In 1913 Dr. Henrici was appointed instructor in bacteriology at the University of Minnesota, where he spent the greater part of his distinguished professional career. He was made a professor of bacteriology in 1925. Following the outbreak of World War I, he enlisted in the Army Medical Corps. He served as captain with his unit in France until after the Armistice.

Dr. Henrici's research interests were largely in the fields of morphology and taxonomy. He soon became a recognized authority in these branches, so much so that he somewhat personalized these fields. In addition to his contributions to scientific journals, he is the author of "Morphologic Variation and the Rate of Growth of Bacteria," "Molds, Yeasts, and Actinomycetes" and "The Biology of Bacteria." He was a member of the Society of American Bacteriologists, of Sigma Xi and of Alpha Omega Alpha. He was associate editor of the *Journal of Bacteriology*, and in 1939 he served as president of the Society of American Bacteriologists. In 1941 he held the Walker Ames Lectureship at the University of Washington.

As a teacher Dr. Henrici had few peers. His clarity in presentation of data was a model of pedagogic technique. Dr. Henrici was loved and admired by his colleagues and idolized by his students. His death will long be mourned by all who knew him.

W. P. LARSON

RECENT DEATHS

FRED HALL KAY, geologist, vice-president in charge of exploration and production for the Standard-Vacuum Oil Company, died on July 9 at the age of fifty-eight years.

DR. EDITH HALL DOHAN, curator of the Mediterranean section of the University of Pennsylvania Museum, author, and member of several expeditions to Crete, died on July 14 at the age of sixty-five years.

SCIENTIFIC EVENTS

RESEARCH IN THE UNITED STATES

Nature makes the following comments on a recent statement made by Sir Ernest Simon before the Parliamentary and Scientific Committee concerning research in the United States:

The research unit of the Bell Telephone Company, for example, has some 5,000–6,000 research workers concentrated on the one problem of telephonic communication. In the United States there seemed to be little need to persuade the business man, hard-headed though he be, of the value of research. He is now so firmly convinced by the results of the last twenty years, in peace and in war, of the necessity of research, that expenditure has risen to an astonishing figure, and, during the great depression, the research budget was the last to be cut. In 1940, according to an official report, industry was maintaining some 2,200 laboratories with a research staff of 70,000, at an annual cost of three hundred million dollars. Sir Ernest wondered what the expenditure is in Great Britain; he doubted whether it was £4,000,000, yet it was to be noted that the United States population was only three times greater than ours. Per head he estimated that the United States was spending five times as much as we spend on university and industrial research. The results were significant. America now leads in hydrocarbon research, the world order being now: United States first, Germany second, Russia third and Great Britain fourth. Yet coal is our only special large-scale natural resource, and success in the difficult post-war period in exporting enough to pay for our essential imports will depend to a substantial extent on the most scientific treatment of our coal in order to get from it the maximum value.

This question of research is, of course, broadly divisible into two parts: research conducted by industrial organizations and research conducted by universities, and Sir Ernest Simon had some equally striking points to make concerning American universities. Their size and number is almost startling. When, during 1937–38, we had about 50,000 university students in Britain, America had a million. Their income was £97,000,000, while ours was just over £6,000,000. American grants from government authorities were ten times, and from private generosity, twenty times as great as ours. In engineering, for example, there were, in the same year, 12,000 graduates from the American schools compared with about 800 in Great Britain. Now none more than ourselves realizes that this comparison either of research or of numbers of universities and students may quite easily be very misleading. There are many factors which need close examination before final and valid conclusions can be drawn. The standards of graduate qualification must be closely examined and more particularly the work done by post-graduate students. The same care is needed when comparisons of arrangements for research are made, for research is a word capable of many interpretations. In saying that, we have no intention of attempting to detract from the vast and expert work of American research organizations and of American universities. By whatever test which may be applied it seems clear, from the points made by Sir Ernest Simon, that America has set and is setting an example which ought, without any avoidable loss of time, to be followed in Britain. The discussion which followed Sir Ernest's statement showed how the problem was appreciated by his listeners and gave indications of where research here should be encouraged and fostered.

VITAMIN D PATENTS

THE following "special" has been sent from San Francisco to *The New York Times* by Lawrence E. Davies: