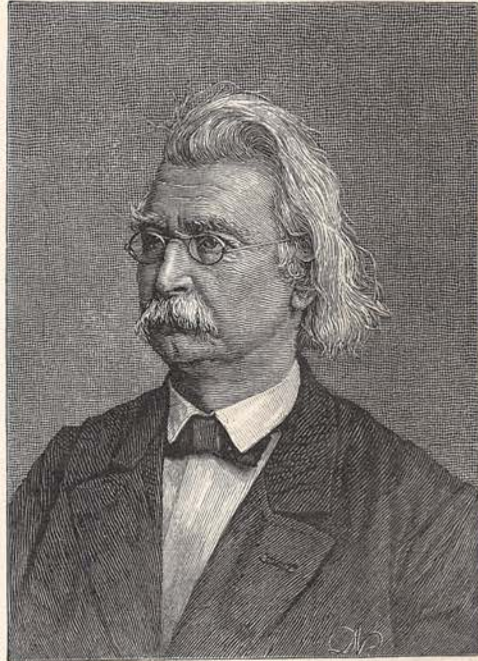
THE UNIVERSITY OF BERLIN.

In England, in France, and in Germany, especially during the last ten years, the question of remodeling the whole system of higher education has been violently debated. Innumerable pamphlets, advocating a dozen conflicting schemes and agreeing only in their extreme disrespect for the historic tradition, have from time to time appeared, and have tended to strengthen the conviction in the public mind that a reform of some sort was an urgent necessity. It is, however, a notable circumstance that both in England and France the most unprejudiced thinkers and those whose experience in educational affairs give them a special right to be heard, have recognized the excellence of the German university system, and have generally agreed in pronouncing it superior to their own. With us, too, a similar conviction seems slowly to be gaining ground among those few who know what a German university is; while the reactionary tendency in the opposite direction is becoming equally pronounced. Every reform, however, if it is to prosper, must be a gradual and organic growth. A sudden transplanting of the German university to our soil would probably be a very disastrous experiment. The reasons for this supposition have been quoted often enough, and need not be repeated.

A university was originally a free association of private men who united into a guild or society for the purpose of cultivating the sciences. They were at first mostly mature men, and, as long as they enjoyed no recognition from the state, had full liberty to arrange their affairs as they pleased. Usually it was the fame of some great teacher which drew them together, and the pure love of knowledge, for its own sake, which made them submit to the self-imposed restraints with which they gradually burdened themselves, as they grew in numbers and the necessity of organization became imperative. A kind of conventual life naturally grew up among these devotees of learning, and celibacy, although not always enforced, became the rule among them. They assumed a dress or uniform of their own, usually of a semi-clerical cut; and a strong *esprit de corps* asserted itself within their organizations. They were really literary monks, separated by their exclusive pursuit of knowledge from the great herd of Philistines who had no spiritual interests, no thoughts beyond the narrow horizon of their daily round of toil. As bequests of money and real estate multiplied, and the associations grew in power and usefulness, the kings began to favor them, adding to their wealth, and investing them with certain rights and privileges, of



KARL RICHARD LEPSIUS.

which they were to have the exclusive enjoyment. Among these were separate and independent jurisdiction and the right of conferring degrees. The graduates, whether they remained at the university or not, regarded themselves always as members of the university, and asserted their influence in the management of its affairs. If they continued to reside within the college walls, they were intrusted with the supervision and instruction of the younger members, and could thus insure the maintenance of their own policy or the continuance of their own school of thought, long after both were historically superannuated.

This accounts, in a great measure, for the extreme conservatism of the European universities, both in mediæval and in modern times. The majorities in the faculties almost

invariably belonged to a defunct school of philosophy and science, and the advanced few frequently found themselves ostracized, or their hands and tongues tied by the vote of the majority, with whom every final de-

ERNST CURTIUS.

cision rested, except in matters where the state reserved for itself the right to interfere.

It need not, therefore, occasion much surprise that, in the great battles of civilization during the past centuries, the universities have usually taken their places in the rear, and when the victory of the one or the other tendency has been decisive, they have yielded, half reluctantly, to external pressure, and have changed their methods of instruction in accordance with the demands of the times. Many examples might be quoted to prove this assertion. In the fifteenth and sixteenth centuries, while scholasticism, with its artificial formulas and hair-splitting definitions, was firmly established within the various faculties, the most prominent humanists, like Ulrich Hutten, Agricola, Reuchlin, and Melanchthon, were denied the privilege of lecturing in many German universities; and it was, in most cases, the command or persuasion of the secular rulers which compelled the professors to recognize them as colleagues. In 1511, Hutten was forbidden to teach Latin and Greek prosody by the rector (president) of the University of Vienna. The popes, who feared the humanists as probable heretics, had authorized the theological faculty to keep a strict supervision over professors and students, and to punish or expel every one who was suspected of teaching or cherishing heretical opinions.

In Heidelberg the humanists had a similar reception. To be sure, at the suggestion of the Elector Philip, Agricola and Reuchlin were permitted to lecture there for a short time; but the faculty refused to recognize them. It even opposed the founding of a professorship of Greek literature. In 1511 it denied Melanchthon the degree of *magister artium*, on account of his well-known hostility to scholasticism.

