

STUDENT LIFE IN THE MIDDLE AGES.<sup>1</sup>

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I ASSUME that every university student of to-day realizes that his possibilities and his opportunities are better in every way than were those enjoyed by students of bygone times. I take it, also, that you would not be averse to listening to an account of the habits, the surroundings, the privileges, and the disadvantages which surrounded students at a time when universities were young and when customs in general, as well as manners, were very different from those of to-day. With all this in view, I shall ask your attention to a brief account of student life in the Middle Ages, with especial reference to that of the medical student. Measured by its results, the most priceless legacy of mediæval times to mankind was the university system, which began in crude form and with an almost mythical origin, but which gradually took form and shape in consequence of many external forces. It represented an effort to "realize in concrete form an ideal of life in one of its aspects." Such ideals "pass into great historic forces by embodying themselves in institutions," as witness, for instance, the case of the Romish Church.

The use of words in our language has undergone many curious perversions. Take our word "bombast," for instance. Originally it was a name applied to the cotton plant. Then it was applied to any padding for the garments which was made of cotton. Finally, it was used as describing literary padding, as it were, as when one filled out an empty speech with unnecessary and long words, and, at last, it came to have the meaning which we now give it. So with the word "university." "Universitas" in the original Latin meant simply a collection, a plurality, or an aggregation. It was almost synonymous with "collegium." By the beginning of the thirteenth century it was applied to corporations of masters or students and to other associated bodies, and implied an association of individuals, not a place of meeting, nor even a collection of schools. If we were to be literal and consistent in our use of terms for the place where such collections of men exercise scholastic functions the term should be "studium generale,"

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meaning thereby a place, not where all things are studied, but where students come together from all directions. Very few of the mediæval studia possessed all the faculties of a modern university. Even Paris, in its palmiest days, had no faculty of law. The name *universitas* implies a general invitation to students from all over the world to seek there a place for higher education from numerous masters or teachers. The three great studia of the thirteenth century were Paris, transcendent in theology and the arts; Bologna, where legal lore prevailed; and Salernum, where existed the greatest medical school of the world's history. In spite of the fact that these, like all the other studia of the Middle Ages, were under the influence of the Church, from them sprang most of the inspiration that constituted the mainspring of mediæval intellectual activity, although how baneful such influence could be may be illustrated by the Spanish—that is, the ultra-Catholic University of Salamanca, where not until one hundred years ago were they allowed to teach the Copernican system of astronomy.

Under the conditions existing during the Middle Ages, with relatively few institutions of advanced learning, and in the presence of that spirit which led men to travel long distances, and very widely out of the provinces, to the cities of the great scholia, or, as we call them now, universities, the most imperative common want was that of a common language; and so it happened that not only were the lectures all given in Latin, but that it was very commonly used for conversational purposes, and appears to have been almost a necessity of university life. Early in the history of the University of Paris a statute made the ability of the petitioner to state his case before the rector in Latin a test of his bona-fide studentship. This will, perhaps, in some measure account for the barbarity of mediæval Latin. Still, as the listener said about Wagner's music, "it may not have been as bad as it sounded," since the period of greatest ignorance of construction and rhetoric had passed away before the university era began. John Stuart Mill even praised the schoolmen of the Middle Ages for their inventive capacity in the matter of technical terms. The Latin language, which was originally stiff and

poor in vocabulary, became, in its employment by these mediæval thinkers, much more flexible and expressive. It was the Ciceronian pedantry of the sixteenth and seventeenth centuries which killed off Latin as a living language. Felicity in Latin counted, then as now, as a mark of scholarship, and six hundred years ago a schoolmaster could come up to the university and, after performing some exercises and passing such an examination as the doctors of music do to-day, could write one hundred verses in Latin in praise of the university, and take his degree. The boys who went to the universities learned their Latin at inferior grammar schools, often in university towns. These schools were, for the most part, connected with cathedrals or churches, although, in the later Middle Ages, even the smallest towns had schools where a boy might learn to read and write at least the rudiments of ecclesiastical Latin. In those days not only were the clergy Latin scholars, but the bailiff of every manor kept his accounts in Latin, and a tutor even formed part of the establishment of a great noble or prelate who had either a family or pages in his care.

In those good old days boys were accustomed to seek the university at the ages of thirteen to fifteen. A Paris statute required them to be at least fourteen, and naturally many were older. Many of these students were beneficed, and boys even were canons or rectors of parish churches. In this capacity they obtained leave of absence to study in the universities, and so it was quite common at one time for rectors and ecclesiastics of all ages to appear in the rôle of university students. At the close of the fourteenth century, in the University of Prague, in the law school alone, there appeared on the list of students one bishop, one abbot, nine archdeacons, 290 canons, 187 rectors, and still other minor ecclesiastics. At one time in the University of Bologna, in the registry of German corps, more than half the students were church dignitaries. Sad to relate, many of these clerical students were among the most disorderly and troublesome of the academic population, the statutes vainly prescribing that they should sit "as quiet as girls;" while, as Rashdall says, "even spiritual thunders had at times to be invoked to prevent them from shouting, playing, and interrupting."

