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WOOLHOPE NATURALISTS FIELD CLUB

presented by

Mrs M.U.Jones 1996



Frontispiece



Photo by

ALFRED WATKINS, F.R.P.S., J.P.
1855-1935.

Vivian, Hereford.

TRANSACTIONS

OF THE

WOOLHOPE

NATURALISTS' FIELD CLUB, HEREFORDSHIRE.

[ESTABLISHED 1851.]

VOLUME FOR 1933, 1934 and 1935.



"HOPE ON."



"HOPE EVER."

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TRANSACTIONS FOR THE YEARS 1933-1934-1935.

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WOOLHOPE NATURALISTS' FIELD CLUB

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- 1851 Club formed in the Winter months.
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 1853 Lewis, Rev. T. T.
 1854 Symonds, Rev. Wm. S., F.G.S.
 1855 Crouch, Rev. J. F., B.D.
 1856 Wheatley, Mr. Hewitt.
 1857 Lingen, Mr. Charles.
 1858 Brown, G. P., M.D.
 1859 Crouch, Rev. J. F., B.D.
 1860 Banks, Mr. R. W.
 1861 Lightbody, Mr. Robert.
 1862 Hoskyns, Mr. Chandos Wren.
 1863 Hoskyns, Mr. Chandos Wren.
 1864 Crouch, Rev. J. F., B.D.
 1865 Steele, Mr. Elmes Y.
 1866 Bull, H. G., M.D.
 1867 Hoskyns, Mr. Chandos Wren.
 1868 McCullough, D. M., M.D.
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 1870 Cooper-Key, Rev. H., M.A.
 1871 Cam, Mr. Thomas.
 1872 Steele, Mr. Elmes Y.
 1873 Davies, Rev. James, M.A.
 1874 Davies, Rev. James, M.A.
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 1884 Burrough, Rev. Charles, M.A.
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 1886 Piper, Mr. George H., F.G.S.
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 1888 Elliot, Rev. William, M.A.
 1889 Southall, Mr. H., F.R.Met.Soc.
 1890 Croft, Sir Herbert, Bart., M.A.

PRESIDENTS—Continued.

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 1894 Davies, Mr. James.
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 1896 Moore, Mr. H. Cecil.
 1897 Moore, Mr. H. Cecil.
 1898 Marshall, Rev. H. B. D., M.A.
 1899 Beddoe, Mr. H. C.
 1900 Leigh, The Very Rev. The Hon. J. W., D.D., Dean of Hereford.
 1901 Blashill, Mr. Thomas, F.Z.S.
 1902 Cornewall, Rev. Sir George H., Bart., M.A.
 1903 Southall, Mr. H., F.R.Met.Soc.
 1904 Hutchinson, Mr. T.
 1905 Baylis, Mr. Phillip, M.A., LL.M., F.Z.S.
 1906 Warner, Rev. R. Hyett, M.A.
 1907 Rankin, Sir James, Bart., M.A.
 1908 Rankin, Sir James, Bart., M.A., and Mr. H. Cecil Moore (joint).
 1909 Williamson, Rev. Preb. H. Trevor, M.A.
 1910 Farn, Mr. A. B.
 1911 Phillips, Mr. E. Cambridge.
 1912 Stooke-Vaughan, Rev. F. S., M.A.
 1913 Watkins, Rev. S. Cornish, M.A.
 1914 Watkins, Rev. S. Cornish, M.A.
 1915 Wood, Mr. J. G., F.S.A.
 1916 Jack, Mr. G. H., F.S.A.
 1917 Grindley, Rev. H. E., M.A.
 1918 Bannister, Rev. Canon A. T., M.A.
 1919 Watkins, Mr. Alfred, F.R.P.S.
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 1925 Mackay, Mr. J. C.
 1926 Scobie, Colonel M. J. G., C.B.
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 1928 Symonds, Mr. Powell Biddulph.
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 Bishop of Hereford.
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 1931 Symonds-Taylor, Lieut.-Colonel R. H.
 1932 Swayne, Lieut.-Colonel O. R., D.S.O.
 1933 Hamilton, Brig.-General W. G., C.B., C.S.I., D.S.O.
 1934 Walker, C. W., M.C., M.D., Ch.B.
 1935 Ellison, Captain F. B.

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- Boycott, Dr. A. E., Ewen Farm House, Nr. Cirencester, Glos.
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 Hereford Times, The, Ltd., Hereford.
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 British Mycological Society, British Musuem (Nat. Hist.), Cromwell Road, London, S.W.7.
 Cambridgeshire and Huntingdonshire Archæological Society.
 Caradoc and Severn Valley Field Club, 37, Castle Street, Shrewsbury.
 Cardiff Naturalists' Society, No. 2, Windsor Place, Cardiff.
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 Essex Field Club, Romford Road, Stratford, London, E.15.
 Geological Society of London, Burlington House, London, W.1.
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 Malvern Field Club, Spencer E. Warner, Wanganui, Upper Wyche, Malvern.
 North Staffordshire Field Club, c/o Public Library, Hanley, Stoke-on-Trent.
 Powysland Club.
 Society of Antiquaries, Burlington House, London, W.1.
 Somerset Archæological and Natural History, Somerset County Museum, Taunton Castle, Taunton.
 Spelæological Society, The Secretary, University of Bristol, Bristol.
 Swansea Scientific and Field Society, Alan Stuart, F.G.S., University College, Swansea.
 Worcestershire Archæological Society, The Librarian, Worcester.
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 National Library of Wales, Aberystwyth.
 University Library, Cambridge, The Secretary, University Library, Cambridge.

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 Bailey, R. E. H., O.B.E., Breinton Court, Hereford.
 Ball, Edward, Oldfield House, Lyde, Hereford.
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 Banks, R. A., Hergest Croft, Kington.
 Bannister, Rev. Canon A. T., The Close, Hereford.
 Barendt, J. E., Hill Court, Kington.
 Barnes, Dr. H. W., Eign Street, Hereford.
 Battiscombe, E., The Grange, Glasbury, Herefordshire.
 Bell, H. D., Wyeleigh, Broomy Hill, Hereford.
 Benn, C. A., Moor Court, Pembridge, Herefordshire.
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 Bettington, H. E., Hafod Road, Hereford.
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 Bridge, S. J., Foxton House, Leominster.
 Brierley, G. M., Pyon House, Canon Pyon, Hereford.
 Bright, A. H., Barton Court, Colwall, Malvern.
 Bright, Capt. G., Beech House, Luston, Leominster.
 Brumwell, D. E., Broad Street, Hereford.
 Bull, E. H., c/o, Miss E. Bull, St. John Street, Hereford.
 Bulman, Dr. J. R., Aylestone Hill, Hereford.
 Bulmer, E. F., Adams Hill, Hereford.
 Bulmer, H. H., Longmeadow, Hereford.
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Burnett, D., Castle Street, Hereford.
 Butcher, G. H., Bodenham Road, Hereford.
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 Capel, Major E. A., M.C., 36, Bridge Street, Hereford.
 Carter, Rev. G. Foster, St. Peter's Vicarage, Hereford.
 Carver, F. T., Ingarsby, Folly Lane, Hereford.
 Christy, H. A., Llangoed, Llyswen, Brecon.
 Clarke, Dr. J. S., Sunnyside, Weobley.
 Clarke, W. G., Windmill House, Canon Pyon Road, Hereford.
 Cockcroft, Major E. F., Tyglyn, Cusop, Hay.
 Cooper, G. B., 9, King Street, Hereford.
 Cotterell, Sir J. R. G., Bt., Garnons, Herefordshire.
 Cotterell, R. C. G., Garnons, Herefordshire.
 Davies, D., Oakwood, White Horse Street, Hereford.
 Davies, Rev. G., Studley Vicarage, Trowbridge, Wilts.
 Davies, H. J., Fernleigh, Bodenham Road, Hereford.
 Davison, Major D. A., O.B.E., Bronsil, Eastnor, Ledbury.
 Daw, Rev. W. S., Peterchurch Vicarage, Herefordshire.
 Day, Rev. E. Hermitage, D.D., The Little Hermitage, Southway, Pinelands, Cape of Good Hope, South Africa.
 Dill, R. F., Riverbank, Hampton Park, Hereford.
 Donaldson, Rev. Canon A. E., County House, The Struet, Brecon.
 Durham, Dr. H. E., 14, Sedley Taylor Road, Cambridge.
 Edwards, A. C., High Town, Hereford.
 Edwards, R. J., Midland Bank, Hereford.
 Ellis, Rev. T., Winforton Rectory, Herefordshire.
 Ellison, Capt. F. B., Arboyne, Eardisley, Herefordshire.
 Evans, Rev. D. R., Dinedor Vicarage, Hereford.
 Farmer, W. G., Withington Court, Hereford.
 Finlay, Dr. D. E., Wells Dene, Park Road, Gloucester.
 Foster, H. K., Kingsthorpe, Hereford.
 Fox, P., 1, Greylands, Gruneisen Street, Hereford.
 Franklin, C., Greentrees, St. Margaret's Road, Hereford.
 Gittings, C. S., Bath Street, Hereford.
 Gledhill, Rev. W. R., Preston-on-Wye Vicarage, Herefordshire.
 Goddard, F. H., The Old Manor, Bishopton, Stratford-on-Avon.
 Gollard, Dr. A., Starley Hill, Bosbury, Ledbury.
 Gostling, A. E., F.G.S., Lincoln Hill, Ross-on-Wye.
 Gowring, Rev. Canon, A. E., Grittleton, Chippenham, Wilts.
 Gray, R., The Oaklands, Dorstone, Herefordshire.
 Greenland, G. B., West View, Bodenham Road, Hereford.

Greenly, Maj.-Gen. W. H., C.B., C.M.G., D.S.O., Titley Court, Herefordshire.
 Griffith, Rev. C. Ashley, Stretton Sugwas, Hereford.
 Grindley, Rev. H. E., Kingsland, Milverton, Somerset.
 Grocock, G. H., Oakleigh, Ledbury Road, Hereford.
 Gwillim, A. Ll., Hill Field, Putley, Ledbury.
 Hall, G. A., Hinton, Elm Road, Hereford.
 Hamilton, Brig.-Gen., W. G., C.B., C.S.I., D.S.O., Coddington Court, Ledbury.
 Harding, C. J., 27, Edgar Street, Hereford.
 Harding, G. W., Aylestone Hill, Hereford.
 Harris, D. W., Mouse Castle, Eign Hill, Hereford.
 Harris, Wm., King Street, Hereford.
 Harrison, Dr. N. H., Much Birch, Hereford.
 Hartman, H. L., The Manor House, Almeley, Herefordshire.
 Haverfield Library, c/o Ashmolean Museum, Oxford.
 Haymes, H. L., Old House, Wellington, Hereford.
 Hayward, Dr. W. C., M.B.E., Eversley, Eldorado Road, Cheltenham.
 Hereford, The Right Rev. The Lord Bishop of, D.D., The Palace, Hereford.
 Hewitt, Rev. J. B., Stanford-on-Teme Vicarage, Worcestershire.
 Higgins, T. H., Glaslyn, Broomy Hill, Hereford.
 Hill, Rev. H. W., The Vicarage, Malvern Wells.
 Hinckes, Capt. R. T., D.L., J.P., Mansel Lacy, Herefordshire.
 Hogben, F., Eign Street, Hereford.
 Holland, Rev. T., Upton Bishop Vicarage, Ross-on-Wye.
 Hoyle, J. H., 9, Walnut Tree Lane, Ross Road, Hereford.
 Hudson, A. G., 32, South Street, Leominster.
 Hughes, Rev. E. A., Kenchester, Hereford.
 Hutchinson, J. M., Grantsfield, Leominster.
 Ingham, Rev. H. L., Dewesall Rectory, Hereford.
 James, F. R., Aylestone Hill, Hereford.
 Jay, T. E., Derndale, Hereford.
 Jenkins, H. R., The Porch, Westhide, Withington, Hereford.
 Jewell, C., Kenfig, College Road, Hereford.
 Johnston, A., South Bank House, Hereford.
 Jones, C., Fairleigh, White Horse Street, Hereford.
 Jones, G. Averay, Pen Hafod, Hafod Road, Hereford.
 Jones, Rev. G. I. R., Llanvillo Rectory, Brecon.
 Jones, Rev. L. P., The Vicarage, Lydney, Glos.
 Kear, A., Commercial Street, Hereford.
 Kilgour, Rev. J. H. T., St. James' Vicarage, Hereford.
 King, C. F., Eign Street, Hereford.
 King, J. W., Prospect Villa, St. James' Road, Hereford.

Knight, L. A., Trinity House, Baggallay Street, Hereford.
 Langford, Dr. A. W., 5. St. John Street, Hereford.
 Langston, Henry, Sunset, Kington.
 Le Brocq, M. A., F.L.S., Brecon.
 Lee, L. B., How Capel Court, Ross-on-Wye.
 Leir, M. R., R.A.C., Pall Mall, London, W.
 Lighton, Rev. C., Lyonshall, Kington.
 Littledale, T. A. R., Wittondale, Ross-on-Wye.
 Lloyd, J. E., 27, Devonshire Road, Weston-super-Mare.
 Lloyd, W. F., Chelwood, Yarkhill, Hereford.
 Loder-Symonds, Vice-Adml. F. P., C.M.G., R.N., Waldrist, Aylestone Hill, Hereford.
 Lodge, J., Holly Mount, Leominster.
 Longueville, Major E., The Sherriffs, Lyonshall, Kington.
 Lynes, Paymaster-Rear-Adml. Chas. E., R.N., Upper House, Westhope, Herefordshire.
 Maclaverty, C., Breinton House, Hereford.
 Mappin, W. H., Ynyshir Hall, Glandyfi, Cardiganshire.
 Marriott, A. W., Cantilupe House, St. Owen Street, Hereford.
 Marriott, C. L., 23, St. Owen Street, Hereford.
 Marshall, George, The Manor House, Breinton, Hereford.
 Marshall, G. H., The Manor House, Breinton, Hereford.
 Marshall, Major T., Sellack, Nr. Ross-on-Wye.
 Marshall, Rev. Wm., Sarnesfield Court, Herefordshire.
 Matthews, J. W., Bartonsham Farm, Hereford.
 Matthews, T. A., 6, King Street, Hereford.
 McDowell, R. H., Shotover, Three Elms Road, Hereford.
 Meredith, H., Rothbury, Cusop, Hay.
 Miller, Dr. H. D. C., Green Gables, Eardisley, Herefordshire.
 Milne, L., 29, Church Street, Hereford.
 Money-Kyrle, Rev. E. L., Homme House, Much Marcle, Glos.
 Morgan, T. D., Style House, Withington, Hereford.
 Morgan, Rev. Canon W. E. T., Upper Dulas, Cusop, Hay.
 Mumford, Capt. W. C. F., Sugwas Court, Hereford.
 Murray, R. H., Dinmore Manor, Hereford.
 Musgrave, M. W., Ridgmont, Hafod Road, Hereford.
 Mynors, Rev. A. Baskerville, Villars Farm, Southam, Cheltenham.
 Newton, Freeman, De Lacey House, Hereford.
 Oatfield, M. C., The Orchard, King's Acre Road, Hereford.
 Parker, Rev. Preb. T. H., Breinton Vicarage, Hereford.
 Pateshall, Lt.-Col. H. E. P., D.S.O., Allensmore Court, Hereford.
 Paul, R. W., F.S.A., Canynge Square, Clifton, Bristol.
 Peacock, G. H., c/o The Hereford Times, Ltd., Hereford.
 Pembridge, V. H., Lifton House, Bodenham Road, Hereford.

Perkins, G. W., Bredon, Cusop, Hay.
 Perry, W. T., King Street, Hereford.
 Pitman, Maj.-Gen. T. T., C.B., C.M.G., Brobury House, Herefordshire.
 Plowden, E. C., Old Hill Court, Ross-on-Wye.
 Pocock, Dr. R. W., Geological Survey, Exhibition Road, South Kensington, London, S.W.7.
 Powell, J. J. S., Hall Court, Much Marcle, Glos.
 Price, T. Lindsey, Commercial Street, Hereford.
 Pritchard, P., Quarry Bank, Callow, Hereford.
 Pritchard, W. P., High Town, Hereford.
 Pritchard, Walter, Quarry Bank, Callow, Hereford.
 Pritchett, W. L., Woodleigh, Ledbury Road, Hereford.
 Pugh, H., The Firs, South Bank Road, Hereford.
 Pulley, Sir. C. T., Lower Eaton, Hereford.
 Purchas, Rev. A. B., Prenton, Churchdown, Glos.
 Reade, Hubert, Church Farm, Much Dewchurch, Herefordshire.
 Riddell, Rev. G. B. E., Barkstone, Aylestone Hill, Hereford.
 Roberts, Rev. J. H., Canon Pyon Vicarage, Hereford.
 Roberts, Rev. T. M. F., Kenchester Rectory, Hereford.
 Robinson, R. S. Gavin, Poston House, Peterchurch, Herefordshire.
 Roderick, Rev. H., The Manse, Gorseley, Newent, Glos.
 Romilly, E. C., Broadfield Court, Bodenham, Herefordshire.
 Russell, F. H., Lawncroft, Hereford.
 Scott, J., Greystone, Pengrove Road, Hereford.
 Secretan, S. D., Swaynes, Rudgwick, Sussex.
 Shawcross, W., Ingleby, Jeffrey Avenue, Hereford.
 Simpson, C. W., Commercial Street, Hereford.
 Skyrme, H., Pengrove Road, Hereford.
 Smith, Engineer-Commr. J., R.N., Bowling Green Orchard, Bromyard Downs, Herefordshire.
 Southwick, T., Lansdowne, Cusop, Hay.
 Sprague, A. Grafton, Holiday Hall, Kington.
 Stewart, Rev. G. W., Holmer Vicarage, Hereford.
 Stewart, H. F., Stratford, Ledbury Road, Hereford.
 Stoker, Rev. C. H., Brinsop Rectory, Hereford.
 Stooke, J. E. H., Palace Yard, Hereford.
 Swayne, Lt.-Col. O. R., D.S.O., Tillington Court, Hereford.
 Symonds, P. B., Daff-y-Nant, Whitchurch, Ross-on-Wye.
 Symonds, R. A., Priors Lodge, Broomy Hill, Hereford.
 Symonds-Taylor, Lt.-Col. R. H., The Copelands, Holmer, Hereford.
 Taylor, G. D., Whitney Bridge, Whitney-on-Wye, Herefordshire.
 Taylor, J. D., Norton House, Wellington, Hereford.
 Taylor, S. R., Stocking Hill, Newlands, Leominster.
 Thomas, W. Ridley, The Lawns, Nunnington, Hereford.

Tickle, A. H., Ballingham, Holme Lacy, Hereford.
 Tomalin, H. F., F.G.S., Waynelete, Ross-on-Wye.
 Tullis, Dr. G. A., Newstead, Aylestone Hill, Hereford.
 Van-der-Weyer, E. B., Lindley Lodge, Putson, Hereford.
 Vaughan, C., Folly Lane, Aylestone Hill, Hereford.
 Verdin, Col. R. N. H., D.L., J.P., Garnstone, Weobley.
 Virgo, R. G., Pontrilas, Herefordshire.
 Wait, Rev. W. O., Titley Vicarage, Herefordshire.
 Walker, Dr. C. W., Summer Hayes, Venn's Lane, Hereford.
 Wallis, E. L., The Firs, Hampton Park, Hereford.
 Wallis, O. B., Vineyard Hill, Hampton Park, Hereford.
 Waterfield, The Very Rev. R., D.D., The Deanery, Hereford.
 Whiting, F. E., Credehill, Hereford.
 Williams, J. B., Dolforgan, Kerry, Montgomeryshire.
 Williams, Rees, Darygarth, Cusop, Hay.
 Wilmshurst, A., 2, North Villas, Hereford.
 Winnington-Ingram, Rev. A. J., The Rectory, Ledbury.
 Yemm, H. C., 36, Grenfell Road, Hereford.
 Zimmerman, A. U., The Vine, Tarrington, Herefordshire.

MEMBERS ELECTED IN 1933.

Bailey, R. E. H., O.B.E., Breinton Court, Hereford.
 Booth, C. E. T., 1, Kyrle Street, Hereford.
 Clarke, W. G., Windmill House, Canon Pyon Road, Hereford.
 Davison, Major D. A., O.B.E., Bronsil, Eastnor, Ledbury.
 Haymes, R. L., Old House, Wellington, Hereford.
 Harrison, Dr. N. H., Much Birch, Hereford.
 Hayward, Dr. W. C., M.B.E., Eversley, Eldorado Road, Cheltenham.
 King, W. J., Prospect Villa, St. James' Road, Hereford.
 Knight, L. A., Trinity House, Baggallay Street, Hereford.
 Maclaverty, C., Breinton House, Hereford.
 Newton, Freeman, De Lacey House, Hereford.
 Scott, J., Greystone, Pengrove Road, Hereford.
 Shawcross, W., Ingleby, Jeffrey Avenue, Hereford.
 Swayne, Col. H. G. C., C.M.G., Burghill Court, Hereford.
 Symonds, R. A., Prior's Lodge, Broomy Hill, Hereford.
 Tootell, Rev. W., Louvain, Barton Road, Hereford.
 Tullis, Dr. G. A., Newstead, Aylestone Hill, Hereford.
 Verdin, Col. R. N. H., D.L., J.P., Garnstone, Weobley.

MEMBERS ELECTED IN 1934.

Birmingham University Library, Edmund Street, Birmingham.
 Daw, Rev. W. S., Peterchurch Vicarage, Herefordshire.
 Franklin, C., Greentrees, St. Margaret's Road, Hereford.
 Harding, G. W., Aylestone Hill, Hereford.
 Hereford, The Right Rev. The Lord Bishop of, D.D., The Palace, Hereford.
 Longueville, Major E., The Sherriffs, Lyonshall, Kington.
 McDowell, R. H., Shotover, Three Elms Road, Hereford.
 Pembroke, V. H., Lifton House, Bodenham Road, Hereford.
 Pritchard, P., Quarry Bank, Callow, Hereford.
 Sprague, A. Grafton, Holiday Hall, Kington.
 Yemm, H. C., 36, Grenfell Road, Hereford.

MEMBERS ELECTED IN 1935.

Banister, W. H., 2, Montpelier Villas, St. James' Road, Hereford.
 Bell, H. D., Wyeleigh, Broomy Hill, Hereford.
 Carter, Rev. G. Foster, St. Peter's Vicarage, Hereford.
 Cooper, G. B., 9, King Street, Hereford.
 Hartman, H., The Manor House, Almeley, Herefordshire.
 Higgins, T. H., Glaslyn, Broomy Hill, Hereford.
 Ingham, Rev. H. L., Dewesall Rectory, Hereford.
 Jones, G. Averay, Pen Hafod, Hafod Road, Hereford.
 Kilgour, Rev. J. H. T., St. James' Vicarage, Hereford.
 Langford, Dr. A. W., 5, St. John Street, Hereford.
 Miller, Dr. H. C. D., Green Gables, Eardisley, Herefordshire.
 Milne, L., 29, Church Street, Hereford.
 Pitman, Maj.-Gen. T. T., C.B., C.M.G., Brobury House, Herefordshire.
 Pocock, Dr. R. W., Geological Survey, Exhibition Road, South Kensington, S.W.7.
 Pugh, H., The Firs, South Bank Road, Hereford.
 Roberts, Rev. T. M. F., Kenchester Rectory, Hereford.
 Smith, Engineer-Commndr. J., R.N., Bowling Green Orchard, Bromyard Downs, Herefordshire.
 Swales, Charles, Kyrle House, Kyrle Street, Hereford.
 Taylor, G. D., Whitney Bridge, Whitney-on-Wye, Herefordshire.

Obituary.

1933.

H. Spencer Bickham.	Dr. C. P. Hooker.
Col. Sir J. A. Bradney, C.B.	H. T. Averay Jones, M.B.E.
C. Franklin.	Rev. John Meredith.
Rev. W. L. Groves.	A. J. V. Radford.
Rev. R. Harington.	Rev. J. S. W. Stanwell.
E. J. Hatton.	

1934.

J. J. Joynes.	R. K. Mitchell.
J. C. Mackay.	H. Moore.
J. Millar.	William Powell.

1935.

S. H. Armitage.	Alfred Watkins.
W. H. McKaig.	A. W. Weyman.
W. Garrold Lloyd.	

RULES

OF THE

Woolhope Naturalists' Field Club

I.—That a Society be formed under the name of the "WOOLHOPE NATURALISTS' FIELD CLUB," for the practical study, in all its branches, of the Natural History and Archæology of Herefordshire, and the districts immediately adjacent.

II.—That the Club consist of Ordinary Members with such Honorary Members as may be admitted from time to time; from whom a President, four Vice-Presidents, a Central Committee, Treasurer, and Honorary Secretary be appointed at the Annual Winter Meeting to be held at Hereford in the latter part of each year.

III.—The Central Committee shall consist of Ten Members, with the President, Vice-Presidents, Hon. Treasurer, and Honorary Secretary, *ex-officio*. It shall be empowered to appoint an Assistant Secretary; and its duties shall be to make all the necessary arrangements for the meetings of the year, and take the management of the Club during the intervals of the meetings.

IV.—That the Members of the Club shall hold not less than three Field Meetings during the year, in the most interesting localities for investigating the Natural History and Archæology of the district. That the days and places of two at least such regular meetings be selected at the Annual Winter Meeting, and that ten clear days' notice of every Meeting be communicated to the Members by a circular from the Assistant Secretary; but that the Central Committee be empowered, upon urgent occasions, to alter the days of such regular Field Meetings, and also to fix special or extra Field Meetings during the year.

V.—That an Entrance Fee of Fifteen Shillings shall be paid by all Members on election, and that the Annual Subscription be Twenty Shillings, payable on the 1st January in each year to the Treasurer or Assistant Secretary. Each Member may have the privilege of introducing a friend on any of the Field Days of the Club.

VI.—That the Reports of the several meetings and the papers read to the Club during the year, be forwarded, at the discretion of the Central Committee, to the "Hereford Times" newspaper for publication as ordinary news, in preparation for the Transactions of the Club.

MERRICK BEQUEST ACCOUNT.
FOR THE YEAR ENDING 31ST DECEMBER, 1933.

		£	s.	d.	£	s.	d.
1933.	Jan. 1. To Brought on	23	12	3			
	" Dividends on £100 3½% War Stock...	3	10	0			
	" Bank Interest ...	0	7	9			
		<hr/>			£27	10	0
	Dec. 31. By Balance on Deposit at National Provincial Bank ...				27	10	0
		<hr/>			£27	10	0

xxvi.

GENERAL RESERVE ACCOUNT.
FOR THE YEAR ENDING 31ST DECEMBER, 1933.

		£	s.	d.	£	s.	d.
Jan. 1.	To Brought on	74	18	4			
	" Dividends on £120 3½% War Stock...	4	4	0			
	" Bank Interest ...	1	4	6			
		<hr/>			£80	6	10
	Dec. 31. By Balance on Deposit at National Provincial Bank ...				80	6	10
		<hr/>			£80	6	10

Audited and found correct.

(Signed) E. AMPHLETT CAPEL.
12th March, 1934.

xxvii.

THE WOOLHOPE NATURALISTS' FIELD CLUB.
THE HONORARY TREASURER'S ACCOUNT FOR THE YEAR ENDING 31ST DECEMBER, 1934.

		£	s.	d.	£	s.	d.
1934.	Jan. 1. To Balance brought on	592	8	2			
	" Subscriptions for 1934 ...	173	1	0			
	" Less paid in advance and credited to 1933 Account ...	9	0	0			
		<hr/>			164	1	0
	" Subscriptions—Arrears for 1933	26	0	0			
	" Do. in advance for 1935 ...	8	0	0			
	" Sale of " Transactions " ...	0	19	9			
	" Do. Pamphlets ...	0	9	2			
		<hr/>			£791	18	1
	1934.						
	Jan. 1. By Cash paid Subscription to British Mycological Society ...				1	0	0
	Apr. 16. " Do. Colonel John Lloyd towards purchase of remaining part of Tretower in Breconshire.				5	0	0
	" 24. " Do. Fire Insurance of Books ...				0	10	0
	July 2. " Do. Subscription to Congress, Archaeological Society ...				1	0	0
	" 17. " Do. C. Chivers Ltd., Binding books				1	14	6
	Dec. 15. " Do. W. E. H. Clarke, Assistant Secretary ...				20	0	0
	" Do. Petty Expenses ...				6	15	1
	" Do. Mr. Geo. Marshall, expense of excavations at Poston, Vowchurch ...				38	8	8
	" Do. " Hereford Times," for printing circulars and stationery				21	10	0
	" Balance in the Bank ...				695	11	9
	" Cash in hands of Assistant Secretary...				0	7	4
		<hr/>			£791	18	1

Audited and found correct.

(Signed) E. AMPHLETT CAPEL.
2nd April, 1935.

GENERAL RESERVE ACCOUNT.
FOR THE YEAR ENDING 31st DECEMBER, 1934.

	£	s.	d.		£	s.	d.
1934.							
Jan. 1. To Brought on ... Stock	80	6	10				
" Dividends on War Stock	4	4	0				
" Bank Interest	1	4	4				
					£85	15	2
Dec. 31. By Balance on Deposit at National Provincial Bank							
					£85	15	2

Audited and found correct.
(Signed) E. AMPHLETT CAPEL.
2nd April, 1935.

xxviii.

MERRICK BEQUEST ACCOUNT.
FOR THE YEAR ENDING 31st DECEMBER, 1934.

	£	s.	d.		£	s.	d.
1934.							
Jan. 1. To Brought on ... Stock	27	10	0				
" Dividend on War Stock	3	10	0				
" Bank Interest	0	8	3				
					£31	8	3
Dec. 31. By Balance on Deposit							
					£31	8	3

Audited and found correct.
(Signed) E. AMPHLETT CAPEL.
2nd April, 1935.

THE WOOLHOPE NATURALISTS' FIELD CLUB.

THE HONORARY TREASURER'S ACCOUNT FOR THE YEAR ENDING 31st DECEMBER, 1935.

	£	s.	d.		£	s.	d.
1935.							
Jan. 1. To Balance brought on		695	19	1			
" Subscriptions received for 1935	179	0	0				
" Less paid in advance	4	0	0				
					175	0	0
" Do. arrears for 1934		22	0	0			
" Do. in advance for 1936		5	1	0			
" Sale of Herefordshire Crosses		0	7	6			
" Do. of Pamphlets		0	2	10			
" Do. of Transactions		0	15	6			
" Do. Assistant Secretary for Bus Fares		3	14	6			
" Mr. Geo. Marshall for Petty Cash		1	0	0			
" Over Credit by Bank		0	1	0			

1935.										
Jan. 1.	By Cash paid	Subscription to British Micrological Society						1	0	0
Feb. 2.	Do.	F. Weatherhead for Vol. 16 "Archæologia Cantiana"						0	3	0
Mar. 16.	Do.	G. C. Druce for "Transactions"						0	15	9
" 23.	Do.	Insurance of Books						0	10	0
May 4.	J. Wilson.	Funeral Wreath						0	15	0
June 3.	Do.	do.— <i>re</i> J. C. Mackay						0	10	6
July 1.	Do.	Subscription to Congress Archæological Society						1	0	0
Sept. 24.	Do.	Cedric Chivers & Co., Book-binding						4	7	6
" 28.	Do.	W. E. H. Clarke, Assistant Secretary to Sept. 28th, 1935						15	0	0
Dec. 3.	Do.	do.—for Petty Expenses						7	7	0
" 31.	Do.	H. J. Powell, Petty Cash Assistant Secretary, Sept. 28th to Dec. 31st, 1935						2	0	0
"	Do.	"Hereford Times," Printing						5	0	0
"	Do.	Mr. Geo. Marshall, Hon. Sec., Petty Expenses						21	14	0
"	Do.	Cheque Book						1	18	10
"	Do.	Balance in Bank						£	870	4
"	Less unrepresented Cheques							28	12	10
								£904	1	5

xxix.

Audited and found correct.

(Signed) E. AMPHLETT CAPEL.
14th March, 1936.

MERRICK BEQUEST ACCOUNT.
FOR THE YEAR ENDING 31ST DECEMBER, 1935.

	£	s. d.		£	s. d.
1935.					
Jan. 1. To Balance brought on ...	31	8	3		
" Dividend on War Stock ...	3	10	0		
" Bank Interest ...	0	9	7		
	£35	7	10		£35
					7
					10
					£35
					7
					10

1935.
Dec. 31. By Balance on Deposit at National Provincial Bank
£35 7 10

xxx.

GENERAL RESERVE ACCOUNT.
FOR THE YEAR ENDING 31ST DECEMBER, 1935.

	£	s. d.		£	s. d.
1935.					
Jan. 1. To Balance brought on ...	85	15	2		
" Dividends on War Stock ...	4	4	0		
" Bank Interest ...	1	5	10		
	£91	5	0		
					£91
					5
					0
					£91
					5
					0

1935.
Dec. 31. By Balance on Deposit at National Provincial Bank
£91 5 0

Audited and found correct.
(Signed) E. AMPHLETT CAPEL,
14th March, 1936.

Woolhope Naturalists' Field Club.

PROCEEDINGS, 1933.

FIRST WINTER MEETING.

FRIDAY, FEBRUARY 10TH, 1933.

LANTERN LECTURE, "MEDIÆVAL SEPULCHRAL MONUMENTS AT
LINTON, HEREFORDSHIRE."

By A. D. LACAILLE, F.S.A.(Scot.).

A Meeting was held in the Woolhope Club Room at 7.30 p.m. to hear the above lecture. There was a small attendance.

In the absence of the President, Dr. H. E. Durham took the chair.

Mr. LACAILLE prefaced his account of the Linton stones with a review of the growth of monuments commemorating the dead from the earliest days of Christianity, when the Fish and Cross are found carved upon monuments to intimate the faith professed by the deceased. He showed on the screen a number of upright and flat gravestones showing the transition of these memorials from early Christian times to the middle ages. He then passed on to describe the stones at Linton, a full account of which will be found printed in this volume, under "Papers".

Mr. W. E. H. CLARKE said that when he removed the churchyard cross a few years ago to its present position, he found the slab with the demi-effigy doing duty as parts of the steps of the cross, hence the marks of wear by treading.

Mr. GEORGE MARSHALL said that all the memorials belonged to the thirteenth and early fourteenth century, except the last one shown which was of fifteenth century date. He was of the opinion that these cross-slabs emanated from the same workshop, similar slabs being found in neighbouring churches, as at Aston Ingham and Woolhope. They were undoubtedly of local origin. During the late seventeenth, eighteenth and early nineteenth centuries a family of monumental masons was evidently working in this same district, as a comparison and examination of the headstones in the churchyards would prove. He said that the Woolhope Club would carry out Mr. Lacaille's suggestion, and use their influence to have the stones, at present on the churchyard wall, removed into the tower for their better preservation.

Dr. DURHAM then proposed a vote of thanks to the Lecturer for his interesting address, which was unanimously accorded.

A vote of condolence was passed to the relatives of Mr. E. J. Hatton, who died on the 7th of February. He was a member of the Club for over thirty years, and a regular attendant at the Meetings.

The following were proposed for membership:—The Rev. W. Tootell, Louvain, Barton Road, Hereford; and Mr. R. H. Baily, O.B.E., Breinton Court, Hereford.

The Meeting then terminated.

SPRING ANNUAL MEETING.

THURSDAY, APRIL 27TH, 1933.

The Spring Annual Meeting of the Club was held in the Woolhope Room in the Hereford Public Library, when there were present:—Lieut.-Colonel O. R. Swayne, D.S.O. (retiring President), Brig.-General W. G. Hamilton, C.B., C.S.I., D.S.O. (President-Elect), Mr. S. J. Bridge, Mr. G. M. Brierley, Dr. J. S. Clarke, Mr. H. J. Davies, Mr. R. F. Dill, Mr. G. H. Grocock, Captain W. Harris, Mr. J. H. Hoyle, Mr. T. E. Jay, Mr. Alex. Johnston, Paymaster Rear-Admiral C. E. Lynes, Mr. G. Humphry Marshall, Dr. A. W. McMichael, Mr. H. R. Mines, Mr. F. C. Morgan, Rev. Canon W. E. T. Morgan, Mr. W. Musgrave, Mr. G. W. Perkins, Mr. Walter Pritchard, Rev. A. B. Purchas, Mr. R. S. Gavin Robinson, Mr. Hubert Reade, Rev. G. B. E. Riddell, Rev. H. Roderick, Mr. G. McNeil Rushforth, Mr. T. Southwick, Rev. C. H. Stoker, Mr. J. D. Taylor, Capt. O. B. Wallis, Mr. Alfred Watkins, Mr. A. U. Zimmerman, Mr. George Marshall (Honorary Secretary), and Mr. W. E. H. Clarke (Assistant Secretary).

The HONORARY SECRETARY said he attended, as representative of the Woolhope Club, the 80th Anniversary Meeting of the Malvern Naturalists' Field Club. This Club was founded the year after their own, and in the early years of the Clubs they had been closely associated together, hardly a year passing from 1853 to 1880, when a joint meeting of the two Clubs was not arranged and held.

The retiring President, Lieut.-Colonel O. R. SWAYNE, D.S.O., read his

PRESIDENTIAL ADDRESS.

During the past year, in which I have had the honour to be your President, the Club has enjoyed a programme of field meetings and lectures of delightful variety and interest.

We shall all long remember the impression made on us by the engrossing lectures and demonstrations given to us by Mr. Bennett on the geology of the Malvern Hills. The energy with which Mr. Bennett laid about him with his stone hammer and the shrewd blow he struck the President, mistaking him for a geological specimen, should, I think, be placed on record.

Neither will Captain Gilbert's lecture on the birds and other things of Hungary be forgotten—at least by me—for I have a tender skin, so I cannot think of all the interesting things about birds and men he told us without wanting to smear myself with paraffin and sit under a mosquito net.

Other engagements prevented me from attending the very interesting Third Field Meeting at Brecon.

The Second Meeting was spoilt by bad weather, but was attended, I understand, by a good number of hardy members. The President appears to have kept his head and stayed at home.

We owe our thanks to the Secretaries and the Committee for their work in providing this varied programme.

The Annual Meeting of this Club must always be an occasion of some interest to the members as the testing time of the President.

It is really a day of reckoning when the President must show what his interest in the Club's activities in the past year has been, and what is his own special interest in the work of the Club.

After considering the addresses made by past Presidents, I wonder what new thing there is to tell or what new line of research there is to urge.

We have been exhorted to undertake various tasks. One particularly, I remember, was to extend our knowledge of the botany of the County and especially to hunt up a plant called something like *Epipogon Epipogium*. The ensuing discussion was mainly sustained by members who seemed very interested in plants with beards and in this one more than all, as it apparently grows its beard upside down, and in trying to describe the plant one member informed another that if he stood on his head so that his chin was above his mouth he would have a perfect representation of the *Epipogon Epipogium*.

I am afraid the matter ended there as this plant has so far as I know not been found again in the County.

No doubt, gentlemen, you enjoy these Annual Meetings, if only in marking the contrast between the outgoing and incoming Presidents.

This duty is so light heartedly undertaken, with full confidence, that in twelve months something must turn up to make the day of reckoning easy—that is the only care, for all other matters are arranged and managed during the year by the Secretaries, to the great comfort and ease of the President.

But as the day approaches and his hunt for matter becomes more intense, his gloom deepens and here, on the day, your entertainment is set and you have but to watch the contrast between coming and going.

In addition to other advice we have often been warned by Presidents of the danger of our activities being lop-sided. This may occur at any time according to the inclinations of the majority of the members. Men will always work easier at and enjoy more the lines of thought which interest them, and as our object I presume

is the recreational pursuit of knowledge, this tendency must be recognised and guided. I suggest that every effort should be made to connect the different branches of study in such a manner as was indicated at Malvern by Mr. Bennett, when showing the plants that grew on different geological formations. The connection between these two branches (Geology and Botany) roused my interest in both, for I had never really studied either.

The Ancient Roads are interesting in themselves, no doubt, to their special students, but they become attractive to many more as the ways pass over the hills and near the quarries of the geologist, between the marshes, through the woods of the naturalist, sometimes showing beside them the plants and trees used for various purposes by the travellers of the past. There, surely, are strong connecting links between the branches of our studies.

The emphasis on these will, I feel, increase interest among the men like myself who are not special students.

But there is one branch in which I have recently taken special interest. Though only a novice I have for some time past studied at intervals the names of our fields. I have been impelled to this study, I suppose, by a passionate love for the fields, hedgerows, turf, tillage and trees of England. Here all life exists and is nursed. Here at all times of the year are to be found matters of great interest in all branches of man's activity. The progress of our race can be read here by the shape and form, the lines, grips or reens and mounds, and the unbroken nesting habits of some of the ancestors of our birds can be seen.

Now, at any rate, amongst the fields we feel we really are in England. How often have we felt on returning from the tropics a strong desire to kneel at the butts of the great trees and worship, and to roll in the sweet turf like a dog released from kennel. Then we learn these fields have names; some given only yesterday and still in use, others handed down from the time of our settler forefathers and though recorded are no longer used:—Buttercup Mead, Flax Close, Lanthorn, Bangy Meadow, Ormer, Holywell, Kinshall, Ryewell, Wain Acre, Warde's Thing, Tynings, Goose Plock, Lady's Plock, Dame Cattern, Juniper Piece, Claypitts, Quebbs, Perry Gobbet, Dyers Leasow next to Broomhill, Old Acre, Stanthulle, Housill, Callow, Lawncroft, Priest's Meadow, Cockshot, Brasley, Lord's Croft, Parlour Orchard, Ablands, Lamp Acre, Ten Shilling Piece, Penny Plock, and so on.

I plead for organised collection and study of these names. This should surely be a proper occupation for a Club described as a Naturalists' Field Club. The care of these names would but be paying due honour to the fields that "the Lord hath blessed". The fields of England that have given us so much that is good, the broad-shouldered, tan-faced men who have covered so much

of the earth, the great cattle, the solid food, the sustaining drink, the good sound wool, we might well ask: who chose these fields? Which way came the men that first cleared them? What has their form been since they were cleared? Under what systems have they been worked? What have they grown? Answers to many such questions may be given by collecting these names in early and present forms and making them available for study by those learned in the early forms of our language.

The importance of the collection of field names to the study of English place-names generally has lately been emphasized by the publication by the English Place-Name Society of the new volume dealing with the names of Northamptonshire. The editors there state that the field names "do contribute very definitely to a further and more detailed knowledge of the past history of the County". The Place-Name Society could not collect the field names without the co-operation of a large number of volunteers, and I suggest that members of this Club might help to organise this co-operation so that when the Society issues the volume dealing with Herefordshire it shall contain all available names of character and interest.

The connections between the different branches of our activity, to be found in this study, are shown by some of the names given above. The interpretation of them is a dangerous but highly diverting subject. Nothing can really be done satisfactorily in this way unless the old forms of the names are available in documents, and the peculiarities of the actual ground are known and considered.

Dyers Leasow looks easy enough. It may be that Weld, Dyers Rocket or Yellow Weed (*Reseda luteola*), grew there, or Dyers Greenweed or Woad Waxen (*Genista tinctoria*). This land is close by an ancient dwelling and place called Broomhill and Woad Waxen is very like broom. I have not found the plant there yet, but shall look for it presently. What of the early form? Well, *Saldyazdestrew*, written in the fourteenth century, no doubt, by a blue-fingered old monk. Anyone is welcome to make what he can of that. The place is still a marsh or marshy; Flaxclose is next to it and very fine marsh marigolds grow there.

Claypit, I think, usually indicates a field where charcoal was burnt and in many "Claypits" the dark patch where the fires were can be seen in the tillage. These are generally not far from woods. A "Claypit" now far away from all woods is a good indication of the condition of the land when the name was given.

Juniper Piece. There is no sign of the juniper bush. May it be the old word *Genofer* (Rosemary) corrupted? There are no early forms available yet and we are left guessing.

After many wonderings and deductions as to the interpretation of a field name it is sometimes sad to find, when an early form of the same is found, how far astray we have been. I have heard *Ormer* derived from all sorts of names—words including the French word *Orme* (Elm tree) and the Scandinavian personal name *Ormr*. It is distressing then to find an early form of it as *Colmer*.

Such is the form of the field names, but we must get early forms where possible and we must examine the ground. This walking over the ground leads to all kinds of delights. You feel you have a fair reason for walking about your neighbour's land, and you can thoroughly enjoy yourself, but you must have a sufficiently clear explanation ready when you are caught and must have a practised opening of a conversation leading to a discussion of ancient tillage, boundaries, names, weeds and so on. If you have a tracing or map with you this should not be used too openly, it may lead to suspicion. You find in the fields the marks of the open field system, old roadways, old boundaries, and many matters of interest, all of which may help to interpret the names.

I have made a collection of the names of the Parish of Burghill and have examined the fields and made a full record, but I am not satisfied that all possible early forms have been collected. The Parish of Brinsop has been done by Mr. Stoker, and the Parish of Coddington by the President-Elect, General Hamilton. I should like to see the work spread out round these parishes until the whole of their hundreds are finished.

The steps to be taken to complete a parish are:—

1. Extract all names and numbers from the Tithe Commutation Award, 1846.
2. Connect the Tithe Map numbers with the Ordnance Survey numbers.
3. Examine the fields.
4. Examine all available deeds and documents, settlements, conveyances, etc.
5. Extract all names from any available manor rolls.
6. Examine all available Estate Maps.
7. Examine Church Terriers and Church documents, Church Fencing lists, etc.
8. Search Inqs. P.M., or have them searched at the Record Office.
9. Search Enclosure Awards (Shirehall).
10. Deeds in the British Museum.

It adds to clearness and makes a delightful record if the field boundaries, roads, and buildings given on the Tithe Commutation Award Map are copied and the names entered on each field with the date of their record. It is well not to copy any information from the Tithe Map which may have a bearing on tithes.

Other lines of research will suggest themselves in each case.

If this work could be organised by the Club, in a limited area to begin with, I am sure we should in the process amass a very large and interesting amount of domestic history, which would enlarge our knowledge of the beautiful land in which we live.

The new President, General Hamilton, is an expert in the work of this collection and I am sure he will be glad to give the result of his experience to any students of the subject and his wise direction in the organisation of the work. I thank you for allowing me to address you (at such length) and for the honour you have done me by having me as your President for the past year.

I will now ask General Hamilton to take the chair.

In the absence of Mr. FRANK JAMES, the Treasurer, the Honorary Secretary read the Statement of the Accounts for the past year, which showed a balance to the good of £605 12s. 0d. This he said was most satisfactory, but allowance had to be made for the payment of three annual volumes of the Transactions, which would probably absorb about £450.

The ASSISTANT SECRETARY presented his Report for the past year. He said that the year 1932 was commenced with 225 paying members and 8 Honorary members. During the year 14 new members were elected, but there had been 6 resignations, 8 deaths, and 6 struck off on account of arrears of subscriptions, so that the present year was started with 219 paying members and 8 Honorary members. He said it was of interest to know that such bodies as the Haverfield Library, Oxford, and the McGill University of Montreal, Canada, were amongst our paying members. He regretted to say that already this year we had lost by death Dr. O. B. Trumper, Mr. E. J. Hatton, and Mr. Spencer H. Bickham.

The HONORARY LIBRARIAN reported that a collection of plans of the ancient earthworks of the county had been acquired, a diary of the late Dr. Wood, of Tarrington, which contained a great number of interesting notes on natural history. The Rev. Canon W. E. T. Morgan had presented to the Club a copy of his recent book on Hay and the District. Arrangements had been made for an exchange of publications with the Essex Archæological Society and the Malvern Naturalists' Field Club, and these Transactions had been brought up-to-date.

The places of two Field Meetings were fixed, one to Bredon Hill in Worcestershire, including Overbury and Tewkesbury, this to be the Ladies' Day, and the other in the Golden Valley to see an Iron Age Camp at Poston and the recently excavated mediæval well at Peterchurch. The other two Meetings were to be at Moccas for the study of trees, and at Rhayader for the study of birds as already fixed at the Winter Annual Meeting.

The following new members were elected:—Mr. Colin Maclaverty, Breinton House, Hereford; Mr. Reginald H. Symonds, Okeleigh, Broomy Hill, Hereford; Colonel H. G. C. Swayne, Burghill Court; Mr. William Gascoyne Clarke, Weobley; Mr. R. H. Baily, O.B.E., Breinton Court, Hereford; and Rev. W. Tootell, Louvain, Barton Road, Hereford.

The following gentlemen were nominated for membership:—Mr. C. E. T. Booth, Kyrle Street, Hereford; Mr. W. J. King, Prospect Villa, St. James's Road, Hereford; and Lieut.-Colonel R. H. Verdin, Garnstone Castle, Weobley.

The question of making an appeal for the preservation of the Norman sculptured arches at Shobdon was raised.

The HONORARY SECRETARY explained that the arches, examples of some of the finest Norman sculptured work in England, were erected in the park at Shobdon as an ornament when the church was pulled down in 1753. The estate had now been sold, and the trustees of the Shobdon estate were anxious that the arches should be preserved if possible in Herefordshire. They had retained the right to have them moved within six months, two of which had already passed, so that the matter was urgent.

For various reasons it was impossible to preserve the arches on their present site, proceeded the Secretary, and it was suggested that they should be taken down and re-erected in the form of a lychgate to the present church—a suggestion which had met with the approval of the Rector and his Church Council. Mr. W. E. H. Clarke consented to prepare plans and to supervise the removal of the arches without making any charge if sufficient funds could be raised for the work, which would cost a little over £200. Mr. Clarke had since prepared the plans, and the Central Committee recommended that an appeal should be issued from the Club to the general public. A special committee had been appointed for drawing up the appeal, and it was recommended that the Club head the list of donations with a sum of £25.

Mr. McNEIL RUSHFORTH, F.S.A., warmly commended the suggestion, explaining that the arches were quite exceptional, and the Ven. Archdeacon P. J. Simpson (rector of Shobdon), who attended the meeting at the invitation of the Club, told the members that he and his Church Council were all anxious that the arches should be preserved as proposed. They were erected in the original church in the time of King Stephen, and if re-erected on the proposed site would be adjacent to the ancient tower, which was the only other part of the original church remaining.

The proposal was also commended by Mr. ALFRED WATKINS, and Mr. W. E. H. CLARKE said the suggestion was that when re-erected the carved faces should be turned inwards. It would

not give the lychgate the most beautiful appearance, but it would help to preserve the old carvings, which had suffered by exposure to the weather since they had been standing in the park.

On the motion of Mr. F. C. MORGAN, seconded by the Rev. C. H. STOKER, it was agreed that the Club should subscribe £25 and issue the appeal, as suggested. Several members at once gave or promised personal donations to the fund.

It was agreed that the Ven. Archdeacon P. J. Simpson and Mr. McNeil Rushforth should become members of the appeal committee.

A paper on "Hereford Hepatic Records," by Miss Eleanora Armitage, was presented to the Meeting, and will be found printed in this volume. Thanks were accorded to Miss Armitage for her contribution.

Mr. F. C. MORGAN reported on a drain at Penrhos Farm, Lyonshall, composed of bullocks' horns, or rather the cores of the horns, for the horns were all absent. It ran the length of a field, about 150 yards. The horns were laid longways in the ground, with some stones above them, and were much decayed, most of them crumbling away when touched.

The age of this drain is uncertain, but probably not earlier than the eighteenth century. It was suggested the horns came from some butcher's slaughterhouse, and Mr. Alfred Watkins said they might have come from a tannery, which is quite probable. No other instance of such a drain is known.

The Meeting then terminated.

FIRST FIELD MEETING.
THURSDAY, MAY 25TH, 1933.

MONNINGTON AND MOCCAS.

The First Field Meeting was held at Monnington and Moccas more especially for a study of the fine trees to be found in that district.

Those present included:—Brig.-General W. G. Hamilton, C.B., C.S.I., D.S.O. (the President), Sir Geoffrey Cornewall, Bart., Mr. R. E. H. Baily, Mr. E. Battiscombe, Mr. C. A. Benn, Mr. G. M. Brierley, Mr. G. H. Butcher, Captain H. A. Christy, Mr. R. S. Dill, Dr. H. E. Durham, Captain F. B. Ellison, Mr. H. K. Foster, Mr. P. E. Greenland, Mr. G. H. Grocock, Mr. C. J. Harding, Mr. Frank Hogben, Mr. J. H. Hoyle, Mr. G. H. Jack, Mr. F. R. James, Mr. T. E. Jay, Mr. A. Johnston, Mr. G. F. King, Mr. L. A. Knight, Mr. W. Lang, Mr. W. P. J. Le Brocq, Mr. G. C. Lloyd, Mr. A. W. Marriott, Mr. Christopher Marshall, Mr. Humphry Martin, Mr. H. Meredith, Mr. W. H. McKaig, Dr. A. W. McMichael, Mr. M. W. Musgrave, Canon W. E. T. Morgan, Capt. W. C. Mumford, Mr. G. W. Perkins, Mr. W. J. Perry, Mr. H. J. Powell, Mr. Walter Pritchard, Mr. W. P. Pritchard, Mr. W. Shawcross, Mr. C. W. T. Simpson, Mr. T. D. Taylor, Mr. William Tootell, Mr. C. H. Vaughan, Mr. S. E. Warner, Mr. Alfred Watkins, Mr. R. Williams, Mr. A. Wilms-hurst, Mr. George Marshall (Hon. Secretary), and two Rover Scouts, Leader W. R. S. Dobell and S. Branner, guests of the Club.

The members drove to Monnington Church, an exceptionally perfect example of a building of the third quarter of the seven-teenth century.

The HONORARY SECRETARY, in making some remarks on this building, said that:—

"He wished once more to endeavour to kill the tradition that the celebrated Owen Glendower was buried here. This statement was first made in 1679, when on the rebuilding of the church a large sycamore tree obstructed the work and was cut down. Beneath was found a stone coffin lid, pointed at the lower end and possibly of thirteenth century date, and still to be seen just to the north of the porch. This lid covered a stone-lined grave containing a skeleton, and someone thereupon suggested it might be the remains of the Welsh chieftain, no doubt having in mind that one of Glendower's daughters was said to have married Sir Richard Monnington¹ of Sarnesfield, and confused and connected the family name

¹ Some authorities say he married Janet, daughter of Glendower and widow of Sir John Croft of Croft Castle, and the *Llyfr Baglan* says "Ane" daughter of Glendower.

of Monnington with that of the place. A cursory glance at the descent of the manor would be sufficient to dispose of any such connection, and show that the selection of such a spot as a retreat by the rebel is too improbable to be entertained.

In 1287 Sir John Giffard was in possession of the manor, and it was by some one fighting under his banner that the dread Llewellyn was slain near Bulth in December, 1282. This knight had licence to hunt wolves in all the King's forests, and to take them with nets or by other means, but if by chance one of his hounds should escape the leash and kill a deer no action was to be taken! On Sir John's death in 1309 he left two daughters, the elder of whom, Katherine, widow of Sir Nicholas Audley, succeeded to Monnington. The manor remained in the Audley family until the death of another Nicholas Audley in 1392, when Monnington passed to his three sisters. One of these was Joan, who had married Thomas Touchet, who was summoned to Parliament, as Baron Audley, *jure uxoris*. Now this Baron fought for the King against Owen Glendower, and it is almost fantastic to suggest that the latter should have sought shelter, with a price on his head, on a manor of one of his chief opponents, with whom he had not even any sort of family ties.

Monnington remained with the descendants of the Touchet heiresses until 1535, when two of the moieties were acquired by James Tomkins, whose family were settled at Weobley, and the other moiety was bought by his son William Tomkins in 1568, and thus the Tomkins family became possessed of the whole manor. William Tomkins died in 1582, and was succeeded by his half-brother Richard Tomkins, who died in 1603, and Richard was succeeded by his son James, born in 1569. James became M.P. for Leominster in 1623 and traditionally is said to have planted the avenue of Scotch Firs and Yews about this time, if not in commemoration of the event. He was unfortunate in his end, for in 1643 he raised a troop in London against the Parliament, but was seized immediately and hanged outside his own house in Fetter Lane. His son William Tomkins was the first Member for Weobley in 1628, on that place being allowed once more to return two Members to Parliament. He died in the lifetime of his father in 1640. His brother Thomas Tomkins succeeded to the estate, was knighted in 1661 as a reward for his loyalty, and dying in 1674, leaving a widow Lucy, daughter of Sir William Uvedale, was followed by his son Uvedale Tomkins. It was this Uvedale who built the church. He died in 1692, leaving no children, but a widow Mary, daughter of Edward Cagle of How Cagle. She died in 1728 and left the property to her brother John Cagle, who died in 1755 at the age of 97 years. His daughter Mary had married John Whitmore of Haywood, near Hereford, and their son John Whitmore sold Monnington to Sir George Amyand, Bart. (who took the name of Cornewall), of Moccas, great-grandfather of Sir Geoffrey Cornewall, Bart., the present proprietor.

The church was built in 1679 by Uvedale Tomkins and Mary his wife. All the fittings are of this period and nearly complete, including altar table, with ^TVM carved on it in two places, communion rails, chancel screen, pulpit and reading desk, all the open backed seats in the nave, a very fine Royal Arms carved in wood and painted, now on the south wall but formerly on the top of the screen, the font with ^TVM cut on one face of the bowl, flat moulded font cover in oak, and wooden gates under the tower arch. The prominent feature of all the woodwork fittings is the twisted balusters or legs, employed wherever it was possible to introduce it except in the nave seating. The twists are all worked by hand and not turned on a lathe. Just at this time there was what amounted

to a craze for thus treating any leg or bar to which the twist could be applied.

Two acts of vandalism have been perpetrated in recent times. The pulpit has been lowered and the sounding board removed. The latter is said to have been made into a table. As recently as 1913 the two panelled square box pews against the screen in the nave, for the use of the owner of the Court, and his retainers, were broken up and done away with.

The porch has over the entrance ^TVM and a coat of arms of Tomkins 1679

impaling Cagle. The pointed chancel arch is formed of two large curved timber balks like a crutch. The tower is possibly late 15th century. Most of the plain glass in the windows is old, with diamond panes. There is one small square glass panel with the arms of Tomkins impaling Cagle of the same date as the church, now fixed, inside out, in a south window of the nave. All the iron stanchions are inside the windows and not outside as is usual.

On the north wall of the nave is a good monument with a bust to Francis Perrott, who died Oct. 24, 1667, aged 48. Unfortunately the whole monument has been given a thick coat of whitewash.

At the north approach to the church is a good timber lychgate, possibly of the same date as the church. Over thirty years ago I was told that there was a similar one at the east approach, but it had been done away with in living memory."

The Court adjoining the Church was then inspected.¹ This seems to have undergone considerable alterations in 1656, when the screen was inserted. The large room, extending the whole length of the first floor of the east wing, was probably ceiled in at this time, the windows and fireplace surround of oak being of this period. There is a fine roof above it, which apparently had alternate couple-close and tie beam principals, with two purlins, both supported by scolloped-out windbraces. A few only of these remain, but the large mortice holes of all of them remain. The carved underlintel to the entrance door into the screens seems to be an insertion of the date of the screen in an earlier frame. The frame may at the same time have been reconstructed.

Mr. ALFRED WATKINS drew attention to the much cruder character of the carved work of the screen, and to other work known to have been executed by John Abel, than that to be found on the Old House at Hereford, which is by a more skilled hand and much more refined. This had been ascribed to John Abel, but it undoubtedly was not his handiwork.

The members proceeded on foot up Monnington Walk and it was noted that since their last visit in 1920 many of the fine Scotch Firs had died where they stood.

The HON. SECRETARY said that it was worth noting that one of the Scotch Firs was blown down in 1868, and the annual rings were found to number 240, which would bring the date of the trees to 1628, that is about the date tradition assigns to them. In 1870 a

¹ Vide Woolhope Transactions, 1920, p. lxxxii.

number of the Yew trees were measured and their average girth was 5 feet 10 inches. If one said 6 feet, and making the usual allowance for the growth of Yews at 1 inch diameter for every year, this would make them also 240 years old at that time, a very good corroboration of the date of these trees.

The "Monnington Oak," standing by the riverside, was then measured. In 1870 (*Transactions*, 1870, p. 318; 1873, p. 152, illustrated) it measured at five feet from the ground 31 feet in circumference. It was now found to be 34 feet, and in a good growing condition.

Here Sir GEOFFREY CORNEWALL met the party and conducted them through his gardens at Moccas Court. He said his grandfather used to plant trees in groups of three, and pointed out a group of three large Spanish Chestnuts, and another of three Sycamores. A Black Sally (*Silix cinerea*) growing by the river bank, just inside the grounds, near the bridge, had several branches of mistletoe upon it. A fine specimen of an Oak crossed with a Cork tree was noted, and a Wellingtonia, standing near the footbridge over the stream gully, was measured and found to be 20 feet in circumference at five feet from the ground, and 91 feet in height.

The sundial on the lawn, which was removed from Monnington Court, is said to have twenty-three dials. A description of it will be found in the *Transactions* for 1891, p. 223.

The Church was then visited and Sir Geoffrey Cornewall pointed out the interesting features to be found in this building. It is built entirely of travertine, which is found here close to the river, in the Deppel wood, but he said that when the Church was restored by Sir Gilbert Scott the necessary travertine for the work was brought from Gloucestershire. There is a fine monumental effigy of a knight, probably one of the de Frenes of Moccas, *circa* 1340. (See Illustrations.)

The members then drove to Moccas Park, where after lunch the business of the Club was transacted.

The following new Members were elected:—Mr. C. E. T. Booth, Kyrlie Street, Hereford; Lieut.-Colonel R. N. H. Verdin, D.L., Garnstone, Weobley; and Mr. W. J. King, Prospect Villa, St. James' Road, Hereford.

The following gentlemen were nominated for Membership:—Mr. Walter Shawcross, Pengrove Lodge, Pengrove Road, Hereford; Major D. A. Davison, Bronsil, Eastnor, Ledbury; Mr. L. A. Knight, Trinity House, Baggallay Street, Hereford.

On the proposition of the President, seconded by Mr. F. R. James, Sir Geoffrey Cornewall, Bart., was unanimously elected an Honorary Member.

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Alfred Watkins, F.R.P.S.

MOCCAS CHURCH, 1933.

Photo by



Photo by

Alfred Watkins, F.R.P.S.

MONUMENT, MOCCAS CHURCH, 1933.

Mr. G. H. JACK said he desired to thank the members for their part in the presentation recently made to him on his leaving the county. He hoped to have occasion to visit the county from time to time in connection with his work for the Council for the Preservation of Rural England, and so keep in touch with the Club.

Mr. Jack further reported more finds of exceedingly rare fossils from quarries in the Lower Old Red Sandstone at Castle Matlock, Wayne Herbert and Pool Quarry, in the vicinity of Clodock, Newton, and Rowstone respectively. These discoveries were the most important of recent years and already had resulted in four new species of Cephalaspis, and some specimens which might be entirely new to science. He recommended that the Club should keep the quarries under observation with a view to making sure that the finds were preserved and thoroughly investigated.

Mr. C. A. BENN and others concurred in the views expressed by Mr. Jack.

Canon W. E. T. MORGAN read a Paper entitled "Dog Doors and Cat Holes, with some remarks on Churches in the Middle Ages".¹

Mr. ALFRED WATKINS reported that Mistletoe had been found growing on a young oak in the garden of Vanham House, Pengrove, within the confines of the City of Hereford.

Captain F. B. ELLISON reported an interesting observation he had recently made in the life history of the shad in the river Wye. He said:—

"Shad came into the Wye to spawn, coming up the river as far as Builth and probably further in May and June. These fish resembled the mackerel in being all colours of the rainbow down the sides. A peculiarity of their mouth was that inside it was jet black. They had been observed to enter the pools for spawning purposes, but he had been unable to find any records of the young fry having been seen returning on their way to the sea. While he recently was watching young salmon in long shoals hastening down the stream, his eye was caught by some shoals in the form of small circles, the fish closely packed with their heads inwards and tails outwards floating and being carried down at the rate of the water. One of the fish became detached and he was able to identify it as a shad."

Mr. WALTER PRITCHARD made the following report on the locating of streams of water running beneath "Arthur's Stone" and "The Four Stones":—

"In a little book *A Peep into Architecture*, written by Eliza Chalk in 1857, she mentions this.

In the *Archæologia*, Vol. 23, published by the Society of Antiquaries, there is an account of a Cromlech called 'Arthur's Stone', which is not sepulchral, as it contains a spring. "As we know" (says Mr. A. J. Kemp) "that Druids consecrated groves, rocks, lakes and fountains to their superstitions, there is little doubt, I think, but that Arthur's Stone was erected over one of their springs."

¹ See under "Papers" in this volume.

Now this was exceedingly interesting to me, as I have known Arthur's Stone for more than 50 years, and photographed it very many times, but had never seen the slightest sign of water there or round about it. About a week before Easter, I was watching a professional water diviner finding a supply of water on some land and, not having seen an expert diviner at work, was all the more interested, especially as he had to work over some six acres of rough sloping ground with no indication on the surface. Naturally we had a little band of onlookers and some who were anxious to try the divining rod in their hands. Three or four showed indications of the movement, and two in particular. Since then these two of the party have shown themselves to be exceedingly sensitive when over streams, and what I have witnessed has left me with no doubt of their ability as water diviners.

Now it occurred to me here was my chance for testing this statement of Eliza Chalk, by taking these water diviners up to Arthur's Stone, which I did, not telling them before what I had read.

First of all my friends noted the flow very decidedly as they made a slow walk across the end of the large stone, and the flat upright stone to the south, then going back they found the stream entered under the railings, flowed between the two pairs of upright ones on the north-west, entered under the main large stone, flowed underneath its full length, and from there under the large upright stone which is placed crossways, and then out of the enclosure, thus proving to me that Eliza Chalk was correct in her statement that Arthur's Stone covers a spring.

A week later we returned to Arthur's Stone, this time with the object of tracing the course of the stream and, if possible, to see where it came to the surface of the ground. The course was immediately indicated on the other side of the hedge, it passed under the holly tree, and was definitely followed down through the meadows to a lane leading into a road at Dorstone.

On its way down the hill it passed between two yew trees at the top of one of the meadows where they are situated about nine yards apart, one of these trees being of unusual size, measuring seven feet across, and from there the stream was traced to another yew tree at the bottom of this meadow, where the water came into sight crossing the lane and going under the road.

Another place which attracted my attention a week or so later was the "Four Stones" at Walton, Old Radnor. These stones I have often visited and taken my friends to see, and many are the tales told relating to their supposed use.

To me it appeared likely to be the site of a very ancient well, and this thought induced me to take the same two water diviners to the spot. First they started walking some distance away from the stones, and soon detected two streams which travelled to the centre of the Four Stones, passing between and crossing each other's course. One of the streams was traced out of the field to where there was a pump and well, now in use.

Upon looking at the Ordnance Map, its locality is called 'Hind Well', which goes a great way to convince one that these 'Four Stones' mark the sight of a very ancient well, which has in course of time become covered over with earth.

It rather leads one to suppose that these two sites, Arthur's Stone and the Four Stones, were used in olden times for religious ceremonies and where cures were thought to take place, by the taking of water at the sacred springs, which practice to-day is still maintained in many places."

Mr. FRANK JAMES then conducted the members through the park,¹ pointing out some of the more famous trees, of which new measurements were taken.

It was found that the "Knoll Oak," which in 1870 girthed 14 feet 7 inches at five feet from the ground, had now increased to 17 feet 7 inches. This is a fine, clean grown tree and shows no sign of decay. The "Club Oak," not far from the last one, in 1870 measured 19 feet 5 inches at five feet from the ground, and the height was then 94 feet. In 1891 it measured 20 feet 10 inches, and now the girth had increased to 23 feet and the height to 105 feet. This is still a fine growing tree, with the bark much twisted, but it was noted that rabbits were working underneath it all round, so the bowl is evidently becoming decayed and hollow.²

Many other fine trees were observed, including a Wellingtonia, 20 feet 2 inches in girth at five feet from the ground, and 108 feet high.

An inspection was then made of the earthwork known as Moccas Castle, just outside the western boundary of the deer park.

Mr. ALFRED WATKINS said he was of the opinion that the mound at the western end was there from very early times, for he found a straight track alinement passing in one direction through Snodhill Castle mound to a mountain peak 2,300 feet high, and in the other direction through Moccas Church and the reputed site of the earlier house by the Court.

Mr. GEORGE MARSHALL said that there well might have been a mound here in early times, but that it was evident that the site had been adapted for a small Norman Castle of the motte and bailey type. The site was a raised tongue of land of glacial formation, surrounded by marsh, and the early Norman possessor had cut a trench across the southern end, and thrown the soil up to make or heighten an existing mound. A large piece had been cut out of the inner face of the mound making it appear very small on the top, but when the mound was complete it was amply large enough for a wooden palisade to be placed around it, and a small wooden tower in the centre, such as were to be seen depicted in the Bayeux tapestry. The rest of the raised ground would have been protected by a palisade or thorn fence and by the surrounding marsh. The site was probably not in use for any great length of time as there are no signs of stone buildings, and in 1293 we know that Sir Hugh

¹ In *The Life and Letters of the great Earl of Cork*, by Dorothea Townshend, 1904, it is recorded that "Henry Vaughan of Moccas contributed deer for his cousin's park" at Youghal, co. Cork, about 1617, and that "Cousin Roger Vaughan of Moccas in Herefordshire sent his son over to service at Lismore," co. Waterford. Presumably this son was the above Henry.

² This tree is illustrated by a photograph in the *Transactions*, 1870, p. 314, and 1932, p. 182.

de Freyne, Lord of Moccas, had a licence to strengthen his house with a wall and crenellate it. This building was probably situated by the Wye, near the site of the present Court.

Several maple trees were noted growing on the motte. The largest measured 9 feet in girth at five feet from the ground.

Mr. P. MURRAY THOMSON said that he found in Herefordshire that a maple was often planted to mark a boundary.

Another large maple tree was seen in the park fence close by, which measured 11 feet 6 inches in girth at five feet from the ground. This tree is very knarled, and had recently lost one of its largest branches, which had broken off about seven feet from the ground.

The Meeting then terminated and the return journey was made to Hereford, *via* Madley, which was reached at 5.30 p.m.

SECOND FIELD MEETING.

THURSDAY, JUNE 15TH, 1933.

ELAN VALLEY.

The Second Field Meeting was held in the neighbourhood of Rhayader for the study of birds and natural history generally.

Those present included:—Brig.-General W. G. Hamilton, C.B., C.S.I., D.S.O. (the President), Mr. F. Bettington, Mr. S. J. Bridge, Mr. Arthur Brook, Mr. C. E. Brumwell, Colonel J. E. R. Campbell, D.S.O., Major E. A. Capel, M.C., Dr. J. S. Clarke, Mr. D. Davies, Dr. H. B. Dickinson, Mr. R. F. Dill, Mr. Rowland J. Edwards, Mr. H. J. Ellis, Mr. D. R. Evans, Mr. J. Howell Evans, Mr. F. H. Goddard, Rev. C. Ashley Griffith, Mr. G. H. Grocock, Mr. C. J. Harding, Mr. F. Hogben, Mr. G. H. Jack, Mr. F. R. James, Mr. C. Jewell, Mr. A. Johnston, Mr. W. J. King, Mr. L. A. Knight, Mr. H. Langston, Admiral F. P. Loder-Symonds, C.M.G., Mr. C. Marshall, Mr. T. M. F. Marshall, Mr. J. W. Matthews, Mr. T. A. Matthews, Dr. A. W. McMichael, Mr. M. W. Musgrave, Mr. W. F. Perry, Mr. Walter Pritchard, Mr. C. W. Simpson, Mr. H. Skyrme, Rev. C. H. Stoker, Lieut.-Colonel R. H. Symonds-Tayler, Mr. J. D. Taylor, Dr. C. W. Walker, Captain O. B. Wallis, Mr. F. E. Whiting, Mr. A. Wilmshurst, Mr. A. U. Zimmermann, Mr. George Marshall (Honorary Secretary), and Mr. W. E. H. Clarke (Assistant Secretary).

The members motored from Hereford, *via* Builth and Rhayader, to the Elan Valley. A halt was made on the road before reaching Rhayader, at some quarries, where Mr. Arthur Brook, well known for his knowledge and photographic records of birds, and whom the Club were fortunate in having with them as guide for the day, assisted by Dr. C. W. Walker, pointed out the site of two ravens' nests in the rocks above from which the birds had flown, and one where they had nested in previous years on the opposite side of the valley. Whilst here, a buzzard and a kestrel flew over.

Another stop was made a little further on, where the members alighted to observe a pair of pied flycatchers at their nest in a hole high up in an oak tree. Dr. Walker said these scarce birds were fairly common in this valley, that they had five or six young at a hatch, and that both male and female birds feed the young. While the observation was being made a squirrel appeared on the scene and was promptly mobbed by the flycatchers until he made off.

The drive was continued through Rhayader to the second dam

of the waterworks, and here the party had an alfresco lunch, during which two buzzards and a number of gulls were observed on the wing.

After lunch the business of the Club was transacted.

The following new members were elected:—Mr. Walter Shawcross, B.A., Pengrove Lodge, Pengrove Road, Hereford; Mr. L. A. Knight, Trinity House, Baggallay Street, Hereford; and Major D. A. Davison, Bronsil, Eastnor, Ledbury.

Mr. G. H. JACK gave a short talk on the rock formations of the Elan Valley, and said he was leaving Herefordshire and regretted that he would not be able to be present at future Field Meetings, but would still remain a member of the Club and follow its proceedings with interest.

A letter from Sir GEOFFREY CORNEWALL was read thanking the members for having elected him an Honorary Member of the Club at the last Field Meeting. He further said that on the 28th May he measured the Eardisley Oak and found it to be 29 ft. 6 in. at five feet from the ground.

The HON. SECRETARY said the Club visited the Elan Valley on June 23rd, 1896, when the building of the dams was in progress. Of those who attended on that day three only were present on this occasion, thirty-seven years afterwards, namely, Mr. Walter Pritchard, Lieut.-Colonel R. H. Symonds-Taylor and himself, all of whom attended the 1896 Meeting as visitors.

Colonel SYMONDS-TAYLER said he had seen this year a number of small humming-bird hawk moths on valerian in his garden, and asked members who had this plant to observe if they frequented it in their locality. They seemed particularly fond of this plant. He had seen this day two green silver-washed fritillaries, and added that they were common near Symonds Yat.

The party then proceeded in the cars up the valley, and stopped to climb the hillside to inspect a buzzard's nest, in which there were two young birds. The female bird took to the wing, but the male was studied at close quarters.

Some of the more active members, led by Mr. Brook and Dr. Walker, climbed higher up the hillside to study a kestrel's and a peregrine's nest, Captain O. B. Wallis being lowered by a rope to examine these at closer quarters.

DR. WALKER gave a few details of the birds. The buzzard, he said, was the nearest approach to the eagle in England; the kestrel was a hawk of repute, but took second place to the proud peregrine falcon, which in the days of the great sport of hawking was permitted to be flown by none but lords of high degree.

The party then returned to Rhayader where tea was provided in the Drill Hall, after which the return journey was made to Hereford.

EVENING MEETING.

THURSDAY, JULY 13TH, 1933.

LANTERN LECTURE: "A SACRIFICIAL STONE AT LYDNEY."

By ALFRED WATKINS, F.R.P.S.

A Meeting was held in the Woolhope Club Room, at 8.15 p.m., in conjunction with the Straight Track Club, who were holding a three days' Meeting at Hereford, to hear the above lecture.

The Straight Track Club had assembled at Hereford to visit the Black Mountains' District and to make investigations respecting "Straight Tracks" in other parts of Herefordshire, under the guidance of their President, Mr. Alfred Watkins, and their Secretary, Mr. M. C. Carr Gomm, and the Local Honorary Secretary, Mr. W. H. McKaig. The party numbered just over twenty.

Brig.-General W. G. HAMILTON, C.B., C.S.I., D.S.O. (President), took the chair and expressed the hope the visit of the members of the Straight Track Club to the beautiful county of Hereford would prove both pleasant and profitable.

Mr. WATKINS then gave his lecture upon his convincing theory that the stone lying below the site of the great Roman camp at Lydney was formerly used for sacrificial purposes. After establishing the fact, by quotations from classical authorities, that human sacrifices were carried out by the early Britons, Mr. Watkins called upon Mr. T. D. Morgan to relate how his son, Mr. James Morgan, on examining the stone, was struck with its similarity to a sacrificial stone he had seen in Northern Nigeria. The theory that the stone was used for human sacrifices was supported by Lord Bledisloe, and by the subsequent discovery of the notes of the Hon. Charles Bathurst, Lord Bledisloe's grandfather, which mentioned that the stone was at one time fixed to the wall in the Roman guest house recently re-excavated on the Camp site.

Mr. Watkins mentioned other facts which strengthened the theory that this was a sacrificial stone.

On the proposition of the Chairman, he was heartily thanked for his lecture, which was excellently illustrated by lantern slides.

Afterwards there was an informal discussion on early British trackways.

THIRD FIELD MEETING (LADIES' DAY).

TUESDAY, JULY 25TH, 1933.

BREDON, WORCESTERSHIRE, AND DISTRICT.

This Meeting was held in fine weather, when Teddington Church, Hailes Abbey, Woollas Hall, and Bredon Church and Rectory were visited.

Those present included:—Brig.-General W. G. Hamilton, C.B., C.S.I., D.S.O. (the President), Mr. R. K. Allan, Mrs. E. Bell, Mr. and Mrs. E. Bond, Mr. A. G. Bunn, Mr. C. H. Butcher, Colonel and Mrs. Campbell, Mr. and Mrs. Carver, Mr. H. J. Davies, Mr. and Mrs. R. F. Dill, Dr. and Mrs. H. E. Durham, Rev. T. E. Ellis, Captain and Mrs. F. B. Ellison, Mr. W. G. Farmer, Mr. and Mrs. P. Fox, Mr. D. W. Harris, Mr. W. C. Hayward, Rev. A. W. Hill, Miss B. M. Hogben, Mr. F. Hogben, Rev. E. A. Hughes, Mrs. King, Mr. W. G. King, Mr. and Mrs. L. A. Knight, Mr. J. C. Mackay, Dr. and Mrs. McMichael, Mr. M. Manning, Mr. A. W. Marriott, Miss G. I. Marriott, Miss Marsh, Mr. C. Marshall, Mrs. George Marshall, Professor F. C. Montague, Miss A. Pearse, Miss W. Pearse, Mr. W. T. Perry, Dr. and Mrs. Pollard, Rev. and Mrs. A. B. Purchas, Rev. and Mrs. G. B. E. Riddell, Rev. and Mrs. H. Rodrick, Mr. G. McNeil Rushforth, Mr. E. S. Salisbury, Miss Seed, Rev. and Mrs. G. W. Stewart, Mr. and Mrs. J. D. Taylor, Mr. and Mrs. S. R. Taylor, Mrs. F. T. Wallace, Miss Wight, Mr. and Mrs. A. Wilmshurst, Mr. George Marshall (Honorary Secretary), and Mr. W. E. H. Clarke (Assistant Secretary).

The party drove *via* Tewkesbury to Teddington Church where they were met by Mr. G. McNeil Rushforth, F.S.A., who acted as guide throughout the day.

Mr. RUSHFORTH pointed out that this Church had many exceptional features. He said the earliest part of the building was the chancel arch, which belonged to the eleventh century. The chancel and nave were rebuilt in the thirteenth century, and had had windows subsequently inserted in the fourteenth and sixteenth centuries, some of which contained fragments of glass of the fifteenth century. The fittings of the Church were noteworthy, most of the seating being pre-Reformation, and the pulpit, dated 1655, with the reading desk were of the Commonwealth period. Painted on the south wall of the nave was an example of the Royal Arms of the reign of William and Mary. But the most remarkable part of the Church was the tower, which is dated A.D. 1567 on the outside, and has an arch and window of re used

material from the dissolved abbey of Hayles. This arch and window belong to the thirteenth century, *circa* 1275, and are part of the eastern apse and arcade of the abbey.¹

The party then drove to Hayles Abbey. The ruins of this famous Cistercian House are now kept in an excellent state of preservation, and a museum has been built close by in which many remains of the monastery, including some very beautiful carved vault bosses, and things in connection with its history are on view. Hayles was founded in 1246 by Richard, Earl of Cornwall, brother of Henry III. Its wealth was greatly increased when it acquired a relic of the Blood of Christ, known as the Holy Blood of Hayles, which was kept in a small phial and exhibited to the faithful. Soon after this acquisition the Church was lengthened by a chevet of five chapels, in the centre of which was placed the shrine of the Holy Blood. It is part of this structure which is now incorporated in the tower of Teddington Church. The plan of the Church is demarcated by small evergreen trees, as there is none of it above ground except the south wall of the nave, against which the cloisters abutted. Some other portions of the cloister walls remain.