The Reformation, although it counted many adherents among the German professors, was, nevertheless, violently opposed by the most prominent faculties, even in North Germany. "The universities and the pope," says Luther, in a letter to Spilatius, "will, you may be sure, either make no declaration or declare against us." In Wittenberg, where Luther held a professorship of theology, his mighty influence, of course, did not fail to assert itself. And in Vienna, where Paulus Speratus, in 1524, preached against the old scholastic methods, the Reformation is said to have found much favor within the university. But the repressive decrees of the Emperor Ferdinand and the vigilance of the Jesuits prevented the further spread of heretical opinions. At Erfurt the Catholics regained their ascendency after the peace of Westphalia. Frankfort-on-the-Oder testified its sentiments toward the Reformation by conferring the degree of doctor of theology upon Tetzel, the notorious dealer in absolutions. Rostock remained passive, and only after the most obstinate struggle Leipsic yielded to the government decree demanding its acceptance of the evangelical faith. Heidelberg refused to obey the command of the Elector, which required of the faculty that it should test the soundness of the new doctrines, and it was not until 1557, when the public opinion among the students loudly demanded a change of policy, that the academical authorities saw fit to accept Melanchthon as a university teacher.

Protestantism, when it had once gained a foot-hold in North Germany, naturally regarded itself as the final result of human progress, and began with more or less success to repeat the tactics of its predecessors. The Protestant professors, like the Catholic

HERMANN GRIMM.

ones, held it to be their first duty to watch over the orthodoxy of their colleagues and students, and the pursuit of learning, apart from its bearing upon theology, became a secondary consideration. The Pietistic movement, although its leaders did not object to a single Lutheran doctrine, but aimed merely at a revival of the religious life within the church, was ridiculed, sneered at, and sometimes attacked even with sterner weapons. Ecclesiastical history and Biblical exegesis were rarely taught, while a vast deal of energy was wasted on doctrinal ingenuities and polemical discussions. Spener, the Pietist, relates that in his youth a student of theology might spend five or six years at a university without having heard one lecture devoted to the interpretation of Scripture. Francke even goes so far as to assert that while he studied in Leipsic a Bible was hardly to be had of any bookseller in the city. And yet the Bible was blindly accepted, and a critical examination of its language condemned as a sin against the Holy Ghost. That the New Testament was not written in classical Greek very few would admit, and when more advanced scholarship had established this fact beyond a doubt, the faculties boldly stultified themselves, and declared that the New Testament spoke a language of its own, and was subject only to its own laws.

The narrow and short-sighted conservatism which discouraged independent research naturally excluded bold and original thinkers from the university faculties. It is especially notable that in Germany, until the beginning of the present century, the majority of scientists, inventors, and philosophers whose names the nation honors, have either had no connection, or only a very brief one, with the great schools of learning. Kepler struggled with poverty all his life long, and did finally obtain a miserable position without salary at the university of Rostock. Copernicus was canon at Frauenburg. Otto Von Guericke, the inventor of the air-pump, was a councilor in Magdeburg. Spinoza lived and labored in philosophic seclusion, and was obliged to refuse a professorship at Heidelberg because full liberty of expression was denied him. The philosopher Wolff was, indeed, a professor at Halle, but he was banished because in a lecture he had compared the moral code of Christ with that of Confucius; he was, however, allowed to return later. Fichte, having been expelled from Jena, was well received in Berlin. Many more examples might be quoted to show that the universities have satisfied themselves with dispensing the fund of learning already accumulated by the past, and that while

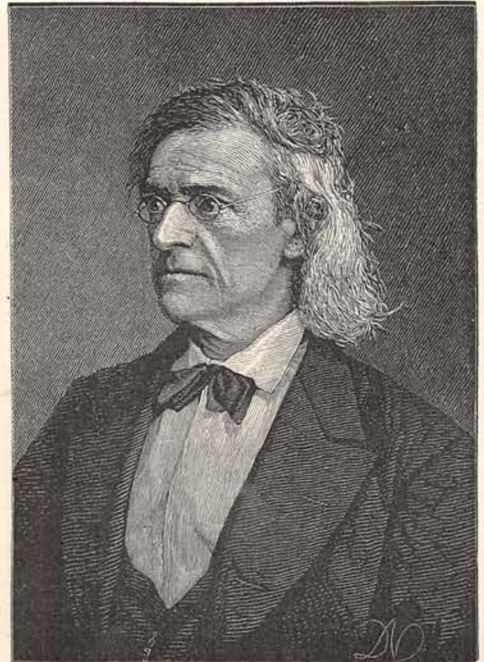
RUDOLF VIRCHOW.

HERMANN LUDWIG HELMHOLTZ.

in accomplishing this work they have rendered invaluable services, they have, as a rule, assumed a hostile attitude toward the champions of independent thought.

When, therefore, the rumor spread in the first years of the present century that King Friedrich Wilhelm the Third intended to found a new university at Berlin, a number of prominent scholars, connected with already existing universities, seized the opportunity to present their views concerning the disadvantages of the old system, and the reforms which they believed necessary to insure their permanent abolishment. All were convinced that the German universities had in the past failed to fulfill the highest purpose of which they were capable, and that the only way to infuse vitality into the new institution was to found it, without regard for tradition, upon entirely new principles which should embody the latest results of modern experience.

The first effort of the king, when the resolution to found the university was irrevocably taken, was to secure the co-operation of as many great and important men as possible. He knew that one or two such men would add more to the fame and usefulness of his university than a hundred conscientious routine men. He was convinced that Fichte was such a spiritual force, and he did not therefore allow himself to be frightened by the expulsion from Jena or the accusation of atheism. Among theologians, Schleiermacher had gained a great reputation as an eloquent author of liberal opinions, and more especially by his efforts to reconcile Christianity with the latest results of science. When Napoleon suspended the University of Halle, which had displeased him, Schleiermacher lost his position as professor of theology. He had thus a double claim to consideration on the part of the government toward which he had in such dangerous times testified his loyalty. Among jurists, Savigny was the greatest name, and he was accordingly invited to accept a seat in the faculty of law. It was on the same principle that Hufeland, the physician-in-ordinary to the king, and a man equally prominent in practical philanthropy and in theoretic science, was offered a professorship in the medical faculty. An effort was also made to secure the permanent services of Wilhelm von Humboldt, whose philological and æsthetic writings had proved him a scholar of extraordinary versatility and thoroughness. No one had taken a livelier interest in the affairs of the university than he, and there is no doubt that it was he who, in his diplomatic capacity as minister of instruction, finally made an end of the king's



THEODOR MOMMSEN.

wavering and persuaded him that the founding of a new school of learning was both pecuniarily a practicable undertaking and, moreover, a necessity of the times.

