## ILLUSTRATED CATALOGUE

of A
portioy of tile collectiows lide by tile biredl or btivologi
during the
FIELD SEASON OF 1881.

WILLIAM H. HOLMES.

## CONTENTS.

Introductory Page.
433
433Collections from Jackson Countr, North Carolina
434From the Cherokee Indians
Articles of stone434
Articles of clay ..... 434 ..... 434
434Vegetal sulstances
Animal sulostances. ..... 435 ..... 432
Collections from Cocke Conntr, Tennessee ..... 43
From the dields at Newport ..... 433
Articles of stone ..... 438
From a mound on Pigeon River ..... 440
Articles of clay ..... 440
Collections from Sevier County, Tennessee ..... 442
The McMahan Mound ..... 44
Articles of stone. ..... $4+2$
Articles of clay ..... 443
Olyjects of metal ..... 446
Objects of shell ..... 446
Animal substances ..... 453
From the fields of Sevierville ..... 453
Articles of stone ..... $45: 3$
Articles of clay ..... 456
Collections from Roane Connts, Tennessec ..... 457
Monnd at Taylor's Bend ..... $45 \%$
Articles of stone ..... 45
Articles of clay ..... 457
Oljects of shell ..... 458
From field at Taslor's Beud ..... 458
Articles of stone ..... 458
Vicinity of Kingston ..... 460
Mound at Niles' Ferry ..... 461
Monnds near Paint Rock Ferry ..... 461
Fragments of pottery ..... 461
Objects of shell ..... 462
Collections from Jefferson County ..... 463
Monnd on Fain's Islaud ..... 463
Articles of clay ..... 463
From the fields of Fain's Island ..... 465
Articles of stone ..... 465
Oljects of shell ..... 466
Animal substances ..... 466
Collections from Mississippi County, Arkansas ..... 468
Pemissicott Mound ..... 468
Chickasawba llonnd ..... 468
Mounds in Carson Lake Township ..... 448
Collections from Mississippi Conuty, Arkansas-Continued. Page
Mounds at Pecan Point ..... 469
Articles of clay ..... 469
Ficld graves and fiolds in vicinity of Pcean Point ..... 470
Articles of stono ..... 470
Articles of clay ..... 471
C'ollections from Arkansas Countr, Arkansas ..... 476
Mounels at Arkansas Post ..... 476
Articles of clay ..... 476
Field graves abont Menard monnds ..... 477
Articles of stono ..... 477
Articles ol clay ..... 479
Olijects of metal ..... $48 i$
Anmmal substances ..... 485
Collection from Monroe Connty, Arkansas ..... 186
Mound at Lawrenceville ..... 486
Articles of clay ..... 486
Mounds att Indian Bay ..... 487
Articles of clay ..... 488
Collections from Ohio ..... 490
From mounds and fields ..... 490
Articles of stone ..... 490
Articles of clay ..... 491
Human remains ..... 491
Collections from Oregon ..... 492
Articles of stono ..... 492
Collections from Kentncky ..... 493
Collections from Missouri ..... 495
Articles of clay ..... 495
Collections from other States ..... 507
Collections from Peru ..... 508

## ILLUSTRATIONS.

Page.
Fig. 116.-Stone implement, 'Teunessee ..... 439
117.-Sections of earthen vessels, Tennessee ..... 440
118.-Earthen vessel, Tennessee ..... 444
119.-Shell ornament, Tennessee ..... 447
120.-Shell ernament, Tennessee ..... 447
121.-Shell ornament, Tennessee ..... 448
122.-Shell ornament, Tennessee ..... 448
123.-Shell crnament, Tennessee ..... 449
124.-Shell ornament, Tennessee ..... 449
125.-Shell ornament, Tennessee ..... 450
126.-Shell ormament, Tennessee ..... 450
127.-Shell ormament, Tennessee ..... 451
128.-Shell ernament, Tennessee ..... 452
129.-Stene implement, Tennessee ..... 454
130.-Stone implement, Tennessee ..... 454
131.-Stone implement, Tennessee ..... 455
132.-Stene implement, Tennessce ..... 455
133. -Stone implement, Tennessee ..... 456
134.-Stone implement, Teunessee ..... 459
135.-Stone implement, Tennessee ..... 459
136.-Shell bead, Tennessee ..... 462
137.-Shell bead, Tennessee ..... 462
138.-Shell bead, Tennessee ..... 462
139.-Earthen vessel, Tennessee ..... 464
140. -Shell ornament, Tennessee. ..... 466
141.-Shell ornament, Tennessee ..... 466
142.-Stone implement, Arkansas ..... 470
143. - Earthen vessel, Arkansas ..... 471
144.-Earthen vessel, Arkansas ..... 472
145.-Earthen vessel, Arkansas ..... 473
146. - Earthen vessel, Arkansas ..... 473
147. - Earthen vessel, Arkansas ..... 474
148.- Earthen vessel, Arkansas ..... 4.4
149.- Eartheu vessel, Arkansas ..... 475
150.-Earthen vessel, Arkansas ..... 476
151.-Stone implement, Arkansas ..... 477
152.-Earthen ressel, Arkansas ..... 478
153.-Earthen vesse], Arkansas ..... 479
154. - Earthen vessel, Arkansas ..... 479
155.- Earthen vessel, Arkansas ..... 480
156. - Earthen vessel, Arkansas ..... 480
157.-Earthen vessel, Arkansas ..... 481
158.-Earthen ressel, Arkansas ..... 422
159.-Earthen vessel, Arkansas ..... 182
160.-Earthen vessel, Arkansas ..... 482
Page.
482
Frg. 161.-Larthen ressel, Arkansas ..... 483
163. - Warthen vessel, Arkansas ..... 4 -
161.- Larthen vessel, Arkausas ..... 484
100.- Barthen vessי], Arkansas ..... $4 \times 4$
166.--1Barthen ressel, Arkausas ..... 485
16.. - Eartheu vessel, Arkansas ..... 480
162. - Barthen vessel, Arkansas ..... 407
169.- liarthen ressel, Arkansas ..... 488
1\%0.- Barthen ressel, Arkansas ..... 15
171.-Lirthen vessel, Arkausas ..... 489
172.- Method of plaiting sandais ..... 493
173.-Mrthod of plating mat ..... 493
17.1.- Earthen vessel, Missouri ..... 495
175.- Earthen vessel, Missouri ..... 496
176.-Warthen ressel, Missouri ..... 497
177.-Larthen vessel, Missouri ..... 497
178.-Earthen vessel, Missouri ..... 498
179.- Carthen vessel, Missouri ..... 498
180.-Eartheu vessel, Missonri ..... 499
181.-Earthen vessel, Missonri ..... 499
182.-Lartheu vessel, Missonri ..... 500
183.-Earthen ressel, Missouri ..... 500
184.-Earthen vessel, Missouri ..... 501
1-コ.-Eartheu vessel, Missouri ..... 501
186. - Larthen vessel, Missonti ..... $50 \%$
187.-Earthen vessel, Missonri ..... 502
188.-Earthen vessel, Missonri ..... 502
189.- Earthen vessel, Missonri ..... 503
190.-Earthen vessel, Missouri ..... 504
191.- L'arthen vessel, Missonri ..... 504
192.-Earthen vessel, Missomri ..... 505
193.- Eartheu vessel, Missouri ..... 505
194.-Earthen vessel, Missouri ..... 505
195.-LEarthen vessel, Missouri ..... 500
196.-Earthen vessel, Missomri ..... 506
197.-Earthen vessel, Missouri ..... 506
198.- Wooden mask, Peru ..... 509
199.-Stone net-sinker, Peru ..... 510
200.-Copper fish-hooks, Peru ..... 510

##  

## By William H. Iloliies.

COLLEGTION MADE BY EDWARD PALMER, IN NORTH CAROLINA, TENNESSEE, AND ARKANSAS.

## INTRODUCTORY.

Mr. Palmer began his explorations early in Jnly, 1881, and coutimed with marked success until the end of the year.

He first paid a visit to the Cherokee Indians of North Carolina, and collected a large number of articles manufactured or used by this people, besides al mumber of antiquities from the same region.

From Carolina he crossed into Tennessee, and began work by opening a number of monnds in Coeke County. In September he opened a very important monnd, whieh I have named the MeMahan Mound. It is located in the ricinity of Sevierville, Sevier County. Afterwards mounds were opened on Fain's Island, at Dandridge, and at Kingston.

In September he crossed into Arkansas and made extensive explorations at Osceola, Pecan Point, Arkansas Post, and ludian Bay.

It has devolved upon the writer to examine and catalogue this fine collection.
lu preparing the catalogue the plan of arrangement already adopted hy the Burean has been carried out; that is, a primary classification by locality and a secondary by material.

The descriptions of specimens are taken from the eard catalogue prepared by the writer on first opening the collection, and will be given in finll, excepting in cases where detailed descriptions have been furnished in separate papers, either in this or the preceding Ammal Report. Cnts hare been made of a number of the more interesting specimens. The localities are named in the order of their exploration.

## COLIHECTIONS FROM JACKSON COUNTY, NORTII CAROLINA.

## OBTANED CIILEFLY FROM TIIE CIIEROKEE INDIANS.

articles of stone.
60953. A small disk of dark-gray slate, $1 \frac{1}{4}$ inches in diameter and $1 \frac{1}{2}$ inches in thickness. The form is symmetrical ame the smfitce well polished. The sides are convex, slightly so near the center and abruptly so near the ciremanferec. The rim or peripheral surface is squared by grimding, the circular form being aceurately presersed. This specimen was obtained from an aged Cherokee, who stated that it had formerly been used by his people in playing some sort of game. It seems not improbable that this stone has been used for polishing pottery.
6295\%. A small sulbghonlar pebble nsed as a polishing stone for pottery.
62954 . A polishing stone similar to the above. This implement was seen in use by the collector.
62947. A hemispherical stone, probably used as a nut-cracker.

6294 . A stone implement somewhat resembling a thick, roumb pointed pick, $4 \frac{1}{2}$ inches in length and 1 inch in diameter. It is perlorated exactly as an iron pick would be for the insertion of a handle. The perforation has been prodnced by boring from opposite sides; at the surface it is five-eighths of an inch in liameter, and midway about three-eighths. The material seems to be an indurated clay or soft slate.
The collector snggests that this specimen was prohably used for smootling bow-strings or straightening arrowshafts.
62949. Eight arrow points of gray and blackish chalcetony.
62950. Pipe of gray, indurated steatite, of modern Cherokee manufacture.
bi2951. Pipe of dark greenstone, highly polished. It is well modeled, but of a recent type.
62888. (irooved ax of compact greenish saudstone; fomul near Bakersville, N. U.

ARTICLES OF CLAY.
Obtained from the Sonthern Bamd of Cherokees, Jackson Connty, North Carolina.
The manuacture of pottery, once so miversally practiced by the At lantic coast Indians, is still kept up by this tribe, rather, however, for
the propose of trale than for ase in their domestic arts. The vessels are, to a great extent, modeled after the ware of the whites, but the methods of manfacture seem to be almost wholly aboriginal.
63070. A handled mig or cup of brownish ware. The form is not aboriginal. It is composed of clay, tempered, apparently, with pulverized shell. The surfice has a slight polish poduced by it polishing implement. The height is $4 \frac{1}{2}$ inches and the width nearly the sime.
63068. Large flat-bottomed bowl, 6 inches in height, 11 iuches in diamter at the top, and 8 at the base. Although made withont a wheel, this ressel is quite symmetrical. The thickness is fiom one-fourth to one-half of an inch. The material has been a dark clay maste with tempering of powdered mica.
63066. A three-legged pot, with spherical body, resembling rely closely in appearance the common iron cooking pot of the whites. The rim is 6 inches in diameter, and 1 inch high. The body is 9 inches in diameter. Two hatules are attached to the nuper part of the body. The form is symmetrical and the surface highly polished. The polishing stone has been used with so much skill that the effeet of a glaze is well produced. The materials used were clay and pulyerized mica. The color is dark brown.
63067. A strong, rudely made vessel shaped like a half cask. The walls are alout one-half an inch in thickness. The surface is rongh, the polishing stone having been very carelessly applien.
biaucs. A that-bottomed bowl symmetrical in shape but rudely finished.

## YEGETAL SUBSTANCES.

63063. Basket sieve said to be used to separate the finer from the coarser particles of ponmed corn. The coarse meal thins obtained is boiled and allowed to ferment. This is used as food and is ealled commowhana. The sieve is made of split cane carefnlly smoothed; some of the strips are dyed red and others brown. A simple ornamental design is worked in these colors. The opening is square, with rombled eorners, the sides measuring 14 inches. The depth is 5 inches. The bottom is flat and loosely woven.
6307:. A bottleshaped basket, with constricted neck and rectangnlar bods, used by the Cherokees for carrying fish. Height, 11 inches; width of mouth, 4 inches; diameter of body, 6 inches. It is made of strips of white oak or hickory, onefonrth of an inch in thickness.
63064. Basket made of strips of white oak intended for the storage of seeds and for other honsehold uses. The rim is abont 5 inches in diameter; the borly is 8 inclies in dianeter, the base being rectangular aud that.