Hayles Parish Church, which is quite near the Abbey, was then inspected. It dates from the twelfth and thirteenth century, and has a chancel and nave of the same width. There are some good mural paintings, a fifteenth century rood screen and a seventeenth century pulpit. On the floor is a fine collection of mediæval tiles. Mr. Rushforth drew attention to the fifteenth century glass in the east window, composed of nine figures of the Apostles, each holding a scroll with an extract from the Creed. This glass probably came from some window in the domestic quarters of the abbey, and was found stored away at Toddington, in Gloucestershire, some years ago.

Leaving Hayles the party returned to Tewkesbury where lunch was served in the Abbey Mill Café. The floors of this ancient mill are now turned into restaurants and tea rooms, but, below, the old stone mills have been reinstated and grind flour for making the bread and cakes consumed by the visitors above.

After lunch the business of the Club was transacted.

The PRESIDENT said that it was with much regret that he had heard of the death of Sir Joseph Bradney on Friday last. Sir Joseph was well known as a learned archæologist and genealogist, and in him the Club had lost one of its oldest and most able members.

The following candidates were proposed for membership:—Mr. James Scott, Greystone, Pengrove Road, Hereford; and Dr. W. Curling Hayward, M.B.E., Eversley, Eldorado Road, Cheltenham.

¹ For a detailed account of this church see *The Transactions of the Bristol and Gloucestershire Archæological Society*, Vol. 52 (1930), pp. 1-3, 93-101, illus.

Mr. L. RICHARDSON sent a note on the Kilpeck font. He said, "that it was probably of a cornstone from the Old Red of the neighbourhood. In the Golden Valley the cornstone known as 'The Limestone' is very massive (as at Urishay), but it varies and I have seen varieties similar to the rock out of which the font has been carved".

Mr. F. C. MORGAN reported the following:—(1) A remarkably fine flint arrow head, of late neolithic or bronze age, dug up by Mr. T. E. Bank in his garden, near Hope-under-Dinmore. This is now on exhibition in the museum and is the most highly finished local flint in the collection. (2) A grave containing an almost complete skeleton was disclosed when a drain was being laid from the new pavilion in the Castle Green at Hereford a few days ago. The grave, made of flat stones, just deep enough to hold a body, was covered by two slabs. It was shaped to fit exactly the head and shoulders of the corpse. Another, but very imperfect skeleton was found upon the top of this grave. (3) A hoard of George III half-crowns of 1819, in mint condition, was found by the workmen when widening College Road in the early part of this month.

The party then drove to Woollas Hall, situated on the north side of Bredon Hill, where they were met by the owner, Miss Hanford-Flood, who showed them over the house. Her family have owned the property since the thirteenth century. Part of the house dates from the sixteenth century, but the fine porch and hall were built in 1611. There are other later additions to the house. Over the hall, under the roof, is a chapel placed there for concealment, the Hanfords adhering to the old religion. There is much interesting furniture and many family portraits, and other pictures.

The PRESIDENT thanked Miss Hanford-Flood for her courtesy in permitting them to see her house and its beautiful contents. Miss Hanford made a gracious reply.

The next stop was made at Bredon. Here the Church was inspected. Mr. RUSHFORTH said the nave was Norman, the west end having pinnacled turrets, and there was a fine Norman porch with a room over. A south aisle was added in the thirteenth century, and a north one in the fourteenth century. The central tower and chancel were of the latter period. Inside the building the most notable features were some remains of the original decoration of the chancel walls, and two windows filled with grisaille glass and shields, much restored. In another window were figures of St. Mary Magdalene and St. Mary of Egypt. A number of fourteenth century tiles, of large size, are exceedingly good examples, among them are many with heraldic shields, one of which has the arms (bendy of six, on a chief 3 fleurs-de-lis) of John Trilleck, Bishop of Hereford, and at one-time rector of Bredon. Others are part of a set of the months; a tile of the same size and from a

similar set is to be seen in Colwall Church. The most interesting of the numerous monuments is a coffin lid carved in relief with a crucifix and two heads of a man and a woman, and a very fine alabaster tomb with the effigies of Giles Reed and his wife, Katherine, who both died in 1611.

The Rev. W. H. B. Yerburgh, the rector, then showed the party over the rectory. This is a good example of a fifteenth century house with a hall open to the roof, with the original timbers. Beyond some additions to the house it remains unaltered and is in a very perfect state of preservation.

Returning to Tewkesbury tea was served at the Abbey Mill Café, after which the party drove back to Hereford.

FOURTH FIELD MEETING.

THURSDAY, AUGUST 31ST, 1933.

TURNASTONE, PETERCHURCH AND POSTON.

The Fourth Field Meeting of the season was held in the Golden Valley to study the geology of the district and more especially the Cornstone formations, and to visit places of archæological interest, in which the neighbourhood abounds.

Those present included:—Brig.-General W. G. Hamilton, C.B., C.S.I., D.S.O. (the President), Mr. W. Betteridge, Mr. C. E. Booth, Mr. S. J. Bridge, Mr. G. Bright, Mr. A. G. Bunn, Mr. H. J. Davies, Dr. H. B. Dickinson, Rev. T. E. Ellis, Mr. G. H. Grocock, Mr. G. A. Hall, Mr. C. J. Harding, Mr. F. Hogben, Rev. E. R. Holland, Mr. C. Jewell, Mr. A. Johnston, Mr. W. J. King, Mr. W. H. Lloyd, Mr. A. W. Marriott, Mr. W. H. McKaig, Mr. F. C. Morgan, Rev. Canon W. E. T. Morgan, Captain W. C. Mumford, Rev. Prebendary T. H. Parker, Mr. G. W. Perkins, Mr. Walter Pritchard, Mr. W. P. Pritchard, Rev. G. B. E. Riddell, Mr. H. Skyrme, Mr. J. D. Taylor, Captain O. B. Wallis, Rev. E. A. Whitfield, Mr. F. E. Whiting, Mr. Alfred Watkins, Mr. A. Wilmhurst, Mr. George Marshall (Honorary Secretary), and Mr. W. E. H. Clarke (Assistant Secretary).

The route taken was *via* the Batcho and the first stop was made at a quarry half a mile beyond Chanstone on the Abbeydore road, where an outcrop of the Cornstone was inspected. Returning, a halt was made at Chanstone Mill to inspect a large circular mound surrounded by a moat, no doubt a habitation site of the late twelfth or thirteenth century. On the opposite side of the stream is a similar but smaller mound and moat, but not in such a good state of preservation.

Proceeding to Turnastone Church attention was drawn to the font bowl, which Mr. L. Richardson has now identified as made from the local Cornstone, as are the fonts at Madley, Moccas, Kilpeck and other Churches in the district. The drain of the Turnastone font is through a hole in the side of the bowl, but this is not an ancient feature. In the field at the west end of the Church is the much ploughed down remains of a mound and moat, probably a similar one to those at Chanstone. Mr. Alfred Watkins thought

it dated from a much earlier period, and read the following notes in support of his contention:—

POSTON CAMP-GROUP ALIGNMENT.

Dr. McMichael first called my attention to the ploughed-over remains of a mound which stand 43 yards north-west of the churchyard wall of Turnastone. Besides the hump on the arable field the much greater number of stones on the site identify it.

It has a striking topographical connection with the three Poston earthworks which we shall see to-day. These are: (1) The Knapp Earthwork, on a spur projecting into the Golden Valley, to be seen on the skyline directly after turning up from Vowchurch into the Peterchurch road; (2) the Iron-Age Camp called locally The Rounds; (3) a more obscure enclosure on which both Poston House and Poston Lodge Farm stand. None of these are named on the maps, but the last two have their western earthworks marked by hatchures, and The Knapp is marked as a group of trees on the 6-in. Ordnance Map, which fortunately covers the whole group of earthworks.

A straight line on the 6-in. map from the Turnastone tumulus exactly touches the western edges of the earthworks of all three camps, also going through, or past, an ancient yew in the western ditch of The Knapp earthwork.

Another line from the tumulus, at an angle of 8 degrees, lies on the whole length of The Rounds Camp's eastern boundary, and might originally have also marked the eastern limits of the upper and the lower camps, both of which have now indefinite outlines on this side, the vallum of The Knapp enclosure appearing now to keep some 20 yards within the line, as shown on my map. I am inclined to think that the western alignment continued far beyond the camps, as it passes to the north through Blakemere churchyard, where still remains one of the few Long Stones of the county, and to the south through St. Margaret's Church.

There are many instances of this methodical planning of groups of camps. I recorded a Brecon instance (radiating from Camlais Castle mound) in my book *The Old Straight Track*; a Herefordshire long distance example, 27 miles long, in which Brandon, Ivington, Sutton Walls and Caplar Camps align is illustrated in the Club's *Transactions* for 1928; and at the Cambrian Archæological Meeting of 1932 I showed on a visit to the Kerry Hills how from the Shenton Tump on that ridge radiate two lines exactly enclosing three camps: Caer Din, Bury Ditches, and Norton.

I make no attempt to fully explain these curious topographical arrangements of camps, but there are too many similar instances in Britain for the fact to be long ignored by experts, and camps are not so thick on the ground that the argument of "accidental coincidence" can have any real weight.

These particular alinements cannot be to sunrise or sunset at any season, nor can the Brandon-Caplar group. I have made a careful field survey of the exact position of both the Turnastone tumulus and The Knapp earthwork to get them accurately on my map.

The Knapp is a sighting point on a ridge to mark a ley coming down the Golden Valley. This ley or track sights from the highest point (2,166 feet) of the Radnor Forest to Garway Hill (1,203 feet), passing through Huntingdon Castle, Arthur's Stone, The Knapp Earthwork, Vowchurch Church, Chanstone Tump, and Moorhampton Park Farmhouse. The origin of all these sites is, I think, shown by this alinement-fact to be pre-Norman.

Continuing along the road towards Michaelchurch Escley, a very fine example of a spring, on the left of the road near the Slough Pitch, issuing from beneath the Cornstone rock bed was examined.

After a three-mile journey along dusty roads, Urishay Chapel was reached. It is not known when this old building was erected, and its vicissitudes, described by the Rev. E. R. Holland, a former Vicar of Peterchurch, proved of exceptional interest. Its main features are a fine timber roof, stone altars, and a Jacobean pulpit. For many years it was desecrated and used, among other things, as a blacksmith's shop, a carpenter's shop and a dog kennel. It was re-dedicated just before the War, but has again fallen into disuse. Urishay Castle, close by, has fallen on evil days, its panelling together with most of its wood-work, have been transported to the Island of Mull, and the ruined walls are now the haunt of sheep.

Lunch was taken at a quarry half-a-mile down the road. A deep band of Cornstone is being worked for road metal, here, and the stone, which is very hard, is nearly pure limestone.

The business of the Club was then transacted.

The following new members were elected:—Mr. James Scott, Greystone, Pengrove Road, Hereford; and Dr. W. Curling Hayward, M.B.E., Eversley, Eldorado Road, Cheltenham.

The following gentleman was proposed for membership:—Dr. N. H. Harrison, Much Birch, Hereford.

In the absence of Mr. L. Richardson, F.R.S.Ed., F.G.S., the HONORARY SECRETARY read his paper, entitled "Cornstone Formations and the Water Supply in the Golden Valley".¹ Thanks were returned to Mr. L. Richardson for this paper.

Mr. F. W. THOMPSON reported in a letter that he had found the plant the "Lesser Skull-Cap" (*Scutellaria minor*) near the top of Slough Pitch, between Vowchurch and Michaelchurch, in district 13 of the "Flora of Herefordshire". This is the first record of this rare plant in this district.

The drive was then continued to Wellbrook Manor in Peterchurch where the party were met by Lieut.-Colonel F. H. Aulton, the owner and occupier, who conducted it over this fine example of a lesser house of the late fourteenth or early fifteenth century, and pointed out the interesting features. There is some exceptional timber work in the roofs and a fine stone fireplace on the first floor of the solar range. The chimney stack has retained its original head.

A visit was then made to St. Peter's Well a short distance away. The water issues from the mouth of a carved stone head into a

¹ See under "Papers" in this Volume.

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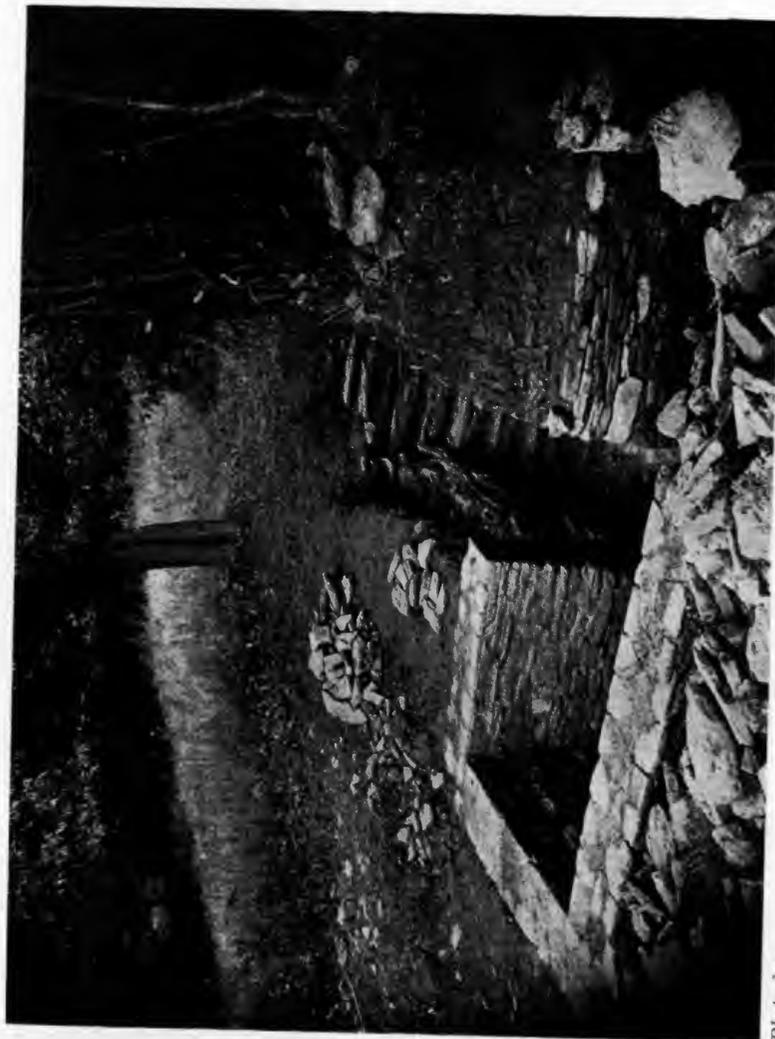


Photo by

ST. PETER'S WELL, PETERCHURCH.
The Bath with Spout Head on right.
Alfred Watkins, F.R.P.S.



Photo by

Alfred Watkins, F.R.P.S.

ST. PETER'S WELL, PETERCHURCH.

SPOUT HEAD AND OUTLET OF ONE SPRING ABOVE.

bath. Up to quite recent times, baptisms were performed here, the bath being approached by eight stone steps. Mr. Watkins explained that the steps and bath into which they lead was choked to the top with earth and the head was covered with water until recently, when excavations were made and the well renovated. Here again, the water issues in the first place from beneath a bed of Cornstone and gives a plentiful supply. The water is now used to supply houses in the valley, and the bath serving as a tank is now covered over.

The party then drove to the top of Stockley Hill and proceeded on foot to Mr. R. S. Gavin Robinson's residence, Poston House. On the way Mr. Robinson pointed out the site of what he believed was a Bronze Age settlement, for he had found here evidence of the manufacture of flint tools, in the shape of completed implements and many flint flakes and chippings. A little lower down the hillside a large round tumulus was inspected and Mr. Robinson and the Honorary Secretary said they would make some excavations in it and endeavour to ascertain its purpose and date.¹

On arrival at Poston House, Mr. Robinson showed the members a circular room, which with the hall and portico was designed about 1780 by Sir William Chambers as a summer house for Sir Edward Boughton, who lived at Poston Court in the valley below. The portico is similar to that at Downton Castle (now incorporated in the house), by the same architect. The details of the circular room are very beautiful, and every fitting follows the curve of the room, the door, the mantelpiece, the windows and even the glass.

Beyond the house a good exposure of the Cornstone formation was seen, and a little further on the very large vallum and ditch of a small Iron Age promontory camp, where Mr. Robinson had carried out some trial excavations with eminently satisfactory and unexpected results. Some of the finds of the early Roman and pre-Roman period were on view.

The members were then entertained to a welcome tea by Mr. and Mrs. Robinson, during which the Honorary Secretary read a paper entitled, "Lower Park Wood Camp, Poston, and some Remarks on the Iron Age in Herefordshire".²

Thanks having been returned to Mr. and Mrs. Robinson for their hospitality, and to Mr. George Marshall for his paper, the return journey was made to Hereford.

¹ A report on the result of these excavations will be found in this volume entitled "Report on the Excavation of a Prehistoric Mound in the Parish of Peterchurch, Herefordshire, p. 30."

² See under "Papers" in this volume.

SECOND WINTER MEETING.
THURSDAY, NOVEMBER 16TH, 1933.

LANTERN LECTURES :

1. "THE EXCAVATION OF A PREHISTORIC MOUND IN THE GOLDEN VALLEY, HEREFORDSHIRE."

By GEORGE MARSHALL, F.S.A.

2. "RUSHLIGHTS AND CANDLES."

By F. C. MORGAN.

3. "FOUNDATIONS OF BUILDINGS RECENTLY OBSERVED IN THE CASTLE GREEN, HEREFORD."

By ALFRED WATKINS, F.R.P.S.

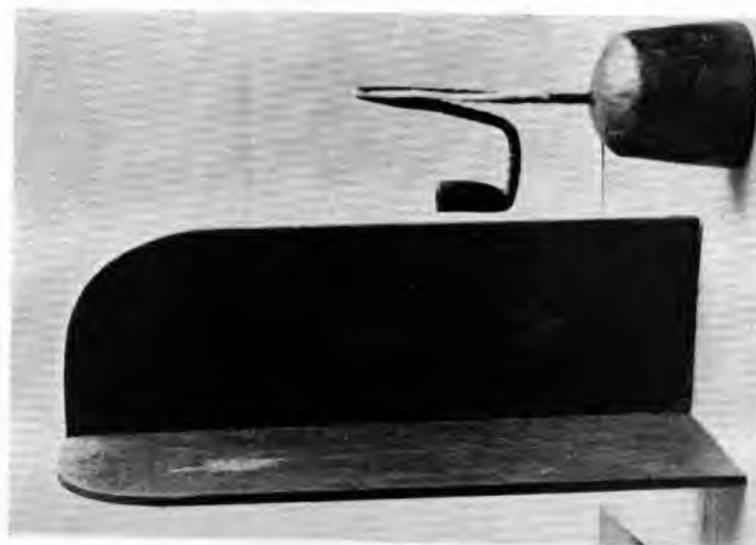
Lectures, as above, illustrated with lantern slides, were given in the Woolhope Room at 7. 30 p.m.

Mr. GEORGE MARSHALL read his paper on the results of the excavation of the tumulus by Mr. Robinson and himself near Poston, in the Golden Valley. This paper will be found printed under "Papers" in this volume.

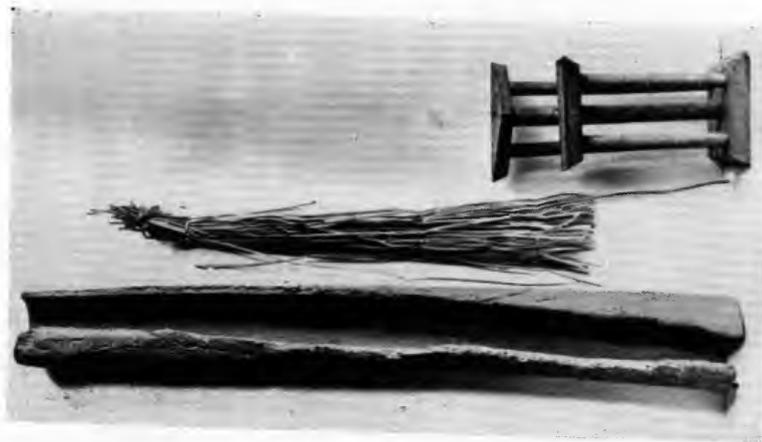
Mr. F. C. MORGAN followed with his lecture on "Rushlights and Candles". He said that recently a number of exhibits illustrating rushlight and candle-making in the home had been secured for the museum. One of these was a piece of bark which formed a store-case for peeled rushes before they were dipped. Apparently a narrow strip of bark was cut from a branch about 2 feet 10 inches long and 4 inches diameter; the remainder of the bark was taken off in one piece, making an almost circular case. When found in an attic of a farmhouse at Ewhurst, Surrey, this still held a bundle of peeled rushes. He believed this exhibit was unique.

Rushlights were made from the common soft rush (*J. conglomeratus*) gathered in large quantities during the summer and early autumn. The rushes were kept moist in water until peeled—quite an easy operation. The rind was divided at one end into narrow strips and all but one of these removed for the whole length—the remaining strip held the pith together. The rushes were afterwards laid out on grass for bleaching and to take the dew and were then dried. As required they were dipped in scalding fat or grease.

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F. C. Morgan.
Candle Shield, from a Herefordshire farm, and Rush-light Holder.



Photos by
Oak-Bark Rush Container with bundle of peeled rushes.
Mid. 19th cent., or earlier.
Candle Mould for five candles of different lengths or thickness.

Gilbert White found that 1,600 dry rushes weighed one pound ; it took six pounds of grease to dip these and the average length of time they burned was half an hour. The cost of grease in his time, when bought, was fourpence per pound, but a careful housewife could get hers from the scummings of her bacon pot. Even if paid for, eight hundred hours of light could be obtained for three shillings. As few country people sat up after dark it was estimated that one and a half pounds would last a cottager for twelve months.

The speaker also gave a few notes upon candle-making in farm-houses down to times within memory of some people still living. Occasionally the whole household devoted a day to this work, and fat which had been saved for the purpose was melted down and poured into moulds of varying lengths and thicknesses. Wick was bought from the town chandler towards the end of the period, but probably it was spun at home in earlier days. An oak candle shield, which was placed upon the table to shelter the flame from draughts, was illustrated. At meal times on windy days one of these was placed before each member of the household. (*See Illustrations.*)

Mr. ALFRED WATKINS then gave his lecture on " Foundations of Buildings recently observed in the Castle Green, Hereford ". This will be found printed under " Papers " in this volume.

The following candidates were proposed for election :—Mr. Freeman Newton, De Lacy House, Hereford ; Dr. G. A. Tullis, senior, Newstead, Aylestone Hill, Hereford ; and Mr. R. L. Haymes, Old House, Wellington, Hereford.

The Lecturers having been thanked for their valuable contributions, the Meeting terminated.

WINTER ANNUAL MEETING.
THURSDAY, DECEMBER 14TH, 1933.

The Winter Annual Meeting of the Club was held in the Woolhope Club Room in the Hereford Public Library on Thursday, December 14th.

Those present included:—Brig.-General W. G. Hamilton, C.B., C.S.I., D.S.O. (the President), Rev. Canon A. T. Bannister, Mr. C. E. T. Booth, Mr. S. J. Bridge, Dr. J. S. Clarke, Mr. Hubert J. Davies, Dr. H. E. Durham, Rev. C. Ashley Griffith, Mr. G. H. Grocock, Mr. J. H. Hoyle, Mr. A. Johnston, Mr. W. J. King, Mr. G. H. Marshall, Mr. R. H. Mines, Mr. F. C. Morgan, Rev. Canon W. E. T. Morgan, Captain W. C. Mumford, Mr. M. W. Musgrave, Mr. Walter Pritchard, Rev. G. B. E. Riddell, Mr. R. S. G. Robinson, Mr. W. Shawcross, Mr. T. Southwick, Rev. C. H. Stoker, Mr. J. D. Taylor, Captain O. B. Wallis, Mr. Alfred Watkins, Mr. Rees Williams, Mr. A. Wilmhurst, Mr. George Marshall (Honorary Secretary), and Mr. W. E. H. Clarke (Assistant Secretary).

Apologies for absence were received from Captain H. A. Gilbert, Mr. Frank James, Paymaster Rear-Admiral C. E. Lynes, Mr. H. F. Tomalin, and Mr. J. B. Willans.

The first item on the agenda was the election of a President and Officers for the ensuing year.

On the proposition of the Rev. C. H. STOKER, seconded by Mr. F. C. MORGAN, Dr. C. W. Walker, M.C., was unanimously elected President.

The following were elected as Vice-Presidents:—Brig.-General W. G. Hamilton, C.B., C.S.I., D.S.O., Mr. G. H. Jack, M.Inst.C.E., F.R.I.B.A., F.S.A., F.G.S., Mr. Walter Pritchard, and the Rev. Canon W. E. T. Morgan, B.A.

The other officers of the Club were elected as follows:—Central Committee: Mr. Alfred Watkins, Rev. Canon A. T. Bannister, Mr. F. R. James, Rev. C. H. Stoker, Mr. P. B. Symonds, Dr. H. E. Durham, Rev. G. B. E. Riddell, Captain H. A. Gilbert, Mr. F. C. Morgan, Captain O. B. Wallis; Editorial Committee: Mr. George Marshall, Mr. Alfred Watkins, Rev. Canon A. T. Bannister, and the Rev. G. B. E. Riddell; Hon. Treasurer: Mr. F. R. James; Hon. Auditor: Major E. A. Capel; Hon. Secretary: Mr. George Marshall; Assistant Secretary: Mr. W. E. H. Clarke; Hon. Lanternist: Mr. W. H. McKaig; Hon. Librarian: Mr. F. C. Morgan.

The Rev. G. B. E. Riddell was appointed delegate to the British Association for the Advancement of Science; and Mr. George Marshall delegate to the Society of Antiquaries.

Two of the Field Meetings for 1934 were fixed—one to be held in the Upper Teme Valley to inspect various earthworks, and the other in the Michaelchurch Escley district to examine prehistoric and other earthworks in that region.

The following new members were elected:—Dr. N. H. Harrison, Much Birch, Hereford; Mr. Freeman Newton, De Lacy House, Hereford; Dr. G. A. Tullis, senior, Newstead, Aylestone Hill, Hereford; and Mr. R. E. Haymes, Old House, Wellington, Hereford.

The following candidate was nominated for election:—Mr. R. H. McDowell, Silver Wells, Ingestre Street, Hereford.

Mr. ALFRED WATKINS presented his "Report on Archæology" for the year.¹

Mr. A. E. A. GOSTLING, of Lincoln Hill, Ross-on-Wye, submitted the following entomological notes:—He had observed the Clouded Yellow, *C. edusa* (at Ross in July); Oak Hooktip, *D. Falcula* (The Chase); Small Black Arches, *N. Strigula*; Scarce Black Arches, *N. Centonalis* (his garden, rare); Broad-bordered Yellow Underwing, *T. fimbria* (his garden, at sugar); The Sprawler, *B. sphinx* (his garden, at light); Tawny Pinion, *L. Semitrumica* (his garden, at sugar); Gold Spangle, *P. festucae* (his garden, at light); Red Sword Grass, *C. velinta* (his garden, at ivy); Green Silver Lines, *H. prasinana* (at Poulstone); Large Twin Spot, *C. Quadryasciana* (The Chase); Broken Barred Carpet, *C. Corylata* (Doward); Netted Pug, *E. Venosata* (his garden); Bleached Pug, *E. Expallidata* (his garden); Barred Umber, *N. Pulveraria* (Doward); Lunar Thorn, *S. Lunaria* (his garden); Scarce Umber, *H. Aurantiana* (his garden). He added "No birds of interest except a Hobby in September at Tretire, where he stayed about ten days. There are a great many bullfinches busy on the sycamore seeds in the garden, both cocks and hens, I suppose the northern form".

Paymaster Rear-Admiral LYNES reported seeing the footprint of a three-toed Dinosaur on a slab of stone quarried about four years ago on the side of Westhope Hill, Canon Pyon, and on the corresponding slab the same footprint in relief. It was not a very good or complete impression. Mr. L. Richardson, to whom this observation was reported, said that such footprints are known at this horizon in the Old Red.

The HON. SECRETARY reported respecting the progress made for the preservation of the Shobdon Arches. He said there had

¹ See under "Reports of Sectional Editors, 1933," in this Volume.

been a great deal of correspondence, and he had made several visits to the site since the last meeting to see if the arches could still be saved. Only four months remained of the period allowed for the removal of the arches, but he still hoped it would not be necessary to remove them. If permission could yet be secured for their preservation on the present site he thought it was possible that the Office of Works would take over the preservation. He had had an interview with the architect of the Office of Works sent down to inspect them, and he was definitely in favour of their preservation. The permission of the new owner of the estate, however, would have to be obtained, and this it had not yet been possible to secure. If the Office of Works undertook the preservation the Club's object would be achieved, and they would be relieved of the necessity of raising the funds, which would be required for the purpose.

Woolhope Naturalists' Field Club.

PROCEEDINGS, 1934.

FIRST WINTER MEETING.

WEDNESDAY, FEBRUARY 21ST, 1934.

LANTERN LECTURE : " ABOUT BIRDS OF HEREFORD." "

By C. W. WALKER, M.C., M.D., Ch.B.

This Meeting was arranged in conjunction with the Committee of the Hereford Public Library, and was held in the Art Gallery to accommodate the large audience which it attracted.

Mr. GEORGE MARSHALL, in the unavoidable absence of the President, took the Chair.

Dr. WALKER, in addressing the Meeting, said :—

At last year's annual meeting, I mentioned the fact that Mr. Marples of the Zoological Department, Manchester University, had undertaken an investigation into the winter habit of starlings of assembling into vast flocks and roosting together at night, to disperse again in the morning over large tracts of country in their search for food. Mr. Marples desired particulars of these roosts throughout England and I attempted to keep an eye upon those near Hereford in order to report to him.

The way to find the roost is to watch the direction of flight of the huge flocks of starlings in the afternoon. As soon as the light has begun to fade, the birds are on the move; small parties unite and the flock grows; if the light fades slowly the flock may alight in some tall trees on the way to the roost, or on a field of grass. As soon as they alight, a confused chirping is heard, as of excited conversation more than singing. There is a moment of complete silence and the whole flock again takes wing towards the roosts. On still afternoons, the flock may come in at a great height, say 200—300 feet, and then you may see a grand manoeuvre; suddenly from horizontal the flock turns vertically downwards, and the sky seems to rain birds. As they turn and fall, the sound of their wings is like the hiss of a breaking wave. They alight often in tall trees near the roost, and begin their chatter as soon as they settle; then just after sunset, they drop into their roosting bushes, while fresh flocks keep arriving from all directions as dusk falls. On a dark and stormy evening the flocks fly lower and go straight to the roost, but on fine bright evenings, vast army corps of birds rise again and again and perform wide swinging flights and dives against the sunset sky, the whole flock moving as one bird, until the final determined plunge into the roost for the night.

The roost may be in a wood, but the tall trees are not used for roosting: it is the under-brush of smaller height that is chosen for this, and on low twigs within seven or eight feet of the ground all the thousands of birds are crowded for the night. After dark you may walk through the bushes

and with a sweep of one hand, brush a dozen birds off every little branch you pass. Before they fall asleep, the chirping noise in the roost is deafening and may be heard confusedly a mile away. The mess they make and the smell can be imagined by anyone familiar with a badly kept poultry yard: the hounds will find no fox in that spinney, and no pheasants will be there for the guns.

The first roost I found last winter was at Arkstone Wood near Allensmore. The flocks came into it from the Wye Valley, from Hay to Hampton Bishop, and the Lugg Valley as far as Bodenham; a huge area when the roost was at the height of its popularity in January. It began to be used in October, and continued to have large flocks until April. The wood is about half a mile long, and the part used as a roost was about two acres of swampy ground, covered with hazel and willow bushes, eight to ten feet high. The higher part consisting of larch and fir, young but well grown, was not used.

About the middle of February another roost came into use, a shrubbery near the gate of Holme Lacy Park, about two acres in extent and consisting of laurels, privet, willow and reeds, again about eight to ten feet high. This roost was used also until the end of March, and the flocks from Hereford, Burghill, Holmer, Tupsley, Lugwardine and Bullingham were seen to have changed their direction in the evenings, and made for Holme Lacy, instead of Allensmore, as they had done throughout January.

I spent some time trying to count and calculate how many birds came into this shrubbery at Holme Lacy, and my lowest calculation made it 600,000! At Arkstone, the numbers were obviously greater, and I could entertain no estimate less than a million, some people guessed it at five million, but I rather agree with those who refuse to make any attempt at enumeration, judging accuracy to be impossible.

A vote of thanks, on the proposition of Lieut.-Colonel Symonds-Taylor, seconded by Mr. E. F. Bulmer, was enthusiastically accorded to the lecturer for his most instructive address.

SECOND WINTER MEETING.

WEDNESDAY, FEBRUARY 28TH, 1934.

LANTERN LECTURE: "A TALK ON SPIDERS."

By T. H. SAVORY.

This Meeting was arranged in conjunction with the Committee of the Hereford Public Library, and was held in the Woolhope Room.

In the absence of the President, Dr. H. E. Durham took the chair.

Mr. SAVORY, of Malvern, one of the leading authorities on "Spiders", and the author of several works on these creatures, gave an interesting discourse which he illustrated with lantern slides. He traced the evolution of the different branches of the spider tribe from the earliest times, and referred to the curious habits of different varieties to be observed in this country. He said that these creatures were entirely devoid of intelligence, and all their actions were due to the stimulation of what occurred around them. He demonstrated by ingenious experiments which he had carried out, what moved them to certain actions, and said that a further study on these lines was desirable to arrive at the reasons for their various activities.

At the conclusion of the lecture a hearty vote of thanks was accorded the lecturer.

THIRD WINTER MEETING.

THURSDAY, MARCH 7TH, 1934.

LANTERN LECTURE : " THE FONTS OF HEREFORDSHIRE. "

By GEORGE MARSHALL, F.S.A.

A Meeting was held in the Woolhope Club Room, when the HONORARY SECRETARY gave a lecture on " The Fonts of Herefordshire ".

Mr. F. C. MORGAN took the chair, in the absence of the President.

Mr. MARSHALL, addressing the Meeting, said that his lecture had only been rendered possible by the industry and skill of Mr. Morgan, who had taken photographs of all the fonts in Herefordshire prior to 1800, and had further made the beautiful slides which would be seen on the screen that evening. Without such photographs he would not have been able to make the comparisons of the various fonts necessary for a proper understanding of their evolution. He then went on to refer to changes in the baptismal rite, and stated that in the early days before England became completely Christian, people were baptised in rivers and springs, but in the year 747 Cuthbert, Archbishop of Canterbury, issued an instruction that all churches should be provided with fonts. The early fonts were, in all probability, made of wood in the form of tubs, but there were no wooden ones in the county. There had been one at Downton, but that had been given away some 60 or 70 years ago, and he had been unable to trace it.

In the 13th century, an order was issued that fonts were to be locked to prevent witches taking the water for the purposes of black magic. In the case of an archidiaconal visitation in Herefordshire three churches were cited for not having the fonts locked. In the reign of Edward VI. it was ordered that all fonts should be destroyed, and for very many years, from the reign of Elizabeth, there was much bitterness over this order. In 1662, however, the Act of Uniformity was passed, which gave directions that fonts were to replace basins, and to be set up in their original positions.

Turning his attention to Herefordshire, Mr. Marshall said there were about 160 pre-Reformation fonts in the county. About 25 fonts belonged to the post-Reformation period. Of the 160, considerably more than half were previous to the 13th century.

He did not know the actual number of churches in Herefordshire, but the figures showed that the majority of the county's mediæval fonts were still in existence.

Mr. Marshall then took his hearers to various parts of the county, describing the fonts in the order of the periods to which they belonged. Commencing at Much Marcle, he described the round fonts made in imitation of the old wooden ones of Saxon times. At Bosbury, he said, was the only font in the county of the square Norman design, while at Madley, Bredwardine and Kilpeck, and other places, were fonts cut from the corn-stone of the Golden Valley. The corn-stone fonts, he added, took a very fine polish, and when highly polished they resembled marble. The one at Bredwardine was the largest he had identified in the Kingdom.

At Kilpeck was the original Norman font plug, which he believed to be unique and should be carefully treasured.

The sculptured font at Eardisley was regarded as the most beautiful of the Norman period in the Kingdom. It was magnificently carved, but he thought the one in the little Norman church at Castle Frome, on which was depicted the baptism of Our Lord, was even more beautiful. This font was supported on three crouching figures, and somewhat similarly the fonts in Hereford Cathedral, and Sutton St. Michael Church rested on lions.

Mr. Marshall proceeded to deal at length with later fonts of various designs, many of them exceedingly beautiful, but others had suffered through being re-designed. There were in the county, he said, two lead fonts, one at Burghill of the 13th century, and the other at Aston Ingham, dated 1689. In conclusion, he referred to the manner in which some fonts had been desecrated, and showed a slide depicting an old font in which flowers were grown. Other fonts had been used for all sorts of purposes, even as pig troughs, and he hoped that eventually it would be possible to restore them to the churches from which they had been taken.

A vote of thanks was accorded Mr. MARSHALL on the motion of the CHAIRMAN, seconded by Mr. J. DAVIES.

FOURTH WINTER MEETING.

THURSDAY, MARCH 15TH, 1934.

LANTERN LECTURES: 1. "THE FREEMEN'S PRISON, HEREFORD."
2. "THE LEDBURY OF JOHN MASEFIELD."

By ALFRED WATKINS, F.R.P.S.

The above two lectures were given by Mr. ALFRED WATKINS in the Woolhope Club Room, when the Rev. Prebendary T. H. PARKER took the chair, in the absence of the President, and a large number of the members and their friends were present.

1. "THE FREEMEN'S PRISON, HEREFORD."

Mr. WATKINS first gave his account of the Freeman's Prison by the Booth Hall. This will be found under "Papers" in this volume. He then followed with a description of "The Ledbury of John Masefield".

The lecturer commenced with a glance at the beautiful countryside of Herefordshire, which lies under the Malvern Hills, illustrating this with a relief map and photographs of that striking ridge. He passed on to the fact of three leading English poets having been brought up in this district, and how the landscape, familiar to their childhood, obviously fostered their sub-conscious genius. The peep from Hope End, the girlhood home of Elizabeth Barrett, with its vista where:—"Malvern Hills, for mountains counted (not unduely), loom a-row" was shown. Then the recent demonstration by Canon Bannister and Mr. Allan Bright that Will Langland was born at an ancient homestead spot between Ledbury and Colwall called Longlands, and not at Cleobury Mortimer (as previously inferred), was illustrated. The view from this birth-spot showed the British Camp, against the sun, with its dell below, which is known to be the site of a one-time "Tower on the hill", as visualised in *Piers Plowman*.

Then came the birthplace of the third poet, John Masefield. A fairly modern house half-way between Ledbury station and town, called The Knapp, built on the site of an old farm-homestead by the poet's father, and where in still earlier days one of our oldest club members, Mr. John Bunn, lived as a child.

Again, as with the other two poets, the view from this included an ancient earthwork—Wall Hills. The lecturer related how, when



Photos by

LEDBURY.

Alfred Watkins, F.R.P.S.

1. The Knapp, John Masefield's birthplace.
2. Gipsy vans at Upper Cross, with Ledbury Park.



Alfred Watkins, F.R.P.S.



Photos by

LEDBURY.

1. Up the Bye Street.
2. Church Lane.

photographing the view from the lawn of this house, he had a surmise that Masefield here imbibed those instincts concerning ancient life on the land :—

“ And felt the hillside thronged with souls unseen
Who knew the interest in me and were keen
That man alive should understand man dead
So many centuries after blood was shed.”

This surmise was confirmed in a personal letter wherein Masefield related how as a lad on Wall Hills, he kicked into an earthen bank, and found stone-walling which he concluded was of Roman or earlier origin.

John Masefield, born at the Knapp on June 1st, 1878, lived there only seven years, for then came the death of his mother. This loss, coinciding with a serious illness of his father (to prove fatal in a few years), caused the uncle, William Masefield (partner with John's father in the lawyers practice still carried on in the family) to adopt his brother's young family, he being childless, although married.

The old Hereford and Gloucester Canal ran past a field below the Knapp, and the lecturer illustrated by photographs taken on the trip how he with a companion, hearing that the canal was to be closed for making the new Dymock-Gloucester line, took a two-days' canoe trip along its complete length in 1880 or 1881, when Masefield was an infant, alighting for the night at the canal warehouse standing at the bottom of the Bye Street.

“ I s'pose they've brought the line beyond the Knapp.
Look queer the street will, with the lock away.”

It was strange how those seven infant years provided the local facts in the tragedy of *The Widow in the Bye Street*, in which the young navy hero was employed in making the line on the canal-site.

The lecturer explained that his familiarity with Ledbury commenced about 1873, from which time he acted first as a traveller for his father's brewery and spirit business, and later as a miller. During this time, commencing before Masefield was born, the lecturer took many photographs of this most picturesque town, and as his business took him into the back-street public houses, so vividly described by the poet, the opportunities for illustrating this talk (unknowingly fully exercised) were many.

Some of these photographs, as the Prince of Wales Inn, and the old house over the pavement at the corner of the Upper Cross, were taken on wet-collodion negatives, before John Masefield was born, and most of the others during his boyhood, but he did not live much in Ledbury after his uncle placed him on the merchant training-ship, the Conway. The pictures therefore accurately represented the Ledbury and some of its inhabitants which Masefield knew as a boy,

and so vividly brought into literature. The local colouring of those epics relating to the town (*The Everlasting Mercy*, *The Widow in the Bye Street*, and *The Daffodil Fields*), is most accurate. But the identity of the foul back-street inns and their keepers is not disclosed, although familiarity with life there at the period indicated that "the Lion" was a blend of two houses, and "Silas Jones, that bookie wide", with his hard-faced wife were to be found as inn-keepers of the time, but that several personalities were taken to create them.

One inn is precisely described, and still to be seen, although the licence is now gone. It is outside the town, near the station.

"So hidden, it is out of sight
To anyone not coming from the west
The high embankment hides it with its crest."

The life in the market place on market day was illustrated by photographs of half-a-century ago, with farmers and country women, an old man in a smock-frock, and a trader of domestic pottery displaying his wares on the ground in shameless fashion.

Many of the old houses did not then display the fine half-timber construction which now makes Ledbury so attractive. For example, the Feathers, Lord Biddulph's house (Ledbury Park), and the Old Talbot in New Street, had their timbers then all hidden by plaster.

The half-century-old photograph of the Old Talbot led to another bit of information concerning Masfield's early life. The lecturer quite recently noted in the inn window of this old picture a long bill which he first recognised to be theatrical, and then detected on it the name of the play in large letters—LEAH. He enquired locally whether this would not be the bill of a Worcester theatre? The answer was "No!" for at that time, a troupe of strolling players used to set up a booth in the Cattle Market for some weeks and give plays like *Maria Martin, or the Murder in the Red Barn*, and *Leah, or the Jewish Maiden*. Remembering that these players also included Hereford in the towns they visited, and knowing that it was in the time of John Masfield's boyhood, the lecturer made a guess that it was from these strolling players that the poet first caught the glamour of the boards, to bear fruit later in such pieces as *The Tragedy of Nan*. John Masfield confirmed this later in a letter, wherein he related how Tom Holloway (leading man in the troupe) was his boyhood's hero.

Photographs of the façade of Ledbury Church before and after the restoration late in the seventies, indicating the great liberties the architect took with the original window patterns, were shown.

The scenes of Masfield's local epics were fully illustrated. Portrait subjects, taken before Masfield wrote, but curiously applicable to his description, were shown. Such were an old widow gazing from her door in a Ledbury back street; a poacher of the time with his gun watching over a hedge; gipsies with their caravans in the town, and encamped against a copse and hedge. Views of "the Scallenge" (entrance to the churchyard), the Homend, daffodil fields nearby, and thatched cottages were shown. It was stated, on the poet's authority, that "The Daffodil Fields" of his epic were the Hall House meadows, about a mile-and-a-half out of Ledbury.

One little known bit of local topography was illuminative of a rather obscure passage in *The Everlasting Mercy*, wherein work on the land proves to be outlet and aim of the ex-poachers changed life.

There is a passage near the end which must puzzle many readers:—

"At Bullen Bank on Gloucester road.
The everlasting mercy showed
The ploughman patient on the hill
For ever there, for ever still
Ploughing the hill with steady yoke
Of pine-trees lightning-struck and broke.
I've watched the May Hill ploughman stay
There on his hill, day after day."

Only a few of the older people in the district seem to know of the "May Hill Ploughman", for his image grows fainter with the years. From high ground near Ledbury, if no hill intervenes, the rounded land-mark, May Hill shows up on the Gloucestershire boundary, with its clump of firs on the summit. Years ago, the outline of these trees against the sky, first a tall group on the left, then some "lightning-struck and broke", sloping down to a twin group of lower and stubby trees, gave the impression, from a distance of miles, of a ploughman with his team of oxen, faint now, but suggestive enough fifty years ago to serve as a keynote of *The Everlasting Mercy*.

About 45 of the lecturer's own photographs were used for his lecture.

A hearty vote of thanks was accorded the lecturer on the motion of Mr. GEORGE MARSHALL, seconded by Mr. F. C. MORGAN.

SPRING ANNUAL MEETING.

THURSDAY, APRIL 12TH, 1934.

The Spring Annual Meeting of the Club was held in the Woolhope Club Room at the Hereford Public Library, when there were present:—Brig.-General W. G. Hamilton, C.B., C.S.I., D.S.O. (the retiring President), Dr. C. W. Walker (the President-Elect), Prof. A. E. Boycott, Mr. S. J. Bridge, Mr. R. F. Dill, Mr. G. H. Grocock, Dr. N. H. Harrison, Mr. F. R. James, Mr. Alex. Johnstone, Mr. G. Humphry Marshall, Mr. H. R. Mines, Mr. F. C. Morgan, Mr. Walter Pritchard, Rev. G. B. E. Riddell, Mr. J. Scott, Mr. W. Shawcross, Lieut.-Colonel O. R. Swayne, Mr. J. D. Taylor, Mr. O. B. Wallis, Mr. Alfred Watkins, Rev. A. J. Winnington-Ingram, Mr. A. Wilmshurst, Mr. George Marshall (Honorary Secretary), and Mr. W. E. H. Clarke (Assistant Secretary).

The PRESIDENT expressed an appreciation of the services rendered to the Club by the late Mr. J. C. Mackay, an ex-President, and the Hon. Secretary was asked to convey a vote of condolence to his widow.

An appeal for subscriptions by the Brecknock Society towards the purchase of the remaining portion of Tretower Court, now in private hands, was considered, and it was unanimously agreed that the Club contribute a sum of five pounds for this purpose.

The retiring President, Brig.-General W. G. HAMILTON, delivered his

PRESIDENTIAL ADDRESS.

To be President of the Woolhope Club is a great privilege and a great pleasure. I have enjoyed both to the full. As a final honour, the Club, under Rule VII, invites the retiring President to address them on the work of the past year and to offer any observations he may deem conducive to the welfare of the Club and the promotion of its objects. The first task is easy, the second must always be approached with diffidence and doubts whether anything one has to say will, in fact, be of any value at all.

In the first place I must say that no one can occupy the position of President without an increased appreciation of the debt we owe to the Hon. Secretary for our successful Field Meetings. Success, which is undoubted, is mainly due to the thorough organization and preliminary spade-work undertaken before the Club comes to enjoy the results. In this respect he is ably seconded by the Assistant Secretary.

The year has not passed, however, without a sense of sadness in the loss of two outstanding members of the Club. Sir Joseph Bradney, and Mr. John C. Mackay. Both of them ex-Presidents, both distinguished in their several ways; both of them zealous for the best interests of the Club. Their membership conferred honour on the Club, their deaths leave a void which it is hard to fill.

Passing now to a brighter retrospect, it has, I think you will all agree, been a successful year. For our Field Meetings the weather was kindly, except perhaps in a moderate degree only for our first meeting at Moccas. The programmes were as varied in their nature as they were interesting and instructive. Archæology, ornithology, geology and botany have all been studied under the guidance of experts, to whom we all were most grateful. I, for one, shall ever remember the day at Rhayader when the distinguished ornithologist, who succeeds me in this chair, introduced us to the nests of the raven, the buzzard, and other rare birds. And the successful Ladies' day in the Tewkesbury neighbourhood, and the final day in the Golden Valley, when the visit to the Iron Age Camp at Poston, illuminated as it was by the discourse of our Hon. Secretary, was to me of supreme interest.

And besides these Field Meetings the series of Evening Lectures, arranged for the Club, in co-operation or otherwise, manifest the vitality of the Club in the many subjects which now fall within the scope of its activities. Individual members have continued to add something to the sum of knowledge, and it will not be deemed invidious if I specially refer to the valuable archæological investigations and reports of Mr. Watkins and Mr. Marshall.

On this point of scope and objects may I (speaking as a very ordinary, non-expert, member) add a few words. Rule I. of the Club shows how wide and inclusive those objects are. "Local natural history and archæology." The specialized divisions and sub-divisions of such subjects are almost innumerable. I notice that an opinion has not infrequently found expression in our proceedings to the effect that we have departed too largely from the geological and natural history studies which were the original objects of the Club and have overweighted the archæological side. The Transactions show what "Papers" have been read or received for publication. If the proportion dealing with natural history and geology is deemed inadequate it only means that the specialists in those subjects are now comparatively few. This is regrettable, but the Club management cannot of itself make experts though it can help in their making. They evolve from personal inclination and the will to be. Field Meetings are necessarily limited while the possible subjects are almost without number. Selection and rejection are inevitable, and in a democratic organization like ours the subjects which now interest the greater numbers must, I suggest, receive the greater attention.

We can no more go back to the necessarily restricted interests of early days than we can revert to the top hats and side-whiskers which adorned their pursuers. I am old enough to remember the sixties of the last century when no picnic was complete without its quota of male enthusiasts who hammered rocks and treasured the fragments, and of ladies who collected wild flowers, to be dried and pressed in albums. Where are those fragments and those albums now?

Every age has its interests and its hobbies. The columns of the popular press are a fair indication of what interests the man-in-the-street, who has a brain to think. Archæology or antiquarianism in many aspects—sometimes stated in too popular a form to be correct—easily takes first place, with bird-love a good second. Animals next, though too often of the pet-dog type, the rest nowhere.

I suggest that, as regards Field Meetings, an object of the Club is to provide the dishes which customers like, rather than what we think they ought to like. Any other course is conducive to mental indigestion or, in severe cases, to mental nausea.

After all we are by name a Club, not a learned society, though many learned men fortunately find now—and will always, I hope, continue to find—in the Club their spiritual home.

Like other Clubs we have our tigers and our rabbits; intelligent rabbits I grant, but none the less rabbits. Being one myself, I know. The Club, I suggest, may rightly continue to be inclusive rather than exclusive, both as regards the scope of its activities and as regards its membership. The intelligent rabbit has his uses. He can keep his eyes open to see things old and new. The reported observations of a very tyro may add something to knowledge and may give a clue to some secret which can be followed up by those with greater knowledge. There is, in one direction alone, so much yet to be discovered of the story of man throughout the ages in this county. With interests aroused and fostered, and guided by the help always so readily accorded by our experts—I speak from personal experience—the rabbit may even become a tiger himself. To produce this phenomenon in evolution is, I suggest, a problem well worthy of consideration and solution by the Woolhope Club.

The ASSISTANT SECRETARY, in presenting his Report for the year, said that the year commenced with 219 ordinary members, and 10 honorary members, making a total of 229. During the year 18 new members were elected, 12 members resigned, and 11 were lost by death, so that the year 1934 started with 214 ordinary members and 10 honorary members, making a total of 224—a loss on the year of 5 members.

The HONORARY TREASURER presented the General Financial Statement of the Club for 1933, which showed a credit balance on



Photo by

Alfred Watkins, F.R.P.S.

CRUCIFIX FROM KIMBOLTON.

the General Account of £592, but from this sum the printing of the *Transactions* for 1932 and 1933 will have to be paid.

The following Field Meetings were decided on:—In the neighbourhood of Staunton-on-Arrow for ornithological studies, and at Gloucester and Uley for the Ladies' Day. The dates of these meetings and the two selected at the last Winter Annual Meetings were left to the Honorary Secretary to fix.

The following new Member was elected:—Mr. R. H. McDowell, Silver Wells, Ingestre Street, Hereford.

The following gentlemen were nominated for election:—Major Edward Longueville, The Sherriffs, Lyonshall; and Mr. Percy Pritchard, Broad Street, Hereford.

Mr. GEORGE MARSHALL exhibited an early 16th century figure from a crucifix, the property of Miss Hutchinson, Grantsfield, Kimbolton, and reported on it as follows:—

"The figure is of brass, 5½ inches in length, perfect except for the right hand which is missing, but much worn (*vide* illustration). Mr. F. C. Morgan had submitted it to the authorities at the Victoria and Albert Museum who reported that it was not an uncommon type, belonging to the early half of the 16th century.

It was found at the Brook Farm, an old house in Kimbolton, buried in the rubbish when a wall was taken down there in the year 1852, and was given recently to Miss Hutchinson by a daughter of the farmer who occupied the house at that date.

How it came there is, of course, unknown, but it is interesting to note that Robinson in his 'Mansions of Herefordshire' says that one, Matthew Meysey held land in the parish of Kimbolton in the 17th century, and gives the following extract from the Sequestration Papers in Add. MS. 16,178, Brit. Mus., dated 2 Jan., 1646: 'Forasmuch as we are informed that Matthew Meysey in Co. Heref. is detained a prisoner in Eggesole Castle uppon suspycyon of being a popish priest, and wee having received a certificate from the parish of Kimbolton that he belongs to sd. parish and is an honest man,' etc., his discharge is ordered.

Where Matthew Meysey lived in Kimbolton is not known. A member of the Jay family was married from the Brook in 1677, but this family was settled at the adjoining farm, The Bache, as was traditionally said by their family for 300 years, the last member to reside there being the churchwarden of the neighbouring parish of Middleton, of which Miss Hutchinson's father was vicar, who is said to have gone to America and was 'lost'. Entries of the family go back in the registers to 1565.

The Rev. A. J. Winnington-Ingram, Vicar of Kimbolton, has kindly made the following extracts from the parish registers, with remarks upon them:—

'Matthew Meysie was married to Joane Phillips, widow, the six and twentieth day of December, 1640.'

'Matthew, the sonne of Matthew Meysie and Joane his wife, was baptized the second day of October, 1642.'

The Vicar suggests that these entries should have cleared him of being a popish priest.

An earlier entry in the register reads:—

'Joane, the daughter of Jane Phillips, the wife of Thomas Phillips late deceased, was baptized the five and twentieth day of January, 1636' (i.e., 1637). 'This woman, travelling between Caynam and Byford where she dwelleth (*ut ait*), was delivered at the Constable's barne in Stockton very late in the night, she crying out for helpe in her miserie and travell.'

Can it be that this Jane Phillips was the woman *Joane* Phillips who married Matthew Meysie? Perhaps this is hardly likely—as if so there was a confusion in the Christian name—and Jane Phillips would seem to have been a poor person seeing that she was housed in the village constable's barn for the night.

Further information with regard to Matthew Meysie, and his popish leanings would be of interest, and whether he resided at the Brook Farm and secreted the cruifix on his arrest."

The Rev. A. J. WINNINGTON-INGRAM said there were three Bache Farms in the parish, and that the Jay family resided at the Upper Bache where there was a pigeon house.

Mr. GEORGE MARSHALL reported that in February last Mr. R. G. Virgo, when widening the road at Garway Cross, cleared the remains of the wayside cross of bushes, that had grown over it. It then showed the socket stone of the cross (*vide* "Standing Crosses of Herefordshire," by Mr. Alfred Watkins, p. 44, plate 44), and some flat stones, displaced, on which it partly stood and that had evidently formed the step. An old man told Mr. Virgo that his father remembered the shaft lying by the socket, and he thought it was buried under the earth close by.

Having offered to defray the expense of the examination of the surrounding ground, for the purpose of discovering the shaft, and also to ascertain if any steps were buried under the soil, Mr. Virgo kindly found two labourers for this purpose, but no steps were revealed, nor was the cross shaft located. The latter is more likely, therefore, to have been broken up.

Mr. ALFRED WATKINS said that he was of the opinion that the piece of a cross shaft in Garway Churchyard, now carrying a sundial, was the shaft of the Wayside Cross as the socket hole, 10 inches square, was of the same dimensions as that of the shaft.

Mr. Alfred Watkins referred to a matter which he described as of considerable interest and concern to the Club, one of whose activities he said had been to publish a record of the ancient crosses of Herefordshire. This was the removal of the ancient churchyard cross at Much Birch from its original position on the south side of the church to a new one on the north side, and its adaptation as a memorial to the late Rector, the Rev. W. L. Groves. He pointed out that these ancient crosses were the heritage of the parishioners in general and deprecated their adaptation as memorials to individuals. He proposed that a resolution be sent to the Chancellor of the Diocese, that in the opinion of the Club no churchyard cross should be interfered with and requesting

that in granting any faculty in connection with such crosses he would place any proposal before the Diocesan Advisory Committee.

The HONORARY SECRETARY, who characterized the removal of the cross at Much Birch as deplorable, seconded the resolution, which was carried unanimously.

Mr. ALFRED WATKINS referred to the excavations, which the Club had agreed to undertake at the last Winter Annual Meeting, to trace the foundations on the Castle Green that were observed in the turf during the dry period last summer. On his proposition a small Committee was appointed, including himself, Mr. O. B. Wallis, and the Honorary Secretary, who were instructed to seek permission for the excavation from the Hereford City Council, and, if such were obtained, to make arrangements for proceeding with the work.

Mr. F. C. MORGAN exhibited a Roman copper coin found in digging a well at Pontrilas, about 500 yards from the bridge. He thought it was the first Roman find in this neighbourhood. The coin had been presented to the Hereford Museum, but its date had not yet been ascertained.

The proceedings then terminated.

FIFTH WINTER MEETING.

THURSDAY, APRIL 19TH, 1934.

LANTERN LECTURE: "FLINT WORKERS AND FLINT USERS IN THE
GOLDEN VALLEY, HEREFORDSHIRE."

By R. S. GAVIN ROBINSON.

This Meeting was held in the Woolhope Club Room in the Hereford Free Library, when the President, Dr. C. W. WALKER, took the chair, and on introducing the lecturer said that they were fortunate in having a member, a native of Herefordshire, who not only took an active interest in antiquarian and natural history matters, but who owned an estate that was situated in a district which presented a practically unexplored field for the study of these subjects.

Mr. ROBINSON then gave his lecture, accompanied by some excellent lantern slides made by Mr. F. C. Morgan and Mr. Alfred Watkins. (See under "Papers" in this volume.)

Mr. ALFRED WATKINS said that he would like to draw attention to the fact that several of the recently discovered mounds mentioned by Mr. Robinson fell on straight tracks, which long previously he had laid down on the map, a curious confirmation of these lines of traffic. He congratulated the lecturer on his peculiar aptitude in being able to find flints, where the ordinary individual would pass them over. Only three other persons he had met in his long experience had this gift, they were his friend, the late Mr. John Ballard, of Ledbury, the late Mr. Cooper Neal, of Linton, and Mr. Gwynne, of Hay.

Brig.-General HAMILTON asked if the district from which the flints came could be identified. He thought there were no flints to be found in Herefordshire, and suggested that they might have been transported down the Avon, by the Severn, Wye and Monnow to the Golden Valley.

Mr. ALFRED WATKINS said he had found flint nodules in the gravels below Hereford and elsewhere in the county, but these would hardly have been accessible to early man or in sufficient quantities for their purpose.

Brig.-General HAMILTON proposed a vote of thanks to Mr. Robinson for his excellent lecture, and congratulated him on his important discoveries, which was seconded by the HONORARY SECRETARY, and carried with applause.

Mr. ROBINSON then showed on the screen a photograph taken by Mr. F. C. Morgan of a woodcock sitting on her nest at Poston. The bird so harmonized with the surrounding sticks and brambles as to be nearly indistinguishable. The nesting of this bird this Spring appeared to be the earliest so far recorded.

The Meeting then terminated.

FIRST FIELD MEETING.

THURSDAY, MAY 24TH, 1934.

 EYWOOD, The ARROW, and SHOBDON.

The First Field Meeting was arranged for the Study of Birds and Botany at the above places. The weather was ideal, being sunny and clear.

Those present included:—Dr. C. W. Walker, M.C. (President), Dr. W. Ainslie, Mr. S. J. Bridge, Mr. G. W. Brierley, Mr. Geoffrey Bright, Mr. E. F. Bulmer, Capt. H. A. Christy, Dr. J. S. Clarke, Mr. J. T. Collidge, Sir Geoffrey Cornwall, Bart., Mr. H. J. Davies, Dr. E. W. DuBuisson, Dr. H. E. Durham, Rev. T. E. Ellis, Capt. F. B. Ellison, Mr. F. H. Goddard, Dr. T. B. Gornall, Mr. G. H. Grocock, Capt. D. W. Harris, Mr. Frank Hogben, Mr. J. H. Hoyle, Mr. A. C. Hudson, Mr. Alex. Johnston, Mr. L. A. Knight, Mr. H. Langston, Mr. A. W. Marriott, Mr. R. W. Marriott, Mr. G. Humphry Marshall, Mr. J. H. Matthews, Mr. H. Meredith, Mr. F. C. Morgan, Capt. W. Mumford, Mr. M. W. Musgrave, Preb. T. H. Parker, Mr. G. W. Perkins, Mr. W. T. Perry, Mr. Percy Pritchard, Mr. Walter Pritchard, Mr. W. P. Pritchard, Rev. D. Ellis Rowlands, Mr. Walter Shawcross, Mr. T. Southwick, Lieut.-Colonel R. H. Symonds-Tayler, Dr. G. A. Tullis, Rev. W. O. Wait, Capt. O. B. Wallis, Mr. F. E. Whiting, Mr. J. S. Wilcox, Mr. A. Wilmshurst, Mr. George Marshall (Honorary Secretary), and Mr. W. E. H. Clarke (Assistant Secretary).

The party drove through Kington to the Flinsham Lodge of Eywood, where, by permission of Mr. C. J. P. Gwyer, the pools and fine timber growing in the park and grounds round the house were inspected.

The President led the party to the Flinsham pool, where a view was obtained of the great crested grebe, whose nest was near the edge of the pool. Close by a patch of bog-bean was growing.

Captain ELLISON said there were in the pool some of the largest carp in England, from 16 lbs. to 18 lbs. weight, also large pike, roach up to 2 lbs., and an eel had been taken weighing 3 lbs. 10 oz. While watching the water fowl an eel was seen lying in the water close to the edge of the pool, which was estimated to weigh 3 lbs. and upwards.

Led by Miss Gwyer and the Rev. W. O. Wait the party walked to the house through the wood seeing on the way some very fine

trees, including hornbeam, Spanish chestnut, Scotch fir, oak and silver firs. A group of the latter had reached a very great height, and one of them at five feet from the ground girthed 14 feet, with a clean bole for sixty or seventy feet. Another splendid tree was a fern-leaved beech near the house. In the garden a pied flycatcher was sitting on six eggs in a nesting box.

The Orangery near the house is said to be from the designs of Robert Smirke. As this architect is known to have designed the Shirehall at Hereford in 1815, and the portico of both buildings is of the old Doric order, the tradition is probably correct.

The PRESIDENT expressed the thanks of the members to Mr. and Miss Gwyer for kindly permitting their visit and for the assistance they had given them, and then proceeded to the third pool where an excellent view was obtained of a pair of great crested grebe, and the nest was seen at close quarters, with the eggs carefully covered over during the absence of the mother bird. Close by this nest a mallard was sitting in the stub of an alder tree, undisturbed by the close inspection of the observers.

Leaving Eywood the road was taken past Hanton Farm to the Forge Siding, where at Mr. E. F. Bulmer's fishing bungalow lunch was taken, and liquid refreshment in the form of "Woodpecker" was provided by Mr. Bulmer.

After lunch the business of the Club was transacted.

The following new Members were elected:—Mr. Percy Pritchard, 24, Broad Street, Hereford; Major Edward Longueville, The Sherriffs, Lyonshall; and Mr. C. Franklin, Cantilupe Street, Hereford.

The following gentlemen were proposed for Membership:—The Rt. Rev. Charles Lisle Carr, D.D., Lord Bishop of Hereford, The Palace, Hereford; and Mr. V. H. Pembridge, Lloyds Bank, Hereford.

The following "Papers" were laid before the Members:—

1. "Notes and Observations upon the Mosses of Herefordshire, 1890—1934," by the Rev. C. H. Binstead, M.A., F.L.S.
2. "The Aculeate Hymenoptera of Herefordshire," by Mr. Howard M. Hallett, F.R.E.S.
3. "Additional Notes to Herefordshire Flora and Fungi," by Miss E. M. Wooldridge.

The HONORARY SECRETARY said that these contributions were all most desirable, but that Mr. Binstead's contribution was of very great length, and it would be advisable for the Central Committee to consider whether they could afford to print it *in extenso*, or only information in it which would form a supplement to the "Flora of Herefordshire".

The other two "Papers" will be found printed in this volume.

The Honorary Secretary read a letter from the Chancellor of the Diocese, giving his reasons for permitting the removal of the ancient cross at Much Birch from its original site, and its reconstruction in the form of a memorial.

The members were still of the opinion that it was desirable that such relics of the past should be preserved as they stand and not moved or put to any other use.

The Rev. W. O. WAIT read the following notes on the botany of the district:—

The flora of this remote corner of the county had not been very carefully searched by the time of publication of the "Flora of Herefordshire," as apparently no one very capable of recording lived near. Consequently though visited from time to time by Augustin Ley (the author of the "Flora of Herefordshire") and other noted botanists many of our somewhat rarer plants escaped notice. It may be of interest therefore to name a few which I have discovered to show that while the district is not very rich in the average, it contains plants of distinctly interesting character.

Being on the borders of the hilly country of Wales it presents very different altitudes, varying from lower levels to a height of 1,000 feet above the sea, and therefore, as might be expected, we find a few things, mosses in particular, which are not always found in more level country. In fact, when the Rev. C. H. Binstead spent a few weeks moss hunting in this parish five or six years ago, he remarked that the moss flora clearly indicated a sub-alpine climate.

Some of the rarer plants of the neighbourhood include members of the cress family, *i. e.*, *Senecbiera didyma* (swine cress), and *Senecbiera coronopus*, both strangely turning up in the Vicarage garden, unlikely to have been introduced by anyone, as being too insignificant.

Lepidium Smithii also appears in two widely separated spots in this parish.

Teesdalia nudicaulis was found by the late Mr. E. H. Greenly, a former member of the Woolhope Club, growing on the wall of Wapley Hill, but I have failed to find it lately. *Erysimum cheiranthoides* appeared for some time in cultivated ground.

Menyanthes trifoliata, one of our most graceful and beautiful wild flowers, grows abundantly in some very widely separated pools in the neighbourhood, particularly in Flintsham Pool at Eywood.

Paris quadrifolia, a curious and interesting plant, grows in one or two localities in the parish.

Neottia nidus avis (the Bird's nest orchis), so called from its roots, growing as a saprophyte on rotten roots of trees, and forming a mass of twisted growth greatly resembling a bird's nest, is found on the Eywood Estate.

Among *Phanrogams* appear the stagshorn moss *Lycopodium clavatum* on the top of Wapley.

Botrychium lunaria (moonwort), at the High beeches. *Ophioglossum vulgatum* (adder's tongue) in one or two localities, neither of which plants would be readily recognised as ferns by ordinary folk.

While this does not present a very long list of rarities, it shows that the district contains various plants well worth attention, and rewarding those who can afford time and labour to penetrate into corners somewhat remote from the more populous parts of the county, and not so likely to be eradicated as is often unfortunately the case when plants grow in the vicinity of towns.

Captain F. B. ELLISON, in making some remarks on the fish, etc., of the district, said that a few years ago he reported having seen the sea lamprey in the Wye. This year, after felling a very large tree in the river, he found a large number of lampreys in the mud adhering to the roots. There were two sorts of lamprey, the sea and river varieties, the latter having brown bodies and bright red heads. One was a beautiful silvery colour, and he had ascertained that they had been fortunate enough to find this one changing into the adult stage. This was very rare. By holding these fish up to the light it was possible to see the blood circulating in their bodies. Lampreys were known as "Nine Holes" in Herefordshire, but really there were only seven holes, the nasal aperture and the eye making the apparent nine.

He had also been carefully observing shad, about which very little was known. The inside of their mouths was black, and they did not travel in enormous shoals as was generally believed. He had observed recently at Whitney Bridge three shoals consisting of three, four and five fish. Shad were passing up the Wye at Bridge Solers on May 11th, and were known to travel as far as Newbridge by Builth.

At the New Weir at Kenchester he saw the "Great Bat" recently, which is very scarce and three to four times larger than the ordinary bat. He noted that queen wasps and cock-chafers were very abundant this year, the latter in one case he knew being like a swarm of locusts.

The members then proceeded down the river and through the woods, under the guidance of Mr. Bulmer and Dr. Walker.

Nests of the Willow Wren and Marsh Tit were seen, and two Buzzards flew close overhead. Sandpipers, heron, curlew, wild duck, teal, pied flycatcher, and kingfishers are usually present but were not in evidence during the walk. A badger's earth in the wood, extensively worked, was seen.

The PRESIDENT having expressed the thanks of the members to Mr. Bulmer for his hospitality, the party drove to Shobdon Lake, where they were able to inspect, by permission of Mr. G. W. Kent, water fowl in greater numbers and variety than at either of the places previously visited. The first sight to greet their eyes was that of the great crested grebe floating placidly in the middle of the pool, and later another pair appeared to add interest to the proceedings. The members hoped to see them in some of their curiously beautiful courtship "scenes", but they did not choose to have these intimate scenes witnessed. Here were also seen the tufted duck, mallard and teal, with wild duck, also the pretty reed bunting, which was feeding quite near to the party.

The return journey was made *via* Kingsland to Hereford, which was reached about 5.30 p.m.

EXTRA MEETING.

SATURDAY, JUNE 9TH, 1934.

TRETOWER COURT, BRECONSHIRE.

On the invitation of The Brecknock Society a joint meeting was held to visit Tretower Court, for the threefold purpose of hearing an address by Dr. Cyril Fox, F.S.A., Director of the National Museum of Wales, on the history of this interesting old house; of seeing the restoration work now in progress of being carried out by H.M. Board of Works; and of encouraging the Brecknock Society in their appeal for about £800 still required before the whole property can be purchased and handed over to the Nation.

There was a large gathering of the members and their friends of both Societies.

The efforts of the Brecknock Society to acquire the property dates from 1930, when they raised £1,000 and acquired the parts now being restored. In October last year the Pilgrim Trust offered a grant of £1,500 towards the acquisition of the dwelling-house and the adjoining land, if the Brecknock Society could raise the other £1,400.

The special appeal sent out by the President of the Society (Mr. Arthur Beckwith) has already brought in nearly £500, so that there is something like £800 still required before the property is handed over to H.M. Office of Works. The restoration work will be completed in about ten years.

Dr. Cyril Fox, who was introduced by Colonel John Lloyd, in his address said Tretower was one of the most complete and interesting great houses of the mediæval period in Wales which time had spared. At the close of the 11th century Bernard de Newmarch, a knight of Herefordshire, conquered Brycheiniog and founded the Norman lordship of Brecon. Moving thence down the Usk valley, the Normans occupied Ystradewy, the upper portion thereof falling to one Picard, who settled on the banks of the Rhiangoll near its junction with the Usk. Here he founded a castle and settlement known to the Welsh as Tref Twr, the village of the Tower. The castle and lordship, after several generations of Picards had held it, came in 1405 to Sir William ap Thomas of Raglan, the ancestor of the Herberts, through his wife, the Picard heiress. Sir William married as his second wife Gwladys, the widow of Sir Roger Vaughan, of Bredwardine, who was killed at

Agincourt in 1415. One of her sons, a second Sir Roger Vaughan, was given the lands of Tretower by his half-brother, William Herbert, first Earl of Pembroke of that creation. Vaughans then dwelt at Tretower for twelve generations (until 1783). The greatest name in this family is Henry Vaughan, the "Silurist" (1622-1695). Tretower Court, which was especially associated with the Vaughans, is hard by the Castle, and probably existed in Sir William ap Thomas's time.

The court, said Dr. Fox, was mainly built and wholly roofed with stone from local quarries. Its lay-out was that familiar in the colleges of Oxford and Cambridge. "A stone-built gate-house fronts the road," he continued, "the arched entrance of which gives access to a square court. The ancient house occupies two sides of this court; the hall, flanked by buttery and kitchen, and the principal retiring rooms, is opposite the gate, while on the right (north) is a building continuous with, and having the same roof-line as the hall block: this is gabled at the ends. On either side of the gate house is a curtain wall corbelled out to provide a passage-way at the level of the chamber over the gate. This wall walk was designed for defence: it is open and battlemented on one side, but roofed on the other. It extends along the wall which forms the fourth (south) side of the court, but is here somewhat obscured by late farmhouse additions." In 1930 the condition of the court caused grave anxiety, and the Brecknock Society purchased the building and presented it to the nation. The gift was accepted by the Ancient Monuments Department of his Majesty's Office of Works, and the work of repair was now well advanced. The skill and competence of the staff of the department had never been more signally shown than in this work. The money available at the time to which I refer," said Dr. Fox, "was sufficient only to purchase those portions of the building then in use as barn and stable; the kitchen wing remains in use as a farmhouse, and it is necessary that this should become the property of the nation in order that Tretower Court may be preserved as a complete example of a great mediæval house."

Mr. Raleigh Radford (Chief Inspector of Ancient Monuments in Wales, under whose direction the restoration work is proceeding) explained that the funds of his Majesty's Office of Works were never used for the purchase of ancient monuments. This was generally left to public or private local effort, after which the monument was handed over as a gift to the nation and then became the responsibility of the Ancient Monuments' Department, which undertook the restoration and preservation. That was why about £800 was still needed to complete the transference of the whole of the buildings to the nation. There would be no conjecture about the restoration, for every known detail would be meticulously observed so thoroughly that only experts would be able to dis-

tinguish between the old and the new once the stonework used in the restoration had had a few years' weathering.

Colonel John Lloyd, in moving a vote of thanks to Dr. Fox, also thanked the members of the Woolhope Club, Hereford, for their substantial support. It was necessary that the money should be collected before the end of July in order to secure the £1,500 gift of the Pilgrim Trust.

The visitors were entertained to tea by the Brecknock Society and viewed with interest the work of restoration.

Tretower Court, when fully restored, will be a perfect and complete 14th century house; and as it lies only a few hundred yards from the main Crickhowell-Brecon road, it is easy of access by the thousands who travel to Mid and South Wales by the Vale of Usk.

SECOND FIELD MEETING.

TUESDAY, JUNE 14TH, 1934.

THE BATCHO, BACTON, ST. MARGARET'S AND DISTRICT.

The Second Field Meeting was held in the Golden Valley to study sundry earthworks and prehistoric sites, and to see the churches of Bacton and St. Margaret's.

Those present included: Dr. C. W. Walker (the President), Mr. S. J. Bridge, Mr. H. J. Davies, Mr. R. T. Dill, Dr. H. E. Durham, Rev. T. Ellis, Captain F. B. Ellison, Mr. G. H. Grocock, Mr. R. G. Hames, Brig.-General W. G. Hamilton, C.B., Mr. C. J. Hardy, Mr. D. Harris, Mr. J. H. Hoyle, Mr. A. G. Hudson, Rev. E. A. Hughes, Mr. Alex. Johnstone, Mr. J. B. Kendrick, Mr. H. Meredith, Rev. Canon W. E. T. Morgan, Mr. G. W. Perkins, Mr. Walter Pritchard, Mr. W. P. Pritchard, Mr. H. Pugh, Mr. R. S. Gavin Robinson, Rev. D. E. Rowlands, Mr. G. McNeil Rushforth, Mr. J. Scott, Mr. C. W. S. Simpson, Mr. T. Southwick, Rev. G. W. Stewart, Mr. J. D. Taylor, Mr. S. E. Warner, Mr. Alfred Watkins, Mr. Rees Williams, and Mr. George Marshall, Honorary Secretary.

The first halt was made at The Batcho, where the road to Peterchurch crosses the bridge from the Wye into the Dore Valley. Here the party were met by Mr. R. S. GAVIN ROBINSON, of Poston, who said that he had recently located two hitherto unrecorded "camps" which probably dated from the Iron Age. The one a promontory "camp" in Brampton Wood had the entrenchment cutting off the promontory very perfect, but the indications of the vallum and ditch on either side were very slight. The other and more important "camp" was on the highest point of Timberline Wood. Coming down the hillside from the Brampton Camp towards The Batcho was a sunk way or dyke which continued along the ridge towards the Timberline Wood.

The HON. SECRETARY, congratulating Mr. Robinson on his recent discoveries, said that the locating of these camps, especially of the very perfect one in the Timberline Wood, was the most important archaeological event in Herefordshire since the finding of the foundations of the Templars' round nave at Garway. As regards the earthwork along the watershed he was inclined to think that in its present form it was a dyke thrown across this pass from the Brampton Wood to the Timberline Wood by the

Saxons to delimitate their boundary against the Welsh,¹ but that the sunk way from the Brampton Camp might have been in use in the Iron Age to gain access to the valley, such as was evidently the intention of the hollow way leading from the Wye Valley to the Timberline Camp.

The party then followed the line of the earthwork to the Timberline Wood, where they picked up the hollow way, in places 12 feet or more deep, which was followed to the camp at the highest point of the wood.

Brig.-General HAMILTON pointed out that the hollow way was of a defensive nature, keeping in view the Golden Valley and the side of the way on the lower slope of the hill had been raised for greater security.

The HON. SECRETARY said it was evident that this hollow way was of great antiquity, and he had no doubt that it dated from the period of the camp, if not before in connection with an earlier Bronze Age settlement that existed on these hills, and might be considered a continuation of the greenway in use at this earlier period. It was evident that it was in existence as a marked Hollow way when the Saxons arrived, for the farm close to it is named The Holsty from *Hol*, O.E. for hollow, and *Stig*, O.E. for path.

On arriving at the camp, Mr. ROBINSON said that the Hollow way joined the Green way, which came along the ridge of the hill from Arthur's Stone, at the narrow neck of land which at this spot separates the Wye and Golden valleys just outside the only entrance to the camp. The camp was defended by a single vallum and ditch that was clearly defined and perfect. These defences followed the contour of the hill, and there was a much worn-down mound guarding the entrance. At the farthest extremity and highest point there was a raised look-out point. The area of land thus enclosed, including the defences, was probably about five acres, but at present it had not been surveyed and measured. The property belonged to Guy's Hospital.

Descending from the camp the motors were rejoined at the Holsty Farm and the road taken to Kerry's Gate. Here a brief halt was made to view a small mound on the extremity of the hill above, which may have been used as a sighting point for the Roman road from Kenchester along Stony Street and over the Brampton hill to Abbey Dore and presumably Longtown.

The drive was continued to Bacton Church, where the Members were met by the Rector, the Rev. C. T. Brothers, who pointed out the interesting features of the church, and exhibited the fine pre-Reformation chalice and paten.

¹ Dr. Cyril Fox has recorded many such dykes on either side of Offa's Dyke, either previous or subsequent to the making of that boundary.

Mr. G. McNEIL RUSHFORTH, F.S.A., spoke of the connections that Blanche Parry had with the parish. In 1573 Simon Parry bequeathed £5 for the church steeple. Later, a Henry Parry married one of the 13 daughters of Simon Milborn, and Blanche Parry was one of the large family that blessed the marriage. The Parrys and the Cecils were cousins, and it was probably through the influence of the latter that Blanche Parry became one of the four ladies-in-waiting to the child Princess, Elizabeth, later Queen Elizabeth. Blanche Parry spent all her life in Elizabeth's service, and enjoyed a position more intimate than that of a maid-in-waiting. She died a maid, and left it on record that as the Queen was a maid she felt it her duty to remain single.

In her will she left her best diamonds to the Queen, perhaps because during her years of service she had been the Queen's jewel keeper. A sum of £300 was left for funeral expenses, an immense amount, equal nowadays to £3,000.

She was buried in St. Margaret's, Westminster, but her internal organs were brought to Bacton Church, where a monument, partly in alabaster, showing her approaching the Queen with a jewel in her right hand, and a Bible in her left, was erected.

