August 30th. I succeeded in bringing away the whole of the lint from the fracture, in which it had been imbedded for two months. I gave permission for the patient to be taken out of doors.

September 10th. The granulations were exuberant, requiring to be touched with nitrate of silver. The bare bone in the centre of the wound continued dry, and was becoming brown. There was an abundant discharge of pus from the lower part of the wound, the seat of the fracture.

September 20th. The exposed bone was evidently loosening, being pushed up by the growth of the granulations beneath.

September 23rd. With dressing-forceps, I removed three pieces of exfoliated bone (Figs. 1 and 2). One of them, of irregular shape (Fig. 1), was about two inches in horizontal, and about an inch and three-quarters in vertical diameter. The temporal ridge was very distinctly seen crossing the middle of this portion.

October 16th. The size of the wound was much diminished; but it was still prevented from healing by more necrosed bone, which was removed, and proved to be an inch and a quarter long and a quarter of an inch thick at its thickest part. It involved the inner table at each extremity, the smaller end being distinctly grooved for the meningeal artery (Fig. 3).

Fig. 1.

Fig. 2.

Fig. 3.

On November 6th and 11th, I removed two more small pieces of bone. On December 4th, she returned home in perfect health, with the wound healed to the size of a sixpence. A large bald patch, considerably depressed below the level of the surrounding parts, indicated the great loss of substance which had resulted from the injury.

April 23rd, 1870. I heard that the wound finally healed at the end of December last, and had continued sound since.

On reviewing the foregoing case, there appear to me to be several points in its history deserving of notice.

1. There was a remarkable immunity from cerebral disturbance; the only symptoms referable to this cause being slight deafness, intolerance of light, deviation of the tongue to the right, and indistinct articulation. This difficulty of articulation was, I think, due to a want of control over the organ of speech from paralysis, and not to any lesion of the third left frontal convolution, or plugging of the middle cerebral artery; as there was not so much a difficulty in finding words to express her ideas, as an inability to articulate them distinctly. I regret to say that her ability to express herself in writing was not tested at the time.

2. There was a complete absence of erysipelatous inflammation, and consequent burrowing of pus, detachment of the scalp, and extensive sloughing.

3. No bad consequences resulted from the depressed bone, and the introduction within the cranium of a strip of lint nearly three inches long for the purpose of arresting the profuse arterial hæmorrhage.

4. The strabismus, which might have had more importance attached to it than it deserved, had its true significance assigned to it by the discovery that it had existed from childhood.

5. The healing of the wound, retarded by the extensive exfoliation of bone, which involved the whole thickness of the outer table, with portions of the diploë, and at the seat of the fracture a small extent of the inner table, as shown in the piece of bone extracted on October 16.

The treatment of the case requires very little comment. The symptoms were never such as to warrant any interference with the depressed bone. Little was done beyond keeping the patient perfectly quiet in a darkened room, relieving the constipated bowels by enema, which answered better than purgatives by the mouth, on account of sickness, and giving a mild, nutritious, unstimulating, diet. The only dressing to the wound after the first day was carbolic oil—one part to thirty—an application which I have always found very efficacious in injuries to the scalp. One fortunate circumstance in the treatment

of the case was, that the hæmorrhage, when its egress through the fracture was arrested, did not go on internally, and thus produce fatal compression.

RECOLLECTIONS OF THE MEDICAL SCHOOL OF VIENNA.

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I.

THE custom for English medical students or graduates to spend some months on the continent, is one so excellent and useful that we could wish it were more common. In this respect, progress has not kept pace with the increased facilities of communication. The Americans, of course, far surpass us in their zeal for travel; and even the Germans seldom think their education complete till they have visited one or two universities besides that in which they have graduated. The English student, on the other hand, rarely has sufficient enterprise even to migrate from one part of London to another; and if his home experience be really confined to one school out of eleven in a single city, he must need, above all others, the wider field of observation given by foreign travel. Moreover, it has been too much considered *de rigueur* to spend a session in Paris; and, as this usually exhausts the time assigned to travel, the student gets no further. Paris has indeed been closed to us by lamentable circumstances; and we should not choose such a moment as this to depreciate in the least degree a city which has so many claims on the sympathy and gratitude of the students of all countries; but the seeker of medical knowledge will not lose if he have to go to Germany instead. The language is, of course, an obstacle. We all know French—as we think; we certainly know our ignorance of German; but the student or his friends must only make up their minds to six months instead of three, or twelve months instead of six, until at least German is more generally taught in our schools. Germany, too, presents another difficulty in the competing claims of so many universities. Paris is always France, but what is the capital of Germany? This is a question which we cannot pretend to answer; but we think we may do a service to the travelling student by pointing out what solid advantages can be got at one at least of the German universities.