630 - . Basket, mate of cane, used for storing seed.
6307f. Two baskets, mate or cane, probably nsed for honsehold purposes. They are neatly ornamented with simple designs, protuced by the use of colored strips. The rims are oval in shape, and the bases rectangular. The larger will hold about halt a bushel, the smaller about a gallon.
63077. Simill basket with a handle, made of splints of white oak. Yellow strips of hickory bark are used to ormanent the rim. Other colors are obtained by using hark of different trees, maple, walnut, etc.
(630\%s. Smatl cop or dish carved from laurel or cucumher wood. It is very neatly marle. The depth is about 1 inch; the willth 5 inches.
63064. Large spoon, carved fiom lanrel or cucmmber wood, used by the Cberokees in handling the comnowhana, or fermented meal. The carving is neally done. The heart-shaped bowl is 6 inches in length, 4 in width, and about 2 in depth. The handle is 12 inches long, and is embellished at the eud hy a knob and ring. The knob is carved to represent a turtle's or suake's head.
63065. A smaller spoon similar in shape to the above.
63087. A large, five-pronged fork carved from the wood of the Magnolia glau $a(p)$. It resembles the iron forks of the whites.
63088. A small, thee-pronged fork of the same pattern and material as the above.
63080. A wooden comb made in imitation of the shell combs used by white ladies for smporting and ornamenting the back hair. The carving is said to have been done with a knife. Considerable skill is shown in the ornamental design at the top. The wood is maple or beech.
G30S9. A walnut padde or club, used to beat clothes in washing.
03059. Buw of locust wood, 5 feet long, one-lalf an inch thick, and $1 \frac{1}{2}$ inches wide in the middle, tapering at the ends to 1 inch. The back of the bow is motressed, the bark simply having been removed. The string, which resembles ordinary twine, is suld to be made of wild lemp. The arows are 40 inches in length. The shafts are mate of hiekory wood and have conical points. Stone aml metal points are not used, as the comntry abounds in small geme only, and heary points are considered muneessary. In trimming the arrow two feathers of the wild turkey are nsed ; these are close clipped and fastened with sinew.
63057. Blow gmo nsed hy the Cherokees to kill small game. This specimen is 7 feet in length, and is made of a large cane, probably the Arundinaria macrosperma. These guns are made from 5 to 15 fcet in length, the diameter in large specimens reaching $1 \frac{1}{2}$ inches.

6305s. Arrows used with the blow.guu. The shafts, which are made of hickory wood, are 2 feet in length and very slemder. The shooting end las a conical point; the feather end is dressed with thistle down, tied on in overlapping layers with thread or siuew. The tip of down completely fills the barrel of the gun; and the arrow, when inserted in the larger end aud blown with a strong puff, has a remarkable carrying and penetrating power.
63085. Thistle heads, probably the Cnicus lancoolatus, from which the llown is obtained in preparing the arrows of the blow. ynn.
630ti. Ball-sticks or racquets made of hickory wood. Rods of this tough wood, about 7 feet loug, are dressed to the proper shape, the ends haring a sembirenlar section, the middle part being flat. Eaeh is bent and the ends united to form a haudle, leaving a pear-shaped loop 6 inches in width by about 12 in length, which is filled with a network of leather or bark strings sufficiently close to hold the ball.
63061. Ball, $1 \frac{1}{2}$ inches in diameter, covered with buckskin, used with the racquets in playing the celebrated ball game of the Cherokee, Choctaw, Creek, and Seminole Indiaus.

## ANIVAL SUBSTANCES.

6.3071. Shell, probably a Unio, used by potters to scrape the surface of clay vessels; seen in use.
masi. Comb made of horw. The teeth are 2 iuches in length, and have been made with a saw. It is nsed in tressing the hair.
G:30s5. Charm made of feathers and snake rattles; worn on the heal or on some part of the costume.
6305. A wl of iron set in a baudle of deer's homu.

## COLLECTIONS FROM COCKE COUNTY, TENNESSEE.

## FROM FIELDS NEAR NEWPORT.

Aliticles of stone.
62752. Grooved ax, 8 inches in length, $3 \frac{1}{2}$ in width, and abont lin thickness ; one side is quite that, the other convex. The material is a bamed schistose slate.
(62758. A fine specimen of grooved ax, 7 inches in length, 4 in width, and $1 \frac{1}{2}$ in thiekness. The groove is wide and shallow, and is bordered by two marrow ridges, which are in sharp relief all the way around. The material appears to be a greenish. gray diorite.
62759. A grooved ax, 6 inches long, $3 \frac{1}{2}$ inches wide, and 1 inch thick. This specimen is similar to the preceding, the groove heing deeper on the lateral edges of the implement, and the upper end less prominent. It is made of a fue-grained gray sandstone.
62753. Fragment of a grooved ax, of gray slate. The groove is shallow and irregular.
62754. Celt of compact gray sanclstone, somewhat chipped at the ends. It is $6 \frac{1}{2}$ inches in length by $2 \frac{1}{2}$ in width and $1 \frac{1}{2}$ in thickness. One face is that, the other convex. The sides are nearly parallel. A transperse section would be sub rectangular.
62555. Fragment of celt, 3 inches in length hy 2 in width and abont $1 \frac{1}{2}$ in thickness. The material is a fine graned sandstone or a diorite.
62750. A long, slender celt, very carefnlly finished, 7 inches in length, 2 in wilth, and less than 1 in thickness. The material is a very compact gray slate. It has apparently been recently used as a seythe-stoue by some harvester.
02757. Fragment of a small, narrow celt, hoth ends of which are lost. Material, gray diorite.
62760. Heary celt of gray dionite, 8 inches in length by 3 in widtle and $2 \frac{1}{2}$ in thickness.
6276\%. A pestle of gray diorite, with enlarged base and tapering top, $5 \frac{1}{2}$ inches in lengtla and 3 inches in diameter at the base.
62751 . A pestle of bamded schistose slate, 15 inches in length, and 24 inches in diameter in the middle, tapering symmetrically toward the ends, which terminate in romuded points.
62763. A ceremonial (?) stone resembling somewhat a suall broadbladed piek, the outline being nearly semicircular. It is piereed as a pick is pierced for the insertion of a landle. It is $2 \frac{1}{2}$ inches in length, $1 \frac{1}{2}$ in width, and three-fourths of an inch in thickmess. The material is a soft greenish mottled serpentine, or serpentinoid limestone. Fig. 1 lG.


Fig. 116.
62761. A piereed tablet of gray slate, $4 \frac{1}{2}$ inches long, $1 \frac{1}{2}$ inches wide, and half aninch thick. The two perforations are $2 \frac{1}{2}$ inehes apart ; they lave been bored from opposite sides, and show no evidence of use. Nine noteles have been ent in one end of the tablet. It has been minch injured by reeent nse as a irlietstone.
Go7cit. Cup stome of rough sandstone, having serenteen shallow emplike depressions, from 1 to 2 inches in diameter. The stone is of irregular outline, abont 10 inches in diameter and 4 in thickness.
6276.5. A large pipe of gray steatite; the bowl is square and about 3 inehes in length by 1 in diameter. The stem end is 4 inehes in length and three-fourths of an inch in diameter. The bowl has a deep, eonical exeavation. The same is true of the stem-end also.

## MOUND AT THE JUNCTION OF THE PIGEON AND FRENCH BROAD RIVERS.

## ARTICLES OF CLAY.

(i2sio. 'The monnd from whieln these fragments were obtaned was lo. cated :3 miles from Newport. It was 19 feet square and if feet high. The original height was probahly mnelt greater. The pottery was mixed with ashes and débris of what appeared to low three fire-places. No hnman remains were fomud. The liagments are not mumerons, not do they indicate a great variety in form. There is, howerer, considerable variety in decoration.

Materinl.-The chay is generally gray or darlk-reddish gray in the mass, and is apprently quite silicenns or sandy, mmerons grans of quartz being visible. There is gencratlyasprinkling of finely-powdered miea, but no shell matter can be deteeferl. When much weathered the surface is quite gritty.

Form.-The leading form is a romd-hodied, pot-shaped vase. There is one small hemispherical bowl. The ontlines have been quite symmetrical. The monthis of the pots are wide, and the neeks deeply constrieted. The lip or rim exhibits a number of novel featores. That of the buger specimen, of which a considerable segment remains, is furnished on the upher edge with a deep chamel, nearly one-halt an inch wide, and more than one fourth of an inch deep. First section, Fig. 117. Others have a peculiar thickening of the rim, a sort of collar being adeled to the ontside. This is about 1 ineh in width, ame is theker below, giving a triangular section. Thimd section, Fig. 117 .


The walls of the ressels are usually quite thin. The bottoms wore probably round, or nealy so. No fragments, however, of the lower parts of the ressels werecollected. 'There is hat one example of handle, :muthis presents no monsual features. Middle section, Fig. 117.

Ormamentation.-The ormamentation is in some respects novel. The donhle or chaneled rim of the larges specimen, the month of which has becu $1: 3$ or 14 inches in diameter, is embellished with a line of flutings, which seem to be the impmessions ot a hollow bone or reed.

The whole exterior surface is embellished with a most elaborate ornamental design, which resembles the imprint of some woven fabric. If a woven fabric has not been used, a pliable stamp, nroducing the effeet of a fabric, has been resorted to. The fact that the sharply concave portions of the neck are marked with as mnch regnlarity as the convex body of the vessel, preelndes the iflea of the use of a solid or non-elastic stamp.

The pattern consists of gromps of parallel indented lines, arranged at right angles with one another, the puzzling feature being that the re is no evidence of the passing of the threats or fillets over or under each other, such as wonld be seen il a woren fabric had been used. The onter surface of the triangular collar peculiar to mans of the pots has been decorated with a herring-hone pattern, made by impressing a shatp implement. The hamble in one case is similarly ornamented. This handle has been added after the lignre previonsly described was impressed npon the neek of the ressel. One small fragment shows another style of indented or stamped pattern, which consists of series of straight and curved lines, such as are characteristic of many of the ressels obtained from the Gulf States.

A small fragment of coal black ware is cutirely smooth on the ontside, and indicates an umbsally well finished and symmetrical ressel. Another shows the impression of basket-work, in which a wide fillet or splint has served as the warp and a small twisted cord as the weof. One interesting featnre of this ressel is that from certain inpressions on the raised ridges we discover that the vessel has been taken from the net mold while still in a plastie state.

Still another reddish porons fragment has a square rim, which is ornamenterl with a series of annular indentations.

## COLLECTIONS FROM SEVIER COUNTY, TENNESSEE.

## THE MCMAHAN MOUND.

On the west fork of the Little Pigeon River, at Sevierville, on a rich bottom, 125 yards from the river, is a celebrated momil, the owners of which have for years refused to have it opened.
Mr. Palmer spent several days in trying to obtain permission to open it, ant was abont leaving in despair, when the owners finaly yiedded, not, however, withont requiring a number of concessions on the part of the wollector, which concessions were pat in the form of a legal document.

This momel is 16 fret high and 240 feet in ciremference.
Three feet below the surtace, a stratum of harnt clay, 15 feet wide by 30 long, was reachen. This has probably formed part of the roof of a I welling.

Beneath this was a bed of chareoal 4 iuches thick. In this bed remmants of cedia posts from 2 to 4 inches thick and 1 to 2 feet in length were tomml.

Below this was a stratmof of ashes, covering a limited area to the defth of 4 feet. Surromming this, the earth contained fragments of mumerons articles used by the inhabitants, while bemeath came $4 \frac{1}{2}$ feret of earth, in which numerons skeletons had been deposited.

The bodies had been interred without order, and the bones were so intermingled, and so far decajel, that no complete skeletons conld be collected. Beneath the layer of bones cume a second deposit of ashes, 2 teet thick by $-\frac{1}{2}$ teet in diameter, and beneath this a mass of rell clay, 18 inches in thickness. In the earth surromiling the asthes and clay, a number of skeletons were found; these were in such an advanced stage of decomposition that only a few fragments of skulls could be preserverl.

Three feet below the secoud layer of bones, the undisturbed soil was reached.

Two boxes of bones were collected, the well-preserved crania numhering about twenty.

A great many interesting specimems of the implements, ntensils, and ornaments of the monad-builders were obtained.

