BOTANICAL MUSEUM LEAFLETS HARVARD UNIVERSITY

CAMBRIDGE, MASSACHUSETTS, DECEMBER 31, 1953

Vol. 16, No. 7

FREDERICK OLIVER THOMPSON, 1883–1953 BY ELSO S. BARGHOORN

THE death of Frederick Oliver Thompson on the third of January of this year, brought to an untimely end the life and activities of a man who was justly recognized as one of the country's leading amateur collectors of prehistoric plant life. Certainly in few scientific fields has a nonprofessional worker been so well known to specialists as was Fred Thompson to American paleobotanists. For the careful and accurate documentation of his collections and for the vast amount of material donated to American universities, his record as an amateur paleontologist has few parallels, particularly when it is recognized that his paleontologic interests were confined to only the last two decades of his life.

Fred Thompson (he always preferred to be called "Fred" by his scientific friends, regardless of their age) was born in Des Moines, Iowa, December 29, 1883, the first son of H. DeVere Thompson and Alice Cooper Thompson, who were among the early leaders in the development of Iowa's capitol. After preparation for college at St. Paul's School in Concord, N.H., he was graduated from Harvard College in the Class of 1907. He returned to Cambridge the following autumn for a year's study in the Harvard Law School and then went back to Des Moines to enter the varied business activities

[173]

in his native state which occupied most of his later years. In 1912, he married Anna Stroh Cram, of Des Moines, who, with three of their four children, survives him.

While at Harvard, young Fred was quite active in various social clubs, among them the Hasty Pudding Club, the Phoenix Club and the Institute of 1770. During his college years, however, he manifested little of that interest in natural history or science which later became an absorbing interest and intellectual outlet.

Fred Thompson first became interested in fossils in 1930 when he accompanied a friend of his on a collecting trip to the great coal-stripping mines near Coal City, Illinois. Here, the beautifully preserved remains of an ancient Carboniferous flora were being unearthed in great quantities, contained in the curious ironstone nodules which feature the sedimentary rocks of this area. Much time and effort were devoted by Mr. Thompson during the following years to the careful selection of these specimens which were subsequently donated to many colleges and universities. He was somewhat surprised years later to observe one of his own Illinois specimens, properly credited to the collector, on public exhibit in a museum in Mexico City. Harvard's collections of fossil plants were enriched by over ten thousand specimens culled from the spoil piles of the Coal City mines.

In 1938, while on a fossil collecting expedition, Fred discovered a number of the curious calcareous concretions known among paleobotanists as "coal balls." Coal balls, because of their wealth of organically preserved plant tissues, have been one of the major sources of knowledge of the organization and structure of Carboniferous plants since they were first studied in Europe. The interest of paleobotanists in this new discovery was not long in manifesting itself, and during the following seven years Thompson collected literally dozens of tons of the Iowa coal balls. The majority of these were sent to the Botanical Museum at Harvard, but large numbers were given to other institutions, in particular to Washington University in St. Louis.

Among Fred Thompson's collections of fossil plants, four species, new to the Carboniferous flora, perpetuate his name in the paleontological literature. In addition, he made available for study a large number of other new species of fossil plants, which have added measurably to our knowledge of the structure and evolution of Carboniferous plant life. Indeed, many references to "Collected by Frederick Oliver Thompson" may be seen in paleobotanical publications in the United States since 1938.

Although his field of special interest was paleobotany, noteworthy contributions were also made to invertebrate paleontology; and, to aid studies in this field, a superb collection of modern Floridian sea shells was donated to the State University of Iowa. He also collected many fossil marine invertebrates from the Pennsylvanian strata of central Iowa and especially from the Upper Devonian deposits of the northeastern part of the state. In this work, as so often when in the field, he was accompanied and ably assisted by his wife, Anna. His collections of invertebrate fossils, as in the case of plants, were invariably made available to specialists. Some of the specimens of Iowa's Paleozoic faunas he even sent to places as remote as Canterbury University College in New Zealand, where they have been used by paleontologists for purposes of comparison.

