the seeker of more knowledge is of little value to mankind if he does not take a sympathetic part in cooperative work. Dr. Moyer possessed these qualities to an extraordinary degree. He was a happy participant in symposia, ever ready for constructive discussions, never allowing a controversy to degenerate into a polemic. He was always friendly, and, though never austere, maintained a dignity which made one appreciate the presence of a scholar of innate refinement. Had he lived, we should have known more.

WILLIAM SEIFRIZ
UNIVERSITY OF PENNSYLVANIA

LAWRENCE TWILLEY CLARK

DR. LAWRENCE TWILLEY CLARK, managing director of the Research and Biological Laboratories of Parke, Davis and Company, died on May 29, at the age of sixty-one years. His entire scientific career was spent in the services of the company, having begun when he entered as a research worker in bacteriology soon after receiving his bachelor of science degree from the Michigan State College in 1904. His rise to the position of managing director of the laboratories and of the biological farm paralleled the rapid expansion of the research activities of the company. His contribution to the standardization of biological manufacturing methods, especially in the field of bacterial products, was perhaps his most outstanding achievement, recognized by his alma mater in 1932 with the honorary degree of doctor of science.

Dr. Clark was a member of many scientific organizations and was active also in the alumni association of his college, which elected him president in 1932. His hobbies were all associated with his devotion to the out-of-doors—hunting, fishing and fruit farming. He is survived by his widow, Rosa, and by his son, Lawrence Twilley, Jr.

OLIVER KAMM

RECENT DEATHS

DR. HENRY F. NACHTRIEB, professor emeritus of animal biology at the University of Minnesota, died at his home in Berkeley, Calif., on July 17. He was in his eighty-sixth year.

DR. ONDESS LAMAR INMAN, director of the Charles F. Kettering Foundation and professor of biology of Antioch College, died on July 21 at the age of fifty-one years.

PROFESSOR HOWARD M. WIGHT, professor of forest zoology at the University of Michigan, died on July 19. He was fifty-three years old.

NORMAN COLMAN RIGGS, professor emeritus of mechanics at the Carnegie Institute of Technology, Pittsburgh, where he had been a member of the faculty for over thirty years, died on July 18 at the age of seventy-one years.

PROFESSOR SCOTT CARY LYON, for sixteen years head of the department of biology at Davidson College, North Carolina, died on July 23 at the age of fifty-eight years.

DR. CHARLES R. HOOVER, formerly professor of chemistry at Wesleyan University, died in the collision of two Navy training blimps off the coast of Manasquan, N. J., on June 8. SCIENCE has already reported the death in the same accident of Dr. Laurence S. Moyer, of the University of Minnesota, an obituary of whom appears in this issue, and of Dr. Arthur B. Wyse, assistant astronomer at Lick Observatory.

BRIGADIER GENERAL H. S. BIRKETT, from 1894 until his retirement with the title of emeritus in 1932 professor of laryngology and otology in the faculty of medicine of McGill University and from 1914 to 1924 dean, died on July 19. He was seventy-eight years old.

A UNITED PRESS dispatch from Vichy reports the death on July 19 of Professor Marcellin Boule, a member of the faculty of geology at Clermont-Ferrand and a professor of paleontology at the Museum of Natural History. He was seventy-two years old.

SCIENTIFIC EVENTS

PRESENT STATUS OF RESEARCH WORK UNDER THE AUSPICES OF THE WAR PRODUCTION BOARD

(1) In July, 1940, the National Defense Commission made a contract with the National Academy of Sciences (of which the National Research Council is a subsidiary) for the establishment of technological committees to report to the National Defense Commission. This contract was renewed and enlarged by the Office of Production Management and by the War Production Board. In the earlier stages the work of the technological committees was confined to the mobilization of existing technical knowledge on particular questions. Recently the scope has been enlarged to include actual laboratory work, and is capable of further expansion to any desired degree. Up to date 143 reports have been requested of the academy and 124 reports received by the War Production Board. Of the 143 projects submitted, 82 relate to processes and production. A very large amount of

construction has been based on this group of reports. Sixty-one of the reports relate to substitution and conservation and this group has served as a basis of many substitution and conservation orders of the War Production Board.

