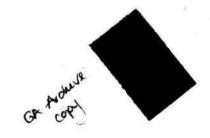
GEOLOGISTS' ASSOCIATION



SOUTH WALES GROUP

T H E

WELSH GEOLOGICAL QUARTERLY

VOL. 3 NOS. 3 AND 4
SPRING AND SUMMER 1968

THE GEOLOGISTS' ASSOCIATION: SOUTH WALES GROUP. The Group was formed in 1959 as a direct result of the interest shown by the teachers of geology from Welsh schools attending refresher courses at the University Colleges at Aberystwyth, Cardiff and Swansea. It is designed to further the study of geology, with particular reference to Wales, and to provide a link between the amateur, the student, the teacher and the professional geologist. At present all four groups are strongly represented in the membership of 160 or so. The members are drawn from a catchment area extending from Pembrokeshire to Gloucester.

The Group's session coincides with the academic year. Ordinary Meetings are held monthly from September to March, the Annual General Meeting in March or April, and up to six Field Meetings — including one week-end excursion — between April and September. The Ordinary Meetings take place alternately at Cardiff and Swansea in the Geology Departments of the University Colleges. They are held at 11.00 a.m. on Saturday — usually the third of the month.

The annual subscription is £1 (which includes the cost of *The Welsh Geological Quarterly*). Student membership is 2 shillings. Further details available from: The Secretary, c/o Department of Geology, National Museum of Wales, Cardiff.

Geologists' Association - South Wales Group

WELSH GEOLOGICAL QUARTERLY

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CONTENTS	Page
Editorial	2
Directory of British Geology. 1. A provisional annotated bibliography and index of geological excursion guides and reports for areas in Britain. C. England.	
Bibliography	3-81
Index	81-91.

EDITORIAL

The third and fourth numbers of volume 3 of the Quarterly are issued together because of the length of the Provisional Annotated Bibliography and Index of Geological Excursion Guides and Reports for Areas in Britain. C. England.

Regular items such as <u>News and Notes</u> and <u>Nature-</u>
<u>Times News</u> will be continued in the first number of volume

4.

Acknowledgements. The cover was designed by Vivian S. James Barry; the text was typed by Mrs. Jean Parsons, Cardiff, and duplicated by Mrs. A. Smith, Swansea.

DIRECTORY OF BRITISH GEOLOGY

- 1. A PROVISIONAL ANNOTATED BIBLIOGRAPHY AND INDEX OF GEOLOGICAL EXCURSION GUIDES AND REPORTS FOR AREAS IN BRITAIN.
 - C. ENGLAND.

D.A. Bassett.

This, the third in the series, deals with excursion guides to areas in England but excluding the itineraries in the western Border counties which were listed in the part dealing with Wales and the Eorders (Welsh geol.Qtly., v.3, pt.1, 1968).

In annotating the items, emphasis has been given, as in the other two parts, to publications which can be purchased at present. Excursion reports in the <u>Proceedings of the Geologists' Association</u> prior to 1920 have not been included.

- EYEMOUTH AND BERWICK ON TWEED. 24th to 26th MAY, 1963. By W.R. Dearman and K.A.G. Shiells. <u>Proc. Yorks.geol.Soc.</u>, v.34(1963-64), pp.455-458, 459.
- (2-7). CHEVIOT HILLS. By S.I. Tomkeieff. Geologists' Association Guides, No.37. 1965. 11pp. Price 3/-.

"The Cheviot Hills consist of a lava dome intruded by a granite and mantled by sedimentary rocks of Old Red Sandstone and Carboniferous ages."

The guide contains an Introduction (1p., g.sk.map, lin. - 12mls., and sk. map showing itineraries, lin. - 4mls.), a bibliography (1p.) and details of the following excursions:-

- 2. Otterburn.
 - ".. situated in the centre of a small tectonic basin traversed by radiating faults, a sort of complex outlier of the Lower Limestone Group."

 (2pp.)
- Jedburgh.
 - "(1) Cheviot lavas of the Lower Old Red Sandstone age, (2) Upper Old Red Sandstone and Lower Carboniferous sedimentary rocks and the underlying Silurian greywacke and slates, (3) numerous basalt and trachyte plugs,

laccoliths and sills, as well as basalt lavas and tuffs of Carboniferous age."

4. Kelso.

".. situated in the crook of the crescent-shaped outcrop of the 'Kelso Traps', a pile of olivine-basalt lavas situated between the Upper Old Red Sandstone and the Cementstones."

5. Wooler.

".. situated on the junction of Cementstones with the Cheviot lavas. S.W. of Wooler are the Cheviot Hills, to the N.E. are the two Fell Sandstone scarps - to the N.W. the Milfield Plain, to the S.E. the Wooperton kettle-moraine."

6. Glanton.

".. overflow channels associated with 'Lake Hedgeley' .." (1p.)

7. Rothbury.

[Fell Sandstone, Cementstones, felsite, lavas, etc.] (12pp.)

- 8. A GUIDE TO THE GEOLOGY OF THE DISTRICT AROUND ALNWICK, NORTHUMBERLAND.

 (WITH A REPORT OF THE FIELD MEETING AT ALNWICK, 22nd 24th MAY, 1954.)

 By T.S. Westoll, D.A. Robson and R. Green. Proc. Yorks.geol.Soc., v.30

 (1955-56), pp.61-100, illus.
- 9. THE SUMMER FIELD MEETING, 1931, IN NORTHUMBERLAND AND DURHAM. By G. Hickling. <u>Proc.Geol.Ass., Lond.</u>, v.42(1931), pp.378-385, pp.378-385.

 The report includes details of the following excursions: Seaton Sluices (Coal Measures), etc. (lp.); Morpeth, Alnwick, etc. (lp.); the Permian in South Durham (lp.); Bamburgh (pp.); Cheviot Hills (lp.); Permian of Sunderland (lp.); Glacial features of the Wear valley (lp.); Tyne valley, etc. (lp.).

In the same volume of the <u>Proceedings</u> there is a 76 page item entitled: "Contributions to the geology of Northumberland and Durham" written for the Summer Field Meeting by leaders of the excursions.

A useful companion volume to the excursion guide is: A guide to the geology of Northumberland and the Borders, by D.A. Robson. (Trans.Nat. Hist.Soc.Northumberland, Durham and Newcastle, 2nd impression 1966, 77pp., illus., 15/-.)

10. THE ROMAN WALL DISTRICT IN WESTERN NORTHUMBERLAND. 24th to 26th MAY, 1958. By G.A.L. Johnson. Proc. Yorks.geol.Soc., v.33(1959-60), pp.136-138.

11. EXCURSION TO THE WHITEHAVEN DISTRICT. JULY 26th - AUGUST 1st, 1924. By B. Smith, E.E.L. Dixon, T. Eastwood, C. Edmonds and S.E. Hollingworth. Proc.Geol.Ass., Lond., v.36(1925), pp.62-75.

The excursions were: Barfs inlier (lp.); Whitehaven area (lapp.); Mockerkin Tarn etc. (lapp.); Hensingham (3pp.); Ennerdale (lapp.); Bootle via Calder Bridge, Gosforth and Muncaster (lapp.).

In the same volume of the <u>Proceedings</u> there is "A sketch of the geology of the Whitehaven District" by B. Smith and others, pp.37-62, illus.

12. LAKELAND GEOLOGY. [WHERE TO GO: WHAT TO SEE.] By E.H. Shackleton. Clapham, Yorkshire: Dalesman Publishing Company Ltd., 1967. 128pp. Price 12/6.

The book contains an Introduction, two preliminary or background chapters ("Some basic ideas" and "The building of the Lake District"), two reference chapters ("Identification of rocks" and "Identification of minerals"), a glossary of geological terms, and the following chapters arranged essentially as excursion guides:— Keswick, Castlehead and Friar's Grag $(3\frac{1}{2}pp.)$; the volcanics at Cat Chyll $(5\frac{1}{2}pp.)$; excursion to Borrowdale $(9\frac{1}{4}pp.)$; the Skiddaw granite (7pp.); Shap granite and its surroundings (3pp.); Seathwaite, Gillercomb and Homister $(4\frac{1}{2}pp.)$; Carrock Fell Area - 1 (4pp.); Carrock Fell Area - 2 (6pp.); The Cockermouth Lavas $(6\frac{1}{2}pp.)$ Ennerdale $(4\frac{1}{2}pp.)$; fossils and fossil localities (6pp.); Ambleside and Skelgill (5pp.); Ashgill, near Coniston (4pp.).

- 13. NORTH-WEST OF ENGLAND. GUIDE TO EXCURSION A.2. By W.B.R. King. International Geological Congress. XVIII Session Great Britain, 1948. 24pp.

 A summary of the geology (5pp.) is followed by details of excursions to:

 Austwick (2pp.); Ingleton (1p.); Shap, Appleby, Hilton, Kirkby Thore (12pp.); Cross Fell Inlier (2pp.); Carrock Fell (1p.); Skelgill (1p.);

 Torver Coniston (1p.); Binsey (1p.); Cautley (12pp.); Barf (1p.);

 Ravenstonedale and Mallerstang (1p.); Coniston (1p.).
- 14. LONG EXCURSION TO THE LAKE DISTRICT. AUGUST 7th 17th, 1920. By J.F.N. Green. Proc.Geol.Ass., Lond., v.32(1921), pp.123-138.

 The excursions were: Derwentwater and Falcon Crag (lapp.); Carrick Fell, The Dry Gills and Silver Gill (lapp.); The Mells Fell and Eycott Hill (lapp.); Long Sleddale and Sadghyll (lp.); Watch Hill, Sale Fell and Bassenthwaite (lapp.); The Tungsten Mine and Skiddaw Aureole (lapp.); Seathwaite, Gillercomb and the Styhead Pass (lapp.); Watendlath and Quayfoot (lapp.); Haweswater and Swindale (2pp.); St. John's and Threlkeld (2pp.).
- 15. SUMMER FIELD MEETING IN THE LAKE DISTRICT. 4 11 SEPTEMBER, 1954. By M.K. Wells. Proc.Geol.Ass., Lond., v.65(1954-55), pp.415-425.
 - ".. concerned with the Lower Palaeozoic rocks of the Lake District inlier,

and especially with the Skiddaw Slates and Borrowdale Volcanic Series."

The excursions were: Skiddaw (lp.); Carrock Fell (l_2 pp.); Stonethwaite to Glaramara (lp.); Shap quarry (2pp.); the area west and south-west of Skiddaw (l_2 pp.); Coniston (l_2 pp.).

In the same volume of the <u>Proceedings</u> there is a paper "The geology of the Lake district - a review" by S.E. Hollingworth (mainly concerned with advances made since the publication in 1916 of Marr's <u>Geology of the Lake District</u> [reprinted 1968 by Cedric Chivers Ltd., Bath]) and three short papers on special aspects of the geology of the area.

Another useful reference is: "A bibliography of Lake District geology and geomorphology" by R.A. Smith. Cumberland Geological Society, April 1965. 44pp. Price 5/-.

- 16. FIELD MEETING AT GREAT LANGDALE, WESTMORLAND. 30th APRIL, 1966. By I.A. Williamson. Proc.Geol.Ass., Lond., v.78(1967), pp.489-491.
- 17. CALDBECK-CARROCKS, 3rd OCTOBER, 1954. By A.W.G. Kingsbury. <u>Proc.Yorks.geol.Soc.</u>, v.30(1955-56), p.105 (9 lines).
- 18. HAWESWATER AND ULLSWATER, 5th and 6th JULY, 1958. By G.H. Mitchell, F. Moseley and G. de Boer. <u>Proc.Yorks.geol.Soc.</u>, v.32(1959-60), pp.138-140.

 A report of an excursion to Haweswater is included in the <u>Proceedings</u> for 1965-66 (pp.430-433).
- 19. DUNN FELL. 18th to 21st MAY, 1956. By G.A.L. Johnson and K.C. Dunham. Proc. Yorks.geol.Soc., v.31(1957-58), pp.72-74, 1957.
- 20. SOUTH-WEST LAKE DISTRICT. 22nd to 24th MAY, 1959. By R.J. Firman, M.H.P. Bott and K.C. Dunham. Proc. Yorks.geol.Soc., v.32(1959-60), pp.372-373.
- 21. GEOLOGY OF THE APPLEBY DISTRICT. By H.C. Versey. Appleby: J. Whitehead & Son (Appleby) Ltd. 5th ed. (rev.) 1964. 44pp.

The greater part of the booklet (32pp.) is composed of a systematic description of the geology of the area and a three page bibliography. Brief descriptions of twelve excursions are, however, given as follows:— Permian Unconformity at Burrells $(\frac{1}{2}p.)$; Permian Rocks on Brackenber Moor $(\frac{1}{2}p.)$; Roman Fell and Long Fell $(\frac{1}{2}pp.)$ incl.g.map: lin.— 660yds.); Typical Section in the Cross Fell Inlier (1p.); Keisley Limestone and High Cup Nick $(\frac{1}{2}pp.)$; Standard Carboniferous Sections round Ravenstonedale $(\frac{1}{2}pp.)$; the Shap Granite and its metamorphism $(\frac{1}{2}p.)$; the northern end of the Cross Fell Inlier $(\frac{1}{2}p.)$; the southern end of the Pennine faults $(\frac{1}{2}p.)$; the Dent

- line $(\frac{1}{2}p_{\cdot})$; the Stainmore Upper Carboniferous Outlier $(\frac{1}{2}p_{\cdot})$; Permo-Triassic sections near Kirkby Stephen $(\frac{1}{2}pp_{\cdot})$ incl.g.map: $\frac{1}{2}in_{\cdot}-1000yds_{\cdot}$)
- 22. SUMMER FIELD MEETING, 1936. AUGUST 18th 25th, 1936. THE CRCSS FELL INLIER AND STAINMORE. By F.W. Shotton and F.M. Trotter. Proc.Geol.Ass., Lond., v.47(1936), pp.376-387.

The excursions were:- Hilton Beck, etc. $(l\frac{1}{2}pp.)$; Augill Beck (lp.); Roman Fell, Dobbyhole Gill, Long Fell, etc. $(l\frac{1}{2}pp.)$; Keisley Dufton $(l\frac{1}{2}pp.)$; Brampton and High Cup Gill, Maize Beck, Great Rundale Tarn, etc. (2pp.); Swindale Beck, Halsteads, etc. $(l\frac{1}{2}pp.)$; Ardale Beck, Lad Slack, Cuns Fell, etc. $(l\frac{1}{2}pp.)$

- 23. ROOKHOPE AND WEARDALE. 19th to 22nd MAY, 1961. By K.C. Dunham, M.H.P. Bott, G.A.L. Johnson, B.L. Hodge and A.C. Dunham. Proc. Yorks.geol.Scc., v.33(1961-62), pp.262-264.
- 24. PURE AND APPLIED GEOLOGY OF THE TYNEMOUTH AREA. 5th to 7th JULY 1963. By R.H. Allonby, A.M. Clarke and D. Magraw. Proc. Yorks.geol.Soc., v.34 (1963-64), pp.459-464.
- 25. CENTRAL AND SOUTH-EASTERN DURHAM. 6th to 8th JULY, 1962. By E.A. Francis, L.S. Phillips and D.B. Smith. <u>Proc.Yorks.geol.Soc.</u>, 34(1963-64), pp.104-112. Details of an excursion to Eastern Durham are given in the <u>Proceedings</u> for 1961-62 (pp.37-41).
- 26. NORTH-EAST COAST. GUIDE TO EXCURSION C.9. By H.G.A. Hickling and T. Robertson. International Geological Congress. XVIII Session Great Britain, 1948. 26pp.

The Guide contains a brief summary of the stratigraphy (lp.) followed by details of excursions to:- South Shields, Sunderland and Newcastle (2pp.); Benton, Earsdon, Seaton Sluice, Tynemouth, Newcastle (2pp.); Wooler to Spittal (2pp.); Wooler, Bamburgh, Beadnell (2pp.); Wooler, Powburn, New Moor House, Alnwick, Longhoughton, Dustanburgh, Eglingham (2pp.); Wooler (lp.); Glanton, Alnham, Alwinton, Swindon, Rothbury (lp.); Newcastle to Wooler (2pp.); Durham, Coxhoe, Ferryhill, Newcastle (lp.); Newcastle, Haltwhistle, Haydon Bridge, Hexham, Newcastle (2pp.); Newcastle, Heddon on the Wall, Riding Mill, Blanchland, Edmondbyers, Stanhope, St. John's Chapel, Allenheads, Hexham, Newcastle (lpp.); Durham, Bishop Auckland, Barnard Castle, Brough, Dufton, Melmerby, Alston, Hexham and Newcastle (2pp.); Newcastle (6 lines).

(27-32). GEOLOGY AROUND THE UNIVERSITY TOWNS: THE DURHAM AREA. By K.C. Dunham and W. Hopkins. Geologists' Association Guides, No.15. 1958. 14pp. Price 2/6. The Guide contains a summary table of the strata exposed around Durham and details of the following itineraries:-

27. The banks of the River Wear at Durham.

(14pp.)

28. The coast section from Tynemouth to Seaton Sluice, Northumberland.

(g.sk.map: lin. - 6mls.) (3pp.)

29. North-east Durham.

(140p.)

30. Upper Teesdale.

(g.sk.map: lin. - 6mls.) $(2\frac{3}{4}pp.)$

31. Upper Weardale.

(1p.)

32. Cleveland Hills - the country between Roseberry Topping and Carlton.

(3pp.)

The last five itineraries are intended to show representative parts of the sequence from Ordovician to Jurassic, exposed within an easy journey to the city.

33. THE GEOLOGY OF THE COAST SECTION FROM TYNEMOUTH TO SEATON SLUIGE. By J.M. Jones. <u>Trans.Nat.Hist.Soc.Northumberland</u>, <u>Durham and Newcastle</u>, v.16(1967), no.3, n.s., pp.153-196 (incl.g.maps and sections).

"The coast section between Tynemouth and Seaton Sluice is one of the few surface exposures of Coal Measure strata in the country. The paper is intended to serve as a field guide to the geology of this stretch of coast. The cliffs and foreshore have been described progressively from south to north and an attempt has been made to present the information in a form that will be acceptable to as large a number of people as possible."

34. FIELD MEETING AT DURHAM. 2 - 9 JULY, 1965. By K.C. Dunham, J.E. Hemingway, E.A. Francis, W. Hopkins, G.A.L. Johnson, G.P. Larwood, R. Phillips and D.P. Smith. <u>Proc.Geol.Ass., Lond.</u>, v.78(1967), pp.325-334.

Details of excursions to:- Cow Green (lapp.); Weardale and Teesdale (lapp.); localities in recently revised Sheet 27 (Durham) (lp.); Hoff Quarry, Burrels via Barnard Castle, Stainmore, Brough and Appleby (2pp.); Cleveland Hills (2pp.).

- 35. MIDDLETON IN TEESDALE. 17th to 19th MAY, 1957. By K.C. Dunham. <u>Proc.</u> Yorks.geol.Soc., v.31(1957-56), pp.326-327.
- 36. UPPER TEESDALE. MAY 22nd and 23rd, 1948. By L.R. Wager. Proc.Yorks. geol.Soc., v.28(1250-53), pp.50-53.

- 37. UPPER TEESDALE AND LUNEDALE. 22nd to 24th MAY, 1964. By K.C. Dunham, G.A.L. Johnson and A.C. Dunham. Proc. Yorks.geol.Soc., v.35(1965-66), pp.287-290.
- 38. COTHERSTONE. 27th and 28th SEPTEMBER, 1958. By H.G. Reading. <u>Proc.</u>
 Yorks.geol.Soc., v.32(1959-60), pp.141-142.
- 39. STAINMORE. MAY 28th and 29th, 1949. By J.S. Turner. <u>Proc.Yorks.geol.</u> Soc., v.28(1950-53), pp.117-118.
- 40. MALLERSTANG AND BIRKDALE, 5th to 8th JULY 1957. By J.S. Turner. Proc. Yorks.geol.Soc., v.31(1957-58), pp.327-329.
- 41. RICHMOND, 10th to 11th JULY, 1954. By A.J. Wells. <u>Proc.Yorks.geol.</u> Soc., v.30(1955-56), pp.102-104.
- 42. SUMMER FIELD MEETING TO NORTH-EAST YORKSHIRE. AUGUST 9th to 20th, 1934.

 By M. Black, J.E. Hemingway and V. Wilson. Proc.Geol.Ass., Lond.,
 v.45(1934). pp.291-306.

".. to study the stratigraphy of the Jurassic Rocks in North-East Yorkshire."

The excursions were: The railway journey from York to Whitby (pp.); Whitby, Saltwick and Esk valley (lpp.); Staithes to Runswick Bay (lpp.); Robin Hood's Bay, Peak, and Blea Wyke (lpp.); Hayburn Wyke and Cloughton (lp.); Burniston, Scalby Wyke, and Scarborough (lp.); Filey Cliffs to Cayton Bay and Scarborough (lp.); Hackness Hills, Forge Valley and East Ayton (lp.); the Middle and Upper Jurassic Rocks in Newtondale (lp.); Eastern Howardian Hills (lp.); Appleton-le-Street and Hildenley (pp.); South Hambleton Hills, Coxwold-Gilling Cap and West Howardian Hills (2pp.).

In the same volume of the <u>Proceedings</u> there is a 44 page itementialed "A synopsis of the Jurassic rocks of Yorkshire" written for the Summer Field Meeting by the leaders of the excursions.

43. SUMMER FIELD MEETING IN EAST YORKSHIRE. 22nd JULY - 5th AUGUST, 1950. By V. Wilson, C.W. Wright, J.E. Hemingway, H.C. Versey and W.S. Bisat. Proc.Geol.Ass., Lond., v.65(1954-55), pp.313-327.

During the 1934 Meeting (see above) a comprehensive study was made of the whole Jurassic sequence. On the 1950 visit an attempt was made to balance the claims of Jurassic and Cretaceous stratigraphy, general geomorphology and drift geology.

The excursions were: - Scarborough and Hackness Hills (1p.); Cayton Bay

and Filey (lp.); the Eastern Howardian Hills (lp.); the Western Howardian Hills and southern part of the Hambleton Hills ($l_{\mathbb{Z}}^{1}pp.$); Sewerby to Danes Dyke ($\frac{1}{2}p.$); Flamborough Head ($\frac{1}{2}p.$); Specton ($\frac{1}{2}p.$); Yorkshire Wolds and Humber Gap ($\frac{1}{2}p.$); the Yorkshire Wolds ($\frac{1}{2}p.$); the Market Weighton Axis ($\frac{1}{2}p.$); Newtondale, Goathland and Whitby (lp.); Holderness Drifts (lp.).

Notes on additional records of mollusca from the Dimlington area (by W.S. Bisat) and on the age of the Holderness shells (by D.F.W. Baden-Powell) are also included.

44. NORTH-EAST YORKSHIRE. GUIDE TO EXCURSION C.2. By H.C. Versey and J.E. Hemingway. International Geological Congress. XVIII Session - Great Britain, 1948. 19pp.

"The Excursion is designed to study the representative sections of the Jurassic and Cretaceous systems exposed in the cliffs of North-east Yorkshire and inland, together with the effects of Kimmerian earthmovements. The area also includes the classic Cleveland glacier-lake system."

The excursions were: Harrogate and Ripon areas (2pp.); Leeds to Scarborough (2pp.); Staithes, Lealholm, Castleton and Ralph Cross (2pp.); Robin Hoods Bay and Fylingdales Moor (2pp.); Whitby, Goathland and Pickering (3pp.); Ravenscar and the Hackness Hills (2pp.); Filey to Cayton Bay (1p.); Specton and Flamborough Head (2pp.); The Market Weighton Axis (1p.).

- (45-55). GEOLOGY OF THE YORKSHIRE COAST. 1. The Jurassic, by J.E. Hemingway and V. Wilson. 11. The Cretaceous, by C.W. Wright. Geologists' Association Guides, No.34. 1963. 34pp. Price 3/6.
 - 1. The Jurassic. By J.E. Hemingway and V. Wilson.

The following eight excursions are described:-

45. Staithes to Porth Mulgrave or Runswick Bay: Middle and Upper Lias.

(4\f2pp.)

46. Whitby to Saltwick Bay: Upper Lias and Lower Deltaic Series.

(5½ pp.)

47. Blea Wyke Point and Ravenscar: Upper Lias and Middle Jurassic Succession adjacent to the Peak Fault.

"A unique succession of Upper Lias and Middle Jurassic rocks is exposed on the shore and in the cliffs south of Peak Steel. The section is in part difficult of access and below the vertical cliffs it is dangerous."

(g.sk.map: lin. - $\frac{1}{4}$ ml.) (6 $\frac{1}{2}$ pp.)

48. Cloughton Wyke to Scalby Wyke. Middle and Upper Deltaic Series with Marine Beds.

".. a part of the Middle Jurassic succession, which although not typical of that of North East Yorkshire in all its aspects, does present a number of outstanding features in well-exposed sections."

(3pp.)

49. Egton Bridge and Goathland.

".. displays most clearly the glacial phenomena consequent upon the retreat of the ice-front from Cleveland to the sea." (3pp.)

50. Scarborough to Cayton Bay.

"The Oxford Clay is well seen from the Marine Drive on the east side of the hill and the basal beds of the Lower Calcareous Grit form over-hanging cliffs above the bare clay face. (lp.)

51. Gristhorpe to Filey.

".. Upper Estuarine sandstones and sandy shales overlie the Grey Limestone beds which contain galena-bearing ironstone nodules. In the sandstones below these beds is the famous Gristhorpe Plant Bed in which are the remains of many plants, thought to have grown in the immediate vicinity."

(g.sk.map: 3in. - 2ml.) (2pp.)

- 52. Hackness Hills and Forge Valley.
 - ".. the local beauty spots known as the Hackness Hills and Forge Valley."

 (g.sk.map: lin. 3mls.) (2pp.)
 - 11. The Cretaceous, by C.W. Wright.

"The Cretaceous System in Yorkshire shows several significant differences when compared with the development in south-eastern England."

An introductory page is accompanied by a folding plate of structural sections from Bridlington to Speeton and another folding plate with full details of the lithological and zonal succession. Three excursions are described:-

53. Reighton Gap to Speeton Cliffs.

Lower Cretaceous Speeton Clay (over 300 feet), Upper Albian Red Chalk (about forty-five feet) and Cenomanian Red and Lower Chalk (about 120 feet).

(g.sk.plan: 9in. - lml.) (32pp.)

54. Flamborough Head.

"Examining Turonian and Lower Senonian White Chalk, particularly cliffscenery and stack-formation in very hard chalk." (lp.)

- 55. South Landing to Sewerby.

 "Examining Senonian zones of <u>Uintacrinus</u> (87 feet), <u>Marsupites</u> (121 feet) and <u>Inoceramus lingua</u> (177 feet)."
- 56. WHITEY. 24th to 26th SEPTEMBER, 1965. By J.E. Hemingway. Proc. Yorks. geol.Soc., v.35(1965-66), pp.435-437.

 Details of an earlier excursion are given in the Proceedings for 1949 (pp.118-122).
- 57. RUNSWICK BAY, 11th to 12th SEPTEMBER, 1954. By J.E. Hemingway. <u>Proc.</u> Yorks.geol.Soc., v.30(1955-56), pp.104-105.
- 58. ROBIN HOOD'S BAY. 23rd to 25th SEPTEMBER, 1960. By L. Bairstow and J.E. Hemingway. Proc. Yorks.geol.Soc., v.33(1961-62), pp.41-45.
- 59. THE YORKSHIRE DALES. THE SUMMER FIELD MEETING, 1933. By R.G.S. Hudson and W.B.R. King. Proc.Geol.Ass., Lond., v.44(1933), pp.428-440.
 - ".. primarily to study the stratigraphy of both the Carboniferous and Lower Palaeozoic Rocks and their relation to the underlying massif on and against which they were deposited."

The excursions were:- the glaciation and Yoredale Succession of Upper Wensleydale $(3\frac{1}{2}pp_{\bullet})$; the Upper Yordales and Millstone Grit of Swaledale and Arkengarthdale $(1\frac{1}{2}pp_{\bullet})$; Ingleborough, Chapel-le-Dale and Kingsdale $(1p_{\bullet})$; the Lower Palaeozoics of Upper Ribblesdale [including Alum Pot] $(1p_{\bullet})$; the Lower Palaeozoics of Crummack Dale $(1p_{\bullet})$; the Reef Limestones and Namurian Unconformity of Stockdale and Scaleber $(1\frac{1}{2}pp_{\bullet})$; the Mid-Craven Fault and the Reef Limestones of Malham $(1p_{\bullet})$; the Craven Lowlands and the Skipton Anticlines $(1\frac{1}{2}pp_{\bullet})$; the Cracoe Reef Limestone $(1\frac{1}{2}pp_{\bullet})$.

In the same volume of the <u>Proceedings</u> there is a 72 page description of "The geology of the Yorkshire Dales" written for the Summer Field Meeting by the leaders of the excursions.

- 60. FIELD MEETINGS ALONG THE NORTH CRAVEN FAULT. North-East Lancashire Group. 12th JULY and 23rd AUGUST 1958. (With Note on the Malham Tarn Silurian Inlier.) By I.A. Williamson. Proc.Gool.Ass., Lond., v.70(1959), pp.210-214.
 - ".. the general geology of the area along the North Craven Fault, between Wharfedale and Ribblesdale, near the south margin of the Askrigg Block."

 The excursions were:— Threshfield to Malham (2½pp.); Malham to Stainforth (2pp.).