Once, while Fred was splitting fossiliferous nodules near Mazon Creek, Illinois, a boulder of Joliet dolomite, which he was using for an anvil, fractured and a striking trilobite pygidium was exposed. It became the holotype of *Arctinurus thompsoni* Miller and Unklesbay, named in honor of its discoverer. Had it not been for his innate

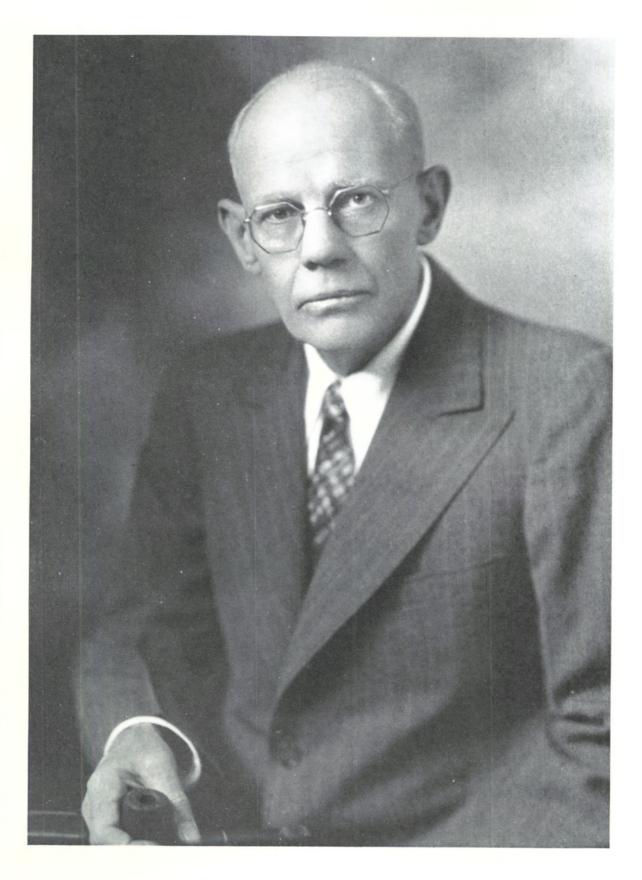
[175]

Frederick Oliver Thompson 1883–1953

Research Fellow in the Botanical Museum Harvard University 1949-1953

[176]

PLATE XXI



modesty regarding his finds, several species of fossil cephalopods would also have been named for him. Since his death, however, a fine specimen from the Ordovician of Baffin Island will honor him in this manner.

It should also be noted, in the realm of invertebrate paleontology, that at least a half dozen of the Special Papers and two of the forthcoming Memoirs of the Geological Society of America carry acknowledgment to Frederick Thompson for financial assistance during their preparation. The same is true for a paleontological monograph recently published by the Museé du Congo Belge and for more than a dozen papers in the Journal of Paleontology.

In addition to his indefatigable collecting, both of fossil plants and of invertebrates, Fred was invariably fomenting and fostering research projects in paleobotany and other aspects of paleontology. His voluminous correspondence and lively and stimulating communications with workers in widely scattered institutions attest to his restless striving to make paleontology a more dynamic field of intellectual interest and activity. In many ways he was more successful in these efforts than were his professional (and scientific) colleagues.

Although the writer personally knew Fred Thompson only during the last six years of his life, the memory of the man will stand, not only on his scientific contributions, but on his unforgettable personality as well. His interest in people partook both of their foibles and their serious endeavors and he was always ready with an anecdote in either vein. This made him a delightful companion in the field and eased the disappointments so often experienced in unsuccessful collecting in unfamiliar localities. In pursuit of new finds, despite failing health in his later years, Fred's energy and cheerful persistence in

[177]

the field were a source of inspiration to younger companions.

Perhaps, above all, for those who knew Frederick Thompson as an amateur paleontologist, he will be remembered most clearly for his selflessness, his generosity and his intense devotion to his chosen field of scientific interest.

Species named in honor of Frederick O. Thompson

ARCTINURUS THOMPSONI Miller & Unklesbay in Journ. Paleont. 18 (1944) 364.

MACROSTACHYA THOMPSONII Darrah in Bot. Mus. Leafl. Harvard Univ. 4 (1936) 53.

MEDULLOSA THOMPSONII Andrews in Ann. Mo. Bot. Gard. 32 (1945) 324.

MESOXYLON THOMPSONII Traverse in Am. Journ. Bot. 37 (1950) 324.

SPHENOSTROBUS THOMPSONII Levittan & Barghoorn in Am. Journ. Bot. 35 (1948) 353.



Barghoorn, Elso S. 1953. "Frederick Oliver Thompson, 1883-1953." *Botanical Museum leaflets, Harvard University* 16(7), 173–178. <u>https://doi.org/10.5962/p.295180</u>.

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