before he can become a practitioner, he is required to pass through another ordeal, which consists of a public anatomical exercise under Professor Rudolphi, and a clinical course of practice, under Professor Newmann, at the hospital. These exercises are termed, a *cursus anatomicus*, and a *cursus clinicus*; in the first, the graduate must dissect, and demonstrate publicly, a part of the body, at the option of the professor, and deliver an anatomical lecture upon any subject which the professor thinks proper to select. If the anatomical professor be satisfied with the anatomical knowledge of the candidate, he is permitted to commence the *cursus clinicus*, at the hospital, where Professor Newmann selects two cases for him to treat during four weeks, and if they should be cured, or die before the term expires, they are replaced by others. Every day, the candidate visits his patients, notes their symptoms, the remedies used, and makes his remarks upon each of them. The four weeks having expired, Professor Newmann grants a certificate of the graduate's attendance and good conduct, and sends this journal of cases of the *cursus clinicus*, to Pro-

fessor Hufeland, who examines it, and reports according to its merits, when the candidate is subjected to a final examination upon practical medicine, before Professors Hufeland, Newmann, Knoffe, Knoer, and Elhart. If the candidate pass this last examination satisfactorily, he receives a license to practise in any part of the kingdom or elsewhere. The degree of doctor of medicine is granted by the university; whereas the license to practise must be procured from the professors of the *cursus clinicus* and *cursus anatomicus*, which are independent of the university; the professors of the *cursus* being appointed by the king, for the express purpose of granting licenses. No one can become a candidate for a license, unless he has previously received the diploma of a doctor of medicine; and any person, with that qualification, whether Prussian or foreigner, is allowed to begin the anatomical and clinical courses.

It is obvious, that any one who has passed the trials necessary to graduate and obtain a license to practise, must be well informed in his profession; since he is obliged to give the most satisfactory proofs of his theoretical and practical knowledge, before he is allowed to enter upon the duties of his profession. A student may easily describe a disease and its proper treatment, or give a very exact description of the anatomical structure of any part, without having a perfect knowledge of either; but it would be impossible for him to dissect and demonstrate it, or treat a disease skilfully, three or four weeks, without understanding them thoroughly.