

definitely indicates its actual or potential danger to individuals and communities which harbor the etiologic agent.

The problem of control is somewhat simplified by remembering that reservoir hosts play no important part in the propagation of amebiasis, so that man may thank himself for the infection. Moreover, the individual who is least likely to manifest symptoms, namely, the so-called "carrier case" who is passing cysts in his stools, is the primary offender. Exposure occurs through entry of viable infection-stage cysts of *Endamoeba histolytica* as a contamination into the mouth. Infection may occur from a single massive dose of cysts, or from repeated lighter doses taken into the mouth in food or water. While the epidemiologic evidence is not conclusive, it is apparent that the safeguarding of food and drink from contamination should do much to protect the population. The public must be made aware that dirty food handlers should not be tolerated. By sanitary regulations these individuals should be examined for amebic infection and, if found positive, should be treated until they are negative. Filth flies should not be allowed to breed; they are not only a menace in this infection but in practically all other diseases primarily involving the gastro-intestinal tract. Thorough sanitary campaigns should be carried out in eleemosynary in-

stitutions to clean out these hotbeds of infection. An awakening of the public consciousness regarding the potential dangers of amebiasis constitutes an additional essential part of the control program. Meanwhile the practicing physician, by his respectful attitude towards amebiasis in his own patients, whether they manifest symptoms or are apparently symptomless, can do much to further this end.

#### CONCLUSIONS

The material which has been presented in this paper is not intended for immediate practical application by the clinician but as a basis for reorientation and re-evaluation of the problem of amebiasis. Some of the remarks are personal reflections of the writer which have never previously been expressed except in informal conferences. It is believed, however, that the subject justifies this type of presentation. It is the writer's sincere hope that some little stimulus will have been provided which will aid the physician and the epidemiologist in elucidating the several obscure aspects of the problem of amebiasis, so that in the future practical means may be found for its control.

It has been a very real honor to be the 1943 recipient of the Alvarenga Prize of the Philadelphia College of Physicians and a privilege to address this distinguished body.

## OBITUARY

### L. CHARLES RAIFORD

PROFESSOR L. CHARLES RAIFORD died on January 8 at the age of seventy-one years after a very short illness. He is survived by a daughter, Mrs. Mark Hagerman, of Towanda, Pa., and a grandson, Mark, Jr.

Professor Raiford was born on August 2, 1872, in Southampton County, Va. He received the Ph.B. degree at Brown University in 1900, the M.A. in 1904 and the Ph.D. at the University of Chicago in 1909. He was on the teaching staff at the Mississippi Agricultural College, the University of Chicago, Clemson College, the University of Wyoming and the Oklahoma A. and M. College before going to the University of Iowa in 1918, where he served as professor of organic chemistry up to the time of his death. He was also head of the division of organic chemistry until 1942 when he reached the age of seventy years. During this period he directed the research of over a hundred graduate students for advanced degrees. These are scattered all over the United States in teaching and industrial positions.

Professor Raiford was a fellow of the American Association for the Advancement of Science, a member of the American Institute of Chemists, the American Chemical Society, the American Association of

University Professors, the Oklahoma Academy of Science, the Iowa Academy of Science, Sigma Xi, Phi Beta Kappa, Phi Lambda Upsilon, Alpha Chi Sigma, Phi Delta Chi, the Research and Triangle Clubs. In the American Chemical Society, he served as national chairman of the organic division in 1937. In the local section of that organization, he served as chairman and secretary and was elected councilor nine times, a very notable record which indicated his popularity and standing in the profession.

Professor Raiford was active in these societies and always willing to do any service, no matter how much work was involved. He was president of Phi Beta Kappa in 1922-23 and was local secretary of that organization when a national directory was prepared, to which undertaking he contributed by gathering the necessary data for the members of the Iowa chapter. He represented the department of chemistry on the library board for many years, and the excellent maintenance of the chemistry library was due in great measure to his efforts. He served as president of the Research Club.

In 1942, when he reached his seventieth birthday, a testimonial dinner was given in his honor at the Alpha Chi Sigma chemical fraternity at which addresses were

given by faculty colleagues and letters read from former students. At that time a watch was presented to him from former students and members of the local chapter of Alpha Chi Sigma.

