

the observations, and there are many others awaiting investigation.

Some 40,000 observations of the sun, moon and planets have accumulated in the 40 years since the construction of the present tables. This great mass of observational material has nearly as much weight as that used in the tables. It is as yet largely undiscussed. There are also some older series needing rediscussion.

Modern calculating machines are becoming very valuable for carrying out the long numerical operations required in such computations, and with a minimum of labor and a maximum of efficiency.

Contributions to astronomy from endowment funds have been generous. The great Albany catalogue, just being completed by the Carnegie Institution of Washington, will be of great value to astronomers. The results from Mt. Wilson are inestimable. Many important investigations have been made possible by

grants from various research funds, and much more support is desirable.

The present generation has had many men of outstanding ability in this work who are passing on a heritage to the younger men of to-day. It is an open and inviting field for investigation. In our classrooms and observatories there may be young men with special talent for such work. I know of no greater help to astronomy nor of any more profitable use of endowment funds than that those who are directing larger astronomical activities should make provision for men of marked ability to study with theoretical men and at fundamental observatories, and later, furnished with assistants and facilities, to make a complete discussion of all observations into a new and comprehensive solution of planetary motions.

I leave with you the suggestion that a more complete solution of the motions in the solar system is now an important problem in fundamental astronomy.

OBITUARY

JESSE EARL HYDE

JESSE EARL HYDE, professor of geology at Western Reserve University, Cleveland, Ohio, died on July 3, 1936. He was born on May 2, 1884, in Rushville, Ohio, the son of Eber and Flora (Johnson) Hyde. He passed his boyhood in Lancaster and attended Ohio State University, graduating in 1906. He held minor positions in Harvard and Columbia Universities and became assistant professor of geology in Queen's University, Kingston, Canada, in 1911. From this position he was called to Western Reserve University as associate professor in 1915, becoming professor after the death of Professor Cushing in 1921.

The father of Professor Hyde was a pharmacist by profession and a geologist by avocation. There was built an annex to the family home, a room devoted to collections and work in geology, and in this room Jesse spent most of his boyhood leisure. During those years and later there were collected thousands of specimens, and these are now in the possession of Western Reserve University.

A discussion of Hyde's work and influence during his Cleveland years falls somewhat naturally into certain categories. The first to be discussed is his interest as a teacher, one might say also, as a conversationalist. In all his personal contacts he promptly struck a responsive strain, and when he spoke, no one, in his class or outside, failed to give him attention. Probably his most stimulating teaching was in the course called "Evolution of the Earth and the Ascent of Man." These class lectures were so inspiring that a number of his colleagues joined themselves to his listeners.

His fund of experience, his philosophical interpretations and his manner of approach were such that his auditors received a stimulus which was high above the ordinary classroom type.

In 1922 Professor Hyde became formally associated with the Cleveland Museum of Natural History, then in its early stages. He was curator of geology until his health in 1931 required the severance of the more formal connection. However, he continued in the capacity of adviser and volunteer curator after that date. The work of those years was three-fold. He left the entire geological collection completely labelled, catalogued and arranged as a study collection. He directed the collection of fossil fishes, and the Cleveland Museum now possesses the best collection in existence of Devonian fish in the Cleveland shales. He was justly proud of the J. H. Wade gem collection which he arranged, a laborious and rewarding piece of work. It has been called the best exhibited gem collection in America.

He worked many summers under the Ohio State Geological Survey. His work on the Waverly Formation is of considerable magnitude, but has not yet been published. The "Camp Sherman Quadrangle" (Geological Survey of Ohio) is a monograph of 185 pages. About fifteen other publications are of lesser size. He was on the Geological Society of America Exchange Committee, in charge of the exchange, distribution and deposition of geological publications from all over the world.

