

**ABORIGINAL ROCK-MORTARS NEAR EL PASO, TEXAS.**

BY H. L. BRUNNER.

The location of these excavations is on the east side of the Franklin mountains, about ten miles north of El Paso, near the mouth of a cañon containing a spring known locally as the House spring. An extensive view is here afforded of the mesa to the east and north. The mountains in the vicinity contain much intrusive granite, which a short distance below the mouth of the cañon rises in two low knolls above the detritus washed down from the mountains. One of these, a bare knob, contains a small number of excavations; the other, partly covered with loosened masses of granite, has thirty-two.

The excavations themselves—"cooking holes" they are sometimes called—vary from ten to fifteen inches in diameter at the mouth, and from fourteen to nineteen inches in depth, being semi-spindle-shaped. The largest measured nineteen inches in depth by fourteen inches at mouth; a small one was fourteen inches deep by ten inches at mouth. Twenty of these holes lie close to and partly in the shadow of a large tilted block of granite, which, besides shade, may have furnished a shield from hostile eyes. Fourteen holes are nearly perfect, particularly those most shaded; five made near the edge of the rock have been partly worn away by disintegration, and one has been opened lengthwise by a fracture of the rock. Scattered among these larger "holes" are perhaps thirty small ones, saucer-shaped or slightly deeper, and varying from six inches wide and three inches deep to two inches wide by half an inch in depth. Seven of these are about of the larger size, but the majority are quite small. They are all rounded at the bottom, whereas the larger holes are more or less pointed.

Within ten paces of this larger group, in separate blocks of granite, two smaller groups are found, consisting respectively of five and seven large excavations, some of them well preserved.

Old plainsmen say these holes are mortars, used for the grinding of grain. A single tool was found, which may have been used in this process, and will be mentioned further on. The smaller exca-

vations above described were probably used to hold round-bottomed vessels and cups.

A few fragments of pottery, both plain and decorated, were picked up, but were not different from the cheaper Mexican ware. An "arrow-scraper," a small implement with a concave sharpened edge, was found, and also an unwrought ax-shaped stone, which had been used for digging or chopping.

About one-third of a mile below the excavations, presumably transported by water, an oval lenticular tool of hard sandstone was found, its greatest length, breadth, and thickness being respectively  $4\frac{1}{2}$ ,  $3\frac{1}{4}$ , and  $1\frac{3}{8}$  inches. One surface is rough, but has been worked to produce its present curvature, which is greatest toward the ends. The form exactly fits the hollow palm of the hand. The other surface is smooth, curving most toward the sides, and showing slight longitudinal scratches. Moreover, the longitudinal axis of curvature makes a small angle with the line of greatest length, which fact, with its occurrence near the mortars, its shape and markings, suggests that the stone was held in the concave palm either in shaping the mortars themselves or in grinding their contents, or possibly for both purposes.

Other similar excavations are reported near Mundy spring, a few miles north of the above locality.

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FLORES AND CELEBES.—An important contribution to the ethnography of these islands has just been published as a supplement to volume 3 of the *Internationales Archiv für Ethnographie*.

It is by Dr. Max Weber, of Amsterdam, who spent the period from April, 1888, to March, 1889, in a journey through Sumatra, Java, Celebes, Saleyer, and Flores for the purpose of making zoological investigations. While zoology was the main object of his journey, he felt that, to use his own words, "The duty of collecting ethnographical objects, as far as time and opportunity permitted, in a region where the leveling effects of western civilization are so rapidly showing themselves, must impress itself even upon the layman."

Accordingly a large and valuable collection was made in the islands mentioned, and the paper is a detailed description of this collection. It is illustrated with eight beautiful colored plates and several figures in the text.

JOHN MURDOCH.