SECTION B, GEOLOGY

Natural Landmarks — Place Names — Glass Mountain — Hills in the Cimarron River Drainage Basin of Northwestern Oklahoma

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A natural landmark is a prominent, more or less permanent, feature of the landscape that may serve as a geographic reference point. Glass Mountain (Fig. 3) is a specific example of such a marker. This place name could be found, after a careful search, plainly labeled as such, on but one map by Gould (1905). On this map it was shown to be near the Cimarron River between two of its tributaries, Skull (Cheyenne) Creek and the Cottonwood Creek branch of the Skunk Creek tributary. The relationships of these streams are shown on a drainage map in Snider (1917). The Glass Mountain landmark is thus located with reference to the other natural landmarks just mentioned. The Gould map also shows to the southeast, the town of Fairview, Major County, but the scale of the map does not permit an accurate estimate of the distance involved. However, a map of Major County (Snider, 1913:146) shows Fairview, Major County, Oklahoma, located approximately 8½ air miles to the southeast of a large butte with the Cottonwood Creek mentioned above, between. This roughly triangular butte with an area of approximately one square mile is in secs. 28 and 33 T. 22N. R. 13W. It has a pronounced northwest face. The "Glass Mountain" geologic section (Gould, 1905:54) was probably taken here. A smaller butte is located a short distance northwest of the larger one in NE ¼ sec. 29 T. 22N. R. 13W. It is this one, or a peak on the large one, that is often pictured in photographs entitled "Glass Mountain" (Gould 1904:64) (Fig. 3, this paper).

Suffel's (1930) map locates the larger butte with reasonable accuracy in the same township between two unnamed tributaries of the Cimarron River. Fairview, Major County, is shown approximately nine miles southeast of the butte.

From these sources, the location of Glass Mountain is near the west bank of the Cimarron River between its tributaries, Skull (Cheyenne) Creek and the Cottonwood Creek branch of Skunk Creek. This landmark is 8½ to 9 miles northwest of Fairview, Major County, and about 6½ miles almost due west of Orienta, Major County. It is in secs. 28 and 33 T. 22N. R. 13W.

Glass Mountain is one of the Glass Mountains in central Major County, so called because of the glittering crystals of selenite that cover the slopes of many of them.

It is suggested that these "mountains" and other hills, mounds, buttes, etc., be grouped in the drainage basins of the rivers in which they are located—in this case, the drainage basin of the Cimarron River of northwestern Oklahoma.

These are quite definitely outlined on maps issued by the United States Department of Agriculture (Anonymous, USDA) and the United States Geological Survey (Anonymous, USGS).

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Named units in this proposed group comprise:

Old Woman's Head (Fig. 1)—Six miles east of Kenton, Cimarron County, Oklahoma, in the NW ¼ sec. 15 T. 5N. R. 2E. of the Cimarron Meridian. This is not far to the southeast of Black Mesa (Mesa de Maya) in the extreme northwest corner of Oklahoma (Rothrock, 1925:55).

The Three Sisters—About 1½ miles west of Old Woman's Head and 5 miles east of Kenton, Cimarron County (Rothrock, 1925:54).

Twin Buttes—Harper County. SE ¼ sec. 12 T. 28N. R. 26W. (Gilmore, 1962:8, 17, 38).

Nig(g)er Hill—Woodward County. Sec. 35 T. 25N. R. 19W. (Gilmore, 1962:6, 47).

