

and teaching now in progress. In this survey a guiding principle will be to utilize men and facilities *in situ* whenever possible, thus preserving the "going value" of groups who are accustomed to working together. In the face of crises, the human tendency is usually to do the reverse, it being so easy for central agencies to ignore established but not well-known organizations, and attempt to cope with an emergency by calling workers from right and left to some new location. As a matter of fact, this tendency was beginning to make an appearance even as long as two years ago, when the fundamental plan of the NDRC was under discussion. Had the tide then setting in been allowed to run on for some months unimpeded, the result would inevitably have been a literal army of uprooted scientists in Washington and other central points, sitting around idly waiting for vast amounts of research equipment which had been placed on order, but was not much nearer materialization than that, to be installed in hastily constructed laboratories. This would have been the easy and disastrous way. Fortunately the creation of the NDRC came in time to stem such a tide.

Another present problem, and it is the last with which I shall trouble you, is one which by its existence supplies evidence that real progress has already been made in some of the research programs thus far initiated. It has to do with shortening the time gap between proven laboratory research results and the stage where mass production can be undertaken.

Some of the laboratory results already achieved hold such promise that every day which intervenes before their wide-spread utilization becomes a serious matter. Obviously the problems to be met here cover a wide range of equipment and materials—as wide as that marked out by the scientific results themselves—and since they involve large-scale manufacture, the whole plan must be carefully worked out with other official agencies, particularly the Office of Production Management and the armed services. I am sure, however, that we are prepared to meet and solve these problems, and rather than be concerned with the difficulty of making progress along this avenue, I think all who are guiding the work of the NDRC would exclaim to the ranks of scientists and technicians, "Bring on your results, the more the better, and we will guarantee them a speedy passage to the firing line!"

In the foregoing, I have attempted merely to sketch the set-up of organized civilian research and development created for the war emergency. Obviously, it is only a part of the total effort which is being mobilized. It would be unfair to thousands of scientists and engineers to infer that the main results were dependent on the work of these agencies.

The scientific departments of the armed services are being greatly enlarged; industrial laboratories are turning more and more of their efforts to direct and indirect war work and engineers everywhere are active. Fundamental and applied science are on the march.

## OBITUARY

### HARRY WARD FOOTE

It is with real recognition of the responsibility which is placed upon the writer, a colleague of Harry Ward Foote in the department of chemistry in Yale University, that this report is made. This academic association covered a period of forty-two years of collegiate activity. Hundreds of graduates of the Sheffield Scientific School who enjoyed the privilege of studying chemistry under this inspiring teacher will be grieved to learn of his sudden death on January 14, 1942, in the New Haven Hospital. There were only eight days difference in the ages of Professor Foote and the writer, and we both grew up together in the atmosphere of Yale, and were taught by the same group of inspiring Yale teachers in chemistry: Professor Horace L. Wells, analytical chemistry, Professor William G. Mixer, general chemistry, and Professor Samuel G. Penfield, mineralogy.

Harry Ward Foote will be remembered as a most successful teacher in his special subjects, namely—general and analytical chemistry. He was the kind of a teacher that every American college boy should come

in contact with during his academic or collegiate career. He endeared himself to his undergraduate students; he tried to understand each individual man in his class; he played fair with them, and the student was impressed with his spirit of fairness and square dealing. He was a sane thinker, not given to making snap decisions; his advice was sound and helpful. He exercised vigilance and conservatism in the trying days of Yale's reorganization of the university's departments of chemistry, and was recognized for his safe counsel and departmental cooperation.

Professor Foote's courses in chemistry laid an excellent and sound foundation for future growth; widened the student's knowledge and outlook, and encouraged many to get scientific training for themselves. Not only the student body suffers a real loss in the death of Professor Foote, but also the general faculty and departmental staff of the Sheffield Scientific School. He was recognized by his teaching associates as a good representative of democracy, a believer in freedom of speech, thought and action, as long as no infringement was made on the rights of others.

He was an excellent companion with a variety of personal interests and always a man of stability.

Collegiate institutions have learned to rate at its true worth the teaching service of men like Professor Foote, and their ability to give sound training in special fields of science. We need more than ever during these critical times young men who can apply successfully the technique of sound pedagogies. This calls for the ability to inculcate habits of keen observation and deduction; to teach the essential facts having a direct bearing on the activities of everyday life, and stimulate progressive thought during the next fifty years.