The following catalogue includes everything of interest:

## ABTICLES OF STONE.

62787, 62792, 62778, 62769, 62784, 62788. Numerons specimens of arrowpoints, llakes, cores, and rongh masses of gray and black chalcedony, obtained partly from the mond, and partly from the soil smromding it.
62793. A somewhat conical object of black compact graphite. The flatisll base is mbled off in an irregular way, as if in grinding down for use as a pigment.
62790. Fragment of hammerstone of gray micaceons sandstone, 5 inches long ly 3 iuches in diameter. It was found associated with the upper layer of skeletons.
62808. Pipe uarved from gray marble. The bowl is symmetrically shaped, and resembles a common clay pipe. It is about $1 \frac{1}{2}$ inches in height and 1 in diameter. The stem part is about one-fourth of in inch in length. Found with the upper layer of skeletons.
62786. A perforated stome tube, $1 \frac{1}{4}$ inches long and three-fonths of an inch in diameter. It is pobably the upper part of a pipe bowl.
6:2794. A large mmber of minute quartz pebbles, probably nsed in a rattle or in playing some game of chance. Found with the skeletons in the momnd.
62798 . Three glass beads, fombl 4 feet below the surface of the monnd. One is a bright blue bead of translucent glass. One is opaque, resembling porcelain. The third is of bhe-gras glass, and has three longitudinal stripes of brown, underlaid by bands of white. All are eylindrical in shape, and are from three-eighths to half an inch in length, and abont onefourth of an inch in diameter.

## ARTICLES OF CLAY.

The collection of pottery from this mound is of mnch interest. There is but one entire ressel, but the fragments are so plentiful and well preserved that many interesting forms can be restored, and a very good ideal of the ceramic work of this locality be formed.

Form.-I have spent much time in the examination of these fragments, and have assigned each to the form of vessel to which it belonged. Where large pieces are preserved, especially if the rim is included, we: have little tronble in reconstructing the entire ressel, without fear of being seriously wrong. The lower parts of the bodies of all forms are round or slightly flattened, and but a small fragment of the rim is needed to tell whether the vessel was a bottle, pot, or bowl.
I find, however, that the forms merge into each other in snch a way that a complete graduated series can be found. Of first importance, are the romd or globnlar rases with more or less constricted neeks.

Ornamentation.-The inside of all forms is plain with the exception of accidental markings of the fingers. The rim is square, sharp, or round on the elge, and sometimes slightly enlarged or beaded on the outer margin. A collar is attached to many lorms, which at the lower edge overhangs. It is added to the body with the rim, or as a strip after-
ward attached. It is often notched or indented with a stick, bone, or reed, or with the fingers.

The necks of rases and pot-shated vessels have a great variety of handles, knols, and ormaments. Some of the latter seem to be atrophied hambles. In some cases a low horizontal ridge, from 1 to f or more inches in length is placed near the rim. in place of the contimons collar. ln other cases a narron, creseent-shaped ridge is attached, the points reaching down on the shoulder, the arch lying mon the neek. Still others have one or more handles which connect the rim with the neck or shoulder of the vessel, leaving a round or oblong passage for a cord or vine.

These handles were added after the vessel was completed. They are nerer ormamented. In one case an arched handle, like the handle of a basket, connects the opposite sides of the rim. This is the only entire


Fig. 118.
vessel recovered from the moum. It was associated with the upper layer of skeletons. Diameter $4 \frac{1}{2}$ inches. Fig. 118.

The boty of these ressels is sometimes fuite plain, bnt is more frequently covered with cord markings. These, with one or two exceptions, seem to be made bs a series of fine cords, approximately parallel, but withont cross-threads of any kind. There is little unformity of arangement. In the upper part, amd abont the base of the neck, the indented lines are generally vertical. On the bottom they are guite irregnlar, as if the ressel, in making, had been rolled abont on a piece of netting or coarse cloth. The cords have been about the size of the ordimary cotton cord nsed by mrehants. One exception is seen in a fragment of a large, rudely-made rase, in which we have the impression of a fabrie,
the warp of which, whether wood or cord, has consisted of fillets more than one-fourth of an inclı in width, the woof being fine cord.

This is what is frequently spoken of as the ear-of-corn impression. No incised or excavated lines bave been noticed in these fragments of pot-shaper ressels. Some of the most elegant vessels are without np. right necks. The upper or incurved surface of the body is approxi mately flat, forming, with the lower part of the body a more or less sharp peripheral angle. The base is ronnled, and, so far as we can judge from the examples, the bottom is slightly flattened. Vessels having ver tical or flaring rims are generally somewhat more shallow.
The incurved upper surface is often tastefully ornamented with patterns of incised or excavated lines which are arranged in groups, in rertical or oblique positions, or encircle the vessel parallel with the border. One specimen has a row of stamped circles, made by a reed or hollow bone.

Bowls of the ordinary sbape are variously decorated. In one case we have on the ontside of the rim, and projecting slightly above it, a rudely-modeled grotesque face. A notched fillet passes around the rim, near the lip, connecting with the sides of this head.

In another case a rude node is added to the rim. The only bowl haring a flaring rim is without oruament.

We have only one fragment of a bowl in which the body has been marked with cords.

Composilion.-The clay used in the pottery from this mound is generally fine in texture, and of a light-gray color. Many of the fragments have been blackened by burning subsequently to their original firing, and some mas have been originally blackened with graphite. The prevailing colors seen in the fragments are yellowish and reddish grays. The percentage of powdered shell used in tempering las usually been very large, forming at times at least half the mass. The tlakes of shell are very coarse, being often as much as one-fonrtl of an inch in diameter. In many cases they hare been destroyed by burning, or hare dropped ont from decas, leaving a deeply pitted surface.

Pipes.-There are a number of pipes in the collection, most of which were found near the surface of the monnd. In some cases they resemble modern forms very closely. The most striking example is made of a fine-grained clay, without visible admixture of temperiug material. The color is a redulish gray. It is neatly and symmetrically formed, the surface being tinished by polishing with a smooth, hard implewent, and shaving with a knife. The bowl is 2 inches high, and the rim is bell shaped above, with a smooth, flat lip, one-fourth of an inch wide. The dianneter of the opening is nearly 2 inches. The base is conical. The stem part is one-halt an inch long and one-half an inch in dianeter. The bowl and stem are both couically excarated.

A notber specimen is male of clay mixed with powtered shell. The bowl is cylimhical. being a little larger at the rim, which is ornamented
with rows of punctmes. The cllow is ormented by a rosette of indented lines. The month pieer has been broken away.

UBIECTS OF HETAL.
62797. One of the most instructive finds in this momed is a pair of brass pins, of undoubted European manfacture. The collector makes the statement, with entire eonfidence in its correctness, that they had been cheased in the carth at the time of the interment of the bolies. One was assueiated with the urper and the other with the lower layer of bones. In size amel slape they respmble our ordinary brass toilet pin. The head is themed of a spimb coil of wire, the diameter of which is atbont one hall that of the shaft of the pin. It is also stated hy the collector that an irou bolt was fomed in the lower stratmo of hones. This object was unfortmately lost.
62795. A small brass eghader, fomed 3 feet 7 inches below the surtace of the momed. The thin sheet of which the coil is made is about 1 inch square. The elges are meven. It was probably used as a bead.

## OBJECTS OF SHELL.

Few momms have rivaled this in its wealth of shell ormaments. Engraved gorgets cut from the horly of the Busycon percersum and large jins from the columelle of the same shell are especially momerons and well-preserved. Large mombers of beads and morked shells were also fonnd. All were intimately associated with the skeletons.

While man of the specimens are well preserved, we find that many are in an adranced stage of decay, and unless most carrefnlly haudled, crumble to powder.
Similar shell ormaments are fombd inomads in other parts of Temesssee, as well as in neighboring States. These have been pretty finly described in the Second Ammal Report.
$62830-62839$. These pins are all made from the Busycon perversum. The matire specimens range from 3 to 6 inches in length; two are fragmentary, having lost their points by decay. The heads are from one half to $t$ inch in length, and are generally less than 1 inch in diameter. They are somewhat varied in shape, some being cylindrical, others being conieal above. The shaft is pretty evenly rommed, hat is seldom symmetrical or straight. It is rarely above one-halt an inch in diameter, and tapers gradually to a more or less romaded point. The groove of the canal shows distinetly in all the heads, and may often be traced far down the shaft. In a number of cases the surface retains the fine polish of the newly finished object, but it is usually somewhat weathered, and frequently
discolored or chalky. These specimens were fomd in the monnds along with deposits of human remains, and generally in close proximity to the head ; this fact suggests their use as ornaments for the hair.
62840-62843. A number of sancer-shaped shell gorgets, the upper elge being somewhat straightened, the result of the natural limit of the body of the shell. Two small holes, for smspension occur near the mper margin. The diameter ranges from 3 to 6 inches.


In studying the dexign the attention is first attracted by an eye-like figure near the left border. This is formed of a series of enncentric circles, and is partially inelosed by a looped band about one-eighth of an incli in width, which opens down ward to the left. This ham is ocenpied by a series of conieal dots or depressions, the number of which varies in the different speei-
mens. The part of the figure inclosed by this band represents the head amd nerk of the serpent. To the right of the ere we bave the mouth, which is manaly shown in profile, the npper jaw being furned mpand exhibiting a donble row ol notches or teeth. The body emeircles the head in a single poil, which apmears from bebeath the neck on the right, passes aromud the front of the head, and terminates at the back in a pointed tail armed with welldefined rattles. The spots and scales of the serpent are represented in a highly conventionalized manner.


Shell gorgets with engraved designs represeming the rattesuake.
60841-62st5. The handsome specimen given in Fig .124 is in a rery good state af preservation. It is a deep, somewhat oval phate, made from a Busycon perversum. The surface is nicely polished and the margins neatly bevelet. The marginal zone is less than latf an inch wide and contains at the mper edge two perforations, which have been considerably ahaded by the cord of smspension. Four long curved slits or perforations almost sever the central dexign from the rim; the four
narrow segments that remain are each ornamented with a single conical pit. The serpent is very neatly engrared and belongs to the elrevoned variety. The ege is large and the neel is oruanented with a single rectamglar intaglio fignre. The mouth is more tham msmally well fefined. The upper jaw is turmed abrmptly backward and is omamented with lines peenliar to this variety of the designs.


Fig. 124. (62845.)
Sbell gorgets with *ngraved designs representing the ratulesnake.
The borly of the serpent opposite the perforations for sus. pension is interrupted by a rather mysterions cross band, consisting of one broad and two marow lines. As this is a feature common to many specimens, it probably hat some important office or significance.
62847-62848. Mask-like shell ornaments. By a combination of engraring and sculpture a rude resemblance to the homan features is prodnced. The objects are generally made from large pear-
3 E'III———?
shaped sections of the lower whorl of marine mivalves. The lower portion, which represents the neck ant chin, is cut from the somemhat eonstricted part near the base of the shell,

while the broad ontline of the head reaches the first sutnre at the noded shoulder of the body whorl. The simplest form is shown in Fig. 125. A more claborate form is given in Fig. 1 26.


Fif, 126, (62317) Mask-like object of shell.
These objects are especially momerous in the momits of Tennessee. but their range is quite wide, examples having been reported from Kentnels, Virginia, lllinois, Missomi, and Arkansas, and smaller ones of a somewhat difterent type from New York. In size they range from 2 to 10 incles in length, the wifth being considerably less. They are generally found associated with hman remains in such a way
as to suggest their nse as ornaments for the heal or neck. There are, howerer, no holes for suspension except those made to represent the eyes, and these, so far as I have observed, show no abrasion by a cord of suspension. Their shape suggests the idea that they may have been used as masks, after the manmer of metal masks by some of the oriental nations.


Flf. 127.-Shell rorget with engraring of a cnrious haman tigure.
fos 46 . Engraved shell, Fig. 127. This very interesting object has been fully described in the Second Ammal Report of the Burean. The fignre is so obseure that considerable study is necessary in making it out.
62930. Engraved shell, Fig. 12. This remarkable specimen has already been described in the Second Ammal Report of the Burean. The engraved design is certainly of a very high order of merit, and suggests the work of the ancient Mexicans.
$62816-62822,62924,6256,62528,62809$. Shell beads discoidal and cylinfrical in form, made chiefly from the colnmelle and walls of marine mivalves.
62895. Shell bead made by grinding off the apex of a large Oliva biplicata. (")
62827. Beads made from Marginella (?) shells.
 some with the skeletons, others near the surface.


Fig. 128.-Shell gorget with engravod design repres entang two fighting figures
The following genera and species ate provisionally deter mined:
I'nio maltiplicatus.
I'nio meratus.
I'rio crassidens.
Inio mictorum.
Marginclla (?).
Oliva (?).
To spinossa.
Irypanostoma anthomyi.
A menlosa subgloboser.
I'usycon perrersum.
62823. A tooth.shaped fresh watev pearl, fomm with the skeletons.

