Dr. Gordon in his first attempts at embarking upon original research. Dr. Gordon also demonstrated repeatedly his ability as an organizer, and as head of the Chemistry Department at Wayne University he succeeded in a very short time in giving new impetus to the work of the Department, and in expanding its scope to include the training of Ph.D.'s.

But in addition to a career which would have taken all the time of an ordinary man, Neil Gordon always seemed to be fired by a novel idea, to want to develop a different—and often an unorthodox—way of speeding up the wheels of chemical progress. In rapid succession he thought up these new ideas and pursued them with dogged determination, often against the resistance of the timorous, but he seldom failed to secure adequate support from those who admired him for his originality and resolution, and who instinctively trusted him because he was always giving so unsparingly of his own means and energy. In this manner he conceived, created and managed in succession:

1924—the *Journal of Chemical Education*,
1929—the National Research Fellowship Program at Johns Hopkins University,
1938—the Gibson Island Conferences of the AAAS, and
1936—the Hooker Library, which in 1942 became the Kresge-Hooker Library.

The Gibson Island Conferences were operated under the sponsorship of Section C, of which Dr. Gordon was long the secretary, and in 1948 the conferences were fittingly renamed Gordon Research Conferences. As the scroll delivered to him on that occasion states:

> Dr. Gordon has introduced a new and fruitful means for the exchange and advancement of knowledge through informal meetings held in pleasant, healthy, and friendly surroundings. His faith in his ideas and his indefatigable efforts in bringing them to pass have brought lasting benefits to the science of chemistry.

The progress of science would be slow indeed without the support of such men of vision, character, and determination. We must thank our lucky stars when one shows up, and at the same time thank ourselves for our freedoms which give the individual with an original idea the opportunity to bring it into full realization if, like Neil Gordon, he has the faith and energy to do it.

William Townsend Porter: 1862–1949

A. J. Carlson

University of Chicago

W. T. Porter was born in Plymouth, Ohio, in 1862 and received his medical training and his M.D. degree at the St. Louis Medical College in 1885. He served as acting superintendent of the St. Louis City hospital for one year, and as assistant professor and professor of physiology at the St. Louis Medical College from 1887 to 1893. During these years Dr. Porter also pursued graduate studies in Germany—Berlin, Breslau, Kiel. He was elected a member of the American Physiological Society at its fourth annual meeting in 1891. At that time probably no one could have predicted the outstanding service Dr. Porter was to render to American physiology during the following sixty years.

Dr. Porter became a member of the faculty of Harvard University Medical School in 1893, and continued a member of that faculty until his retirement in 1928. His teaching of physiology at the Harvard Medical School led him to establish the Harvard Apparatus Company, for the production of better and less expensive laboratory apparatus for both teaching and research in physiology. His work on the coronary circulation of mammals is probably his most fundamental research contribution to biology and medicine, but in his earlier years he also worked and published on growth, respiration, the nervous system, and skeletal muscle.

When Dr. Porter joined the faculty of the Harvard University Medical School physiology was taught to medical students largely by "talks and books." Fifty years later he wrote: "It was easy to say that physiology should be taught by experiments performed by the students themselves. But in 1899 the Harvard Medical School had 200 students in physiology. Working in pairs these students needed 100 kymographs. At that time this apparatus was made only in Europe, and could be imported at the cost of $200 apiece. Obviously even the richest university medical school could not meet this teaching requirement at such costs."

Dr. Porter started to meet these essential requirements for medical training by simplifying existing

laboratory equipment, inventing new apparatus, and reducing costs by quantity production, at first using the mechanical facilities of the Harvard Medical School. Very soon other medical schools wanted this laboratory equipment, but Harvard University could not sell it. This led Dr. Porter, aided financially by President Eliot, three men on the Harvard Medical School faculty, and two more citizens of public spirit in Boston to establish the Harvard Apparatus Company as a nonprofit educational institution. This company has been a large factor in providing, at low cost, equipment for research and teaching in physiology and pharmacology, not only in the United States, but in many other countries. Dr. Porter was the active head and guide of the Harvard Apparatus Company until a few months before his death. He conducted the business in the public interest and without commercial profit. When there was a modest surplus, this was used to improve production equipment, to provide a pension fund for the company's employees, and to finance the W. T. Porter Research Fellowship in Physiology, administered by the Council of the American Physiological Society. In 28 years (1921–49) the Harvard Apparatus Company has contributed a total of $38,453.00 to the American Physiological Society for the Porter Fellowship in Physiological Research. Dr. Porter twice offered to give his Apparatus Company to the Physiological Society.

The significant attention to physiological research in our country towards the close of the last century raised the question of adequate facilities for publication. In 1894 Dr. Porter was made a member of a committee to investigate ways and means to start an *American Journal of Physiology* by the then young physiological society. The society did not accept the committee's recommendations that such a journal be started. But in 1897 Dr. Porter started the *American Journal of Physiology,* as the sole responsible editor and publisher, and carried these financial and intellectual burdens until 1914, when 34 volumes of the journal had been published. In that year Dr. Porter presented the *Journal* (including all unsold numbers) to the American Physiological Society. In recognition of this great service to American physiology the society dedicated Volume 37 to him. The dedication includes this significant statement, referring to his services as editor: "A rigid pursuit of ideals by one individual frequently arouses in others lack of appreciation, criticisms, and opposition; and these he received without complaint."

In consideration of all the significant services of Dr. Porter—the early years of the *Journal,* the Harvard Apparatus Company, the Porter Fellowship—the society made him honorary president for its 50th anniversary meeting in Baltimore in 1937, and in 1948 elected him honorary life member. Referring to those early and trying years, the late W. H. Howell of Johns Hopkins Medical School said in 1938: "The American Physiological Society never gave the *American Journal of Physiology* the financial support that might properly have been expected." Dr. Porter's contributions were achieved by his integrity, his courage, and his intelligence rather than by his financial fortune. Knowing Dr. Porter, a few of his colleagues in the medical school and other citizens in Boston gave him some initial financial aid both for the *Journal* and for the Apparatus Company. But the main financial burden for both was carried by Dr. Porter. I have never heard anything but praise for the services of the Harvard Apparatus Company.

Dr. Porter's record as editor of the *Journal* is to his great credit, but even a superior editor is not a superman. There were more than a few of the younger investigators who did not take kindly to Dr. Porter's analysis, criticisms, and suggestions of their research reports submitted for publication in the first 34 volumes of the *American Journal of Physiology.* His editorial policy may be illustrated by his reply to me when I sent him in 1904, my first study on the limulus heart for publication in the *Journal of Physiology.* He wrote: "I think you are wrong both in your observations and your interpretations, but I will publish your report in the *Journal.*"

The record of Dr. Porter's unselfish and significant services to his generation is a true picture of the man, as I knew him for nearly fifty years. In these times of well-nigh pandemic hysteria, hate, and fear, William Townsend Porter's persistent and serene work for his fellow man aids our courage for today and guides our hope for tomorrow. May his tribe increase!