Considering the youthfulness of what we may call the freshmen, as many of them went up to the universities at the early age already mentioned, it is not strange that we hear of "fetchers" or "carriers" or "bryngers," who were detailed to escort them home; but we must remember that the roads

were dangerous in those days, and that protection of some kind was necessary even for men. Proclamations against bearing arms usually made exceptions in favor of students travelling to or from the university. Students, many of them, lived in halls, or, as we would say now, dormitories, and one of them assumed the rôle of principal, or was delegated to exercise certain authority. Quite often this was the man who made himself responsible for the rent, whose authority came only from the voluntary consent of his fellow-students, or who was elected by them. When it came to the matter of discipline, the good old-fashioned birchen rod was not an unknown factor in university government. There seems to have been always a certain relationship between classic studies and corporal punishment. In mediæval university records allusions to this relationship began about the fifteenth century. In Paris, about this time, when there were so many disgraceful factional fights, the rectors and proctors had occasionally to go to the colleges and halls and personally superintend the chastisement of the young rioters. We find also in the history of the University of Louvain that flogging was at one time ordered by the Faculty of Arts for homicide or other grave outrages. It is worth while to recall for a moment how grave offences were dealt with in those days. At the University of Ingolstadt one student killed another in a drunken quarrel, and was punished by the university by the confiscation of his scholastic effects and garments, but he was not even expelled. At Prague a certain Master of Arts assisted in cutting the throat of a friar bishop, and was actually expelled for the deed. In those days drunkenness was rarely treated as a university offence. The penalties which were inflicted for the gravest outrages and immoralities were for the greater part puerile in the extreme. In most serious cases excommunication or imprisonment were the penalties, while lesser offences were punished by postponement of degree, expulsion from the college, temporary banishment from a university town, or by fines. In Leipzig, in 1439, the fine of ten new groschen was provided for the offense of lifting a stone or missile with a view of throwing it at a master, but not actually throwing it; whereas the act of throwing and missing increased the penalty to eight florins, while successful marksmanship was still more expensive. Later statutes made distinction between hitting without wounding and wounding without mutilation, expulsion being the penalty for actual mutilation. With the beginning of the six-

teenth century the practice of flogging the very poorest students appears to have been introduced. During these Middle Ages they had a peculiar fashion of expiating even grave offences. For example, at the Sorbonne, if a fellow should assault or cruelly beat a servant he was fined a measure of good wine—not for the benefit of the servant, but for all the culprit's fellow-students. Those were the days, too, when trifling lapses incurred each its own penalty. A doctor of divinity was fined a quart of wine for picking a pear off a tree in the college garden or forgetting to shut the chapel door. Clerks were fined for being very drunk and committing insolences when in that condition. The head cook was fined for not putting salt in the soup. Most of these fines being in the shape of liquors or wines, I imagine that the practice was more general because the penalty was shared in by all who were near.

With lapse of time the statutes of the German universities gradually grew stricter until they became very minute and restrictive in the matter of unacademical pleasures. A visit to the tavern, or even to the kitchen of the college or hall, became a university offence. There were statutes against swearing, against games of chance, walking abroad without a companion, being out after eight in the winter or nine in the summer, making odious comparisons of country to country, etc. This was particularly true of the English universities, where a definite penalty was imposed for every offence, ranging from a quarter of a penny for not speaking Latin to six shillings eight pence for assault with effusion of blood.

The matter of constantly speaking Latin led to a system of espionage, by which a secret system of spies, called "*lupi*" or wolves, was arranged; these were to inform against the "*vulgarisantes*," or those offenders who persist in speaking in their mother tongue.

It was the students of those days who set the example and the fashion of initiating, or, as we would say now, of hazing the newcomers. This custom of initiation, in one form or another, seems to have an almost hoary antiquity. As Rashdall puts it, three deeply rooted instincts of human nature combine to put the custom almost beyond suppression. It satisfies alike the bullying instinct, the social instinct, and the desire to find at once the excuse and the means for a carouse. In the days of which we are speaking the *Bejaunus*, which is a corruption of the old French *Bec-jaune* (or yellow bill), as the academic fledgling was called, had to

be bullied and coaxed and teased in order to be welcomed as a comrade, and finally his "jocund advent" had to be celebrated by a feast furnished at his own expense. A history of the process of initiating would furnish one of the most singular chapters in university records. At first there were several prohibitions against all *bejaunia*, for the unfortunate youth's limited purse ill afforded even the first year's expenses. As the years went by certain restrictions were imposed, and by the sixteenth century the *depositio cornuum* had become in the German universities a ceremony almost equal in importance to matriculation. The callow country youth was supposed to be a wild beast who must be deprived of his horns before he could be received into refined society in his new home. This constituted the *depositio* for which he was supposed to arrange with his new masters, at the same time begging them to keep expenses as low as possible. Soon after he matriculated he was visited in his room by two of the students, who would pretend to be investigating the source of an abominable odor.

