

tific man any longer works alone. All future advances must be based on what other men have done, and the further the advance the more this is true. Perhaps the greatest scientific need to-day is for vastly increased facilities for the publication of results of research in pure science. The recognition of this fact is no new thing on the part of the Smithsonian Institution. In the founder's single statement of purpose—"for the increase and diffusion of knowledge among men"—publication is given a place in importance equal to research. As Secretary Henry said in his plan of organization drawn up in 1846, "Knowledge can be most successfully diffused among men by means of the press."

In obedience to the expressed will of James Smithson and to the interpretation thereof by Joseph Henry, the Smithsonian has for eighty years maintained a definite program of publication with such success that these publications have come to be among the best-known books of the scientific libraries of the world. Who among you does not know of the "Contributions to Knowledge" series, of the "Miscellaneous Collections," of the "Smithsonian Physical Tables"? These various series include the results of pure research in widely different lines of science, many of which would never have been published had not the Smithsonian undertaken the work.

Not only has the Smithsonian faithfully striven to publish the results of as much fundamental research work as possible, but it has made sure that these publications would do the greatest amount of good by the free distribution of them among scientific bodies and libraries in all parts of the world. It is no uncommon thing for a traveler in Siam, for instance, in Borneo, in Nairobi, in Uruguay, in Queensland to come upon local scientific groups, the libraries of which give a place of honor to the torch of the Smithsonian publications.

In recent years the greatly increased cost of printing has forced the Smithsonian to suspend the "Contributions to Knowledge" series altogether, and to reduce the "Miscellaneous Collections" to a third of the number published annually before the war. While I have no desire to overdraw the picture, I can not forbear calling this a tragedy. The Smithsonian Institution earnestly desires not only to resume publication on the former scale, but to increase it to an extent more nearly commensurate with modern needs.

In this ambition we know that we can count upon the support of every man of science in America.

#### THE FUTURE

At the present time the enormous extension of applied science and its superior rewards are attracting to this line of work much of the best material

from among the graduates and from the faculties and staffs of our educational and other institutions. Consequently the sources to which we must look for the elaboration of new ideas and theories are gradually drying up. The application of facts already known is outrunning the discovery of new facts. And yet application is dependent upon discovery; it can not come before. Our first duty, therefore, is to support agencies for the discovery of new facts.

Quite apart from the ultimate materialism of this point of view, such mining for new truths is the nearest approach that man can make to the intriguing realm of the unknowable. Such mining will assist man's spiritual growth, while at the same time adding to his material prosperity. Let us not turn aside from this opportunity.

The Smithsonian Institution is consecrated to a definite program of research in pure science and the publication of the results thereof. So it has been for eighty years. So it is now that we are on the threshold of new endeavors. You know what the institution has done. I have told you what it proposes to do. In carrying out its program for research, publication and the training of promising men and women, the Smithsonian will perform a fundamental service to the American people and to the American government. Only by the performance of such service will it continue worthy of the traditions of achievement which have made it "The Smithsonian Institution."

AUSTIN H. CLARK

SMITHSONIAN INSTITUTION

---

#### EDWARD SYLVESTER MORSE

PROFESSOR MORSE, son of Jonathan K. and Jane Seymour (Beckett) Morse was born in Portland, Maine, June 18, 1838, and died at Salem, Mass., Dec. 20, 1925. Like most naturalists he early showed an interest in natural history, amassing a notable collection of shells at the age of thirteen, and what is less common, he developed unusual artistic ability. He made for Dr. William Stimpson numerous admirable drawings of living mollusks of the Maine coast. In 1859 he became one of Louis Agassiz's special students at the Museum of Comparative Zoology, where he pursued his studies until 1862 when he published his first paper on brachiopods, a subject to which he later made notable contributions. His first paper to attract particular attention was devoted to some very minute landshells of Maine, illustrated by his own drawings and proposing new generic names for several of them based on anatomical characters. This paper, published in 1864, was the precursor of a long series of studies by Bland, W. G. Binney and

Pilsbry, which have revolutionized the classification of the landshells.

