WHITSUN FIELD MEETING IN THE YEOVIL DISTRICT.

May 27th to 30th, 1939.

Report by the Directors: G. A. KELLAWAY, B.Sc., F.G.S., and VERNON WILSON, Ph.D., B.Sc., D.I.C., F.G.S.

THE only occasion on which the Association has held a field meeting at Yeovil was at Whitsuntide, 1871, when the sequence from the Junction Bed up to the Cornbrash was studied under the guidance of Professor J. Buckman and J. L. Lobley. A subsequent meeting at Whitsuntide in 1885 was held at Sherborne under the direction of W. H. Hudleston, when the faunal aspects of the Inferior Oolite received special attention. Some 26 years later, two days of the Whitsuntide (1911) excursion to Dunball, Burlescombe, Ilminster, Chard, Ham Hill and Bradford Abbas under the leadership of Mr. L. Richardson and others were spent in the Yeovil district examining the Yeovil Sands, Ham Hill Stone and Inferior Oolite.

For the present meeting about 30 members and friends arrived in Yeovil during the afternoon of May 26th, and in the evening they assembled at the Manor Hotel, where the directors outlined the geology of the district and elaborated the programme of the proposed excursions for the ensuing four days. The Association was fortunate in securing the services of the Rev. J. Fowler, M.A., F.G.S., as Field Meeting Secretary and also in having the benefit of his extensive local knowledge throughout the meeting. In the absence of the President, Mr. C. N. Bromehead, B.A., F.G.S., kindly deputised.

Saturday, May 27th.

This day was devoted to studying the rocks above the Inferior Oolite in the country south-west of Yeovil and around Sherborne. The party left Yeovil by motor coach and took the Sherborne road out of the town. After crossing the alluvial plain of the River Yeo at Pen Mill, the road climbs obliquely up the steep face of the Yeovil Sands escarpment at Babylon Hill. On the upper part of the hill it runs through a deep cutting in the Yeovil Sands with their lines of large gritty doggers well displayed. From the summit of the hill an excellent view was obtained of the course of the River Yeo as it meanders northward to the more open flats of the Vale of Ilchester. . The valley is here flanked to the east by the northward continuation of the Yeovil Sands escarpment and to the west by the truncated edge of the Junction Bed dip-slope, on which a large part of Yeovil is built.

Continuing past Halfway House the route followed the road to Bedmill Farm and down the dip-slope of the Inferior Oolite to Bradford Abbas. From the coach, members had their first glimpse of the low Fuller's Earth Rock escarpment and the more dominant escarpment of the Forest Marble extending from Sherborne Park to Lillington Hill south of the Yeo Valley. South-west of Lillington Hill, the low-lying country around Ryme and Yetminster opens out into the broad, densely wooded Vale of Blackmore with the high Chalk escarpments looming up in the distance. In the south bank of the Yeo, near Smith's Bridge at Bradford Abbas, some three feet of Lower Fuller's Earth Clay were seen resting on the top bed of the Inferior Oolite which crops out in the river bed. The next mile of the road southward passes over the broad, flat floor of the Yeo Valley, but on approaching the railway at Troll it rises up to the fertile platform of the Fuller's Earth Rock running N.E.–S.W. through Thornford. Close to Thornford Halt Station the Fuller's Earth Rock is exposed in the famous Troll Quarry. The quarry is, unfortunately, being rapidly obliterated and only the upper three feet of the original section were available for examination. The beds consist of hard, cream-coloured limestones and somewhat darker, softer marly bands, and in them *Pholadomya lyrata* J. Sow. and *Tulites subcontractus* (Morris and Lycett) were found.

At Lake Farm, a short distance east of Thornford, the party left the coach and proceeded southward across the fields to Gaul Hill—one of a line of small bluffs occurring along the northern slope of Lillington Hill, formed by the hard beds of the *Wattonensis* Beds. Here, in two stream sections, these buff, grey-centred limestones are exposed and the following fossils were found in abundance :—*Rhynchonelloidella wattonensis* Muir-Wood, *R. smithi* (Dav.), *Rugitela bullata* (J. de C. Sow.), *Acanthothyris powerstockensis* Buckman and Walker, and fragments of *Trigonia elongata* J. de C. Sow. var. *lata* Lycett.