This would be subsequently discovered to be due to the newcomer himself, whom they would take at first to be a wild boar, but later discover to be that rare creature known as a *bejaunus*, a creature of whom they had heard, but which they had never seen. After chaffing comments about his general ferocious aspect it would be suggested, with marked sympathy, that his horns might be removed by operation, the so-called *depositio*. The victim's face would then be smeared with some preparation, and certain formalities would be gone through with—clipping his ears, removal of his tusks, etc. Finally, in fear lest the mock operation should be fatal, the patient would be shriven; one of the students, feigning himself a priest, would put his ear to the dying man's mouth and then repeat his confession. The boy was made to accuse himself of all sorts of enormities, and finally it was exacted as penance that he should provide a sumptuous banquet for his new masters and comrades.

This latter ceremony consisted of a procession headed by a master in academic dress, followed by students in masquerading costume. Certain further operative procedures were then gone through with, the beast was finally dehorned and his nose held to the grindstone, while a little later his chin was adorned with a beard made of burnt cork, and his wounded sensibilities assuaged by a dose of salt and wine. All this constituted a peculiar German custom, although some means of extorting money

or bothering those who were initiated was practically universal. In Germany this ceremony of *depositio* seems to have led later to the bullying and fagging of juniors by seniors that gave rise to while at the same time it more than exceeded in brutality anything which we have read of in the English grammar schools. These excesses reached their highest in the seventeenth century, and for a long time defied all efforts of both government and university authorities to suppress them.

In southern France this initiation assumed somewhat different form. Here the freshman was treated as a criminal, and had to be tried for and released by purgation from the consequences of his original sin. At Avignon this purgation of freshmen was made the primary purpose of a religious fraternity formed under ecclesiastical sanction, and with a chapel in the Dominican church. (Rashdall.) The preamble of its constitution piously boasted that its object was to put a stop to enormities, drunkenness, and immorality, but its practices were at extreme variance with its avowed purposes.

The matter of academical dress may interest for a moment. During the Middle Ages there was for the undergraduate nothing which could be properly called academic dress. In the Italian universities the students wore a long black garment known as a "cappa." In the Parisian universities every student was required by custom or statute to wear a tonsure and a clerical habit, such "indecent, dissolute, or secular" apparel as puffed sleeves, pointed shoes, colored boots, etc., being positively forbidden; and so the clothes of uniform color and material, like those worn in some of the English charitable schools, have been the result of the uniform dress of a particular color which mediæval students were supposed to wear, and which indicated that at the time they were supposed to be clerks. At one time the so-called Queen's Men in Oxford University were required to wear bright red garments, and differences of color and ornament still survive in the undergraduate gowns of Cambridge. While the students usually wore dark-hued material, the higher officials of the universities wore more and more elaborate garments, until the rector appeared in violet or purple, perhaps with fur trimmings. The hoods, which are still worn to-day, were at one time made of lamb's wool or rabbit's fur, silk, such as those which we wear, coming in as a summer alternative at the end of the fourteenth century. The birretta, or square cap, with a tuft on the top, in lieu of the modern tassel on top of the square cap, was a distinctive badge of membership,

while doctors and superior officers were distinguished by the red or violet color of their birrettas.

This so-called "philosophy of clothes" throws much light upon the relation of the Church to the universities, as well as on the use and misuse of the term "clericus." That a man was a *clericus* in the Middle Ages did not necessarily imply that he had taken even the lowest grade of clerical orders. It simply implied that he was a clerk, *i. e.*, a student. Even the wearing of a so-called clerical dress was rather in order that the wearer might enjoy exemption from secular courts and the privileges of the clerical order. The lowest of the people even took the clerical tonsure simply in order to get the benefit of clergy; and to become a clerk was at one time almost equivalent to taking out a license for the commission of murder or outrage with comparative immunity. Nevertheless, the relation between clerkship and minor orders is still quite obscure.