In the many documents relating to the university which were from time to time laid before the cabinet, we find this thought repeatedly emphasized that Germany needed an intellectual center, and that this center could and must be nowhere except in the political capital. If young men from all parts of the Prussian dominions could be induced by the superior advantages of the capital to come here to pursue their studies, their petty provincial pride would be gradually rooted out and give place to a nobler and worthier patriotism embracing the whole German land and nationality. Thus the university was to further the great thought of German unity. For it is well known that it was a statesman of those days, the Minister von Stein, who laid the foundation for the work which Bismarck is now accomplishing. And yet, strange to say, von Stein was not favorably disposed toward the plan of founding an institution of learning in the capital, and his temporary retirement from office in 1808, owing to Napoleon's persistent hostility, was among the circumstances which hastened the realization of the long-considered and much-debated project.

Although it was not until August, 1809, that the cabinet resolution definitely establishing the university was issued, the institution may be said to have existed *de facto* since the winter of 1807–1808 when Fichte delivered his thundering "Orations to the German Nation" *(Reden an die Deutsche Nation)*. Berlin was then yet in the power of the French; the French grenadiers paraded the streets, and the rattle of their arms and the sound of their drums could be heard through the windows from the hall where the fearless professor was lecturing. He tried to rouse the German people from their hopeless apathy; he appealed to all their tenderest memories, to their patriotism, to their pride, and his words re-echoed far and wide and rekindled the slumbering enthusiasm for the Fatherland. He prepared the way for the war of liberation, awakening the sentiment which then burst forth mightily, sweeping the foreign armies from the soil. When he ventured to publish his stirring philippics, Fichte received a warning from the Minister von Begme, to which he proudly answered: "I know that a ball of lead can kill me, as it did Palm, but it is not that I am afraid of; for the end for which I labor I am also willing to die,"—no meaningless boast, indeed, in those days when the life of a German offender was held to be of small account in the eyes of the French conqueror.

The university was opened in October, 1810. The organization which was finally adopted differed but slightly from that of the older German universities; although a number of radical changes proposed by Fichte and Wolf were respectfully listened to by the minister and the commission, they were in the end rejected. The academic constitution which, after prolonged debate and a careful study of the workings of the system at Leipsic and Göttingen, gained the approval of the government, contains the following regulations: The teachers of the university shall be divided into three degrees; ordinary or full professors, extraordinary, or assistant professors, and *privatdocenten*—for which no English equivalent exists. The professors are appointed by the state, and it is their duty to give a certain number of lectures during the academic year. The members of the Prussian Academy of Sciences shall also have the right to deliver lectures at the university if they desire it. Every professor may lecture on any subject he chooses within his own faculty; he may also lecture on subjects outside of his own specialty if he possesses the degree proving proficiency on the chosen subject. Every ordinary professor takes part in the deliberations by his faculty,* at the head of which is a dean. The highest officer of the university is a *rector magnificus* who is elected annually by the ordinary professors from their own number. The deans of the four faculties form with the rector, pro-rector (the rector of last year) and the university judge, the academic senate, within whose jurisdiction everything belongs which concerns the university in general. Its decisions are made by a majority of votes and the rector is presiding officer. In minor matters, involving breaches of discipline, the rector may punish the delinquent without consulting the senate. Punishments exceeding four days' prison can only be ordered by the senate.

It will be seen from the above that inde-

* The four faculties of a German university are theology, medicine, law and philosophy. The professors representing all these departments form together a governing body, corresponding to what we would call the faculty. I have been obliged to use the term, now in its German and now in its American sense—but the meaning is in every instance explained by the connection.

pendent jurisdiction was accorded to the new institution in spite of much opposition on the part of individual professors. The feeling seems to be general, at least among those of the professors whom I have the honor to know, that it is an entirely superfluous right,—a remnant of mediæval times which will probably disappear before many years.* One learned gentleman with whom I lately discussed this point thought, however, that it was a great convenience to the students to have their quarrels among themselves and their occasional fights with the police judged by a mild and humane tribunal like the academic senate; it was a very humiliating thing to be dragged up before a police-court and to have the proceedings published in the newspapers the next morning. He was especially anxious to impress upon my mind that in German society it was regarded as a great disgrace to have been fined by an ordinary police-court or to have endured never so brief a term of imprisonment at its dictation, while a couple of days in an academic *carcer* was an experience which a man would look back upon in his old age with fond regret, as something that rather belonged to student life, and without which one's youth would not have been complete. My informant seemed to regard it as an inalienable right of students to thrash a night-watchman if they could, or to be thrashed by him if he happened to be the stronger. These feats were held to be about equally glorious, and one of the chief charms of academic life would be destroyed in case an eternal peace was concluded between students and police, which would inevitably be the case if the university were deprived of its independent jurisdiction.

