## Field Work, April, 1919-February, 1920.

By J. A. DAVIES.

During the session the field work of the Society has centred mainly round Burrington. A preliminary tour of inspection of the country in the neighbourhood of the Coombe was made on April 18th, 1919, and the entrances of possible Swallets and Caves noted.

The following day Goatchurch Cavern was explored. This cave is well-known, and is described by Rutter in his "Delineations of Somerset" and by Baker and Balch in "The Netherworld of Mendip." In the lower chambers are to be found a few examples of erratic stalactites, similar to those occurring at Swildon's Hole (Balch, 1918) and in the Keltic Cavern. It has been suggested that their formation is due to earth movements, the presence of foreign particles, air currents, variations of temperature or water supply, but these causes, in themselves, do not adequately explain the phenomenon of erratics.

A second feature of interest is the smooth water pipe connecting the two lowest chambers. It consists of a straight tunnel in the limestone about 40 feet in length with a mean diameter of less than 2 feet, and usually known as the "Drain pipe." · A small rift sinks from the chamber at the lowest part of the cave. It drops vertically for 12 feet, and then proceeds horizontally. The lower part is in old red sandstone, and in winter and spring contains a pool, or sluggish stream. In summer, when it was dry, the bottom of the rift was examined, and progress of a few feet made. A point was reached where it turned off at a right angle. It is thought that this rift might very profitably be excavated, since it is possible that the junction of the waters of the E. Twin Brook and Goatchurch stream could be reached. Owing to the difficulty of transporting tools through the tunnel, of ventilation and lack of space above the rift, the excavation promises to be a strenuous undertaking.

On the southern slope of the Coombe, below Lower Ellick Wood, at the point marked C on the accompanying map, is an artificial shaft. It is the entrance to a cave which contains a large block of clay and stones near the entrance. This block is kept in position by two dry walls, which indicate further depths.

Work was begun here on April 21st, but was discontinued in the Autumn. About 8 tons of debris was removed, including much of the further wall. The cave is very narrow—in most places only 18 inches—; this makes the use of tools extremely difficult. It is hoped to open this cave in the spring.

At the point D is an old Swallet hole known as Foxes Hole, in which finds were made by Sir William Boyd Dawkins. The entrance is 100 feet above the road, on the North-Eastern slope of Burrington Coombe, nearly opposite the swallet of the East Twin Brook. It is reached by a scramble over loose scree. The cave consists of 3 chambers, of which the first is not large. A small side cavern which opens from the left was searched, but vielded no discovery of interest. Behind the entrance chamber, separated from it by a heap of massive boulders, is the largest and most interesting part of the cave. It was investigated on April 26th and a few subsequent occasions, and found to contain tufa curtains of great beauty, and some long stalactite pencils. The tufa on the steeply sloping floor was more than a foot in depth and was broken through in places, exposing a very thin layer of cave breccia. This breccia is quite barren. At the lower end, where a pool of water was found, the cave branches in two directions, both being filled from floor to roof by thick deposits of hard stalagmite, through which it is impossible to break without blasting.

It should be noted that in this first season of the Society, all work is of a prospective character. This entails distribution amongst many caves. Further work at Foxes Hole was deemed unprofitable.

On the southern edge of Mendip Lodge Wood may be found a line of pits marking the joint of the Cambrian and Carboniferous systems. Streams run into two of these depressions only, but possibly the others were at one time the swallets of other streams which ran over the impervious Old Red Sandstone and formed underground channels in the comparatively permeable limestone shales. Of the two streams mentioned above, one runs into Swallet E. at the mouth of the Keltic Cavern, and the other into a hole known as Swallet H.

The stream, which disappears at H, is never large. In dry summer weather it only flows during the night and early morning.

The Swallet is a small hole underneath a boulder at the bottom of the depression, which is twenty feet in depth. In the clay sides of the pit is an interesting hole which, we are told, commenced to sink two years ago. In August of last year the hole was eight feet in diameter and eight feet deep. The stream was diverted into this hole to increase the rate of sinking, and in February, 1920, the diameter of the hole had increased to twenty feet, whilst the depth had increased by two feet. The method of formation may point to the existence of a considerable cavity below the depression.

The bulk of the work of the Society during the latter part of the session was done at The Cave (Avelines' Hole in local nomenclature) and at the Keltic Cavern. These have been treated in detail by Prof. Fawcett and Mr. L. S. Palmer in their respective papers.

