Indiana, which must have been a significant part of the original collections surely constituted most of the other 350 fossils that were saved. Twenty-two specimens were eventually returned to Indiana University from Washington, of which 12 are currently reposited in the departmental type collection. About 110 specimens still remain in the U. S. National Museum collections. What happened to the remainder of the 349 specimens is not clear.

The Mystery of the Missing Megalonyx

It is quite clear that the giant ground sloth skeleton, Megalonyx, survived the fire, although what eventually became of this large and important fossil is a mystery today.

In the 1887-88 annual bulletin a section on the Museum states that the Museum is now on the second floor of newly constructed Owen Hall. Collections include 1500 minerals as well as many more deposited by Professor Branner. Fossils number several thousand, including the finest specimen of Megalonyx Jeffersoni. Recent donations of fossils and minerals are also listed, including a "tapir bone from a cleft of rock" by Capt. Perry of Ellettsville.

The University archives contain an invoice from Ward's Natural Science Establishment in Rochester, New York, dated October 10, 1901 for $201.94. This is for mounting the skeleton of Megalonyx, a case for the fossil, and freight charges. So, the specimen was complete and intact at the turn of the century. There is also a hand-written memorandum that seems to be a press

release titled "Additions to Museum". The document says, in part, "In 1883 fire destroyed the building that contained the university museum and efforts were made at once by Dr. David Starr Jordan to secure another collection. . .Another valuable addition is the bones of a megalonyx, a mammal belonging to the edentata, a group which no longer have representatives in the temperate regions of America. The bones were found near Henderson, Kentucky, and were originally a part of the Owen collection. At a recent meeting the Trustees ordered the bones to be mounted. Dr. Eigenmann decided upon a unique plan for mounting. Instead of having the missing parts "restored" by plaster casts the bones are mounted in the relative position they would occupy in the skeleton, the missing parts being supplied by the imagination. A third addition is the bones of a mastodon found on a sandbar in the Ohio River at very low water. These were presented to the museum by Karl Kramer, of Rockport, a graduate with the class of 1901." This release is undated but it may be close in age to the Ward's invoice. At any rate, it also clearly demonstrates that the Megalonyx specimen survived the fire.

By 1901 there was not a single museum room at the University. Instead, several departments each had a its own small museum. Presumably the giant ground sloth was possessed by the zoology department, given Eigenmann's role in having the specimen mounted.

The specimen was clearly extant and mounted as Eigenmann had

wanted, because Oliver P. Hay saw the specimen in 1912 or shortly before that, when he published his paper on Pleistocene vertebrates in the reports of the Indiana Geological Survey.

In correspondence between Cumings and Bryan it seems that a museum was intact as late as 1937, but that with increasing pressure for space as enrollment increased, especially at the close of World War II, many large specimens apparently were stored away so that some small museums failed to survive.

If the specimen were in charge of the Department of Geology it may have been destroyed shortly after Charles Deiss became chair in 1945. There apparently was a great "housecleaning" of poorly attributed specimens at that time. There are reports that a dump truck was backed up to a second story window of Owen Hall and students tossed unwanted specimens out the window.

In 1947 the anthropology department had on display in a Franklin Hall window display case five bones of the sloth. The specimens may have been saved from a trash heap, perhaps one caused by Deiss' cleaning out of Owen Hall, by Professor G. K. Neumann of the anthropology department. Another story is that there was a fire in a storage building and Neumann rescued the specimens from the ruins of that fire. Presumably the remainder of the skeleton was destroyed either in the fire or in the cleaning out of Owen. I cannot attest to the truth of either one of these stories. When the anthropology department moved, the remaining five bones were boxed up and stored in the basement of the Student Building, where the University Museum was situated.

When Mather Museum opened the specimens were not wanted and were given to the Indiana State Museum, where they now reside. What happened to the other 60 odd bones is not known. Whether zoology or geology had custody of the sloth is not known.

And there the story ends, with the mystery unsolved.

Upon Jordan's return from Europe he immediately began trying to replace some of the destroyed museum collections. He was especially concerned about the fish collections, his specialty. He also was instrumental in obtaining a collection of stuffed birds that had been labelled by President Theodore Roosevelt.

The Board of Trustees realized that the small site at the south end of College Avenue (Seminary Square) would ultimately become too small and unsuitable as a campus. Jordan negotiated purchase of the present campus location on what was then the Dunn farm on the east edge of town. The initial site was 20 acres in extent and Theophilus Wylie thought the purchase was a mistake and too costly. He would have preferred the funds to be used to strengthen the library and scientific apparatus. The Trustees also obtained permission and funds to build three new buildings--Owen, Wylie, and Maxwell halls. Owen and Wylie halls were completed in 1884 and Maxwell (later Mitchell) was constructed the next year. The geology laboratory was in Owen Hall, along with zoology and botany.

The University Bulletin for 1884 also reflects the University's growing commitment to research. For the first time a list of papers published by faculty and students during the past year was printed in the bulletin. All papers are scientific in nature, no social sciences, languages, arts, or humanities papers are listed. David Starr Jordan, either alone or with co-authors, has 49 papers listed. A senior science major, Benjamin F. Adams Jr., from Bloomington, had two chemical analyses of oolitic limestone published in the Report of the Indiana Geological Survey for 1881. This is apparently the first published report of a geological nature by an IU student. Adams graduated from IU in 1883 with a Bachelor of Arts degree. In the next year's annual report and bulletin, Adams is listed as a student in chemistry, presumably a graduate student. It was about this time that students were allowed to "specialize" in specific subjects.