Professor Hyde often deplored the sacrifices he made in attending committee meetings in the adminis-

tration of his democratic university. He was called upon incessantly and was a most patient and useful counselor. It is only natural to assume that his misgivings in devoting so much time to this type of work were assuaged by his feeling that he was helpful, and he surely had some interest in this type of intellectual activity. His sense of duty was no doubt an important factor.

To an outside observer Professor Hyde's academic career may have seemed of about the same nature of that of the usual college professor, more successful in some respects, less so perhaps in others. Only a few were familiar with a less apparent versatility which when fully realized marked him as unusual. There was in him a strain of the artistic and an even more striking strain of the philosophical. In the former connection he was especially interested in the use of lines. He studied intensively available types of drawings and etchings, partly from an inherent interest, partly to enable him to produce with the desired degree of satisfaction the graphic representations of his work. The drawings in his work on the Waverly Formation illustrate his success in such portrayals.

To a few he directly revealed his philosophical bent. Others appreciated this from his lectures and his conversation. Practical results of this bent are seen in some of his informal essays, in his annotations in his books, his lectures, the conferences he held with students in discussing their religious problems. However his intense devotion to these fields of thought, revealed more clearly after his death, comes as a surprise to some even who knew him well.

Especially noteworthy among his interests was book collecting. One lot, collected no doubt with a sense of humor, he called his "monkey books," a lot of specious undisciplined writings aimed at evolution. A serious and larger collection includes books which he used to clarify his ideas not on what one might call "Conflict of Science and Theology," but rather on the consonance of scientific and spiritual interests. His most valuable

collection is an outstanding set of biographies and autobiographies of scientists and naturalists.

HIPPOLYTE GRUENER

RECENT DEATHS AND MEMORIALS

PROFESSOR STANLEY ROSSITER BENEDICT, for many years head of the department of biochemistry at Cornell University Medical College, died suddenly on December 21. He was fifty-two years old.

DR. MARSHALL AVERY HOWE, director of the New York Botanical Garden, died on December 24 at the age of sixty-nine years.

WILLIAM CAMPBELL, professor of metallurgy at Columbia University, died suddenly on December 16 at the age of sixty years.

DR. J. K. FOTHERINGHAM, reader in ancient astronomy and chronology in the University of Oxford and honorary assistant in the University Observatory since 1925, died at Dumbarrow on December 12 at the age of sixty-two years.

JOHN NICHOLAS VROOMAN VEDDER, professor of thermodynamics at Union College, Schenectady, N. Y., died on December 26. He was sixty-three years old.

A PORTRAIT of the late Charles Proteus Steinmetz, of the General Electric Company, was unveiled on December 14 in the assembly hall of the Steinmetz High School, Chicago. The portrait is the gift of the General Electric Company. It was accepted on behalf of the school by Mayor Kelly and by Principal D. F. O'Hearn.

ACCORDING to a wireless dispatch to *The New York Times*, the twenty-fifth anniversary of Roald Amundsen's discovery of the South Pole was marked on December 14 by a meeting in the polar museum aboard Dr. Fridtjof Nansen's vessel *Fram*, in which tablets were unveiled in memory of Nansen and Captain Otto Sverdrup by Knud Ringnes, chairman of the *Fram* committee, and in memory of Amundsen by Knut Doaaas.

SCIENTIFIC EVENTS

THE BRITISH COMMONWEALTH SCIENTIFIC CONFERENCE

THE British Commonwealth Scientific Conference met recently in London, under the chairmanship of Sir Charles Howell Thomas. The *London Times* reports that the commonwealth delegates were impressed by the effectiveness of the system administered by the executive council of the Imperial Agricultural Bureaux and favored the continuance and the extension of this system.

In his address Sir Charles pointed out that after having been on trial for seven years this cooperative commonwealth scheme may be said to be firmly established on a permanent basis, and that it shows "two main factors which underlie successful inter-imperial scientific cooperation. One is that the objective must be clearly defined, strictly limited in scope and of a nature which appeals to all units of the commonwealth. The second is that the executive body must owe allegiance to no particular government, but be strictly rep-