61. EASTER FIELD MEETING IN THE SETTLE DISTRICT. 8th - 11th AFRIL, 1955. By M.M. Sweeting and W.W. Black. <u>Proc.Geol.Ass., Lond.</u>, v.69(1958-59), pp.24-27.

".. to study the general geology and geomorphology of the area and to examine in detail the Carboniferous succession at and near the margin of the Askrigg Block."

The excursions were: Settle to Malham (lp.); Giggleswick Scar, Black-riggs Quarry, etc. $(\frac{1}{2}p_{\bullet})$; Ingleborough Cave, Trow Gill, etc. $(\frac{1}{2}p_{\bullet})$; some of the geomorphological problems of the Askrigg Block $(\frac{1}{2}p_{\bullet})$.

Two useful sources of local information are: "A guide to the geology of the district round Ingleborough." By K.C. Dunham et al. (Issued for the Field Meeting at Ingleton, 16-18th May, 1953.) Proc.Yorks.geol. Soc., v.29(1953), pp.77-115, maps, photos. Available separately for 15/-.); and The face of north-west Yorkshire. Geology and natural vegetation. By A. Raistrick and J.L. Illingworth. Clapham: Dalesman Publishing Company Ltd., 1967. 90pp.

- 62. MALHAM. 4th and 5th JULY, 1959. By I.A. Williamson. <u>Proc.Yorks.</u> geol.Soc., v.32(1959-60), pp.373-375.
- 63. CRACCE, GRASSINGTON AND GREENHOW HILL. 29th AUGUST to 2nd SEPTEMBER, 1959. (Joint Meeting with the British Association.) By W.W. Black, K.C. Dunham, C.J. Stubblefield and K.A. Joysey. <u>Proc.Yorks.geol.Soc.</u>, v.32(1959-60), pp.375-377.
- 64. GRASSINGTON. JULY 25th and 26th, 1949. By G. Bond and W.W. Black. Proc. Yorks.geol. Soc., v.28(1950-53), pp.122-124.
- 65. UPPER NIDDERDALE. 25 to 27th MAY 1962. By A.A. Wilson. <u>Proc.Yorks</u>. geol.Soc., v.34(1963-64), pp.102-104.
- 66. MASHAM. 29th JUNE to 1st JULY, 1956. By A.A. Wilson. <u>Proc.Yorks</u>. geol.Soc., v.31(1957-53), pp.75-77.
- 67. THE SUMMER FIELD MEETING, 24th JULY 2nd AUGUST, 1938. THE HARROGATE DISTRICT. By R.G.S. Hudson, W. Edwards, L.H. Tonks and H.C. Versey. Proc.Geol.Ass., Lond., v.49(1938), pp.353-372.
 - ".. primarily to study the relation and variation in the sedimentation of the Millstone Grit and Carboniferous Limestone, the various features of the Pennine Poothills due to the Vale of York Glaciation, and the Permian succession in Yorkshire."

The excursions were: The succession and structure of the Harrogate Anticline (1 pp.); the Middle Yoredale Inliers of Upper Nidderdale (2pp.); the Millstone Grit Succession of Upper Nidderdale (1p.); the Millstone Grit of the Simonseat Anticline and the Lower Carboniferous of the Greenhow Inliers (2pp.); the Coal Measures south of Leeds (2 pp.); the Millstone Grit North-west of Harrogate and the Glacial Features of the Fountains District (2 pp.); the Great Scar and Reef Limestones of the Burnsall Anticline (2 pp.); Knaresborough and Talonster (2pp.); Ripon and Masham (2pp.); the glaciation and Millstone Grit Succession of the Wharfe Valley (2pp.).

In the same volume of the <u>Proceedings</u> there is a 59 page account of The Geology of the country around Harrogate [written for the Summer Field Meeting] by the leaders of the excursion. The account is complementary to that written for the field meeting in the Yorkshire Dales (1933) - see above.

- 68. HELMSLEY-COXWOLD AREA. 20th 22nd MAY, 1955. By H.C. Versey, V. Wilson and J.E. Hemingway. Proc. Yorks.geol.Soc., v.30(1955-56), pp.322-324.
- 69. ROSEDALE AND PICKERING. 20th to 22nd SUPTEMBER 1963. By J.E. Hemireway and B.N. Twombley. Proc. Yorks.geol. Soc., v.34 (1965-64), pp.465-468.
- 70. SCARBOROUGH 28th and 29th SEPTEMBER 1957. By H.C. Versey. <u>Proc.Yorks</u>. geol.Soc., v.31(1957-58), pp.329-335.
- 71. FORDON. 2nd JUNE, 1956. By A.V. James and J.E. Hemingway. <u>Proc.Yorks</u>. geol.Soc., v.31(1957-53), pp.74-75, 1957.
- 72. BRIDLINGTON. SEPTEMBER 25th and 26th, 1948. By W.S. Bisat and H.C. Versey. Proc. Yorks. geol. Soc., v.28(1950-53), pp.55-56.
- 73. HCLDERNESS AND SPIRN HEAD, 18th to 20th SEPTEMBER, 1964. By G. De Boer, L.F. Penny and J.A. Jatt. <u>Proc.Yorks.geol.3oc.</u>, v.35(1965-66), pp.294-298.
 - Details of an earlier excursion are given in the <u>Proceedings</u> for 1957-58 (pp.77-78).
- 74. FIELD MEETING TO THE HOLDERNESS COAST. 18th AUGUST 21st AUGUST, 1933. By W.S. Bisat. Proc.Geol.Ass., Lond., v.44(1933), pp.441-443.

 The excursions were: Hessle (3pp.); Hornsea, Kelsey Hills and Burstwick (1p.); Flambre' Head (4p.).

- 75. NORTH LINCOLNSHIRE 21st to 23 SEPTEMBER 1962. By P.E. Kent, J.W. Neale and A. Straw. Proc. Yorks.geol.Soc., v.34 (1963-64), pp.112-116.
- (76-81). GEOLOGY AROUND THE UNIVERSITY TOWNS: HULL. By W.S. Bisat, L.F. Penny and J.W. Neale. Geologists' Association Guides, No.11. 1962. 34 pp. Price 3/6.

The Guide contains an Introduction (4pp., loc.map lin.-10mls., and structural sections across the Market Weighton area) and details of nine excursions:-

76. Hotham to South Cave, by J.W. Neale.

".. a west-east traverse across the whole Jurassic succession as developed some six miles south of Market Weighton." (6pp.)

77. Elloughton to Hessle.

".. various aspects of the Jurassic, Cretaceous and Pleistocene deposits in the area immediately north of the Humber." (5pp.)

78. Newbald, Market Weighton, Kiplingcotes, Willerby.

Cave Oolite; Red Chalk and Carstone on Lower Lias; Turonian, Holaster planus Zone; Senonian, Micraster cortestudinarium Zone. (2pp.)

79. Sewerby, Flamborough, Hunmanby, by L.F. Penny.

"The buried cliff at Sewerby, the Flamborough end-muraine, and glacial overflow phenomena in the Hunmanby area." (24pp.)

80. Dimlington and Keyingham.

"Coast-section of Holderness drifts at Dimlington, and inland exposure of Kelsey Hill Gravels near Keyingham." (35pp.)

81. Cliff-sections on the Holderness coast [Kilnsea to Bridlington], by W.S. Bisat. (2pp.)

"The cliffs consist almost entirely of boulder-clay, with only minor intercalations of sand and gravel. Banked against the foot of the cliffs are long stretches of sand and shingle derived from the waste of the cliffs. There is a tendency for this detritus to consist of (a) a cliff-foot bank of the coarser material extending perhaps fifty yards or so outwards from the cliff, and (b) a lower flat of sand extending seawards beneath low water. Between these two deposits there is frequently a channel in which the boulder-clay may be exposed, or which may be floored by a collection of erratic boulders of all sizes derived from the cliffs." (i) Easington to Holmpton (3½pp.): (ii) Withernsea to Holmpton (1½pp.); (iii) Hornsea to Mappleton (1p.); (iv) Hornsea to Skipsea (2pp.).

A useful supplement is: "A guide to the geology of the area between Market Weighton and the Humber" by G. De Boer, J.W. Neale and L.F. Penny. Proc. Yorks.geol.Soc., v.31(1957-58), pp.157-209, illus.

82. GEOLOGY AND SCENERY OF THE COUNTRYSIDE ROUND LEEDS AND BRADFORD. By H.C. Versey. London: Thomas Murby & Co. 1948. 94pp. Price 10/-.

The book contains a section on General Principles and descriptions of The Mountain Limestone Country, The Millstone Grit Country, The Coalfield, The Magnesian Limestone and Rivers and Glaciers. The emphasis of the volume is "on those principles of the science that can be illustrated from local phenomena and the excursion itineraries direct the reader to those places which are most suitable for this purpose".

The excursions were: Malham District (lp.); Skipton and Draughton (lp.); Bolton Abbey (2pp.); the Harrogate Anticline (lip.); Almscliff Crag and Leathley (ip.); Burnsall and Trollers Gill (lp.); Bardsey and Collingham (lp.); Robin Hood and Middleton (2pp.); Knaresborough (lip.); Castleford and Pontefract (ip.); country west of Bradford (lp.); Roundhay Park and Shadwell (lp.)

83. PENNINES. GUIDE TO EXCURSION A.9. By R.G.S. Hudson and F.W. Cope.
International Geological Congress. XVIII Session - Great Britain, 1948.
25pp.

The Guide contains a general Introduction (lp.), selected bibliography (4pp.) and two main sections, as follows:-

Excursions in the Southern Pennines area. (Centred on Buxton, Derbyshire.) - Wye Valley, Derbyshire (2pp.); Castleton and Edale ($\frac{1}{2}$ pp.); Matlock and Dovedale ($\frac{1}{2}$ pp.); Goyt Syncline and Manifold ($\frac{1}{2}$ pp.); Potteries coalfield ($\frac{1}{2}$ pp.).

Excursions in the North and Central Pennines area. (Centred on Skipton, Yorkshire.) - Skipton, Greenhow and Cracoe (12pp.); Malham and Settle (1p.); Ingleborough and Upper Ribblesdale (1p.); Yorkshire Dales and Vale of Eden (1p.).

84. EXCURSION TO THE WESTERN PENNINES. JULY 24th - AUGUST 3rd. (Organised by the N.E. Lancs. Group.) By the Directors and Excursion Secretary. Proc.Geol.Ass., Lond., v.39(1928), pp.169-192.

The excursions were: Malham (3pp.); Horton in Ribblesdale (1pp.); Rishton, Whalley Banks and Black Hill (6pp.); Worsaw and Pendle (4pp.); Great Hameldon (1pp.); Cliviger Gorge (1pp.); The Cracoe Knolls (1p.); The Clitheroe Limestone (2pp.); Bank Hall Colliery and Roughlee (pp.).

- 85. CLITHERCE. By D. Magraw and W.H.C. Ramsbottom. Proc.Yorks.geol.Soc., v.33(1961-62), pp.264-266.

 Details of an earlier excursion are given in the Proceedings for 1950-53 (pp.53-54).
- 86. WORTH VALLEY: MAY 1st, 1948. By H.C. Versey. <u>Proc. Yorks.geol. Soc.</u> v.28(1950-53), p.50.
- 87. THE NORTH-WEST END OF THE CLIVICER GORGE. 7th MAY, 1955. By I.A. Williamson. Proc. Yorks.geol.Soc., v.30(1955-56), p.324.
- 88. THE SOUTH-EAST END OF THE CLIVIGER CORGE, 19th JUNE, 1954. By I.A. Williamson. Proc.Yorks.gecl.Soc., v.30(1955-56), p.102.

 In the same volume of the Proceedings (pp.375-406) there is "A guide to the geology of the Cliviger Valley, near Burnley, Lancashire" by I.A. Williamson.
- 89. FIELD MEETING IN THE CLIVIGER GORGE. North-East Lancashire Group. 8th SEPTEMBER 1956. By I.A. Williamson. Proc.Geol.Ass., Lond., v.68(1957-58), pp.65-67.
- 90. DENSHAW. JULY 10th, 1948. By B. Whitehead. <u>Proc.Yorks.geol.Soc.</u>, v.28(1950-53), p.54.
- 1-93). GEOLOGY AROUND THE UNIVERSITY TOWNS: LIVERPOOL. By R.G.C. Bathurst, J.C. Harper, R.M.C. Eagar, E. Neaverson, A. Bannerjee, P.J. Brenchley, A.E. Oldershaw, J.K. Shanklin and J. Starkey. Geologists' Association Guides, No.6. 1965. 40pp. Price 4/6.

 The Guide contains a very brief Introduction (2p.) and the following

The Guide contains a very brief Introduction (\$\frac{1}{2}p.\) and the following three itineraries for areas in Iancashire. The remaining ten itineraries are included in the second part of this provisional bibliography (Welsh geol.Qtly., v.3, pt.1, 1968).

91. The Permo-Trias of Skellow Clough, Lencashire, by R.G.C. Bathurst.
".. wooded ravine, five miles north-east of Ormskirk .. in which the basal beds of the Permo-Trias are exposed."

(g.sk.maps: 12in. - 20mls.; lin. - 200yds.) (25pp.)

The Upholland and Parbold areas west of Wigan, by R.M.C. Eagar. (pp.) Uppermost Namurian and basal Ammanian strata are described in two itineraries:-

92. The Upholland area.

"An almost complete succession of over 500 feet of measures lying in the

Zone of <u>Carbonicola?</u> <u>lenisulcata</u> may be seen in the magnificent quarried sections at Ravenhead and Pimbo Iane Brickworks."

(g.sk.map: 4in. - lml.) (5pp.)

93. The Parbold Area and Harrock Hill.

"Measures of the same age as those observable in the lower half of the succession at Upholland are seen again at Parbold and Harrock Hill, where their development is somewhat different. Much of the ground of the area is covered by drift and sections mostly small and discontinuous."

(g.sk.map: 3in. - lml.) (34pp.)

4-99). THE AREA AROUND MANCHESTER. By R.M.C. Eagar, F.M. Broadhurst and J.W. Jackson. Geologists' Association Guides, No.7. 1959. 32pp. Price 3/-.

The Guide contains a section on The Geological setting of Manchester $(4\frac{1}{2}pp., g.sk.map, 1\frac{1}{4}in. - 10mls.)$ and details of the following six excursions:-

94. The Irwell Valley between Radcliffe and Bolton, Lancashire, by F.M. Broadhurst.

"Most of this itinerary is confined to the Irwell Valley where the post-Glacial Irwell has cut a magnificent gorge through both the drift and solid rocks and thereby exposed one of the finest Coal Measure sections to be seen in Lancashire. Unfortunately the River Irwell is heavily contaminated with industrial waste products and as a result its appearance and smell are both unpleasant."

(g.sk.map: 3in. - lml.) (3pp.)

The Upholland and Parbold areas west of Wigan, by R.M.C. Eagar.

"Uppermost Namurian and basal Ammanian strata crop out on the western margin of the coalfield around Wigan to form a broad ridge of relatively high ground, fairly free from heavy drift, running approximately north-north-west - south-south-east, from Parbold area to Billinge. The areas to be visited lie on or about this ridge."

(g.sk.map: lin. - 4mls.) $(\frac{1}{2}pp)$

95. The Upholland Area.

"Within the area the beds dip uniformly E.N.E. An almost complete succession of over 600ft. of measures, of which nearly 500ft. lie in the Zone of Anthraconaia lenisulcata (Basal Ammanian), may be seen in magnificent quarried sections at Ravenhead and Pimbo Lane Brickworks."

(g.map: 4in. - lml.) (4pp.)

96. The Parbold Area: Parbold, Skellow Clough and Harrock Hill.

"Measures of the same age as those observable in the lower half of the

succession at Upholland are seen again at Parbold and Harrock Hill,
... where their development is somewhat different. Skellow Clough
provides a unique section of Permian beds. Much of the ground of the
area is drift-covered and sections are mostly small and discontinuous."

97. Alderley Edge, Cheshire, by R.M.C. Eagar and F.M. Broadhurst.

"Alderley Edge forms a prominent escarpment of resistant Keuper sandstone and conglomerate resting on softer Upper Mottled Sandstone of the Bunter and rises from the Cheshire plain fourteen miles south of Manchester ..."

"The Edge is riddled with mine workings, nearly all for copper ..."

(g.sk.map: 3in. - 1ml.) (5pp.)

98. The Rowarth Area, South of Glossop, Derbyshire, by F.M. Broadhurst.

".. an opportunity to study features of the stratigraphy and palaeontology of the upper Namurian of the Southern Pennines and enables various
structures (including different types of fault, the Goyt Syncline and
slump structures) to be seen."

$$(g.map: 2in. - lml.)$$
 $(4\frac{1}{2}pp.)$

99. The Edale-Castleton Area, Derbyshire, by J.W. Jackson.

".. planned to provide an opportunity to study the stratigraphical relationships of the 'standard' limestone succession and the 'reef' deposits on the northern edge of the limestone massif ... in the Castleton area, and the stratigraphy and palaeontology of the Namurian rocks below the Kinderscout Grit in the Edale area."

(100-105). THE PEAK DISTRICT, DERBYSHIRE. By F.W. Cope. With contributions by J.W. Jackson and F.M. Broadhurst. Geologists' Association Guides, No. 26. 1965. 26pp. Price 3/-.

The Guide contains an Introduction ($2\frac{1}{2}pp.$, g.sk.map, lin. - $4\frac{1}{2}mls.$) and details of the following six itineraries, which for the most part are over ground included in the Peak District National Park.

100. Ladmanlow and the headwaters of the River Goyt, including Goyt's Moss.

"To examine the relationship between the Carboniferous Limestone and the overlying Namurian strata, and to examine the Namurian succession together with the lowest Westphalian beds in the small Goyt's Moss coalfield."

(g.sk.map.)

(5pp.)

101. The Valley of the River Wye from Buxton to Monsal Head.

"For the type-section of the Carboniferous Limestone (standard or massif facies of the Avonian)." (5%)p.)

102. Glutton Dale, Parkhouse Hill, Dowel Dale and Chrome Hill.

"South-south-east of Buxton to study the relationship between the massifand reef-facies, and the nature of the junction between the Viséan limestones and the Namurian rocks."

(g.sk.map: $\lim_{n \to \frac{1}{4}} \min_{n}$) (2½pp.)

103. Wolfscote Dale and Dovedale.

"For a study of different facies in the uppermost Tournaisian and lower Viséan in an area of great scenic beauty. Good opportunities are afforded for the collection of well-preserved fossils, mainly brachiopods." (23pp.)

- 104. Peak Forest, Tideswell Dale, Litton, Great Hucklow and Bradwell Dale.
 - ".. opportunities for observing a dolerite sill at Peak Forest, a basic igneous intrusion into limestones of D1 age in Tideswell Dale, where a bed of clay has developed columnar jointing, and the Upper Lava Flow (of the Miller's Dale area) which is also exposed in Tideswell Dale. In Bradwell Dale, higher horizons of the Avonian limestones are well exposed, and fossils may be collected."
- 105. Edale, Castleton and Pin Dale, by J.W. Jackson, F.W. Cope and F.M. Broad-hurst.
 - ".. planned for the purpose of studying the stratigraphical relationships between the bedded limestones and the reef-limestones on the northern edge of the Derbyshire massif, and the stratigraphy and palae ontology of the Namurian rocks underlying the Kinderscout Grit in the Edale area."

106. WEEK-END FIELD MEETING IN THE PEAK DISTRICT OF DERBYSHIRE. 28th Sept. - 1st Oct. 1962. By F.W. Cope. Proc. Geol. Ass., Lond., v.74(1963), pp.91-96.

".. to examine the type section of the Dinantian rocks in and adjacent to the valley of the River Wye, to see the markedly unconformable relationship of the Namurian rocks to the underlying limestones, and to examine sections in the Namurian and lowest Westphalian rocks, and finally to investigate the reef limestones and their relationship to the standard limestones of the Dinantian."

The excursions were: The Wye Valley section of the Dinantian rocks (2pp.); The Govt Syncline (2pp.); Chrome Hill and Parkhouse Hill $(1\frac{1}{2}pp.)$.

Two useful supplementary references are: The Peak District Mineral Index, by T.D. Ford and W.A.S. Sarjeant (Bull.Peak District Mines Historical Society, v.2, pt.3, May 1964, pp.122-150) and Bibliography of the Geology of the Peak District of Derbyshire (to 1965), by T.D. Ford and M.H. Mason (The Mercian Geologist, v.2, no.2, June 1967, pp.135-244).

(107-112). THE AREA AROUND SHEFFIELD. By C. Downie. With a contribution by J.W. Jackson. Geologists' Association Guides, No.9. 1960. 24pp. Price 3/-.

The Guide contains a section on The Geological Setting of Sheffield (62pp.) and details of the following six itineraries:-

107. The Castleton District: Carboniferous Limestone and Millstone Grit, by C. Downie and J.W. Jackson. (g.map: lin. - lml.) (4½pp.)

108. Stoney Middleton and Eyam: Carboniferous Limestone and Millstone Grit.

(g.sk.map: lin. - 2ml.) (34pp.)

109. The Langsett area: Lower Coal Measures.

(g.map: lin.
$$-\frac{1}{2}ml.$$
) (2 $\frac{3}{4}pp.$)

110. South-West of Sheffield: Lower Coal Measures and Millstone Grit.

(g.sk.map.) (13pp.)

111. Conisborough: Upper Coal Measures and Permian.

112. The region between Kiveton Park and Barlborough: Permian. (18pp.)

(113-136). GEOLOGICAL EXCURSIONS IN THE SHEFFIELD REGION AND THE PEAK DISTRICT NATIONAL PARK. Edited by R. Neves and C. Downie. Sheffield: University of Sheffield. 1967. xlv + 163pp.

The Introduction (35pp. including stratigraphical charts and geol. map), by L.R. Moore, contains an outline of the geology of the area and a list of 34 references. The following twenty-four itineraries are described and illustrated:-

113. The Wye Valley, by F.W. Cope.

"The River Wye rises on the Namurian rocks in the high moorland country to the south-west of Buxton: from Buxton it flows in a generally easterly direction for some 10 miles when, near Little Longstone, it turns abruptly southwards to enter the Namurian again between Ashford and Bakewell."

$$(sk.map: lin. - 1\frac{3}{4}mls.)$$
 (8pp.)

114. Earl Sterndale Area, by E.B. Wolfenden.

".. to examine shelf and reef-complex limestones of Lower Carboniferous (mid-Viséan) age which are well-exposed within a short distance of the village."

(g.sk.map: lin. - 750yds.) (6pp.)

115. The Castleton Reef Belt and Adjoining Areas, by I.P. Stevenson.

"Most of the limestones [Dinantian] are of shelf or massif ('standard') facies and yield a coral-brachiopod fauna; typically they are pale and often massive in lithology. On the margins of the Derbyshire Dome, lateral passage into beds of basin facies has been observed in places; these are shales or shales and dark limestones with a goniatite-lamellibranch fauna. The basin facies is in general little exposed and is known mainly from boreholes."

(g.sk.map: lin. - iml.) (9pp.)

- "The Carboniferous Limestones of the Stony Middleton Area, by G.R. Orme.

 "The canyon-like valley of Middleton Dale runs in a westerly direction from the village of Stony Middleton, and exposes a sequence of limestones of Upper D₂ age in strike section, so that individual beds can be traced continuously for well over a mile along the sides of the dale."

 (g.map: lin. \frac{1}{2}ml.) (9pp.)
- 117. The Viséan Rocks of the Matlock-Wirksworth-Monyash Area, by J. Shirley.

 ".. a fascinating area both stratigraphically and mineralogically since it is impregnated by veins carrying galena, sphalerite, fluorite, barite and calcite and these are intimately related to the structures."

The sedimentary rocks of the area are mostly limestone of Carboniferous age. "Igneous rocks are present at several horizons. These are contemporaneous basalts and tuffs, known locally as toadstones, agglomerates and tuffs at the site of vents and in this area two masses of intrusive olivine dolerite, the Ible and Bonsall 'sills'."

(g.sk.map: lin. - 22mls.) (5pp.)

118. The Ashover Area, by G.H. Rhys.

".. a succession extending from Viséan $\rm D_2$ to the top of the Namurian is encompassed within a relatively small area."

(g.map: lin. - 5\frac{1}{2}mls.) (6pp.)

119. The Crich Inlier, by R. Neves.

"The topography ... closely reflects the influence of the underlying geology which is dominated by the southern culmination of the Crich-Ashover anticline and the Crich Fault."

"Viséan limestones of D₂ age underlie the greater part of Crich village which is encircled on the north and east sides by alternating shale hollows and inward facing grit scarps of the Namurian and Lower Westphalian."

(g.map: lin. - iml.) (4pp.)

120. Volcanic Rocks in the Peak District, by P. Wilkinson.

"Extrusive igneous activity ... is represented by lava flows, bedded

pyroclastics, and tuffaceous limestones. Intrusive activity is shown by sills, dykes, vent intrusions."

All the igneous rocks, extrusive or intrusive, are basic in character, but range in petrological type from tholeiitic basalts to alkali basalts."

(g.sk.map: lin. - 2mls.) (6ppp.)

.121. Some Mineral Deposits of the Carboniferous Limestone of Derbyshire, by T.D. Ford.

"The Carboniferous Limestone massif of Derbyshire is traversed by some hundreds of mineral veins containing galena, fluorite, baryte, sphalerite and calcite as well as nearly a hundred other less economically important minerals."

Mineralogical Guides:- (a) Treak Cliff and Windy Knoll, Castleton (3pp. incl.g.sk.maps); (b) Pindale and Dirtlow Rake, Castleton (12pp., g.sk.map lin. - 600yds.); (c) Glebe Mine, Sallet Hole and Longstone Edge (2pp., g.sk.map lin. - 2ml.); (d) Long Rake and Haper Mine (12pp., g.sk.map lin. - 2ml.); (e) The Masson Hill Fluorspar Deposits, Matlock (4pp., g.map lin. - 2ml., sk.plan lain. - 100yds.); (f) Middleton Limestone Mine, Middleton-by-Wirksworth (12pp., g.sk.map lin. - 2ml.); (g) Manystones Quarry, Brassington (2pp., sk.map 6in. - lml.); (h) Calton Hill (2pp.).

122. Fossiliferous Localities in the Namurian Rocks of Edale, by W.H.C. Rams-bottom, I.P. Stevenson and G.D. Gaunt.

(g.sk.map: lin. - gml.) (6pp.)

123. Namurian Sedimentation in the High Peak, by J.D. Collinson and R.G. Walker.

"Several localities just to the north of the Derbyshire Dome demonstrate successive stages in the infilling of a deep basin by a southward advancing deltaic complex. The main basin-filling in this area took place in the R₁₀ zone of the Namurian (Namurian B). The following succession was deposited in this zone: Kinderscout Grit 110m. (Mainly fluviatile), Grindslow Shales 70m. (delta slope), Shale Grit 150m. (submarine fan), Mam Tor Sandstones 80m. (distal turbidites), Edale Shales 230m. (deep basinal mudstones)."

124. The Bradfield-Ewden Area, by A.C. Higgins.

".. the later part of the Millstone Grit Beries and the early part of the Goal Measures ranging in age from Upper Namurian (Marsdenian and Yeadonian stages) to Lower Westphalian A (lenisulcata zone). It is primarily a non-marine sequence deposited in deltas and river estuaries with occasional marine intercalations represented by goniatite-bearing snales."

(g.sk.map: lin. - 2mls.) $(5\frac{1}{2}pp.)$

125. The Ashover and Chatsworth Grits in North-East Derhyshice, by R.W. Mayhew.

"In the Marsdenian succession ... the sandstone norizons - millstone grits - show marked variation in thickness, grain size, sedimentary structure and direction of derivation. These bear witness to variation in condition of deposition and strength and direction of the transporting currents. Illustration of these points is found in the exposures of the Ashover and Chatsworth Grits along a north-south line between Ewden and Belper."

(g.sk.map: lin. - 3mls.) (9pp.)

126. The Namurian and Basal Westphalian Rocks of The Beeley-Holymoorside Area, by E.G. Smith.

"The excursion covers the principal horizons of interest between the R. bilingue Band and the Grawshaw Sandstone, including all the marine bands."

(g.maps: lin. - lamls., 4in. - lml.) (6pp.)

127. The Namurian and Lowermost Westphalian Hooks in the Southern Part of the Goyt Syncline, by E.A. Francis.

".. opportunities for viewing the sequence of well-defined marine bands and associated strata extending from the upper Kinderscoutian (k_1) through the Marsdenian (R_2) and Yeadonian (0_1) of the Namurian (Mill-stone Grit) into the lower part of the Westphalian (Coal Leasures). All the well-authenticated marine bands of this part of the ... succession are exposed in the south-west Pennines and their relationship to stratigraphy and structure are clearly displayed in the southern part of the Goyt Syncline."

(g.map: lin. - lml.) (7pp.)

128. Westphalian A Palaeontology and Stratigraphy of the Langsett-Peniston Area, by M.A. Calver.

".. to examine the sequence in the lower part of the Lower Coal Measures (= Westphalian A) in the area between Langsett-Penistone-Midhopestones,
... The measures extend from the Rough Rock at the top of the Namurian to the Grenoside Sandstone which lies just below the middle of the Lower Coal Measures. In terms of the goniatite succession these beds belong to the Upper Gastrioceras age (G₂) plus the lowest part of the Anthracocoras age (A); they also correspond to the Anthracocorais age (A); they also correspond to the Anthracocorais lemisulesta Zone and basal part of Carbonicola communis Zone of the non-marine lamell@reclassification."

(g.sk.map: lin. - lml.) (5app.)

129. City of Sheffield, by L.C. Love.

"The rocks in the city of Sheffield are of the Millstone Grit and Coal Measures Series."