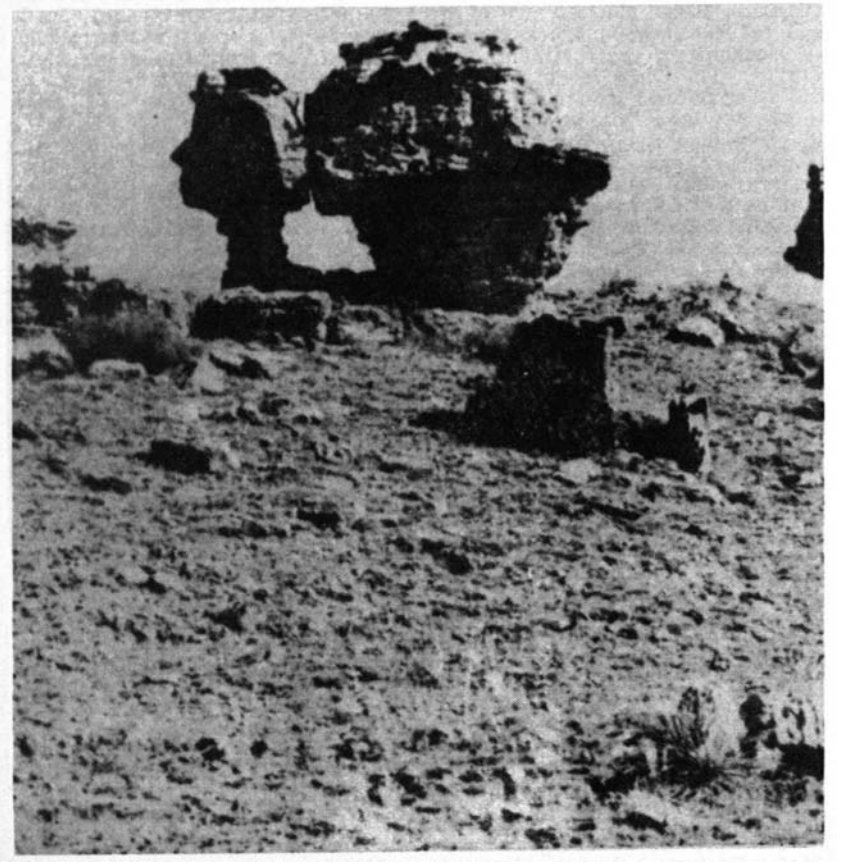

Fig. 1. Old Woman's Head

Chimney Rock on *Chimney Butte* (Fig. 2)—Woodward County, Oklahoma, sec. 27 T. 25N. R. 17W. About 4 miles northwest of Mountains Heman and Zion (Snider, 1913:144).

