The multiple fellowship on organic synthesis, whose senior fellow is H. F. Robertson, carried forward studies on the preparation, properties and uses of amines, solvents, intermediates and resins. In the field of amines, various derivatives of alkylene, alkylol and heterocyclic amines were made and their characteristics and some of their applications investigated. Work on solvents consisted partly of the preparation of new propylene glycol and ethylene-propylene glycol derivatives that have not heretofore been available for research. An investigation was made of the solubility of all the commonly available natural gums and resins in over 40 solvents, and a study was carried out on the corrosive effect of commercial chlorinated solvents on metals. Work on brake fluids was continued, as were experiments on water-soluble textile lubricants. Several new products were synthesized, among them the silicon and titanium esters of some higher alcohols as well as their phosphoric and boric acid esters. Advances were recorded in research on problems incidental to the refining of lubricating oils by solvent extraction methods. A number of newer compounds of interest to the dyestuff and pharmaceutical industries were synthesized. Investigation was continued on the properties of the sodium sulfates of some higher alcohols, three of which are now on the market under the name of "Tergitol" penetrants. In the domain of resins experimental work was carried out on the improvement of vinyl resins in hot-melts for those adhesive applications where the use of solvents is undesirable. Facilities were provided for adapting some of the commercially available vinyl resins to the specific needs of the protective coatings industry.

During the calendar year 1937, one book, 14 bulletins, 32 research reports and 65 other papers were published. Twenty-two United States patents and 70 foreign patents on fellowship discoveries proceeded to issue. The total contributions to the literature for the 27 years ended December 31, 1937, have been 20 books, 157 bulletins, 776 research papers and 1,182 miscellaneous papers; 690 United States patents were granted during the same period.

SCIENTIFIC EVENTS

BUREAU FOR STREET TRAFFIC RESEARCH AT YALE UNIVERSITY

YALE UNIVERSITY has announced the establishment, beginning on July 1, of a Bureau for Street Traffic Research to be devoted to the joint purpose of the scientific study of the problem of street and highway traffic accidents and congestion and to the training of graduate students for professional work in the field of traffic engineering.

President Charles Seymour, in making the announcement said:

This action on the part of Yale University is in line with its long interest in the entire field of efficient transportation. Through the Transportation Committee now composed of Professor Charles Tilden, Robbins Stoeckel and Dean S. W. Dudley, Yale University has for many years, with the aid of funds bequeathed by Lord Strathcona, conducted broad studies of the problems of transportation.

The function of transportation has always been a factor of great social and economic importance. In the present generation it has assumed new importance and has accumulated additional problems in the almost universal use of the automobile.

With 29,000,000 motor vehicles in operation by 40,000,000 drivers over a 3,000,000-mile highway system, the automobile has become the dominant transportation mechanism in America. Despite the many obvious services which it has rendered to society, it has, nevertheless, brought with it some exceedingly serious and complicated problems. These problems fall into two natural categories: those of accidents and those of congestion. America can not calmly accept a situation where 40,000 lives are taken annually through accidents, many of which are obviously preventable, nor can the country accept without serious question a situation where congestion deprives a valuable transportation service of its maximum efficiency.

There is a further need at this time to make a searching examination of the possibilities of achieving a better coordination as between the various means of transportation available to the American people. In line with its traditional policy of attempting to render full service to society through the development of techniques to solve current social problems, Yale University has taken the step of establishing a formal activity devoted to the development of engineering and administrative principles for the relief of the joint problem of traffic accidents and traffic congestion.

Provision will be made for continuous research on problems in this field and, in addition, for the training of qualified graduate students for professional positions in the field of traffic engineering. Beginning with the academic year 1938, there will be available twenty-three graduate fellowships, fifteen of which are provided by a general grant of the Automotive Safety Foundation and eight of which are provided through a grant made by Alfred P. Sloan, Jr. The major financial support for the bureau will be through the Automotive Safety Foundation and its president, Paul G. Hoffman. Intensive training will be given covering the entire field of traffic engineering and administration. The staff of the bureau is composed of Miller McClintock, Maxwell Halsey,

T. M. Matson and Theodore Forbes. They have been prominently identified with the development of the growing profession of traffic engineering, both in research and training activities and, likewise, in professional engineering work.