A student who is called up before the rector or the senate is always treated as a gentleman. He is addressed with extreme courteousness, and is made to feel his own dignity, which, perhaps, in a freak of boyish exuberance of spirits, he had forgotten. He is not, as is so frequently the case with American faculties, bombarded with questions from all sides, cross-examined with an evident purpose to confuse and entrap him, and in the end treated to a long-winded moral exhortation, containing the usual professional platitudes. I have conversed with a number of students, both in Leipsic and in Berlin, who have received "special invitations" from the rector, and I have never discovered in them any trace of that petty spite and animosity toward their instructors which in many of our American colleges is so deplorably prevalent. American students, it may be urged, are often mere boys; at all events, as a rule, they are younger than the German. They do not understand their own welfare, and therefore waste much of their time and energy in playing tricks on one another and on their teachers. This is undeniably true; but it is only half the truth. The fault lies as frequently with the teachers themselves. A man who sits year after year at a desk, droning out the same commonplace lectures, interspersed with feeble jokes, or hearing lessons in a half-mechanical way, even if his moral character be never so estimable, can hardly chain the attention of twenty or a hundred lively young men, overflowing with animal spirits. He is merely a school-master, and school-masters have proverbially a hard time in trying to enforce discipline.

Then again, the American professor is too often, in our smaller colleges, a man who has failed in some other pursuit, and falls back on teaching as a last resort. Real scholarship, in the German sense, has certainly been the exception, and respectable mediocrity the rule. No one has ever thought of demanding prominence as an original investigator as a necessary qualification for a professorship. We have, of course, scholars of this order at three or four of our colleges; but, as the public understand it, the duty of the instructor is to communicate the accumulated traditional lore of the past, not to be laboring in the vanguard of pioneers, on the outermost boundaries of science. And here lies the difference between the German and the American (or, indeed, the English) idea of a university teacher. The Germans hold that a man of the latter order is more valuable to an institution of learning than any number of ordinary, respectably educated, routine teachers. He fills his students with enthusiasm for his science; he stimulates them to follow in his footsteps; their daily contact with him often makes the decisive epoch in their lives, and in after years the memory of him remains a living presence and an inspiration.

It is not an exaggeration when I say that hardly any institution in the world counts at the present time so many great names within its faculties as the University of Berlin. Mommsen, Curtius, Helmholtz, Grimm, Vir-

* Since writing this I have been informed that a law has already been passed abolishing the jurisdiction of the German universities of Berlin from October 1st, 1879.

chow, Leopold von Ranke, Lepsius, Gneist, Zeller,—what a fund of talent, strength, and spiritual vitality is represented by names like these! Each one of these men has broken a pathway for himself into the unknown, and has extended the sphere of human knowledge. They do not look upon themselves merely as teachers of youth; their first allegiance is to their science. And the government takes the same view of their position, and encourages them by granting them leisure and frequently pecuniary help for independent investigation. It is safe to assert that no one can now obtain a professorship at the University of Berlin without being a man of unusual power and energy. The system of selection provides, so to speak, only for "the survival of the fittest," and those of the competitors who are insufficiently equipped for the intellectual contest disappear from the arena and drop into inferior positions. It is well known that, besides the professors, a great number of *privatdocenten* (private instructors) are permitted to lecture at the German universities. These private instructors are graduates who, after having gained some distinction during their college career and obtained their doctorate, aspire to professional honors. They have no regular salaries, but manage to eke out a scanty living by the lecture fees they obtain from the students, by giving private instruction, and frequently by writing for scientific periodicals. The fact that their names appear in the university catalogue is looked upon as a kind of official indorsement, and is in itself a guarantee of thorough scholarship. They devote their time largely to study and experiments in some special branch of science which has hitherto received insufficient attention, and in which there is, accordingly, yet a chance of making a name. A great deal of conscientious and valuable labor is done by these men, chiefly in the way of collecting minute facts and observations, though frequently of a more boldly experimental kind. What is especially worthy of notice is that the German universities are thus constantly educating a whole army of workers who, from motives of ambition or from a true love of knowledge, spend the better part of their lives in the service of science. Such a class of people, whether they reach the goal of their ambition or not, cannot fail to exert influence upon the spiritual life of the nation, especially as their number is rather larger than appears from the academic calendars. According to this latter authority, they number in Berlin at present about eighty, while the whole body of instructors exceeds two hundred (1877–78, two hundred and fourteen). Of these, one hundred and five constitute the faculty proper, and have the title of professors, viz.: sixty-three ordinary and sixty-two assistants. The *privatdocenten* have no seat or vote in the deliberations of the faculty.

The practical workings of this system I had ample opportunity to observe during a previous sojourn at a German university. When a professor is inclined to take his ease, and fails to give satisfaction, the students desert him, and go to one of the *privatdocenten*, who lectures on the same or a kindred subject. And, as the professor is largely dependent upon the lecture fees which he receives from his students, such a desertion is apt to stimulate his lagging energy and induce him to exert himself to the utmost. There is, of course, no attempt made to control the attendance of undergraduates upon lectures, and every one is at liberty to seek knowledge wherever he chooses. The only thing which concerns the university is whether, in the end, he has acquired the amount requisite to pass his examination, and of this the examination itself is a sufficient test. During the first years after the foundation of the University of Berlin, a feeble effort was made to regulate the attendance; the professor now and then passed a paper around, without previous notice, and requested all who were present to sign their names upon it. It is needless to say that they signed not only their own names, but also those of their absent comrades. And the professor found, moreover, to his astonishment, on glancing over the names, that Seneca, Æschylus, Socrates, Cicero, and other distinguished strangers had been among his audience.

