AMERICAN SCHOOL OF PREHISTORIC RESEARCH IN EUROPE

EXCAVATIONS AND RESEARCHES, 1924

By GEORGE GRANT MACCURDY
Director

MUCH has recently appeared in the press concerning the work of the American School of Prehistoric Research in Europe. Before giving a brief account of what was achieved during the summer term just closed, a word about the new organization itself may not be out of place. As originally conceived by Drs. Charles Peabody and Henri Martin, the activities of the School were to be limited to France with an opportunity for American students to dig at the Mousterian rock shelter of La Quina and perhaps spend the winter months in Paris, which affords unusual facilities for prehistoric studies.

The present writer was called in to help organize the School and was elected its first Director. The first year opened July 1, 1921. Before its close the Director became convinced that the scope of the School should be broadened so as to include the whole of prehistory from the Eolithic Period to the Iron Age inclusive, and other countries as well as France. For the next two years the Directors were Dr. Peabody and Dr. A. Hrdlicka respectively. It was not, however, until the present year that the reorganization became effective.

The new Director was given *carte blanche* to develop and carry out a program; he was also left single handed to provide funds for the year's work. A prospectus was followed by a campaign for funds. A dozen students were enrolled—some on full time, others on part time—and the work of the summer term began auspiciously in London on July 1st last. Between that date and the close of the summer term toward the end of September, the students followed a well-balanced and carefully prepared program. They studied in 23 museums; visited and inspected 55 prehistoric sites representing every phase of prehistory from the Pliocene relic-bearing beds of East Anglia to Swiss tumuli of the Iron Age inclusive; attended 27 lectures by the Director and 28 by fourteen specialists * of commanding ability; and excavated for 23 days at two important stations. The first four weeks of the term were devoted to southern England, the megalithic monuments of Brittany, the relic-bearing terraces of the Somme Valley, and the Paris museums.

EXCAVATIONS AT CASTEL MERLE, LEASED BY ARCHAEOLOGICAL SOCIETY OF WASHINGTON

From Paris the School went direct to the Dordogne where, thanks to the cooperation of President John C. Merriam of the Carnegie Institution of Washington and to the generosity of Colonel William Eric Fowler, the

* The School is particularly indebted for valuable services to the following: Dr. F. A. Bather, Mr. and Mrs. B. H. Cunnington, Miss Dorothy Garrod, Col. Hawley, Dr. A. G. Ince, Sir Arthur Keith, Messrs. Guy Maynard, J. Reid Moir, W. J. Perry, Reginald A. Smith, Stevens, and Sir Arthur Smith Woodward of England; Dr. F. Arcelin, the Abbé H. Breuil, Prof. Charles Depéret, Mons. H. Hubert, Dr. Lucien Mayet, and Mons. Z. Le Rouzic of France; Mons. F. Blanc, Prof. H. Lehmann, Prof. Otto Schlaginhaufen, and Dr. D. Viollier of Switzerland (Zurich).

FIG. 1. AMERICANS DIGGING AT SOLUTRÉ (SAÔNE-ET-LOIRE) AUGUST, 1924, WHERE THE SCHOOL FOUND SIX HUMAN SKELETONS DATING FROM THE STONE AGE AND BRONZE AGE.

Archaeological Society of Washington now has a paid-up lease good for ten more years on a productive rock shelter and cave; the Society has granted to the School the sole privilege of excavating this site. During the past summer enough digging was done to reveal three relic-bearing horizons, all of Paleolithic age, two representing the Mousterian culture left by the Neanderthal race and one the Aurignacian culture left by an early Cro-Magnon race. Flint implements of various types were found by the hundred; but the rarest specimen was a perfect Mousterian scraper of magnificent pale yellow rock crystal. The station, which has been christened "Castel-Merle," is beautifully situated overlooking the Vézère river—secluded and at the same time easily accessible.

