## A REMARKABLE PAINTED CAVE ON THE ESTATE OF LESCAUX (MONTIGNAC, DORDOGNE)

## By Prof. THE ABBÉ HENRI BREUIL

Collège de France

In mid-September 1940, several young lads of Montignac, MM. Ravitat, Marsal, Quéroy, Cuëncas, and Estrégil, encouraged by a retired schoolmaster of the town, M. Laval, to explore underground passages in the neighbourhood, cleared out a shaft leading vertically from a plateau to the east of the town. This shaft had been filled up to prevent cattle falling in and only a narrow passage led to the bottom, ending in a hollow into which the young explorers slid after having enlarged it. Descending a slope of fallen boulders, they discovered that some of those fallen from the vault of the first hall were decorated with magnificent frescoes which continued down a narrow alley leading out of it. M. Estrégil made several sketches of these, which he showed to M. Laval, who was at first sceptical about Whereupon M. Maurice Thaon, a good sportsman and draughtsman, whom I had known since his childhood, and to whom, a few days earlier, I had shown the painted caves of Font-de-Gaume and La Mouthe, at Les Eyzies, was taken to the cave by the youthful discoverers, and brought careful drawings and some tracings

His descriptions convinced me of the exceptional importance of the discovery. I therefore went to Montignac, where M. Laval, M. Parvan, bailiff of the proprietor, Madame la Comtesse Emm. de la Rochefoucault, and various distinguished people received me most kindly. I asked M. D. Peyrony, delegate of the Ministry of Fine Arts, to meet me there and a three days' study enabled me to send a preliminary report to the Académie.

The cave in its present state consists of an oval entrance hall (20 m. × 10 m.) continuing in a narrow passage. In the second half of the hall and in the passage there are more than eighty paintings, chiefly on blocks fallen from the vault above. In a short gallery to the right, there are fewer; but this gallery leads to another lofty hall sloping steeply and leading on the left to a corridor with a high nave, shrinking to a slit of a passage, extremely narrow in parts.

Beyond the lofty hall is a well about 10 m. deep leading by a scramble on the opposite side to ascending galleries, as yet almost unexplored. In the high nave, engravings are generally superposed on paintings; but they are unaccompanied in the tortuous galleries; their great number and delicacy have prevented us from deciphering them adequately, as yet.

The paintings vary in size from 30 cm. to nearly 5 m.; they are of different technique, frequently superposed and restored.

- (1) A single little hand outlined in red, with its arm, recalls the Aurignacian type of hands.
- (2) Fine line drawings in red, of horses and stags.
- (3) Bigger red line drawings, wide blotchy lines filled in with splashes here and there, representing a fairly big horse and bison; there are also some big bulls and stags covered over and swallowed up by other figures.
- (4) Small and medium-sized red, black or sepia line drawings, or in a mixture of these tints more or less filled in with rather transparent sepia or red very much stomped spots. Black touches have often been added later, blending and denoting anatomical details or restoring the outline. A great many small horses, often with very heavy coats, and a great many stags, their antlers in twisted perspective, and one bear (?)
- (5) Figures in red, medium-sized, softly dappled, being horses and oxen with small horns and slender build
- (6) Black wash combined with dappling, frequently used in restoration, or depicting single analogous animals.
- (7) Two ibex, decorated with wide splotchy black bars.
  - (8) Stag's heads drawn with a fine black line.
- (9) Enormous bulls with big horns, the biggest about 5 m. long, drawn in wide black lines, the colour spreading over the legs and horns and part of the head, the field inside the outline sprinkled with big spots, though usually only the head.

There are neither reindeer nor mammoth, and besides the animal figures there are a good many signs; rectangles barred lengthwise and across; five-pronged comb-shaped signs, chessboard patterns filled with big squares of flat wash, the colours arranged in varied ways, looking like coats

of arms; lances or javelins with a single barb; arrows, feathered on one side.

The foot of the well boasts a more unusual subject; to the left a black rhinoceros walks slowly away; in the centre, drawn in red, a half-conventionalized man is lying beside a javelin and a throwing stick. To the right, a sand-coloured bison outlined in black gazes at him; its entrails seem to be flowing out like a horse ripped open in a bull-fight. It looks like a scene in a prehistoric drama. Near the man a bird is perched on a post.

Though there may be many surprises in store when the engravings are studied, we can state already there are many horses, oxen, bison, two lions, and what seem like straw huts such as those at Altamira.

As regards the age of the engravings and paintings at Lescaux, the following are some suggestions.

In Dordogne, there are such blocks fallen on the hearths found in the Aurignacian levels and during the Perigordian epoch, in the rock shelters of Blanchard and Labattut (Sergeac) discovered by Monsieur Louis Didon. These blocks display big bichrome figures or the last of the black line drawings. This discovery permitted me to date as of pre-Solutrean age a few figures partially hidden under the big polychromes and black shaded paintings of Magdalenian age at Font de

Gaume (Les Eyzies), Le Portel (Ariège) and Cabrerets (Lot), all of which have fine painted panels of that age. It is the same in the Cantabrian provinces; the beautiful Magdalenian frescoes of Altamira are obliterated by red line and red wash drawings, between these two black line drawings intrude.

At Cavalanes and La Haza there are only paintings in wide smudgy red lines, but at La Pasiega such paintings obliterate fine line drawings and have black drawings superposed. The stags and oxen of this ancient series have horns in twisted perspective as at Lescaux, and we have already remarked that this curious perspective is always seen in the open air art of the east of Spain from Lerida to Almeria. The only French examples are those in the rock shelter of Labattut (Sergeac) and the two at Portel (Ariège).

The similarity of the stags and oxen at Lescaux and those in the eastern Spanish art is sometimes so great that they become identical. M. Peyrony and I agree that the whole ensemble of Lescaux represents an art earlier than either the Magdalenian or Solutrean, and except in a few instances is attributable to levels later than the typical Aurignacian. As the much regretted Joseph Dechelette called Altamira "the Sixtine Chapel of Magdalenian art", so Lescaux represents with equal splendour that of the far more ancient Perigordian.

## SEARCH FOR PETROLEUM IN AUSTRALIA

## By H. B. MILNER

SIR EDMUND TEALE'S recent observations on oil occurrences in Gippsland, Eastern Victoria (a summary of which appears on p. 27 of this issue), reopen in critical circumstances two fundamental though wider questions: if there exist commercial petroleum reserves in the Commonwealth of Australia, where are they and why have they not long since been exploited? Now, if ever, is surely the time to realize such assets if they are not for ever to remain frozen.

For many years past, indeed, and since before the War of 1914–18, both casual and ordered search for oil pools in this continent have occupied the attention of pioneers, mining engineers, State, Territorial and Commonwealth Government Departments, also leading oil companies. The record is long, interesting, but in results bitterly disappointing. Even so, belief in possibilities still prevails in many quarters, fostered perhaps more by political and economic than by scientific premises. Let us first briefly review geological data.

The relationship of loci of major oilfields of the Eurasian continent to the Alpine geotectonic system is a firmly established and universally recognized fact. To take the relevant segment in terms of petroleum development, follow through Irak, Iran, North-West India, Assam, Burma, Dutch East Indies to New Guinea: these proved fields in disposition themselves trace those great Tertiary earth-movements responsible for their actual oil concentrations to-day. But equally the fundamentally resistant earth masses to the south, namely, Arabia, peninsular India and, be it noted, Australia, played a significant, if passive, part in restricting the influence of this diastrophism, being themselves practically unruffled in the process.

Thus any oil pools existing in Australia must at least lack the Alpine cachet, surely a most serious