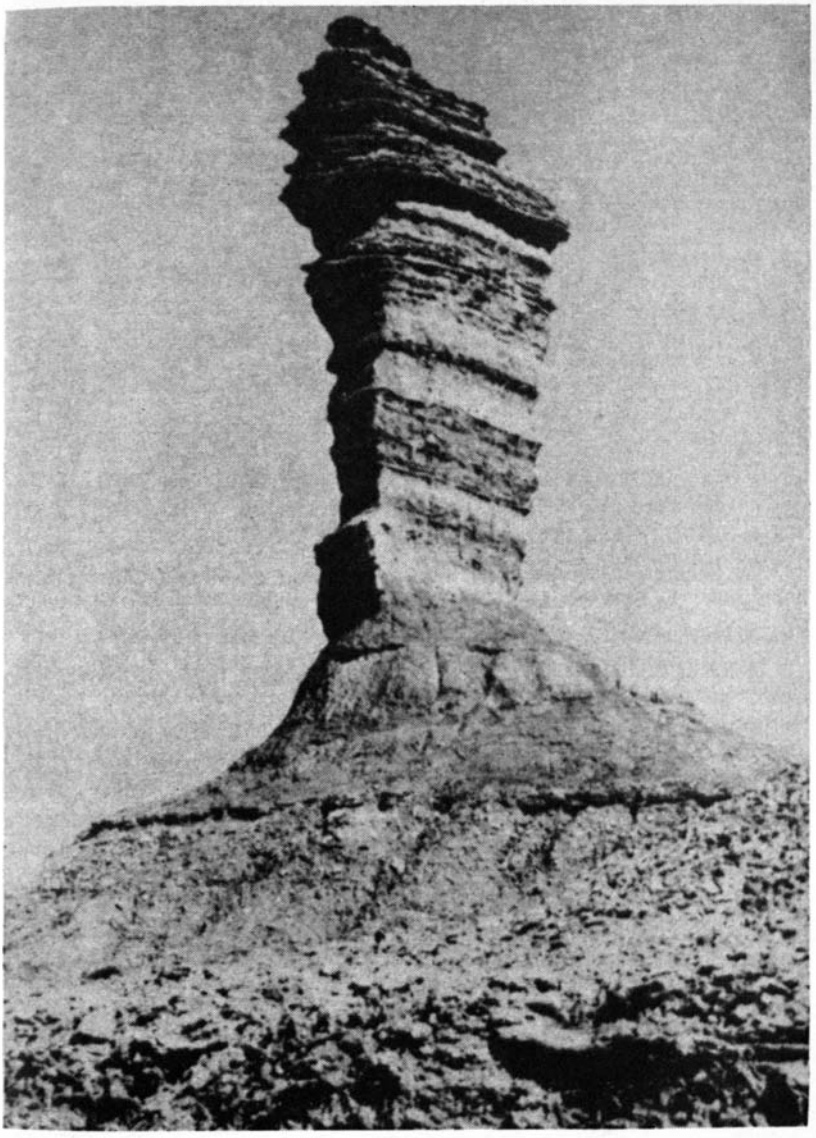

Fig. 2. Chimney Rock

Mountains Heman and Zion—Woodward County, Oklahoma. About 4 miles southeast of Chimney Rock. Just southwest of the confluence of the Cimarron River and its tributary, Sand Creek. In sec. 12 T. 24N. R. 17W. This is 6 miles due north of Belva, Woodward County, and the extreme northwest corner of Major County. It is about 4½ miles almost due west of Waynoka, Woods County (Gould, 1901-1902:105). Strong

circumstantial evidence tends to prove that Mount Zion is the more northerly and smaller of the "two most prominent" buttes, Mount Zion and Mount Heman, in the vicinity mentioned (Gould, 1901-1902:105).

Wild Cat Butte—Woods County, Oklahoma. One of five Wild Cat Buttes. These are close together, about 6½ miles east and 3 miles south of Freedom, Woods County, in center of south line sec. 12 T. 26N. R. 17W. They are about 4 miles west and 6 miles south of White Horse Mounds and 11 miles south and 2 miles west of the Cleveland Hills. The last two groups are also in Woods County but considered in another drainage basin (Fay, 1965:47 and map of Woods County).

Glass Mountain—Major County. See above (Gould, 1904:64; Snider, 1918:151).

Henquenets Butte—Close to the intersection of secs. 23, 24, 25, 26 T. 18N. R. 12W. near old townsite of Henquenet, Blaine County, Oklahoma, which was in sec. 30 T. 18N. R. 11W., about 10 miles north of Watonga, Blaine County, Oklahoma (Snider, 1913:Map).

Cedar Hill—About 7 miles east of Watonga, Blaine County, Oklahoma, in SW ¼ sec. 18 T. 16N. R. 10 W. (Snider, 1913:144).

Porcupine Butte—Kingfisher County, Oklahoma. Sec. 33 T. 15N. R. 9W. USGS Map of Fort Reno Quadrangle.

Prominent Unnamed Buttes and Hills in the Cimarron Drainage Basin:

"A prominent butte 1 mile west of Quinlan, Woodward County, Oklahoma, near E. line sec. 24 T. 23N. R. 18W." (Suffel, 1930:92).

A butte near Freedom, Woods County, Oklahoma (Fay, 1964).

A hill in NE ¼, NE ¼ SE ¼ sec. 13 T. 21 N. R. 14W. (Fay, 1964:19; is listed in the Glass Mountains).

Hill—A high hill in Harper County, SE ¼ sec. 1 T. 28 N. R. 26W. (Fay, 1965:60).

Lookout (Sentinel, Centennial) Mound—Anonymous, USDA, Woods County Map. SE¼ sec. 6 T. 28N. R. 19 W. (Fay, 1965:77).

