

named in his honor, although his failing health never permitted him to visit it. In all the years of his membership in the National Advisory Committee for Aeronautics, and particularly from 1927 to 1939, when he was chairman, he made frequent visits to the committee's laboratory at Langley Field and gave to its operations the same meticulous care which characterized his university work.

Dr. Ames had the reputation of being blunt. To those who knew him well he was at heart the kindest of men. But to paraphrase one of the legends which surround the memory of Professor Rowland, Dr. Ames appeared to feel himself bound by an oath to speak the unvarnished truth as he saw it about the physical world, inanimate or not. Nevertheless, in any discussion he was preeminently fair. He would listen patiently to his adversary, whoever he might be. If he was thereby convinced that he had been in error, he would frankly admit it. If they failed to agree, he merely agreed to disagree, with no hard feeling of any kind. A meeting with a specified time schedule was to him an obligation to be met, and as chairman he carried it out to the minute, even if it left his unwary speakers gasping in the middle of a sentence, as it sometimes did. All this simply reflects the orderliness of his own mind. He had trained himself to present a subject in a logical way in a specified time and conclude it on the minute. Others could of course do the same if they would try hard enough. By sheer will power he conquered a speech impediment which troubled him much in his earlier years.

If former students of physics at Johns Hopkins were asked to name the outstanding characteristic of Dr. Ames, the answer would probably be his remarkable ability as a teacher. He was not primarily an experimentalist. In fact, the literature of physics contains very few investigations under his name. He was first and foremost a teacher in accordance with the best traditions of the university. The wide use of his text-book on "General Physics" was a tribute to the clarity of his exposition. He followed closely new theoretical and experimental advances in physics, and made every effort to keep his students informed regarding current developments. The journal meetings and seminars of the physics department under his personal direction were inspiring occasions, and the habits of thought there developed were destined to have a deep influence on the students who were privileged to participate.

So firmly did Dr. Ames hold to the importance and obligations of teaching that he continued to give his undergraduate courses in physics long after he became director of the physical laboratory. His classroom lectures were masterpieces of straightforward logical presentation. Even in his graduate courses he

seldom referred to his notes. In his Joseph Henry Lecture before the Philosophical Society of Washington, which necessitated a manuscript for publication, he laid aside his manuscript at the beginning and presented his subject in characteristic style.

Dr. Ames was a member and past president of the American Physical Society; a member of the National Academy of Sciences; a fellow of the American Academy of Arts and Sciences and honorary member of the Royal Institution of Great Britain. He received the Langley Gold Medal in 1935 in recognition of his leadership in developing aerodynamic research. Washington College, the University of Pennsylvania and Johns Hopkins honored him with the degree of doctor of laws. He was a member of the Baltimore School Board and was president of the Baltimore Country Club for twenty years.

In 1899, Dr. Ames married Mrs. Mary B. Harrison. There were no children of this marriage, but he was deeply attached to his three step-children. Their home on Charlecote Place, Guilford, was a delightful place to foregather. He was a kindly and genial host and a skilful raconteur. After the death of Mrs. Ames in 1931 Dr. Ames lived alone in his home in Guilford until the end. A great teacher has passed to the realm of memory.

LYMAN J. BRIGGS

RECENT DEATHS

DR. WILLIAM FOGG OSGOOD, emeritus professor of mathematics of Harvard University, died on July 22 at the age of seventy-nine years.

DR. CARL EDWIN LADD, dean of the New York State College of Agriculture, Cornell University, died on July 23 at the age of fifty-five years.

DR. GEORGE FREDERICK KAY, professor of geology at the State University of Iowa from 1907 until early this year, dean of the College of Liberal Arts from 1917 to 1941, died on July 20 in his seventieth year.

DR. AGNES LOW ROGERS, formerly professor of education and psychology at Bryn Mawr College and director of the Phoebe Ann Thorne School, has died in Scotland. She was in her fifty-ninth year. Dr. Rogers had been professor of educational psychology at Goucher College and at Smith College.

DR. GEORGE ABRAM HARTER, professor emeritus of mathematics of the University of Delaware and president of Delaware College from 1896 to 1914, died in his ninetieth year on July 22.

CHARLES H. STERNBERG, collector of fossils and a contributor to museums in Munich, London, Paris, New York and Toronto, died on July 20. He was ninety-three years old.

DR. LEONARD S. MCLAINE, Dominion entomologist and assistant director of the science service of the

Department of Agriculture, Ottawa, died on July 20 at the age of fifty-six years.

