which he has happened to obtain generally satisfactory results in the past. Many times, therefore, he may be using the wrong steel for particular applications.

There have been many attempts to classify tool steels by numbering systems or by composition but so far they have been unsuccessful. At present, some steel companies are using a system which classifies tool steels into seven main types, or families, as follows: plain tool steels, oil- or air-hardened die steels for punch press work, oil-hardened die steels for hot work, tough tool steels, high-speed steels, cemented carbides, miscellaneous tool materials, such as "Graphitic Steels." This system of classifying steels has been copied by both manufacturers and users.

The new project for the standardization of materials for cutting tools proposes to index all tool steels by class designation, by manufacturer, by trade name and by classes of usage. The American Society of Tool Engineers believes that this classification of tool steel by types, or uses, rather than by trade name alone will make the choice of the steel for a particular application a simple matter to the user.

THE NEW HYDRAULIC LABORATORY OF THE NATIONAL RESEARCH COUNCIL OF CANADA

THE National Research Council of Canada has recently provided in Ottawa facilities for research on hydraulic structures. Hon. J. A. MacKinnon, chairman of the Committee of the Privy Council on Scientific and Industrial Research, which deals with matters of policy relating to the National Research Council, states that the laboratory has been set up on the recommendation and under the guidance of a committee composed of technical representatives from four Dominion Government departments.

The new laboratory, which is a part of the Division of Mechanical Engineering, has been planned to supplement the limited facilities which are at present available in Canada for work of this kind. Space and equipment have been provided for model research on many classes of hydraulic structure to a scale which will ensure correct flow conditions and freedom from uncertainty regarding "scale effect." The design of structures such as canal locks, dams, spillways, gates and power plant details can be investigated and work may be undertaken on river hydraulic problems of limited extent. Many pipe-flow problems are also within the scope of the laboratory. A feature of the laboratory is the large flow of water available which will be adequate for the largest models that can be accommodated. The present location of the hydraulic equipment is temporary, and the equipment has been designed for more commodious quarters for which plans have been made.

This hydraulic laboratory provides the engineering profession with a useful tool not hitherto available in Canada for the solution of many problems in hydraulic design. Like all the facilities of the National Research Council, the new laboratory is provided to serve the needs of the country, and its facilities are available not only for investigations of national interest, but also for the solution of those specific problems which arise in private industrial development.

THE PROPOSED NEW CANCER HOSPITAL IN NEW YORK CITY

THE Board of Estimate of New York City referred on December 3 to the City Planning Commission between the city, the trustees of Columbia University and the Presbyterian Hospital an agreement which has been under consideration for the last year for the building of a new cancer hospital.

Under this agreement the trustees of the university and the hospital would convey to the city without charge a two-and-a-half acre site adjacent to the Columbia Medical Center, which is valued at $750,000. It is planned that the hospital be ten stories high, large enough to accommodate 315 beds. The total estimated cost is $2,650,000. The capital budget for 1940 of the Board of Estimate includes $350,000 for design and preliminary work, and an appropriation of $600,000 is contained in the capital budget for 1941. The College of Physicians and Surgeons of the Medical Center will collaborate with the Department of Hospitals in the scientific work and in maintenance of the hospital.

The university will nominate the professional staff of the hospital, except for such appointments as are made under the rules of the Municipal Civil Service Commission.

The city is required to build, equip and maintain the hospital. Unless the building is begun within five years of the date of delivery of the deed, the land reverts to the Presbyterian Hospital.

Dr. Willard Cole Rappleye, commissioner of hospitals, who is on leave of absence as dean of the College of Physicians and Surgeons, stated that the hospital should be completed in 1942. If the Planning Commission and the Board of Estimate approve the agreement and the plans, construction will begin in a few months.