At the University of Berlin, the lectures of *privatdocenten* are, as a rule, rather scantily attended compared to those of professors, probably because almost every department of learning is represented by men of such conspicuous ability and fame that it is hopeless for a comparative beginner to enter the lists with them. What, for instance, could a new-fledged doctor have to say on the subject of Roman history, which in interest and authority would even remotely approach a lecture by Mommsen? What young physicist could hope to draw students away from Helmholtz? Whose word would be more weighty concerning the antiquities of Greece than that of Ernst Curtius, the ex-

cavator of Olympia? But at other universities where the old pedantic type of professor, prodigiously learned and prodigiously tedious, is not yet extinct, I have known instances of *privatdocenten* gradually making the professor entirely superfluous. If at our American colleges we would introduce some modification of this system adapted to our civilization, we should soon see the amiable and incompetent instructor replaced by wide-awake and adequately equipped men. A free and unlimited competition would hardly be commendable, as students are with us not always the best judges of real competency and soundness of scholarship; but a competition among men whose scholarship had been tested and whose character furnished a sufficient safeguard against mere hunting for cheap popularity by claptrap devices, could not fail to have the most beneficial results. Those who have reason to fear for their own heads, will doggedly oppose "all baneful German innovations," and others, no doubt, who would gladly measure strength with younger rivals, may, from an honest distrust of whatever comes from Germany, fight against this timely reform.

The faculty is, of course, continually being recruited from the body of the *privatdocenten*, although there is no rule obliging a university to fill its vacancies in this manner. Very frequently the government, with the consent, or at the recommendation, of the academical senate, invites some well-known foreign scholar to accept the vacant place; but as far as I can learn from the statistics of the University of Berlin, the majority of the faculty have been chosen from the *privatdocenten*. The senate practically has the appointments in its own hands. As soon as a vacancy occurs, the rector, in the name of the senate, sends in the names of three candidates as especially worthy of consideration. Each name is accompanied with a recommendation, while the preference of the academic body is also respectfully indicated. The *Kultus-minister* (the minister of public worship and instruction) then appoints one of these candidates, and almost invariably the one whom the senate has declared to be its choice. Strictly speaking, the government is not bound by any law to accept the advice of the university, but practically a well-established precedence is equivalent to a law. A deviation from this method of appointment would be an unheard-of thing in Prussia. If the government were to reject all the names presented by the senate, it would naturally be construed as a wanton challenge to the university, and as the university is a powerful institution, having many of its members both in the Prussian and in the German parliament, the minister would undoubtedly before long have occasion to repent of his rashness.

In American colleges the methods of appointment differ somewhat in the different states. The board of trustees—in most cases a very miscellaneous body, consisting largely of men who have no idea of what a university is or ought to be—come together and deliberate concerning the needs of the institution. In matters of appointments they usually act on the recommendation of the president and accept his candidate, which is, on the whole, the nearest approach to the Prussian system which we can hope to see realized. In the Western states where trustees are mostly selected for their wealth and presumable willingness to endow the needy university, friends and protégés of these gentlemen offer themselves to teach half a dozen branches with equal willingness, and the president, who is afraid to alienate a future endower, gives the worthless polyglot his recommendation for a professorship. Of course, this criticism in no wise applies to colleges like Harvard, Yale, Cornell and Michigan, where the alumni of the institution have now, or before many years will have, a majority in the board of trustees. It is a very curious notion, however, which seems to be prevalent among us, that professors, who certainly know the needs of a university better than any one else, and have its interest more at heart, must be excluded from all direct participation in its government.

There are at present from thirty to forty American students at the University of Berlin. Many of them are regularly matriculated, and are studying for the degree of *philosophiæ doctor*, while others merely attend special lectures, with the consent of the professor. One celebrated member of the faculty, whose word ought to have great weight, assured me that they were, as a rule, earnest and energetic men, with whom it was a great pleasure to work. If they come here for the purpose of devoting themselves to science, their previous training (provided they are graduates) is found to be quite sufficient, and there are among them many excellent mathematical heads. In philology they are at a disadvantage, because they have passed through no preliminary course of training approaching in completeness and thoroughness that of the German

gymnasium. Moreover, in the so-called *Seminarien* (private exercises in the professor's house or elsewhere) Latin is frequently spoken, and in the classical ones exclusively. It is delightful to hear with what fluency Professor Vahlen, who conducts the *Seminar* in classical philology, speaks the Ciceronian tongue. He enunciates with great distinctness, as if he gloried in the very sound of the words, and liked to dwell on them. His students also express themselves with apparent ease, and answer the questions he addresses to them without much hesitation, and in Latin—usually grammatically correct, but rather destitute of the classical flavor. Of course the American student who has reached even this degree of proficiency is a phenomenon, and he who despairs of ever reaching it is apt to quit the *Seminar* with a discouraged air, and vow that he will never again look into a Latin book.

Professor Vahlen is a thin and bony man of about fifty, with a pair of piercing eagle eyes, and a lean but very impressive face. He reads and translates his author from the *cathedra*, and intersperses his critical and grammatical remarks as he goes along. Like most German professors, he dwells with preference on the philological phase of the text, and illustrates it abundantly with historical and philosophical comments. He seems rarely to regard his author from a literary point, although he reads with warmth and animation as if he really felt the beauty of the passage, which in the next moment he dissects with admirable keenness and accuracy. He takes a strong personal interest in those of his students who in any way distinguish themselves, and is especially kind and considerate toward foreigners.