After lunch in Thornford the next stop was made at Honeycomb Wood, en route to Sherborne Park, where a few feet of the Fuller's Earth Rock were examined in an old roadside quarry and, again, *Tulites subcontractus* (Morris and Lycett) was found. On the hillside south of the keeper's cottage the *Wattonensis* Beds were displayed in a stream bed and the same fauna collected as that obtained at Gaul Hill. In Sherborne Park a halt was made to examine a fuller section (25 feet) of the Fuller's Earth Rock in the footpath cutting leading up to the cricket field, and here *Rhynchonelloidella smithi* (Dav.) and *Oecotraustes* sp. were collected.

From this point the route was continued by way of Castleton, past the ruins of the Castle in Sherborne Park and up towards

Highmores Hill—an outlier of Forest Marble. In the roadside ditch near Crackmore Lodge the earthy limestone *Boueti* Bed was exposed and on examination it soon yielded the characteristic *Goniorhynchia boueti* (Dav.) and a fine specimen of *Trigonia elongata* J. de C. Sow. var. nov. A few yards walk brought the party to the summit of the hill, where Mr. Fowler described the local geology and pointed out the structural relations of the hill to the Poyntington Fault and the features of the surrounding countryside ; he also commented on the more distant landscape forming the skyline away to the south and south-east. The blue-hearted shelly limestones of the Forest Marble were examined in the numerous disused quarries on the hill top. At Milborne Port, half a mile farther east, a serious defect developed in the coach and the remainder of the day's programme was curtailed. However, after the members had admired the village Fives Court and the Norman work in the parish church a relief coach conveyed the party to Sherborne by way of Charleton Horethorne and Milborne Down, observing en route the Poyntington Fault scarp dominating the village of Poyntington to the east.

After tea in Sherborne Mr. Fowler took the party to the Abbey, where he outlined the vicissitudes through which it has passed since it was first constructed in Norman style in the 12th Century, and pointed out the different kinds of stone used for various purposes in the building. Afterwards he conducted the members over the fine museum of Sherborne School, where among the many fossils admired, mention should be made of the unique specimen of the marine reptile *Megalosaurus bucklandi* Meyer from the Inferior Oolite of Sherborne. The party returned to Yeovil at 6.30 p.m.

Sunday, May 28th.

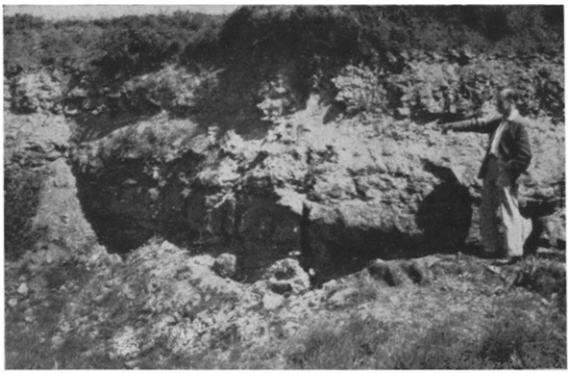
Leaving Yeovil by way of Hendford Hill the party proceeded to North Coker, where a halt was made at the road section opposite Coker Park. Here the Lower Inferior Oolite was seen resting on Yeovil Sands. ' *Terebratula* ' *eudesiana* S. S. Buckman was obtained from the brown ironshot oolite at the top of the section and the Director pointed out that here the *Murchisonae* Zone is at least 5 feet 6 ins. in thickness, and that the *Opalinum* Zone and the *Ancolioceras* sub-zone are missing, the junction of the Inferior Oolite and Yeovil Sands being non-sequential. From North Coker the party proceeded to Yeovil Junction, where the quarry south of the railway station was visited. The remarkably attenuated Inferior Oolite resting on Yeovil Sands was carefully examined and it was pointed out that the beds are thinner at this point than at any other place in the district. From Yeovil Junction the journey was continued

via Stoford to Bradford Abbas, where the members dismounted to view the Inferior Oolite and Yeovil Sands in the railway-cutting. The party then walked into the village, where the Directors explained that most of the sections in and around the village are now in very poor condition, while some of the most famous ones described by S. S. Buckman are completely obliterated.

