practical use the knowledge acquired, and are based upon the same principles of education that govern the methods of the earlier schools.

Such a system is consistent in all its methods and aims; it maintains a constant unity of purpose; while each department is distinct in its own individuality, and bears a proper relation to the whole. C. E. MELENEY.

MR. MATTHEW ARNOLD'S REPORT ON ELEMENTARY EDUCATION ON THE CONTINENT.

MR. MATTHEW ARNOLD has but lately resigned the office of her majesty's inspector of schools, a position which he has filled for many years with credit to himself, and with great benefit, we are sure, not only to such schools as have come under his immediate supervision, but also to English educational interests in general. One of his last official duties of any importance was to visit Germany, Switzerland, and France, and to write an official report on certain specified points connected with elementary education in those countries. Some portions of that report were used by Mr. Arnold in his address before the University of Pennsylvania, which was printed afterwards in the *Century* magazine. But the entire report is of the liveliest interest to American educators; for several of the points investigated by Mr. Arnold are those to which no little attention is being paid in this country, and all the information gathered by him is part of the material to be used by the comparative method in studying educational institutions and methods.

By the terms of Mr. Arnold's instructions, his attention was to be more particularly directed to Germany and Switzerland, and the points he was to study were four in number: 1°. Free education; 2°. Quality of education; 3°. Status, training, and pensioning of teachers; 4°. Compulsory attendance, and release from school. Only fourteen weeks were given to the inquiry; and of these, five were spent in Prussia, two in Saxony, two in Bavaria, two in Switzerland, and three in France. Mr. Arnold's latest mission, as he expressly states, differed from those of 1859 and 1865 in that he did not go now to study systems of education, but only to report on the four above-mentioned points. These points Mr. Arnold takes up in order.

Under the head of free education, he was instructed to ascertain whether gratuitous education is confined to elementary schools, or extends to other schools or colleges; what reasons induced the state to establish the gratuitous system; in what way (directly or indirectly) the lower classes of society are made to feel the weight of the expenditure on education; in what way the dirty and neglected children in large towns are dealt with, and especially whether all descriptions of children are mixed in the same schoolroom; whether there is a legal prohibition against charging fees in public schools, even if parents and children are willing to pay; whether the attendance of children has increased or diminished since the establishment of free schools, Mr. Arnold answers these questions first with the information gained by him in Prussia. In the Prussian constitution of 1850 is this provision: *In der öffentlichen volksschule wird der unterricht unentgeltlich ertheilt.* But this provision has generally remained inoperative, because the popular school is to be maintained by the *Gemeinde*, or commune, and the communers have not in general found themselves able to forego the income from school fees. And, on the other hand, the state has not been able or willing to provide gratuitous instruction in the communes. Some few communes, however, have been able to throw their popular schools open to all classes of the population, free of all charge. Düsseldorf has done so: so has Berlin. The Berlin schools have been free since 1870, and last year it cost more than 6,000,000 marks to support them. At the time of the introduction of free schooling, the municipality had 49 communal schools, with 31,752 scholars; in 1885 it had 146 such schools, with 132,889 scholars. These communal schools are the only body of schools in Berlin or throughout Prussia in which school fees are not paid. Herr von Gossler, minister of education, was found by Mr. Arnold to favor making the communal schools free everywhere, and Prince Bismarck is said to agree with him. But among the public generally, including the teachers themselves and the government officials, the weight of opinion is against such a course. Even where school fees are charged, they meet but a small portion of the total expense. On an average for the whole of Prussia, school fees furnish 20.58 per cent of the cost of teaching in the popular schools; endowments, 12.02 per cent; the communes, 55.26 per cent; and the state, 12.14 per cent. In some towns, Cologne for example, where the popular schools are not free, provision has been made for giving free instruction to poor children in schools by themselves. But in Berlin the children of the working and middle classes all attend school together. The only distinction made on the ground of poverty at Berlin is that school-books and school-material are supplied gratuitously whenever the teacher finds that the child cannot afford to buy them.

But throughout Germany, payment is the rule, free schooling the exception. The popular school is a municipal thing, and is paid for out of municipal taxes. No special school tax is levied.