The tapestries that were hanging in the church were given by her, and were undoubtedly parts of one of the Queen's dresses, as no maid-in-waiting would be permitted to wear one so richly embroidered. The embroidery of lifelike birds and flowers is typical of the age.

Dr. WALKER proposed a vote of thanks to Mr. Rushforth and to the Rev. C. T. Brothers for their most interesting addresses.

The party then drove to St. Margarets, where an inspection was made of the recently restored early 16th century screen.

This restoration was rendered possible through the munificence of Mr. H. C. Moffatt, and was admirably carried out by Mr. W. E. H. Clarke. In the absence of the latter, the HONORARY SECRETARY read the following report supplied by him on the rood-loft and screen.

"It is with great surprise and pleasure that a visitor to this Church sees such an unusually complete and so richly carved Rood loft. The Church is certainly situated 'far from the madding crowd' and although you might expect quaint features in the Church you would hardly expect anything so good as this.

It was erected about 1520, about which time the Nave was probably rebuilt. This type of screen is peculiar to our Welsh Border, and another good example may be seen at Patrishow.

It consists of a panelled loft supported on two posts; the posts are semi-octagonal on the west face, each of the sides having applied bands, carved with running ornament. At the western angles are small buttresses and at the top of each post the semi-octagonal face is cut back to form a niche with crocketed and pinnacled canopy. The loft front is panelled, with moulded muntings and moulded upper and lower rails, both the latter

enriched with running vine and other foliage. The soffit of the loft is slightly coved and is divided into panels by moulded ribs with bosses at the inter-sections and carved with foliage, lion and human faces, interlaced knot, a cross on a shield and other curious and quaint designs. At the base of the cove is a cornice carved with running oak foliage and finished with bratticing.

The loft is approached from the Chancel by a flight of rude stone steps. Until 1930 the Rood loft was in great danger of falling down but thanks to the generosity of Mr. H. C. Moffatt a proper restoration was undertaken under my supervision. A large shed was erected on the north side of the Church and the loft was dismantled and erected piece by piece in the shed. In dismantling a very interesting discovery came to light. It was found that really the loft was holding up the walls and the latter were built of thin slabs of stone and the joints filled in with earth. In course of time the roof leaked and this played havoc by washing out the earth. Attempts to strengthen the wall by pointing the joints had failed. Mr. Moffatt also undertook to rebuild the walls but not with earth.

A close examination of the loft after it was re-erected in the shed showed that it had been taken down previously and wrongly put together. Many of the running mouldings were in the wrong grooves.

The loft was gradually re-arranged with everything in its proper place. No new design has been introduced in any part. Some portion of the original was in every case obtainable.

Unfortunately the loft at some time had been heavily painted, even white enamel being introduced. This made it impossible to find out what colours had originally been on the loft. According to Duncumb who wrote his 'History of Herefordshire' about 1805 'the effect of the whole is increased by gilding, and by painting in various colours'. It is a pity that the original colouring was interfered with.

In dismantling the loft I noticed that the running carvings were very insecurely fixed and yet were perfectly straight and true. It had always been a mystery to me and so far as I know to all other people that mediæval carved strips always seemed to be straight and true. Modern work would require very careful fixing to enable it to keep straight. This pulling down gave me the opportunity of closely studying this subject and I solved the problem. I found that all the oak strips which were carved were prepared from split timber and not sawn timber. The result is that the grain is perfectly true and does not want to warp.

Many people wanted figures put in the niches but as this would involve new design and guesswork I objected and I am very pleased to say that Mr. Moffatt supported me in this contention. How fortunate that such a man as Mr. Moffatt was willing to undertake the work. He is a lover of Herefordshire, a lover of Screens and Rood lofts and has a unique knowledge of oak and its handling. It was his munificence that also enabled me to carry out the restoration of the presses in the Chained Library at Hereford Cathedral and also the formation of the Room in which the Library is housed."

After a picnic luncheon, the business of the Club was transacted.

The following new members were elected:—The Right Rev. Charles Lisle Carr, D.D., Lord Bishop of Hereford, The Palace, Hereford; and Mr. V. H. Pembridge, Lifton House, Bodenham Road, Hereford.

The following candidate was proposed for membership: Mr. Harold Yemm, 36, Grenfell Road, Hereford.

Mr. R. S. GAVIN ROBINSON gave some interesting information concerning the domestic habits of the woodcock. He said that he and two others once saw a woodcock carrying its young, not in its claws as it was generally believed to do, but between its thighs. They were very close to it and there was no possibility of a mistake.

A discussion took place about cuckoos carrying their eggs, and Dr. WALKER, the President, summed up the evidence by saying that he supposed the cuckoo was a sufficiently intelligent bird to adapt itself to the circumstances in which it might find itself, and if unable to lay the egg in the nest, would lay it on the ground near by and carry it to the nest.

The party then walked to inspect a mound in a field about 600 yards E.N.E. of the church.¹

The HONORARY SECRETARY said that the mound might not be a burial mound, although its position and outlook was favourable for such a purpose, and suggested that it was only a spoil heap from a small quarry which seemed to have been worked on one side of it. A cutting through the mound would soon settle the question.

Mr. ALFRED WATKINS said it might have been used as a landmark, and his alignments suggested that to be so, but it might also have been a burial ground.

The drive was continued to Coed Poeth, where the 16th century farmhouse was inspected. An earlier timber building, probably part of the forerunner of the present dwelling place, is attached to one end of it. This would appear to be an ancient site; for there is an earthen bank and ditch surrounding about an acre or more of ground within which the house is built. It is apparently a defensive post on the ancient ridgeway leading to Hay.

From here the party drove about a mile and alighted to inspect some mounds near Upper Llannon. One of these appeared to be an undoubted burial mound, that at some time had had the centre dug into in search of treasure. A ring of Scotch fir trees had been planted on the edge of the mound about seventy or eighty years ago, but a number of them had disappeared. Nearby were two sites covered with large holly trees, which it was thought might be the site of other burial mounds, but this seemed doubtful.

Another mile along the ridge brought the members to the alighting place for the Werderris Standing Stone, to which they walked by an old lane. This is one of the few Standing Stones in the county and was illustrated and described in *The Transactions*,

¹ See "An Inventory of the Historical Monuments in Herefordshire," Vol. i, p. 227, for measurements of this mound.

1923, pp. cvxi, 287. What may be ploughed down mounds were seen in the field adjoining, though they may be only the natural contour of the ground.

The drive was then continued towards Turnastone and a deviation was made to inspect a mound at Cothill. This is undoubtedly a Norman motte with a deep ditch, with traces of the bailey adjoining it.

The return journey was then made to Hereford.

THIRD FIELD MEETING (LADIES' DAY).

THURSDAY, JULY 19TH, 1934.

GLOUCESTER AND ULEY.

The Third Field Meeting (Ladies' Day) was held in fine weather, to visit Gloucester Cathedral, Llanthony Priory, by Gloucester, and the great pre-historic camp at Uley.

Those present included: Dr. C. W. Walker, M.C. (the President), and Mrs. Walker, Mr. E. E. T. Booth, Mr. A. G. Bunn, Mr. H. J. Davies, Dr. and Mrs. H. E. Durham, Captain F. B. Ellison, Mr. F. H. Goddard, Mr. G. A. Hall, Brig.-General W. G. Hamilton, C.B., Captain D. W. Harris, Mr. B. Hogben, Mr. F. Hogben, Rev. T. Holland, Mr. and Mrs. King, Mr. A. W. Marriott, Mr. G. Marriott, Mr. T. A. Matthews, Mr. and Mrs. M. C. Oatfield, Rev. and Mrs. A. B. Purchas, Mr. R. S. Gavin Robinson, Miss E. C. Scott, Mr. J. Scott, Mr. C. W. Simpson, Mr. D. S. Simpson, Lieut.-Colonel N. H. Waller, M.C., Mr. George Marshall (Honorary Secretary), and Mr. W. E. H. Clarke (Assistant Secretary).

The first stop was made at Gloucester Cathedral, where the party were met by Lieut.-Colonel N. H. WALLER, M.C., who is the architect in charge of the building. He said Gloucester Cathedral was very interesting both from a historical and architectural point of view. Perhaps its most interesting feature was the east window, which was the largest in England. It was in the Perpendicular style, and the glass work was a war memorial of the Battle of Crécy (1346).

In order to have ample lighting for the choir the sides of the window were splayed out, and the window itself was slightly on the curve. The Lady Chapel and the whispering gallery were behind the window, but were so arranged that they cast little or no shadow on it. The Lady Chapel was a gem, in a delicate Perpendicular style, with lovely windows and an air of graceful beauty. The glass from the east window was buried for safety during Cromwell's time, but was, unfortunately, put back wrongly with the result that several people had changed heads, *etc.* The general effect, however, was not impaired.

The reredos was defaced by Thomas Cromwell, and not, as was supposed in some quarters, by Oliver Cromwell, who actually saved the Cathedral, which was among those marked for destruction but was spared at his injunction.

Robert of Normandy, who was murdered at Cardiff in 1134, was buried in the Cathedral, and a quaint effigy was made in his honour. Edward II., who also had a violent death, was buried there, and a graceful tomb was erected to his memory. Although other monasteries refused to bury him, fearing the consequences, the then reigning abbot, who was a man of courage and foresight, allowed him to be buried in his monastery, and out of the money given by those who came to pay homage to the dead king, he built a new church.

The Cathedral had several unusual buttresses that appeared to have been put up to solve various architectural difficulties as they arose. The two fine arches on the pillars that supported the tower had no constructional use but were put there because the design of the roof did not finish artistically. Should any of the pillars subside, however, those arches would immediately crack, and so give warning before any serious subsidence could take place.

It was interesting that Jenner, who invented vaccination, and had a memorial in the Cathedral, was a Gloucester man, and yet Gloucester, taken as a whole, still refused to take this preventive measure and had suffered as a consequence.

After lunch at Urch's Restaurant, the business of the Club was transacted.

The following new member was elected: Mr. H. C. Yemm, 36, Grenfell Road, Hereford.

The PRESIDENT thanked Colonel Waller for so ably guiding the members over the Cathedral, and a hearty vote of thanks was accorded him for the information he had imparted.

The party then drove to new Llanthony Abbey, where they were met and shown round by Mr. E. Grove, who resides in some of the ancient domestic quarters of the monks. This Abbey was founded in 1136 by Milo de Bohun, Earl of Hereford, and was a cell of Llanthony Priory in Monmouthshire, and was surrendered to the King on the 10th of May, 1539, and purchased two years later by Sir Arthur Porter. The walls of the Priory barn, the ruins of the gate house, and some part of the domestic buildings are still to be seen. The remains of the church were destroyed when the ship canal was made.

Dr. WALKER moved a vote of thanks to Mr. Grove for his interesting information, and the party then proceeded to the British Camp, known as Uley Bury.

Here the party were met by Mr. W. ST. CLAIR BADDELEY, who gave a very interesting and illuminating talk on the camp, which, he said, was 31 acres in area and at an elevation of 766 feet. It was slightly oblong and curved at the sides. There were two

upper terraces, of which the higher was 70 feet wide. There was nothing Roman about the camp, and the misconception had arisen out of finding a Roman coin, which was not, by itself, conclusive evidence. The bury was so large that it must have contained a collection of buildings worthy of the name of a town. In 49 B.C. the Dobuni were working lead mines in the district, and it is certain that they must have used the camp, although it is impossible as yet to say who built it. It was previously occupied by the Cornovii, who were driven out by the Dobuni. There was every reason to believe the Roman records, which said that the people living in Southern England were totally different from those living in the North. They even had coins, and used the Roman word *rex*.

The party walked round the terraces and inspected two entrances with tumps guarding them, all in a wonderful state of preservation. Twenty years ago he had dug down in the terraces and found the black soil which is always in evidence where men or animals had lived for a long period. In regard to the flint arrow heads that had been found there, he cautioned them against jumping to the conclusion that it was a stone age camp, saying that flint arrowheads were still used in Roman times, as they were cheap and fairly effective.

A hollow way, sufficiently wide to let two men walk abreast, and in excellent preservation, led from the camp, and branched, one branch winding round and below the earthworks. This fortification probably belonged to the Iron Age and might date from 400 B.C.

Looking down upon the village of Uley, he said that eighteen years ago he had found at the home of a blacksmith, who lived nearby, a tunnel leading down to an underground well, and beyond it. He was sure that there was still another chapter to be added concerning the history of this hill.

The PRESIDENT, in thanking Mr. Baddeley, said that his unbounded knowledge as an antiquary excellently fitted him for the talk he had so ably given. He regretted that there was not time to stay and see the burial chamber, known as Hetty Pegler's Tump, a very large long barrow, *circa* 1600 B.C., which they had passed on the hillside when approaching the Camp.

The party then returned to Gloucester for tea, after which the return journey was made to Hereford.

FOURTH FIELD MEETING.

THURSDAY, AUGUST 30TH, 1934.

THE UPPER TEME VALLEY AND KERRY.

The Fourth Field Meeting took place to visit various archaeological objects in the Upper Teme Valley, and at Kerry. This was the Club's first expedition to this district.

Those present included: Mr. G. H. Jack (acting President for the day), Mr. J. Arnfield, Mr. S. J. Bridge, Mr. E. F. Bulmer, Mr. G. H. Butcher, Mr. F. T. Carver, Dr. J. S. Clarke, Mr. W. G. Clarke, Mr. H. J. Davies, Dr. H. E. Durham, Mr. S. Foster, Mr. G. H. Grocock, Mr. G. A. Hall, Brig.-General W. G. Hamilton, C.B., Mr. C. J. Harding, Mr. F. Hogben, Mr. J. H. Hoyle, Mr. A. G. Hudson, Mr. A. Johnstone, Mr. W. J. King, Mr. L. A. Knight, Mr. L. Lewis, Mr. W. H. Mappin, Mr. A. W. Marriott, Mr. J. H. Matthews, Mr. H. Meredith, Mr. J. D. Moore, Mr. F. C. Morgan, Captain W. C. Mumford, Mr. W. M. Musgrave, Rev. A. B. Mynors, Mr. G. W. Perkins, Mr. D. Pritchard, junr., Mr. Walter Pritchard, Rev. G. B. E. Riddell, Mr. R. S. Gavin Robinson, Mr. T. Southwick, Rev. G. W. Stewart, Lieut.-Colonel O. R. Swayne, D.S.O., Mr. J. D. Taylor, Mr. W. Ridley Thomas, Captain O. B. Wallis, Mr. S. E. Warner, Mr. A. U. Zimmerman, and Mr. George Marshall (Honorary Secretary).

The members drove through Brampton Brian and Knighton and, passing the site of the castle of Knucklas high above the road, the first stop was made at Bryndraenog. This ancient timber and stone house has on it the date 1636, but the framework is much older. The hall is still open to the roof, though partly ceiled in, and the timbers are a fine example of crutch construction, probably dating from the fourteenth century (*see illustrations*). The date 1636 is in reference to alterations effected by Morgan Vaughan, the owner, who was High Sheriff of Radnorshire in that year. At this time the gallery running round three sides of the hall and the staircase were erected, and no doubt the panelling about the house is also of this date. The initials M. V. are carved on one of the doors.

Proceeding two miles up the valley a stop was made at Bugeildy to see the church. It has a good perpendicular screen on which a good deal of the original colouring remains, a dug-out chest and some old pews. The building itself has been rebuilt in recent



Photos by

F. C. Morgan, F.L.A.

BRYNDRAENOG.

1 and 2. Upper floor of the Hall,



F. C. Morgan, F.L.A.



Photos by

BRYNDRAENOG.
1 and 2. The Hall.

years, but funds not yet permitting of the erection of a tower, the three bells of 1660 are housed against the east end of the church near the ground under a corrugated iron shelter.

Crossing the Teme and ascending a steep hill to an elevation of 1,300 feet, the members viewed the church at Bettws-y-Crwyn, said to be the highest situated church in these islands. The Vicar, the Rev. H. H. Stickings, drew attention to the screen, roof, and font, and showed a silver chalice of the reign of Charles the Second, which was found flattened out under a stone slab. The pews, which date from the middle of the nineteenth century, have painted on the ends the names of the farms to which they belong.

Lunch was taken in the open near the church, after which the business of the Club was transacted.

The following new member was proposed: Mr. Anthony Grafton Sprague, Holiday Hall, Kington.

Miss Elenora Armitage, of Dadnor, Ross, reported an instance of mistletoe "on a holly tree on Moraston Farm, in Bridstow parish, in the hedge on the Ross to Hoarwithy road, about three miles north of Ross. The tree is dying and the leaves falling off, hence the mistletoe has become visible and was discovered by my sister, Miss Cecilia Armitage. I believe there is no record of the occurrence of mistletoe on this host in Britain. In the 'Herefordshire Flora' this is one of the excluded trees. It may be recalled that other very rare occurrences of mistletoe in this neighbourhood are on the pear, Dadnor Farm; on the hazel, near Sellack; and on the white mulberry at Perrystone Hill."

Dr. H. E. Durham corroborated these finds and exhibited photographs of them. He also said he had records of the mistletoe on the Siberian Elm (*Zelkova*), Norway Maple (*Acer Platanoides*), and *Crataegus prunifolius* in the county.

Mr. G. H. JACK, F.S.A., read a paper entitled "Stone Masons—Walter of Hereford," which will be found printed in this volume under "Papers".

Captain F. B. ELLISON read the following notes on "Fish and the Drought."

"Drought and heat cause to fish great discomfort. Continuous heat causes the temperature of water to rise and this creates a lack of oxygen, and eventually brings about the death of the fish. Heat nearly always produces diseases amongst fish, especially salmon, which want cool water rich in oxygen, such as is found amongst waterfalls and fast running streams in the upper reaches of the rivers.

This year, owing to the drought, mortality was caused to many salmon, so many as sixty odd salmon being taken out of the Wye and buried in one short stretch of the river.

It is not only the game fish that have suffered but the coarse fish, and even eels have died in their hundreds particularly in ponds. In one instance in the County of Hereford, in July, a large pond nearly dried up, the water

became quite warm and the fine carp and eels were killed in dozens. Now carp and eels particularly take a lot of killing. I have carried on many occasions a carp, a perch, or an eel in my pocket, wrapped only in a bit of grass, and on putting these fish into a tub at night, although they seemed to be torpid and nearly dead yet in the morning they were very much alive.

A little point which many people do not know is that game fish sink and coarse fish rise when dead, with the result that the mortality among coarse fish is noticed, but that among trout, *etc.*, is not.

Fish have an 'air bladder' which contains a quantity of gas. When a salmon is hooked and nearly exhausted it gives out a lot of gas.

Fish leave their haunts when the river or stream gets very low and seek cooler water and more shade.

Kingfishers, owing to the fine weather and drought, have had easy fishing this year, and so plenty of food. The fish being restricted owing to the drought were easy for the kingfisher to pick up. This bird has been very plentiful this season and one perched on my rod."

The party then drove along a grassy track to the Pound Gate. Here Mr. F. C. Morgan pointed out the embanked enclosures which, he said, were originally used for the sheep and cattle trade between England and Wales. The cattle were taken to the pounds, sorted, specially shod for the hard English roads, and left to the drovers, who agreed to sell them and return the money. This particular pound was nine acres in extent, and it was reported that many large droves were taken as far as London and Kent. Droves of 400 cattle were common, and there were four drovers to each hundred. In later times special banks were set up for the drovers, but they disappeared with the advent of the railways.¹

On the way to Kerry near the road, high up on the moors, a stop was made to inspect a stone circle. Here Mr. J. B. Willans made some remarks on the prehistoric remains in this district. The stone circle, he said, was about 90 yards in circumference formed of small upright stones with a central one. Another nearby was said to have been destroyed. He pointed out several tumuli, of which there were a considerable number on these hills. He said that the land was most probably covered with forests in early times, and drew attention to the extensive replanting of trees now being undertaken under the Government reforestation scheme. A little further on a dyke was seen guarding the ridgeway which passed along these hills, probably earlier in date than Offa's Dyke, which lies a few miles farther to the east.

Proceeding to Kerry, the party was met at the church by the Vicar, the Rev. H. G. Whiteman. Mr. J. B. Willans gave a detailed description of the church, which he said was built in 1176, the north aisle arcade and the western tower of this date remain, but the chancel was rebuilt in the fourteenth century, and the

¹ See an account of this trade in *Historical Memoranda of Breconshire*, by John Lloyd, 1899.

south aisle in the seventeenth century. There is a good roof on the nave, a font with the emblems of the Passion carved upon it, an eighteen century Welsh bible, a pre-Reformation bell, and a fine oak chest.

On the kind invitation of Mr. Willans, the members adjourned to his house, a short distance from the church, where they were entertained to tea. Afterwards a number of archæological objects which were specially displayed was examined with interest, and the collection of very fine trees and shrubs was seen in close proximity to the house.

After a vote of thanks had been accorded to Mr. Willans for his hospitality, the members made the return journey to Hereford by way of Clun and Leintwardine.

EXTRA MEETING.

SATURDAY, SEPTEMBER 15TH, 1934.

IRON AGE CAMP AT POSTON, VOWCHURCH.

This meeting was held to inspect the excavations carried out on the site of the Iron Age Camp at Poston by Mr. R. S. Gavin Robinson, the owner of the site, and Mr. George Marshall. There was a large gathering of members and their friends.

Under the guidance of the above gentlemen the excavations were examined, and the discoveries they had made explained. A report on these excavations will be found under "Papers" in this volume.

The HONORARY SECRETARY described some trial excavations that he had carried out with Mr. Robinson at the Timberline Wood Camp, Brampton Camp, St. Margaret's Mound, and The Leigh Wood, Tyberton. A report on these sites will be found under "Papers" in this volume.

The following gentlemen were nominated for membership: Mr. George Harding, Aylestone Hill, Hereford; and the Rev. W. S. Daw, The Vicarage, Peterchurch.

WINTER ANNUAL MEETING.

THURSDAY, DECEMBER 13TH, 1934.

The Winter Annual Meeting of the Club was held in the Woolhope Club Room in the Hereford Public Library on Thursday, December 13th.

Those present included: Dr. C. W. Walker, M.C. (the President), Mr. A. G. Bunn, Mr. H. J. Davies, Dr. H. E. Durham, Captain F. B. Ellison, Mr. J. H. Hoyle, Rev. E. A. Hughes, Mr. F. R. James, Mr. Alex. Johnstone, Mr. W. J. King, Mr. H. Meredith, Mr. H. R. Mines, Mr. F. C. Morgan, Rev. Canon W. E. T. Morgan, Captain W. C. Mumford, Mr. M. W. Musgrave, Mr. W. Pritchard, Rev. G. B. E. Riddell, Mr. R. S. Gavin Robinson, Mr. G. McNeil Rushforth, Mr. J. Scott, Mr. W. Shawcross, Mr. T. Southwick, Rev. C. H. Stoker, Captain O. B. Wallis, Mr. J. B. Willans, Mr. George Marshall (Honorary Secretary), and Mr. W. E. H. Clarke (Assistant Secretary).

The HONORARY SECRETARY read a letter from Mr. Feltham, the Town Clerk, in which the Estates Committee of the Hereford Town Council gave permission for the Club to carry out excavations in the Castle Green after the 1st of October last. It had not been possible to take advantage of this privilege owing to the illness of Mr. Alfred Watkins, who had undertaken to superintend the work. He hoped it would be possible to carry out the excavation at a later date.

The following members were elected officers of the Club for 1935:—President, Captain F. B. Ellison; Vice-Presidents, Dr. C. W. Walker, M.C., Mr. R. S. Gavin Robinson, Mr. G. McNeil Rushforth, and the Rev. Canon W. E. T. Morgan; Central Committee, Mr. Alfred Watkins, Rev. Canon A. T. Bannister, Mr. F. R. James, Rev. C. H. Stoker, Dr. H. E. Durham, Rev. G. B. E. Riddell, Captain H. A. Gilbert, Mr. F. C. Morgan and Mr. Walter Pritchard; Editorial Committee, Mr. George Marshall, Mr. Alfred Watkins, Rev. Canon A. T. Bannister, Rev. G. B. E. Riddell, and Dr. H. E. Durham; Hon. Treasurer, Mr. F. R. James; Hon. Auditor, Major E. A. Capel, M.C.; Hon. Secretary, Mr. George Marshall; Assistant Secretary, Mr. W. E. H. Clarke; Hon. Librarian, Mr. F. C. Morgan; Hon. Lanternist, Mr. W. H. McKaig; and the Rev. G. B. E. Riddell was appointed delegate to the British Association; and Mr. George Marshall, delegate to the Society of Antiquaries.

Mr. Arthur Bennett was appointed Geological Sectional Editor in place of Mr. G. H. Jack, who wished to retire as he had left the county.

The places for two of the Field Meetings to be held next year were fixed—one at Worcester and neighbourhood, and the other in the Rowlestone district.

The following new members were elected:—Mr. Anthony Grafton Sprague, Holiday Hall, Kington; Rev. W. S. Daw, Peterchurch Vicarage; and Mr. George Harding, Aylestone Hill, Hereford.

The following candidate was proposed for election: The Rev. J. H. T. Kilgour, St. James' Vicarage, Hereford.

The appeal for funds for the Library extension was brought to the notice of the Club by Mr. MORGAN, the Curator and Librarian, who pointed out that both the Art Gallery and Museum were badly overcrowded, and he asked whether the Club would give any financial assistance.

In the discussion which followed Mr. MORGAN explained that the Library Committee felt they could approach the City Council with more confidence if they had funds in hand for the project, and, in reply to Mr. Riddell, said that about £4,000 would be required for the extensions, the nature of which would depend upon what adjoining land became available.

Mr. SHAWCROSS said that what had surprised him since he came to Hereford was that there should be a request for voluntary subscriptions. He would have thought that the necessary finances would have been provided out of the rates.

Mr. JAMES pointed out that the Corporation's powers in the past had been limited to a definite rate.

Mr. SHAWCROSS: Have the Corporation used all the powers they have?

Mr. MORGAN: They are unlimited now.

Mr. SHAWCROSS said the institution was entirely governed, directed and managed by the Corporation, and he could not see any reason why the whole expenditure should not be borne by the rates of the city.

The HON. SECRETARY said that while he thought the city might do something towards the required extension they ought to remember that at present it bore the whole expenditure on the institution, while the county derived benefit but did not subscribe anything.

Mr. MORGAN said he thought Mr. Marshall had made a very good point, and that it was justifiable to appeal to the county to help.

Captain ELLISON spoke of the manner in which residents in the county, and their children, now made use of the museum, contending that circumstances had changed completely during the past ten years; and said general feeling among people of his acquaintance living in the county was that the institution should be assisted by the county as well as the City Corporation.

In the ensuing discussion the feeling was expressed that the projected extension had not yet taken definitely enough shape for an immediate grant to be made, and on the motion of Mr. James the question was referred to the Central Committee with power to take what action they consider suitable.

The members agreed to vote a sum of about £38 from the Club's fund to defray the expense of the excavations carried out by Mr. Marshall and Mr. Gavin Robinson on the site of the Iron Age Camp at Poston.

Mr. MARSHALL told the Club that they had secured some very astonishing results and information with regard to the Iron Age, not only as affecting Herefordshire but the whole country. The importance of the excavations, he indicated, was comparable with those which have been taking place at Maiden Castle, in Dorset, about which so much had been heard.

Dr. DURHAM urged that if possible the work should be carried on, and he hoped that the Club would be prepared to come forward with further funds for that purpose. When a task such as this was commenced it ought to be properly done.

In supporting this, Captain ELLISON spoke of the splendid work of Mr. Marshall and Mr. Robinson, but agreed with Dr. Durham that so far it had been, comparatively speaking, "merely scratching". There was a tremendous amount of work yet to be done on the site.

Mr. RUSHFORTH also supported; and, in reply, Mr. MARSHALL said that he and Mr. Robinson would be pleased to go on with the excavations for another year, because there was a considerable amount of work yet to be done to clear up the history of the site.

Appreciation was expressed of the work of Mr. Marshall and Mr. Robinson; of that of Captain Ellison, who carried out a survey and prepared a plan of the site; and of that of Mr. Morgan, who restored an earthenware pot found on the site and now exhibited to members.

Mr. H. F. TOMALIN reported having seen a male great spotted woodpecker in his garden at Waynflete, Ross-on-Wye, on the 25th of November last.

Captain F. B. ELLISON reported having seen on the 12th of December a thrush's nest with two eggs in it. In June, 1927, he said he saw a snipe rise and perch close to him on a post five feet

high, and on another occasion one settled on a bough of an old ash tree 12 to 16 feet from the ground.

Mr. F. C. MORGAN said that about three years ago he saw a snipe settle on a tree at Tram Inn.

Mr. R. S. GAVIN ROBINSON reported seeing a blackbird sitting on four eggs at Callow a few days ago.

Dr. C. W. WALKER said on the 19th of November last a mallard hatched off four ducklings.

Mr. JAMES H. HOYLE reported the following observation on the line of Watling Street to the north of Hereford, made on the 17th of June, 1931:—

"This line passes through 'Armadale' and the cider works on Widemarsh Common. On June 15th and 16th, 1931, a trench was opened for the electric cable through the orchard lying between the two. The ground was on a fine gravel subsoil—undisturbed—and free from stones to any noticeable extent except on the line of the road, where, though there was nothing that could be considered as a pavement, yet for a width of about 20 feet the soil above the gravel contained many stones of various shapes and sizes up to about 7 inches in length in no definite order.

The occurrence of such a quantity of stones—on this line, and nowhere else in the cutting—though not conclusive evidence of a road or path is very suggestive."

The meeting then terminated.

Woolhope Naturalists' Field Club.

PROCEEDINGS, 1935.

FIRST WINTER MEETING.

THURSDAY, FEBRUARY 28TH, 1935.

LECTURES:

1. "TWO 16TH CENTURY SCULPTORS, JOHN GILDON AND EPIPHANIUS EVESHAM."

By F. C. MORGAN, F.L.A.

2. "RECENT FLINT FINDS IN THE GOLDEN VALLEY."

By R. S. GAVIN ROBINSON.

A Meeting was held in the Woolhope Club Room to hear the above two Lectures, which were illustrated with lantern slides.

The chair was taken by Dr. C. W. Walker, the President.

The following candidates were proposed for election as members:—Mr. Henry Hartman, Almeley Manor; Mr. Michael Symonds, Okeleigh, Broomy Hill, Hereford; Mr. Hubert Dugmore Bell, Wyeleigh, Broomy Hill, Hereford; Dr. H. C. Miller, Eardisley; and Mr. William Howell Banister, 2, Montpelier Villas, St. James' Road, Hereford.

Mr. Morgan exhibited the following objects:—

1. A large pewter still belonging to Mr. T. H. Foster, of Peterchurch, probably 18th century, but with no pewterer's mark.

2. An oak bowl found under an elm tree at Almeley with an iron pin through it and nails round to give the bias. It is said that there was a bowling green near the place where it was found.

3. A holed stone axe from a sandpit at Southend Farm, Mathon, with hammer end of a Middle Bronze Age type.¹

¹ See report on this axe by Miss Chitty, pp. LXXXVI, LXXXVII.

Before beginning his lecture, Mr. MORGAN asked if anyone who knew of examples in Herefordshire of Norman and Early English work of the Western School would report the same to him. He showed some instances on the screen of doorways and arched openings which had continuous mouldings unbroken by any capital, a typical feature of this School.

Mr. MORGAN followed on with his lecture, illustrated with excellent slides, on the monuments executed by the two local sculptors John Gildon and Epiphanius Evesham. His lecture will be found under "Papers" in this volume.

Mr. R. S. GAVIN ROBINSON then gave his address on his recent discovery of flint sites in the Golden Valley, which will be found incorporated in his paper "Flint Workers and Flint Users in the Golden Valley" in this volume, pp. 54-63.

The HON. SECRETARY suggested that the round "scrapers," of which so many had been found, were used for cutting skins. He had found it possible to cut through a leather strap quite easily with one of these flints.

Brig.-General HAMILTON said that some primitive races still used flint knives and could cut and skin an animal in a few minutes with the use of such tools only.

Dr. H. E. DURHAM said that the subsidiary flaking on the edges would add greatly to the strength of the cutting edge.

The PRESIDENT then proposed a vote of thanks to the lecturers, which was heartily accorded them.

SECOND WINTER MEETING.

THURSDAY, APRIL 4TH, 1935.

LECTURE : " RECENT EXCAVATIONS AT POSTON CAMP AND OTHER SITES IN THE GOLDEN VALLEY."

By GEORGE MARSHALL, F.S.A.

A Meeting was held in the Woolhope Club Room to hear the above Lecture, which was illustrated with lantern slides.

The Chair was taken by Dr. C. W. Walker, the President.

The following candidates were proposed for election :—The Rev. G. Foster Carter, St. Peter's Vicarage, Hereford; and Dr. R. W. Pocock, D.Sc., Geological Survey Offices, Exhibition Road, South Kensington, S.W.7.

In his opening remarks Mr. MARSHALL thanked those whose help had made possible the excavations, namely, Mr. R. S. Gavin Robinson, who had given every facility for the excavations to be made on his land, and for his constant assistance, Mr. Alfred Watkins for some excellent slides from his photographs, Mr. F. C. Morgan for the remainder of the photographs and slides, Capt. F. B. Ellison for surveying the site and making plans, and the members of the Woolhope Club for providing the necessary finance.

The lecturer then proceeded to give a short summary of the result of trial excavations at a mound at St. Margarets which proved to be a stone quarry spoil heap and not prehistoric; at Upper Llannon in a mound in which had been a cist burial much disturbed; at the Camps recently discovered by Mr. Robinson in the Timberline and Brampton woods on either side of the Batcho Pass; and in the Ley Wood to the north of Stockley Hill, where nothing was found in the nature of prehistoric earthworks.

The lecturer then gave the results of the excavation of Poston Camp and the conclusions to be drawn therefrom, and ended by saying: "We have advanced considerably our knowledge of the Iron Age in this county, and it will be of assistance to others who are studying this period all over the country."

There were shown on the screen some beautiful photographs of the existing vallum taken by Mr. Alfred Watkins, plan and

sections of the Camp and excavations, and photographs of the work in progress, and others of some of the objects found, including those in stone, pottery, bronze, iron, bone, etc.

An account of the excavations at Poston will be found in this volume, pp. 89-99.

The PRESIDENT said they felt proud that the Club had managed to do such an important piece of work, although all the credit was due to Mr. Marshall and his team of helpers.

A hearty vote of thanks was accorded to Mr. Marshall for his lecture.

SPRING ANNUAL MEETING.

THURSDAY, APRIL 11TH, 1935.

The Spring Annual Meeting of the Club was held in the Woolhope Club Room at the Hereford Public Library, when there were present : Dr. C. W. Walker (the retiring President), Captain F. B. Ellison (the President-Elect), Mr. S. J. Bridge, Major E. A. Capel, M.C., Sir Geoffrey Cornewall, Bart., Mr. R. F. Dill, Dr. H. E. Durham, Captain H. A. Gilbert, Mr. G. H. Grocock, Brig.-General W. G. Hamilton, C.B., Mr. J. H. Hoyle, Mr. A. G. Hudson, Mr. F. R. James, Mr. W. Garrold Lloyd, Mr. G. Humphry Marshall, Mr. F. C. Morgan, Rev. Canon W. E. T. Morgan, Mr. W. Musgrave, Mr. J. W. Perkins, Mr. Walter Pritchard, Mr. W. P. Pritchard, Rev. H. Roderick, Rev. D. Ellis Rowlands, Mr. J. Scott, Mr. T. Southwick, Rev. C. H. Stoker, Lieut.-Colonel O. R. Swayne, D.S.O., Mr. J. D. Taylor, Captain O. B. Wallis, M.C., Rev. A. J. Winnington-Ingram, Mr. George Marshall (Hon. Secretary), and Mr. W. E. H. Clarke (Assistant Secretary).

The PRESIDENT expressed his deep regret at the death of Mr. Alfred Watkins, and said the Club had indeed suffered a tremendous blow from which it would take long to recover. He asked the members to stand in silence in tribute to his memory.

The HONORARY SECRETARY then said a few words in regard to the great debt the Club owed to their departed member. He recalled that Mr. Alfred Watkins was elected a member forty-seven years ago and had served on the Central Committee for forty-three years. He had contributed many valuable papers to the *Transactions* and his Annual Reports on Archæology were regularly supplied and were models of what such reports should be. But it was by his photographic skill more than anything else that he would be remembered, for from the time he joined the Club he had supplied more than ninety per cent. of the illustrations which appeared in our *Transactions*. He had a great sense of beauty which was the more remarkable in that he was colour blind, nevertheless he was able to supply an excellent colour photograph to illustrate a paper in the *Transactions* of 1922. His activities covered a wide field and his knowledge on many subjects was extensive. To our Club his loss was irreparable.

The Retiring President, DR. C. W. WALKER, stressed the twofold nature of the Club's interests, and after congratulating the members on the excellence of the archæological activities of the past year, with special reference to the valuable work of

Mr. Robinson and Mr. Marshall in the excavations carried out at Poston, went on to deplore the Club's comparative inertia with respect to natural history studies. He then read his

PRESIDENTIAL ADDRESS.

"Natural history societies have various methods of expressing themselves: some find an outlet mainly in regional research, others more in furthering schemes of protection, as, for example, the Norfolk Naturalists' Association, which owns large areas at Hickling and Alderfen broads and also coastal areas where various rare species of birds, insects and plants are protected, and thus saved from extinction—I refer among birds more particularly to the Marsh and Montagu's Harriers, the Bearded Tit, and the Bittern—all of which, thanks to that Society, we may rest assured are now saved from extinction as British birds. I feel very strongly that conservation of our peculiar local fauna and flora is a function and duty of this Club; we are not powerful or wealthy enough to undertake the formation of sanctuaries, nor is suitable country for this available or likely to be available in our area, but I maintain that it is the Club's duty to do all it can to see to it that the wild fauna and flora of our district are preserved for future generations, exactly as the Club has in the past made it its duty to protect local objects of archæological interest from demolition or utilitarian vandalism.

In order to preserve, it is necessary to know what we have to preserve, and this entails up-to-date recording of natural phenomena. The mechanism for this is to hand; we have members who undertake the reception of reports in the individual branches, and our great thanks are due to them for the work they do, and are willing to do. The trouble is that their services are insufficiently used, and are likely to continue so, unless it can be made more widely known that the Woolhope Club is avid of information with regard to all matters of nature lore in its district and is in fact, in default of any other such organisation, responsible to the community for keeping up-to-date records of the natural history of the county. Now the serious keeping of records is a difficult matter, especially when it comes to dealing with occurrences of rare or unexpected natural objects, because, in this enlightened age, we are more pleased to hear that some rare bird, for example, has been *seen*, than that it has been *shot*: the identification rests therefore upon the accuracy of the observer, and hence it is important that such phenomena should be reported at once, and if possible independently observed by someone else, before recording them as scientific facts. I cannot but think that if it were widely known that there are members of the Club who would be only too glad to go out, on hearing of some such interesting occurrence, to confirm the observation, or help in identifying some doubtful species, we should have a heavier post-bag of such reports. As

it is, we hear of such events much too late, and often without the accurate details of date, or even season: in other words, from a scientific point of view, even apart from the possibility of the witness being mistaken as to identity, the reports have little value as records.

I have often been astonished to be told quite interesting, and even remarkable pieces of ornithological information, which had not been considered worth reporting at the time, and many records are lost through this "shyness": for example, a few winters ago a sportsman shooting over a marsh in the county flushed a pair of Snowy Owls—a very large white northern owl—which rose in the air and flew away—obviously to continue their migration after a short rest; three summers ago a Hoopoe haunted a garden quite near Hereford, but no one thought of informing the Woolhope Club of this event; yet in both cases the descriptions given me long afterwards of these very rare birds were excellent, and left me no room for doubt in either case: the Snowy Owls were seen by a man who is perfectly familiar with our white or barn owl, and who described exactly the soft but powerful flight of these huge arctic owls; the lady who enjoyed the Hoopoe's visit described the unique crest and orange colour of the bird, which acted moreover in a typical hoopoe way, in strutting about the garden paths and lawn. Another rare occurrence, that of the Great Grey Shrike seen in Hereford in October, 1932, was reported to me on the day it was seen, its observer consequently deserving commendation, but in this case again, the bird had departed, and the report, which I mentioned to the Society, has to rest upon the testimony of witnesses who, though well acquainted with the Red-backed Shrike, and accurate in description, would be the last to claim to rank as experts.

Another motive which may, and in point of fact, in some cases, actually does, prevent the forwarding of information, is the suspicion with which many bird-lovers regard anyone who lays claim to a scientific interest in birds. All must remember Mark Twain's "ornithologist" and his gun: it is less the gun than the blow-pipe that is now generally feared, and I wish that some publicity could be given to an assurance that anything confided to the Woolhope Club would not be broadcast, but kept completely private: far less would the recipients of that confidence meditate any such betrayal of trust as the looting of eggs or other specimens. Any public or private reference to such a report would be made without referring to the locality, or even the reporter's name if that would give away the locality of, for example, the nest of a rare bird or even the presence of such a bird in the nesting season. Last spring, for example, a Kite was seen haunting a remote wood *in this county*; now I can hardly conceive of anything more hush-hush among bird-lovers than the whereabouts of a Kite in spring,

unless it were an actual Kite's nest, and this secret was well kept, though no nest resulted. Still this was quite properly reported to the club's referee, as all such occurrences ought to be.

Such information, if regularly received, would enable us to keep up-to-date our knowledge of the county's fauna. The last county bird-list to be compiled appeared about the end of last century. Even assuming it to be accurate, thirty-five years bring many changes—some applicable to the whole country, others locally important. In Hutchinson's *Herefordshire Birds*, 1897, for example, the Black-headed Gull is noted as an "occasional visitor", and this may then have been a true description, though totally inadequate now, when the bird is always with us, and breeds freely just over the Welsh border.

There is even one bird which is to be seen in Herefordshire and which very probably breeds in the county, unmentioned in any of the old county lists for the very good reason that the species was not known in those days to exist—as a separate species. I refer to the Willow Tit. Anyone unacquainted with the Willow Tit passes it by as a Marsh Tit, which it resembles very closely, except for its notes and nesting habits: when looked at closely, it is seen to have a sooty-brown instead of a glossy blue black head (as has the Marsh Tit) and to be rather pinker about the breast and flanks: it is the common form in Scotland, and throughout my boyhood I must have seen dozens of Willow Tits and put them down as Marsh Tits! It would be most interesting to be able to add this bird's name to the county list with definite information as to its status and distribution. Much of what I say is applicable to other branches of natural study. Among mammals, for example, can anyone tell me whether the Polecat is still a wild mammal of Herefordshire? It is certainly increasing rapidly just over the Welsh border beyond Hay. And what of our bat-species? I do not believe anyone exists who could tell us how many species are found in the county—there must be at least six kinds. Here also there is room for report and research, and so too with the other branches of nature study. But the collection of information as to the local occurrence of rarities, and of the distribution and status of common species by no means exhaust the possibilities for scientific activity of such a Club as this. At the present time there are broadly two methods, apart from highly specialised studies (and this is an age of specialism), by which advance in the study of natural history is made: the first is by concentrated individual study of a species, entailing often close watching (again using ornithology as an illustration) of an individual pair of that species for extended periods until its stereotyped habits and possible individual variations become plainly apparent—such work is necessarily outside the powers of such a club as this. The other broad method, increasingly employed, is that of national or regional

census taking, initiated generally by some prominent body or individual, and advertised through the scientific journals, or even the daily press. I refer to such broadcast inquiries as the recent Heronry census, the Great Crested Grebe enquiry, the Starling Roost census, and the enquiry into the breeding and other habits of Woodcock, now in progress. In all these reports, Captain Gilbert has upheld the Club's honour by providing local information, but, I feel it necessary to add, as an address of this sort aims not so much at appreciation as at constructive criticism, in some cases he has been assisted only to a very slight extent by the Club's members. These reports would be more valuable, I feel, and their preparation less onerous on the Club's ornithologist if we had a list of our members interested in this branch and willing to collect and check information in various sections of the county, so that all would be covered in the report, and as few data as possible missed. Interest in the subject and willingness to make enquiries would be more necessary attributes for the performance of such services than deep or special knowledge. Apart from participation in great national enquiries such as those just mentioned, there must be many lines of research which might be initiated by the Club in the form of a *county enquiry* or *census*, dealing with some species or problem, of predominantly local interest, but capable of management on exactly similar lines. Work on such lines would enable the club to justify its title and history as a naturalist's society.

I have now to vacate the chair to make way for our new President. Captain Ellison needs no introduction to you: he never misses a meeting, and has always got something interesting to report. He has a great interest in and considerable knowledge of all sides of the Club's activities, and very special ability in certain directions, especially in surveying and in certain branches of natural history, which have been employed already for the Club's benefit. In short, he is an asset to the Club, and his election to the office of President inspires us with the greatest confidence for the coming year."

Captain F. B. Ellison, the new President, then took the chair.

Mr. F. R. JAMES, the Hon. Treasurer, presented the Financial Statement of the Club for 1934. He said there was a balance of £695 11s. 9d. to the good, but there would be a considerable sum to be paid shortly for the *Transactions* now in the press.

The ASSISTANT SECRETARY (Mr. W. E. H. CLARKE) made his Report for the year. He said the year was started with 214 ordinary members and 10 hon. members. During the year 11 new

members were elected, 9 resigned, and 6 were lost by death. The year 1935 was therefore started with 210 ordinary members and 10 hon. members, a reduction on the year of 4 members.

The following Field Meetings were decided on:—Llan Bwch Llyn, near Painscastle, and district, to take place at the end of May; and Symond's Yat and district. The other two Field Meetings were fixed at the Winter Annual Meeting to take place at Worcester, and at Rowstone and district.

The following new members were elected:—Rev. J. H. T. Kilgour, St. James' Vicarage, Hereford; Dr. H. C. D. Miller, Eardisley; Mr. Michael Symonds, Okeleigh, Broomy Hill, Hereford; Mr. Hubert Dugmore Bell, Wyeleigh, Broomy Hill, Hereford; Mr. Henry Hartman, The Manor House, Almeley; Mr. William Howell Banister, 2, Montpelier Villas, St. James's Road, Hereford; the Rev. G. Foster Carter, St. Peter's Vicarage, Hereford; and Mr. R. W. Pocock, D.Sc., Geological Survey, Exhibition Road, South Kensington, S.W.1.

The following gentlemen were nominated for election:—Major-General T. T. Pitman, C.B., C.M.G., Brobury House, Brobury, Hereford; Mr. George Averay Jones, Drybridge House, Hereford; and Mr. Leonard Milne, 29, Church Street, Hereford.

The Rev. W. Oswald Wait presented his Report on Botany for the past year, which in his absence was read by the Honorary Secretary.¹

Captain H. A. GILBERT read his Report on Ornithology for the past year.²

The HON. SECRETARY read Reports on two holed axes, one found in a sandpit at Southend Farm, Mathon, and one at Michaelchurch Escley by Miss Chitty, of Yockleton Rectory, Salop, as follow:—

PERFORATED STONE AXE-HAMMER FROM MATHON SANDPIT.

Thank you very much indeed for letting me see and sketch this really lovely implement, the first of its kind from Herefordshire (so far as my knowledge goes) and one of the finest I have ever met; I do hope you will be able to secure it for the Hereford Museum.

It belongs to the "Battle Axe" category and is of a developed form found in association with the earliest bronze spear-heads and daggers of Arretton Down type, e.g. at Snowhill, Glos., where the group was found with an unburnt burial in a central cist under a barrow, and at Hove, Sussex, with a coffin burial and an amber cup: see Reginald A. Smith, *Archæologia*, LXXV, 77-108, Figs 1, 2, "The Perforated Axe-Hammers of Britain". It may safely be assigned to Middle Bronze Age A, circa 1700-1400 B.C., or, according to the old manner of description, which I rather prefer, to the latter part of the Early Bronze Age.

¹ See p. 108.

² See pp. 105-107.

Your specimen is distinguished by its parallel faces, central cylindrical hole and expanded ends, both of which show signs of use, so it was no mere weapon of parade; the lozenge-shaped butt is an artistic abnormality of which I cannot recall any other example. The sand has evidently helped to preserve its beautiful polish while staining it a rich golden-brown that may not be an original feature; the recent chip taken off the side shows a grey core that looks like dolerite, but a geologist should be asked to identify the material. Was any trace of a wooden shaft observed?

The precise site ought to be marked on the 6 in. O.S. map of the district and added on any future revisions by the Ordnance Survey. Further finds around Mathon should be watched for.

I hope some day to work out in detail the distribution of these battle-axes and to show the direction in which they travelled. That they crossed the Cotswolds is shown by the Snowhill specimen and, probably, by a model in soft stone now in Cheltenham Museum but without recorded provenance. They certainly journeyed along the Severn Valley, where they have been found at Grimley, Ribbesford (Museum of the Society of Antiquaries, London), Bewdley (Ashmolean) and one dredged from the Severn, site unrecorded (Worcester). My distribution maps make it pretty clear that yours derived from this traffic route. Judging by the breadth of its flattened butt (Mr. Smith's criterion of date), yours should be rather later than those from Ribbesford and Bewdley, in which the butt is a narrow oval.

The only other axe-hammer known to me from Herefordshire is a large clumsy specimen, very rough, asymmetrical and probably of far later date, labelled as found at *Pembridge*, 1928; I saw it recently in the Birmingham Municipal Museum and Art Gallery; it was lent by E. F. Breakwell; you might try to get it for Hereford, as there is no sense in having it where it is. The Bronze Age distributions suggest that it may have come from south Shropshire; its material needs testing.

HOLED STONE IMPLEMENT FROM MICHAELCHURCH ESCLEY.

This peculiar holed stone implement seems to have been ground down from a naturally celt-shaped pebble of hard (?) sandstone (Geological opinion should be obtained: would such stone be found in the Golden Valley?); the sides show two facets, the ends are rounded and flattened. It appears to have been polished all over, but the flat lower face has lost its lustre, possibly by use. (Some of the apparent polish might come off in washing and so prove to be a result of lying in the soil; I have not risked testing this.) The upper face is convex: a large flake evidently broke off above the edge in antiquity, the fracture being patinated over. It is 4 inches (104 mm.) long, 2½ in. (56 mm.) wide at the edge and 1½ in. (37 mm.) at the butt end, and ¾ in. (17 mm.) thick; it weighs just under 6 oz. (168 grams).

The method of boring the hole is uncommon; it is countersunk and somewhat oblique, the lower edge being near the centre of the implement; it appears to have been worked first from each face with a blunt-ended pebble, then bored through with a sharper and narrower circular implement, as the central portion is cylindrical, ¾ in. diameter. The high polish within the perforation denotes considerable age and the former presence of a wooden shaft.

One might call the object a perforated stone adze, but the broad bluntness of both its edge and butt make its utility questionable. Neither is stout enough to be of much use in hammering, yet it appears to be a tool rather than a weapon of parade. I wonder whether it was used for

skin dressing or leather-working. It is presumably of Bronze Age date, as the general technique and character suggest, but it is abnormally thin in the body for a blunt-ended mace-head. It is distantly related to Figs. 122 and 158 in Evans, *Ancient Stone Implements*, but no close analogy has come to my notice.¹

The find is unique in the district and its derivation is at present quite uncertain. It might be the product of an isolated community to which the idea of holed stone implements had penetrated without the full tradition of their technique and uses. The exact site and circumstances of its discovery should be recorded and a watch kept for further finds. It looks as if it had laid on the surface of cultivated land, as both faces bear marks probably made by a ploughshare passing over it.

Are holed stones hung in cowsheds and dairies in your County to keep the milk sweet?

Mr. J. H. HOYLE read the following notes on Watling Street south of the Wye:—

During the making of cuttings for roads and drains and the removal of the hedge-bank on the E. side of Ross Road in connection with the building of houses on the Great Broad Leys Estate, I have been looking for traces of a road—Roman or other—which I supposed might have continued the line of the present Ross Road (the old Monmouth Road) from the point of its slight deviation to the left (the W.) at about 150 yards from the crossing of Bullingham Road.

Before this slight divergence the road is making almost directly for the Old Ford.

Near the point of divergence at a depth of about 18 inches below the surface a layer of gravel some 15 in. thick was struck, which might have indicated the bed of an old road. This was carefully examined by Mr. George Marshall and myself. We found, however, that this was the edge of a bed of gravel which was continued for some distance towards the E.

A subsequent cutting for a drain near the S. side of Bullingham Road, opposite to St. Martin's Vicarage, made about February 20th, 1935, and taken right across the line of such a continued road revealed a depth of about 4 ft. of a fine marly virgin undersoil, and below that a bed of gravel which seems to me from the examination of previous cuttings to be continued westward along Walnut Tree Lane. But there was no trace whatever of any road at this point.

The following books were received with thanks:—13 volumes of *The Woolhope Club Transactions* from Mrs. Hamilton Symonds; two *Guides* from the British Museum; and Braithwaite's *Moss Flora*, 4 volumes, from the Rev. W. O. Wait.

The PRESIDENT then made two presentations to the Club, and, in doing so, said that the Central Committee were known as "The Knights of the Round Table", an allusion to the fact that they sat at a round table. He had noticed that the centre of the table was always bare, and, being the King's Jubilee year, he thought that he would like to characterise it by giving the Club

¹ The nearest is a perforated adze from Randle Bridge Farm, Knowsley, near Liverpool (C. Carter, *Naturalist*, 1930, p. 192, fig. 1), but this has the normal sharpened edge.

a vase which he would like to be called "The President's Vase", and which could be used by the Club as regalia were used by other ancient societies to denote the opening of a meeting.

After the vase, which dated from about 1780 and was either Mason or Spode ware, had been placed into position, Captain Ellison presented to the Honorary Secretary a basket of beautiful everlasting flowers, arranged by Miss Lee of Eardisley, to be used in the same way as the vase.

The gifts were acknowledged with grateful thanks by Dr. Walker, Dr. Durham and the Honorary Secretary, and the members accepted the gift with acclamation.

The PRESIDENT raised the question of a change in the name of the Club. He said that he had frequently been asked in what part of the country "The Woolhope Naturalists' Field Club" was located. He would suggest that to make this clear the word "Herefordshire" should be added to the official title.

The HONORARY SECRETARY said he had often encountered like enquiries as to the Club's habitat. If the name of the Club were to be changed in any way it would be necessary to make an alteration in Rule 1, and this could not be done without notice being given under Rule XIII. What he thought would meet the case, without making any alteration to Rule 1, would be an instruction from the members to the Secretaries and Editors that Herefordshire, in brackets, be put after the name on the title pages of the *Transactions*, notices of meetings and other publications, so that when they came into the hands of strangers these would know with what part of the country The Woolhope Club was concerned.

This suggestion was unanimously adopted.

The Rev. C. H. STOKER said that he would like to see the date of the foundation of the Club appear with the title whenever possible, and it was agreed the words "Established 1851" should appear on all future notices of meetings and such like announcements.

The ASSISTANT SECRETARY reported that he had received an estimate for moving the Norman tympanum at Fownhope, now outside the west wall, and exposed to the weather, to the inside of the same wall, for the sum of £9 4s. 0d. It was decided to have this work carried out, subject to the consent of the authorities responsible for its care.

Mr. F. C. MORGAN asked if the Club would give its support to the endeavour he proposed to make to get the carved Norman stone, now loose in the church at Pipe Aston, removed to the Museum.

The Hon. Secretary said the stone, possibly the base of a small columnar piscina, was found some years ago in the neighbourhood, and probably had nothing to do with Aston Church—it might have come from Wigmore. As a specimen of the Herefordshire School of Norman sculpture it would prove of great value in the Museum.

It was decided to give what support was possible to Mr. Morgan's application.

Dr. Durham urged the advisability of carrying out further excavations at Poston, and suggested that some of the younger members might be willing to help in the work of excavation.

The HON. SECRETARY said that Mr. Robinson and himself were desirous of further exploring the site, which was likely to yield still more satisfactory results, and would welcome the assistance of any of the members and the general support of the Club. Mr. Robinson had the last few days made a discovery of other Roman material lower down the hillside.

It was decided that the work be proceeded with.

Dr. J. S. Clarke sent a note saying that he had observed a Ring Ouzel at Sarnesfield on January 16th, and had quite a close view of the bird.

The Meeting then terminated.

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Photos by

F. C. Morgan, F.L.A.

A SALADE IN EARDISLEY CHURCH, c. 1450-70.

XCI

FIRST FIELD MEETING.

THURSDAY, MAY 23RD, 1935.

EARDISLEY, WHITNEY, AND LLAN BWCH LLYN.

The First Field Meeting was held in fine weather at Eardisley, at Whitney to inspect the bridge, and at Llan Bwch Llyn for the study of natural history.

Those present included Captain F. B. Ellison (the President), Mr. H. D. Bell, Mr. F. Boddington, Dr. J. S. Clarke, Mr. H. J. Davis, Mr. R. F. Dill, Dr. H. E. Durham, Mr. Roland J. Edwards, Rev. E. Ellis, Dr. T. B. Gornall, Rev. C. Ashley Griffith, Mr. G. A. Hall, Mr. C. J. Harding, Mr. G. W. Harding, Mr. T. H. Higgins, Mr. F. Hogben, Rev. E. A. Hughes, Mr. C. Jewell, Mr. Alex. Johnston, Mr. G. S. Averay Jones, Rev. H. T. Kilgour, Mr. W. J. King, Mr. L. A. Knight, Mr. H. Langston, Mr. A. W. Marriott, Mr. G. Humphry Marshall, Mr. J. W. Matthews, Mr. F. C. Morgan, Captain W. C. Mumford, Mr. M. W. Musgrave, Mr. W. T. Perry, Mr. T. Lindsey Price, Mr. P. Pritchard, Mr. Walter Pritchard, Mr. W. P. Pritchard, Mr. H. Pugh, Mr. J. Scott, Mr. C. W. T. Simpson, Mr. H. Skyrme, Rev. G. W. Stewart, Mr. J. D. Taylor, Mr. Ridley Thomas, Dr. G. Tullis, Lieut. A. B. G. Tulloch, R.N., Dr. C. W. Walker, Captain O. B. Wallis, Mr. F. Whiting, Mr. A. U. Zimmerman, Mr. George Marshall (Honorary Secretary), Mr. W. E. H. Clarke (Assistant Secretary), and others.

The first stop was made at Eardisley Church, where the party were met by the Rector, the Rev. S. H. Osborne, who pointed out the chief objects of interest, including the finely sculptured Norman font.¹ He had had two helmets (*see illustrations*) brought down from the hooks on which they are hung over the chancel arch, to enable the members to inspect them closely, and he made some remarks on these ancient and valuable pieces of armour.²

The oldest piece was a salade of about 1450-70 and was found some years ago on cleaning out the moat at the castle site adjoining the church. It had rivet holes for the vizor, and a row

¹ Illustrated in *The Transactions*, 1927, p. lxxvii.

² Mr. Cripps-Day estimated the value of the salade at £300, and that of the armet at £50. A description and illustrations of these helmets will be found in *Arch. Cambrensis*, 5th Series, Vol. VI., January, 1889.

of brass rivets with leaden washers, with traces of the leather cap inside with which it was lined. There is a ridge along the top, and it curves upwards at the back to protect the neck.

The other piece is an armet or close helmet of about 1550-1600, which has always been in the church and probably belonged to a tomb of one of the Baskerville family. It is of blue tinted polished steel, now much rusted, and has a bevor decorated with arabesque ornament in gold with a number of holes for ventilation, and a chin piece and vizor. There is a deep comb and two holes for fixing the crest. The ocularium is protected by a raised ridge.

The yew tree in the churchyard was measured and was 16 ft. 11 in. at 4 feet from the ground and 17 ft. 7 in. at 5 feet. In the *Transactions* for 1904, p. 240, its girth was recorded as 16 ft. 1 in. presumably at 5 feet, but no height is given.

The site of the Castle, the home of the Baskervilles for several centuries, was next visited, the only remains of which are the moat, now mostly filled in, and a large motte. Some years ago large timbers were found in the moat near the present entrance which were surmised to be those of a wooden drawbridge.

The President then conducted the Members to the site of the Brecon, Hay and Kington Tramway where it crosses the Almeley road. The embankment still exists in a very perfect condition at this spot. He read a paper tracing the history of the undertaking, which will be found printed in this volume.

The President invited the party to inspect the 17th century panelling and the fine stairs which he and Mrs. Ellison have restored so successfully in their home, and through the courtesy of Mr. Vaughan it was also possible to see the fine oak beams in The Holme, a 15th century house, with Gothic barge-boards carved with perpendicular period tracery.

On the way to Whitney a stop was made to measure the famous Eardisley oak,¹ which was found to be 29 ft. 2½ in. at 5 ft. from the ground.

At Whitney, the members met the owner of the bridge, Mr. G. D. Taylor, who is the descendant of the builder who erected it, and saw the site of the ferry which preceded the bridge.

The President read a paper on the history of the bridge, entitled "Whitney Bridge and Whitney Ferry," which will be found printed in this volume, pp. 119-123.

After taking lunch at the Rhydspence Inn, the business of the Club was transacted, the following members being unanimously elected: Major-General T. T. Pitman, C.B., C.M.G., Brobury

¹ For particulars of this tree see *The Transactions*, 1899, p. 111. It is feared that it will have to be pollarded, as the huge branches are a threatening danger to the school close by it.



Photos by

F. C. Morgan, F.L.A.

AN ARMET OR CLOSE HELMET IN EARDISLEY CHURCH,
c. 1550-1600.

House ; Mr. George Averay Jones, Drybridge House, Hereford ; and Mr. Leonard Milne, 29, Church Street, Hereford.

New members were proposed as follow :—Rev. T. M. F. Roberts, Kenchester Rectory ; Dr. A. W. Langford, 5, St. John Street, Hereford ; Mr. T. H. Higgins, Glaslyn, Broomy Hill, Hereford ; Mr. G. B. Cooper, 9, King Street, Hereford ; Rev. H. L. Ingham, Dewsall Rectory, Hereford ; and Engineer-Commander J. Smith, R.N., Kington House, Weobley.

In the absence of the writer, the Rev. E. Hermitage Day, D.D., F.S.A., the Honorary Secretary read his paper entitled "The Courtenay Bequest to Hereford Cathedral", which will be found printed in this volume.

Mr. Michael Symonds recorded finding a blackbird's nest with three eggs in it on the 7th of December, 1934, when a wall was being stripped of creepers at 33, Bridge Street, Hereford. It deserted two days later.

The President recorded seeing a pike seize a large dace by the tail, worrying and shaking it until it had the dace by the head, when the pike slowly swallowed it. The whole process took about ten minutes. He also said he saw bees working on snowdrops on January 16th, and others at Bridge Sollers on January 15th. In April he observed a carrion crow mobbing and driving a curlew off its nest and at Bunshill, Kenchester, two thrushes mob and drive off a carrion crow.

The President read to the members an amusing doggerel poem on the Woolhope Club, written by a friend of his.

Mr. F. C. Morgan drew attention to Rhydspence being one of the places where the cattle, that were driven from the Welsh hills to the eastern counties, were shod.

Travelling through Clyro and Painscastle, the members reached Llan Bwch Llyn in the middle of the afternoon, after a hard journey which got one of the 'buses into difficulties. At the lake members who had provided themselves with rubber boots were able to study the bird life on the margin under the guidance of Dr. C. W. Walker, and although the conditions were not ideal some interesting observations were made.

Here a paper by the Rev. Canon W. E. T. Morgan was read in his absence by the Honorary Secretary on the Legends connected with the Lake.¹

Professor A. E. Boycott contributed the following interesting notes on the snail *Limnæa stagnalis*, of which a few specimens were found.

¹ See *The Transactions*, 1879, pp. 184, 185 ; 1927, pp. 30, 31.

The conchological interest of Bwch Llyn was discovered by the late J. W. Vaughan in 1905. The most conspicuous species is *Limnæa stagnalis*, our largest freshwater snail, which is abundant and grows exceptionally big: some which I got in September, 1934, were 52 mm. long, which is as large as the species ever grows in this country. *L. stagnalis* is common in the south-east and midlands of England as far north as Yorkshire; west of the Severn it is rare and in middle and north Wales it has been found only in Bwch Llyn, Llangorse Lake, Lake Maelog and Lake Coron in Anglesea and a pond at Welshpool. In Herefordshire it used to abound in the old canal and in the ponds by the road between Tupsley and Lugwardine. This distribution is dependent on the presence of calcareous water, which is very uncommon in Wales except in the south. Three samples of water from Bwch Llyn each gave 21 milligrams of calcium per litre, equivalent to about 5 degrees of hardness on the ordinary scale, which is enough to encourage the snail, though it would domestically generally be called soft. Two other species in Bwch Llyn—*Bithinia tentaculata* and *Planorbis fontanus*—also have calcareous inclinations, though the other 10 which live there (*Ancylus lacustris*, *Planorbis albus*, *Planorbis conivertus*, *Physa fontinalis*, *Valvata piscinalis*, *Sphaerium corneum*, *Pisidium nitidum*, *P. personatum*, *P. pulchellum* and *P. subtruncatum*) occur also in quite soft water. There is a striking contrast between Bwch Llyn and Lake Gwyn, 14 miles to the north and similarly situated in a hollow of the hills; the water is very soft with only 2 mg. calcium per litre, the vegetation scanty and there are no mollusca at all. Bwch Llyn (970 feet) is also remarkable as being the only known locality approximating to 1,000 feet above sea level for *Ancylus lacustris* and *Planorbis fontanus* and, with the exception of Malham Tarn, a calcareous lake at 1,250 feet in north-west Yorkshire, for *Limnæa stagnalis* and *Bithinia tentaculata*. Llangorse Lake (502 feet) has even harder water (36 mg. calcium per litre) and a rich snail fauna of 25 species.

The return journey was made *via* Erwood, where tea was served in the Jubilee Hall, after which the members proceeded to Hereford, which was reached about 7.0 o'clock.

SECOND FIELD MEETING.

TUESDAY, JUNE 25TH, 1935.

 THE DOWARDS AND SYMONDS YAT.

The Second Field Meeting was held to inspect the Iron Age Camp on the Little Doward, King Arthur's Cave on the Great Doward, and the Iron Age Camp on the Yat, and to study the geology and the botany of the district. The weather was fine and hot until tea time, when a violent thunderstorm broke over the valley.

Those present included: Captain F. B. Ellison (the President), Mr. F. H. Barnett, Mr. Arthur Bennett, Mr. W. E. Best, Mr. C. W. Betteridge, Mr. W. Betteridge, Mr. I. Braby, Mr. F. G. Coulter, Mr. A. Cleghorn, Rev. W. S. Daw, Mr. R. F. Dill, Dr. H. E. Durham, Mr. W. G. Farmer, Mr. C. J. Harding, Mr. H. Hartman, Mr. F. Hogben, Mr. J. H. Hoyle, Mr. F. R. James, Mr. C. Jewell, Mr. C. F. King, Mr. W. J. King, Mr. A. W. Marriott, Mr. T. M. F. Marshall, Mr. J. W. Matthews, Mr. L. Milne, Rev. C. L. Money-Kyrle, Mr. W. T. Perry, Mr. Percy Pritchard, Mr. Walter Pritchard, Mr. W. P. Pritchard, Mr. J. Scott, Mr. C. W. T. Simpson, Mr. H. Skyrme, Mr. P. B. Symonds, Mr. A. H. Tickle, Mr. W. Ridley Thomas, Mr. A. U. Zimmerman, Mr. George Marshall (Honorary Secretary), and Mr. W. E. H. Clarke (Assistant Secretary).

Proceeding through Whitchurch the party alighted at the Lodge at Wyastone Leys and ascended the Little Doward to inspect the Iron Age Camp which crowns the hill. En route, the company tarried to inspect some massive conglomerate rocks, similar in constitution to the famous Suckstone, one of the largest individual conglomerate rocks in the world, on the other side of the Wye from this spot. Here Mr. Arthur Bennett, of Upper Colwall, spoke on the subject of the geology of the district, and particularly of the succession of the three palæozoic beds—the Silurian, the Old Red, and the carboniferous—described the great earth movements which affected their original disposition, and the denudations through millions of years which resulted in the outcropping beds as they are seen to-day.

On reaching the Camp, the Honorary Secretary pointed out that it was the site of one of those Iron Age enclosures which are to be found up the course of the Wye to Hereford, and then up the Lugg. The surrounding vallum was large and in a fairly

perfect state. A low bank divided the camp into two unequal parts. The lower and lesser south-east portion was bounded by sheer precipices of limestone rock which rendered a vallum unnecessary. The area of the fortification is about twenty-six acres. May Day celebrations were held here in the 18th century. Few things had been found on the site but Mr. P. B. Symonds had picked up a flint which is now in the Hereford Museum, and spear heads and many coins of Victorinus (A.D. 265-267) are said to have been found here.¹ There are three round mounds in the camp, possibly the three which were dug into about 1800, when nothing was found; and three rectangular ones possibly artificial for rabbit burrows. Unfortunately the earthwork had been considerably damaged when Mr. Richard Blakemore, a Bristol shipmaster, bought the property about 1830 and constructed a drive up to the camp—a very considerable undertaking—to gain access to an iron tower 70 ft. high which he erected with the notion (a mistaken one) that he would be able to see from that vantage point his ships sailing up and down the Bristol Channel. What remained of this tower was demolished in recent years. It was one of those sites where, if excavations could be carried out, something might be learned of its history.

The walk, continued round the perimeter of the camp site, took the company over the limestone outcrop, and they paused to examine an example of the *Pyrus aria*, or white beam tree, belonging to the pear and apple family, and a somewhat rare specimen usually to be found growing on limestone soil. On the way down a rather steep and rocky path, giving fascinating vistas of the Wye between the trees, there was another short halt to observe, under the direction of the President, some peculiarities of the wood ant, hereabouts found in abundance. The nests here were built of pine needles.

The members then drove to the Great Doward, where, at King Arthur's Cave, Mr. P. B. Symonds read a paper, which will be found printed in this volume, giving an account of the excavations carried out by him in conjunction with the Bristol Spelæological Society in 1925 and following years on this very early prehistoric site.

At Symonds Yat lunch was served at The Wye Rapids Hotel, after which the business of the Club was transacted.

The following new members were elected:—Rev. T. M. F. Roberts, Kenchester Rectory; Dr. A. W. Langford, 5, St. John Street, Hereford; Mr. T. H. Higgins, Glaslyn, Broomy Hill,

¹ For further particulars see *The Transactions*, 1884, pp. 213-217, and plan; *Duncumb's History of Herefordshire*, Hundred of Wormelow, Lower Division, part i, pp. 17, 18.

Hereford; Mr. G. B. Cooper, 9, King Street, Hereford; Rev. H. L. Ingham, Dewesall Rectory; and Engineer-Commander J. Smith, R.N., Kington House, Weobley.

The following gentlemen were proposed for membership:—Mr. George D. Taylor, Whitney-on-Wye; and Mr. H. Pugh, The Firs, South Bank Road, Hereford.

The party then divided, some proceeding on foot to The Yat, where the earthworks were inspected and the view enjoyed, others walking down the river to see some of the tallest specimens in the country of the English elm (*Ulmus campestris*) growing at the Doward near the Dropping Well, to which attention had been drawn by Miss Eleanora Armitage of Dadnor, and also to see a cave not far from the river bank.

Returning to the Wye Rapids Hotel for tea, a paper was read by the President on "Shad", which will be found printed in this volume.

The thunderstorm and torrential rain having somewhat abated, the members returned to Hereford.

THIRD FIELD MEETING (LADIES' DAY).

THURSDAY, JULY 25TH, 1935.

WORCESTER.

The Third Field Meeting (Ladies' Day) was held in the City of Worcester.

Those present included: Captain F. B. Ellison (the President), Mr. C. E. T. Booth, Miss Cadwallader, Mr. H. J. Davies, Rev. and Mrs. W. S. Dew, Mrs. Dill, Dr. H. E. Durham, Mrs. F. B. Ellison, Mr. and Mrs. T. B. Fox, Mr. G. A. Hall, Mr. and Mrs. G. W. Hardy, Mr. Frank Hogben, Mr. Alex. Johnston, Mr. Colin Maclaverty, Mr. A. W. Marriott, Mrs. George Marshall, Mr. H. J. Powell, Mr. J. Pritchard, Rev. and Mrs. G. B. E. Riddell, Rev. W. and Miss Rowlands, Mr. G. McNeil Rushforth, Mrs. Salisbury, Mr. J. Scott, Miss Scott, Mr. H. Skyrme, Mr. and Mrs. C. N. T. Simpson, Mr. J. Smith, Captain O. B. Wallis, Mr. George Marshall (Honorary Secretary), and Mr. W. E. H. Clarke (Assistant Secretary).

At Worcester the party were met by Mr. G. McNeil Rushforth, F.S.A., who acted as guide throughout the day. The first place visited was the Guildhall, built in 1721 from designs by the architect Thomas White of Worcester. The front is stucco and in three niches are statues of Kings Charles I and II and Queen Anne: the latter was on the old Hall. The walls of the hall are adorned with suits of armour taken at the battle of Worcester, and other interesting pieces, and an instrument of torture known as the branks, to punish scolding women. In other rooms were seen old Worcester china, plate, insignia of office and other objects. On the walls were many portraits, including one of King George III by Sir Joshua Reynolds; Robert Howarth in his official robes as Sword Bearer, about the year 1755, wearing a "Cap of Maintenance" adorned with ostrich plumes, which is always kept on the head on ceremonial occasions; Sir Edward Elgar, Master of the King's Music, and many other Worcester celebrities. A long series of Worcester charters and historical documents were specially on view.

Proceeding to the Cathedral, Mr. Rushforth described the architectural features of the building and the chief objects of interest, and gave a learned discourse on the many figures that adorn the magnificent tomb of Prince Arthur, who died at Ludlow Castle and was brought to Worcester for burial. The Guest Hall and the Edgar Tower were also seen.

After lunch at the Cadena Café, the business of the Club was transacted.

The following new members were elected:—Mr. H. Pugh, The Firs, South Bank Road, Hereford; and Mr. G. D. Taylor, Whitney-on-Wye, Herefordshire.

In the afternoon, the 12th century church of St. Alban, the Gothic church of St. Helen, *circa* 1450, the classical churches of St. Swithin's, built in 1736, with a fine three-decker pulpit, and of St. Martin's, dating from 1772, and also the old timber house, The Friary, for which efforts are being made to save from demolition, were visited. The party then saw over the Royal Porcelain Works, after which tea was served in the Café annexed.

The return journey was made to Hereford, *via* Malvern.

FOURTH FIELD MEETING.
THURSDAY, AUGUST 29TH, 1935.

ROWLSTONE AND WALTERSTONE.

The Fourth Field Meeting was held to visit Llancillo Church and objects of interest at Rowlstone and Walterstone, including the Iron Age Camp at the latter place.

There was a large attendance of members and their friends, including the following:—Captain F. B. Ellison (the President), Mr. J. Arnfield, Mr. W. H. Banister, Mr. E. Battiscombe, Mr. C. H. Betteridge, Mr. W. Betteridge, Rev. C. H. Binstead, Mr. G. M. Brierley, Mr. I. Braby, Mr. G. H. Butcher, Rev. J. Foster-Carter, Dr. J. S. Clarke, Mr. M. F. Clarke, Mr. W. J. Clarke, Mr. A. Cleghorn, Mr. G. B. Cooper, Mr. H. J. Davies, Mr. R. F. Dill, Dr. H. E. Durham, Mr. W. G. Farmer, Rev. W. R. Gledhill, Mr. G. A. Hall, Brig.-General W. G. Hamilton, Mr. C. J. Harding, Mr. T. H. Higgins, Mr. J. H. Hoyle, Rev. E. A. Hughes, Mr. T. E. Jay, Mr. G. F. Averay Jones, Mr. Alex. Johnston, Mr. W. King, Mr. L. A. Knight, Mr. W. F. Lloyd, Mr. W. Garrold Lloyd, Mr. T. D. Morgan, Mr. M. W. Musgrave, Rev. Preb. T. H. Parker, Mr. G. W. Perkins, Mr. Percy Pritchard, Mr. Walter Pritchard, Mr. H. Pugh, Mr. E. Romilly, Rev. D. Ellis Rowlands, Mr. C. W. Simpson, Mr. H. Skyrme, Mr. H. F. Stewart, Rev. J. W. Stewart, Mr. T. Southwick, Mr. J. D. Taylor, Dr. C. W. Walker, Mr. S. E. Warner, Mr. F. Whiting, Mr. J. B. Willans, Rev. A. J. Winnington-Ingram, and Mr. George Marshall (Honorary Secretary).

The members drove to St. Peter's Church at Rowlstone, where the HONORARY SECRETARY made a few remarks on the building. He said it was a Norman structure dating from about 1145-1150, but the tower was a later addition or rebuild of the latter half of the 16th century. The upper storey of this tower was originally of timber, like those at Skenfrith and Orcop, but at some later period the timber framing was filled with brick nogging and encased with stone, which slightly overhangs the rest of the tower. The most curious feature of the church is the pair of 15th century candle brackets, for five pricket candles each, the one on the north wall being adorned with cocks and that on the south wall with what may be hens. It might be thought that the cocks were in reference to St. Peter, to whom the church is dedicated and whose image would have been on a bracket to the north of the altar, but Mr. Rushforth said his emblem was invariably a key. This iron work has been painted in recent times, but

whether the colouring followed an original scheme is unknown. Two of the bells have pre-Reformation inscriptions, but are probably of 17th century date. An old silver chalice was stolen in 1836 by one John Pritchard, who melted it down. Some of the silver was recovered and sold for £1, and a cup to replace it, hall-marked twenty years earlier, was bought for £4 2s. 0d.

Mr. G. McNEIL RUSHFORTH said that he had visited the church some years ago with Mr. John Bilson, a noted expert on 12th century architecture. Consequently it was on this authority that he dated the church between 1150 and 1175. He pointed out the carvings on the arch separating the nave from the chancel; it was from these carvings that Mr. Bilson had drawn his conclusions. Next to the capitals of this arch are panels of a saint and an angel, the figures on the south side being inverted. He could offer no explanation as to why the one panel was inverted unless it were a mistake of the sculptor, although one of the party had suggested that the scene represented the angels ascending and descending the ladder of Jacob's dream, in which the arch would be the ladder. The tympanum over the south porch was similar to those at Shobdon and St. Giles' Almshouses, Hereford. That at Shobdon is known to have been made during King Stephen's reign, thereby dating from about 1150.

The drive was continued to "Arcadia", from which point the party walked across fields for three quarters of a mile to Llancillo church, which lies in a very narrow valley. Immediately below the church is a large Norman motte with indications of a moat and a bailey. The church is an early Norman building consisting of nave and chancel. The angles of the west wall of the nave and a few feet of the north wall have been rebuilt and the doorways and windows altered. In the bell-cote are two bells, one of which is a very long-bodied bell, nearly certainly dating from the 12th century, and, may be, coeval with the church. There is a good dug-out chest with a lid in one piece, and hasps for the two locks with which it was once fitted. This chest deserves better treatment than to be used as a receptacle for storing coal. There are two pewter patens eleven inches across, each provided with a foot, three and a half inches high, and engraved in the centre in a running script "Llancillo". There are two exactly similar patens at Rowlstone with "Rollstone" on them. A pewter plate sixteen and a half inches across has "S.P." scratched on the back.

Mr. GEORGE MARSHALL called attention to the large motte adjoining the church, and said that there were probably more of such earthworks in the small area lying adjacent to the Black Mountains than in any other similar sized district on the border. It would seem that the Lord Marchers of Ewyas Harold, Ewyas Lacy, and Clifford parcelled out their land to their followers,

who were encouraged to construct fortified dwellings in this form on their holdings to keep in subjection the natives who were hostile to these Norman invaders. A study of the methods of occupation of the land along this border would prove of great local historical interest.

Returning on foot to the cars the drive was continued to the Iron Age Camp at Walterstone, where the party were met by Mr. R. Tickle, the owner, who conducted them round the earthworks, which are composed of three vallums and ditches, the whole area being rather under ten acres in extent. A few years ago the interior of the camp was dug over and planted with flowering and other shrubs, but it is said nothing was found but some Elizabethan pottery.

After an alfresco lunch the business of the Club was transacted.

The following gentlemen were proposed for membership:— Mr. Charles Swales, Kyrle House, Kyrle Street, Hereford; and Mr. Arthur H. Griffiths, Overdale, Three Elms Road, Huntington, Hereford.

Mr. E. BALL reported having found *Sedum Telephium* in a lane near The Forge at Titley. Duncumb calls this plant "Orpine stone-crop", and the *Herefordshire Flora* "Live long".

Dr. H. E. DURHAM read a paper entitled "On Mistletoe", which will be found printed under "Papers" in this volume.

Captain F. B. ELLISON reported further discoveries he had made in the history of the Brecon-Kington Tramway.

