

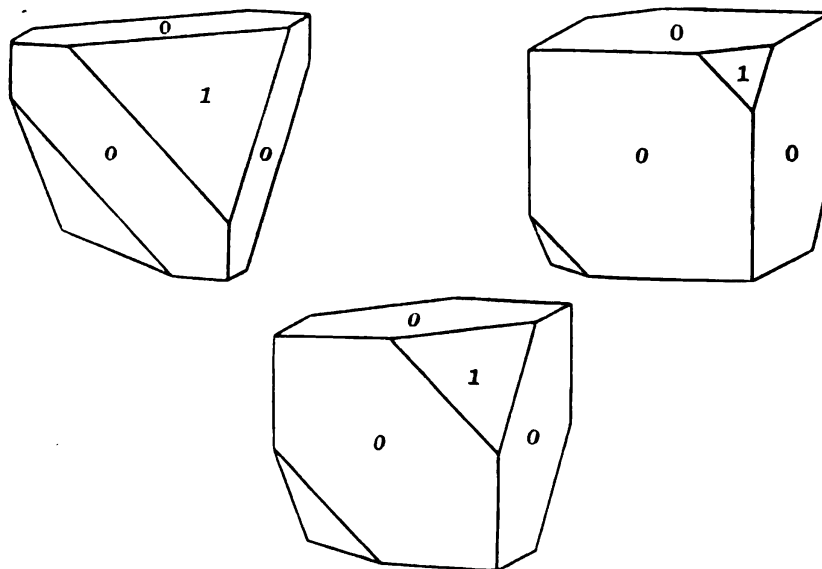
NOTES ON PHARMACOSIDERITE.

BY RICHARD PEARCE.

I have already drawn the attention of the Society to the occurrence of pharmacosiderite, associated with copper arsenates, in the Mammoth Mine, Utah.

The first specimen from this locality coming under my observation shewed a light straw-colored coating, on ferruginous quartz, which under the microscope developed distinct cubes but without any evidence of the diagonal striation generally well marked in pharmacosiderite.

Since the discovery of this specimen I have watched very closely for the occurrence of the mineral in the Utah ores and I have been rewarded by finding some very good specimens shewing a variety of color and crystalline form probably rarely equalled.



I cannot find any mention of an American locality for this mineral in Dana's Mineralogy. According to my own observations Cornish specimens from the old Wheal Unity

and Wheal Gorland shew a color almost uniformly green, and some well crystallized specimens which I found about 25 years ago at the old abandoned mines near the foot of Skiddaw Mountain in Cumberland were of a rusty-green color. The varieties of color observed in the crystals of the Utah mineral are, straw-yellow, amber-yellow, yellowish-brown, brown, pale-green, apple-green and leek-green, varying from transparent to translucent and opaque. The crystals are either cubes without any modification, or shew the usual tetrahedral development of O modified in different degrees by 1, with the characteristic diagonal striae well marked in some specimens. (See figures.)

The exact chemical composition of the Utah pharmacosiderite has not yet been investigated owing to lack of sufficient material, the mineral occurring very sparingly: but sufficient has been done in this direction to establish its identity beyond question. In one specimen which I examined I found quite an appreciable amount of sulphuric acid and it will be an interesting point to discover whether this plays any part in the composition of the mineral, or is present only as an accidental impurity.