In Switzerland there is also a constitutional provision determining free schooling. Article 27 of the Federal constitution of May 29, 1874, says, "Primary instruction is obligatory, and in the public schools gratuitous." So jealous are the cantons of their local independence, that there is no national department of education. Yet each canton has complied with the above article of the constitution. Mr. Arnold takes as examples canton Zurich, which is Protestant and industrial, and canton Lucerne, which is a mountain canton and Catholic. In Lucerne the child must come to school at seven years old, and may come at six: his day-school course lasts until he is fourteen; and he has then, unless he goes to some higher school, to attend a *fortbildungsschule* for two years more. In Zurich the child must come to school at six years old: his day-school course lasts until he is twelve; and he must then spend three years at an *ergänzungschule*, besides an hour a week at a singing-school. All these schools are free, and in canton Lucerne the higher schools are free also. Religious instruction is given in the popular schools in the several cantons according to the faith of the majority. Catholic instruction is given in Lucerne, Protestant in Zurich. There is, according to Mr. Arnold, no unfair dealing, no proselytizing, no complaint. In Switzerland there is no separate provision for dirty and neglected children, because there is no such class. Fifteen years ago there were 1,500 pupils attending the great town-school of Lucerne: now there are 3,300. "I regard free schooling, however," says Mr. Arnold, "rather as a part and sign of the movement of advance in popular education than as itself the cause of the movement."

In France, Mr. Arnold found that the payment of fees in public primary schools was abolished in 1881, and that attendance at school is obligatory for children of both sexes between the ages of six and thirteen. This is ascribed to no constitutional provision, as in Germany and Switzerland, but to *l'idée démocratique*, a moving cause at which Mr. Arnold sneers a little. No religious instruction is allowed in these schools, for democracy in France is at war with clericalism. The result is that there is much complaint, and rival schools, established by private effort, are numerous. The Catholics alone have raised for their schools in Paris over 15,000,000 francs in the last six years, and at the present time educate in their schools one-third of all the school-children of Paris. As to how these public primary schools are supported, the report summarizes thus: "The communes had formerly to maintain their primary schools out of their own resources, supplemented, if necessary, by an addition of four centimes to the four direct taxes for the commune; further supplemented, if still necessary, by an addition of four centimes to the four direct taxes for the department; supplemented finally, if still necessary, by a grant from the state. These eight centimes for the commune and department have now been made regular and fixed taxes paid to the state. Since 1882 the state has relieved of all further charge for their primary schools those communes which could not meet such charge out of their own resources. Only the five chief cities of France have undertaken so to meet it, — Paris, Lyons, Marseilles, Bordeaux, Lille. In all the other communes of France the cost of primary instruction is met out of the public taxes by the state. When, therefore, it is asked how the lower classes feel the weight of the expenditure on education, the answer must be, so far as they feel their share in the general taxation of the country to be increased by it. And this probably they do not feel at all."

Mr. Arnold found a very large increase, both in the outlay for primary schools and in the number of children attending them, since he last saw them in 1859. At present the state bears nine-tenths of the annual expense of primary instruction, and spends over 80,000,000 francs on it. The municipality of Paris had, in 1884, 361 primary schools, with accommodations for 121,798 scholars.

The second subject of inquiry related to the quality of the education given; and Mr. Arnold speedily found that the suggestion of his official instructions, that he determine this by having the teachers set papers in arithmetic and dictation on the model of those set in England, could not be carried out, because the whole spirit and course of teaching was opposed to setting in school-hours a number of sums, and leaving the children to do them by themselves. So Mr. Arnold determined to secure an answer to this question by seeing and hearing what the scholars did; and the popular schools of the free city of Hamburg he chose for the test. He concludes that in German schools, as a rule, the programme is fuller, the course longer, and the instruction better, than in England. The methods of teaching seemed more gradual, more natural, more rational, on the continent than in England. He wrote again and again in his notes, '*The children human.*' As to the school course at Hamburg, we read, "The fixed matters of the course are religion, German language, English language, object-lessons, his-

