Number Four

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BULLETIN

OF THE

American School of Prehistoric Research

IN AFFILIATION WITH THE

ARCHAEOLOGICAL INSTITUTE OF AMERICA

Founded 1921; Incorporated under the laws of the District of Columbia, 1926

REPORT BY THE DIRECTOR

ON THE

WORK OF THE SEVENTH SEASON

REPORT BY JAMES T. RUSSELL, JR., FELLOW,

ON A

SUMMER OF PREHISTORIC RESEARCH IN THE "PAYS CIVRAISIEN"



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REPORT BY THE DIRECTOR ON THE WORK OF THE SEVENTH SEASON

In certain respects the work accomplished by the American School of Prehistoric Research in 1927 marks a departure from preceding years. In addition to the regular program there were four prospecting parties in the field. Moreover, during the term, the direction was successfully turned over twice to former students of the School.

RECONNAISSANCE

Southern France.—The prospectings by the Director and Mrs. Mac-Curdy were in southern France—especially Landes, Hérault, Aveyron, and Allier. They were fortunate in being able to see a great cavern about the archeology of which nothing was known until 1927. This is the cavern of Aldène situated in the canyon of La Cesse at Fauzan, a few kilometers above Minerve and not far from Olonzac. The floor deposits in Aldène are in some places as many as ten meters thick; they also cover a vast area rich in phosphate and are being extensively exploited by the Compagnie des guano-phosphates de Fauzan. The deposits have already yielded large quantities of fossil animal bones—especially the cave bear. There are also to be noted the remains of a bear of smaller size, those of the cave hyena, cave tiger, and rhinoceros, as well as coprolites.

Evidence that the cavern was frequented by man in prehistoric times is not lacking. The Neolithic Period is represented by pottery. A few crudely chipped flints and fragments of human crania have been classed as Paleolithic. One of the lateral galleries, the entrance to which had been completely obstructed for ages by a thick deposit of stalagmitic sands, was opened last February. A few days later it was explored by Professor M. Guerret of Montauban, who found not only foot prints, claw marks, coprolites and the skull of a cave bear, but also several examples of Paleolithic mural art.

All the figures are on a large scale, most of them are incised, only one is completely outlined in red ocher. The latter represents a cave bear; there is also the figure of a rhinoceros and another good example of the cave bear. A fourth may represent an ox or bison; the others are not decipherable. Curiously enough, it was only a short distance down the valley of the Cesse in the cavern of Bize (Aude), that just ninety-nine years ago the first discovery in France was made of human bones and artifacts associated with faunal remains of species in part extinct.

Our next stop was at Nant in Aveyron to inspect the grottes des Fées on the Pic d'Ambouls recently partially explored by the owner of the property, Mons. Ernest André. A good many human and animal bones as well as industrial remains including pottery have been found by André. These are all from superficial deposits and are of Neolithic age. Soundings sufficiently deep may reveal a Paleolithic substratum.

We visited the Musée Crozatier at Le Puy to see the human remains taken from a tufa deposit in 1844 and recently declared by Depéret to be the oldest yet discovered in France—Chellean or even pre-Chellean—hence as old as the man of Piltdown. Dr. Mayet is also of this opinion.

From Le Puy we proceeded to Glozel and dug part of one morning with Émile Fradin, son of the proprietor, and Dr. A. Morlet of Vichy. The rain came down in torrents, making it exceeding difficult to excavate. The trench was some 60 cm. deep. In a short time Fradin uncovered an implement of deerhorn pointed at both ends. The next object, also found by Fradin, was a polished ax or celt of stone made of a pebble from the bed of a small stream-La Vareille-some 8 meters below and at the foot of the small terrace in which we were digging. As soon as the celt became visible, Dr. Morlet and Fradin invited me to detach it; this I did with a digging knife. The two specimens had been found within an hour and under such weather conditions as to make it practically impossible to say whether they had been found in situ or not. We then retreated to the farm house in order to see the Fradin collection. Our visit to Glozel ended with Dr. Morlet's return to Vichy at noon. I had expected to return later in the summer with the members of the School of Prehistoric Research, but abandoned the idea because of Dr. Morlet's disinclination to allow "students" to dig.

Mons. Herriot, minister of Public Instruction and of the Fine Arts, classified the site on October 6th and placed it under the absolute supervision of Mons. D. Peyrony of Les Eyzies, a Government Inspector of Prehistoric Monuments; Herriot also named Mons. Champion of the Museum of National Antiquities at Saint Germain to aid Peyrony in making an inventory of the finds. The International Institute of Anthropology, meeting in Amsterdam September 20-29, took a hand in the Glozel controversy by naming a commission to conduct an impartial investigation. Peyrony is on this committee. The other members are Favret, Epernay; Forrer, Strassbourg; Bosch-Gimpera, Spain; Hamal-Nandrin, Belgium; Pittard, Switzerland; and Miss Dorothy Garrod, England. After three days of digging and one of studying the collections, this Commission*

^{*}Their report, covering thirty pages, has appeared as a supplement to the Revue Anthropologique, No. 10-12, 1927.

has reported against the authenticity of all the Glozel specimens with the exception of certain potsherds and fragments of polished celts and flints.