## avisial substances

62861. Fragments of deer-horn fouml near the sulface of the mound.
62862. An implement of musual form, made from a flat piece of bone, found with the skeletons in the monnd.
62859,62860 . Bone implements, needles and pertorators, some of which are well preserved and retain the original polish ; others we in a very advanced stage of deeay.
Three boxes of human bones (not numbered).

## FROM THE FIELDS AT SEVIERVILLE. <br> ABTICLES OF STONE.

62770. A small grooved ax, tormed of a coarse textured stone, resembling diorite. It is $4 \frac{1}{2}$ inches in length and $2 \frac{1}{2}$ in width. The head is romnded and the cutting edge much battered. The groove is wide and shallow, and the burdering ridges prominent. The blade thins ont quite abruptly. Presented by J. B. Emert.
62771. A celt 63 inches long, $2 \frac{1}{2}$ inches wide, and 1 inch thick. The waterial is a compact, blue-gray, banded slate. The sides are straight and a transverso section is somewhat rectangular. Both edges are sharpened, and are very neatly beveled and polished. Presented by W. P. Mitchell.
62772. A small celt of compact greenish slate; one face is flat, the other convex. It is neatly mate and perfectly preserved, the broader end being oblique and sharp. It is $3 \frac{1}{8}$ inches in length.
62773. A rule, much-battered celt of coarse sandstone or diorite. It is 4 inches in length by 2 in wilth near the cutting edge. The top is somewhat conical.
62774. A large msymmetrical celt made of coarse vellowish sandstone; one side is mneh battered. The rutting edge is round and dull. It is 9 inches in leugth by 5 in willth near the broad end and is $1 \frac{1}{2}$ inches thick.
62775. A knife-blade-shaped object, apparently a fragment of a winged ceremonial stone. The whole surface is smooth and shows no evidence of use. It is made of fine-grained gray slate. It is 2 inches in length by fire-eighths in width.
62776. A bell-shaped pestle made of yellowish gray quartzite. The surface has been evenly roughened by picking, but has become slightly polished on parts most exposed wheu in use. The base part is subrectangular in section, and the bottom is slightly but evenly convex. The upper part, whieh has been shaped for convenient grasping by the hamb, is evenly
rommed at the tol. Weight, 41 inelses; width of base, $3 \frac{1}{2}$ inches.
62itif. A well-formed globe of gritty sandstone. The surface is ronghemed or gramular. It is $\ddot{\circ}^{2} \frac{1}{2}$ inches in diameter.
$6278 \%$. Portion of an oblong hammer stone, $t$ inches in length hy 3 in liamoter in the middle part. One end has been much reanced ly use. It is made of some dark, much decomposed, crystalline rock.
G276s. A symmetrical sandstonn ring, 2 inches in diameter and theefourths of an inch in thickness. The perforation is about five-eighths of an inch in diameter. The surface is roughened ly picking.


Jie 129.
62767. A symmetrical, neatly finished disk of light gray quartzite. It is $4 \frac{1}{4}$ inches $1 n$ diametor and $1 \frac{1}{t}$ inehes in thickness at the cireumference, and less than 1 inch thiek at the center.
62869. An hour-glass shaped tube mate of gray hydromica schist, which resembles rery compact steatite. It is $5 \frac{1}{2}$ inehes long, $\because$ inches in diametor at the widest part and $1 \frac{1}{4}$ inehes at the narowest part. The most restricted part near the middle is gindled by a ridge or ring, on the circumference of which seventy or eighty shallow notehes have bean ent.

The praforation is mach eniarged at the ends, giving enplike eavities. The walls are thin near the ends and quite thick near the midule, the passage being havdly more than one-quarter of an inch in dianeter. The markings on the insile indicate that the excavation has been made by a gonging process, rather than by the nse of a rotary perforator.


FIG. 13:
62776. A boat shaped ceremonial stone of banderd slate, 3 inches long, 1 ineh wiale, ams 1 inels deep. From the side the ontline is triangnlar. the two lines of the keel forming almost a right angle. From the top the ontline is a long, pointed orinl, as seen in the illustration, Fig. 131.


Fig. 131.
The trongh-slaped excaration is more rommed in ontline, and is three-fonths of an inch in depth. Perforations have been made near the emols of this trongh; these seem to be somewhat abraded on the ontside by a cord of suspension or attachment which has passed between them along a groove in the apex or angle of the keel.
62868 An amulet or charm of dark-meenish rock, probably a serpentine, earved to represent a birl's head. The more highly


Fig. 132.
polished parts are duite dark, while freshly eut lines are whitish. The leat is graphically represented, the bill, the eye, and nostril being well shown. A stand-like base takes the place of the body of the bird. Around this, mear the bottom, a groore has been cut for the purpose of attaching a string or securing a handle. In dressing the surface some implement lias been used that has left file-likeseratelies. Fig. 132 represents this olject natural size.

62-i.3. Fragment of a stone disk or wheel that has lines eut upon it rescmbling in arrangement the grooves of an ordinary mintstone. Diameter, 6 inches; thiekness, 2 , inehes. This is probable not an aboriginal work.


Fig. 133.
63186. A banner-stone of musmal shape, made of gray slate. The cut, Fig. 133, represents this object three-fonths natmral size.
The perforation is one-halt an inch in diameter, and is quite symmetrical. The entire surface is well polished.

ABTICLEN OF CLAY.
A few specimens of potsherds were collected from the fields about Sevierville.

Most of these are identieal in every way with the pottery of themonnd, but three examples are of a totally different type. The material of these is a fine sandy clay, tempered with a large percentage of finely pulserized mica.

The forms of the vessels cannot be made out. The outer surfaces were ornamented by a stamped pattern of small square or lozengeshaped figures, a number of these together were apparently formed by a single stamp.

Among the fragnents we have half a dozen disks, from 1 to 2 inches in dianster, worked from ordinary potsherds. A small rudely modeled fignre of a hird was also foum with these fragments. There were also masses of indurated clay, which secm to have been used for chinking purposes.

# COLLECTIONS FROM ROANE COUNTY, TENNESSEE. 

MOUND AT TAYLOR'S BEND.

This monnd is sitnated three humdred and fifty yards from the French Broad River, on the farm of Mr. William Harris.

It is 10 feet high aud nearly 50 feet in eirenmference. Its snmmit has been enltivated for many years, and the height has doubtless been mueh redneed. Immenliately nuder the surface soil a heary bed of ashes aud chareoal was reached, which at the border of the mound was only a few inches thick, but at the center was abont 3 feet thick.

In this stratum were found a few implements, and fragments of pottery, and two very muel decayed skeletons. A part of one cranimu was preserved. The mound beneath this stratum was composed ehiefly of loam, with some saud in the center, and contained nothing of iuterest.

## ARTICLES OF STONE.

(62885. A needle-like implement, made of a soft black stone that may be eannel coal. It is $3 \frac{1}{2}$ inches in length, but is not entire. The shaft is a little more than one-fourth of an inch in diameter, is nearly round, and tapers to a symmetrical point. The surface is highly polished. It was found in the stratmo of ashes.

## ABTICLES OF CLAT.

62890, 62892-6. A considerable number of fraginents of pottery was found in the stratum of ashes.

Form.-Vases of the wide-mouthed, round-bodied variety are represented, also a number of hemispherical bowls. One large fragment representing a vessel with rounded bottom was found.

Size. -The pot like vases have been quite large, the mouths being as much as 14 inches in diameter. The larger bowls hare been 10 inches or more in diameter. Others are smaller. The walls of some of the larger vessels have beeu half an iuch in thickuess.

Material.-Classified by material, there are two varieties, one is composed of the usual clay and pulverized shells, the latter being coarse and exceedingly plentiful; the other has no shell material, but in its place an admixture of sand and small quartz pebbles.

Ornamentation.-The inside is plain as usual, and many of the fragments have no exterior ornament. There are two varieties of surface markiugs; one consists of impressions of basket work, which indicate a broad series of fillets bound together by small twisted cords of grass or bark; the other appears to have been made ly an opeu net-work of fine cords, which have been quite irregnlarly arranged.

## OBJEOTS OF SIELL.

fi2898. A shell pin made from the columella of a large mivalye. The original polish is still preserved. The head is rond and swall, and the shaft 2 inches in length. Fomnd in the stratum of ashes.
62899. Two species of shells, Io spinosa and Pleurocera conradii (3), ob. tained from the stratum of ashes.

## COLLECTIONS FROM THE FIELDS AT TAYLOR'S BEND.

ARTICLES OF STONE.
62883. A lot of arrow points, spear points, and kuives, baving a wide range of shape and size. A serrated specimen is 3 inches in length, and is made of yellowish striped chalcedony. One is made of white translucent quartz, and others of dark gray and black chalcedony.
62881. A stone disk, $1 \frac{1}{4}$ inches in diameter and three-eighths of an inch thick. It is of gray sandstone, nicely smoothed. The edge is rommed and the sides shghtly convex.
62882. Two stone disks similar to the preceding, but smaller.
62878. A small, thick, nearly symuetrical celt, $2 \frac{1}{2}$ inches in length, $1 \frac{1}{2}$ inches in width, and one-half of an ineh thick. The edge is rounded in outline and well sharpened. The beveled areas are narrow and stand at an angle of $30^{\circ}$ with each other. It is widest at the edge, tapering above to a conical point. The material is apparently a compact greenish diorite.
62877. A small celt similar to the preceding in form and material. It is $3 \frac{1}{4}$ inches long, and $1 \frac{3}{4}$ inches in width near the cutting edge, whieh is considerably battered.
62875. A curred celt of considerable interest, made of a greenish diorite. It is 8 inches in length, $2 \frac{1}{2}$ inches wide near the cutting edge, aud abont 1 inch thick. It tapers toward the apex to $1 \frac{1}{2}$ inches in width. A transverse seetion would be a sharp oval. A longitndinal seetion showing the thickness of the implement gives a bow like figure, the median line of which would deflect nearly half an ineh from a straight line.
62876. A celt, $3 \frac{1}{2}$ inches in length, of the usual form, made of a greeuish diorite.
62574. A grooved ax of gray sandstone, 5 inches long, 3 inches wide, and 1 inch thick. The groore is deep and well roundel,


FIG. 134.
and has two bordering ridges in ligh relief. The head is low and conical, and the blade narow aul rectangular. The surface has originally been quite smooth, but is now somewhat battered.


Fif. 135.
62871. A cylindrical pestle of gray diorite (?), 11 inches long and 2 inches in diameter. The general surface is rough, the points being smoothed by use.
60579. A perforated tablet, made of gray, chloritic sehist, $2 \frac{1}{2}$ ineles long by $1 \frac{1}{2}$ inches broad, illustrated in Fig. 134. The sides are notched in a way that gives a dumb-bell like ontline. The ends are almost square. Series of notches have been cut in the terminal edges. On one of the lateral margins rute notehes and zigzag lines have been engraved. In the middle of the plate there is a circular perforation one-fourth of in inch in diameter. Midway between this and the ends are two other perforations, one being cireular and one eighth of an inch in diameter, and the other lozenge or diamond shaped and nearly one-fourth of an inch in width. These show no evidence of wear. The surface is meven, though somewhat polished. It has probably been nsed for straightening arrow shafts and shaping strings.
62880. Fragment of a perforated tablet carved from gray slate. It hats been broken transversely wear the middle, throngl a perforation which has been abont one eighth of an inch in diameter. The remnant is 2 inches in lengtlo and $1 \frac{1}{2}$ inches in width at the perforation. One side is plain, the other has a desigu of plain and zigzag lines. The edges are beveled and notched. See Fig. 135.

## VICINITY OF KINGSTON.

On the farm of Mr. M. Biss, three miles from Kingston, on the Tennessee River, a mound was opened which was so located as to overlook the river, and at the same time guard the approach from two pieces of projecting wood. It was 11 feet high, 29 feet wide on the top, and 45 feet in diameter at the base. It was composed entirely of elay.

Three feet from the surface six very much decased skeletons were found, no parts of which could be preseregd. The bodies seem to have been deposited withont definite order.

No objects of art were obtained.
Opposite Kingston, on the Clinch River, are three mounds, loeated on the farm of T. N. Clark. They are all small, and, with the exception of two much decayed skeletons and a single arrow point, contained nothing of interest.

On the farm of S. P. Evans, three miles below Kingston, are three groups of monnds. The first contains five monuds; the second, a little higher up, has the same number, while the third has but two. They are all built of clay, and seem to br without remains of any sort.

## MOUND AT Niles' ferry.

On the farm of J. W. Niles, at this point, is a large monud that has the appearance of a Creek or Cherokee ball-ground. It was flat on the top, and had an area of $1 \frac{3}{4}$ acres. The height was 1 in feet. In outline it was somewhat triangular. This mound was also constructed of clay, and contained nothing of interest. In the fields, near liy, human bones, potters, stone implements, beads, etc., are frequently plowed np. From this locality the following specimens were collected: 69957. Arrow hearls and knives of gray and black chalcedony. 6a9. Un. Unworked Unio shells.
69956. A momber of shell beads of usnal size and form.

