mental scientific organizations in the United States, most of whose members are attached to the staffs of some 600 colleges, universities and engineering schools, some 2,000 industrial research laboratories and other specialized research institutes. Do not be alarmed when I begin by saying that these comprise well over one hundred nationally recognized scientific and engineering societies, exclusive of the social sciences. Of these, only a few are general in scope in the sense that they cover broadly the entire field of science. Largest of these is the American Association for the Advancement of Science, a close parallel to your British Association, with a direct membership of about 24,000 and an indirect aggregate membership of about a million through the 187 associated and affiliated societies. Of a more exclusive character and without the affiliated and associated societies are the American Philosophical Society and the American Academy of Arts and Sciences.

Unique among the scientific organizations of the United States is the National Academy of Sciences.

In March, 1863, during a crisis of our Civil War, Congress established the National Academy of Sciences and President Lincoln signed the Act of Incorporation. This act specified that "the Academy shall, whenever called upon by any department of the government, investigate, examine, experiment and report upon any subject of science or art, the actual expense of such investigations, examinations, experiments and reports to be made from appropriations which may be made for the purpose." There was also the provision in the charter that, except for the actual expenses of these activities, neither the academy nor any member of the academy is entitled to receive any compensation whatsoever for such services. Although the membership is legally limited to 450, the actual membership in the academy has never exceeded its present enrolment of 350.

Outside of its services in war-times, perhaps the most noteworthy public service by the academy was its geological and engineering investigation of the slides which at one time threatened to prevent the successful consummation of the Panama Canal. However, the utilization of the academy by the government has been rather "spotty." Under some administrations the academy has been used rather extensively and in other administrations has been more or less forgotten by the government. In this respect I believe that your Royal Society has had a more consistent role of usefulness.

One inevitable characteristic of this type of organization, in which membership is considered to be the highest scientific honor of the country, is that membership, like scientific recognition, is likely to come to a man after he has passed the peak of activity in his scientific career. For this reason the academy has been able to perform an excellent function of the "scientific elder statesmen" variety. It has zealously kept itself free from all types of political influence. Its ideals have been unselfish service, integrity and scientific competence. Frequently, however, probably in the great majority of cases, when a very active research program has to be undertaken, many of the personnel best adapted for the particular job are not found within the membership of the academy.

During the last world war in Europe, but before the United States had become a participant, President Wilson by executive order requested the National Academy of Sciences to establish the National Research Council as a measure of national preparedness. This organization operated so usefully during the war that after its termination, in April, 1919, the National Research Council was perpetuated by the National Academy of Sciences at the express request of President Wilson.

This National Research Council is organized into nine permanent divisions covering the various fields of scientific research and of scientific administration. These divisions are composed of appointed members and also of representatives from many of the scientific and engineering societies and branches of the government. Because of this wide representation the National Research Council is a most effective agency for finding just the right persons to do any specific scientific job.

During the present war the National Academy and the National Research Council have been called upon to perform many important services, some of an advisory character and some involving the placing of contracts for research and development work in various laboratories.

Among the nearly 200 committees operating under the National Research Council, the following are typical of those concerned with the war: Aviation Medicine, War Metallurgy, Passive Protection Against Bombing, War Use of Research Facilities, Tin Smelting and Reclamation, Clothing, Shock and Transfusions, Treatment of Gas Casualties, Wartime Diet and Selection and Training of Service Personnel. *(To be concluded)*

OBITUARY

HENRY SEELY WHITE
1861–1943

HENRY SEELY WHITE, distinguished mathematician and professor emeritus at Vassar College, died on his eighty-second birthday, May 20, 1943, at his home on Overlook Road, Poughkeepsie.

