native biotic communities as soon as civilized man and his satellites put in an appearance and proceed to upset the ancient balance. The list of organisms that have become extinct within the historic period fairly bulges with the names of astonishing island birds, from the dodo of Mauritius to the mamo of Hawaii. All the peculiar land birds of Tristan da Cunha Island, in the South Atlantic, have become extirpated since the introduction of hogs and rats. The remnant of the fauna of Tahiti is waging a rapidly losing struggle against domestic mammals, alien hawks, mynahs and weavers that have become established there, and against the wild-fire spread of lantana and other weeds that have already dispossessed much of the original vegetation. The same story is being repeated elsewhere; primitive conditions that may have flourished for a million years melt away when men of the dominant races, whether white or yellow, arrive to break the spell.

SCIENCE

Experimentalists are understandably impatient of data beyond reach of their breeding tests. But we should remember that the present age of experiment will some day be combined with an age of fuller correlation, when the inconceivably rich mine of factual matter now buried in the text of ten thousand outdated books will be drawn upon, and when zoological collections, no less than zoological literature, will be combed for now ignored truths that can then be properly fitted into the picture of life as a whole. We museum men collect and preserve not only with respect to our individual scientific predilections; rather, we may be said to share some of the characteristics of devoted librarians. We feel a heavy responsibility to lay up, while opportunity offers, a capital sum of the irreplaceable data of science, even though part of this fortune may not begin to bear interest at its proper rate for a long while to come.10

SCIENTIFIC EVENTS

RESEARCH GRANTS OF THE VIRGINIA ACADEMY OF SCIENCE

THE Research Committee of the Virginia Academy of Science met on November 5 to make the regular awards for the encouragement of scientific research in Virginia. It had available for distribution \$450, which included the \$100 from the American Association for the Advancement of Science. It had in hand sixteen applications for grants amounting to \$1,200. After long and careful consideration of each request the following awards were finally made:

To Professor James I. Clower, of the Virginia Polytechnic Institute, \$50 provided the Virginia Polytechnic Institute would supply an equal amount for the purchase of a Robinson colorimeter for use in his study of lubricating oils in automobiles.

To Dr. J. Frank Hall and Dr. R. L. Simpson, of the Medical College of Virginia, \$50 to be used in the purchase of animals and other supplies in their study of the changes in the abutment teeth and their surrounding tissues brought about by the additional stress applied through crown and bridge restorations.

To Dr. C. W. Lampson and Dr. A. I. Whitenfish, of the University of Richmond, \$60 provided the University of Richmond would supply a similar amount needed for the purchase of a special condenser needed in their study of the dielectric constant as a factor in the "salting out" of non-electrolytes.

To Dr. M. J. Murray and Dr. F. F. Cleveland, of Lynchburg College, \$97.50 to be used for the purchase of apparatus and supplies needed in their study of the Raman effect and molecular structure.

To Dr. A. A. Pegau, of the University of Virginia, \$50 to help to defray the expenses in mapping an unmapped portion of the Petersburg granite, chiefly in Dinwiddie County.

To L. B. Snoddy, of the University of Virginia, \$90 to help to defray expenses in the study of the luminous discharge in the aurora borealis as a function of time.

To M. A. Stirewalt and F. F. Ferguson, of the University of Virginia, \$50 to help to defray their expenses in a study of the occurrence, distribution, taxonomy and physiology of the Turbellaria of the eastern United States.

Dr. J. Shelton Horsley, Sr., reported that the amount of the research fund had now been brought up to \$13,000, and consequently the amount available for distribution next year should be correspondingly larger.

> E. C. L. MILLER, Secretary

CONGRESS OF AMERICAN INDUSTRY OF THE NATIONAL ASSOCIATION OF **MANUFACTURERS**

A THREE-DAY Congress of American Industry opened in New York City on December 7. At this meeting the report was presented of the joint committee of leading industrialists and scientific men that was established last year to study increasing production and employment through wider use of scientific research in industry. A considerable part of the session held on December 8 was devoted to it. The chairman of the committee is M. H. Eisenhart, president of the Bausch and Lomb Optical Company, Rochester, N. Y.

The activities to be undertaken by the committee with relation to industrial research include :

¹⁰ The author wishes to express his appreciation of the privilege of discussing the genetic aspects of this paper with Dr. G. K. Noble and with Professors T. H. Morgan and Richard Goldschmidt.

Encouragement of wider use of scientifically trained men in industry.

A survey to determine advantages to smaller industries of maintaining research laboratories.