EXCAVATIONS AT SOLUTRÉ

The other site where the School carried on excavations was none other than the classic station of Solutré near Mâcon (Saône-et-Loire); we went by invitation of Professor Depéret and Drs. Mayet and Arcelin of Lyons. Solutré has three relic-bearing horizons of Upper Paleolithic age: Aurignacian, Solutrean, and Magdalenian. The site, which comprises some 2.5 acres, was discovered in 1867 and has been excavated intermittently since that time. A number of human skeletons have been found there, perhaps the most important being the three of Aurignacian age discovered by Depéret, Mayet, and Arcelin during the summer of 1923. (Fig. 1.)

The spot set aside for the School was the highest portion of the area covered by the station. It adjoined a trench sunk by the Abbé Breuil and Dr. F. Arcelin eighteen years ago, where they found cultural remains including an example of cave art but no human skeletal remains. Our school was especially fortunate in finding a human skeleton the first day, and before the end of a week had encountered five others. It is too early to establish definitely the age of the various skeletons. Solutré is admirably adapted by nature for a prehistoric camp site and place of burial; it is high and dry with a spring nearby and protected on the north by the towering rock of Solutré. The Aurignacians were the first to leave their dead here; later races did likewise. The problem is to decide which are the intrusive burials.

The skeletons uncovered by the School were all near the surface—the deepest being not much over two feet; but depth alone is no absolute criterion of age. The spot where we found the skeletons has been subject to erosion for thousands of years. On the contrary the adjoining depression in which the three skeletons were found in 1923 has been subject to fill for a like period of time; this fact would easily account for the additional depth of four feet at which they were found.

The first skeleton (that of a female) found by the School was a burial similar in every detail to the Aurig-

nacian burials discovered last year. It lay full-length, resting on the back, and with a flagstone set up at each side of the head. Some red ocher was found near the right hand. Bones of the horse and reindeer were picked up in fairly close association with the skeleton. At the same level, but somewhat removed from the skeleton, Paleolithic flints were found. There was nothing to suggest an intrusive burial; however, only after detailed studies have been made, can one say definitely whether or not this is a Cro-Magnon skeleton. (Fig. 2.)

The other five skeletons are apparently of later date; in fact three of them certainly are. None of them had flagstones at the head. The second skeleton found is that of an old man. Bones of the horse, reindeer, etc., were found in fairly close contact with it, also a flint chip, but no finished implements. The skeleton is practically intact and is particularly interesting on account of the pathological condition at the upper (proximal) end of the left fibula or small lower-leg bone. Accident or disease had carried away the upper end and the shaft of the fibula had fused with that of the tibia some four centimeters below what would have been the normal epiphysial contact.

Find number 3 was a fragmentary cranium only; a Solutrean laurel leaf flint point was found with it. Skeleton number 4 is an adult female and with it were the bones of a young child. A bronze earring was picked up near this skeleton by one of the workmen; the skeleton probably dates from the Bronze Age. Skeleton number 5 is that of a very old man of small size; with it was found a fragment of sheet bronze. The last skeleton discovered is that of a child some six years old. In uncovering this skeleton, one of our

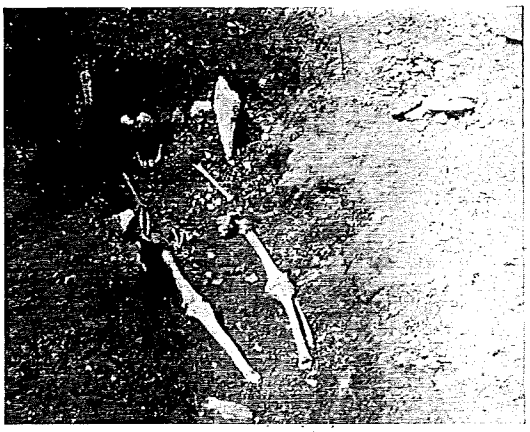

FIG. 2. SKELETON NO. 1, FOUND BY DR. MACCURDY AT SOLUTRÉ, AUGUST, 1924, NOW IN U. S. NATIONAL MUSEUM.

students found a bronze buckle near the head of the left femur. Judging from the style and workmanship of this buckle, the burial probably dates from about 300 to 400 A. D. (Fig. 3.)

