having, in all, 5,307 teachers and 127,138 students, were purely Arabic ; 93 schools, with 416 teachers and 8,961 pupils, were sustained by the various foreign colonies and religious communities ; the remainder being under governmental control. Statistics since 1875 are in great part not obtainable ; but it may be safely said, that, during the past twelve years, almost no change has taken place in the Arabic schools, while the other two classes have made great progress.

The native education is, for practical purposes, valueless, as it consists in mere memorizing, the other faculties being entirely neglected. of which the outcome is a mechanical acquaintance with a list of facts ; and even that is lost when the formulaic order is destroyed. At almost every street-corner in the cities, behind a fountain, is a native school, presided over by a sheikh, who instructs from ten to one hundred boys in committing the Koran to memory. In 1875 these schools were attended by 112,000 children. The instruction consists in repeating over and over again a single verse, until the pupil has learned it. The droning of the children is always accompanied with a swinging motion of the body, which is supposed to facilitate the mental effort.

The university course is much the same as that of the elementary schools, the Koran being the centre and end of all instruction. At Cairo is the University El Azhar, the most celebrated stronghold of Mohammedan doctrine. Its students number seven or eight thousand, and come from all Mohammedan countries. The studies are the memorizing of the Koran and of the commentaries, grammar, language, and law (but only so far as they are interwoven with the faith), and a smattering of Aristotelian philosophy. No time is devoted to mathematics ; history and geography are despised, and every foreign language is rigorously excluded as dangerous to the religion of the faithful. Students sometimes spend a number of years at the school, and at the end of the time are fitted for nothing more than to become caliphs or teachers of Arabic in foreign schools, at a salary of one or two pounds a month.

The schools managed by foreigners, especially those of the American and English missions, are European in organization, and are accomplishing some excellent results. In them much time is devoted to the study of English and French, a knowledge of which is of increasing value and importance in Egypt. These schools are attended by pupils of all nationalities and religions, and many of them are open to both sexes.

Government supervision of schools has existed for forty years ; but until lately the system was overrun with abuses, and barren of results. During the last two years a new *régime* has been entered upon, and the government schools now offer excellent advantages. They are of three classes,—primary, preparatory, and higher special schools. The primary schools, for children from eight to twelve years of age, throughout the four-years' course give instruction in the Koran, Arabic language and penmanship, arithmetic, and object-lessons of the kindergarten character. To these studies are added, after the first year, drawing and the geography of the Ottoman empire ; after the second year, French, English, geometry, and Egyptian history. Under the head of *civilité et éducation*, the pupils are taught the principles of politeness, cleanliness, moral habits, and so forth. The object-lessons give elementary instruction in physics, mechanics, and in various industries. The preparatory schools continue the same courses, adding, in the first year, physics, chemistry, natural history, algebra, and moral philosophy. The results obtained from these schools is encouraging, though the incompetence of Arab teachers to adopt modern methods is a great drawback. A ministerial decree of 1886 founded a normal school at Cairo "to train professors for the schools of Egypt, and to popularize good methods of instruction." In the normal school the course of three years is a continuance of those of the two lower grades of schools. with the addition of instruction in hygiene, psychology, pedagogy, and gymnastics. Small scholarships are offered to the most deserving students.

Among the other special courses are schools of medicine and law, two good schools of technology, and a school of languages. Much good work is being done, especially in the departments of modern languages, a knowledge of which is necessary to obtain a government position. Much remains to be done, but the energetic efforts of the government have fixed a standard of thoroughness in education which must soon result in a higher degree of intelligence and less of mechanical knowledge among the people. R. ARROWSMITH.

DOES EDUCATION DIMINISH INDUSTRY?