Leaving the camp, the next stop was made to visit Walterstone Church.

Mr. RUSHFORTH drew attention to an heraldic shield in one of the windows and said it appertained to the Cecil family, who came from Alltynyns, a house hard by. A second cousin of William Cecil, 1st Lord Burghley, left him the house, he being without male issue. Apparently, Burghley sent two stained-glass windows, with his coat of arms inlaid, to the house, for these were formerly in the parlour. Now, one is in Walterstone Church and the other in Hereford Museum.

A motte similar to that at Llancillo, lying on the other side of the road to the church, was then inspected, after which the party drove to the Skyrrid Mountain Inn, a 16th century house with a fine staircase.

Here tea was served, and afterwards the return journey was made to Hereford, which was reached about 6.30 p.m.

EXTRA MEETING.

SATURDAY, OCTOBER 5TH, 1935.

IRON AGE CAMP AT POSTON, VOWCHURCH.

This meeting was held to inspect the results of this year's excavations, and the finds obtained during the autumn on the Iron Age Camp at Poston, under the direction of Mr. R. S. Gavin Robinson and the Honorary Secretary.

The line of the inner ditch had been traced further to the west and trial trenches dug to locate the entrance on the west side of the camp. What appeared to be a roadway was located on which was found a number of shoe nails, an iron axe, and other objects. A hut site was partially unbarred between the inner and middle ditches.

A full Report on these excavations will be printed at a later date.

THIRD WINTER MEETING.

THURSDAY, NOVEMBER 21ST, 1935.

LANTERN LECTURES :

1. " DRAGONS ON ROODLOFTS."
By H. E. DURHAM, Sc.D., M.B., B.Ch., F.R.C.S.(Eng.).
2. " DISCOVERY OF A HUMAN SKELETON AT POSTON, VOWCHURCH."
By R. S. GAVIN ROBINSON.

The above lectures were given in the Woolhope Club Room at 5.30 p.m., and were illustrated with lantern slides.

Dr. H. E. DURHAM gave his lecture on " Dragons on Roodlofts ", which opened up a new field of research into the distribution and significance of the combination of vine and dragon to be found frequently on the roodlofts of the 15th and 16th centuries in Herefordshire and the border counties.

Captain F. B. ELLISON, the President, in moving a vote of thanks to Dr. Durham, said he had learned much about dragons that he did not know before.

The lecture will be found printed under " Papers " in this volume.

Mr. R. S. GAVIN ROBINSON followed with an account of the discovery of a human skeleton at Poston. He said that on July 26th last a workman engaged in quarrying at Poston reported that he had found a piece of bone. He went to the quarry, which is situated near the road nearly opposite Poston Mill, and after a search uncovered a long bone and the fingers of a left hand. He left this until the next day, and then with the help of several members of the Woolhope Club, cleared the burial. The man had been buried in a coffin or bier fastened with iron nails, lying at full length on his back, with his feet pointing due north; his head and feet were inclined towards the left, or west side (*vide* illustration). Apparently the ground had been cleared for the burial, down to the limestone rock through the rubble and marl, and after the coffin had been placed in position, the rubble and marl were heaped in a narrow mound over the body. This rubble and marl set again in the course of years and acted practically as a covering of cement over the burial, eighteen inches thick at the middle, becoming shallower at the head, which was only nine inches below the surface.

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Photo by

SKELETON OF A MAN FOUND AT POSTON, *in situ*.

F. C. Morgan, F.L.S.

He did not think the ground had ever been ploughed; the site was a hundred yards north west of the hollow way leading from the Poston Iron Age Camp.

No pottery but twenty pieces of iron were found with the burial, and a curious feature was four small iron spikes at the left knee. It seemed possible that these might have been spikes of a mace, or weapon of a similar nature. One tiny piece of flint was found among the right ribs. This might have been part of a broken weapon, but as it was only $\frac{1}{4}$ -inch long and 1-16-inch thick, it was impossible to say anything definite.

He had submitted the skeleton to Mr. L. H. Dudley Buxton, M.A., F.S.A., of Oxford, who had kindly made the interesting subjoined report upon it:—

"The remains are those of an adult man of fine physique. There is no indication, from what survives, of damage to the bones during life, nor of any marked disease, so I cannot tell whether he died by violence or natural causes. He was probably about five feet four tall. His head was rather smaller than I should have expected, probably because after all he was rather shorter than the average. I could not reconstruct his skull sufficiently well to give an exact cephalic index, but he was certainly mesocephalic, probably the index was about 77 or 78. There is no trace whatever of any dental disease, a condition so free from such trouble is uncommon even among our forbears, but the grinding surfaces of the teeth were much worn, due no doubt to the hard food which he ate, or to grit from the grindstone being baked in the flour from which his bread was made. Further than this the incisor teeth, that is the front biting teeth, met edge to edge, not with the slight overlap which is normal, though not perhaps invariable, today. Sir Arthur Keith has suggested that the edge to edge bite persisted in England till Elizabethan or even slightly later times and it has been further suggested that the change to the modern form of bite was due to the introduction of forks. There is another interesting point. In early times chairs were a luxury used only by eminent people, the commoners squatted on their haunches, as still do modern primitive people. Such a method of resting causes extreme flexion of the thigh and leg and the pressure of bone against bone within the joints produces what are technically known as pressure facets, small flat smooth surfaces which are not present in normal modern bones. These facets are well marked in the specimen before me. Judging from these and the condition of the teeth it is practically certain, together with other small technical points, that we are not dealing with a modern man. From the shape of the skull I should be inclined to suggest that the remains are either Romano-British or Saxon, but Saxons are usually buried with some form of grave furniture. The differences physically between the Saxons and the Romano-Britons are slight. Of course in the west of England the older types and cultures survived longer. Here in Oxfordshire I should have said it was probable that the remains were dated somewhere between say 50 B.C. and 400 A.D., with a greater probability that it was second or third or fourth century. Elsewhere such precision is not so easy and I must be contented with suggesting that there is every probability that you have either a Romano-Briton or a Saxon. More likely the former, but not certainly."

In view of this report and of the similarity between the Poston burial and a record of a similar burial by General Pitt Rivers, definitely classified as a Romano-British burial, and taking into

consideration the fact that the Poston burial is only one hundred yards from the hollow way leading from the Romano-British Camp at Poston, they might fairly definitely decide in favour of it being a burial of the Romano-British period.

The lecture was illustrated by slides from excellent photographs by Mr. F. C. Morgan.

Captain H. A. GILBERT reported that he had a letter from Sir Charles Venables-Llewellyn saying that Mr. Hastings Smith, of Aberystwyth, had seen an osprey in September last at Pwll Dwrgi on the Wye near Llowes Farm, and again near Clyro, and that he had reason to believe this was a correct observation.

Captain F. B. ELLISON said he saw two cormorants flying up the Wye near the New Weir, Kenchester, on October 7th last.

A vote of thanks having been accorded the lecturers, the meeting terminated.

WINTER ANNUAL MEETING.
TUESDAY, DECEMBER 17TH, 1935.

The Winter Annual Meeting of the Club was held in the Woolhope Club Room, in the Hereford Public Library, on Tuesday, December 17th.

There were present: Captain F. B. Ellison (President), Mr. W. H. Banister, Mr. F. Boddington, Mr. C. E. T. Booth, Mr. S. J. Bridge, Mr. G. M. Brierley, Mr. G. H. Butcher, Mr. G. F. Carver, Mr. H. J. Davies, Dr. H. E. Durham, Rev. T. E. Ellis, Rev. C. Ashley Griffith, Mr. G. H. Grocock, Mr. T. Higgins, Mr. J. H. Hoyle, Rev. E. A. Hughes, Mr. F. R. James, Mr. Alex. Johnston, Rev. J. H. T. Kilgour, Mr. G. Humphry Marshall, Mr. H. R. Mines, Mr. F. C. Morgan, Rev. Canon W. E. T. Morgan, Captain W. C. Mumford, Mr. M. W. Musgrave, Mr. Walter Pritchard, Mr. H. Pugh, Rev. G. B. E. Riddell, Mr. R. S. Gavin Robinson, Mr. G. McNeil Rushforth, Mr. H. Skyrme, Mr. T. Southwick, Rev. C. H. Stoker, Lieut.-Colonel O. R. Swayne, Dr. C. W. Walker, Captain O. B. Wallis, Mr. George Marshall (Hon. Secretary), and Mr. H. J. Powell (Acting Assistant Secretary).

On the proposition of Dr. C. W. Walker, seconded by Mr. J. H. Hoyle, and supported by Mr. George Marshall, Mr. R. S. Gavin Robinson was elected President for the ensuing year.

The other officers of the Club were elected as follow:—Vice-Presidents: Captain F. B. Ellison, Mr. G. McNeil Rushforth, Rev. Canon W. E. T. Morgan, and Lieut.-Colonel O. R. Swayne, D.S.O.; Central Committee: Rev. Canon A. T. Bannister, Mr. F. R. James, Rev. C. H. Stoker, Dr. H. E. Durham, Rev. G. B. E. Riddell, Captain H. A. Gilbert, Mr. F. C. Morgan, Captain O. B. Wallis, Mr. Walter Pritchard, and Dr. C. W. Walker; Editorial Committee: Mr. George Marshall, Rev. Canon A. T. Bannister, Rev. G. B. E. Riddell, and Dr. H. E. Durham; Hon. Treasurer: Mr. F. R. James; Hon. Auditor: Major E. A. Capel; Hon. Secretary: Mr. George Marshall; Hon. Librarian: Mr. F. C. Morgan; Hon. Lanternist: Mr. F. C. Morgan. Mr. Walter Pritchard was appointed Editor for Archæology in place of the late Mr. Alfred Watkins.

Mr. George Marshall was appointed as delegate to the Society of Antiquaries.

The President announced that the Central Committee had appointed Mr. F. Boddington, Assistant Secretary, in place of Mr. W. E. H. Clarke, resigned.

On the proposition of the Honorary Secretary, an honorarium of five pounds was granted to Mr. H. J. Powell, who had acted as Assistant Secretary during the past three months.

Two Field Meetings were fixed, one to take place in the Cotteswold district, and the other at Eastnor for the study of Natural History, or if it were found more suitable, to see a Bird Sanctuary near Bishop's Castle.

Dr. C. W. WALKER read the following Natural History notes on Birds, etc., which he had made during the past year:—

January.—The mildness of the winter was responsible for reports of precocious spring activity among birds, and some abnormally early appearances. Thrushes', blackbirds' and robins' nests with eggs were found; a blackbird was heard in full song on the 20th, and a chaffinch on the 22nd. On the 16th Dr. Clark, Weobley, saw a ring ousel at Sarnesfield.

February.—Woodcock were seen in their spring or "roding" flight on the 4th by Mr. Gavin Robinson, and rooks were mating during the first days of the month. On the 12th a swallow was seen at Bosbury by Miss Robinson and others.

April.—In spite of such records the vast bulk of migrating birds arrived at normal dates: *e.g.* at Hereford: chiff-chaffs on 27th March; willow-wrens on 7th April; cuckoo on 12th; sand-martins (late) on 13th; house swallow and common sandpiper on 14th; house-martins on 19th; nightingale's song on 22nd. Swifts were early, being seen on 19th April and every day afterwards in small numbers on passage, until the main body arrived about 1st May.

May.—Cold weather delayed later migrants' arrival. Red-backed shrike first seen on 12th; very few spotted flycatchers until late in the month. A greater spotted woodpecker nested and (in June) brought off its brood in the Conservative Club's garden, Church Street, Hereford!

July.—This has been a "Crossbill year" in this region. Capt. H. A. Gilbert saw a party of these birds at Bishopstone on 18th July. Mr. McCormack saw a party of about 12 to 20 crossbills at Maeslwch on various dates in August.

August.—Swifts left as usual at the beginning of the month, but passing flocks were noted over Hereford until the very end of the month on 24th, 25th, 30th and 31st—late dates. A peregrine falcon was seen to pass over Hafod Road, Hereford, going north, on the 25th—an unusual sight, as the nearest eyrie is over twenty miles away.

September.—The gale of the 16th brought several unusual stray birds. On the morning of the 17th Dr. G. A. Tullis saw a gannet on his garden path: it was uninjured and flew away due westwards. On the 18th Mr. T. Powell found and handed to the Curator of the Hereford Museum the body of a Manx shearwater (Eardisland). Cormorants were seen by different observers on the Wye near Hereford on or about the 19th. On the 21st a hen hobby was shot near Leominster and shown to the Curator. This is only the fifth record of this harmless little falcon which has come to the Club in the last five years: three of these were shot; only one of these records related to a pair that bred successfully in the county.

November.—The floods in the Lugg Valley attracted large flocks of black-headed gulls, peewits and golden plover; also curlews, widgeon and teal in unusual places.

Mammals: The rabbit plague continued this year, and there are many reports of a considerable increase of stoats and weasels as a result. (N.B.—Buzzards appear to be slightly on the increase in the county, perhaps also from this cause.) A grey squirrel was trapped on Nov. 1st at King's Pyon, and five have been shot near Fownhope. No more has been heard of the musk-rat.

In the absence of Captain Gilbert, the following note submitted by him on a hybrid pheasant was read by the Honorary Secretary:—

The bird was shot at Cusop on the Herefordshire border by Captain Vaughan Phillips, and is now the property of the Hereford Museum, where it may be seen. Dr. P. R. Lowe has made the following observations on this hybrid:—

"The bird is immature and is undoubtedly a male, for it was sexed by Mr. Morgan when he skinned it, and, in addition, one may see an enlarged oval plaque-like scale on the hinder part of the tarsus, indicating the spot where the spur would have subsequently broken through, if spurs ever do appear in these hybrids. Captain Gilbert thought this cross was between Black Cock and Hen Pheasant. He has been kind enough to send me a letter from Captain Vaughan Phillips in answer to enquiries relative to its parentage. Captain Phillips says: "I agree with you in nearly all cases—it is Black Cock and Hen Pheasant. But in my case, No! as the bird I shot got up with a Grey Hen (the Grey Hen was not shot at). A Black Cock had not been seen there for a long time before; neither have I seen the Grey Hen since—I believe she was the last one there. I have not seen any for miles around that part for many years."

This, of course, is not absolutely conclusive evidence of the parentage, but it is, I think, very strongly in favour of its being Cock Pheasant and Grey Hen.

There is one other point. All the birds I have seen so far were males, and so were all the illustrations of others I have seen, and I feel strongly inclined to think that most, if not all, of the examples recorded by the Rev. F. C. R. Jourdain (*Zoologist*, x., 1906, pp. 321-330; *l.c.* p. 433; and *British Birds*, vi., 1912, p. 146; see also Bull. *B.O.C.*, lii., 1931, p. 6) as females were more than likely young males wrongly sexed originally, without dissection, as females. I hazard this suggestion because I believe that it is possible in crosses for only one sex (*e.g.* males) to be invariably, or almost invariably, thrown.

In support of this idea, which I rather think is novel among birds, I may mention, as examples among mammals, tortoise-shell cats, which are almost invariably females, and ginger cats, which are almost invariably males."

On the recommendation of the Central Committee it was decided to make a grant of £14 to defray the expenses incurred by Mr. R. S. Gavin Robinson and the Honorary Secretary for the excavations at Poston Camp this year.

The following were elected Members:—Mr. Charles Swales, Kyrle House, Kyrle Street, Hereford; Mr. Arthur H. Griffiths, Overdale, Three Elms Road, Huntington, Hereford; and Mr. A. T. Cheese, Moor Farm Lane, Hereford.

The following were proposed for membership:—Mr. Nugent Armitage, Silverhope, Hinton, Hereford; and Mr. W. F. Morris, Tyn-y-craig, Lingen Avenue, Hereford.

On the proposition of the Honorary Librarian, it was decided to dispose of the larger part of the remainders, nearly 250 in number, of the late Mr. Alfred Watkins' book *Old Standing Crosses of Herefordshire*, to the best advantage. The matter was left in the hands of the Hon. Librarian, the Hon. Secretary and the President to deal with.

The Honorary Librarian requested that Public Libraries, Universities, kindred societies to the Woolhope Club, and such like institutions, might, on registering their names, be provided with the *Transactions*, and other publications, issued to the members without extra payment, on payment of an annual subscription of ten shillings. This was agreed to.

The HONORARY SECRETARY reported that the Norman tympanum at Fownhope had now been removed from the outside west wall, which had been made good, and was in the church awaiting erection. He had intended, with the consent of the Vicar and churchwardens, to have it let into the north wall, west of the nave doorway, where it would have been in a good light, but on removal it was found to be a foot thick, and it was considered that it would be inadvisable to interfere with the wall to this extent. He had therefore arranged for it to be placed on two suitable stone brackets at the west end of the nave, underneath the window. When removed it was discovered that the back of the stone was rebated to receive the door, and above this it was dressed smooth, over the necessary area to form an inside plain tympanum.

The HONORARY SECRETARY said that he had been approached by Mr. John Arkwright, of Kinsham, to know if the Woolhope Club would lend their support to a suitable scheme, several of which he had in mind, to commemorate the centenary of the death of Thomas Andrew Knight, which would occur in 1938. The members agreed that some such recognition of the celebrated horticulturist was desirable and that they would do what they could in the matter when the time came.

The HONORARY SECRETARY said that he had been told by the Secretary of the British Archaeological Association that it proposed holding its annual meeting in Hereford during the week commencing the 29th of June next. He thought that the Club might on that occasion welcome this Association and put the Woolhope Club Room at their disposal for their evening meetings.

Mr. F. C. MORGAN suggested that some hospitality might be offered possibly in conjunction with the Museum and Art Gallery

Committee of the Public Library. The members endorsed such action being taken.

The HONORARY SECRETARY reported that a large gravel pit had been opened in the Camp at Sutton Walls, on the right hand of the south entrance, and to the south of the "King's Cellar", and that two skeletons and the skull from another had been brought to light. The former came from near the surface, but the position of the latter was doubtful. He had secured these remains, or the major part of them, and deposited them with Mr. Morgan in the Museum. It was proposed to get an expert report on these remains. No pottery, or other objects, had been found.

Dr. H. E. DURHAM proposed that a consolidated index of the *Transactions* from 1912 to 1935 inclusive be prepared and issued to the members.

The HONORARY SECRETARY said he heartily endorsed such action, which he had had in his mind for some time past. If fewer books were written and more indexes made, the vast store of knowledge accumulated in the past, but now largely inaccessible, would become available to students.

A sub-committee consisting of Dr. H. E. Durham, Rev. G. B. E. Riddell, Mr. F. Boddington, and the Honorary Secretary, was appointed to deal with the matter.

The Rev. G. B. E. RIDDELL presented to the Club a coin, which the British Museum reported to be a double mite of Flanders, late 14th or early 15th century, found in his garden at Barkstone, Overbury Road, Hereford, at a depth of eighteen inches in the gravel; also a scrap book, *circa* 1850, bought at the sale of the late Mrs. Glynn, daughter of Richard Johnson, once Town Clerk of Hereford, containing water colour sketches, prints and cuttings of local interest.

A brochure, *The Life of Blanche Parry*, by Mr. Charles Angel, Bradford, was sent by the author for the Club's library.

These gifts were accepted with thanks.

Mr. WALTER PRITCHARD drew attention to the proposed sale of Gloucester House, in Berrington Street, by the Trustees of the Charity to which it belonged, and asked if the Club could take steps to save it from being destroyed. After some discussion, Mr. Pritchard was asked to keep himself acquainted with what was being done with it, and report to the Club if it were in danger of demolition.

The meeting then terminated.



2 Ft.

CROSS SLAB, LINTON CHURCH. (Fig. 7.)

Woolhope Naturalists' Field Club.

PAPERS, 1933.

MEDIAEVAL SEPULCHRAL MONUMENTS AT LINTON, HEREFORDSHIRE.

By A. D. LACAILLE, F.S.A. Scot.

(Read 10th February, 1933.)

Some years ago I had occasion to inspect the collection of prehistoric and other antiquities brought together by my friend, the late Mr. S. Cooper Neal, at Linton, near Ross-on-Wye. During my stay in the district I took the opportunity of visiting the parish church in order to examine two mediæval sculptured monuments which I knew were preserved within the building.¹ So far as I am aware these monuments are not illustrated in the *Transactions* of any learned society.²

The two ornamented slabs inside the church are not the only carved monuments worthy of record, for other sculptured stones, with interesting characteristics, exist here. Several visits have been made to Linton since my first stay, and it is now my purpose to record the result of my investigations.

Examination of the church and churchyard reveals the presence of a number of sculptured stones, some apparently dating back to the early years of the present church. No monument, however, has been found of a period coeval with an ecclesiastical structure, which, in all likelihood, stood on the site occupied by the actual building.³

¹ G. W. and J. H. Wade, *Herefordshire*, p. 201.

² Since this paper was written, the Royal Commission on Historical Monuments has issued the second volume of the *Inventory of Monuments in Herefordshire*, where the existence of these slabs is recorded, and the one with the shears illustrated on plate 48.—*Editor*.

³ The parish church of Linton, dedicated to St. Mary the Virgin, shows signs of great age, its most ancient features being the massive piers of crude character forming the north arcade. These support plain round arches of later date. A round-headed doorway in the south wall has been built up, but only half of the original opening in the wall is visible. A spire surmounts the square tower within which is groined vaulting. Chimeric heads and figures ornament the corbels, while the exterior of the western door bears carved representations of human heads and the tower several quaint gargoyles.

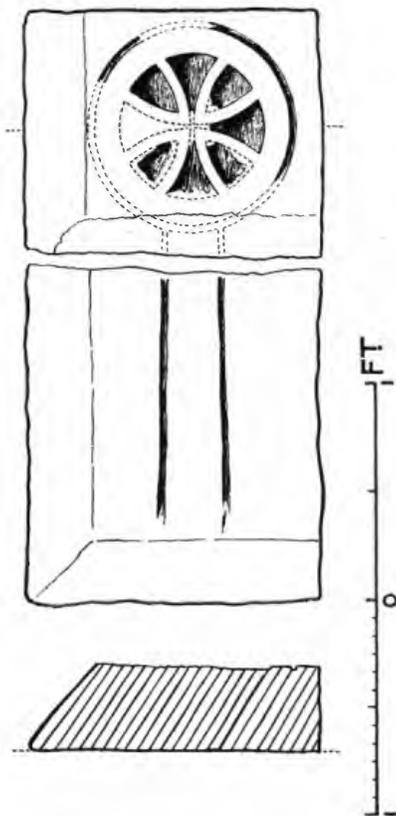
Frequently success rewards search in ancient graveyards for forgotten relics of mediæval times. At Linton two carved monuments of the native sandstone were re-discovered as a result of careful inspection of the graveyard surrounding the church. Ignored hitherto by the antiquary, they have been allowed to serve as coping stones for the walls retaining the cutting forming the western entrance from the road opposite the vicarage. When the monuments were detected, the carved work was all but concealed by vegetation, only vestiges of the sculpturings being visible. Cleared of the turf and mossy growth, the disposition of the very badly weathered carvings became evident.

One of the stones is affected to the degree that only traces of design are discernible; still, the geometric treatment of the Christian symbol is such that restoration presents no difficulty. This monument is $4\frac{5}{8}$ inches thick and is bevelled on one side and at the base for three inches. In shaping the slab to serve in the walling, the modern mason has reduced its dimensions at the top and along one side by cutting away the chamfered parts. Thus the carved stone, in its present condition, measures 2 feet $6\frac{1}{2}$ inches in length and 1 foot $4\frac{1}{2}$ inches in width. What was the original size cannot now be determined with accuracy as the sculpturings do not appear to be placed centrally on the slab. The monument is broken in two unequal parts, the smaller bearing the main or upper portion of the design.

The cruciform figure cut upon the stone has been produced by striking arcs of equal radius at eight points on the circumference of a circle 11 inches in diameter. These arcs, which form the cross, do not meet the enclosing circle. Each interspace between the equal arms of the cross is partly filled in by a figure made up of small arcs, and these in turn are so disposed in their compartments as to convey the first impression that the main symbol is made up of Celtic cords stopped short. When the monument was in good condition, the design, although actually on the same level as the stone, would appear to stand out as if carved in low relief on account of the hollowing out between the components of the figure. The cross is provided with a shaft expanding slightly in width downward. It comprises two shallow incised lines set at 3 inches apart where they join the large circle. Just above the bevel at the base of the slab the shaft is 4 inches wide. The extent of defacement and injury suffered by this monument may be judged from the dotted line restoration of the carved work. (Fig. 1.)

In its essential and plain form this type of cross often appears. Indeed, it figures on some of the earliest monuments of the Christian era in the British Isles. Of the mediæval period, one of the most

To face page 2.



CROSS SLAB, LINTON CHURCH

(Fig. 1.)

typical examples known to me is carved upon a slab found some years ago at Alloway Kirk, Ayrshire.¹

The neighbouring derelict monument is somewhat larger. Although two of its corners are wanting, one damaged possibly by accident, the other by the deliberate removal of a square piece of stone to facilitate the erecting of a wooden gatepost, the slab is otherwise in fair condition. It measures 2 feet 8½ inches by 2 feet 1 inch, and is 4½ inches thick. The stone is bevelled on all its edges, one of the sides being so treated only over a width of 2½ inches, or one inch less than its fellows.

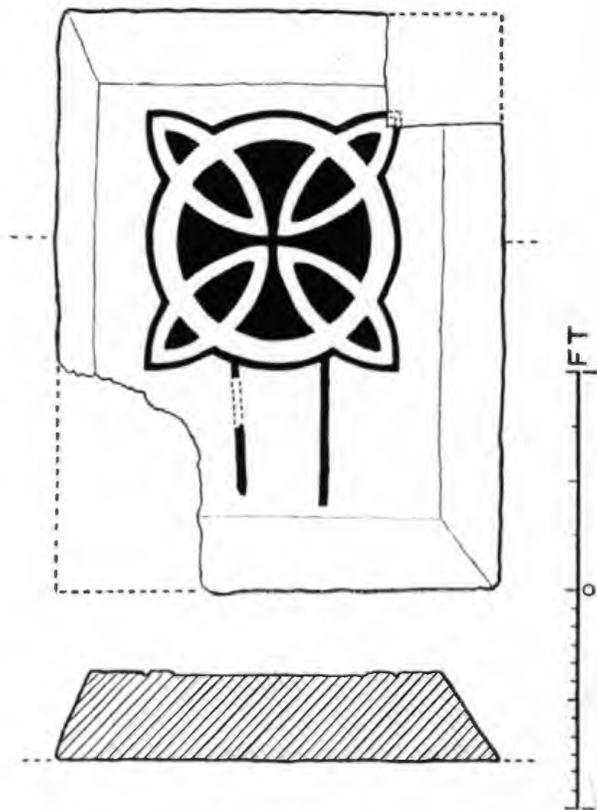
The carvings upon the surface of this small slab were produced in the same manner as those occurring on the preceding monument, but with the additional feature that the arcs extend beyond the enclosing outer circle. The eight arcs meet to form four peaks, thereby emphasising the idea of interlaced cords. As this stone is not so weathered as its partner it may be observed that the shallow hollowed-out portions give the impression of relief to the assemblage forming the cruciform figure. The seemingly raised carving is slightly rounded in section. (*Fig. 2.*)

These two sepulchral slabs (but particularly the second) may be usefully compared with a monument unearthed with many others at Bakewell, Derbyshire.² The Linton examples, although differing in some degree from those belonging to the midland county by default of interlacing of the plaits, may well be contemporary. It may be assumed that the monuments detailed belong to the middle or latter half of the twelfth century.

It does not seem unreasonable to put forward a plea for the removal of these two carved stones to the shelter and preservation accorded other monuments now inside the church. Surely the small outlay necessary to substitute these ancient memorials in the walling would be sufficiently repaid by the knowledge that two of the most venerable relics in point of antiquity connected with the old church are immune from the possibility of further damage by weather or accident, and by the certainty that two monuments of the past are preserved for posterity. Left where they are, not many years will elapse before these sepulchral monuments are as unrecognisable as the fragments of another slab also serving as a capstone in the walling on the north side of the western gateway.

One mediæval carved stone without the church has been rescued and is comparatively well protected in the situation it now occupies. To judge from its appearance, however, the monument was undoubtedly long exposed before being placed against the

To face page 3.



CROSS SLAB, LINTON CHURCH

(*Fig. 2.*)

¹ A. D. Lacaille, *Proc. Soc. Ant. Scot.*, Vol. LXIII, pp. 348-350.

² Rev. Edward L. Cutts, *Sepulchral Slabs and Crosses*, pl. xxxviii, No. 3, and p. 77.

wall at the east end of the church beneath the central window of the chancel. This sandstone slab is small and narrow, 2 feet 6 $\frac{1}{4}$ inches long, tapering in width from 12 $\frac{1}{2}$ inches near the top to 7 inches and standing out 3 inches from the wall. This last measurement is probably equivalent to the thickness of the monument, for the stone is cemented on to the wall and supported at the foot by two iron clamps, rather than incorporated into the structure.

Two equal-armed incised crosses, not unlike "croix-pattées", are carved on the stone, one near the top made up of arcs, and the other, close to the base, composed of straight lines. The upper cross, cut to the depth of $\frac{1}{4}$ inch, is surrounded by a circle 5 inches in diameter. Scrutiny shows that the treatment of the Christian symbol is peculiar. The hollowed portions forming the arms join the circular outline, but they are not so deeply cut out. Between the arms the interspaces appear to be raised above the surrounding surface; this exaggerated effect is due to the cuts which are deep in proportion to the dimensions of the diminutive cross and circle.

The lower cross, incised $\frac{1}{8}$ inch, measures 4 $\frac{1}{8}$ inches vertically and across. It is slightly inclined to one side of the central axis of the slab, but the absence of symmetry does not detract from the appearance of the monument. In its lower part the cross is injured by weathering. (Fig. 3.)

To find a circumscribed cross repeated as a base to the shaft is not altogether rare, and this peculiarity will be noted occurring at Linton.¹ It is unusual, however, for such encircled crosses to be unconnected by a shaft, but at least one instance has been recorded previously from Herefordshire. The case in point consists of a tapering slab at Dore Abbey, which bears two crosses, each one formed of arcs disposed like petals and surrounded by a circle.²

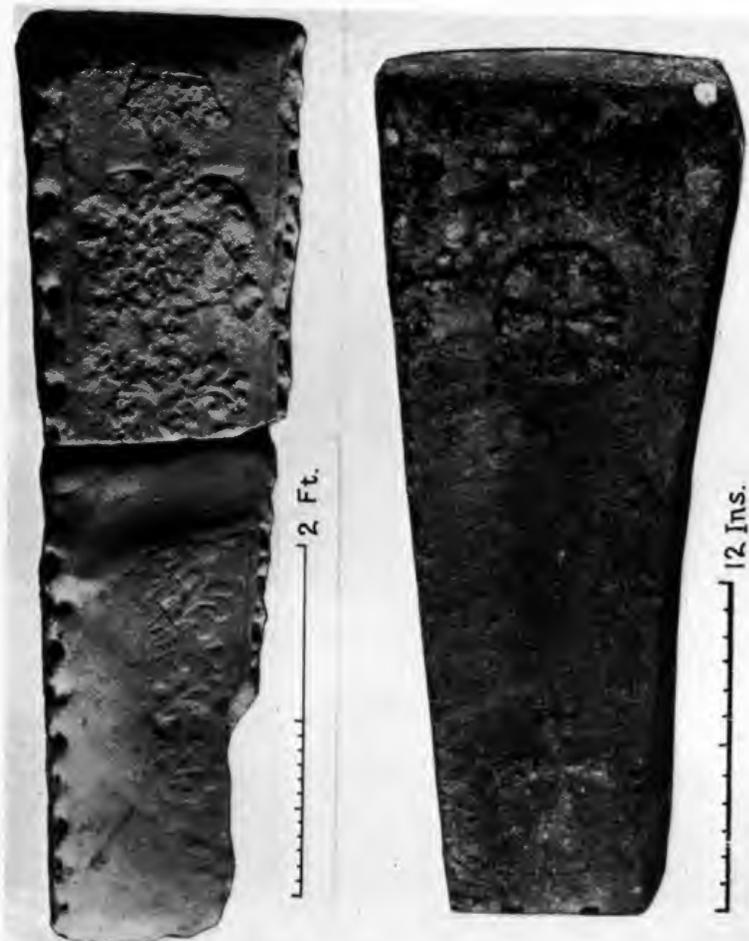
Monuments ornamented with two or more crosses joined by a shaft may be assigned to the craftsmanship of the thirteenth century.

Of the carved monuments inside the church, two, as has been mentioned, were known to be preserved here. As may be supposed, the monuments in question attracted by their ornamentation and size. Unfortunately they have been fractured at some time, and the damage, similar in both cases, must have been wilfully inflicted. On the other hand, it is fair to say that these slabs have been very carefully pieced together, and they now stand supported against the wall near the west door.

¹ *Infra*, p. 5, fig. 4.

² Edward L. Cutts, *Sepulchral Slabs and Crosses*, pl. xi and p. 65.

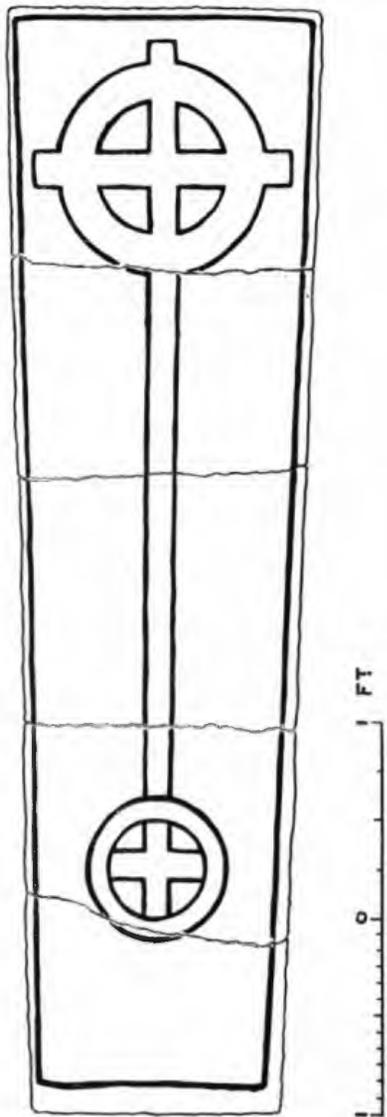
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CROSS SLABS, LINTON CHURCH.

1. (Fig. 9.) 2. (Fig. 3.)

To face page 5.



CROSS SLAB, LINTON CHURCH
(Fig. 4.)

It does not seem that the two monuments can be separated in the matter of age, although the carvings are quite different. One feature they have in common is that of their large dimensions. The plainer of these two monuments is a tapering slab varying from $2\frac{1}{2}$ to 3 inches in thickness, 5 feet $8\frac{1}{2}$ inches long by 1 foot 9 inches at top and 1 foot $3\frac{1}{2}$ inches at its foot. Broken at some time into five unequal parts, the fractured edges have been so skilfully brought together that the incised sculpturings, which almost fill the area prepared for them, are but slightly impaired. The carvings consist of two crosses within circles connected by a long narrow tapering shaft, all represented by paired incised lines. As a whole these markings present a pleasing and well-balanced appearance, and, despite simplicity of lay-out, certain peculiarities are noteworthy.

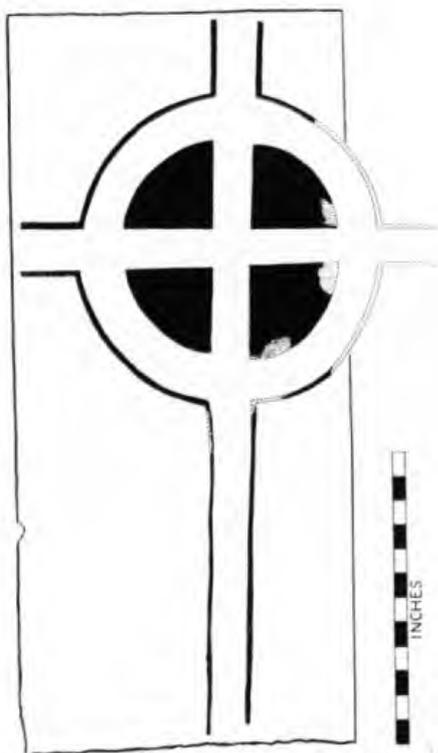
The head and arms of the upper and larger cross project beyond the circle surrounding the cruciform figure without cutting through the line making up the latter. The shaft, on the other hand, is closed at its foot by the circle circumscribing the small cross. The carved group is bounded by a deeply cut but narrow moulding. (*Fig. 4.*)

Before passing to the neighbour of the last monument, it will be well to examine two defaced slabs now built under the window nearer the north porch and to the east of the door. Both present the same type of sculpturings, the cross carved on each resembling the symbol cut upon the long slab standing near the west door.

Inspection of the first of these shows it to have been hewn down to fit into the space between the base of the window and the floor; with its partner it forms a seat within the recess. In its present state it measures a fraction over 2 feet in length; originally its width was probably 18 inches. The carvings consist of a cross with circular head provided with a shaft; all the sculpturings are made up of two incised parallel lines uniformly 2 inches apart and nearly $\frac{1}{4}$ inch deep. The head and arms extend beyond the circle without cutting through it, the extremities being left open. Parts of the markings are wasted away, the friable nature of the native stone having caused much of the surface to flake. Between the arms the flat-bottomed interspaces are hollowed out to a depth of nearly $\frac{1}{2}$ inch. Dotted lines in the illustration indicate what has been restored upon a drawing made from a rubbing. One cannot conjecture with any degree of assurance the length of this memorial before it was reduced in size nor how the shaft was finished off. (*Fig. 5.*)

A very similar carved slab covers the other half of the space. More interesting than its neighbour by reason of elaboration of design, yet the cross it bears is almost a counterpart of that upon the adjacent mutilated stone. In length this example now measures 3 feet 4 inches, but presumably it could never have been much

To face page 5.



CROSS SLAB, LINTON CHURCH
(*Fig. 5.*)

longer as indicated by traces of an incised line forming part of a rectangle enclosing the assemblage of symbols. The head of the cross closely resembles the upper and larger of the two cruciform figures carved upon the great slab standing near the door in the tower, but with this difference, the ends of the cross and head are left open so as to join the moulding near the edge of the stone. Incised lines $\frac{1}{8}$ inch deep feature this circular-headed cross, but where forming the shaft they are shallow and uniformly $1\frac{1}{2}$ inches apart. In many places the outlines are vague, and in others cement fills them. Flaking of the surface, too, has caused partial or complete ablation at various points. A feature worthy of notice is a series of twelve lines deeply cut on the dexter side of the shaft at intervals of nearly one inch and at right angles to it for some way above the foot. One such line appears on the opposite side about a quarter of its length up from the base of the monument.¹ (Fig. 6.)

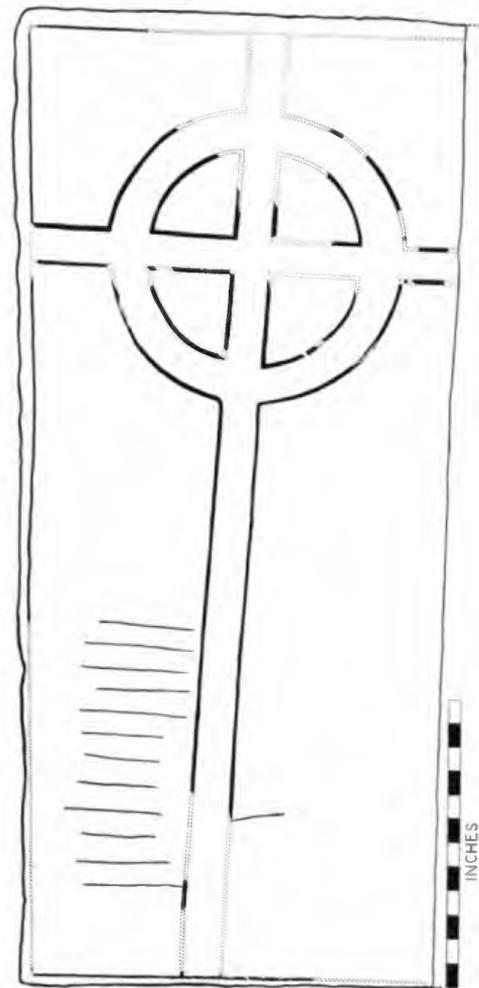
The simple but effective treatment of the Christian symbol on these three monuments does not seem to be common in the later mediæval period. Pre-Conquest instances are not wanting, however, such examples being usually associated with interlaced ornament. Standing crosses, rather than recumbent stones, were the types of later monuments which bore this form of cross.

Returning to the west door of Linton Church, one sees in the second of the monuments, repaired and now standing against the wall, a highly ornate slab profusely carved in relief. As a whole the assemblage of carvings consists entirely of floral and foliaceous ornament in excellent condition except where the slab has been broken across and the fractures brought together and held in place with cement. Tapering from 2 feet $7\frac{3}{4}$ inches at top to 2 feet 2 inches at the base, this monument is 5 feet 9 inches long and averages $2\frac{3}{8}$ inches in thickness. In common with very many mediæval monuments, the absence of symmetry in the carved work in no way detracts from the pleasing appearance of this sepulchral stone, in itself a beautiful specimen of fourteenth century art. (Fig. 7, see page 1.)

Among the varied carvings the principal feature which stands out is a circumscribed and equal-armed cross apparently composed of heraldic emblems. The principal symbol takes the form of a "croix pommée" extended by means of a lance-point conventionally represented and projecting to meet the circle. On either side of the rounded end of the cross, obliquely set and symmetrically

¹ I do not recall any parallel to this peculiarity, but a cross-slab recorded by me in the churchyard of Kilmarnock, Dumbartonshire, in addition to a sword, bears a number of geometrical straight-line figures on the left side below the arm of the principal symbol.—A. D. Lacaille, *Proc. Soc. Ant. Scot.*, Vol. LXI, pp. 137-140.

To face page 6.



CROSS SLAB, LINTON CHURCH
(Fig. 6.)



BIRDS ON CROSS SLAB, LINTON CHURCH. (Fig. 8.)

disposed, is a "jessant-de-lys", its central portion figured also in lanceolate form. In each of the angles, or interspaces between the arms, is a six-petalled flower enclosed in a circle. From four equidistant points on the large circle surrounding the cross drops a cinquefoil bearing stem which almost touches the small circle within the angle.

A sort of shaft is provided by a central stem which comprises two bosses, each one being the centre of a pattern disposed saltire-wise and made up of four jessants-de-lys. The fleurs-de-lys are arranged in pairs, the upper pair pointing obliquely in opposite directions upward; the lower pair is similarly treated, but its components point downward. Originally the lanceolate termination of the shaft at the top would impinge upon the large circle, but the stone here is broken. The lower lance-head points downward and is joined to another with upward turned point forming part of a precisely similar group. The shaft is finished off by a pair of shears, a symbol of common occurrence on mediæval sepulchral slabs.¹ The lower part of the monument is ornamented on the sides with a sinuous stem from which spring conventional six-petalled flowers or five-leaved sprigs. This main stem is carried up to each upper corner of the stone where it terminates in a flower of six petals. A distinctive character is given this stone by the figuring of a bird in each upper corner seemingly perched upon the topmost flower. At first sight the representation of the creature does not seem clear, but upon closer scrutiny the attitude of the bird with head turned to look over the shoulder is obvious. Rubbings have been taken of the surface the better to show the ornithomorphic figures, which, although visible in a photograph lack prominence. A beading encloses the assemblage of sculpturings upon this outstanding memorial. (Fig. 8.)

Also housed in the tower is a mutilated coffin-lid of massive type. I do not think that one could find any other mediæval monument showing more evidence of extensive and wilful damage. In its pristine condition, however, this large monument undoubtedly rivalled the neighbouring ornamental slab in beauty of workmanship. When it is considered what must have been the original appearance of this stone, it may not be dismissed too briefly even in its present state. Broken unequally in two, the monument measures 5 feet 3 inches in length. At the head its width is 1 foot 9 inches and at the foot 1 foot 2 inches, the thickness being fairly evenly $6\frac{3}{4}$ inches. Before mutilation the monument would be 1 foot 4 inches wide at its lower end.

¹ Various interpretations of the shears symbol have been advanced, and these are, no doubt, well known to the members of this Society. Some authorities regard it as a purely feminine emblem, others say that when it appears upon a sepulchral monument it denotes the memorial of one in the wool or clothing trade. The elaborate carvings and the nature of the monument discussed above seem to commemorate a woman of rank.

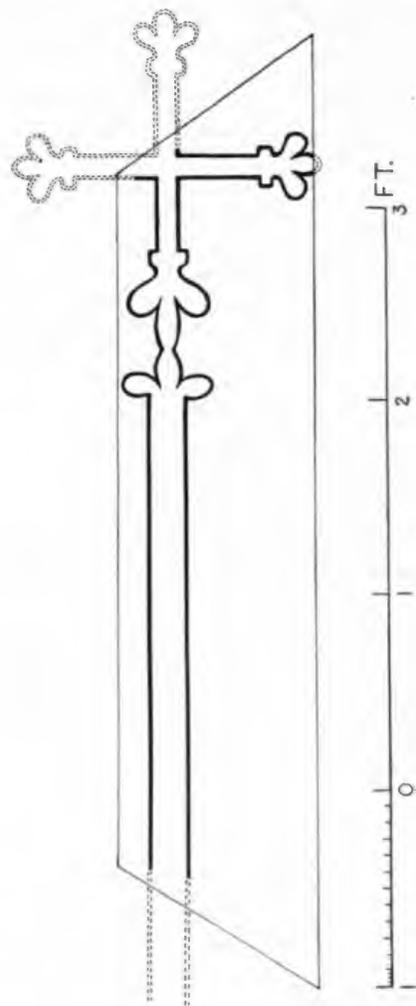
From the upper portion the carvings have been systematically removed with hammer and chisel. There exists proof of similar vandalism on the lower part, from the side of which a long fragment has been detached. Most of the defacement here, however, has been caused by human tread, the stone clearly having long served as a step. Indeed, at one end wear has not only completely obliterated all sculptured work but also very considerably reduced the thickness of the stone.

This relic exemplifies the semi-effigial monument, but the exact nature of the carvings is now difficult to determine. Despite what has been ruthlessly destroyed, the outlines suffice to show that upon the monument was carved in high relief the representation of the upper part of a recumbent human figure, the head resting upon a square pillow, and the hands joined in the conventional attitude of prayer. Extending downward from the middle the outline of a central stem is visible, but the precise character cannot be estimated. Judging from the spacing of the quatrefoils still apparent and springing from the place formerly occupied by the main stem, seven such ornaments occurred on each side. On the dexter below the traces of the human form a fragment of leaf is discernible, but on the side opposite six remain, four still clearly defined. A shallow rebate along all four edges makes it appear that the carvings are enclosed within a panel. (*Fig. 9, see page 4.*)

The head of the stone and the vertical sides of the monument are decorated with quatrefoils carved in high relief and detail. The condition of the monument is now such that its ascription to any definite period must necessarily be in the nature of conjecture, but the carvings identifiable by the vestiges remaining point to middle or late fourteenth century craft.

The defacement of the upper portion showing the faint outline of a human head makes it uncertain whether the monument was the memorial of an ecclesiastic or a layman. But from the remains of profuse ornament it may be inferred that the massive sepulchral stone covered the tomb of one not in Holy Orders. That it did not bear the half-effigy of a woman is evident from the delineation of the hair.

Apparently the latest of the pre-Reformation monuments at Linton is a slab deliberately reduced in thickness and cut down to trapezoidal shape regardless of the carvings upon it. The slab, fitted into the north window of the chancel in its present condition, measures 4 feet 11 inches along its greater length, 3 feet 7 inches on the shorter and 12½ inches in width, and, to judge from the proportions of what still survives of the cruciform design incised upon the surface, the original dimensions of the monument must have been large. The cross takes the form of a degreed "croix-botonnée", but only part of one arm and the lower portion of



CROSS SLAB, LINTON CHURCH

(Fig. 10.)

the upright member now remain to indicate that the Christian symbol is based upon heraldic type. The shaft proper terminates in the same way as the arms, but the central leaf is upturned so as to join the corresponding but downward turned leaf. In this way a pleasing ornament relieves the monotony of what, otherwise, would be a disproportionately long shaft. In effecting a reconstruction it is not possible to hazard a true restoration of the base of the long shaft, as a study of mediæval monuments, which bear this form of cross, shows that the variants are many. The illustration (*Fig. 10*), from a rubbing, shows the absence of symmetry in the cut-out design.

The parish church of Linton and the graveyard surrounding it are, I believe, fair examples of what may be yielded by many parishes. Occasionally a sepulchral monument of outstanding interest is recorded, but in present conditions such references are sporadic and infrequent. Linton cannot be said to be rich in monumental remains, nor that any masterpiece of the mediæval sculptor's art exists here, yet its carved stones are not without interest when they are considered in the light of being integral parts of the story of craftsmanship of the Middle Ages. At Linton the monuments are few, but, on the other hand, the variety is relatively imposing. One may hope that through the efforts of learned societies a record will be made in every parish of the ancient monuments in church and churchyard. Photographs, rubbings and scale drawings of these relics of local expression and rendering of national art throughout the ages could not fail to attract attention if placed in county museums. Such pictorial records, it is believed, would lead to the preservation of these ignored and too often neglected artistic remains of the country's past.

In conclusion, I wish to express my indebtedness to those whose assistance has been so valuable. My regretted friend, the late Mr. Cooper Neal, and the former vicar, the Rev. R. W. Bennett, were good enough to check many of my measurements and kept in touch with me while compiling the first draft of the notes I have had the honour of submitting to you. Mr. Chas. M. Langley, Linton, went to endless trouble to meet my wishes in regard to the taking of photographs in most difficult lighting conditions. Him also I have to thank for revision of many measurements and details. To the Rev. C. D. Lewis, the present incumbent, I am grateful for facilities granted to examine the monuments inside the church.

EARLY HEREFORDSHIRE HEPATIC RECORDS.

By ELEONORA ARMITAGE.

(Contributed, 27th April, 1933.)

After the death of the Reverend Augustin Ley in 1911 some old botanical correspondence came into my hands. Some extracts from this will be interesting to local botanists, showing how *Riccia sorocarpa* became known as a British plant, and details about other rare species.

The letters were written by Dr. Benjamin Carrington, F.L.S., of Eccles, Lancashire, born 1827, died 1893; author of *British Hepaticæ*, 1874-5; and Mr. William Henry Pearson, A.L.S., of Pendleton, Manchester, born 1849, died 1923, author of *Hepaticæ of the British Isles*, 1890-2, to both of whom the study of Hepatics in Britain owes so much.

Their Herefordshire correspondent was Mr. Burton Mounsher Watkins, born 1816, died 1892, who was for fifty years Relieving Officer at Ross and lived at a cottage in Hentland. He was a keen botanist and worked with Ley, and was the author of the *Florula of the Doward Hills*, 1881, with later additions, see *Transactions Woolhope Field Club*, 1881, etc. These papers were on Flowering Plants and Ferns, but, with the Rev. J. F. Crouch, of Pembridge, and Ley, he was an early worker on Bryophytes, being especially interested in the Hepatics (see my "Hepatics of Herefordshire", *Transactions Woolhope Club*, 1925, p. 254, et seq.).

I possess Watkins' interleaved copy of M. C. Cooke's *Easy Guide to the Study of Hepaticæ*, 1865, in pamphlet form, in which he recorded his local gatherings.

I should explain that Watkins used to send Carrington and Pearson specimens for their albums of Hepatics, which they issued to their subscribers at intervals. I have the four volumes which were presentation copies to Watkins from Pearson. They were entitled *Hepaticæ Britannicæ Exsiccatae*, Fascicle I, Nos. 1-75, Manchester, 1878; Fasc. II, Nos. 76-150, 1879; Fasc. III, Nos. 151-215, 1883; Fasc. IV, Nos. 216-290, 1890.

Occasionally, written on the backs of the letters or on scraps of paper are Watkins' draft replies, expressed in accordance with the simplicity of his character. I have no copy of the first letter to Carrington, with which Watkins sent him a *Riccia* for identification, which greatly interested Carrington.

1. B. C. to B. M. W. Eccles, Nov. 26, 1872.—At first view I was struck by the resemblance as to size, shape of fronds, and vivid green colour, between your *Riccia* and one discovered in North Wales by Ralfs . . . in which, when dry, the fronds curl up and show purple scales. On washing one or two shoots, I was astonished to find no trace of the purple lamellæ, so it could be neither *lamellosa* nor *nigrella*. I then turned to Nees ab Esenbeck's *Hepat. Eur.* and Rabenhorst and Gottsche's *Fasc. Hepat. Eur.* No. 23, and found it resembled most *Riccia Sorocarpa* Bisch., described in *Syn. Hep.*, p. 600. [Latin diagnosis follows.] I trust you will find specimens in fruit, if so, please send me a portion. I am glad to have this additional species to publish. I have no *R. Sorocarpa* except from the above No. 23, Vercelli (Piemont), *leg. Cesati*.

2. B. C. to B. M. W. March 11, 1873.—I shall be glad to accept more specimens of your *Riccia*. I see Dr. Braithwaite has published a notice of it in *Grevillea*. But I am not quite satisfied he is correct. I would advise you to send specimens to Dr. Gottsche, Altona, by Hamburg. I have always found him exceedingly kind in answering questions, and he is far our first authority on the Hepaticæ.

3. B. M. W. to B. C. Rough draft of Watkins' reply.—Treadow, Hentland, nr. Ross, Herefordshire, 14 March, 1873. In reply to your note of the 11th instant relative to specimens of *Riccia*, I beg to say I will endeavour to procure you some next week. Please look at the enclosed and, if not troubling you too much, be kind enough to inform me if it is correctly named, if not, what is it? By way of sparing your time in future correspondence, just drop the Esqr. after my name, being an appendage. . . . [Blank.—E.A.]. Were I qualified to correspond with Continental botanists, I should undoubtedly avoid any desire on my part to do so in your favour. Therefore please send specimens to Altona or wherever else you may desire.

4. B. C. to B. M. W. 28 March, 1873.—There is no doubt about your last plant, even a novice cannot easily mistake *Sphaerocarpus terrestris*. [This plant was later called *S. Michellii*. An American writer, Miss C. C. Haynes, in 1910, on examining British specimens, found that our plant is generally *S. texanus*, only separated from the above in 1877. Watkins' specimens, Peterstow, 1862, Sellack, 1881, and Ley, 1872, are *texanus*; but *S. Michellii* has been found in Herefordshire, loc. cit., p. 256.—E.A.] I am very glad to see it, as I am in want of specimens and I do not think any one has found it of late, although it cannot be rare in cultivated fields in the South. *Sphaerocarpus*, unlike most hepaticæ, is annual, so it may not appear twice in the same field. The only other annual species in Britain are the

two forms of *Anthoceros*. I heard a few days ago from my friend Prof. Lindberg of Helsingfors, and he states your *Riccia* to be *sorocarpha*, so I think you may rely upon the name.

I found a rough draft of Watkins' discovery prepared by him for the Woolhope Club, which should be included here: "I beg to send for the inspection of the members of the Woolhope Club a small inconspicuous looking plant, being an interesting addition, not only to the County Flora, but to the Flora of Great Britain, gathered last year (1872) on an exposed limestone cliff at Doward Hill. It is a species of crystalwort named *Riccia sorocarpha* . . ."

5. B. C. to B. M. W. Dec. 14, 1874 (after receiving specimens of *Ricciocarpus natans*).—I wish you could find me fruiting specimens of *R. natans*. I do not see why this should not bear capsules, not on the floating plants but on those attached to mosses, etc. May I also ask you for a further supply of living fronds of this curious species. Mine, kept growing in a tumbler, has strangely altered in form, diminished in quantity and taken on a linear form.

6. B. M. W. to B. C. Draft letter, in reply to above.—I cannot understand *Riccia natans* [later called *Ricciocarpus*]. I have had it in my aquarium for some time and have not been enabled to detect any fertile fronds. As I reside within a quarter of a mile of the habitat of this *Riccia*, I intend to look again carefully, as I have so little faith in my own perceptive powers.

[End of correspondence with Carrington.—E.A.]

The correspondence with Pearson began in 1878.

7. W. H. P. to B. M. W. 115, Church Street, Pendleton, May 31, 1878.—Shall value very much the two hepaticæ you mention for 2nd Fasc. [in which they appeared]. A "set" consists of sixty specimens of *R. sorocarpha*; of *R. natans*, if it is plentiful with you, you might send me as much as you can to make some good specimens.

8. B. M. W. to W. H. P. Draft of letter.—*Riccia sorocarpha* is within four miles north-east of Monmouth. I send you all I have. I have no dried specimens of *R. natans*, neither can I obtain fresh specimens now, the pool being flooded. Last August this plant was in abundance, forming pretty green rosettes about half-an-inch in circumference upon the black mud of a small portion of the pool. I hailed with great pleasure the issue of Dr. Carrington's Book, of which I have received but four parts. [No more was published of *British Hepaticæ*, 1874; the lack of books was discouraging to Watkins.—E.A.] Any specimens which my humble self can supply, you have only to command.

9. W. H. P. to B. M. W. June 11, 1878.—For your specimens of *R. natans* and *sorocarpha* accept my thanks, they will be a

very valuable addition to the 2nd Fasc. Could you send the two forms of *natans*, the floating and the land forms?

10. W. H. P. to B. M. W. March 24, 1879.—Could you favour me with a little more of *R. natans* to make up a set for the next Fasc. upon which Dr. Carrington and I are engaged?

W. H. P. wrote again on April 9 asking for more; also on April 16 thanking for "various forms of *R. natans*", but demanding "as much as you can send me at your earliest convenience." On May 16 he thanks for specimens, but asks for more; and on May 30 he reiterates his demand, which is amplified on June 5 and on June 9; adding as an encouragement: "I shall send you the second fascicle for your trouble"; and lastly, on June 21, he records "thanks for your good specimens of *R. natans*."

The small pool was apparently completely denuded of its *Ricciocarpus*, in the attempt to satisfy the insatiable maw of the fascicle producer. The present writer has visited it from 1915 onwards at all seasons and has found none, but fortunately it has been rediscovered for the county lately elsewhere.

Riccia sorocarpha is now known to be one of the commonest of the genus, and may be found in most stubble fields.

DOG DOORS AND CAT HOLES, WITH SOME REMARKS
ON CHURCHES IN THE MIDDLE AGES.

By the Rev. Canon W. E. T. MORGAN, B.A.

(Read 25th May, 1933.)

The discovery of another dog door at Paignton demands an allusion to the subject by way of explanation and further information.¹ Miss Ethel Hartland, of Gloucester, while taking a holiday at Torquay, visited the very interesting parish church of St. John the Baptist, Paignton. She noticed at the bottom of the north door traces of what she immediately concluded were the remains of the original dog door. The big north door is probably 14th century. From measurements which have been taken the small door is 13½ inches in width and 13 inches in height, or 18 inches in height, if an additional piece at the top, of different wood, be included. The bottom of the big door has been so restored that it is difficult to decide exactly whether this extra piece formed part of the original door. The latch, attached to the little dog door, may be distinctly seen in the illustration.

This discovery was immediately reported to the Vicar, the Rev. Preb. H. M. Drake, who was very pleased and interested and kindly inserted a note in the Parish Magazine describing the door. But he hesitates to accept the theory that it is a dog door, and seems more inclined to favour the idea that these small doors in churches were placed there for the convenience of cats, which might enter our churches in search of rats or mice. It is to discuss this point that this paper is mainly written. Objection has also been raised to the presumption that these were dog doors owing to their size. It is suggested that the so-called dog doors which have already been found and recorded are too small for the passage of a good-sized dog. Let us take this objection first.

Here it is important that we consider briefly the existence in mediæval days of strict laws concerning the ownership of dogs. These laws were the result of the depredations committed by dogs in the Royal Forests as well as in the private parks of the gentry. They hunted and killed the deer and other game. This applies to the large dogs, hounds, mastiffs, and the like, and stringent laws were passed that no one was allowed to keep a dog above

¹ Previous Paper in *The Transactions* for 1929, pp. 218-225, illustrated.



DOG-DOOR AT PAIGNTON, DEVON.

a certain size without a special licence. The consequence of this was that at one time thousands of large dogs were destroyed. There still exists at Browsholme, Clitheroe, a measuring ring which was formerly used to gauge the size of the dogs. Those which could not pass through this ring were destroyed. It measured 7 inches by 5 inches.¹

The following story was given to me by Mr. G. N. Carter, of Manchester, which he says is a true one: There were once two candidates for a Parliamentary election at Clitheroe, one of whom kept a pack of hounds. He won. His opponent was furious and, by way of revenge, reported the pack to the Lord or Steward of the Manor, who, although his sympathy was with the hounds, yet had to decide that if they could not pass the test of the ring, they must be killed. This they failed to do and so had to be destroyed.

Mr. Carter also suggests that these church doors may have been used for the same purpose—to gauge the size of the dogs, and as these doors were a part of God's House, they were the final appeal. He adds that in those days most country squires, and frequently the clergy, kept a pack of harriers.

A short time ago I spent a day with my friend Mr. George Marshall at his beautiful home, The Manor House, Breinton, and he showed me a window in one of the outhouses from which a pane had been removed. One of his sheepdogs succeeded in passing through it, although it measures only 9 inches by 6½.

In concluding this part of our enquiry let us just compare this last instance of a dog door measurement with the others that have already been recorded. Let us take Mullion (Cornwall)—here the small door is 11 inches square. Then there is Mawgan-in-Meneage (Cornwall), which is 10½ inches by 7½ inches. And St. Anthony's, Manaccan (Cornwall), 11 inches by 9 inches. Brecon (St. Mary's) is larger still, 34 inches by 20 inches. Paignton (Devon) is 13 (or 18) inches by 13½ inches.

We will now leave the dog doors and examine briefly what is known of cat holes. This is a title which I adopt advisedly because they are not strictly doors, but merely holes to allow cats to pass through at will. They are commonly found in dwellings and outhouses, especially granaries. Where there are doors they are introduced to prevent draughts, and seldom have hinges or latches, but simply a board dropped into a slot. They are usually round, but sometimes square, following the size of the boards of the door, and often arched. The average dimension is 5 or 6 inches in diameter.

¹ See description and illustration by Albert Wade in the *Preston Guardian*, June 21, 1930.

I know of no cat hole in any church with the exception of one in Exeter Cathedral. This is below the clock placed there by Bishop Cotton in 1598. It is mentioned by the Rev. Prebendary Drake and associated in his mind with the doggerel which we all learnt when we were children:—

Dickory, dickory dock,
The mouse ran up the clock,
The clock struck one,
And the mouse ran down,
Dickory, dickory dock.

But unfortunately the "cat door" is not a door, but merely a hole, and it does not admit to the clock. It is cut in a small door below the clock and leads to the "Nun's Walk," which goes round the building high up. It is said that the recess, behind the door, and before ascending the stairs, was once used as a Confessional. Cut in this door near the top are two apertures of about 6 or 8 inches by 2 inches, and below near the foot is the round hole. The legend is that the Confessional was served by a priest who liked to have his cat with him.

That mice frequent churches, we all know, but they must have a precarious existence, hence the old saying: "Poor as a church mouse". But in one church of which I have heard, they seemed to thrive, but this is accounted for by the fact that there belonged to that parish a bread charity, the loaves being kept in a certain part of the church.

There is a cat hole in an attic in Aberllynfi House, Glasbury. It is round and five inches in diameter and may be a hundred years old, or more.

Then there is an interesting hole in the top storey of The Old House, Hereford. It is $14\frac{1}{2}$ inches from the bottom of the door and nearly square, being $10\frac{3}{4}$ inches by $10\frac{1}{2}$ inches. It is cut just above the lower hinge. This, too, must be an ancient hole.

Let me conclude this section of my paper by relating an amusing story. It is told of a well-known philosopher, I think it was Sir Isaac Newton. He once had a favourite cat which spent most of her time in his study. As she was restless and often wanted to be let in and out, he determined to have a small hole cut for her convenience. One day a friend called and noticed that a still smaller one had been cut adjoining it. The philosopher was asked the reason for this addition, and replied that his cat had recently presented him with some kittens, and the smaller hole was intended for them!

Let us now take a short survey of our churches as they were four, five, or six hundred years ago. Then the naves were wholly unfurnished and were used for many secular purposes. If we read such a book as *The English Parish Church* by A. R. Powys, we shall

be able to gain some idea of what was done in them. Now our naves are filled up with seats. In those days they were not necessary, and until the 14th century the only furniture they contained were the stone benches arranged along the walls for the use of the aged and infirm, or for the usual frequenters of these places. This arrangement seems to have given rise to the well-known expression "The weak to the wall". It was not until the 15th century that pews became general, and it is not until the 17th century that the fashion of erecting high pews became common. Some of these which resemble the old four-poster beds, often richly carved, are still to be seen in many of our churches. The occupants often indulged in a surreptitious siesta during the service, screened by the surrounding curtain from the public gaze. Sermons were not often preached in pre-Reformation days, and pulpits were not general. We hear, too, of village feasts being held in churches, which were also used as storehouses for wool, grain, and other commodities. Then there was the performance of mystery plays, "Church Ales", the holding of Courts, which practices continued to the end of the 16th century. (*Vide "The English Parish Church"*, by J. Charles Cox, p. 13.) They were the market, the law courts, and the theatre of the manor. The Reformation changed all this. There followed a time of reaction and of ruthless puritanical vandalism. A spirit of iconoclasm was in the air, and our churches had to suffer. Glorious screens, roods, and rood-lofts were hacked and removed; beautiful carved stone reredoses and statues were smashed and destroyed, and priceless windows demolished and thrown away, and our churches are the barer and the meaner for their loss.

There seems to be little doubt that the custom of the whole Catholic Church, so far as the congregation was concerned, was to stand, when not kneeling, during Divine Service. To this custom our own Church conformed for many centuries. But during the course of time this custom seems to have weakened in the West, and especially in England, and seats were gradually introduced. This accounts for the few examples of very early pews to be found in any of our churches. There are some which date back to the middle and end of the 13th century. At Garway, for example, are a few old benches which probably date to the close of this era. By an order made at the Synod of Exeter, dated in the year 1287, "it was decreed that with the exception of noble persons and patrons of churches no one might claim a seat," and that "he who first came to Church let him select a place of prayer according to his will."

The custom of providing fixed seats for the congregation probably was introduced gradually into the Chantry or Guild Chapels.

And we must remember that originally most of the furniture was of stone, stone altars, many stone screens, for instance that

of the beautiful example at Totnes, which was erected in 1459, stone seats around the walls or bases of the columns, which were used by the aged and infirm, while others probably carried with them their own mats or even a stool.

It may be interesting to remember that the origin of the use of wands in churches as signs of office by the churchwardens and vergers probably arose from the use of these staves in early days for the clearing of a passage through the naves when a procession passed by.

CORNSTONE FORMATIONS AND THE WATER SUPPLY IN THE GOLDEN VALLEY, HEREFORDSHIRE.

By L. RICHARDSON, F.R.S.E., F.G.S.

(Read 31st August, 1933.)

As the members are aware, Herefordshire is for the most part on the Old Red Sandstone: it floors the lowland of the county around the county town and composes the towering Black Mountains in the south-west. Many years of detailed study will be necessary before sufficient is known concerning the formation for present-day requirements, but investigations have been commenced on parts of the margin of the county.

The Lower Division of the Old Red has been divided, in descending order, into: (1) Brownstones, (2) Dittonian, and (3) Downtonian. In the Downtonian red marl predominates; in the Dittonian, sandstone.

Near the top of the Downtonian is a prominent and important bed of limestone known as "The Limestone" or *Psammosteus*-Limestone. It caps and is the main cause of the prominent hills such as Dinmore, Wormsley, Credenhill, Garnons, Dinedor and Aconbury in the neighbourhood of Hereford; occurs in the long line of hills extending from Merbach Hill to near Abbey Dore on the north-eastern side of the Golden Valley; and, slightly lower down (owing to the dip), in the side of the hills stretching from Little Mountain north-west of Dorstone to Pontrilas on the south-western side of the Golden Valley.

It is a very important bed from a water-supply standpoint. The rain-water works down through its joints and fissures and is thrown out from its base by the underlying impervious marl in the form of many springs. It will be recollected that the prominent hills around Hereford are densely tree-capped: the luxurious tree-ground is due to the occurrence of the water in the limestone. The limestone is doubtless of chemical origin and varies much in lithic character from place to place as will be seen from an examination of it in the quarries to be visited. In the Golden Valley the main bed of limestone, which is about 10 feet thick at Urishay, has a band of rubbly limestone above and below. The fonts at Kilpeck, Turnastone and Madley have been carved out of this rock.

The first quarry to be visited, that near Morehampton Park Farm between Vowchurch and Abbey Dore, shows the upper

rubbly band and the main limestone—in some parts with a yellowish matrix, in others with a black.

Impressive ocular demonstration of the importance of the limestone as a source of water is to be had in the copious spring in The Slough, where crystal-clear water is seen rushing out from beneath a large mass of the limestone. Water is piped from it to supply the houses alongside the road in The Slough.

Below Urishay the limestone has been extensively worked for road metal and for burning for lime in the past and to-day is actively worked for road metal. Here again the upper rubbly band is well displayed. The main limestone varies in lithic characters: in some places it is a very pure limestone (calcium carbonate, 96.37 parts per 100,000), and in others "kernels" of limestone in a red matrix—a variety that apparently appealed to the sculptors of certain local fonts. This quarry also displays well the joints and fissures with which the rock is riven: the calcite (crystalline calcium carbonate) has been deposited in the joints and fissures from percolating waters. It will be appreciated that the water of springs from the limestone is hard, but it is mostly temporary hardness.



Photos by

Alfred Watkins, F.R.P.S.

VALLUM OF CAMP AT POSTON, HEREFORDSHIRE.

1. Inner side looking north-east.
2. End with outer ditch. Probable entrance.

LOWER PARK WOOD CAMP, POSTON, IN THE PARISH
OF VOWCHURCH, AND SOME REMARKS ON THE
IRON AGE IN HEREFORDSHIRE.

By GEORGE MARSHALL, F.S.A.

(Read 31st August, 1933.)

This hill-fort had passed nearly unrecorded¹ until the issue of a *An Inventory of the Historical Monuments in Herefordshire* (Vol. I., 1931, pp. 245, 246) by the Royal Commission on Historical Monuments in England, where it is listed as "Earthwork, in Lower Park Wood, 200 yards S. of Poston House and nearly 1 m. N. of the church, is a small promontory-fort from which the ground falls sharply on all sides except the N. On this side it is defended by a bank and ditch, which stop towards the E. to provide an entrance to the work. On the W. side is a scarp, which is largely artificial, but the other sides are defended only by the fall of the ground. The area, including the defences, is about 5½ acres. Condition—Fairly good." A small plan accompanies these remarks.

Before giving further particulars of this camp and the important finds made on the site by Mr. R. S. Gavin Robinson, the owner of the property, some reflections on other similar settlements in Herefordshire and elsewhere may be helpful in visualising the state of affairs in our county at the period when these hill-forts were built.

It may be definitely said that such forts belong to the pre-historic age which we now designate "The Iron Age", when the iron began to supersede bronze for implements used in peace and war.

Our present knowledge of prehistoric man in Herefordshire is limited, but we have evidence of the presence of Neolithic man on the Black Mountains, at Ledbury, Linton, and elsewhere. These Stone Age men were followed by those of the Bronze Age, who arrived in this district about 1700 B.C., and to whom, very early in the period, can be attributed the two burial cists recently found in the Olchon Valley,² and there are evidences of a strong later settlement in the district surrounding the Golden Valley and in other parts of the county.

¹ It is marked as "Camp" on Isaac Taylor's map, 1754.

² See *Transactions of the Woolhope Club*, 1932, pp. 147-153.,

The Bronze Age culture would seem to have persisted in this part of the country down to a much later period than in the low-land areas further east, in fact centuries after the Iron Age culture had reached southern Britain.

Briefly it may be said that the Iron Age commenced in this country in the 6th century B.C., when Celtic immigrants settled in the south-eastern counties of England, and in the succeeding centuries established themselves within a line drawn from the Wash to the mouth of the Severn, and from there southwards through Dorset to the coast. This invasion, now generally known as Iron Age A, never reached Herefordshire, and the people who made it are known by their hill-forts composed of simple rampart and ditch, and by the Late Hallstatt culture they brought with them as seen in their weapons, implements, pottery and ornaments.

A second invasion of Celtic people commenced in the 4th century B.C. from Brittany and the western coast of France, and possibly northern Spain. These people brought with them a different culture known as La Tène, and built hill-forts of a similar character, but of a more advanced type than the previous invaders. This is known as Iron Age B. These invaders first settled in Cornwall and Devon, incorporating themselves with the native race and implanting their culture upon them. In the succeeding centuries before the Roman invasion they penetrated north through Somerset, established themselves on the southern coast of Wales and in Gloucestershire along the Cotswold Hills, and eventually penetrated by way of the Severn and the Wye to the confines of our county, and then northwards through Shropshire to the Stretton Hills and probably by this route to parts of North Wales.

Another invasion of this country by the Belgæ of North Gaul occurred about 75 B.C. on the south coast, and reached north of the Thames. This is known as Iron Age C, but like the Iron Age A people, these invaders never reached Herefordshire, so nothing further need now be said about them.

Returning to the people of Iron Age B. Dr. R. E. M. Wheeler's recent excavations at Lydney Camp,¹ on the Severn, prove that they had established themselves there not earlier than the first century B.C. As this must have been one of the earliest settlements on the Severn, it may be deduced, there being no evidence as yet to the contrary, that the penetration of our district took place from south to north and that therefore the hill-forts in Herefordshire and Shropshire are later in date than the one at Lydney. When our camps have been systematically examined

¹ *Report on the Excavation of the Prehistoric, Roman, and Past Roman Site in Lydney Park, Gloucestershire.* By R. E. M. Wheeler, D.Litt., F.S.A., and T. V. Wheeler, F.S.A., 1932, pp. 11-13.

this no doubt will prove to be the case; the sites, as one passes north, being successively later in date, though the time taken to occupy the relatively narrow strip of land on which the camps are found, from the mouth of the Wye to the Stretton Hills, may not have covered more than a century, and very possibly a much shorter period. Such a late occupation is rather indicated by the few finds and data already available from this district, and is supported by the evidence that Dr. Willoughby Gardner has produced showing that the Hill-forts of North Wales all date, as far as can be proved at present, to a period not earlier than the beginning of our era, and often are even later than the Roman invasion, and that they continued in use throughout the 2nd, 3rd, and 4th centuries A.D.¹

The settlement in our district followed the left bank of the Wye to the junction of the Lugg and thence up that river till it turns west. The camps then take a line northward, crossing the Teme valley and lie between the Clee Hills and Offa's Dyke as far north as the Stretton Hills. It may be noted that practically none of this type of fort from Montgomery southward is to be found to the west of Offa's Dyke, which points to the same cause operating to check the penetration in a westerly direction of the Iron Age men, as that of the Saxons at a later date. This cannot be attributed to the natural features of the country, for both in Herefordshire and in Shropshire a large stretch of country is of the same character to the west of Offa's Dyke as to the east, where suitable settlements could have been made by both new races. This therefore seems to point to occupants who successfully withstood both Iron Age and Saxon intruders, of the same stock no doubt as the men of Archenfield whom we know kept their own individuality at the Norman Conquest and made their own terms with the new conquerors. The Normans penetrated far west of Offa's Dyke into Wales, but the descendants of the earlier Welsh held their own on a retreating line till the final subjugation of Wales by Edward the third.

We will now examine the trend of this Iron Age B invasion as it affected Herefordshire. In this county there are twenty-seven Hill-forts of the type we associate with the Iron Age people. Taking these from south to north, we find two on the right bank of the Wye, the one at Ganarew, namely The Little Doward, and the other, in a loop of the Wye, at Symonds Yat. The next one is at The Chase in Penyard Park on the left bank, and then near the river, also on the left bank, is Caplar, and a little further north on the Woolhope hills a small camp, Cherry Hill, near Fownhope, with Oldbury on the Marcle side, and St. Ethelbert's Camp (Backbury) at the northern end. Opposite these on

¹ *Archæologia Cambrensis*, LXXXI (1926), pp. 225-282.

the right bank of the Wye are Aconbury and Dinedor. To the east of the Woolhope range on the Malvern Hills are the Herefordshire Beacon, and the Holly Bush, and south of these Haffield in Donnington, and forming a link between this group and the Woolhope group is Walls Hill in Ledbury, and a small camp, Kilbury, also in Ledbury, overlooked by the great camp, the Herefordshire Beacon. North of the junction of the Lugg and the Wye is the large camp at Credehill between the two rivers, with Sutton Walls close to the left bank of the Lugg. Proceeding north on the farther side of Dinmore Hill are Ivington and Risbury on either side of the Lugg. Further north, in Kimbolton is Batch, a small camp, and to the west of this Thornbury, with another fort a little to the north of it, Garmsley, lying just outside the county boundary, but it requires mention as belonging to the definitely isolated group of camps in our county. Following the Lugg north of Leominster, where it turns in a north-westerly direction, on the left bank of the river is Croft Aumbry, then a small camp, Pyon Wood, in Aymestrey, on the same bank, and further west overlooking the right bank of the Lugg is the great fort of Wapley. Just outside the county and immediately west of Offa's Dyke is Burfa, in Knill, in the Lugg basin, the most westerly one of our group. Passing north into the Teme valley two camps lie within or partially within the confines of our county, namely Brandon near Leintwardine, and Coxall Knoll more to the west, but these belong to a group the remainder of which are in Shropshire. The Lugg-Teme watershed may well have formed the boundary between the Silures and Ordovices mentioned by Tacitus.

There remain two camps isolated from those already enumerated lying in the Monnow basin, namely, Walterstone and Poston in the Golden Valley. Apart from any evidence it might be anticipated that both these camps would prove to be late settlements made perhaps in Roman times by the Bronze Age folk, who had adopted the culture of the Iron Age men. It is also not improbable that it will be found that other of these hill forts were built after the advent of the Romans, such as Risbury, which has decidedly Roman features.

The larger of these camps no doubt represented a tribal unit with one or two lesser ones sometimes dependent upon them. By the time that the Romans conquered Herefordshire large groups under petty reguli would seem to have been united, for we know from the account given us by Tacitus that the Silures and Ordovices, who occupied Herefordshire and southern Shropshire, here made their last stand under the leadership of Caractacus, who had sought refuge in these parts.

The Iron Age men in choosing their sites in this district avoided the long ridge hills, such as are to be found at Linton, Ledbury,

and those bordering the valleys under the Black Mountains, which at the time of their coming were in possession of the Bronze Age people, and following no doubt the line of least resistance confined themselves to the main river valleys, where isolated hills admirably adapted for their hill-forts were available. In former times many of these must have been bare of trees, even as were the majority not more than a hundred and fifty years ago, and as some, such as Walls Hill, Ivington, and Thornbury, are to-day, and until quite recently Wapley. Further, these late Iron Age men had the advantage over their predecessors in that they possessed a plentiful supply of iron tools, drawn in our district from the Forest of Dean, which enabled them to make short work of any scrub and timber that covered the land they desired to occupy. It was quite beyond the powers of the Bronze Age people to clear such land with their stone, or their more effective, but expensive, bronze axes. Hence we find these newcomers settled, for the most part, in an area not before occupied by earlier man.

In such localities these invaders would have found suitable grazing for their cattle and sheep, and the fortified enclosures would have provided at night ample protection for their stock from the depredations of wolves which must have infested the wooded valleys surrounding them.

The layout of the defences of these camps almost invariably followed the contour of the hills, enclosing whatever area of land was available on the hill top, unless the nature of the ground dictated a promontory fort such as Symonds Yat or Poston. Space here does not permit of a description of these defences, with their cleverly planned entrances and other warlike features, but that they were meant for resistance in case of attack is apparent. From evidence gleaned elsewhere it would appear that such occasions may have seldom arisen, as the defences of some of these camps were allowed to become ruinous, being hastily repaired and strengthened from time to time when need arose. For years together the inhabitants no doubt lived a peaceful life, the tribal chiefs residing within the camps, and many of the ordinary folk dwelling nearby or on the slopes, as we know to have been the case at the Holly Bush and elsewhere. The general population would only have sought refuge within the ramparts when danger threatened from some tribal disagreement.

That these men practised agriculture has been proved by the identification of their small inclosed fields on sites in other parts of the country, many such cultivated plots having been revealed by photographs from the air, but evidence for this is not yet available for Herefordshire.

It is not improbable that these people supplemented their commissariat by fishing, and the fast disappearing coracles may be the surviving indication of the boats they introduced, for the

Carthaginian, Himilco, who visited these islands about 500 B.C., relates that the natives of Cornwall used only skiffs fashioned with sewn skins.

