confers its medals for especially distinguished accomplishments in science.

This evening we bestow a medal, in memory of Marcellus Hartley, for eminence in the application of science to the public welfare, and the John J. Carty Medal and monetary award granted not oftener than once in every two years to an individual for noteworthy and distinguished accomplishment in any field of science coming within the scope of the charter of the academy.

The Committee on the Award of the Marcellus Hartley Gold Medal for eminence in the application of science to the public welfare this year decided to recognize the field of public health, but they were unable to distinguish between the merits of two outstanding servants of the public. Accordingly, they recommended a dual award: to Dr. Hugh Smith Cumming, surgeon general (retired) of the United States Public Health Service, and to Dr. F. F. Russell, of the Rockefeller Foundation. I wish that both might have been present together, but Dr. Cumming was absent in Europe at the time of our spring meeting in Washington when the medal was conferred on Dr. Russell, and the award to him has accordingly been deferred until this time.

To our great regret, the chairman of the Committee of Award, Dr. Harvey Cushing, is unable to be present. In his absence our distinguished fellow member, Dr. Ludvig Hektoen, director of the McCormick Institute for the Study of Infectious Diseases and chairman of the National Research Council, will state the reasons that governed the committee in its recommendations.

F. R. LILLIE

PRESENTATION OF THE PUBLIC WELFARE MEDAL TO DR. HUGH SMITH CUMMING

It is the purpose of the Marcellus Hartley Medal "to mark the appreciation of the National Academy of Sciences for eminent services to the public performed without a view to monetary gains and by methods which in the opinion of the academy are truly scientific." Of the 14 previous recipients of the Marcellus Hartley Medal for eminence in the application of science to the public welfare five have been physicians, four of whom spent their active years in governmental services, federal or municipal, and the fifth partly so. Again the medal is awarded to a physician long in the service of the government.

Hugh S. Cumming was born and educated in Virginia. He studied medicine at the University of Virginia, graduating in 1893. The following year he entered the U. S. Public Health Service as assistant surgeon. Promotions followed, and in 1920 he was appointed surgeon general, which position he held

under five successive presidents until January 31, 1936, when he was retired, at his own request, after forty-two years of service.

Dr. Cumming was well prepared to head the Public Health Service by the work and training of his previous assignments. While at Ellis Island he came face to face with the health problems of immigration on a large scale. In charge of quarantine at San Francisco and while in Japan, where he was next detailed, he was in intimate touch with certain diseases against which the United States always has maintained quarantine. After a tour of duty in the Pacific he carried out investigations of the pollution of tidal waters of Maryland and Virginia, of the Potomac watershed and of coastal waters of New Jersey, New York and Delaware. This work gave results of much importance to the understanding and prevention of the pollution of the waters of shellfish and resort areas and its dangers, sanitary as well as industrial.

During the world war Dr. Cumming served first as adviser in sanitation to the Navy; later he was in charge in Europe of activities of the Public Health Service in relation to sanitation, the return of troops and the resumption of trade. While serving as president of the Interallied Sanitary Commission to Poland in 1920 he was called home to be surgeon general.

Only brief mention can be made of some of the important advances in the Public Health Service under Dr. Cumming's leadership. I would recall first the reorganization and expansion of hospital facilities to meet the emergency of temporarily caring for exservice men and women who were beneficiaries of the War Risk Insurance Bureau, now the Veterans' Administration, a difficult task carried out with expert judgment and foresight. By acquiring to federal control the last state-owned quarantine station in operation, the station at the port of New York, the national quarantine system was completed and unified. The examination by medical officers of the service of intending immigrants to this country prior to their departure from foreign ports was a measure of humanitarian and sanitary significance. An acute need was met by the erection of a hospital for leprosy at Carville, Louisiana, and needed improvements were assured by the provisions for new marine hospitals in various parts of the country. In the prompt control of several outbreaks of bubonic plague within our borders is a striking example of the benefits from the application of science to the prevention of epidemic disease. The creation of a division of mental hygiene, including medical services at penal and correctional institutions under federal control, recognized constructively the mental aspects of the public health. The addition to the corps of commissioned medical officers of dental, sanitary engineer and scientific personnel was in response to the demands of the expanding activities of the Service. Special mention should be made of the friendly, actively cooperative relations, now well established, between the Public Health Service and the health departments of the various states. In this development, which has resulted in marked improvement in health administration, the influence of Dr. Cumming, wise, modern, clear-sighted, has been of great weight.