It is quite evident that students of those days were not worked as hard as those of the present day. Three lectures a day constituted a maximum of work of this kind, beside which there were disputations and "resumpciones," which seemed to have corresponded very much to the quizzes of to-day, scholars being examined or catechised, sometimes even by the lecturer himself. Gradually, supplementary lectures were introduced, but there was a period during which the university seemed to decline and decay rather than the reverse, when intellectual life was not nearly as active and studies not nearly as closely pursued. In the days of Thomas Aquinas intellectual vigor was at its highest, but in the fifteenth century there was a distinct falling off.

During these centuries, too, it was not unusual that students attended mass or religious services before going to lectures. This practice grew during the latter portion of the Middle Ages. Attendance was not, however, compulsory. Even at Oxford the statutes of the New College were the first which required daily attendance at mass. In those days lectures began at six in the morning in summer, and sometimes as late as seven in the winter mornings. There is every reason to think that often lectures were given in the darkness preceding dawn, and even without artificial light. It should be said that these lectures were sometimes three hours in duration, and hence it might appear that three such lectures a day were about all that could be expected of a student.

The standard of living for the mediæval student was not always so bad as has been sometimes repre-

sented. University students then, as now, were recruited from the highest as well as the poorest social classes, and the young sons of princely families often had about them quite an establishment. At the lower end of the university social ladder was the poor scholar who was reduced to begging for his living or becoming a servant in one of the colleges. In Vienna and elsewhere there were halls whose inmates were regularly sent out to beg, the proceeds of their mendicancy being placed in a common chest. Very poor scholars were often granted licenses to beg by the chancellor. This was not regarded as a particular degradation, however, because the example of the friars had made begging comparatively respectable. Those who would have been ashamed to work hard were not ashamed to beg.

This custom, for that matter, is by no means yet abandoned. When I was studying in Vienna, in 1882, I remember a young German nobleman who was reduced to such an extent that he lived absolutely on the charity of others. He kept a little book in which he had it set down that on such a day such a person had promised to give him so much toward his support, and he called regularly on his list of supporters, and almost daily, in order that the gulden which they had promised him might be forthcoming.

There is the good old story you know, also, of the three students who were so poor that they had but one cappa or gown between them, in which they took turns to go to lectures. In the small university towns, where thousands of students gathered together during a part of the year—where means of carrying food were scanty, and food itself not abundant—it is not strange that student fare was often of the most meagre sort.

The matter of food was not the only hardship of student life in those days about which we are talking. At that time such a thing as a fire in a lecture-room was unknown, there being no source of warmth or comfort, save, perhaps, straw or rushes upon the floor. The winter in the northern university towns must have been severe, but it is not likely that either in the lecture-room or in his own apartments did the student have any comfort from heat. This was true to such an extent that they often sought the kitchens for comfort. In Germany it was even one of the duties of the head of the college to inspect the college-rooms lest the occupants should have supplied themselves with some source of heat. In some places, however, there was a common hall or combination room in which a fire was built in cold weather. You must remember, also, that glass win-

dows were an exceptional luxury until toward the close of the period under discussion. In Padua the windows of the schools were made of linen. In 1643 a glass window was for the first time introduced into the Theological School at Prague. In 1600 the rooms inhabited by some of the junior fellows at Cambridge were still unprovided with glass windows. Add to these hardships the relative expense of lights, when the average price of candles was nearly two pence per pound, and you will see that the poorest student could not afford to study by artificial light. Some of the senior students may have had bedsteads, but the younger students slept mostly upon the floor. In some places there were cisterns or troughs of lead, or occasionally pitchers and bowls were provided, but usually the student had to resort to the public lavatory in the hall.

Along with these hardships consider the amusements of this period, which were for the greater part conspicuous by their absence. Statutes concerning amusements were often more stringent than those concerning crime or vice. These were essentially military times, and tournaments, hunting, and hawking, which were enjoyed by the upper social classes, were considered too expensive and distracting for university students, and were consequently forbidden. Mortification of the flesh was the cry of those days, as even now, among some religious fanatics. Even playing with a ball or bat was at times forbidden, along with other "insolent games." A statute of the sixteenth century speaks of tennis and fives as among "indecent games" whose introduction would create scandal in and against the college. Games of chance and playing for money were also forbidden; nevertheless, they were more or less practised. Even chess enjoyed a bad reputation among the mediæval moralists, and was characterized by a certain bishop of Winchester as a "noxious, inordinate, and dishonest game." Dancing was rather a favorite amusement, but was repressed as far as possible, since the celebrated William of Wykeham found it necessary to prohibit dancing and jumping in the chapel. Apparently, then, in those days a good student amused himself little, if at all, and had to find his relaxation in the frequent interruptions caused by church holidays. At St. Andrew's, in Scotland, however, two days' holiday was allowed at carnival time expressly for cock-fighting. On the evenings of festival days entertainments were occasionally provided by strolling players, jesters, or mountebanks, who were largely patronized by students.

