A SECOND METEORIC FIND FROM SCOTT COUNTY, KANSAS.

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Those conversant with the literature will perhaps remember that in connection with the description of a new meteorite from Modoc, Kansas, some years ago ¹ I appended a brief note descriptive of a small stone (135 grams) forwarded by Mr. J. T. Freed, which I relegated provisionally to the Jerome fall of 1898. This was acknowledgedly open to question; there was no question, however, but that it formed no part of the Modoc fall then under consideration, and the occurrence was sufficiently interesting to cause Mr. John T. Freed (son of Mr. J. K. Freed, finder of the Modoc stone) to search for more material. As a result there was received from him in November, 1911, the fragment shown in plate 39, fig. 1, accompanied by the statement that it was found on a quarter section adjoining the one where was found the largest stone of 1906; or, more exactly, about the middle of section 8, township 18, range 33 southwest.

The stone as received is plainly a fragment, roughly wedge-shaped, showing on the lower surface (pl. 39, fig. 1) a fracture so recent in the course of its flight as to be scarcely coated by a fused crust. Other surfaces show the usual crust though obscured by oxidation, the entire stone being of a rusty ocherous brown color. As figured it weighed a scant 1,900 grams. The maximum dimensions were 140 mm. by 130 mm. by 65 mm., thinning out to not more than 10 mm. at the top. The exterior features of the stone, as well as a polished surface, are somewhat similar to those of a recently found but yet undescribed stone from Cullison in Pratt County, and it was thought at first there might be some connection between the two. Further study has, however, convinced me of a lack of identity, both in mineral composition and in structure.

The stone is chondritic, but chondrules of such size as to be evident on a polished surface are rare, of a green color, and firmly embedded in the dense greenish black fragmental ground. The microscopic

¹ Amer. Journ. Sci., vol. 22, May, 1906.

forms are largely fragmental and of the usual olivine-pyroxene type, the pyroxenes being both the monoclinic and orthorhombic varieties. The colorless limpid interstitial mineral occurring in the Modoc stone and there assumed to be a feldspar, is here quite lacking, and nothing that could with certainty be identified as a feldspar was observed. Occasionally polysynthetically twinned forms were met with which, while suggestive of a plagioclase, were, from their lack of limpidity and high polarization colors, assumed to be pyroxene, as usual. The metallic iron and iron sulphide are very evenly and abundantly disseminated throughout the mass of the stone in sizes rarely above one or two millimeters in diameter. Compared with other stones from the same State it is a trifle coarser in texture and of a more greenish color than that of Oakley; more compact and darker in color than that of Ness County. It more closely resembles both in color and texture a stone in the U.S. National Museum collections, from Cullison, Pratt County, in the south-central part of the State, but more than 100 miles distant. Of foreign stones it more closely resembles that of Gilgoin Station, New South Wales, than any others of the National Museum collection.

Should this, as is now apparent, prove to be an independent fall it, together with that of Cullison, above noted, will make 17 to be credited to Kansas. Inasmuch as I designated the find of 1906 as the Modoc meteorite, it will perhaps be best that this second find be known simply as the Scott City stone, the two individuals thus far known weighing respectively 135 and 1,900 grams. From the slightly glazed character of the fracture above alluded to it seems not at all improbable that more material may yet be found.

A fragment of this stone, weighing 175 grams only, is in the collection of the National Museum (Cat. No. 429), the main mass still remaining in the possession of Mr. John T. Freed, of Scott City.



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