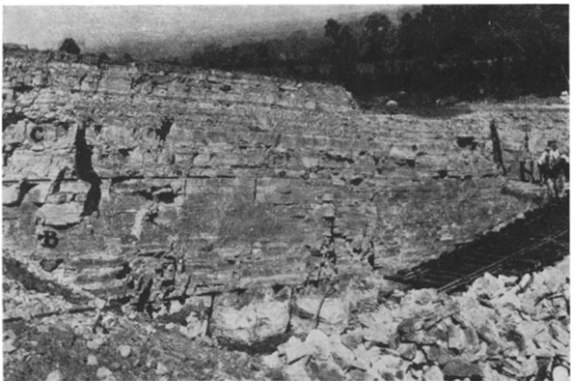
From Bradford Abbas the coach conveyed the members to the well-known quarries at Halfway House. A number of fossils were collected, more particularly from Rock Cottage Quarry, which is still worked from time to time. After leaving Halfway House the coach proceeded towards Sherborne, stopping for a short interval to allow the more energetic members of the party to visit the Louse Hill Quarry. The chief object of interest here was the Irony Bed, but though one of the Directors had found a specimen of *Strenoceras niortensis* (D'Orbigny) *in situ* a week or two before, no finds rewarded the searchers on this occasion. After Louse Hill the next stop was on the Bristol Road at Sherborne, where lunch was taken at " The Mermaid."

The party then walked to the Redhole Lane Quarry in the Sherborne Building Stone and Rubbly Beds. From here most of the party, under the guidance of Mr. Fowler, proceeded across the fields to Frogden Quarry, Oborne, while the coach travelled by road to Oborne village. The section at Frogden Quarry is now not so clear as formerly, nevertheless one member managed to procure an excellent specimen of *Teloceras blagdeni* (J. Sowerby) from the *blagdeni*-beds.

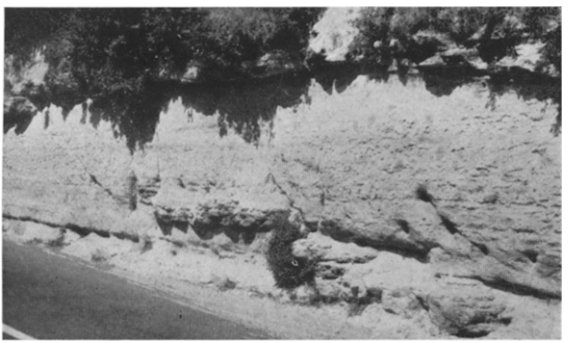
From Oborne the drive was continued along the valley of the River Yeo to Poyntington and thence up the dip-slope of the Inferior Oolite to Wheatsheaf Hill. Descending the escarpment of Yeovil Sands the route followed the Junction Bed platform as far as Parrock Hill and thence to Marston Magna on the Lower Lias clays. At Marston Magna the party left the coach and walked along the south bank of the brook to a bend in the stream, beyond which a small bridge gave access to the north bank ; they crossed here and after a search the Marston Marble was located in the bed of the brook. Lumps of limestone crowded with *Promicroceras marstonense* Spath were obtained and the members returned wet and dirty, but triumphant, to the coach. Tea was taken at Sparkford, after which it was decided to complete the programme by a visit to the quarry at Dancing Cross, Maperton, which had been omitted on the previous day, owing to the breakdown of the coach. At Dancing Cross the Fuller's Earth Rock yielded a rich haul of fossils, particularly brachiopods, ammonites, lamellibranchs and corals. The presence of *Ornithella bathonica* Muir-Wood shows that here the typical Fuller's Earth Rock of



A.—INFERIOR OOLITE ON HAM HILL STONE, CHISELBOROUGH HILL.
The *cynocephala* band is indicated.
G.A.K. photo.



B.—LOWER LIAS LIMESTONES, CAMEL HILL.
(A) White Lias, (B) Pre-*planorbis* Beds, (C) *planorbis* Zone.
A. F. Hallimond photo.



C.—YEOVIL SANDS, COKER HILL ROAD CUTTING.
G.A.K. photo.
[*To face p.* 178.

the Mendips is present From Dancing Cross the party returned to Yeovil via Ilchester, arriving at about 6.30 p.m.