On the fundamental and more directly scientific side I can not emphasize too much the growth in the investigative activities and achievements of the Public Health Service in general and as illustrated by the National Institute of Health, formerly known as the Hygienic Laboratory, and by the comprehensive plans for its future growth. We may well be proud of the National Institute. It is a productive center of investigation in its field.

Dr. Cumming has been concerned for many years in international health matters. He has represented the United States on international sanitary conferences; he is now the representative of the Office Internationale d'Hygiéne Publique on the health committee of the League of Nations; he is also the director of the Pan American Sanitary Bureau, a body designed to combat epidemic disease and to improve the health in the countries represented in the Pan American Sanitary Conferences.

A leader in the application of scientific methods to public health, Dr. Cumming has rendered a remarkable public service worthy of conspicuous recognition.

LUDVIG HEKTOEN

RESPONSE OF THE MEDALLIST

No man could help being gratified when given any favorable recognition by such a body as the National Academy of Sciences, and now when you have awarded me such an honor as this, I feel that, whether or not it be deserved, it is more than adequate compensation for a long and interesting life spent in the public service of my country.

Frankly, when I first heard of the award, I thought there must be some mistake, though consolation came with the thought that this body in its search for truth and knowledge has made few errors!

The question in my mind as in yours and in the mind of every thoughtful person is, "What is Public Welfare?"

We all agree with the Roman dictum: "Salus populi suprema lex esto!" But what is it? How may we best attain it?

The desire to help others, to promote the public welfare was not created by or with our generation or country; it runs like a golden thread down the ages in the teachings of great philosophers and the deeds of persons in all walks of life. Some of these teachings and efforts, time and experience have proven unwise, while others have stood the test of changing circumstance.

Unhappily "public welfare" in its narrower as well as broader implications has drawn to its cause not only those intellectually honest, wise, patriotic persons of all classes who have devoted their own lives and possessions to the betterment of humanity but, like other great causes, has attracted an apparently increasing number of camp followers and leaders with mental myopia and strabismus or selfish motives and ambitions, who dissipate public effort or lead it into false paths with strange doctrines, arousing class hatred and distrust, teaching that vice or virtue are class rather than individual attributes, until the term "public welfare" at times has almost an unpleasant connotation.

Is too much stress being placed upon the rights, too little upon the duties and responsibilities of individuals and classes?

Is the petition in the Common Prayer Book, "Lord make us content to do our duty in that state of life in which it hath pleased God to call us," all wrong?

Is the Biblical statement, "Happiness consisteth not in the abundance of riches," one of these truths which time has made uncouth?

Through the ages crimes have been committed, errors made and the progress of humanity toward happiness arrested in the name of high ideals—religion, happiness. Is the same course being followed in the name of "public welfare"?

These questions arise in the minds of thoughtful persons who have been in touch with the unrest and surging here and abroad. "Quo vadis" is in the mind if not on the tongue of each of us.

The acquisition and application of scientific knowledge to methods of production, transportation, domestic life, and no less to medicine in its broader meaning; the consequent increase in total populations and concentration in urban centers, with facilities for rapid movement of peoples and their products—these have perhaps not changed the goal to be reached but have created the necessity for new methods and also, let us hope, the means for the solution of our problems.

As was so ably pointed out at the recent meeting of the British Association, it is to such scientific men as your organization that we should be able to look for assistance in the solution of the problem as to how the accumulated wisdom and knowledge of the arts and sciences may best be used to promote the welfare and happiness of our public.

Such a body will not forget the old Chinese proverb that while "wisdom without knowledge is helpless, knowledge without wisdom is dangerous," nor neglect