Altogether, it is not strange that students in those days fell into dissolute habits, many having to be expelled or punished. We can even understand how some of them actually turned highwaymen and waylaid their more peaceful brothers as they approached the universities with money for the ensuing season. In the archives of the University of Leipzig there are standard forms of proclamation against even such boyish follies as pea-shooting, destruction of trees and crops, throwing water out of the window upon passers-by, shouting at night, wearing of disguises, interfering with a hangman in the execution of his duty, or attending exhibitions of wrestling, boxing, and the like.

Evidently, then, university life had its exceedingly wild side. One needs only to recall the history of the famous Latin Quarter in Paris to be convinced of this. This was the students' quarter in the old city of Paris as extended by Philip Augustus across the river. Paris then was surrounded by a cordon of monasteries, whose abbots exercised jurisdiction over their surrounding districts. Just to the west of the student quarter stood the great Abbey of St. Germain. Between the monks of this monastery and the students there were frequent conflicts, and it is recorded that in 1278, for instance, a pitched battle occurred between the monks, under their provost, on the one side, and the unarmed and defenceless boys and masters, on the other, during which many were badly wounded, and some mortally. The matter was finally carried to court, and the monks were required to perform certain penances and to pay certain fines. Their brutality, however, was not effectually suppressed. In 1304 the Provost of Paris hanged and gibbeted a student, and was punished therefor by the king. And so the subsequent history of Paris is one of constant conflict between students and the clerical orders. On the other hand, the clerical tonsure in which the Parisian scholar clothed himself enabled him to indulge in all kinds of crime, without fear of that summary execution which would have been his fate had he been merely an ordinary beggar.

Bibulousness was another striking characteristic of mediæval university life. In those days they knew not tea nor coffee nor tobacco, but spirituous liquors in some form were far from unknown to them. No important event of life could be transacted without its drinking accompaniment. At all exercises, public or private, wine was freely provided, and many of the feasts and festivals which began with mass were concluded with a drunken orgie.

You have observed that so far I have made frequent mention of clerical matters. In truth, in northern Europe the Church included practically all the learned professions, including the civil servants of the government, the physicians, architects, secular lawyers, diplomatists, and secretaries, who were all ecclesiastics. It is true that in order to be a "clerk" it was not really necessary to take even minor orders, but it was so easy for a king or bishop to reward his physician, his lawyer, or his secretary by a monastic office rather than by a large salary, that the average student, at least in the larger places, looked to holy orders as his eventual destination. How much of insincerity and hypocrisy there were among those reverend gentlemen thus constituted you may imagine better than I can picture. The Reformation, as well as the increasing corruption of the monastic orders, brought about changes which were not rapid, but which became almost complete, and led finally to the partial restoration of the ancient dignity of the early Church.

Without pursuing this part of the subject further, it may be imagined what a general alteration and reformation in all branches of study, as well as in the general intellectual life of the people, the founding of the universities accomplished. For the greater part designed for the confirmation of the faith, they often brought about a reaction against it. Like the other integral portions of the university, the medical departments of nearly all the mediæval institutions came into existence through voluntary associations of physicians and would-be teachers. For a long time medicine was included under the general head of philosophy, whose standard-bearers were Aristotle and the Arabians. At Tübingen, in 1481, the medical student's days were divided about as follows: In the morning he studied Galen's *Arts Medici*, and in the afternoon Avicenna on *Fever*. During the second year, in the forenoon he studied Avicenna's *Anatomy and Physiology*, and in the afternoon the ninth book of Rhazes on *Local Pathology*. The forenoons of his third year were spent with the *Aphorisms* of Hippocrates, and in the afternoon he studied Galen. If any text-book on surgery at all were used it was usually that of Avicenna. Some time was also given to the writings of some of the other Arabian physicians. At that time any man who had studied medicine for three years and attained the age of twenty-one might assume the rôle of teacher if he saw fit, being compelled only, at first, to lecture upon the preparatory branches. He was at that time called a *baccalaureus*. After three years' further study he became a *magister* or

doctor, although for the latter title a still further course of study was usually prescribed. The courses of medical instruction were quite stereotyped in form, and were carefully watched over by the Church. Nevertheless, it came about that the study of medicine once more was taken up by thinkers, although, unfortunately, not logical thinkers, whereas previously it had been almost entirely confined within the ranks of the clerics or clergy. The most celebrated of all these mediæval philosophers in science and medicine was Albert von Bollstaedt, usually known as Albertus Magnus, who died in 1280. His works which remain to us fill twenty-one quarto volumes, in which he discussed both anatomical and physiological questions. It is exceedingly illustrative of the foolishly speculative vein in which many of these discussions were carried on, that they seriously discussed such questions as whether the removal of the rib from Adam's side, out of which Eve was formed, really caused Adam severe pain, and whether at the judgment day that loss of rib would be compensated by the insertion of another. Those were the days, also, when it was seriously discussed whether Adam or Eve ever had a navel. In spite of such follies, however, Albertus Magnus left an impression upon scholarship in science, in a general way, which long outlasted him.