"(a) Rivelin Valley, (b) Ringinglow-Whirlowdale-Dore, (c) Parkwood and Neepserd, (d) Central City Area, (e) North-East and East of the City Centre."

(g.sk.map: lin. - 2mls.) (7pp.)

130. The Lithofacies of a Lower Coal Measure Sandstone Unit Between Sheffield and Brighouse, by H.G. Davies.

"The sandstone unit [Upper Lenisulcata and basal Communis zone] forms the upper portion of a thick cycle, the top of which is taken at the Better Bed seatearth and the base at the 80 Yard or Upper Band seat earth. The sandstones are known by two local terms, the Greenmoor Rock in the area between Sheffield and Huddersfield and the Elland Flags in the area to the north of Huddersfield. The unit comprises several sandstone leaves separated by argillaceous sediments."

(loc.map: lin. - 4mls.) (102pp.)

131. The Middle and Upper Coal Measures (Westphalian B and C) North-East of Sheffield, by D.A. Spears.

"The sandstones form prominent features giving rise to rolling country. The area is not, however, renowned for its beauty ... In the past a large number of coal seams, and some fireclays, were worked at outcrop but these have now been largely superseded by deeper working to the east. There are opencast sites, and these provide excellent temporary exposures, which is also true of the motorway exposures. More permanent exposures of strata other than sandstones are virtually confined to brickpits .."

(g.sk.map: lin. - 3mls.) (6pp.)

132. Conisborough, by C. Downie.

".. an area where Upper Permian rocks are well exposed. They are mostly poorly fossiliferous marine deposits of limestone and dolomite ... Relationships to the underlying Coal Measures can also be seen ... and structures associated with the Don Monocline ... studied. There is little or no drift cover."

(g.map: lin. - l_z^2 mls.) ($4\frac{1}{2}$ pp.)

133. The Permo-Triassic Rocks of the Worksop Area, by E.G. Smith.

".. rocks, ranging from the Lower Magnesian Limestone to the Bunter
Pebble Beds and dipping gently to the east, crop out ... Despite the
sparsity of drift, exposures are virtually confined to quarries, mostly
disused, and cuttings."

(g.map: lin. - lml.) (5pp.)

134. Sounthorpe, by D.A. Spalding.

"The softer marls and clays [of Mesozcic age] form the valleys, and are often overlaid with alluvium and only exposed in temporary excavations. The harder beds form successive scarps, and are relatively well exposed, particularly as the Frodingham Ironstone, Lincolnshire Limestone and Chalk are all of economic importance."

135. Kirton, Lincolnshire, by C. Downie.

"The area north of Kirton-in-Lindsey has been and still is being quarried extensively and good sections of Lower and Middle Jurassic rocks are exposed."

(loc.map: lin. - ½ml.) (3½pp.)

136. Nettleton, Lincolnshire, by C. Downie.

".. succession of rocks ranging from the Upper Jurassic to the Chalk. These form a more or less continuous sequence of shallow water marine deposits. Important non-sequences are present notably at the bases of the Spilsby Sandstone and Carstone. The facies developed in the Lower Cretaceous is more or less typical for Lincolnshire."

(loc.map: lin. - ½ml.) (3½pp.

- 137. CAUTLEY 20th to 22nd MAY, 1960. By J.S. Turner. <u>Proc.Yorks.geol.</u> Soc., v.33(1961-62), pp.36-37.
- 138. THE CHATSWORTH AREA. By E.G. Smith. <u>Proc.Yorks.geol.Soc.</u>, v.30(1955-56), pp.327-328.
- 139. CONGLETON DISTRICT. 9th to 11th JULY, 1965. By B.J. Taylor and A.A. Wilson. Proc. Yorks.geol.Soc., v.35(1965-66), pp.433-435.
- 140. ASHOVER AND DISTRICT. 17th and 16th SEPTEMBER, 1955. By G.H. Rhys and E.G. Smith. Proc. Yorks.geol.Soc., v.30(1955-56), pp.326-327.
- 141. EASTER FIELD MEETING, 1946. ASHOVER DISTRICT, DERBYSHIRE. By G.S. Sweeting and G.W. Himus. <u>Proc.Geol.Ass., Lond.</u>, v.57(1946), pp.137-152. The excursions were: The Kinderscout Grit and Middle Grit Country (2½pp.); Carboniferous Limestone, Butts Shales and Toadstone [Hockley Quarry and Marsh Brook at Butt] (3½pp.); the Kinderscout and Middle Grits, north and west of Kelskedge (4pp.); Ashover Hay, Ravensnest and Wire Stone area (4pp.).
- 142. FIELD MEETING AT LINCOLN. 10th MAY 14th MAY 1940. By L. Richardson Proc.Geol.Ass., Lond., v.51(1940), pp.246-256.

 The report contains an account of the formations investigated (52pp.) Northamptonshire Ironstone, Lower Estuarine Series, Lincolnshire Limestone, Upper Estuarine Series, Great Oolite (White) Limestone, Blisworth Clay and details of four excursions.
- 143-147). THE AREA AROUND STOKE-ON-TRENT. By F.W. Cope. Geologists' Associatio Guides, No.8. 1958. 16pp. Price 2/6.

 The Guide contains an Introduction (lapp., g.sk.map lain. 6 mls.) and details of the following excursions:-

143. Newcastle and Keele. Butterton Park and Acton.

"To examine part of the type sequence of the Upper Coal Measures for the Midlands coalfields, the Butterton dyke, and a section of the Bunter Pebble Beds at Acton near Whitmore."

(g.sk.map: lin. - 600yds. sk.map: lin. - 300yds.) (3pp.)

144. Newbold Astbury and Congleton Edge.

"The Carboniferous Limestone inlier at Newbold Astbury ... south of Congleton, and the overlying Namurian succession (approximately 2,400 ft.) exposed on the western slopes and crest of Congleton Edge.

(g.sk.map: lin. - 600yds.) (4pp.).

145. Leek, the Roches and Goldsitch Moss.

"For the examination of Namurian and lowest Westphalian beds in the Goyt Syncline by a route designed for an appreciation of the typical Namurian cyclothem including a marine band, and of the quite remarkable scenery in this part of the Pennines."

(g.sk.map: lin. - 500yds.) (3pp.)

146. Newcastle, Chesterton, Bignall Hill and Wood Lane.

"For an examination of part of the productive Coal Measures in an area where the structure is also of considerable interest."

(g.sk.map: lin. - 300yds.) (22pp.)

147. The Valley of the River Manifold.

"For an examination of different facies of the Carboniferous Limestone." (2pp.)

148. WEEK-END FIELD MEETING IN THE GRANTHAM DISTRICT. 8th and 9th JULY, 1939. By L. Richardson. <u>Proc.Geol.Ass., Lond.</u>, v.50(1939), pp.463-475.

The reports include an account of the geology of the district (7½pp.) and details of two excursions:- Melton Mowbray, Sproxton, etc. (2pp.); Melton Mowbray to Ancaster (2pp.) with a note on the petrology of parts of the Weldon Beds (1p.).

149. FIELD MEETING IN THE U.K. EAST MIDLANDS OTLFIELDS AND ASSOCIATED OUTCROP AREAS. 20, 21 and 22 SEFTYMBER 1963. By F.M. Taylor and F. Howitt. Proc.Geol.Ass., Lond., v.76(1965), pp.195-209.

".. to see some of the operations involved in the East Midlands oil-

fields with a particular emphasis on geological exploration; and also to examine in the outcrops to the west possible source and reservoir rocks and structure types encountered in the search and development of the oilfield."

The excursions were: Bothamsall (p.); Eakring (pp.); Coal Measures and Millstone Grit of Chesterfield (2pp.)

- 150. THE PERMO-TRIAS OF NOTTINGHAMSHIRE. 10th to 12th JULY, 1964. By R.F. Elliott, R.J. Firman and F.M. Taylor. Proc. Yorks.geol.Scc., v.35(1965-66), pp.290-294.
 - 151. THE MODERN SEDIMENTS OF THE WASH AND THE ADJACENT EAST LINCOLNSHIRE AND NORTH NORFOLK COASTS. AUGUST 6th 10th, 1967. By G. Evans. VII International Sedimentological Congress, Great Britain, 1967. Excursion reports. Excursion A.10. 7pp.
- 152. WHITSUNTIDE EXCURSION TO THE CHOMER AND MORWICH DISTRICTS. 16th 23rd MAY, 1923. By P.G.H. Boswell and G. Slater. Proc.Geol.Ass., Lond., v.34(1923), pp.223-232.

The coast from Mundesley to Overstand (Cromer Forest Bed, etc. - 3pp.)

- 153. WEEK-END FIELD MEETING IN THE STAMFORD DISTRICT [LINCOLNSHIRE]. 25th and 26th JUNE, 1938. By L.Richardson. <u>Proc.Geol.Ass., Lond.</u>, v.50 (1939), pp.29-45.
 - ".. to follow the beds between the Upper Lias and Great Colite Linestones, namely (in ascending order), the Northamptonshire Ironstone, Lower Estuarine Series, Lincolnshire Limestone and Upper Estuarine Series, from the Kettering District into Rutland and South Lincolnshire and to study certain sections of the superficial deposits."

The report contains an account of the geology of the district (6pp.) and details of two excursions.

- 154. FIELD MEETING IN THE CHARNWOOD FOREST. By W.W. Watts and H.H. Gregory. 26th and 27th SEPT. 1936. Proc.Geol.Ass., Lond., v.48(1937), pp.1-12, map.
 - ".. to exhibit the succession of the Charnian Rocks; the structure of the fault-shattered dome: the correlation of the north-west region with the rest of the Forest; the nature of the ancient rocks and the landscape of their surface, whether unconformably covered with the Keuper Marl or with this cover stripped from it; the two ways in which this ancient landscape is being 're-developed' (1) by general ablation bringing out the hill summits and ridges, (?) by re-excavation of Trianfilled valleys; and the effects of trans-section where streams which

have 'lost their way' on the Trias cover have come across buried ridges of Charnian rock down into which they have been compelled to cut their way."

- 155. THE VISIT TO CHARNWOOD FOREST -WHITSUNTIDE, 1928. By the Directors. Proc.Geol.Ass., Lond., v.39(1928), pp.486-491.
 - Details of excursions covering the following:- The Charnian Sequence $(2\frac{1}{2}pp.)$; the igneous area of Mountsorrel $(\frac{1}{2}p.)$; Tectonics Coarse Agglomerate Bardon Hill $(1\frac{1}{2}pp.)$; The North Western Region (1p.).
 - In the same volume of the <u>Proceedings</u> there is a 57 page account of the geology of Charnwood Forest written for the field meeting.
- 156. FOOTPATHS IN CHARNWOOD FOREST. A CIRCULAR WALK VIA BEACON HILL, ULVERSCROFT AND BRADGATE PARK, WITH NOTES ON THE GEOLOGY OF THE DISTRICT. By members of the Geology Section of the Leicester Literary and Philosophical Society. Trans.Leicester Lit. and Philosoc., v.60 (1966), pp.29-47 (incl. 10 sk.maps and glossary).
- 157. FIELD MEETING AT POLESWORTH AND DORDON, WARWICKSHIRE. 2nd JUNE, 1945. By G.H. Mitchell. Proc.Geol.Ass., Lond., v.56(1945), p.237.
- 158. MIDLAND GROUP FIELD MEETING REPORTS, 1945. SUTTON PARK. 16th JUNE. By D. Parkinson. BARNT GREEN AND BROCK HILL PUMPING STATION, 18th AUGUST. By L.J. Wills. Proc.Geol.Ass., Lond., v.57(1946), p.22.
- 159. MIDLAND GROUP FIELD MEETING REPORTS, 1944. THE MIDDLE BUNTER DEPOSITS OF THE BARR BEACON DISTRICT. 24th June. By E.M. Hignett. Proc. Geol.Ass., Lond., v.56(1945), pp.21-22.
- 160. WREN'S NEST. NATIONAL NATURE RESERVE. London: The Nature Conservancy, 1967. 31pp. Price 3/6.
 - "Wren's Nest National Nature Reserve at Dudley, in Worcestershire has long been renowned internationally as the source of many of the finest fossils displayed in the World's museums; it is also a unique monument to the Industrial Revolution."
 - Introduction (2pp.); the geology of Wren's Nest (3pp.); economic history (5pp.); advice to visitors (2pp.); elementary trail (2pp.); advanced nature trail (6pp.) coloured g.map: 2pin. pml.
- 161. MIDLAND GROUP FIELD MEETING REPORTS. ELLOWS PARK AND TURNER'S HILL.
 2nd MARCH 1946. (By L.J. Wills.) DRAKELOW AIRCRAFT FACTORY NEAR
 KIDDERMINSTER. 18th MAY, 1946. (By L.F.I. Walters and Major Thomas.)

VISIT TO DOVE DALE, 5th OCT. 1946. (By D. Parkinson.) <u>Proc.Geol.</u>
Ass., Lond., v.58(1947), pp.71-72.

162. EASTER FIELD MEETING (EXTENSION) TO MINSTERLEY. 8th - 11th APRIL, 1931. By W.F. Whittard. Proc.Geol.Ass., Lond., v.42(1931), pp.339-344.

"The excursion was planned, firstly, to make a traverse across the Ordovician rocks of Shelve, and, secondly, to visit the Valentian rocks of the Longmynd-Shelve outcrop."

The excursions were: Hope Valley and Stiperstones (2pp.); Bromlow Callow and Wotherton (lapp.); The Longmynd Flank and Sneed (lapp.); The Halsberley Lane section (app.).

In the same volume of the <u>Proceedings</u> there is a paper on "The Geology of the Ordovician and Valentian rocks of the Shelve Country, Shrop-shire", by W.F. Whittard (pp.322-339).

163. EASTER FIELD MEETING AT BRIDGNORTH, 1931. By T.H. Whitehead. Proc. Geol. Ass., Lond., v.42(1931), pp.370-377.

The excursions were: The glacial deposits east of the Severn $(2\frac{1}{2}pp.)$; Linley Brook to Morville and Buildwas, etc. (lp.); Knowlesands to Erdington and the Worfe valley, etc. (lp.); Billingsley to Oreton, etc. $(\frac{1}{2}pp.)$; Jiggers Bank, Doseley, etc. (2pp.).

4-169). GEOLOGY OF THE AREA AROUND BIRMINGHAM. By P.A. Gerrett, W.G. Hardie, J.D. Lawson and F.W. Shotton. Geologists' Association Guides, No.1. 1958. 22pp. Price 3/-.

The report contains a general account $(7\frac{1}{2}pp.)$ by J.D. Lawson, and details of the following excursions:-

164. Wren's Nest Hill, Dudley; Hurst Hill and Beacon Hill, Sedgley, by W.G. Hardie.

".. the Wren's Nest ... is the best known of a number of Silurian inliers which rise through the Coal Measures in the Midlands. It has a narrow dome-like form, elongated north-to-south."

(g.sk.map: 4in. - lml.) (2½pp.)

165. Nuneaton and Dosthill, by W.G. Hardie.

"To examine the rocks of the Nuneaton ridge, trending N.W. to S.E., and rising conspicuously above the Midland Plain of Triassic (here Keuper) rocks. The ridge is formed mainly of the basal Cambrian Hartshill Quartzite, resting unconformably on Pre-Cambrian igneous rocks."

(g.sk.map: lin. - 1600ft.) (2pp.)

- 166. Lickey Hills, by W.G. Hardie.

 [Rubery Sandstone Series (Llandoverian); Lickey Quartzite (Cambrian); etc.]

 (g.sk.map: 13in. 1ml.) (3pp.)
- 167. Newbury Lane (Rowley Hills), by W.G. Hardie.

 ".. a laccolitic intrusion of basic igneous rock of a type not uncommon in the Midlands, and varying texturally from basaltic to doloritic. It is very extensively quarried for road metal. The intrusion is regarded as being of Upper Carboniferous age (Staffordian); it everywhere contacts Etruria Marl. This latter rock provides the raw material for high class engineering bricks.
- 168. The Trias of South-West Birmingham, by P.A. Garrett.

 (g.sk.map: lin. 2mls.) (2ipp.)
- 169. The Drift Deposits of Warwickshire, by F.W. Shotton.

 "In general, the Older Drift caps the hill-tops, while the Newer Drift occurs as terraces on the valley sides."

 (lapp.)
- 170. FIELD MEETING IN THE KIDDERMINSTER AREA. 22 AUGUST 1954. By W. Waldron and G. Cotton. <u>Proc.Geol.Ass., Lond.</u>, v.66(1955-56), p.320.

 ".. to examine the Bunter in the Kidderminster-Habberley area, and the Dittonian and Downtonian in the Trimpley inlier."
- 171. EASTER FIELD MEETING IN THE BIRMINGHAM DISTRICT. 16 19 AFRIL 1954. By F.W. Shotton, E.D. Lacy and I. Strachan. Proc.Geol.Ass., Lond., v.66(1955-56), pp.321-324.

The excursions were: Rubery section and Bromsgrove (lp.); Wren's Nest, etc. $(\frac{1}{2}p_*)$ North Warwickshire coalfield (lp.); Oldbury, Rowley, etc. (lp.).

Details of excursions to the following are given in the <u>Proceedings</u> for 1935 (pp.391-398):- Lickey and Clent Hills; Abberley Hills; Numeaton and Hartshill; Coventry district; and of two other excursions in the <u>Proceedings</u> for 1931 (pp.297-302).

172. WEST MIDLANDS. GUIDE TO EXCURSION A.7. By L.J. Wills. International Geological Congress. XVIII Session - Great Britain, 1948. 12pp.

The Guide contains a Summary of Geological History in the West Midlands (6pp.) and very brief details of the following seven excursions:- Birmingham district and Lickey Hills; Wellington-Wrekin district; Church Stretton-Wenlock Edge district; "Black Country" and Rowley; Abberley Hills-Martley district; Titterstone Clee district; Nuneaton district.

- 173. FIELD MEETING AT NUNEATON. 23rd APRIL, 1949. By T. Eastwood. Proc.Geol.Ass., Lond., v.60(1949), pp.272-273.
 - ".. Pre-Cambrian, Cambrian [and] Coal Measures, rising as a ridge through the Trias of the Midland Plain though the actual contact is chiefly a fault known as the Eastern Boundary Fault .."
 - Details of an earlier field meeting are given in the <u>Proceedings</u> for 1940 (pp.77-78).
- 174. KETTERING FIELD MEETING. JUNE 7 10, 1946. By S.E. Hollingworth and J.H. Taylor. <u>Proc.Geol.Ass., Lond.</u>, v.57(1946), pp.235-245.

 Brixworth. Pitsford. Earls Barton. Irchester and Irthlingborough (5pp.

Brixworth, Pitsford, Earls Barton, Irchester and Irthlingborough (5pp.); Finedon, Cranford, Thrapston and Islip (2pp.); Stanion, Corby and Cottingham (2pp.).

In the same volume of the <u>Proceedings</u> there is a 29 page outline of the geology of the district, written for the Field Meeting.

- 175. WEEK-END FIELD MEETING IN THE KETTERING DISTRICT. 12th and 13th JUNE, 1937. By L.Richardson and P.E. Kent. Proc.Geol.Ass., Lond., v.49(1938), pp.59-76.
 - ".. to enable members to become acquainted with a large tract in the heart of Northamptonshire; to study the glacial deposits and 'solid' rocks, namely (in ascending order), the Northampton Ironstone, Lower Estuarine Series, Lincolnshire Limestone, Upper Estuarine Series, Great Oolite, Blisworth (or Great Oolite) Clay and Cornbrash; and to see the greater part of the actively worked Northamptonshire orefield in which the Lincolnshire Limestone 'thins out'."

The details of two excursions are prefaced by 9 pages of description.

176. EAST MIDLANDS. GUIDE TO EXCURSION C.4. By C.E. Marshall and H.H. Swinnerton. International Geological Congress. XVIII Session - Great Britain, 1948. 19pp.

The Guide contains an Introduction $(\frac{1}{2}p_{\bullet})$ and details of The Charnwood Forest District (5pp.), the Carboniferous Limestone of the Marlock Eyam and Castleton districts of Derbyshire (4pp.), the Ccal Measures (1p.), the Eakring Oilfield area (1p.), Permo-Trias and Pleistocene ($\frac{1}{2}pp_{\bullet}$), Jurassic ϵ w Cretaceous (2pp.).

- 177. FIELD MEETING AT FRANKLEY AND RUBERY, 2 JUNE 1951. MIDLAND GROUP.
 By F. Raw. Proc.Geol.Ass., Lond., v.64 (1953), p.99.
 - ".. from Allen's Cross (Borrowdale Road) by Egg Hill Lane to Frankley Beeches on the Stour Rea, or Tame, watershed; along this to Newtown Farm and thence to Rubery .."

- 178. FIELD MEETING AT ABBERLEY, WORCESTERSHIRE. MIDLAND GROUP. 12 SEPT-EMBER 1953. By P.A. Garrett. Proc.Geol.Ass., Lond., v.65(1954-55), pp.372-373.
- 179. MIDLAND GROUP. FIELD MEETING REPORTS, 1939. THE GLACIAL DRIFTS AND RIVER TERRACES NEAR STRATFORD-ON-AVON. 22nd APRIL. By M.E. Tomlinson. Proc.Geol.Ass., Lond., v.51(1940), p.216.
- 180. FIELD MEETING IN THE DUSTON DISTRICT NR. NORTHAMPTON. 7th JULY, 1945.

 By V. Wilson. Proc.Geol.Ass., Lond., v.57(1946), pp.28-29.
- 181. EXCURSION TO NORTHAMPTONSHIRE. MAY 13th 18th (WHITSUNTIDE), 1921. By B. Thompson. Proc.Geol.Ass., Lond., v.32(1921), pp.219-226.

 The excursions were:- Northampton (pp.); Harlestone and Duston (2pp.); Irthlingborough (1pp.); Islip, Twywell, Cranford (1p.); Brixworth (1pp.).
- 182. FIELD MEETING IN THE CAMBRIDGE DISTRICT. 19-21 SEPTEMBER 1958. By C.L. Forbes. Proc.Geol.Ass., Lond., v.71(1960), pp.233-241.

 ".. to demonstrate currently accessible Jurassic and Cretaceous exposures within reach of Cambridge."

 The excursions were:- Great Ouse River Board Pit, Stretham, Stretham "Mere", etc. (2½pp.); Barrington, Cherry Hinton, etc. (2pp.); Werboys, Mepal, etc. (3pp.).
- 183. EAST ANGLIA. GUIDE TO EXCURSIONS A.17, C.17. By C.D. Ovey and D.F.W. Baden-Powell. International Geological Congress. XVIII Session Great Britain, 1948. 11pp.
 - ".. to study the stratigraphy of the Cretaceous, Tertiary and Pleistocene deposits of East Anglia, together with the glacial and coastal phenomena, and the industries of Early Man."

The Guide contains a table of the General Succession in the Area and details of the following excursions:- Walton-on-the-Naze (½p.); Bramford, Claydon and Ipswich (lp.); Orford, Sudbourne Park, Chillesford and Bawdsey (lp.); Hoxne, Corton, Lowestoft Ness and The Broads (lp.); Thorpe, Sprowston and Whitlingham (lp.); Cromer Coast (lp.); Blakeney, Morston and Stiffkey (lp.); Scolt Head Island, Brancaster and Hunstanton (lp.).

184. FIELD MEETING AT BARRINGTON, NEAR CAMBRIDGE. 27th MAY, 1944. By. W.B.R. King. Proc.Geol.Ass., Lond., v.55(1944), pp.189-190.

- 185. REPORT OF A VISIT TO THE SEDGWICK MUSEUM, CAMBRIDGE, AND FIELD MEETING AT ROYSTON [CHALK]. 7th MAY 1938. By O.T. Jones. Proc.Geol.Ass., Lond., v.49(1938), pp.405-406.
- 186. FIELD MEETING ON THE CHALK OF CAMBRIDGESHIRE AND HERTFORDSHIRE. 14

 JULY 1962. By R.G. Bromley. Proc.Geol.Ass., Lond., v.77(1966), pp.

 277-279.

Details of an excursion to Barrington, Melbourn and Royston, Herts.

187. EXCURSION TO THE BANBURY AND TOWCESTER DISTRICTS. MAY 21st to 26th, WHITSUNTIDE, 1920. By L. Richardson. Proc.Geol.Ass., Lond., v.32 (1921), pp.109-122.

The excursions were: Constitution Hill (3pp.); Towcester and Blisworth (3pp.); Edge Hill (12pp.); Hook Norton and Sharp's Hill (2pp.); Tadmarton, Gallow Hill (Brailes) and the White House, Epwell (2pp.); King's Sutton and Newbottle (1p.).

- 188. FIELD MEETING AT HOOK NORTON AND SIEFORD, OXFORDSHIRE. 15th SEPTEMBER, 1945. By T.H. Whitehead and W.J. Arkell. proc.Geol.Ass., Lond., v.57(1946), pp.16-18.
 - ".. Middle Lias to the Cornbrash."
- 189. GEOLOGY EXPLAINED IN THE FOREST OF DEAN AND WYE VALLEY, by W. Dreghorn. Newton Abbot: David & Charles. 1968. 196pp.

"The aim of this book is to explain geology in terms of scenery in an area which is visited every year by thousands of tourists who for the most part are well educated but were never introduced to the sbjuect of geology in their school days."

The chapters include:— A traverse of the Dean Syncline; The Littledean and Ruspidge Areas; The Blakeney-Soudley Area; The Lydney Area and Beachley-Clanna Pericline; The Hope Mansel Dome and Wigpool Syncline; The Wye Valley: Ross to Kerne Bridge; The Symmond's Yat Area; The Wye Valley: Monmouth Area; The Wye Valley: Monmouth to Tintern Abbey; The Wye Valley: Tintern to Chepstow; The Scowles.

- 190. FIELD MEETING IN THE FOREST OF DEAN. 10 12 JUNE 1966. By J.G. Capewell. Proc.Geol.Ass., Lond., v.79(1968), pp.207-209.
 - ".. to present as broad a view as possible ... of the succession, structure and geomorphology of the area, and this would necessitate going outside the strict limits of the Forest .."

The excursions were: Plump Hill, etc. (2pp.); Westbury on Severn, etc. (1p.).

- 191. FIELD MEETING IN THE CENTRAL COTSWOLDS. 3 5 JUNE 1955. By D.V. Ager. Proc.Geol.Ass., Lond., v.66(1955-56), pp.356-365.
 - ".. a demonstration of lateral variation in the Inferior Oolite and higher Liassic rocks of the Cotswolds between Wotton-under-Edge and Cheltenham."
 - The excursions were: the area south of Stroud (5pp.); the area from Stroud to Cheltenham (4pp.).
- 192. FIELD MEETING IN THE COTSWOLDS. EASTER, 1949, 14 19 APRIL. By L.R. Cox. <u>Proc.Geol.Ass., Lond.</u>, v.61(1950), pp.261-267.

 The excursions were:- Fiddler's Elbow, Cooper's Hill, etc. (1p.); Salperton, Guiting Stone quarries, etc. (1pp.); Minchinhampton Common, Fracester Hill, etc. (1p.); Cirencester, etc. (1p.); Eyford Hill, Longborough, etc. (1p.).
- 193. WHITSUN FIELD MEETING. 3rd to 6th JUNE, 1949. THE WOOLHOPE DISTRICT AND MAY HILL. By R.W. Pocock. Proc.Geol.Ass., Lond., v.61(1950), pp.202-205.
 - ".. to examine the geology and physiography of the Woolhope in some detail and to compare it with the May Hill district to the south."
 - The excursions (all from Hereford) were: Priors Frome, Sutton Cockshoot, etc. (lp.); Mordiford, Scutterdine, etc. (lp.); Huntley, May Hill, etc. (lp.).
- 194. EASTER FIELD McETING, 1934. THE GLOUCESTER DISTRICT. By C.I. Gardiner, G.A. Kellaway, S.H. Reynolds, S. Smith and A.E. Trueman.

 Ass., Lond., v.45(1934), pp.445-450.
 - The excursions (all from Gloucester) were: Cheltenham, Painswick, Birdlip, etc. (2pp.); Woolhope Cockshoot, Scutterdine, etc. $(\frac{1}{2}p.)$; Garden Cliff section, Chepstow, etc. $(\frac{1}{2}p.)$; Longhope, Wilderness Quarry, etc. (1p.); Tortworth inlier (1p.).
- 195. EXCURSION TO CIRENCESTER AND DISTRICT. JUNE 7th to 10th (WHITSUNTIDE)
 1924. REPORT WITH AN APPENDIX ON A BORING AT LEWIS LANE, CIRENCESTER.
 By L. Richardson. <u>Proc.Geol.Ass., Lond.</u>, v.36(1925), pp.80-99.

 The report contains an Introduction (2½pp.) and details of three
 excursions:- Fosse Cross, Winterwell and Ampney-Crucis (2½pp.); Thames
 Head, Caksey and Minety and South Cerney (5pp.); Cirencester (2pp.).
- 196. GEOLOGY EXPLAINED IN THE SEVERN VALE AND COTSWOLDS, by W. Dreghorn. Newton Abbot: David & Charles. 1967. 192pp.
 The chapters include: The Jurassic System of Gloucestershire; Wainlode

Cliff; Westbury-on-Severn; The Severn Bridge; The Severn Bore and Hock Cliff; The Severn Terraces; The Cheltenham Sands; The Churchdown Cutlier; Robin's Wood Hill; Bredon Hill; Leckhampton Hill; Cleeve Hill; Barrow Wake, Crickley Hill and Birdlip; The Combes; Springs and Villages in the Great Oolite regions; Cotawold Tiles and Building Stones; The Painswick Area; The Northern Malverns; The Southern Malverns; May Hill.

