

SCIENCE

FRIDAY, MAY 4, 1888.

THE SUGGESTIONS which Dr. Gouverneur M. Smith makes, in an article contributed by him to the *New York Medical Record*, an abstract of which we give in this number of *Science*, are most excellent, and, so far as we are able to judge, are also entirely practical. The two things which are especially lacking in the lives of those who live in tenement-houses are fresh air and sunshine. This is especially true of the invalids, so many of whom are found among the poor and unfortunate of all large cities. While those of this class who have health and strength may find recreation and an opportunity to expand their lungs in the parks, the sickly ones must remain, often year after year, in the confined, and not infrequently dark bed-chambers of a thickly populated tenement-house. Many such could be transported to the roofs, while they could not be taken to the public pleasure-grounds; and if these were so constructed as to admit sunlight and fresh air, and at the same time to exclude the wind and the rain, and were made attractive by the presence of a few flowering plants, the results could not but be beneficial, and repay a thousand-fold the money expended in making the necessary alterations. There is at the present time one serious impediment to a general adoption of such a plan. The sewer-system of New York, and of other cities as well, contemplates the extension of soil and waste pipes of all dwellings to the roof, so that the foul air, produced by the decomposition of the filth which they carry, may find a ready escape into the outer air, and not obtain an entrance into the dwelling-rooms. In many cases these pipes are trapped from the street-sewer, in many others they are not; and in either case the gases which escape at the roof are offensive, and undoubtedly detrimental to health. The writer recalls a case of continued fever, which was contracted by a young man, who, unable to leave the city during the summer, was in the habit of spending his evenings on the roof of his dwelling. The soil-pipe, untrapped from the sewer, extended above the roof, and the odors which escaped therefrom were often so offensive that he could not remain on the roof with comfort. In a thickly settled tenement district this evil would be greatly magnified. In the elaboration of any plan, therefore, for the arrangement of the roofs of our city houses so that they may be utilized as pleasure and health resorts, this important element of ill health must not be overlooked. We shall be glad to open the columns of *Science* to the discussion of this subject, and to reproduce any feasible designs which architects or others may devise for the carrying-out of the plan suggested by Dr. Smith.

THE FRENCH EDUCATIONAL WORLD is discussing with interest a recent innovation at the Collège de France, to which we have already referred in *Science*. That institution, ranking as the representative of the higher education, and having connected with it some of France's most eminent scholars, has converted a chair at the college into a chair of 'experimental and comparative psychology.' This is a very high tribute to the new psychology, and this illustrious example will, it is hoped, induce other institutions to take a similar step. M. Paul Janet contributes an extensive article in the *Revue de Deux Mondes*, outlining the interests which the new professorship is to represent, and defending it against certain misrepresentations to which it has been laid open. The occupant of the new professorship is Th. Ribot, whose name is well known to English readers, and all of whose works have been translated and edi-

tions published in America. His three monographs—upon the 'Diseases of Memory,' the 'Diseases of the Will,' and the 'Diseases of Personality'—are most admirable introductions into the studies with which they are concerned. His work upon the psychological aspects of heredity is of standard value, and his compilations of the systems of English psychologists and of German psychologists are hardly less serviceable. M. Ribot will in his new sphere be able to still further widen his useful influence by imparting to young men the same enthusiasm and liberality of thought which he has shown in his works, and nowhere more than in his able editorship of the *Revue Philosophique*, whose founder he is. The opening address of his course Professor Ribot (*Revue Scientifique*, April 11, 1888) devoted to a brief survey of psychological work in Europe and America. He finds everywhere encouraging examples of good work by scientific methods, and draws a very hopeful picture of the strides that this young science seems destined to make in the near future. The step that the Collège de France has thus taken is an indication of the *raison d'être* which scientific psychology has already proved for itself; and a similar reform is doubtless to take place elsewhere. It is gratifying to add that the educational institutions of this country are beginning to realize the propriety of such a step, and of having a representative of the new psychology in their faculties.

NO DEPARTMENT OF PHYSICAL RESEARCH is more fascinating to the biological investigator, or more transcendently important to the human race, than that one of comparatively recent development, the study of micro-organisms and of their agency in producing disease. It is to be regretted that Dr. Sternberg, who was employed by the government to make the inquiry in regard to the existence of a yellow-fever germ, and the feasibility of securing protection from that dread disease by inoculation, was not permitted to pursue his investigations to a more satisfactory conclusion. His report, as it is, will be a very important one, although it will afford no encouragement to those who are striving to account for every known disease by the germ theory, and to look to inoculation as a preventive.

A VERY INTERESTING FEATURE of the Washington experiment in manual training in the public schools, a brief account of which is given elsewhere in this issue of *Science*, is the great amount accomplished with a small amount of money. The sum available for the current school-year, aside from the salaries of teachers, was only five thousand dollars. With this, four carpentry-shops, two schools of cookery, and one turning, moulding, and forging shop, have been fitted up, the last with a steam-engine, shafting, etc.; and all the material used in them, and in the teaching of sewing to the girls in all the grammar grades, have to be paid for. The number of pupils, boys and girls, enrolled in the two higher grades of the grammar-schools in which it has been attempted to introduce manual training, and in the High School, was last year 3,807, and it is probably a little larger this year. The number of the pupils comprising the manual-training classes is 1,243. It is true that the most of these are receiving only one-half as much instruction as is desirable, and that a much larger amount of material could be used to advantage; but the fact that Superintendent Powell has accomplished so much with so small a sum proves that the expense of making an experiment in manual training in connection with the public schools, at which so many cities have hesitated, need not deter them.