Reports of general interest which are not secret or confidential have been mimeographed for general distribution and copies may be obtained from Ernst Hergenroether, Room 3116, Railroad Retirement Building, Washington, D. C. The academy assumes the responsibility of selecting the members of the technological committees both from within and without its own membership. C. K. Leith, of the University of Wisconsin, acts as the agent of the War Production Board for the transmission of requests to the academy.

(2) The War Production Board has made extensive use of the services of the Bureau of Mines and the Geological Survey. In fact, it has helped in securing extra funds from Congress for this purpose and has advised on a large part of the work of these two organizations in the field and laboratory since 1940.

(3) The War Production Board has used the Bureau of Standards for research and testing on several commodities.

(4) The branches of the War Production Board have instigated and utilized researches in many industrial laboratories. For instance, the Bureau of Industrial Conservation has used the research facilities of the American Bell Telephone Company, General Motors, Westinghouse, General Electric, Chrysler, the Battelle Institute, the Mellon Institute, the California Institute of Technology and others.

(5) The Inventors Council transmits to the War Production Board such reports of inventions as it thinks should have further attention. These go to Ernst Hergenroether, Bureau of Industrial Conservation, who passes them on the branches of the War Production Board concerned. Two new specialists are being appointed to help in this work.

In all the work above outlined, the principal object has been to mobilize existing technical information in the least possible time, and to do only such laboratory work as would yield results in time to be used in the war emergency. This necessarily has eliminated many researches which would be highly desirable from a longer range point of view.

The following additional steps are now being taken:

(1) A review is being made of the activities of divisions and branches of the War Production Board to make sure they are utilizing to best advantage all available opportunities for research. With the creation of new divisions and the turnover in personnel, we believe that even the existing facilities for research in some branches are not being fully utilized. Instances have come to our attention where there seemed to be no knowledge of the existing facilities.

(2) An effort is being made to improve the dissemination of the research reports through the various parts of the War Production Board, to insure wider publicity and to follow up the recommendations of these reports to see that they are actually used in the various administrative activities of the War Production Board.

(3) To make wider use of research facilities in the United States not now engaged in the war effort, the War Production Board has requested the National Research Council to appoint a committee to make recommendations to the board as to the most effective grouping of research facilities, by regions or by adaptation to classes of projects; as to desirable form of organization of these groups; and as to procedure to establish a two-way flow of ideas and projects between the War Production Board and the research groups that may be set up.

SYNTHETIC RUBBER

IT is stated in the *National Geographic News Bulletin* that as a center of synthetic rubber production, Voronezh, Russia, "anchor" of the northern Don front, is of special interest to Americans now concerned with their own manufacture of this material.

Voronezh normally is one of the Soviet Union's leading sources of rubber made from alcohol that has been processed from potatoes. Other important sources of this type of rubber are still out of range of immediate German attack; for example, Yaroslavl, northeast of Moscow, and Kazan, some 500 miles northeast of Voronezh.

Before the outbreak of the war, Soviet authorities claimed that their country was the world's largest producer of artificial or synthetic rubber. Moreover, its high quality was demonstrated as far back as 1933, when tires of such rubber were used in the extensive motor races across the Kara Kum Desert, in Central Asia.

With its expanding rubber and other industries, Voronezh was one of the fastest growing of Soviet Russia's industrial centers. In 1926, the city had a population of less than 125,000; by 1939, it had passed the 326,000 mark, including nearly 90,000 workers in factories and locomotive and other repair shops. It had a dozen colleges and universities, in which some ten thousand students were reported in training for the chemical, engineering, teaching and medical professions, as well as for agricultural and veterinarian work.

In addition to synthetic rubber, Voronezh specialized in manufactured food products, in vegetable oil from sunflower seeds, in turning out radio equipment, Diesel engines, tractor parts, machinery and machine tools. Like other rising industrial towns of the region, it drew fuel and raw materials from the rich coal and