(197-199). GEOLOGY OF THE COTSWOLD HILLS. By W.S. McKerrow, D.V. Ager and D.T. Donovan. Geologists' Association Guides, No.36. 1964. 26pp. Price 3/-.

The Guide contains details of three excursions:-

197. The North Cotswolds: Moreton-in-Marsh, Chipping Campden, Broadway Hill, Bourton-on-the Hill, Eyford, by W.S. McKerrow.

(sk.map: $\frac{1}{2}$ in. - lml.) (4 $\frac{1}{2}$ pp.)

198. The Central Cotswolds, by D.V. Ager.

"The Jurassic rocks of the Central Cotswolds between Wotton-under-Edge and Cleeve Hill give rise to some of the finest scenery in the country, coupled with a fascinating record of shallow-sea sedimentation and an abundance of fossils that have been well known since the earliest days of geological science."

- (i) Cleeve Hill, Battledown and Robins' Wood Hill (by D.V. Ager); (ii) Cheltenham to Stroud (by D.V. Ager); (iii) Stroud to Wotton-Under-Edge (by D.V. Ager and D.T. Donovan). (sk.maps.)
- 199. The Great Oolite series of the South Cotswolds, by D.T. Donovan.

 ".. to examine the facies-changes in the Great Oolite Series of the South Cotswolds. North of Bath striking lateral changes of facies occur .."

 (sk.map: lin. lml.)
- 200. SEDIMENTOLOGY OF THE GREAT COLITE SERIES (MIDDLE JURASSIC) OF THE COTSWOLDS. AUGUST 10th, 1967. By G. de V. Klein. VII International Sedimentological Congress, Great Britain, 1967. Excursion Reports. Excursion A.15. 3pp.

".. to demonstrate the evidence for the intertidal origin of most of the Great Colite Series exposed in Western Oxfordshire and eastern Gloucestershire."

201-205). GEOLOGY AROUND THE UNIVERSITY TOWNS: THE OXFORD DISTRICT. By W.S. Mc-Kerrow. Geologists' Association Guides, No.3. 1958. 19pp. Price 2/6. The Guide contains details of the following five excursions:-

- 201. North of Oxfordshire: The Middle and Upper Lias, Inferior Oolite and lower part of the Great Oolite Series [Dane Hill, Wroxton, Sharp's Hill Quarry, etc.]

 (sk.map: 8mls. lin.) (4pp.)
- 202. West Oxfordshire: The Middle and Upper Lias, Inferior Oolite and Great Oolite Series [Cassington, Milton under Wychwood, Fawler, Stonesfield, Ashford Mill, etc.]

 (sk.map: lin. 2mls.) (44pp.)
- 203. East Oxfordshire and West Buckinghamshire: The Great Oolite Series and Oxford Clay [Shipton on Cherwell, Kirtlington, Bicester, Calvert, Islip, etc.] (2/pp.)
- 204. East of Oxford: The Upper Jurassic and Wealden [Headington, Beckley, Littleworth, Littlemore, etc.]

(sk.maps: lin. - lml., lin. - 2mls.) (4pp.)

205. West of Oxford: The Upper Jurassic and Cretaceous [Cummor Hurst, Cothill. Faringdon, White Horse Hill, etc.]

(sk.map: lin. - 4mls.) (4pp.)

- 206. EASTER FIELD MEETING, 1952. THE JURASSIC ROCKS OF OXFORDSHIRE AND THEIR SUPERFICIAL DEPOSITS. By W.S. McKerrow and D.F.W. Baden-Powell. Proc.Geol.Ass., Lond., v.64(1953), pp.88-98.
 - The excursions covered: The Lias (2pp.); the Upper Inferior Oblite and lower part of the Great Oblite Series (2pp.); upper part of the Great Oblite Series and the Oxford Clay (3pp.); the Corallian, Kimmeridge and Portland (2pp.).
- 207. FIELD MEETING TO EXAMINE THE GREAT OOLITE SERIES OF OXFORDSHIRE. 7
 AUGUST 1955. By W.S. McKerrow. Proc.Geol.Ass., Lond., v.66(1955-56),
 pp.353-355.
- 208. REPORT OF FIELD MEETING TO STUDY THE CORALLIAN ROCKS SOUTH-WEST OF OXFORD. 27th SEPTEMBER, 1930. By W.J. Arkell. <u>Proc.Geol.Ass., Lond.</u>, v.42(1931), pp.50-52.
- 209. WEEK-END FIELD MEETING IN THE WITNEY DISTRICT. 25th and 26th MAY, 1935. By L. Richardson. Proc.Geol.Ass., Lond., v.46(1935), pp.403-411.

 ".. to study the Inferior Oolite, Chipping Norton Limestone, certain intervening beds, Great Oolite, 'Forest Marble' and Cornbrash of the district, and to pay some attention to the Superficial Deposits."

 Reports of 2 excursions.

- 210. NEW EVIDENCE OF THE GREAT OOLITE SUCCESSION AT BLADON, NEAR WOODSTOCK, OXFORDSHIRE. WITH REPORT OF FIELD MEETING TO KIRTLINGTON, SHIFTON ON CHERWELL, BLADON AND HANDBOROUGH [16th JULY, 1932]. By W.J. Arkell. Proc.Geol.Ass., Lond., v.44 (1933), pp.177-183.
 - ".. a close examination of the finest section of the Great Oolite Series in Oxfordshire, the Old Cement Works Quarry at Kirtlington, and also to visit the vast new excavation of the same company at Shipton on Cherwell."
- 211. FIELD MEETING IN THE OXFORD CLAY OF CLAVERT AND WOODHAM BRICK PITS, BUCKINGHAMSHIRE. 23 SEPTEMBER 1956. By J.H. Callomon. Proc.Geol. Ass., Lond., v.68(1957-58), pp.61-64.
- 212. FIELD MEETING TO THE LEIGHTON BUZZARD DISTRICT, BEDFORDSHIRE. 27 MAY 1961. By H.G. Owen. Proc.Geol.Ass., Lond., v.73(1962), pp.215-218.

 Details of earlier excursions are given in the Proceedings for 1921 (pp.172-177) and 1935 (pp.432-436).
- 213. FIELD MEETING IN THE HITCHIN DISTRICT. 18th JUNE, 1938. By E.F.D. Bloom and J.C. Harper. <u>Proc.Geol.Ass., Lond</u>, v.49(1938), pp.415-419.

 ".. to give a general view of the solid geology of the district in the region of the Hitchin-Stevenage gap, from the Chalk scarp to the Oxford Clay plain; and to examine in more detail some recent exposures."

 For details of earlier excursions see the <u>Proceedings</u> for 1930 (pp.87-91, pp.441-442.).
- 214. EXCURSION TO STEVENAGE, HERTS. 5 JUNE, 1920. By B.E.L. Culpin and S. Priest. Supplementary notes by S. Priest. Proc.Geol.Ass., Lond., v.32(1921), pp.20-27.
- 215. SUMMER FIELD MEETING IN EAST ANGLIA. 14 24 AUGUST, 1958. By D.F.W. Baden-Powell and R.G. West. Proc.Geol.Ass., Lond., v.71(1960), pp. 61-80.
 - ".. to study the Pliocene and Pleistocene rocks of the area, with special reference to the fossil plants and animals and the modern techniques which gave been devised for investigating them. Naturally the glacial deposits, geomorphology and coastal processes of the district attracted attention, and these have also been the subject of new and recent research."

The excursions were: Cambridge to Ipswich ($l\frac{1}{2}pp$.); (Ipswich to Orford to Chillesford (2pp.); Ipswich district (2pp.); Ipswich to Norwich (2pp.); Norwich (2pp.); Norwich to the coast (2pp.); North Norfolk coast (Overstrand, East Runton, etc. - 2pp.); glacial features of North Norfolk Coast (2pp.); western end of North Coast (1p.); Norwich to Cambridge ($l\frac{1}{2}pp$.).

- 216. FIELD MEETING IN THE QUATERNARY OF EAST SUFFOLK. 4 7 JUNE 1965.

 By H.E.P. Spencer. Proc.Geol.Ass., Lond., v.77(1966), pp.371-380.

 The excursions (all from Ipswich) were:- Westleton, Blyth burgh Heath;

 Southwold etc. (2pp.); the older Crag formations (2pp.); the glacial and other deposits of the Gipping Valley between Ipswich and Needham Market (5pp.)
- 217. FIELD MEETING AT THE STOUR ESTUARY. 18 MAY 1952. By A.G. Davis, G.F. Elliott and H.E.P. Spencer. Proc.Geol.Ass., Lond., v.64(1953), p.24 and pl.4. The plate contains copy of an old engraving of Harwich cliff in the early eighteenth century (Lavan clay with stone band capped by Red Crag) after Samuel Dale 1730; and photo of approximately same site in 1952.)
- 218. EXCURSION TO THE FELIXSTOWE AND IPSWICH DISTRICT WHITSUNTIDE, JUNE 3rd to 7th, 1922. By P.G.H. Boswell and I.S. Double. Proc.Geol.Ass., Lond., v.33(1922), pp.306-312.

 In the same volume of the Proceedings there is a 20 page description of the geology of the area.
 - Details of two other excursions to Ipswich are given in the <u>Proceedings</u> for 1932 (p.290) and 1938 (pp.410-414).
- 219. EXCURSION TO STANSTEAD, EASNEYE, AND WARE. 11th SEPTEMBER, 1920. By R.L. Sherlock. Proc.Geol.Ass., Lond., v.32(1921), pp.49-50.
- 220. EXCURSION TO DIGSWELL AND COLE GREEN, HERTFORDSHIRE. 17th APRIL, 1920. By R.L. Sherlock. Proc.Geol.Ass., Lond., v.31(1920), pp.159-160.
- 221. FIELD MEETING TO WELWYN AND CODICOTE. 19th JUNE, 1937. By R.L. Sherlock. Proc.Geol.Ass., Lond., v.48(1937), p.316.

 Details of an earlier excursion to Welwyn and Mardley Heath are given in the Proceedings for 1933(p.378).
- 222. FIELD MEETING AT CHEDDINGTON, IVINGHOE AND GUBBLECOTE. By K.P. Oakley. JULY 7th, 1935. Proc.Geol.Ass., Lond., v.47(1936), pp.38-41.
 Details of an earlier excursion to Ivinghoe and Cheddington are given in the Proceedings for 1928 (pp.492-497).
- 223. FIELD MEETING TO THE LEIGHTON BUZZARD-AYLESBURY AREA. 26 MAY 1962. By C.R. Bristow and J.F. Kirkaldy. <u>Proc.Geol.Ass., Lond.</u>, v.73(1962), pp.455-459.
 - ".. to see some of the results of recent detailed mapping of the beds

- ... between the Gault and the highest Jurassic clays ... [between] Brickhill ... in Bedfordshire [and] ... Albury in Oxfordshire."

 Details of two earlier excursions, one to Leighton Buzzard and one to Aylesbury, are given in the <u>Proceedings</u> for 1946 (pp.329-330) and 1934 (pp.104-106).
- 224. FIELD MEETING IN THE NORTH CHILTERN HILLS AND AYLESBURY DISTRICT.

 10th APRIL, 1948. By A.M. Davies and V. Wilson. Proc.Geol.Ass.,

 Lond., v.60(1949), pp.219-221.

 Much earlier field meetings to the area are reported in the Proceedings
 for 1873(p.210), 1887 (p.166), 1893 (pp.90-97), 1912 (pp.254-256) and
 a more recent excursion in the Proceedings for 1934 (pp.104-106).
 - national Geological Congress. XVIII Session Great Britain, 1948.

 11pp.

 The Guide contains a Table of Strata in the district and details of six excursions, as follows:- Cumnor, Shellingford, Aringdon, Swindon, White Horse Hill (lp); Calvert and Woodham brickpits, Aylesbury, Hartwell, Stone (*p.): Oxford (lp.): Stonesfield and the Evenlode Gorge.

GUIDE TO EXCURSION A.6.

225. OXFORD DISTRICT.

six excursions, as follows:- Cumnor, Shellingford, Aringdon, Swindon, White Horse Hill (lp); Calvert and Woodham brickpits, Aylesbury, Hartwell, Stone (p); Oxford (lp.); Stonesfield and the Evenlode Gorge, Blenheim Palace and Woodstock, Fawler, Long Harborough (lp.); Wroxton, Edge Hill, Shipton-on-Cherwell and Kirtlington (lp.); Burford, Milton under Wychwood, Evenlode valley, Churchill, Charlbury, Woodstock and Bladon quarry (lp.).

By W.J. Arkell.

- 226. REPORT OF EXCURSION TO THE OXFORD DISTRICT. [JULY 19th -JULY 21st 1926.] By J. Pringle. Proc.Geol.Ass., Lond., v.37(1926), pp.447-458.

 The excursions were:- Littlemore Station (*p.); Fawler, etc. (with an account of the superficial deposits of the Oxford area 62pp.); Headington, Magdalen Quarry, etc. (4pp.)
- 227. GEOLOGY OF THE OXFORD DISTRICT. AUGUST 9th, 1967. By J.D. Hudson and M. Talbot. V11 International Sedimentological Congress, Great Britain, 1967. Excursion reports. Excursion A.14. 3pp. (with sk.map)

 To "study facies and sedimentation in the Corallian Beds (Upper Jurassic) and Great Colite Series (Middle Jurassic) of Berkshire and Oxfordshire."
- 228. REPORT OF FIELD MEETING TO THE VALE OF WHITE HORSE, BERKSHIRE. MAY 28th, 1932. By H.L. Hawkins. Proc.Geol.Ass., Lond., v.43(1932), pp.272-274 (incl.g.sk.map).

229. FIELD MEETING AT SWINDON. 26th APRIL, 1936. By J. Pringle, C.H. Gore and C.P. Chatwin. Proc.Geol.Ass., Lond., v.48(1937), pp.82-84.

Two earlier field meetings in the district are described in the <u>Proceedings</u> for 1923 (pp.233-241) and 1922 (pp.152-155).

230. THE SILURIAN INLIERS OF THE SOUTH-EASTERN WELSH BORDERLAND. By M.L.K.
Curtis, J.D. Lawson and H.C. Squirrell. Geologists' Association Guides,
No.5. 1967. 32pp. Price 4/-.

The Guide contains a general introduction (3pp.) including a geological sketch map and a correlation chart of the Ludlovian of the inliers, and details of five itineraries. Four of these were incorporated in the second part of the provisional bibliography (Welsh geol.Qtly., v.3, pt.1, 1968).

The Tortworth Inlier, by M.L.K. Curtis.

"The Upper Llandoverian rocks rest unconformably on the Tremadocian; they consist of about 700 ft. of fine-grained sandstones and shales, with two lava bands which thin out in a westerly direction. The Wenlockian is represented by about 800 ft. of mudstones, siltstones and fine-grained sandstones, with impersistent limestone bands developed at various horizons. The Ludlovian beds consist mainly of mudstones and siltstones, sometimes calcareous; the lowest horizons are not seen, but the Bringwoodian, Leintwardinian and Whitcliffian Stages have been recognised. At Purton the Ludlovian beds pass up conformably into the Downtonian, but farther south in the Buckover section the Ludlovian and Downtonian are missing and the Wenlockian is overlain unconformably by Upper Old Red Sandstone.

(g.sk.maps) (5pp.)

231. BRISTOL DISTRICT. GUIDE TO EXCURSION C.3. By W.F. Whitterd. International Geological Congress. XVIII Session - Great Britain, 1948. 22pp.

The Guide contains details of the following excursions:- classic Rhaetic succession of Aust cliff (lp.); Silurian and Tremadoc rocks of the Tortworth inlier (\frac{1}{2}p.); Upper O.R.S., Carboniferous volcanic and Mendip scenery (l\frac{1}{2}pp.); Lower Oolites of the Southern Cotswolds (lp.); Carboniferous Limestone at Burrington Combe and Vallis Vale, etc., and Mesozoic-Palaeozoic unconformity in Vobster-Vallis region (3pp.); Lower and Middle Jurassic of Cotswold Hills (l\frac{1}{2}pp.); Carboniferous Limestone at Cannington Park, Mesozoics at St. Audries, etc. (3pp.); Lower Jurassic succession in Cotswold Edge (2pp.); Coal Measures of Bristol Coalfield and celestine deposits of Yate (lp.); Coal Measures of Somerset coalfield, etc. (\frac{1}{2}p.); classic Avon section (\frac{3}{2}pp. incl. sketch).

- 232. FIELD MEETING IN THE BRISTOL DISTRICT, NORTH OF THE RIVER AVON. 27 28
 JUNE 1964. By J.W. Cowie, D. Hamilton and C.E. Leese. Proc.Geol.Ass.,
 Lond., v.76(1965), pp.261-267.
 - ".. to examine the varying character of the unconformity between the

Palaeozoic and Mesozoic rocks involving the Old Red Sandstone, the Carboniferous Limestone Series and the Coal Measures together with the overlying Dolomitic Conglomerate, marls and sandstones of the Kauper, and the Rhaetic and Liassic rocks."

233. EXCURSION TO THE ERISTOL DISTRICT. Proc.Geol.Ass., Lond., v.40(1929), pp.171-176.

The excursions were: Portishead and Clevedon (lp.); South Gloucestershire (lp.); Avon Gorge (2p.); Central and Eastern Mendips (lp.); Dundry and Radstock (2pp.).

234. EASTER FIELD MEETING: THE LOWER AND MIDDLE JURASSIC ROCKS OF THE BRISTOL DISTRICT. 18 - 22 AFRIL 1957. By D.T. Donovan and T.R. Fry. Proc. Geol. Ass., Lond., v.69(1958-59), pp.130-139.

Earlier excursions to the area (<u>Proceedings</u> for 1881, 1901, 1919 and 1929) are of general scope. The present one consists of a more specialized study of certain Jurassic rocks.

The excursions were: North Wick, Dundry Hill, etc. (3½pp.); East Mendips (4pp.); Sutton Hill quarry, etc. (1p.); South Cotswolds (½p.).

- 235. GUIDE TO GEOLOGICAL EXCURSION TO SOUTH WALES AND BRISTOL. By E.E.L. Dixon and J. Pringle. Geological Survey Centenary. 1935. 19pp.
- 236. WILLIAM SMITH EXCURSION (ENVIRONS OF BATH). GUIDE TO EXCURSION A.3.

 By L.R. Cox, G.A. Kellaway, F.B.A. Welch. International Geological Congress. XVIII Session Great Britain, 1948.

"Demonstration of the Upper Palaeozoic and Mesozoic succession in the classic area in which William Smith discovered the fundamental principles of stratigraphy and determined the order of succession of the strata."

An 8 page pamphlet entitled "William Smith and the birth of stratigraphy" (by L.R. Cox) was published by the International Congress in 1948.

237. EASTER FIELD MEETING. BATH. MARCH 21st - 26th, 1940. By L.R. Cox, with details of sections by G.A. Kellaway and A. Templeman. Proc.Geol. Ass., Lond., v.52(1941), pp.16-35.

"This Field Meeting (postponed from September, 1939, on account of the outbreak of war) arose out of a suggestion to commemorate the centenary of the death of William Smith by a visit to the district in which he had first determined the order of succession of the English strata and discovered that strata may be identified by the fossils which they contain."

"Apart from its sentimental interest as the 'cradle of English geology',

Bath is an admirable centre for the study of the stratigraphical succession, outcrops of nearly all the formations from the Lower Palaeozoic to the Upper Cretaceous being within easy reach of the city."

The excursions were: Dyrham, Wick, etc. (2pp.); Beechen Cliff, Odd Down, Rugburn, etc. (7pp.); Twerton, Midford, etc. (3pp.); Westbury (Wilts.). etc. (2pp.); Limpley Stoke, Freshford Mill, etc. (2pp.).

Earlier visits are described in the Proceedings for 1873, 1888 and 1893.

- 238. FIELD MEETING AT PEWSEY VALE AND DEVIZES DISTRICT. 31 AUGUST to 2 SEP-TEMBER 1956. By R.S. Barron. Proc.Geol.Ass., Lond., v.68(1957-58), pp.228-230.
 - ".. the rocks exposed at the west end of the Vale of Pewsey; the Upper Jurassic rocks west of Devizes."
- 239. FIELD MEETING AT INKPEN, BERKSHIRE. MAY 23rd, 1936. By H.L. Hawkins.

 Proc.Geol.Ass., Lond., v.47(1936), pp.236-238.

 A traverse of "a considerable part of South-West Berkshire and part of North Hampshire".
- 240. EXCURSION TO NEWBURY AND BOXFORD. MAY 17th, 1924. By H.L. Hawkins. Proc.Geol.Ass., Lond., v.35(1924), pp.395-400.
- 241. EXCURSION TO GORING GAP. JUNE 10th, 1922. By H.L. Hawkins. <u>Proc.</u> Gecl.Ass., Lond., v.34(1923), pp.56-65.
- 242. FIELD MEETING AT PANGBOURNE AND SULHAM. MAY 5th, 1945. By H.L. Hawkins. Proc.Geol.Ass., Lond., v.56(1945), pp.228-230.
- 243. FIELD MEETING IN THE HENLEY INLIER. MAY 13th, 1933. By H.L. Hawkins. Proc.Geol.Ass., Lond., v.44(1933), pp.336-339.
- 244. FIELD MEETING AT MOOR END AND FRIETH. 28th APRIL, 1934. By S.W. Wooldridge and C.J.C. Ewing. Proc.Geol.Ass., Lo.d., v.45(1934), pp.434-435.
- 245. FIELD MEETING AT MONK'S RISBOROUGH, BUCKS. AFRIL 27th, 1935. By A.M. Davies. Proc.Geol.Ass., Lond., v.46(1935), pp.399-400.
- 246. FIELD MEETING AT PANGBOURNE AND BASILDON. MAY 11th, 1929. By H.L. Haw-kins. Proc.Geol.Ass., Lond., v.40(1934), pp.420-423.

- 247. FIELD MEETING AT THE PANG VALLEY, BERKSHIRE. APRIL 14th, 1934. By H.L. Fawkins. Proc.Geol.Ass., Lond., v.45(1934), pp.420-423.
- 248. EXCURSION TO WENDOVER AND BUCKLAND COMMON, NEAR CHOLESBURY. JULY 24th, 1920. By G. Barrow and J.F.N. Green. Proc.Geol.Ass., Lond., v.32(1921), pp.42-46.
- 249. FIELD MEETING IN THE CHILTERNS, NEAR TRING. 21 JULY 1963. By E.H. Brown. Proc.Geol.Ass., Lond., v.75(1964), pp.341-343.

 ".. to demonstrate the principal items of geomorphological interest in the gap through the Chiltern scarp between Tring and Ivinghoe."

 Details of earlier excursions to Gubblecote and Tring and to the Tring Gap and Steps Hill are given in the Proceedings for 1928 (pp.498-499) and 1921 (pp.215-217) respectively.
- 250. FIELD MEETING IN THE CENTRAL CHILTERNS. 7 MAY 1949. By P. Evans and K.P. Cakley. <u>Proc.Geol.Ass., Lond.</u>, v.63(1952), pp.59-62.

 Details of exposures at Folly Farm quarry, near Pitstone, Bucks.
- 251. FIELD MEETING IN THE VALE OF ST. ALBANS. 13 SEPTEMBER 1953. By P. Evans. Proc.Geol.Ass., Lond., v.65(1954-55), pp.18-22.
- 252. EXCURSION TO TYTTENHANGER, HILL END, NEW BARNES, MILL PIT AND ST. ALBANS.

 JULY 31st, 1920. By A.H. Williams. Proc.Geol.Ass., Lond., v.32(1921),
 p.51.
- 253. FIELD MEETING AT WATER END, NORTH MIMMS [HERTFORDSHIRE]. 28th MAY, 1949. By J.F. Kirkaldy. <u>Proc.Geol.Ass., Lond.</u>, v.61(1950), p.224.

 Details of an earlier excursion are given in the <u>Proceedings</u> for 1944 (p.189).
- 254. THE GEOLOGY OF THE MIMMS VALLEY. By S.W. Wooldridge and J.F. Kirkaldy. Together with Report of the Field Meeting held on July 10th, 1936. Proc. Geol.Ass., Lond., v.48(1937), pp.307-315.
- 255. FIELD MEETING IN THE LOWESTOFT DISTRICT. 1st JULY 3rd JULY, 1949.

 By D.F.W. Baden-Powell. (With a Note on the Marine mollusca of the Corton Beds.) Proc.Geol.Ass., Lond., v.61(1950), pp.191-197.

 The excursions were:- Waveney valley (2½pp.); Beccles, Hoxne, etc. (2pp.).

- 256. EVIDENCE FOR FOLDING IN THE TERTIARY AND CRETACEOUS ROCKS NEAR SOUTH MIMMS AND RIDGE HILL. With Report of Excursion. MAY 28th, 1920. By S.W. Wooldridge. Proc.Geol.Ass., Lond., v.32(1921), pp.227-231.
- 257. FIELD MEETING IN THE LEA VALLEY. OCTOBER 10th, 1937. By J.N. Emery. Proc. Geol. Ass., Lond., v.48(1937), p.378.
- 258. FIELD MEETING IN THE EPPING FORFST DISTRICT. 9th MAY, 1948. By J.F. Hayward. Proc.Geol.Ass., Lond., v.60(1949), p.222.

 Details of an earlier excursion with Notes on the geology of Epping Forest are given in the Proceedings for 1923 (pp.244-252).
- 259. FIELD MEETING AT DANBURY HILL, NEAR CHELMSFORD, ESSEX. 24 JULY 1955. By K.M. Clayton. <u>Proc.Geol.Ass., Lond.</u>, v.68(1957-58), pp.22-25.

 Details of an earlier excursion are given in the <u>Proceedings</u> for 1937 (pp.160-162).
- 260. FIELD MEETING AT BRADWELL, ESSEX. 14 JULY 1965. By J. Greensmith and V.E. Tucker. Proc.Geol.Ass., Lond., v.77(1966), pp.281-282.
- 261. THE GEOLOGY OF THE RAYLEIGH HILLS, ESSEX. With report of excursion.

 JUNE 23rd, 1923. By S.W. Wooldridge. Proc.Geol.Ass., Lond., v.34(1923),
 pp.314-322.
- 262. NOTES ON THE GEOLOGY OF THE LANGDON HILLS, ESSEX. With a report of excursion. MAY 6th, 1922. By S.W. Wooldridge and H.C. Berdinner. Proc.Geol.Ass., Lond., v.33(1922), pp.320-323.
- (263-269). THE LONDON REGION. (NORTH OF THE THAMES.) By R.G. Blezard, R.G. Bromley, J.M. Hancock, S.W. Hester, R.W. Hey and J.F. Kirkaldy. Geologists Association Guides, No.3OA. 1967. 34 pp. Price 3/6.

 The Guide contains an Introduction (3pp.) and details of the following 7 excursions:-
 - 263. The Aylesbury neighbourhood, by J.F. Kirkaldy and R.G. Blezard.

 (sk.map: lin. 2 inls.) (4 pp.)
 - 264. The Lower Cretaceous around Leighton Buzzard, by J.M. Hancock.

 "There are about six working pits for sand in the Lower Cretaceous around Leighton Buzzard. The quality of the exposures varies from year to year; these notes on individual pits were made in August 1966."

 (7pp.)

265. Ice-disturbed chalk south of Royston, by R.G. Bromley.

"The exposures of chalk ... show various aspects of a considerable dislocation of the chalk ridge south of Royston by southward-moving ice."

(sk.map: lin. - lamls.) (32pp.)

- 266. The Colne Valley from Rickmansworth to Uxbridge, by S.W. Hester.
 - ".. (1) the Cretaceous-Eocene unconformity; (2) the Reading type of the Woolwich and Reading Beds (Landenian); (3) the fossiliferous Basement Bed of the London Clay (Yspresian); and (4) the irregular solution of the Upper Chalk beneath gravels."

 (g.map: ½in. lml.) (3½pp.)
- 267. Water End and North Mymms, Herts., by J.F. Kirkaldy.

".. Swallow-holes; Pebble Gravel; Reading Beds; Upper Chalk."

(sk.map: lins. - lml.) (3pp.)

268. The pebble gravels of South Hertfordshire, by R.W. Hey.

"Apart from a few small outliers of the Red Crag, the Pebble Gravels are the oldest Pleistogene deposits of the London Basin ... south Hertfordshire .. has provided more information than any other [area] about the nature of the deposits and the history of their deposition.

 $(sk.map: lin. - l\frac{3}{4}mls.)$ (4pp.)

- 269. South East Essex: Thurrock and Aveley, by R.G. Blezard.
 - 1. Thurrock Chalk Anticline.

"The dominant structural feature of this area is the Thurrock anticline with a N.E.-S.W. trend."

(sk.map: 3in. - lml.) (3pp.)

2. Aveley.

"The London Clay exposed at Aveley is typical of the lower sediments of the London Basin facies. Using current zonation it is classified division 2 of Wrigley (1924), being characterised by stiff clays, with flattish septaria between 100 and 200 ft. above the base and containing the index fossils Balanocrinus subbasaltiformis and Thyasira angulata."

- 270. FIELD MEETING AT HAINAULT FOREST AND THE RODING VALLEY. 8 AFRIL 1951. By J.F. Hayward. Proc.Geol.Ass., Lond., v.62(1951), p.254.
- 271. EXCURSION TO RICKMANSWORTH. MAY 8th, 1920. By G. Barrow. Proc. Geol. Ass., Lond., v.32(1921), pp.17-20.