MOUNDS NEAR PAINT ROCK FERRY.
Abont three hundred rards from the Tennessec River, at Paint Rock Ferry, is a large monnd 40 feet in height, and covering an area of about abont two :lcres.

Pemmission conli not be obtained to open the monnd, on acconnt of the crop of corn that covered it. Near its base, on opposite siles, were two smaller mommels. One of these was 5 feet high and 10 in diameter, and contained a stone grave. The body which it contained had been laid on the gronnd and covered a foot deep with earth. A flat rock had been laid mpon this, and slabs of limestone set on elge all iround. The inclosed space was 4 teet in wirlth by 5 in length. Earth had heen used to cover the cist and form the mound.

Abont this momn were scattered many slabs of stone which had been plowed up during previous fears; and it is stated that human bones and varions objects of art have, at different times, been bronght to light.

A short distance from the large mound, and near the river bank, is mother mound on which a barn has been built.
Several hundred yards from the river, in a meadow, is a third momm, less than half as large as that first mentioned. The owner wonld not allow it to be disturbed. Still another mound, near by, was oval in ontline, 28 feet long, by 20 wide, and 12 high. It was composed of clay and contained nothing but a tiew pieces of potters.
62939, 62940, 62945. Fragments of pottery from the monnds at Paint Kock Ferry.

ORJECTS OF SHELL.


Fig. 136.


Fig. $1: 17$.

62935, 62933. Shell beads, buttons, and pendants, made from marine shems. A meatly manle perdant is 1 inch in dianeter and one-sixth of an inch thick. Near the edge are two small perforations for suspeusion, and at the center is a conical pit, encircled by a shallow incised line. Beside this, there are a number of buttons of similar shape, which have single perforations at the center. Some of the smaller beads seem to have been painted red. Figs. 136, 137 , and 13 s .
Godis. Fragment of a large Ibusycon perversum.
fi29t己. Teeth of the hear, and possibly of the horse found near the surface of one of the monnds.


Fig. 138.

## COLLEC'IIONS FROM JEFFERSON COUN'IY.

## MOUND ON FAIN'S ISLAND.

This monnel is located on the east end of the island. Although it has been under cultivation for many years, it is still 10 feet in height. The circmmference at the base is about 100 feet. Near the surface a bed of burned clay was thconntered, in which were many impressions of poles, sticks, aud grass. This was probably the remains of the roof of a louse, which had been about 16 feet long by 15 feet iu width. The bed of clay was about 4 inches thick. Beneath this was a layer of charcoal and ashes, with much charred cane. There were also iudications of charred posts, which probably served as supports to the roof. Fonr feet below the surface were found the remains of thirty-two human skeletons. With the exception of seventcen skulls, none of the bones could be preserved. There seems to have been 10 regularity in the placing of the bodies.

ABTICLES OF CLAY.
The fragments of pottery from this mound are monsually large and well presersed, and exhibit a number of varieties of form and ornamentation.
Forms.-The prevailing form is a pot-shaped vase, with wide mouth, and rounded body; the neck is short and straight or but slightly constricted. The handles or ears which connect the upper part of the neck with the shonlder are in some cases as much as 3 inches wide. The bowls are mostly hemispherical, but in a few cases have incurred lips, the shoulder being ronnled and the base somewhat flattened. The largest specimens have been 11 or 12 inches in diameter. The rases have been somwhat larger.

Material.-Classified by material, there seem to be two varieties, one with a very large percentage of coarsely pulverized shell material, the other withont visible dégraissant. The clay is usually fine and apparently without almixture of sand or other impurities. A little comminuted mica may be scen in some cases.

Color.-The prevailing color is a reddish gray, more or less blackened by use. A remarkable variety has a bright red surface, the mass being gray.

Ornamentation.-The ornamentation consists of cord and net impressions, incised lines, stamperl fignres, indented fillets, and life and fanciful forms modeled in relief.

The study of cord impressions is quite interesting. The cords are twisted and as large as medium twine. These cords appear to have
been disconmerted, at least, not woven into a fabric, and the impres. sions are gemprally mearly vertical abont the uprer part of the vessel, bum below take all positions, the result beiner a sort of hatching of the lines. This effect may he the result of pheing the ressel upon a coarse fahre while the rim was being tinished or the hamdes added.

It seems possible that a loose net of eords, probably with tine crosstheads, is used to smeperd the ressel in dming the process of modeling. It aprears, howerer, it this has been the case, that the ressel has been taken out of this met hefore it was homed. Where hamdles have heen arded, it will be fomm that the com mankings hate been destroyed by the tourlo al the fingers. Jut the borly has impoessions of the net male after the addition of the handles and ormaments, as the impressions appear out the outside or lower edges of these alditions. 'The lower part of the looly maty still have been suphert by the met during the proeess of drying; lut as some vessels have no cord markings what-


Fig. 139.
ever, it is evident that it was not difieult to complete the vessel without the support of the net.

By making a clay impression of one of the fragments I lave been able to determine the character of the fabicic nsed. It was loosely woven and quite flexille, the elay often reediving finger impressions through it. It was probably made of grasses or the fibre of bark.

Besile the net and cord marks, which may or may not be the result of an attempt at ormament, there are ormaments made of fillets of clay. In a nombre of eases a comb-like figure made of thin fillets has been adhed to the shoulder of a vase. In other eases il fillet has been earried aromed the neck of the vase and imbented by the finger or an implement.

The rim of one bowl has heen ornamented with three deeply incisel or exeavated lines, which form a sort of embattled figure abont the inemred lip. Another has a series of shallow, retical, incisel lines near the rim, and a circle of ammbla indentations, three-eighths of an inch in diameter, about one-fometh of an ineh from the lip.

There are also various forms of noded ornaments on the rims of bomls. The handles of vases are in a fer cases effectively ornamented. In one case the handle has been elaborated into a life form, representing a frog or human figure. The arms are attached to the upper part of the haudle aud lie extended along the rim. The handle proper represents the body, the breast being protruded. The legs lie flattened out upon the shoulder of the ressel, the feet being bent back beneath the body; height $3 \frac{1}{2}$ inches. This vessel is illnstrated in Fig. 139.

## FROM THE FIELDS OF FAIN'S ISLAND. <br> Articles of stone.

62906. A very handsome specimen of grooved ax. It is made of a remarkable variety of porphyritic diorite that resembles breccia.

The matrix has the appearance of a gray speckled quartzite; the angular inelnsions being whitish feldspar, with llarkgreenish patches of hornblende. The surface is smooth and shows but little wear. The length is 7 inches, the wilth 4 , and the thickness 2 inches. The groove is deep, and has two well-defined bordering ridges. The head is low and rounded, and occupies abont one-third of the length of the implement. The blade is well-formed, the sides being parallel or nearly so. The edge is slightly rounded in ontline, and is polished and sharp.
62907. A grooved stone ax, 5 inches in length, $4 \frac{1}{2}$ inches in width, and $1 \frac{1}{4}$ inches in thickness. The groove is placed as in the preceding example, but has a bordering ridge on the upper side only: The head is very large and narrow. The blade is rectangular in outline, and has a rounded, moderately sianp edge. The material is a compact graphic diorite (?).
62904. A grooved ax, 4 inches in length, $3 \frac{1}{2}$ inches in width, and threefourths of an inch in thickness. The groove, which is well defined, has no lateral ridges. It seems to have been made from a flattish, oval, river pebble.
62902. Fragment of a pierced tablet of slate.
62903. A well shaped disk of translucent quartz, $1 \frac{3}{4}$ inches in diameter and three-fourths of an inch in thickness. The sides are nearly flat, and the edge evenly rounded. The surface is quite smooth.
62905. Steatite pipe found on the surface of the mound. The bowl is about 6 inches in length and 1 inch in thickness. A section is nearly square. The cavities are roughly excavated.
3 етн- 30

## OHSECTS OF SHELL.

$6: 916$. Well preserved specimen of Io spinosa.
62955. Specimens of Unio probatus.
62914. A large specimen of shell pin, made from the columella of a Busycon perversum. It is much discolored and in an advanced stage of decay. Length nearly 4 inches. Form as usual.
62913. A shell pin similar to the precerling.


Fig. 140.-Shell gorget with an engraved cross.
62931. A mmber of large shell beads, made from the columella of marime shells. The larger specimens are cylindrical in form, and are 1 inch in length and $n p$ wards of 1 inch in diameter.


Fig. 141.-Shell gorget with the evgraving of a spider.
62932-62834. Shell beads of varions sizes and shapes, made from the columellap and walls of marine shells.

62928 A shell ornament, on the convex surface of which a very curious ornamental design has been engraved. The design, inclosed by a circle, represents a cross such as would be formed by two rectangular tablets or slips, slit longitndinally and interlaced at right augles to each other. The lines are neatly and deeply incised. The edge of the ormament has been broken away nearly all around. It is represented natural size in the cut. Fig. 140.
62929. This disk is somewhat more convex on the front than is indicater in the engraving. It is $2 \frac{1}{2}$ inches in diameter, and is quite thin and fragile, althongh the surface has not suffered much from decay. The margin is oramented with twenty-four very neatly made notches or scallops. Immediately inside the border on the convex side are two iucised circles, on the outer of which two small perforations for suspension have been made; inside of these, and less than half an inch from the margin, is a circle of seventeen subtriangular perforations, the inner angle of each being much romded. Inside of this again is another incised circle, abont $1 \frac{1}{4}$ inches in diameter, which incloses the highly conventionalized fisme of an insect resembling is spider. The middle segment of the borly is nearly round and has near the center a large conical perforation. This round portion corresponds to the thorax of the insect and has four pairs of legs attached to it. It is difficult to distinguish the anterior and posterior extremities of the body. It is probable that the subtriangular figure below is intended for the head, as the two circles with central dots are good representations of eyes. Fig. 141.

## ANIMAL SUBSTANCES.

62910, 62911, 62912. A number of bone implements, including needles, perforators, and paddle-shaped objects, found with the skeletons in the monnd.

## COLLECTIONS FROM MISSISSIPPI COUN'IY, ARKANSAS.

## PEMISSCOTT MOUND.

On Pemisscott Bay u, 22 miles northwest of Osceola, on the farm of Sammel Hector, is a monnd 20 feet in height, with a surface area of about one-fourth of an acre. The sides have been dug into extensively, but the central part remained untonched. It was composed of sand and bluish clay, but contained no remains of interest. It is statel by the proprietor that formerly there were three circular ditches extending around the slopes of the momud. When the surface of the monnd was first plowed quantities of charcoal and potsherds were fonnd.

## CHICKASAWBA MOUND.

This monnd is situated at Chickasawba Village, 24 miles north of Us. ceola. It is 25 feet high, and covers an area of one-fourth of an acre.

Collectors had already done much work on this mound, but obtained little or nothing. The owner does not wish it disturbed further. A ficld of several acres near by abounds in fraginents of pottery, stone implements, and the remains of houses ant camp-fires.

The field contained originally many small mounds or heaps, which were probably the sites of houses. In a number of eases skeletons have been found beneath these heaps.

## MOUNDS IN CARSON LAKE TOWNSHIP.

In Oarson Lake township, 6 miles southwest of Osceola, on the farm of Hugh Walker, are three mounds, which were much disturbed by the earthquake that visited the New Madrid district in 1811.

The first one inspected is 50 feet wide by 75 feet long, but exhibits no evidence of having been a drelling or burial place.

The second mound is abont 100 yards from the first, and is circular in ontline, having two ridge-like projections from opposite sides. It is 20 feet in leight, and about 23 feet across at the top. A nmmber of recent interments have been made near the summit.

The third mound is 250 yards from the preceding, and is 6 feet high, $: 3$ feet wide, and 35 feet long. Six skeletons were found iu this monud. A stratum of ashes, charcoal, and burned clay was associated with them. One clanimm and a few bones were collected.
63049. Burnt elay from the third mound just described.
63052. Fragment of a plain vase; interior, reddish; exterior, yellowishgray. Other fragments are of ordinary undecorated ware.

## MOUNDS AT PECAN POINT.

On the land of R. W. Friend, 1 mile west of the Mississippi River, are two mounds. The one first examined is 5 feet high and 150 feet in cirenmference. The other is 4 feet high and 75 feet in circumference. Two skeletons were fomul uear the sniface of the latter mound.

