

contribution to the war effort but also on more fundamental, long-range plans for the solution of the present and continuing problems of physics and the war. Its reports have been widely circulated and are worthy of the careful study of all concerned with these problems and the future of physics.

Aside from the larger scale activities of its war policy committee, the institute and its staff are engaged in a variety of projects and activities—each relatively small in itself but all together summing up to a very significant total. A series of bulletins has been issued supplying to heads of college physics departments and to others information which should be disseminated more quickly than is possible through the usual publication channels. These bulletins have reported Selective Service policies and procedures, War Policy Committee actions, educational policies of the Army and Navy Enlisted Reserve programs, War Production Board regulations and other topics of immediate concern to physicists. The institute has become an increasingly important center for information and advice regarding all phases of the inter-relationship between physics and the official agencies guiding the war effort.

Much of the institute's effort has been concerned with the problem of obtaining suitable personnel for war-connected research and other work. Partly as a result of this experience, the director of the institute was asked to organize, in the spring of 1941, the Office of Scientific Personnel in the National Research Council at Washington. Dean Homer L. Dodge, of the University of Oklahoma, a former member of the institute's governing board, directs the activities of this office.

The plight of the nation, faced in its hour of greatest need by inadequate manpower trained in physics, demands that steps be taken to help provide against a future shortage of physicists. Some such steps have been taken by the institute, and it is gratifying to acknowledge that other steps—even more effective because of their source—have been taken by the Navy, the Army Air Force and the U. S. Office of Education, to emphasize physics and mathematics in high schools and to acquaint high-school graduates with the practical usefulness of the continued study of physics in

college. The institute has been represented in Washington conferences at which the opportunity to encourage and expedite these actions of the government has been grasped. High-school programs can not yield physicists to meet the present shortage but they do more than lay the basis for the future physics strength of the country. They can provide the best pre-induction training for the large number of men the Army and the Navy will need to operate technical devices of warfare.

PHYSICS AS A PROFESSION

The increased use of physicists in industry and the importance attached to physics in the present war program have placed new emphasis on physics as a professional field of work. The term "physicist" is becoming more widely known and recognized. This recognition of physics as a profession, and of "physicist" as a professional title, not only carries with it a considerable distinction but brings up numerous important problems concerned with the establishment and safeguarding of professional levels and standards. It is time to shape policies and plans for the protection of the title "physicist" and the maintenance of the high standards now associated with it, to determine methods of recruiting and selecting persons of high ability for the profession, to evaluate present educational standards with a view to insuring continued and improving training, to fight for appropriate rewards for the physicist, and to guide social forces such as labor unions and government regulations to a proper understanding of the profession's character, potentialities and needs.

In the American Institute of Physics physicists have a record of progress and achievement of which they may be proud. It is evident, however, that the problems of its future are fully as difficult and important as those of its past. The very success of the institute in thus far promoting the welfare and development of physics has placed in its hands added responsibilities and new tasks which must now be performed. Only a truly cooperative organization, fully supported by all American physicists, can adequately meet these responsibilities and successfully carry out these tasks.

OBITUARY

DR. HOWARD ATWOOD KELLY

DR. KELLY, the last of the "Big Four" of Sargent's well-known portrait of the early Johns Hopkins Hospital leaders (Osler, Welch, Halsted and Kelly) to survive, died in Baltimore on January 12, 1943. Had he lived five weeks longer he would have been 85 years of age.

Born in Camden, N. J., on February 20, 1858, he received his A.B. degree at the University of Pennsylvania in 1877 at the age of 19. He entered the medical department there as a student in the autumn of the same year, but at the end of the second year because of ill-health (insomnia) was compelled to interrupt his medical studies. He went to Colorado,

to live in the open air, earning his own living as a cowboy for a year. Returning to the University of Pennsylvania he received his M.D. degree there in 1882. After a year as resident physician in the Episcopal Hospital he established himself in Kensington, turned his attention especially to the practice of gynecology and established a small private hospital, which later developed into the well-known Kensington Hospital for Women.

