interest aroused among local persons, it was deemed advisable to complete the excavation at once, in order to prevent others from taking the smaller parts. The excavation was completed on Friday afternoon, October 6, and the bones were brought to Indianapolis October 7.

It was impossible to learn from the arrangement of the skeleton what position the animal had been in when it died, and it is likely that the bones were disarranged by other animals before they were buried beneath the marly clay in which they were found. The tusks and head were in poor condition, and the shoulder blades and pelvic bones were somewhat broken; practically all of the other bones were sound. The tusks could not be measured accurately, but were approximately seven feet long. Only five teeth were recovered, and these show evidence of great wear. The vertebrae were in two sections about eight feet apart, and the head was upside down, as though it had been thrown back over the left shoulder. The bones averaged four feet in depth beneath the surface, at about the present ground water level. The surface material was muck, and apparently the spot had been within the edge of a swamp.

Associated with the bones was a piece of wood about three feet long and two and one-half inches in diameter. This has been identified by Dr. Samuel J. Record of the School of Forestry of Yale University as a branch of *Larix americana*, or tamarack. Some of the mud which coated the bones has been examined by Mr. P. K. Houdek of the botany department of the University of Chicago, who reported that pine, fir, and oak pollen were present in it.

A mixture of methyl acetone and celluloid has been found satisfactory as a preservative, and the bones are being coated with this after they have thoroughly dried. No arrangements have been made for the mounting or permanent storage of the skeleton, but it will be stored temporarily in the State Museum.

SOME UNUSUAL GEODE FORMS

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Some time ago, Dr. C. A. Malott brought a peculiar form of geode to the writer's attention. Through his co-operation, the locality of occurrence of the geodes was found and a large number of specimens were collected.

The geode, as usually described, is a sub-spherical body consisting of a shell of compacted crystalline quartz, inside of which occurs crystals of quartz, calcite, and occasionally, other minerals. There may or may not be a cavity. The new form little resembles the normal, rounded geode. The unusual geodes are either sliver-like or elongated, faceted wedges which fit tightly together and make up the whole of a lens in the parent formation (See B, Fig. 1). They do exhibit, however, true

geode structure. The cavity is present in most of the larger specimens and even in some of the smaller slivers.

The wedges range from one and one-half inches to five inches in length and from three-quarters of an inch to three inches square at the butts, from which they taper to more or less of a point. The large ends of the wedges are oriented alternately toward the top and the bottom of the lens in which they occur (See C, Fig. 1). The slivers are usually thin enough to be slightly translucent. They range from three-quarters of an inch to three inches in length. The individual pieces fit very closely together, but a few blows with the hammer cause them to separate along the facets, each piece a true geode (See D and E, Fig. 1).

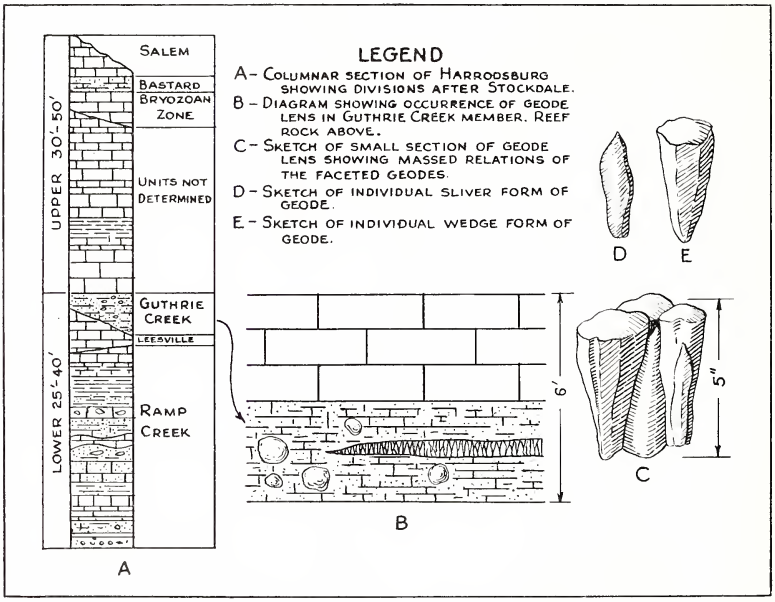

Fig. 1. Illustrating the faceted geodes and their occurrence in the Harrodsburg limestone.

The locality where these peculiar geodes were found is in the west bluff of Stouts Creek Canyon, a short distance downstream from the ford crossing just west of the Park School, in section 19, T. 9 N., R. 1 W., about two and one-half miles north of Bloomington, Indiana. They occur a little below the middle of the Harrodsburg limestone, in a silty zone just below a massive, reef-like structure described by Beede.[1] The silty zone appears to be the Guthrie Creek member of the lower Harrodsburg as described by Stockdale[2] (See A, Fig. 1).

The elongated geodes seem to have had their origin in the same processes which accounted for the sub-spherical variety which occur at

[1] Beede, J. W., 39th Ann. Rept., Indiana Dept. Geol. Nat. Resources, p. 195, 1914.

[2] Stockdale, P. B., Stratigraphic Units of the Harrodsburg Limestone, Proc. Indiana Acad. Sci., 1929.

the same horizon, both up- and down-stream from the lens in the silty zone or the Guthrie Creek member of the Harrodsburg. Indeed, the elongated types show a tendency to round at the butts of the wedges. It seems evident that the elongated species are a result of close compaction upon one another; this compression has been sufficient to prevent the normal rounded or sub-spherical form. The individual geodes, when pressed upon one another, developed the elongated form with the facets and the thin sliver form because of lack of space, in a manner similar to the growth of the hexagonal corals, each geode having its individual casing of crystalline quartz. Each geode is therefore a complete specimen. The lens encompassing them is a closely packed mass of individual geodes.