

to aid in their identification are: quartz, epidote, zircon, staurolite and diamond.

Striations due either to twinning or to oscillatory combination are preserved on quartz, epidote, plagioclase, specular hematite, rutile and diamond. Cleavage and parting, induced by the grinding action of the gravels, are conspicuous on cyanite, epidote, orthoclase, plagioclase, specular hematite, rutile and diamond.

Some of the red garnets are pyrope resembling the "Cape ruby" of the diamond diggings of South Africa. Topaz, which has been reported in the diamond-bearing gravels of Rhodesia and Brazil, and xenotime and monazite, reported from Brazil, were not observed.

An article published a few years ago by Ball and Shaler<sup>1</sup> on the economic geology of the Belgian Congo describes the Kasai diamond fields. In this interesting paper, which represents a pioneer summary of the knowledge of the mineral resources of the Belgian Congo, some of the minerals enumerated above are mentioned. To this paper and to an earlier one by Ball<sup>2</sup> the reader is referred for a description of the underlying geology and the occurrence of the diamond bearing gravels.

<sup>1</sup> Ball, S. H. and Shaler, M. K., *Econ. Geol.* 9, 605, 1914.

<sup>2</sup> Ball, S. H., *Eng. Min. J.*, Feb. 3, 1912, p. 268.

### TERMINATED CRYSTALS OF THAUMASITE.<sup>1</sup>

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The U. S. National Museum recently received from Mr. James G. Manchester a lot of minute thaumasite crystals, found loose in a cavity in the trap rock at West Paterson, N. J. Five of them have been found to be terminated by good pyramidal faces, so that a redetermination of the axial ratio of the mineral has been possible. Dr. W. T. Schaller had previously reported this to be  $c = 1.09$ , on the basis of a very rough measurement on a single crystal from the same locality.<sup>2</sup> Full details of the new results will be published in the Proceedings of the National Museum in a few months, but the following preliminary data seem worth placing on record at this time:

#### THAUMASITE

Hexagonal (hemimorphic?).  $\rho_p = 47^\circ 05'$ .  $c = 0.931$

Forms:

base	c	0001
second order prism	a (new)	11 $\bar{2}$ 0
first order prism	m	10 $\bar{1}$ 0
first order pyramids:	e (new)	10 $\bar{1}$ 2
	f (new)	20 $\bar{2}$ 3
	p	10 $\bar{1}$ 1
	q (new)	30 $\bar{3}$ 2

<sup>1</sup> Published with permission of the Secretary of the Smithsonian Institution.

<sup>2</sup> *Bull. U. S. Geol. Survey*, 610, 130, 1916.