SYMPOSIUM ON MALARIA

A SYMPOSIUM on malaria consisting of six programs will be held in Mitchell Hall, College of Physicians Building, 19 S. 22nd Street, Philadelphia, on Monday, Tuesday and Wednesday, December 30 and 31, 1940, and January 1, 1941. The symposium has been organized by Section N (Medical Sciences) as part of the annual program of the American Association for the

Advancement of Science and is jointly sponsored by the American Society of Tropical Medicine, the National Malaria Committee and the American Society of Parasitologists. It represents an encyclopedic coverage of the subject of human malaria as the disease exists in the United States and the regions surrounding the Caribbean. A total of 42 papers has been prepared by outstanding authorities, and the titles are grouped under the following headings: (1) Introduction and Parasitology, (2) Anopheline Vectors, (3) Epidemiology, (4) The Human Infection, Symptomatology, (5) Pathology, (6) Therapy, (7) Control and Eradication.

The desirability of reviewing the present-day knowledge of this disease in the aforestated manner was emphasized some three years ago when reports of the presence of a severe epidemic of malaria in Brazil were made known. The epidemic had appeared subsequent to the introduction of the mosquito *Anopheles gambiae* from Africa to endemic areas in South America. It was apparent to those familiar with the situation that the same tragedy might take place in the United States since malaria is not only indigenous in 36 of the 48 states but deaths have occurred as a result of the infection in practically every state in the Union. On the basis of the experiences in Brazil the sole requirement for its duplication here was the presence of a good transmitter (anopheline mosquito) which might enter accidentally in the ordinary course of airplane transportation. Accordingly an organization committee was appointed by the Executive Committee of the Association to investigate the problem, and the symposium will mark the culmination of two years of active planning by this group.

Investigators in this country have not been callous to the menace of this malady, which is often believed by the laity to be confined to the tropics. From the day when malaria was first recognized as a serious, disabling and frequently fatal disease in the Western Hemisphere, attempts have been made to combat it, and there is some indication that the most malarious areas in the United States are gradually coming under control. Research workers from the various disciplines have been extremely active in contributing to fundamental discoveries in this field; nevertheless, it is recognized that serious gaps exist in our present knowledge of the disease. Even though the causative agent, a microscopic protozoan, was seen and recognized in human red blood cells over 60 years ago, the germ has not as yet been cultured satisfactorily and at will on artificial media; thus, little is known of its food requirements or by-products of growth. Again, the lack of a suitable laboratory animal susceptible to the human parasite is an additional handicap limiting experimental work to studies in man. The present unsettled conditions in the Far East have jeopardized the shipments of the antimalarial drug, quinine. The limited supply of this substance on hand has stimulated a feverish search for a satisfactory substitute. These are some of the urgent problems which will be covered in Philadelphia. It is hoped that the contributions to the symposium will be suitable for publication in monograph form by the association and thus serve as a guide for immediate as well as for future thought and research on this most important disease.

MALCOLM H. SOULE, *Secretary,*
Section N, A. A. A. S.

THE PACIFIC DIVISION OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

THE 1941 meeting of the Pacific Division of the American Association for the Advancement of Science and its affiliated societies will be held at Pasadena, Calif., from June 16 to 21. The host institutions on this occasion will be the California Institute of Technology, the Henry E. Huntington Library and Art Gallery and the Mt. Wilson Observatory of the Carnegie Institution of Washington.

A preliminary announcement descriptive of the general features of the program will be distributed to members of the Pacific Division early in March.

It is hoped that this meeting will be widely attended not only by members resident on the Pacific Coast, but also by members of the association resident elsewhere in the country.

Members desirous of presenting papers are advised to communicate with the secretary of the society before which the paper will be presented, and to submit titles of communications not later than April 25. Brief abstracts are also requested.

THE COLD SPRING HARBOR BIOLOGICAL LABORATORY

AT a recent meeting of the Board of Directors of the Long Island Biological Association the resignation of Dr. Eric Ponder, for the past five years director of the Biological Laboratory at Cold Spring Harbor, was received and accepted with expression of appreciation of his services.

When the laboratory was suddenly bereft of Dr. R. G. Harris's services, Dr. Ponder assumed charge and carried forward the multifarious activities of the laboratory without interruption. He organized and carried through the five symposia on excitation phenomena, internal secretions, the protein molecule, biological oxidations and permeability, the results of which, so far as published, have met with unstinted praise.

Dr. Millislav Demerec, of the Department of Genetics, Carnegie Institution of Washington, was elected director of the laboratory for the year 1941. Dr. Kenneth S. Cole, of the College of Physicians and