Glozel first came to the notice of prehistorians in Allier early in 1924 when the school teachers of the Department were invited to report on the archeology of their respective communes. The results of this inquiry soon came into the hands of Dr. Brinon, President of the Société d'Emulation du Bourbonnais and then to Mons. Viple, procureur de la République at Moulins. The latter's published account* tells how he was attracted by the report of a Mlle. Picandet, which mentioned for the first time the discovery made on March 1, 1924, by Mons. Fradin and his son Émile on their farm known as Glozel. Their plough uncovered a flagstone some 30 by 15 centimeters in dimensions crudely shaped into a rectangular form and bearing the imprint of an extremely large human hand. Searching further on the spot, they found at a depth of about one meter a flagging of brick placed in pairs horizontally on the soil for a length of 2.5 meters. The Society appointed Mons. Clément to investigate the discovery; he was joined by Viple. After a number of visits to the site, Clément brought out a report in May, 1925. In this report he abandoned the original idea of a sepulture for one of a furnace or oven of a glass founder.

According to Viple the first brick or plaque with inscription had been found by Émile Fradin on the occasion of the first discoveries. The inscribed plaque had been placed in his garden; it was not until January, 1925, that he noticed the inscription. Clément's last visit to the place was in June, 1925. At this point Dr. A. Morlet of Vichy appears on the scene as co-explorer with Émile Fradin. It seems that Clément had not personally discovered any specimens. Dr. Morlet and Fradin have had much better luck as may be attested by the specimens in possession of Dr. Morlet at Vichy and the little Fradin museum at Glozel.

Morlet's first paper was published privately in September, 1925. This fell into the hands of Van Gennep, prehistoric chronicler for the *Mercure de France*, in which journal a number of aricles on Glozel have since appeared. Dr. Morlet took a series of originals to Paris and showed them to Boule, Jullian, Salomon Reinach, Breuil, Dussaud, and others.

Among those who actually visited the site prior to the arrival of the International Commission are: Capitan, Breuil, Depéret, Mayet, Arcelin, Espérandieu, Loth, Peyrony, Reinach, Viennot, and Vayson de Pradenne, to mention only French savants. O. G. S. Crawford, Editor of "Antiquity," and Dr. Leite de Vasconcellos and Mendès-Corréa, both of Portugal, also investigated the site.

RUMANIA.—The second reconnaissance trip, also in the month of June,

^{*} Bulletin Société d'Emulation, Jan.-Feb., 1926.

was made by one of our students, Vladimir J. Fewkes of the University of Pennsylvania. He investigated twelve caves and four rock shelters in the vicinity of Stierdorf, Banat. We had been led by our informant, Mr. Milacek, to expect much from this trip, but the results obtained by Fewkes were negative—all sites had been vandalized by treasure hunters.

Austria.—During the summer a third expedition, under the auspices of the School but in charge of Dr. K. Ehrenberg of the Paleobiological Institute, University of Vienna, was exploring a newly discovered cavern on Dachstein mountain, southeast of Salzburg. The cavern, which is at an elevation of 1,600 meters above sea level, has been christened Schreiberwandhöhle. There were reasons to believe that the important discoveries made by Bächler at Wildkirchli, Drachenloch, and Wildenmann-lisloch, as well as those by Abel at the cavern of Mixnitz in Styria, might be duplicated here; but the season's work failed to reveal any evidence that Schreiberwand cavern had been the abode of man in prehistoric times. On the other hand, remains of the cave bear were found in quantity including every part of the skeleton; rodent remains were also plentiful.

After the close of the summer session of the School, two of the students, Miss Edna Thuner and Mr. George Woodbury, made a voluntary prospecting trip in Greece..

Their conclusions are as follows:

No apparent evidence of Paleolithic man in the Peloponnesus from either observation or report.

Traces of Paleolithic man found in Thessaly and remains of the mammoth reported from Macedonia.

Investigations by Blegen and others furnish ample proof of the presence of Neolithic man throughout Greece.

The two students are much indebted to Professor Rhys Carpenter, Director of the American School of Classical Studies at Athens, who made it possible for them to make the most of their short stay in Greece.

SEVENTH SUMMER TERM

The Seventh Summer Term of the School opened in London on June 27th and closed in Cologne, September 15th. After ten days in southern England, nearly two months were spent in France: valley of the Somme, museums of Paris and Saint-Germain, Brittany, Civray and Poitiers (Vienne), Dordogne and the Pyrenees. For a week in July we were the guests of a former student of the School, James T. Russell, Jr., who spent the summer digging in the caves and tumuli in the region of Civray. His report is published as the accompanying paper in this Bulletin. While

in France, the students had an opportunity to visit the cavern of Altamira in northern Spain, the excursion to Spain being in charge of Miss Thuner, a former student of the School. Another rare opportunity was afforded by Count Begouen's invitation to visit Niaux and his own cavern of Tuc d'Audoubert with its incomparable clay bisons.