There are other natural landmarks in the drainage basin of the Cimarron River (Anonymous, USDA publication, awaiting names or locations or both).

DISCUSSION

In the location of natural landmarks, particular attention should be directed to compass bearings and distances from selected reference markers. The problem of the viewpoint of a person trying to orient himself with a natural landmark should be carefully considered. The position of a marker with respect to other landmarks, culture features, and a grid system of, for example, section, township and range should be taken into account. An example:

Red Hill—"The noted Red Hill between Watonga and Geary."
Location by Natural Landmarks: 2 miles west of the North Canadian River where it runs due north in the drainage basin of the North Canadian River.

Location of Red Hill by cultural features—Red Hill is in Blaine County, about 1½ miles northwest of Greenfield, Blaine County, Oklahoma; it is about 6 miles due south of Watonga, Blaine County, Oklahoma; it is about 8 miles north and 4 miles west, about 9 air miles northwest of Geary,

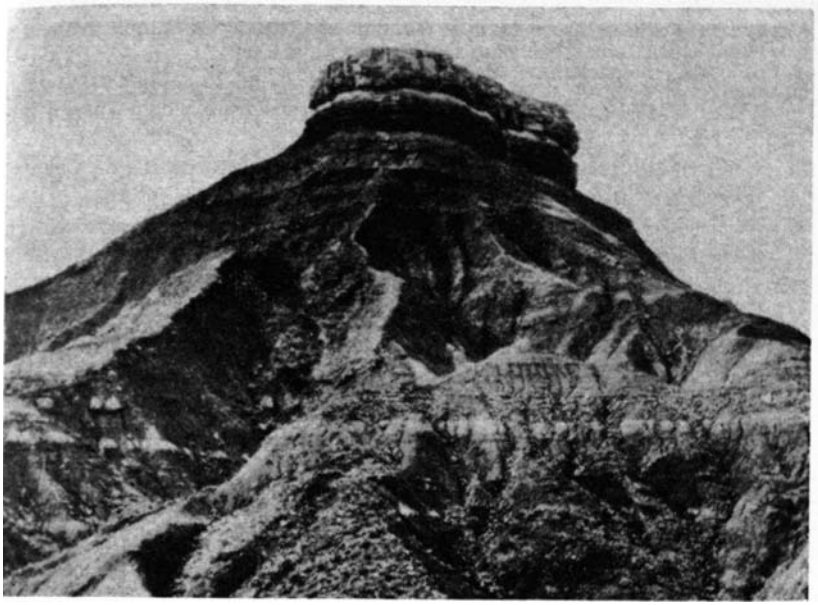

Fig. 3. Glass Mountain, from Gould (1904)

Blaine County, Oklahoma, just west of a point where US Highways 270 and 281 turn northwest from a due north course.

Location of Red Hill by grid—Red Hill is close to the intersection of sec. 19, 20, 29, 30 T. 15N. R. 11W. (Anonymous, USDA).

After major named natural landmarks have been accurately "pinpointed," lesser unnamed features may be located by distances and compass bearings from the major features in a given group. These last may be designated by capital letters as Red Hills "A," etc. Still smaller features may be designated by numbers as Red Hills "A1," etc.

Description of natural landmarks (Hills, Mounds, Buttes, etc.)—Perhaps the best way of permanently describing such a natural landmark is by a geologic "section" showing kinds of rock, colors, and thicknesses of strata in sedimentaries, etc. A good example of this is the Glass Mountain "Section" of Gould (1905:54). A good photograph of such a "Section" on such a natural landmark perhaps best describes it.

There is need to locate other hills, mounds, mesas, buttes, etc., in other drainage basins: one feature in the North Canadian River Drainage Basin has just been discussed; others lie in the (South) Canadian River Basin (Committee Report on Rock Mary); Antelope Hills; in the Washita River Drainage Basin, Keechi Hills; and in the Red River Drainage Basin, etc.

So many activities of so many people are so intimately connected with natural landmarks that it does not seem advisable to ignore their importance.

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