Promotion of cooperative research activities generally. Study of advantages of cooperative technical research by industrial groups.

Encouragement of educational institutions to train men who can organize and carry on industrial research programs, especially in small factories.

In the field of "pure research"—research which does not necessarily have a commercial aim—the Joint Committee plans:

To study the importance of pure research to the public generally, and the problem of its adequate financing.

To analyze and express, in the business man's language, the objectives and industrial possibilities inherent in the long-term trends of present-day pure research.

To promote the employment of scientists in industry for the purpose of interpreting the trends and results of pure research and visualizing possibilities of applications to specific industries.

The speakers at a session on "Research, an Increased Asset for National Progress," were: Dr. Willard H. Dow, president of the Dow Chemical Company, Midland, Mich., representing management; Dr. Carl Breer, of the Chrysler Corporation, New York, representing industrial laboratories, and Dr. Isaiah Bowman, president of the Johns Hopkins University, representing independent laboratories.

Members of the Joint Committee include the following scientific men: Dr. Karl T. Compton, president of the Massachusetts Institute of Technology; Dr. George B. Pegram, dean of the Graduate School, Columbia University; Dr. R. A. Millikan, chairman of the Executive Council of the California Institute of Technology; Dr. Ross G. Harrison, chairman of the National Research Council; Dr. F. R. Moulton, permanent secretary of the American Association for the Advancement of Science; Dr. E. R. Weidlein, director of the Mellon Institute; Dr. Henry A. Barton, director of the American Institute of Physics, and Julius Weinberger, of the Radio Corporation of America.

Industrialists who are members of the committee are: W. B. Bell, president of the American Cyanamid Company, New York; J. C. Hilton, vice-president, Standard Oil Company of New Jersey, New York; J. F. Lincoln, president of the Lincoln Electric Company, Cleveland, Ohio; John F. Tinsley, president, Crompton and Knowles Loom Works, Worcester, and Philip C. Wentworth, treasurer, National Ring Traveler Company, Providence.

AWARD OF THE ROEBLING MEDAL OF THE MINERALOGICAL SOCIETY OF AMERICA TO DR. SCHALLER

AT its annual luncheon, to be held on December 28 in the Waldorf-Astoria Hotel in New York City in connection with the annual meeting of the Mineralogical Society of America, from December 28 to 30, the society will present the Roebling Medal to Dr. Waldemar Theodore Schaller, of the U.S. Geological Survev. Professor Esper S. Larsen, professor of petrography at Harvard University and former associate of Dr. Schaller on the U. S. Geological Survey, will make the presentation. The Roebling Medal was authorized by the Mineralogical Society in 1936. The medal is awarded for "Meritorious Achievement in Mineralogy and Allied Sciences." It has been named in honor of the late Colonel Washington A. Roebling, or Trenton, N. J. Colonel Roebling was by profession an engineer and, in connection with his father, John A. Roebling, constructed many famous bridges throughout the country. However, his chief interest, outside of his profession, was mineralogy and he maintained an intense delight in it throughout his life. He built up one of the most complete private collections in the United States and was so well acquainted with his specimens that although he collected some 16,000 different mineral specimens he was able to identify and describe them on occasion. His interest was not limited to the mere collection of rare specimens, but included the recent literature regarding them, and he often furnished specimens for research and analysis. His collection now forms part of the famous mineral display at the U.S. National Museum.

Dr. Waldemar Theodore Schaller, the second recipient of the Roebling Medal, was born in Oakland, Calif., and attended the University of California, from which he received a bachelor of science degree in 1903. Since that time he has been chemist and geologist with the U. S. Geological Survey, and this year will mark his thirty-fifth anniversary of service. In 1912, Dr. Schaller received his Ph.D. from the University of Munich. Dr. Schaller is a charter fellow of the Mineralogical Society of America, was its president in 1926 and since 1931 has been treasurer. He is a fellow of the Geological Society of America, the American Academy of Arts and Sciences, the Washington Academy of Sciences, honorary member of the New York Mineralogical Society, member of the American Chemical Society, American Institute of Mining and Metallurgical Engineers and of the British, French, German and Austrian mineralogical societies.

In his mineralogical work, Dr. Schaller has published about 150 papers and reports dealing with mineralogy and has described more than 40 new mineral species. Among these is the mineral, kernite, the most important borax mineral found in the United States. Much of his work has also been devoted to the mineralogy of the potash fields of New Mexico and Texas. Dr. Schaller is one of the leading authorities in the world on rare and unusual minerals. One of his most interesting contributions has been a study of the crys-