EXPANSION OF THE TUFTS MEDICAL SCHOOL

ACCORDING to an account given in *The Tufts College Alumni Bulletin,* approval was given at a recent meeting of the Board of Trustees to the proposal of the Executive Council of the Medical School Alumni Association to raise a fund of $2,000,000 for building an entirely new medical school as a physical part of the New England Medical Center on Bennet Street, downtown Boston. The new school will replace the antiquated buildings on Huntington Avenue.

This fund is to be raised by appeal among the alumni, their friends and among the general public. Part of the money will be utilized for building the new school; the balance will go into endowment for improving the teaching facilities and for a much-needed surgical teaching unit.

For Tufts Medical School, this move means greatly added prestige. In 1929 the school associated itself with the Boston Dispensary and the Boston Floating Hospital in forming the New England Medical Center. To this group is now being added the Joseph H. Pratt Diagnostic Hospital.

Plans for the improvement of the Medical School were formulated by the late President Cousens and the Medical Alumni Association more than a year ago. These plans at first contemplated the raising of $250,000 only among the alumni. Discussion led to the decision that the needs of the school were much greater and a public campaign was decided upon.

The *Bulletin* points out that:

> The close control of medical education by the American Medical Association has forced medical schools all over the country to elevate their standards both with regard to physical equipment and to the teacher-student ratio. The school has always had a Class "A" rating, but the pressure to meet requirements of the American Medical Association has been growing. The main building on Huntington Avenue has been used since the beginning of the century and it is entirely inadequate for present-day needs. To increase the teacher-student ratio means the creation of new professorships and the only solution is sufficient endowment to meet this need. At the Medical Center, the teaching of surgery has been handicapped because of the lack of a surgical unit.
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> Plans for the medical school, therefore, finally crystallized into a campaign to raise $2,000,000. Of this sum, $150,000 will go to a surgical unit, from $750,000 to $850,000 for a new school building at the Medical Center, and $1,000,000 to set up an endowment sufficient to meet present teaching needs.

THE AMERICAN STANDARDS ASSOCIATION

REPRESENTATIVES of ten national associations met on April 6 at the offices of the American Standards Association to set up standard methods and procedures for the guidance of testing laboratories and other public endorsement agencies.

Need for this action arises from the increasing use by producers and distributors of "approvals" "certifications" and "listings" to satisfy the consumer demand for more factual information concerning quality of goods and performance of equipment offered for sale. These "certifications" are of great potential value to the buying public if backed by adequate tests of responsible agencies; but, according to the Association of Consulting Chemists and Chemical Engineers who proposed that the American Standards Association undertake this work, such tests are not always carried out. It is pointed out that "Irresponsible endorsements that claim significance which they do not possess are bringing the whole system into disrepute. Some vendors cater to the consumer desire for facts by asserting half-truths or by implications which have no real significance. In other cases there is no evidence of the existence of standards, and if they do exist they are not available to the public. Some vendors use 'certified' as a trade designation."

The proposal of the testing engineers and chemists, many of whom are heads of laboratories, has been heartily endorsed by the National Bureau of Standards, the National Association of Purchasing Agents, the American Home Economics Association, the Consumers' Division of the U. S. Department of Labor and the American Society for Testing Materials.

The plan is to set up standard practices covering fundamentals which should underlie approval procedures—such standards to be developed cooperatively by consumers, producers, distributors and advertisers, many of whom were represented at the meeting. Among the points suggested for inclusion are a clear statement of the auspices under which any plan of approval is operated; adequate independent sampling and testing of the product to determine its conformity with definite, published standards; systematic reexamination to insure continuing conformity, records of tests to be publicly available, and compliance with these principles to be indicated on labels or tags.

At the meeting, Thomas A. Wright, of the Association of Consulting Chemists and Chemical Engineers, was appointed chairman and B. L. Oser, secretary.

The following organizations were represented at the meeting:

American Society for Testing Materials
American Home Economics Association
American Council of Commercial Laboratories
National Association of Purchasing Agents