- 272. FIELD MEETING AT CHCRLEY WOOD. 22nd JUNE, 1935. By S.W. Wooldridge and G.D.B. Gray. Proc.Geol.Ass., Lond., v.47(1936), p.149.
- 273. FIELD MEETING AT HENFIELD AND BRAMBER. JUNE 6th, 1936. By J.F. Kirkaldy and A.J. Bull. Proc.Geol.Ass., Lond., v.47(1936), pp.346-348.
- 274. FIELD MEETING IN THE CHILTERNS. 17 JUNE 1956. By B.W. Avery and A.J. Thomasson. Proc.Geol.Ass., Lond., v.67(1956-57), pp.168-171.

 ".. to study certain problems of the stratigraphy and geomorphology of the Chiltern area covered by Geological Survey, New Series, lin. Sheets 238 and 255."
- 275. FIELD MEETING AT HIGH WYCOMBE, PENN AND BEACONSFIELD. JUNE 11th, 1939. By R.L. Sherlock. Proc.Geol.Ass., Lond., v.50(1939), p.432.
- 276. FIELD MEETING IN THE MARLOW DISTRICT. 23rd SEPTEMBER, 1933. By L. Treacher. Proc.Geol.Ass., Lond., v.45(1934), pp.107-108.
- 277. EXCURSION TO MARLOW. JULY 14th, 1923. By L. Treacher. <u>Proc.Geol.</u>
 <u>Ass., Lond.</u>, v.35(1924), pp.150-151.
- 278. FIELD MEETING AT HAREFIELD. AFRIL 29th, 1939. By S. Hester. Proc. Geol.Ass., Lond., v.50(1939), pp.420-421.

 Details of an earlier excursion to the Great Pit at Harefield are given in the Proceedings for 1923 (pp.43-46) and of an excursion to Northwood and Harefield in 1929 (pp.373-375).
- 279. EXCURSION TO SLOUGH AND CIPPENHAM. FEBRUARY 7th, 1920. By W.H. Booth and J. Pringle. Proc.Geol.Ass., Lond., v.31(1920), pp.133-139 (with a Report on the Cippenham borehole to the Lower Greensand, by W.H. Booth).
- 280. FIELD MEETING AT TAPLOW, BURNHAM AND IVER, BUCKS. 20th SEPTEMBER, 1936. By K.P. Oakley. <u>Proc.Geol.Ass., Lond.</u>, v.48(1937), pp.276-279.

 Details of an earlier excursion to Taplow are given in the <u>Proceedings</u> for 1922 (pp.73-74).
- 281. FIELD MEETING IN THE SOUTHERN CHILTERNS. 28 APRIL 1951. By H.L. Hawkins. Proc.Geol.Ass., Lond., v.62(1951), pp.255-256.

 Details of exposures at South Lodge pit, Taplow, etc.

Details of an excursion to the Emmer Green and Binfield Heath outliers are given in the <u>Proceedings</u> for 1936 (pp.32-35).

- 282. EXCURSION TO SHIPLAKE. JUNE 26th, 1926. By L. Treacher. <u>Proc.</u> Geol. Ass., Lond., v.37(1926), pp.440-441.
- 283. FIELD MEETING AT READING. MAY 4th, 1946. By H.L. Hawkins. <u>Proc.</u> Geol. Ass., Lond., v.57(1946), pp.164-169.
- 284. EXCURSION TO WOKINGHAM AND VIRGINIA WATER. MAY 24th, 1924. By L. Treacher and H. Dewey. Proc.Gool.Ass., Lond., v.36(1925), pp.449-451.
- 285. EXCURSION TO BRACKNELL. JUNE 24th, 1922. By A. Wrigley. Proc.Geol. Ass., Lond., v.34(1923), p.66.

 Details of an earlier excursion are given in the Proceedings for 1922 (pp.79-80).
- 286. EXCURSION TO EGHAM, SURREY. MAY 1st, 1920. By H.W. Monckton. <u>Proc.</u> Geol. Ass., Lond., v.31(1920), pp.215-217.
- 287. EXCURSION TO WORCESTER PARK AND NEW MALDEN. APRIL 29th, 1922. By A. Wrigley. Proc.Geol.Ass., Lond., v.33(1922), p.319.
- 288. EXCURSION TO KINGSTON HILL. MARCH 5th, 1921. By E.A. Turner. <u>Proc</u> <u>Geol.Ass., Lond.</u>, v.32(1921), pp.181-182.
- 289. FIELD MEETING AT TOLWORTH. APRIL 1st, 1939. By A. Wrigley. Froc. Geol.Ass., Lond., v.50(1939), pp.418-419.

 Details of an earlier excursion are given in the Proceedings for 1924 (pp.152-153).
- 290-299). THE LONDON REGION (South of the Thames). By W.S. Pitcher, N.B. Peake, J.N. Carreck, J.F. Kirkaldy and J.M. Hancock. Geologists Association Guides, No.30B. 1967. Price 3/6.

The Guide contains an Introduction (2pp.) and an outline of the geological setting of the Lower Tertiary deposits of the London region, by W.S. Pitcher (6pp. with palaeogeog.map).

290. Blue Bell Hill and Aylesford, by J.M. Hancock.

"Upper Chalk; Middle Chalk; Lower Chalk; Gault; Lower Greensand
(Folkestone Beds); superficial deposits."

(sk.map) (42pp.)

291. The coastal Chalk of north-east Thanet, by N.B. Peake.

(5pp.)

292. Charlton and Valley Grove, by W.S. Pitcher.

(sk.map: lains. - aml.) (2pp.)

293. Abbey Wood.

"An old digging in Lessness Abbey Wood provides a section in a highly fossiliferous sand lenticle within the Blackheath Beds.

(sk.map) (1p.)

294. North Kent Coast - Upnor near Strood.

"Exposures on the Tertiary escarpment at Upnor provide excellent sections in the Thanet and Woolwich horizons; the facies differs little from that at Charlton, although the Oldhaven Beds, which are the stratigraphical equivalent of the Blackheath Beds, are much more sandy.

(sk.map: ltins. - 500yds.) (2pp.)

295. North Kent coast - Isle of Sheppey: Warden Point.

"The upper part of the London Clay is exposed along several miles of cliffs to the east and west of Warden Point. Though this outcrop is famed for its fossils the visit is really one for the specialist collector, for the great slips and chaotic sludges obscure the general geological setting."

296. North Kent Coast - Herne Bay.

"The cliffs immediately east of Herne Bay provide the finest section in the Lower Tertiary Deposits of England." (25pp.)

North Kent Coast - Pegwell Bay.

297. 1. The Tertiary Beds, by W.S. Pitcher.

"The cliffs at Cliffsend near Pegwell provide a section through the greater part of the Thanet Beds and thus continue downwards the succession previously detailed at Herne Bay."

(1p.)

298. 2. The Chalk in Pegwell Bay, by N.B. Peake.

(1 pp.)

299. Swanscombe, by J.N. Carreck.

"Barnfield Pit, Swanscombe, the classic site in the Boyn Hill Terrace gravels of the Thames, is now unfortunately in poor condition." (lp.)

300. TWO BURIED RIVERS - AN AFTERNOON IN LONDON. 27th AUGUST, 1949. By J.F. Hayward. Proc.Geol.Ass., Lond., v.61(1950), p.225.

Details of an excursion in the Hampstead and Holborn areas.

- 301. FIELD MEETING AT CHARLTON, PLUMSTEAD AND ABBEY WOOD. 25th JUNE 1949. By F.J. Epps. Proc.Geol.Ass., Lond., v.61(1950), p.218.

 Details of an earlier excursion are given in the Proceedings for 1948 (pp.172-173). For details of other excursions see as follows: Charlton Proceedings for 1920 (pp.154-155), Charlton and Blackheath-Proceedings for 1939 (pp.355-356) and 1930 (pp.361-362), Charlton and Bostall Heath Proceedings for 1955-56 (pp.325-328), Plumstead see below, Abbey Wood see below.
- 302. REPORT OF A FIELD MEETING AT PLUMSTEAD AND BOSTALL HEATH. JULY 13th, 1929. By A.L. Leach. Proc.Geol.Ass., Lond., v.40(1929), p.390.
- 303. REPORT OF FIELD MEETING AT SHOOTER'S HILL. AFRIL 16th, 1932. By A.L. Leach. Proc.Geol.Ass., Lond., v.43(1932), p.276.
- FIELD MEETING AT GRAYS THURROCK. 19 SEPTEMBER 1959. By J. McA. Hart. Proc.Geol.Ass., Lond., v.71(1960), pp.242-244.
 ".. to collect from highly fossiliferous chalk and visit one of the most interesting flint implement sites on the north bank of the Thames.
- 305. FIELD MEETING AT AVELEY AND WEST THURROCK. 1 MAY 1965. By A.G. Blez-ard. Proc.Geol.Ass., Lond., v.77(1966), pp.273-276.
- 306. FIELD MEETING AT HIGHAM UPSHIRE AND SHORNE, KENT. SEPTEMBER 22nd, 1934. By S. Priest and F.J. Epps. Proc.Geol.Ass., Lond., v.46(1935), pp.61-64.
- 307. EXCURSION TO COBHAM AND STROUD. OCTOBER 14th 1922. By S. Priest. Proc.Geol.Ass., Lond., v.35(1924), pp.77-78.

 Details of the Tertiary section at Shorne Wood, Cobham, with a report of an excursion are given in the Proceedings for 1923 (pp.137-141).
- 308. FIELD MEETING AT ABBEY WOOD AND SWANSCOMBE, KENT. 14 MAY 1966. By M.K. Durkin and S.A. Baldwin. Proc.Geol.Ass., Lond., v.79(1968), pp.211-218.

 Details of earlier excursions to Abbey Wood are given in the Proceedings for 1933 and to Swanscombe in the Proceedings for 1961, 1939, 1935, 1932, 1931, 1921 and 1920.
- 309. FIELD MEETING AT DARTFORD AND STONE. JUNE 9th, 1934. By S. Priest. Proc.Geol.Ass., Lond., v.46(1935), pp.203-206.

 Details of an earlier excursion to Dartford Heath and Joyden's Wood are given in the Proceedings for 1920 (pp.218-219).

- 310. FIELD MEETING AT KNOCKMILL, KENT. 12th SEPTEMBER, 1936. By R.H. Chandler and A.L. Leach. <u>Proc.Geol.Ass., Lond.</u>, v.48(1937), pp.46-47. Previous visits are recorded in the <u>Proceedings</u> for 1935 (p.210) and 1932 (pp.284-289).
- 311. EXCURSION TO BEXLEY AND BEXLEY HEATH. MARCH 6th, 1920. Part I. By S. Priest. Proc.Geol.Ass., Lond., v.31(1920), pp.145-146. Part II. NOTE ON THE SECTION EXPOSED IN THE RAILWAY CUTTING BETWEEN BEXLEY HEATH AND BARNEHURST STATIONS. By L.Dudley Stamp. Proc.Geol.Ass., Lond., v.31(1920), pp.146-149.
- 312. EXCURSION TO RUXLEY AND THE CRAYS. SEPTEMBER 4th, 1920. By E.S. Brown. Proc.Geol.Ass., Lond., v.32(1921), pp.47-48.
- 313. EXCURSION TO GROVE PARK AND CHISLEHURST. MARCH 20th, 1920. By L.D. Stamp. Proc.Geol.Ass., Lond., v.31(1920), pp.150-153.
- 314. REPORT OF AN EXCURSION TO THE RAVENSBOURNE VALLEY. JUNE 9th, 1928.

 By A.L. Leach and A.C. Young. Proc.Geol.Ass., Lond., v.40(1929), p.170.
- 315. FIELD MEETING AT ELMSTEAD WOODS, KENT. 28th JULY, 1944. By A. Wrigley. Proc.Geol.Ass., Lond., v.56(1945), pp.219-221.
 Details of an earlier excursion are given in the Proceedings for 1944 (p.190).
- 316. EXCURSION TO BROCKLEY, BROWLEY PARK AND BECKENHAM. JULY 16th, 1921. By C.N. Bromehead. Proc.Geol.Ass., Lond., v.33(1922), pp.77-78.
- 317. FIELD MEETING AT WEST WICKHAM, KENT. 13th MAY, 1944. By A. Wood. Proc.Geol.Ass., Lond., v.55(1944), pp.190-191.
- 318. FIELD MEETING AT CROYDON, SURREY. 20th MAY, 1944. By F. Gossling and A.J. Bull. Proc.Geol.Ass., Lond., v.56(1945), pp.140-141.
- 319. EXCURSION TO WOODSIDE (LONDON CLAY). JUNE 6th, 1925. By A.G. Davis and A. Wrigley. Proc.Geol.Ass., Lond., v.37(1926), pp.434-436.
- 320. EXCURSION TO EWELL AND EPSOM. APRIL 10th, 1920. By H. Dewey. Proc. Geol.Ass., Lond., v.31(1920), pp.156-158.

- 321. EXCURSION TO CLAYGATE AND OXSHOTT. MAY 12th, 1923. By H. Dewey. Proc.Geol.Ass., Lond., v.34(1923), pp.323-324.
- 322. REPORT OF EXCURSION TO COBHAM, SURREY. (Weald Research Committee Excursion) JULY 17th, 1926. By F.A. Turner. Proc.Geol.Ass., Lond., v.39(1928), pp.193-194.
- J.F.N. Green. Proc.Geol.Ass., Lond., v.47(1936), pp.234-235.

 Details of earlier excursions to the Mole Gap and the valley of the Mole are given in the Proceedings for 1933 (pp.312-313) and 1921 (p.219) respectively.
- 324. FIELD MEETING AT TADWORTH AND HEADLEY. 26th MAY, 1934. By J.F. Kirk-aldy. Proc.Geol.Ass., Lond., v.45(1934), p.424.
- 325. FIELD MEETING AT WORMS HEATH. 17th JULY, 1937. By G.M. Davies.

 Proc.Geol.Ass., Lond., v.48(1937), p.349.

 Details of an earlier excursion are given in the Proceedings for 1929 (pp.384-387).
- 326. FIELD MEETING IN THE CATERHAM-GODSTONE DISTRICT. 11 OCTOBER 1952. By R. Bradshaw. Proc.Geol.Ass., Lond., v.65 (1954-55), pp.23-24.
- 327. EXCURSION TO SANDERSTEAD AND PURLEY. APRIL 30th 1921. By W. Whitaker. Proc.Geol.Ass., Lond., v.32(1921), pp.217-218.
 Details of an earlier excursion to the New Road Cutting, Purley are given in the Proceedings for 1921 (pp.33-36).
- 328. EXCURSION TO CROHAM HURST AND THE ADDINGTON HILLS. JUNE 19th, 1920. By G.M. Davies. Proc.Geol.Ass., Lond., v.32(1921), pp.27-30.
- 329. FIELD MEETING AT KESTON, DOWNE, KENT, AND VISIT TO THE DARWIN MEMORIAL ROOMS AT DOWNE HOUSE. 20 JUNE 1953. By J.N. Carreck. With 'Notes on some Holocene Chalk Rainwashes at Cudham and Keston, near Downe, Kent', by M.P. Kerney and J.N. Carreck. Proc.Geol.Ass., Lond., v.65(1954-55), pp.338-344.
 - Details of earlier excursions are as follows: Ravensbourne Valley at Hayes and Keston (<u>Proceedings</u> for 1934, pp.70-71); Keston, Kent, and Fair-childes, Surrey (<u>Proceedings</u> for 1929, pp.103-104).

- 330. EXCURSION TO KNOCKHOLT AND DUNTON GREEN. MAY 29th, 1920. By R.S. Herries. Proc.Geol.Ass., Lond., v.31(1920), pp.220-221.
- 331. FIELD MEETING AT WELL HILL AND HAISTEAD, KENT. 12th JUNE, 1948. By A.G. Bell. Proc.Geol.Ass., Lond., v.59(1948), pp.176-178.
- 332. FIELD MEETING AT EYNSFORD, KENT. 24th SEPTEMBER 1949. By A.G. Bell and R.J. Bell. Proc.Geol.Ass., Lond., v.61(1950), p.302.
- 7 OCTOBER 1961. By J.N. Carreck. Proc.Geol.Ass., Lond., v.75(1964), pp.357-360.
- 534. EXCURSION TO BLUE BELL HILL ROCHESTER. JULY 2nd, 1921. By G.E. Dibley. Proc.Geol.Ass., Lond., v.33(1922), pp.75-76.
- 335. FIELD MEETING AT UPNOR, KENT. 20th JULY, 1945. By D.L. Searle. Proc. Geol.Ass., Lond., v.58(1947), pp.125-127.

 Details of an excursion to Frindsburg and Upnor are given in the Proceedings for 1925 (pp.432-433).
- 336. FIELD MEETING IN SHEPPEY. 11 JULY 1954. By A.G. Davis and G.F. Elliott. With a note on the varying condition of the Sheppey Cliffs and Foreshore. Proc.Geol.Ass., Lond., v.65(1954-55), pp.383-384.
 Additional notes on the geology of Sheppey, with a report of a field meeting, are given in the Proceedings for 1937 (pp.77-81) and a report of another meeting in the Proceedings for 1951 (p.269).
- 337. FIELD MEETING AT HERNE BAY AND RECULVER. JUNE 14th, 1936. By E.S. Brown. Proc.Geol.Ass., Lond., v.47(1936), pp.349-351.
- 338. FIELD MEETING IN THE LOWER LONDON TERTIARIES OF KENT. 6 JUNE 1964. By F.C. Stinton. Proc.Geol.Ass., Lond., v.76(1965), pp.175-177.

 Details of a sandpit at Lower Upnor, and at Herne Bay.
- 339. FIELD MEETING TO EAST KENT. 24 JULY 1966. By H.J. Gamble. Proc. Geol.Ass., Lond., v.78(1967), pp.587-593.

 ".. to examine the palaeontology, sedimentology and tectonics of the Paleocene and Eocene marine facies and associated deposits."

- The excursions were: Shelford (32pp.); Bishopstone Glen and Reculver (1p.); Pegwell Bay (1p.).
- 340. FIELD MEETING ON THE COASTAL LANDSLIDES OF KENT. 1 3 JULY 1966. By J.N. Hutchinson. Proc.Geol.Ass., Lond., v.79(1968), pp.227-237.

 ".. to demonstrate the diverse types of coastal landslide occurring and to indicate the main factors determining the character of each type of failure."

 Details are given of an excursion to the London Clay cliffs of North Kent (5pp.) and to the Cretaceous cliffs of East Kent (4pp.).
- 341. FIELD MEETING IN THE KENT COALFIELD. JULY 15th, 1933. By H.G. Dines and R. Crockall. With an account of Chislet Colliery by E. Potts. Proc.Geol.Ass., Lond., v.44(1933), pp.422-427.
- 342. REPORT OF EXCURSION TO CANTERBURY. WHITSUNTIDE, 1925. By H. Dewey and E.E.S. Brown. Proc.Geol.Ass., Lond., v.36(1925), pp.284-290.

 The excursions were:- Herne Bay-Reculver (1½pp.); Sturry-Shelford (½p.); Chilham, Stour Gap, Plumpton, Ashford, Eastwell Lane (1½pp.); Selling, The Blean, Chartham Hatch, Bigbury (2½pp.).
- 343. NOTES ON THE GEOLOGY OF BOUGHTON-UNDER-BLEAN. With report of Excursion. JUNE 2nd, 1923. By I. Collins and D.M.C. Gill. Proc.Geol.Ass., Lond., v.34(1923), pp.300-313.
- 344. FIELD MEETING AT MAIDSTONE AND SUTTON VALENCE, KENT. 27th MAY, 1933. By R.W. Stott. Proc.Geol.Ass., Lond., v.44(1933), pp.415-416.
- 345. FIELD MEETING AT AYLESFORD. (WEALD RESEARCH COMMITTEE) 3rd JULY, 1938. By G.W. Himus. Proc.Geol.Ass., Lond., v.50(1939), pp.68-71.

 Details of an earlier excursion to Burham and Aylesford, Kent are given in the Proceedings for 1926 (pp.432-433).
- 346. FIELD MEETING AT WATERINGBURY AND MEREWORTH. (WEALD RESEARCH COMMITTEE.)
 OCTOBER 4th, 1936. By E.E.S. Brown and G.W. Himus. Proc.Geol.Ass., Lond.,
 v.49(1938), pp.55-57.
- 347. FIELD MEETING AT BARMING AND EAST MALLING, KENT. (WEALD RESEARCH COMMITTEE.) 29th SEPTEMBER, 1945. By G.W. Himus. <u>Proc.Geol.Ass., Lond.</u>, v.56(1945), pp.224-227.

- 348. FIELD MEETING AT WEST MALLING, KENT. (WEALD RESEARCH COMMITTEE.) 2nd OCTOBER, 1937. By E.S. Brown. Proc.Geol.Ass., Lond., v.48(1937), pp.396-398.

 Details of an earlier excursion to Sole Street, Holly Hill and West Malling are given in the Proceedings for 1922 (pp.324-327).
- 349. FIELD MEETING AT WROTHAM AND THE MAIDSTONE BY-PASS. 25 APRIL 1959. By R. Casey. Proc.Geol.Ass., Lond., v.70(1959), pp.206-209.

 ".. to examine new sections in the Lower Greensand and Gault along the Maidstone By-Pass."
- 350. FIELD MEETING AT WROTHAM AND BOROUGH GREEN, KENT. SEPTEMBER 11th, 1937. By S.C.A. Holmes. <u>Proc.Geol.Ass., Lond.</u>, v.48(1937), pp.350-353.

 Details of an earlier excursion to Borough Green are given in the <u>Proceedings</u> for 1928 (pp.194-195).
- 351. FIELD MEETING AT SEVENOAKS, KENT. 25 SEPTEMBER 1954. By R.A. Milbourne. Proc.Geol.Ass., Lond., v.65(1954-55), p.426.
 Details of earlier excursions are given in the Proceedings for 1949 (p.274) and 1922 (p.80).
- 352. EXCURSION TO THE NORTH DOWNS IN KENT. JULY 17th, 1920. By A.L. Leach. Proc.Geol.Ass., Lond., v.32(1921), pp.36-42.

 Details of an excursion from Oxford to Shore Hill and Oaklands, Knockmill.
- 353. FIELD MEETING BETWEEN LIMPSFIELD AND WESTERHAM. MAY 21st, 1938. By F. Gossling. Proc.Geol.Ass., Lond., v.51(1940), pp.341-345.
- 354. REPORT OF FIELD MEETING AT OXTED. 17th MAY, 1947. By C.W. Wright. Proc.Geol.Ass., Lond., v.59(1948), p.86.
- 355. FIELD MEETING AT GODSTONE, SURREY. 11th MAY, 1946. By A.J. Bull. Proc.Geol.Ass., Lond., v.57(1946), pp.172-173.
- 356. FIELD MEETING AT OXTED AND GODSTONE. (WITH AN APPENDIX CONTAINING A LIST OF FOSSILS COLLECTED FROM THE HYTHE BEDS AT GODSTONE.) By F. Gossling. Proc.Geol.Ass., Lond., v.47(1936), pp.322-327.

 ".. a study of the lithology and stratigraphy of the Lower Greensand ... [and] ... an examination of the geomorphological features .."

- 357. REPORT OF FIELD MEETING AT TILBURSTOW HILL, SURREY. 24th APRIL, 1948. By A.J. Bull. Proc.Geol.Ass., Lond., v.59(1948), p.140.

 Details of an earlier excursion to Tilburstow Hill and Nutfield are given in the Proceedings for 1921 (pp.30-32).
- 358. FIELD MEETING A WALK IN WEST LONDON. 16th MAY, 1945. By C.N. Brome-head. Proc.Geol.Ass., Lond., v.56(1945), pp.231-234.
- LONDON'S COUNTRYSIDE. GEOGRAPHICAL FIELD WORK FOR STUDENTS AND TEACHERS (359-370). OF GEOGRAPHY. By S.W. Wooldridge and G.E. Hutchings. London: Methuen Reprinted 1964. Price 30/-. and Co. Ltd. xiv + 223pp. illus. 1957. The contents are: Preface (lapp.); Introduction (lapp.); Glossary (3pp.); Index (10app.); and chapters on the physiography and vegetation The remainder of the book contains a series of excursion guides arranged under three main headings :-
 - A. The Juniper Hall Country.
 - 359. Ashtead, Headley and Box Hill: the North Downs in mid-Surrey.
 - ".. based on a N-S traverse of the North Downs, beginning on the Eocene rocks at the margin of the London Basin, ascending the dip-slope of the Chalk to the high plateau of the Downs, and descending the scarp-face to the outer vale of the Weald."

The traverses described are: Chessington to Epsom Common; Chessington to Ashtead Common; Ashtead Station to Epsom Common; Epsom Common to Farm Lane; Farm Lane to Headley; Headley to Betchworth Clump; Betchworth Clump to Box Hill; Headley to Mickleham; Mickleham to Headley.

(16pp.)

- 360. Leatherh∋ad to Box Hill, Surrey: a study of the Mole Gap.
 - The traverses described are: The Mole at Leatherhead; Thorncroft (Leatherhead) to Mickleham Bridge; Mickleham Bridge to Swanworth Farm; Swanworth Farm to Box Hill Station; Box Hill Station to Box Hill River Cliff. (9pp.)
- 361. Great Bookham, Cobham and Oxshott, Surrey: river terraces of the Lower Mole.
 - ".. wholly within the belt of the Tertiary (Eocene) rocks which lie between the Thames and the North Downs Chalk. It affords a study of the low plateau of the London Clay and of the sequence of river terraces which are so well preserved across the broad floor of the Mole valley .."

 The traverses described are: Bookham Station to Downside Mill; The environs of Cobham; Cobham to Fairmile Common via Norwood Farm; Fairmile Common to Oxshott.

362. Dorking and Leith Hill - the Greensand Hills and the Western Weald.

".. to traverse the dissected dip-slope of the Lower Greensand rocks from the lower parts of the Gault vale between Dorking and Westcott to the high crest line of the Leith Hill escarpment overlooking the western end of the inner Weald."

The traverses described are: Dorking to the Nower; Views from the Nower; The Pipp Brook Basin; The Tillingbourne; Vegetation of the Leith Hill country; Friday Street to Leith Hill; The views from Leith Hill; Leith Hill to Coldharbour - The Hythe Beds Scarp.

(13pp.)

- B. Other routes in the Northern Weald.
- 363. West Clandon, Albury and Guilford: a study of the North Downs and the Holmesdale East of the Wey Gap.
 - ".. illustrates interesting and important variants of the features seen around Dorking."

The traverses described are: The Tertiary margin and the Chalk dip-foot; The Chalk Plateau; The Chalk escarpment and the Holmesdale; Diversion to the "Silent Pool"; The Peasemarsh anticline at Albury; St. Martha's Hill; The "Pilgrims' Way"; St. Martha's to Guildford.

(17pp.)

364. Aylesford, the Medway Gap and Maidstone.

".. to compare the Medway gap in the North Downs with the gaps of two other Wealden rivers, the Darent and the Mole. The middle Medway basin has been greatly exploited for its mineral resources, extensive workings occurring in the Chalk, the Gault, the Lower Greensand and in the river deposits overlying these rocks."

The traverses described are: East Malling to Aylesford; the environs of Aylesford; Diversion to the Gault Section at Aylesford Pottery; The Scarp-foot and the Chalk Quarries; The view from Blue Bell Hill; Diversion to view the Medway Gap; Descent of Blue Bell Hill; Blue Bell Hill to Maidstone via Boxley.

(15pp.)

365. Woldingham, Limpsfield and Oxted: the North Downs and the Holmesdale.

".. essentially a N-S traverse of part of the Chalk country and the northern margin of the Weald."

The traverses described are: Croydon to Woldingham; Woldingham Station to the Scarp-crest above Oxted; The view from the scarp-crest; The North Downs at Titsey; The Scarp-foot zone; Limpsfield Common; The Greensand dip-slope; Diversion to Limpsfield chart; The Oxted Stream.

(10pp.)

366. Chelsfield, Shoreham and the Darent Gap: the North Downs in Kent.

".. devoted to the study of the Chalp dip-slope immediately to the west of the Darent gap, and the southern part of the Darent valley itself."

The traverses described are: Chelsfield; Chelsfield to Well Hill; Diversion to the Summit of Well Hill; Well Hill to Lullingstone Park; Lullingstone Park to Shoreham; Shoreham to Halstead and Knockholt Station.

(9pp.)

367. Lingfield, Dry Hill and Kent Water: a Study of the High Weald.

The traverses described are: Lingfield; Lingfield to Dry Hill; Dry Hill; The Valley of the Kent Water; The Holtye Ridge.

(11pp.)

- C. The Country North of London.
- A brief general account of the area is followed by details of the following traverses: South Mimms Church to Ridge Church; Ridge Church to Ridgehill; The view from Ridgehill; Ridgehill to Water End; Water End to Castle Lime Works; Castle Lime Works to South Mimms; South Mimms and its roads.

(15pp.)

- 369. Highgate and Hampstead.
 - ".. the culminating points of the 'Northern Heights' of London."

 The traverses described are: Highgate and Highgate Ponds; The view from Parliament Hill; Parliament Hill to Ken Wood and Hampstead Lane; Hampstead Iane to West Heath and Hampstead: West Heath to Golders Green.

(8pp.)

370. The Lea Valley and Epping Forest.

[Concerned largely with historical geography.]

(7pp.)