Professor Raiford was the author of a "Laboratory Course in Color Chemistry," since 1936 a member of the board of editors of the *Journal of Organic Chemistry*, and contributed many articles to scientific journals.

Funeral services were held on January 11. Dr. M. Willard Lampe officiated, and honorary pallbearers were Edward Bartow, Perry A. Bond, George H. Coleman, Jacob Cornog, Homer R. Dill, George Glockler, Hubert L. Olin, Henry A. Mattill and J. Hubert Scott.

GEO. GLOCKLER

THE STATE UNIVERSITY OF IOWA

#### LEVIN BOWLAND BROUGHTON

L. B. BROUGHTON, dean of the College of Arts and Sciences of the University of Maryland, died suddenly at his home in College Park, Md., on December 13, 1943. A correspondent writes:

"Dean Broughton was born in Pocomoke City, Md., on March 29, 1886. In 1908 he was graduated from the Maryland Agricultural College, by which college he was awarded the M.S. degree in 1911. He received his Ph.D. in chemistry from the Ohio State University in 1926. Dean Broughton's association with the University of Maryland continued from 1904 until his death. After graduation he was assistant chemist at the Experiment Station until 1916. He then became, in succession, associate professor in 1916, professor in 1918 and department head in 1929, on which date he also became state chemist of Maryland. In 1938 he was appointed dean of the College of Arts and Sciences, which office he filled with marked success until the day of his death. Within the year Governor O'Connor appointed him a commissioner of the Maryland State Department of Geology, Water Resources

and Mines. He was best known for his researches in agricultural chemistry. Among these were studies in soil acidity, the ascaridole content of chenopodium oil, potash as a by-product of alcohol production, biological changes in pork during curing and vitamin assays. During 1941 he was honored with the presidency of the Association of Official Agricultural Chemists. He was also a member and sometime councilor of the American Chemical Society, Sigma Xi, Alpha Chi Sigma, Kappa Alpha, Phi Kappa Phi, Omicron Delta Kappa and the Rotary Club."

#### RECENT DEATHS

DR. J. McKEEN CATTELL, editor of *SCIENCE* for nearly fifty years, formerly professor of psychology at Columbia University, died on January 20 in his eighty-fourth year.

DR. COLIN C. STEWART, Brown professor of physiology at Dartmouth College, died on January 22 at the age of seventy years. He had been a member of the Dartmouth faculty for the past forty years.

DR. FREDERICK SCHEETZ JONES, formerly professor of physics and electricity at the University of Minnesota, where he became dean of the School of Engineering in 1902, died on January 14 at the age of eighty-one years. He was dean of Yale College from 1909 to 1927.

DR. ALBERT E. TAUSSIG, professor of clinical medicine at the Washington University Medical School, a former director of medical service of the Jewish Hospital of St. Louis, Mo., died on January 16 at the age of seventy-two years.

ROBERT S. LEHMAN, a member of the firm of Alfred and Robert S. Lehman, retail druggists of New York City, a former president of the New York State Pharmaceutical Association, the Academy of Pharmacy and the Pharmaceutical Council, died on January 15 at the age of seventy-six years.

## SCIENTIFIC EVENTS

#### GIFT TO THE UNIVERSITY OF OXFORD FOR PLASTIC SURGERY

It is reported in *The Times*, London, that the Nuffield Provincial Hospitals Trust, at Lord Nuffield's suggestion, has offered the University of Oxford £8,000 a year for ten years towards the cost of establishing and maintaining a plastic surgery unit there. The university has accepted the offer with gratitude and has appointed Thomas Pomfret Kilner as the first director of the plastic surgery unit with the title of Nuffield professor of plastic surgery. The Radcliffe Infirmary will provide hospital facilities for the

unit, and these will be supplemented by the Ministry of Pensions.

Lord Nuffield's direct personal gifts to the University of Oxford for the purpose of the development of the Medical School amount to £2,810,000. His series of great and related benefactions began in 1930 with the purchase of the Observatory Buildings and grounds adjoining the Radcliffe Infirmary, which he gave to the university to be used for the purpose of medical teaching and research, this being followed by a second gift of £2,000,000 for the development of the Medical School.