Harry Ward Foote was born in Guilford, Connecticut, on March 21, 1875. He received his degree of Ph.B. from Yale in 1895, and his Ph.D. degree from Yale in 1898. He was appointed an instructor in 1898 and served as assistant professor of chemistry from 1904-1912, and as professor of chemistry from 1912 to the time of his death. He was a fellow of Silliman College, a member of the scholastic Society of Sigma Xi and an honorary member of Chi Chapter of the chemical fraternity, Alpha Chi Sigma. He was a member of the following scientific societies, namely—American Chemical Society, Connecticut Academy of Arts and Sciences and the Royal Geographical Society. For several years he was associate editor of the *American Journal of Science*.

TREAT B. JOHNSON

YALE UNIVERSITY

### PAUL STILWELL MCKIBBEN

1886-1941

DR. PAUL S. MCKIBBEN, until recently dean of the School of Medicine, University of Southern California, was born in Granville, Ohio, on March 14, 1886, and died in Los Angeles, California, on November 11, 1941. His parents were George F. McKibben, professor of Romance languages in Denison University, and Elizabeth Stilwell McKibben, a graduate of Wellesley College, a very kindly and strong character. Paul McKibben's education was obtained in the public schools of Granville, Doane Academy and Denison University, where he was graduated in 1906, a bachelor of science with honors in zoology. He was appointed a fellow in anatomy in the University of Chicago in October, 1907. Professor C. Judson Herrick, who had been professor of biology in Denison University before going to the University of Chicago, was a great friend of the elder McKibbens. This friendship was shared by the younger McKibben when he went to Chicago, and under Herrick's direction and kindness, McKibben's scientific qualities developed. This resulted in the production of one of the great anatomists, teachers and administrators of this gen-

eration. Paul S. McKibben received the degree of doctor of philosophy in June, 1911, and was immediately made instructor in anatomy at the University of Chicago.

In 1913 Dr. McKibben was offered and accepted the professorship in anatomy at the University of Western Ontario. The department of anatomy soon became the outstanding department of the Medical School. From March, 1918, for one year, Dr. McKibben was first lieutenant in the U. S. Army attached to the Neuro-Surgical Laboratory of the Johns Hopkins University where, in association with others, he did some original work on brain injuries. On his return to the University of Western Ontario, he was appointed acting dean and, because of his outstanding administrative abilities, was soon made dean. A new Medical School building was constructed largely through Dr. McKibben's efforts. Even the design was his, and it is considered one of the finest and best-equipped medical buildings in Canada. Dr. McKibben realized the advantages of a good library with the result that the University of Western Ontario Medical Library now has over 30,000 volumes. The School of Public Health was established during his deanship, mainly through his efforts. His work at the University of Western Ontario was a major factor in the development of one of the outstanding medical schools in Canada. He was very strong for the integration of primary subjects with the clinical.

In 1927 Dr. McKibben was appointed professor of anatomy at the University of Michigan, where he remained for two years. He was called in 1929 to the chair of anatomy in the newly established Medical School of the University of Southern California. In 1931 he was made dean of the School of Medicine but continued as chief of the department of anatomy. Here again his great administrative ability came to the fore and he gathered together a fine group of teachers in both the pre-clinical and clinical years.

Dr. McKibben's knowledge of medicine in general was tremendous. His ability to pick students was uncanny. He combined the qualities of a great mind with those of an outstanding teacher and administrator and, above all, was a tolerant and understanding friend to many fortunate people. Dr. McKibben was given the honorary degree of LL.D. from the University of Western Ontario in 1928 and Sc.D. from Denison University in 1936. He was a fellow of the Royal Society of Canada, the American Association of Anatomists, the American Association for the Advancement of Science, and was a member of Beta Theta Pi, Gamma Alpha, Phi Rho Sigma, Phi Beta Kappa and Sigma Xi. He leaves his widow, Elizabeth Kendall McKibben, whom he married at Baltimore while doing research at the Johns Hopkins University, four children, Paul Stilwell, Jr., Richard Ken-