

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'Hygiène 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

to use the lamp of experience in its search for the paths to be followed.

And your assistance will perhaps be more particularly valuable, indeed necessary, in the readjustments necessary in that most important factor, the medical profession and its allies, for medicine in its broader meaning includes all the arts and sciences that may contribute to increasing the mental and physical health of a people.

However much men may differ as to the goal we should strive to attain or the means and methods to be used, all must agree that no people can become or remain great or happy—the public welfare achieved, unless its individuals have sound minds in sound bodies. While we appreciate that all the arts and sciences must contribute to our efforts to reach our goal, nevertheless it is to the medical and its allied professions, especially perhaps to that section devoted particularly to the public health, which by its training, its knowledge of the individual body and mind and its dedication to the task, that we shall be wise in looking for guidance and coordination of effort.

It is because I feel that you wish to show appreciation of their achievements by awarding this great honor to a representative of the profession that I accept it with humility as an individual but with pride as a physician.

As any contribution I have made to public health has been possible only because of the splendid *esprit de corps* of the United States Public Health Service, I am sure that my fellow officers will feel that they have a share in this appreciation of our work.

HUGH SMITH CUMMING

REMARKS BY THE PRESIDENT

THE next medal and monetary award is named after one of our most distinguished and meritorious members, John J. Carty, eminent for his work in telephonic communication, especially wireless, and also trans-continental and transoceanic telephony. It was established by an endowment shortly before his death at the end of 1932; he was the first recipient and was informed of the award, but the actual presentation was made, after his death, to his son at the spring meeting of the academy in April, 1933.

The award this year is made to Edmund Beecher Wilson, Da Costa professor emeritus of zoology in residence at Columbia University, and unofficial dean of zoology in America. This recognition of a long, brilliant and devoted scientific career is a great satisfaction to his many friends, of whom I count myself as one of the chief. The chairman of the committee, Frank B. Jewett, president of the Bell Telephone Laboratories, will state the basis for this award. I have much pleasure in presenting Dr. Jewett.

F. R. LILLIE

PRESENTATION OF THE JOHN J. CARTY MEDAL AND AWARD TO DR. EDMUND BEECHER WILSON

Mr. President: In connection with presenting Dr. Edmund Beecher Wilson to you for receipt of the John J. Carty Medal and Award for the Advancement of Science, voted to him last spring by the academy, it is appropriate that a word both as to the history of the medal and award and Dr. Wilson's qualifications for it should be made. I am happy that it falls to my lot as chairman of the Carty Medal Committee to make these few remarks.

The late General John J. Carty, in whose honor this medal and award were established, was for many years a distinguished member of the National Academy of Sciences. His major activity throughout his active life was concerned with the development of electrical communication. At the time of his death on December 27, 1932, it can be said without fear of contradiction that he was recognized to be the most distinguished communication engineer in the world. This distinction had long been his, and when on June 30, 1930, he retired for age from active service as vice-president of the American Telephone and Telegraph Company, his associates in the Bell System sought for some appropriate way in which to signalize their esteem for him and for his contributions to science and engineering. Recognizing as they did the wide and scholarly sweep of his intellectual and scientific interests and his deep and abiding faith in the value of the National Academy of Sciences as a powerful instrumentality for the advancement of science in the United States, they decided that nothing could be more appropriate nor more pleasing to General Carty than the establishment of a perpetual medal and award in the academy to be named for him.

The result of this decision was that the directors of the American Telephone and Telegraph Company, acting for themselves, the stockholders of the company and the employees, all of whom recognized their great debt to General Carty, gave to the academy the sum of \$25,000 to be held in trust, with the income available periodically for the bestowal of a gold medal and a monetary award. In addition to this General Carty's immediate associates in the management of the American Telephone and Telegraph Company, as a token of their particular admiration and esteem, arranged for the design of the medal and the making of the dies needed for striking it.

In order that with the passage of time the medal and award should achieve a real distinction, and because of the catholicity of General Carty's interest in the whole domain of science, the donors in their deed of gift specified only two major requirements. The first and lesser of these requirements was that the medal and