

SCIENCE.

FRIDAY, OCTOBER 8, 1886.

COMMENT AND CRITICISM.

TWENTY-NINE MEN, at an expense of ninety dollars per diem, are employed in Chicago by the U.S. government in quarantining cow-stables which are infected with contagious pleuro-pneumonia. Our federal authorities are wonderfully paternal when they desire to be, and the U. S. laws are at times remarkably flexible. Singularly enough, however, the activity is usually displayed in a direction which is suggestive of a desire to propitiate the farming interests. Thus a tax is put upon oleomargarine, and local cow-stables, from which disease might spread to other localities, are quarantined at the national expense; but when the question of restricting the importation of possibly infected rags is broached, we are told that the matter is one with which the general government cannot interfere, and that it must be left to the local authorities. We are far from deprecating governmental interference in this matter of pleuro-pneumonia, but we would like to see the same careful supervision exercised in all matters which affect the public health, as much when they concern the urban as when they affect the rural population.

THE PROBLEM of how to deal with the financial difficulties in the way of obtaining any very great number of graduate students at our colleges and universities, in spite of the great educational advantages offered, is one that has given and is giving considerable trouble. When a young man takes his bachelor's degree at twenty or twenty-one, he is quick to see the advantages of a post-graduate course of special study as a broader and deeper preparation for his professional career, but he hesitates to incur the necessary expense. Not only must he be a non-producer during the extended period of study, but his expenses, including usually a considerable tuition fee, are heavy. When this aspect of the question is considered and weighed against the inducements to follow some career that will provide self-support immediately, we cannot wonder that the financial consideration is the determining one in the minds of many young men. President Barnard of Columbia sees this obstacle

to the increase of students in our university courses, and in his report for the past academic year, which has just been published, earnestly recommends that the tuition-fee now required of graduate students be abolished. This is a step in the right direction, and we trust that it will be taken by Columbia's trustees, and followed by other institutions. A more efficient and advantageous remedy is the foundation of numerous graduate scholarships and fellowships, but to enter upon this on any considerable scale requires more spare funds than more than one or two of our educational institutions can boast of. It is here that private munificence should step in to aid educational and scientific advance.

THE PUBLISHED REPORTS from the English eclipse expedition to the island of Grenada show, in general, a very gratifying amount of success; and, although thus far the photographs of the corona have failed to establish Dr. Huggin's method upon the firm footing we had hoped for, a fuller account of the circumstances may throw some light upon the matter. We shall also await with peculiar interest the results of Mr. Pickering's work. Photometric observations, and photographs of the corona and of its spectrum, were obtained by the different branches of the English party, and also good spectra of the prominences, showing the bright lines of highly incandescent vapors. "In this respect the result resembles that obtained in the two previous eclipses, though it was thought possible that this year, being one when sun-spots are tending to a minimum, would be marked by the more continuous spectrum that bespeaks lower temperature." The bright lines of the prominences were displaced in such a direction as to prove that there was a downrush of gas towards the sun. The observations of the corona also confirm those of the last two eclipses.

THE LACK OF INTEREST which is manifested by public bodies in matters which pertain to the improvement of the public health has never been better illustrated than by the common council of Brooklyn in their treatment of certain proposed amendments to the ordinances of that city relating to tenement-houses. While New York has,

by virtue of recently enacted laws, made great strides in the matter of tenement-house reform, Brooklyn stands where she did in 1867, when the Metropolitan board of health existed. In May, 1885, more than sixteen months ago, the health commissioner forwarded to the common council a number of amendments to the old law, which the experience of nearly twenty years had proved to be necessary for the welfare of the poor. These amendments required the construction of all new tenement-houses to be in accordance with the requirements of the health department as to light, ventilation, plumbing, and drainage, and prohibited the building of such a house so as to occupy more than sixty-five per cent of the lot on which it stands. Other suggested changes were of equal importance and value. Before the amended ordinances can have validity, they must be approved by the common council. Thus far, no sign has been given that this body has the least intention of acting upon them in any way, and it is more than probable that they have been consigned to a pigeon-hole, from which they will never be removed.

THE ATTENTION OF PHYSICIANS and other philanthropists has of late been more directed to the care of the inmates of public institutions than ever before, and as a result many cases of neglect and ill treatment have come to light which would otherwise have been soon forgotten by every one cognizant of the facts; excepting, perhaps, the poor victims, who, being without friends or influence, could not bring their wrongs to the notice of the authorities. In view of the possibilities, to say the least, of what might happen in institutions, the friends of reform succeeded in passing through the last legislature of New York a bill which is entitled "An act for the better preservation of the health of children in institutions." It went into effect Oct. 1 of this year. The provisions of this law apply to all institutions which have been founded for the harboring of children. The act, which is known as chapter 633, requires every institution of this kind to have attached to the service a regular physician of good standing. His duties consist in examining every child that applies for admission, and issuing a certificate of its freedom from contagious disease or not, as the case may be. The certificate must also state the mental and physical condition of the child. He is also held responsible for the sanitary condition of the building, and must report the same to the

officials of the institution and to the board of health. It is made the duty of this latter body to investigate at once any complaints made to it, and to remedy in a prompt manner the defects found. If any of the children become affected with any of the contagious diseases, including those of the eye and skin, they must not be permitted to remain unless they can be properly isolated and taken care of without prejudice to the other children. The law also requires that special attention be paid to the ventilation of the buildings. A refusal to comply with the provisions of the law constitutes a misdemeanor. We had occasion, in a recent issue of *Science*, to speak of the large number of children in public institutions who suffered from contagious ophthalmia, — a disease which, if neglected, is liable to destroy the eyesight of those attacked. The law to which we have just referred will do much to reduce this evil, and indeed, if completely fulfilled, to eradicate it entirely from the places where for so long a time it has found its victims by the score.