THE London *Spectator*, at once the most serious and dignified of papers, recently published an article of which the above is the title, which took for the subject of its comments the plan now being advocated in England for introducing workshops into the national schools. As the same plan is coming into prominence in this country, the *Spectator's* remarks will interest our readers. The writer in question says that many critics of the present system of primary instruction in England fear that it will breed up a generation with a

distaste, and even contempt, for manual labor. "The boys make less trusty workmen, and the girls worse cooks and housemaids and laundry-women." They "are less handy and more conceited than a former generation; have less liking for work, and more 'notions.'" As this language is used in advocating a specific project, it is perhaps too strong to be critical; but there is no doubt it expresses a feeling very general not only with 'the classes,' but with employers of labor of all degrees, and especially with employers in a small way. Moreover, behind all these complaints, some of which are justified, for the English have as yet been too busy making up leeway in the battle with utter ignorance to attend sufficiently to technical education, there rests an idea general enough and broad enough to deserve attention, — the idea that education is in itself inimical to continuous industry. A lad who expends some years in acquiring knowledge will not, it is fancied, betake himself willingly to the drudgery of manual labor, will avoid it, even if he loses by the avoidance, will crowd into the towns, and will go perilously near starvation in any easy employment, rather than work with his hands for fifty-four hours a week. The old method of training lads through apprenticeship to the necessary habit of endurance is breaking up, and with it the mechanical aptitude transmitted through generations which made the acquisition of the necessary knowledge almost unconscious. The working lad's mind has expanded, however little; and he will not, it is contended, work as he did. It is quite right that the subject should be stirred, for, if the theory of the objectors is true, the look-out for the world is but a poor one. Some of the most necessary tasks are disagreeable tasks. Somebody must cart the muck, dig the drains, unload the ships, stack the coals, carry the bricks, or the world will stop; and a resort to slave-labor would be criminal, or to excessive pay highly inconvenient or impossible. Machinery will not do every thing; will not, for instance, before making the bricks, excavate and damp the clay for filling the moulds. The human hand is still, in many departments of labor, the only conceivable as well as the only available machine. Education cannot be stopped; and if, therefore, education develops an aversion to hard work, humanity will stand in presence of a nearly insoluble problem. The chance even is serious, and attracts the more attention because there is some *prima-facie* evidence that the danger is real. One clever race, the Jew, which, though often uneducated, has just the kind of intellect that education by itself produces, steadily and successfully avoids hard manual labor. The Hebrews all over the earth will not plough, yet they contrive to live. Another, the Yankee, which is educated, dislikes work so much that it is said that its true destiny is to oversee workers, and that a Yankee sitting on the gate to drive other men to labor is worth five Yankees in a field. The drift towards the towns, which in all countries follows education, and is now covering Europe with huge centres of population, is believed to be in part caused by the hope of obtaining 'light' tasks; and the excessive increase of competitors for clerkships has been for years matter of constant observation. The clerks swarm in ever-increasing numbers, till their wages are driven down to starvation-point, and they declare themselves incapable of living under a competition which seems to have no bounds. There are trades, we believe, now, in which the clerks pay the employers. Some of the peoples of the continent are penetrated with the notion that instruction is fatal to willing labor. Mr. Hamerton, in his wise book on France, declares that the peasants think a son who has gone to school outside the village is lost to their work, and believes that in the main they are right, the lads who have been instructed revolting against the unbroken toil, the penury, the calculating thrift, essential to the peasant life. English dealers of the lower class say a lad must be taken young, or he will never succeed; and in one trade at least, that of a sailor, the rules in favor of beginning early are made immutable, the old hands knowing from experience that the life is intolerable to most of those who have tried any other.

On the other hand, no dislike of work, and especially no dislike of agricultural work, which is at once the roughest, the most continuous, and the worst paid, has appeared among two of the best-educated races. The Scotch, who have been taught for two hundred years, and are now far more thoroughly trained than the English national-school boys, show no disposition to avoid labor, but are, on the contrary, remarkable for persistent and fairly contented industry. There are thousands of Hugh Millers among them, though without his genius. The Prussian peasants, who are as educated as the English will be twenty years hence, work exceedingly hard, and in the country, where their holdings are their own, show none of the resentment at their fate which is no doubt manifested in the towns in the form of socialist aspirations. Gardeners, who all over Great Britain are the best instructed of manual laborers, work, more especially when working for themselves, with unusual diligence; and it is matter of constant observation that a laborer who happens by any accident to be a 'bit of a scholar' can be depended upon when work presses and every

