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NOTES AND NEWS

AN UNUSUAL COLLEGE MONUMENT

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Every known variety of Keystone State building stone, assembled from Pennsylvania's 80,000 square miles of earth's crust, may be seen on the Pennsylvania State College campus in a "monument," known as the Polylith, which is only six feet square at the base. The Polylith is so constructed that the rock formations of the State, arranged in exactly the same order in which they occur in nature, may be seen at a glance.

The Polylith, erected 33 years ago, consists of 281 samples of stone procured from almost 150 localities of Pennsylvania. Its chronological series of rocks, measuring 33 feet in height, represents a span of millions of years in the geological formation of the earth's crust of Pennsylvania. The weight of the column is calculated to be approximately fifty-three and a half tons. Because it tells how various stones withstand weathering, the "monument," as it is known to students, attracts building specialists and geologists from all parts of the country.

An examination of the Polylith in its present condition reveals that there are approximately 25 different rocks that have withstood atmospheric alterations exceptionally well and 36 that have undergone only a very slight change. Students of geology who have examined the Polylith and studied the changes which have taken place in the rock formations, have classified the various stones according to their adaptability for building purposes, based on appearance, texture and durability.

AN UNIQUE FORMATION OF SATIN SPAR

VICTOR G. HILLS, Skouriotissa, Nicosia, Cyprus.

Here in the ancient mine at Skouriotissa which had been closed for at least 1500 years is found a most odd formation of satin spar crystals which have grown since the workings were closed. Fig. 1 is a photograph taken in the ancient drift. Fig. 2 shows a handful of the crystalls scattered on a black cloth. These long clear white, hair crystals stood out each independently, growing from the faces of the mine drift, from either top, bottom or sides. I measured one 13 inches long. Nine inches is a common length. Their diameter is from 0.05 to 0.12 millimetre; the longer hairs being commonly about 0.1 millimetre. They are somewhat flexible, the more slender bending to a half circle of one inch diameter. Some bent crystals may be seen in the photograph. Large handfuls, probably the longest and best, were gathered in bunches and brought to the office before I had a chance to take the photograph.

In Fig. 2 is also shown an odd cluster of somewhat coarser crystals attached to a piece of rock and standing just as they grew from the bottom of the drift. Note that the top looks like a bunch of cords which had been broken off by twisting. That the crystallization should take a spiral form, even so slightly, seems the strangest thing of all about this odd formation.

At other places where ancient workings are broken into there are found transparent selenite crystals usually from 1/16 to 1/8 inch thick and from 1-1/2 to 2-1/2inches in length. These crystals have developed singly and without any sort of orientation.

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Occasionally the gypsum has formed stalactites as clear as icicles and reaching five inches in length.

The hairy formation has been found only in one place and extended along the drift for about ten feet. The other formations have been found in several of the old drifts but only sparingly.



FIG. 1



Quite recently another ancient drift, disclosing an entirely different crystalline formation, has been cut. This drift is sufficiently open to permit entrance for about 40 feet. Both ends terminate, as usual, in cave fills. This gallery has its top, bottom and sides lined with a clumpy formation of hydrous iron and copper sulphates. The crystals are in such complex masses that it is not practicable to separate clean crystals for determination, but an off-hand observation discloses the following minerals as possibilities: coquimbite, melanterite, phillipite and chalcanthite. The coquimbite predominates as amethystine tinted crystals. Whether the beautiful purple, blue and green colors will be retained in free air remains to be seen. All of the formations are soluble in cold water. I note that Dana gives phillipite as soluble in water but unaffected by exposure to air. When the drift was first opened it was devoid of oxygen, but after a few hours a light would burn. An antique clay lamp was found in this drift.

The recent mine workings occasionally disclose bunches of nearly pure chalcanthite. On exposure to the air these turn white.

THE LARGEST METEORS

A seventy-ton meteor is reported to have been found at Otjihaene, near the head of the Grootfontein railway in the northeastern part of Southwest Africa, imbedded in soft limestone. Its approximate size is ten by ten by four feet. Though this is said to be the largest meteor ever actually discovered in the world, it is probably dwarfed by the one which many years ago caused the famous Meteor Crater in Arizona. This is the opinion of Dr. George P. Merrill, of the U. S. National Museum. The great meteor which fell in the Yenissei Province of Siberia on June 30, 1908, was also probably much larger, but as yet the main part of neither of these meteors has been located. Another huge crater, caused by a meteor that fell at some time in the past, was discovered in the Pamir, in Central Asia, near Afghanistan. This latter crater is a conical pit 260 feet in diameter and 33 feet deep.

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