A further source of supply for their larders would have been the wild animals, deer, hares, badgers, and various birds which must have been fairly abundant in the Herefordshire woods and plains.

A considerable trade in other necessities must have been carried on. Iron would have been brought from the Forest of Dean; salt from the coast or from the salt pits at Droitwich; flints, which men still used for many purposes from further east beyond the Severn; ornaments for their gratification such as beads from many lands; gold from Ireland; and tin and copper from Cornwall for fashioning bronze pins, brooches, mirrors, horse trappings and the like.

Trade in such articles pre-supposes trade routes, so these settlements must have been connected up with each other by trackways, to the tracing of which our Members might advantageously devote themselves, when Mr. Alfred Watkins' studies on straight tracks may aid in the identification of such lines of communication.

A suggestion as to the number of these Iron Age men in Herefordshire may be hazarded. If the larger camps had a population of 500 souls, which may be deduced as about the number, judging by hut sites, etc., in other places, the average of all the camps might be in the region of 400, and as there are 26 such sites, the population of the whole would be 10,400. This number, excluding present towns and taking into consideration the area in the county these Iron Age men occupied, would give one-third as dense a population as is found at present, which is a probable estimate.

After this general survey of the Iron Age invasion of Herefordshire, it is time to return to the camp at Poston.

As has already been said this small settlement is isolated from the general line of advance of the Iron Age B penetration of Herefordshire, and from this the natural inference would be that it was a late occupation in the period, and what has now been found by Mr. Robinson in his excavations supports this conclusion.

Last autumn Mr. Robinson drew the attention of Mr. Alfred Watkins and myself to this site, and he decided to make a few trial holes to see if any evidence of occupation could be obtained. This has resulted in the finds you now have before you. In the meantime the camp has been scheduled as an Ancient Monument, so that no further excavations can be made until leave is obtained from the Chief Inspector of Ancient Monuments.

Additionally to what has been quoted from the Royal Commission's Report, it may be said that this camp can be classed as a promontory fort, the great vallum on the north being thrown across the flat ground on that side and cutting off the end of the projecting hill which has steep declivities on its three sides. The vallum from the bottom of the ditch is twelve feet high or more, and on the interior several feet less, and the scarp about five feet above the bottom of the ditch. A trial trench across the bottom of the ditch showed fine soil for about eighteen inches, when marly ground was revealed, but it is doubtful whether the bottom has been reached. Nothing was found in cutting this trench. On the interior side of the vallum the ground is somewhat lower than that immediately adjacent to it and it would appear that some soil was here obtained to add to that thrown up from the ditch. The vallum has now growing on it large beech and other trees, probably eighty to one hundred years of age.

From the present end of the vallum to the steep scarp on the east a section has been levelled, but the line of it can be traced. It must have been in this short section that the main entrance was situated, and its destruction is unfortunate, as the type of entrance might have been of assistance in dating the site. Careful exploration here might possibly recover the plan. At the western end of the vallum the ditch is continued about half-way along the western scarp, gradually fading out. In the centre of this side is what may be an original postern entrance, leading to a spring of water a little way down the hillside. There is also water obtainable outside the main approach towards Poston House, but there is no sign of any spring inside the defences.

The contour of the ground rises some few feet gradually towards the centre of the enclosure, but here and round the south and east sides trial holes have revealed undisturbed soil at a very little depth.

Two trial excavations have been made, the one to the east about the centre of the vallum and about 90 feet away from it and some little distance apart. The first to the east has been filled in, being a danger to stock, and was sunk to a depth of five to six feet through made soil. It may be said here that all the top soil of the field contains small quantities of charcoal and burnt clay. This is no doubt due to the land being limed when under the plough some forty years ago. This lime was obtained from the local cornstones which contain clay nodules and was burnt with wood.

In the east excavation, which was about eight feet long by three feet wide, the first two feet were composed of the stony soil which is to be found all over the site, below this was blackish soil with fragments of burnt earth, charcoal, and stones. At two

to three feet pieces of pottery were found, including soft pale red ware of a similar nature to some found at Marley Hall, one piece having a flat base and an outward sloping straight side, and fragments of black gritty ware, one a rim similar to that figured in the Report on "Excavations on the site of Ariconium", 1923, plate 11, fig. 1. About four feet down at the north end was a section of circular dry walling about a foot high, and inside this circular section, which would have had a diameter of a few feet, was a good deal of charcoal leading towards the south end, where were several flat stones placed sloping back and upwards and overlapping as if to form a flue. There was no sign of charcoal under these stones. I formed the opinion that here was some kind of furnace with a long flue, which may have been covered with a stone slab for drying grain upon. This excavation was not carried much beyond a depth of about five feet, except in the centre by the circular dry walling, where it was sunk about a foot deeper without definitely reaching the natural soil.

The trial hole to the west revealed at the depth of a foot very black soil and at one to two feet bones and a little pottery of similar ware to that found in the other hole. A small piece of iron, possibly a nail, was found not more than eighteen inches down, but this may have come from a higher level. About two feet down was found half a melon-shaped pendant made of sandstone and coloured blue, similar to several found at Kenchester in a different material, and now in the Museum at Hereford.¹ At two feet six inches what was evidently the rammed floor of a hut was encountered, composed of nodules from the cornstone. Some charcoal and a flat triangular piece of sandstone about a foot across was found on this floor level, several animals' teeth and part of a deer's antler, and the rim of a pot of grey-fumed ware with some grooves a little way below the rim. There was also the remains of another pot of the same ware with wavy lines round the upper part, which can be attributed to about 100 A.D. Still more interesting is a bronze fibula or brooch in a perfect condition excepting for the pin, which is missing. The pattern on this brooch is exactly the same as on one found at Ariconium and illustrated in the *Victoria County History of Herefordshire*, page 190, fig. 13, No. 1. This particular type of brooch can be dated as lying somewhere between the years 80 and 120 A.D., and the pottery rim and pattern belong to a similar period. Part of a spindle whorl was also found, about $\frac{1}{2}$ in. thick by $1\frac{1}{2}$ inches across, made out of the black gritty ware used for pottery. On the side of this excavation, above the floor, there seemed to be a low walling composed of cornstone nodules, and a lump of clay

¹ *Excavations on the Romano-British Town of Magna, Kenchester*, plate 45, nos. 5, 11 and 16.

may have been plastering on the wattles which would have formed the sides of the dwelling.

Slightly below this floor level was unearthened a worked bone apparently for use as a shuttle.

Beneath this floor, black soil was passed through to another floor; 18 inches down in this black soil was found very friable remains of a large vessel of black-gritted ware, thick, with a flat bottom, and a long thin (? bird) bone.

It is evident that here were two successive occupation sites, the upper one dating about 100 A.D. and the lower one must have been earlier, but by how long a period the remains of the one pot found does not enable us to say.

Here then we have definite evidence of a hill-fort in Herefordshire occupied in the latter part of the first century A.D. or early part of the second century A.D., which conforms to the slight indications from other hill-forts in the county as being a period when these camps were in use. Mr. Jack's excavations at Caplar, although very negative, point to an occupation there during the Roman period, and Mr. Hughes', at Midsummer Hill, showed a similar result, but with evidence of still earlier occupation, though how much earlier could not definitely be decided.

Mr. Robinson is to be congratulated on his discoveries, and a further careful excavation of the immediate area where these finds have been made is most desirable. With his consent and leave from the Chief Inspector of Ancient Monuments, more extensive excavations might be carried out and the results published by the Woolhope Club.

REPORT ON THE EXCAVATION OF A PREHISTORIC
MOUND IN THE PARISH OF PETERCHURCH,
HEREFORDSHIRE.

By GEORGE MARSHALL, F.S.A.

(Read 16th November, 1933.)

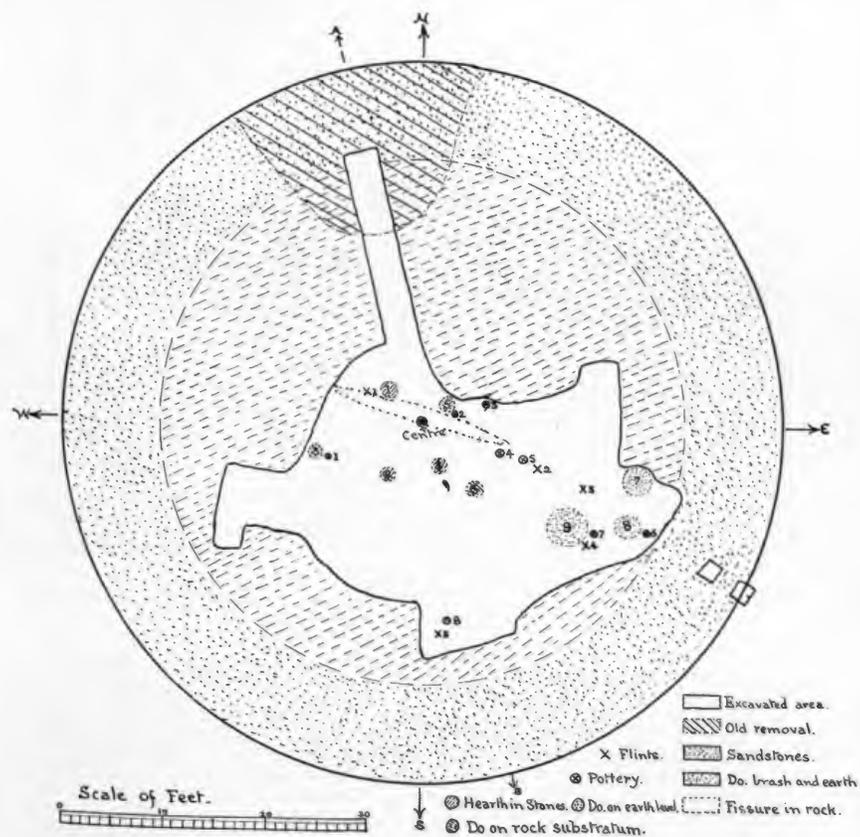
This mound is situated in the parish of Peterchurch, not far from the road leading over Stockley Hill, to the south of the road, and on the western side of the hill. It lies on Lat. $52^{\circ} 2' 23''$ and Long. $2^{\circ} 56' 15''$, in a field just above the 700 feet contour line, now growing nothing but bracken and broom, known with land adjoining it as "The Bradleys", probably a corruption of "Broad Leys". The field was formerly a larch wood, but this was cut down in 1917, the trees being then about twenty years old; several of the stumps of these trees were removed during the excavation. The timber crop immediately before this was also larch, these trees being of considerably greater age.

The subsoil of the field is sandstone rock which shales off in slabs about an inch thick, and the surface soil surrounding the mound is composed of this sandstone broken up into small pieces with soil disintegrated from it and about a foot deep. Under the mound, as will be described presently, this subsoil layer is non-existent, and in its place is a depth of fine soil, nearly free from stones, varying from eighteen inches to two feet six inches in depth. Fields immediately adjacent have in places this fine soil, or soil with numerous stones of various formations deposited by glaciers which once covered this part of the county.

Mr. R. S. Gavin Robinson, of Poston Court, was the first to draw attention to this important earthwork, which had hitherto gone entirely unrecorded, possibly from the fact of its being hidden in a larch wood. The land on which the mound is situated was until recent years part of his estate, but was exchanged for other land, and it is due to the courtesy of the new owner, Mr. E. J. Prosser, of Upper Wellbrook, in Peterchurch, that its excavation has been possible, he having given Mr. Robinson and myself leave to deal with it in any way we thought fit.

The members of the Woolhope Club at their Field Meeting in the Golden Valley on August 31st, 1933, took the opportunity of inspecting the mound, and Mr. Robinson volunteered to find

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George Marshall, del.

PLAN OF IRON AGE MOUND IN PETERCHURCH, HEREFORDSHIRE.

the men necessary for its exploration. Accordingly with two men the work of excavation was commenced on September 5th and carried on practically continuously till October 5th.

I had previously visited the mound with Mr. Robinson, and its true purpose had never been suspected, it locally being attributed to having been made for the banking up of a lime kiln. As there were no indications of it ever having been used for such a purpose, I surmised that it might be a round barrow belonging to the Bronze Age, the situation being such a one as might well have been chosen for burial purposes. The land slopes slightly towards the north, and extensive views are obtained from the site to the north-west towards the Black Mountains and across the Wye Valley to the hills beyond Hay, now somewhat obstructed by high trees in the valley dip beyond the field.

The barrow has a diameter of about 70 feet and a height above the rock level of 7 feet 6 inches, and was covered with bracken and broom. It apparently had never been disturbed except for the removal of a few loads of stone from the north side (*vide* plan), and this proved to be the case. As there was less material to deal with on the north side, in consequence of the removal of some of the mound at this point, it was decided to cut a trench here to the ground level towards the centre of the mound, where it was anticipated that the primary burial would be found, probably in a cist, especially as large slabs of sandstone suitable for such a purpose were available close by on the sides of the little stream that rises in and runs on the east side of the field. This expectation proved abortive, no large slabs being found anywhere in the barrow.

The cutting made towards the centre was about three feet wide, and it was soon apparent that the upper and larger part of the barrow was composed of stones, the lower part as already indicated being fine earth with a very few sandstones and some glacial pebbles. A number of these were small white stones, but they evidently had no significance with regard to any burial, but were, with the other stones, such as are abundant in the adjacent fields. The stones composing the upper part of the mound were all small flat pieces of sandstone about one inch or less thick and the largest not more than about ten to twelve inches across. In places a certain amount of earth had become mixed with these, but for the most part they were free of soil. Such stones are obtainable from the rock subsoil in the field surrounding the mound. This subsoil is of sandstone which shales and breaks up readily into small flat pieces.

During the excavation the stones were cleared from the soil lying beneath, and this was then carefully examined and removed down to the natural rock level.

Nothing pointing to the date of the barrow was found in making this cutting, nor was there any indication of there ever having been a burial at the centre of the mound. In the sandstone rock at the centre was a narrow fissure about a foot wide, tapering to nothing, and running nearly due east and west. The two sides of the fissure did not correspond; by some earth movement one side must have sunk or the other been elevated. The fissure itself was filled with broken and loose sandstone fragments, which went to a depth of several feet. The character of this rock bed was very deceptive, leading from time to time to the hope that a covering to a cist had been found, but on being broken up it never revealed anything but the natural rock.

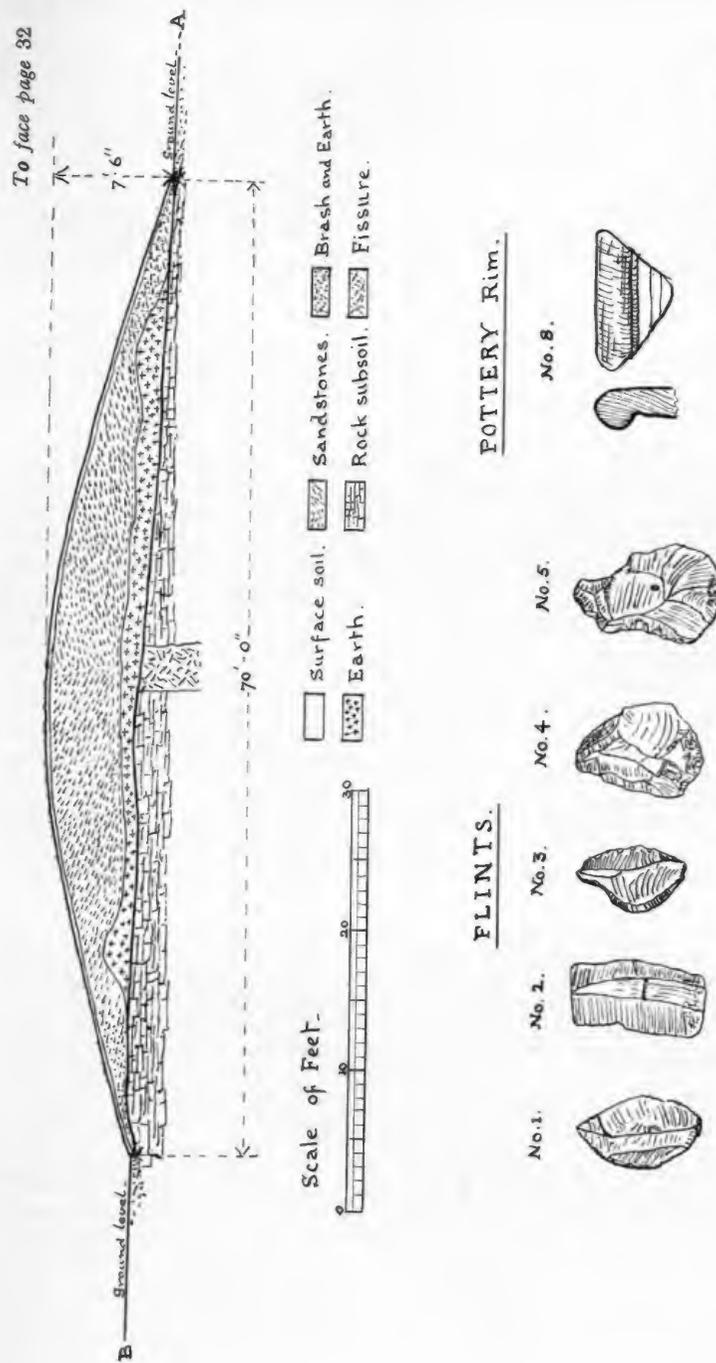
Nothing having been found at the centre of mound, the area examined was gradually enlarged as the work proceeded in the direction which at the moment seemed likely to lead to satisfactory results, the south-west section being more extensively explored, as it is here that secondary burials are more usually found. This sector did eventually prove the most fertile in finds, the large hearths (7, 8, and 9 on plan) being uncovered at the earth level, and four out of the five flints, and five of the pieces of pottery out of the eight fragments, were found here. The flints and the pottery all came from near the earth level, or a few inches below it. A description of these finds will be found appended below.

The construction of the barrow proved of exceptional interest, and I can find no record of such a carefully compounded mound. The method of its construction was apparently to first cover a circular area, about 54 feet in diameter,¹ with a layer of fine soil to a depth of two feet, more or less, and then to make a raised rim of the same material round the circumference about one to two feet high, making the average height of the rim about four feet. Small flat sandstone slabs were then placed on the inner circumference of the sloping rim, tipping steeply inwards, and this was continued till the centre was reached and the mound raised to the desired height (*vide* section).

The result of this construction has been that all the rain falling on the mound has drained to the centre eventually finding its way to the crevice in the rock bed. This result could be plainly seen in the course of the excavation, for the earth at the centre of the mound was found to be very wet, but at eight to ten feet from the centre it was bone dry.

Because no signs of any burial were found, it does not follow that there had been none in the area of the mound examined, for the rain water with the free access of air between the stones

¹ As was to be expected, the mound has gradually spread, which now gives it a diameter of about 70 feet. (*See Plan.*)



being conducted to the centre and surrounding area might well have dissolved the bones, if it were burial by inhumation, so that nothing whatever remained, as has been found to be the case elsewhere.¹

It is of course possible that a burial might still be found in the unexplored portion of the mound, but as already stated the area has been thoroughly searched where in most cases the interments are found.

Actual hearths (as shewn on the plan), or at least some amount of charcoal, were found. The presence of such hearths is general in barrows of this class, and though the explanation of these fires is in doubt, they must have had some connection with the funeral rites.

The only evidence for dating the barrow is the five flints and eight fragments of pottery. The flints are of Bronze Age type, but they might well have been in use after the arrival of the Iron Age men, whose appearance in this district most likely did not take place till the beginning of this era. One of these flints is a leaf-shaped arrow head, and might be early in the Bronze Age, but is it certain that such a form was not used contemporaneously with tanged and winged arrow heads as being much more easily manufactured? It is possible that this flint, or any of the other four, was brought here with the fine soil which forms the base of the mound. A Bronze Age settlement was situated a little higher up the hillside, as Mr. R. S. Gavin Robinson has proved by his discovery there of a flint factory site.

Six of the pieces of pottery are soft red paste, and without any indication beyond their composition by which they could be dated. One piece is, however, fortunately a bit of the rim of a pot of soft red ware with a glaze like Samian, and another is a hard-baked red fragment.

These two pieces of pottery, found in the earth at the bottom of the mound, prove it impossible for the burial to be earlier than the Iron Age. Both fragments of pottery must have been made after the advent of the Romans to these parts, so the date of the barrow may fairly be ascribed to the latter half of the first century A.D.

This mound may have been raised to a chief of the tribe, who resided at the camp at Poston not very far away. Such a site may have been chosen owing to the facility with which the requisite material could be obtained on the spot, and as looking out over the country in the direction from which an enemy might be expected to appear, the camp at Poston being the extreme Iron Age settlement up the valley.

¹ See *British Barrows*, by William Greenwell, 1877, pp. 202, 203, for remarks on this subject.

THE FLINTS.

1. Leaf-shaped arrow head. $1\frac{1}{8}$ inch long. Thin flake, clear, brown and blue. Found about 6 inches down in base soil.
2. Butt-ended rectangular knife. $1\frac{3}{16}$ inch long. Opaque light blue patinated flake. The patination would point to its being earlier than the mound. Found about 6 inches down in base soil.
3. Borer or knife, with shouldered butt. $\frac{3}{4}$ inch long. Opaque white and blue patinated flake, fractured at point, showing interior of brownish flint. The fracture must have occurred before finding its way to the barrow, so the patination must have taken place much earlier. This flint therefore was probably brought here with the soil forming the base of the mound. Found about 4 inches down in base soil.
4. Thick roughly worked round scraper. $1\frac{3}{16}$ inch long. Grey flake. Found near the surface of base soil.
5. Roughly worked scraper. $1\frac{7}{16}$ inch long. Dark opaque blackish grey. The black lead like patination on this flint is due to the flint having been at some period in contact with peaty matter, subsequent to ordinary patination having taken place, but whether this occurred before or after being placed in the barrow cannot be determined. Found a little way in base soil.

As all these flints were found near the surface of the base soil, they may have been placed here intentionally in connection with the funeral rites.

THE POTTERY.

1. Fragment of body of a large vessel. Hard red with black specks, well baked and potted, wheel turned. $\frac{7}{16}$ inch thick. Found 2 inches down in base soil.
2. Fragment of body of a good-sized vessel now in two pieces. Soft bright red, hand made (?). $\frac{3}{16}$ inch thick. Found about an inch down in base soil.
3. Fragment of a vessel, and some smaller pieces. Very soft bright red, hand made (?). $\frac{5}{16}$ inch thick. Found about 3 inches down in base soil.
4. Fragment of a vessel similar to last. Found a few inches down in base soil.
5. Two fragments, they fit together, but old break, of a vessel similar to 3 and 4. Found about 2 inches down in base soil.
6. Fragments, three pieces, very small. Soft red with a blue fracture. $\frac{1}{4}$ inch thick. Found 9 inches down in base soil.

7. Piece of a base. Soft red with blue fracture. About $\frac{1}{4}$ inch thick. Found a few inches down in base soil.
8. Piece of a rim. Soft red, with a red glaze like Samian. A piece of false Samian with red wash. Thickness of body $\frac{1}{4}$ inch. The diameter of the vessel by the curve was probably about 9 inches.

In addition to the above one fragment of soft red pottery was found on the soil thrown out during the excavation.

THE HEARTHES.

1. About 2 feet from top of the mound and 15 inches across, and basin shaped, possibly made for baking something.
2. At 4 feet to 4 feet 6 inches, a puddled hole of clay with charcoal.
3. A black patch of burnt earth and charcoal about 3 inches below base soil, going down 6 to 8 inches. Lying above this was No. 1 piece of pottery.
4. At 3 feet 9 inches down in stones.
5. Between the stones of the mound and the base soil a considerable amount of charcoal and stones placed as if to prop up a cooking pot. No. 2 pottery about a foot away from this in the soil.
6. Below the base soil at rock level, burnt earth and charcoal, about 2 feet 6 inches in diameter.
7. On surface of base earth a large quantity of charcoal.
8. Ditto ditto
9. A very large quantity of charcoal over an area about 5 feet across on surface of base earth.

In addition to the above, charcoal was found in various places throughout the mound, but not in sufficient quantities to say that any of it represented a definite hearth. Puddled areas of clay were found in the stones of the mound, and nearer the rock base, but whether these were intentional and had any significance in regard to a burial there was nothing to show. They may only have been patches of clayey soil puddled by the rain draining through the mound.

My thanks are due to the owner of the site, Mr. E. J. Prosser, of Upper Wellbrook, Peterchurch, who gave Mr. R. S. Gavin Robinson and myself a free hand to explore the mound as we thought fit; to Mr. Robinson for his active assistance and advice in connection with the excavation; to the men employed to do the spade work for their watchfulness and care as the work proceeded; and to the Woolhope Club for defraying the cost of carrying out the excavation.

FOUNDATIONS OF BUILDINGS IN HEREFORD CASTLE.

By ALFRED WATKINS, F.R.P.S.

(Read 16th November, 1933.)

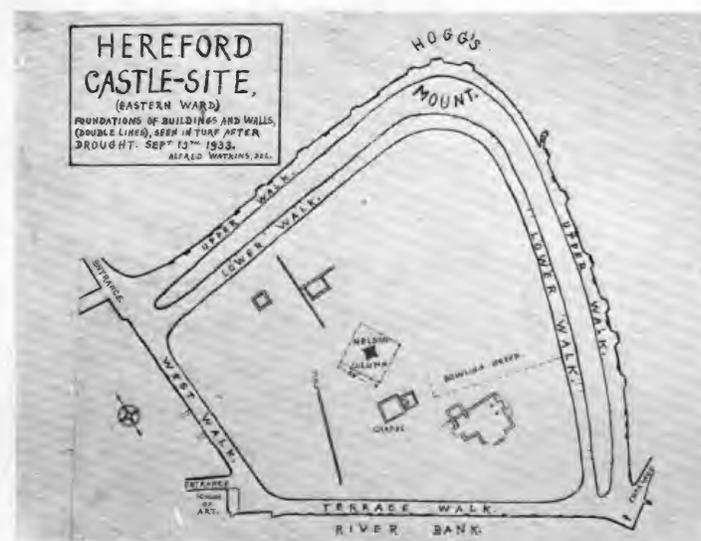
A few only of our early English castles remain intact and occupied—the Tower of London notably. Most of them are ruined and unroofed, the shell perhaps fairly complete up to the parapets, as at Ludlow; in more advanced decay, as at Goodrich; or with only a fragment of a keep and a few ruined walls left, as at Clifford.

At Hereford the decay or neglect of the Castle had commenced in the Middle Ages, and the clearing of the site soon after the Civil Wars was made so complete by the use of the stones for other buildings, that at the present day it can almost be said that not a single stone of the ancient Castle remains above ground in its original position. The one exception to this is in the walls of the house at the south-west entrance to the Castle Green (probably the Gatehouse shown in Speed's map), at one time known as the Bridewell, but now as Castle Cliffe. Here are several 13th century windows, and one doorway called sometimes Harold's Arch—an error, for it is clearly a century and a half later in date than the death at Hastings of Harold Godwin, who a few years earlier had been sent down by King Edward to fortify Hereford.

Thus it is that any indication to be found of the planning of the Castle should be carefully recorded, especially as during my lifetime it can be said that scarcely any additional information, by excavation or otherwise, has been brought to light to add to what we can glean from the records of Leland and Speed.

My own opportunity has come with the long drought of 1933, when the sun of our glorious summer had bleached in patches the turf on the Castle Green, as if on a stony hill-side, leaving between the green of normal pasture. In places, straight lines of whitened grass of even width appeared, with other lines at right angles, forming in at least three cases (which I roughly surveyed and measured-up) the outlines of foundations of rectilinear buildings, twenty to twenty-seven feet in length, and with walls two to four feet thick. Beside these were two long lines of similar marks, probably boundary walls, although a suggestion has been made that they mark the line of underground passages, to which I shall refer later.

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Photos by

Alfred Watkins, F.R.P.S.

HEREFORD CASTLE GREEN.

Foundations seen in drought, September, 1933.

1. Plan.
2. Chapel (?) foundations, and straight wall (?).

In addition to my own survey, Mr. F. V. Milligan, headmaster of the adjoining School of Arts and Crafts, made a quite independent observation of a more complicated set of foundations in the south-eastern corner of the Green, which he measured up and added to my plan in right scale and position. The City Surveyor, Mr. Shimmin, kindly furnished a large scale-plan of the Green, and on this the essential outlines of my plan are based, the records of the buildings marked within the Green being original observations made by myself and Mr. Milligan.

As regards the buildings, the one nearest to the Castle Street entrance, standing isolated, and giving the impression of being a tower, I made to be $6\frac{1}{2}$ paces square, with very thick walls, at least 4 feet wide; that nearer to Hogg's Mount, 7 by $8\frac{1}{2}$ paces, with walls 2 feet 6 inches thick; and the one to the south of the Nelson Column, undoubtedly a chapel (this is confirmed by Speed's map-illustration), has a nave about 10 paces long by 9 wide, with a rectilinear chancel 6 feet narrower (this junction is plain in my actual photograph), and about 6 paces long, although the extreme east is not distinct. Mr. Milligan, making his observation quite independently of mine, was struck by finding traces of a small semi-circular apse to the chapel, the interior half-circle 10 feet 6 inches across, being very plain. Leland describes the chapel within the Castle as having a rounded apse, but, on the other hand, the symmetrical set-off of the rectilinear chancel is very plain in my photograph. Perhaps excavation will show both the early Norman apse and the later rebuilt rectilinear end. I therefore sketch both on the plan. I made the walls to be about 2 feet 9 inches, but that between nave and chancel 4 feet thick.

It is not easy to say much about the more complicated buildings in the south-east corner of the Green, which appear to have had columns. Could they be those referred to in a Treasury order of the reign of Henry III, 1233, which orders the sheriff of Hereford to construct at the head of the oriole of the king's chamber in the castle "a certain fair and decent chapel of the length of 25 feet" and to have the same wainscoted? (Robinson's *Castles of Herefordshire*, p. 75).

The more southerly of the two long walls is distinctly indicated on my photograph, which was taken from the roof of the portico of the Arts and Crafts School on the last day before the marks began to fade after rain. This wall showed 36 paces long and 2 feet 6 inches to 3 feet wide. Along its length the ground to the east dropped a little, as if it originally stood on a bank.

Let me here face the not improbable suggestion that this wall might show the line of a lined underground passage from the interior of the Castle to the river bank, for, as with almost all ancient buildings, tales of such a passage having been "seen and

walked up for quite a distance" are floating about. I heard of two such recollections regarding Hereford Castle Green, and have been able to test them.

The first was from Mr. Matthey, in the County Education Office. He told me that he remembered seeing and walking up such a passage opening out into the river bank, the passage being of good size, lined with brick. Since it was about 40 years ago when he saw it, his recollection of its position was rather indistinct. I arranged to meet him on the spot. He was then sure that he could find the passage by walking down what is now the garden-approach to the Victoria Bridge, and at first thought, he had turned to the right, under the steep bank, but the greatly altered conditions here baulked his memory. But at last he settled down to the exact spot where he had found the culvert, which in fact still exists, five yards below the Victoria Bridge, partly hidden by bushes. It is the old outlet of the Castle millstream, and it neither leads into the Castle enclosure, nor is it a walking passage at all.

The Rev. Llewellyn Jones told me of a similar recollection of an "underground passage" which he had walked up some 38 years ago. I met him also at the spot, and on going over the ground with him, his memory also took him down the same garden and to practically the same position for the outlet as Mr. Matthey had indicated.

Now the forty years' recollection of both these observers coincides with the opening of this little garden and the footpath beyond (under the Hospital wall), in 1893. I was the leader in the citizens' agitation which led to this great improvement, and remember, when taking at the time a panoramic photograph of the river bank here, seeing this culvert opening.

My knowledge of the spot goes further back to my childhood recollection of scrambling down the then gully here and over the ruined walls and foundations of the ancient Castle Mill, then being demolished. This must have been about 1861. It was in 1863 that I heard the Russian gun fired on the marriage-day of the Princess Alexandra, being present in the Castle Green, and remember running off behind Hogg's Mount to escape the terrible hurt to the drums of my young ears, for the concussion broke many windows at the Hospital. The site of the Castle Mill was not that of the Hospital Lodge, as usually stated, but low down in the trough of the stream running from the mill-pool or moat, as clearly shown in Speed's map.

My recollections of the Green include that of its use for a national and citizens' demonstration at the time of Queen Victoria's Diamond Jubilee, when it was an open space, with the amphitheatre of Hogg's Mount available for a grandstand. It is, I think (as do many others), a regrettable step to divide

up the not-too-large open space of our only public park by fences, converting it into semi-private uses, and no longer available for full public use.

PREVIOUS RECORDS OF THE CASTLE.

Leland, in his *Itinerary* (c. 1538), gives a word picture of its condition and extent. "The drawbridge now cleane downe, and the whole castell tending towards ruine. It hath been decayed since the Bohun's time (Edward III), it hath been one of the fayrest, largest and strongest castels in England."

It is only the eastern ward (our present Castle Green) that I now deal with, and Leland gives a vivid picture of its decayed defences in his time: "The walls of it be high and strong, and full of great towres". These walls, of which no trace remains, evidently capped the earthworks to north and east, and came along the present terrace walk on the river bank. He notes, too, how the City wall, approached the north-east corner of the earthwork (Hogg's Mount) and crossed the moat by an arch, which was on the site of the present foot-bridge over an end of the Castle Pool. Hogg's Mount, the traditional name of this earthwork-corner, was, I have evidence, a separate mound of prehistoric origin, before the earthworks were added to it. Its name is from the Scandinavian root, *haugr*, for mound.

When Cantilupe Street was made, perhaps 45 years ago, I was fortunate enough to notice and take a photograph of a bit of the City rampart wall, now destroyed, which here approached and came into Hogg's Mount.

The map of John Speed, dated 1610, gives a good idea of the fortifications at that time, but obviously only a sketch, as it omits the moat, although showing the Castle Mill. The towers are omitted. It seems evident that the water-gate here shown is the present Castle Cliffe house, and Mr. Milligan thinks he sees signs of the steps within "Harold Arch" going down to the river. Whether this is what the post-war survey of 1652 (given in full in *Duncumb*) calls the Governor's Lodge is uncertain. It is notable that even as late as this the entire Castle (both wards) is said to have been "surrounded on the west, on the north, and on the east, by a wet moat, and on the south by the river Wye". It is seldom noticed that there are to-day indications of the fact that the present Castle Pool then continued through the site of Fosse House partly to encircle Castle Hill.

The decayed Castle, patched up for the Civil War defence, was afterwards sold to Sir Robert Harley, by him presented to the County for the use of the community and, in 1752, rented by "The Society of Tempers" and laid out by them in the

present form as public gardens. The County, in 1873, leased it for 200 years to the City.

The state of the Green in 1757 is accurately shown in Isaac Taylor's splendid map of the city. This shows walls and buildings, all of which have gone save Bridewell (now Castle Cliffe), and the eastern arm of the moat and the Castle Hill intact, also, in the western ward, the partly demolished mound of Castle Hill, on which formerly stood the keep.

I will now try to trace records of the Chapel within the Castle, the foundations of which were so vividly revealed by the 1933 drought.

About 1150—1154, Roger, Earl of Hereford, made a grant of the Chapel of St. Martin's in the Castle to the See of Hereford, But it seems to have belonged to another body, for about 1163—1173 Henry II confirms the right of the Abbey of Gloucester and the monks (St. Guthlac's) of Hereford to this same Chapel of St. Martin in "my Castle of Hereford", which Hugh de Lacy had given them. (See *Charters and Records of Hereford Cathedral*, pp. 13, 22.) There probably was also the separate domestic Chapel which, as I have already quoted, Henry III ordered to be built. The matter is confused by Leland referring to the Chapel of St. Cuthbert in the Castle—a probable error in name. By a confusion between ownership and dedication it has sometimes been called St. Guthlac's Chapel.

As regards the frequent human remains dug up in the Castle Green, it is not safe to connect them with a supposed cemetery of the Chapel.

Collins, in his *Modern Hereford*, Part II, p. 112 (this author is fairly safe for the *modern* history of the site), relates how in carrying a new deep sewer through the southern side of the Green in the 1880's, great quantities of loose human bones were found, and that these came "from the Cathedral Close in Dean Merewether's time". About four years ago, I saw and photographed human remains, at least two sets of bones in a stone-lined trench lying out of order end to end. An exactly similar find near (south and east of the chapel site) occurred this year and was seen by Mr. F. C. Morgan. I do not regard them as orderly burials, but whether or not transplanted remains seems uncertain.

Let me in conclusion say how this drought-revealed planning of buildings on the Castle site seems to demand organised and skilled excavation to give further information. It is all so shallow and the turf is so easily rolled back and replaced, that it does not promise to be a long or expensive matter. It does not follow that the buildings so plainly indicated are the most recent ones, which may have tumbled down and formed those shapeless patches of whitened grass which were as plentiful on the Green during the drought as the sharply defined lines.



Photos by

1. HILLSIDE, BOUGHROOD.



LONGSTONES.

Alfred Watkins, F.R.P.S.

2. LLANGOED.

To face page 41.



Photo by

Alfred Watkins, F.R.P.S.

3. STONE IN LLANGOED WOOD.



Photo by

4. LEY OVER PIPTON MOUND, ANOTHER MOUND, AND THE ALT, TO PEN-Y-BEACON. Alfred Watkins, F.R.P.S.

REPORTS OF SECTIONAL EDITORS, 1933

ARCHÆOLOGY.

By ALFRED WATKINS, F.R.P.S.

LONG STONES NEAR LLANGOED CASTLE.

These important stones stand on either side of the Wye near Llangoed Castle. They are within the usual Club limits and, as details were got together for a visit of the Straight Track Club to that district in August of this year, details are suited to this report.

The one on the Radnorshire side of the Wye, near Boughrood, is a particularly fine Menhir, standing upright on the hill-side, about 8 feet high, of massive proportions, being 4 feet wide (*Illustration No. 1*). It aligns (crossing the river) through the ancient historic burial ground (site of ancient chapel) near Llangoed Castle, to the second stone, which is in Breconshire (*Illustration No. 2*), and can be seen from the main Three Cocks—Builth Road, and would be 8 feet high if it did not lean over considerably. It is of more slender proportions, being 2 feet 6 inches wide. The alignment goes on to within 60 yards of a smaller mark-stone in Llangoed Wood, west of the main road (*Illustration No. 3*). This stone is on a cart-track, straight for a distance, and starting from the main road close to Leys Cottage. The stone, 5 feet 8 inches long, has been moved to be out of the way of timber hauling. The alignment of the straight woodland path is unusually complete in its mark-points, for it passes through two tumuli marked on the maps, one at Pipton, the other on the other side of the River Llynfi nearer Three Cocks (*Illustration No. 4*), and terminates in Pen-y-Beacon or Hay Bluff.

STONE MORTARS.

Two stones with hollows (*see Illustrations*), suggesting to me a use for grinding or mixing, have been found in river-beds.

The first, in the possession of Rev. E. Dew, was from the Wye near Whitney, a very rough cube of stone in quarried state, with a flat-bottomed basin, $4\frac{1}{4}$ inches diameter, $1\frac{1}{4}$ inches deep, roughly pecked in it. It has no smooth finish, and measures 8 inches long by $5\frac{1}{2}$ inches high and $4\frac{1}{2}$ inches deep.

The second, found by Dr. Williams of Kingsland in the bed of the Lugg near the Day House, is of smooth finish throughout.

The stone is a long oval, apparently with lugs or handles at the long ends, and is curious in having uniform and symmetrical hollow oval basins on both sides, suggesting the same idea as the double-sided prehistoric mortar found near Wye Bridge, illustrated in *The Transactions* for 1917.

The stone is $5\frac{1}{2}$ inches by $2\frac{1}{2}$ inches and $3\frac{1}{2}$ inches deep. The hollows are $3\frac{1}{4}$ inches long and only 1 inch wide, but $1\frac{1}{2}$ inches deep. I cannot think that the whole is the result of water action or accidental, but that it must be an implement worked with a tool. My suggestion is an early apothecary's mortar for salves. This stone, which I photographed at Kingsland, is now in Hereford Museum.

CHEST FROM AVENBURY CHURCH.

The abandonment, the first step to ruination, of this very interesting old church has led to the disposal of items of church furniture. The extremely interesting chest of fourteenth century date (*see Illustrations*) was lent to the Old House as a stepping stone to selling it to the highest bidder, regardless of whether it left the county or the country. It was not in good condition, but had many points of interest, especially in its iron work. It is thus described in the *Historical Monuments Commission's Report, Herefordshire*, Vol. 2, p. 7: "Of hutch type, 7 ft. long, iron bound and with round iron carrying-rings, six strap hinges, large dove-tailed joints, front feet carved with large four-petal flower."

There was some surprise that this most interesting local-relic was not given a home in the church at Stoke Lacy, to which Avenbury has been united.

CHALICE FROM AVENBURY.

This also was sold, but under conditions, and is in the Hereford Museum. It is described as: "Cup of 1571, with band of engraved ornament, cover-paten of about the same date." A pewter flagon from the same church is now in the Old House.

DEMONSTRATION AT THE QUEEN STONE.

The fact that from four to five hundred members of the Woodcraft Folk were camped out in the Huntsham meadow, enclosed by the horseshoe bend of the Wye close to Symonds Yat, gave the opportunity for the incident of which I give a note.

This organised camp-movement draws members of Co-operative and kindred bodies from many large cities and some from abroad. As the camp was pitched round the Queen Stone, I suggested to the camp-leader that I might give a short talk on the possible meaning of this prehistoric stone as a mark-point on tracks and as a sacrificial stone. This suggestion was eagerly accepted.



Photos by

Alfred Watkins, F.R.P.S.

MORTARS (?).

1. From the Bed of the River Wye at Whitney.
2. From the Bed of the River Lugg at Kingsland.

To face page 42.



Photos by

Alfred Watkins, F.R.P.S.

14TH CENT. CHURCH-CHEST FROM AVENBURY.

To face page 43.



Photo by

Walter Pritchard.

LECTURE TO CAMP-FOLK AT THE QUEEN STONE.
(A Sacrificial Cage.)



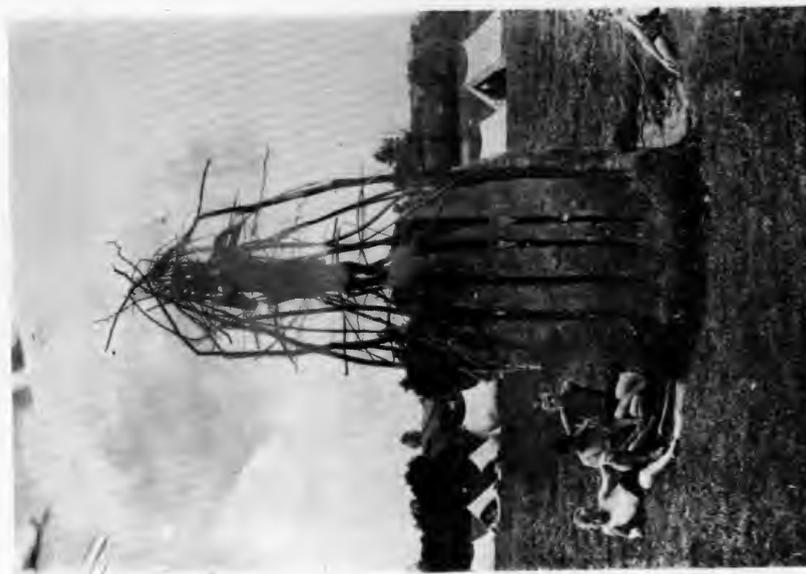
Photo by

Alfred Watkins, F.R.P.S.

VIEW FROM JELLEY'S TUMP TO ORCOP HILL CLUMP.
(Through Woodcraft Folk Camp and Queen Stone.)



ALFRED WADKINS, F.R.P.S.
CASTLE MOUND, ENGLISH BICKNOR.
(On Queen Stone Ley.)



PHOTOS BY
"CAGE" AT QUEEN STONE.

It is necessary to recall that Julius Cæsar, in his *De Bello Gallico*, speaking of Druid sacrifices in Gaul, says that they "have figures of vast size, the limbs of which formed of osiers they fill with living men, which being set on fire, the men perish enveloped in the flames" ("Everyman" translation). The first word in italics is, in the original Latin, *simulacra*. Commentators point out that this word often had the meaning of emblems, and need not be the images in likeness of a god or person, but was sometimes applied to stones or trees. The second word is *membra*, which, if the first word is not translated as figures, would mean parts or members.

My suggestion has been that the Queen Stone was the permanent base for a wicker sacrificial cage as described by Cæsar, the deep grooves being exactly right for the upright osier rods which made the foundation of a large wicker cage.

This was explained to the Camp Leader a day before the talk, and he put some of his folk to try their hands at a rude wicker cage on the top of the stone, the result, with two "victims" inside, being shown in the illustration.

The talk was based on my paper in *The Transactions* for 1926, so it need not be repeated here. It appeared to hold the rapt attention of about 250 of the camp-folk, who asked many questions afterwards.

If the wicker cage was not a model one for its purpose (a skilled basket maker and many prepared rods being wanted), it proved conclusively that the grooves served perfectly for the purpose of holding foundation rods upright, so this experience may pave the way to a future and more complete reproduction of the scene.

I verified a few days later the leys through the stone which I named in my original paper, and from the top of the ridge at "Jellemys Tump" (which seems to me an incipient camp enclosure, not an artificial tump). The photograph taken looking over the Woodcraft Folk camp of tents towards Marstow old church, on a line from English Bicknor Castle Tump, shows this ley to be sighted on that circular "folly" of trees which caps Orcop Hill, and which Mr. Hubert Reade has written about as "Butters Court". (See *Illustrations opposite and p. 44.*)

MARK-STONES.

Several previously un-noted ones have been discovered, chiefly by Dr. J. S. Clarke, of Weobley, who has told me of the following:—(1) At a road-junction a little north of The Hurst Farm, Weobley; (2) in Weobley, on the Kington road on the right at a corner a little beyond the Catholic Chapel; (3) at Devil's

Green, near Newton, where the road from the Hurst comes out into the Dilwyn road; and (4) the important cup-marked stone at Tillington, which I deal with separately.

A fine upright stone in Corgum Lane above Vowchurch Common (*see Illustration*) was reported to me locally, and is marked on the 6-inch map. It has a smooth basin on the top, too sloping to hold water, which I surmise to have been used for pounding or grinding corn. It is on an alignment from the Ord. Trig. point 751 ft. (on a hill-top locally called "Camp"), passing also through the high corner-point of the earthwork near Poston House, Pen-twyn, and cross-roads in Peterchurch village.

CANON BALL FROM VOWCHURCH.

Mr. Seaborne, of Vowchurch Common, gave to me for the Hereford Museum an eleven-pounder ball picked up near Wassel Farm, evidently of Civil War date.

PILLAR STONE AT BUSH BANK.

I have long noted what seemed to be a Long Stone (*see Illustrations*) lying in the grass 150 yards up a by-road leading to Weobley, leaving the main road at the Corner Inn at Bush Bank, and had suggested to local members the desirability of re-erecting it.

Dr. Clarke, of Weobley, has now had this done on the spot where it lay. It now stands 4 feet above ground and 17 inches buried. I still thought of it as a Long Stone when I examined it erect. But the following points modified this conclusion.

Firstly: It is a *worked* stone, being uniformly rounded by chisel at the upright corners. Secondly: There are indications of a symmetrical shield pattern on the two sides, and on the front at the top. Thirdly: The top is not the original shape, but badly broken, part of the breaking being a recent fracture. A piece of stone which was embedded in the ground a yard or so away fitted this fracture, and it is in position in my photograph, but it does not complete the original top. The whole thing is a "worked" monument later than prehistoric times, probably an early monolithic Wayside Cross. I surmise that when defaced, probably in accordance with the Puritan Long Parliament decrees about 1642, it was moved a little from its original position, about 90 yards nearer the road-junction, being then on a well-marked alignment from the western vallum of Magna Castra through Birley Church, markstone at Knoakes Court, etc. This I gave in my Archaeological Report for 1931 under the heading of the Brinsop Cist-burial.

MARLEY HALL POTTERY-SITE.

Cleaning out a pond at the north end of the orchard containing the pottery dumps, a large stone slab (*see Illustration*) was found



Alfred Watkins, F.R.P.S.
CORGUM STONE, VOWCHURCH.



Photos by
THE QUEEN STONE (*see page 42.*)

To face page 43.

To face page 44.



Photos by

PILLAR-STONE, BUSH BANK.



Alfred Watkins, F.R.P.S.

TOP OF THE STONE.



Alfred Watkins, F.R.P.S.
THE CAMEL EMBLEM OF THE KNIGHTS HOSPITALLERS
AT CONINGSBY HOSPITAL.



FLAT SLAB, MARLEY HALL.
Photos by

lying horizontally. It measured 8 feet by 6 feet by 3 inches thick. No other stones or paving were near it. It was 2 feet 3 inches below ground, with washed layers of clay adjoining, suggesting that it was a platform for the potters to stand on when washing clay. There were many pottery scraps of types like those found near, and the clay around was of fine potting quality.

EMBLEM AT CONINGSBY HOSPITAL.

Over the door of the dining hall of the Knights Hospitallers' wing is a puzzling emblem, usually guessed to be either the "coney" emblem of the Coningsby family, or the Golden Fleece. I took the photograph of it to Mr. Geo. Marshall to get the considered opinion of one with heraldic knowledge.

He reports: "I was puzzled at first, but it is undoubtedly a camel, in reference to St. John the Baptist, the patron saint of the Hospitallers. St. John in mediæval sculpture is often represented holding a camel-skin cloak with the head hanging down. Probably a 14th century work copied from one of the Bestiaries. The camel is shown among palm trees. Note the very fair representation of the camel's head and the long legs, also, I think, the hump. What looks like a tail is, I think, part of the palms." (See *Illustration*.)

It has obviously been reset from another position.

CUP-MARKED STONE AT TILLINGTON, HEREFORD. (See *Illustrations*, p. 46.)

Until Dr. J. S. Clarke found this instance of those strange pre-historic markings on the top of a large stone at Tillington, no such stone was known to exist in Herefordshire.

The purpose of such markings has puzzled antiquaries. Dr. Graves, Bishop of Limerick, observed last century that in many cases the cups were in lines of three, the ancient mounds in the district being also three in a line, therefore the cups were primitive maps or diagrams.

Asking Dr. Clarke to mark the stone-site on my 1-inch Ordnance Map, he exclaimed: "Why! you have an alignment already marked through it." This is additional corroboration of the existence of the trackway-alignment that I had described in the Woolhope Club *Transactions* for 1931, p. 135, two years before this stone (now found to be on the track) had been noticed and reported. The stone is in a grassy lane against a cottage, and a rod laid exactly over two of its four cups points to, and along, part of a deeply-cut ancient track by the wood starting 35 yards from the stone. This is at an angle (or azimuth) of 139 degrees east of true north, exactly that of the map-alignment already published, and according to a table for the latitude furnished by

Admiral Boyle Somerville would be right for observing the sunrise at the Winter Solstice (December 21-22) over a skyline 5 degrees above the true horizon.

The map revealed a second alignment crossing at the stone, at an azimuth of 225 degrees, this being right for Winter Solstice sunset over a sky-line elevated 3 degrees. A rod laid over the other two holes indicated exactly this angle.

The map mark-points of these two alignments are:—

A—B. Harley's Hill, Presteign (1,029 ft.)—Titley Church—Moated mound, Strangworth—Weobley Church—Beacon Hill, Wormsley—CUP-MARK STONE—two demolished church-sites at Hereford and over the Wye near present bridge—Dinedor Church.

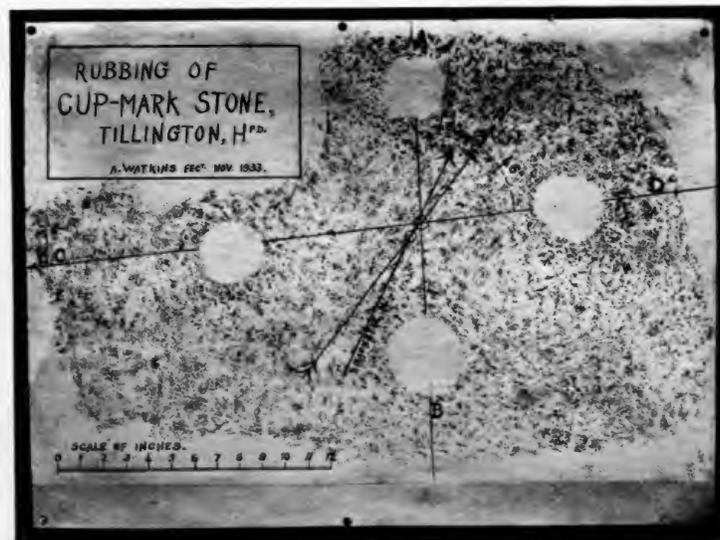
C—D. Hampton Court—CUP-MARK STONE—Brinsop Court moated site—Ancient ford at Bridge Sollars with approach lanes in line—Bellimoor, Madley.

One of the direction-lines over the cups (A—B) therefore points along an ancient track and to a Beacon Hill. The other (C—D) to a moat-site and an ancient Wye ford with its approach lane.

The stone is on the present parish boundary. Size, 20 inches above ground, top about 4 ft. by 3 ft. It is buried for about 12 or 18 inches, and has apparently a step cut out of one side, as if to make it a horse mounting block. It seems therefore to have served at times the three purposes which the Ancient Laws of Wales (Triads) name as protected stones, namely—Meer-stone, Guide-stone and Mounting-stone.

Regarding alignment A—B, there is further confirmation of its trackway purpose in the fact that when visiting Strangworth mound (to report an early pottery on it) in July, 1931, my printed report read:—"From Strangworth farm-yard a cobbled causeway through a gate pointed at the mound, and opposite this was the one original causeway over the moat on to the mound." Now (November, 1933) the line A—B laid at 139 degrees over the moat-site on the 6-inch map falls exactly on the two causeways described two years before. In August, 1931, a cist-burial near Brinsop was reported and visited, and it was then that the mark-points (but not the cup-mark stone, then unknown) on A—B were found by local and map investigation and given, the said burial being on, or alongside, the track thus inferred.

There seems to be very clear evidence, or perhaps proof, on several points: (1), The stone being a mark-stone on a straight track; (2), the track (marked by a cup-marked stone) being of great antiquity; (3), the cups (in this case) being directing-indicators pointing out a convincing track.



Photos by

Alfred Watkins, F.R.P.S.

THE FOUR CUP-HOLES IN STONE AT TILLINGTON.



Photos by

Alfred Watkins, F.R.P.S.

1. LEYS THROUGH CUP-MARKED STONE, TILLINGTON.
2. CUP-MARKED STONE, TILLINGTON.

To face page 46.



THE STEP IN CUP-MARKED STONE, TILLINGTON.



Photos by

Alfred Watkins, F.R.P.S.

STRANGWORTH MOATED MOUND, ON CUP-MARK LEY.

This stone, with only four cups, is an unusually simple example, for such stones have usually a greater number, and in such, three cups in a row are required as evidence. Indeed the Llanerch Farm stone in Radnorshire with 31 cups has rows of four cups for indicating direction.

Obituary Memoir.

COLONEL SIR JOSEPH ALFRED BRADNEY, KNT.,
C.B., T.D., M.A., D.LITT., F.S.A., D.L., J.P.

BORN 11TH JANUARY, 1859—DIED 21ST JULY, 1933.

The Club has sustained a great loss by the death of Sir Joseph Bradney. He was the oldest member of the Club, having been elected in 1875 when he was but sixteen years of age.

His historical knowledge of the district in which he lived was unsurpassed, and in his monumental work *A History of Monmouthshire* he has incorporated much of this for future generations. As a genealogist he was unrivalled, and his large collection of pedigrees of the families of Monmouthshire and South Herefordshire, beautifully written in many volumes, he bequeathed to the National Library of Wales. Among his many accomplishments he excelled as a Latin scholar, and was one of the few who could converse and write in that tongue.

In his own county of Monmouth he occupied many public offices and was at one time chairman of the County Council. At his home, Talycoed Court, which house he built, he was greatly interested in the welfare of those on his estate, and in the care and development of the woods on the property, having a great partiality for planting avenues and making vistas through the woods, which he carried out with excellent effects.

He supplied contributions on local families to our *Transactions* from time to time, and acted as President of the Club in 1923.

He died on the 21st of July, 1933, and was buried in the churchyard of his parish church of Llanvihangel Ystern Llewern.



Photo by

Alfred Watkins, F.R.P.S.

FREEMEN'S PRISON.
Front showing bressumer and window.

Woolhope Naturalists' Field Club.

PAPERS, 1934.

THE FREEMEN'S PRISON AT THE BOOTHALL, HEREFORD.

By ALFRED WATKINS, F.R.P.S.

(Read 15th March, 1934.)

The final and complete demolition of the ancient Freeman's Prison this year makes a record of it necessary.¹ Entries in various documents made it clear that for several centuries those freemen of the city of Hereford who, having got on the windy side of the law, had temporarily lost their personal freedom, were confined in certain privileged apartments "in ward in Bothehall".

But until references in the deeds of the property belonging to Messrs. A. C. Edwards and Sons were noticed by Mr. Edwards this year, it was a puzzle where this prison actually was situated, as it was obvious that a room used for this purpose could not be used also for a public trading hall.

My own paper on the history of the Boothall in *The Transactions* for 1919 only considered the actual timbered hall, and although that paper should be read as an introduction to these present notes it is now clear that the tenement or messuage "called Bothehalle", from the time when it was bought by the Mayor and commonalty of Hereford in 1393 to the time when it was sold by them in 1783, comprised in addition to the hall itself buildings, stables, premises, garden and yards running from East Street to High Town, in fact what is now the several properties of the owners of the Booth Hall Inn and all the premises of Messrs. Edwards and Sons, drapers and furriers. There was thus room for chambers devoted severally to a Freeman's Prison and to a hall for the Mercers' Company, quite independently of the large Boothall. The records make it quite clear that there were rooms so devoted, and these are the ones, much altered, which have just been destroyed. I will now give the documentary evidence I have found which throws light on the Freeman's Prison, repeating a few items from my earlier paper.

1393. License from the King to the Mayor and commonalty of Hereford to purchase the Bothehalle.

¹ A playing card of the year 1665 was found on demolishing the Freeman's Prison.

Between 1509 and 1547, in Johnson's *Ancient Customs of Hereford*, p. 113, is quoted an entry made at a law-day, *temp.* Henry VIII, which records that "it is agreed by the mere, steward, mere's brethren, and the three enquests, that every person . . . condemned . . . finding surety, shall be imprisoned in the Bothehall instead of in Bistrete Gate, provided that it is lawful to go to divine service at St. Peter's, with the keeper of the Bothehall or other citizen, or with permission of the mere to goo to dyn with a friend, or to his counsell lerned."

1555. Petition from William a Prise, "detained in ward in Bouthe hall", complaining that he has not had the liberty that other prisoners have of "Goeinge wuthe a freeman to the churche to here devyne service of Almyghtie God, and so withe hym to warde againe, whiche hathe bene accustomed tyme oute of mynde."

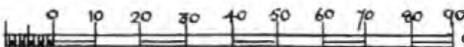
1589. Entry in register of St. Peter's Church: "George Elliott buried out of the Bouthall"; that is out of the Freeman's Prison there. Similar entries, "out of the gate," refer to Bysters Gate Prison.

EXTRACTS FROM DEEDS OF MESSRS. EDWARDS AND SONS' PREMISES.

1780, April 28th. Lease for 21 years. The Mayor, &c., to Geo. Willim, on surrender of former lease to William Willim (deceased) of June 28, 1766. All that messuage or tenement called the Boothall, and all houses, stables, buildings, &c., to the same belonging. Four Chambers called the Freeman's Chambers and one house or office thereunto belonging. Two of these chambers having chimneys only excepted to the said Mayor for such uses as have been anciently accustomed for the benefit of such freemen as shall be committed prisoners to the said house and custody of the said George Willim. With (reserved) Free ingress, egress and regress thereunto as anciently and as often as need shall require. And it shall be lawful as well to and for the said Mayor, Aldermen and citizens and all others whatsoever, to have and enjoy from time to time during the said term convenient Booth or Leather Hall for the sale of all tanned leather. The annual rent to be Five pounds and two shillings, with a couple of fat capons for the Mayor at the feast of Easter.

MINUTE OF COMMISSIONERS OF THE HEREFORD PAVING ACT.

1783, February 28th. This recites how George Willim holds of the Mayor and citizens a certain messuage called the Boothall Inn, the said houses and premises consist of a large pile of buildings

Scale: 1/500thScale  of Feet.

The Old House.

High Town.



PLAN of FREEMEN'S PRISON and BOOTH HALL.

which have now become ruinous and in great decay although Geo. Willim has spent considerable sums in repairs.

In consideration, Geo. Willim agreeing to take down and rebuild the front with brick in a handsome and ornamental manner.¹ The Mayor, Aldermen and citizens having given their consent, the Commissioners also approve; to alienate and sell for ever the said messuages and premises. There appears to be no reservations, as in the lease of three years previously, as to the use for the public of a Boothhall, or as to use as part as a Freeman's Prison.

DEDUCTIONS FROM ABOVE DOCUMENTS.

The use of the Boothhall for the wholesale trade in woollen goods and in fact most other kinds of goods sold by mercers (as detailed in my first paper) had ceased by 1780, excepting only a limited use for tanned leather, this also ceasing by 1783.

The use of some part of the premises as a Freeman's Prison seems to have documentary evidence of a commencement in or about the first quarter of the 16th century. This agrees with both the architectural date of the building and with the 1555 petition from an inmate. The same use was evidently carried out by William Willim as gaoler from 1766 to 1780, and was continued by his son Geo. Willim, "Wine Merchant," for a year or two, but ceased by 1783. In these three years the premises had become the Boothhall Inn.

The premises included a "Stoneyard", which seems to have occupied the site of the present stables of the Boothhall Inn, also a garden at the back of the Freeman's Prison, and somewhere to the west the Blue Boar Inn, defined in a lease of 1803 as having Packers Lane to its south, and "the street or place where the fishboards formerly stood on the north". I surmise that these fishboards were in one of the several passage-lanes which Taylor's map of 1757 shows joining High Town and Packers Lane. Price's *Hereford*, 1796, says "under the Shire Hall is kept the corn market, and in a retired part of the same place is the fish-market".

I must correct what I now think to be an error in my earlier paper on the Boothhall. I there assumed the reference in the 1686 minute of the Mercers' Company Book, to the "Booth-hall being the ancient and accustomed place for such sales", to be some indication that their place of meeting was at the Boothhall, especially as they had to move to another meeting-room some time after 1750, which was about the period when the Boothhall fell into decay. But I now see that Duncumb's statement in his *History* (1804), that among the 14 City Guilds or Companies who had separate apartments in the upper story of the old Town Hall or Market House, the Mercers' Company was one, is probably correct, as their new quarters, the Sun Inn, immediately opposite the

¹ A drawing of this proposed front is in the Hereford Public Library.

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5ca

Town Hall on the south, is "as near as may be" to their old meeting-place there. The Mercers' Company was evidently a revival of the old Drapers' Company, made in 1576, the date of building the Town Hall and of the provision of new apartments for City Companies, for the date on the seal of the Mercers is also 1576.

THE BUILDING NOW DEMOLISHED.

The lease of 1780 shows that "four chambers" were then called "The Freemen's Chambers", but that only two of them, "having chimneys", were now to be allotted to that purpose.

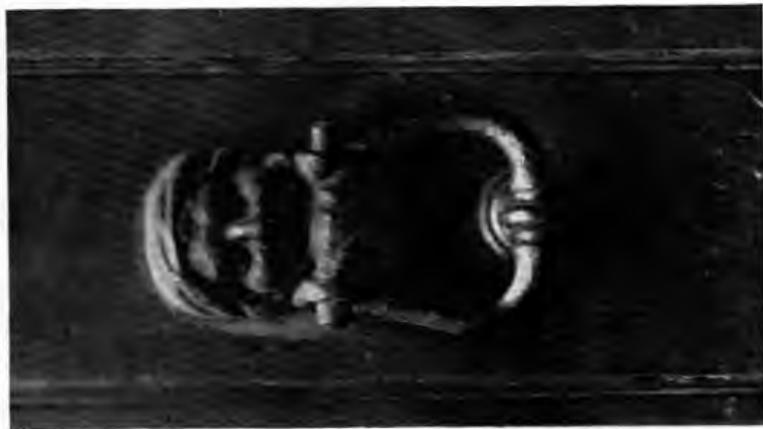
What was to be seen in Messrs. Edwards and Sons' yard up to 1933, but now all demolished, was a timber-fronted building, facing the western wall of the Boothall, and about fifteen feet from it; the open yard thus formed being apparently a survival of a cobbled passage, which, as Taylor's 1757 map indicates, formerly ran right through from High Town to East Street.

This two-storied building, parallel with the Boothall, was approximately thirty-five feet in frontage and about twenty feet deep (*see Plan*), of timbered structure, the upper story overhanging a foot or more, the lengthways bressemer showing deeply moulded above the overhang. The section of this moulding as sawn off appears in the illustration. The building was originally completely timber built, and before demolition the corner upright stanchions on the western side still went up to the roof, and, supported on stone blocks at the foot, took the roof weight. An oriel window, shown in the illustrations, lit the upper room, and a smaller window, long blocked up, lit the ante-room to the north.

The lower story, until demolished, revealed nothing but modern work, excepting the fine Georgian brass knocker on the outer door (*see Illustration*), which evidently came from the High Town front of the 1783 building.

The large upper chamber, about twenty feet square, was fairly complete (*see Illustration*). The ceiling, in four panels, each with central boss and fleur-de-lis in the corners, the oak panelling, much disturbed, but pulled down when I saw it, had in part a strap-work frieze; the flat panels measured about $14\frac{3}{4}$ inches by $10\frac{1}{2}$ inches. There was one bit of fluted panelling, but without linen-fold ends. All these accessories are probably of the same date as the building. The window was 8 feet wide, 4 feet 6 inches deep with upright protecting bars of oak, two in each of the lights, $\frac{3}{4}$ inch square, set in diamond fashion as if substitutes for earlier iron bars. A small ante-room adjoined on the north side with a papered-up communicating doorway having a four-centred Tudor head with plain hollow moulding to jambs and head.

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Alfred Watkins, F.R.P.S.



FREEMEN'S PRISON.
1. Ceiling timbers, ground floor.
2. Door knocker.

Photos by

6
See



Photos by *Alfred Watkins, F.R.P.S.*

FREEMEN'S PRISON.

1. Upper chamber with plaster ceiling.
2. Bressemer and arches.

It was seen on demolition that these "Freemen's Chambers" were all of the same date, and originally extended under the rebuilt premises for another eighteen feet at least towards High Town. The beams and cross-beams supporting the floors of the whole were elaborately moulded and formed panels about five feet square, the joints not being mitred but made with the older "mason's stop," a square joint in which the apparent mitre is cut out of the solid main beam, which is not therefore weakened by a notch. This is shown in the illustrations, as is also some Tudor arcading with the same heads as in the small doorway upstairs, but with moulded corbels which help to date the whole.

The date of the whole building, confirmed by doorways in the cellar, appears to be the first quarter of the sixteenth century.

Some interesting colour painted decorations on wood-work of uncertain date were found built into the demolished premises, namely joists apparently cut from a larger decorated beam. They bear fragments of inscription in old English letters, and on a kind of shield some initials, of which the final one (perhaps indicating a surname) is A.

This type of painted decoration for internal wood beams or joists seems to have been in fairly general use locally.

A cellar basement went under the northern end of these "Freemen's Chambers" and from it, leading to passages eastward and northward, two stone doorways, round-headed, that is one-centred, but segmental, much short of the half-circle, the head and jambs having a continuous flat bevel but no other moulding, all apparently of the same date as the upper wood-work.

FLINT WORKERS AND FLINT USERS IN THE
GOLDEN VALLEY.

By R. S. GAVIN ROBINSON.

(Read 19th April, 1934.)

For this paper I will define the Golden Valley as lying between the top of the ridge from Arthur's Stone to the Batcho Hill, and the 1,000 ft. contour line on the Urishay Ridge, and will actually only deal with that part of it which lies within a two mile radius of Turnastone Church. I must explain that my knowledge of flint sites is limited to the Golden Valley, in less hilly districts the conditions under which the flint-users lived was doubtless entirely different.

Some of my flint finds have been identified by the British Museum as being of the late Neolithic or early Bronze Age, and this is classified as being the period of Menhirs, oblong enclosures of stones, burials in cists, and round barrows, all of which we find evidence of in or near the Golden Valley. Grinding of corn and cultivation of crops was known earlier in the mid-Neolithic period.

The flint-users of the Golden Valley were apparently governed in their choice of sites by three factors, water, observation, and safety for their crops and themselves from wild animals. Their pottery did not lend itself to the transport of water for any great distance, therefore their villages had to be near a good water supply. They chose hilltop sites for several reasons, the prior one being, probably, inter-communication by signals both between the various settlements, and also between the hunting parties who would go to the valleys for food and the settlements on the hills. Signal fires lit on the hilltops would be readily observed by the hunting parties, who could return in case of emergency. The second reason for the selection of hilltop sites was that the hilltops being comparatively bare of trees, they were in less danger from wild animals, and their crops free from destruction by wild deer, pig, etc., than they would have been in the valleys.

I propose taking the areas where I found evidence of flint workers in the following order: Stockley Hill—Hill Farm—Poston—Shegaer—Cothill. I shall also refer to the places where I have found flints or barrows: Vowchurch Common—Wellbrook—Turnastone—Urishay. The first flint I discovered was at Stockley Hill, and it was a fortunate find, as it was well

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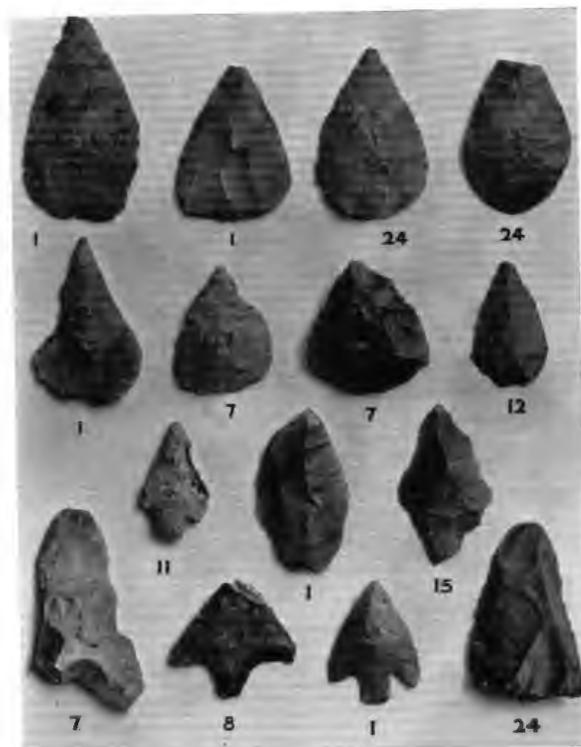


Photo by

F. C. Morgan, F.L.A.

Arrow head types. The tanged, and tanged with barbs varieties are rare, only four specimens having been found. No. 7 see notes on p. 63. In the third row transpose the figures "11" and "1."

worked, and drew my attention to the possibility of there being more. It was in a ploughed field on the top of Stockley Hill, across which members of the Club walked last year. Having found one indisputably worked flint, I have searched for more, whenever my work took me across the field, with very gratifying results. Five different types of arrow head have been found in this field, both polished and unpolished, with and without tangs. A knife found is of different flint to the others, the only implement of this particular flint found elsewhere was in a field above Snodhill Castle. I think this point is of particular interest, as indicating two separate sources of supply from which the workers obtained their rough material. The British Museum are of the opinion that this knife is late Neolithic or early Bronze Age.

With reference to the question of where the flint worked at Stockley Hill was obtained, the authorities of the British Museum expressed the opinion that the implements sent for identification had been made from flint found in the drifts. But although I have searched, I can find no flint in the gravels of Stockley Hill, nor in the gravels of the Golden Valley. As the two flints referred to above are of different quality to the others, although they come from sites three miles apart, and bear no resemblance to the general run of flint used in the Golden Valley, I think we may infer that flint was obtained from at least two sources, neither of them local, as suggested by the Museum authorities.

With reference to the flint scrapers and borers from Stockley, I do not know to what extent patination indicates the age of flints, but the patination of flints in this field is very varied. One I have found shows signs of working over patination. This may possibly indicate that it was a flint which had been worked by previous occupants of the site, thrown away, and again found and re-worked. If this is correct, and instances of this have occurred in England, then we have evidence of extremely protracted occupation of this site.

Now it is of particular interest that practically all the flints in this field come from a strip on the west side, say 100 yards long by 50 yards wide, with a dense area of some 30 yards square. By a "dense area," I mean a site, where judging from the number of flakes and partially worked flints I have found, there must be several flints per square foot if the soil were sifted. With a few exceptions every flint I have found outside this strip has been worked, and these exceptions have been mainly small flakes which can easily have been carried on agricultural implements, etc.

Now in view of what I propose saying later, it is worth noting that the densest area is 25 yards away from the highest point of the field. On the highest point of the field, which is also the highest part of the ridge in this part, there are the remains of an oval enclosure marked by stones of varying sizes and composition,

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Photo by

F. C. Morgan, F.L.A.

Spear or lance heads. No. 19, see notes on p. 63.

sandstone, limestone, and conglomerate from the drifts. These have not arrived in their present position by natural means, as some of them are blocks of sandstone, showing no signs of water action; adjacent there are also large blocks of limestone, lying a long way from and higher than the nearest outcrop, which can only have arrived in their present position by human agency. I think it would be safe to say that these stones marked a boundary during the flint-users occupation of the site, and that, if so, the men who actually worked the flints lived some 25 yards outside the enclosure marked by the stones. Within the line of stones I have found a few flints only, though Mr. Marshall picked up a large one (from the type it might possibly be a scraper of an earlier date), yet 20 yards from the line of stones I have picked up 17 flakes in one morning when the ground was being worked. As the stones forming the enclosure interfere with the cultivation of the field, I am removing most of them, and intend re-erecting them in my garden, more or less in a circle. The removal of the stones might be worth recording in the *Transactions* of the Club, as otherwise, at some future date, a Druid Circle may be discovered in Poston garden! You will see from the illustrations of these stones that it is highly improbable that blocks of sandstone of this shape should be lying near the surface mixed with gravels of the drift, and yet showing very little sign of weathering or water action, unless they had arrived by human agency, leaving out the point that they formed an oblong enclosure.

Now this Stockley Hill site has two of the requirements I mentioned, a very wide field of observation over the Wye Valley, to the Malverns, Aconbury, and also to the Black Mountains and the Urishay Ridge, and I think Mr. Watkins will bear me out in saying it lies at the junction of the old hilltop road (the Greenway) from Arthur's Stone, and an old track from the Wye Valley to the Urishay Ridge, where we know there was a large Neolithic-Bronze Age population.

The barrow which Mr. Marshall and I excavated last year (see the *Transactions*, 1933, pp. 30-35) dates the period of occupation to the Iron Age in this district, but the flints I have found date back much further, indicating a very protracted occupation of the locality.

Before dealing with the next flint worker's site, I wish to call your attention to the barrows of the Golden Valley. When I first drew Mr. Marshall's attention to the barrow we excavated near the Stockley Hill site, I made enquiries from old residents in the district, and one man of 84, who has lived here all his life, and whose father and grandfather farmed land adjoining the barrow, informed me that what we thought was a burial place was "merely a lime kiln." As you know, having heard Mr. Marshall's paper on the subject, the barrow definitely was undisturbed, with no

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Photo by

F. C. Morgan, F.L.A.

Neolithic points, knives, and microlithic types.

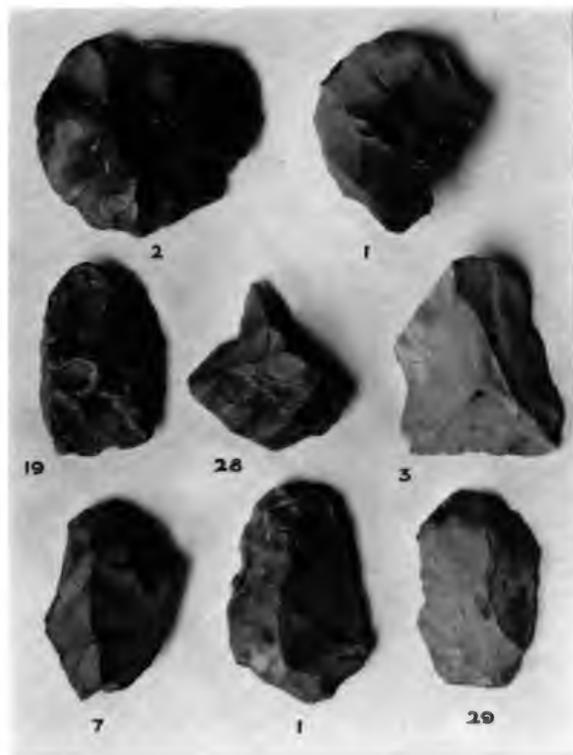


Photo by

F. C. Morgan, F.L.A.

Implements. No. 19, see notes on p. 63. No. 28, Halbert type implement, rare. No. 7, scraper made of drift pebble, see notes on p. 63.

trace of ever having been used as a kiln. There is a genuine kiln some 200 yards away, near to the outcrop. Now, near the Hill Farm settlement, which I propose dealing with next, there is another limekiln standing on a bare hilltop, and 200 yards away there is a very substantially built limekiln near the outcrop.

I wish to draw your attention particularly to the very strong resemblance between the two mounds, with which I am now going to deal, Hill Farm and Shegaer. I cannot help thinking that the Hill Farm limekiln, on the bare hilltop, represents a barrow connected with the Hill Farm settlement, and that in the early days of lime burning the workmen merely converted a convenient mound into a kiln, and then when it became a more systematised industry they built a substantial kiln near the outcrop of limestone. At Shegaer, there is a limekiln a very long way from the outcrop, very similar in shape and position to the one just mentioned, and with two definite flint workers' settlements close by, one to the north and the other to the south-west. I will deal with these later. I merely mention them now to emphasise their relationship to the mound.

On the Urishay Ridge, near the Wernderris Longstone, we have a single barrow, with possibly another close by. It was on the Pucha Farm here that Mr. Lewis found the very fine bronze celt which is in the Hereford Museum. About half a mile away there is the Pentwyn barrow. I cannot claim to be the finder of this, as Dr. McMichael had already reported it.

Nearby there is also Coed-Poeth. This is possibly an unrecorded Norman earthwork, but I think there was a far earlier occupation of the site, as I found flints in a field nearby. In fact it was the flints which started me looking for an earthwork at this point.

To return to the flint-users' settlements. The next one is on the Hill Farm, about 800 yards south of the Stockley Hill settlement already dealt with. My attention was called to this field by a gentleman picking up a flint scraper while shooting, and I proceeded to search the field with satisfactory results. Among the finds are a well worked knife of a different pattern to the Stockley one, a different type of arrow head, and a very minute circular scraper. The flint used is similar to that found at Stockley.

Here again, the site met the requirements of observation over a wide area and unfailing water. Here again the densest area of flints was some 20 yards from the highest point of the field. A very interesting point about this site is that it commands the Grey Valley, down to the Orcop Range of hills, but has no observation over either the Wye or the Golden Valleys, while the Stockley site has no observation over the Grey Valley. As I have already mentioned there is a possible barrow some 200 yards away.

The next site to consider is the one near the Iron Age Camp at Poston, visited by the Club last year. I had heard that a perfect flint arrow or spear had been found some 40 years ago, during some ditching operations, but this unfortunately has been lost. I carried out a thorough search of the field next time it was cultivated, and found flints all over it, both flakes, worked implements, borers and scrapers.

But I could find no area of density similar to that on the other two sites. Owing to disturbance to the surface soil that has taken place here during many centuries, it is impossible to guess where the actual occupation site was. There is a preponderance of worked flints in this field; apparently there was less manufacturing done here than at Stockley. The flint is similar to that used at Stockley and the Hill Farm. I found a very large number of sandstone picks littered about this field, all apparently split off a block, shaped to fit the hand and roughly chipped or ground to a point. These could have been used in excavating for the large earthworks which exist on both sides of the flint-users' settlement.

This site commands the Golden Valley from end to end, but has no observation over the Wye Valley, and only a partial view of the Grey Valley. Might we infer that each settlement was allotted a separate hunting ground, and that their settlements were individually sited to command different areas both from a view of mutual protection and to cover their own allotted hunting grounds?

