

Harvard-Tech Cooperation at Last

The "History-Making" School of Public Health Soon to Open

By David Cazneau

FOR the first time the seals of the corporations of Harvard College and the Massachusetts Institute of Technology will make an official appearance together on the catalogue of the School for Health Officer which is to be published next week. After years of futile discussion of cooperation between the two institutions, the much desired union of resources for a common educational end has reached accomplished fact in what is practically a graduate school without a parallel in this country, and which is of all the greater significance in that it represents one of the newest and most important developments in public health work.

The School will open on Monday, Sept. 29, and its first academic year will end on June 11, 1914, when the Certificate of Public Health, which is the form of the degree to be conferred, will be given to students who have completed a satisfactory one-year course. The degree differs from the Dr. P. H., which is the degree granted by the Harvard Medical School, and from the Diploma of Public Health given for similar work in England to health officers who are known both in England and in Canada as M. O. H.'s—"Medical Health Officer." The new Certificate is to be issued by Harvard and Technology, jointly, and will be signed by the authorities of both institutions.

"History-making" is the term applied to the new school by those who know the field of its work, for several reasons. Not the least of these reasons is the fact of cooperation between Technology and Harvard. Aside from the economy of effort involved in this cooperation, and the use of existing educational facilities to avoid wasteful duplication of work and machinery, the Certificate gains much by having behind it the great prestige of both institutions in somewhat different fields.

The Place of the Engineer

This fact of cooperation leads to the second feature in which the new school is notable and that is the harmonizing of the points of view of the sanitary engineer and of the purely medical health officer. Of course, all public health work is primarily medical work, and must rest on a foundation of medical science. But the application of medical knowledge to the concrete tasks of protecting the public

health calls for a good deal of work from the engineer, who must design and build reservoirs, aqueducts, sewerage systems, sewage purification plants and water filtration plants, etc. in order to make certain large parts of medical knowledge effective for the public benefit. The operation of public health engineering works calls for the knowledge of both the doctor and the engineer. The engineer without a large amount of medical knowledge cannot always manage the operations of a sanitary district, for without that medical knowledge he cannot perceive and rightly interpret signs of present or impending outbreaks of disease that would be comparatively plain to the doctor. On the other hand, the purely medical health officer must usually call on an engineer to run and repair his sanitary works, and such a purely medical officer is likely to go considerably astray in his ideas of what it is practicable to accomplish with engineering works under given financial and physical conditions. Each side has had its appropriate stone to heave at the other fellow, and in consequence harmony of feeling between medical and engineering sanitarians has not been conspicuously intense. The new school will show every student the interdependence of the medical and engineering sides, and the necessity of adding to these two sides a considerable further equipment not always possessed by either, especially adequate training in the collecting and interpretation of vital statistics.

The Health District Idea

Most important, perhaps, is the way in which the new school will make possible the extension of the new idea of the division of the country into small sanitary districts, each under the administrative supervision of a man trained in every side of the complex work that must come under such supervision. This district idea seems to be the coming scheme for providing the whole country with adequate public health supervision and control. So far, the only State to put it into operation is New York, which by a law passed last winter authorized the division of the State outside of New York city into twenty sanitary districts, each of these to be under the supervision of a sanitary supervisor, who is to be a physician. When the bill was in the Legislature the text provided that the sanitary supervisors should be men specially trained for such work, as the new school proposes to train its students; but it soon became apparent that there were not enough such men to fill the places proposed for them. The requisition was therefore changed to "physicians," so as to avoid antagonisms between local health officers, who were almost wholly doctors, and supervisors whom the doctors would look at askance as being only engineers.

The duties of the New York sanitary supervisors suggest pretty well the kind of

equipment that will be provided for the students in the new school. The supervisors are required to keep themselves informed of sanitary conditions throughout their districts; aid each local health officer within the district in the performance of his duties, especially in epidemics of disease; assist each local health officer in making an annual survey of the local territory of such officer; call together the local officers of the district for occasional conferences; study the causes of excessive mortality from any disease in the district; promote efficient registration of births and deaths; try to secure the cooperation of organizations of physicians in improving the public health; and promote the information of the public in all matters pertaining to the public health. This is not all, by the way, but it shows that neither the engineer nor the doctor, nor the intelligent layman, each by himself, is anywhere near qualified to supervise a sanitary district.