For strictly professional knowledge, no serious student will ever regret having gone to the University of Vienna. At a distance, people are apt to depreciate this famous school. At Berlin they speak of the Vienna School of Medicine always in the past tense. At Leipzig, at Munich, at other universities where the sciences accessory to medicine are studied with admirable zeal and magnificent appliances, they will tell you that Vienna may be very good for "practice", but in science it is nowhere. Nevertheless, we think that any candid student, native or foreign, who pays more than a flying visit, and takes the trouble to know intimately the varied resources of instruction offered by Vienna, must come to place the school above Berlin with her distinguished names, or Paris with her great traditions. Of Paris, we will only say enough to justify this strong assertion. As compared with Vienna, it has the great drawback of not being in Germany. Germany is, at the present moment, that part of the world in which anatomy, physiology, and their applications to medicine, are studied by the largest number of persons with the greatest energy, and therefore with the greatest success. Of the results of German labours in this field, the older teachers of the Paris school are most strongly and unfortunately ignorant. It is true that there is a younger school whose writings have given occasion for the epigram, that a French book may be known by the number of German quotations; but, while the French character and traditions remain the same, it will always be the exception to find a distinguished Paris teacher who is prepared to learn from the foreigners instead of instructing them. This, then, is the first drawback to the Paris school. The second drawback may seem a trifling one, and yet is not unimportant. In Paris, the numerous and splendid hospitals, so admirably conducted and so generously opened to the students of all nations, are, for good and sufficient reasons, scattered all over the city, and, as the lectures and clinics of most of the teachers take place at the same hours, some must be sacrificed. In Vienna, on the other hand, all the important medical institutions are within a very small area, and the teachers, for the most part, accommodate their hours so as not to

clash with one another. There is no hour of the day which cannot be profitably occupied either with clinical medicine and surgery, or with some one of the numerous specialities which make Vienna most of all attractive to the foreign student. As to Berlin, the case is different. There can, of course, be no suspicion there of want of acquaintance with the results of modern research. An university which, taken altogether, in letters, learning, and science, is probably the most important educational body in the world, is not likely to be behindhand. There are, in fact, just now, more distinguished names in the Prussian than the Austrian capital; and the local concentration is almost as great in one as in the other, but the arrangement of time is not so good, and the resources of the hospital are not thrown open to students with the same freedom. The clinical lectures of Professor Frerichs, the eminent teacher of medicine at Berlin, are a curious sight. One patient at a time is brought in his bed into a large theatre, where the great mass of the students are, of course, at a considerable distance. One student at a time is called out in rotation, and has to examine the case, and undergo a severe cross-questioning upon it. The rest do not so much as touch the patient with the tips of their fingers; nor are they freely admitted to the wards unless they hold some office in the hospital. In the other great medical clinique, that of Professor Traube, the case is somewhat better, students being admitted to the wards during the visit. Altogether, however, the opportunities for actual observation of patients are very inadequate, and it is strange that this fact does not strike the zealous Berlin professors more forcibly. The writer knew a Berlin student, the son of a professor, who migrated to the considerable town of Halle, for the sake of the clinical instruction there. If Trousseau could say of the Paris system, "*Je sais bien, messieurs, combien l'enseignement clinique de la faculté manque d'actualité*," how much more is this true of Berlin. In Vienna, though the wards are not so open as in the London hospitals, any student may spend three or four hours a-day in actual observation of patients; and the system of clinical offices is so arranged, that every matriculated student during his clinical years has constantly one or more patients under his immediate care. Another strong point at Vienna is the specialities. In certain branches, other schools may be pre-eminent. No oculist, in Germany or elsewhere, stood higher than the illustrious and lamented Von Graefe, of Berlin; no hospital in the world can offer such opportunities for the study of skin-diseases as the St. Louis at Paris; but, taken as a whole, the staff of teachers and the opportunities for observation in specialities at Vienna are quite unrivalled. A diligent learner may begin early in the morning and leave off late in the evening, if his powers of observation hold out, studying diseases of the eye, the ear, the skin, the throat, syphilitic diseases, practical obstetrics, children's diseases, and so on, all in the same building, or close by, and under competent and most zealous teachers. What is most important, however, is the way in which this instruction is given. The "lecture" is not a mere piece of bookwork, nor yet merely watching a rapid prescriber "see out-patients" against time. The patients are brought into the middle of the room, and described and commented upon, as specimens of natural history are exhibited by a lecturer. The proper treatment of the maladies is, of course, not neglected, but it is kept well hand in hand with the teaching, and not allowed to squeeze it out altogether. It is plain that demonstrations of this kind give active occupation to the mind, and do not leave it in the passive, helpless condition produced by the many hours of pure listening which the unfortunate London student has to go through. The Vienna student passes from one so-called lecture to another, but in each his mind is brought into actual contact with the proper subject-matter of his science, and, if it still remain dull and unawakened, the fault is his own.