Near these mounds is another, 4 feet high and 20 feet in diameter. Formerly this mound was eorered with large trees, and the roots have penetrated the soil, cansing much injury to the contents. It is the opinion of the collector that this mound, as well as many others of the same region, has been used as a dwelling site, and that when á death oceurred the dwelling was burned down over the body. Before building agaiu the site was covered with a few inches of earth. There was no miformity in the position of the graves or their contents. The folloring oljects were obtained from this mound:

ABTICLES OF CLAY.
63009. A jar-slaped rase, with low neek and much conpressed body. Height, 4 inches; width, $5 \frac{1}{2}$ inches; surface, moderately smooth; color, almost black.
63022. A jar sinilar to the preceding, but somewhat taller.
63046. A rather unusual form of bottle-shaped vase. The neck is narrow and tapering. A fillet with finger indentations encircles the lip. The base of the neek is also ormamented with a collar or fillet. The body is globular, apparently a little pointed above. Whole height, 10렬 inches; width, S inches; color, gray.
63029. A small, large-necked vase, with glubular body, and lip a littlo recurved. The body is ornamented with a number of indentations, probably made with the finger nail. Color, dark gray.
63008. A large, thick-bodied vase, modeled to represent a hunchbacked human figure. The head is missing. It is 9 iuches in width, and has been about 12 inches in height. Ware of the orlinary dark variety.
62995. Fragments of steatite ressels which have been from 1 to 2 feet in diameter. The walls about the rims were quite thin.
62959. A large clay pipe, fomm in the soil near the banke of the Missis sippi.

FIELD GRAYES AND FIELDS $1 N$ THE VICINITY OF PECAN POINT.
abticles of stone.
63204. A large lot of arrow-points of yellow and gray jasper.
$62966,62976,62979-62998,(33000-63006$. Celts or knives made of jasper and jellowish jaspery slate, which range from 2 to 5 inches in length, and are less than 1 inch in width and half an inch in thickness. Thes have been ehipped into the desired shape, and finished by grinding off the more prominent parts and prodncing in many eases sharp entting edges. A good example is shown in Fig. 142.


Fig. 142.
62965. A flat pebble, with rulely-made notches at the site. $62967,62968,62974$. Fragments of celts. 62970. Tellowish jasper pebble, resembling a celt.
62000. Fragment of a Iong, chipped, knife-like implement, the extrem-
ities of which are lost.
6:975. Fragment of a steatite ressel.
62969, 62971. Sandstone pebbles.
6:960. Hammer-stone, with conical points, made from a pebble of cherty sandistone.
62962. Slightly grooved fragment of rnbbing.stone.
62964. Flat pebble, slightly hollowed by use; a sort of shallow mortar. 62961. Fragment of a stone similar to the preceding.
62972. Fragment of concretionary iron ore, concare on one side. 62973. Red paint.

## articles of clay.

A large number of very fine ressls of clay was presented by Dr. J. M. Lindsley. They were obtained from a field near Pecan Point, within


Fig. 143.
half a mile of the Mississippi Rirer. In the fields is a large mound which could not be opened on account of the crops. Years ago, whers the timber was cleared from this field, many small elevations or hillocks were observed scattered irregularly over the surface. The plow has obliterated these, but las brought to light many evidences of ancient
orempation, sucl as charcoal, ashes, buned clay, stone implements, and luman bones.
B320\%. A large, beantifully-formed jar has received this number. The neck is short and slender, and the rim slightly enlarged and recurved. The body is full and symmetrical, lint greatly compressed rertically, the width being about twice the height. The ware is of the dark, porous variety. Full height, 8 inches; width, 10 inches.
63010. A bottle-shaped jar or vase, with long neek and globular body. The form is musually graceful. Height is 10 inches. Diameter of body, $6 \frac{1}{2}$ inches. This vessel is shown in Fig. 143. 63012. A well-formed jar, with plain neek and globular body. Seven and one-half inches in height, and $\mathrm{S}_{\frac{1}{3}}$ in width.


Fig. 344.
63013. A medinm sized, bottle-shaped vessel, of elegant proportions. A rudimentary foot or stand is added to the bottom. Height, 8 inches. Fig. 144.
63017. A small, much compressel, bottle-shaped vase. Height, 5 inches; width, $6 \frac{1}{2}$ inches.
63018. A bottle-shaped rase of reddish-gray color, resembling the preceding in shape and size.
63019. A large, bottle-shaped rase, with long neek and subglobular body. It is mique in having a stand or base which seems to have been added after the body was somewhat lardened. This stand has been perforated for ornament, as shown in Fig. 145. Height, 8 inches; diameter, 6 inches.
63011. A small rase, ormamented with a series of ribs, which extend around the body from the neek to the base. This vessel is


FIG. 145.
shown in Fig. 146. It is in a fragmentary state. Height, $4 \frac{1}{4}$ inches ; width, 7 inehes.


Fig. 146.

6801ti. A medimm-sized vase with vertically compressed body. Height, if inches; diameter, st $\frac{1}{2}$ inches. Fig. 147.
(i3015. I plain bowl, with flattish bottom. Diameter, 9 inches; height 5 inches.


Fig. 147.
63014. A well-made jar or vase, with globnlar bod 5,6 inches in width and $4 \frac{1}{2}$ in height. The surface of the ressel is completely covered with an irregular, bead-like ornamentation, made by pinching the soft clay between the thumb and fingers. Fig. 148. Diameter $5 \frac{1}{2}$ inches.


Frg. 148.
63020. A much compressed vase, $4 \frac{1}{2}$ inches in lieight and $7 \frac{1}{2}$ in width. Four equi-distant protnberances are placed about the widest part of the body and rndely imitate the extremities of some animal.
63021. A small, jar-like vase, with globular body, 6 inches in height, and the same in diameter. The form is not quite symmetrical.
63022. A small rase, with large, high neek and much eompressed body. Height, $5 \frac{1}{2}$ inches; width, $6 \frac{1}{2}$ inches.
63023. A vase similar to the preceding.

G3024. A medimm-sized bowl, $7 \frac{1}{2}$ inches in diameter and 3 inehes in height. The rim has an exterior ornament of thumb indentations.
63025. A small, rudely-construeted jar, 4 inches in height aud $4 \frac{1}{2}$ iu width.


Fig. 149.
63026. A jar haring a high, wide neek, and small, globular body. The bottom is flat. Height, 5 inehes; wirlth, $4 \frac{1}{2}$ inches.
63027. A small, rndely-construeted eup, of a reddish color. Height, 1 inch; width, $1 \frac{1}{2}$ iuches.
63045. A small, rudely-finished vase, with high, wide neek and short pedestal. The globnlar body is embellished with an encireling band of seroll-work of incised lines. The scrolls are bordered by triangular wings filled with retienlated lines, as shown in Fig. 149; height, $4 \frac{3}{4}$ inches. Nos. 63113, 63026, and 63099 are plain ressels of similar form.
Additional numbers have been given to numerous fragments from this locality.

## COLLECTION FROM ARKANSAS COUNTY.

## MOUNDS AT ARKANSAS POST.

A gronp of well-known monnds is situated on the furm of the late Frank Menard, $S$ miles south-east of the village of Arkansas Post.

The largest monnd is 965 feet in circumference at the toj and considerably larger at the base. The slopes are covered with trees and bushes.

This mound had already been dug into quite cxtensively, and it was thonght useless to explore it further. Commected with this mound by a ridge of earth 300 feet long and 20 feet across, is a small circular mound, 15 feet high and 45 feet in diameter, which bore evidence of having been occupied by houses.

## articles of clay.

Near the middle of the connecting ridge, just muler the soil, a layer of burnt clay, about 5 or 6 feet in diameter, was found. At one side, imbedded in the débris of elay, a large quantity of fragments of earthen vessels was discovered. They comprise a nnmber of bowls of various sizes, which are all quite new-looking, and are of a type of ware quite distinct from that found in the fields and graves of the same locality. Restorations of a large number have been made, and the collection proves to be extremely interesting.

The collector argues, from the position of the fragmentary vessels, that they had been placed by their owners upon the roof of the house, which, he sumises, was destroyed by fire. 63040, 63034, 63170, 63421, 65412, 65409, 65422, 65405. Plain bowls of yellowish-geay ware, restored from fragments deseribed above. They are wide and shallow, and somewhat conical below; hand-mate, and withont polish. Composed of clay, tempered with pulyerized shell. The walls are usually quite thin. Diameter 10 to 13 inches. Height 3 to 6 inches.


Fig. 150.

63039, 63033, 63041-63043, 64045, 65406, 65401-65403, 65415,-65417, 65408,65410 . Bowls corresponding in general character to those described above, but having tasteful desigus of incised lines aud indentations on the exterior surface. The most interesting of these desigus consists of series of interlaced or of festooned lines. The extcrior margin is encircled, in all cases, by ornaments consisting of parallel lines, groups of short incised lines, or rows of indentations.


Fig. 151.
The principal design encireles the body beneath this, as shown in Figs. 150 and 151.
$63037,63038,63416$. Bowls similar to the above having interior decorations consisting of curved lines.
$63035,63099,65404,65411,65413,65414,65418-65420,65423$. Bowls corresponding to the above in general characters, but having flaring rims. They are mostly plain. A few have decorative designs of incised lines. Some have been blackened by use as cooking vessels.

## FIELD GRAVES NEAR MENARD MOUND.

Surrounding the Menard monnd is a field containing about twenty acres, which appears at one time to have been the site of a great number of dwellings, as, at a depth of from 1 to 2 feet, layers of burned elay are found. This field seems also to have been a greateemetery, as the remains of skelctons are fond in great numbers.

Pottery is found in great abnndance. It has, as a rule, been depos ited near the heads of the dead, but no ornaments or implements have been discovered with the remains. The frequent plowing of the field has destroyed many earthen ressels, the interments having been made quite near the surface. It is a noticeable fact that the pottery from these graves is of a character quite distinct from that of the mond. It is of the class of ware so common in this region.
(63129, 63122, 63150. Arrow-points, spear-points, and knives of chalcedony, jaspers, and quartz.
63132. Celt or chisel of black slate, $2 \frac{1}{2}$ inehes long, and $1 \frac{1}{4}$ wiole at the wider end.
63133. Celt of gray diorite. The blade is quite smooth; the upper part is ronghened. Length, 3 inches. Width, $1 \frac{1}{2}$ inches. Thickness, 1 inch.
6:3134. Celt of yellow limestone, $2 \frac{1}{2}$ inches $\operatorname{long}$, and $1 \frac{1}{2}$ inches wide.
63135. A two-edged celt of gray quartzite, $2 \frac{1}{2}$ inches long, and threefourths of an inch wide.


Fig. 152.
63136. Celt of yellowish-gray jasper, chipped, and afterwards partially smoothed by grinding. Four and one-half inches long, and $1 \frac{1}{2}$ inches wide.
(i:31:37. Celt very similar to the preceding.
6313s. Celt of dark-gray slate; edge nicely sharpened. Lower part smooth, upper part rough; 4 $\frac{1}{2}$ inches long, $1 \frac{1}{4}$ inehes wille, and nearly 1 inch thick.
03123. Fragment of a large celt, with conical apex.
63124. A hammer-stone.
63131. A pebble of coarse sandstone, resembling a celt in shape.
63127. A quartz pebble, probably used as a polishing-stone.
63139. A boat-shaped implement of speckled roleanic rock, 3 inches long, 1 inch wide, and three-fourths of an inch thick at the middle part.
63140. An implement of grayish-red sandstone similar to the above in size and shape. The ends are slightly squared.
63126. A small disk of gray quartzite, having a shallow circular depression in each face.
63128. A pendant of gray slate, somewhat pear-shaped in ontline, 12 inches in diameter, and one-cighth of an inch thick. Near the pointed end, a neat, biconical perforation has been made.
63121. An implement or ceremonial stone of ferrnginons slate, possibly a clay iron-stone, or limonite. It has a hatchet-like ontline, the blade being semicircnlar, and the upper part clongated and narrow. A large biconical perforation has been made near the center of the implement ; a smaller one, as if for suspension, at the npper end. It is $6 \frac{1}{4}$ inches long, $5 . \frac{1}{2}$ inches wide, and three-fourths of an ineh thick. Fig. 15:.

ARTICLES OF CLAY.
63113. A small reddish cnp or vase. The rim is low and wide and is ornamented with fonrears placed at regular intervals on the exterior surface. Two of these are pierced as if for the insertion of a string. Height, 3 inches. Width, 5 inches. Fig. 153.


Fig. 153.
63111. A small hottle-shaped rase. The surface has been painted red. Height, 4 inches. Width, $3 \frac{1}{2}$ inches. Fig. 154.


Fif. 154.
63091. A small globular rase, with low neek of medium width, which has an ornament consisting of a band of clay, slightly raised and indented with oblique lines. Kellowish-gray ware with dark stains. Height, 6 inches.
63108. A low bottle-sliaped rase, of yellowish ware, with flaring rim and somewhat flattenel body. Height, 5 inches; width 5 inehes. Fig. 155.