man is required. The people of Rome, who can read and write, are far more diligent than the Neapolitans, who cannot; and the best workmen in Italy are those who have passed through the army, and so obtained what is practically an education. There seems no *a priori* reason why it should be otherwise. Attendance in the schools, which are well ventilated and warm, notoriously improves health, and there is no evidence whatever that it diminishes strength in the lower class any more than in the upper, who decidedly benefit by school-life. Nothing recognizable, in fact, happens to the child who is taught, except a break in his habit of steady endurance, which is met in the agricultural schools by the system of half-time, and does not appear to impair industry in factories or workshops. Cultivated lads — we mean lads 'well educated' in the conventional sense — work in scores in the founderies, learning the engineer's business through a most severe physical apprenticeship; and lads who emigrate without capital constantly work at hard tasks as well and as steadily as ploughmen; often, moreover, acknowledging a complete contentment with their toil. They feel monotony when there is monotony; but they do not resent hand-work any more than thousands of educated Canadian or New England farmers. On the whole, and subject to the evidence which can only be supplied by many more years of observation, we should say the truth was something of this kind. Education of the modern kind does not diminish industry, and does not, except for a very short period, break the habit of assiduity at work. Nor does it diminish the readiness to do manual labor in those who can do it, though it does diminish their number, — the 'delicate' lads, as their mothers call them, who, if left uneducated, would have gone on in the groove of their forefathers, taking by a species of natural selection to the lighter tasks. The remainder work as before, though probably not in the old, machine-like way. They spare themselves more, are more quick to avoid unnecessary toil, and no doubt, as a large proportion are and must be selfish men, in numberless instances they 'scamp' their work in ways the unintelligent never think of. That scamping, together with the eagerness for more money produced by new wants, and a certain indocility or independence, combine to produce an unfavorable impression as to industry which is not justified, or rather is due to other causes than aversion to work. The English must wait a little for full information, the boys who have passed through school not being thirty yet; but they do not despair of seeing plenty of Hugh Millers among their workmen; that is, men who are educated, yet have a definite love for and pride in exceedingly hard and monotonous manual toil. Miller set up stone walls for eight hours a day, — a real back-breaking occupation, — but he had learned more than most lads. It would be well if half-time could be made general, as many are nearly convinced it would increase learning, by allowing school-time to last longer, and would not discourage any scheme for keeping up the habit of manual labor, which will be the lot of the great majority while the world goes round, and which is, in fact, the permanent gymnasium of the human race; but there is little fear, even if the present system continues. The changes which may come will not be produced by laziness, but by a longing for larger wages, and the comfort they bring, which some industries, agricultural especially, in closely populated countries, may find it difficult to satisfy. It will be satisfied, however, in one way or another, for education opens wide the grand safety-valve, the power of wandering over earth in search of the opportunity of toil. For what we know, the human race may be destined some day to perish like mites on a cheese, through their own multiplication; but at present there is ample space for all of our race, who may for the next century, at the cost only of expatriation, have their twenty acres apiece to work on. Germans, Englishmen, Italians, are swarming out in thousands daily; but still there is no chance that they will perish for want of room, or be driven, like Chinamen, to that ceaseless work for bare existence under which other virtues than industry are apt to perish. Another Europe could live and prosper on the unpeopled river-basins of South America. Education helps to disperse mankind; and we certainly do not find that emigrants, who are rarely of the know-nothing class, are at all reluctant to undertake severe toil. Is there not in the whole discussion a defect caused by tradition, an impression that as brain-workers avoid hard labor, knowing well that they cannot do both up to their full power, those whose brains have been developed will never do it? Fortunately, or unfortunately, they will specially feel the great disciplining force of the world, 'the strong conscription of hunger,' which constrains us all. If all the world were Newtons, nobody would get a mouthful of bread without somebody facing all weathers to plough and sow and reap.

THE IMPERIAL UNIVERSITY OF JAPAN.

To those of us who are not intimately acquainted with the intellectual progress made by Japan in recent years, the calendar of the Imperial university for 1886 will come as a revelation.