The identification of the settlement at Shegaer was not due to the accidental discovery of a flint, but to working on a theory as to how these people lived. My argument is that they constructed their settlements where they had a definite field of vision, and a good water supply, and that they used definite trackways, sighted on natural features, and that their barrows had been converted in some cases into lime kilns. Mr. Watkins' lecture on "Trackways" drew my attention to Shegaer, on the Urishay side of the Valley, and I found on a map that there was a lime kiln, unfailing water and good visibility at about 600 feet. I visited Shegaer, and in the most likely field found a number of flint flakes lying in a zone of 150 yards by 50 yards, slightly below the highest point of the field. A consideration of this site shows it is what one might expect after an inspection of the other two, *i.e.*, a plateau on a hill commanding a valley, with a slight rise in the middle, say of 10 feet, unfailing water, and a lime kiln at an unreasonably long way from the outcrop. I have dealt with the probability of this kiln being a barrow converted.

There is another flint working site about 200 yards west of the barrow, the flints again concentrated, and a rise in the middle

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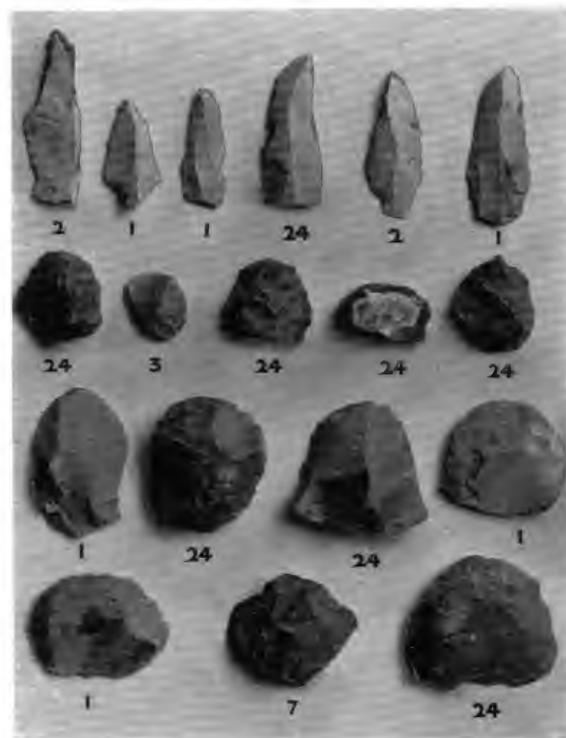


Photo by

F. C. Morgan, F.L.A.

Non-geometric microlithic types.

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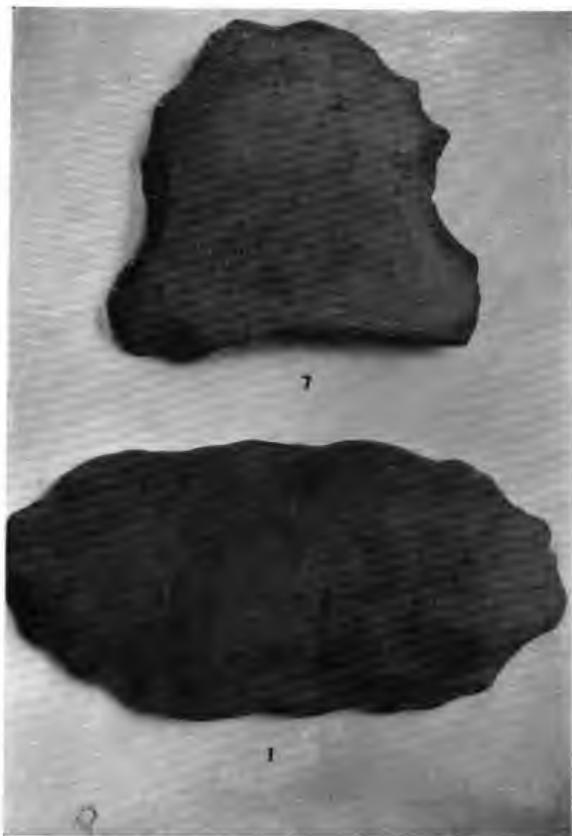


Photo by

F. C. Morgan, F.L.A.

Implements made from drift pebbles. For No. 7 refer to notes on p. 63.

of the field, with a spring close by. Mr. Watkins selected this barrow or mound as one of the points in his lecture on trackways. The flint used here is similar to that found on the Stockley site.

The examination of the next site at Cothill is incomplete, as the field indicated by visibility, water and a mound is under winter corn. However on this site I managed to find three flints, one calcined, and two cores. Three flints do not of course prove a settlement, but I hope to search the field thoroughly when the corn is off the ground. The mound here called "Camp" is on a line Mr. Watkins selected in his "Trackways" lecture.

I have not dealt with the occasional finds of flints, mainly worked and broken, which occur in almost every field above the 500 feet contour line. Below that level I have only found flints in two places, one in the Knapp field at Wellbrook, near Peterchurch, and the other on the mound near Turnastone Church, and I do not think, considering the number I have found above that line, that if they had been common below it I should entirely have missed them.

It is of course impossible to say if all these sites listed in the schedule attached were occupied simultaneously, but we may visualise a fairly dense population living on the hilltops in little settlements, subsisting on the animals that lived in the valleys, supplemented by roots, berries, and a few scanty corn crops, and trading skins and roots for flint, salt, etc.

One final word of explanation as to where I obtained some of the theories I have put before you regarding the conditions under which the flint-users lived. I have spent a considerable time in the forests of Ceylon, where the people today are practically living in the same state of culture as the flint-users apparently were, having reverted more or less to their aboriginal state from the high civilisation that existed in Ceylon 2,000 years ago. If you take a jungle villager today, and remove his muzzle-loading gun, his steel knife, his scanty clothing of foreign manufacture, and a slight veneer of education, you will have a man who lives by hunting, supplemented with a little corn grown in clearings in the forest and with roots, berries, etc., living in little villages, each with its half-dozen families, presided over by a minor headman or patriarch. The huts built of mud and wattle are congregated together for mutual protection against wild animals. These villages are practically self-supporting, the only requirements they obtain from the outside world being weapons, clothes and salt, for which they trade skins, dried meat, honey, etc. Intercommunication is mainly along narrow tracks through the forest, generally leading from one stone outcrop to another, or from one natural feature to another. I think you will agree with

me that this probably represents a very fair picture of how the flint-users lived in the Golden Valley.

That is all I have to say, except that without the interest taken in my finds by Mr. Marshall, Mr. Watkins and Mr. Morgan, I do not think I should have persevered in my search for traces of early man, or have obtained sufficient data for these remarks.

NOTE.—The numbers on the illustrations refer to the site numbers as given in the "Analysis of Sites".

ANALYSIS OF SITES WHERE FLINTS ARE FOUND IN THE GOLDEN VALLEY.

Locality.	Parish and Ordnance Map Number.	Height above Sea Level.	Area where found in Field.	Period or Type.	Remarks.
(1) Stockley No. 1 ...	Peterchurch. 1175	764 feet ...	Neolithic on the East. Working floor of Bronze Age 30 yards from west hedge.	Neolithic Bronze.	Very prolific site, arrows, knives, scrapers, and chips.
(2) Stockley No. 2 ...	Peterchurch. 1178...	764 feet ...	Scattered over S.W. end of field.	Neolithic Bronze.	Well-worked implements. Arrows and knives. Quality good.
(3) Hill Farm ...	Vowchurch. 113 ...	737 feet ...	South central ... in permanent pasture.)	...	...
(4) Kennel Field ...	Vowchurch. 80 ...	700 feet ...	Scattered all over field ...	...	...
(5) Birchey Wood ...	Peterchurch. 514 ...	736 feet ...	On small Earthwork at east edge of wood.	...	Scrapers, borers, flakes and cores.
(6) Greenway No. 1 ...	Peterchurch. 443 ...	772 feet ...	N.E. corner of field	...	Six flakes and scrapers found in excavation trenches.
(7) Greenway No. 2 ...	Peterchurch. 442 ...	772 feet ...	South side ...	...	Flakes and scrapers. See footnote.
(8) Greenway No. 3 ...	Peterchurch. 444 ...	780 feet ...	Central ...	Neolithic	One arrow early bronze. Scrapers, chips and flakes.
(9) Wellbrook ...	Peterchurch. 920 ...	527 feet ...	North slope	...	Scarce, quality bad.
(10) Slade Farm ...	Peterchurch. 1039...	500 feet ...	South central	...	A very pronounced working floor area, with quantity of chips, flakes and scrapers.
(11) Barrow ...	Peterchurch. 1158...	769 feet ...	Six flints found when barrow was excavated.	Iron Age Barrow.	Leaf-shaped arrow, knife and scrapers.
(12) Woodbury No. 1...	Peterchurch. 351 ...	959 feet ...	Working floor on highest point, round small swamp.	Neolithic	Arrows, scrapers, chips abundant.
(13) Woodbury No. 2...	Peterchurch. 354 ...	906 feet ...	Scattered ...	...	Several small working floors on south slope. Working floor in N.E. corner.

ANALYSIS OF SITES WHERE FLINTS ARE FOUND IN THE GOLDEN VALLEY—cont.

Locality.	Parish and Ordnance Map Number.	Height above Sea Level.	Area where found in Field.	Period or Type.	Remarks.
(14) Woodbury No. 3...	Peterchurch. 350	906 feet	North central	Neolithic	Flakes and chips.
(15) Bodcotte No. 1	Dorstone. 685	850 feet	N.W. end of field	...	Arrows, chips, cores.
(16) Bodcotte No. 2	Dorstone. 684	850 feet	Scattered. Working floor in west central area.	...	Scrapers and chips.
(17) Arthur's Stone	Dorstone. 398	900 feet	South central	...	Scrapers, chips and flakes.
(18) Merbach	Dorstone. 619	950 feet	Scattered	...	Scrapers, chips and flakes.
(19) Brampton	Kingstone. 781 & 782.	500 feet	Scattered in woodland	Neolithic	See footnote.
(20) Cothill	Turnastone. 9	675 feet	Scattered. West edge and east central.	...	Flakes, chips and scrapers.
(21) Dolward	Peterchurch. 56	702 feet	Working floor S.E. corner...	...	Chips and flakes.
(22) Shegaer No. 1	Peterchurch. 49	675 feet	West central	...	Chips and flakes, scrapers.
(23) Shegaer No. 2	Peterchurch. 59	675 feet	Scattered. Working floor east central.	...	Chips, flakes and cores abundant.
(24) Pucha No. 1	Michaelchurch. 220.	1,074 feet	Central. Working floor south central.	Neolithic Bronze	Arrows, scrapers, flakes, chips, etc.
(25) Pucha No. 2	Michaelchurch. 296.	1,068 feet	Scattered	Bronze	Bronze celt found. Flint arrows, etc.
(26) Gibes	Michaelchurch. 423.	1,053 feet	Central	...	Field adjoins Wherriderris Long Stone.
(27) Pen-y-parc	Michaelchurch. 262.	1,020 feet	South central	...	Chips and flakes.
(28) Lower Wernhir	Peterchurch. 644	750 feet	North, east, and west end.	...	Two flint nodules. Flakes, knives, chips, and cores.
(29) Pentwyn	Michaelchurch. 348.	1,068 feet	North side	Neolithic Bronze	Scrapers, flakes and cores. Scraper of Basaltic stone. 100 yards from Round Barrow.

NOTE.—The numbers in brackets refer to flints in Robinson's Collection.

NOTES ON FLINT SITES IN THE GOLDEN VALLEY,

Identified up to January 1st, 1937 (sic).

- No. 1. Stockley No. 1.—An oblong stone circle existed till recently at the north end of this field.
- No. 4. Kennel Field.—This site adjoins an Iron Age Camp and other earthworks. In this field are found a large number of stone picks or hoes, fashioned from an oolitic limestone, probably from Abergavenny district, *vide* report from Professor T. Neville George.
- No. 7. Greenway No. 2.—This is not a prolific site, but flints and implements found are of exceptional interest. Two arrows of "Long Barrow" type; one arrow of type found in Norfolk and North Africa (*vide* Burkitt's *Our Early Ancestors*); a scraper of honey-coloured flint, unique in this district, with double patination. Also implements made with a flint working technique from Drift pebbles, *i.e.*, scrapers and a stone axe of Egyptian type, made from a Drift pebble of fine grained volcanic ash, of north Welsh or Cumbrian origin. Scrapers, flakes, and chips identify the actual occupation area on a small ridge at the edge of a swamp.
- Nos. 15-18.—These sites are within half a mile of Arthur's Stone.
- No. 19. Brampton.—Flints were recovered here when the wood was cut down in 1934-35. The finds include a chert spear or lance head of Neolithic Northern Irish type, and a scraper of unusual working and uncommon flint.
- No. 20. Cothill.—Miss P. Wood, of Ladywell House, Vowchurch, has recovered a large number of flakes, cores, and scrapers from the east central area.
- No. 24. Pucha No. 1.—A small, very prolific site. The main working floor was in the area where there appears to have been a cutting in a steep slope, facing south. This may be the remains of a hut site. This field has now been laid down to permanent pasture.
- Sites from 1-19 are situated on the ridge to the east of the Golden Valley, between the Batcho Hill and Merbach Hill.
- Sites from 20-29 are situated on the ridge between the Golden Valley and the Michaelchurch Eskley Valley.
- The list does not include finds of single flints, but only those areas where a definite working site existed.

THE ACULEATE HYMENOPTERA OF
HEREFORDSHIRE.

By HOWARD M. HALLETT, F.R.E.S.

(Contributed 24th May, 1934.¹)

So far as can be ascertained no list of the bees, wasps and ants of the County has been published, and the following contribution is offered as a start towards the compilation of such a list.

Colonel J. W. Yerbury, whilst on a visit to Dr. John H. Wood of Ledbury in 1902, collected what Aculeates he met with, at the request of Edward Saunders, and a list of these was published in the *Entomologists' Monthly Magazine*, 1903, page 111; these records are incorporated in the subjoined list. The writer, during several visits to West Malvern and occasional visits to Ross-on-Wye, collected assiduously in those localities, and the total number of species so recorded make the list worth putting on record.

By far the most noteworthy occurrence is that of the bee, *Andrena congruens* Schmied; this bee had not previously been found in Britain, and it so happened that when the rather worn males were sent to Dr. R. C. L. Perkins for naming, he was actually engaged in drawing up a note adding the species to the British List on an example he had received from the Rev. A. Thornley, who had taken it at Cirencester. It has also, since, been recorded from the Marlborough district, but it would appear to be well established in its Mathon locality, as it has occurred on two occasions since.

Other noteworthy records are those by Colonel Yerbury of *Psenulus concolor* Dahlb., *Calicurgus hyalinatus*, *Oplomerus laevipes* and *Sapyga clavicornis*.

It is quite evident that collecting over a larger area of the County would result in considerable additions to the rather meagre list which follows, and probably Herefordshire would be found to be quite a rich County for this very interesting order of insects.

Since writing the above my attention has been called to a list of Bumble bees of the Staunton-on-Arrow district by the Rev. S. Cornish Watkins in the 1914-1917 *Transactions*, page 40, and these have been incorporated in the subjoined list.

¹ Observations have been added down to the year 1936.

APOIDEA.

HYLAEIDAE.

HYLAEUS Fab.

1. *annularis* Kirb. This scarce little bee has occurred at West Malvern, one male being taken in August, 1920.
2. *communis* Nyl. Common at Tarrington, Woolhope, Ashperton and Tram Inn, 25th May to 1st September, 1902 (Y.); also common in the Mathon district.
3. *hyalinatus* Smith. Common in the Mathon district.
4. *confusus* Nyl. Tarrington, one male and three females in August, 1902 (Y.); Mathon, not rare.
5. *minutus* Fab. One female at Ross-on-Wye in July, 1935.

COLLETIDAE.

COLLETES Latr.

1. *fodiens* Kirb. One female in the Mathon Sandpits, 13th July, 1920.
2. *daviesana* Smith. Plentiful in the Chase Woods at Ross-on-Wye in August, 1927.

ANDRENIDAE.

ANDRENA Fab.

1. *albicans* Mull. Tarrington, three females in May and June, 1902 (Y.); abundant in the Mathon district and Ross-on-Wye.
2. *nitida* Fourc. Much Marcle, a male; Tarrington, a female, May, 1902 (Y.); plentiful at Mathon.
3. *nigroaenea* Kirb. Both sexes at Tarrington in June, 1902 (Y.); and abundant in the Mathon district and at Ross-on-Wye.
4. *gwynana* Kirb. Not rare at Mathon on flowers of Bryonia, and at Ross-on-Wye on the same flowers, abundant at The Lea.
5. *trimmerana* Kirb. Three males in Mathon sandpits, one on 10th and two on 13th July, 1930. This is the summer brood of *Andrena spinigera* K., and not to be confused with the next species. The spring brood, *A. spinigera* K., was plentiful on shallows at Aston Crews, 24th March, 1936.
6. *jacobi* Perk. (*trimmerana* auct. nec. K.). Both sexes at Tarrington in May and June, 1902 (Y.); plentiful at Mathon, Eastnor and Ross-on-Wye.

7. *bucephala* Steph. One female of this interesting and local bee was taken at Tarrington on 5th June, 1902, by Col. Yerbury, and another occurred at The Lea in June, 1936.
8. *ferox* Smith. I have it marked as having occurred in the County.
9. *fucata* Smith. Both sexes at Tarrington, Tram Inn, Cusop and Much Marcle in May and June, 1902 (Y.).
10. *helvola* Linn. Mathon, one female in June, 1927.
11. *fulva* Schr. Females at Tarrington, May and June, 1902 (Y.); the females plentiful at West Malvern on gooseberry.
12. *clarkella* Kirb. Occurs at Mathon, probably common.
13. *denticulata* Kirb. Scarce in the Mathon district.
14. *fulvago* Schr. One female at Mathon on 19th July, 1929.
15. *sericea* Chr. Plentiful in the Mathon sandpits, and lasting as late as September in 1913.
16. *labialis* Kirb. Males at Tarrington and Tram Inn, females at Much Marcle in May and June, 1902 (Y.); Mathon in 1920.
17. *coitana* Kirb. Chase Woods, Ross-on-Wye, in August, 1927; one female at Mathon on 19th July, 1929.
18. *tarsata* Nyl. Chase Woods, Ross-on-Wye, in August, 1927.
19. *chrysoceles* Kirb. Both sexes at Tarrington, Woolhope and Much Marcle in May and June, 1902 (Y.).
20. *cingulata* Fab. Both sexes at Tarrington in June, 1902 (Y.).
21. *saundersella* Perk. Chase Woods, Ross-on-Wye, August, 1927; the record for *nana* K., Malvern Hills, June, 1902 (Y.), is no doubt this species.
22. *minutula* Kirb. Tarrington, three females, June and July, 1902 (Y.); common in the Mathon district.
23. *ovatula* Kirb. Not rare at Ross-on-Wye in July, 1935.
24. *wilkella* Kirb. Male, Malvern Hills, female, Tarrington, June, 1902 (Y.); abundant in the Mathon district.
25. *dorsata* Kirb. Occasional in the Mathon district.
26. *congruens* Schmied. Four males were taken in the Mathon sandpits in August, 1923, in worn condition; one female and several males in the same sandpits on 13th July, 1930. This interesting species was added to the British list (*Ent. Mo. Mag.*) by Dr. R. C. L. Perkins on a specimen taken at Cirencester by Rev. A. Thornley and on the four males referred to above. It has since been taken in the Marlborough district.

CILISSA Leach.

1. *leporina* Panz. One example was taken in the Chase Woods, Ross-on-Wye, in July, 1935.

HALICTUS Latr.

1. *rubicundus* Chr. Tarrington, one male, 13th September, 1902 (Y.); an abundant bee at Mathon and Ross-on-Wye.
2. *leucozonius* Schr. Females at Tarrington and Ledbury in 1902 (Y.); common generally.
3. *zonulus* Smith. Both sexes at Tarrington, August and September, 1902 (Y.).
4. *lativentris* Schk. Mathon, not rare. The examples quoted by Saunders from Tarrington, 22.8 and 26.9.02 as *quadrinotatus* K. will probably be this species.
5. *laevigatus* Kirb. Both sexes at Woolhope, August and September, and Tarrington, June, 1902 (Y.); Mathon, fairly plentiful, the females on thistle flowers.
6. *calceatus* Scop. Plentiful at Tarrington, Tram Inn, Woolhope and Hereford, 10.8 to 15.9.02 (Y.); common at Mathon and Ross-on-Wye.
7. *albipes* Kirb. Tarrington and Tram Inn in August and Much Marcle in May, 1902 (Y.); common in the Mathon district.
8. *immarginatus* Schk. Tarrington, two males in August and three females at Ledbury in June, 1902 (Y.).
9. *fulvicornis* Kirb. Fairly common at West Malvern and Mathon.
10. *fratellus* Perez. About equally plentiful with the last. It is not possible to say to which of these two species Col. Yerbury's captures of *subfasciatus* are to be referred, probably both will be represented.
11. *villosulus* Kirb. A common species, Tarrington, in August, 1902 (Y.); Mathon and West Malvern.
12. *punctatissimus* Schk. Both sexes at Tarrington on 6th August, 1902 (Y.).
13. *nitidiusculus* Kirb. Common in the sandpits at Mathon and no doubt widely distributed throughout the County.
14. *minutus* Kirb. A few males at West Malvern in September, 1923.
15. *rufitarsis* Zett. Rarely at West Malvern; one fresh male at Ross-on-Wye, in the Chase Woods, August, 1927.
16. *minutissimus* Kirb. Rather scarce at West Malvern.

17. *tumulorum* Linn. Both sexes at Tarrington in August and a female at Ledbury in June, 1902 (Y.); plentiful at Mathon and Ross-on-Wye.
18. *smeathmanellus* Kirb. A male at Tarrington, August, 1902 (Y.); very abundant at Mathon.
19. *morio* Fab. Common at Mathon and West Malvern.
20. *leucopus* Kirb. One female at Tarrington in July, 1902 (Y.).

SPHECODES Latr.

1. *gibbus* Linn. Fairly plentiful in the Mathon sandpits.
2. *monilicornis* Kirb. Not rare at Mathon and West Malvern.
3. *pellucidus* Smith. Tarrington and Ledbury, 16th June to 18th September, 1902 (Y.); plentiful in Mathon sandpits.
4. *puncticeps* Thoms. Occasionally in the Mathon sandpits.
5. *divisus* Kirb. Mathon and West Malvern, not very frequent.
6. *crassa* Thoms. Males occurred in Chase Woods, Ross-on-Wye, in July, 1935.
7. *affinis* v. Hag. Common in the same localities as the last.

PANURGUS Panz.

1. *calcaratus* Scop. One female at Tarrington on 16th August, 1902 (Y.).

ANTHOPHORIDAE.

NOMADA Scop.

1. *goodeniana* Kirb. Two males at Tarrington in July and August, 1902 (Y.).
2. *marshamella* Kirb. Both sexes at Tarrington, Hereford, Cusop and Much Marcle, May to September, 1902 (Y.); it is common at Mathon and West Malvern, and at Ross-on-Wye.
3. *bifida* Thoms. Males at Tarrington and female at Cusop in May and June, 1902 (Y.).
4. *hillana* Kirb. One female in Chase Woods, Ross-on-Wye, in July, 1935.
5. *leucophthalma* Kirb. Once at Mathon.
6. *ruficornis* Linn. One female at Ross-on-Wye in July, 1931.
7. *flava* Panz. Common at Mathon and West Malvern. It is now impossible to say to which species Colonel Yerbury's records of *ruficornis* are to be referred.
8. *fabriciana* Linn. One female at Tarrington, 2nd August, 1902 (Y.); Mathon sandpits, 14th July, 1929.
9. *flavoguttata* Kirb. Males at Tarrington in August and at Much Marcle in May, 1902.

ANTHOPHORA Latr.

1. *pilipes* Fab. Ross-on-Wye and Much Marcle in May and June, 1902 (Y.).
2. *furcata* Panz. One female at "Blue Gates," Mathon, 14th July, 1929.

EUCERA Scop.

1. *longicornis* L. Five females at Much Marcle in May and at Tarrington in July and August, 1902 (Y.); Mathon, one female in May, 1927.

MEGACHILIDAE.

CHELOSTOMA Latr.

1. *florisomne* Linn. Two males at Tarrington in June, 1902 (Y.); plentiful near "Blue Gates," Mathon, in May, 1927, nesting in palings, accompanied by *Sapyga clavicornis*, *Chrysis ignita* and *C. cyanea*.
2. *campanularum* Kirb. One female at Ross-on-Wye, in flowers of *Campanula trachelium*, 11th July, 1931, and plentifully in 1935.

MEGACHILE Latr.

1. *willughbiella* Kirb. One male at Tarrington, 5th August, 1902 (Y.); common at Mathon and West Malvern.
2. *circumcincta* Lep. West Malvern, apparently not common.
3. *versicolor* Smith. One female at Mathon sandpits in August, 1923, and one on 20th July, 1929.
4. *centuncularis* L. Common at West Malvern and Mathon, and at Ross-on-Wye in August, 1927.

STELIS Panz.

1. *ornatula* Klug. A single example of this rare bee occurred at Ross-on-Wye in July, 1935.

COELIOXYS Latr.

1. *acuminata* Nyl. One female at West Malvern on 22nd July, 1928.

ANTHIDIUM Fab.

1. *manicatum* Linn. One female at Tarrington in August, 1902 (Y.); Mathon in July, 1928.

OSMIA Panz.

1. rufa Linn. One male at Tarrington in May and three females at Ross-on-Wye in June, 1902 (Y.).
2. pilicornis Smith. Three females at Tarrington in May and June, 1902 (Y.).
3. caerulescens Linn. Not rare at West Malvern and Mathon.
4. ventralis Panz. One female at Mathon on 21st July, 1928.
5. leucomelana Kirb. One female at Tarrington in August, 1902 (Y.).

BOMBIDAE.

BOMBUS Latr.

1. lapidarius Linn. Common at West Malvern and Mathon, at Ross-on-Wye and Staunton-on-Arrow (S.C.W.).
2. soroensis Fab. Staunton-on-Arrow. Scarce, very late in appearing. (S.C.W.)
3. terrestris Linn. Common and generally distributed.
4. lucorum Smith. Common and generally distributed.
5. pratorum Linn. Abundant everywhere.
6. lapponicus Fab. Herefordshire (Saunders' Brit. Hym. Acul.), Wapley Hill, common on Radnor Forest. (S.C.W.)
7. hortorum Linn. Abundant everywhere.
8. ruderatus Fab. Only noticed at Mathon, where it is common; Staunton-on-Arrow, common both in the black and striped forms. (S.C.W.)
9. distinguendus Mor. Once at Mathon.
10. subterraneus Linn. Staunton-on-Arrow (as *latreillellus*). Scarce. (S.C.W.)
11. ruderarius Mull. Common at West Malvern and Mathon; Staunton-on-Arrow. (S.C.W.)
12. sylvarum Linn. West Malvern, Mathon and Ross-on-Wye, apparently not very common; scarce at Staunton-on-Arrow. (S.C.W.)
13. agrorum Fab. Abundant and generally distributed.
14. helferanus Seidl. Common and generally distributed.

PSITHYRUS Lep.

1. rupestris Fab. Not rare at Mathon in 1923; Staunton-on-Arrow, rather scarce. (S.C.W.)
2. vestalis Fourc. Common at West Malvern and Mathon, also at Ross-on-Wye; common at Staunton-on-Arrow. (S.C.W.)

3. bohemicus Seidl. Staunton-on-Arrow (as *distinctus*), common. (S.C.W.)
4. barbutellus Kirb. One female at West Malvern, 15th July, 1929.
5. sylvestris Lep. Staunton-on-Arrow (as *quadricolor*), fairly plentiful in early spring. (S.C.W.)
6. campestris Panz. Common at Staunton-on-Arrow. (S.C.W.)

APIDAE.

APIS Linn.

1. mellifera Linn. The Hive bee, common everywhere.

SPHECOIDEA.

SPHEGIDAE

SPHEX Linn.

1. sabulosus Linn. One example in Mathon sandpits in July, 1934.

MIMESIDAE.

PSENULUS Kohl.

1. pallipes Panz. One female at Tarrington on 18th July, 1902 (Y.); West Malvern in September, 1913, and at Mathon on 22nd July, 1928.
2. concolor Dahlb. One male at Tarrington on 18th June and a female at Tram Inn on 2nd August, 1902. This is one of the most interesting of Col. Yerbury's discoveries, as it appears to be recorded from very few localities.

PEMPHREDONIDAE.

CEMONUS Jur.

1. shuckardi Mor. Both sexes at Tarrington, 2nd June and 14th July, 1902 (Y.); Mathon sandpits; Ross-on-Wye, August, 1927.
2. lethifer Shuck. Abundant at West Malvern, Mathon and Seager Hill.

PEMPHREDON Latr.

1. lugubris Fab. Both sexes at Tarrington, 11th July and 17th August, 1902; Ross-on-Wye, 19th June, 1902 (Y.); common at West Malvern and Mathon.

DIODONTUS Curt.

1. minutus Fab. Very plentiful at Mathon, burrowing in the face of the sandpits.

PASSALOEUCUS Shuck.

1. *corniger* Shuck. Plentiful at Mathon, 20th to 25th July, 1928, accompanied by *Elampus caeruleus*.
2. *insignis* V. d. Lind. One female at Tram Inn, 23rd July, 1902 (Y.); Mathon in July, 1929.

SPILOMENA Shuck.

1. *troglydites* V. d. Lind. This minute little wasp was plentiful on a gate post at Mathon on 20th July, 1928.

CRABRONIDAE.

CLYTOCHRYsus Mor.

1. *cavifrons* Thoms. One female at Tarrington on 15th August, 1902 (Y.); Mathon in August, 1913.
2. *chrysostomus* Lep. Not rare at Mathon and West Malvern, also at Ross-on-Wye in August, 1927.

SOLENIUS.

1. *vagus* Linn. Plentiful at Mathon and West Malvern, also at Ross-on-Wye in August, 1927.
2. *larvatus* Wesm. One female at Ross-on-Wye in July, 1935.

ACANTHOCRABRO Perkins.

1. *vagabundus* Panz. Taken in the County by, I think, Dr. T. A. Chapman.

HOPLOCRABRO Thoms.

1. *quadrifasciatus* Fab. Very abundant at Ross-on-Wye in the Chase Woods in August, 1927.

CUPHOPTERUS Mor.

1. *serripes* Panz. Two males at Cusop on 11th June and 26th September, and one female at Tarrington on 5th August, 1902 (Y.).

BLEPHARIPUS Lep.

1. *leucostomus* Linn. One male at Ross-on-Wye, 19th June, two females at Tarrington, 14th July and 22nd August, 1902 (Y.); common at West Malvern and Mathon.
2. *capitosus* Shuck. One male at Ross-on-Wye on 19th June, 1902 (Y.).
3. *ambiguus* Dahlb. One female at Mathon in September, 1923.

ABLEPHARIPUS Perk.

1. *podagricus* V. d. Lind. One female at Tram Inn on 2nd August, 1902 (Y.).

CROSSOCERUS Lep.

1. *varius* Lep. One male at Tarrington on 17th July, one female at Cusop on 26th July, 1902.
2. *ovalis* Lep. One male at Tarrington on 2nd July, 1902 (Y.).
3. *wesmaeli* V. d. Lind. One female at Mathon sandpits on 21st July, 1928.
4. *elongatulus* V. d. Lind. One male at Tarrington on 5th July, 1902 (Y.); very common at Mathon and West Malvern.

PHYSOSCELIS Lep.

1. *clavipes* Linn. One male at Cusop on 26th July, 1902 (Y.); common in the garden at Mathon (Tomlin).

LINDENIUS Lep.

1. *albilabris* Fab. One female at Tarrington on 22nd August, 1902 (Y.); Ross-on-Wye, a large colony in August, 1927.

OXYBELIDAE.

OXYBELUS Latr.

1. *uniglumis* Latr. Common in the sandpits at Mathon.

NYSSONIDAE.

GORYTES Latr.

1. *mystaceus* Linn. One male at Tarrington on 17th June, and females at Woolhope in June and July, 1902 (U.); Ross-on-Wye, one female in July, 1931.

MELLINIDAE.

MELLINUS Fab.

1. *arvensis* Linn. Common in the sandpits at Mathon.

TRYPOXYLONIDAE.

TRYPOXYLON Latr.

1. *figulus* Linn. Not rare in the Mathon sandpits.
2. *clavicerum* Lep. Tarrington, Cusop and Woolhope, 26th July to 26th August, 1902 (Y.).
3. *attenuatum* Smith. One male at Tarrington on 15th August, 1902.

LARRIDAE.

TACHYSPEX Kohl.

1. *pectinipes* Linn. Occurs in the Mathon sandpits, but not very commonly; also at Ross-on-Wye in July, 1935.

VESPOIDEA.

PSAMMOCHARIDAE.

PSAMMOCHARES Latr.

1. *spissus* Schiodte. Two females at Tarrington on 11th and 14th July, 1902 (Y.).
2. *gibbus* Fab. Not rare in the Mathon sandpits.
3. *ungicularis* Thoms. One female at Tarrington, 20th June, 1902 (Y.); the females of these last two species are so difficult to separate, that the correctness of this identification is very much open to doubt, but both sexes of *gibbus* have occurred at Mathon.
4. *concinus* Dahlb. Once only in Mathon sandpits.
5. *crassicornis* Shk. One female at Ross-on-Wye in August, 1927.

PRIOCNEMIS Schiodte.

1. *perturbator* Harris. Saunders recorded 5 females from Tarrington on 28th and 31st May, 1902 (Y.) as *fuscus* Linn.; but Dr. O. W. Richards has shown that this name cannot stand (*Ent. Mo. Mag.*, lxx., 114, 1934), and of these five, four belong to *perturbator*. This species is plentiful at Pontshill also.
2. *coriaceus* Dahlb. Dr. Richards finds that the remaining female, as above, belongs to this species. I have also taken it in both sexes at Pontshill in May, 1936.
3. *exaltatus* Fab. Two females at Tarrington on 3rd and 26th August, 1902 (Y.).
4. *pusillus* Schiodte. One male and two females at Tarrington on 15th August, Cusop, 20th August, 1902 (Y.); two females at Ross-on-Wye on 12th August, 1927. Since Colonel Yerbury's records were made this species has been split up into four and it is therefore uncertain to which his belong; the Ross specimens are, however, definitely *pusillus*.

CALICURGUS Lep.

1. *hyalinatus* Fab. One male at Tarrington on the 18th June, 1902 (Y.).

DEUTERAGENIA Sust.

1. *hircana* Fab. One male and two females at Tarrington, 6th to 19th August, 1902 (Y.); Mathon, two females, July 22nd, 1928.
2. *variegata* Linn. Two females at Ross-on-Wye in July, 1935.

VESPIDAE.

VESPA Linn.

1. *crabro* Linn. The Hornet is not at all an uncommon insect in the County, and occurs frequently round West Malvern and Mathon amongst other places; Weston-under-Penyard, 1937 (Bindon).
2. *vulgaris* Linn. A very abundant insect everywhere.
3. *germanica* Fab. Almost, if not quite, as abundant as the former.
4. *rufa* Linn. Appears to be fairly common everywhere.
5. *sylvestris* Scop. Common throughout.
6. *norvegica* Fab. Only observed once, at Mathon, where a male was picked up in the road.

EUMENIDAE.

ODYNERUS Latr.

1. *gracilis* Brulle. One male at Ledbury, 19th July, 1902 (Y.); Mathon, one female on July 22nd, 1928.
2. *sinuatus* Fab. One female at Woolhope, 24th August, 1902 (Y.).

ANCISTROCERUS.

1. *callosus* Thoms. One male at Ashperton on 1st September, 1902 (Y.).
2. *parietum* Linn. Both sexes at Mathon sandpits, not rare.
3. *pictus* Curt. Not rare at West Malvern and Mathon.
4. *trifasciatus* Oliv. One male at Tarrington on 17th August, 1902 (Y.).
5. *parietinus* Linn. Three females at Tarrington, 6th August, Cusop, 20th August, 1902 (Y.); not rare at West Malvern and Mathon.
6. *antilope* Panz. Hereford. (Dr. T. A. Chapman).

OPLOMERUS.

1. spinipes Linn. Not rare in the Mathon sandpits.
2. melanocephalus Gmel. One female at Tarrington on 18th July, 1902 (Y.).
3. laevipes Shuck. One male at Tarrington on 18th July, 1902 (Y.).

SAPYGIDAE.

SAPYGA Jur.

1. 5-punctata Fab. A few have occurred in the sandpits at Mathon.
2. clavicornis Linn. One male at Tarrington, 3rd June, 1902 (Y.); at Mathon fairly numerous about the burrows of *Chelostoma florissomme* in July, 1927. This species used to be considered very rare, but seems to be spreading, and is becoming much more plentiful.

TIPHIIDAE.

TIPHIA Fab.

1. minuta V. d. Lind. One male at Pembridge on 15th July, 1902 (Y.); one female at West Malvern in July, 1912.

MYRMOSIDAE.

MYRMOSA Latr.

1. melanocephala Fab. Abundant in Chase Woods, Ross-on-Wye, in July, 1935, about the burrows of *Lindenius albilabris*.

CHRYSIDIDAE.

ELAMPUS SPIN.

1. auratus Linn. Several at Bromsash in June, 1936.
2. caeruleus Dahlb. One example was taken at Mathon about the burrows of *Passaloecus corniger*, 20th July, 1928.

HEDYCHRUM Latr.

1. roseum Rossi. I have this marked as having occurred in the County.

CHRYSIS Linn.

1. cyanea Linn. Tarrington in 1902 (Y.); plentiful at Mathon at the burrows of *Chelostoma florissomme* and also in the sandpits.

2. viridula Linn. Common in the sandpits at Mathon.
3. neglecta Shuck. A few in the sandpits at Mathon.
4. pustulosa Ab. Hereford. (T. A. Chapman).
5. ignita Linn. Abundant. Cusop and Tarrington in 1902 (Y.); West Malvern and Mathon, also at Ross-on-Wye.

FORMICOIDEA.

MYRMICIDAE.

MYRMICA Latr.

1. laevinodis Nyl. Not rare at Mathon, one nest in the sandpits, in an old boot contained a very small dealated female, a microgyne, which was smaller than the workers.
2. ruginodis Nyl. Not rare at Mathon.
3. scabrinodis Nyl. Female at Tarrington on 27th August, 1902 (Y.); a common ant in all districts where collecting has been done.

LEPTOTHORAX Mayr.

1. acervorum Fab. Lydbrook Junction and Symonds Yat (Farren White); Mathon, 20th July, 1928.

LASIUS Fab.

1. fuliginosus Latr. Recorded from the County in Donisthorpe's *British Ants*.
2. niger Linn. Very abundant everywhere.
3. flavus Fab. Very abundant everywhere. Female, Clifford Castle on 27th August, 1902.

FORMICA Linn.

1. rufa Linn. Abundant on the Hereford side of the River Wye at Symonds Yat, and no doubt everywhere else in suitable localities in the County.
 2. fusca Linn. Common at West Malvern, Mathon and Ross-on-Wye.
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ADDITIONAL NOTES TO HEREFORDSHIRE
FLORA AND FUNGI, 1933.

By MISS E. M. WOOLDRIDGE.

(Contributed 24th May, 1934.)

A copy of the *Flora of Herefordshire*, published by the Woolhope Club in 1889, came into my possession in 1932. I have found various additions to the habitats named, particularly in my own district, No. 4.

Miss Marsh, whose excellent botanical work is well known, suggested that any notes I might make would possibly be of use. The result is given below.

For convenience I have followed the nomenclature of the Herefordshire Flora, and not that of the 11th Edition London Catalogue.

The most interesting find was that of *Monotropa hypopitys*, growing on hazel in Brock Hill Coppice. Miss Wight very kindly took one of her splendid photos of this, which is a fortunate proof of identity, as for the moment it has vanished. The coppice was felled last summer, and bundles of faggots lying about prevented our finding it, but we hope to track it again this year, and also various Helleborines which were not traced last year.

There are a number of interesting things in Hayslad Bog, West Malvern, including *Pinguicula* and *Carex* of various kinds, but, strictly speaking, the bog is not in Herefordshire, though only just over the boundary. I have included plants found here, as it is listed in the *Herefordshire Flora* as "the bog at the western base of the Worcestershire beacon." *vide* p. 241.

It is interesting to note that *Potentilla verna* is still in the same place where Lees recorded it in 1868, and *Gagea lutea* is still where it was found in 1858, though, from the description, in less quantity.

I have never seen *Gentiana amarella* in such profusion as in the field behind the Peytons, at Colwall. Alas, this ground has been built on, and the gentian field is now included in the garden.

Neottia nidus-avis in Colwall Coppice is of interest from the fact that it is growing on maple and has been noted in the same place for the last three years.

1. FLORA.

District No. 2.

83A	<i>Lepidium Draba</i>	...	Goodrich Castle
315	<i>Cotyledon umbilicus</i>	...	"
316	<i>Saxifraga tridactylites</i>	...	"
<i>District No. 3.</i>			
4	<i>Anemone nemorosa v. rubra</i>	...	Coldborough Wood
583	<i>Primula elatior</i>	...	"
<i>District No. 4.</i>			
1	<i>Clematis Vitalba</i>	...	Colwall New Road, Bank Wood Knell Coppice
27	<i>Helleborus viridis</i>	...	Evendine Lane
28	" <i>foetidus</i>	...	Chance's Pitch (diminishing)
31	<i>Berberis vulgaris</i>	...	Between Mathon and Cradley, across country in a wild hedge
61	<i>Cardamine impatiens</i>	...	Brock Hill Coppice
84	<i>Reseda luteola</i>	...	Croft Farm and Batchelor's Bridge
85	<i>Helianthemum vulgare</i>	...	West side Knell Coppice, Croft Farm, Colwall New Road
141	<i>Malva moschata (v. white)</i>	...	Croft Farm
158	<i>Geranium lucidum</i>	...	British Camp
173	<i>Genista tinctoria</i>	...	Edge of Bank Wood
176	<i>Ononis arvensis</i>	...	Colwall New Road near Perlieu Lane
181	<i>Melilotus officinalis</i>	...	Colwall Station Bank, Croft Farm
195	<i>Astragalus glycyphyllus</i>	...	Sewage Lane
203	<i>Vicia sylvatica</i>	...	Rowburrow Wood, Ledbury Tunnel
204	" <i>sepium (v. white)</i>	...	Colwall Coppice
286	<i>Epilobium angustifolium</i>	...	Heref. Beacon, near News Wood and Bank Wood
320	<i>Chrysosplenium oppositifolium..</i>	...	Perlieu Lane
321	" <i>alternifolium</i>	...	"
323	<i>Sanicula europæa</i>	...	Colwall Coppice, Whitman's Hill
354A	<i>Apium nodiflorum</i>	...	Park Lane, near West Malvern
358	<i>Adoxa moschatellina</i>	...	Perlieu Lane
375	<i>Valeriana dioica</i>	...	Meadows off Colwall, New Road
380	<i>Dipsacus sylvestris</i>	...	Croft Bank Farm
402	<i>Centaurea scabiosa</i>	...	"
441	<i>Chichorium Intybus</i>	...	Near "Hatchetts" off Mathon to Colwall Road
458A	<i>Hieracium aurantiacum</i>	...	Bank, left side road beyond Slatch Coppice, before coming to Mathon Road
468	<i>Campanula trachelium</i>	...	Brock Hill Coppice, Bank Farm
478	<i>Calluna vulgaris</i>	...	Beyond British Camp
480	<i>Monotropa hypopitys</i>	...	Brock Hill Coppice on Hazel (now cut down)
482	<i>Ligustrum vulgare</i>	...	Ledbury Tunnel
486	<i>Chlora perfoliata</i>	...	Behind The Peytons, Colwall Whitman's Hill and Croft Bank Farm
487	<i>Gentiana amarella</i>	...	Behind The Peytons, Colwall Ledbury and Eastnor (now built on)
497	<i>Hyoscyamus niger</i>	...	British Camp
528	<i>Lathrœa squamaria</i>	...	Perlieu Lane
552	<i>Marrubium vulgare</i>	...	Croft Bank Farm
555	<i>Stachys palustris</i>	...	Mathon Road, near Lodge to Court
570	<i>Lithospermum officinale</i>	...	Near Gate into Bank Wood and Whitman's Hill
578	<i>Anchusa sempervirens...</i>	...	Bank near Mathon Lodge

625	<i>Daphne laureola</i>	...	...	Brock Hill Coppice, Park Wood Slatch Coppice, etc., variegated specimen in Knell Coppice
707	<i>Habenaria chlorantha</i>	...	...	Cother Wood, Bank Wood, Whitman's Hill, Colwall Coppice
712	<i>Neottia nidus-avis</i>	...	...	Bank Wood and Colwall Coppice on Maple
713	<i>Epipactis latifolia</i>	...	...	Brock Hill Coppice, Lane near the Peytons, Colwall
715	" <i>violacea</i>	...	...	Brock Hill Copp
717	<i>Cephalanthera ensifolia</i>	...	...	Broadmoor and Woolhope, in Common Acre, Haugh Wood
721	<i>Iris pseudacorus</i>	...	...	Vine's End
722	<i>Narcissus pseudo-narcissus</i>	...	...	Meadow behind Hoe Court and Vine's End
726	<i>Paris quadrifolia</i>	...	...	Cowleigh Park and Brock Hill Copp
729	<i>Gagea lutea</i>	...	...	Perlieu Lane
730	<i>Scilla nonscripta</i> (var. <i>bracteata</i>)	...	...	Dog Hill Wood, Ledbury
734	<i>Allium ursinum</i>	...	...	Brock Hill Coppice
890	<i>Ophioglossum vulgatum</i>	...	...	Meadow off Storridge Road, between village and turn to Cradley
				<i>District No. 5.</i>
431	<i>Inula Helenium</i>	...	...	Sapey Brook
				<i>Not strictly in Herefordshire.</i>
13	<i>Ranunculus hederaceus</i>	...	...	Hayslad Bog
118	<i>Stellaria uliginosa</i>	...	...	"
581	<i>Pinguicula vulgaris</i>	...	...	"
586	<i>Lysimachia numularia</i>	...	...	"
590	<i>Anagallis tenella</i>	...	...	"
746	<i>Juncus acutiflorus</i>	...	...	"
765	<i>Carex pulicaris</i>	...	...	"
771	" <i>echinata</i> (<i>stellulata</i>)	...	...	"
No Number	<i>Eleocharis palustris</i>	...	...	"

2. FUNGI.

				<i>In District 2.</i>
3	<i>Amanita Mappa</i>	...	...	Symonds Yat
8	" <i>rubescens</i>	...	...	"
41	<i>Tricholoma rutilans</i>	...	...	"
67	<i>Clitocybe nebularis</i>	...	...	"
94	<i>Collybia platyphyllus</i>	...	...	"
119	<i>Mycena purus</i>	...	...	"
127	" <i>polygrammus</i>	...	...	"
233	<i>Hebeloma glutinosus</i>	...	...	"
327	<i>Cortinarius elatior</i>	...	...	"
375	<i>Hygrophorus eburneus</i>	...	...	"
419	<i>Lactarius quietus</i>	...	...	"
451	<i>Russula ochroleuca</i>	...	...	"
452	" <i>fragilis</i>	...	...	"
				<i>Polyporei.</i>
485	<i>Boletus elegans</i>	...	...	"
491	" <i>chrysenteron</i>	...	...	"
				<i>Discomycetes.</i>
808	<i>Bulgaria inquinans</i>	...	...	"

				<i>In District 4.</i>
	<i>Agaricini.</i>			
8	<i>Amanita rubescens</i>	...	...	Brock Hill Coppice
11	<i>Lepiota procerus</i>	...	...	" "
22	" <i>carcharias</i>	...	...	" "
31	<i>Armillaria melleus</i>	...	...	" "
53	<i>Tricholoma sulphureus</i>	...	...	" "
97	<i>Collybia butyraceus</i>	...	...	" "
98	" <i>velutipes</i>	...	...	" "
126	<i>Mycena galericulatus</i>	...	...	" "
127	" <i>polygrammus</i>	...	...	" "
395	<i>Hygrophorus puniceus</i>	...	...	" "
443	<i>Russula cyanoxantha</i>	...	...	" "
466	<i>Marasmius peronatus</i>	...	...	" "
				<i>Thelephorei.</i>
563	<i>Craterellus cornucopioides</i>	...	...	" "
585A	<i>Peniophora incornuta</i>	...	...	" "
				<i>Clavari.</i>
608	<i>Clavaria cristata</i>	...	...	" "
				<i>Tremellini.</i>
629	<i>Tremella mesenterica</i>	...	...	" "
633	<i>Exidia albida</i>	...	...	" "
				<i>Trichogastres.</i>
646	<i>Lycoperdon pyriforme</i>	...	...	" "
				<i>Agaricini.</i>
4	<i>Amanita muscarius</i>	...	...	Riley Hill
10	" <i>vaginatus</i>	...	...	" "
19	<i>Lepiota cristatus</i>	...	...	Sapey Brook
124	<i>Mycena rugosus</i>	...	...	" "
391	<i>Hygrophorus ceraceus</i>	...	...	Riley Hill
392	" <i>coccineus</i>	...	...	" "
				<i>Polyporei.</i>
497	<i>Boletus luridus</i>	...	...	"
				<i>Clavari.</i>
616	<i>Clavaria fusiformia</i>	...	...	"
				<i>Discomycetes.</i>
745	<i>Peziza aurantia</i>	...	...	Sapey Brook

STONE MASONS—WALTER OF HEREFORD.

By G. H. JACK, M.Inst.C.E., F.R.I.B.A., F.S.A.

(Read 30th August, 1934.)

I suppose working in stone is the oldest trade or craft we know of. Certain it is that the length of time which has elapsed since the earliest examples of man's handiwork in stone were wrought cannot be estimated. It is coeval with the beginnings of man's existence on the earth.

From pre-Palæolithic times to the present day this working in stone in some form or other has persisted and increased in its various forms and degree of accomplishment. In the case of structures, from the crude hut to the ornate cathedral, and from mortarless defensive walls to the mediæval castle, with every variety of building between these extremes.

The art reached its zenith during the 400 years covered by the 12th, 13th, 14th and 15th centuries. Most of the stonework in Castle, Abbey and Church in this county was executed during that period, and what a wealth of it there is! I need only mention the beautiful and dignified work in the Cathedral, the churches of Kilpeck, Madley and Shobdon, the abbey of Dore and the castle of Goodrich; and if of these examples I venture to make a selection, I choose the choir and ambulatory at Abbeydore. Just contemplate the grace, proportions and exquisite detail of this gem of the mason's art.

What kind of men were they who produced this elegance in stone?—so noble and so satisfying. It has been truly said that every man is known by his works, both in a material and spiritual sense. That being so, the creators of this goodly heritage were men possessing a dual quality. They were fertile in conception and eminently skilled in their craft of masonry. Such an one was Walter of Hereford.

King Edward the First and his famous Queen Eleanor laid the foundation stones of Vale Royal Abbey in Cheshire¹ on the 13th of August, 1277, and dedicated that great Cistercian house, one of the last to be built in England, to the honour of Christ, the Virgin Mary, and the confessors and bishops

¹ *The Mediæval Mason*, by Knoop & Jones. (Manchester, 1933.)

St. Nicholas and St. Nicasius.¹ He decreed that there should be no monastery more royal than this one; and seeing that it cost an equivalent of half-a-million pounds of our money and took 73 years to build, it is certain that it was indeed a great building. There is little of it to be seen to-day, and it was not until excavations were carried out in 1911 that the dimensions of the church could be ascertained. We now know that it was 420 feet long—40 feet longer than Fountains Abbey and 93 feet longer than Hereford Cathedral. It measured 200 feet across the transepts—54 feet more than Hereford.

The great Cistercian houses at Tintern, Rievaulx, Fountains and Abbeydore had been in existence for over 100 years before Vale Royal was commenced. The first monastery of this Order was built at Waverley in Surrey in 1129.

The Abbot and Monks of Abbeydore had rendered some good service to King Edward's household, and in the early days of the conception of Vale Royal, four years before the foundation stone was laid—viz., on the 14th of January, 1273—certain monks of Abbeydore were transferred to Vale Royal. This incident may have had some connection with the engagement of Walter of Hereford in the high office of Master of Works (*Magister Cementarius*) at Vale Royal from 1277, the year of the laying of the foundation stone, onwards. His title proves that he was in chief control of the building operations, and also infers that he was a man high up in his profession and capable of taking charge of ecclesiastical building works of the highest order. He was equally capable in building of a military character, for in 1289 we find him in charge at Carnarvon Castle. In 1304 he was serving Edward I in Scotland, and in 1306 he took masons and carpenters to London for "the Queen's work". On this occasion he had some trouble with the London masons, for they threatened to beat his men if they accepted less wages than they were receiving, or as we should say to-day, if they accepted "less than the standard rate of wages current in the district". Low wages seem to have been always a bone of contention in Herefordshire. In 1315 we hear of Walter for the last time. He was again at Carnarvon, and in that year he was succeeded by Henry de Elerton—possibly this was the year of his death. If we assume that he was 30 years old when he took up his duties as Master of Works at Vale Royal, then he would be 42 when we first hear of him at Carnarvon, 57 when he was in Scotland, in London at 59, and back at Carnarvon at 68. The great works at the Abbey continued for 35 years after the date we assume for his death.

¹ He was bishop of Rheims in the middle of the 5th century. See *Universal Lexikon aller Wissenschaften, U.S.W.*, by Johann H. Zedler, Vol. XXIV, Leipzig, 1740 fol., and Migne's *Encyclopédie Théologique*, Vol. XLI, 1845, small fol.

In my search for information about the famous mason, I came across another Walter of Hereford, abbot of Vale Royal in 1300,¹ successor to the first abbot, John Champneys, who started to build at Vale Royal. I wondered if it were possible for the mason architect to have discarded the chisel for the crozier, but on reflection I think this very unlikely. The mason was heavily engaged in his practical work 23 years before his namesake took office, and was at work in the same profession 15 years after that event. They were contemporaries, and certainly both of Hereford.

The abbot is described as an "untamed and pugnacious" man, and at the same time a man of most "beautiful appearance" as regards externals. The record goes on to give an incident in his life. On one occasion a certain knight came with a multitude of armed men and wrongfully claimed the right of taking his way straight through the monastery. When the abbot heard this, he went out unarmed with a few attendants, and so upheld the rights of his monastery that in a short time they all turned and fled—which was brought about, there can be no doubt, by the character of the man, and therefore, says the chronicle, this Walter was right worthy to be made abbot of this new monastery. We know that Walter the abbot was good-looking and pugnacious, but we know nothing of his attainments as a divine or administrator. The worth of the mason may perhaps be gauged from the fact that he had 131 masons working under him, and his rate of pay was 2/- a day, while the most skilled men under him got only 2/6 a week. There is one man mentioned who received 2/8 a week, and he also came from Hereford (Richard de Hereford). He acted as Walter's second assistant, and so satisfactory was he in that capacity that he received a rise of 2d. a week, no doubt on the recommendation of his Master and fellow-townsmen.

It would be interesting to know how these men got their training for the great and responsible post of Master of Works. It is probable that they were apprenticed to a skilled man and gradually worked their way up, only those specially gifted reaching the top and passing the grade of "freemason", a term first used in this country about 1374. The freemason was a skilled worker in freestone, in contrast to the rough mason, who prepared the stone and executed plain work and laying. There is mention in the accounts for the first three years' work at Vale Royal of an item for making lodges (*logias*) for the masons. In June, 1279, 1,400 boards were purchased for this purpose, and in April, 1280, 1,000 more boards. These lodges were closed sheds in which masons worked, and were of wood, roofed with boards, tiles or thatch, and accommodated 12 to 20 men. In some cases the lodges were termed *mansiones*. In these the men lived as well as worked.

¹ Lancashire and Cheshire Archæological Society, Vol. XVI.

The tools were kept in the lodge, and in an inventory preserved in the York fabric rolls dated 1399, among other things were

69 stone axes,
96 iron chisels,
24 mallets,
2 tracing boards, and
1 compass.

In addition to the tools, the masons were provided with "gloves and aprons". At Eton College, 1456, a payment was made to John Glovere de Eton for five pairs of gloves for layers of the walls to protect their hands from splinters. At Exeter the Dean and Chapter provided "gauntleted" gloves.

I suppose the "cuffs" worn by modern Freemasons represent these, but the ancient gloves and aprons were part of the working kit, and in no sense "regalia" or badges of office.

The architects of the Middle Ages were drawn from these freemasons, skilled carvers and designers of tracery. Men like Walter of Hereford were a step above even the highly skilled workmen, for in addition to their mastery of the craft, they were administrators and had some knowledge of calculating and estimating. In his time large numbers of men were required, and some had to be pressed into service and sent to the master masons, who would interrogate them, set them tasks and value their service.

In the 14th century the Sheriffs of the counties were ordered to require masons to be sent to certain royal works. Forty masons were conscripted from Hereford and 60 from Salop. If they resisted, they were imprisoned.

I should have liked to have been able to show that some of Walter's work exists in our Cathedral, but this cannot be done. Somewhere about the time he was raising the walls of Vale Royal, Bishop Cantilupe was enlarging and beautifying Hereford, 1275-1282, during which time other beautiful work was consecrated at Abbeydore, which was founded as early as 1147. In 1260 Bishop Aquablanca granted an indulgence to those who would contribute towards the completion of the work,—perhaps the consecration by Bishop Thomas marked the accomplishment of this great and good work. We all know what a thing of beauty it is, and it will remain a joy, not for ever, but as long as time spares it.

During my researches I discovered some interesting references to mason's work at the Cathedral. One of the citizens, Thomas Denyar by name, was engaged to do work requiring six years to complete, and he was to have for his pains two robes annually or in lieu 41 shillings in silver for himself and his partner. He was to receive 23½ marks for his labour, and to be paid forty-two pence

per "sothin", whatever that is, for stone and carriage which he was to find. The date of this transaction is obscure, and the nature of the work is not stated.

In 1359 a native of Evesham, by name John, was appointed to work on the Cathedral fabric for the rest of his life, on condition that he should instruct the labourers in the art of masonry and carpentry, and receive in wages 3/- a week and a house, for which he was to pay 10/- a year, and a white loaf daily thrown in. If he was ill or absent from his work for more than two weeks, his wages were to be reduced to 1/- a week.¹

I found a reference to the building of the new cloister (end of the 15th century), which I take to be what we know as the Vicars' Cloister on the S.E. side of the Cathedral. This work was administered by the Vicar Choral (Canon Glennie's predecessor) in the capacity of "clerk of works". This gentleman would be both a "freemason" and a cleric. No doubt he would be considerate and charitable, like the brothers of the Hereford Lodges of Freemasons, and in addition capable of setting out and executing that charming bit of stonework which does him credit as a good freemason in the mediæval sense. He would also be a man well versed in music. What a happy combination!—a musical mason of high character.

The demand for skilled masons grows less and less, and the number of ordinary masons has sadly shrunk; but the tradition of good masonry lingers on. For instance, in the Cotswold country and within the last ten years, Hereford masons² rekindled the flame and much good and distinctive work resulted in the repair and preservation of Herefordshire's ancient bridges.

Times have changed and we with time. This is a mechanical age, all classes of work must be done quickly and cheaply. There are great advantages in speed, cheapness and mass production, but there are disadvantages. The scourge of unemployment is one. Pride in workmanship is almost non-existent, and has been replaced by that horrid conviction "it will last my time".

The demand for men capable of carving a cornice, pilaster or balustrade is seldom heard nowadays—such work is now rapidly produced in "imitation stone". The call now is "moulders" and "casters", not masons. I wonder what Westminster Abbey would look like to-day had it been erected with a skeleton of steel girders, cased with artificial stone and artificial Purbeck shafts all complete!

Speculative building development on the outskirts of London

¹ Charters and Records of Hereford Cathedral.

² A Guild of Masons known as "The Hereford Bridge Brothers" was founded by G. H. Jack in 1932.

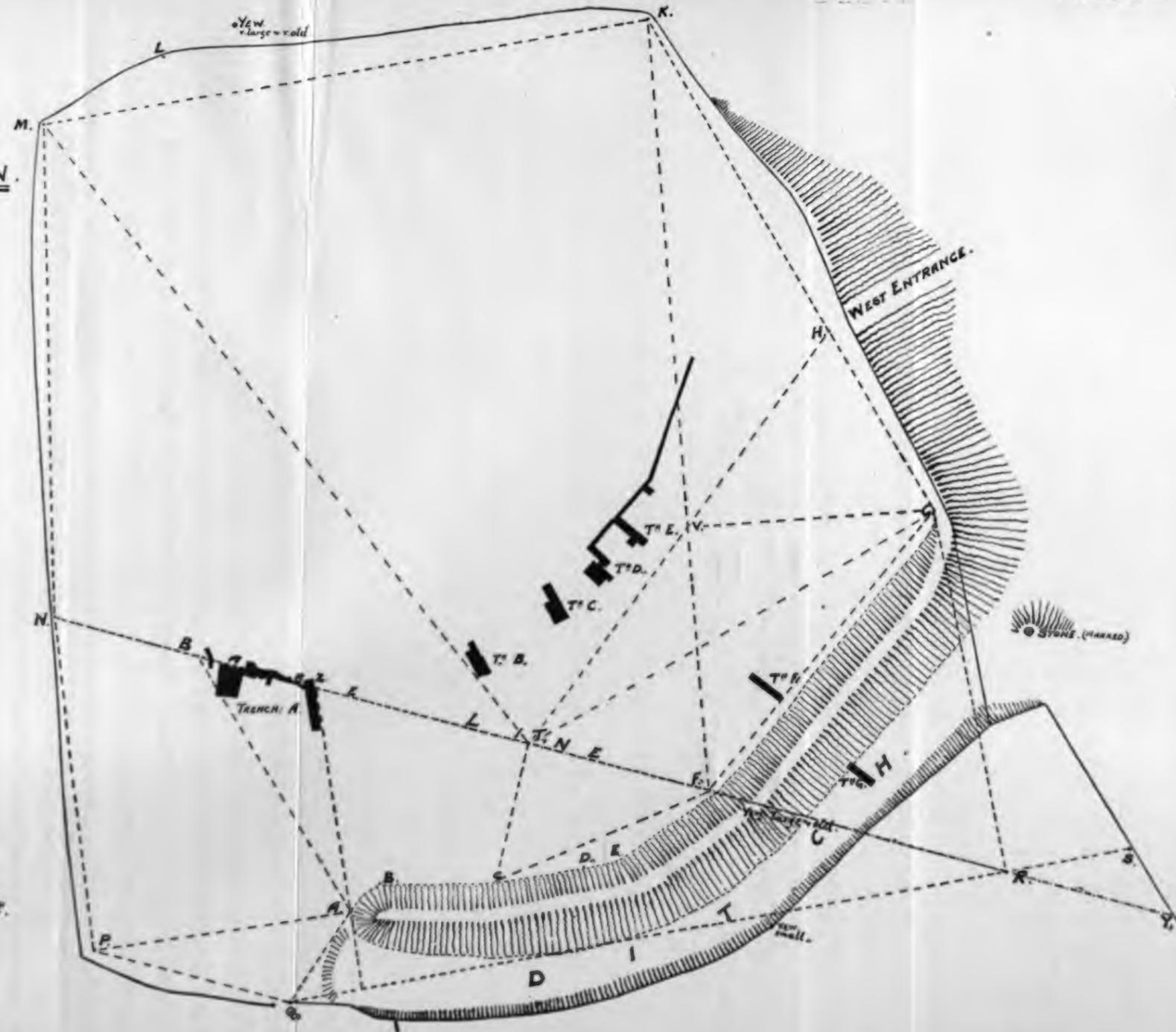
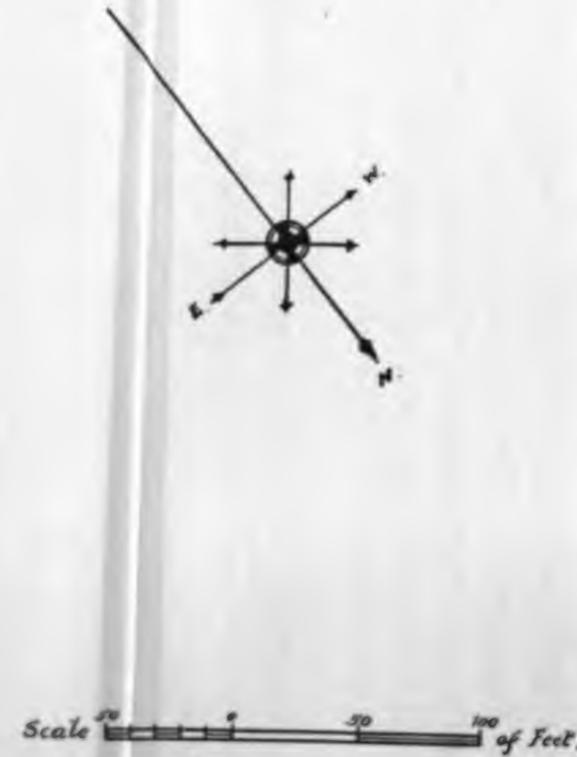
and other towns is progressing at a truly amazing pace, and every device is seized upon to attract buyers on easy terms. I noticed on one of the estates this proclamation: "Houses built to last"; so that the idea of permanence, so beloved of the mediæval builders, is still held in veneration. This laudable aim indicates that the speculator is aware that some of the houses "on other estates" will not last, a fact which we are glad to know. There is great variety in these new houses. The roofs are mostly of concrete tiles, dyed bright green, drab or red both light and dark. Asbestos both of the salmon pink and grey corrugated varieties is also much in evidence. Some examples do not appear to be standing up to the fickle English climate very well, and if they give out they will not be cheap after all.

There appears to be three prevailing styles of modern house building: (1) the Council House, very plain and Noah's-Ark-like and fast receding from public favour; (2) the sham Tudor—"Pantomime Tudor", some critics call it—with its unnecessary gables, ridgetiles and half-inch timbering, which at the moment is first favourite, but rapidly giving place to (3) the white walled and flat-roofed concrete ultra modern house, with its external bright paint and internal chromium-plated fittings. All these houses, and especially No. 3, have walls of marvellous thinness, and there is much glass in evidence. Lightness, brightness and airiness are all very good; so are cosiness, solidity and absence of draughts. All these types can be well proportioned and made very attractive and really good if designed by a competent architect. The concrete houses have many advantages over older styles, but they should be grouped and not sprinkled among other types with which they do not harmonize. The badly-designed, cheap and nondescript small houses which are appearing in ones and twos in the most lovely and as yet unspoilt English countryside, produce a disastrous effect and lower the rateable value of adjoining lands, to the great disadvantage of both the community and the individual. Since the passing of the Town and Country Planning Act of 1932 there is no excuse for this sort of thing being permitted. The Planning Authority has full power to control the external appearance of buildings, and if there are any more outrages the Local Authority will be directly to blame and the ratepayers and those who complain will share in the blame, for they elect those who can if they will regulate these things. I make this reference to our modern building troubles in order to accentuate your appreciation of the difference between work done by the skilled mediæval masons, who approached their task with a religious desire to excel and produce the very best, and a great mass of modern work, done largely by machinery and mechanically and materially-minded workmen and employers. I am often told that the people prefer this garish "doll's house" type of dwelling; I do not believe it. They have to take what is offered, and have no

means of knowing whether the houses are worth the money they pay for them or not. The type is decided upon by the speculators and the Building Societies, not by the purchasers. These unsightly small houses are often not cheap. A much sounder and better-looking house can be designed by a competent architect for less money. You, gentlemen, know the great gap which exists between work which is really good and the imitation which is wrongly described as up-to-date.

The mediæval builders no doubt claimed to be up-to-date in their time. We claim the same; but as I have said—there is a difference.

"THE ROUNDS CAMP. POSTON.
VOWCHURCH. N^R HEREFORD.



CAPTAIN F. B. ELLISON, delin.

INTERIM REPORT ON THE EXCAVATION OF AN
IRON AGE CAMP AT POSTON, VOWCHURCH,
HEREFORDSHIRE.

By GEORGE MARSHALL, F.S.A.

(Contributed October, 1934.)

These excavations were carried out in the autumns of 1933 and 1934, with the consent and active assistance of the owner of the site, Mr. R. S. Gavin Robinson of Poston House.

The Camp is situated in the parish of Vowchurch just above the 700 ft. contour line on the east side of the Golden Valley, on a promontory commanding a direct view up and down the valley.

To the west the whole range of the Black Mountains can be seen, and the recently discovered Iron Age camps in the Timberline wood and Brampton wood on either side of the Batcho pass, between the Wye and Golden valleys, are visible a little to the south-east.

The promontory is now defended on the north by a large vallum and ditch, cutting off the flat land on that side, and steep declivities guard it on the south and east sides, while on the west where it is not so steep it has been scarped and partly ditched to render the defences more effective. A reference to the plan will make this clear.

The area enclosed, including the present vallum and ditch, is about five and a quarter acres.

The earliest record of this earthwork is to be found on Isaac Taylor's map of Herefordshire, dated 1754, where it is marked as a "Camp".

References to what may be this Camp occur in *The Beauties of England and Wales*, p. 544 (1805), *Camden's Britannia*, vol. iii, p. 70 (1810), *British and Roman Encampments of Herefordshire*, by James Davies, p. 14 (1850), and it is mentioned in *The Golden Valley, Herefordshire*, by Thomas Powell, p. 19 (n.d. but c. 1882), who when speaking of the Round House (now Poston House) says "In the grounds are the remains of a high embankment and a moat, evidences of a former extensive fortified camp". At this time the Camp was under the plough. In *An Inventory of the Historical Monuments in Herefordshire*, vol. i, p. 245 and plan (1931), it is described thus:—"Earthwork. In Lower Park Wood, 200 yards S. of Poston House and nearly 1 m. N. of the church, is a small promontory-fort from which the ground falls sharply

on all sides except the N. On this side it is defended by a bank and ditch, which stop towards the east to provide an entrance to the work. On the W. side is a scarp, which is largely artificial, but the other sides are defended only by the fall of the ground. The area including the defences is about 5½ acres. Condition—Fairly good."

On old estate maps the site was called the "Encampment", but is known locally as "The Rounds".

The field has now been down to grass for about forty years, but before this was under the plough.

The vallum is planted with beech and other trees, dating back to the end of the 18th century.

The east of the vallum and ditch terminated in flat or slightly sloping ground about forty yards from a steep declivity. It is said that the vallum once extended on to this flat ground and was levelled when the field was put under the plough, possibly at the beginning of the last century, and it is almost certain that the main entrance to the camp must have been close to where the vallum now ends.

The ground outside this point, where it is possible that there was some outer defensive earthwork, has been disturbed.

The ground along the inner side of the vallum is known as "The Old Maids' Walk", but interesting as it might be to connect this with Maidun, converted into Maiden, as in the names May Hill, Maiden Castle, etc., it is more likely to have acquired the name from being a pleasant place for exercise, being sheltered from the prevailing wind and catching all the sun, as the present writer can testify.

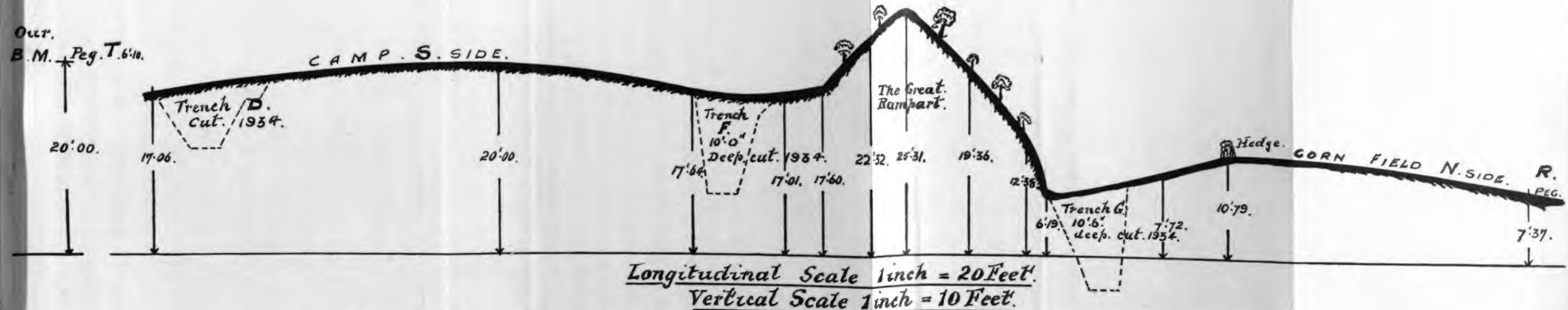
No objects are known to have been found in the Camp or any excavations made, unless a shallow dig in the ditch for "treasure" in Mr. Robinson's childhood can be reckoned as such, until the autumn of 1932, when Mr. Robinson made a few trial holes within the Camp, in the hope of locating some habitation site. Two of these holes gave a reward greater than could have been anticipated, and a slight further investigation in 1933, and the excavations made this autumn gave the valuable results now to be recorded.

At two to three feet below the surface of both trenches, evidence was soon available of an occupation of the early Roman period, and that this was superimposed on previous occupations to a depth of 6 to 7 ft., a rather puzzling feature being that undisturbed ground was found closely adjacent. In 1933 in one of the cuttings a quantity of sandstone slabs was found at a depth of about 6 ft., which by their position it was surmised might have been some kind of a flue, but have since been proved to be fallen walling such as was found later in all the sections excavated.

"THE ROUNDS" CAMP. POSTON.

VOWCHURCH.

NR HEREFORD.



Section from Trench D. to Trench F. over Rampart to Trench G. on to Hedge and Peg R.

CAPTAIN F. B. ELLISON, delin.

Time not then being available, it was decided to postpone the exploration of the site until 1934, Mr. Robinson permitting one trench to remain open, but the other was filled in and has not been re-examined.

Work was recommenced on the site on the 15th August, 1934, and was carried on nearly continuously to the end of September, with from two to five men, Mr. Robinson and myself being in constant attendance, and it is due to his enthusiasm and watchful attention while the work proceeded, in seeing that nothing was overlooked, and the intelligence of the workmen he provided that it has been possible to arrive at results which a camp of this size could hardly have been expected to yield. Captain F. B. Ellison also has rendered valuable assistance by making a careful survey of the site, and drawing the plan and section through the three ditches, and existing vallum, which accompany this report.

The trench (C on plan) which is at the highest point and had been left open, was first explored, and as it was cleared it became apparent that the occupation was situated in a ditch, which eventually proved to be about 23 feet across the top, and 9 ft. 6 ins. deep, of V shape and cut through a subsoil of rather soft marl. On the inner or south side was a large quantity of sandstone slabs which had slid down the steep face of the ditch, the interstices between those against this face being still free from any earth silting. Over these stones was a layer of reddish earth, evidently the crumbings from a vallum made of the marl from the ditch—a reference to section (No. 1) will make this clear. It thus became evident that here was another vallum and ditch all trace of which had disappeared on the surface.

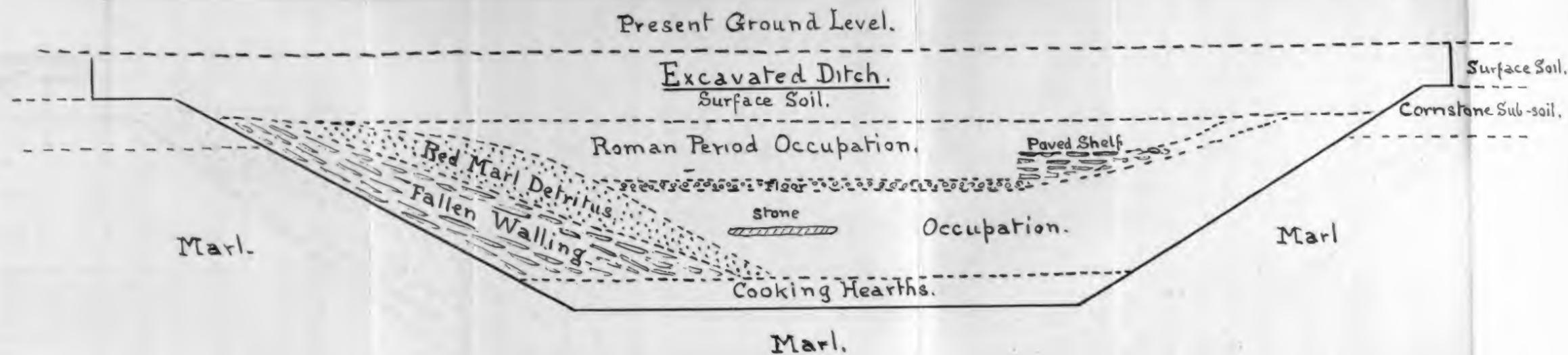
When a complete section had been obtained, it was evident that the ditch had been used soon after it was made for purposes other than that of defence. Soon after completion a small amount of natural silting had taken place to a depth of about 18 inches, when, as Mr. C. A. Raleigh Radford, F.S.A., suggested, the ditch began to be used by the natives as a sheltered place for making their fires for cooking purposes, but not as a living place. The nature of the soil confirms this, being largely composed of very black earth, with bones, charcoal, and hearths in various places, mostly against one side or other of the ditch, and also the almost entire lack of any finds except fragments of very coarse pottery.

After the accumulation of about a foot of these ashes and debris the whole of the walling composed of thin sandstone slabs forming a revetment to the vallum slid into the ditch, overrunning nearly two-thirds of its width. It was found subsequently that this collapse of the revetment had happened consistently along such length of the ditch as has been examined, with nearly identical signs of occupation in all the cuttings that have been made, as will be seen by a comparison of the sections here

illustrated. The collapse of this walling, which must have occurred not very long after the earthwork was made, can have only been due to one of three causes: (1) That the wall was deliberately thrown into the ditch to render the fortification useless; but this can be ruled out for in that case the stones would have been thrown into the ditch starting from the top of the wall downwards, in which case they would have fallen at all angles, whereas they have slithered down very consistently one over the other; (2) That it was the effect of an earthquake, but it would have had to have been an extraordinarily severe one to have brought about such a consistent result; (3) That the wall was built on the surface of the ground on the extreme lip of the ditch, that is, on about a foot of cornstone detritus that forms the top soil, overlying the marl subsoil, with the result that the top soil soon crumbled away beneath the wall foundation, when the whole wall eventually slid into the ditch, as at present found. Sections may have given way at intervals of a few years, but no definite proof of this was found. This last cause seems to be the only satisfactory explanation of the fall of the wall. The wall having fallen, occupation seems to have ceased for a short period, for a layer of silting about 6 inches thick took place before the ditch was used again. There then accumulated about another two feet of similar black soil caused by constant fires, after which the ditch was used for actual occupation purposes. On the outer slope was a deposit of cornstone detritus, possibly deliberately thrown down to render the descent less steep. No sign of steps cut in the slope of the ditch was observed in any of the sections, but they might well be found if the ditch was entirely cleared. A floor of loose cornstone rubble was here trodden down on the previous cooking hearths. No doubt any clearing out of the previous occupation soil would have been most objectionable, for my attention was drawn to the fact that in the Great War the trenches, which had an accumulation of filth in them, when left undisturbed were not objectionable, but if the filling was moved they became very much the reverse.

In this the first actual occupation level, which eventually rose another two feet, a considerably greater quantity of pottery was found and other objects of domestic use. On the top of this a new floor was laid and fresh occupation commenced. This upper occupation level will be distinguished under the name of the *Roman level*, for it was here that nearly all the finds of the Roman period were discovered, and these finds enable a date to be assigned to this occupation.

