

GENERAL SCIENCE

Science to Find New Resources, Point Out Saner Way of Life

Dual Role in Development of Democracy Hailed By Speakers at American Institute Dinner

SCIENCE was acclaimed at the American Institute annual dinner in New York City for two future possibilities:

1. It will save civilization when natural resources run low.
2. Its methods applied to other fields will lead to effective democracy and better living.

Dr. Frank B. Jewett, president of the Bell Telephone Laboratories, accepting on behalf of its 4,500 employees the Gold Medal of the American Institute, predicted that the quest for oil and other mineral resources within the United States will soon become as futile as hunting for buffalo.

Watson Davis, director of Science Service, in receiving a fellowship of the American Institute warned that "not even science must be allowed to become a dictator" and that science must set the example for straight thinking, confident that the processes of democracy guided by scientific method and reason will give the effective result.

Exploring in New Dimension

"While we have exhausted the two-dimensional surface of the earth for geographical frontiers and while, as seems likely, we are nearing the limit of our three-dimensional exploration beneath the surface of the earth," Dr. Jewett said, "yet through discoveries in fundamental and applied science we are most opportunely becoming conscious of the vast domains of physics, chemistry and biology. These, strictly speaking, are neither on the surface of the earth nor within it. In a purely figurative way, they are what I refer to as a fourth dimension. Here, as I see it, is our hope for the future, both as individuals who must by the creative or productive work of our hands and heads earn our living, and collectively as a nation with a still increasing population and an ambition to achieve an ever higher standard of living."

"The implications of the present pooling of interests by the public and the world of science extend far beyond the mere implanting of scientific facts into the minds of laymen, or the replace-

ment of so many newspaper columns of crime, politics, or other news by scientific news," said Mr. Davis. "Science reporting and interpretation do not accomplish their purpose—the principal purpose of science popularization—if they do not bring about an appreciation and a utilization of the method of science in every-day life."

Two awards of the American Institute of the City of New York for 1937, the Gold Medal to the Bell Telephone Laboratories, and a fellowship to Watson Davis, director of Science Service, Washington, D. C., were made at the dinner attended by more than three hundred members and guests. Robert T. Pollock, president of the Institute, presided and made the awards. Other speakers were President Karl T. Compton of Massachusetts Institute of Technology, Cambridge, Mass.; G. B. Parker, editor-in-chief of the Scripps-Howard newspapers, Washington, D. C.; and J. O. Perrine, assistant editor, Bell System Technical Journal, New York.

The gold medal, given annually in recognition of outstanding accomplishment in research, went to the Bell Telephone Laboratories "for researches in electrical science which, applied to communication, have promoted understanding, security and commerce among peoples by transmitting human thought instantly throughout the world."

For Interpreting Science

The fellowship in the Institute, given for outstanding service in the interpretation of science to laymen, was conferred on Watson Davis "for interpreting to the people of the Nation the rapid progress of science upon which modern civilization depends and for the organized dissemination of research findings as news."

Reviewing the accomplishments of the Bell Telephone Laboratories, Dr. Compton cited pioneering in television, the transmission of pictures over telephone circuits, ship-to-shore and transoceanic telephony, the co-axial cable capable of carrying 240 separate telephone conversations over a single pair

of wires, sound recording systems and aids to the deaf.

"Many distinctly scientific achievements," he continued, "have contributed both to these practical developments and also to the progress of science generally. Among these are: a satisfactory oxide-coated filament for electron tubes, the discovery that electrons are diffracted, like waves, from crystal surfaces, great progress in knowledge of the nature of speech and analysis of sounds, the development of new electron optics, great advances in photoelectricity and especially in the production of sensitized photoelectric surfaces, discovery of remarkable magnetic materials, like permalloy, and the mathematical theory of electric circuits."

Science, Wonder-Bringer

No single move in the history of journalism was more important than the founding of Science Service, Mr. Parker said in presenting Mr. Davis for the fellowship. "Science, more than any single force, was then, as now, changing the face of the time, was bringing into the world more wonders in a decade than had been discovered in ten centuries before. It was altering the existence of every man, woman and child in this nation, and, in terms of economics, peace and war, health, happiness and employment was literally changing the life of the globe.

"Because newspapers manifestly were the quickest and most frequent means of communication of what was going on and because they reached millions where scientific magazines reached scores," Mr. Parker continued, "it should have been quite obvious that as a matter of vast public service some sort of a practical working understanding should be reached between the scientists on the one hand and the press on the other. This cooperation was achieved through the founding of Science Service.

"The first news report from Science Service was sent out by Watson Davis," Mr. Parker stated, "and since then he has supervised the day-by-day progress of the institution, which, in its sixteen years, has played such a tremendous part in bringing together science and the human beings over which science holds sway."

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Enamel on the teeth is the hardest tissue in the body.

An automobile is about an eighth of an inch longer on a hot summer day than on a cold day in winter.