A QUESTION OF ORIGIN AND CLASSIFICATION

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Some time ago my attention was called to some curious rocks or fossils which had recently been washed out along a creek bank. Upon examination, they suggested handmade material as they bore little resemblance to familiar fossils. However most casual observers promptly designated them as fossils but C. E. Decker with whom I was then studying paleontology, entreated me not to call them fossils. Samuel Weidman definitely established the assurance that they were not crystals and F. E. Clements, of the anthropology department in the University of Oklahoma, declined to accept them as of his realm.

Not defeated by the unsuccessful attempts to classify them, they were sent, by V. E. Monnett, to The American Museum of Natural History, New York, where they were declared to be mud cracks; not satisfied with this designation, we are bringing this question to you.

Mud cracks develop in varied lines, in all directions, forming blocks of all sizes and angles, frequently concave on the upper surface and with no regular or symmetrical form; the walls of the cracks are perpendicular. Filler of these cracks would, of course, follow the same irregular lines.

These specimens are, generally, more or less oval or oblong in outline and with a very definite form and finish; something like an inch in regular thickness and some as large as four and one half by six inches in size; the edges have a distinct finish, somewhat rounded and frequently ridged. Near the edge is generally a raised connected rim regularly corrugated; inside this rim the lower area is crossed by slightly raised lines of even height and width, forming curious outlines. Many have similar, but never the same figures on both sides. Of literally bushels of these formations examined, no two were alike. A few have actual mud cracks in sediment which is plainly superimposed upon these definite figures.

Where found in place these specimens occur in a certain well defined and persistent stratum about six inches in thickness of a light bluish grey sediment; shaley clay. sometimes sandy. The pieces are laying flat, side by side as tiles of a floor.

Could mud crack in such form that either the mud or the filler would occur in chunks with such regular thickness; with clearly terminated, rounded — not broken — edges; with distinct raised figures on both sides? This would necessitate regularly formed depressions in the under mud layer corresponding with the cracks of the upper mud layer. Further, if a bed of sediment, water soaked, then dried and cracked was later invaded by water transported material would not the mud cracks soften and merge with the new sediment, thus leaving no cracks to fill? The composition of these specimens is not of the nature of the wind blown material.

"Mud cracks" is the only identification thus far offered; it seems inadequate — utterly incompetent.

If these were "concretions" they should be more exactly alike and show the lamellar, concentric structure which these do not.

If they were fossils they should be more alike as members of the same group, side by side in the same formation; the two sides of the same specimen should correspond as — for example — the two side of a bivalve. While many of these specimens have very decided figures on both sides the two figures have no resemblance.

Here is a specimen having the definite raised, ridged figure with irregular breaks or cracks across its figured surface and dying out entirely below; very evidently the cracks were made while the specimen was still soft and pliable. If this had been a concretion, or a fossil surely it would have broken entirely through.

ILLUSTRATIONS

1-A A front view and 1-B side view of image; actual size.

2 A characteristic specimen; ¼ actual size.

3 Evidently a hammer or striking weapon, so shaped as to furnish an effective hand hold. Note the perfect Roman numeral one in the upper area. ¼ actual size.

4-A and 4-B, the two sides of one specimen.

According to Shimer, most fossils are calcite, aragonite, silica, chitin, lime phosphate or celluose. By tests made in the laboratory of the University of Oklahoma under the supervision of Samuel Weidman, these specimens are 82.5% dolomite (with a litttle Calcite, and 17.5% fine chlorite clay. By the unqualified opinion of C. E. Decker, and the accumulated arguments, these cannot be fossils.

If they are not mud cracks, not fossils, not concretions, not crystal aggregations, what are they? Nothing of known anthropology has an identification for these waifs. We are asking you, what are they?

Can one conceive of anything but human hands being responsible for these clear and carefully wrought objects, similar but all different? Could they be the hieroglyphics of a vanished race? If so, from where did they come, and what became of them?

In The National Geographic Magazine of February, 1922, in an article by Sylvanus Griswold Mobley, entitled, "The Foremost Intellectual Achievement of Ancient America" are given illustrations of the carvings of the Maya temples among which are many figures with raised rims and interior markings; these Maya rims are not ridged and the interior markings are not the same as these presented to you but there is a suggestion of similarity. Also in "Art and Archaeology" of March, 1928, an article by James C. Bardin, "Maya Writing" may be found the same figures. The Maya hoeroglyphics are carved in stone; these are made, I believe, of soft mud, now hardened. Could these have been made by the forebears of the Mayan people?

Associated with these objects are others that may be artifacts for their daily use; one with a sharpened edge is shaped to fit the hand and would function nicely as a scraper; another with a thick, heavy, ridged edge narrows to a decided edge as for a cutting instrument. Another fits the hand nicely as a hammer and has a perfect Roman numeral one.

With these specimens was found the image of a human head about one and one-fourth inches in length, one inch in depth from front to back, and three-quarters of an inch in width. It is a well shaped head with a good forehead, well developed chin and eyes wide apart; quite a modern head shape. Many of the Mayan carved heads have receding foreheads in line with very prominent noses; the chins are also deficient. This image may represent a race superior to the Maya.

This head has an evident casque or helmet reaching to the brows and brought down at the sides to protect the temples. The corn god of the Mayas, as illustrated in the National Geographic magazine article before mentioned wears a casque of similar shape as to the face outline; otherwise that of the corn god is vastly more elaborate. However this one has as decoration across the skull, very fine and very perfect striations.

But here the problem arises; these objects are found in southern Noble county, Oklahoma, associated with fossils of the Enid, lower Permian formation. Permian was the period of amphibians; mammals did not appear until late Mesozoic, and man until the Psychozoic, according to Pirsson and Schuchert. However Edward Herbert Thompson in his book "People of the Serpent," page 77, mentions that Henry Fairfield Osborn, president of the American Museum of Natural History, has placed on record his belief that man has existed for more than five million years.

If these specimens were all on top of the ground the solution would appear much more simple but many of them are in place under a bed of red sand stone, twelve or more inches in thickness. One might imagine these had floored a cave but they are too close to the heavy sand stone cover, being only a few inches between. How came these here? Members of the Oklahoma Academy of Science, you have the question.