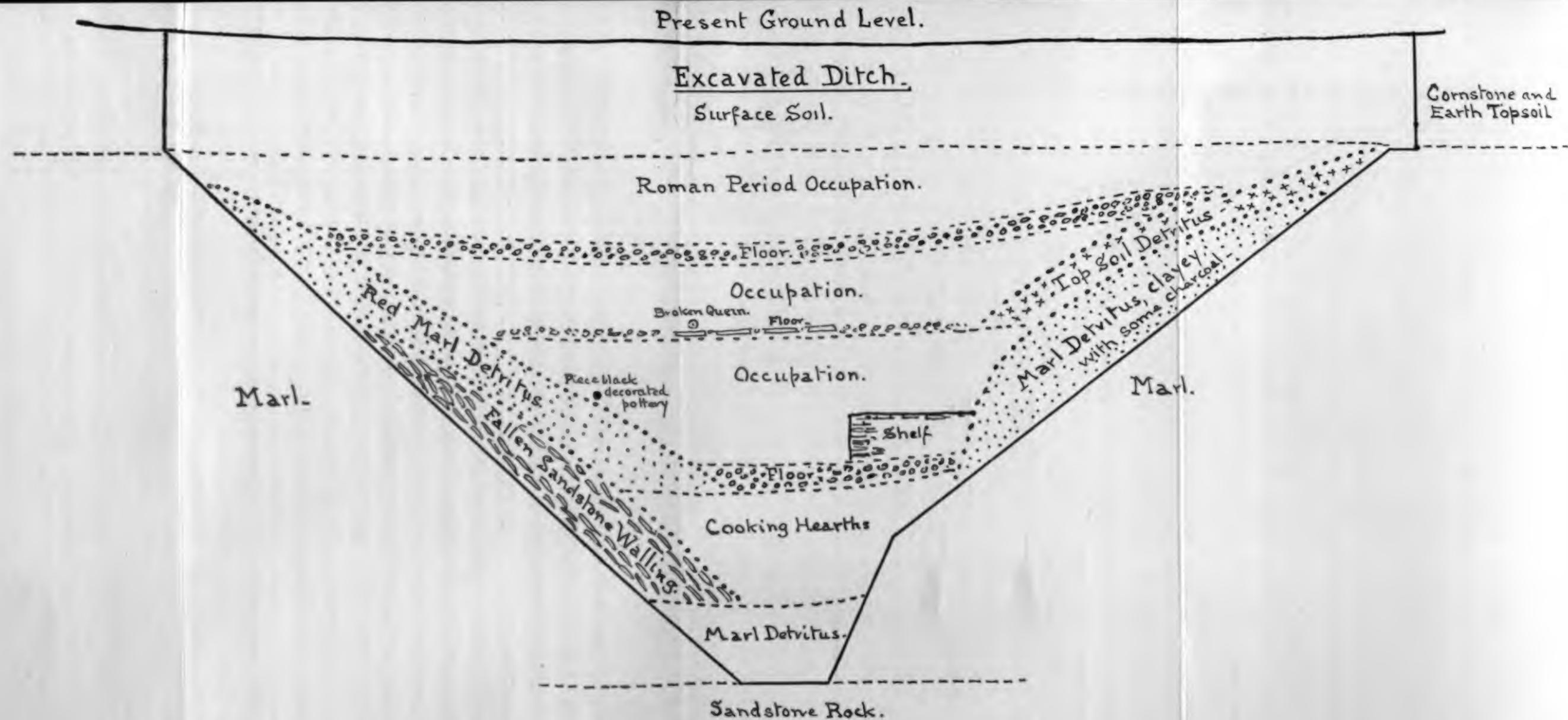
Trench D on plan revealed a rather different state of affairs, for it was found to finish in a shallow pocket on the inner side, which pocket curved round to the east and deepened, the wider portion being lined with stone slabs, which on the inner side followed round over the fallen walling. The limit of this apparent



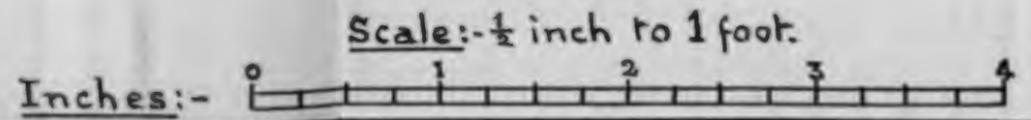
SECTION of Innermost occupied Ditch. Trench "E".
Looking West.

Scale:- $\frac{1}{2}$ inch to 1 foot.

Inches:- 0 1 2 3 4 G.M. delin.



SECTION of Innermost occupied Ditch. Trench "B".
Looking West.



G.M. delin.

hut site has not been explored fully on its eastern side, nor to its full depth. On the face of the lining was found part of a human skull and two flints, one a small round scraper near the skull, and the other an arrow head with point and base broken off. It would appear that there was a break in the ditch here, possibly for an entrance, which may have been protected by a wall across the ditch, for there is a line of what apparently is walling that has fallen westwards. The west section of trench D on plan also points to the presence of an entrance at this point, for here the ditch proved to be only a little over four feet deep, with the fallen walling and detritus over the first occupation level as in trench C, and with Roman pottery in the upper layer.

Trench E was similar to the western section of trench D. The latter was not fully excavated and this area requires further exploration. Trench B (see section and plan) was in nearly every respect similar to C, as reference to the sections will show. The western section of trench A proved similar to B and C so far as it was explored.

At the east end of the ditch where it turns south there was uncovered a rough paving about 18 inches below the surface (see plan). Whether this formed an entrance after the ditch became filled up was not determined, but the ditch apparently passes under it. It may more likely be the floor of some later hut or shed for cattle, but against this one piece of flint and a piece of Roman pottery were found on the surface of the floor, but these may have been strays.

The ditch was traced along its course as far as shown on the plan, but time did not permit of further examination to determine the actual line in its entirety.

A section was cut not quite across the outer ditch of the existing vallum (see plan and section). From the present ditch level this proved to be 10 ft. 6 ins. deep, V shaped and about 2 feet across the bottom, and had been cut through marl similar to that found in the old ditch, as regards its lower part, but with a shaly sandstone bed of about 2 ft. in depth or more above it.

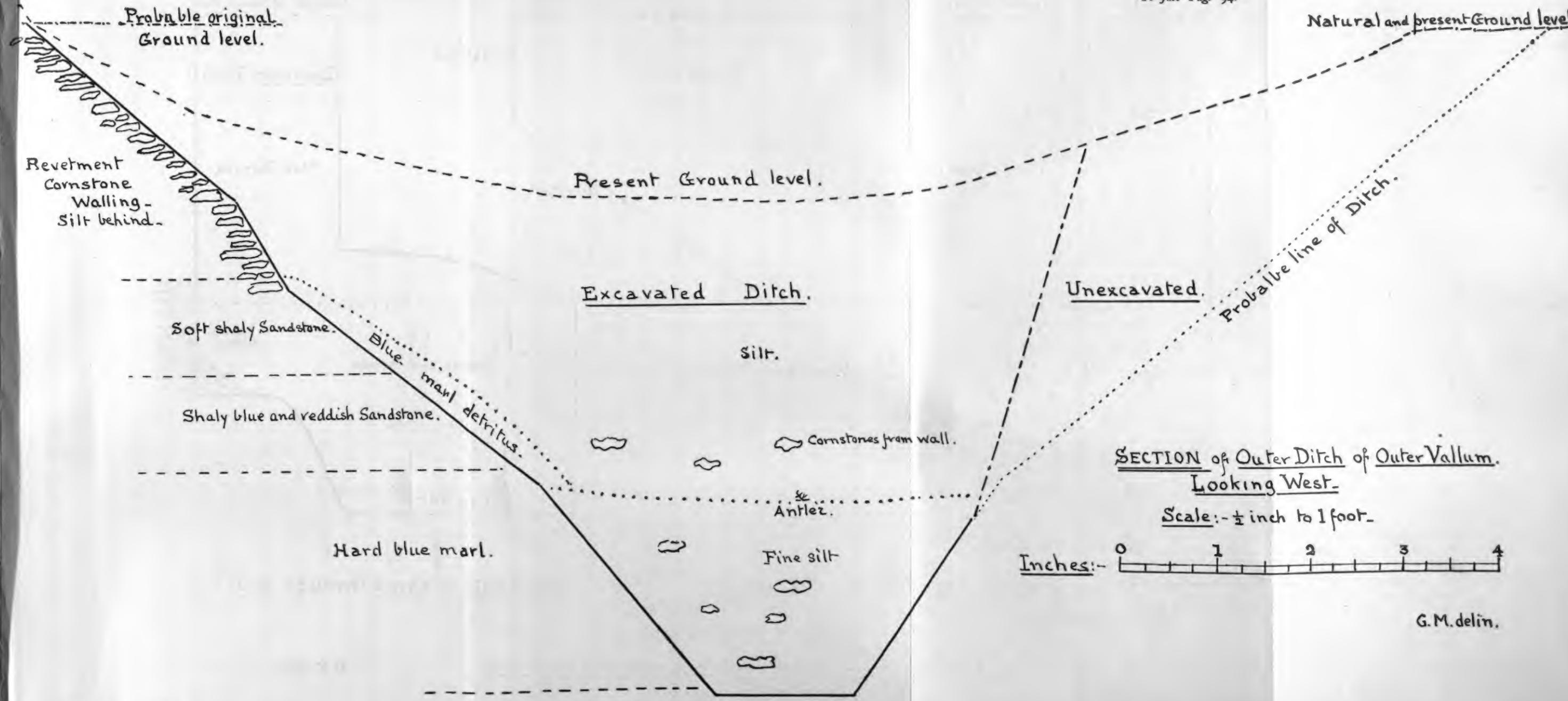
The filling was composed almost entirely of silt with a few large blocks of cornstone from the revetment scattered through it. A shed red deer's antler, complete but very decayed, was found at a depth of 6 ft., and a few unsplit bones and a little charcoal in other places. Nothing was found to date the ditch. The revetment to the vallum is composed of large blocks of cornstone. Beds of this stone are found in the field outside the ditch and to the east of it, so probably it may have been obtained further up the ditch to the east, but another section would have to be made to determine this. The base of this revetment was built on the bed of shaly sandstone mentioned above, evidently some little way below the

original ground level, but this level was not exactly determined as time did not permit of making a cutting into the vallum. In starting the foundation so low down, it is likely that the makers of the vallum had learned their lesson from the collapse of the wall of the inner defence work, and were careful not to repeat their mistake of building their retaining wall on the lip of the ditch at the ground surface.

Along the inner side of the vallum the ground is somewhat sunk as if soil might have been obtained here for raising the height of the embankment, and as it seemed not unlikely that habitation sites might be found in this sheltered spot, it was decided to make a cutting across the depression in a likely place (F on plan). This being done, it soon became evident that there was nothing in the way of occupation, clean earth without even any cornstone detritus only being found. When the cutting had been sunk a little way, the slope of a ditch was found on the vallum side, cut through marl subsoil as in all sections of the inner ditch. The bottom, rather wide, of this ditch was reached at 8 ft. 6 ins., having gone through clean earth silt till within two feet of the bottom, when numerous sandstone slabs were passed through, with many animal bones and a little pottery. These sandstones were fairly consistently mixed with the bones, and as it was thought a more extensive examination of this deposit was desirable, the east side of the ditch was tunnelled into for a distance of five feet, and to nearly its full width at this level. The bottom of the ditch in this heading then proved to be some 2 ft. 6 ins. deeper than at the point of the original section, and of V shape with a flat bottom about 18 inches across. It became evident that the stones must have fallen or been thrown into the ditch. Probably the stones were from a revetment of a vallum which must have been on the inner side, and the bones had been merely thrown in from time to time, though the evenness of the disposal of these animal bones seemed to militate against this. But the interesting result of this cutting is that it was evident that the ditch had never been finished, as was apparent when the sides and floor were cleared. On the floor of the unfinished part and a little above it were found fragments of pots of the Roman period from which deductions will be made presently.

This section concluded the examination of the site as far as the excavations have been carried, and it remains to explain what light they throw on the history of this earthwork.

It is evident that there have been three lines of defence, firstly an inner ditch and vallum, the ditch gradually filled up by occupation and the vallum entirely destroyed; secondly, just outside this and nearly parallel with it, another vallum and ditch, the ditch of which had gradually filled with silt and had never been finished, with a certain amount of the vallum still remaining, as was proved by a cutting a little to the east of the ditch section;

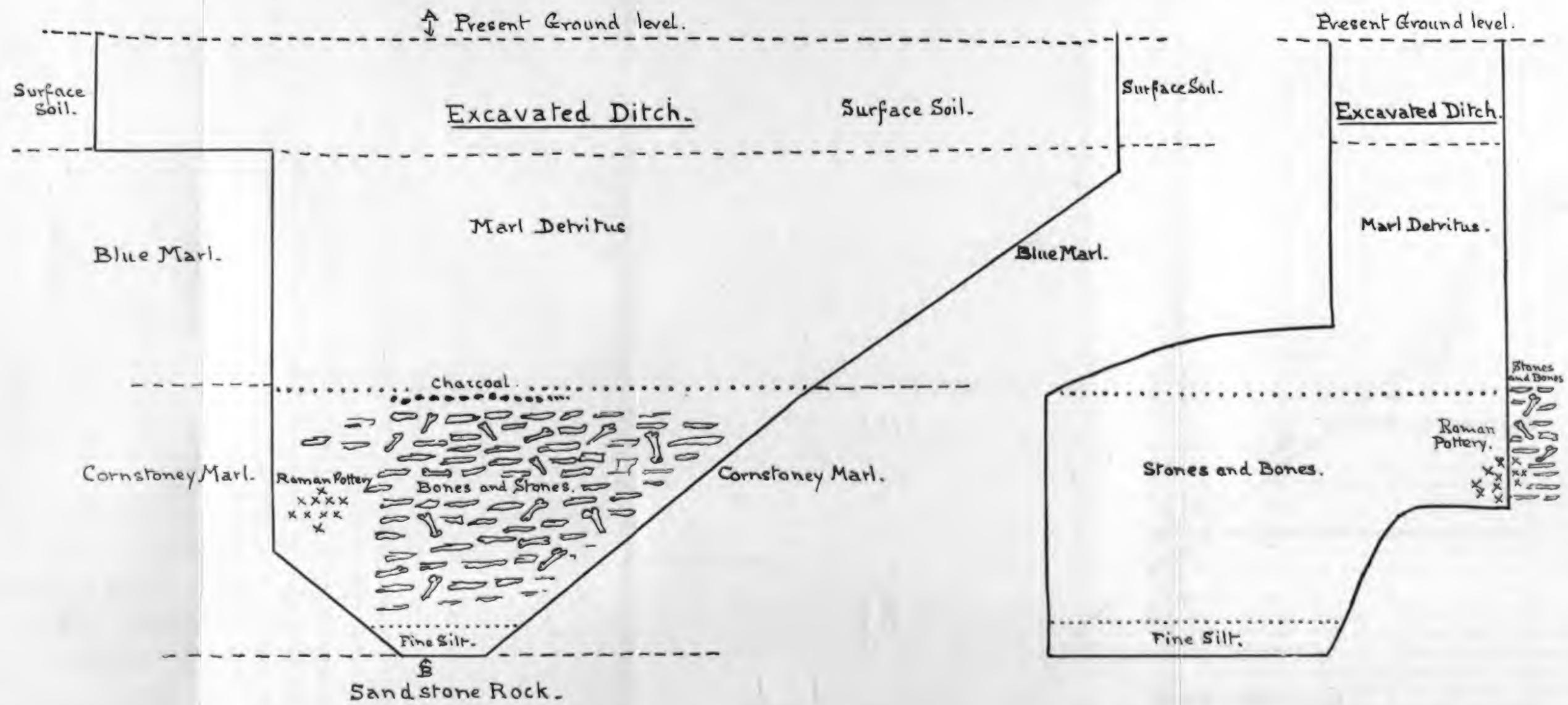


SECTION of Outer Ditch of Outer Vallum. Looking West.

Scale:- 1/2 inch to 1 foot.

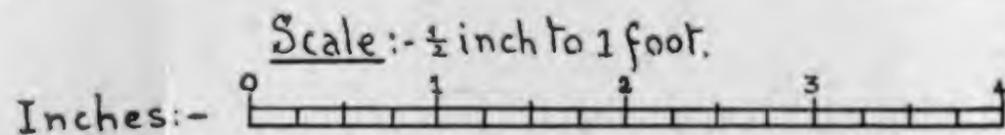


G.M. delin.



SECTION of Inner Ditch of Outer Vallum. Trench "F".
Looking East.

SECTION of same through A-B.



G.M. delin.



Photo by
George Marshall, F.S.A.

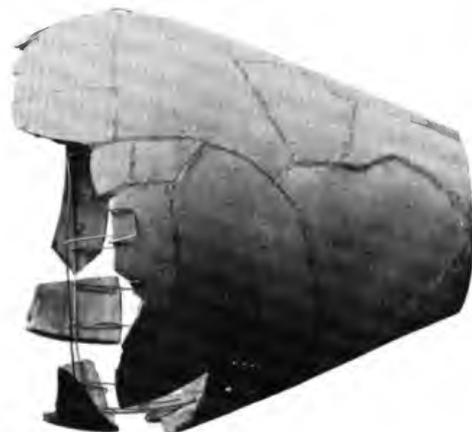


Photo by

F. C. Morgan, F.L.A.

1. Romano-British cooking pot *in situ* on hearth.
2. Ditto after restoration.

and thirdly, immediately adjoining this last ditch the present existing vallum and its ditch outside. The sequence of these works was probably as follows: The site having been chosen for a promontory fort, a vallum and ditch were constructed on the flat ground, curving round and ending where the steep sides of the promontory formed a sufficiently good defence. Then at a considerably later period another vallum and ditch (the existing one) was commenced and finished, space having been left on the inner side for still another vallum and ditch, which were begun from the east end after the outer ones had been completed, but for some reason though nearly finished were never entirely carried out.

Now it is clear by what has already been said that the inner vallum and ditch were constructed, with probably an entrance not far from the west end, and the vallum revetted with sandstones, as the first fortification of the site. Soon after this was completed the inhabitants began using the ditch as a sheltered place for their cooking operations. A very short time must have intervened between the making of the ditch and the occupational use, as the silt in the ditch had only accumulated to a depth of about 18 inches, probably a period of not more than two or three years at the most.¹ There then accumulated ashes from their fires to a depth of about a foot, when the revetment slid into the ditch and covered two-thirds of the floor. Another layer of silt was deposited to a depth of 6 inches and occupation of the ditch began again and the debris from the fires raised the filling another two feet. At this point something in the nature of a floor was made, and it would seem probable that the ditch was used as a dwelling site and not merely for cooking purposes. This occupation level gradually rose another two feet, when a well-packed and rammed floor of stones was laid down. On this floor or a little below it was found most of the pottery fragments and all those of the Roman period, and other objects of that time. These Roman objects all date from the last twenty years of the 1st century or from very early in the 2nd century. Here was found a large red cooking pot (*see illustration in situ*) behind a hearth, as left when the hut was abandoned. It was firmly packed round with clayey earth burned hard, and was evidently intended to get the heat of the fire for keeping warm its contents. It was broken into about sixty pieces, partly by the pressure of the surrounding and superimposed earth, and partly by the upper part being broken possibly by the falling in of the hut roof, as fragments of the pot were lying round in the near neighbourhood. Seeing that no part of the rim was found it may have been a damaged

¹ See *Pitt Rivers*, vol. iv (Excavations in Cranborne Chase), p. 24, (1898), for the rate of the silting up of ditches.

vessel when placed where it was discovered. A piece of the base was missing, which part must have been extracted before the pot became filled with soil. At the bottom of the pot was what may have been the remains of food and a piece of a vessel of Samian ware belonging to the 2nd century.

The other sections show a very similar condition of successive occupations.

If it were possible to arrive at the rate of accumulation of the debris in this ditch, the dating of the earthwork would be proved.

In the upper occupation nearly all the dateable finds can be placed in the Flavian period, say 80 to 100 A.D., but a few belong to the 2nd century. Some Roman period pottery was found not far below the actual "Roman" hut floor. It would therefore appear that Roman things were finding their way to the Camp a short time before the "Roman" floor was laid down, so the level must have risen about 12 to 15 inches in a period of probably not more than 30 years, say 80 to 110 A.D.

The accumulations downwards must have been progressively more rapid, and on the average are not likely to have been less than twice as fast again as the rate of the top portion, and more likely three times as fast. As roughly there is a depth of six feet to account for, if the first rate is taken on a basis of 12 inches in 30 years at the Roman level, it would have required ninety years, and if the latter, sixty years for this deposit to have accumulated. But the occupation, when Roman things were being acquired, may not have covered more than twenty-five or even twenty years, when at a proportionate rate of accumulation, if the Roman rate were 25 years, the time required for the lower six feet to accumulate would be 75 or 50 years, but if 20 years were the Roman rate it would have required 60 years or 40 years. Taking a mean of these various calculations between the extremes of 90 years and 40 years, we arrive at a figure of 65 years, which would date the original earthwork at 15 A.D. if the earliest Roman things to find their way here were dated from 80 A.D. The native pottery used throughout the period of occupation has disclosed no pieces that may not fall within the first century A.D., which evidence supports such a date, even if it does not confirm it.

Putting aside this calculation it might be suggested that this defence work was made when the Romans, shortly before 50 A.D., advanced to the Welsh Marches with the intention of subduing Wales, at which time although their forces under Ostorius Scapula had some success and defeated and eventually captured Caractacus, the campaign had to be abandoned in 51 A.D. If the Camp had been made at that time it is most unlikely that so soon after its construction the inhabitants would have begun to fill up the

ditch by using it for domestic purposes with the enemy at their door, even if not actually taking the offensive. On the other hand if the Camp was made by an offshoot of the Iron Age men in or about 15 A.D., in a district not occupied by them before, it is natural that they would have constructed their normal type of defensive work, but finding that the previous occupiers of this ridge (for it had been intensively occupied before, as Mr. Robinson's location of many flint sites has proved) were of a peaceable nature, the neglect of their defences might well soon have commenced. Further support for the founding of this Camp previous to the Romans reaching this border will appear by a consideration of the other defences, both apparent and recently disclosed by these excavations.

That the present existing vallum and ditch, and the ditch inside this and the vallum accompanying it were subsequent additions to the original Camp is certain. The method as already explained of revetting the existing vallum points to this conclusion, but proof was obtained of this by finding, at the bottom of the unfinished inner ditch, pottery of the Roman period similar to that unearthed at the "Roman" floor level in the original ditch. As this pottery and other objects belong to the latter part of the 1st century A.D. it is evident that this inner ditch must also date from that time, as the pottery was thrown there soon after the ditch had started to silt up. Therefore the only conclusion one can arrive at, is that these two outer lines of fortification were made immediately before the final subjugation of the Silures by the Romans under the General Julius Frontinus, who commenced his campaign in 75 A.D. and brought it to a successful conclusion in 77 or 78 A.D., and that they do not date from the first attempt of the Romans to conquer Wales under Ostorius Scapula, about 50 A.D. That the inner ditch was never completed points to the fact that the work was actually in progress at the time of the final surrender, and so may be dated somewhere between 75 and 78 A.D.

The evidence therefore leads to the conclusion that a defensive work had been established on this site in the first quarter of the 1st century A.D. with a single line of defence, which soon after its inception was neglected, and rendered entirely ineffective by the collapse of the revetment into the ditch. This was followed by a period of peaceful occupation, the ditch gradually filling up, till the second campaign of the Romans, when two new lines of defence were constructed just outside the original and now useless one. It might be argued that these new works were *begun* to ward off the Romans under Ostorius Scapula in the first campaign, but if so they were not finished at that time, and must have been taken in hand again during the second campaign, but even then they were not completed. Only an exhaustive examination of

these earthworks could determine this point, but it is far more likely that they are entirely a conception of the later period.

A rough calculation based on one person moving a cubic yard of earth a day would lead to the conclusion that the present vallum and ditch might have been made by 75 men and women in 100 days. If so it would take 8 months to make the two lines of defence. Any calculation of such a nature must allow a large margin of error, as the number of men available must always remain in doubt.

There are several other things in connection with the Camp that require consideration. For instance what has become of the vallum of the original ditch? Very little detritus from it was found in the ditch itself, and now there is no indication whatever of it on the surface of the soil. Was it used to add to the two vallums constructed subsequently or was it levelled and spread over the surrounding ground, when the field was put under the plough in modern times? The fact that the site is known as "The Rounds" is in favour of the latter supposition, otherwise why not "the Round"? The central vallum has also nearly disappeared, but apparently not entirely, for a section on the site revealed a mould similar to that found in the central ditch, and not soil of broken cornstone as over the centre of the field, so it too may have been partly levelled in recent times.

Then again why was the site evacuated some time in the early 2nd century? Many of these Iron Age camps were apparently deserted in the first twenty years of the century. It may have been for one of three reasons. The peaceful and prosperous state of the country may have induced the inhabitants to seek more sheltered spots on the hillsides, but if so these have not been located, and at Poston this would scarcely have applied as the site is ideal for habitation; or the Romans may have ordered the evacuation of these forts when they had to rush troops to the north to retrieve the disaster of the extermination of the IX legion at York in 119 or 120 A.D.; or at about this time some form of disease swept the country, and the population was largely wiped out. If the latter it might have been a contributory cause to the extermination of the IX legion, and would also account for the less intensive occupation of so many Roman sites during the following half century, as is demonstrated by the reduced quantity of pottery and coins found during excavations on inhabited sites.

There is one entrance to the Camp that has not been mentioned, a narrow opening in the west side, now in use. Whether this is an ancient approach has not yet been determined, but it would seem probable that such is the case, for leading from it just outside the ditch at this point are a number of small ways, parallel to each other, descending this west side of the hill, and

turning northwards into the valley. These no doubt are cattle ways formed by daily movement of the stock to the pastures below.

On the north side of the Camp, just to the north of Poston House, where the ground starts to descend into the valley toward Peterchurch, is a deep sunken way, and one shallower leading straight up the hill, and bending to the left before arriving at the top just north of the house. This may have been in use in mediæval times, but most likely would also have been used as a main approach from the valley on that side of the Camp, as were the ways on the west side.

On the west side and close to Poston House is a very small promontory with a high bank across the neck, and very steep on the north and south, and scarped on the south side. Whether this has any significance as an ancient site it is not possible to say without excavations.

A flat shelf of land below the western escarpment of the Camp south of the entrance on this side, and above the sunken ways, is a site likely for huts of the Iron Age men. The soil here in places is black as if from habitation, but this may be due to burning of charcoal or brushwood in later times.

A full report on the pottery and other finds will be issued at a later date.

NOTE.—For further particulars of the Iron Age in Herefordshire see *The Woolhope Transactions*:—1924, pp. 10-17; "Observations on Earthworks with reference to the Welsh Border," and 1924, pp. 18-27, "Report on the Excavations Conducted on Midsummer Hill Camp", by Ieuan T. Hughes, B.A., F.R.G.S.; 1925, pp. 83-88, "Excavations on the Site of Caplar Camp, in the parish of Brockhampton, Herefordshire", by G. H. Jack, M.Inst.C.E., F.S.A., and A. G. Hayter, M.A., F.S.A.; 1933, pp. 21-29, "Lower Park Wood Camp, Poston, in the parish of Vowchurch, and Some Remarks on the Iron Age in Herefordshire", by George Marshall, F.S.A.

COPY OF A DEED BY RICHARD PHELIPS,
DATED 1535.

By FRANCIS R. JAMES,
With foreword by George Marshall, F.S.A.

(Contributed 13th December, 1934.)

This deed is transcribed from a contemporary copy or draft¹ of an existing indenture in Latin, formerly in the possession of Richard Johnson, Town Clerk of Hereford. It is dated 24 April, 1535, and the grantor, Richard Phelips, must have died soon after, as Leland, writing about 1540, records his death.

The deed recites that owing to customs and tolls levied at the gates of the city and murage being a heavy charge on those trading with the city of Hereford to its great impoverishment by reason of the merchants taking their goods to other markets, Richard Phelips grants to the mayor and citizens all his lands and tenements for a period of twenty years after his decease and that of his wife Anne, the proceeds of such lands and tenements to be used for the payment of the tolls, *etc.*, and that if before the end of the twenty years a license in mortmain can be obtained from the King, that his feoffees and their heirs upon the request of the mayor and citizens shall make them an estate in the said lands and tenements for the uses above recited and no other.

Richard Phelips, or Philips as it is spelt on his brass, was born, as he states in the deed, in the city of Hereford, and was six times Mayor of Hereford, namely in the years 1509, 1516, 1518, 1520, 1525 and 1532, and was an alderman.

He bequeathed by his will lands in Burghill, Cowarne, Bromyard, Eaton, Hennor, Stretford, Croft, Newton, Elton, Stocklow, Moorfield, and Hereford, for the reparation of the town walls in place of the tolls previously levied at the gates, which greatly impeded the trade and commerce of the city.² This bequest was of the clear yearly value of £28 1s. 4d.³

¹ This draft in English was given to the Hereford Public Library by Mr. E. Wintour, and is now numbered "L. C. Deed 2180" in that Library.

² *Ancient Customs of the City of Hereford*, by Richard Johnson, 1882, 2nd edn., pp. 85, 233. Johnson does not state the date of the will, or where it is to be found. There is a will in P.C.C. of Anne Phillips, of All Saints, Hereford, dated 1542. She was probably the widow.

³ *Collections Towards a History of the County and Antiquities of Hereford*, by John Duncumb, 1804, vol. i, p. 439.

There is a brass plate, 18½ inches square, now on the wall of the south aisle of the nave of the Cathedral to the east of the Bishop's door into the cloister with a rhyming inscription referring to this benefaction, part of which reads:—

"He being seven tymes Mayer and Ruler of the same
ffurther to declare of his port And fame
his pitie and compassion on them that were in woe
To doe work' of charitie his hand' were nothing lame
Through he hym all people here May frelye come and goe
Wythoute payeng of Custome toll or other moe
The whiche thing' to Redeme he lefte both house and land
for that intent p'petuallye to Remayne and Stand
Anne also that godlie woman hathe put to her hand
Approvyng her Husband' acte and enlargyng the same."

This inscription says that he was seven times Mayor of Hereford, but in the lists of Mayors given by Duncumb in his *History of Hereford*, and by Johnson in his *Ancient Customs*, he only appears as Mayor six times, in the years given above. Possibly he died in the early part of his seventh year of office and so does not appear in the lists. There is no date on the brass.

Leland writing about 1540 tells us that he "was buried of late days in *cemiterio S. Mariæ infra claustrum S. Mariæ in septo ecclesiæ (de Hereford), tegitur saxo quod erat super altare prioratus de Aconbyri*"¹ (In the cemetery of St. Mary, within the cloister of St. Mary in the yard of the church (of Hereford), covered by a stone which was the altar slab belonging to the Priory of Aconbury.) As Aconbury Priory was dissolved in 1536, Richard Phelips' death must have occurred between this date and the time that Leland wrote.

The first mention of this brass is found about 1680, when Dingley tells us that in the "Tolsel" of Hereford was kept an ancient brass plate taken from a tombstone in the Cathedral church and gives the inscription.²

Rawlinson, writing about 1717, gives the inscription and says the brass was taken from a tombstone in the Cathedral church and afterwards preserved in the City Tolsey, and has since been fixed on a Freestone near the west side of the Bishop's Cloisters, in "the Area," and was under the figures of a man and woman.³ These figures were no doubt also in brass and let into the altar stone from Aconbury. Whether "the Area" can be taken as the actual cloister or the cloister yard is questionable, but more

¹ *The Itinerary of John Leland*, ed. by Lucy Toulmin Smith, 1908, vol. ii, p. 66.

² *History from Marble*, by Thomas Dingley, 1867, p. ccvii.

³ *The History and Antiquities of the City and Cathedral-Church of Hereford*, [by R. Rawlinson], 1717, p. 111.

likely the yard or garth. "In septo" in Leland's account is also more likely to be the yard, but if so the brass must have been exposed to the weather, which would be unusual. None of the authorities mentions any other inscription, so whether the names of the deceased or dates of their deaths ever existed is uncertain.

Browne Willis repeats the last statement in less detail and says the brass was near the west part of the Cathedral and gives the inscription.¹

When Duncumb wrote about 1804 the brass plate had again been detached, and he found it loose in the Cathedral Library. He gives the inscription, as does Havergal, in whose time it was in its present position.²

From the above accounts it is evident that Richard Phelips was buried either in the west walk of the Bishops' cloisters or in the yard just outside it, under an altar slab, possibly rescued by his widow as a sacred stone on the demolition of the east end of the Priory church of Aconbury. The brass plate and maybe the figures would seem to have been a tribute by the grateful citizens to their benefactors. It was unusual and doubtless an honour for a civilian to be buried in the Ladye Arbour, which was reserved for the Canons and lesser dignitaries of the church.

[24 April 27 Henry VIII]

THIS is the very entent and mynde of me Richard Phelips of this my p(re)sent dede and Feoffement endented and to this present scedule endented annexed for the Lymytacon order yng and disposing of all my man(or)s Lands ten(emen)ts Millis Rents Rev(er)cons and s(er)VICES and other my hereditaments w(i)t(h) thapp(ur)ten(a)nces in my saide dede and Feoffement comprised *Furst* I the saide Richard Phelips being borne w(i)t(h)in the Citie off Hereford calling unto my remembrance the greate and contynual ruyn decay and dishabiting of the saide Citie Whiche as ys probably thought, is for that that the Custu(ms) tolls & Murage of the saide Citie being at all tymes leviabie of the kings subjects by small p(ar)cells of men of div(er)se parties of this Royalme resorting to the same for marchaundizes and other their necessaries, as also for that that div(er)se townships and hameletts w(i)t(h)in the Shere of Hereford and in other places being in tymes passed contributoryes to the payment of the saide tolls Custu(m)s and Murage hathe ben and dayly be exempte and by p(ri)vilege thereby discharged for payeng of any suche Custu(m)s tolls or Murage, By reason Wherof not onely the marketts and Feyres in the saide Citie dothe decay but also the greate and hole charge and Burden of the saide Cust(u)m)s tolls and Murage restethe now upon the saide Citie being very pore forasmuche as hit is not at this tyme so muche inhabited nor haunted of people resorting to the marketts there

¹ *A Survey of the Cathedrals, etc.*, by Browne Willis, 1742, vol. ii, p. 504.

² *Monumental Inscriptions in the Cathedral Church of Hereford*, by Rev. Francis T. Havergal, 1881, pp. xxi, 54.

and otherwyse as hit hathe ben in tymes passed for that that suche p(er)sons so resorting as is aforesaide by sundry vexacons that thei have had and susteyned at the gates and other places of the saide Citie by the Custu(m)mar and his officers there in tymes passed and daily do sustayne for the payments and leveyeng of suche Custum(m)es, tolls and Murage now w(i)t(h) drawith themselves and resortith to other marketts w(i)t(h) their marchaundizes and vitayles as Corne Catall and suche other by force wherof thoccupieng and marchaundizes of the saide Citie is not onely sore decaied and dothe dayly more and more decay. But also many goodly houses and buyldings there for lack of inhabitaunts be now voyde and ruynouse and povertte more and more encreasyth in the said Citie amongs the inhabitaunts there so that by contynuaunce of tyme by occasion of the enormities and other the p(re)misses hit is to be feared that the saide charge being before tymes leveyed amongs a greate multitude now for the more parte exempte and discharged therof as is beforesaid shall rest in shorte processe of tyme upon the Mayre and Citizens of the said Citie Who by reason of the premisses and of the povertte whiche dayly encreasyth amongs them by occasion aforesaide and of sundry and manyfolde charges whiche they do dayly susteyne in Rep(ar)acon of the walls Gates Bridge and paviments of the saide Citie shall not be able to susteyne the same nor to do our soveraigne Lord the king suche honorable servyce in his said Citie according to their duties as their p(re)decessours hathe don in tymes passed. *In consideration* of redresse of the p(re)misses and also to the furtheraunce and encrease of the co(m)mon Wealth of the saide Citie And to thentent the saide Custu(m)s tolls and Murage may be thereby extinguyshed w(i)t(h)out further exaction or demaund of any thing of any p(er)son or p(er)sons resorting to the saide Citie for any their busynesse or nedes but from hensforth clerely to be discharged and acquitted for ev(er) I the saide Richard Phelips wyl and ordeyne declare and establysh that my feoffees named in this my saide dede endented unto this schedule endented annexed and their heyres from hensforth shall stand & be seased of and in all my man(or)s Lands ten(emen)ts Millis Rents Rev(er)cons & s(er)vyce and other my hereditaments w(i)t(h) all and singler their app(ur)ten(a)nces in my seid dede indented menconed and to this scedule endented annexed to thuse of me the saide Richard Phelips and Anne my wyff for terme of o(u)r two lyves and the lenger levar of any of us two w(i)t(h)out empechement of waste. And after the decease of me the saide Richard and of Anne my wyff to thonly use and behove of the Mayre Citezens and Co(mmon)altie of the said Citie of Hereford and their successors for the space and terme of XX yeres next immediaty ensuyng the decease of me the saide Richard and of Anne my wyff, and to thentent that the said Mayre Citizens and Co(mmon)altie and their successours shall during the said term of XX yeres receive & take to their onely use and behove all the Rents yssues and p(ro)fits cu(m)myng of the saide lands and other the p(re)misses for the payment and discharge of the said Custu(m)s tolls and Murage due at the gates and in other places of the saide Citie onely and to none other purpose or use to be employed And also I the saide Richard further wyl & ordaigne that yf hit happen the said Mayre Citizens & Co(mmon)altie or me the said Richard or any other charitable and well disposed p(er)son mynding the co(m)mon Wealth of the saide Citie at any tyme hereaft(er) and on thisside thend of the seid XX yeres to aptayne and purchase of o(u)r soveraigne Lord the king or his heires a Licence of mortmayne according to the law to thuse of the said Citie then I the said Richard Phelips wyl that my said feoffees and their heirs upon request to them made by the said Mayre Citezens and Co(mmon)altie or on their behalf at any tyme aft(er) the decease of me and Anne my Wyff as is beforesaid do make estate of and in all my said lands and ten(emen)ts and othe the p(re)misses to the said Maire Citezens and Co(mmon)altie as by their lerned counseyll from tyme to tyme may or can be devised to have & to hold to them and to their successours

for ev(er) to th(entent) and for thonely discharge of the said Custu(m)s
tolls and Murage and other exactions and impositions used in the said
Citie

[Feoffees mentioned in attached indenture. Written in Latin.]

Rouland Bishop of Coventry & Lichfield		Thomas Havard	
Thomas Englefield	m	Hugh Walshe	
James Baskerville	m	John Blackstone	c
John Vernon	a	John Jenkyns	c
Thomas Bodenham	a	Henry Chippenham	
John Scudimore		John Warnecombe	
Nicholas Chippenham		John Havard	
Richard Warnecombe		William Gybbes	
Thomas Gybbes		Richard Walshe	

m=miles a=armiger c=clericus.

REPORTS OF SECTIONAL EDITORS, 1934.

ORNITHOLOGY.

By CAPTAIN H. A. GILBERT.

Fifty years ago, in November, 1885, there died in this city Dr. Henry Graves Bull, the author of the *Birds of Herefordshire*. It would seem therefore a suitable moment not only to record some facts about Herefordshire ornithologists of past generations but also to state the changes which have taken place since the *Birds of Herefordshire* was published by Messrs. Jakeman & Carver in 1888—three years after Dr. Bull's death.

Before we begin to write about our early ornithologists it is advisable to remember their difficulties. Nowadays there are twenty intelligent observers in existence for every one who helped Doctor Bull. Field glasses had not reached their present perfection, and shank's mare was the general mode of conveyance. Long laborious toil was necessary in order to visit a chosen locality, where nowadays a modern man would arrive in half-an-hour—after pressing a self-starter, merely sitting at his ease in a motor car.

The earliest Herefordshire ornithologist of whom I can find any record is the Rev. W. E. Evans, Prebendary of the Cathedral, who once lived at Burton Court. This gentleman wrote a book entitled *The Songs of the Birds*—the first edition (there were three) of which is dated 1845, not 1851 as stated by Dr. Bull. Mr. Evans' first description is of that extremely local and elusive bird, the woodlark. Well did the author know that charming bird whose song he says is "clear and sweet and seems to tell a tale of deep and tender feeling".

Another keen ornithologist was James W. Lloyd (1837-1906), who was for many years postmaster of Kington and a keen member of the Woolhope Club. His first note appears in the *Transactions* for 1866.

The Rev. William Clement Ley¹ (? 1841-? 18 . .) must have been a good observer. He wrote for our *Transactions* in 1869, and is frequently quoted by Dr. Bull. For instance regarding

¹ The *Transactions* for 1908, p. 195. His father was the Rev. William Henry Ley, Vicar of Sellack and King's Cagle, 1841-1887. He was curate of King's Cagle, 1863-1871, and his brother the Rev. Augustin Ley succeeded his father in the livings, 1887-1908. He was Rector of Ashby Parva, Leicester, 1874-1892.

the raven: "When I was a boy," says Mr. Ley, "raven trees were often pointed out by old men in my constant and vehement bird's nesting rambles, but I never once met with a nest in a tree. Is it true that they do still breed upon trees in Herefordshire?" It is pleasant to record that they do so once again, after having been absent for many years.

Another ornithologist of olden time was Mr. R. M. Lingwood, of Lyston, Llanwarne. He was Secretary of the Club in 1864 and 1865 and High Sheriff in 1848. He wrote in 1860.

Since Dr. Bull's book was published in 1888, two further publications on Herefordshire birds have been issued. The first by George Horne was published in 1889 and is entitled *An Authenticated List of the Birds of Herefordshire*. Mr. Horne lived at Hampton Park, and also wrote another pamphlet on *Aviary Pheasants*.

The second publication, *Herefordshire Birds* is written by Thomas Hutchinson and is dated 1899. Mr. Hutchinson was Honorary Secretary of the Club from 1908 to 1916 and died in that year.

Many of these gentlemen had noticed changes among Herefordshire birds in their time. Mr. Clement Ley noted that the "kite is almost a bird of the past in our County and the Common Buzzard is becoming yearly more uncommon. They are rapidly disappearing under the ruthless persecution of the gamekeeper. In a few years the sight of one of the larger birds of prey which used to be such an ornament to our landscape will be as unexpected a pleasure as the discovery of a dodo."

Dr. Bull remarks that "the drainage of marshes as at Shobdon and Berrington has driven away some of our rarer birds", and also comments on the destruction of raptorial birds. The Doctor wrote also: "The fox has long been spared: why should not these birds be allowed equal immunity?" It is pleasant to record that the buzzard and the raven have returned to nest on Herefordshire soil again—though one regrets that the beautiful and harmless bird the honey buzzard, once so well known in some of our large woodlands, appears to have vanished for ever. Dr. Bull says that a few years ago it was not uncommon, and Hereford bird stuffers had two or three brought to them every year. I have seen eggs taken at Weston-under-Penyard in 1889. The kite, also, slowly dying out over the border, has only once or twice paid a fleeting visit to our shire within the last twenty years.

One bird, somewhat unexpectedly, seems to have disappeared, namely the cornbunting. Dr. Bull describes this bird as "not infrequent; being fairly distributed over the arable parts of the County". Hutchinson quotes Dr. Williams of Kingsland that it "has nested in Lugg Meadows and at Mortimer's Cross". Yet

I have never seen the bird on Herefordshire soil of late years since I have lived here. The nearest areas on which I have seen this bird is below Chepstow and on the Cotswolds.

Again, Mr. W. E. de Winton, writing in 1897 of the Black Mountains, says that the rock pipit was very plentiful. I have never had the luck to see this bird. The corncrake is another bird that has nearly gone.

Other birds, however, have entered the county. The black-headed gull, unknown to Dr. Bull, etc., has been for nearly 30 years a regular spring migrant and breeds in the county whenever the fishermen allow it to do so.

Heron has almost disappeared, although they nested once within a mile of the city,¹ and at Lugwardine. Near Lingen in 1836 there were a hundred nests. Hutchinson, in 1899, describes seven heronies in the county.² There are now only two or three.

The shoveller and the tufted duck are now to be found in the county, probably their presence is due to the importation of fancy ducks.

The hawfinch has become very scarce, but the little owl is spreading, and it is hoped that the protection now afforded it will be withdrawn by the Home Office, and that no one will show the little brute any mercy.

The following records of the black redstart are worth recording. It was seen by the Rev. Canon W. B. Glennie and others at Hereford Cathedral on December, 1918, to April, 1919; March 15th, 1925, a pair for several weeks; November, 1925, 1926 and 1928, a single bird; and on November 23rd, 1932, a single bird or possibly two.

I would draw attention to the excellent list of every writing and publication concerning Herefordshire ornithology made by Mr. F. C. Morgan of the Hereford Public Library, where the works cited above may be consulted.

¹ *Birds of Herefordshire*, by Dr. H. G. Bull, p. 14.

² *Transactions of the Woolhope Club*, 1899, p. 212.

BOTANY.

By REV. W. OSWALD WAIT, M.A., B.C.L.

During the past summer Mr. W. E. Clarke reported an exceptional growth of the common great mullein, which had attained the height of eight feet with a central spike of bloom three feet long, surrounded by eleven subsidiary spikes of about two feet each, presenting in all a magnificent specimen, possibly owing its unusual height to the abnormally hot summer of 1934.

Miss Hutchinson of Leominster sent a curious violet coloured *Clavaria* (Fungus), which Dr. H. E. Durham forwarded to Kew for identification. The authorities there said it was an unusual form of *Clavaria stricta*.

Dr. Durham also sent to Kew a specimen of the fine Hornbeams growing at Kerry, Montgomeryshire, one measuring a trunk growth of eight feet, which was considered by the authorities to be only the ordinary variety.

The hot summer of 1934 was followed by an unusually mild winter, hardly deserving the name, so much so that even in the north of the county some tender plants which never survive an ordinary winter have come through unhurt, with no protection whatever.

Obituary Memoir.

JOHN CHARLES MACKAY.

BORN 1854—DIED 1934.

The death of John Charles Mackay has deprived the Club of an active supporter of many years standing. He was born on June 23rd, 1854, at Longnor in Shropshire, but was a Scotchman by descent, belonging to the Aberach branch of the Mackays of Strathnaver. Educated at Shrewsbury School, he followed in the footsteps of his father as a civil engineer, and was responsible for many important engineering contracts in this country and abroad. In his Presidential Address to the Woolhope Club he

described the making of the Dowlais and Pontypridd tunnels in 1876 and 1885 respectively, two of the works which he successfully carried out.

As Chairman of the Titterstone Clee Hill Quarries, he welcomed the Club on their visit there in 1919, and entertained the members at his residence nearby.

He joined the Club in 1911, was a member of the Central Committee from 1919 to 1924, acted as President for the year 1925, and Vice-President from 1926 to 1931, at which time he left Hereford to reside in Cheltenham.

He took a great interest in the excavations carried out at Kenchester and elsewhere by Mr. G. H. Jack, and was always ready with shrewd advice and financial support for any work undertaken by the Club.

He passed quietly away from heart failure at Cheltenham on March the 19th, 1934, in his eightieth year, and was buried at Leckhampton, near Cheltenham, leaving a widow but no children.

To face page 111.



Photo by

F. C. Morgan, F.L.A.

TOMB OF CHRISTOPHER ROPER, 2ND BARON TEYNHAM,
died 1622, in Lynsted Church, Kent, by Epiphanius Evesham.
(See page 113.)

Woolhope Naturalists' Field Club.

PAPERS, 1935.

TWO HEREFORD 16TH CENTURY SCULPTORS,
JOHN GILDON AND EPIPHANIUS EVESHAM.

By F. C. MORGAN, F.L.A.

(Read 28th February, 1935.)

Recent discoveries prove that Herefordshire has well played its part in the history of art. There is the work of the Norman masons responsible for churches at Kilpeck, Shobdon, part of Leominster and elsewhere. The western school of masons whose origin is unknown built the particularly fine transitional Norman arches in the ambulatory of Hereford Cathedral, described by the late Sir Harold Brakspear in *Archæologia* for 1931. Minor work by this school can be found in other parts of the county, the south door of King's Pyon being an example of their continuous roll mouldings. Our Honorary Secretary believes that perhaps the ball flower ornament originated in this county, where certainly the best examples of its use may be seen, as on Hereford Cathedral Tower, at Ledbury, Leominster, etc. Then there was the Hereford school of figure sculpture of which examples are to be seen in the figures over the Grandisson monument in the Cathedral and as far south as Ottery St. Mary and Exeter.¹

In 1932 an important discovery was made by that great scholar, Mrs. Esdaile, who brought into prominence the work of Epiphanius Evesham, a native of Wellington, near Hereford, the first known English sculptor of bas-reliefs. He executed some particularly fine examples and also sculptured some good effigies. Having had a number of photographs of monuments sent to her by Mr. R. Griffin, F.S.A., and seeing in pencil upon the back of one of these "Lynsted E. Evesham fecit", she at once connected this with other monuments similar in character she had noted elsewhere.² Here was a clue to "the most exquisite Artist M. Epiphanius Evesham" recorded by John Penkethman in a volume of his translation of *Virgil* published in 1624, the passage mentioning him being copied by Horace Walpole

¹ *Bishop Grandisson, student and art-lover*, by Frances Rose-Troup, 1929.

² *The Times*, 30th Jan., 1932.

in *Anecdotes of Painting*. This passage referred to a monument made by Evesham for Mr. John Owen which perished when old St. Paul's was destroyed in the great fire of London. No other example of his work had been recorded. Now, owing to Mrs. Esdaile's researches, other monuments by this gifted artist are known. In addition to the before-mentioned Roper monument at Lynsted (1622), there is a monument to Sir Thomas Hawkins and his wife at Boughton-under-Blean (1616-1617); three small tablets in Kent to members of the Collyns family, two in Hythe church (1586 and 1597), and one signed "Evesham me fecit" in Mersham Church (1595); at Alderton, Wiltshire, is one to Charles Gore (1628), whose widow is shown kneeling before a desk; in Westminster Abbey is an alabaster monument to Jane, Lady Crewe (1639); at St. Frideswide's, Oxford, is another alabaster tablet to the memory of William, Viscount Brouncker (1645) and his wife Dame Winefred (1649); and at St. John-at-Hackney is a bas-relief to Thomas Wood (*obit* 1649) and Susan his wife (1650) standing between their eight children. It is probable that a floor-slab at West Hanningfield Church, Essex, commemorating a two-year old child, John Erdeswicke (1622), was also made by Evesham. The inscription is almost obliterated, but is recorded in the *Holman MSS.* as "Eversham fecit", almost certainly an error for our artist.¹

Evesham was born a twin in 1570 and the youngest of fourteen children of William Evesham and Jane his wife (daughter of Alexander Haworth), of Burghope, Wellington, Herefordshire. His father died in London in 1584, probably having left this county. His famous son, called by Mrs. Esdaile "the first known scion of the landed gentry to adopt the profession of sculptor", became a pupil of Richard Stephens at his alabaster works at Southwark. While here he engraved a sundial. This is lettered "EPIPHANIVS EVESHAM FECIT 1583". There is the Evesham coat of arms, and on either side of this "IOHN EVESHAM". In later lettering is engraved "Humfrey Howorth". Mr. G. Marshall deduces from this that the dial was made for his eldest brother John or another brother of the same name who was a great traveller. It probably passed to a second cousin, Humfrey Howorth, of the White House, Vowchurch, and later found its way to the Great Turnant Farm, Longtown, where it was purchased a few years ago by Mrs. A. Richmond and recently presented by her to Hereford Museum.

¹ *Archæologia Cantiana*, Vol. 44, 1932, "The Ropers and their Monuments in Lynsted Church," by Aymer Vallance, and Vol. 45, 1933, "The Hawkins Monument by Epiphanius Evesham at Boughton-under-Blean," by K. H. Jones.

Mrs. Esdaile has since discovered another monument, *vide* "The Monument of the first Lord Rich at Felstead," by Mrs. Esdaile, *Essex Arch. Soc. Trans.*, Vol. 22, 1936.



Photo by

F. C. Morgan, F.L.A.

PANEL ON TOMB OF CHRISTOPHER ROPER, 2ND BARON TEYNHAM, died 1622, in Lynsted Church, Kent, by Epiphanius Evesham.



Photo by

F. C. Morgan, F.L.A.

PANEL ON TOMB OF CHRISTOPHER ROPER, 2ND BARON TEYNHAM, died 1622, in Lynsted Church, Kent, by Epiphanius Evesham.

The Roper monument at Lynsted in Kent and the Hawkins monument at Boughton are described in *Archæologia Cantiana*, the former by Mr. Aymer Vallance in the volume for 1932 and the latter by Capt. K. H. Jones in that for 1933, and I must refer those interested to the papers by these writers for full details.

To-night I can give a few notes and illustrations of the former monument only. It is the tomb of Christopher Roper, second Baron Teynham, who died in 1622, and stands on the north side of the Roper chancel of Lynsted—opposite to the monument of his father, which was probably built by Evesham's master, Richard Stephens. Christopher Roper married Catherine, daughter of John Seborne, of Sutton St. Michael, Herefordshire, who caused the monument to be erected to his memory. She is represented wearing a widow's hood and is kneeling bolt upright in prayer before a prie-dieu with an open book upon it. The effigy of her husband, clothed in armour over which is his peer's mantle, is outstretched upon the tomb before her. Authorities say this part of the monument is neither better nor worse than hundreds of the same period though it is dignified by a restraint as unusual as pleasing. The distinguishing feature which raises it high above all others are two alabaster bas-relief groups on the front of the tomb. One is of the Baron's two sons, John (afterwards third Baron) and William; the other is of his four daughters, Bridget, Mary, Catherine and Elizabeth and their nurse or governess. These two panels were a new feature in English art, and are of remarkable artistic merit. Indeed it is perhaps safe to say that of their kind nothing to surpass them has been carved since. They alone would justify the expression of "the most exquisite artist Epiphanius Evesham". To see these panels and to photograph them for Hereford Library amply repaid me for a long, hot and dusty walk last September. (See *illustrations*.)

JOHN GILDON OR GILDON.

Mrs. Esdaile, in her scholarly work *English monumental sculpture since the Renaissance*, 1927, drew attention to a monument at Bosbury—the first known example to be signed by the maker. Upon the south side of the chancel is the monument of John Harford erected to his memory by his son Richard. Around the pillars may be seen in large letters "John Guldō of Hereford made this Tombe with his owne hande Ano Dni 1573". It is of local red sandstone and typical of the Tudor period, but being fully described in Mrs. Esdaile's work and in the *Royal Commission on Historical Monuments Report, Herefordshire*, vol. ii., p. 19, we need not linger over details.

Opposite is the monument to Richard Harford of the same florid type—this is not signed,¹ but is almost certainly by the same hand.

In the Chilston Chapel of Madley Church are the recumbent effigies of Richard Willison and Anne [Elton] his wife (1575). Unfortunately, these have suffered much, and the lower part of the man is missing.

They lie upon a stone altar-tomb similar in style to those to be mentioned later at Astley and Abergavenny. The man is in armour, his wife is in the costume of the period, and around the tomb are arched panels enclosing shields of arms, except on the north side, where are kneeling figures of Anne and John Willison, and the inscription "This Towm John Gildō made".

At Astley, Worcestershire, are two monuments similar in style, but well preserved. They lie close together in the north chapel of the church, the southern one being to the memory of Walter Blounte and Isabel his wife, who died in 1561 and 1562 respectively. Their effigies are in good condition. Around the base of the tomb are figures of their children, two sons and five daughters, executed in a manner poor indeed when compared to that of Epiphanius Evesham. The inscription reads:—

HEARE · LIETH · THE · BODI · OF · WALTER / BLONTE ·
ESQUIER · AND · IUSTICE · OF · PEACE · WHO · DECEASED
THE · III · DAIE · OF · OCTOBER · Añ · Dñ · 1561 · AND /
IZABEL · HIS · WIFE · WHO · DECEASED · THE · VIII ·
DAIE · OF · IANUARI · Añ · Dñ · 1562 ·

N. IOYCE. B. ELIZABETH · B ANNE · B.
W. IZABEL B
S. RICHARD B. FRAVNCIS B
E. MARGERIE B

The north tomb is to the memory of Robert and Anne Blount: the former died in 1573 and the monument evidently was erected during the life time of the latter as the inscription reads:

HERE · LIETH · THE · BODI · OF RO / BART
BLONTE · ESQUIER · WHO DECEASED · THE ·
XXIII · DAIE · OF / MAIE · An · Dñ · 1573
AND · ANNE · HIS / WIFE · BEING · AS ·
YET · LIVING · DESIRING GOD TO CONTINEW
HER · LIFE

S. Three Tudor roses.
E. ELIZABETH B
N. WALTER B
W. MARGARET B

¹ On the left hand capital in the same position as the inscription on the companion monument can be read the word "OF," so no doubt there was a similar inscription, now obliterated, or otherwise it was never completed.—
Editor.



Photos by

F. C. Morgan, F.L.A.

TOMB OF RICHARD AND ANNE WILLISON IN MADLEY CHURCH,
HEREFORDSHIRE, 1575, by John Gildon.



Photos by

F. C. Morgan, F.L.A.

1. TOMB OF WALTER BLONTE, died 1561, in Astley Church, Worcestershire.
2. TOMB OF ROBERT BLONTE, died 1573, in ditto ditto

Both by John Gildon.

Around the base can be seen the effigies of two sons and two daughters. The chief interest to Herefordshire however is the panel upon the west end which reads :

I H O N · G I
L D O N · O F
H E R E F
O R D E · M
A D E · T H
I S · T O W
M E S · A N
N O · D O M
I N I · 1 5 7 7

A wall tablet over the east end of Walter Blount's monument records that

R O B E R T · B L O V N T
E S Q V I E R · W A S · T H
E · F O V N D O R · O F · T
H I E S · T O W M B E S
A N D · T H E · O V E R S
E E R S · O F · T H E · S A
M E · W E R · T H E Y
W H O S · N A M E S · A
R R · S V B S C R I B I D
F R A V N C I S · B L O
V N T · E S Q V I E R
A N D · I V S T I C E
O F · P E A X · A N D · I
A M E S · Y O N G

In Abergavenny Church at the east end of the north aisle is a similar monument to Dr. David Lewis. This is believed to have been erected during his life time and under his direction. He was judge of the High Court of Admiralty. The lower part has emblems connected with the Admiralty, and is inscribed "John Gildon made this Towme". Lewis died unmarried in 1584 after an active and eventful life. He was judge of Martin Frobisher's suspected actions of piracy, and also of those of Hawkins. His monument inspired his friend and poet Thomas Churchyard in the *Worthines of Wales* in 1587 :—

" A friend of myne who lately dyed,
That Doctor Lewis hight :
Within that church his tombe I spyed,
Well wrought and fayre to sight.
O Lord (quoth I) we all must dye,
No lawe, nor learnings lore :
No judgement deepe, nor knowledge hye,
No riches lesse or more,

No office, place, nor calling great,
 No worldly pompe at all,
 Can keepe us from the mortall threat
 Of death, when God doth call.
 Sith none of these good gifts on earth,
 Have powre to make us live :
 And no good fortune from our birth,
 No hower of breath can give.
 Thinke not on life and pleasure heere,
 They passe like beames of sunne :
 For nought from hence we carrie cleere,
 When man his race hath runne."

Other monuments possibly by Gildon are to a knight of the Poole family at Sapperton (Gloucestershire), 1574, and to Mistress Antholin Newton, c. 1600, at St. Peter's, Bristol.¹ These I mention on the authority of Mr. R. Holland-Martin, F.S.A., who also suggests that other work in Gildon's tradition can be found at Dumbleton and elsewhere.² Mr. Holland-Martin thinks that possibly his name may yet be found on some of the large carved mantelpieces in this district.

Who then was this John Gildon who made his mark in Hereford and in English art ?

Mr. Holland-Martin thinks he may be a member of the Guilding family who still exist between here and Tewkesbury. Mrs. Esdaile believes he was trained in the Torrigiani traditions of terracotta, and that he was a pupil or son of a pupil of that sculptor, and was of foreign descent as evidenced by his struggle between free imagination, which finds scope in the settings, and the obvious effort to produce rigid effigies of the traditional English school. At Bosbury he used the acanthus leaf mouldings for the first time on an English monument, and the mouldings in the edges bear witness to classical models which can only come from an Italian training.

The wall paintings from No. 5, Widemarsh Street, now preserved upon the wall in the Herefordshire room in this Museum, have been considered by several learned in such matters to show traces of Italian design. Is it possible that these, and other contemporary paintings still existing in the city, are by his hand ? Most artists are able to work in more than one medium and perhaps discoveries may be made even yet to prove this last supposition.

¹ See an account and illustration of this tomb in *Monumental Effigies of Gloucestershire and Bristol* (1931), by Ida M. Roper, F.L.S., pp. 136-141, pl. 11.

² *Bris. and Glos. Arch. Soc. Trans.*, Vol. 55 (1933), "A Plea for the better consideration of the 17th and 18th century monuments in our churches."



Photos by

F. C. Morgan, F.L.A.

1. END OF TOMB OF ROBERT BLONTE in Astley Church, Worcestershire, 1577, by John Gildon. (See page 114.)
2. TOMB OF DR. DAVID LEWIS, died 1584, in Abergavenny Church, by John Gildon.

In transcribing some of the City archives for another purpose I have found a number of references to a John Gildin during the period when the artist was at work in this city. If these refer to our John Gildon or not I am unable to be definite, as unfortunately a trade is given in one instance only. However if two men of the same name lived in a city the size of Hereford it was usual to distinguish them in legal documents by giving their occupations. Therefore, this may be the man about whom information has been sought for so long a time and hitherto without result. Church Registers and the collection of Hereford wills, now, alas! at Llandaff, have yielded no clues.

If this supposition is correct, and I do not urge it, the Hereford documents show that Gildon's character was not perfect. On the 9th October, 1578, there was an affray between James Harper and John Gylden, a true bill being found in default of both when the matter came before the mayor. In the same year John Gildene's name appears in the list of dwellers in Bisters ward as eligible to serve upon one of the three inquests, and again in the same year John Gylden appears in the list for the third inquest, and another document shows that he actually served upon this on 11th May.

Again in 1578 John Gyldon, together with eighteen other inhabitants, men and women, were presented "for kepinge unlauffull games in their houses contrary to the forme of the Statute". His name also appears some few times at this period in the Mayor's court book in cases concerning money.

In 1583 "John Gildinge's" name is on jury lists for sessions of the Peace held on the 4th and 5th of April, and in 1585 "John Gildinge Joyner" "acknowledges himself indebted to Richard Parratt in the sum of two and fortie shillings and alevn pence". Is this John Gildinge the joiner the same as the John Gildon or not? About this I cannot make up my mind, though it is inclined to the contrary opinion.

Up to the present only one other document has been found containing the name. This is in the examination of "Cuthbert hodson of Cissetor" concerning the stealing of two sheets in 1576, who stated that he bought them "yesterdaie of one Thomas Robynson late of Kriklade" in Wiltshire for 3/-. These sheets he had carried in "his britches". He "laie on Sondaie night in John Gylden's house where he supped and paide vj^d for his Supper". Is this the Artist? The interesting fact remains that the name has not been found in any Hereford document earlier than our artist's period.

I am still hoping to find further evidence of John Gildon's connection with this city, and ask any one interested in the subject

to look for his name upon monuments of the period, in Registers, or other likely places. So important is his work in the history of English monumental sculpture that students are most anxious to know more of him. Where did he obtain his knowledge of the art, and when and where was he born? and when and where did he die?

A complete catalogue of his work with illustrations should be available in this Museum.

NOTE.—Since this was written it has struck me that possibly Gildon came to Hereford when the monument to Alexander Denton was placed in the Cathedral, and decided to remain here.

Also the following additions can be made to the list of Epiphanius Evesham's monuments due to Mrs. Esdaile's researches:—

<i>County.</i>	<i>Parish.</i>	<i>Monument.</i>
Lincolnshire ...	South Cockerington ...	Scrope
Somerset ...	Cothelstone ...	Stawell
Do. ...	Pitminster ...	Coles
Do. ...	Wiveliscombe ...	Wyndham

WHITNEY BRIDGE AND WHITNEY FERRY.

By CAPTAIN FRANCIS BEAUMONT ELLISON.

(Read 23rd May, 1935.)

In the year 1250 A.D. Humphrey de Bohun held the Castle of Hay and he also owned many of the Manors in the district, including Brillley and Eardisley. Two years later he conveyed the latter Manor to Walter de Baskerville.

In 1263 Eardisley was burnt and wasted by the Welsh. At this time Bohun's fishery at Hay was worth 18/- a year.

Humphrey de Bohun, 4th Earl of Hereford, married in 1302 Eleanor, eighth daughter of King Edward the First, and in 1322 was succeeded by his son John de Bohun, whose watermills and fishery at Hay were worth an annual sum of £9 6s. 8d. He also had a boat and presumably ferry rights over the river Wye worth £1 6s. 8d.

In 1340 Clifford was valued for taxation purposes at £30, Whitney at £100, and Eardisley at 14 marks.

Humphrey de Bohun, 7th Earl of Hereford, left two daughters and coheirs, the younger of whom, Mary, married in 1380 Henry Plantagenet, Earl of Derby, afterwards King Henry IV.

On June 22nd, 1402, Owen Glendower, or his Lieutenant, fought the battle of Pilleth, near Knighton, against King Henry IV. Very heavy losses were incurred by the King's army, among the slain being Sir Robert Whitney. Immediately after the battle, Owen Glendower came south, and having burned a mill and done some damage at Huntington, he descended on Whitney. The Castle, supposed to have been situated near Whitney Old Court, owing to the death of Sir Robert, became an easy prey to Owen Glendower.

It is at this time that we hear of the Whitney ford or ferry, for Owen Glendower crossed here in June, and then proceeded to attack Clifford and Hay Castles, which he reduced to ruins, and pillaged all the country round.

As a result of this raid the district lay in ruins for the next 200 years, in support of which we find that in 1460 the two mills and fisheries at Hay were only worth £2 compared with £9 6s. 8d. 150 years earlier.

The river Wye has always been notable for its destructive floods, and in 1447 or 1448 a great flood destroyed the boat and ferry at Hay.

Another flood occurred about 1660, which caused the river to suddenly change its course at Glasbury, and it swept away the old church, necessitating the building of a new one, which was consecrated in 1665.

On January 25th, 1680, a curious event occurred, for the river at Lewsford suddenly stopped its course for some hours, so that people walked over dryshod, and gathered up fish for several miles (*vide* Gough's MS. in the Bodleian Library, Oxford). It is possible that a landslide further up the river may have been the cause of this phenomenon.

In 1684 we again find mention of Whitney Ford, for at noon on the 5th of August in that year His Grace the Duke of Beaufort, Lord Warden of the Marches, arrived in his chariot accompanied by a large retinue and crossed the river by this ferry. The ferry boat (if there was a boat) must have been of considerable size to take his chariot across, and it would seem more probable, it being high summer, that the Duke and his company forded the river, and to do this would require no mean effort as the banks were steep at this point. The records we have of crossings of the river are all in summer, and I am unable to find mention of one in the winter.

The Duke, who had just been made Lord Warden, was making an official progress through the district, accompanied by his Secretary, one Dingley, an antiquary, who wrote a Diary of the "Official Progress", in which, on the occasion of the visit to Hay, he says, "His Grace and Company dined, a very handsome entertainment having been provided by at the Castle of The Hay".

In 1730 Whitney old church was swept away by another great flood, and here again the river changed its course. The site of the old church was in a field on the left bank of the river, but as a result of this change it is now on the right bank. The only things from this church that remain are the font, the monument to the Williams family, and the tracery now in the east window of the present church. A few years ago, a table, surmised to be the Communion Table from the old church, was discovered in the Boat Inn, where it was being used to serve beer on. This table was purchased by Miss Jane Dew, who presented it to the recently restored Chapel of St. John in Hay, where it now is.

Hay and Whitney people, seeing a bridge at Glasbury and finding the ferry at Whitney insufficient for their purposes and very dangerous, especially in time of flood, about the year 1774 began to agitate for a bridge.

The ferry was 150 yards below the present bridge, and the old road leading from Hay follows the hedge which continues

in a straight line from the point where the road now takes a sharp right-angle bend to approach the bridge.

The stones discovered in the field below the bridge on the right bank of the river and hidden by the fence are the site of the old ferry, and are probably part of a jetty built to allow the ferry boat to land its passengers.

Whitney ferry was owned by Tomkyns Dew, Lord of the Manors of Whitney and Clifford, and he was instrumental in getting a Bill presented to the House of Commons on 9th November, 1774, to build a bridge. The names of the promoters were:— Thomas Weale, of Whitney; Francis Eves, of Hay; Charles Hayward, of Sheepcote, Clifford; Lewis Chambers of Clifford; and John Phillips, of Hay. Tomkyns Dew was to be compensated for his ferry, and the gentlemen presenting the Bill were to build the bridge in three years, and were to be called the "Undertakers".

The undertakers were to maintain the bridge at their own expense, and were to make and keep in repair all roads leading to and from it. They had power to take stone, gravel and sand from the adjoining manors belonging to Tomkyns Dew free of cost, and had land given them for the erection of a toll-house.

Barge owners using the river were to be answerable for any damage to the new bridge, so from this it is evident that goods such as coal from the Forest of Dean were being taken up the river to Hay at that time, and the tow path then used can be seen to-day. The bridge was to be free from rates and taxes, present or future, and was not to be a County Bridge.

The tolls were to be as follows:—

Foot Passengers	... ..	½d.
Horse, etc., drawing	... ..	3d.
do. do. not drawing	... ..	1d.
Each score of oxen, cows, etc.	... ..	10d.
Each score of calves, hogs, sheep	... ..	5d.
Officers and soldiers on duty	... ..	Free.

A ferry was to be provided if the bridge should become impassable.

This bridge, No. 1, soon collapsed owing to bad foundations, floods, etc.

Bridge No. 2 was then erected, and again disaster befell it, caused, as before by floods, etc.

Bridge No. 3 was then begun and completed.

These three bridges were built of stone and were composed of five arches. Each arch had a span of 30 feet, and was 15 feet above river level and 12 feet wide. The foundations of one or two of these bridges, consisting of huge dressed stones, can still be seen on the west bank of the river.

Bridge No. 3 stood until 1795, when at 6.0 p.m. on Wednesday, 11th February, of that year, a record flood swept it away. This flood was higher by 2 feet 6 inches than any recorded before. On the same occasion the bridges at Hay and Glasbury were destroyed, and that at Ross was severely damaged. This flood is recorded by a tablet erected in a yard in Bridge Street, Hereford.

Having been more or less ruined by their losses the "Undertakers" retired. The pertinacity of these gentlemen must arouse our admiration.

On 12th July, 1796, a new Bill was presented to Parliament by Thomas Longfellow of Brecon, John Longfellow of Brecon, and John Phillips of Hay, who had acquired, probably by purchase, the bridge property and rights from Mrs. Sarah Weale of Whitney, who was in possession about this time.

The new bridge, No. 4, was to be of two stone arches and three wooden ones. Probably the two stone arches which are to be seen to-day are part or one of the old bridges, as they do not appear to me or to Mr. George Marshall, who examined them with me, to have been designed *de novo* as part of the present structure.

The Longfellows were the principal carriers of Brecon at that time, and therefore a bridge to facilitate the transport of their merchandise to Hereford was of considerable value to them.

Courage was shown by these men in tackling a fourth bridge after such rapid disasters to the former three.

The present bridge has now been in existence for 136 years, and the upkeep of it and its approach roads has been most costly, and the tolls produced little until the advent of motors.

The tolls for the new bridge were to be :—

Horse drawing	...	...	...	...	4½d.
do. not drawing	...	...	...	...	2d.
Each foot passenger	...	...	...	...	1d.
Score of oxen or cows	...	...	...	...	10d.
do. of calves, hogs or sheep	...	...	...	...	5d.

Later on a charge was added for :—

Asses drawing	...	...	...	...	2d.
Dogs drawing	...	...	...	...	2d.

Unfortunately this notice board is lost.

Whitney people and their cattle pasturing on the common were allowed to use the bridge free.

In 1810 the Tram Road was constructed and brought coal and other goods over the bridge from Brecon, and caused a decline in the water-borne transport to Hay.

John Longfellow having died, the bridge passed into the hands of Mrs. Amelia Longfellow, who died in 1849. She had a

daughter who became Mrs. Caroline Taylor, whose son Mr. George Daniel Taylor to-day controls the bridge.

In 1854 an agreement was made between Mr. Tomkyns Dew and Mrs. Caroline Taylor which settled certain differences as to his claim to be exempt from tolls.

In 1859 the Railway Act was passed. This was opposed by the owner of the bridge and many actions were fought, the ultimate result being that the Railway Company had to guarantee the tolls up to the sum of £345 per annum.

The rights appertaining to the bridge under the Acts of Parliament are very valuable, for :—

1. The tolls are guaranteed by the Railway Company.
2. Stone is obtained free of charge from an adjacent quarry.
3. Gravel and sand may be taken free of charge.
4. The roads and approaches to the bridge belong to the owners, though they have to be kept in repair by them.

In conclusion I have to thank Mr. Taylor, the controlling owner, for permission to peruse his deeds; Miss Helen Dew for the use of her books; and the Rev. Canon W. E. T. Morgan, and Mr. Gunter of Glasbury for their kind assistance.

THE COURTENAY BEQUEST TO HEREFORD
CATHEDRAL.

By the REV. E. HERMITAGE DAY, D.D., F.S.A.

(Read 23rd May, 1935.)

In the year 1382 or thereabouts William Courtenay, Archbishop of Canterbury, turned from the vehement controversies in which he was then involved to set about the business of making his will.

It began with the pious phrases customary in his time, averring that the testator was moved to make his will being mindful of the frailty of our human nature, and of the swift coming of death to all, noble or humble. But as he approved the phrases, the Archbishop might well have thought that for him they were not merely conventional. He had become Archbishop because his immediate predecessor, the liberal and tolerant Simon of Sudbury, had been dragged from the altar of the chapel in the Tower of London, and brutally hacked to death on Tower Hill by the men of the Kentish rising of 1381. The realm was quiet again, but history might repeat itself, and none could say how death might come for the Archbishop.

It was a very long will, for the Archbishop had many things of which to dispose, things which, as he piously said, he possessed by the sole bounty of God, and not for any merit of his own. Broad lands and great houses were not among them; those of which he had enjoyed the use had been his by virtue of his tenancy of a high office, and would pass to his successor in the primacy. His own fortune was not large, though he came of the most powerful family in the West, a family which for many centuries had maintained the truest of titles to the epithet "noble"; he was but the fourth son of the Earl of Devon. Yet there was some money to leave, and a great number of things of beauty and value, such things as in those days one great man would munificently give to another. And there were very many whom the thoughtful Archbishop desired to remember in his will, the greater number of them quite humble folk who had served him well, and whom he desired to remember him as their benefactor. So the assignment of things to persons was a long matter.

The will thoughtfully disposes of a large number of pieces of plate, vestments, books and the like. He leaves, for example, his very best mitre to his nephew Richard Courtenay, then a priest,

in case he should become a bishop. Those were days in which a priest of noble family might reasonably cherish the expectation of a See; and thirty years later Richard Courtenay, in fact, became Bishop of Norwich, and doubtless claimed the mitre from the Dean and Chapter of Exeter, in whose care it had been left. There were many small bequests of plate and vestments to his brother-bishops and to heads of religious houses; small sums of money to monks, and to the ankrats of Crewkerne and Sherborne. He seems to have forgotten no one of his great household, even the valets, the pages and the boys had their little legacies.

Then there were the two cathedrals in which he had been enthroned before his election to Canterbury. To London, from which he had been lately translated, he left precious vestments, and two bowls of silver-gilt, which the Grand Master of the Order of St. John of Jerusalem had given him when he was on a visit to the Priory at Clerkenwell.

But to Hereford his bequests were more munificent than to London. Hereford had been the Archbishop's first See; he was consecrated to it by papal provision in 1370, when he was only twenty-eight, and therefore under the canonical age. The Hereford bequest is in these terms:—

Item lego ecclesie Cathedrali Herefordensi unum vestimentum album cum draconibus de auro diasperatum cum tunica dalmatica et tribus capis ejusdem secte cum duabus albis paruris stolis manipulis et duas albas capas cum auro diasperatas et non sunt plures de illa secta quia Dominus Philippus frater meus habuit de me terciam. Item lego eidem ecclesie pontificalem librum meum quem emi de executoribus Domini Johannis de Grandissono. Item lego eidem ecclesie duas pelves argenteas ad usum magni altaris cum armis Domini mei Regis in fundo sed volo quod ibi ponantur arma mea.

The Archbishop's gifts must have made a brave show in Hereford Cathedral on great days; the white vestment powdered with gold dragons,¹ with the dalmatic and tunic, and the three copes of the same suit, with their albs and apparels, stoles and maniples; and the two white copes powdered with gold, and the

¹ "Diasperatum," there seems some confusion in the translation with a Latin origin (dispersum), but the Byzantine Greek word "diaspros" (διασπρος) gave derivation to our word diaper (old French diaspre) that is fabric with inwoven diamond-wise lines. The vestments seem to have been embroidered upon a diapered groundwork; strictly, diaper is all white (aspros = white). Littré however refers to colour being used, so possibly some of the robes were "diapered" by lines in gold as well as ornamented with gold dragons.—Eds.

ornaments that went with them, though the latter suit was imperfect because his brother Dom Philip had bought or borrowed some of it. The great pontifical was doubtless a noble book since the Archbishop had bought it from the executors of that masterful and efficient prelate John Grandisson, Bishop of Exeter, and Grandisson was a liturgical scholar, most solicitous for the dignity of worship and for its exact rendering. The silver bowls for the use of the high altar may have been either for the washing of the celebrant's hands at the *lavabo*, or perhaps merely for the adornment of the altar. For it was customary in great churches to display on the altar on festivals the most beautiful pieces of plate that the treasury possessed; and the custom of the "array of plate" is still kept at Westminster Abbey.

On these bowls, as on other ornaments which he bequeathed to various places, the Archbishop enjoined his executors to engrave his arms. Not because he was a Courtenay and a great prelate, but because he would put posterity in mind of a benefactor for whom, with all other benefactors, they would be in duty bound to pray. In Courtenay a humble spirit lay beneath the magnificence of his office; as he lay dying at Maidstone in the summer of 1396 he verbally revoked the direction in his will that his body should be buried in the cathedral church of Exeter, near to his father's home, and he expressed a wish to be buried in the graveyard of Maidstone, since, as he said, he was not worthy to be interred within any cathedral or collegiate church. His body was, in fact, carried to Canterbury, and buried in the cathedral eastward of the tomb of the Black Prince. The King, Richard II, overruled both Courtenay's dying wish and the direction in his will.

Probably the vestments lasted their time, and were worn out before they ran the risk of being put to profane use in the sixteenth century. Perhaps Grandisson's pontifical was also worn out before the time came for it to be superseded by the English books; though pontificals were among the longest-lived of mediæval books, being used only by the bishop. The silver bowls were probably taken to the King's use in course of time, and went into the melting-pot; very little escaped the search of King Edward's visitors in 1552.

Nothing remains of the bequests. But Hereford may still have a kindly thought of the testator, who from the throne of St. Augustine looked back to the cathedral in which as a stripling bishop he had first been enthroned, and as he drew near to his end made provision for the glory of its sanctuary.

THE OLD TRAMROAD FROM BRECON TO HAY, WHITNEY, EARDISLEY AND KINGTON.

By CAPTAIN FRANCIS BEAUMONT ELLISON.

(Read 23rd May, 1935.)

The construction of the old Tramroad, known also as the Tram Rail, Tram Railway, the Hay Railway, etc., was discussed in 1810, as shewn by a plan lent to me by Mr. Gunter of Glasbury. This survey plan was prepared by Mr. William Crosley in 1810, and shews that the proposal was for the "Tramroad", as he called it, to run from Brynich near Brecon, on the Brecon and Abergavenny Canal, to Parton Cross near Eardisley, travelling through or near Bronllys, Three Cocks, Glasbury, Hay, Clifford, over the bridge at Whitney, to near Winforton and across country to Parton Cross near Eardisley.

This idea was modified, and the actual tram was built where possible alongside the roads (if any). This is seen at Glasbury, below Clifford, Whitney, Stowe, on to Winforton, again crossing at Eardisley on its way to Almeley and Kington and Dolyhir, where the lime works were.

The Tramroad eventually started at Watton Gate, Brecon, and on its way up a steepish hill rose 309 feet in three miles. Having reached the summit beyond Alexanderstone it fell quickly to near Bronllys, and in five miles dropped 362 feet; from near Bronllys to Hay ($7\frac{1}{2}$ miles) it fell 141 feet.

From Hay to Parton Cross, Eardisley, seven miles across country, the Tram fell only 22 feet. So you see, first the tram from Brecon had to rise 309 feet to the summit, and then fall 525 feet to Parton Cross, Eardisley.

The proposal, as later amended, was discussed at the first meeting held at the Golden Lion Inn, Brecon, on Friday, 18th January, 1811, at 12 o'clock. Great excitement was felt and the idea was thought to be very wonderful, for I find that once again, and as quickly as 23rd January, 1811, another meeting was called at the Lion.

Mr. James Jones was in the chair, and no less than £31,600 were subscribed at this meeting, and, with the subscriptions given at the previous meeting, £38,700 had been raised.

Herefordshire people were the major supporters, at least as regards money, for to those living in the north of the county the idea made a strong appeal—cheap coal was coming.