- 371. REPORT OF EXCURSION TO COULSDON, CHALDON AND MERSTHAM. (WEALD RESEARCH COMMITTEE EXCURSION.) JUNE 11th, 1927. By A.G. Davis. Proc.Geol.Ass., Lond., v.39(1928), pp.196-198.
 - Details of an earlier excursion to Merstham and Coulsdon are given in the Proceedings for 1926 (pp.221-224).
- 372. FIELD MEETING AT MERSTHAM AND REDHILL. 26th MAY, 1945. By S.E. Coomber. Proc.Geol.Ass., Lond., v.56(1945), pp.235-236.

- Details of an earlier excursion to Redhill, South Merstham and Nutfield are given in the <u>Proceedings</u> for 1930 (pp.206-211).
- 373. FIELD MEETING AT REIGATE. An introductory meeting for those who had done little or no geology in the field. 18 SEPTEMBER 1957. By J.M. Hancock. Proc.Geol.Ass., Lond., v.69(1958-59), pp.175-176.
 [Reigate Hill; Colley Hill; Juniper Hill; Buckland sand-pit.]
 Details of earlier excursions are given in the Proceedings for 1947 (pp.192-193) and 1922 (pp.313-318).
- 374. EXCURSION TO WALTON HEATH AND HEADLEY. WITH SPECIAL REFERENCE TO THE SUPPOSED PLICENE DEPOSITS. JUNE 11th 1921. By G.W. Young and E.A. Turner. Proc.Geol.Ass., Lond., v.32(1921), pp.231-235.
- 375. REPORT OF FIELD MEETING AT BETCHWORTH AND BROCKHAM (SURREY). (WEALD RESEARCH COMMITTEE.) JULY 11th, 1931. By H.A. Hayward. Proc.Geol. Ass., Lond., v.43(1932), pp.199-200.
- 376. FIELD MEETING AT DORKING. APRIL 8th, 1.933. By F.H. Edmunds. <u>Proc.</u> Geol. Ass., Lond., v.44(1933), pp.389-390.
- 377. EXCURSION TO CLANDON AND CHILWORTH, SURREY. JULY 1st, 1922. By H.W. Monckton. Proc.Geol.Ass., Lond., v.34(1923), pp.67-69.
- 378. FIELD MEETING AT GUILDFORD AND THE GUILDFORD BYPASS. 21st JUNE, 1954. By E. Dix and C.W. Wright. Proc.Geol.Ass., Lond., v.56(1945), pp.222-223. Details of earlier field meetings at Guildford are given in the <u>Proceedings</u> for 1932 (p.73) and 1931(p.303); and to the Hogs Back and Guildford in the <u>Proceedings</u> for 1927 (pp.402-403).
- 379. FIELD MEETING TO FARNHAM, SURREY. 31 JULY 1965. By H.M. Montford. Proc.Geol.Ass., Lond., v.77(1966), pp.381-384.

 Details of an earlier excursion are given in the Proceedings for 1927 (p.402).
- 380. THE LONDON CLAY OF NEWNHAM (HANTS.) WITH A REPORT OF AN EXCURSION TO HOOK ON JULY 2nd, 1927. By A. Wrigley. Proc.Geol.Ass., Lond., v. 39 (1928), pp. 360-368.

- 381. EXCURSION TO KINGSCLERE. MAY 21st, 1927. By H.L. Hawkins. <u>Proc.</u> Geol. Ass., Lond., v.39(1928), pp.98-102.
- 382. NOTES ON THE DEVELOPMENT OF THE WESTERN PART OF THE WEY DRAINAGE SYSTEM.

 TOGETHER WITH A REPORT OF THE FIELD MEETING AT BORDEN AND ALTON (HANTS.).

 15th SEPTEMBER, 1928. (WEALD RESEARCH COMMITTEE REPORT, NO.13.) By

 D.L. Linton. Proc.Geol.Ass., Lond., v.41(1930), pp.160-174.
- 383. FIELD MEETING AT SELBORNE, HAMFSHIRE. THE GEOLOGY OF GILBERT WHITE'S COUNTRY. 4 OCTOBER 1958. By F.A. Middlemiss. Proc.Geol.Ass., Lond., v.70(1959), pp.31-32.
 - ".. to show the strata best known to Gilbert White and described by him in The Natural History of Selborne and to demonstrate the accuracy of his geological observations in that work."
- 384. FIELD MEETING IN THE HINDHEAD AREA. TOGETHER WITH NOTES ON THE TERRACES OF THE RIVER WEY. 10 12 MAY 1957. By F.A. Middlemiss. Proc.Geol. Ass., Lond., v.69(1958-59), pp.239-243.

 [Inval ridge: Devil's Punch Bowl; Woolmer Hill, Holm Hills cutting, Woolmer Forest; Hollycombe; Telegraph Hill.]

 Details of an earlier excursion are given in the Proceedings for 1954-55 (pp.175-177).
- FIELD MEETING IN THE WESTERN END OF THE WEALD. 5 7 MAY 1961. By F.A. Middlemiss. Proc.Geol.Ass., Lond., v.73(1962), pp.125-129.
 ".. to demonstrate that the south-western corner of the Weald consists structurally of a series of anticlines arranged en echelon and, at the same time, to show the stratigraphical succession and some of the points of geomorphological interest."
- 386. FIELD MEETINGS IN THE CRETACEOUS OF THE WESTERN PART OF THE WEALD. By J.F. Kirkaldy and J.W. Reeves. <u>Proc.Geol.Ass., Lond.</u>, v.69(1958-59), pp.262-267.
 - ".. to demonstrate the variations of structure and geomorphology, and the nature of the Cretaceous beds, in different parts of the western portion of the Weald."
 - The excursions were: West Surrey and West Sussex a dip traverse (2pp.); East Surrey and West Kent a strike traverse (2pp.).

- 387. WHITSUN FIELD MEETING TO THE CENTRAL WEALD. (WEALD RESEARCH COMMITTEE.)
 8 11th JUNE, 1946. [By S.W. Wooldridge, P. Allen, A.J. Bull and J.W. Reeves.] Proc.Geol.Ass., Lond., v.58(1947), pp.73-85.

 The excursions, all from Horsham, were:— Haslemere and Midhurst (25pp.);
 Central Weald (35pp.); Storrington to Petworth (3pp.); The Henfield neighbourhood (25pp.).
- 388. FIELD MEETING AT WITLEY AND HASCOMBE. JUNE 31st, 1930. (WEALD RESEARCH COMMITTEE.) By J.F. Kirkaldy and E.A. Turner. Proc.Geol.Ass., Lond., v.41(1930). pp.217-219.
- 389. REPORT OF FIELD MEETING AT GODALMING, HURTMORE AND COMPTON, SURREY. 8th JUNE, 1947. By C.W. Wright. Proc.Geol.Ass., Lond., v.59(1948), p.37.
- 390. FIELD MEETING IN THE NORTH-WEST WEALD. 29th MAY, 1948. (WEALD RESEARCH COMMITTEE.) By J.F. Kirkaldy. Proc.Geol.Ass., Lond., v.59(1948), pp.174-175.

 Details of an excursion from Newlands Corner to Albury, etc.
- 391. FIELD MEETING AT ALBURY AND SHERE. OCTOBER 1st, 1932. By J.F. Kirkaldy. Proc.Geol.Ass., Lond., v.44(1933), pp.174-176.
- 392. FIELD MEETING AT NETLEY HEATH AND ALBURY, SURREY. By G.M. Davies. Proc.Geol.Ass., Lond., v.45(1934), pp.432-433.
- 393. REPORT OF A FIELD MEETING IN THE LEITH HILL DISTRICT. 22nd JUNE, 1929. (WEALD RESEARCH COMMITTEE.) By H.A. Hayward. Proc.Geol.Ass., Lond., v.41(1930), pp.212-216.
- 394. FIELD MEETING TO AN AREA NORTH OF HORSHAM, SUSSEX. 20 JUNE 1965. By B.C. Worssam and R.G. Thurrell. Proc.Geol.Ass., Lond., v.77(1966), pp.263-271.
- 395. FIELD MEETING AT WEST HOATHLY, SUSSEX. 21st SEPTEMBER, 1935. By F.H. Edmunds. Proc.Geol.Ass., Lond., v.47(1936), pp.68-70.
- 396. THE GEOLOGY OF THE COUNTRY AROUND EAST GRINSTEAD, SUSSEX. WITH REPORT OF AN EXCURSION TO HARTFIELD, HOLTYE COMMON, FOREST ROW, ASHURSTWOOD AND EAST GRINSTEAD. JUNE 16th, 1923. By H.B. Milner. Proc.Geol.Ass., Lond., v.34(1923), pp.283-300.

- 397. FIELD MEETING AT SOUTHBOROUGH, TUNERIDGE WELLS, AND ERIDGE. 9th JUNE, 1945. By G.S. Sweeting. <u>Proc.Geol.Ass., Lond.</u>, v.56(1945), pp.153-155.

 Notes on the geology and structure of the country around Tunbridge Wells with a report of an excursion to Southborough, Tunbridge Wells, High Rocks and Eridge are given in the Proceedings for 1923 (pp.47-55).
- 398. WHITSUN FIELD MEETING, 1933. A TRAVERSE OF THE CENTRAL WEALD. (WEALD RESEARCH COMMITTEE.) By S. Hall, H.B. Milner and G.S. Sweeting. Proc. Geol. Ass., Lond., v.44(1933), pp.444-454.

 ".. A comparison of the representatives of the Hastings Sand Series in the north with those in the South."

 The exampliance were: The Tenhnidge District (24np.): Tunbridge Wells.

The excursions were: The Tonbridge District (2pp.); Tunbridge Wells, High Rocks and Eridge (2pp.); Heathfield, Burwash, Dudwell Valley and Netherfield (1pp.); Crowhurst, Telham Hill and Battle (4pp.).

- THE WEALDEN OF SOUTH EAST ENGLAND. AUGUST 8th, 1967. By P. Allen and J.E. Prentice. VII International Sedimentological Congress, Great Britain, 1967. Excursion Reports. Excursion A.8. 3pp.
 ".. to see evidence for origin and depositional environments" and to focus attention on "sources, water depths, salinities, turbidites, flow regimes, flow directions."
- 400-403). GEOLOGY OF THE WEALD. By J.F. Kirkeldy. Geologists' Association Guides, No.29. 1967. 19pp. Price 2/6.

 The Guide contains a General Account (3 pp.) and details of the following itineraries:-
 - 400. The Weald: Peripheral Area. Westerham-Sevenoaks-Tonbridge.

 "Blackheath Pebble Beds; Upper Chalk; Gault; Lower Greensand (Folkestone Beds, Hythe Beds); Tumbridge Wells Sands; Wadhurst Clay; Ashdown Sands."

 (g.sk.map: ½in. lml.) (4pp.)
 - 401. The North-Western Weald: Guildford, Hog's Back, Hindhead.

 "Structures along the Hog's Back; gentle folding of the Lower Greensand; topography and landslipping; capture of the River Blackwater by the River Wey; exposures in Reading Beds, Upper, Middle and Lower Chalk, Lower Greensand (Folkestone Beds, Puttenham Beds, Bargate Beds, Hythe Beds and Atherfield Clay), Weald Clay."

 (g.sk.map: lins. 4mls.) (4pp.)
 - 402. Henfield to Bramber (Sussex).

 "Weald Clay; Lower Greensand (Hythe Beds, Sandgate Beds, Folkestone Beds);
 Gault; Upper Greensand; Lower and Middle Chalk; Henfield Syncline and

- Complementary Pyecombe Anticline. (g.sk.map: lins. lml.) (32pp.)
- 403. Clandon-Albury-Guildford.

 "Upper Chalk; Lower Chalk; Lower Greensand (Folkestone Beds, Bargate Beds, Hythe Beds); Topographic expression and 'Phiocene' bevel; Structure."

 (g.sk.map: 14ins. lml.) (4pp.)
- 404. GUIDE TO GEOLOGICAL EXCURSION TO THE WEALDEN DISTRICT. By F.H. Edmunds. Geological Survey Centenary. H.M.S.O. 1935. 16pp.
- 405. FIELD MEETING AT TONBRIDGE AND LEIGH. 28th SEPTEMBER, 1929. (WEALD RESEARCH COMMITTEE.) By S. Hall. Proc.Geol.Ass., Lond., v.41(1930), pp.92-95.
- 406. FIELD MEETING ON THE LOWER CHALK BETWEEN FOLKESTONE AND DOVER. 18 MAY 1963. By C.J. Wood. <u>Proc.Geol.Ass., Lond.</u>, v.76(1965), pp.301-304.

 Details of an earlier excursion to Folkestone, with notes on the zones of the Gault (by L.F. Spath) are given in the <u>Proceedings</u> for 1923 (pp.70-76).
- 407. THE UPPER PART OF THE LOWER GREENSAND AROUND FOLKESTONE. (WITH A REPORT OF THE FIELD MEETING AT FOLKESTONE AND SANDLING 15th MAY, 1938.) (WEALD RESEARCH COMMITTEE REPORT NO. 26.) By R. Casey. Proc.Geol.Ass., Lond., v.50(1939), pp.362-378.
- 408. FIELD MEETING AT FOLKESTONE AND SANDLING. 20TH JUNE, 1948. By R. Casey. Proc.Geol.Ass., Lond., v.60(1949), pp.223-225.

 Details of an earlier excursion to Folkestone are given in the Proceedings for 1935 (pp.429-431).
- 409. FIELD MEETING TO STUDY THE COASTLINE OF ROMNEY MARSH. 4th JULY, 1948. By T.W. Marsh. Proc.Geol.Ass., Lond., v.60(1949), pp.41-43.
- 410. EXCURSION TO ST. LEONARDS. MAY 21st, 1921. By W.J.L. Abbott. <u>Proc.</u> Geol. Ass., Lond., v.32(1921), pp.226-227.
- 411. THE HASTINGS BEDS DELTAS: RECENT PROGRESS AND EASTER FIELD MEETING REPORT. 15 18 APRIL 1960. By P. Allen. Proc.Geol.Ass., Lond., v.73(1962), pp.219-243.

 The item contains an Introduction (lp.), followed by details of excursions

illustrating the building of the Ashdown deltaic pile (42pp.); inundation and temporary resurgence of the Ashdown deltas (5pp.); building and retreat of the Lower Tunbridge Wells delta (14pp.).

(412-417). GEOLOGY OF THE CENTRAL WEALD: A STUDY OF THE HASTINGS BEDS. By P. Allen. Geologists' Association Guides, No.24. 1958. 28pp. Price 3/-.

"An attempt is made to spotlight those sedimentary features of the Hastings cyclothems most important in interpreting the environments of deposition within the basin and in inferring the geology and geography of the uplands surrounding it."

"Each cyclothem appears to be an arenaceous delta, or complex of deltas, together with its argillaceous pall. The itineraries, making use of denudational surgery, are in effect post-mortem incisions exposing, along selected directions, the anatomy of the deltas lying beneath the clays that buried them."

The Guide contains an Introduction ($5\frac{1}{2}$ pp. incl. sk.map lin. - $6\frac{1}{2}$ mls.) and details of the following excursions:-

412. Purbeck Floor of the Ashdown Deltas.

(2pp.)

413. Building of the Ashdown Deltaic complex.

(3½ pp.)

- 414. Submergence and temporary revival of the southern margin of the Ashdown deltas.
 - ".. lateral changes in the pall of Wadhurst sediment up to twelve miles N.E. and N. of Hastings .." (5pp.)
- 415. Submergence of the south-western margin of the Ashdown deltas.

".. the lateral changes in the Wadhurst sediment covering the Ashdown delta ... closer to the margin." (2pp.)

416. Inundation of the northern back-area of the Ashdown deltas.

(13pp.)

417. Building and burial of the lower Tunbridge Wells delta.

(7pp.)

418. FIELD MEETING AT EASTBOURNE, SUSSEX. LOWER CHALK SEDIMENTATION. 30
APRIL 1966. By W.J. Kennedy. Proc.Geol.Ass., Lond., v.77(1966), pp.365370.

Details of earlier excursions are: Eastbourne - <u>Proceedings</u> for 1937 (pp.328-329); Eastbourne and Hastings - <u>Proceedings</u> for 1925 (pp.317-320 with an Appendix).

- 419. FIELD MEETING AT POLEGATE, JEVINGTON AND WILLINGDON. JUNE 15th, 1935.

 Proc.Geol.Ass., Lond., v.47(1936), pp.36-37.
- 420. FIELD MEETING AT BIRLING GAP, SUSSEX. JUNE 3rd, 1939. By A.J. Bull. Proc.Geol.Ass., Lond., v.50(1939), pp.431-432.
- 421. FIELD MEETING AT SEAFORD AND THE CUCKMERE VALLEY, SUSSEX. 27th AFRIL, 1940. By C.T.A. Gaster. Proc.Geol.Ass., Lond., v.51(1940), pp.272-273.
- 422. EXCURSION TO NEWHAVEN AND BRIGHTON. 3rd SEPTEMBER, 1927. By C.T.A. Gaster. Proc.Geol.Ass., Lond., v.39(1928), pp.198-201.
- 423. FIELD MEETING AT ETCHINGHAM AND ROBERTSBRIDGE. MAY 17th, 1930. By A.A. Fitch. Proc.Geol.Ass., Lond., v.41(1930), pp.439-440.
- 424. THE GEOLOGY OF THE COUNTRY AROUND HEATHFIELD, SUSSEX. WITH A REPORT OF EXCURSION TO HEATHFIELD, BRIGHTLING, NETHERFIELD AND ROBERTSBRIDGE.

 JUNE 4th, 1921. By H.B. Milner. Proc.Gecl.Ass., Lond., v.33(1922), pp.142-151.
- 425. FIELD MEETING TO THE WEALD OF EAST SUSSEX. 25th JULY 1964. By R.A. Bazley and C.R. Bristow. Proc.Geol.Ass., Lond., v.76(1965), pp.315-319.

 ".. to make a traverse across the Weald to demonstrate the succession from the Grinstead Clay to the Purbeck Beds."

 The localities visited were:- Shorelstrode lane Pit (½p.); Eridge Rock (1p.); Jarvis Brook Brickworks (1p.); Butcher's Cross (½p.); Milkhurst Wood (1p.).
- 426. FIELD MEETING AT LEWES, BERWICK, AND NEWHAVEN. 16th JULY, 1949. By I.E. Higginbottom. <u>Proc.Geol.Ass., Lond.</u>, v.61(1950), pp.299-301.

 Details of earlier excursions to Lewes are given in the <u>Proceedings</u> for 1948 (pp.7-8) and 1937 (pp.354-355); and to Berwick and Hellingly, Sussex, in the <u>Proceedings</u> for 1936 (pp.265-268).
- 427. FIELD MEETING AT HASSOCKS AND THE DEVIL'S DYKE. MAY 4th, 1935. By A.J. Bull, C.T.A. Gaster and J.F. Kirkaldy. Proc.Geol.Ass., Lond., v.46(1935), pp.401-402.
- 428. FIELD MEETING TO THE HAYWARDS HEATH AREA, SISSEX. 7 JULY 1963. By R.W. Gallois. Proc.Geol.Ass., Lond., v.75 (1964), pp.361-366.

- 429. FIELD MEETING AT STEYNING AND HENFIELD. JUNE 16th to 18th, 1939. By J.F. Kirkeldy and A.J. Bull. Proc.Geol.Ass., Lond., v.51(1940), pp.72-76.
- 430. FIELD MEETING IN THE GAULT AT SMALL DOLE, NEAR HENFIELD, SUSSEX. 14
 AUGUST 1960. By R.A. Milbourne. Proc.Geol.Ass., Lond., v.72(1961),
 pp.135-138.

 Details of a field meeting at test borings for oil at Portsdown and
 Henfield are given in the Proceedings for 1937 (pp.280-281).
- 431. FIELD MEETING ON THE SOUTH DOWNS. 11th JUNE, 1949. By B.W. Sparks.

 Proc.Geol.Ass., Lond., v.61(1950), pp.163-164.

 Details of excursion from Shoreham-by-Sea to Bramber, etc.
- 432. FIELD MEETING IN THE WORTHING DISTRICT. 18th JULY, 1948. By E.C. Martin. Proc.Geol.Ass., Lond., v.60(1949), pp.44-47.

 Details of an earlier excursion are given in the Proceedings for 1925 (pp.99-101).
- 433. FIELD MEETING AT HIGHDOWN HILL, CLAPHAM AND STORRINGTON, WEST SUSSEX.
 23rd MAY 1954. By E.C. Martin. Proc.Geol.Ass., Lond., v.65(1954-55),
 pp.377-382.

 Details of earlier excursions are as follows:- Highdown Hill, Clapham
 and Angmering, West Sussex Proceedings for 1939 (pp.72-76); Heighdown
 Hill and Angmering on Sea, West Sussex Proceedings for 1934 (pp.427-431).
- 434. FIELD MEETING IN THE PULBOROUGH DISTRICT, SUSSEX. JUNE 23rd, 1945.
 (WEALD RESEARCH COMMITTEE MEETING.) Proc.Geol.Ass., Lond., v.57(1946), pp.161-163.

 Details of earlier meetings at Amberley and Pulborough and at Pulborough are given in the Proceedings for 1939 (pp.26-28) and 1935 (pp.207-209) respectively.
- 435. FIELD MEETING TO MIDHURST: A TRAVERSE OF THE WESTERN PART OF THE VALE OF FERNHURST, SUSSEX. 23 JUNE 1952. By S.C.A. Holmes. Proc.Geol. Ass., Lond., v.74(1963), pp.87-89.
- 436. FIELD MEETING AT DUNCTON, SINGLETON AND SOUTH HARTING, WEST SUSSEX. 17 SEPTEMBER, 1938. By C.T.A. Gaster. Proc.Geol.Ass., Lond., v.50 (1939), pp.162-163.

- 437. FIELD MEETING AT LOWER SWANWICK, HAMPSHIRE, AND BRACKLESHAM BAY AND SELSEY, SUSSEX. 1 JULY 1962. By D. Curry, C. King, and E.M. Venables. Proc.Geol.Ass., Lond., v.76(1965), p.37.
- (438-442). GEOLOGY OF THE SOUTHAMPTON AREA INCLUDING THE COAST-SECTIONS AT BARTON, HANTS. AND ERACKLESHAM, SUSSEX. By D. Curry and D.E. Wisden. Geologists' Association Guides, No.14. 1958. 16pp. Price 2/-.

 The Guide contains an outline of the Geology of the Southampton Area, by D.E. Wisden, and details of the following excursions:-
 - 438. Scenery of Tertiary strata the Dean Hill anticline; Jurassic and Cretaceous rocks of the Vale of Wardour; the Mere fault. (2pp.)
 - 439. Scenery of Tertiaries; topography associated with minor folds in Chalk and with Cretaceous overlap; Upper Jurassics of Shaftesbury area.

 (2pp.)
 - 440. Winchester anticline; Cretaceous strata and scenery of the Western Weald; Fernhurst anticline; Tertiary strata of Clapham brick-pit; Portsdown anticline. (22pp.)
 - 441. The Barton Area Higheliffe, Barton, Hordle Cliffe and Milford-on-Sea, Hampshire. By D. Curry.

 "The cliff-section is continuous for five miles and displays the whole of the Barton Beds ... together with a fine section of the Lower Headon Beds. Representatives of the Bracklesham Beds and the Middle Headon Beds are also seen. Almost the whole sequence is richly fossiliferous."
 - 442. Bracklesham Bay and the Selsey Peninsula, Sussex. By D. Curry.

 "Bracklesham Beds (overlain in places by Post-Tertiary beds) occur beneath the recent beach-sand of the sea-coast of the whole of the Selsey peninsula from Chichester Harbour to Pagham Harbour."

(sk.map: lin. - lml.) (4pp.)

443. ISLE OF WIGHT. GUIDE TO EXCURSION C.8. International Geological Congress. XVIII Session - Great Britain, 1943. By H.L. Hawkins. 11pp.

"The Isle of Wight includes within its small area an exceptional concentration of geological interest. Although the main object of this excursion is to investigate the remarkably full and fossiliferous sequence of the Cretaceous and Lower Cainozoic strata, many features of tectonic and physiographic significance will also attract attention."

The Guide contains details of the geological structure and stratigraphy (9pp.) and very brief details of 6 excursions.

- (444-453). THE ISLE OF WIGHT. By D. Curry, F.A. Middlemiss and C.W. Wright. Geologists' Association Guides, No.25. 1965. 26pp. Price 3/5.

 The Guide contains an Introduction (2pp., g.sk.map 3/4in. 4mls.) and details of the following excursions:-
 - 444. Whitecliff Bay, by D. Curry.
 "Eocene and Oligocene beds of the eastern part of the Isle of Wight."

 (32pp.)
 - 445. Sandown, Culver Cliff and Whitecliff Bay, by F.A. Middlemiss and C.W. Wright.

 "Examining Wealden (about 250 ft.), Lower Greensand (617 ft.) and Lower, Middle and Upper Chalk."
 - 446. Shanklin-Ventnor, by F.A. Middlemiss.

 "Examining Lower Greensand, Carstone and Lower Gault."

 (1\frac{1}{2}pp.)
 - 447. Niton, Binnel Bay to Rocken End, by C.W. Wright.

 "Examining Gault, Upper Greensand and Chloritic Marl."

 (1p.)
 - 448. Atherfield, by F.A. Middlemiss.

 ".. classic section of the Lower Greensand."

 (64pp.)
 - 449. Brighstone and Brook, by F.A. Middlemiss.
 "For the Wealden Beds (750 ft. exposed)."
 - 450. Compton Bay, Freshwater Bay and Alum Bay, by F.A. Middlemiss and C.W. Wright.

 "For Lower Greensand Gault, Upper Greensand and Chalk."

 (1p.)
 - 451. Alum Bay and Headon Hill, by D. Curry.
 "Eccene and Oligocene beds of the western parts of the Isle of Wight."
 (3pp.)
 - 452. Colwell Bay, by D. Curry.
 "Cliff-section in very fossiliferous Middle Headon Beds." (1p.)
 - 453. Bouldnor Cliff, by D. Curry.
 "Shore- and cliff-sections in Bembridge and Hamstead Beds." (lapp.)

- 454. FIELD MMEGING AT WHITECLIFF BAY, ISLE OF WIGHT. 31 MAY 1953. By D. Curry. Proc.Geol.Ass., Lond., v.65(1954-55), pp.182-184.
- 455. FIELD MEETING ON THE LOWER GREENSAND AND CHALK IN THE ISLE OF WIGHT.

 18-20 MAY 1962. By F.A. Middlemiss and R.G. Bromley. Proc.Geol.Ass.,
 Lond., v.73(1962), pp.449-453.
- 456. FIELD METING IN THE CLIGOCENE OF NORTH-WEST ISLE OF WIGHT. 21-3 JUNE 1963. By F.C. Stinton. Proc.Geol.Ass., Lond., v.75(1964), pp.67-91.

 ".. the highest strata of the Oligocene Formation occurring in this country ranging from the Lattorfian Bembridge Limestone up to the Rupelian Upper Hamstead Reds."

 The excursions, both from Yarmouth, were:- Tapnell and Prospect quarries (2pp.); Cranmore Hill (1p.).
- 457. WHITSUN FIELD MEETING TO THE ISLE OF WIGHT. 23rd 26th JUNE, 1947. By T. Barnard. Proc.Geol.Ass., Lond., v.59(1)+8), pp.229-253.

 The exercisions were: Cretaceous and Lower Pertiary Bods of the eastern end of the Island (25pp.); A tour of the Island (1p.); Lower Greensand between Sandown and Ventnor; and the Dunnose landslip (1p.).

 Details of an earlier meeting are given in the Proceedings for 1933 (pp.184-186).
- 458. GUIDE TO CEOLOGICAL EXCURSION TO THE ISLE OF WIGHT AND THE MAINLAND OPPOSITE. By C.P. Chatwin. Geological Survey Centenary. H.M.S.O. 1935. 25pp.

Details of 7 itineraries.

See also "Geological excursions round the Isle of Wight, and along the adjacent coast of Dorsetshire; illustrative of the most interesting geological phenomena and organic remains" by G.A. Mantell. London, 3rd. Ed., 1884. 356pp.

- 459. FIELD MEETING AT ALUM BAY AND COLWELL BAY, ISLE OF WIGHT. 28 and 29 APRIL 1956. By D. Curry. Proc.Geol.Ass., Lond., v.57(1956-57), pp. 405-408.
- 460. FIELD MEETING AT BARTON AND MILFORD-ON-SEA, HANTS. 21st MAY, 1949. By E. St. J. Burton and D. Curry. Proc.Geol.Ass., Lond., v.61(1950), pp.161-162.

Details of an earlier excursion to Barton are given in the <u>Proceedings</u> for 1937 (pp.374-378).

461. WHITSUN FIELD MEETING, 1934. THE ISLE OF PURBECK. By. W.J. Arkell. Proc.Geol.Ass., Lond., v.45(1934), pp.412-419.

The excursions were: Swanage to Studland (12pp.); Durlston Bay and Tilly Whim Caves (12pp.); Winspit, St. Alban's Head and Chapman's Pool (1p.); Purbeck Hills, Worbarrow Bay and Kimeridge (3pp.).

- 462. WHITSUN FIELD MEETING AT SHAFTESBURY. 4 8 JUNE 1954. By B.H. Mottram. Proc.Geol.Ass., Lond., v.67(1956-57), pp.160-167.
 - ".. to visit localities in the Vale of Wardour and the Mere Fault country in south-west Wiltshire and north Dorset. Exposures were seen in almost all formations from the Cornbrash to the Chalk."

The excursions were: An introductory drive through the Vale of Wardowr $(\frac{1}{2}p_{\bullet})$; localities within the Vale $(\frac{1}{2}pp_{\bullet})$; the northern limb of the Wardour fold and the Mere Fault $(\frac{1}{2}pp_{\bullet})$; the Cenomanian basement beds and Corallian in North Dorset $(2pp_{\bullet})$; the physiography of the downland country flanking the Chalk Valley, etc. $(\frac{1}{2}pp_{\bullet})$.

