

To which may be replied *Bacterium tumefaciens*, and probably others!

This is his additional and closing sentence designed to be a finality of invincible logic:

Wer diese genannten angeborenen Sarkomformen als durch Bakterien erzeugt betrachtet, übernimmt damit die Verpflichtung, auch für die Bildung seiner eigenen normalen Gewebe und Organe eine bakterielle Infektion nachzuweisen.

To which may be answered: Very well, and why not? Since a bacterial organism does just that in the plant!

I believe these old ideas and assumptions must be sifted, turned and overturned, and many of them wholly rejected if we are to find the truth.

Cancer, according to my notion, is a problem for the experimental biologist and the bacteriologist. The morphologist has gone as far as he can go and the energy of cancer research from now on must, I believe, be turned into new channels, if we are to expect results commensurate with the needs of humanity.

ERWIN F. SMITH

LABORATORY OF PLANT PATHOLOGY,
U. S. DEPARTMENT OF AGRICULTURE

**ESTABLISHMENT OF A SCHOOL OF
HYGIENE AND PUBLIC HEALTH
BY THE ROCKEFELLER
FOUNDATION**

IN recognition of the urgent need in this country of improved opportunities for training in preventive medicine and public-health work and after careful study of the situation the Rockefeller Foundation has decided to establish a school of hygiene and public health in Baltimore in connection with the Johns Hopkins University, where it is believed that the close association with the Johns Hopkins Medical School and Hospital and with the school of engineering of the university furnish especially favorable conditions for the location of such a school. Dr. William H. Welch, now professor of pathology, and Dr.

William H. Howell, professor of physiology in the university, will undertake the organization of the new school in its inception. The trustees of Johns Hopkins University have appointed Dr. Welch as director of the school, and Dr. Howell as head of the physiological department.

Funds will be provided by the foundation for the purchase of a site and the erection of a suitable building, in proximity to the hospital and the medical laboratories, to serve as the institute of hygiene, which will be the central feature of the school. Here will be housed various laboratories and departments needed in such a school, such as those of sanitary chemistry, of physiology as applied to hygiene, of bacteriology and protozoology, of epidemiology and industrial hygiene, of vital statistics, a museum, library, etc. Additional facilities for instruction and research will be supplied by the medical and engineering schools, the hospital and other departments of the university. Funds will be provided by the foundation for the maintenance of the school in accordance with plans which have been submitted.

It is expected that the school will be opened in October, 1917, as it is estimated that a year will be required for the construction and equipment of the institute and the gathering together of the staff of teachers.

As it is recognized that the profession of the sanitarian and worker in preventive medicine, however closely connected, is not identical with that of the practitioner of medicine and requires a specialized training, the school of hygiene and public health, while working in cooperation with the medical school, will have an independent existence under the university, coordinate with the medical school.

The school is designed to furnish educational and scientific opportunities of a high order for the cultivation of the various sciences which find application in hygiene, sanitation and preventive medicine, and for the training of medical students, physicians, engineers, chemists, biologists and others properly prepared, who wish to be grounded in the principles of these subjects, and above all for

the training of those who desire to fit themselves for careers in public-health work in its various branches. The most urgent need at the present time is provision for the training of prospective health officials and for supplementary and advanced courses for those already engaged in public health service. Satisfactory completion of work in the school will be suitably recognized by the bestowal of certificates and degrees.

It is anticipated that mutually helpful relations will be established with municipal and state departments of health and the federal public health service, whereby opportunities will be afforded for field work and other practical experience in various departments of public health work. Especially advantageous will be the relations with the International Health Board of the Rockefeller Foundation, which is engaged in the study and control, not only of hookworm, but also of malaria, yellow-fever and other tropical diseases in various parts of the world.

The influence and usefulness of the school of hygiene and public health will be extended toward education of the public by exhibits, lectures and other means in a better appreciation and understanding of the importance and needs of public and personal hygiene, in co-operative efforts for the training of public health nurses, and in other directions.

The benefits to be expected from the establishment of such a school as that contemplated will not be measured solely by the number of students trained within its walls. A far-reaching influence should be exerted upon the advancement of the science and the improvement of the practise of public health, in establishing higher standards and better methods of professional education in this field, in stimulating the foundation of similar institutions in other parts of the country, in supplying teachers, and in cooperating with boards of health and other medical schools.

ENGINEERING EXPERIMENT STATIONS IN THE STATE COLLEGES

In the Senate of the United States on March 9, 1916, Mr. Newlands introduced the follow-

ing bill, which was read twice and referred to the Committee on Agriculture and Forestry.

A Bill to establish experiment stations in engineering and in the other branches of the mechanic arts in connection with the colleges established in the several states and territories under the provisions of an Act approved July second, eighteen hundred and sixty-two, and of the Acts supplementary thereto.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in order to aid in acquiring and diffusing among the people of the United States useful and practical information on subjects connected with engineering and the other branches of the mechanic arts, and to promote the scientific investigation and experiment respecting the principles and applications of the mechanic arts, there shall be established under the direction of the land-grant college in each state or territory established, or which may hereafter be established, in accordance with the provisions of an Act approved July second, eighteen hundred and sixty-two, entitled "An Act donating public lands to the several states and territories which may provide colleges for the benefit of agriculture and the mechanic arts," or any of the Acts supplementary to said Act, a department to be known and designated as an "engineering" or a "mechanic arts experiment station."

SEC. 2. That it shall be the object and duty of said experiment stations to conduct original researches, to verify experiments, and to compile data in engineering and in the other branches of the mechanic arts as applied to the interests of the people of the United States, and particularly of such as are engaged in the industries; also to conduct researches, investigations and experiments in connection with the production, transportation, extraction and manufacture of substances utilized in the application of engineering and of other branches of the mechanic arts to industrial pursuits; water supplies as to potability and economic distribution; sewage purification and its ultimate inoffensive disposal; economic disposal of urban and manufacturing wastes; flood protection; architecture; road building; engineering problems connected with transportation, manufacturing and public utilities, and such other researches or experiments bearing directly on the various industries and occupations of the people of the United States as may in each case be deemed advisable, having due regard to the varying conditions, resources and needs of the people of the respective states and territories.