One is impressed by the great preponderance of horse bones; not only in the celebrated horse magma at the top of the Aurignacian desposit but also at other levels. The three pits sunk by the School were outside the limits of the horse magma; but bones and teeth of the horse were exceedingly plentiful and comprised about 99 per cent of the faunal remains. The leg bones predominate. Many horse teeth were found; for every incisor or upper molar encountered there were literally scores of lower molars. One might assume from such a marked discrepancy that the head of the horse had been dismembered in the plain below and the upper jaw, including brain case, left where the horse fell, but the reason for such action would be difficult to explain.

Very few cultural remains were found in the pits of the School in addition to the metal objects already recorded; they include four fragments of Solutrean laurel-leaf points, two gravers, a cleaver, and a scraper. The interesting point about the last two is

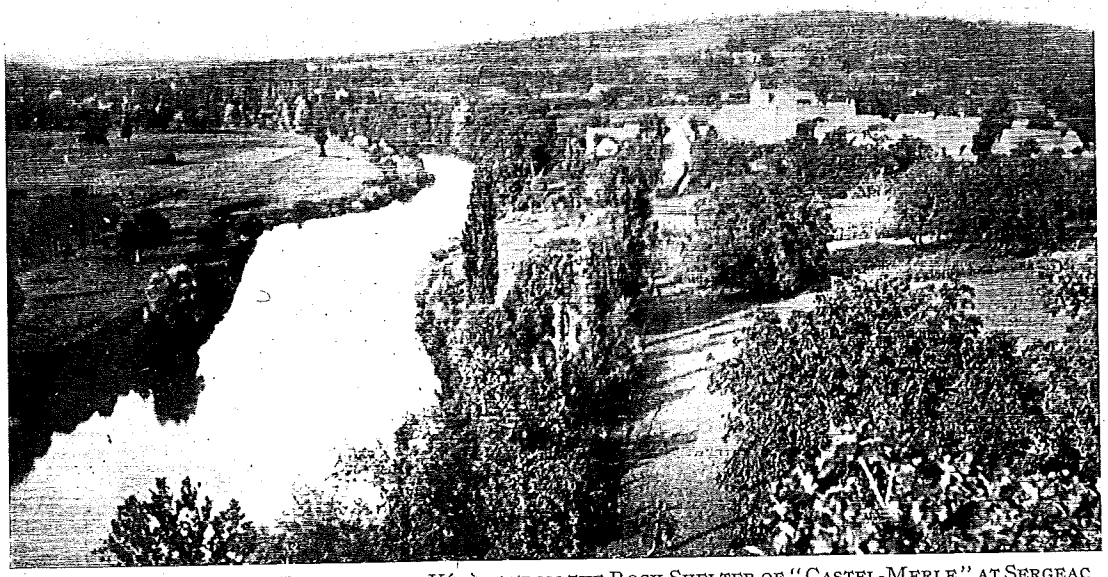

FIG 4. LOOKING UP THE VALLEY OF THE VÉZÈRE FROM THE ROCK SHELTER OF "CASTEL-MERLE" AT SERGEAC NEAR SAINT LÉON-SUR-VÉZÈRE (DORDOGNE). THIS ROCK SHELTER HAS BEEN LEASED FOR THE SCHOOL BY THE ARCHEOLOGICAL SOCIETY OF WASHINGTON.

that both are typical Mousterian implements. The cleaver was encountered very near skeleton number 2 and at the same level, while the flint scraper came from pit number 3 at a depth of about 60 cm. (2 ft.).

After leaving Solutré, the School went to Lyons and saw the prehistoric collections in two museums under the guidance of Professor Depéret, who also conducted the School on three field excursions to the moraines and terraces of the last three glacial epochs—Mindelian, Rissian, and Würmian.

