American delegates with the representatives of the organizations of other countries, very cordial relations were established with those associations. The resulting cooperation should prove of immense value to international commerce, as well as effect a reduction in cost of production in many fields.

RESOLUTIONS OF THE AMERICAN FEDERATION OF LABOR ON SCIENTIFIC RESEARCH

WHEREAS, scientific research and the technical application of results of research form a fundamental basis upon which the development of our industries, manufacturing, agriculture, mining, and others must rest; and

WHEREAS, the productivity of industry is greatly increased by the technical application of the results of scientific research in physics, chemistry, biology and geology, in engineering and agriculture, and in the related sciences; and the health and well-being not only of the workers but of the whole population as well, are dependent upon advances in medicine and sanitation; so that the value of scientific advancement to the welfare of the nation is many times greater than the cost of the necessary research; and

WHEREAS, the increased productivity of industry resulting from scientific research is a most potent factor in the ever-increasing struggle of the workers to raise their standards of living, and the importance of this factor must steadily increase since there is a limit beyond which the average standard of living of the whole population can not progress by the usual methods of readjustment, which limit can only be raised by research and the utilization of the results of research in industry; and

WHEREAS, there are numerous important and pressing problems of administration and regulation now faced by federal, state and local governments, the wise solution of which depends upon scientific and technical research; and

WHEREAS, the war has brought home to all the nations engaged in it the overwhelming importance of science and technology to national welfare; whether in war or in peace, and not only is private initiative attempting to organize far-reaching research in these fields on a national scale, but in several countries governmental participation and support of such undertakings are already active; therefore be it

Resolved, by the American Federation of Labor in convention assembled, that a broad program of scientific and technical research is of major importance to the national welfare and should be fostered in every way by the federal government, and that the activities of the government itself in such research should be adequately and generously supported in order that the work may be greatly strengthened and extended; and the Secretary of the Federation is instructed to transmit copies of this resolution to the President of the United States, to the president pro tempore of the Senate, and to the speaker of the House of Representatives.

NATIONAL RESEARCH FELLOWSHIPS

THE National Research Council announces further appointments to national research fellowships in physics and chemistry. Previously six appointments were announced—three in chemistry and three in physics. The object of the National Research Council in maintaining a system of research fellowships is to promote fundamental research in physics and chemistry primarily in educational institutions in the United States. Fellowships are awarded to persons who have demonstrated a high order of ability in research for the purpose of enabling them to conduct investigations at educational institutions which make adequate provisions for research in physics and chemistry. The new appointments are as follows:

In Chemistry

Warren C. Vosburgh, of New York City. B.S. Union, '14; A.M., '16; Ph.D., Columbia, '19. Research assistant to the professor of chemistry at Columbia University for the past six months.

George Scatchard, of New York City. A.B. Amherst '13; Ph.D., Columbia, '17. Formerly research assistant to the professor of chemistry at Columbia University and instructor

in organic chemistry; first lieutenant, Sanitary Corps, U. S. A.

In Physics

Ernest F. Barker, of London, Canada. B.S. Rochester, '08; M.A., Michigan, '13; Ph.D., 15. Professor of physics Western University, London, Canada, since 1915.

Albert Edward Caswell, of Eugene, Oregon. A.B. Stanford, '08; Ph.D., '11. Professor of physics, University of Oregon, since 1917.

The members and acting members of the research fellowship board are as follows: Wilder D. Bancroft, Henry A. Bumstead, Simon Flexner, George E. Hale, Elmer P. Kohler, A. C. Leuschner, Robert A. Millikan. Arthur A. Noyes, E. W. Washburn.

SCIENTIFIC NOTES AND NEWS

Dr. George Ellery Hale, director of the Mount Wilson Observatory and foreign secretary of the National Academy of Sciences, who has been for the last ten years a correspondent of the Paris Academy of Sciences, has been elected a foreign associate, taking the place of Adolph von Baeyer, declared vacant by the academy. The foreign associates are limited to twelve, and the distinction has been held by only two Americans—Simon Newcomb and Alexander Agassiz. The National Research Council, upon the presentation and acceptance of Dr. Hale's resignation as its chairman and the election of Dr. James R. Angell as his successor, "created and bestowed in perpetuity upon Dr. Hale the title of honorary chairman in recognition of his services to the National Research Council and to science and research by indefatigable efforts that have contributed so largely to the organization of science for the assistance of the government during the war, and the augmentation of the resources of the United States through the newly intensive cultivation of research in the reconstruction and peace periods that follow."

A distinguished service medal has been awarded to Colonel William H. Walker, Chemical Warfare Service, U. S. A., for exceptionally meritorious and conspicuous service. "His extraordinary technical ability, untiring industry and great zeal have enabled remarkable results to be achieved in the production division of the Chemical Warfare Service in the face of many obstacles encountered." Colonel Walker has been discharged from the Army and has returned to his home in Bridgton, Maine.

The University of California has conferred its doctorate of laws on President Ray Lyman Wilbur and Professor Vernon Charles Kellogg, of Stanford University.

The degree of doctor of science has been conferred by Dartmouth College on Dr. Raymond Pearl, of the Johns Hopkins University.

For scientific exhibits at the Atlantic City meeting of the American Medical Association the gold medal was awarded to Dr. H. S. Warthin and the silver medal to Dr. Hideyo Noguchi.

Dr. R. F. Ruttan, of McGill University, Montreal, president of the Royal Society of Canada, has been deputed to represent Canada at the International Research Council which meets in Brussels on July 18. He will also attend the Inter-allied Federation of Chemists to be held in London as the representative of the chemists of Canada.

Dr B. E. Fernow, dean of the faculty of forestry, University of Toronto, Toronto, Canada, since its inauguration in 1907, retired at the close of the session just concluded. He has been appointed professor emeritus. Dr. C. D. Howe, a member of the faculty has been appointed acting dean.

Professor I. Bayley Balfour has been awarded the Linnean gold medal of the Linnean Society, London.

At the seventy-first general meeting of the Institution of Mining Engineers held in London on June 19, medals were presented to Dr. Auguste Rateau, of France and M. Victor Watteyne, of Belgium.

Dr. John Dewey has been invited by the Chinese government to assist in the reorganization of its educational system and has for this purpose received a second year's leave of absence from Columbia University.