

SCIENCE

VOL. 84

FRIDAY, DECEMBER 25, 1936

No. 2191

Medals of the National Academy of Sciences:

Introductory Remarks by the President: PROFESSOR F. R. LILLIE. *Presentation of the Public Welfare Medal to Dr. Hugh Smith Cumming:* DR. LUDVIG HEKTOEN. *Response of the Medallist:* DR. HUGH SMITH CUMMING. *Presentation of the John J. Carty Medal and Award to Dr. Edmund Beecher Wilson:* DR. FRANK B. JEWETT. *Response on Behalf of the Medallist:* DR. ROSS G. HARRISON 561

Obituary:

James Newton Pearce: PROFESSOR L. CHARLES RAIFORD 567

Scientific Events:

The Section of Medicine and Science of the Paris Exposition; International Exhibition of Applied and Scientific Photography; The American Standards Association; Symposium on Early Man at the Academy of Natural Sciences of Philadelphia; Broadcasts by the American Association for the Advancement of Science; Election of Officers of the American Chemical Society; Award of the Charles Frederick Chandler Medal 568

Scientific Notes and News 571

Discussion:

Significant Figures in Statistical Constants: DR. F. R. MOULTON. *Hydrogen and Carbon Dioxide Photoassimilation in Purple Bacteria:* DR. C. S. FRENCH. *Length of Life of a Rabbit:* DR. MARY TEGGE 574

Scientific Books:

Proboscidea: PROFESSOR F. B. LOOMIS 576

Academies and Meetings:

The Tennessee Academy of Science: PROFESSOR J. T. MCGILL. *The Texas Academy of Science:* H. B. PARKS 577

Special Articles:

The Size of the Universe and the Fundamental Constants of Physics: PROFESSOR ARTHUR HAAS. *Type Specific Antipneumococcus Rabbit Serum:* DR. FRANK L. HORSFALL, JR., DR. KENNETH GOODNER and COLIN MACLEOD. *Identical Twins in a Mouse Cross:* PROFESSOR W. E. CASTLE and OTHERS 578

Scientific Apparatus and Laboratory Methods:

A New Apparatus for Constant Temperature: DR. R. E. COKER and E. W. CONSTABLE. *The Visualization of Different Organs in Normal Unanesthetized Animals:* F. R. STEGGERDA and C. GIANTURCO. *Demonstrating CO₂ Production during Respiration:* SAMUEL L. MEYER 581

Science News 17

SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. McKEEN CATTELL and published every Friday by

THE SCIENCE PRESS

New York City: Grand Central Terminal

Lancaster, Pa.

Garrison, N. Y.

Annual Subscription, \$6.00

Single Copies, 15 Cts.

SCIENCE is the official organ of the American Association for the Advancement of Science. Information regarding membership in the Association may be secured from the office of the permanent secretary, in the Smithsonian Institution Building, Washington, D. C.

MEDALS OF THE NATIONAL ACADEMY OF SCIENCES¹

INTRODUCTORY REMARKS BY THE PRESIDENT OF THE ACADEMY

FROM time to time endowments have been deposited with the academy in trust for general purposes of the academy and council or for aiding research by grants or for bestowing medals, in some cases with honoraria, upon outstanding American or foreign scientists. There are twenty of these funds, of which eleven are for conferring honors. Each of the honor funds is in the hands of a special committee, which recommends to the academy the recipient it has chosen for any given year. Some of these awards are in recognition of research in special fields, as for instance the Watson Medal for the promotion of astronomical research or the Agassiz Medal for contributions to oceanography.

The history of science has demonstrated that, throughout all recorded time, certain men of the high-

est intelligence have been dominated by ideas and by ideals of human betterment with quite secondary reference to material rewards. This is written not only in the history of science, but also in other realms of the human understanding and endeavor. May we not, however, claim for science that for some hundreds of years its results have been progressively cumulative, that it has not had to relinquish any territory over which it has once established dominion and that each conquest is a base for new advances. These are the two chief claims of science to be heard in our time. That the methods and the spirit of science can be applied to all kinds of human needs is also one of the beliefs that urges us on to its farther advancement.

Because scientific men have labored so, usually without thought of material reward, for the joy of accomplishment and for the good of humanity, the academy

¹ Presented after the dinner of the academy at the annual autumn meeting held at the University of Chicago on November 16, 17 and 18.