RESEARCHES IN SWITZERLAND

The last weeks of the summer term were spent in Switzerland where the program comprised: (1) a study of glacial phenomena, including the overdeepened valley of the Lütschine and the moraines of existing glaciers; (2) the collections in the National Museum and the Laboratory of Anthropology at the University—both in Zurich; and (3) inspecting three tumuli of the early Iron Age uncovered for the occasion by Director Lehmann of the National Museum and his staff.

Eight of the students were connected with college faculties. Two are remaining for the entire year to pursue their studies in Paris and London.

In addition to serving its regular students, the School has proved its ability to serve others incidentally. Dr. J. E. Gignoux joined us on our visits to the Paris museums and later saw the principal stations in the Vézère valley. While in the Dordogne, Mrs. MacCurdy and the Director took turns at serving as guide to a party of eleven from the Archaeological Society of Washington, led by Professor Carroll, and five from Connecticut. Later, at Solutré, we were joined by Raymond E. Merwin; and on leaving Soultré, by Dr. Henry H. Covell who

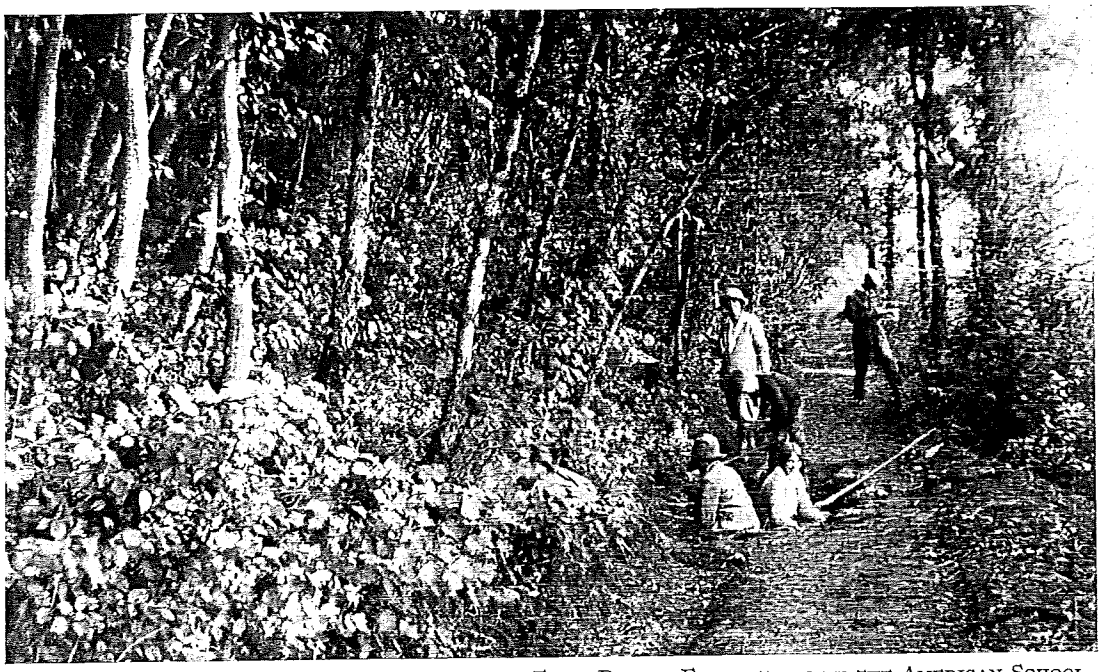

FIG. 5. ROCK SHELTER OF CASTEL-MERLE ON THE FIRST DAY OF EXCAVATIONS BY THE AMERICAN SCHOOL OF PREHISTORIC RESEARCH IN EUROPE.

remained with us for two weeks. After our arrival in Switzerland our party was joined by Judge Edward Lindsey, one of the School's benefactors, and Mrs. Lindsey. There have already been requests from some twenty persons for similar service during the coming year.

