a round opening about half an inch in diameter at the back of the head; the pupils of the eyes are represented by holes, and there is a pair of openings between the filed teeth. In Plate IX., l and t, are shown other examples of the same class of objects. In this class also is included a number of masks and similar objects, which, although resembling in material and workmanship those which embellish many of the whistles, do not appear to have belonged to any such articles (Plate VIII., j to v).

Three small masks of terra cotta (Plate XII., a, b, and c) have holes around the edges at the back, probably for fastening them to the dress, in the manner indicated by sculptures from Copan. They are of a very fine clay, very hard and polished, and may have been painted in such a way as to imitate carved stones.\* All the objects included in classes two and three are cast. A few samples of the clay moulds used in their manufacture were found during the excavations.

Although many of these objects, and particularly the heads and masks, are modelled with much artistic skill, none can be said to be faithful copies

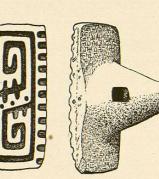


Fig. 20.— Terra-Cotta Stamp and Whistle.

of natural objects. Evidently the artist, not being bound to imitate nature, had free scope for the exercise of his fancy; still he doubtless adhered to prescribed forms and followed conventional rules within certain limits, for these masks and heads, of which those shown in Figs. 18 and 19 are typical examples, are probably fanciful representations of mythological characters.

Coming now to the fourth class of objects (Plate X.), we meet with a higher

development of the artistic sense, and, in giving form and expression to certain conceptions, a much closer attention to nature as it is. A few specimens only were found, none being entire. The subject is the human figure, and the material is a fine light-colored clay. The modelling is fairly good. The figures are solid, well burnt, and very hard. The surface is polished, and in one case (b) there is evidence of a white enamel having been used. The female torso (Plate X, g) has a girdle about the waist; with this exception the figures are nude. They bear evidence of a very accurate perception of nature and a real ability to copy it correctly, indicating an artistic instinct that is capable of developing a high degree of realism.

Next in order is a number of clay seals or stamps (Plate XI.). They are flat plates of baked clay, having some conventional design in deep lines on one side and a short stub for a handle on the other. In some instances

\* Mr. E. H. Thompson found in Yucatan clay beads on which remained traces of the green paint by which they had been made to look like jadeite. Memoirs Peabody Museum, No. 3.

this handle is enlarged and converted into a whistle (Fig. 20). One of these seals is cylindrical, and has a hole through the centre (Fig. 21).

On page 33, Fig. 34, is shown a pair of small receptacles of burnt clay; they are divided sometimes into two and sometimes into three compartments, and resemble crucibles; but it cannot be said definitely what their use really was. On Plate XII., d, is shown a double paint-holder, which still contains a quantity of bright red pigment. The clay pipe, shown on page 41, Fig. 35,





Fig. 21. — Cylindrical Stamp.  $\frac{2}{3}$ .

Fig. 22.—Object of Baked Clay, probably Ear Ornament.  $\frac{2}{3}$ .

is the only pipe from Honduras of which we have any record.\* The curious little object shown in Fig. 22 is hard to describe. There is a twin specimen from Copan in the Museum, and I am of opinion that they are ear ornaments, and form another instance of imitation jewelry. The little projection at the smaller end would serve to keep the ornament in place. They are polished and very hard, and if painted might be made to look like stone. The nature of several clay objects, one of which is shown in Fig. 23, is not apparent; they resemble little marlin spikes more than anything else, but it is hard to see why such an instrument should be made of clay.

There remain to be mentioned only the objects carved from stone. Of these the most important are the two vases of calcite (Plate XII., e, f). Few specimens of this type have been reported. One figured in the *Journal* 

de la Société des Américanistes de Paris, Numéro 1, is reported to have been sent by a lady in Comayagua, Honduras, and to have been found in the river Humuya, which is a branch of the Uloa; but the exact locality is not

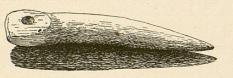
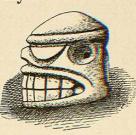


Fig. 23.—Implement of Baked Clay.