About this time he prepared the beautiful series of drawings which illustrate Binney's edition of Gould's *Invertebrata* of Massachusetts.

In 1871 he became professor of comparative anatomy and zoology at Bowdoin, remaining until 1874, and also gave a series of lectures at Harvard. In 1876 he was elected a member of the National Academy of Sciences and the following year went to Japan, led chiefly by the desire of studying the Japanese brachiopoda, in which that region is so rich. He received the appointment of professor of zoology at the University of Tokyo, which he filled with great success, returning in 1880 with a large collection and signal honors from the Japanese government. During this period his ready pencil was active in taking notes which later formed the basis of his volume on Japanese homes, and other contributions to our knowledge of the Japanese people for whom he always cherished a profound admiration. At this time too his artistic taste recognized the beauty of the common pottery of Japan, and he made of it the remarkable collection which is one of the treasures of the Boston Museum of Fine Arts.

On his return to Salem he became director of the Museum of the Peabody Academy of Sciences and so remained, being named director emeritus on his retirement. His work in this institution made the museum the custodian of the most artistically and scientifically arranged minor collection in the United States, if not in the world. After a wide inspection of European museums, the only one which even seemed to approach the Peabody in these respects is the Royal Cabinet at Stuttgart.

In 1886 Morse was elected president of the American Association for the Advancement of Science, and in the intervals of activity at Salem lectured acceptably in many parts of the United States. Long years a widower he leaves a son and daughter and four grandchildren.

The salient characteristic of Professor Morse, apart from his devotion to science and love of the beautiful in art, was his boyish enthusiasm which captivated all who knew him. The versatility of his interests was unbounded, his love of fun overflowed at every opportunity; to meet him was to find a welcome. The world was brighter for his presence.

WILLIAM H. DALL

## SCIENTIFIC EVENTS

### THE NATIONAL RESEARCH ENDOWMENT

FOLLOWING a conference of public men and scientists, who have consented to serve as a board of trustees of a National Research Endowment to obtain

immediate support and encouragement for pure science research in the United States, this declaration was made public on February 1.

The Trustees of the National Research Endowment, recognizing that human progress depends in large degree upon research in pure science, declare their conviction:

(1) That the United States, which already occupies a leading position in industrial research, should rank with the most enlightened nations in the advancement of pure science.

(2) That it is wiser to make large expenditures for scientific research, thus advancing civilization, improving human welfare, conserving health and saving countless useful lives, than to tolerate suffering and then endeavor to alleviate it at still greater cost.

(3) That research in all branches of the mathematical, physical and biological sciences should be encouraged, because of the intellectual and spiritual value of adding to knowledge and because the greatest advances in science and in industry often result from apparently useless abstract discoveries.

(4) That scientists exceptionally qualified to widen fundamental knowledge through research are of such value to the nation that every effort should be made to facilitate their work.

(5) That the overcrowding of educational institutions, and the consequent excessive demands of teaching and administration, have further reduced the limited opportunities for research previously enjoyed by the members of their faculties.

(6) That the funds now available for the support of research in pure science in the United States are far below what our population, education and material resources demand.

(7) That the National Academy of Sciences, created by congressional charter the scientific adviser of the government, and composed of leading investigators in the closely interlocked and mutually dependent mathematical, physical and biological sciences, is peculiarly qualified to evaluate the needs of pure science in America, to stimulate its progress and to insure the widest use of funds provided for research.

In view of these considerations, the Trustees of the National Research Endowment, established by the National Academy of Sciences, propose immediately to secure adequate funds for the encouragement of research in pure science.

Those in attendance at the organization meeting of the special board of trustees, appointed recently by the National Academy of Sciences for the fund, were: Secretary Hoover, *chairman*; Albert A. Michelson, president of the National Academy of Sciences; Gano Dunn, chairman of the National Research Council; Vernon Kellogg, permanent secretary of the National Research Council; Elihu Root, Col. Edward M. House, Cameron Forbes; Henry S. Pritchett; Dr. Robert A. Millikan, foreign secretary of the National Academy of Sciences; Dr. John C. Merriam, president of the