Some twenty-five days of the students' time were devoted to actual digging, chiefly at Castel-Merle near Saint Léon-sur-Vezere (Dordogne) also with Mr. Russell in Vienne. The end of the season was reserved for Switzerland and for the annual meeting of the German Anthropological Association in Cologne.

SUMMARY

The activities of the School may be summed up in a few brief paragraphs. Of the eleven students* taking part, about half were unable to remain for the entire term; these were permitted to enroll as part-time students. In addition to the student body, thirty-four other persons were permitted to take part in our program at various times—especially during our stay in Brittany and in the Dordogne.

Of the fifty conferences given, twenty were by the Director and thirty by twenty-nine specialists.† To the latter, the Director wishes to express his deep sense of appreciation. Sixty-three important prehistoric sites and thirty-five museums and special collections were examined. As a result of the twenty-five days of digging, collections were sent to seven contributing institutions in America. At the end of the season, five students remained in the Old World for further study and field work.

PROSPECTS AND NEEDS

The School has demonstrated its ability to give a limited number of students intensive training in prehistoric archeology during the summers. It should be able to follow up these short periods of intensive training by taking the initiative in the location and development of new projects

^{*}One of these did not go abroad, but worked in the U. S. National Museum with Dr. Hrdlicka, a former Director of the School.

[†] Prof. V. Gordon Childe, Mr. Langford, Prof. G. Elliot Smith, Mr. Hopwood, Henry Balfour, Profs. W. J. Sollas and Dudley Buxton, Miss Dorothy Garrod, Sir Arthur Evans, J. Reid Moir, H. H. Walls, and Mr. Paylor (England); Z. Le Rouzic, Gustave Chauvet, James T. Russell, Jr., Henri Martin, Count Begouen, Jacques and Louis Begouen, Mons. Clastres, Félix Trombe, D. Peyrony (France); Prof. Hugo Obermaier, Spain; Dr. Paul Vouga, Dr. Carl Miller, Dr. Emil Bächler, Hans Bessler, Prof. H. C. Stehlin, and Dr. Paul Sarasin (Switzerland).

either alone or in coöperation with other existing institutions. During the past summer invitations have come to us from Oxford University and the British School of Archæology in Jerusalem to coöperate with them jointly in prehistoric exploring expeditions in Iraq, Transjordania, and in Palestine. Such a program not only renders highly desirable permanent headquarters for the School but also adequate endowment and if need be special funds for special projects.

With a permanent base, preferably at home, serving as a laboratory and repository for apparatus, books, and specimens, branch bases could be established or existing ones made use of on the other side as occasion demanded. With adequate endowment, professorships and lectureships might be maintained, at least one of which should be for distinguished foreign specialists. We already have the promise from an able foreign prehistorian and ethnologist that he will come to America and offer gratis a course of lectures as soon as such a center shall have been established. Surely we cannot afford to be so lacking in appreciation of such a generous offer as to fail to take advantage of it.

BULLETINS

During the year two Bulletins have been published by the School: Bulletin Number Two containing the Minutes of the First Meeting of Incorporators and Trustees, the Certificate of Incorporation, and the By-Laws of the School; and Bulletin Number Three containing the Report of the Director on the Work of the Sixth Season (22 pp. and 26 figures).

A SUMMER OF PREHISTORIC RESEARCH IN THE "PAYS CIVRAISIEN"

By JAMES T. RUSSELL, JR., Fellow of the School

NOTE OF THANKS

I wish to express my thanks to the society "Les Amis du Pays Civraisien" for having placed at my disposal the archæological riches of its neighborhood, and for the assistance rendered me on every hand.

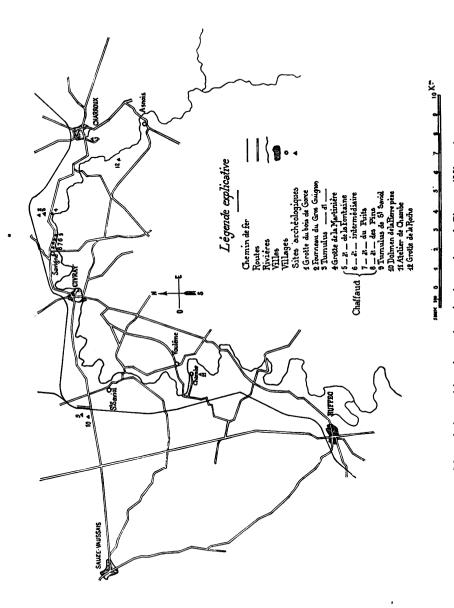
I am deeply indebted also to M. Gustave Chauvet for the counsel he gave me on the various problems which arose in the course of my summer's work.

To M. Bailloux, of Chambe, finder of the Lower and Middle Paleolithic open air workshop of Chambe, I owe sincere thanks for the information he gave me thereon.