Professor White's early years were spent in Cazenovia, N. Y., where his father, Professor Aaron

White, was principal and mathematics teacher in Cazenovia Seminary. In his seminary years the boy was introduced to farm life on his grandfather's lands and invited to take up that work, but, like Newton, he preferred academic activities to farming, and his chief contribution to the farm consisted of surveying, a task which he appreciated most for its temporary claim. He entered Wesleyan University and was graduated with honors in 1882. Twice he returned there for service, to assist in astronomy and physics the year after graduation, and again in 1884 as registrar and tutor in mathematics after an intervening year of teaching at Centenary College. Frequent trips to Wesleyan in later years and deep interest in its welfare gave testimony to his strong attachment to his Alma Mater and the honorary degree conferred on him at the Wesleyan Centennial in 1932 bespeaks the university's pride in him.

Between 1887 and 1890 Mr. White was at Göttingen in work that led to the doctorate. Here he responded to the stimulus of great mathematicians with a thoroughness and joy which characterized all his work. Whether through the influence of these years of close contact with the minds congregated in that Mecca of the era or through his own natural urge to wider fields, he developed a breadth of view and a catholicity of interest that marked his scholarship through the following years.

At Clark University, to which he was called on his return from European study, and at Northwestern University, where he was chairman of the department, his mathematical stature could be measured by the calls he was receiving to other posts. It was at Northwestern, in 1905, that President James Monroe Taylor, of Vassar College, after a nation-wide search for a distinguished mathematician, found in him the man he sought.

To Vassar's advantage he declined frequent further calls and remained to direct the Vassar Department of Mathematics for thirty-one years, an inspiration to students and colleagues who enjoyed the charm of his personality and the quality of his mind. His dry wit, his courtly bearing and his quiet, gentle insistence on work of substance expressed with clarity brought forth the best in his students. To the college community Professor White and his wife, a musician of note, provided generous hospitality which afforded valuable opportunities for additional acquaintance. They also helped to cement friendly relations between town and gown, Mr. White serving at one time as president of the Poughkeepsie University Club, at another as commodore of the Poughkeepsie Yacht Club, and both entering into various other local activities.

Profesor White was one of the founders of the American Mathematical Society Colloquium Lectures. He served as editor of the *Annals of Mathematics* from 1899 to 1905 and of the *Transactions* from 1907 to 1914. He was president of the American Mathematical Society from 1906 to 1908, president of the American Association for the Advancement of Science in 1915, and was elected fellow of the National Academy of Science in the same year. The degree of doctor of laws was conferred on him by Northwestern University in 1915.

Publications by Mr. White in book form and as contributions to journals were concerned primarily with his interests in the theory of invariants, geometry of curves and surfaces, correspondences, plane and twisted curves, homeomorphic sets of lines in a plane and relativity in mechanics. His best known work was "Plane Curves of the Third Order."

With his vast fund of information Professor White was always ready to explore topics brought to his attention by others, beginners as well as mature workers, and shared his wisdom with genuine pleasure. His colleagues of various departments enjoyed the universality of his knowledge as well as his humor and friendly, constructive cooperation, and they continued to consult him during the years of his retirement from teaching. He never did retire from creative scholarly work nor from his connections with church and city groups, but remained a remarkably active and efficient person to the time of his death.

MARY EVELYN WELLS

VASSAR COLLEGE

ARTHUR TRAUTWEIN HENRICI

1889–1943

DR. ARTHUR T. HENRICI passed away on April 23, 1943, at the age of 54 years. To many of his friends the news of his death will come as a severe shock. His youthful appearance and active mind gave promise of many more years of productive and fruitful service. His associates, however, were aware of his failing health and were therefore somewhat prepared for the blow when it fell.

Dr. Henrici's Germanic ancestors migrated from Grosskarlsbach to Pittsburgh in 1825, where many of their descendants still reside. Born in Economy, Pa., on March 31, 1889, Dr. Henrici moved with his parents to Pittsburgh when a boy. Here he attended public schools and entered the medical school of the University of Pittsburgh in 1907, where he was graduated at the head of his class four years later. Upon graduation he received the Brinton Award in recognition of outstanding scholarship. Following graduation from the medical school, he served for about a year and a half as pathologist in St. Francis Hospital under the late Dr. Klotz.