

portant object of scientific meetings is to furnish to these men, most of whom are working singly in their schools and communities, a stimulus to continue the scientific work for which they have been trained, and an opportunity of bringing the results of their study before a sympathetic audience. This opportunity, however, can be afforded only by a local meeting, and any arrangement of meetings which sacrifices the local gathering to the national meeting will have a disastrous effect on the spread of the scientific temper in the country, because it will necessarily weaken these local scientific centers which, from their number, are quite as important as the more conspicuous and stronger centers of science in our great institutions.

I may perhaps be permitted to call attention to a second matter suggested by the discussion, although it is one in which I am not in any way officially interested. I must own that I look with some concern on the change of the American Association for the Advancement of Science from a general gathering to one composed of professional scientists. It has always seemed to me that a most important part of the work of this Association has been in serving as a common ground of meeting for the professional scientists and those who, without professional knowledge, were interested in science. Its meetings have served as an important means of communication between the professional scientific world and the community, reaching the community in the best of all ways—through those individuals who, though without special knowledge of science, have yet a personal interest in it. This function certainly ought to be performed by some organization and it will be of no small concern to science if the American Association decides to abandon this function.

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ALPHEUS HYATT.

ALPHEUS HYATT died suddenly of heart disease at Cambridge, Mass., January 15, 1902, a few months before the completion of his sixty-fourth year.

He was born at Washington, D. C., April 5, 1838; prepared for college at the Maryland Military Academy and passed a single year at Yale College. After a year's travel in Europe, he entered the Lawrence Scientific School at Harvard in 1858, graduating with the degree of Bachelor of Science in 1862.

He enlisted in the volunteer militia in 1862, served for nine months, and at the close of the Civil War was mustered out in 1863, as Captain of the 47th Massachusetts Infantry.

Returning to Cambridge, he resumed his studies under the guidance of Professor Louis Agassiz, the greater part of his time being directed to work upon the fossil Cephalopoda. In 1867 Mr. Hyatt went to Salem, Mass., and was associated with Messrs. Putnam, Packard, and Morse in the care of the natural history collections of the Essex Institute, and of the Peabody Academy of Science, and in the editorial management of the *American Naturalist*. He remained in Salem until 1870, when, on May 4, he was elected custodian of the Boston Society of Natural History. By yearly choice Mr. Hyatt remained the scientific head of the Society until his untimely death.

He held professional chairs in Boston University and in the Massachusetts Institute of Technology, and was at one time or another officially connected with the Museum of Comparative Zoology, and the United States Geological Survey.

Professor Hyatt was a member of the National Academy of Sciences (1875), the American Philosophical Society (1895), the American Academy of Arts and Sciences (1869), and of other leading scientific so-

cieties both in this country and abroad. In 1898 Brown University conferred upon him the degree of Doctor of Laws.

Professor Hyatt's private life, though uneventful, was attended with many blessings; he had vigorous health, congenial work and many friends. He enjoyed scientific meetings and general society; his welcome to his own home, where he was the most charming of hosts, can never be forgotten. His death, though premature, came as he would have wished, in the fulness of his power and without attendant suffering. As a man of true science he was ready, yet loath, to die.

Professor Hyatt possessed traits of character the worth of which cannot be exaggerated; his kindness towards those working with him was very marked, as was also the purity of his thought and speech; his friendship was sincere and hearty, for while he had, as every man has, his moments of excitement, caused by misunderstandings and differences, one could disagree with him on any or on every vital question with full confidence that such clashes would not weaken his regard. Such an entire absence of all personal feeling must be regarded as a very rare and remarkable trait.

From the outline as given, the life work of Alpheus Hyatt may be grouped in three sections: First, as the head of a museum of natural history; secondly, as a teacher of science; and, thirdly, as an investigator. A few salient features of these phases of work may be noted.

For the head of a museum of natural history, Professor Hyatt had many and marked qualifications; his knowledge of zoology, of paleozoology and of geology was extensive; he was skilful in manipulation, suggestive in council, enthusiastic and approachable.