To the Grimaud family, of Savigné, proprietors of the Grotte de la Fontaine; to Mme. Pontois, of Civray, proprietor of the Grotte Intermediaire; to the society "Les Amis du Pays Civraisien," proprietors of the Grotte du Puits; to M. Guillaud Vallée, of Civray, proprietor of the Grotte des Pins; to M. Louis Cerf, of Civray, proprietor of the Grotte de la Martinière; to Mme. Tétard, of Charroux, proprietor of the Grotte du Bois-de-Gorce; to M. Valade, of Sommière, proprietor of the Grotte de la Roche; to M. Vincent, of Pennesac, proprietor of the Tumulus of Saint-Saviol, and to M. Grellier, of Civray, proprietor of the site near the Tumulus of Gros-Guignon, my utmost expression of thanks is due for the free and liberal permission they gave me to excavate on their property.

I would also like to mention with appreciation the devoted and intelligent work done for me by my laborers throughout the season.

Civray, which is the center of the region covered by this report, is situated some fifty kilometers south of Poitiers and near the southern boundary of the Department of Vienne. The prehistoric stations included in this study are plotted on the accompanying map; these are described successively, beginning with the one containing the oldest industrial remains.



Map of the prehistoric stations in the region of Civray (Vienne).

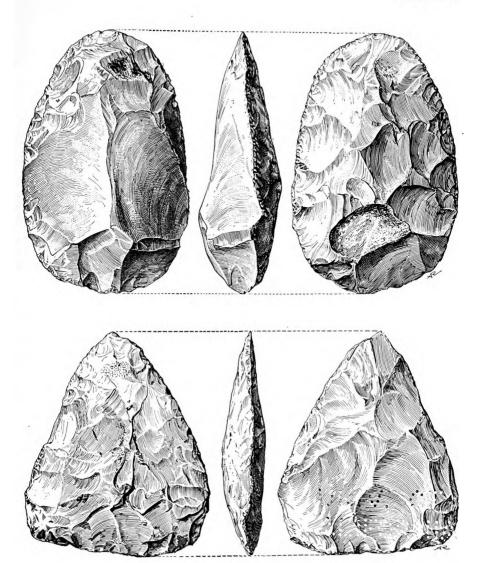


PLATE I. Two flint cleavers from the Chambe workshop, commune of Voulême (Vienne). (1) Ovoid type; scale ½. (2) Triangular type. Scale ½. Mousterian Epoch.

I. THE LOWER AND MIDDLE PALEOLITHIC OPEN AIR WORKSHOP OF CHAMBE

The Lower and Middle Paleolithic open air workshop of Chambe, taking its name from a group of farm houses near-by, is situated on the top of the Poitevin plateau, not far from the village of Voulême.

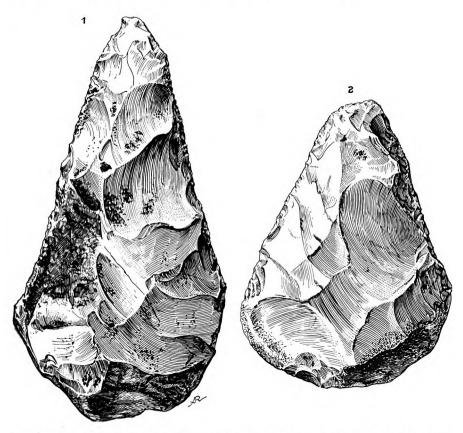


FIGURE I. Two flint cleavers from Chambe. Early type of cleaver or hand ax resembling those found at La Micoque (Dordogne). Mousterian Epoch. Scale 34.

M. Bailloux, who kindly furnished me with all the material for its publication, discovered the station in 1886. The first recognized piece came from a wheelbarrow full of stones gathered from the surrounding

fields and dumped on a road which runs through the workshop. The altitude of the station is 140 meters, which is the average height of the plateau. Worked flints and flakes of human origin came from over an

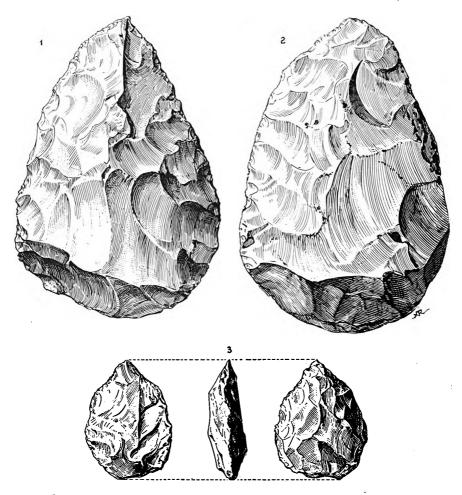


FIGURE 2. Three flint cleavers from Chambe. Mousterian Epoch. Scale 34.

area of 1,150,000 square meters, but the richest zone, which is the heart of the site, covers 70,000 square meters. Where the altitude rises or falls slightly no flints are found.

The artifacts of this station are typical of the Mousterian and Lower

anacila)

Paleolithic epochs. The rock formation of the country being limestone, the patination of the flints is white. The quality of the flint itself is very poor, and fine examples of workmanship are rare.