Helping the Small Town

The district form of organizing State public health work is considered by the best authorities the system of the future, for in no other way does it seem possible so well to keep watch on the whole territory of a State, and especially to prevent the developing of rural centres of disease and contamination which nearly always menace distant cities through their water supplies. It provides a way out for the small town which cannot afford adequate service of its own very much as our Massachusetts system of school superintendents for groups of towns serves them in the matter of school supervision and improvement.

"It is recognized," says the forthcoming announcement, "that the requirements for public health service are broad and complicated, and that the country needs leaders in every community fitted to guide and instruct the people in the art of hygienic living; qualified to direct the expenditure of time, money and energy in public health work into fruitful channels; and able to initiate plans to meet novel conditions as they arise. It is the object of the School for Health Officers to provide the scientific groundwork of sanitary knowledge which underlies an efficient health administration. The opportunities for the practical study of the arts of public sanitation offered to students of the school are exceptional. The city of Boston is an important port of entry for foreign and domestic shipping and for immigrants, with thirty or more municipalities in its immediate vicinity.

A Picked Body of Students

Requirements for admission to the School for Health Officers show the intention of the two institutions to pick only men of considerable technical preparation of a high grade.

"While the medical degree," says the announcement, "is not a prerequisite for the

certificate of public health, candidates are advised to obtain the medical degree before specializing in public health work. Experience teaches that preferment for position and advancement to the higher positions come more readily to those who have a medical degree."

Graduates in medicine of Harvard University and other recognized medical schools will be admitted to the School for Health Officers upon their records and registered as candidates for the Certificate of Public Health. Bachelors of Science in biology and public health of the Massachusetts Institute of Technology and other recognized institutions will likewise be admitted and registered.

Masters of civil engineering of Harvard University who have specialized in sanitary engineering and bachelors of science in sanitary engineering of the Massachusetts Institute of Technology and other recognized institutions who lack the necessary preparation in medical and other sciences will likewise be admitted to the school upon their records, but will be required to spend at least one year in preparation before being accepted as candidates for the Certificate of Public Health.

Other graduates of colleges or technical or scientific schools will be admitted to the school without examination provided their collegiate courses have included adequate instruction in physics, chemistry, biology, French and German; but they will be required to spend two or more years in preparation before being accepted as candidates for the Certificate of Public Health. Applications for admission will be considered from those who have spent at least two years in a recognized college or technical or scientific school and have pursued satisfactory courses in physics, chemistry, biology, French and German; also from persons of unusual experience or special qualifications. Special students not candidates for the certificate may also be admitted.

The Faculty

The instruction specifically provided already includes over seventy courses, by Professor Whipple and his assistants, in sanitary engineering and in demography, at Cambridge; by Professors Sedgwick, Prescott, Dewey and other leading professors at Technology; and by Drs. Rosenau, Theobald Smith, Strong of the School of Tropical Medicine, Ernst and others at the Harvard Medical School. The courses include such various subjects as infant mortality, social service work, mental hygiene, oral prophylaxis, the prevention of ear, nose and throat diseases, hygiene of the eyes, covering factory and workshop conditions, and there will be a course on eugenics and genetics by Professor W. E. Castle of Harvard. Professor Wambaugh of the Harvard Law School will give a course on sanitary law. Other courses, from those offered by the two institutions, may be taken by consent of the administrative board.

Dr. Rosenau is the director of the school, and his office is at Building E 11 of the Medical School. The administrative board, which has direct management of the school under vote of the two corporations, is made up of Professor Sedgwick of Technology, chairman; Dr. Rosenau of the Medical School and Professor George C. Whipple, head of the department of sanitary engineering at Harvard, secretary. Students will take courses in both institutions.