SCIENCE.

FRIDAY, MAY 21, 1886.

COMMENT AND CRITICISM.

THOSE PEOPLE who have thought that Englishmen had already formed a society for every charitable purpose under the sun are now shown to have been mistaken. A society has just been organized for providing amusement for children. Of the eighty thousand children in London who leave the elementary schools every year, only four per cent have been willing to continue their education in the evening classes which have been provided by the education department. This unsatisfactory state of things has led to the formation of the Recreative evening schools association, whose object is to offer the children, who have been at work during the day, such an enticing evening programme that they will find it impossible to stay away. There are classes in musical drill, song, wood-carving, modelling, and drawing, with lessons in history, geography, and science, illustrated by the magic lantern. The idea is an excellent one. An education which 'children will cry for' is the ideal towards which education at all ages should approach as nearly as possible; and until that ideal is reached, the educational reformer will not find himself without an occupation. Sowing and reaping have not come any nearer in these days to being as great sources of enjoyment as foot-ball and tennis; but schools are very different from what they were when our fathers were young, and it is quite possible to hope that we shall learn in time how to give children a life of purely happy activity.

COMPLAINTS OF THE OVERCROWDING of the medical profession in the United States are constantly becoming more numerous, and there is certainly some ground for them. When the relatively greater increase in the number of graduates than of the population is taken into consideration, there is every reason to fear a far more severe struggle for existence as the lot of the average physician in the near future. Statistics give 3,675 as the number of medical students graduating in 1885, and the number will probably be increased the present year. Already the United States has a larger proportion of physicians to its population than any other country in the world, averaging one to less than six hundred. To keep up this proportion, taking into consideration the natural increase of population, an annual increment of but little more than two thousand annually would suffice for some years to come. It is evident that a large part of the yearly graduates must either drop out by the wayside, or struggle for a very moderate subsistence.

But for this actual and threatened overcrowding there is a remedy whose necessity and importance are fast being recognized; viz., stricter requirements on the part of the state and of the medical colleges. The requirements for graduation in many medical institutions have been disgracefully lax: a few months' attendance upon lectures, an oftentimes worthless certificate of study, an hour's superficial examination, and the candidate is admitted to the degree of doctor of medicine. But it is interesting to observe the appreciable effects of state legislation in this direction. No one factor has exercised so much influence in elevating the standard for medical graduation as the action of the Illinois state board of health. Illinois was a good place to begin, for no city in the world turns out more irregular practitioners than Chicago; and the board of health, by securing the passage of laws requiring the registration of physicians with evidence of fitness as shown by the possession of a diploma from some college of a given grade or by examination, has undoubtedly exerted wide-spread influence. The number of graduates in 1885 was less than in 1884; and nearly every college, ostensibly at least, now requires a preliminary examination; and not a few have raised their standard of requirements for graduation, and lessened the number of their graduates.

THE SUBJECT of industrial education in common schools has been often broached of late, and any able work upon it is sure to attract attention. There lies before us a pamphlet on this subject by H. H. Dinwiddie of the Agricultural and mechanical college of Texas; but we are compelled to say that it sheds no new light on the

question. The author thinks the times are out of joint; and he is grieved that so many men have difficulty in earning a living. "The benevolent heart," he says, "is tortured by the cruel deliberation of natural selection, with its inexorable logic." "Shall thousands of young men walk the streets of our cities with their high commencement-day hopes ever sinking, till despair and gnawing hunger throw over every noble aspiration, and drive them to lives of infamy or death by suicide?" The conclusion is, that, if the young were taught the methods of industry at school, they would afterwards have no trouble in earning their living. We expected, therefore, to find the author advocating the teaching of mechanical trades in the common schools, as many others have done. As a matter of fact, he doesn't advocate industrial training at all: he only advises that the methods of the various industries should be described to the students, just as objects in natural history are described, but without any manual practice by the students themselves. How this is to help them in earning a living, we are unable to see; but it is the sole outcome of Mr. Dinwiddie's pamphlet.

THE INTELLECTUAL MOVEMENT IN JAPAN.

Everybody in America who knows at all that there is such a country as Japan in the far east ought to be aware by this time that great social changes have for a past decade or two been going on among us. And numerous books and articles on Japan which have appeared within recent years in America, ought to have made tolerably clear of what nature these changes are. Thoughtful persons must often have wondered from afar whether these reforms are permanent, whether the spirit of progress does not lag sometimes, whether the people who seem to be rushing on with a headlong pace do not at times look back with longing on their past. If such persons had taken the trouble to look into the matter three or four years ago, they would have discovered that their surmises were correct. At that time we seemed to have turned round suddenly in the path which we had been so eagerly pursuing. People had started with the idea that all things European were good, and all things Japanese were bad. As they went on trying one sweeping change after another, they began to discover naturally that there were many blots in the European form of civilization, especially as imported into oriental countries, and that many things Japanese were not bad at all, but excellent, and even surpassed their European counterparts. This discovery, helped also, to some extent, by compliments, which foreign visitors are ever willing to pour on us, carried the people's feeling to the opposite extreme. They said to themselves, "We are not so very bad, after all. Why should we change? Let us have back our own familiar ways and things." The revival of old things became the order of the day. Chinese ethics began to be studied again with fervor, and the doctrines of Confucius and Mencius reigned supreme once more in the moral world. There was a revival of old Japanese literature and traditions. Women were to be brought up in the old-fashioned strait path: they were not to be allowed to catch hold of any new-fangled European ideas. *Utai* (a peculiar kind of singing) was heard again on all sides, and brought back old associations. Teachers of *cha no yu* (the art of making tea, including all the formalities attending its drinking, etc.) were in requirement on every hand, while masters of the Ogasawara school of etiquette bustled along with smiling countenances. The fashion was to give banquets in the old Japanese style, and restaurants *à la europienne* felt it to be very hard times. Young men were seen on the street, carrying about fencing-apparatus, — a sight not seen since the old feudal days. Schools of *jū jitsu* (a kind of wrestling) sprang up into existence by dozens. Various weapons of the *saumrai* which had been hung up in dark corners, again saw the light, and each claimed its own votaries. In short, all reforms seemed to be at an end for the present.

It must not be supposed, however, that all these carried us very far back. The backbone of old Japan — feudalism — had been shattered beyond all hopes of recovery; and, without that, things could not be made to work as in former days, however much minor matters might be patched up. Neither did people care to go back quite so far. Those who looked beneath the surface could easily see that this period of reaction could offer but a temporary check in the way of reforms, being comparable simply to the rest-stages observable during earlier developmental phases of many an animal. In fact, it proved to be of a very short duration. And who shall regret that there was just at that time partial retracing of the path we had been following, since it will prove to be the means of preserving many harmless arts and accomplishments peculiar to Japan, which might otherwise have been lost forever?

At the present time we may be said to be fairly in the midst of the second period of activity. We seem to be just as eager as ever to pursue the course of reforms; perhaps a little more so, for