SCIENTIFIC EVENTS

MESSAGE FROM CHINESE MEN OF SCIENCE¹

PROFESSOR TSENG CHAO-LUN, head of the department of chemistry of the National Southwest Associated University, Kunming, China, has sent the following open letter to British scientific men:

While the introduction of modern science into China dates back to eighty years ago, the real beginnings of scientific research in China came after 1919. On May 4 of that year, students in Peiping (then still called Peking) demonstrated against Japanese aggression, and from that incident was evolved the so-called "May 4th Movement," so important in the cultural as well as the political history of modern China. That movement, which quickly spread all over China, not only rallied the country to the standards of democracy but also promoted the natural sciences as factors in the modernization of China. With this impetus, scientific education and scientific research developed at a rate never dreamed of before. The progress made between 1929 and 1937 was particularly rapid, and constant encouragement was received from scientific workers in the United States and in Europe. Since the outbreak of the Sino-Japanese War in 1937, scientific institutions and scientific men in China have suffered tremendously through the deliberate efforts of the Japanese to destroy Chinese culture. But here in the hinterland of Free China, Chinese men of science have been laboring hard for the last five years in the interest of China and of science.

Chinese scientific workers owe much to Great Britain for their training. For both democratic ideals and scientific accomplishment, we have always looked to Great Britain for guidance. Now, under the banner of the United Nations, Britain and China are fighting shoulder to shoulder to save democracy for the world; a new era of cooperation between the British and Chinese peoples has begun. Early this year we had the honor of welcoming a cultural mission from the British Council. One of its members is Dr. Joseph Needham, who is now doing most valuable work in our country, and who brought with him a large number of scientific books so much needed by us. Recently, Chinese science students in Britain, with the help of the British Ministry of Information, the British Broadcasting Corporation, the British Council and other organizations, have started a scheme for sending us science news, which includes a weekly broadcast summary of the principal contents of each week's issue of *Nature*; recent valuable scientific publications and microfilm copies are being sent, and scientific books are being collected with the view of establishing an adequate Science Library in China. Many British men of science are helping in these efforts. We shall never forget such things, and we hope they will develop into a bigger scheme of

cooperation between the scientific men of Great Britain and China.

THE AQUARIUM OF THE ZOOLOGICAL PARK, LONDON

The Times, London, writes:

One of the most popular pre-war attractions of the London Zoo, the aquarium, was reopened on June 11 in time for the Whitsun holidays.

It had been closed since the beginning of the war for fear of the possible consequences if a bomb should hit one of the big tanks, water from which might then have flooded the tunnels used as air-raid shelters. So the exhibits were removed, and the sea-water was emptied from the tanks into the Regent's Canal—by which it used to reach the Zoo in barges after coming from the Bay of Biscay as ballast in ships' holds. Some time later a German bomb did in fact fall through the roof of the aquarium.

In response to many inquiries by the public the fresh-water section of the aquarium has now been reconstituted, though necessarily on a more modest scale than before. The exhibition reflects much credit on the aquarium overseer, Mr. H. Vinall, who has got it together in face of many difficulties. He himself has made fishing excursions, with a drag-net, to acquire many of the British fresh-water fish now on view. Among them are trout, perch, roach, dace, bream, tench, carp and eels.

The other exhibits are survivals from the pre-war aquarium and have been stored behind the scenes in tubs and all manner of receptacles. Most are cold-water fish, but the exhibition also includes five tanks of tropical fish, kept warm by electrical elements in the water. Some of the most vivid little tropical fish have been on view for the past year in the neighboring reptile house, which provides a suitable temperature for these miniature wonders of the deep, and they will remain there.

In warm-water tanks in the aquarium are several species of cichlid and two lung-fish, one from Africa, the other from Australia. There are salamanders from China and Japan, American garfish and sunfish, the Mexican axolotl (which is capable of living on dry land) and a fine display of ornamental gold-fish. At the entrance is a large and attractive ornamental pool, inhabited by large carp and golden orfe.

THE RESOURCES OF VIRGINIA

UNDER "Science Notes" in *The Commonwealth* Dr. Sidney S. Negus reports that a committee has been appointed by W. Catesby Jones, president of the Virginia Academy of Science, to prepare an inventory of Virginia resources, including minerals, soils, agriculture, water, forestry, water power, transportation, labor, education, manufacturing, finances, research,

¹ From *Nature*.