

connected with and in the immediate vicinity of a great medical school and of great hospitals. As was said before, one of the essential foundations of scientific knowledge of the causes of disease is minute and accurate diagnosis and pathology, and we are therefore in constant need of the best knowledge of leaders in these branches of medical science. The hospital is filled with specimens of the results of such causes, acting on the human body—from one point of view, Nature's experiments with poisons cunningly elaborated in the tissues of the body, or with viruses coming from without, upon blood and bone, muscle and brain. Much of the work of this new department will be connected with the results of these experiments.

The laboratory is also fortunate in being located in a great manufacturing city, where the effects of different occupations, of trades dangerous or offensive by reason of dusts, or of vapors, or of waste products, can be readily observed and the materials for study obtained. There is an immense field for a sanitary clinic here, and in the habitations, the streets, the water-supply, and the sewers of Philadelphia.

These clinics, however, cannot, as a rule, be reported for the press, either lay or medical, since to do so would, to a great extent, defeat their object; the great majority of the sick in houses and manufactories must be considered as strictly private patients, and their affairs held as confidential. In the case of public institutions, or of public nuisances, a somewhat different rule may apply.

Practical hygiene is to play an important part in municipal government, to secure the best form of which is now one of the most urgent questions of the day. Many of the questions to be decided by city officials as to water-supplies, sewage disposal, etc., require expert knowledge to answer.

Of course, the subject of hygiene and the work of a university department devoted to the increase and diffusion of knowledge in sanitary science extends far beyond the experiments and demonstrations for which this laboratory is specifically fitted. Bacteriology, chemistry, pathology, physics, and medical and vital statistics give us the foundations, but sociology and jurisprudence must also be studied in their relation to sanitation to obtain the best results.

It is in and to the home and to the workshop that these results are to be applied, and he who aspires to be his brother's keeper must know how his brother lives.

Labor questions, education questions, marine and inter-state commerce questions, and methods of municipal finance and government are all intimately connected with matters of personal and public hygiene, and economic consequences, as well as health, must be considered in the advice and regulations of the sanitarian.

I count it as fortunate, therefore, that there is a law school and a school of finance and political economy in this university to which the department of hygiene can look for advice and friendly criticism when these are needed, as they surely will be.

And now a very few words as to the needs of the laboratory. First of all, it needs men—men thirsting for knowledge, and fitted by previous training and education to come here and acquire that knowledge, not merely the knowledge that exists in books or that the teachers in this laboratory may possess, but that which is yet unknown, the weight of that which no one has yet put in the balance—the shape, and size, and powers for good or evil of things whose existence has not yet been demonstrated—men who will patiently and earnestly seek the answers to the questions, "What?" "When?" and "How?" in the hope that thus they may by and by obtain some light upon the more difficult problems of "Whence?" and "Whither?" even if they may never be able to answer "Why?"

There are not many such young men whose tastes will be in the direction of these lines of research, and of these there will be very few who will have the means to support themselves while engaged in the work. We need, therefore, the means to help them in the shape of half a dozen fellowships, paying about five hundred dollars a year each, and granted only to those who give satisfactory evidence of capacity and zeal.

The second thing we want is a demand on the part of the public for really skilled, well-trained sanitary investigators and officials such as we hope to send out from here; we want a market for our product; we want the legislators of this and other states, and of our rapidly growing municipalities, to be educated to appreciate