As regards the expediency of employing Latin as the language of lectures and other academic exercises, the opinions of the members of the Berlin faculty seem to be divided; most of those with whom I have conversed on the subject agree that it is a useless mediæval tradition, and that the sooner it is done away with the better; but they believe that this can only be done gradually, and are therefore opposed to all sudden and sweeping changes. It is, however, merely a question of time when the reform will be finally accomplished. At present, all lectures, with a few notable exceptions, are delivered in German; but until very recently, the so-called *Antrittsrede* (inaugural address) of a *privatdocent*, no matter to what faculty he belonged, had to be delivered in the classical tongue. A scientific lecturer, whose inaugural address required the most modern terminology, naturally found this rule extremely inconvenient; and if, as was often the case, he had to illustrate his theories by experiments, the difficulty was doubly increased. Dissertations in philology (German, classical and Oriental), ancient history and ancient philosophy must still be written in Latin, as also the dissertation for the licentiate degree in theology. Candidates for the degree of doctor of philosophy are permitted to write in German, but are then obliged to pass an extra examination in Latin afterward. A number of American students who have studied in Berlin, but who are unable to conform to this requirement are thus obliged to take their doctorate at Göttingen, or some other university where the rule is not enforced. Helmholtz, the present* *rector magnificus*, and nearly the whole scientific portion of the faculty are strongly opposed to these regulations making the study or use of Latin obligatory upon scientific students after their admission to the university, and there is every reason to believe that all such regulations will soon be abolished.

As I have said, the strength of the Berlin University lies chiefly in the fact that it counts so many great and renowned men within its faculty. Among these no one is more conspicuous than Hermann Ludwig Helmholtz, professor of physics, of whom it is said, with justice, that he has made an epoch in every branch of science to which he has devoted himself. He is a man of about fifty-seven, rather below middle height, and somewhat inclined to stoutness. His face is decidedly handsome; the brow especially of remarkable spaciousness and breadth, and all the features clearly modeled and in good proportion. His grave dark eyes express calm and keen observation; they are undeniably a trifle cold, and probably judge men with the same merciless, mathematical exactness with which they observe other natural phenomena. One can hardly imagine a more unsentimental, passionless face, nor a fitter face for a man of science. One feels at once that his mental atmosphere must be clear and bracing, and unobscured by fogs of sentiment. I find also that in social circles Helmholtz has the reputation of being an interesting but a cold

* Academic year 1877–78.

and unapproachable man. However, the students, who work in his laboratory and thus come into closer contact with him, cherish the profoundest respect and admiration for him. One of them, a young American, who has studied physics in Berlin for three years, told me that during all this time he never remembered that the professor had addressed one personal question or remark to him, not even as much as a comment upon the weather. Every morning, when Helmholtz enters his laboratory, he greets the young gentlemen, and then immediately begins to question them successively in regard to their work. He explains with admirable clearness and ease, and when an interesting point comes up for discussion, he has been known to spend an hour or more with one student in trying to elucidate it, sometimes even forgetting his lecture hour. His language is always mathematically precise, and the most abstruse and involved theory becomes as simple as the multiplication table before he has done with it.

The remarkable discoveries of Helmholtz in the most various departments of science are universally known, and may be found in every encyclopedia. His fame dates from the publication of his treatise "On the Conservation of Energy," which was only the forerunner of a long series of equally brilliant labors in optics, acoustics and physiology. If he may be said to have any specialty to which he devotes himself by preference, it is the physiology of the senses. Here his philosophical profundity, combined with mathematical exactness of thought, have produced the most significant results. It will be remembered that it was he who succeeded in ascertaining the speed with which sensations were communicated through the nerves of animals and men; it was he too whose experiments in acoustics *(Die Lehre der Tonempfindungen)* established the scientific proof for the musical theory of harmony, and, above all, it was he who invented the ophthalmoscope, an instrument by which light is thrown upon the background of the eye, so that the retina with its woof of nerves and blood-vessels may be distinctly observed. The nature of a disease in the eye may thus be ascertained and the sight of thousands saved, who otherwise might have become the victims of false conjectures and experiments. It is needless to say that Helmholtz is an excellent lecturer. He does not aim to be eloquent, as indeed eloquence would be out of place; but he is clear, concise and impressive.

Among the scientists of the university, Rudolf Virchow, professor of general pathology and therapeutics, probably ranks next to Helmholtz. He is a restless and energetic man, who extends his activity in many directions, and has accomplished much solid and valuable work. As a physiologist he is especially known by his great work on cellular pathology *(Cellularpathologie)*; and of late he has turned his attention toward anthropological studies, and has published a voluminous work, concerning the value of which I am not competent to express an opinion. Professor Virchow's political career, which has extended over many years and brought him many reverses, is so variously judged that it is hard, among the many conflicting opinions, to arrive at an independent judgment. It appears, however, that the professor has at all times stood up boldly and bravely for what he believed to be right, and has refused to keep silent when prudence or regard for higher authority might have made such a course expedient. In consequence of this irrepressible bravery, Virchow, who was with many other excellent and patriotic men involved in the political movement of 1848–49, was deprived of his professorship by the reactionary government, and was not reinstated in his former position until 1856. Since then he has taken his place in the Prussian *Landtag*, and has played a significant rôle as one of the leaders of the so-called *Fortschrittspartei* (party of progress). He is in no sense an eloquent speaker, but bristles with facts and statistics, and delivers many a valuable argument which presents a much better appearance in the newspaper than on the floor of the house. As a lecturer on medical topics he is said to be very successful, and often inspires his students with his own enthusiasm for his work. It is especially owing to him that the Pathological Institute of Berlin has been so admirably fitted up and affords such fine opportunities to young doctors for independent scientific research.

Another famous professor, who, like Virchow, has had to suffer for his political independence, is Theodor Mommsen, the author of the history of Rome. He was, previous to the revolution of 1849, professor of jurisprudence in Leipsic, and traveled from 1844–47 in Italy, partly at the expense of the Berlin Academy of Sciences. On his return, the ardor with which he expressed his liberal sentiments made him suspected

by the government, and he was deprived of his office. He then for a time edited a paper in his native province, Schleswig-Holstein, became professor in Zürich, but was in 1857 appointed to the chair of ancient history at the University of Berlin. In the Prussian parliament he has occupied a conspicuous position as one of the ablest and most honored members of the National Liberal party.