stated. Another vessel of the same type is in the American Museum of Natural History in New York. It was in Squier's collection, and has been supposed to have come from Mexico, but without authority, as there is no reference to it in any of Squier's writings. In the absence of any reliable information concerning it, it ought to be referred to this Uloa region of Honduras, where similar specimens are known to have been found. A fifth specimen is in the possession of a resident of San Pedro Sula. It came from the same

<sup>\*</sup> This is the only pipe from Central America in the Museum, and the only one that has been found in that region, to my knowledge, except the remarkable stone pipe found by the late Mr. Sylvanus Miller in Salvador, and now in the Douglas collection in the American Museum of Natural History, New York.

locality as the two figured on Plate XII., while a sixth has been sent to the Berlin Museum. All these specimens differ but little from each other in respect of form and ornament. That shown on Plate XII., e, is provided with a rim about three-quarters of an inch deep on which the vessel rests; some of the others mentioned have similar rims ornamented with open work. They are carved from calcite of a translucent variety, and exhibit consider-



able elegance of design which is in keeping with the beauty of the material. The walls are about one-eighth of an inch thick; the interiors are smooth and even, showing no tool marks. A grotesque head of conventional form projecting from either side serves for handles. A design of conventional pattern carved in low relief covers the outside surface, the chief device Fig. 24. — Ornament and leading feature of this decoration being a sort of CARVED FROM CAL- greeque. The derivation of this form of ornament is uncertain and the notion unfamiliar, but the device

is associated without doubt with some set of ideas connected with the particular office which these vases were intended to fulfil. There are some indications that point to a feathered monster as the original form from which the various features are derived, the grecques resulting from the transformation of the feathers, through conventional treatment. Besides the specimens mentioned, there are a number of fragments which, although their evidence is meagre enough, lead to the conviction that the practice of this branch of art was not uncommon. Moreover they represent vases differing in shape and ornament and exhibiting a high degree of skill in the manipulation of stone in this particular form. An object carved from calcite and representing a death's head is shown in Fig. 24. The back is hollow, and each side is pierced as if for fastening the ornament to the

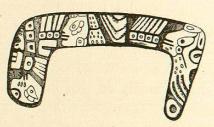


Fig. 25. — Design on Fragment of Terra Cotta Figure. 2.

## PAINTED DECORATIONS ON POTTERY.

Among the vases from the Uloa River, those forming groups A and B exhibit the most elaborate color decorations. The colors used are black, yellow, red and white; although their composition is not known, they are unquestionably of mineral character and generally retain their brilliancy. The quality of the paste employed in these two groups is the same; it is made of a light red clay of a fine grade, and the ware is well burnt and very hard. Usually, before the colors were laid on, the vessel was treated with a thin orange or cream colored slip, and on this ground the various designs were drawn, and then before firing the surface was polished with a smooth stone or other implement, of which the marks are still visible in a number of instances. There is no uniformity in the relation of colors in the design to those of the slip; a light red or yellow wash seems to have been a favorite ground for the color decorations.

The conventional forms employed in the decorations on group A are more or less familiar to students of the Maya codices. In one part of the group, that which is made up of the bowl and cup forms, the decoration is arranged in bands and zones of varying width, encircling the vase from top to bottom. The designs here reproduced, illustrating these forms, are transferred to flat surfaces without breaking up the relations and with only such slight and inconsequent distortion as results from the changed form of the available space. Geometrical figures, i. e., straight lines and circles, are drawn mechanically instead of in the bold freehand of the original; otherwise no departure is made from the character of the original drawing. With each design is given a sketch of the corresponding vase (Figs. 26 to 30 inclusive and a, Plate III.). In these drawings black represents black, red is represented by line shading, and the yellow or orange ground is left white. The design shown on Plate IV. is painted on a vase nine inches high and seven inches in diameter. The entire surface of the vase, which is made of a fine red clay, was covered before firing with a cream-colored slip, and the design drawn boldly on this in black and different shades of red. The space between the figures was then painted black. There is no sign that care was taken in the drawing. The decorator evidently worked rapidly and even carelessly. The drawing of the life figures is extremely crude, - a fact which is best seen in the treatment of the right hand of the personage holding a band or piece of ribbon, which the painter has made to look like a fork with three prongs. Around the rim of the vase is an ornament in the form of a kind of grecque, drawn in black. Below