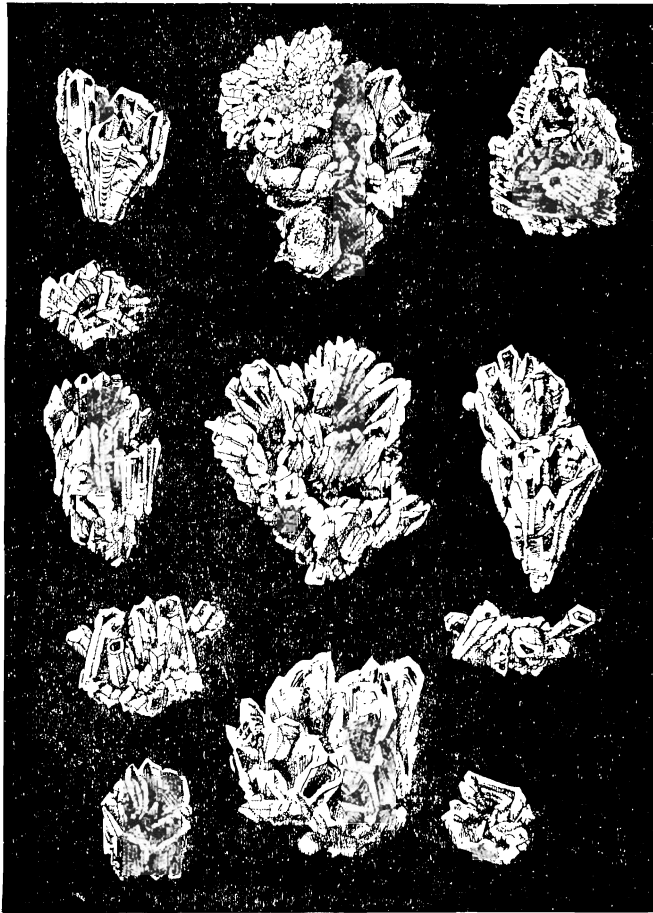


ART. LIV.—*Mineralogical Notes*; by GEORGE F. KUNZ.1. *Rhodochrosite from Colorado.*

RHODOCHROSITE in rich red, transparent crystals has been found in the John Reed mine at Alicante, Lake Co., Colorado. One specimen shows forty crystals lining a cavity 8^{cm} in width; these crystals are simple rhombohedrons (*R*), 12^{mm} across, a number of them being entirely transparent. Some cleavage pieces are as pellucid as red Iceland spar and show the same strong double refraction. One of them measured 10^{mm} by 20^{mm} and weighed 2 grams. This is the first locality that has yielded crystals of such magnitude and transparency. The specific gravity is 3.69 and the hardness 3.5; it is not scratched by calcite but is by Bilin aragonite. An analysis, by Mr. James B. Mackintosh, yielded the following results:

MnO	58.325
FeO	3.615
CaO	none
MgO	trace
CO ² by difference	38.06
	100.00

It also occurs opaque, massive and cleavable, enclosing bright cubic crystals of pyrite at times 25^{mm} across. Some of the crystals are opaque while others are of a transparent flesh color. At the Ulé mine, Lake City, Col., crystals, both opaque and flesh-colored, rounded and curved like dolomite, are found on an argentiferous galena. Some crystals were observed 23^{mm} across. The faces are not polished but rough like the *himbeerspath*. With the spectroscope there is considerable absorption of the citron, forming a decided dark band between the yellow and the green. With the dichroscope the ordinary image is a salmon-pink and the extraordinary light yellow sherry color.



CRYSTALS OF HOLLOW QUARTZ.

2. *Crystals of Hollow Quartz from Arizona.*

These crystals are found about 3 miles southwest of the town of Pinal, in Pinal Co., Arizona. They occur in a sandstone which has been traced for about one mile; it is penetrated in many places by spherules of obsidian $\frac{1}{8}$ to 3 inches across, which cover the ground like a shower of large hailstones. These quartz crystals are of exceptional interest from the fact that they are mere walls surrounding hollow spaces much larger than the area of the wall itself (see figures on adjoining cut). In some instances the crystals radiate from a central point; numbers of the detached crystals show this very strikingly. At the point of attachment there often appear small nuclei of chalcedony, and in some instances, the crystals radiate from this chalcedonic center so as to form true quartz flowers, as shown in the second figure. Quite often they are single individuals hollowed out, leaving only the smallest edges of what ought to be a pyramid, and the interior of the crystal being hollow to the base in a few instances. They are not cavernous like the Poretta, Italy, and Burke Co. quartz. As hollow quartz their characteristics are sufficiently marked to isolate them from those found at any other locality.

It is very evident that they are the result of a crystallization from a solution, and the chalcedony being rounded and coated white, has every appearance of stalagmitic growth, fading imperceptibly into quartz. In some few instances the quartz crystals have a coating of chalcedony at their terminations. The sides of the prismatic faces are striated and have all the unevenness of those made up of crystalline plates. The hollow crystals themselves are usually made up of six flat individuals so symmetrically arranged as to leave the center hollow, the whole often being one distinct crystal. Many of the crystals are terminated with the pyramid face *R* only; -1 , when present, is usually very small and only slightly developed. Some, however, have both *R* and -1 . In general appearance they resemble the amethyst of Schemnitz, Hungary. The figures were all carefully drawn and are of the natural size.

In this connection it may be mentioned that from near Crouch's Mill, Gaultney's township, Alexander Co., North Carolina, the writer obtained a beautiful group of quartz radiating from one of these chalcedonic nuclei and forming a complete flower that measured 7^{cm} across. None of these crystals, however, were hollow.

3. *Hydrophane from Colorado.*

A white opaque variety of hydrophane, in rounded lumps, from 5^{mm} to 25^{mm} in diameter, with a white, chalky or glazed coating somewhat resembling the cacholong from Washington

Co., Georgia, has recently been brought from some Colorado locality. For its power of absorbing liquid it is quite remarkable. When water is allowed to slowly drop on it, it first becomes very white and chalky, and then gradually, perfectly transparent. This property is developed so strikingly that the finder has proposed the name "Magic Stone" for it, and has suggested its use in rings, locket, charms, etc., to conceal photographs, hair or other objects which the wearer wishes to reveal only when his caprice dictates. The specific gravity of several specimens was taken with the following results:—Nos. 1–3 were slabs 2^{mm} thick, No. 4 was a natural lump with glazed coating.

	Dry. Grams.	Wet. Grams.	Water abs.	Weight(in water).	Spec. grav.
1.	·880	1·342	·588	·463	2·110
2.	·644	·934	·416	·3385	2·091
3.	·730	1·109	·379	·382	2·097
4.	1·8745		1·0595	·864	2·191

The weight was taken both dry and wet, and it will readily be seen that this hydrophane absorbs more than an equal volume of water.

A remarkable nugget of Silver.

Gen. A. G. Greenwood recently called my attention to a nugget of native silver weighing 606½ ozs. Troy, one of sixty that have been found at the Greenwood group of mines in the state of Michoacan, Mexico. The other nuggets weighed from one to thirty-five pounds each. The large nugget is entirely worn except in cavities where some of the crystals are rounded and the form is still visible. It is almost pure silver, scarcely a trace of any gangue rock being discernible. This specimen was found on the surface, and in its original state is said to have weighed 12 lbs. more. It is one of the most remarkable nuggets of silver ever found. The geological formation is a limestone with outcroppings of limonite.