DISCOVERIES AT CASTEL-MERLE

The rock shelter of Castel-Merle at Sergeac is first mentioned by Reverdit in 1878.* In describing the locality he says: "Les premiers rochers faisant directement face à Sergeac sont ceux désignés sous le nom de Castel-Merle. Sous ces rochers, existe un vaste et magnifique abri. Au pied de cet abri, les silex sont nombreux dans les terres cultivées. J'ai aujourd'hui acquis la certitude que l'abri de Castel-Merle a été une station. De légères fouilles m'ont permis de trouver les silex en place. Parmi eux deux hachettes (cleavers), deux pointes, des racloirs et autres, tous du type du Moustier."

Castel-Merle is one of nine Paleolithic stations forming a compact group near the village of Sergeac. The rock of Castel-Merle rises precipitously near the left bank of the Vézère about 1.5 kilometers (1 mile) up the river from St. Léon-sur-Vézère. The rock shelter, leased for the American School of Prehistoric Research in Europe by the Archaeological Society of Washington, is under the north face of the rock of Castel-Merle and commands an extensive view up the Vézère valley in the direction of Montignac (Fig. 4).

The rock is flanked on the southwest by the little valley of *ruisseau des Roches*. Both sides of this valley are bounded by rocky escarpments under shelter of which the Paleolithic hunters lived at the contiguous sites known as La Souquette, Labatut, Assieur, Delage,

* Stations et traces des temps préhistoriques dans le canton de Montignac-sur-Vézère. Bull. Soc. historique et archéologique du Périgord, V, 407.

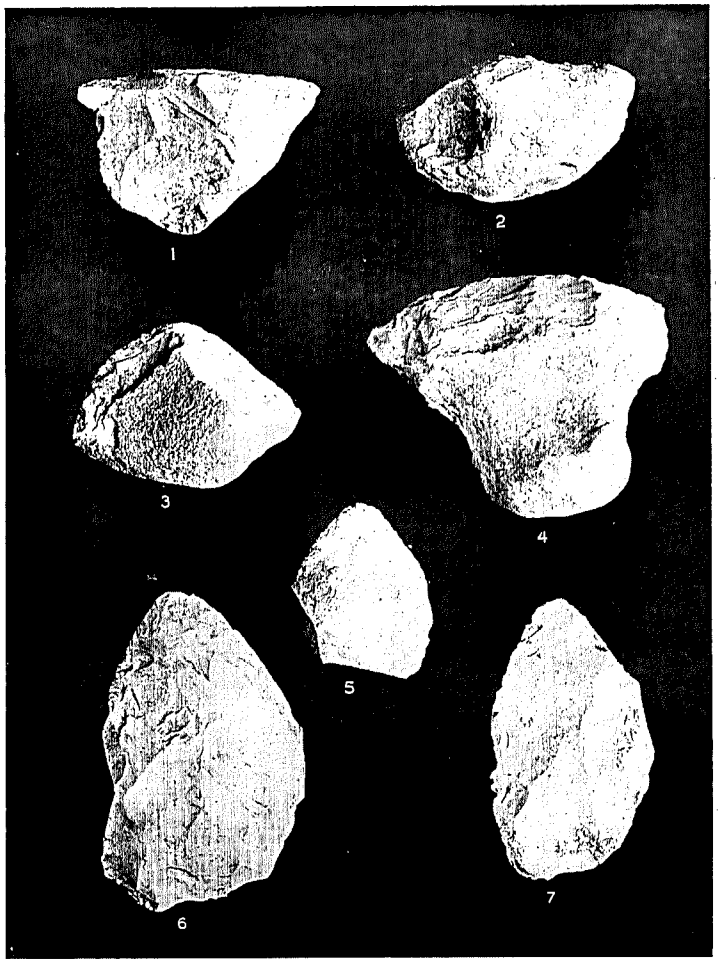

FIG. 7.

FIG. 8.

MOUSTERIAN STONE IMPLEMENTS FOUND IN THE EXCAVATIONS OF THE ROCK SHELTER OF CASTEL-MERLE.