Fig. 155.
63098. A well-made bottle shaped vase, with low neck and globular body, somewhat conical abore. Color dark bromnish. $7 \frac{1}{2}$ inches in height. Shown in Fig. 156.


Fig. 156.
63090. Fragments of vases corresponding in characters to the preceding. One example has been painted red.
63110. A small bottle shaped vase of red ware. Height 6 inches, width $5_{2}^{\frac{1}{2}}$ inches.
63102. The body of a small bottle-shaped rase, much flattened, the outline being quite angular at the most expanded part. Yellowish-gray in color and without polish. There are indications that a desigu in red has ornamented the body. Width 4 inches.
63092. The borly of a small bottle-shaped rase, globular in form. Surface painted red and unusually well polished. Diameter $4 \frac{2}{2}$ inches.
63100. Neck aud upper part of body of a rase resembliug in form and color the example last deseribed.
63120. A handsome bottle-shaped vase with flariug lip. The neek widens towarl the base. The body is almost globular, being slightly pointed above, and expanded along the equatorial belt. The surface is only moderately smooth. The body is ornamented with a rery handsome design of incised lines, which consists of a scroll pattern, divided into four sections by perpendicular lines. The design covers the upper part of the body, the lower part being plain. Height, $9 \frac{1}{2}$ inches. Fig. 157.


Fig. 157.
63112. A bottle-shaped vessel of dark, mudely finished ware. The body is modeled to represent a fish, the mouth and eyes appearing on one side, and the tail upon the other. Width $3 \frac{1}{4}$ inches. Fig. 158.

```
3 ETH-31
```

63114, 63117. Two small ressels with globntar bodies, which have a curions resemblance to an ordinary tea-pot. A spont has, in each case, been added to the side of the body. Figs. 159 and 160 show these ressels on a seale of one-half.

63115. An oblong, shallow basin. Wide, tlat handles have been added to the rim at the ends of the ressel; one of these is pierced. Length 83 inches, width 4 inches, depth 2 inches. Color dark gray. Fig. 161.


Fig. 160.


Fig. 161.
$63103,63101,63169,63176,63116,63199,63095$. Plaiu bowls of ordinary composition and appearance. Fig. 162 is a good example. Diameter 9 inches.


Fig. I62.
63096. A handsome bowl of dark ware. The body is ornamented with an incised design, whieh consists of a somewhat discomnected running seroll. The bottom is flat. Diameter $S_{\frac{1}{4}}$ inches. Fig. 163.


Fig. 163.
63109. A bowl of dark porons ware, very nicely made. The rim is ornamented at one side with a grotesque head, representing some wild animal, probably a panther. The ornament on the opposite side takes the place of the tail of the animal. Diameter of bowl 8 inches. Fig. 164.
$630 \pm 8,63046$. Fragments of many vessels, chicfly of black porons ware, among which are a number of handles representing the heads of hirds and quadrnpeds, also the fragments of a vessel which restored give the vase shown in Fig. 165. The designs are red on a yellowish ground. Diameter $5 \frac{1}{2}$ inches.

6310 - A large vase modeled to reuresent a grotesque hmman figure. It is paiuted with designs in red and white, the ground color


Fig 164.
being a reddish yellow. The figure has a kneeling posture. The hands are upraised against the shoulders, with palms


Fig. 165.
turned forward. Height, $10 \frac{1}{2}$ inches; width of shonlders, 8 inches. Fig. 166.

63090, 63054, 63095. Fragments of pottery hariug incised designs, similar to the dark ware already described. A few of these frag. ments have been worked into rule disks.


Fig. 166.
OBJECTS OF METAL.
62048. A thin plate of copper, probably intended for a pendent orna ment, as two perforations have been made at one end. It is, rectangular in outline, and has suffered much from corrosion.
63113. A fragment of galena ore.

## ANIMAL SIBSTANCES.

63142. Fragment of a needle-like perforator. A conical perforation has beeu made toward the larger end. The point has been lost.
63143. A cubical fragment of bone, the sides of which have been squared by euttiug or grinding.

## COLLECTION FIROM MONROE COUNTY, ARKANSAS.

MOUND AT LAWRENCEVILLE.
On the firm of Daniel Thompson, near Lawrenceville, the remains of ancient habitations are of frequent ocenrrence.

The fiefds have been cultivated for many years. In one case a bed of clay 8 inches thick, and covering an area of many hundred feet, was discovered near the snrface; this is supposed to be the remains of the roof of a honse. Associated with it were a number of objects, among which were five very interesting specimens of pottery.

## ARTICLES OF CLAY.

63151. A large bottle-shaped vase of red and white ware. The upper part of the neck is lost. The body is encircled by an ornamental design in white, upon a red gronnd, which resembles a molely drawn Greek fret. The diameter of the body is 9 inches; the height has been 11 or 12 inches.


Fig. 167.
63152. A fine bottle-shaped vase, resembling the preceding; very handsome, and in a remarkably good state of preservation. It also has a design in red and white. The original color of the
vase has been a dull reddish yellow. The neek is red, the body is ornamented with four red and four white figures, which extend from the neek to the base of the vessel. These belts of color are separated by bands of the gronndcolor of the ressel. Height 12 inches. Fig. 167.
63153. A small rude enp of gray clay, withont deeoration. Diameter 4 inches.
63154. An egg-shaped ressel, made in imitation of a gonrd. The month of this ressel is a small round opening on the side, near the pointed end. The base is somewhat flattened. Height 5 inches. Fig. 168.


Fig. 168.
63155. A mimnte enp, $1 \frac{1}{2}$ inches in diameter. The rim is encireled by a series of rude notehes.

## MOUNDS AT [NDIAN BAY.

A large monud 30 feet high and 250 feet long is located on the farm of Mr. A. Spencer, near Indian Bay. Our collector, however, could not obtain permission to examine it. At the edge of Iudian Bay corporation is another large mound, used as a cemetery by the white residents. In a field uear by were two small mounds about 3 feet in height and 30 feet in circumference. In one of these, two feet beueath the snrface, a skeleton was found, near the head of whieh three earthen ressels had been placed. From the other small monnd a very interesting collection of pottery was proeured, mueh of whicl was in a fragmentary condition.

From these fragments a number of vessels have been reconstructed. These are given in the following list:

## ABTICLES OF CLAY.

63046. A hottle-shaped vase of dark, grayish-brown ware. The neek is quite high and slemler, and the body globular-a little elongated abore. The rim and collar are ornamented with incised notches. Height, 10 inelies.
63047. A large symmetrically shaped vase or jug oí a grayish yellow color. Restored lrom fragments. The body of the jug is globular, the neck slightly flaring, the rim being notchet on the outer edge. The ware is coarse and rongh. Height, 102 inches.
$63156,63163,63164,63173,63174$. Fragments of ressels similar to that last described.
63048. A low wide-monthed vase of dark gray compact ware. The neck is decorated by two series of lines, which eross and recross the neck in such a mamer as to form diamond-shaped figures. They are deeply incised. The rim is notehed, ant has three small noles on the outer margin. The body is covered witlı an ornament protnced by pinching the clay while in a soft state. Height, $6 \frac{1}{2}$ inches; diameter, 9 inches.


Fig. 169.
63159. A very large wide-monthed vase, the body of which is conical below. The rim and neek are ornamented in a manner very similar to the one last described. Height, $\mathbf{1 6}$ inches; diameter, 19 inches. Fig. 169.
$63025,63029,63030,63164,63166,63167$. Fragments of vessels similar to the one last described.
63192, 63195, 63196. Three small rsesels restored from fragments; two of these resemble deep bowls with flaring rims. The lip is notched on the onter margin. The other has an upright, slightly constricted neek, ornamented with a band of rude indentations. Diameter, $6 \frac{3}{4}$ inches. Fig. 170.
63161. A shallow bowl of yellowish gray ware, ormamented with irregular notches about the rim. Diameter, 9 inches.
$63197,63162,63185$. Bowls similar to the preceding.
$63194,63160,63168$. Large bowls with flaring rims.
63176. A very deep bowl. Fragmentary.
63159. A large, handled eup or ladle of gellowish clay. The bowl part is 6 inches in diameter. The extremity of the handle has been lost. Fig. 171.


Fig. 170.
$63157,63,158$. Large portions of the bodies of two vessels of unnsual shape.


Fig. 171.

## COLLECIION FROM OHIO.

## FROM MOUNDS AND FIELDS.

During the year 1881 small collections of stone implements and articles of pottery were forwarded to the Burean by Dr. Wills De Haas.

Most of these are, however, withont record, excepting of the most general character.

The majority appear to have been obtained from Warren Connty, at or in the ricinity of Fort Ancient.

## ARTICLES OF STONE.

65613. Spear points or knives of gray chalcedony. Thiee are very sharply pointed, and have probably been used as perforators. A rerage width 1 inch, arerage lengtlı $2 \frac{1}{2}$ inches.
65614. Lot of rudely chipped arrow or spear points of grayish chalcedony. Notches quite shallow.
65615. A lot of medium-sized, rather heary arrow points of gray chalcedony.
65616. Lot of neatly shaped, deeply notched spear and arrow points, averaging abont 1 inch in width, and ranging from 2 to 3 inches in length. Made of gray chalcedony.
65617. Lot of arrow points, spear points, and knives of varions sizes and slapes. Material same as the preceding.
65618. Lot of rudely finished knives and spear points, mostly wide and heary, some being almost circular in outline. Material same as the preceding.
65619. Lot of large knives and spear points of variously colored chalcedony.
65620. Knives and flakes of chalcedony.
6572.2. Large lot of long, triangular knives or spear points, made of gray and reddish mottled chalcedony. They average about $2 \frac{1}{2}$ inches in length, and $1 \frac{1}{2}$ in width.
65621. Large lot of flakes and fragments of gray and dark chalcedony or flint, left from the manufacture of implements.
$65434-65451$. Celts and fragments of celts of greatly varied size and shape, made of a grayislı, speckled rock, resembling diorite.
65429-65430, 65431. Medinm-sized, grooved axes of ordinary forms. One is made of diorite (?), the others of gray rock resembling sandstone.
65426-65428. Very large grooved axes of greenish diorite(?). The largest is $9 \frac{1}{2}$ inches long, 5 inches wide, and 3 inches thick.
65622. Short heavy pestles with broad bases and conical tops, made of gray diorite or sandstone. Diameter of bases from $2 \frac{1}{2}$ to 4 iuches. Height from 3 to 6 inches.
65623. A loug, heavy, cylindrical pestle.

65464-6549\%. Round, oblong, and flattish pebbles, comprisiug several varieties of stoue, used as hammer-stones, nut-crackers, \&c., varying from 1 to 6 inches in diameter. The sides of many are flattened or hollowed ont by use.
65463. Fragment of cmp stone, made of coarse sandstone. On one side two cavities remain; on the other, three. These are about $1 \frac{1}{4}$ inches in diameter, and about one-half an iuch in depth.
65449. A grooved stone inplement, made from a large pebble of coarse gray stoue. The groove about the middle has evidently been made for attaching a handle. The upper lobe has been considerably reduced by picking, and the base, which wonld correspond to the edge of an ax, has been worked quite flat. Length of lower part $4 \frac{1}{2}$ inches. Height of implement 3 inches.
articles of clat.
65484. A number of small fragments of pottery of ordinary rarieties.

## COLLECTION FROM OREGON.

## ARTICLES OF STONE.

The following articles were forwarded to the Burean from John Day River, Oregon, by Captain Beudire:
64102-64113. Arrow-points, knives, and flakes of obsidian, agate, ete., from Indian graves on John Day River.
64125-64139. Fragments of stone implements, including celts, cylindri. cal pestles, ete., mostly of compact, eruptive rock.
64127. Pipe of gray sandstone, slaped very mueh like an ordinary straight eigarholder; 3 inches long, and 1 inch in diameter at the larger end. Obtained from an Indian grave on John Day River.
64126. Fragment of a pipe-stem (\%) made of soft blaek stone, apparently a chloritie slate. A very neat, ornamental design has been engraved upon the cylindrieal stem.
64129. Fragment of an ornament earved from greenish sandstone.

## COLLECTIONS FROM KENTUCKY.

A small collection of ancient relics, obtained from caves in the ricinity of Mammotl Cave, Kentucky, was presented to the Burean by Mr. Francis Klett.

With this collection were a number of articles of stone, some of which were probably obtained from the fields of the same region.
87276. Fragments of gourds.


Fig. 172.
87277. Two very beautifully knit or plaited saudals. The fiber used has probably been obtained from the inner bark of trees. The combination of threads is shown in Fig. 172. A small piece of matting from the same place is shown in Fig. 173.


Fig. 173.
27278. Two bundles of eharred sticks and reeds.

27280-27283. Spearheads of ehert or flint.
27284. Stone knife.
27285. Flake kuife.

272S6. Small spear heads.
27287. Fliut knife.
27288. Arrow heads.

