lows of the society wherever they may be. It has been giving valuable service to doctors in the fighting forces, oversea and at home, since the outbreak of war, and supplying information to men in the emergency medical services as well as in every department of medical life in this country. These services have been rendered in difficult circumstances, as the society lives almost entirely on the subscription income received from its fellows. This income has seriously diminished since the outbreak of war, but the society has nevertheless carried on with its important work. Officers returning from the beaches of Dunkirk have reported to the secretary that information received from the library was invaluable, and that they regretted having had to abandon books, bibliographies and photostatic reproductions in the face of the advancing enemy. The Rockefeller Foundation, learning of the society's service and of its plight, has generously given £1,000 to enable its headquarters at 1, Wimpole Street, to spread the target which it offers to bombing aeroplanes. With this gift it is being arranged to remove a large number of irreplaceable volumes to a suitable place in the country, where they will be easily available to inquirers for information."

EMERGENCY COURSES TO TRAIN ENGINEERS AND TECHNICIANS

EMERGENCY courses to train engineers and technicians needed in the nation's defense industries will be offered soon in a cooperative program sponsored by Harvard University, the Massachusetts Institute of Technology, Northeastern University and Tufts College.

The proposed program comprises full-time day courses, as well as evening courses of college grade for men who are employed. Organized to comply with the engineering defense training program of the United States Office of Education, this plan, which has been presented for formal approval, is part of a project supported by the government for specialized training in fields essential to national defense. The courses will be offered if there is sufficient demand to satisfy the requirements of the United States Commissioner of Education, and will be given without charge to the students for tuition.

The other engineering schools in the Northeastern regional district, which includes Maine, New Hampshire and Vermont, as well as Massachusetts, are preparing to offer similar intensive courses. These programs are being planned by the individual colleges, which have the cooperation of the regional adviser on engineering defense training, Dean Edward L. Moreland, of the Massachusetts Institute of Technology.

The joint program of the four greater Boston institutions was arranged to avoid duplication of courses and to assure the most effective utilization of the special teaching and laboratory resources of each. The committee in charge of the project, which is expected to train approximately 1,000 students, includes Dean Harald M. Westergaard, of the Harvard Graduate School of Engineering; Professor Raymond D. Douglass, of the Massachusetts Institute of Technology; Dean William C. White, of the College of Engineering of Northeastern University, and Dean Harry P. Burden, of the Tufts School of Engineering. None of the courses conflicts with or replaces regular evening courses now being offered by such agencies as the State University Extension Service, the Lincoln Institute, the Lowell Institute School or the university extension courses of Tufts College.

All courses in this program are of collegiate grade and in general the requirements for admission include at least three years in an accredited engineering school or its equivalent. In some instances two years in an evening engineering school plus practical experience may be considered sufficient preparation, and in certain cases other preparation may be acceptable. Certain highly specialized courses will require engineering degrees.

Application for detailed information on all courses to be given at the participating colleges in the Boston area should be made immediately, and by mail only, to the Engineering Defense Training Bureau, Room 7–102, Massachusetts Institute of Technology, Cambridge.

THE HOSPITAL OF THE MEDICAL COLLEGE OF VIRGINIA

DEDICATION of the new six hundred bed hospital at the Medical College of Virginia, Richmond, took place on December 5, Founders' Day. Among those participating were Governor James H. Price; Colonel E. W. Clark, Commissioner of Public Works, Public Works Administration; Dr. Walter L. Bierring, past president, American Medical Association; Dr. Walter B. Martin, president of the Medical Society of Virginia; Dr. H. E. Jordan, dean, department of medicine, University of Virginia; M. Haskins Coleman, Jr., secretary, Richmond Hospital Council, and Dr. Lewis E. Jarrett, director of the hospital division, Medical College of Virginia. Beginning at two o'clock in the afternoon the new hospital was opened for inspection to the general public, and on Tuesday night, December 3, a reception and hospital open house was observed at the hospital for the local medical profession and specially invited guests.

The new hospital, completed at a cost of approximately $2,500,000, with equipment, provides for two new services, neuropsychiatry and contagious diseases, enlarged facilities for physical therapy and many other activities, including ample provision for teaching. It is built in the form of a Maltese cross with the various utility services in the center of the cross, the wings themselves being used for the housing of patients. By

this arrangement wards have exposure on both sides and each room has an outside exposure. It is completely air conditioned.