During 1886 and 1888 Dr. Kelly traveled in Europe, visited the leading gynecological clinics in Great Britain and in Germany and observed the abdominal and pelvic operations of the best surgeons there. In 1888 he was made associate professor of obstetrics in the University of Pennsylvania. On his second visit to Germany he was married in Danzig to Laetitia Bredow, who became the mother of nine children and who died on the same day as did Dr. Kelly.

Early in 1889 he was called to Baltimore to be professor of obstetrics and gynecology in the Johns Hopkins University and gynecologist-in-chief to the Johns Hopkins Hospital. He organized and developed the department at the hospital and arranged for courses of instruction for graduates in medicine. On the opening of the medical school a few years later he organized the courses of lectures and the clinical work for the students of medicine. Owing to the rapid development of his private practice he opened in 1892 a private hospital in the city, which gradually grew to be a large institution. He early relinquished the work in obstetrics but continued as professor of gynecology until 1919, when he was succeeded by Dr. Thomas S. Cullen; he then became emeritus professor.

As an operator in his special domain, it is said that he has never been equalled in skill, in celerity or in judgment. Many distinguished surgeons have watched him operate and all marveled at his manual dexterity. As the originator of new operative procedures upon the female generative organs and upon the kidneys and ureters he rapidly became world-renowned and in the development of operative technique his contributions have been designated as epoch-making.

His assistants through the training they received at his hands found the opportunity to develop into expert gynecologists. Many of them came to occupy important positions, among them Hunter Robb, W. W. Russell, John G. Clark, B. R. Schenck, J. E. Stokes, G. R. Holden, John Sampson, A. L. Stavely, C. W. Vest, L. R. Wharton, Otto Ramsay, D. B. Casler, E. H. Richardson, G. L. Hunner, Thomas S. Cullen, who succeeded him in the chair at Johns Hopkins, and Curtis F. Burnam and William Neill, Jr., who continued his work at his private hospital and in his radium clinic. Dr. Kelly was a good executive, for he learned early to delegate impor-

tant responsibilities to his associates, developing them and at the same time giving him greater freedom for the exploration of new fields.

During his lifetime he was the author of more than a dozen books and he contributed some 500 articles to scientific journals. Among his books, "Operative Gynecology," "The Vermiform Appendix and its Diseases" (with Dr. Hurdon), "Walter Reed and Yellow Fever," "Gynecology and Abdominal Surgery" (with Dr. Noble), "Medical Gynecology," "Myomata of the Uterus" (with Dr. Cullen), "Cyclopedia of American Medical Biography," "Some American Medical Botanists," and "Diseases of the Kidneys, Ureters and Bladder" (with Dr. Burnam) have been widely read. His "Stereo-Clinic" consisted of some 20 volumes describing the more important gynecological operations, accompanied by stereoscopic photographs of their different stages; this represented a new method of teaching surgery. For the illustrations of his other volumes he brought the medical artist, Max Broedel, from Germany, who later developed the department of "Art Applied to Medicine" at the Johns Hopkins Hospital.

Dr. Kelly was always a naturalist, his great love for natural science having been promoted by his friendship with the paleontologist, Professor E. D. Cope, during his early student days. Professor Cope had even offered to send him in charge of an exploring and collecting expedition to South America, but owing to his father's objection, he entered upon the study of medicine instead. He always maintained his interest in botany and zoology and was an ardent collector of plants and animal specimens. He developed an especial interest in mushrooms and in snakes, and was made an honorary member of several botanical and zoological societies in this country and in Europe.

Always athletic, Dr. Kelly was a champion swimmer at the University of Pennsylvania and he became an expert canoeist during his summer holidays, which he spent at a camp in northern Ontario. He was a devoutly religious man and in 1925 wrote a book entitled "A Scientific Man and the Bible." He took his duties as a citizen seriously and tried to improve political and moral conditions in Maryland. At one time he was a watcher at the polls in South Baltimore and he participated in anti-vice crusades and in the movement for pure food laws.

Many honorary degrees were conferred upon Dr. Kelly, among them the LL.D. degree from the University of Aberdeen (1906).

LEWELLYS F. BARKER

RECENT DEATHS

DR. FRANCIS HUNTINGTON SWETT, professor of anatomy in the Duke University Medical School since