M. EUGENE STROPENO, the writer who has an article in a late issue of the *Revue internationale de l'enseignement* on higher education in the United States, has very carefully digested for his readers the report of the commissioner of education for 1883-84. M. Stropeno gives no evidence, in his article, of any personal acquaintance with our educational system, and therefore has nothing critical to advance. He merely gives an exposition of Commissioner Eaton's report, and the elaborate tables of statistics accompanying it. In touching on the Harvard system of electives, M. Stropeno quotes the criticisms of Presidents Porter and McCosh, and is inclined to side with them in the view they take of President Eliot's policy. Whatever the writer's views, it is refreshing to see so full and painstaking an exposition of what our colleges and professional schools are, and are doing for the benefit of foreign readers. And among no people is the new pedagogical movement more active than among the French. In the following number of the same review, there is an appreciative account of Fichte's pedagogical theory and influence, by Professor Hallberg of Toulouse. We can heartily recommend this short sketch to those educators who would know what Fichte taught and did. It must be borne in mind that he was the man who showed Pestalozzi the latter's essential agreement with Kant, and it was he

who predicted that from Pestalozzi's institute would come the regeneration of the German nation. Fichte's own *Reden an die deutsche nation* is an educational classic, and his influence in Germany is perceptible to this day. What Professor Hallberg has to say is far too brief to be exhaustive, but it is very instructive so far as it goes.

THE MODERN MUSEUM.

THE Prince of Wales, in a letter to the lord-mayor of London under date of Sept. 13, proposes the formation of a permanent museum, to represent the arts, the manufactures, and the commerce of the queen's colonial and Indian empire, as a fitting memorial of the queen's jubilee. In the London *Spectator* of Sept. 25 is an article upon the Prince of Wales's idea, which brings out so prominently the advantages of the modern museum, that we quote from it extensively below. The *Spectator* refers to the difficulty of treating as a whole the English colonies and the English dependencies; but, as diversity is so singular a character of the empire, it ought certainly to be reflected in any such institute. The Prince of Wales points out especially the advantage of such an institution in stimulating and efficiently directing emigration by giving to those frequenting it a more correct picture of the lands to which they might have thought of going. Again, it is almost needless to point out the commercial advantages of a permanent museum of the products of the empire, for it would serve the purpose of advertising, which is an essential of mercantile progress; but, as said, the prince is probably right in putting emigration first of all in his list of benefits.

Emigration, wisely undertaken, is an unmingled blessing to the working-classes. It gives the man who emigrates the opportunity which no man can ever be quite content till he has had, whether he fails or not, — the opportunity of making a fortune, and of emerging from the dullness of the ranks of life. It gives to the workman who stays that relief from the pressure of competition which he so much needs. With these results before them, people of the upper class constantly wonder how it is the workingmen are not more eager about emigration, and in general can only be induced to adopt it as a final resort from misery. They argue, "In our rank of life, the younger sons all emigrate," and call to mind the not unfrequent cases where, out of a family of six, four will have left England. "We do it easily enough," they say; "why, then, won't the workingmen, where the pressure is so much greater and the in-

ducements comparatively so much higher?" The answer, of course, rests in the fact that the one class of men know geography, and the other do not. The young man who determines to go to Florida knows where Florida is, and, before he chooses it, has been able to picture to himself, by the information he has the means of getting easily, the kind of life he will have to lead. The notion has no nameless, shapeless, unknowable terrors for him. He has seen plenty of Americans, and knows that they are like other men, and that, but for the banishment from England, he will be happy enough. So, too, with the woman of education who accompanies her husband when he emigrates: she has not that physical dread of an awful existence, with no relation to previous experiences of life, which is so often to be witnessed among the women of the poor. With the artisan, or at any rate with the laborer and his wife, it is just the reverse. They have not the means of obtaining knowledge by which to compare the various lands that invite emigration. They are quite unable to acquaint themselves, or to grow familiar, with the idea of the new social and material conditions that await them. Thus their ignorance of the colonies allows the wildest notions of misery and discomfort to take possession of them, — notions that practically forbid them emigrating, except in case of severe pecuniary pressure. They will seldom emigrate to better themselves; only do it, in fact, to prevent themselves falling lower. An institute where these spectres can be laid will be of immense use in increasing timely emigration, — emigration of men who are not driven by despair. If the London artisan can see good photographs of the Australian and Canadian towns and settlements, and can notice around him the rich produce of the colonies (the sugar, the wool, the wood, the corn, the wine, the oil); if he can learn that men live there as they live here, that there are public-houses and Sunday-schools, and that he will not be daily expected to encounter naked savages; and if at the same time he can get intelligent advice and direction from competent instructors on the spot, — he will soon find his fears and dismal forebodings of colonial wretchedness die away.

But if the working-men are really to make use of the institute, for this or for the other purpose of political education, it will be utterly useless to place it in the West End. Working-men will not and can not travel for miles, at a considerable expense of money and comfort, to see a museum. If it is placed in a convenient situation, they will flock to it as eagerly as they do to Mr. Barnett's Easter exhibitions of pictures. If the institute is to do the good work it ought to do, and can do, it must,