Acoustical treatment has been applied to all corridors, lobbies, utility rooms, diet kitchen and in any other place where excessive noise may be a disturbing factor.

The entire building is being wired for radio reception. A central unit will control reception and has a four-channel outlet to each part of the building. For the present, however, these channels are only being wired for two programs. The other two can be wired later at nominal cost. In the wards there are speakers attached to the ceiling, one speaker for each eight beds. Individual rooms will have individual speakers. The volume of the radio can be controlled at the central receiving station and each individual unit can be controlled in the wing itself.

THE MEETING OF MATHEMATICIANS AT BATON ROUGE

THE forty-seventh annual meeting of the American Mathematical Society will be held at the Louisiana State University, Baton Rouge, La., from December 30 to January 1, in conjunction with meetings of the Mathematical Association of America and the National Council of Teachers of Mathematics.

The sessions of the society will begin on Monday afternoon and will continue through Wednesday afternoon. The regular sessions of the Mathematical Association will be held on Thursday morning and afternoon. A joint session of the Mathematical Association and the National Council is scheduled for Wednesday morning. Other sessions of the National Council will be held on Monday and Tuesday.

The Board of Trustees will meet at 6 P.M. on Monday and the Council of the Society will meet at 8 P.M.

The annual business meeting and election of officers will be held on Tuesday evening. Following this, Professor G. C. Evans will deliver the retiring presidential address on "Surfaces of Minimum Capacity."

By invitation of the program committee, Professor Saunders MacLane and Dr. Leo Zippin will deliver addresses. Professor MacLane's title is "Extensions of Groups" and Dr. Zippin's, "Topology of Rigid Motions."

An excursion to St. Francisville and its environs to visit some of the old colonial residences is planned for Tuesday afternoon. Other alternative excursions may be planned later.

A joint dinner of the three mathematical organizations is planned for Wednesday evening.

AWARD OF THE MEDALS OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

DR. CHARLES F. KETTERING, vice-president and director of General Motors Corporation and general director of General Motors Research Laboratories, received the American Society of Mechanical Engineers Medal, presented annually for distinguished service in engineering and science, on December 4. The presentation was made by Warren H. McBryde, national president of the society, at the annual dinner and honors night.

The award has been made to Dr. Kettering in recognition of his outstanding achievements as engineer, inventor and manufacturer. He invented and perfected the automobile self-starter and the Delco lighting system for farms and as a portable source of power. He is also largely responsible for many engine improvements and, most recently, for the development of improved Diesel engines for trains and ships. Dr. Kettering is patentee or co-patentee of about 140 inventions.

Edwin H. Armstrong, professor of electrical engineering at Columbia University and pioneer in the field of "frequency modulation" and other radio circuits, received the Holley Medal.

Dr. Armstrong has long been a leader in the development of radio communication. He was first to make practical use of the three-electrode tube for generating continuous electric waves which make radio broadcasting feasible; and invented the widely used superheterodyne receiving circuit. His most recent work has been in the new field of his own invention, FM or "frequency modulation" radio broadcasting, which has made practicable the avoiding of static nuisances, as well as decreasing danger due to lightning.

The Holley Medal is presented periodically for distinguished service in engineering and science. It is named for the late Alexander Lyman Holley, chairman of the meeting on February 16, 1880, at which preliminary plans for the organization of the society were discussed. It was endowed by George I. Rockwood, who recently retired as president of the Rockwood Sprinkler Company of Massachusetts.

The Melville Medal for original engineering work was presented to Carl A. W. Brandt, chief engineer of the Superheater Company, New York, for his paper on "The Locomotive Boiler."

Mr. Brandt was born in Stockholm in 1881, studied mechanical engineering at the Technical College there, and obtained his early engineering experience with the Swedish Government Railways and the Sweden Atlas Locomotive Works. He was with the New York Central Lines from 1902 to 1916, becoming mechanical engineer and master mechanic of the Cleveland, Cincinnati, Chicago and St. Louis Railway in 1910. He joined the Superheater Company as chief engineer in 1916, where he is now in charge of the development and design of locomotive equipment, including superheaters and feedwater heaters, in addition to similar apparatus for stationary power plants.