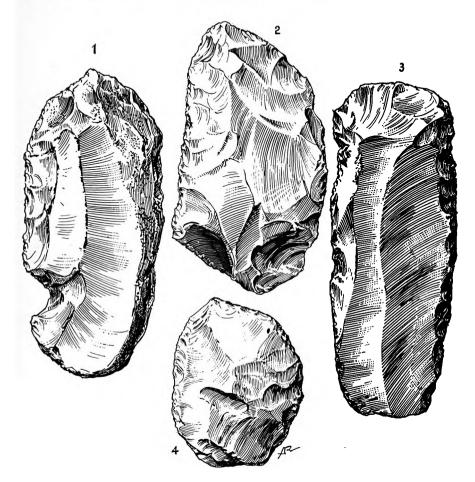


FIGURE 3. Flint knives and scrapers from Chambe. Mousterian Epoch. Actual size.

I searched exhaustively for the hearth-levels which must have belonged to the workshop, but I was unable to find any trace of them. Where the plateau falls away below the station towards the Charente river, there once existed a group of caves which the quarriers have totally destroyed.

II. THE CHAFFAUD CAVES

I. The Grottes de la Fontaine and Intermediaire.—I began the season's excavations in the Chaffaud caves. This is a group of four caves, sometimes referred to as of five caves owing to the fact that one of them has two openings. They are located six kilometers easterly from Civray, in the side of a hill rising almost directly from the right bank of the Charente river, and they possess a Southern exposure.

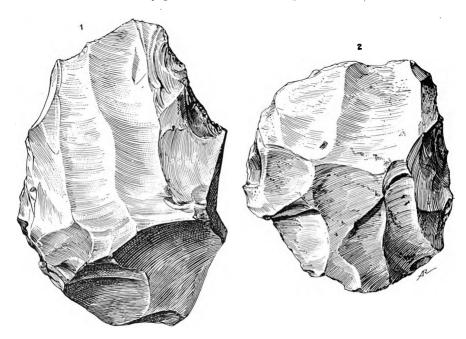


FIGURE 4. Flint cores from Chambe. Mousterian Epoch. Scale 3/4.

From May thirteenth to May twenty-sixth I worked in the Grottes de la Fontaine and Intermediaire. The results yielded by my work in these two caves being the same, I consider them together.

The Grotte de la Fontaine is the highest of the group up the course of the Charente and, thus, the furthest to the East, while the Grotte Intermediaire is the next one to it down stream. Both caves are admirably adapted for human habitation. The Grotte de la Fontaine has a small opening while its interior broadens into a rectangular room. The Grotte Intermediaire is the one possessed of two openings, while the cave itself forms the arc of a circle.

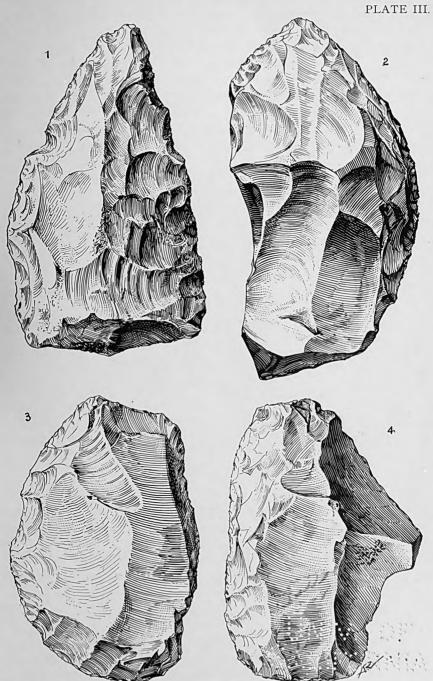


PLATE III. Flint scrapers from Chambe. Mousterian Epoch. Actual size.

Soundings below the mouths of both caves revealed a deposit of debris fallen from above. These levels were thin, perhaps owing to the rapid descent of the hill, but contained splintered and charred bone, flint flakes, and a few artifacts of the Upper Paleolithic type.

Trenches run at the mouths of each cave yielded little. The few gravers, scrapers, and bits of charred and splintered bone that came out were mixed with potsherds and bits of iron of modern date.

Both of these caves were inhabited in the Upper Paleolithic, but the finds are not sufficient to permit a determination of the epoch. In this



FIGURE 5. Combination graver and scratcher found in the disturbed levels of the Grotte de la Fontaine, commune of Savigné (Vienne). Upper Paleolithic Period, probably Magdalenian Epoch. Scale 3/4.

part of France the Middle Ages were very troubled, and all natural caves were used as refuges. As the entrances and ceilings of these caves are low, and as the Paleolithic levels lay on top of the native rock, just under the vegetal layer, they were soon destroyed. One unique piece, which I found in the Grotte de la Fontaine, is reproduced in Figure 5.

Fauna of the Grotte de la Fontaine: Reindeer, horse, bison. Fauna of the Grotte Intermediaire: Horse.