FLINT SCRAPERS (1, 5, 7) AND A CLEAVER (6); NOTE THE NODULAR CRUST IN 2, 3, 4, AND THE STEEPLY RETOUCHED EDGES IN 1, 2.

SAME AS THE PRECEDING WITH NOS. 5, 6, 7 REVERSED. ORIGINALS IN U. S. NATIONAL MUSEUM.

FIG. 9. SCRAPER OF TOPAZ FROM THE ROCK SHELTER OF CASTEL-MERLE (DORDOGNE), REGARDED AS ONE OF THE MOST IMPORTANT SPECIMENS OF THE MOUSTERIAN EPOCH.

Castanet, Blanchard No. 1, etc., Blanchard No. 2 is just around the projecting point of the rock and to the north of Blanchard No. 1, and the rock shelter of Castel-Merle is immediately to the east of Blanchard No. 2, where Peyrony found three culture levels—two Mousterian and one Aurignacian.

The site leased is a talus slope including a cave at the east end; it reaches from the rock to the cultivated field below, and has a width of about 45 meters (148 ft.); and is at an elevation of some 40 to 50 meters (131 to 164 ft.) above the Vézère river. The work of the School here during the past summer reveals the same culture levels as those found by Peyrony at Blanchard No. 2, viz., Middle and Upper Mousterian and Upper Aurignacian. (Fig. 5.)

MOUSTERIAN HORIZONS

The Mousterian horizons at Castel-Merle are relatively rich in cultural remains. This is particularly true of flint scrapers. The flint was obtained on the plateau above. It consisted almost wholly of nodules. In only one instance is it evident that an implement had been made from a piece of tabular flint—a large scraper with the crust still intact on two faces. The total number of flint scrapers found during the past season was 1020. They vary in length from 5 to 14 cm. (2 to 5.5 in.). Marcel Castanet, owner of the site, states that in making soundings in 1923 he found a scraper of much larger dimensions, which he gave to Dr. Charles Peabody.

A striking peculiarity of the flint scrapers from Castel-Merle is the method that was employed in producing scraper blanks from the nodule of flint—method which resulted in the retention of the nodular crust on the back or portion opposite the scraping edge; the back thus produced required no chipping or retouching to make it fit the hand comfortably. The Mousterian craftsman could produce a whole series of scrapers from one shapely flint nodule by beginning at one end and knocking off sections by means of blows directed alternately from opposite sides. Scrapers produced in this manner outnumber all other types found at Castel-Merle. Even superficial flakes with one face entirely covered by the nodular crust were made to serve as scrapers by retouches which removed the crust along a selected margin. The toolmakers were not always content with

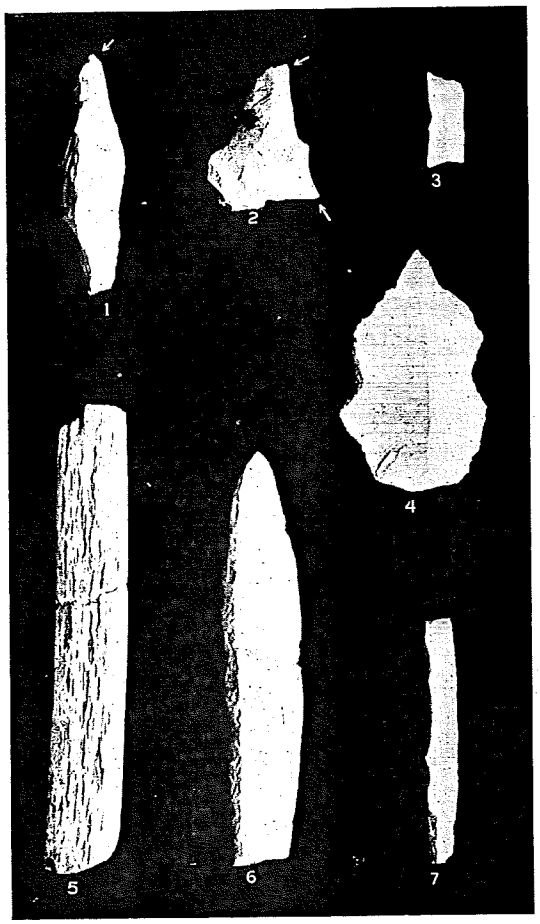

FIG. 10. FLINT GRAVERS (1-3), PERFORATOR (4) AND KNIVES (6, 7); WAND OF REINDEER HORN, FOUND AT CASTEL-MERLE. ORIGINALS IN U. S. MUSEUM. AURIGNACIAN EPOCH.