Other swallets and possible caves which were investigated are situated at A., B. and I. (see map), but it was considered that they would not repay further work at present. A is a vertical shaft marked on the ordnance map as Avelines Hole, although in the locality the cave opposite the Rock of Ages is known by that name. B is a shaft similar to A, known as the Toad Hole. I is a barren hole on the left bank of the E. Twin Stream.

Through the kindness of the Wells Archæological Society, parties visited Swildon's Hole on June 7th and 9th. An enjoyable time was passed under the guidance of Mr. Balch. Swildon's Hole is mentioned for its erratic stalactites, and is of further interest to us since this cave and the Keltic Cavern contain the only known records on the Mendips of earth movement shown by the severance of stalactites from the roof, due to the downward motion of the lower rock on which the merged stalagmite is based.

During the camp of July-August, two excursions were made, the first to a cave at Milton, near Weston-super-Mare, permission being given by Mr. Jones, the owner. The cave is in two parts, and much excavation has been done to bring it to its present condition. A remarkable series of water-pipes can be seen in the roof of the upper cavern. These pipes, which are the American "Sink Holes," are rarely seen from below, but many occur in Derbyshire, where they may be seen from the surface or from the floors of caves. The shaft of a former swallet, greatly damaged by

quarrying, was also investigated. Some years ago rhinoceros teeth were found lodged in the ledges of this shaft.

Through the kindness of Mrs. Whitley, of Banwell, a visit was paid to the celebrated Banwell Bone Caves, mentioned by Rutter and many others. The upper cavern, from which a vertical shaft sinks, contains a fine collection of bones, both ancient and modern. Many of the bones have been gnawed and afford striking evidence of the lions and hyenas which roamed over the Mendips. The most interesting bones have been removed to Taunton Museum.

An adjacent cave was explored. This cave is entered by the aid of a rope ladder, and is in the form of a wide, lofty chamber with a sloping floor. There are many interesting coralline formations found in this cave, similar to those found in Eastwater Swallet and the Coral Cave at Compton Bishop. ("Wookey Hole," Balch.) A chimney rising from the upper part of this cave in the direction of the Bone Cave was followed for some way. Many very delicate and beautiful stalactites occur in little chambers off this shaft.

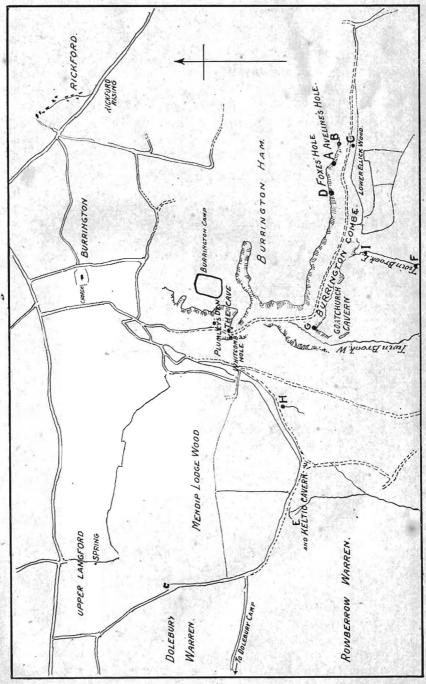
On December 21st, since the weather was unsuitable for a journey to Mendip, a party proceeded to exploit the Avon Gorge. A cave was found a hundred feet above the M.V.T.C. Rifle Range, on the Gloucestershire bank of the River Avon. The mouth was gained by a short awkward climb, and the cave entered by a vertical shaft, twenty feet deep. The rocks around the mouth bear evidence of blasting operations, and the shaft is choked with boulders and clay. A passage six feet in width opens from the right of the shaft and runs away from the cliff face at a small angle. This passage was entered for several vards. and many water-pipes, similar to those of Milton Cave, were seen, but the water, which was three feet in depth, was met by the roof, and so further investigation had to be postponed until drier weather. Another shaft is reported two hundred feet above this point, and there may be some connexion between the two caves.

## BOOKS CITED-

Balch—1918 Report of Wells Archæological Society, pp. 28—32, Erratic Stalactites. "Wookey Hole," p. 245, Fig. 53, Coralline Formations.

Balch and Baker—"Netherworld of Mendip," pp. 99—103, Goatchurch.

Rutter—"Delineations of N.W. Div. of Somerset, 1829," pp. 118—119, Goatchurch Cavern. pp. 146—160, Banwell Bone Caves.



Scale:-1 inch to 466 yards.