2. The Grotte du Puits.—On June eleventh and twelfth, in the presence of Dr. George Grant MacCurdy, Director of the American School of Prehistoric Research, I made soundings in the Grotte du Puits. This

I did at the request of the Society "Les Amis du Pays Civraisien" who wished to know if there remained any intact levels at that spot.

This large cave, with its high ceiling, is the most famous of the Chaffaud group, and the third down the course of the Charente river towards Civray. As early as in 1834 excavations were begun here, and the levels of this cave yielded the first recognized piece of Paleolithic art. The results of the various excavations have been admirably published by M. Gustave Chauvet, the noted Poitiers savant.*

My soundings showed that the interior and the shelters on the exterior had all been excavated. I did encounter one intact level in the gallery that runs off to the left leading to a small opening at the side, but it contained nothing.

3. The Grotte des Pins.—On the twenty-second of June I made soundings in the Grotte des Pins, the furthest of the Chaffaud group down the course of the Charente river towards Civray. It was never inhabited in Paleolithic times.

III. THE GROTTE DE LA MARTINIÈRE

On June eighth I made soundings in the Grotte de la Martinière. This is a small cave situated similarly to the Chaffaud caves, and mid-way between Civray and Charroux. My work here yielded a few flint flakes and examples of Quaternary fauna mixed with modern objects. The finds do not warrant my concluding that the cave was inhabited in Paleolithic times. Fauna: Horse, hyena.

IV. THE GROTTE DU BOIS-DE-GORCE

From May thirty-first to June fourth I worked in the Grotte du Bois-de-Gorce. This is a large cave with western exposure, situated near and not more than ten meters above the Charente river, at one kilometer's distance from Charroux. I went down through 2 meters 20 c. of rock fallen from the ceiling, at which point I found the original floor level of the cave; soundings were made in this to the depth of one meter without encountering a single flint flake or bit of bone.

V. THE GROTTE DE LA ROCHE

On the ninth and tenth of June I made soundings in the Grotte de la Roche, situated on the left bank of the Charente, opposite Charroux. It

^{*} See vol. 10, third series, "Mémoires de la Société des Antiquaires de l'Ouest," 1918.

has a south-eastern exposure and has two openings, each of which leads to separate galleries, these being connected by a third small gallery.

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Although I made soundings in the two openings and in all three galleries, I found only one small relic-bearing deposit, and that in the form of a pocket. This was situated on the right side of the right-hand opening as

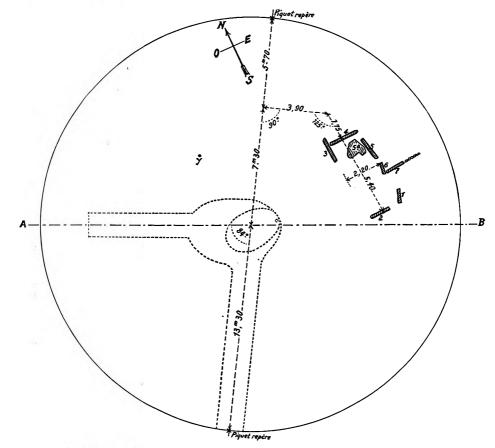


FIGURE 6. Plan of the Tumulus of Saint Saviol, near Civray (Vienne).

one faces the cave. It was 90 centimeters deep and one meter square, and the hard, sterile sand upon which reposes directly the vegetal layer mounted abruptly all around it. This pocket contained no flint, but a large amount of splintered bone fractured in the manner typical of that seen in the culture levels of Paleolithic man. There were also numerous teeth. Fauna: Bison, hyena.

VI. THE TUMULUS OF SAINT SAVIOL

From June twenty-fourth to July twelfth and from July eighteenth to July twentieth I excavated in the Tumulus of Saint Saviol. This tumulus is near the station of St. Saviol, on the Paris-Bordeaux railway line. About one hundred meters from it is the Dolmen of Pierre Pèze, by the



FIGURE 7. Pile of bones near upright No. 7, outside the Tomb of Saint Saviol Tumulus.

name of which the tumulus was formerly called. But, fearing that confusion might arise from the tumulus and the dolmen being referred to by the same name, I re-christened it "The Tumulus of Saint Saviol."

At points X and Y on the plan, curious people had made superficial holes, hoping to find a mediaeval subterranean passage. At point X, the tops of several upright boulders appeared, in the midst of which a small hole had been dug.