These were the days when the students organized themselves into so-called "nations," whence arose that conspicuous feature of German university life of to-day of so-called students' corps. These nations—each composed, for the main part, of men of one nationality—had their own meeting-places, their own property, etc. One of the principal means of instruction in those days was disputations, or, as we would say, debates, held between students, often of different nations, in which they were expected to prove their knowledge and mental alertness. When it is recalled that universities were larger—*i. e.*, better attended—in those days than now, it will be seen to what an extent these nations were developed. Oxford, in 1340, is said to have had no less than 14,000 students; Paris about the same time had 12,000; and Bologna had some 10,000 students, the majority of whom were studying law.

The title of doctor came into vogue about the twelfth century. At first it was confined to teachers proper, and was bestowed upon the learned—*i. e.*, those who had almost solely studied internal medicine, and who were required to take an oath to maintain the methods which had been taught them. For the title of doctor certain fees were paid, partly in

money and partly in merchandise. The so-called presents consisted of gloves, clothes, hats, caps, etc. At Salernum it cost about \$60 to graduate in this way, while at Paris the cost was sometimes as high as \$1000, and this at a time when money had much more purchasing value than it has to-day. It was then, as now, a peculiar feature of the English universities that but little systematic instruction in medical science was given. Just as the majority of English students at present study in London rather than at one of the great universities, so in those days did they go to Paris or Montpellier.

This will be perhaps as good a place as any to emphasize the fact that the clergy, having so long monopolized all learning and teaching, and having, at the same time, an abhorrence for the shedding of blood, which indeed had been prohibited by many papal bulls and royal edicts, permitted the practice of the operative part of medicine—*i. e.*, surgery—to fall into the hands of the most illiterate and incompetent men. Inasmuch as the Church prohibited the wearing of beards, and as many of the religious orders also shaved their heads, there were attached to every monastery and to every religious order a number of barbers, whose duty was to take care of the clergy in these respects. Thus into their hands was gradually committed the performance of any minor operation which involved the letting of blood, and from this, as a beginning, it came about that no really educated man concerned himself with the operations of surgery, but left them entirely to the illiterate servants of the Church. This is really the reason that the barbers for many centuries did nearly all the surgery, and why, at the same time, surgery fell into such general and wide-spread disrepute. From this it was only revived about one hundred years ago. Did time permit, this would be a most appropriate place to digress from the subject of this paper and rehearse to you the various stages in the evolution of the surgeon from the barber; but time does not permit it, and it constitutes a chapter in history by itself, which must be relegated to some other occasion.

It was about the beginning of the fifteenth century that the better class of physicians began to belong to the laity, and were called "physici" in contrast to the "clerici." Later they were known as "doctores." Until the fourteenth century most of them studied in Italian or French universities, the Germans even being compelled to go to these foreign institutions. In Paris they were required to take an oath that they would not join the surgeons.

This regulation was founded as much upon spite and envy as upon any other motive. Many of the clerical physicians belonged to the lower class, and were so ignorant that even the Church itself was forced to declare many of their successes miracles. Although monks and the clergy in general had been frequently forbidden to practice medicine, the decrees to this effect were quite generally disregarded, except in the matter of surgical operations. In the ranks of the higher clergy it must be said that well-educated physicians were occasionally met with. There is, for instance, the record of a certain bishop of Basel, who was deputed to seek from Pope Clement V. an archbishopric for another person, but finding the Pope seriously ill, cured him, and received for himself in return the electorate of Mayence, which was perhaps one of the largest honorariums ever given to a physician.

These were the days when magic mingled with mystery played no small rôle in the practice of medicine, and when disgusting and curious remedies were quite in vogue. Superstition and ignorance everywhere played a most prominent part. For instance, it was, in those days, an excellent remedy to creep under the coffin of a saint. When a person was poisoned it was considered wise to hang him up by the feet and perhaps to gouge out one of his eyes, in order that the poison might run out. It should be noted that putting out the eyes was frightfully common in the Middle Ages, mainly as a matter of punishment. It is said, for instance, that the Emperor Basil II. on one occasion put out the eyes of 15,000 Bulgarians, leaving one eye to one of every thousand, in order that he might lead his more unfortunate fellow-sufferers back to their ruler, who, it is said, at the sight of this outrage swooned and died in two days. It is said, too, that this is the reason why the Emperor Albrecht was one-eyed.