It cannot be denied that it gives one a peculiar satisfaction to know how a famous man looks. I have not infrequently found that an author's eyes, gestures and facial expression furnished the exact commentary I needed for the complete understanding of his books. Thus the passionate partisanship which characterizes Mommsen's Roman history; his love of Cæsar, his hatred of Cicero, and more especially the intensely modern spirit in which he deals with ancient events, will perhaps be in a measure explained by the study of the historian's own personality. His most prominent feature is a pair of piercing gray eyes, with which he is apt to regard you sternly over his spectacles, while he converses in a gentle, deliberate manner which almost takes the edge off the severity of his glance. You are not surprised to know that he has the reputation of saying the sharpest, most biting things in the calmest tone, as if they were mere truisms. There is a gleam of fanaticism lurking in his features,—a suspicion which is confirmed by his whole career as an author and a politician. His face is that of a scholar, but it indicates primarily a man with strong beliefs and conviction, and with the keenest power of observation. The *tout ensemble* of his features has an intensity of expression which is rarely seen in a modern man of his position. I have met similar types, deducting the scholarly refinement and finish, among religious fanatics in the West. But to complete the professor's portrait: his large forehead is covered with a net-work of wrinkles and surmounted with an abundance of gray hair, which is worn long, reaching down upon the neck. It may be of interest to know that he has fourteen children, of whom a large majority are daughters.

The weakness of Professor Mommsen's voice makes it difficult, in the moment, to value his lectures at their full worth. I should give any young man who intended to study history under him the advice of Mephistopheles to the student in "Faust":

> "But take thy notes as zealously
> As did the Holy Ghost dictate to thee."

In dealing particularly with Sulla, Marius, Cicero and Cæsar, and the whole period of the decline and fall of the Roman republic, Mommsen displays an eloquence which, on paper, looks as magnificent and imposing as from the *cathedra* it sounds dry and unimpressive. And yet there is a sharpness and delicacy of characterization in the portraits which he gives you of the great Romans, and a certain charm of complete intelligibility with which he invests their motives and modes of action, which, once heard (or rather seen), is never forgotten. These are, of course, the same qualities which have made his Roman history renowned, but Mommsen is not the man to fall back upon his early achievements; he is yet laboring with inexhaustible energy and force, and gives his students always the latest results of his investigations.

Almost a contrast to Mommsen, both in personal appearance and in his tendencies as a scholar, is Hermann Grimm, the son of Wilhelm Grimm, the younger of the two famous brothers. Hermann Grimm's literary affiliations were in his youth with the Romanticists, whose atmosphere he breathed, and who gave the first coloring to his ambition. He even married, so to speak, within the Romantic school; his wife being the daughter of Bettina Brentano, "Goethe's child-love," and Achim von Arnim, the author of "Countess Dolores" and many other nightmarish and blood-curdling tales. Grimm, however, has with every year removed himself more widely from the traditions of the school, until now only the faintest tinge of Romantic moonshine may be felt, rather than seen, lingering over his pages. As a novelist, he excels by the fineness with which he draws the most fleeting, intangible moods and the finest *nuances* of character. Among his shorter tales there is one entitled "The Child," which gives evidence of a remarkable gift of psychological observation. His longest romance, entitled "Invincible Forces," contains many vivid descriptions and remarks of extraordinary fineness and force, but seems to have no firmly knit skeleton, strong enough to keep the whole elaborate structure erect. It is an excellent book, without being an excellent novel. The American heroine, I am afraid, would find it hard to convince her countrywomen that she had ever seen New York or Chicago. It is well known that Grimm has always taken a lively interest in American affairs, has done much toward introducing our best authors

in Germany, and has himself translated the greater part of Emerson's essays. For Emerson he entertains the heartiest veneration, and speaks with enthusiastic appreciation of the loftiness of his character and genius.

It was, however, not his attempts in fiction but his early prominence as an art critic which led to Grimm's appointment as professor of the history of art at the University of Berlin. His volumes of "Essays," dealing with subjects relating to art and literature, have already become classics, without which no German library is complete; they are written in the purest style, with a warmth of sentiment and a delicacy of perception which are beyond all praise. His "Life of Michel Angelo" (the only work of Grimm's which seems to be generally known in the United States) is, properly speaking, a history of the Renaissance itself with Michel Angelo for its chief and central figure. It is a marvelously attractive book,—a book charged with warm vitality. Like all that Grimm has written, it has a decided individuality; it arouses in you the desire to know the author. Grimm, the professor, has the same lovable and delicately constituted personality as Grimm, the author. In his lectures on Goethe, for instance, now published in two handsome volumes, he displays a power of characterization and of sound æsthetic judgment which is rarely found in an academic *auditorium*. It is this varied endowment—creative ability coupled with keen critical discernment—which constitutes the perfect university teacher. None but he who has himself felt the creative joy *(die schaffende Freude*, of which Goethe speaks) can enter sympathetically into a poet's soul, follow his development, judge of his actions, and worthily interpret his works. It is this which Grimm has done, as no one else before him, in his "Lectures on Goethe," and which he has been doing for a long series of years in relation to many other artists and poets whom he has interpreted to his students, from his *cathedra*. Personally, he is no less attractive than he is as an author. He is a tall, well-formed man with a fine, expressive face. You cannot talk long with him without being impressed by the healthy naturalness and fineness of his thought; you discover at once that he is a man of delicate senses. He has suffered much from illness during recent years and looks nearly ten years older than he did in 1873.