Monday, May 29th.

The party travelled to North Coker, and in Halves Lane, leading to Holywell, members left the coach and proceeded on foot along the road to Pendomer. Within a short distance the large fault running at the foot of the northern slope of Coker Hill was crossed and in the road-cutting just beyond the Lodge at the west entrance to Coker Park the Cornbrash with underlying Forest Marble clays are displayed There are about 15 feet of the soft grey clays, from which *Ostrea hebridica* Forbes and *Exogyra* sp. were collected. The Cornbrash, amounting to six feet of hard sandy limestones with interbedded softer marly bands, yielded an assemblage of fossils which left no doubt as to the existence of all the zones of the Lower and Upper Cornbrash in this locality. This fauna included *Cererithyris intermedia* (J. Sow.), *Kallirhynchia transversa* Douglas and Arkell, *K. elegantissima* Buckman, *Ornithella* (*Obovothryis*), *obovata* (J. Sow.), *Ornithella* (*Obovothyris*) *magnobovata* Buckman, *Microthyris siddingtonensis* (Walker), *Lopha marshii* (J. Sow.) and *Oxytoma expansa* (Phillips). Another small exposure of the Cornbrash was also visited in the second field on the south side of the lane running westward from the last road section to Westfield Bungalow. Here, *Ornithella* (*Obovothyris*) *obovata* (J. Sow.), *Ornithella miltonensis* Douglas and Arkell, *Microthyris siddingtonensis* (Walker) and *Rhynchonelloidea* cf. *cerealis* Buckman were collected.

The party returned to the coach and proceeded to West Coker, where they again dismounted and walked up Chur Lane—a steep hollow way in the Yeovil Sands—to the top of Coker Hill. At the cottages in Chur Lane the position of the Coker Hill Fault was pointed out and lumps of ironshot Inferior Oolite were seen in the fault plane. From the top of the hill an excellent view was obtained of the country to the south and south-west. In the immediate foreground is the valley of Chinnock Brook, a tributary of the River Parrett, flanked on the south by the Forest Marble escarpment, which is terminated abruptly near the main road to Crewkerne by a fault; to the west, the Inferior Oolite dips northward and forms a lower ridge extending westward by Middle Chinnock. In the far distance to the south the skyline is dominated by Lewesston Hill and Pillsdon Pen with the Blackdown Hills lying farther to the south-west.

At the west end of Coker Hill the current-bedded, shelly Forest Marble which forms this ridge was examined in numerous disused quarries, and behind the cottages at Coker Hill bridge

the Upper Fuller's Earth was seen in a large pit. Though no actual outcrop of the *Boueti* bed occurs here, Mr. Fowler, after diligent search, succeeded in finding a stray specimen of *Goniorhynchia boueti* (Dav.) in the hedge bottom at the top of the clay pit.

After rejoining the coach at the bridge the next stop was made at Hazelbury Mill, where, in an old quarry near the Mill, beds of the Inferior Oolite (Parkinsoni zone) are visible. Special interest centred on the sponge bed (*Schloenbachi* sub-zone) and numerous specimens of *Craticularia foliata* (Quenstedt), *Holcospongia liasica* (Quenstedt) and *Tremadictyon sparsum* Hinde were collected. On leaving the quarry a large heap of recently excavated blue sandy shale was noticed by some members in the yard behind the mill and on investigation it yielded large numbers of *Pleydellia* spp. and *Cotteswoldia* spp., including *Pleydellia* cf. *aalensis* (Zeiten).

After lunch at East Chinnock the party proceeded to Chiselborough Hill via Chinnock Hollow—another impressive "Hollow Way" in the Yeovil Sands. In two large quarries on the Hill a few feet of Inferior Oolite are seen resting on the upper beds of the Ham Hill Stone; the section in the quarry on the south side of the road is as follows (Plate 11, A) :—