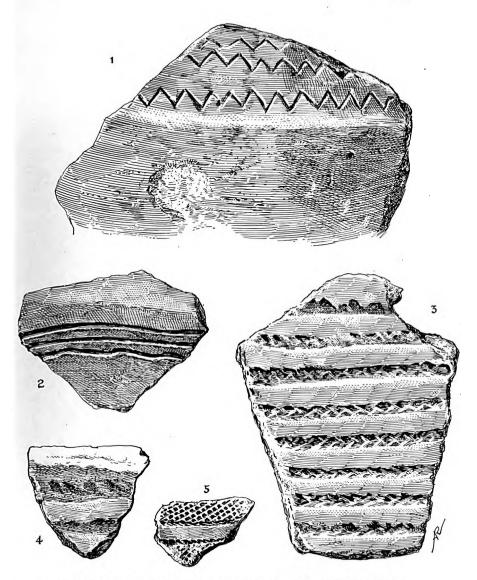


PLATE IV. Examples of decorated pottery from the tumulus of Saint Saviol. No. 4 is a potsherd from the lip of a pot bearing the cord design. The portion which exhibits the features of a lip carries a white plaster-like border. No. 5 represents a red glaze. Actual size.

I began a trench running northeast and southwest through the tumulus toward the center and following the level of the surrounding terrain. I found the tumulus to be composed of pure rubble made up of the native limestone that occurs everywhere on the surface.

When the trench had progressed to 4 meters 20 c. into the tumulus, I



FIGURE 8. The American School of Prehistoric Research, at work on the tomb in the Tumulus of Saint Saviol.

came across a dry masonry wall constructed of the same limestone that composes the rubble of the tumulus, and traversing the width of the trench.

After having dug for a distance of 9 meters 20 c.—almost to the center of the tumulus—I encountered another wall of a construction similar to that of the first. This seemed to promise a circular enclosure, but, on further excavation, it proved to extend only 50 centimeters into the trench. On the far side of this wall the rubble construction of the tumulus went down below the level of the terrain.

In continuing I found this to be a ditch at the center of the tumulus,

but before going into it I had the men expose its dimensions. In searching for the westerly limit I came upon more dry masonry. This was composed of two semi-circular walls running out over the ditch at their intersection. To better expose this structure I dug a northwesterly southeasterly trench toward the center, running at right angles to the first; just outside these walls and at the depth of I meter 50 c. from the top of the tumulus, the men found a brick referable to a late phase of the Iron Age. When the walls were exposed entirely, I found that only the side nearest the ditch was faced.



FIGURE 9. Only intact pot found in the Tumulus of Saint Saviol. Actual size.

I then began to excavate the ditch. Oriented from east to west, it proved to be 4 meters 60 c. long, and from 1 meter 60 c. to 2 meters wide. It was dug in the native limestone rock underlying the vegetal layer of the terrain to the depth of 1 meter 20 c. At the eastern end there was a hole 90 centimeters long and 1 meter 50 c. wide which went to the depth of 1 meter 40 c.

The finds included nothing but a few fragments of human bones and potsherds.

On the morning of July sixth I began to excavate a trench around the upright stones the heads of which appeared at point X. This was in preparing for the American School of Prehistoric Research whose visit was expected on July sixteenth.

The tops of stones Nos. 1, 4, 5, 5a, and 6 were already visible, my trench bringing to light two more, Nos. 3 and 7. The latter a small one, 30 centimeters high and 1 meter 60 c. long, seemed to suggest a passageway leading off from the opening between stones Nos. 6 and 1. while the line

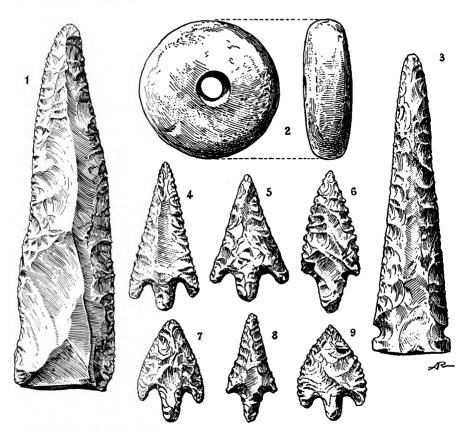


FIGURE 10. Flint blades and arrow heads; a spindle whorl of limestone. Tumulus of Saint Saviol. Actual size.

was further prolonged eastward by a dry masonry wall similar to those found at the center of the tumulus. There was no opposite corresponding wall, however. If there ever were any uprights between stones Nos. 2 and 3, they are now absent. I found upright No. 3 to have a small artificial hole pierced in a corner of it which projected outside the line made by the others.

All around the tomb, in the construction of the tumulus, I found human

bones. Between uprights Nos. I and 6, and thus beside No. 7, there was a considerable quantity broken and lying pellmell just under the vegetal layer. Among them were potsherds, flint flakes, and flint artifacts.

On July eighteenth, nineteenth, and twentieth, the American School of Prehistoric Research completed the excavation of the tomb itself. The interior was in utter confusion, most of the bones being broken, and no two of them in their proper association, and the funerary objects scattered among them without order.

A survey of the fragments shows that there must have been at least eleven individuals interred here, while a considerable quantity of charred human bones was also found. In all, twenty-one arrowheads, seven crude flint scrapers, a polished fibrolite axe, two beautifully worked flint blades, a green stone bead, and three pieces of worked bone were encountered in the course of the excavation. An iron link and nail head were also found inside the enclosure. With the exception of one small pot which is reproduced in Figure 9, only potsherds were found. The pot had been washed in grey slip, but its red texture is visible on one face; within it was a human first molar.