Among the other celebrities of the university, the Egyptologist Karl Richard Lepsius is one of the foremost. He is a man of very striking appearance, but in spite of his vast learning he is rather dry and a little wearisome as a lecturer. His fund of facts and his knowledge of details are so enormous that he seems to find it difficult to master them. He gives you much that is interesting, but in a rather uninteresting manner. The astonishing acquirements of the man, of course, inspire you with unbounded respect and make his utterances absolutely authoritative; but, for all that, a listener of a literary turn will be apt to spend a good deal of his time in imagining how much more beautiful and impressive these marvelous facts would have been, were they presented with a slight *afflatus* of eloquence. But I find it is a tradition in the German universities that regard for style is unworthy of the serious consideration of a scholar, and that eloquence is a mere clap-trap substitute for the solider virtues of scholarly soundness and profundity. It thus happens that men of exceptional intellectual endowments, as, for instance, the former university preacher, Professor Steinmeyer, adopt a style of address which impresses one as a fraction of the confusion of Babel. Professor Steinmeyer writes most excellent sermons, but he delivers them with a studious disregard for commas and periods, and with inflections which must have been borrowed from some strange barbaric tongue. It is needless to say that the students do not manifest much eagerness to listen to such preaching; I find that a great number of them are not aware that a university preacher exists. The government, possibly because it failed to appreciate Professor Steinmeyer's style of rhetoric, seized the opportunity, during a recent illness which brought him near death's door, to appoint his successor. This act of discourtesy immediately stimulated all the professor's latent vitality and he hastened to recover; the government was forced to recognize the fact of his existence, and in order to avoid difficulties, established a new theological professorship, or divided the duties of the old one between the two claimants.

But to return to Lepsius. I did not intend to compare his manner of speaking with that of his theological colleague. I only ventured to express the opinion that grace of style and an occasional approach to eloquence are not necessarily proofs of dillettanteism. My limited space does not permit me even to mention the long array of valuable contributions to classical and Semitic philology, and especially to the science of Egyptology, which we owe to this

indefatigable scholar. While he was yet a very young man his historico-philological treatises repeatedly gained the prize of the French Academy; in his "Lettres à M. Rossilini" he established the scientific theory for the interpretation of hieroglyphics, and during the years 1842–45 he accompanied a joint English and German expedition through Egypt, and on his return collected the rich results of his researches in twelve superb volumes with 650 plates, published at government expense. He is a man of marvelous energy, and in the various offices which he fills, as director of the Egyptian division of the royal museums, as librarian of the Royal Library, and as member of the Academy of Sciences, accomplishes an extraordinary amount of work.

One of the most popular teachers at the University of Berlin is Ernst Curtius, the author of "The History of Greece." His perfect amiability and *bonhommie* and the elegance and cordiality of his manner could not but endear him to those who come into close contact with him, while his fame as a historian and the profundity of his scholarship inspire something more than respect even in those who meet him only in his lecture-room. Professor Curtius has had from fifty to sixty American students under his instruction; and I may be pardoned for mentioning two whom he remembers with particular pleasure and of whose ability and scholarly acquirements he speaks with much appreciation, viz.: Professor Carter of Yale College and Mr. Keep, the author of an excellent Homeric glossary. In the opinion of Professor Curtius, the majority of American graduates rank with German *Primaners*, or members of the highest class in a gymnasium; they are apt to deal with learned themes in a declamatory and rhetorical fashion, hiding the insufficiency of their knowledge under a sounding phraseology. He did not mean to assert that this was a national characteristic; it was rather the common device of immaturity and indicated some false system or tendency in our preparatory schools.

Professor Curtius has a very agreeable voice and a clear and lucid manner of lecturing; he is frequently in the habit of conducting his auditors through the Greek division of the Royal Museum, and illustrating by the veritable objects, many of which he has himself excavated at Olympia, the manner of life and thought among the ancients. It is needless to add that these peripatetic lectures are very popular, being really themselves a venerable tradition from the days of Plato and Socrates. You seem to breathe the breath of Greece. These objects —some of them two to three thousand years old—may have been touched by the heroes who came to participate in the Olympian games. Here, for instance, is an urn or pitcher of burnt clay, or terra cotta, the fragments of which Professor Curtius discovered in an Olympian tomb. It has now been carefully joined together, and no piece was found lacking. The form is light and graceful, and the sides decorated with hasty-colored sketches, representing scenes of everyday life. There is the picture clearly drawn, and the colors yet bright and warm. Notice the wonderful grace and the soft distinctness of the few simple lines which go to make up this figure; and these pitchers were made and decorated by common artisans, not by men who laid claim to the title of artists. Imagine, then, what the average artistic culture must have been among a people whose artisans could draw lines like these. The fact that they are not the work of educated artists is proved by various circumstances: in the first place, the material is very cheap; and, secondly, the pitchers are found in great abundance in the tombs of a certain period. They are a kind of mortuary vessels, which were thrown into the grave, and thus purposely broken; the breaking having some symbolism, and being a part of the burial ceremony. In these lectures, whatever Professor Curtius touches is made to tell, not only its own history, but the history of the people who fashioned and used it. Antiquity revives under his hands, and begins to breathe and move in a human and intelligible manner. We feel our own blood pulsing in its veins, our own emotions and passions animating its actions.

It is not to be wondered at that, with such a corps of instructors, the University of Berlin attracts more students than any other similar institution in Germany. The number of regular attendants upon lectures is at present 5,006, of which 2,834 are regularly matriculated, and candidates for university degrees. In Leipsic, where the total number is less (3,163), the number of matriculates is somewhat higher (3,036). The opinion generally prevails in Germany, as abroad, that for any one who intends to devote himself to classical or Germanic philology, the Leipsic University is to be recommended; while a naturalist—or, in fact, any student of the exact sciences—would find it more profitable to go to Berlin.