tory, geography, natural history, arithmetic and algebra, geometry, writing, drawing, singing, and gymnastics. English must be taught in the popular schools from the third class upwards, and French comes in as an optional matter (the only one), and to take it the consent of the *oberschulbehörde* is required. The two lower classes have each of them 26 hours of schooling a week, the class next above them has 28, the four higher classes have 32 each. Some of the popular schools in Hamburg, like those in Berlin, meet once a day only. In summer the schools meet at 8 in the morning, and the different classes go on till 12, 1, or 2 on different days in the week, so that each class shall make its proper number of weekly hours. In winter they meet at 9 and go on an hour later. No week-day is a holiday, like the Saturday with us and the Thursday with the French. Other schools have two daily meetings, from 8 to 11 or 12, and from 2 to 4, the proper number of hours for each class being again always made. Local convenience determines whether the school shall have two daily meetings or one. The pressure which the long attendance from 8 to 2 or from 9 to 3 would seem likely to exercise is remedied by an arrangement which I found general in German countries, and which works very well. At the end of each hour the class disperses to the corridors and playground, and the teachers to the teachers' meeting-room. In ten minutes a bell rings, and the classes and teachers re-assemble refreshed. How much the work of a long morning is lightened by this simple plan may be observed by any one of school experience who will pass a morning in a German or Swiss school."

In German grammar the children learn the declension of nouns, comparison of adjectives, and conjugation of verbs. In history, where the prescribed aim is to make the pupil acquainted with the prominent persons and points in the development of mankind in general, and of the German nation in particular, biographical notices form the principal subject-matter. In religion, parables and hymns are learned and said by heart, and instruction is given in the literary history and translation of the Bible. Everywhere in Germany Mr. Arnold thought the text-books used, good. The following passage merits quotation in full: "In the specially formative and humanizing parts of the school-work, I found in foreign schools a performance which surprised me, which would be pronounced good anywhere, and which I could not find in corresponding schools at home. I am thinking of literature and poetry and the lives of the poets, of recitation and reading, of history, of foreign languages. Sometimes in our schools one comes across a child with a gift, and a gift is always something unique and admirable. But in general in our elementary schools when one says that the reading is good, or the French, or the history, or the acquaintance with poetry, one makes the mental reservation, 'good, considering the class from which children and teachers are drawn.' But in the foreign schools lately visited by me I have found in all these matters a performance which would be pronounced good anywhere, and a performance, not of individuals, but of classes. At Trachenberg, near Dresden, I went with the inspector into a schoolroom where the head class were reading a ballad of Goethe, 'Der sänger.' The inspector took the book, asked the children questions about the life of Goethe, made them read the poem, asked them to compare it with a ballad of Schiller in the same volume, 'Der Graf von Habsburg,' drew from them the differences between the two ballads, what their charm was, where lay the interest of the middle age for us, and of chivalry, and so on. The performance was not a solo by a clever inspector: the part in it taken by the children was active and intelligent, such as would be called good if coming from children in an altogether higher class of school, and such as proved under what capable teaching they must have been. In Hamburg, again, in English, and at Zurich in French, I heard children read and translate a foreign language with a power and a pronunciation such as I have never found in an elementary school at home, and which I should call good if I found it in some high-class school for young ladies. At Zurich, I remember, we passed from reading and translating to grammar, and the children were questioned about the place of pronominal objects in a French sentence. Imagine a child in one of our popular schools knowing, or being asked, why we say *on me le rend*, but *on le lui rend*, and what is the rule on the subject!"

And the instruction is better in foreign schools, because the schools are better organized, and the teachers better trained, than those in England This brings us to the third general subject treated in the report, — the status, training, and pensioning of teachers.

To begin with, it may be safely said that teachers in Germany, France, and Switzerland, come from the same class of society as do teachers in England. For mention of all that is interesting and valuable in Mr. Arnold's report about the training of teachers, we have no space: but we give an abstract of the training in a typical instance, in Saxony.

The training-school course there lasts six years.