the somewhat precarious handhold of the ordinary scraper even when it was protected by a coating of nodular crust. They often contrived to utilize a natural prominence of the original mass of flint as seen in Figure 7, No. 4. This natural prominence afforded a perfectly secure as well as comfortable handhold.

Another distinguishing character of the scrapers from Castel-Merle is the steepness of the retouching to form the scraping edge. One of the objections brought against eoliths has been the steep slope of the retouched face—the objector's argument being that an edge produced in such a manner could have served no useful purpose. Among the Mousterian scrapers from Castel-Merle it is not uncommon to find the retouched face making an angle of 45 degrees with the face opposite, and in one case this angle is fully 90 degrees, a fact which renders invalid the objection to eoliths as artifacts on similar grounds. (Fig. 7, Nos. 1 and 2.)

Among the flint scrapers, there is one that is unique in nearly every respect. It is one of the smallest scrapers with a maximum length of 5 cm. (2 in.) and is one of the very few which have not retained some portion of the nodular crust. The flake from which a scraper is usually made has a single striking platform and one bulb of percussion marking the ventral or face with but a single plane of fracture; this face is the one which fits against the parent core. The opposite or upper face is usually the one whose margin (or margins) is retouched. But the scraper in question has two striking platforms, two bulbs of percussion, two ventral faces, and consequently no upper face at all. It was therefore struck, not from the nucleus but from a flake off the nucleus. It would be difficult to say which of the two bulbs is the older, probably the one on the face whose margins were later retouched. This is one of the few double scrapers; it is also a point, for the two retouched margins meet at an acute angle. (Figs. 7 and 8, No. 5.)

Another rare scraper is a sort of connecting link between the scraper and the cleaver. In some of the cleavers a portion of the striking platform is visible on one margin in the region of the greatest breadth of the specimen. One cleaver retains the remnants of two striking platforms, one opposite the

other. One of the scrapers resembles this cleaver, except for the second striking platform which, if it existed, would have been removed in retouching the scraping edge. The bulb or ventral face has not been altered in the region of the scraping edge, but a few flakes have been removed in the region of the back in order to reduce the thickness of the implement. (Figs. 7 and 8, Nos. 6 and 7.)

The rarest scraper found during the past season is made of rock crystal tinged with just enough yellow to give it the appearance of topaz. It is a sort of double scraper which might also be classed as a point since the two scraping margins meet at one end. The dimensions are 3.5 by 6 cm. (1.3 by 2.4 in.). A portion of the striking platform is retained near the broader end or base. The ventral face is marked by a bulb of percussion and an uneven resin-like plane of fracture. The outer or dorsal face is everywhere reduced by means of chipping except for a small area at the level of the greatest diameter (Fig. 9). Half of a scraper of exactly the same quality of rock crystal was found by one of the students in the cultivated field just below and adjoining our leased site. Implements of rock crystal are rare even in the Upper Paleolithic. To find two of Mousterian age in one season is an unusual bit of good fortune.

In comparison with scrapers all other Mousterian artifacts at Castel-Merle are rare. Only seven spokeshaves or scrapers of the notched type were found. As for points it is difficult to separate them from double scrapers; the two series combined number only eleven specimens. There were seventeen cleavers (coups de poing), fifteen knives, seventeen nuclei, and two punches.