What the revival of learning could thus and did accomplish under these conditions as above portrayed may be readily appreciated. The restoration of Greek literature, the revival of anatomy, the habit of independent observation—all told materially in this renaissance of medicine. The Italian universities became the objective point of all who desired a thorough medical education. The students chose the lecturers and officers of the university and had a large voice in the construction of the curriculum. The officers of their selection negotiated with those of the State, at least until the close of the sixteenth century.

In spite of this general renaissance of medical

learning and the impetus felt by the inspired few during the sixteenth century, it must be said that the general condition of medical science and of those who practised it was not greatly improved. The superstition of the common people and the timidity and indolence of all concerned were about as marked as they have ever been in the history of human error, and the practice of medicine was at least a century behind the applied knowledge of the other arts and sciences. At that time the best physicians and doctors were to be found in the Italian universities, the French coming next, and, last of all, the German. The Italian universities were the Mecca sought by those who desired the best education of the day, and of all the Italian medical faculties those of Bologna, Pisa, and Padua ranked highest.

Those were the days, also, of the travelling scholars—a very marked feature of mediæval life. They migrated from one of the Latin schools to another, and from one famous teacher to another, sometimes travelling alone, at other times in groups or bands, and practising often the worst barbarities while *en route*, supporting themselves by begging and stealing. On their marches they stole almost everything which was not tightly fastened down, and prepared their food even in the open fields. The result was that most of them fell into dissolute habits of life. A somewhat better class of vagrant students sang hymns before doors and received food, as pay. Some earned money singing in the churches. They apparently both drank more beer and at less cost than at present. At that time the cost of beer was about one cent for a large glass.

The younger students were called "schutzen," and, like apprentices in trades, were obliged to perform the most menial duties. The older students were known as the "bacchanten," and each bacchant was honored in proportion to the number of "schutzen" who waited upon him. When, however, this bacchant himself reached the university he was compelled to lay aside his rough clothing and rude manners and take an oath to behave himself.

Not only the students, however, wandered from place to place, but even the professors of the sixteenth century were nomadic, wandering from one university to another; for example, Vesalius, the great teacher of anatomy, taught in Padua, in Pisa, in Louvain, in Basel, in Augsburg, and in Spain. These habits may be partly accounted for by the fact that the students elected at least some of their teachers, and the professors who failed of re-election certainly may be considered to have had a motive



for moving on. Salaries were certainly not large in those days. Melanchthon, the great theologian, received during his first eight years a salary of \$43 per annum, and by strict economy was able during this period to buy his wife a new dress. During his later years his salary attained the sum of \$170, which would be equivalent to \$750 to-day. When Vesalius died his salary was \$1000 per annum, to which certain fees were added. It is not strange, therefore, that many of the professors pursued reputable occupations during their odd hours or that they took students to board. We hear to-day of frequent illustrations of the pursuit of knowledge under difficulty, but certainly during the ages to which I have referred the ardent student, were he undergraduate or professor, put up with an amount of hardship, meagre fare, and trouble of all kinds which would stagger most of the young men of to-day.

Men were human then as now, and the universities were not above disputes and quarrels, which sometimes became very bitter and dishonorable, but were the indirect instrument of good, since they led in not a few instances to the founding of other universities. Thus, about the beginning of the sixteenth century Pistorius and Pollich were both teachers in Leipzig, but holding antagonistic views regarding the nature of syphilis, became so embittered that they could not bear each other's presence, and each resolved to seek another home. The former influenced the elector to select Frankfurt-on-the-Oder as the site of a new university, while the latter was the means of founding another at Wittenberg.

It is pretty hard to keep away from the relation of the barber to the anatomist and surgeon when discussing this subject. In another place I have dealt with the evolution of the surgeon from the barber, and have endeavored to show that the principal factor which operated to keep back the progress of surgery during the eighteen centuries previous to the last was the influence of the Church, which opposed the study of anatomy and degraded the practice of surgery. In the times to which I am referring now, an operation which caused the shedding of blood was considered beneath the dignity of an educated physician, and, in some circles, was regarded even as disreputable. It was, therefore, left to the only class of men who were supposed to know how to handle a knife or sharp instrument, *i. e.*, the barbers. When operations were done in universities, papal indulgences were often required, and these cost money, since in those

days the Pope gave nothing for nothing. Public dissection required also papal indulgences, although in Strasburg, in 1517, permission to dissect the body of an executed criminal was granted by the magistrates in spite of papal prohibition.