His plan that a natural history museum should be arranged so that a visitor on entering should pass from the simpler groups

to those more specialized, and that the specimens in each case should be similarly classified, though opposed as impractical, is both sound and feasible. Somewhat disposed in late years to a too great use of diagrams and models in place of actual material, his recognition of the value of these, of descriptive labels and of a personal guide was early, important, and helpful. His invention of the 'Hyatt bracket' gave an accessory at once simple, effective, and inexpensive, and applicable for greater use than that for which it was planned. It is true that the full realization of much of his best museum work and thought is left for appreciative successors, as Professor Hyatt was too apt to be content with an initiative, the result of which he clearly apprehended, and did not always give attention to the actual carrying out of details, details that in many cases required continuous interest through successive years.

Professor Hyatt's reputation as a teacher will rest largely on the work he did for the Teachers' School of Science. His management of this school was very skilful, and his lectures, of which he gave many courses, were uniformly successful. It was here that he enforced the value of direct observation and comparison, and transmitted the spirit instilled into him by Agassiz to another generation of teachers, many of whom to-day attribute a large share of their success to his methods. His direct influence upon the work of other lecturers in this school may also be mentioned. His early maintenance of a seaside laboratory at Annisquam, Mass., the resources of which were open to teachers so far as space and means would allow, was also an important educational mode.

In the pursuit of his investigations, Professor Hyatt not only studied the accumulations preserved in museums in this country and abroad, but he partook in active field work; he dredged off the east coast at

various points from Labrador to Noank, Conn., and explored many geological horizons in Canada, the Maritime provinces, New England, New York and the far west. His published writings, though less numerous than those of some of his contemporaries, are many and important; they cover a wide field in the Invertebrata, both fossil and recent, and in some cases represent pioneer work in the group studied.

The titles of a few of the more important of his publications may be noted: Observations on Polyzoa (1866-68); On the parallelism between the different stages of life in the individual and those of the entire group of the molluscous order Tetrabranchiata (1867); Fossil cephalopods of the Museum of Comparative Zoology. Embryology (1867); Revision of the North American Porifera (1875-77); The genesis of the Tertiary species of *Planorbis* at Steinheim (1880); Genera of fossil cephalopods (1883-84); Larval theory of the origin of cellular tissue (1884-85); Genesis of the Arietidae (1889); Bioplastology and the related branches of biologic research (1893); Phylogeny of an acquired characteristic (1894); Cephalopoda (1900).

From the beginning Professor Hyatt's researches were very largely devoted to evolutionary questions, and to the special study of fossil cephalopods; at the time of his death he was one of the foremost authorities upon the fossil Cephalopoda. The true value of his work upon this group must be left for the future; memoirs such as the Genera of fossil cephalopods (1883-84), and the chapter on the Cephalopoda (1900) contributed to the English issue of Zittel's 'Palæontology' cannot be properly estimated by the present generation; they require prolonged and detailed study founded upon large series of specimens. His theory of parallelism based on acceleration and retardation, and his discoveries concerning the laws of development,

growth and decline were advocated with persistence and vigor; and while his treatment is not always lucid, he is to be credited as the originator of a distinct school, a school devoted to exact methods of research. The growth of this so-called Hyatt school, never of greater importance than at the time of his death, was a source of sincere gratification to him.

SAMUEL HENSHAW.

SCIENTIFIC BOOKS.

Dictionary of Philosophy and Psychology.

Written by many hands and edited by JAMES MARK BALDWIN, Ph.D., with the co-operation and assistance of an international board of consulting editors. In three volumes, with illustrations and extensive bibliographies. Vol. I. New York, The Macmillan Company. 1901.

In considering an enterprise of such magnitude as this dictionary offered by Professor Baldwin, the reviewer should keep in mind several important points. He should remember the purpose which guided the editor in his work, its value to those for whom it is especially intended, and the great difficulties of the undertaking. He should not measure it by ideals which the editor never aimed to realize and which it was not necessary for him to realize under the circumstances. Two purposes are combined in the work, Professor Baldwin tells us—'first, that of doing something for the thinking of the time in the way of definition, statement and terminology; and second, that of serving the cause of education in the subjects treated.' The task, therefore, is 'to understand the meanings which our terms have, and to render them by clear definitions; and to interpret the movements of thought through which the meanings thus determined have arisen, with a view to discovering what is really vital in the development of thought and term in one.' The other part of the problem is pedagogical and carries with it the duty 'to state formulated and well-defined results rather than to present discussions.' The reader, therefore, who expects to find nothing but original articles written for experts