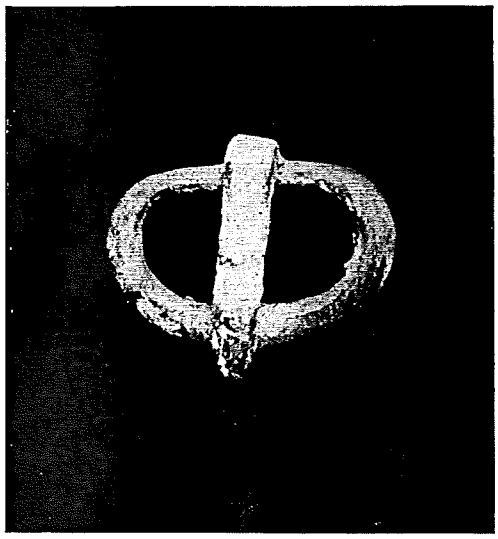

FIG. 3. BRONZE BUCKLE FOUND NEAR SKELETON NO. 5 AT SOLUTRÉ BY THE AMERICAN SCHOOL.

A number of spherical nodules of flint averaging about 6 cm. (2.4 in.) in diameter were encountered; these evidently had been brought to the rock shelter for some purpose other than the manufacture of chipped implements; they might have served as throwing stones or bolas, or might not have seen service at all.

Hammerstones chiefly of quartzite were fairly plentiful; some three score good examples were encountered. Secondary tools of quartzite were much rarer. Of stones showing the effects of fire there were but seven; some of these were flint and some of other material. A spherical lump of pyrites about the size of a small apple was found near the top of the Mousterian deposit. No bone implements were found in the Mousterian horizons.

THE AURIGNACIAN DEPOSIT

The Aurignacian deposit was not so fully developed during the past season as was the Mousterian; it is probably neither so extensive nor so rich. Never-

theless a number of interesting specimens came to light. Two of these give promise of important future eventualities. They are flint gravers which show distinct evidence of having seen service in producing works of art or in the working of bone, ivory, or reindeer horn. One of these gravers is of a rare type being elbow shaped and double; each of the beveled points shows equally the effects of wear. The other graver is of the ordinary type. In all three cases there is but a single worn facet, indicating that the tool was always held in one way when being used; and the position of the facet in each case is such as would be produced when the tool was held by the thumb and first two fingers of the right hand. We hope next season to find the objects on which these gravers were used. The most common type of graver (burin) found at Castel-Merle are the so-called burins de Noailles, named for the cave of Noailles in Corrèze; they are remarkable for their small size and belong to the Upper Aurignacian Epoch. (Fig. 10, Nos. 1, 2, 3.)

A considerable number of Aurignacian flint knives were found; some of these have remarkably long and straight edges with thick, carefully chipped backs. They vary in size as seen in the illustration (Fig. 10, Nos. 6, 7). Tools on which so much labor was bestowed must have been carefully guarded against breakage. The larger one bears indubitable marks of usage.

Another interesting flint implement is a combination punch and strangled blade made from a shapely pointed flake. The point is accentuated by means of reverse working and the two lateral notches are so situated as to make a bilaterally symmetrical whole. (Fig. 10, No. 4.)

Thus far the site has yielded but one piece of worked horn—a sort of wand 11 cm. (4.3 in.) long, oval in section and of uniform size throughout. There is an old break at one end and a fresh break at the other, so that it would be impossible to give the exact length of the specimen when complete. (Fig. 10, No. 5.)

The fossil animal remains thus far found at Castel-Merle are not abundant in either quantity or variety. The species represented include: the horse, mammoth, reindeer, bison, *Bos primigenius*, cave hyena, wolf, and elk or moose.

RODIN'S "HAND OF GOD"

In the Metropolitan Museum of Art, New York City

Beside an ancient roadway near the gate—
A rough old stone by artists cast away
Untouched by famous workers, there it lay,
Rejected by the unkind hand of fate,

Until a dreamer saw, in shape so odd,
The hidden figure of a great ideal.
He chiseled deep and slow arose the real—
The mighty, universal hand of God.

—M. E. Hawkins.

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THE ARTS THROUGHOUT THE AGES

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