M. Franchet, the noted French authority on prehistoric pottery, was kind enough to look over the samples from this tumulus. He tells me that the potsherds represent the Neolithic, Bronze and Iron Ages.

If the tomb protected by these uprights once composed a dolmen, the table stone and some of the supports are now missing. The place of origin of these uprights is the same as that of those in the Dolmen of Pierre Pèze. In both instances they came from the Charente valley, about a kilometer from Saint Saviol. The fauna represented in this tumulus comprised the following: Horse, pig, dog.

VII. THE FURNACE OF GROS-GUIGNON

July fourteenth and fifteenth, I spent in preparing for the American School of Prehistoric Research what had been indicated to me as a small Iron-Age tomb, 185 meters from the large Hallstatt incineration tumulus of Gros-Guignon, situated half-way between Civray and Charroux.

This site is composed of a small mound from which runs a "barrow" towards the northwest. This prolongation is lower than the mound and gradually dwindles away into the vegetal layer of the terrain.

Following the level of the surrounding country, I began a northwestern-southeastern trench through the mound in the direction of the "barrow." I found the mound composed of reddish dirt and blocks of flint similar to

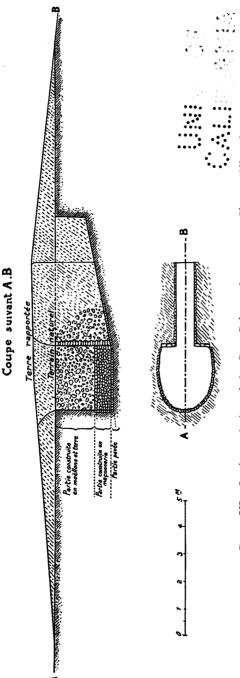


PLATE VI. Section and plan of the Gros-Guignon furnace near Civray (Vienne), probably dating from the first or Hallstatt Epoch of the Iron Age.



those in the flint levels of the Gros-Guignon Tumulus. Under the mound there appeared to be a pit which went below the level of the terrain. Leaving the exploration of this for the visit of the School, I ran the trench on into the "barrow." I found the flint blocks to cease at the limit of the mound, where I once more encountered the level of the terrain. The



FIGURE 11. Lower masonry of Gros-Guignon furnace. Above, blocks of flint packed with red earth; below, sandstone masonry with the external face calcined to plaster.

"barrow" was composed of pure brown earth, free of stones, of the same quality as that in the earth levels of the Tumulus of Gros-Guignon.

On July twenty-first, twenty-second, and twenty-third, I excavated the pit under the mound in the presence of the American School of Pre-historic Research. We found that the bottom of the pit was two meters below the level of the terrain. It was filled with reddish earth, blocks of flint, pieces of grey sandstone, and chunks of the same sandstone reduced by fire to a plaster-like substance. We encountered several pockets of

red clay and at the bottom pieces of a smelted limestone exhibiting a metallic lustre on one side.

Unfortunately, the schedule of the School did not permit of its remaining in Civray for the conclusion of the excavation of this site. They left on July twenty-fourth.



FIGURE 12. Sandstone arch in front of the niche. Gros-Guignon furnace. The keystone can just be seen at the top, and the base stones at the bottom. Observe the sandstone paving.

On July twenty-sixth and twenty-seventh I continued work on opening the pit and found it to have the shape of a closed horseshoe. The closed side was towards the east, and contained a false arch behind which was a niche filled with pure brown earth similar to that in the "barrow." The pit was floored in grey sandstone blocks. The lower portion of its circular wall, for 60 centimeters, was composed of grey sandstone having a plaster-like quality on its exposed face. Above this and up to the level of the terrain, the pit was walled by means of flint blocks very tightly packed

with red earth. The arch, I meter IO c. wide at its base and I meter 70 c. high, was constructed of grey sandstone blocks mortared with red clay as hard as terra-cotta.

In excavating the niche behind the arch, I went in as far as I dared from the floor of the pit, and then had to go down from the outside and come in from the back. In the brown earth filling the niche, and just under the keystone of the arch, the skeleton of a pig was found. The niche proved to be 2 meters 60 c. deep. Its floor was paved in sand-stone similar to the paving of the pit and inclined in such a way that, at the innermost point of the niche, it was only I meter below the ceiling, although the level of the latter remained the same throughout. The sand-stone masonry of the arch ran only 80 centimeters into the niche on the right hand side, and I meter on the left. The remaining portions of the walls and ceiling were constructed of flint blocks tightly packed with earth.

Although the sites have not yet been published, Prof. Stocky, of Prague, has kindly given me permission to say that similar pits have been discovered at Dobris, near Prague. In both the Dobris and the Gros-Guignon sites, no charcoal, potsherds, or objects of any kind were found.*

^{*} For further information regarding the archeological sites in the vicinity of Civray, see "Répertoire Archéologique de l'Arrondissement de Civray," by Coquillaud, published by "Les Amis du Pays Civraisien," 1926.