The ceremonies attending demonstrations of this kind were both fantastic and amusing. A corpse was ordinarily regarded as disreputable, and had first to be made reputable by reading a decree to that effect from the chief magistrate or lord of the land, and then, by order of the University, stamping the body with the seal of the corporation. It was carried upon the cover of the box in which it had been transported into the anatomical hall, which cover, upon which it rested through the ceremonies, was taken back afterward to the executioner, who remained at some distance with his vehicle. If the corpse was that of one who had been beheaded, the head during the performance of these solemn ceremonies lay between its legs. After the completion of the ceremonies the occasion was graced with music by the city fifers, trumpeters, etc., or an entertainment was given by itinerant actors (Baas).

In time, however, this folly was given up, and by the latter half of the sixteenth century public anatomical theatres were established. The most celebrated was built by Fabricius ab Aquapendente, in Padua. It was so high, however, and so dark that dissections even in broad daylight could only be made visible by torchlight.

The zeal with which gradually the better class of physicians pursued their scientific studies became more and more conspicuous, evidenced in many ways by the hardships with which some of them had to deal, as witness the struggles of many of the great anatomists of those days.

And so in time the clergy disappeared almost entirely from the ranks of public physicians, and after the Thirty Years' War completely lost their supremacy even in literary matters, this being gradually usurped by the nobility and the more educated laymen; but even then knowledge was pursued under difficulties, especially the study of anatomy. It was not until 1658 that a mounted skeleton could be found in Vienna. Strasburg obtained one in 1671. The handling of the dead body, which we regard as so necessary, was in those days avoided as much as possible. The professor of anatomy rarely, if ever, touched it himself, but he lectured or read a lecture while the actual dissection was done with a razor by a barber, under his supervision.

Practical instruction in obstetrics, which would

seem almost as important as that in anatomy, was not given in those days; male students only studied it theoretically. In the Hôtel Dieu, in Paris, that part which was devoted to instruction in midwifery was closed against men. It was the midwives in those days who enjoyed the monopoly of this teaching, and upon whom the greatest dependence for obstetrical ability was placed. The physicians proper, or *medici puri* of the seventeenth century, were individuals of greatest dignity and profoundest gravity, who wore fur-trimmed robes, perukes, and carried swords, who considered it beneath them to do anything more than write prescriptions in the old Galenic fashion. Some continuation of this is seen in the distinction made even to-day in England between the physicians who enjoy the title of doctor and the surgeons who affect to disdain it. These old physicians knowing nothing of surgery, nevertheless demanded to be always consulted in surgical cases, claiming that only by this course could things go right. Still when elements of danger were introduced, as in treating the plague, they were glad enough to send the barber surgeons into the presence of the sick, whom they merely inspected through panes of glass. Very entertaining pictures could be furnished you illustrating the habits of the physicians of two or three hundred years ago in dealing with these contagious cases. The masks and armor which they wore and the precautions which they took would seem to indicate protection rather against the weapons of mediæval warfare. At one time they were advised that if they must go into actual contact with these patients they should first repeat the Twenty-second Psalm. You may find in the old books, if you will hunt for them, curious pictures illustrating the precautions taken a few hundred years ago against the pestilence of whose nature they knew nothing, and seeing them you may even imagine the vague dread and even the abject fear which led the *physici puri* or physicians to send the barbers in to minister to plague-stricken patients, while they contented themselves with ministering at long range to their needs.

But, gentlemen, I fear lest I weary you with a longer rehearsal of mediæval customs and student follies. While they have all passed away some of them have survived either in tradition or in modified form, as will surely have occurred to you while they were rehearsed. You will not fail to note the steady progress of an ethical evolution which has toned down the barbarities and the asperities of the past, and which has substituted a far more ennobling life-purpose and method of its accomplishment than seemed to actuate your predecessors of long ago.

It is small wonder that the students of those days bore an ill-repute with their surrounding neighbors. You may see better now, perhaps, why the medical student even of to-day has to contend with a prejudice against both his calling and himself, a prejudice begotten of the many debaucheries and misdeeds of his predecessors, and, I am sorry to say, even certain excesses of to-day. I do not know how I may more fittingly terminate these remarks than by reminding you that the profession which you students hope to enter has suffered most seriously in time past from the character of the men who have entered it, and that even to-day certain of its members fail to have a proper regard for its dignity. It is axiomatic that those slights and indignities from which we often suffer, and the neglect and indifference of which we often complain, are in effect the result of our own shortcomings, and that we are ourselves largely to blame because of that which does not suit us. I beg you then to remember that even at the outset of student life there should be ever before you such an ideal of intellectual force and dignity, of power of co-ordination of mind and body, as may keep you ever in the right way, so that when you at last attain your goal you may deserve that sort of benediction which I find in one of Beaumont and Fletcher's plays (*Custom of the Country*, v. iv.):

"So may you ever  
Be styled the 'Hands of Heaven,' Nature's restorers;  
Get wealth and honors, and, by your success  
In all your undertakings, propagate  
A great opinion in the world."