But a youth enters at the age of about 14, with the attainments required for passing an examination for the *entlassungs-zeugniss*, or certificate of discharge, from a *mittlere volksschule*, or popular school of the second grade, — a school which in Saxony must be organized in at least four classes, with a two-years' course for each. In the training-school, instruction and lodging are free; a small sum is paid for board, but a certain number of free boarders, 'gifted poor children,' are admitted. To the training-school is attached a practising school, organized as a *mittlere schule*, a middle school with four classes and 155 scholars. In this school the students see and learn the practice of teaching. Their own instruction they receive in small classes which may not have more than 25 scholars. Their hours in class may not exceed 36 a week, not counting the time given to music. The matters of instruction are religion, German language and literature, Latin, geography, history, natural science both descriptive and theoretical, arithmetic, geometry, pedagogy including psychology and logic, music, writing, drawing, and gymnastics. All of these matters are obligatory, but after the first year students of proved incapacity for music are no longer taught it. One-third of the teaching-staff of the training-school may be distinguished elementary teachers without university training, but this proportion is never to be exceeded. Each teacher, exclusive of the director, is bound to give 26 hours of teaching in the week. There are half-yearly examinations: the six years' term may be lengthened by one year for a student who is deemed not ripe for the leaving examination, which comes at the conclusion of the course. At the end of the course, when the student is about 20 years old, he undergoes the *schulamtskandidaten-prüfung*, or examination for office. The examination is both oral and in writing, and turns upon the work of the student's course in the training-school. The examining commission is composed of the Minister's commissary, a church commissary, and the whole staff of the training-college. The staff conduct the examination, the Minister's commissary presides and superintends. If the student passes, he receives his *reifezeugniss*, or certificate of ripeness, and is now qualified to serve as assistant in a public popular school, or as a private teacher where his work has not to go beyond the limits of popular school instruction. After two years of service as assistant, at the age of about 22, the young teacher returns to the training-school and presents himself for the *wahlfähigkeits-prüfung*, or examination for definitive posting. For this examination the commission is composed of the Minister's commissary, a church commissary, the director of the *seminar*, and either two of its upper teachers, or else other approved schoolmen named by the minister. This examination again is both written and oral. Mr. Arnold attended the oral part on two days, and heard and saw candidates examined in religion, music, German language and literature, the history of education, pedagogy, psychology, logic, and school law.

Training-schools for women are much less numerous in Germany than those for men, because women are much less used in teaching than men; the presumption being that women cannot teach satisfactorily certain matters of instruction in the upper classes of a popular school. The result is that in Prussia there are 115 training-schools for men, and 10 for women; in Saxony, 16 for men, 2 for women.

As to teachers' salaries and pensions, custom and law vary greatly. In Prussia in 1878 the average salary of a schoolmaster was £51 12s. per annum. In Berlin the average salary was £103 3s. In France the primary-school teachers must rise through a series of grades, to each of which a fixed salary is attached, varying from £36 to £48 for a man, and from £28 to £36 for a woman. If a school-mistress marries in Germany, she loses her situation. In all the countries visited by Mr. Arnold, teachers have retiring pensions, to establish which a deduction is made from their salary.

In respect to the fourth and last subject of inquiry, that as to compulsory attendance, Mr. Arnold quotes Saxon law as representative for all the countries visited by him. It is thus: "Every child has to attend, for eight years uninterruptedly, the common popular school in the school district where it resides; as a rule, from the completion of the sixth year of its age to the completion of its fourteenth. Children who by the end of their eighth school year do not attain due proficiency in the principal matters of instruction, that is to say, in religion, the German language, reading, writing, and arithmetic, have to attend school a year longer. The holidays for the popular schools in Saxony are fixed by law, and amount to 44 days in the year. In general the school meets for a minimum of three hours in the morning and of two hours in the afternoon. 'Parents and guardians are bound,' says the law, 'to keep children of school age to a regular attendance in school hours. As a general rule, only illness of the child, or serious illness in the child's family, is ground of excuse for its missing school.' Absences, with their causes, are entered daily by the teacher in the school registers. At the end of every month he hands a list of them to the managers, whose chairman has to bring, within