We must, however, pass on to speak of the instruction in general medicine and surgery. In these subjects, there are no systematic courses precisely corresponding to those which go under the same name in the London schools. The whole of the instruction is given in the form of clinical lectures, an arrangement which is very general, though not universal, in the German schools. It is not quite easy to see how the Germans have come to discard entirely the method of instruction by systematic lectures, indispensable as it is thought in other sciences, and maintained in all other countries as a part of medical education, especially as it is said that in former years the opposite extreme prevailed, and long courses of general pathology and general therapeutics occupied a large portion of the student's time. The fact we believe to be, that this change is only an indication of the great revolution which the German intellectual character has undergone in this century. We are still apt to think of the Germans as idealists, whereas there is hardly any nation so positive. We still enjoy the well-known story of how artists of three nations were commissioned to paint a picture of the camel; how the Frenchman went to the Jardin des Plantes, the Englishman to Egypt, while the German shut himself up in his study and

evolved the idea of a camel out of his inner consciousness—a story which may have been at one time a fair caricature, but must now strike anyone who knows Germany as being not only incorrect, but strangely and studiously incorrect. German works are distinguished from others, not by their subjective character, but by the predominance of the solid basis of observation and experiment. It is perhaps this pronounced positive tendency which begets a certain impatience of teaching that cannot be illustrated by objects or experiments.*

Now, in medicine, we cannot as yet produce objects and experiments to order, as can be done in scientific lectures; and therefore, waiting the progress of experimental pathology, medicine to be taught demonstratively must be taught occasionally—that is to say, clinically. Of course, if clinical lectures take the place of all systematic teaching, they must be somewhat different from ours. They are more elaborate, and also more expository, than when the object is merely to explain a particular case. The case is, in fact, made a peg, on which to hang a full account of the disease. This system has its weak point; sometimes the lecture is hung on to the wrong peg. The writer once heard a venerable Professor of the Vienna School pointing out the symptoms of a patient in his wards. "This, gentlemen," he said, "might at first sight be taken for a case of gangrene of the lung" (a favourite hobby of the Professor's). "It is not, for several reasons, a case of gangrene of the lung, but I shall make that disease the subject of my remarks to-day." Another time he would begin:—"A fortnight ago, gentlemen, there was a case of typhus in this bed. The patient has left the hospital some time since, but I shall take the opportunity of lecturing on typhus." These anecdotes are strictly true of a justly esteemed professor of the Vienna School, who has only just ceased to teach, and whose fame is indeed European, though he is perhaps more honoured in his own city than abroad—the distinguished Skoda. To the medical public, Professor Skoda is best known as the author of a work on auscultation, of which the first edition appeared thirty years ago; but his own pupils and admirers attach a still higher value to his numerous lectures, some of which have been published in weekly journals, while others, taken down in shorthand and lithographed, find a considerable private circulation. It is not easy to estimate the actual importance to science of works, some of which have never undergone the ordeal of wide publicity, while others, when subjected to this ordeal, have apparently failed to produce the effect which might have been expected; but it could be shown, were this the place to do so, that certain principles of treatment which have been looked upon in England as daring innovations, and which Trousseau regretfully spoke of as almost too hazardous to be tried, have been for many years taught and acted upon by Skoda; we mean that system which has been lately called studying the natural history of the disease. With regard to pneumonia, for instance, he has long taught that in this, no less than in what are called the specific fevers, there is a natural involution, which, if changed at all, is not changed advantageously, by any therapeutical interference. Many years ago, when both English and French physicians were attempting, by bleeding *coup sur coup*, to arrest the progress of pulmonary inflammation (though all did not carry it to the excess of Bouilland), Skoda used to watch for the crisis of the disease with the same equanimity with which we now watch the course of eruptive fevers. It is natural, therefore, that his treatment has incurred the reproach of what the Germans call *nihilismus*, or doing nothing. In the details of that branch of medicine specially connected with his name, Skoda has attained marvellous technical perfection, and he has a great reputation for diagnosis. Of late years, his lectures might perhaps be obnoxious to the traditional criticism, that they would have been better if he had taken more pains. He appeared to rest almost entirely upon his immense personal experience and the laborious studies of his earlier years. He had many favourite topics, and his treatment of these was said to change but little from year to year; so that the well-read students, ever desirous of novelty, complained that he was by no means *au courant* of the rapid progress of medical science. Still, when heard for the first time, some of these lectures were very remarkable for their wealth of experience and the marked originality of treatment of well worn themes. Professor Skoda was appointed in 1847 to the post which he has only just resigned. He is by birth, like many celebrities of the Vienna School, a Bohemian. Speculators in ethnology might amuse themselves by tracing in his works the evidences of that industry and tenacity on which the Bohemians pride themselves, and the absence of the philosophic breadth of the German minds.

* We may remark in passing that we believe the positive tendency of the English mind to be at least as marked as that of the German; and that it would produce among ourselves the same impatience of theoretical lectures, but for the despotism of written examinations. It is the immense importance attached to knowledge which can be reproduced on paper that creates a demand for second-hand systematic knowledge, which teachers are obliged to meet.