463. A CONTRIBUTION ON THE PHYSIOGRAPHY OF THE MERE DISTRICT, WILTSHIRE. WITH A REPORT OF FIELD MEETING, WHITSUN, 1937. By F.H. Edmunds. Proc. Geol. Ass., Lond., v.49(1938), pp.174-196.

The excursions were: Chalk and Greensand of the Mere District $(4\frac{1}{2}pp.)$; Portland and Purbeck Beds of the Wardour Vale $(2\frac{1}{2}pp.)$; The physical features of the Chalk Rock of the Mere District $(2\frac{1}{2}pp.)$; Corallian and Kimmeridge Clay (2pp.).

464. WHITSUN FIELD MEETING IN THE YEOVIL DISTRICT. MAY 27th to 30th, 1939. By G.A. Kellaway and V. Wilson. Proc.Geol.Ass., Lond., v.52(1941), pp.175-182.

The excursions were:- The Inferior Oolite south-west of Yeovil and around Sherborne (2pp.); North Coker, Yeovil Junction, etc. $(1\frac{1}{2}pp.)$; Coker, Pendomer, etc. $(2\frac{1}{2}pp.)$; Corton Beacon, etc. (1p.).

In the same volume of the <u>Proceedings</u> there is a 43 page outline of the geology of Yeovil, Sherborne and Sparkford Vale by G.A. Kellaway and V. Wilson (pp.131-174).

- 465. DORSET COAST. GUIDE TO EXCURSION A.S. International Geological Congress. XVIII Session Great Britain, 1948. By P.C. Sylvester-Bradley. 12pp.
 - ".. to study the stratigraphy of the Mesozoic system as displayed by the coast sections, and the tectonic phenomena of the coastal regions."

The Guide contains very brief details of the following nineteen excursions:-

Pinhay Bay to Lyme Regis; St. Gabriel's Mouth; Eype Mouth and Watton Cliff; Burton Bradstock; Langton Herring; Fortland; Holworth to Osmington Mills; Chickerell; Abbotsbury; Abbotsbury and Ridgeway Faults; Ham Cliff, Redcliff and Jordan Cliff; Lulworth district; Maiden Castle; Worbarrow; Kimeridge; St. Aldhelm's Head and Chapman's Pool; Dorset County Museum; Wool and Durlston Ray; Ballard Down Fault.

466. JURASSIC LIMESTONES OF DORSET. AUGUST 7th -10th, 1967. By R.G.C. Bathurst and A. Hallam. VII International Sedimentological Congress, Great Britain, 1967. Excursion reports. Excursion A.6. 6pp. (with sk.map).

".. well exposed limestones and associated rocks in one of the world's classic Jurassic sections."

(467-473). THE DORSET COAST FROM POOLE TO THE CHESIL BEACH. By M.R. House. Geologists' Association Guides, No.22. 1958. 21pp. Price 3/-.

"The area covered by these itineraries is roughly the same as that of the Survey Memoir of the district entitled 'The Geology of the Country around Weymouth, Swanage, Corfe and Lulworth', by W.J. Arkell (2nd Ed., 1952)."

The Guide contains an Introduction (p.) and details of the following excursions:-

467. The coast between Ballard Down and Durlston Head.

"This comprises the Purbeck Beds (396 feet), the Wealden (c.2300 feet), Lower Greensand (200 feet), Gault and Upper Greensand 157 feet) and the Chalk (1300 feet)."

(sk.map: lin. - 5mls.) (5pp.)

468. The cliff sections between Lulworth Cove and White Nothe.

"To study the tectonics of the middle limb of the Purbeck Monocline and the Purbeck Beds (176 feet), Wealden (544 feet), Gault and Upper Greensand (110 feet) and the Chalk."

469. The Isle of Portland.

"This involves Portland Sand (eighty feet), the Cherty Series (sixty feet), the Freestone Series (twenty-five feet), the Lower Purbeck Beds and the Portland Raised Beach."

470. Alternative Itinerary.

"As an alternative to Itinerary III [above] the same succession can be examined along the Isle of Purbeck coast between Chapman's Pool and ...
Winspit."

471. Black Head to White Nothe.

"The Corallian Beds (250 feet), Kimeridge Clay (c.800 feet), Portland Beds (140 feet), the Albian, the Cenomanian Besement Bed and the mud-slides west of Osmington Mills."

(g.sk.map: $1\frac{1}{2}$ ins. - 1ml.) (3pp.)

472. The Fleet Coast between Langton Herring and Wyke Regis.

"The Fuller's Earth, Forest Marble (c.100 feet), Cornbrash (thirty feet) and Oxford Clay (c.600 feet). ... The route passes southwards from the core and across the southern limb of the Weymouth Anticline."

(g.sk.map: lin. - lml.) (3pp.)

473. Abbotsbury to Sutton Poyntz.

".. a day along the Abbotsbury-Ridgeway fault-line."

(1意pp.)

474. THE DORSET COAST. A GEOLOGICAL GUIDE. By G.M. Davies. London: Adam and Charles Black. 2nd Ed. reprinted 1964. 1285p. Price 12/6.

The Guide contains a Preface (14 pp.), and Introduction (5pp.) and three main sections:-

Western Section with Suggested Excursions.

Lower Lias of Lyme Regis; Lower and Middle Lias between Charmouth and Seatown; Watton Cliff and East Cliff, Bridgort; Burton Cliff, Burton Bradstock, and Bothenhampton; Inferior Colite of Loders Cross and Shipton Gorge; Cretaceous and Inferior Colite near beaminster; Inferior Colite east of Yeovil.

Central Section with Excursions round Weymouth.

Abbotsbury and the shore of the Fleet; Portland: the Corallian on the south side of the Weymouth anticline: Weymouth to Osmington Mills; Ringstead Bay; Lulworth.

Eastern Section with Excursions round Swanage.

Peveril Point and Durlston Bay; Swanage, Dancing Ledge, Anvil Point; St. Alban's Head and Winspit: Chapman's Pool, Hounstout, Corfe Castle; Kimmeridge Bay and Worbarrow Bay; the Lulworth coast; Ballard Point and Studland. Swanage Bay.

475. FIELD MEETING AT WEYMOUTH, DORSET. 13th SEPTEMBER to 19th SEPTEMBER. By P.C. Sylvester-Bradley. With an Appendix: New sections in the Inferior Oolite, by G. Bomford. <u>Proc.Geol.Ass., Lond.</u>, v.59(1948), pp.141-150.

".. to study the Jurassic stratigraphy and the tectonics of the Weymouth and Bridport district."

The excursions were: Redcliff and Jordan Cliff, Bowleaze Cove $(\frac{1}{2}p_{\bullet})$; Inferior Colite of Burton Bradstock-Beaminster district $(\frac{1}{2}p_{\bullet})$; Holworth, Ringstead and Osmington Mills $(\frac{1}{2}p_{\bullet})$; Isle of Portland, Chickerell, Langton Herring $(1p_{\bullet})$; Lulworth district $(1p_{\bullet})$; Watton Cliff, Eype and Seatown $(\frac{1}{2}p_{\bullet})$; St. Gabriel's to Charmouth $(\frac{1}{2}p_{\bullet})$; Abbotsbury, Upwey and Bincombe, Chalbury to Sutton Poyntz, Poxwell $(2\frac{1}{2}pp_{\bullet})$.

Details of an earlier excursion to the Dorset Coast, near Weymouth are given in the Proceedings for 1932 (pp.277-283).

- 476. WHITSUN FIELD MEETING AT LYME REGIS. 14 17 MAY, 1946. By T. Barnard and J.G. Capewell. With a Note: The post-Eccene development of the valley of the Char, by W.D. lang. Proc.Geol.Ass., Lond., v.61(1950), pp.156-160.
- 477. SUMMER FIELD MEETING IN SOUTH DEVON AND DORSET. 20 27 AUGUST 1955. By W.E. Smith, D.V. Ager and D.J. Shearman. Proc.Geol.Ass., Lond., v.68(1957-58), pp.136-152.

".. to study, from a centre at Seaton, the Mesozoic rocks exposed in the coastal region between Babbacombe and Burton Bradstock."

The excursions were: Seaton (lp.); Torquay (lp.); Budleigh Salterton (lp.); Wilmington and Membury outliers (3pp.); Seaton, etc. (3pp.); Seaton, etc. (3pp.); Lyme Regis, etc. (lp.); Burton Bradstock, etc. (lp.); Little Halden (lp.).

478. WHITSUN FIELD MEETING: DEVONTAN OF WEST SOMERSET AND CARBONIFEROUS OF NORTH EAST DEVON. 15 - 18 MAY 1964. By B.D. Webby and J.M. Thomas. Proc.Geol.Ass., Lond., v.76(1965), pp.179-193.

".. to examine the Devonian succession in west Somerset, devoting particular attention to the non-marine to marine transition from the Hangman Grits to the Ilfracombe Beds, and ... to study the Carboniferous succession of north-east Devon where the Culm Measures most closely approach the 'normal' shallow-water Carboniferous of the rest of Great Britain."

The report contains an Introduction (2pp. with g.sk.map) and details of the following excursions:- Quantock Hills (3pp.); Dunkery Gate, Dunkery Beacon, etc. (4pp.); Asabrittle, etc. (2pp.).

In the same volume of the <u>Proceedings</u> there are articles on the stratigraphy and structure of the Devonian rocks in the Brendon and Quantock Hills, respectively, by B.D. Webby.

479. FIELD MEETING, WHITSUN 1953 AT LYNTON, NORTH DEVON. By S. Simpson and C. Kidson. Proc.Geol.Ass., Lond., v.65(1954-55), pp.178-181.

".. attention was primarily directed to morphological problems and their bearing on the catastrophic floods of 15 August 1952."

480. EXCURSION TO COMBE MARTIN. APRIL 12th to 20th, EASTER, 1922. By J.W. Evans. Proc.Geol.Ass., Lond., v.33(1922), pp.228-234.

The excursions were: Coombe Martin (lp.); Coombe Martin (lp.); Widmouth Head, etc. $(\frac{1}{2}p.)$; Wild Pear Beach, etc. $(\frac{1}{2}p.)$; Wooda Eay, Lynton, etc. (lp.); Park and Henstridge Quarries, etc. $(\frac{1}{2}p.)$; Knap Down silver mine, etc. $(\frac{1}{2}p.)$.

In the same volume of the <u>Proceedings</u> there is an article by J.W. Evans on The Geological Structure of the country round Combe Martin (27pp.)

481. THE VISIT TO TORQUAY. EASTER 1927. By W.G. Shannon. <u>Proc.Geol.Ass.</u>, Lond., v.39(1928), pp.154-156.

The excursions were: Babbacombe $(\frac{1}{2}p_{\bullet})$: Dartmouth $(\frac{1}{2}p_{\bullet})$; Kent's Cavern and Lucmaton Quarry $(\frac{1}{2}p_{\bullet})$; Pig Tor and London Bridge $(\frac{1}{2}p_{\bullet})$; Waterside, Saltern Cove $(\frac{1}{2}p_{\bullet})$; Aller Vale $(\frac{1}{2}p_{\bullet})$.

In the same volume of the <u>Proceedings</u> there is an account of The geology of the Torquay district, by W.G. Shannon (pp.103-136).

- 482. WHITSUN FIELD MEETING REPORT: DEVONIAN OF TORBAY. 8 11th JUNE 1962. By G.F. Elliot. <u>Proc.Geol.Ass., Lond.</u>, v.74(1963), pp.81-85.

 The excursions were: Lummaton Hill and Hope's Nose (2pp.); Waterside Cove, Goodrington (1p.); Broadsands (½p.).
- 463. FIELD MEETING IN NORTH-WEST DARTMOOR. 1 3 OCTOBER 1965. By W.R. Dearman. Proc.Geol.Ass., Lond., v.77(1966), pp.229-232.

".. to follow selected parts of Itineraries I, III, IIIa and IV in the Dartmoor Guide, and to demonstrate the results of more recent work on the tectonics of the area."

The excursions were: Okehampton and Meldon (1p.); Coryton and Lydford $(1\frac{1}{2}pp.)$

Details of earlier excursions are given in the <u>Proceedings</u> for 1959 (pp.338-341) and 1926 (pp.278-282).

- (484-491). DARTMOOR. THE NORTH-WEST MARGIN AND OTHER SELECTED AREAS. By W.R. Dearman. Geologists' Association Guides, No.33. 1962. 29pp. Price 3/-.

 The Guide contains an Introduction (4pp.) and details of the following 7 itimeraries:-
 - 484. The Quarries at Meldon and the Sections along the West Okement River and the Red-A-Ven Brook.

"To study the structure and succession in the Lower Culm Measures inlier and the Upper Culm Measures syncline next to the granite; contact meta-

morphism, metasomatism and mineral deposits; the Meldon aplite and other minor granite dykes."

(g.map: lin. - 450yds.) (7pp.)

485. Okehampton, Belstone, Sticklepath, Ramsley.

"Another traverse ... of the Lower Culm Measures anticlinal inlier to the granite of Belstone Common; the Sticklepath Fault, and the dumps of the disused copper mines at Greenhill and Ramsley."

486. Lewtrenchard to Sourton.

".. to illustrate the change in structure in the Lower Culm Measures inlier as it passes to the west beyond the granite margin."

487. The River Lyd Section.

".. the variety of structures in the Slate-with-Lenticles Group both within and outside the contact metamorphic aureole of the Dartmoor granite... [and] ... Lydford Gorge.

As a result of recent field studies some of the details need reinterpretation and this is done in a revised insert of 4pp.

$$(g.map: lin. - \frac{1}{2}ml.)$$
 (1p.)

488. Okehampton, North Tawton, Hatherleigh and Petrockstow.

"To study the Upper Culm Measures around Okehampton, the Permian sediments and lavas of the western end of the Crediton Valley, and the ball clays of the Petrockstow Basin."

489. The West Side of Dartmoor.

".. to see more of the igneous rocks within the Culm Measures, a granite quarry worked for monumental stone, and further examples of the varied mineralisation of the area."

(2pp.)

490. Dartmoor, Haytor Down to Yelverton.

"The Dartmoor granite, its varieties and contacts .."

491. Lee Moor and Ivybridge.

".. included so that all types of alteration of the Dartmoor granite may have been examined after a final visit to the kaolinised area around lee Moor."

Also included is a visit to the most southerly Culm mass at Ivybridge.

(2pp.)

Useful supplementary information is given in:-

Cornish Mineral Index. Trans.Roy.geol.Scc.Cornwall, v.17(1949), pp.455-475, v.18(1954), pp.406-410, and in "Some minerals of special interest in South-west England" (by A.W.G. Kingsbury) in Present views of some aspects of the geology of Cornwall and Devon (edited by K.F. Hosking and G.J. Shrimpton), Penzance: Royal Geol.Soc.Cornwall, 1964.

492. LONG EXCURSION TO LYDFORD AND BRENT TOR, DEVON. AUGUST 19th - 26th, 1922. By R.L. Sherlock. With an Appendix: Notes on two samples of water from the Devon Great Consols Mine, by C.C. Duncan. Proc.Gecl. Ass., Lond., v.34(1923), pp.32-38.

The excursions were: Devon Great Consols Mine (lp.); Lydford Gorge ($\frac{1}{2}$ p.); Coryton, Liddaton Down (lp.); Tavy valley ($\frac{1}{2}$ p.); Meldon quarries ($\frac{1}{2}$ p.).

In the same volume of the <u>Proceedings</u> there is a 12 page description of the geology of Lydford and Brent Tor, by R.L. Sherlock.

493. FIELD MEETING, WHITSUN 1951, AT TINTAGEL, NORTH CORNWALL. By G. Wilson. Proc.Geol.Ass., Lond., v.63(1952), pp.49-58.

The excursions were: Boscastle to Smith's Cliff (lapp.); Smith's Cliff to Tintagel (2pp.); Tintagel Haven and the Bodmin granite (3pp.); Old Delabole Slate Quarry and Pentire Head (2pp.).

Details of an earlier excursion to the area are given in the <u>Proceedings</u> for 1915 (pp.24-33). Much the same ground is covered as in the 1951 excursion, but in the latter greater emphasis was laid on the structural details around Tintagel.

In the same volume of the <u>Proceedings</u> there is an article: The influence of rock structures on coast-line and cliff development around Tintagel, by G. Wilson.

(494-498). THE COAST OF SOUTH DEVON AND DORSET BETWEEN BRANSCOMBE AND BURTON BRAD-STCCK. By D.V. Ager and W.E. Smith. Geologists' Association Guides, No.23. 1965. 21pp. Price 3/-.

"Near Branscombe, west of Seaton in Devonshire, there begins a long series of classic coastal sections in highly fossiliferous Cretaceous and Jurassic strata which extend eastwards to near the Dorset-Hampshire border, and which have been well known since he earliest days of geological science. Approximately the western half of this stretch of coastline is covered by the present Guide - the eastern half (from Chesil Beach to Poole) is described in the complementary Guide by M.R. House (No.22)."

The Guide contains an Introduction (1p.) and details of the following excursions:-

494. Branscombe Mouth to Seaton, by W.E. Smith.

"The Cretaceous succession to be studied ... presents many points of difference when compared with the better-known succession of ... the North and South Downs."

(sk.map: lin. - 2ml.) (52pp.)

495. The Beer Stone Quarries near Beer, by W.E. Smith.

(1p.)

496. Seaton to Lyme Regis, by D.V. Ager and W.E. Smith.

".. Cretaceous and Keuper rocks are encountered as in Itirerary I; but for the first time in our west-to-east traverse ... the Rhaetic and lowermost Jurassic strata appear." (sk.map: 3in. - 1000vds.) (5pc.)

497. Lyme Regis to Seatown, by D.V. Ager.

"The Lias is magnificently displayed ... practically the whole of the Lower Lias may be studied, together with part of the Middle Lias, as well as the unconformably overlying Cretaceous rocks."

(4po.)

498. Seatown to Burton Bradstock, by D.V. Ager.

".. an opportunity to examine an excellent series of sections in the Middle and Upper Lias, and in the Inferior Onlite Series." (4pp.)

- 499. EASTER FIELD MEETING, 14 21st AFRIL, 1938. CORNWALL. By H.G. Dines, C.E. Leese and D.E. Owen. <u>Proc.Geol.Ass., Lond.</u>, v.49(1938), pp.385-391.

 The excursions, all from Tintagel, were:- Widemouth, Camelford, etc. (1p.); Delabole Slate Quarries, Boscastle, etc. (2p.); Tremorebridge quarries, Roche Rock, Wheal Louisa Clay Pit, Tregargus China Stone Quarries, Ladock Quarry (2pp.); Kennack Sands, Church Cove, Landewednack (1p.); St. Erth sand pit, the Mount, etc. (1p.); Cape Cornwall (2p.); South Crofty Mine, Carn Brea, etc. (1p.).
- WHITSUN
 500. FIELD MEETING HELD AT HELSTON,/1930. By S. Hall. Proc.Geol.Ass., Lond.,
 v.41(1930), pp.354-361.

The excursions were:— The Godolphin granite $(2\frac{1}{2}pp.)$; Helston, Wheal Fortune, etc. $(1\frac{1}{2}pp.)$; Godolphin granite (1p.); coastline near Cudden Point $(1\frac{1}{2}pp.)$.

501. DEVON AND C ORNWALL (MINERALOGICAL). GUIDE TO EXCURSION A.4. International Geological Congress. XVIII Session - Great Britain, 1948. By A. Russell. 18pp.

The Guide contains details of the following localities, mines and insti-

tutions:- The British Railways' (Southern Region) Meldon Quarry. Okehampton (tp.); Meldon Limestone Quarry (Tp.); Meldon Aplite Quarries (zp.); Treburland Manganese Mine. Altarnum (p.): Tolpetherwin Guarry. South Petherwin (2p.); Castle-An-Dinas Wolfram Mine, St. Columb Major (2p. Tremore Quarry (4p.); Trenute Antimony Mine, Lezant (4p.); Clicker Tor Quarry, Menheniot (4p.); Port Eliot, St. Germans (4p.); China Clay Pit (4p.); Bunny Mine, St. Austell (1p.); Stenna Gwyn Mine, St. Stephen in Brannel (1p.): Tregargus China Stone Quarries, St. Stephen in Brannel (2p.); South Terras Uranium Mine. St. Stephen in Brannel (2p.); Coverack (ap.); Chynhalls (ap.): The Royal Institution of Cornwall Museum. Truro (1p.); Cligge Head and Perranporth, Perranzabulce (+p.); South Crofty Mine. Illogan (ap.); Camborne School of Mines (ap.); Wheal Gorland and Wheal Unity, Gwenrap (2p.); The Lizard District (2p.); Mullion Cove (p.): Kynance Cove (p.): St. Michael's Mount (p.); St. Hilary (zp.); The Royal Geological Society of Cornwall, Penzance (zp.); St. Just Mining District (ap.); Geevor Tin Mine. St. Just (ap.); Levant and Botallack Mines and the Strip of coast between them (lp.).

502. DEVON AND CORNWALL (GENERAL). GUIDE TO FXCURSION A.5. By H.G. Dines and J. Robson. International Geological Congress. XVIII Session - Great Britain, 1948.

Stratigraphy (mainly Devonian and Carboniferous), igneous rocks, metamorphic rocks, mineralization, etc.

503. LONDON TO WALLS (GLOMOLPHOLOGY). GUIDE TO EXCURSION A.11. By S.W. Wooldridge and A.A. Miller. International Geological Congress. XVIII Session - Great Britain, 1948. 21pp.

The excursions included:- The London Basin ($2\frac{1}{5}pp.$): the Reading area ($1\frac{1}{5}pp.$); Oxford District ($1\frac{1}{5}pp.$).

See also the second part of this Provisional Bibliography (Welsh geol. Qtly., v.3, pt.1, 1968).

504. ECONOMIC CEOLOGY OF ENGLAND AND WALES. GUIDE TO EXCURSION A.1. By K.C. Dunham and J.H. Taylor. International Geological Congress. XVIII Session - Great Britain, 1948. 68pp.

The itineraries include descriptions of the following:- The Yorkshire, Nottinghamshire and Derbyshire coalfield (2pp.); Iron ore pits in the Corby District (2p.); Florence Mine (haematite) (2p.); Haile Moor Line (haematite) (2p.); Eakring Oilfield (1p.); Formby Oilfield (2p.); Masson Fluorspar Mine (2p.); Cowgreen Mine (barytes) (1p.); Kirby Thore Mines (gypsum) (12pp.); Meadown Bank Mine, Winsford (salt) (2p.); Hope Cement Works (1p.); Totternhoe Lime Works, nr. Dunstable (1p.); Raisby Hill Quarry (dolomite) (1p.); Coxhoe Quarry (dolomite) (2p.); Coatham Stob Quarry (roadstone) (2p.); Parkend Quarry (roadstone) (2p.); Croft Quarry, Huncote (roadstone) (2p.); Mountsorrel Quarries (roadstone) (2p.); Nuneaton Quarries (roadstone) (2p.); Stewartby Brick Works (2p.); Woolton Quarry, Liverpool (building stone) (2p.); The Mersey Tunnel (12pp.).

505. HYDROGEOLOGY OF FIGLAND AND WALES. GHIDE TO EXCURSION A.18. By J. Buchan. International Geological Congress. Section XVIII - Great Britain, 1948. 41pp.

Twenty-two pages of the Guide are devoted to an introduction to hydrogeology covering the following topics:— sources of supply, water-bearing characteristics of the rocks, recent legislation, collection of data and research work, and selected literature.

The descriptive itinerary includes descriptions of the following localities:- Southend Waterworks, Cambridge, Bourne, Lincoln, Harrogate,
Swinsty and Fewston reservoirs, Ladybower Reservoir, Howden Reservoir,
Derwent Reservoir, Sheffield, Liverpool, Mersey Funnel, Chester, Hereford,
Gloucester, Cheddar Reservoir, Bath, Birmingham, Chipping Camden, the
Cotswolds, Oxford and Brighton.

The remainder of the itinerary is referred to in the second part of this Provisional Bibliography (Welsh geol. utly., v.3, pt.1, 1968).

506. VERTEBRATE PALAEONTOLOGY. GUIDE TO EXCURSION C.15. By D.M.S. Watson, T.S. Westoll and E.I. White. International Geological Congress. KVIII Session - Great Britain, 1948. 29pp.

The Gride contains an Introduction by D.M.G. Watson and a series of itineraries for England and Wales by S.I. White and M.A. Toombs, and for Scotland by T.S. Westell. The Scotlish and Telsh itineraries were included in the first and second parts respectively of the Provisional Bibliography (Welsh gool.Qtly., v.2, pt.3 and v.3, pt.1).

The English itineraries are: London, Exbridge, High Mycombe, Oxford, Witney, Burford, Northleach and Gloucester (lp.); Shrewsbury, Wem, Whitchurch, Tarperley, Warrington, Wigar, Preston, Lancaster, Kendal, Windermere, Patterdale, Penrith, Carlisle (lp.).

ADDENDUM

- 507. The Dudley canal tunnel and mines, Worcestershire. By W.A.S. Barjeant. Mercian Geologist, v.1(1964), pp.61-66.
- 508. Geological tour of the east Midlands. By F.M. Taylor. Mercian Geologist, v.1(1964), pp.67-68.
- 509. The geology of Charmwood Forest. By T.D. Ford. Mercian Geologist, v.1 (1964), p.69.