eight days after the end of the month, all punishable absences to the notice of the magistrate, if he has not previously brought the parents to their duty by an admonition, or had the child fetched to school by the school beadle, to whom a small fee is due from the parent for his trouble. If, however, the matter goes before the magistrate, this functionary inflicts a fine, which may go as high as 30s., and if the fine is not paid the penalty is changed to one of imprisonment. In Saxony the law prescribes that the number of scholars in a class shall not exceed 60, and that the number of scholars to one teacher shall not exceed 120. In schools with from 60 to 120 children, therefore, if the commune is not rich enough to do more in the way of providing teachers than the law actually requires, two classes are formed, and a reduction of school time takes place for each, in order to allow the one master to conduct them separately."

The rural population greatly prefer the half-day school, as it is called, because they thus have the older children at their disposal for half the day.

Mr. Arnold concludes his valuable paper with three comments: 1. The retention of school fees is not a very important matter; something can be said for and against it, but the weight is in favor of their retention; 2. Keep improving our schools and studying the systems of other countries; 3. Organize the secondary instruction not only in the interest of that instruction itself, but in the interest of popular instruction. This last remark applies with peculiar force to education in the United States.

Mr. Arnold's report is free from official dryness, and reads more like an essay than a government document.

THE EDUCATIONAL INSTITUTIONS OF PRUSSIA.

DESPITE all that has been said and written in this country during the past few years concerning the respective merits of the *gymnasium* and the *realschule*, there are very few educators who are able to describe accurately the character and relative status of the various educational institutions of Prussia. Therefore the following summary will be of value.

At the head of the education department in Prussia is the minister of education, whose duty it is to look after the administration of church matters as well. In each of the twelve provinces of Prussia is a *provinzial-schul-collegium*, having charge of the secondary schools. The elementary or primary schools are under the supervision of district boards, of which there are from two to five in each province. Every commune is compelled by law to build and support a number of elementary schools sufficient to provide primary instruction for all the children of the community. Where the means are not sufficient, a grant is allowed by the central government. The assistance of this sort given in the year 1885 amounted to nearly 21,500,000 marks. The inspection of these elementary schools is very thorough; and every teacher, no matter what his grade, must have passed a government examination. In the towns a rector is placed over the teachers; in the country a local school inspector, usually a clergyman, acts in the same capacity. These rectors and local inspectors are under the surveillance of district inspectors. Gradually laymen are superseding clergymen as incumbents of these district-inspectorships. The district inspectors report to the district boards, and these themselves not infrequently overlook the inspectors' work. In the eye of the law, all schools, no matter what they teach, that have no *berechtigung*, — a term used to express the privilege of preparing students for an examination the passing of which shall absolve from part of the full period of military service, — are elementary schools. All schools having *berechtigung* are classed as high schools, and are under the administration of the above-mentioned *provinzial-schul-collegien;* and in this way the high schools are very closely connected with the military system. After 1812, military service was made compulsory for every Prussian. The period of service in the standing army is three years; but those who have received a higher education have the privilege of serving one year only, if they apply to the authorities at the proper time. These are the so-called 'one-year volunteers' (*einjährige freiwilliger*). They receive no pay, and must keep themselves. In order to increase the intellectual standard of the army, and also to reduce expenses, the high schools have the right (*berechtigung*) to grant certificates for one-year volunteers.

These high schools are of various kinds, and include, 1°, the *gymnasien;* 2°, the *pro-gymnasien;* 3°, the *real-gymnasien* (formerly known as *real-schulen* of the first class); 4°, the *real-pro-gymnasien;* 5°, the *ober-realschulen;* 6°, the *realschulen;* 7°, the *higher-burgher schools*, and a few industrial and agricultural schools.

The *pro-gymnasium* is merely a *gymnasium* without the highest class, and the *real-pro-gymnasium* and the *realschule* stand in similar relation to the *real-gymnasium* and the *ober-realschule*. Those students who have satisfactorily attended for one year the second class of a *gymnasium*, *real-gymnasium*, or an *ober-realschule*, or the first class of a *pro-gymnasium*, a *real-pro-gymnasium*,