Another student much influenced by Jordan was Willis S. Blatchley, who is listed as publishing a paper on local plants as a sophomore. Blatchley, from Bainbridge in Putnam County, was later to become an important botanist, geologist, and State Geologist in Indiana. During his junior year Blatchley is listed as a major in biology and geology. He published two papers in the Proceedings of the Philadelphia Academy of Sciences on the genera Umbra and Pemephales. He graduated from IU in 1887, with a degree in biology. He did a senior thesis on the flora of Monroe County and stayed on as a graduate student in biology, completing a Masters thesis on the butterflies of Indiana. Blatchley later

became State Geologist of Indiana in 1894 and held this post until 1910. He was responsible for some of the most important economic and scientific papers published on Indiana, not only in geology but also in biology. The geological survey reports included such non-geological research as reports on crawfishes, birds, modern mollusks, flowering plants, orthoptera, insect galls, mushrooms, arachnids, modern mammals, and beetles.

It was during this same time interval, 1883 to 1885, when significant changes in graduation requirements and course offerings occurred. Required courses were restricted to the freshman and sophomore years and more advanced courses in a variety of subjects with possibilities of choices become available. Thus elective subjects became firmly established under Jordan's influence. The idea of a student "majoring" in a specific subject--initially called "specializing"--was introduced.

By 1885 the Department of Natural Sciences had been abolished, and was replaced by a Department of Biology, which for one year included zoology, botany, and geology. This inappropriate placement of geology was rectified the following year, 1886, when a Department of Geology was established. In April, 1885, the Board of Trustees voted to establish a separate chair of Botany and Geology.

By the next year, in 1886, the University had hired John Caspar Branner, to fill the newly created chair of Botany and Geology and a separate Department of Geology had been created.

The decade from 1880 to 1890 saw formation of many of the departments currently recognized in the University. This, along with earlier establishment of elective choices of courses, was part of Jordan's effort to relax the rigidity of earlier course requirements and to afford advanced students the opportunity to pursue independent study. President Jordan was a strong proponent of these changes.

John Branner was from Tennessee and did his undergraduate work at Cornell, where he became friends with Jordan. As an undergraduate he spent several years in Brazil as a geological assistant, thus delaying his graduation until 1883. Branner returned to South America several times, both in the role of a geologist and as a botanist. He was 45 years old and on the staff of the Pennsylvania Geological Survey in 1885 when Jordan brought him to Indiana. During his first year in Bloomington Branner was awarded a Doctor of Philosophy degree by IU. Despite his primary research in geology, his PhD dissertation was on the "Fibre-vascular bundles of Palms". Two years later, in 1887, Branner taught 70 students and gave 15 hours of lectures a week in botany and geology. He possessed great vigor and talent (Melhonr, 1967).

In 1885 Branner taught dynamical and structural geology to sophomores (5 students), special courses in advanced geology to juniors all three terms (5 students). In addition he taught courses in botany, entomology and Portuguese and is cited as having published 10 scientific papers. He is listed as an instructor in botany as well as geology.

At this time the geological laboratory is on the second floor of Owen Hall, convenient to the Museum. Large collections of geological maps and diagrams are mentioned, as are transits, levels, telemeter rods, protractors, notebooks, drafting tables and drafting paper. The lecture room has large mounted photographs of geological subjects. There is also a photographic laboratory for production of both positives and negatives used to illustrate geological lectures and the geology of regions studied in classes.

In addition, there is a summer school of geology and topography, which is mentioned only briefly.

In 1887 Branner was appointed State Geologist of Arkansas and was given a two-year leave of absence by IU, which was later renewed for an additional two years. He never did return to full-time teaching at IU, because he was hired by Jordan to come to Stanford University before the second two-year leave had expired. In 1887 two new courses were introduced--elementary and advanced topographical geology, but these apparently were not taught on campus. The arrangement seems to have been that Jordan would take over teaching of the introductory geology courses in Branner's absence. The advanced geology courses, including the new topographical courses, would be taught by Branner in Arkansas with IU students serving as assistants on the Arkansas Geological Survey. According to Cumings (Melhorn, 1967) Branner's "common practice was to have his graduate students cut their teeth in the Paleozoic backwoods of rural Arkansas where Branner almost

literally kicked them off the train, forcing them to do geologic mapping on their own with little or no assistance from their mentor. It is not surprising that in view of this Spartan introduction to field geology their studies . . . in later years were so thorough and accurate."

This was a time when topographical maps were beingbeginning to be produced by the Federal Government, especially the mapping department of the United States Geological Survey. This work was done using plane table and alidade, so there was a need to train young geologists in these surveying methods.

The bulletin for 1886-1887 for the first time lists students specializing in geology. The very first graduate in geology was not an undergraduate but rather a graduate student, David R. Moore, from Logan, Ohio, who had an A.B. from Miami University. He did an M.A. thesis on Silurian fossils of Franklin County, Indiana and received his degree in 1886. A resident graduate student in geology is also listed, John Franklin Thompson, from Richmond, Indiana who held a B.S. degree from Hillsdale College. There is no record of Thompson completing an advanced degree.

The only undergraduate geology major listed is Ernest Percy Bicknell, from Bicknell, Knox County, Indiana. He is listed as a senior and as a junior was listed in biology and geology. When he graduated in 1887 his senior thesis was a review of the genus Semotilus, so he apparently reverted to biology.

No other geology majors are given in the bulletins until 1888 when Richard Ellsworth Call, from Des Moines, Iowa, is