27289 . Same; small and thin.
$27290-27293$. Stoue awls or perforators.
27294. Leadeu bullet.

27295 . P'ieces of pottery.

## COLLECTIONS FROM MISSOURI.

## ARTICLES OF Clay.

A fine collection of earthen ressels was purchased for the Bureau from Mr. J. T. Couden, of Morrow, Ohio, through the agency of Dr. Wills De Haas.

Few facts in regard to them have been furnisherl, ercepting that they were taken from graves in the vicinity of Charleston, Mo. They resemble so closely the well-known types of Missomi pottery that it is safe to conclude that they were obtained from ancient graves and monnds in the locality named.

The numerous cuts accompanying this section are intended for subsequent use in a general treatise on the works of the Moundbuilders.


Fig. 174.
This ware is generally of the dark gray or black variety, handsmoothed, or but slightly polished, and tempered with pulverized shells.

A few examples are yellowish-red in color. Some of these have been
painted red or have been ornamented with designs in red. In one case white paint has been used.

The prevailing form is a bottle-shaped vessel, the neek being frequently high and slender, and the body globular or subglobular. The hase is nearly always slightly flattened.
605.no. An eftigy rase of unnsual form. The body is subrectangular. The upper part or neck is lost, but has doubtless been mod. eled to represent the human figure, as the feet remain attached to the shonlder of the ressel. The color is jellowish gray. Diameter, 5 inches. Fig. 1it.


FIG. 175.
030003. An effigy vase of the dark ware. The body is globular. A kneeling human fignre forms the neek. The month of the vessel oeeurs at the baek of the heat-a rinle in this class of vessels. Is is finely made and symmetrical. 93 inches high and 7 inches in diameter. Fig. 175.
65595. Effigy vase representing a kneeling or squatting human figure, moderately well modeled. The exterior surface is painted red. Height, 7 inches; diameter, 5 inches. The locality is not known with certainty.
6560t-65607, 65611, 65612. Effigy rases of human figures. Sizes, medium to small. The body below the waist is hemispherical, and the legs are not indicated. Fig. 176.


Fig. 176.
65597. Effigy vase, representing au owl. The body is globular. The wings are indicated at the sides, and the legs and tail serre as a tripod when the ressel is placed in an upright position. The head is quite grotesquc. This is a usual form in the Middle Mississippi district. Height, $S$ inehes; width, $5 \frac{1}{2}$ inches.
6560s. Small example, resembling the preceding.
65601, 65596. Vases with globular borlies; the necks represent an owl's head. Size, medinm.
65605 . A small rase similar to the abore, but having a human head.
65558 . A minute ressel modeled to represent a bird, the opening or


Fig. 177.
wouth being ou the nnder side of the body; length, 2 inches. Fig. 17\%.

3 ETH——32

65599, 65602, 6.764, (bin610. Bottle-shaped vases, with globular or flattish bodies and grotesque tops. The romuded heads are armed with a number of nodes or horms, but no features are shown. The largest is 7 inches in width by 7 in height. Fig. 178


FIg. $17 \%$.
65598. Similar rase of medium size. The tol is modeled to represent the eurved stem and neek of a gourd. Fig. 179. Height 7 inches.


Fig. 179.
65600. Vase similar to the above. The top representing a gourd with short conical neek. Fonr lines are drawn from the stem down the sides whieh represent the natural markings of the gourd. Height, $5 \frac{1}{2}$ inches; diameter, $5 \frac{1}{2}$ inches.


Fig. 180.
6.5555. A two-storied ressel, the lower part being a eup of flatened globular form. The upper part is similar in size and shape, hut is modeled to represent a univalve shell, the apex being represented by a large node surrounded by six smaller nodes, and the hase or spine by a graceful extension of the rim. The groose or depression that encireles the vessel between the mpper and lower parts of the body is spaned by two minnte handles. Height, 3 inches; width, $4 \frac{1}{2}$. Fig. 180.


Ftg, 181.

65543, (6.5.51, (6.552, 65554, 6.5073 . Small bowls or cups, mate in imitation of shell ressels, the noded apex occurring at one side. and the more or less pointed beak at the opposite side Fig. 181. Another similar specimen with hemispherical body is given in Fig. 189. Length, 6 inches.


Fig. 182.
65542, 65545, 65550. Small rases with wide mouths, the rim and shonlders of which have the heads and extremities of frogs, modeled in relief. Fig. 183. Diameter, 6 inches.


Fig. 183.
65539, 65541, 65544, 65546. Low, wide-monthed vases or bowls, modeled about the rim to represent simfish. A vertical view is given in Fig. 184. 5 inches in length.
6557!. A small bowl, the rim of which is embellished on one side with the head of a panther, on the other side a dattish projection which resembles a tail.

65580 . A small bowl, haring upon the rim a buman head, the face of which is tumed inward. On the opposite side is the usual flattish projection. Fig. 18j. Diameter of bowl 5 inches.


Fig. $1 \times 4$.
65578. Small bowl, the rim of which is embellished with the head of a fox or molf; at the opposite side is the usual tail.


Fig. 185.
$65576,65575,65581,65585$. Bowls of various sizes, the rims of which are ornamented with the heads and tails of birds. No. 65576 is an uusually fine example. Besides the features described it has beew further embellisherl by four incised lines which encircle the rim, forming a loop on the opposite sides as seeu in Fig. 186. Bowl 9 inches in diameter.
65553. Small bonl, the rim of which has been embellished by four pairs of nodes. Fig. 187. Diameter, 6 inches.
05.27. A small glohular enp of dark ware which las four large nodes abont the rim. Between these on the sides of the ressel, four ornamental figures have been painted in red, these consist of an inner cirtl: ocenpied by a cross, and an exterior cirele of rays or seallops. Height, $2 \frac{1}{2}$ inches; width, $3 \frac{1}{2}$ inches.

The rim has been perforated for the purpose of suspension. Fig. 185.


Fig. 186,


Fig. 187.


Fig. 188.
$65487,65512,65514,65519,65521,65523,65525,65531$. Bottle-shaped vases. The bodies are generally globnlar. A few are conical above, while others are much compressed vertically. Some are slightly ridged about the greatest circumference, while all are slightly flattened on the bottom. The necks are slenker and long, being about equal to the body in height. They are generally narrowest in the middle, expanding trumpet-like toward the montl, and widening more or less abruptly toward the shonlder below. In a few cases a ridge or collar encircles the base of the neek. The exterior surface is generally quite smooth, but never polished, although a polishing implement seems to have been used.

The largest is 9 inches in height and 7 inches in diameter. No. 65501 has a rery tastefnl incised design, encireling the shonlder as shown in Fig. 189. Diameter 6 $\frac{1}{2}$ iuches.


Fig. 189.
65520. Vase similar to the above in form, but with the addition of a base or stand, 1 inch high and 3 inches in diameter at the base.
65486. Same. with the base divided into three parts, forming a kind of tripod, the legs being flat. Fig. 190. Height, 9 inches.
$65513,65526,65530,65532,65539$. Bottle or jug shapel rases, resembling the preceding, but having wide, short necks. Fig. 191 ilhstrates a typical form. Height, $4 \frac{1}{4}$ inches.
65485. A vase similar to the above, but of jellowish gray mare, decorated with a design in broad red and white lines. Height, 6 inches; width, 6 inches. Height of neck, 2 inches; width, 3 inches.
65538. Similar to the above in shape, but with flattish body, and peculiar in having two small handles or ears at the base of the neck. Fig. 192. Diameter, 5 inches.
$65548,65501,65562,65564,65569$. Small cups, with low, wide necks, and globutar or subglobular bodies, having two handles or ears which commect the lip with the shoulder.


Fig. 190.


Fig. 191
65573. A cup like the above, with four handles.
$65563,65565,65568$. Small cups similar to the preceding, but having a rariety of indented ornaments about the shoulder and upper part of the body; these ormaments consist of wite rertieal lines, or of encireling scalloped lines. Figs. 193 and 194. Djameter of each, $4 \frac{1}{2}$ inches.


Fig. 192.


Fig. 193.


1IG. 104.
63570. Has six norles abont the circumference, and a sealloped figure of three incised lines cnoircling the ressel above then. The handles lave oblique incised lines upun the onter surface.
65588 , 65590. Bowls with scalloped rims. The largest is 9 inches in diameter and 3 inches in lieight. Fig. 195.


Fig. 195.
$65574,65575,65586,65557,65591$, 65593. Plain bowls, of various sizes, and somewhat raried slapes. Figs. 196 and 197. Inawn one-half the real size.


Fig. 197.

## COLLECTIONS FROM OTHER STATES.

65447. Stone implement of unusual form. It may be described as a Hattish cylinder tapering slightly toward the ends, which are truncated. In oue end a hole has been bored one half an inch in diameter and three-fourths of an inch deep. A narrow, shallow groove encircles the implement near the middle. The material is a grayish slate. The form is symmetrical and the surface quite smooth.
Found upon the surface in Hamilton Comnty, Indiana.
65448. A copper knife or poinard, with bent point. Found by Edward Daniels while digging a cellar at Ripon, Wis.
65449. A handsome vase, shaped like a bowl with incurved rim, obtained from a mound on the farm of A. C. Zachary, in Morgan County, Georgia. The incurred surface abore has an ornamental design of incised lines resembling the Greek fret. The most expanded portion of the ressel is encircled by a raised band, which is neatly ornamented with notches. The lower part of the body is shaped like a bowl with a flattened base. Diameter $9 \frac{1}{2}$ inches. Presented by J.C.C. Blackburn.

## COLLECTION FROM PERU, SOUTH AMCERICA.

A number of interesting articles mere presented by Mr. G. H. Hurlbut. These were obtained from ancient giares in the vicinity of Lima by an agent sent out for the purpose hyr. Hurlbut while the city was inrested by the Chilian army. Details of their occurrence were consequently not obtained.

A study of this collection leads to the belief that all the specimens are from one interment, that is, the grare of a single individual. The finct that there is but one sknll, one mask-like idol, and but a small number of articles of each of the classes represented, tends to confirm this supposition.
6537. Sknll retaining the scalp and hair. The latter is long, coarse, and black. The lower jaw is missing.
65376. A mask-like wooden figure, the face being somewhat above lifesize. Fig. 198. It is of a form not unusual in Perusian graves. The features are fairly well shown. The eyes are tormed by excavating oval depressions and setting in pieces of shell. First, oval pieces of white clam-shell are inserted, which represent the whites of the eye; upon these small circular bits of dark shell are cemented, representing the pupils. Locks of hair have been set in beneath the shell, the ends of which project, forming the lashes of the eye.

The back head is formed by a neatly-ronnded bundle of leaves, held in place by a net-work of coarse cord. The edges of the woorlen mask are perforated in several places; by means of these the back head, some long locks of fine flax which serve as hair, and a number of other articles have been attached.

Upon the crown a large bunch of brilliantly colored feath. ers has been fixed; behind this, extending across the top of the head, is a long ponch of coarso white cloth in which a great number of articles have been placed-little packages of beans and seeds, rolls of cloth of different colors aud textures, minute buudles of wool aud flax and cords, bits of copper and earth carefully wrapped in husks, bundles of feathers, etc.

Encircling the crown are long, narrow bands or sashes, one of which is white, the others haring figures woven in brilliant colors. The ends of these hang down at the sides of the face. Attached to one side of the mask by long stout cords is a pouch of coarse cotton cloth resembling a tobacco-bag. It is about 6 inches square. Attached to the lower edge of this is a fringe of long, heary cords. To the opposite side a
net is suspended, in whieh had been placed inmmerable articles, probably intended for the use of the dead - a sling, made of cords, rery skillfully plaited; bundles of cord and


Fig. 198.
flax; small nets containing beans, seeds, and other articles; copper fish-hooks, still attached to the lines, which are wonnd about bits of cornstalk or caue; neatly-made sinkers wrapped in corn-husks, together with a variety of other artieles.

65350,65382 . Sinkers of gray slate, shaped somewhat like a cigar, one or more groves partially encireling the euds. These were carefully wrapped in corn-husks. Fig. 199.
65383 , 65384. Two copper fish-hooks and the cords to which they are attacherl. The hooks pierce the eurls of the bit of cornstalk abont which the cord is wound. Fig. 200.

$\frac{1}{1}$
Fig. 190.

$\frac{1}{2}$
Fig. 200.
65387. A sling, 4 feet long. The extremities consist of a single cord, the midlle part of 4 heary, compactly-plaited cords.
65359. Head-hands of coarse fabrication, having figures of red, yellow and white.
65391. A large piece of cloth, possibly a mantle, made ly piecing together fragments of highly-colored eloths.
65390. A large piece of ganze-like white cottou fabric.

65385 , 65386. Small nets containing a variety of articles.
65386. A head ornament of red feathers, skillfnlly attached to cords.