- 510. The volcanic rocks of the Wirksworth area, Derbyshire. By P.H. Speed. Mercian Geologist, v.1(1964), pp.71-72.
- 511. The geology of the area west of Nottingham. By F.M. Taylor. Mercian Geologist, v.1(1964), pp.73-74.
- 512. The Lower Jurassic of south Nottinghamshire and adjacent parts of Leicestershire and Lincolnshire. By P.C. Stevenson. Mercian Geologist, v.1 (1964), pp.75-76.
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LOCALITY INDEX

Abberley 178
Abberley Hills 171,172
Abbey Wood 293,301,308
Abbotsbury 465,473,
474,475
Acton 143
Addington Hills 328
Albury 223,363
Aldbury 390,391,392,
403
Alderley Edge 97

Allenheads 26
Allen's Cross 177
Aller Vale 481
Almscliff Crag 82
Alnham 26
Alnwick 8,9,26
Alston 26
Alton 382
Alum Bay 450,451,459
Alum Pot 59
Altarnum 501

Alwinton 26
Amberley 434
Ambleside 12
Ampney Crucis 195
Ancaster 148
Angmering 433
Anvil Point 474
Appleby 13,21,34
Appleton-le-Street 42
Ardale Beck 22
Aringdon 225

Arkengarthdale 59 Ashbrittle 478 Ashford 113,342 Ashford Mill 202 Ashgill 12 Ashover 118,125,140 Ashover Bay 141 Ashtead 359 Ashurstwood 396 Atherfield 448 Augill Beck 22 Aust 231 Austwick 13 Aveley 269,305 Avon river and gorge 231,232,233 Aylesbury 223,224,225,263 Aylesford 290,345,364

Babbacombe 477,481 Bakewell 113 Ballard Down 467 Ballard Point 474 Bamburgh 9,26 Banbury 187 Bank Hall Colliery 84 Bardon Hill 155 Bardsev 82 Barf 11,13 Barlborough 112 Barming 347 Barnard Castle 26,34 Barnehurst Station 311 Barnt Green 158 Barr Beacon 159 Barrington 182,184,186 Barrow Wake 196 Barton 460 Basildon 246 Bassenthwaite 14 Bath 199,236,237,505 Battle 398 Battledown 198 Bawdsey 183 Beacon Hill 156,164 Beaconsfield 275 Beachley 189 Beadnall 26 Beaminster 474,475

Beccles 255

Beckenham 316 Beckley 204 Bedfordshire 212,223 Becchen Cliff 237 Beeley 126 Beer 495 Belper 125 Belstone 485 Benton 26 Berkshire 227,228,239, 247 Berwick 426 Berwick on Tweed 1 Betchworth 375 Betchworth Clump 359 Bexley [Heath] 311 Bicester 203 Bigbury 342 Bigmall Hill 146 Billinge 94 Billingsly 163 Bincombe 475 Binfield Heath 281 Binnel Bay 447 Binsey 13 Birdlip 194,196 Birkdale 40 Birling Gap 420 Birmingham 164-169. 171,172,505 Bishop Auckland 26 Bishopstone Glen 339 "Black Country" 172 Black Head 471 Blackheath 301 Black Hill 84 Blackriggs Qry. 61 Blackwater river 401 Bladon, nr. Woodstock 210 Bladen Gry. 225 Blakeney 183,189 Blanchland 26 Blea Wyke 42.47 Blean, The 342 Blisworth 187 Blenheim Palace 225 Blue Bell Hill 290,364 Blue Bell Hill, Rochester 334

Blythburgh Heath 216 Bolton 94 Bolton Abbey 82 Bookham Station 361 Bootle 11 Borough Green 350 Borden 382 Borrowdale 12,15 Boscastle 493.499 Bostall Heath 301,302 Botallack Mine 501 Bothamsall 149 Bothenhampton 474 Boughton-under-Blean 343 Bouldnor Cliff 453 Bourne 505 Bourton-on-the-Hill 197 Bowleaze Cove 475 Boxford 240 Box Hill 359,360 Boxley 364 Brackenber Moor 21 Bracklesham Bay 437 Bracknell 285 Bradfield 124 Bradford 82 Bradgate Park 156 Bradwell 260 Bradwell Dale 104 Bramber 273,402,431 Bramford 183 Brampton 22 Brancaster 183 Branscombe 494-498 Brassington 121 Bredon Hill 196 Brendon Hills 478 Brent Tor 492 Brickhill 223 Bridgenorth 163 Bridlington 53-55,72,81 Bridport 465,474,475 Brighouse 130 Brighstone 449 Brightling 424 Brighton 422,505 Bristol 231,232,235,234, 235 Brixworth 174,181 Broads, The 183

Proadsands 482 Broadway Hill 197 Brockham 375 Brock Hill 158 Brockley 316 Bromley Park 316 Bromlow 162 Bromsgrove 171 Brook 449 Brough 26,34 Buckinghamshire 211 Buckland Common. nr. Cholesbury 248 Buckland sand pit 373 Budleigh Salterton 477 Buildwas 163 Bunny Mine 501 Burford 225,506 Burham 345 Burnham 280 Burniston 42 Burnley 88 Burnsall 82 Burrells 21,34 Burrington Combe 231 Burstwick 74 Burton Bradstock 465, 474,475,477,494-498 Burton Cliff 474 Burwash 398 Butcher's Cross 425 Butt 141 Butterton Park 143 Buxton 83,101,102,113

Caldbeck 17
Calder Bridge 11
Callow 162
Calton Hill 121
Calvert 203,225
Camborne School of
Mines 501
Cambridge 182,184,215,
505
Cambridgeshire 186
Camelford 499
Cannington Park 231
Canterbury 342
Cape Cornwall 499

Carleton 32 Carlisle 506 Carn Brea 499 Carrick Fell 14 Carrocks 17 Carrock Fell 12,13,15 Cassington 202 Castle An Dinas Mine 501 Castleford 82 Castlehead 12 Castle Lime Works 368 Castleton 44,83,99,105, 107, 115, 121, 176, 523 Caterham 326 Cat Ghy11 12 Cautley 13,137 Cayton Bay 42,43,44, 50 Chalbury 475 Chaldon 371 Chapman's Pool 461, 465,470,474 Char, Valley of 476 Charlbury 225 Charlton 292,294,301 Charmouth 474,475 Charnwood Forest 154, 155,156,176,509 Chartham Hatch 342 Chapel-le-Dale 59 Chatsworth 125,138 Cheddar 505 Cheddington 222 Chelmsford 259 Chelsfield 366 Cheltenham 191,194,198 Chepstow 189,194 Cherry Hinton 182 Cheshire 97 Chesil Beach 467-473, 494-498 Chessington 359 Chester 505 Chesterfield 149 Chesterton 146 Cheviot Hills 2-7,5,9 Chichester 442 Chickerell 465,475

Chilham 342 Chillesford 183,215 Chilterns 224,249,250, 274,281 Chilworth 377 Chipping Campden 197, 505 Chislehurst 313 Chislet Colliery 341 Cholesbury 248 Chorley Wood 272 Chrome Hill 102,106 Church Cove 499 Churchill 225 Church Stretton 172 Chynhalls 501 Cippenham 279 Cirencester 192,195 Claygate 321 Clandon 377,403 Clanna 189 Clapham, Yorks. 12 Clapham, Sussex 433 Clavert brick pit 211 Claydon 183 Cleeve Hill 196,198 Clevedon 233 Cleveland 49 Cleveland Hills 32,34 Clicker Tor Gry. 501 Cliffsend 297 Cligga Head 501 Clitheroe 85 Cliviger Gorge 84,87, 88,89 Cloughton 42 Cloughton Wyke 48 Coatham Stob Ory. 504 Cobham 307,322,361 Cockermouth 12 Codicote 221 Coker 464 Coldharbour 362 Cole Green 220 Colley Hill 373 Collingham 82 Colne Valley 266 Colwell Bay 452,459 Combe Martin 480

Combes, The 196 Compton 389 Compton Bay 450 Congleton 139 Congleton Edge 144 Conisborough 111,132 Coniston 12,13,15 Constitution Hill 187 Cooper's Hill 192 Corby 174,504 Corfe 467-473,474 Cornwall 491,499,501, 502 Corton 183 Corton Beacon 464 Coryton 483,492 Cotherstone 38 Cothill 205 Cotswolds 191,192,196, 197-199,200,231,234, 505,515 Cottingham 174 Coulsdon 371 Coventry 171 Coverack 501 Cow Green [Mine] 34, 504 Coxhoe 26,504 Coxwol: 42,68 Cracoe 63,83,84 Cranford 174,181 Cranmore Hill 456 Craven lowlands 59 Crays, The 31? Crediton Valley 488 Crich 119 Crickley Hill 196 Croft Gry. 504 Croham Hurst 328 Cromer 152,183 Cross Fell 13,21,22 Crowhurst 398 Croydon 318,365 Crummack Dale 59 Cuckmere Valley 421 Cuddon Point 500 Cudham 329 Culver Cliff 445 Cumnor 225 Cumnor Hurst 205

Cuns Fell 22

Danbury Hill 259 Dancing Ledge 474 Dane Hill 201 Danes Dyke 43 Darent 364 Darent Gap 366 Darent Valley 366 Dartford 309 Dartford Heath 309 Dertmoor 483,489,490 Dartmouth 481 Delabole Slate gries. 493,499 Denshaw 90 Derbyshire 105,121,125, 176,504,516,524,525, 526 Derwent reservoir 505 Derwentwater 14 Devil's Dyke 427 Devil's Punch Bowl 384 Devizes 238 Devon 477,478,491,494-498,501,502 Devon Great Consols Mine 492 Digswell 20 Dimlington 43,80 Dirtlow Rake 121 Dobbyhole Gill 22 Dordon 157 Dore 192 Dorking 362,363,376 Dorset 458,462,465,466, 467-473,474,475,477, 494-498 Doseley 163 Dosthill 165 Dovedale 83,103,161 Dover 406 Dowel Dale 102 Downe 329 Downside Mill 361 Draughton 82 Dry Gills 14 Dry Hill 367 Dudley 160,164,507,520

Dudwell Valley 398

Dufton 26
Duncton 436
Duncton 436
Dundry [Hill] 233,234
Dunkery Beacon 478
Dunn Fell 19
Dunnose 457
Dunstable 504
Dunton Green 330
Durham [dstr.] 9,25,26,
27-30,34
Durlston Bay [Head] 461,
465,467,474
Dustanburgh 26
Duston 180,181
Dyrham 237

Eakring [oilfield] 149, 504 Earl Sterndale 114 Earls Barton 174 Earsdon 26 Easington 81 Easneye 219 East Anglia 183,215 East Ayton 42 Eastbourne 418 East Grinstead 396 East Malling 347,364 East Runton 215 Eastwell Lane 342 Edale 83,99,105,122,518 Eden, Vale of 83 Edge Hill 187 Edmondbyers 26 Egg Hill Lane 177 Egham 286 Eglingham 26 Egton Bridge 49 Elloughton 77 Ellows Park 161 Elmstead Woods 315 Emmer Green 281 Ennerdale 11,12 Epping Forest 258,370 Epsom 320 Epsom Common 359 Erdington 163 Eridge 397,398,425 Esk Valley 42 Essex 259,260,261,262,269 Etchingham 423
Evenlode Gorge [Valley]
225
Ewden 124,125
Ewell 320
Eyam 108
Eycott Hill 14
Eymouth 1
Eyford [Hill] 192,197
Eynsford 332
Eype 475
Eype Mouth 465

Fairchildes 329 Fairmile Common 361 Falcon Crag 14 Faringdon 205 Farnham 379 Fawler 202,225,226 Felixstowe 218 Fens, The 517 Fernhurst, Vale of 435 Ferryhill 26 Fewston reservoir 505 Fiddler's Elbow 192 Filey 42.43,44,51 Finedon 174 Flamborough [Head] 43,44, 54,74,79 Fleet [coast] 472,474 Florence Mine 504 Folkestone 406,407,408 Folly Farm Gry. 250 Fordon 71 Forest Row 396 Forest of Dean 189,190 Forge Valley 42,52 Formby oilfield 504 Fosse Cross 195 Freshford Mill 237 Freshwater Bay 450 Friar's Crag 12 Friday Street 362 Frieth 244 Frindsbury 335 Frankley 177 Frocester Hill 192 Fylingdales Moor 44

Gallow Hill (Brailes) 187

Geevor Tin Mine 501 Giggleswick Scar 61 Gillercomb 12.14 Gilling Gap 42 Gipping Valley 216 Glanton 6.26 Glaramara 15 Glebe Mine 121 Glossop 98 Gloucester 194,505. Gloucestershire 196, 200,233 Glutton Dale 102 Goathland 43,44,49 Godalming 389 Godstone [dstr.] 326. 355,356 Golders Green 369 Goldsitch Moss 145 Goodrington 482 Goring Gap 241 Gosforth 11 Goyt, River 100 Goyt's Moss 100 Grantham 148 Grassington 63.64 Gray's Thurrock 304 Great Bookham 361 Great Hameldon 84 Great Hucklow 104 Great Langdale 16 Great Rundale Tarn 22 Greenhill 485 Greenhow 83 Greenhow Hill 63 Greensand Hills 362 Gristhorpe 51 Grove Park 313 Gubblecote 222,249 Guildford 363,378,401, 403 Guiting Stone (gries.) 192 Gwennap 501 Habberley 170

Hackness Hills 42,43,44,

Haile Moor Mine

Hainault Forest 270

Halsbersley Lane 162 Halstead 331.366 Halsteads 22 Haltwhistle 26 Hambleton Hills 43 Ham Cliff 465 Hampshire 239,494-8 Hampstead 300,369 Handborough 210 Harefield 278 Harlestone 181 Harrock Hill 93,96 Harrogate [dstr.] 44,67. 505 Hartfield 396 Hartshill 171 Hartwell 225 Harwich Cliff 217 Hascombe 388 Haslemere 387 Hassocks 427 Hastings [dstr.] 414,418 Hetherleigh 488 Haweswater 14,18 Hayburn Wyke 42 Haydon Bridge 26 Hayes 329 Haytor Down 490 Haywards Heath 428 Headington 204,226 Headley 324,359,375 Headon Hill 451 Heathfield 398,424 Heddon on the Wall 26 Hellingly 426 Helmsley 68 Helston 500 Henfield 273,387,402, 429,430 Henley 243 Hensington 11 Henstridge Ory. 480 Hereford 193,505 Herne Bay 296,297,337, 342 Hertfordshire 186,220, 267,268 Hessle 74,77 Hexham 26 Higham Upshire 306 Highcliffe 441

High Cup Gill 22 High Cup Nick 21 Highdown Hill 433 Highgate 369 High Peak 123 High Rocks 397.398 High Weald, The 367 High Wycombe 275,506 Hildenley 42 Hill End 252 Hilton 13 Hilton Beck 22 Hindhead [dstr.] 384, 401 Hitchin 213 Hock Cliff 196 Hockley Gry. 141 Hoff Gry. 34 Hogs Back 378,401 Holborn 300 Holderness 43,73,74, 80,81 Hollycombe 384 Holly Hill 348 Holmesdale 363,365 Holm Hills Cutting 384 Holmpton 61 Holtye Common 396 Holty Ridge, The 367 Holworth 465,475 Holymoorside 126 Honister 12 Hook 380 Hook Norton 187,188 Hope Cement Works 504 Hope's Nose 482 Hope Valley 162 Hordle Cliffe 441 Hornsea 74,81 Horsham 387,394 Horton in Ribblesdale 84 Hotham 76 Hounstout 474 Howardian Hills 42,43 Howden reservoir 505 Hoxne 183,255 Huddersfield 130 Hull 76-81 Humber 77,81

Humber Cap 43 Huncote 504 Hunmanby 79 Hunstanton 183 Huntley 193 Hurst Hill 164 Hurtmore 389

Illogan 499.501 Ingleborough [Cave] 59,61,83 Ingleton 13.61 Inkpen 239 Inval Ridge 384 Ipewich 183,215,216, Irchester 174 Irthlingborough 174,181 Irwell River 94 Isle of Portland 475. 469 Isle of Purbeck 461, 470 Isle of Sheppey 295 Isle of Wight 443,444-453,455,456,457,458 Islip 174,181,203 Iver 280 Ivinghoe 222,249 Ivybridge 491

Jarvis Brook brickworks 425 Jedburgh 3 Jevington 419 Jiggers Bank 163 Jordan Cliff 465,475 Joyden's Wood 309 Juniper Hill 373 Juniper Hall Country 359

Keele 143 Keisley 21 Keisley Dufton 22 Kelsey Hills 74 Kelskeige 141 Kelso 4 Kendall 506

Kennack Sands 499 Kent 294,295,296,297, 306,308,315,317,338, 339,340,341,386 Kent's Cavern 481 Kent Water 367 Ken Wood 369 Kerne Bridge 189 Keston 329 Keswick 12 Kettering 153,174,175 Keyingham 80 Kimeridge [Bay] 461,465. 474 Kingsclere 381 Kingston Hill 288 Kidderminster 161,170 Kilnsea 81 Kingsdale 59 King's Sutton 187 Kiplingcotes 78 Kirkby Thore [mines] 13.504 Kirkby Stephen 21 Kirtlington 203,210, 225 Kirton 135 Kirton-in-Lindsey 135 Kiveton Park 112 Knaresborough 67,82 Knockholt 330,366 Knockmill 310 Knowlesands 163 Kynance Cove 501

Ladmanlow 100
Ladock Gry. 499
Lad Slack 22
Ladybower reservoir 505
Lake Dstr. 12,14,15,20
Lake Hedgely 6
Lencashire 60,89,91-95
Lancaster 506
Landewednack 499
Langdon Hills 262
Langsett [dstr.] 109,
128
Langton Herring 465,472,
475

Lealholm 44 Leatherheed 360 Leathley 82 Lea Valley 257,370 Lackhampton Hill 196 Leeds 44,67,82 Leak 145 Lee Moor 491 Laiceater 156 Laisesterahire 512,526 Leigh 405 Leighton Buzzard 212. 223,264 Laith Hill [detr.] 362, 393 Lasensas Abbey Wood 293 lavant Mine 501 Lewos 426 lawis Lane 195 Lewtrenghard 485 Lickey [Hills] 166, 171,172 Liddatown Down 492 Limpley Stake 277 Limpefield (Common) 354,365 Lincoln 142,505 Lincolnshire 75,151, 153,175,512 Lingfield 367 Linley Brock 163 Littledean 189 Little Haldon 477 Little Longstone 113 Littlemore 204,226 Littleworth 204 Litton 104 Liverpool 91-93,505 Lizard District 501 Loders Gross 474 London 263-269,290-299,300,356,359~376, 481,503,506 Longborough 192 Long Fell 21,22 Long Harborough 225 Longhope 194 Longhoughton 26 Longmynd 162

Long Rake 121 Long Sleddale 14 Longatone Edge 121 Lower Swanwick 437 Lower Upnor 338 Lowestoft 255 Lowestoft Ness 183 Lullingstons Park 366 Lulworth [dstr.] 465, 467-473,474,475 Lummaton Hill 481,482 Lunedalo 37 Lyd River 487 Lydford [Gorge] 483, 497,492 Lydney 189 Lyme Regio 465,474,476. 477,496,497 Lynton 479,480

Magdalen Gry. 226 Maiden Castle 465 Maidatone 333,344, 349,364 Maine Book 22 Malham [Tern] 59,60. 61,62,82,83,84 Mallerstang 13,40 Malverns 196 Manohester 94-99 Manifold, Valley of River 147 Manyatones Ory. 121 Mappleton 81 Mardley Heath 221 Market Weighton [axia] 43,44,76-81 Marlock Byam 176 Marlow [detr.] 276,277 Marr 15 March Brook 141 Martley 172 Masham 66,67 Masson Fluoraper Mine 504 Masson Hill 121 Matlook 83,117,121 May Hill 193,196 Meadown Bank Mine 504 Medway Cap 364

Medway Valley 333 Melbourn 186 Maldon 463,484 Meldon Ories. 492,501 Mells Fell 14 Melmorby 26 Melton Mowbray 148 Mendipa 231,233,234 Manhaniot 501 Mapal 182 Mors 463 Mereworth 346 Mersey Tunnel 504,505 Meratham 371,372 Mickleham 359,360 Middleton 82,121 Middleton Dale 116 Middleton in Teesdale 35 Midford 237 Midhopestones 128 Midhurat 387,435 Midland Plain 173 Midlands 143,149,164,167. 172,176,508 Milfield Plain 5 Milford on Sea 460 Milkhuratwood 425 Miller's Dale 104 Mill Pit 252 Milton under Wychwood 202,225 Mimms Valley 254,368 Minchinhampton Common 192 Minety 195 Mineterley 162 Mookerkin Tarn 11 Mole [river, gap] 323,360 361,364 Monk's Risborough 245 Monmouth 189 Monsal Head 101 Monyach 117 Moor lind 244 Mordiford 193 Moreton-in-the-Marsh 197 Morpeth 9 Moraton 183 Morville 163 Mount, The 499 Mountsorrel [gries.] 155,

Mullion Cove 501 Muncaster 11 Mundesley 152

Needham Market 216 Neepsend 129 Netherfield 398,424 Netley Heath 392 Nettleton 136 Newbald 78 New Barnes 252 Newbold Astbury 144 Newbottle 187 Newbury 240 Newbury Lane 167 Newcastle 9,26,143,146 Newhaven 422,426 Newlands Corner 390 New Malden 287 New Moor House 26 Newnham 380 Newton Farm 177 Newtondale 42.43 Nidderdale, Upper 65, 67 Niton 447 Norfolk 151,215 Norwich 152,215 Northampton 180,517 Northamptonshire 142, 153,175,181 North Coker 464 North Downs 352,359, 363,364,365,366,494 Northleach 506 North Mimms [Mymms] 253,267 North Tawton 488 Northwood 278 Norwood Farm 361 Northumberland 8,9,10 North Wick 234 Nottingham dstr. 511, 517,521,525 Nottinghamshire [coalfield] 150,504,512, 513 Nower, The 362 Nuneaton [gries.] 165, 171,172,173,504,527 Nutfield 357,372

Oaklands 352 Caksey 195 Odd Down 237 Okehampton 483,485, 488.501 Oldbury 171 Oreton 163 Orford 183,215 Ormskirk 91 Osmington 465,471, 474,475 Otterburn 2 Overstand 152,215 Oxford [dstr.] 201-205, 208,225,226,227,352, 503,505,506 Oxfordshire 200,201,202, 203,206,207,210,223, 227 Oxshott 321,361 Oxted 354,356,365 Oxted Stream, The 365

Pagham Harbour 442 Painswick 194,196 Pangbourne 242,246 Pang Valley 247 Parbold [dstr.] 72,93, 94.96 Parkend Gry. 504 Parkhouse Hill 102,106 Park Gry. 480 Parkwood 129 Parliament Hill 369 Patterdale 506 Peak 42 Peak District 100-105, 106,113-136,514 Peak Steel 47 Pegwell Bay 297,298, 339 Pendle 64 Pendomer 464 Pennines 21,67,83,84, 98,127,145 Penistone 128 Penn 275 Penrith 506 Pentire Head 493 Perranporth 501 Perranzabuloe 501

Petrockstow 488 Petworth 387 Peveril Point 474 Pewsey Vale 238 Pickering 44,69 Pig Tor 481 Pimbo Lane Brickworks 92,95 Pin Dale 105,121 Pinhay Bay 465 Pipp Brook Basin 362 Pitsford 174 Pitstone 250 Plump Hill 190 Plumpton 342 Plumstead 301,302 Polegate 419 Polesworth 157 Pontefract 82 Poole 467-473,494-498 Port Eliot 501 Portishead 233 Porti Mulgrave 45 Portland 465,474 Portsdown 430 Powburn 26 Poxwell 475 Preston 506 Priors Frome 193 Prospect Gry. 456 Pulborough 434 Purbeck Hills 461 Purley 327 Purton 230

Quantook Hills 478 Quayfoot 14

Radoliffe 94
Radstock 233
Raisby Hill Qry. 504
Ralph Cross 44
Ramsley 485
Raper Mine 121
Ravenhead 92,95
Ravensbourne Valley 314,
329
Ravenscar 44,47
Ravensnest 141
Ravenstonedale 13,21
Rayleigh Hills 261

Reading [datr.] 235,503 Reculver 337,339,342 Red-A-Ven Brock 484 Redoliff 465,475 Redhill 372 Reigate 373 Reighton Gap 53 Ribblesdale [Upper] 59, 60,83 Richmond 41 Rickmansworth 266,271 Ridge Church 368 Ridge Hill 256,368 Riding Mill 26 Hinginglow 129 Ringstead [Pay] 474-475 Ripon 44,67 Rishton 3 Rivelin Valley 129 Robertsburge 425,424 Robin Hoels By 42,44, 58,82 Robin's Wood Hill 196, 198 Roche Rock 499 Roohes, The 145 Rochester 333 Rocken End 447 Roden Valley 270 Romen Fell 21,22 Roman Wall 15 Romney Marsh 409 Rockhope 23 Roselarry Topping 32 Rosedale 69 Ross 199 Rothbury 7,26 Roughlee 64 Roundhay Park 82 Rowarth 98 Rowley [Hills] 167.171, 17% Royal Institute of Cornvall Museum, Truro 501 Roya Geological Society of Commell, funzance Royston 185, 186, 265 Rubery 171,177 Rugburn 237

Runswick Bay 42,45,57 Ruspidge 189 Rutland 153,517 Ruxley 312 Sadghyll 14 St. Albans [Vale of] 251,252 St. Albans Head 461,474 St. Aldhelm's Head 465 St. Audries 231 St. Austell 501 St. Colomb Major 501 St. Erth sandpit 499 St. Gabriel's 475 St. Gabriel's Mouth 465 St. Germans 501 St. Hilary 501 St. John's 14 St. John's Chapel 26 St. Just 501 St. Leonards 410 St. Martha's Hill 363 St. Michael's Mount 501 St. Stephen in Brannel 501 Sale Fell 14 Sallet Hole 121 Salperton 192 Saltern Cove 481 Saltwick [Bay] 42,46 Sanderstead 327 Sandling 407,408 Sandown 445,457 Scalby Wyke 42,48 Scaleber 59 Scarborough 42,43,44, 50.70 Scolt Head Island 183 Scowles, The 189 Scunthorpe 134 Soutterdine 193,194 Seaford 421 Seathwaite 12,14 Seaton 477,494-498 Seaton Sluice 9,26,28, Seatown 474,475,498 Sedgley 164,520 Sedgwick Museum 185

Selborne 383 Selling 342 Selsey 437,442 Settle 61,83 Sevenoaks 351,400-403 Severn lvalley, estuary | 163,196 Sawerby 43,55,79 Shadwell 82 Shaftesbury [dstr.] 439,462 Shanklin 446 Shap 12,13,15,21 Sharp's Hill [qryd 187,201 Sheffield [dstr.] 107-112,113-136,505 Shelford 339,342 Shellingford 225 Shelve 162 Shappey 336 Sherborne 464 Shere 391 Shiplake 282 Shipton Gorge 474 Shipton on Cherwell 203,210,225 Shooter's Hill 303 Shoreham 366 Shoreham by Sea 471 Shore Hill 352 Shorelstrode Lane Pits 425 Sharne 306,307 Shrewsbury 506 Shropshire 162 Sibford 188 "Silent Pool", The 363 Silver Gill 14 Singleton 436 Skelgill 12,13 Skellow Clough 91,96 Skiddaw 12,14,15 3ki psea 81 Skipton 82,83 Slough 279 Small Dole 430 Smith's Cliff 493 Sneed 162 Sole Street 348

Somerset 231,478 Soudley 189 Sourton 486 Southampton 438-442 Southborough 397 South Cave 76 South Cerney 195 South Crofty Mine 499, South Downs 431,494 Southend Waterworks 505 South Hambleton Hills 42 South Harting 436 South Landing 55 South Lodge pit 281 South Merstham 372 South Mimms 256,368 South Pertherwin 501 South Shields 26 South Terras Mine 501 Southwold 216 Sparkford Vale 464 Speeton 43,44,53-55 Spittal 26 Sprowston 183 Sproxton 148 Spurn Head 73 Staffordshire, N.E. 524 Stainforth 60 Stainmore 21,22,34,39 Staithes 42,44,45 Stamford 153 Stanhope 26 Stanion 174 Stanstead 219 Steps Hill 249 Stenna Gwyn Mine 501 Stevenage 213,214 Stewartby Brick Works 504 Steyning 429 Stickle path 485 Stiffkey 183 Stiperstones 162 Stockdale 59 Stoke on Trent 143-147 Stone 225,309

Stonesfield 202,225 Stone thwaite 15 Stony Middleton [dstr.] 108,116 Storrington 387,433 Stour estuary 217 Stour Gap 342 Stour Rea 177 Stratford-on-Avon 179 Stretham 182 Strood 294 Stroud 191,198,307 Studland 461,474 Sturry 342 Styhead Pass 14 Sudbourne Park 183 Suffolk 216 Sulham 242 Sunderland 9,26 Surrey 286,318,322, 386 Sussex 386 Sutton Cockshoot 193 Sutton Hill Gry. 234 Sutton Park 158 Sutton Poyntz 473,475 Sutton Valence 344 Swaledale 59 Swanage | Bay | 461, 467-473,474 Swanscombe 299,308 Swanworth Farm 360 Swindale [Beck] 14,22 Swindon 26,225,229 Swinsty reservoir 505 Symond's Yat 189

Tadcaster 67
Tadmarton 187
Tadworth 324
Tame 177
Taplow 280,281
Tapnell Qry. 456
Tarporley 506
Tavy Valley 492
Teesdale [Upper] 30,
34,36,37
Telegraph Hill 384
Telham Hill 398
Thames [Head] 195,299,304

Thanet 214 Thanet, N.E. 291 Thornoroft 360 Thorpe 183 Thrapston 174 Threlkeld 14 Threshfield 60 Thurrock 269 Tideswell Dale 104 Tilburstow Hill 357 Tillingbourne, The 362 Tilly Whim Caves 461 Tintagel 493,499 Tintern Abbey 189 Titsey 365 Titterstone Clee 172 Tiverton 237 Tolpetherwin Gry. 501 Tolworth 289 Tonbridge [dstr.] 398, 400,405 Torbay 482 Torquay 477,481 Tortworth 194 Torver 13 Totternhoe Lime Works 504 Towcester 187 Treak Cliff 121 Treburland Mine 501 Tregargus qries. 499,501 Tremore Gry. 501 Tremorbridge gries. 499 Trenute Mine 501 Tring[Gap] 249 Trollers Gill 82 Trow Gill 61 Tunbridge Wells 397,398 Tungsten Mine 14 Turners Hill 161 Twywell 181 Tynemouth [dstr.] 24,26, 28,33 Tyne Valley 9 Tyttenhanger 252

Ullswater 18 Ulverscroft 156 Upholland 92,93,94,95,96 Upnor 335 Upmor, nr. Strood 294 Upmey 475 Uxbridge 266,506

Valley Grove 296 Vallis Vale 231 Ventnor 446,457 Virginia Water 284 Vobster-Vallis region 231

Wainlode Cliff 196 Wales 503,504,505 Wales, South 235 Walton Heath 374 Walton-on-the-Naze 183 Warboys 182 Warden Point 295 Wardour Vale 438,462, 463 Ware 219 Warrington 506 Warwickshire 169,171 Wash, The 151,517 Watch Hill 14 Watendlath 14 Waterend 253,267 Wateringbury 346 Waterside 481,482 Watton Cliff 465,474, 475 Waveney Valley 255 Weald 362,363,385,386, 387,390,398,399,400-403,404,412-417,425 439 Weardale [Upper] 23,31, Wear, River and Valley 9,27 Well Hill 331,366 Wenlock Edge 172

Wellington 172 Welsh Border 230 Welwyn 221 Wem 506 Wendover 248 Wensleydale, Upper 59 Westbury 237 Westbury on Severn 190,196 West Clandon 363 Westcott 362 Westerham 354,400 West Heath 369 West Hoathly 395 Westleton 216 West Malling 348 Westmorland 16 West Okement River 484 West Thurrock 305 West Wickham 317 Wey [River, Gap] 363, 382,384,401 Weymouth [dstr. | 467-473, 474,475 Whalley Banks 84 Wharfedale 60 Wharfe Valley 67 Wheal Fortune 500 Wheal Gorland 501 Wheale Louisa Clay Pit 499 Wheal Unity 501 Whirlowdale 129 Whitby [dstr.] 42-44,46,56,522 Whitchurch 506 Whitecliff Bay 444,445. 454 Whitehaven 11 White Horse Hill 205,225

White Horse, Vale of 228

White House, Epwell 187

White Nothe 468,471 Whitlingham 183 Whitmore 143 Wick 237 Widemouth [Head] 480,499 Wigan 92,94,506 Wilderness Qry. 194 Willerby 78 Willingdon 419 Wiltshire 462 Windermere 506 Windy Knoll 121 Winsford 504 Winspit 470,474 Winterwell 195 Wirksworth [dstr.] 117,510 Witley 388 Witney 209,506 Withernsea 81 Wokingham 284 Woldingham 365 Wolfscote Dale 103 Wooda Bay 480 Woodham Brickpits 211,225 Wood Lane 146 Woodside 319 Woodstock 210,225 Wool 465 Wooler 5,26 Woolhope 193 Woolhope Cockshoot 194 Woolmer Forest [Hill] 384 Wrekin, The 519

Yarmouth 456
Yate 231
Yelverton 490
Yeovil 464,474
Yoredale 59
York [Vale of] 42,67
Yorkshire 42,43,44,45-55,
59,61,67,83,504,528

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1967-1968

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