		ft.	ins.
10.	Red soil with occasional angular cherts and pebbles ...	1	0
	INFERIOR OOLITE.		
9.	Thin, broken beds of sandy limestones with a median layer of soft sandy brash and broken sandy limestone fragments ... ... 1′ 9″ to	2	0
8.	Soft sandy bed with broken sandy limestone fragments	1	2
7.	Hard calcareous sandstone	1	3
6.	Soft cream-coloured marl with thin courses of sandy limestone in the centre. This bed yielded the following fossils in abundance : ... ... *Homoeorhynchina cynocephala* (Richard), *Euidothyris holcophora* Buckman, *Aulacothyris blakei* (Dav. non Walker), *Ptyctorhynchia* sp. nov., *Holcorhynchia* sp., *Lioceras* sp.	1	3
	UPPER LIAS.—Ham Hill Stone.		
5.	Coarse calcareous gritstone bed	3	6
4.	Nodular bed of crystalline limestone with large belemnites		7
3.	Hard crystalline gritty limestone	1	7
2.	Sandy marl		5
1.	Hard sandstone, seen to bottom of quarry	1	0

Opposite this quarry, on the north side of the road, the Ham Hill Stone is more thinly bedded and current-bedded in its upper part.

North of Chiselborough Hill is the high plateau of Ham Hill, an impressive flat-topped promontory commanding the Middle and Lower Lias flats of the Vale of Ilchester to the

north and north-west. In Roman times it was the site of a large encampment. From the Middle Ages down to the present time it has become famous for its excellent stone, much prized for building and ornamental purposes. The Ham Hill Stone is a thick lenticular mass of beds of finely comminuted shell debris measuring a total thickness of 90 feet. It was examined by the members in the only quarry now in work and, though fossils are usually rare, it yielded a fine specimen of the ammonite *Dumortieria*.

Nestling at the foot of Ham Hill on its north-west side is the picturesque little village of East Stoke, where the party spent some time in the church admiring the beautiful Norman tympanum over the north porch and other Norman interior work. Tea was taken at the historic Elizabethan mansion at Montacute, after which the party was conducted over the house. The return to Yeovil was made at 6.30 p.m.

After dinner the members assembled at Headquarters, where the Deputy-President, Mr. C. E. N. Bromehead, proposed a vote of thanks to the Directors and to the Field Meeting Secretary. In reply to Mr. Bromehead's kind remarks the Directors took the opportunity to thank the Rev. J. Fowler for all his help both before and during the field meeting and for placing at their disposal his detailed knowledge of the geology of this district.

Tuesday, May 30th.

Leaving headquarters at about 9 a.m., the party proceeded via the Marston Road to the foot of Corton Beacon. Here the members dismounted and climbed the remaining 225 feet to the top of the Beacon (649 ft. O.D.), where the Director gave a brief outline of the chief structural features of the surrounding country. The day was hot and dry, though a slight haze reduced the visibility so that the Mendips were rather indistinct and the Quantocks and Blackdowns were completely obscured. The striking Junction Bed dip-slope at Corton Denham and the view of the Sparkford Inlier and Cadbury Castle were much admired. After descending the hill, members proceeded to Camel Hill, where the Trias, Rhaetic and Lower Lias limestones were examined. The Insect and Crustacean beds were searched for fossils without success, but specimens of *Psiloceras* and *Caloceras* were found in the *planorbis* and *johnstoni* beds.

From Camel Hill the journey was continued northwards through Castle Cary to Evercreech Junction, where, at the Somerset Brick and Tile Works, a face of about 20 feet of clay yielding *Androgynoceras* and other fossils of the *Davoei* Zone was examined: The well-bedded limestones of the *Bucklandi* Zone were next seen at the limeworks near Evercreech New Station, after which lunch was taken in Evercreech.

After lunch the party drove to Hornblotton Mill on the River Brue, where some Lower Lias shale exposed in an old brickpit yielded *Arnioceras* sp. From here the drive was continued by way of Keinton Mandeville to the Butleigh Monument, where the party dismounted to see the view of Glastonbury and the edge of the Blue Lias escarpment above Compton Dundon. From the Butleigh Monument the route lay through Somerton and Langport, thence to Oath and Curry Rivel. At Curry Rivel a halt was made to see the view across Sedgemoor and then the journey was continued, after some delay due to another mechanical breakdown in the motor coach, to Muchelney. After visiting the Abbey and parish church, the party proceeded to Langport for tea at the "Langport Arms." The return journey was by way of Ilchester, Yeovil being reached at about 6.30 p.m.