

were found sick; measles, diphtheria, scarlet-fever, scrofula, and syphilis being the prevailing diseases. In nearly every instance the sick children were not only without proper medical attendance, but were living in places rendering complete recovery to the majority almost impossible. To give the sick children the benefit of fresh air, 6,312 free tickets were distributed for the excursions of the St. John's Guild Floating Hospital, where they and their parents were given a sufficient quantity of good foods. Twenty-four very sick children were sent to a hospital on Staten Island, where they remained for a week or two. In the final report of one of these physicians, he gave it as his opinion that the great death-rate among children under five years of age was attributable to over-crowding, filth, filthy habits, and bad drainage. He says, "Upon a hot summer's day to enter a room in a rear house, whose walls were cracked and besmeared with refuse, and perhaps dead vermin, occupied by a family of six or eight, harboring three or four boarders, upon the floor of which might be seen soiled linen, particles of food, and children, with a mother standing about the red-hot stove, washing and cooking, and perhaps attending to a sick child, lying in a dark bed-room, suffering from cholera-infantum, diphtheria, or scarlet or typhoid fever, was a spectacle frequently indeed brought to my attention." Another physician observed a great number of cases of diseases of the eye and ear, especially among those subjected to bad hygienic conditions. All the houses, without exception, were overcrowded and in a filthy condition, the rear houses being dark and badly ventilated. In one apartment having three rooms, from twelve to fourteen persons were often found; in some of these, father, mother, and grown-up sons and daughters all sleeping in one room, without any regard for delicacy or decency. A third member of this visiting corps describes the small yard of a rear tenement, containing an open cesspool, around which groups of sickly children were playing; these children being stunted in growth, pale, and, as a rule, having some form of ophthalmia. Of thirty children found in one of these small yards, only one could be said to be in vigorous health.

CAUSE OF TYPHOID-FEVER.—Investigations made by Beumer, Peiper, and others seem to have demonstrated that a ptomaine produced by the typhoid-bacilli when injected into animals may cause a disease resembling typhoid-fever. This ptomaine was discovered by Brieger, and named by him 'typhotoxine.' It is this substance, and not the germ directly, which is the cause of typhoid-fever in man, according to the most recent theory. The *London Medical Record*, in commenting on these researches, draws the following conclusions from them: "1. The symptoms and alterations observed in animals in which cultures of typhoid-bacilli had been injected are due to the toxic substances secreted by these bacilli. 2. The noxious germs, which secrete the typhotoxine, are reproduced in the intestinal canal. From these the ptomaine is taken up by the circulation, and carried to all the organs liable to be affected by this poison. 3. It is most probable that the same takes place in abdominal typhoid-fever of man. 4. A first infection induces immunity against the injurious effect of a later infection, even of large quantities of the toxic substance. 5. Further experiments and careful clinical investigations are necessary in order to establish a scientific support of the theory of immunity from infections of sterilized cultures containing not more than a determined quantity of typhotoxine. 6. In case this theory be an ascertained fact, the reproduction of the same immunity in man would be justified by commencing with very minute doses of typhotoxine, which would be gradually increased according to the results obtained."

A TEST FOR THE CHOLERA-BACILLUS.—Bujwid, in the *Zeitschrift für Hygiene*, describes a chemical test for the detection of the presence of the cholera-bacillus. He adds to a bouillon-culture of the bacillus from five to ten per cent of ordinary muriatic acid. In a few minutes a rose-violet color appears, which increases in intensity for half an hour. It remains unchanged for several days. This re-action occurs in bouillon-cultures ten to twelve hours old, and in gelatine-cultures after twenty-four hours. The coloring is increased by heat. It is claimed by Bujwid that this color is characteristic of the bacillus of Asiatic cholera, and distinguishes it from all others.

BOOK-REVIEWS.

The Elements of Political Economy, with Some Applications to Questions of the Day. By J. LAURENCE LAUGHLIN. New York, Appleton. 12°.

THE author of this work is impressed, as many other people are, with the importance of a more general training in economic science. Almost all of the questions with which our national government will soon have to deal are of an economic character, or involve economic considerations; while the conflict between labor and capital shows the importance of economic science in purely industrial affairs. To supply the needed information, it will be necessary to introduce the study of economics into our high schools and academies, and for this purpose good elementary treatises are necessary. Such treatises, however, are by no means numerous; and hence a work like Professor Laughlin's is to be welcomed. It is intended as an introductory work merely, and for the use of schools: "The main topics are treated, the fundamental principles are emphasized, but no effort is made to produce a detailed and exhaustive treatise" (p. vii.). The author's object, we think, has been successfully accomplished. The adaptability of the work to school use must, of course, be tested by actual practice; but it certainly has many of the qualities that such a work ought to have. The division and arrangement of topics are excellent, and the style clear; while the choice of matter is appropriate to an elementary treatise. The work is divided into two parts, the first demonstrating the principles of the science, the second applying them to the economic problems of the day. The doctrines and method of the work are those of the standard English school. Indeed, that school seems to have been followed a little too strictly; for, though its method is the leading and most productive one, yet the comparative and historical methods have their uses.

Professor Laughlin gives the usual definitions of 'wealth' and 'value,' and the usual account of the agents of production. He lays special stress, however, on the important function in contemporary industry of the skilful industrial manager. In treating of exchange, he follows Mill in the main, while adopting something from Cairnes on the subjects of supply and demand, and foreign trade. On the subject of distribution he holds the views that have prevailed generally among English writers, with the fiction of the wages fund left out. He argues that "the proportional shares of labor and capital out of the product will depend upon the relative scarcity and abundance of labor and capital" (p. 186); while "the productiveness of a country's industries determines whether the general level of wages shall be high or low" (p. 198). Interest, or the share of the capitalist, he considers a reward for abstinence merely, while the profit of the industrial manager is treated as the wages of a superior kind of labor.

In the second or practical part of the work, Professor Laughlin seeks to apply economic principles to such questions as socialism, taxation, free trade, and others, while recognizing that such questions cannot be settled by economic considerations alone. His remarks on the subjects of money and taxation, if generally read, can hardly fail to be useful. He condemns socialism, as all economists do, and holds that the prosperity and advancement of the working-classes depend on their own mental and moral improvement. He favors individualism, and deprecates undue interference by the State, holding that "it is high time that the weak and narrow-minded recourse to the State for legislation on every conceivable subject should be abandoned for a greater growth of self-help and a more independent and self-confident manhood" (p. 349). The book may be commended not only for schools, but also for private students, and we should be glad to see it extensively read by the working-people.

Animal Life in the Sea and on the Land. By SARAH COOPER. New York, Harper. 12°.

IT is impossible to give, in large type, in the space of about three hundred double-leaded, duodecimo pages, a satisfactory account of several hundred species of animals, from the lowest to the highest. Yet this is what the author attempts in this volume; and she throws in, besides, a chapter on coral-reefs, and many pages about fossils. The result is a curious cross between a grammar-school text-book