Amongst others the following names appeared:—Duke of Beaufort £500, Edmund Cheese £200, Viscount Hereford £1,000, Earl of Oxford £2,000, Sir George Cornwall £1,000, Mr. T. Longfellow £300. (This man or his father had been one of the Undertakers for the famous Whitney Bridge.) Another meeting was held at Brecon on 30th January, at which the Earl of Ashburnham gave £1,000, T. Foley, M.P., £500, Sarah Eves £100.

Now, much money was coming from Herefordshire and, probably because of this, the next meeting was held at the Swan Inn, Hay, on 20th February, 1811.

By this time £47,000 had been subscribed: Samuel Peploe, Garnstone, £2,000; the famous Tomkyns Dew, Whitney, £1,000; L. Parkinson, Kinnersley Castle, £500; Trumper, Whitney (another Undertaker for the Bridge there), £200. The idea was pushed on quickly, for an advertisement in the local paper, *The Hereford Journal*, published on 10th April, 1811, said that the Bill was in Parliament. The Brecon and Abergavenny Canal Co. and all the lands were mentioned in the advertisement.

As I perused the various papers and particularly *The Hereford Journal* for 1811, I noticed that poachers were so numerous that nearly every estate published that action would be taken at once against all men taking game and also for taking fish of any sort. This evidently was done, as poaching cases became scarce.

Various "Quacks" were very numerous at this time and their advertisements appeared frequently. Every lady in Herefordshire, apparently, must have a pill of some sort, and one amusing advertisement appeared in 1811. I did not know that in 1811 we knew much about Abyssinia, but we all learn. Here is a wonderful thing for the ladies.

PERSONAL ELEGANCE AND FEMALE BEAUTY.

Alsana Extract or Abyssinia Botanical Specific for the teeth and gums as discovered by Mr. Barasbinska, Dentist to the King of Abyssinia. 10s. 6d. and 4s. 6d. per bottle, to be obtained in London and also from Mr. Wright of the "*Hereford Journal*".

The advertiser, Mr. Barasbinska, must have been a great traveller to know the King of Abyssinia in 1811, and a brave man to ever get into that country and get out and be able to advertise in *The Hereford Journal*. Wonderful.

In 1811 also the Hereford and Abergavenny Tram Road was being promoted, chiefly by Sir Hungerford Hoskyns, Bart.,

who had a big meeting at the City Arms and also one at the Mitre, Hereford, in April, 1811.

£33,000 was wanted for this. 20,000 tons of coal per annum was required for Hereford, and coal was to be brought from Abergavenny. Thus it would only cost 26/- per ton, so the advertisement said. Mr. Baker Gabb was Secretary.

Now I must return to the Brecon and Hay Tramroad. In June, 1811, the Act had been passed, and at a meeting held as usual at the Swan Inn, Hay, on 22nd July, postponed from 8th July, it was decided "For putting in execution", in other words for getting on with it. On 10th July they were advertising for an Engineer, who was to send his name in to Mr. James Spencer, Clerk, Swan Inn, Hay.

On 7th August they advertised for 2,000 tons to be "pattern of Cheltenham Tram Road plates, not exceeding 50 lbs. weight per plate". On 11th September notice was given to divert the Tram from Parton Cross into the village of Eardisley. On 18th December there appeared an advertisement for 20,000 stone blocks, not less than 6 ins. in thickness, each to weigh 163 lbs., and to be worked and bored according to specification; also for "Persons to contract for forming the ground at Hay". Tenders to be in on 11th January, 1812.

On 22nd January, 1812, an advertisement appeared in *The Hereford Journal*: "The Hay Tram Road was to adopt a better line of road".

There appears to have been a bit of trouble about this, for the Road must have been altered from the plan of 1810 and Act of 1811, as it followed later along the road where it could. There was an amending Act in 1812. Where the line went through enclosed lands it was fenced off, but alongside roads it was open on its highway side. Its length from Brecon to Eardisley was about 25½ miles.

At Whitney, on the Tramroad side, I found after some trouble an old Tramroad stone, which, after some cleaning, appeared to read thus:—

HAY RAILWAY.

22 M

This ancient stone is in a bad way and wants preserving, so I hope the H.C.C. will take care of it.

The Tramroad was a great success and paid well according to the accounts I have seen, and the shares changed hands occasionally.

The Tramroad was used for bringing cheap coal from Wales per the Abergavenny and Brecon Canal Co., and also for lime, timber, iron, stone, slate, bricks, hay, straw, etc.

Mr. John Lloyd wrote that:—

“ I have invoices and letters shewing that the marble mantelpieces at Maesllwch Castle (Glasbury) and much of the finer material used in the interior were brought from Bristol by the Brecon Canal and then by the Tramway to Glasbury. It was an alternate day traffic, mostly for traders. The chief traders were the Bridgewater of Talgarth and Porthamel and the Quaker family of Trusted of Hay and Eardisley. Trusted's team, say, of trams would leave Eardisley or Hay on the Monday and return on the Tuesday.”

The trams, or corves, were similar to those running on collieries. They were small, made of iron and pulled by horses. The trams had fixed brakes and wooden sprags. The tramroad was made of iron rails L shaped. The outside measurements were $4\frac{3}{4}$ ins. x $2\frac{3}{4}$ ins. The inside measured $3\frac{1}{2}$ ins. x $2\frac{1}{2}$ ins. and the thickness $\frac{5}{8}$ in. bottom and $\frac{3}{8}$ in. top (possibly more than this, which I got from the specimen of worn rail, which I found and showed you at Eardisley this year, and is now in the Hereford Museum). According to their advertisement the rails were to be 50 lbs. weight per plate, but my specimen was 22 ins. long and weighed 24 lbs. So I gather that the plates were 4 ft. 6 ins. long.

These were laid on stone blocks, worked and bored for a wooden plug, and were spiked down into the plug. They had an iron lip underneath, and this was probably let down into the stone and thus prevented the rail from being pushed out and also took the strain off the spike and wooden plug. The gauge of the tramway was about 3 ft. 6 ins. wide and between the rails; the track for the horses was generally pitched with stone, and thus became very popular with the country people to walk on and enable them to avoid the mud; but this, I gather, was not really allowed, as a man was kept to keep people off the Tramroad. Up till 1820 the Tramroad finished at Eardisley, having cost £93,000, but in 1818 another Act was promoted at Kington, to join the Brecon—Eardisley portion to Kington. This section cost £23,000, and was successfully built, commencing at Dolyhir, outside Kington, and proceeding through Kington, Lyonshall, Almeley to Eardisley.

The Engineer for this difficult work was Mr. Morris Sayce, of Kington. The length of this section was 12 miles from Eardisley to Kington and on to the Radnor Lime Works. When the first coal came into Kington, wild excitement occurred and the town celebrated the occasion that night right royally.

In 1841 a curious machine worked by wheels, cogs, and handles arrived, manned by two men. This was to be used instead of horses, and was thought to be very wonderful, but unfortunately men left the machine on an incline whilst they were refreshing

themselves, and the naughty boys of Kington moved the machine, which tore down the incline and was completely smashed at the bottom.

The Tramway, of course, ruined all the barge traffic from Hereford to Hay, and navigation was stopped.

For nearly 50 years the Tramroad was run and did its work well, but it met with a great opponent, for the steam railway arrived about 1864, and the Tramroad was bought out and became vested in the Hereford, Hay and Brecon Railway Co. This Railway Co. tore up all the iron rails and sold them, I suppose, but the stone blocks were taken up and used for building into many of the railway bridges, though a few of the stones can still be seen, particularly near Kington.

My story is now finishing, but it is very interesting to note that, firstly, coal was brought by water in barges to Hay, then this trade was ruined by the Tramroad, drawn by horses, which, in turn, was ruined by the Steam Railway, and now the Steam Railway is suffering from coal being taken on the roads, by petrol engines.

The roads are giving way under the enormous weight put on them, for which they were never intended. The future will indeed be interesting.

In conclusion, I must thank Mr. Gunter of Glasbury, Canon Morgan of Hay, Mr. Chambers of Kington, Dr. Darling of Eardisley, *The Breconshire Border*, *The Hereford Journal* (to be found in the Hereford Public Library), and many other friends who have helped me to compile these notes, which I trust you will find interesting and will, I hope, prove to be a valuable account of the now ancient Tramroad, also known as the Hay Railway.

KING ARTHUR'S CAVE.

By P. BIDDULPH SYMONDS.

(Read 25TH June, 1935.)

Some of you will remember the occasion—on 3rd July, 1924, to be exact—when I had the privilege of addressing the Club on this spot, and of telling all that is known of the excavations carried out by my grandfather, the Rev. W. S. Symonds, in 1870-71. As you are aware, we have somewhat progressed in our prehistoric knowledge and in our methods of work since that early date. Then it was regarded as sufficient to dig out all that could be found, without paying overmuch regard to levels or exact position, while the method of sorting the spoil was more or less careless and primitive. Now every handful of soil is searched by hand for the tiniest fragments, and each layer or "hearth" is kept carefully separated.

In 1925 and following years, in conjunction with the Spelæological Society of Bristol, I was able further to explore this spot, and our discoveries were sufficiently important to prove this to be one of the really valuable prehistoric sites.

Nowadays we realise that ancient man made his home in front of some cave or rock shelter; he did not actually live in a hole, though no doubt he sheltered there in bad weather. Modern savages of a low type do the same to this day. Therefore it was outside this cave that most of our work was done, on what was formerly the platform, but which is now, as you see, a pit. The really remarkable thing about this spot was this—we found the various occupation levels absolutely untouched, superimposed upon one another, a very rare occurrence in this country. There are only two or three others in England as definite as this.

I will speak of the oldest deposits first, thus following the course of time. At the bottom of this hollow you can see the solid rock. Right down there we found teeth and bones, which included those of the mammoth, hyæna, the huge primeval ox (*Bos primigenius*), the gigantic deer which is often called the Irish elk, horse, woolly rhinoceros, cave bear and reindeer, while mingled with them were ashes of the hearth and flint implements. These latter dated the lowest hearth for us, for they belonged quite definitely to the middle Aurignacian age. This age may be taken as that of the first appearance of essentially modern man. But this man was a savage pure and simple, with no knowledge of

agriculture or pottery; he was a hunter who knew of fire and how to make tools of flint. When he lived England was still joined to France, and the great Ice Age had not passed through its last epoch. Of this latter fact we had evidence here, because above what I may call the mammoth layer we found an overlying bed of limestone rubble broken by the action of extreme frost. You can see traces of it remaining.

In this rubble we found only a very few deer bones, but there were many jaws of small rodents, chiefly pika and arctic lemming. The pika is a true hare, but is the size of a mouse and still exists in the Himalayas. Man had completely disappeared at this period, probably driven south by the great cold.

Above this rubble we found a totally different condition of things. The climate had moderated, man had come back, but the great beasts, with the exception of the primeval ox, had totally disappeared. Even the wild horse, which was used for food and not for traction, had become very rare. Flint implements of a later type were found in this hearth, which was much more extensive than the lower one. It is a curious fact that at the end of the Old Stone Age the flint implements degenerated, and were mostly very small, though sometimes beautifully finished. This upper hearth belonged to the Tardenoisian period, right at the end of the Palæolithic.

I myself found an amulet here which I should like to mention because these amulets (which are rare) are always made from the incisor tooth of a female pig. A hole was drilled through them, and they were doubtless worn round the neck strung on a sinew. A suggestion of my own is that they were intended to confer fertility on the wearer, who was probably a woman; the female pig is a very prolific animal, and savages still venerate the mothers of large families.

We found few evidences of later occupation here, except a few pieces of Romano-British pottery, and I found two Bronze Age flint arrow heads, which you may see in Hereford Museum. There was also a little pottery of the "beaker" type, which is exceedingly rare on this side of the Severn. It is quite evident that when the Neolithic period began, with its higher civilisation and more settled conditions, man no longer lived here.

I have said that early man lived outside and not inside caves, but he sometimes made his fires at the entrance. I will show you the spot where I found the remains of a fire and of a prehistoric dinner. The diner may himself have been dined upon by hyænas, for he left his valued flint flakes behind him. You can see what is left of the dinner in our Museum.

I will show you the place where I unearthed a large quantity of teeth and bones. These were under some stones cemented

together by stalagmite. A set of milk teeth of rhinoceros is now in the British Museum. There were no traces of man's presence at this spot.

We found that the interior of the cave had been completely cleared out in 1870. It was, of course, a hyæna den, and many bones and flints were found in it. Perhaps I may be allowed to remind you that every piece of flint on this site or anywhere else in Herefordshire must have been carried by man for a distance of at least 60 or 70 miles—and they had no pockets!

I will anticipate one question which some member will most probably ask me—"How long ago did these people live here?" It is quite impossible to give any definite reply, but the oldest deposits cannot be much less than 20,000 years old, and may be as much more. You must remember that the climate has completely changed at least twice; most of the animals living today are utterly different from those of which we have found the bones and teeth, and many quite distinct races of men have over-run the land, while physical change like the separation of England from France has had time to take place. The patination of the flints and the complete mineralisation of the bones must have taken long ages.

I must just mention what is known of the origin of the name "King Arthur's Cave", or rather the tradition which explains it. It is said that King Arthur—who was a perfectly genuine historical figure—was fleeing before his enemies and, being hard pressed, hid his treasures here. Merlin enchanted the hiding-place, so that the treasure should never be found. It never has been found; but is not this tradition merely a case of "race memory"? Countless generations have remembered that there was treasure here, and what greater treasure can prehistoric man have possessed than his flint implements? Arthur was quite a local celebrity, for his son was buried on Orcop, which we can almost see from where we stand, while the church at Whitchurch, the other side of the hill, is dedicated to St. Dubritius, who crowned him. But Arthur, who lived a mere 1,500 years or so ago, was quite modern compared with the savages upon the ashes of whose dead fires we have been standing.



ALLIS SHAD :—1. Hen fish, 2½ lbs.
2. Cock fish, 1½ lbs.
3. Cock fish, 1 lb.

SHAD.

By CAPTAIN FRANCIS BEAUMONT ELLISON.

(Read 25th June, 1935.)

These very interesting fish were known to Aristotle, who mentions the fact that they entered the Danube in his time. The Egyptians also knew them as they went up the Nile. The Romans were also aware of them as they entered the famous River Tiber. Ælian mentions them and states that they are attracted by music. The last Shad in the Thames was caught in 1833, over one hundred years ago, off Hampton Court Palace. They are known to our sea-fishermen as the "Queen of the Herring", and are reported as from 20 to 24 inches long. People have seen them out at sea, off Berwick and off the mouth of the Tweed in autumn, and very rarely indeed in the Firth of Forth. They are known to spawn in pools in the river Teme at Powick, near Worcester. These fish are very rare in Great Britain except in the Wye and the Severn.

Before I continue further, I wish to thank the Wye Fishery Board for their help and particularly our friend Mr. F. C. Morgan for his splendid photographs, which illustrate this paper.

There are two varieties in this country, one the Allis Shad (*Clupea alosa*). These are the larger, rarer and certainly, in my opinion, the most beautiful, and this variety I am dealing with in this paper.

The other variety, the Twaite Shad (*Clupea finta*), are smaller and more common and therefore better known.

Both belong to the herring family and enter the Wye and the Severn for the purpose of depositing their eggs. They all proceed at a good pace through the deep pools, and naturally very slowly up through the rapids, where my observation and study of them has been taking place, at Symonds Yat, and also above Hereford.

They proceed up the rapids with their peculiar movement, quite slowly, keeping in close and often very near to the bank, as I have observed at Symonds Yat, the only place I know of where they can be so closely studied. They have to be watched for carefully, or else they are not seen. As they use their strength to get through the rapid water the whole body seems to vibrate and quiver and move, right from the head down to the tail, and they are therefore very fascinating to watch. The colour

of the back matches well with the bottom of the river, sometimes almost black, sometimes brown, sometimes greeny black, and the sides, though really silver, when viewed from the bank and out of the sun, look like "grey ghosts" passing up the river. If the watcher stands motionless, they will pass within two feet of him, and thus give him a wonderful chance of observing them. The slightest movement of the observer and in a fraction of a second they have disappeared like "grey ghosts".

It was at Symonds Yat that Taylor the fisherman and I caught the splendid specimens now in the Hereford Museum.

Though Taylor is a born fisherman and his father before him, and also his brothers-in-law the Coopers, yet all of them are miners and spend all their spare time in catching these shad in April and May, and their knowledge of the shad as they run is remarkable.

I spent many happy hours chatting with Taylor and his brothers-in-law, and am very much indebted to them for their information. Fine fellows are these miners, keen to learn anything about natural history, and kind to give their knowledge to me.

Their method of catching shad is by means of a cleaching net. This is much like a glorified shrimping net, such as used by you as a boy when at the seaside. The net has a very long handle.

The method of using it is as follows:—The fisherman stands motionless, watching, his net well up the river, handle in his hands, but not over the river. Suddenly he sees one or two Allis Shad, or, if lucky later on, a huge shoal of Twaite under his feet or sometimes a few feet out. He allows the fish to pass him and go about six to nine feet above him, *i.e.*, higher up the river, then he suddenly pulls his net partly beyond them and partly over them down on to the bottom of the river, then sharply rakes the mouth of the net in towards him, and the fish shoot out and into the purse of the net. As many as seventeen in a cast have been caught when they were very thick, but this year they have run very badly owing to the cold winds, and many, many casts have been made in vain. This year not only are they scarce but seem very timid and difficult to net. Such is my account of how they net them at Symonds Yat, and this method has been going on for generations.

As the water at Symonds Yat is a Crown Fishery, the fisherman must have:—

1. A Crown Permit.
2. A Wye Board Permit.
3. A Coarse Fishing Licence.

With regard to the Allis Shad, which appear in the river first, generally in the last week of April, I noticed that they come in

small numbers. The cocks come first in shoals, in fives, threes and twos, and the much larger hens follow later, often alone.

The largest hen I handled was about 3½ lbs., but the largest ever reported by the naturalist Yarrell was 5 lbs.

The Allis Shad when landed is very beautiful. It has a dark back, below that the beautiful steel blue of a fresh-run salmon, and all below that a brilliant silver down to a white belly. It is covered when alive with a wonderful "shot effect" of all colours of the rainbow which soon disappears. A truly beautiful fish and very strong and powerful and difficult to hold.

All naturalists' books I have read dealing with Allis Shad have never reported the following facts, which with modesty I offer to you for the first time:

1. On opening the mouth the bottom jaw, sides and tongue are almost black or at any rate a very dark grey.
2. The sides when the fish is alive are not only yellowish, as given by painters and naturalists, but also are brilliant, and show in the sun the colours of the rainbow, which, alas, soon disappear.
3. The shad have, when fresh, a smell of their own, somewhat aromatic and quite pleasant. In the same way a grayling smells strongly of cucumber.
4. Naturalists and painters agree that the shad has a large black spot on the shoulder only. With this I disagree, for on scraping off the big scales along the back I found under the scales four or five large black blotches or spots also, which are easy to see.

I am indebted to Mr. Taylor, my miner friend, for showing me this, to my astonishment. Of course we know that Twaite have black blotches or spots on the outside which show, but this point about Allis Shad has never been mentioned before.

5. Naturalists point out the "serrated line" along the belly; but I go further than that: I say that it is more like a small saw, and has small sharp spikes which project slightly and, if a finger is drawn from the tail towards the head, the finger sticks on these small spikes. Possibly the tiny spikes were larger thousands of years ago and were used for defence, in the same manner as the spikes on a perch. The spikes on a large hen can be seen.

The Allis Shad when in spawn and after entering the river, are good eating, but very bony. After spawning, as kelts they appear miserable things, thin, shape gone, and most of their beautiful colours have disappeared. They become voracious, as all

kelts do, and will sometimes take a small salmon fly, a maggot, a trout fly, or a very small fly spoon, on which I have caught them. They are very strong, and fight hard on a small rod.

I have told you how they enter the river and appear at Symonds Yat. Now we will follow them up the river. They go up through Ross and Hereford, right up to Builth and, I am told, even up to Newbridge-on-Wye, and on their way and in the pools are continually showing themselves and make such a noise that even experienced salmon fishermen are misled. Naturalists say that they are "beating the water". I only partly agree with this, and I now give you exactly what happens.

Last year in May I was in my punt, anchored in the middle of the river, watching the shad come up in large numbers, and I found that the shadow of my punt seemed to attract them. To my delight, a shoal rose to the surface, within a yard of my punt, and one or two of the shad, cocks I thought, came half out of the water, heeled over like a yacht in hard wind, showed all their sides and tails, and at a great speed moved through the water in a circle, about 5 or 8 feet in diameter, making a great noise and sending the water into spray. This was caused by the tail being first right out of the water, then deep into the water, then as the tail came out of the water, the water was lifted and disturbed like spray, then as the tail hit the water naturally it made a great noise. This curious action in detail has never been reported by naturalists before, so I give it to you.

Why do they do this and make this noise? No man knows, but they seem to me to be only cocks that do it, and possibly it may be done to attract hens.

Where do they spawn? Naturalists say in rocky and gravelly pools. I agree more or less, for I noticed while in my wading trousers, above Hereford with Mr. Herbert Hatton, that they always seemed to like a stony and gravelly bottom about 3 feet deep at the tail of a pool with a good current going through it. As I kept motionless, on observing them, they darted all around me and even between my legs at a tremendous speed. They undoubtedly can move at a great pace.

I have also watched them going underneath me, from the top of Whitney Bridge.

I suggest that they lay their eggs in the gravel, at the tail of a pool, *i.e.*, in the river Wye.

Yarrell says:—"The young in October are 2½ inches long and in the following Spring the Allis Shad are 6 inches long and the Twaite 4 inches long."

I cannot find a man all along the river who has ever seen or caught a young shad, which seems remarkable.

I reported to you last year a sight I saw, deep down, whilst counting salmon smolts going down the river. A number of small fish in May, in a dense circular shoal, heads into the centre, tails out, were moving slowly down the current, all very close to one another, just as you see Roach on a hot day sunning themselves. I could see their mackerel-pointed tails and was very puzzled, until one came to the surface and swam in a small circle very, very, quickly, and did what all shads do according to naturalists, *i.e.*, "beat the water with their tails".

I therefore suggest to you that what I saw was a shoal of young shad migrating to the sea. If this be so, this account should be of interest to other naturalists, for it has not been reported before.

The habits of the shad are a mystery to most of us, and to nearly all anglers, for they will not as a rule take anything on their way up. No lure or bait has been found which will attract them. Nor have I found any angler who has ever caught a young shad. Kelt shad, yes, many of us have caught them, but not in great numbers.

They fight hard when hooked and run about like salmon, trout and sea-trout, all over the pool, and show great strength and speed. What a great pity no one can find out what will attract them. If anyone can, a very sporting fish would be added to the list.

They sell in the Forest of Dean at about fourpence to eightpence each, and are in great demand.

I might mention that I have opened up several, but the stomach was always empty, except one which had some very tiny yellow spots which might have been the eggs of some fly, and this I am investigating further.

In conclusion, gentlemen, there is an old saying, "Fools step in where angels fear to tread", and, possibly, as I have ventured to point out several original, new and interesting points with regard to Allis Shad, other naturalists may regard me, an ardent *observer*, as belonging to the *first portion* of my quotation. I hope, however, that my own fellow members will deal with me gently, and have perhaps even enjoyed what I have told them.

ON MISTLETOE.

By H. E. DURHAM, Sc.D., M.B., B.Ch., F.R.C.S. (Eng.).

(Read 29th August, 1935.)

1. FOLKLORE AND PHARMACY.

Sir J. Frazer, when dealing with the traditional druidical rites connected with Mistletoe, seems to be of the opinion that these rites may have had some medical connexion (*v. The Golden Bough, Balder the Beautiful*). When we consider how closely linked are priestcraft and medical lore, and how oft a medicament may fail without some form of incantation, blessing or even threat to some malicious spirit, this opinion certainly acquires probability. Mistletoe has had a chequered career in medicine. For periods it seems to have been neglected, again to be revived as a useful drug. For instance in the work of the two physicians Estienne and Liébault (*L'Agriculture et Maison rustique*, 1673), it received no mention, but in the furtherance of the work (*La nouvelle Maison rustique*, J. F. Bastien, 1804), much prominence is given to it as a domestic remedy to strengthen the brain, for epilepsy, paralysis, apoplexy, lethargy, worms and convulsions. Whilst that taken from pear, apple or hawthorn trees is effective, that from oak is stated to be preferable; perhaps the druidical tradition led to this assertion. But that a difference in quality from different hosts is still recognised is shown by the Rev. G. W. Stewart's information that the villagers of Holmer and Mrs. Leather's at Weobley at present prefer it taken from the hawthorn. The leaves were dried and powdered for storage, the berries were only used for poultices as external applications for ripening abscesses. Old tradition alleges that it is only serviceable against apoplexy if it has not been allowed to touch the ground—that which hath not fallen to the ground will prevent a fall to it, a character shared by several other drugs. That overdosing did occur is shown by remedial instructions to imbibe large quantities of warm water in such event. In the monumental *Materia Medica of Pereira* (1850) no mention is made of it. In more recent times it has returned to the prescribing list, for modern research has shown that its active constituents have the power of reducing blood-pressure; this is particularly interesting from its former exhibition in conditions such as apoplexy. In a Viennese Pharmacopeas of 1895, the dried powdered stems are listed only, but usually the leaves form the drug as in older days. It is now

known that the active principles of the drug are of the nature of glucosides chemically and somewhat related pharmacologically to those of the foxglove (*digitalis*). This is a group of poisons which native cunning has selected for arrow and dart poisons in widely separated parts of the world [*e.g.*, Upas (*Antiaris*) in Malaya, Sass wood (*Erythrophloeum*) in West Africa and Ouabaia (*Akokanthera*) in Uganda]. Perhaps the legend of the death of the invulnerable Balder may serve to elucidate the mystery of the discovery; he was killed by an arrow made from mistletoe. Aborigines may have tried various woods for their darts and found that wounds with those made from certain trees had a desirable effect upon their quarry, consequently it would be a small step to make the heads or to collect sap or juices from such trees and apply the same to non-effective shafts; of course with the addition of mystery and secrecy by the holders of the knowledge—the priesthood. In the case of Balder, it seems most likely that only the arrow head was made of mistletoe wood, since it is impossible to get reasonable lengths from the short joints of the plant, moreover it is too brittle. Examination of the wood of some old growths, reaching an inch in diameter, showed that it has considerable hardness allowing the formation of a keen edge; the surface is so hard that it is not easily indented with the thumb-nail. The pith core is rarely axial; on the lathe it can be turned and shows a fine, hard, dense, grainless surface which polishes well. At first it is a pale yellow but darkens here and there on exposure somewhat like olive wood.

There seem to have been two periods of the year for the induction of mistletoe ceremonies. The one round about midsummer, the other about mid-winter, each associated with a St. John's day—St. John the Baptist on 24th June and St. John the Evangelist, 27th December—roughly midsummer and midwinter. In regard to the profitable collection of other plants, there seems to be some confusion between the days of homonymous saints. From the therapeutical point of view it may be that it would have greater virtue and potency during active maturing growth in the summer than later in the winter (*cf.* the collection of pot-herbs). Duclos (*Mémoires des Druides*, Vol. I, p. 284) relates that the great sacrifice of the mistletoe was on the sixth day of the moon which was the commencement of the New Year. Later the use of garlands made of "Gui de chêne" is mentioned in the fifteenth century, and the greeting "au gui de l'an neuf" long outlasted the pristine ceremonies.

The mere association in time of the winter ceremonies with the later introduced Christian festival makes some connexion between the use of the plant as a decoration at Christmastide; many other items have been carried over from pagan pre-Christian rites and dates, but there seems to be a veto on the inclusion of it

in church decoration mentioned by Dr. Bull (*Woolhope Club Transactions*, 1864) and still persisting. But it would seem possible that there is a more intimate link between pagan and Christian from a contemporary note on a thirteenth century manuscript, *Li Abecès par Ekivoche et li Significations des Lettres, Huon de Cambrai, Edn. Les Classiques français du moyen Age*, ed. A. Langförs, Paris, 1925). The interest centres on the letter Y, against which the learned editor notes that a contemporary scribe had written the word "GUI", upon which elucidatory notes are given in connexion with our (English) name of the letter and the then soft pronunciation of "gu" as our "W", and the Pythagorean association with the parting of the roads of life, the good by one branch, the bad by the other from the common stem. He also lays stress on the intimate linkage of Y in the holy cipher ΠΥΑ, wherein Π stands for Πατήρ (The Father), Y for Υἱός (The Son) and Α for Ἅγιον Πνεῦμα (The Holy Spirit). But he makes no remark on the use of the word Gui = Y = Mistletoe, written in old Norman French VI. It would seem that there may be a direct association of the cipher Y for the Saviour and the typical forkings of the plant. From such point of view, mistletoe may be verily taken as a Christian emblem. (*Vide* Postscript.)

Neither Frazer, nor any other source yet consulted by me, has revealed rhyme or reason for the innocent licence afforded by the mistletoe for kissing purposes; is it of Christian origin or should it be traced further back? Under the Pythagorean tenet it might or might not be precarious. (*Vide* Postscript.)

2. BOTANICAL NOTES.

The forking habit of growth, upon which insistence has been made in the above section, is not the true bifurcation or dichotomy of the botanist, since it does not arise from division of a terminal bud. On either side of the "end cone", which contains the actual terminal bud, at the bases or *axils* of the pairs of leaves is a pair of forking or axillary buds, which on growth form the forking branches (with on either side a pair of *fork-side-buds*), each of which again produces a further pair of leaves again with an "end-cone" and axillary buds. The terminal bud of the "end-cone" never grows out into a woody shoot; it may either remain permanently dormant or it may produce a blossom, which, if female, may go on to fruit formation. It may be noted here that the sexes are separate—a plant is either male or female. But the "end-cone" is also provided with a pair of "end-side-buds" as well as the terminal bud; these may or may not be visible, like the terminal bud, but they remain dormant or produce blossoms and, in the case of the female, also fruits. Thus, and perhaps most commonly, a single terminal fruit is formed; or it may happen that the result may be the whole gamut of three fruits or a pair only



FIG. 1.

Specimen of free growing habit from a Plum tree. In this all four "fork-side buds" have produced woody shoots. The normal forking shoots can be discriminated by their greater length. Several of the next generation of forking side buds are seen, these again may produce woody shoots or blossom in the following season.

from the two side-buds or again pair of fruits, one from terminal and one from side-bud, the second side-bud remaining dormant. Often on old much branched plants only single terminal fruits are formed, likewise when all three buds of the "end-cone" form fruits, the *fork-side-buds* remain dormant or again when the *fork-side-buds* produce fruit in pairs or threes, the apical region remains sterile. It may be noted that whereas the forking buds are placed in one plane, so that the forking is as a fan, those of the end cone are at right-angles to this and if the *fork-side-buds* produce woody growth these are not co-planar with the proper main growth and hence can be distinguished from the normal forkings. One forking branch may grow on normally, whilst its congener is stunted and only gives rise to fruit or fruitful short growth with leaf or small shoot; this latter may consist of a mere cushion of softish tissue of a millimetre or two in height. von Tubeuf mentions a variety he calls "Polycoccon", usually on apple, in which masses of berries of as many as nineteen may be seen. Though I have not yet seen such a specimen, it appears that they would derive from the shortened and fruitful growths above described. If there is a full complement of fruit from all the buds, three from each of the *fork-side-buds* and three on the terminal cone, fifteen fruits would be accountable, and if short cushion-like growth has occurred, further fruiting buds would be available. We know from fruit-tree growth (apple, pear, etc.) that abundant sap supply leads to woody growth and a reduced one to fruit formation, provided that it be not too meagre. So in the mistletoe, when the sap supply is abundant luxuriant growth of all or some side buds may occur—hence six shoots in maximum, two from the forking-buds and four from the *fork-side-buds*, which growth from the last named may also pursue a forking course (Fig. I). It would seem that similarly to the effect of hard pruning in fruit trees, an increase of woody growth may be encouraged; in a mistletoe on oak, which was severely cut back a few years ago, very free woody growth ensued and large numbers of joints have produced all six shoots of considerable length. As has been noted above, the shoots can be distinguished from a co-planar arrangement or otherwise. It will be seen that some degree of irregularity by departure from simple forking may occur naturally or by actual damage. Of other variants in growth the formation of a single tiny leaf on a tiny shoot may be mentioned in starved places. von Tubeuf does not seem to recognise the basic simplicity of the variations* in production. In regard to branching, one further character deserves notice; here and there, particularly upon certain hosts apparently, a unilateral growth takes place (Fig. II), that is, only one of the forking buds gives rise to permanent woody progress, hence one is confronted with a single unbranched sytem of many joints which eventually near its end shows normal forking. von Tubeuf alludes to such growth on a hornbeam (*vide* his figure,

p. 487, fig. 96), and I have met with it (*vide Fig. II*) five times on common maple (*Acer campestre*), once on Norway maple (*Acer platanoides*) and also on the lime (*Tilia europaea*) and probably on holly from a distant view. This habit seems associated with the pendant habit (*v. infra*) and is due to two circumstances: the joints are short (*v. Appendix*), swollen at ends and easily broken, so much so that one specimen hung up to dry actually dismembered itself into separate joints. Where this traumatic origin is toward, the scars of rupture can be seen in places. On the other hand there may have been failure to grow on the part of one of the forking buds by its remaining dormant. On such growths, it appears that fruiting is often restricted to a single apical fruit. The condition rather bespeaks a want of sympathy between host and parasite, even though growth has persisted over very many years.

3. DISTRIBUTION.

von Tubeuf has amassed much information on the mineral constituents of the ash of the plants from various hosts and localities, and he tends to conclude that a somewhat calcareous soil is necessary. Such a condition is presented by our Old Red Sandstone-derived soils in the county. In passing up through southern France, I have been struck by the abundance or rather superabundance of mistletoe on the poplars (I am told that these are referable to *Populus serotina*) in the valleys of the Aveyron and Dordogne, whilst many miles to the east, where the railway route passes across the upper reaches of these rivers in basaltic and granitic formations, there was an apparent complete absence of the parasite, though poplars are not wanting; it may be noted that this region is at a higher altitude.

4. FERTILISATION.

From the sticky nature of the pollen, von Tubeuf concludes that it must be insect borne. Pollination has some mystery attached, for latterly I have found some difficulty in finding male plants, one after another only berry-bearing plants could be seen—of seven growths on hawthorns in a hedgerow only one was a male, yet the females and two hazel growths near by were fruiting abundantly. Again in my garden I have three growths, one only a male, from which in the spring bullfinches are apt to peck every bud (they do not seem to attack the female blossom buds), and the only known neighbouring growths (on a lime) are both females; yet my female plants were full of fruit. Such insects, as are involved in the transfer, must travel considerable distances and be avid after the scent of the blossoms.

5. VARIOUS HOSTS.

Two main groups of *Viscum album* are distinguished. That affecting coniferous trees and that on deciduous leaf trees. The former are hardly known in this country, the only records appear

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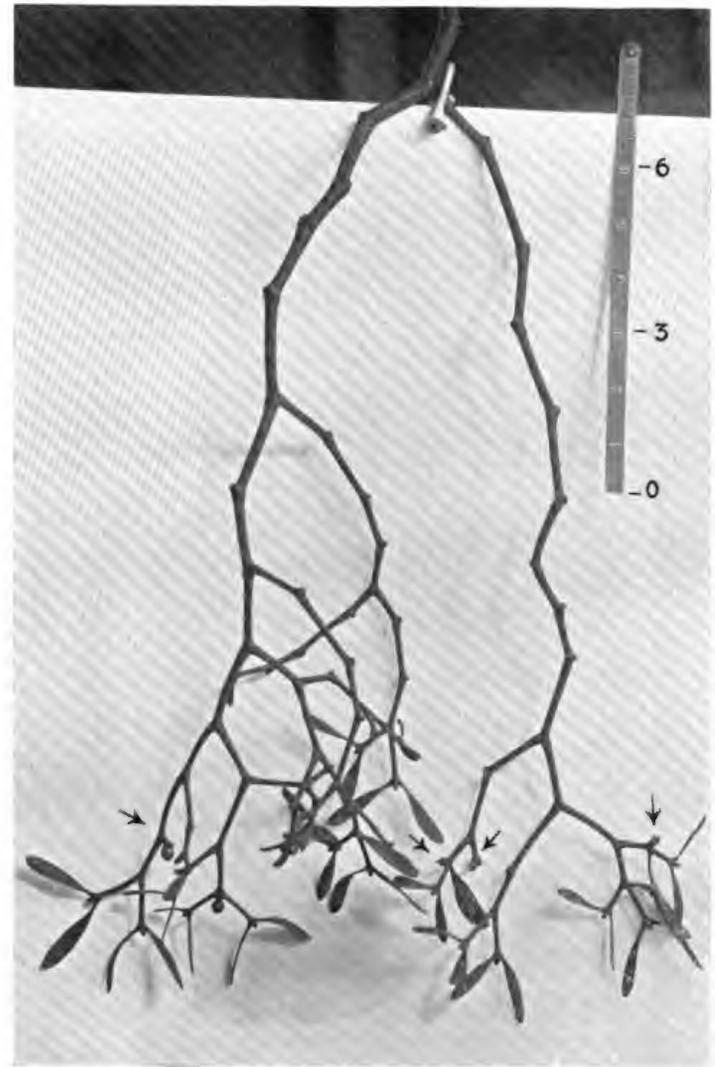


FIG. II.

Specimen from Maple—showing unilateral extension. The arrows point to seats where dormancy or stunting has occurred. Contrast this with Fig. I.



FIG. III.

Unique specimen of Mistletoe growing on Holly, near Dadnor, Bridstow. It was revealed by the dying of the host and will be seen on the left-hand side at the upper part of the left-hand main trunk. The tree finally died in the summer of 1935. From distant view it was clear that the parasite had been growing for many years.

to be single specimens on Yew, Cedar and Larch, quoted by Dr. Bull many years ago, and no more recent ones have appeared; von Tubeuf¹ divides these two into two strains, the *Pinus* and the *Abies-Picea* and notes that they are unknown in Sweden (p. 111).

Deciduous trees. Besides the list given in our *Transactions* (1864) by Dr. Bull and in the *Flora of Herefordshire* by Purchas and Ley (1889), many of which recorded specimens now no longer exist, an extensive conspectus was given by C. Nicholson in the *Gardeners' Chronicle*, 6th and 20th Feb., 1932 (pp. 102 and 145), including English and continental records.² von Tubeuf also gives a list of occurrences in England, but it is very incomplete.

It is obvious that Mistletoe is able to affect a very large number of hosts with more or less vigour, some more commonly, others more rarely, and it seems hardly profitable to attempt a comprehensive list for these pages. It may be worth while, however, to mention the unique records (1) on Holly (*Ilex aquifolium*) found by Miss Eleanor Armitage last year (1934) near Dadnor, then revealed by the moribund state of the tree, which has since succumbed (*vide Fig. III*); (2) on Mulberry (*Morus alba*) at Perrystone (*vide Fig. IV*); and (3) on Siberian Elm (*Zelkova crenata*) at Holme Lacy. Of those less rare are specimens on the Pear (Dadnor, Swinmore, Holme Lacy); Oak (*Quercus robur*), Stretton Sugwas, Deerfold Forest, Llangunock, Moccas, and actually within the City bounds at Pengrove (*Woolhope Transactions*, 1933, p. xv); the Wych Elm (*Ulmus montana*) at Yazor and near Eastnor: this host is given by von Tubeuf as "unknown"; the Rose (*R. canina* and *sp.*) at Homend and Weobley, it has disappeared at two other sites lately; the Birch (*Betula alba*) and Buckeye (*Pavia*) at Holme Lacy. It is curious that von Tubeuf puts Ash as a very rare host: here we have many sites, Withington, Sellack, Staunton-on-Wye and not far from the City boundary along the Ross road. Of hosts which have been recorded locally (but not now persisting so far as I have determined) or have been recorded recently elsewhere in England, Beech (*Fagus sylvatica*), Hornbeam (*Carpinus betulinus*), Alder (*Alnus glutinosus*), Sweet Chestnut (*Castanea vesca*), and Gooseberry (*Ribes grossularia*) may be mentioned.

This short account and reference to the more extended lists show that a very wide series of quite unrelated hosts are capable of supporting the parasite, so that the quite occasional occurrence

¹ K. von Tubeuf. *Monographie der Mistel*. München, 1923.

² One or two misprints occur in this list, thus Lombardy poplar is given as common. Bull was unable to find it, and von Tubeuf remarks on its rarity. So far I have not met with an example or heard of an authentic case in this county. Pear is given as not uncommon, though hereabouts are fewer cases than on oaks; the "very common" against *Rosa* has slipped from the line of *Robinia*.

at Perrystone, ruy. it appears as common.

on possible hosts, where the chance of infection from commoner hosts [such as apple, poplar, lime, hawthorn and "acacia" (*Robinia*)] in this county seem to be great, is mysterious and deserves some discussion.

One point which has so far apparently not attracted attention is the more or less characteristic growth on some different hosts. Three main types may be discerned: (1) The GLOBOSE, (2) the somewhat lax or SEMIPENDENT, and (3) the PENDENT; to which may be added the denuded or unilateral growth and the stunted or dwarfed.

The Globose forms large balls of free-growing masses densely packed and prominent to the view, especially when at the summit of a tree. Such are to be seen on the Poplar (e.g. the big *P. serotina* lately damaged by gales at Swainshill), on Willows (*Salix alba* and *fragilis*) and on numerous *Robinias* ("acacia"). From a distance, often the nature of the tree can be premised by this globular appearance of the parasite.

The Semipendent, in which a few of the branches are sufficiently stiff to hold up against gravity, but mainly are inclined downwards; this is the commoner form and is to be seen on apple, hawthorn, ash and in fact on most hosts.

The Pendent in which the branches all hang downwards has been noted on the holly, oak *Zelkova*, and lime. The denuded or unilateral type of growth is often present (*v. supra*, p. 143) in such cases. The stunted is a matter of poor growth and is well marked in the only example that I have seen on the birch; on this tree the sites of infection are numerous, but all are small and cause marked swelling of their host's branch and apparently of suicidal intent from the presence of dead or dying pieces. This is curious in the light of von Tubeuf's statements that the birch is the most favourable subject for artificial propagation of the plant.

Three groups of factors may be considered in relation to the question why certain individual hosts do or do not become successfully and more commonly attacked, viz., (1) The Physical, (2) the Chemical, and (3) the possibility of existence of different strains or varieties of the plant. Each of these presents difficulty.

In regard to *Physical conditions*, the extreme rarity of infection of the very common Lombardy poplar (*P. nigra var. fastigiata*), even when growing in vast numbers side by side with other species of poplar as may be seen in many parts of France,¹

¹ Though I have looked out over very considerable numbers of trees, particularly the poplars, in travelling about France, only once have I detected it on the Lombardy variety, and that on two closely placed trees far away from any other poplar; on the other hand mixed plantations or rows in which both sorts were intimately dovetailed together, and the *P. serotina* might be so heavily infested as to show 20 or 30 bunches, not an example on the Lombardy was espied over considerable tracts of country.

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FIG. IV. Unique example of growth of *Viscum* on Mulberry (*Morus Alba*) of considerable age, at Perrystone, Foy. It appeared fortuitously.

is associated with the nearly vertical habit of the branches, which may therefore be unsuitable perching sites for birds, though one would assume that the sharp-angled recesses would give excellent lodgment for the seeds as in the case of a climbing rose in which lodgment apparently occurred in the angle at contact between the stem and the supporting post. Smoothness of bark might be a factor in the case of the beech to explain the great immunity of that tree, but against this one sees that lodgment of seed has happened on quite thin, less than pencil thick, smooth twigs (for instance on a hazel, itself an uncommon host), nor again does hard, resistant bark afford a complete explanation, for endeavours to infect the beech artificially have not succeeded (von Tubeuf), as also on elm from apple, when incision is practised.

The *Chemical aspect* leads to the consideration of the possible existence of varietal differences between the growths raised upon differing hosts, whereby one strain might be more in sympathy with one host than another. Obviously the mistletoe growing upon a conifer must be able to prosper on a very different sap to that which is supplied by a deciduous foliage tree. von Tubeuf distinguishes two separate conifer types and one other for leaf trees; the criteria being (1) morphological, (2) experimental. He lays down that though differences in size and shape of leaf, shape of seeds and of berry are to be seen, yet these differences are not of sufficient constancy even upon one and the same host.¹

Such differences as exist seem largely referable to the vigour of the growth, as may be seen in samples from separate bunches off the same individual host or to some extent to the age of the plant. In regard to the experimental sowing of seeds taken from one host and implanted on a similar or a different host, a very large number of observations have been recorded by numerous workers. Many of those published have been tabulated by v. Tubeuf (p. 164), showing that out of 140 attempts, only 45 succeeded (say 33 per cent.); again amongst the primary successes the young plant often was not permanent and died after a year or two, which makes the percentage still lower. Of 200 attempts to seed from oak to oak only one succeeded, of its permanence naught is known, as it was accidentally destroyed. Of the few successes from conifer to leaf tree, most were short lived and died out in two years or so. One, however, sown from *Abies* to willow (sallow, *Salix caprea*) in 1908, was still alive in 1917. Attempts to sow from alder to alder gave poorer results

¹ This is quite confirmed by the specimens which so far I have been able to obtain. Photographic direct nature-prints of these have been made to illustrate this point: a collection of these has been lodged with the Club's archives and a similar collection at the Royal Botanic Gardens at Kew, where also a collection of photographs of occurrences on a number of hosts is to be found; v. also tabulations in Appendix.

than from alder to birch and apple, on the other hand birch to alder rarely succeeded. Attempts from apple to beech and elm all failed. It may be added that attempts from *Abies* to *Pinus* likewise failed; also that mistletoe may grow on itself as also upon the allied *Loranthus*, a deciduous parasitic plant which does not succeed or occur in our climate. It will be observed that though the spread of the plant is precarious in both natural and artificial conditions, there is some suggestion that seed from certain hosts is more prone to succeed on others when taken from particular sorts, though like to like (*v. sup.*, oak to oak) may be liable to fail. In the cases of two unusual hosts, the holly and a hazel, from their locale it appeared that both had derived their origin from hawthorn-born seed; on the other hand it would seem that apple-born seed must have poor implantation power except upon apple, judging by the immense numbers of apple-born seeds that the County presents year by year; the same may be said of the poplar, by natural implantation poplar-born seed must be suitable for poplar, judging by the immense amount of growth on this host, especially in northern France. In our apple orchards, the juxtaposed pears habitually remain free, as do neighbouring oaks, etc. For a small area, the gardens and park of Holme Lacy perhaps present greater variety of host, by nature infected, than any other place. There you may see apple, pear, lime, *Zelkova*, *Robinia*, birch, *Pavia* and hawthorn in comparatively near neighbourhood, though on the other hand the oaks, sweet chestnuts, etc., hard by, are exempt.

6. CONCLUSION.

This essay may be closed with a speculation framed to account for the mystery and vagary of mistletoe invasion—if only in some small degree. Namely that the failure or success to establishment may be due to some intercurrent factor, for instance the presence or absence of a favourable set of microbes, whether of bacterial or of higher grade in the class of fungi. It has been quite definitely determined for instance that orchids are dependent upon symbiotic fungi, as also the lichens which also actually consist of a combination of fungus and green plant, neither of which can prosper alone. Indeed, one way and another, the whole of the higher living creation seems much dependent upon the activities of these lower forms of life—thus our crops are made or marred by the presence or absence of proper soil, bacteria, etc., even the low-down vinegar fungus has to be served by yeasts which make the alcohol necessary for production of acetic acid and so on to the higher animals with their constant accompaniment of myriad hosts of microbes. Whilst it is true that by microbes many of us die, it is none the less true that by microbes we are able to live! In the case before us—the implantation of mistletoe—it may be that success or failure, whether in nature or in artificial endeavour, may be dependent upon the microbe. Thus one may surmise

that if some fermenting agent which has the power of producing much acid from the gums, etc., of the mistletoe berry is present, such acid might harm the young rootlets of the plant and lead to disaster, or again such a condition might be favourable to the parasite yet harmful to the hosts whereby the resulting tissue changes (digestions or interference) might make a more favourable nidus for the young plant. Both the effect upon host and parasite need consideration. Speculative as this thesis is at the present, there is clearly a vista opened for some future experimentalist to follow, whereby perchance the perplexing mystery of the spread of mistletoe may one day be determined, whether it be eventually some effect on the host or some need of the parasite.

Finally I must record my thanks to my friend Sir Arthur Hill, Director of the Royal Botanic Gardens at Kew, to Dr. Metcalfe and others of his staff for much kindly advice, information and material.

Bibliography.—A very large literature has accumulated about Mistletoe, both comprehensive and casuistic. The following are quoted in this essay:—"The Mistletoe in Herefordshire," by Dr. Bull, *Woolhope Club Transactions*, 1864; "Mistletoe and its Hosts," by C. Nicholson, *Gardeners' Chronicle*, Feb. 6th and 20th, pp. 102 and 145, 1932; *Monographie der Mistel*, by Prof. K. von Tubeuf, 4to, pp. 832, München, 1923; *Gardeners' Chronicle*, v.d., many references: e.g., Feb. 28th, 1920; April 30th, 1921; Almond, March 4th, 1922; H. E. D., March 23rd, 1929; Gooseberry, etc., December 20th, 1930, p. 512; Pear, H. E. D., Jan. 10th, 1931, p. 30; Plum, *ibid.*; Cherry, Jan. 17th, 1931, p. 57; Sweet Chestnut, Feb. 21st, 1931; Alder, March 12th, 1932, p. 207; *Zelkova*, H. E. D., Jan. 14th, 1933, p. 32, and numerous letters appearing soon after Mr. Nicholson's article in 1932; and *The Folk-lore of Herefordshire*, by E. M. Leather, Hereford, 1912. Mistletoe, pp. 19, 79 and 91.

POSTSCRIPT.

The following notes have reached me too late for inclusion in the body of the above Paper, but seem to be of sufficient interest to be appended hereto.

Mistletoe in Churches. The oft-repeated statement that mistletoe forms the subject of an enrichment border on the Berkeley tombs in Bristol Cathedral is set at naught by the official handbook, and Professor Macgregor Skene (Professor of Botany, Bristol University), who kindly examined the tombs at the instance of Mr. W. North, M.A., agrees that mistletoe is not represented thereon; and that though differing in some details from the original model, it was probably the intention to show the fruits of the Field Maple (*Acer campestre*) as a cursive enrichment border.

It was an ancient observance to place a bough of mistletoe on the high altar on Christmas Day in York Minster. (A sermon preached in York Minster on December 1st, 1929, by Chancellor Austen. Reprinted by request and sold by Mr. Story, Minster Gates. Price 2 pence.)

Mr. L. Cahen states that mistletoe is looked on as something very sacred, much as the palm on Palm Sunday, in Italy. At Christmas, people take a piece of mistletoe to church and, when it has been blessed, hang it up over their beds with the Palm Sunday palm and keep it there until the following Christmas. This gives further importance to my remarks on the Holy cipher (page 142).

Further, Herrick's poem *Noble Numbers*, No. 114, *To God*, runs:—

Lord, I am like to mistletoe.
Which has no root and cannot grow
Or prosper but by that same tree
It clings about; so I by Thee.
What need I then to fear at all,
So long as I about Thee crawl?
But if that tree should fall and die,
Tumble shall heav'n and down will I.

(Ed. A. Pollard, London, 1891.)

In regard to *Kissing under the Mistletoe*, Mr. A. Hamilton-Ellis (*The Observer*, 22/3/36) writes: "The kissing was of a quasi-sacramental nature and was equivalent to a pledge of atonement, reconciliation and goodwill, usually a berry being taken off for each kiss, which is symbolical of the theological marriage of Christ and His mystic bride, the Church on Earth, being expressed in the Psalms 'Mercy and Truth are met together, Righteousness and Peace have kissed each other'."

In connexion with the therapeutical virtues of mistletoe, reference to the following works may be added: Colbatch (Sir J.), *A Dissertation concerning Mistletoe (etc.)*, 1719, and fifth edition, "to which is added a second part," 1730. Fraser (Henry), *On Epilepsy and the use . . . of mistletoe of the oak in the cure of that disease*, 1806.

Some recommendations and the reverse for the use of mistletoe for feeding animals in France were given in the periodical *Le Cidre et le Poiré* some years ago. E. K. Balls (*Gardeners' Chronicle*, Vol. CII, p. 443) states that in Greece its use as fodder for animals is prohibited for inducing milk production.

APPENDIX I.

LEAF DIMENSIONS in m/m.

VISCUM ALBUM from various hosts.

	Name.	Date.	Length.	Breadth.	Thickness.
+	Acer campestris	... 29.viii.35	31:34:36	—	0.6-0.6
	— platanoides	... 14.vii.35	46:49:50	12:12	1.2-1.3
	Corylus avellana	... 6.iv.35	45:49:52:52	16:15:17:17	0.8
+	Crataegus oxyacantha	... 23.vi.35	58:60	11:11	1.0
	" "	... 17.x.35	44:47	12:14	0.6:0.6
	" "	... 17.x.35	65:65	17:18	1.2:1.2
	" prunifolius	... iv.35	61:62	16:16	0.7:0.6
+	Prunus (Plum)	... 29.viii.35	66:66	23:23	1.8*
			62:62	13:14	—†
+	Pyrus malus. Apple	... 19.x.35	69:70	12:11	0.5:0.6
	" Bramley seedling	... 6.iv.35	72:72	13:14	0.8:0.9
	" "	... 6.iv.35	71	18	1.0
+	Quercus robur	... 30.vii.35	62:63	14:14	0.6:0.6
	Rosa sp.	... 29.vi.35	89:100	22:26	1.0:1.0
+	Salix cinerea	... 24.ix.35	55:57	10:11	0.6:0.8
	Tilia europæa	... 11.xi.35	32:38	8:10	0.6:0.6

* Old leaves.

† Young leaves.

EXPLANATION.—The figures are for millimetres and fractions thereof. It will be seen that considerable variations in leaf size occur. Slight differences were noted in the shapes of the leaves, but these inconstant and probably of no scientific value.

DIAGRAM OF GROWTH OF VISCUM ALBUM ON DIFFERENT HOSTS.

Leaf	VV	VV	VV	VV	VV	VV	VV
I	48|2.1	V	64|2.5	55|2.7	V3.0	41|2.5	49|2.0
	49|2.9	|	82|3	40|3.0	40|3.5	42|3.0	50|2.8
	51|4.0	78|3.5	85|	43|4.3	46|4.5	48|3.5	48|3.0
	59|4.5	70|5.1		55|4.8	57|5.6	45|4.6	50|3.8
V	41|5.0	58|5.4	Hazel ♀	68|6	68|6.5	56|5.2	29|4.0
	35|5.1	:		:	70|7.0	30|6.0	16|4.3
	:	Oak ♀		:	60|7.4	24|7.0	67|4.9
	:			:	7.5	37|7.0	90|7.0
	Salix Cinerea ♀			:			
				Ex Apple ♂			
					Hawthorn A ♀	Ex Hawthorn B ♀	C ♂

NOTE.—It will be seen that the length of the terminal internode varies very much—from 4 m/m to 80 m/m—the latter figure is surpassed, viz., 114 on a rose, which is not included, as few joints were recorded. In regard to diameter, the shoots are often oval in section, especially when growth has been vigorous and that it remains very constant over many joints where extension has been unilateral; compare the specimen from poplar with diameters of 4.1 at joint V, 7.3 at X, and 16.0 at XV with that from lime with diameters of 4.0 at joint V, 4.0 at X, and 4 at XV, and only attaining 7.0 at XX.

Also the specimens from the same species of host Maple A and B. A had attained a diameter of 4.6 m/m, B 8.5 at IX. Similar difference was observed in specimens of different bunches from the same actual host, the one younger and more vigorous, and from a younger branch of the host.

The largest basal "trunk" had attained 31.0 m/m and was probably some 30 or 40 years old.

Leaf	VV	VV	VV	VV	VV	V	VV	VV	Leaf
I	20|2.0	32|2.3	12|2.0	80|3.0	18|2.3	4|	57|2.0	26|2.5	I
	25|2.5	32|2.5	18|2.5	100|4.0	24|2.7	5|	40|2.5	27|3.0	
	22|3.5	32|3.0	43|2.8	90|7.0	25|3.5	15|	52|3.5	35|	
	22|4.0	16|4.0	45|3.0	10.0	24|3.5	13|	32|4.0	22|3.1	
V	23|4.1	29|4.0	45|3.5	:	28|4.0	24|	29|4.5	41|4.3	V
	25|5.5	32|4.0	47|4.6	:	26|4.0	27|	32|5.0	:	
	35|6.0	40|4.0	32|5.0	:	18|4.1	19|	18|5.8	Ex Maple "C" ♀	
	30|7.6	33|4.0	36|5.0	:	10|4.6	17|	20|6.0	:	
	22|7.0	43|4.0	40|5.0	:	21|4.6	28|	43|8.5	:	
X	25|7.3	45|4.0	27|5.5	:	40|4.8	:	49|9.0	:	X
	27|10.0	34|4.0	30|5.5	:	:	:	33|10.0	:	
	43|12.3	34|4.2	43|6.0	:	Ex Maple "A" ♀	:	45|10.5	:	
	77|14.5	47|4.0	22|7.0	:	:	:	35|11.0	:	
	85|15.5	29|4.0	26|8.0	:	:	:	12.0	:	
XV	90|16.0	33|4.0	29|8.3	:	:	:	Ex Maple "B" ♂	:	XV
	87|17.0	47|5.0	:	:	:	:	:	:	
	92|18.0	37|6.5	Ex Plum ♀	:	:	:	:	:	
	60|	40|7.0	:	:	:	:	:	:	
	:	35|7.0	:	:	:	:	:	:	
	Ex Populus serotina ♀	31|7.0	:	:	:	:	:	:	XX
XX	:	41|7.5	:	:	:	:	:	:	
	:	:	:	:	:	:	:	:	
	:	Ex Tilia Europæa ♀	:	:	:	:	:	:	

EXPLANATION.

|/	80|11.0	The Roman figures in vertical columns record the internodes from tip towards base.
65|9.0	85|18.5	The upper line of VV represents the leaves.
120|13.0	45|18.0	The second line of V represents the last forking.
101|23.0	75|31.0	The vertical lines | represent internodes.
Basal =		The oblique lines // represent one or more forking branches.
Basal =		The figures on left side are lengths of internodes in millimetres.
Ex Populus serotina		Those on right side are diameters of internodes in millimetres.
Basal part.	Bracket {	indicates same bunch.

DRAGONS AND ROOD LOFTS.

By H. E. DURHAM, Sc.D., M.B., B.Ch.

(Read 21st November, 1935.)

A series of small churches, in which the rood lofts or screens escaped the general destruction or dismantling, is to be found along the Welsh marches in our neighbourhood. Amongst the various enrichments, the combination of a cursive vine ornamentation with terminal dragons is so oft repeated that enquiry into its nature seemed desirable. First as regards the vine, which whilst lending itself to artistry of embellishment with its stem, leaves and fruits, also is recognised to have an emblematic significance. For instance, verse 1 of Chap. XV of St. John's Gospel, "I am the True Vine, etc.," and again an old Hungarian ballad of the battle of the flowers shows that the blue cornflower claimed precedence, "for when they place me on the altar they name me the Body of Christ"; then said the Vine, "I am better than you, for when they place me (*i.e.*, evidently my product—wine) on the corner of the altar they call me the Blood of Christ." Further, going to earlier and pre-Christian times the vine had religious connexion from the similitudes arising from the semblance of red wine to blood. The vine then takes its place as an emblem of Good.

The dragon on the other hand symbolises Evil; in the carvings to be illustrated in the following slides only one shows the dragon apparently swallowing the vine (Partrishow); more often it is more or less entangled with it. The word *dragon* is apt to be much misused and applied to any sort of fantastic or horrible monster, and reference must be made to early works in order to get ideas about it. *Li livres dou Tresor*, by Brunetto Latini (b. 1230, d. 1294), edited by P. Chabaille, Paris, 1863, tells us (p. 193): "The dragon is the largest of all serpents and one of the biggest beasts of the world, it lives in India and Ethiopia, where there is great heat. When he leaves his cave he rushes through the air so fast and with such violence that the air shines after him like a blazing fire. He has a crest and small mouth, also a hole for his breathing and his tongue: his strength is not in his mouth *but in his tail* with which he does more damage by blows than by wounds. None of the strongest and largest of beasts surpasses him for strength and, if the dragon strikes with his tail, it is certain death; even the elephant has to die and hence has mortal hatred for him." Emphasis must be laid on the mode of attack by means of the tail, on account of the frequent rather crocodilian character in its portrayal. The *tail* forms the first line of attack by the crocodile ("coccodrille" of older folk). Once it has swept

its prey into the water by a sweep of its tail little hope of escape remains. The resemblance or possible confusion between it and the dragon is also manifest whilst immersed or partly immersed in a river when all that appears is serpent-like and, if the forelegs show, it agrees with the common two-legged nature of the dragon (the French heraldic dragon officially has two legs only). With regard to wings, these are sometimes suggestive of the carver having taken the bat, a beast of darkness, as a model rather than the bird. (The Canon Pyon dragons seem to have distinctly feathered wings.) The tenth century Lay of Alexander (*v. Chrestomathie de l'ancien français*, K. Bartsch, 1884) gives insight into the colour of the eye, for Alexander the Great revealed "l'un uyl ab glauc cum de dracon, et l'autre neyr cum de falcon" (*he had one eye white like the dragon, the other black like the falcon*). The Bestiaire of Ph. de Thaun (13th century, *v. op. cit.*) tells us that the Dragon signifies the devil and is the only animal hated by the panther—which signifies the life or the Saviour—by gorging a meal, sleeping three days and rising on the third day to call by its voice and sweet smell the other animals which, with the above exception, come together and follow it, so much beloved is it. The exception falls in a sort of faint and trembles with fear owing to it being the devil.

We have Serpent=Devil, Dragon=Devil and Dragon=Serpent, so that whilst the vine signifies the powers of good, the dragon serves those of evil. In the designs the vine is more usually rather tangled with the dragon: at Partrishow it seems being swallowed by it.

Bond in his book *Screens and Galleries in English Churches* considers that rood lofts derive from the ambo, a structure whence preaching was done in early Christian churches, which had two stairways in line. An Italian one, which he figures, portrays a dragon on either side, one swallowing a man head first and the other foot first. We have only to substitute the symbolised human life in the form of the vine to make the designs of the rood screens which are under consideration. A good example of the dragon's mouth receiving bodies is seen in the perfect tympanum at Conques in southern France, which portrays a last judgment; here the dragon forms the mouth of hell, the arch demon being enthroned within the precincts.

Illustrations of early dragons with vines were shown from Italian churches and related designs from orthodox churches in Bulgaria, both early and later date, in which the frames of the ikons on the ikonostases are socketted in the mouths of dragons. Slides were shown as follow:—

Llangattock Lingoed. Rood beam only survives with very perfect double vine enrichment.

At *St. Margaret's*, which was not shown, a good vine border has no dragon.

Llananno. Complete vine border, terminated at each end with fine dragon, whose tail ends in serpent's head.

Llandevallye.¹ Good vine enrichment with complete dragon at north end and collared head and shoulders at south end. In this the main vine stem curls around the dragon and becomes continuous with its tail.

Llanfilo.¹ Good vine border with dragon at north end, the southern one if ever present has been removed or obliterated by a memorial tablet. As in the not far distant specimen at *Llandevallye*, the vine stem is continuous with the dragon's tail and is perhaps due to the same designer.

Canon Pyon. A rather crudely cut vine, the termination being a forking of the main stem with a pair of grape bunches. The dragon has feathered wings and is somewhat serpentine with a chamæleon-like tongue; it is unusually clearly illustrated in the work of the Royal Commission (*Ancient Monuments of Herefordshire*, vol. ii, plate 71).

Partrishow. A fine pair of dragons with extended wings which apparently are swallowing the vine; they have elaborately coiled tails.

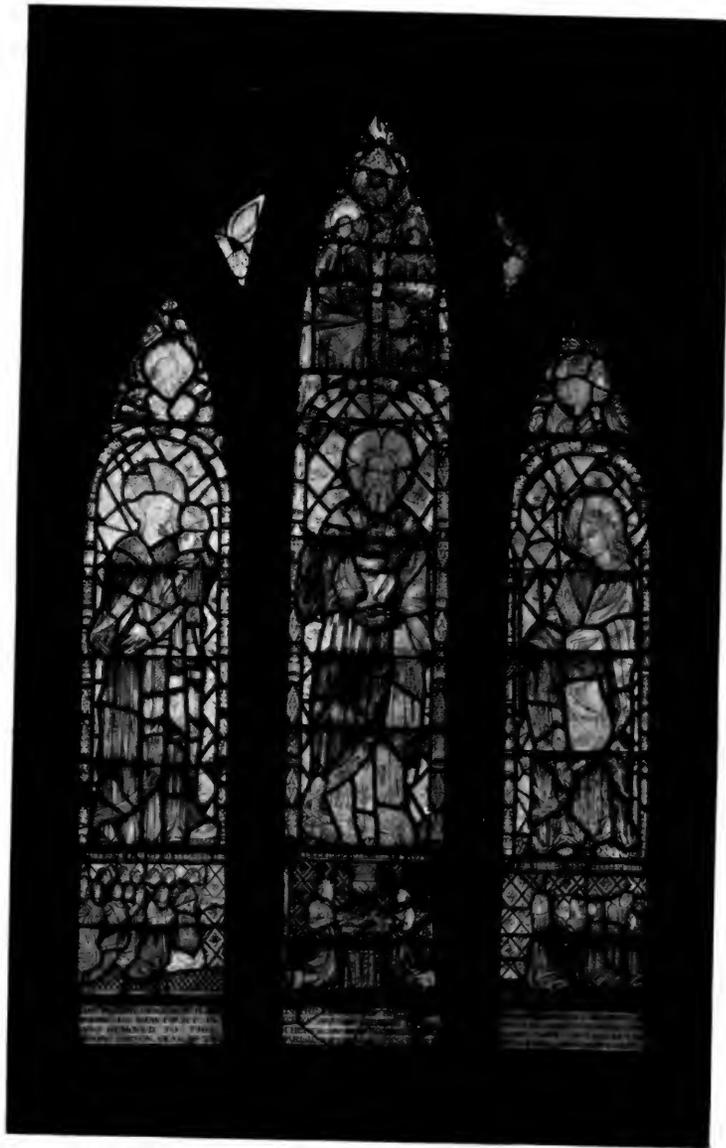
Llangwm Ucha (=over or chief, there are two churches not far from one another) has another very celebrated rood loft. One band of the upper tier has an exquisite vine with at the north end a pair of hands, the presence of which needs some explanation. The south end ends so to speak blindly. There are, however, dragons on a lower band. This is of a floral design and obviously not a vine tracery. Merely the heads and shoulders are shown with a sort of collar (cf. collar at *Llandevallye*).

It seems clear that the design of dragon and vine is quite an old one and was introduced through occidental workers or designers, imbued with Byzantine tradition, and in this respect it is interesting to note that tradition has ascribed the carving at *Partrishow* to an Italian craftsman. Even if some of the others are due to native workmen, and this looks probable in the case of *Canon Pyon*, they evidently took on the general features of the design for their inspiration.

Postscript.—Mention may be made of a pair of dragons, centrally placed on the 16th century screen at *Vowchurch*; they are of somewhat serpentine character—but there is no vine.

And also of dragon and vine ornamentation in the cloister of *Mont Saint Michel* (Brittany): here the dragon is apparently eating a bunch of grapes; the date of the cloister is 1225—1228.

¹ These are illustrated in *Folk Lore*, vol. xliii, 1932, plate viii, facing p. 297.



GLASS IN EAST WINDOW OF ATCHAM CHURCH, SHROPSHIRE.

THE BACTON GLASS AT ATCHAM IN
SHROPSHIRE.

By G. McNEIL RUSHFORTH, M.A., F.S.A.

(Contributed 17th December, 1935.)

The story of the Atcham glass may be summarised as follows : In 1811 Mrs. Burton, wife of the Rev. Henry Burton, Vicar of Atcham, paid a visit to Bacton in search of memorials of the Parrys of Newcourt in that parish, from whom she was descended. Bacton is a remote place, and one is not surprised to learn that at that time there was no resident clergyman, and that the painted glass of a window commemorating a Parry and his family was much broken and neglected. Mrs. Burton succeeded in persuading the local authorities, such as they were, to let her take it away, a transaction which seems to have been smoothed over by some public entertainment which she gave, for we are told that the glass was removed amidst rejoicings and a general holiday at Bacton.¹ If the glass was in the condition described, it must have required considerable restoration before it assumed the presentable form which we now see in the east window of Atcham Church ; and we shall find that, as a matter of fact, it bears traces of extensive renewal.

Let us see what the east window of Atcham Church contains (*see illustration*). Apparently, it is substantially the glass of the east window of Bacton Church. The stonework of the latter has now been replaced by a different design, but the original window seems to have been of the usual Perpendicular type, with three main lights, and tracery lights above. The former contained three full-length figures against quarry backgrounds framed by borders of crowns and ornamental lozenges. In the middle is Christ with right hand raised in blessing, holding the sacramental cup in the left. In the left-hand or northern light is the Madonna, crowned and holding the infant Jesus, who grasps a bird (a common medieval plaything for children) in His left hand. The right-hand light shows St. John the Evangelist, of the usual youthful type, holding a palm in his left hand and a sceptre in his right, transferred, apparently, by mistake at the restoration from the Virgin Queen

¹ Statement by the Rev. A. G. Kingsford, Vicar of Atcham, to the Woolhope Club on their visit to Atcham, 28th May, 1895—*Woolhope Club Transactions*, 1895-7, p. 23.

of Heaven, whose right hand (though now empty) is ready to grasp it.

The subject of the window is remarkable and unusual. We are accustomed to see Mary and John on either side of Christ crucified on the Rood, but here the Mater Dolorosa is replaced by the Mother and Child, and instead of the Crucifix we seem to see the Passion symbolically represented through the Eucharist, the chalice suggesting the words: "This is my blood which is shed for you and for many for the remission of sins." One might have been suspicious of the present make-up of the window were it not that once there was a somewhat analogous treatment in a fifteenth century window of Great Malvern Priory Church. Only fragments survive, but Dr. Thomas described it early in the eighteenth century when it was tolerably complete.¹ As at Atcham, the side lights showed the Virgin and Child and St. John the Evangelist; and moreover the subject of the middle light was Eucharistic, only at Malvern it is described to us as a priest saying mass. Probably above the altar, at which the priest was saying mass, there was some representation of a vision of the "Christ of Pity", such as we see in the "Mass of St. Gregory", where He appears with all the marks of the Passion.

In the tops of the side lights are two heads: St. George and a Virgin martyr (e.g. Katherine²), of the same style and period, probably coming from the tracery of the window. They may be the remains of full-length figures. Above the Christ in the middle light are evidently the contents of the two central tracery lights of the Bacton window and of the pear-shaped opening at the apex. The latter contains a flaming star on a rosette ground. The glass in the two triangular openings on either side is also original. The two angels (on similar backgrounds) hold shields, that on the left bearing the arms of Parry (only in trick, but really: argent a fess between 3 lozenges azure within a bordure of the last), and that on the right those of Stradling.³ These lights may have been bordered by a stem wreathed with foliage, part of which is seen between them. The shields of arms give the clue to the kneeling family groups at the bottom of the window, and show that they represent Miles Ap-harry or Parry of Newcourt in Bacton, and his wife Joan, daughter of Sir Henry Stradling of St. Donat's Castle near Cardiff, with their children.

We should never learn from the Visitation that they had so large a family as the 12 sons and 7 daughters depicted in the glass.⁴

¹ *Antiquitates Prioratus Majoris Malverniae* (1725).

² Or is it St. Faith, the patron of Bacton Church? See will of Miles Parry below.

³ *Stradling*: Paly of 6 arg. and az. on a bend gules 3 cinquefoils pierced or, quartering *Berkrolles*: Azure a chevron between 3 crescents or.

⁴ F. W. Weaver, *Visitation of Herefordshire*, 1569 (Exeter, 1886), p. 4. Cf. Clark, *Genealogies of Glamorgan*, p. 435.

Indeed his will, which we possess,¹ mentions only five sons, so that the others in the glass may be grandsons, unless they died before their father. The daughters are not mentioned individually in the will, but he bequeaths all his debts and silver plate "for the marriage of my daughters according to [the wishes] of my wife Joan and my (eldest) son Henry". The will was proved 21st November, 1488, by John Stradling, his brother-in-law, and we thus get an approximate date for the window, whether put up by Myles Parry himself in his last years, or by his widow. The usual bidding prayer which must have accompanied the family group (*Orate pro animabus*, etc.) has disappeared.

A remarkable feature of the window is that it is carried out without colour, except yellow stain, *i.e.*, in white, black, and brown matt either lighter or darker. Such treatment is unusual in medieval glass (except in tracery lights), for even though quarries lightly decorated with stain take the place (as here) of the usual coloured backgrounds, colour is almost always used for either the upper or under garments of the figures, sometimes for both. Here, with the long white tunic of Christ delicately patterned in gold, we should have expected the jewel-bordered mantle to be e.g. red, instead of the sombre brown which it shows. In that case, by the usual alternation of colours, the Madonna should have had a white mantle over a blue dress, and so with St. John, of whose white mantle a piece (of unquestionable medieval work) survives in the middle of the figure. The fact that his tunic below is represented as if made of ermine, only used in medieval glass for linings and borders of garments, arouses the suspicion that all three figures have been drastically restored, and that originally their garments may have been coloured, as described above. The heads are certainly original, but, with the exception of St. John's left hand holding the palm, all the hands seem to be modern. In the figure of the Madonna a strip of the mantle in the middle, with its broad fold and ermine lining of a characteristic medieval pattern, contrasts with the meaningless multiple folds to the left, and with the commonplace ermine pattern of the tippet resembling that of St. John's tunic. With the above exceptions and some fragments at the bottom, one of which shows a bit of the tiled floor, the whole of the Madonna seems to be modern. Originally she probably held the sceptre (which appears to be medieval) now given to John, though why, with her hand bent to hold it, she should have been deprived of it, is a mystery. Of John, all the left side from the neck downwards, and nearly the whole of the lowest part, appear to be modern. There is nothing to tell us what he originally held in his right hand.

¹ G. S. Parry, *Genealogical Abstracts of the Parry Wills* (London, 1911), No. 148.

The figure of Christ, in the same way, betrays its composite character. The ermine lining of the mantle at the neck is of the medieval pattern which we saw with the Madonna, but the rest of the mantle, except a small piece at the bottom on the left, has the meaningless small folds noticed above. Remembering the analogous subject at Great Malvern, we may accept the attitude and intention of the Christ as reproducing the original, though the left hand supports the chalice in a rather unconvincing way, and it would be strange if in a medieval window the Eucharist were represented by the chalice alone without the host. We may, perhaps, assume that originally the host was there, emerging from the bowl of the cup in the usual way, and that it disappeared in the restoration. Possibly Mrs. Burton thought it unsuitable. It is, perhaps, too hazardous to suggest that the cup really belonged to St. John, and was removed by a restorer who did not know the legend of the poisoned cup with which he is so often represented in medieval art. If so, it will have contained the little dragon flying out of it at the Apostle's exorcism.

The Parry family below also bear traces of considerable renewal. The centre panel seems to be almost entirely modern except, perhaps, the head of Miles Parry. The tone is different from that of the side panels, and the costume is not characteristic. The coat of arms is also suspicious. In the group of sons several of the heads appear to be original. One of those in the front row is in armour, the leg being medieval work, but the upper part is sketchy and formless. The drapery in the group of daughters recalls the modern treatment of the mantles of the principal figures above.

At the base of the window runs the inscription recording Mrs. Burton's removal of the glass from Bacton.

A superficial glance at these figures, now presenting themselves as more or less complete and perfect, might suggest that Mrs. Burton's statement as to their damaged condition was a pretext rather than a fact. But the results which our closer examination has revealed confirm her account of the window as being "much broken and neglected". In order to make the remains presentable before insertion in the east window of Atcham Church, they were no doubt entrusted to one of the glass painters known in Shrewsbury and the Midlands, and none would be more likely than William Raphael Eginton (1778—1834) of Birmingham, who (Mr. J. A. Knowles tells me) worked almost entirely in brown and stain. With his father he supplied William Beckford with much of the painted glass at Fonthill.¹

¹ The east window of St. Alkmund's Church, Shrewsbury, is by the elder (Francis) Eginton. The Shrewsbury firm of Betton and Evans was hardly in the field by 1811. Evans's windows in Shrewsbury churches belong to the thirties.



GLASS IN WESTERNMOST WINDOW IN THE NORTH WALL OF
NAVE OF ATCHAM CHURCH, SHROPSHIRE.

There is some more old glass in the westernmost window on the north side of the nave in Atcham Church (*see illustration*), where the outer pair of angels holding harps in the tracery lights are original and *in situ*, the other two being copies of them. The middle light below contains with other 15th century fragments, a good deal of the same border of crowns and lozenges which we saw in the east window. But the chief feature is a memorial of the granddaughter of Miles Parry, viz., Blanche Parry, gentlewoman of the Privy Chamber to Queen Elizabeth, which reproduces in glass the design of her monument on the north side of the chancel in Bacton Church, put up before or after her death in 1589. On this monument (of stone and alabaster) Blanche Parry is represented kneeling before the Queen enthroned in royal state, with crown, sceptre and orb, while she herself holds a small book and a precious stone with its setting, one of the Queen's jewels which were in her custody. Within the arch which frames the figures is a long autobiographical epitaph in verse. Below, on the front of the monument, are the Parry arms between two lozenges of Blanche's own arms, and on the architecture at the top are the royal arms.

It will be noticed that all this is only summarised in the glass at Atcham, the Parry shield being transferred to the top, while the background and pavement accompanying the figures are copied from those of the Parry family group in the east window. Such a memorial in glass, of the Elizabethan age, would be hard to parallel; and in any case it seems unlikely that a memorial window-panel, if contemporary, would take the form of a picture of the structural monument close by. Mrs. Burton would scarcely contemplate the removal of the monument to Atcham, and she may have thought that a picture of it in glass would be a suitable supplement to the Parry window which she had brought from Bacton. This Blanche Parry panel is evidently the work of the same glass-painter who restored the east window, and, of course, executed the three Parry shields and the inscription about Blanche Parry below. It will be noticed that nothing is said in the latter about any removal of glass from Bacton. The nineteenth century artist has, therefore, roughly copied the monument, giving the two figures the usual adjuncts in windows of a patterned background and a tile pavement, both of which he copied from the east window.

There may have been some rearrangement of the contents of the light,¹ for the description of Blanche Parry should come immediately below the memorial panel where there is now part of a

¹ The glass was at first in a window on the south side of the church, but after damage by winds in the early part of 1894 was removed. Statement by the Vicar on visit of the Woolhope Club, May 28th, 1895 (*Transactions*, 1895-97, p. 23). It must have been re-set in the present window on the north side after this date.

late 15th century window inscription, to be restored thus: [Orate pro anima] d(o)m(ini) Joh(a)n(ni)s Rosse V(icarii?) [. . . qui istam] Fenestram fieri fecit.

The title *dominus*, representing the "Sir" so often prefixed to the names of clergy in the 16th and 17th centuries, suggests that the donor may have been a priest, perhaps a Vicar of Bacton or Atcham, but I have not been able to identify him. At the end of the inscription is a fragment, probably of the pavement on which he was kneeling, with a bit of his garment. Above this is another [Or]ate p(ro) a(n)i(ma)bus from another window, perhaps part of the missing inscription under Miles Parry (see above, p. 159). The three coats of arms below are part of Mrs. Burton's work. In the middle is a lozenge of the Parry arms for Blanche Parry herself. On the left is Parry impaling a cross moline. As Burke's *General Armory* gives under Milborne or Milburne: argent a cross moline pierced gules, and argent a cross patonce, I suppose that the shield is intended to represent Henry Parry and his wife Alice Milborne, the parents of Blanche. But Simon Milborne of Herefordshire, the father of Alice, bore a very different coat: gules a chevron ermine between three escallops argent, which is correctly represented as the 2nd quarter of the shield in the picture of the Bacton monument in the upper part of the window. Apparently a mistake has been made by the glass-painter who, when instructed by Mrs. Burton to insert the Milborne arms, may have looked them out in some heraldic book of reference and hit on those of another family of the same name, belonging to a different part of the country (? Somerset). The shield on the right is Parry impaling Scudamore: gules three stirrups leathered and buckled or, for the marriage of Blanche's eldest brother, Miles Parry, with Eleanor daughter of James Scudamore of Kentchurch.¹ The stirrup-leathers in the Scudamore arms are regularly represented as bent round so as to form a bow or loop, and not hanging vertically as here, which may be due to the glass-painter not having a proper model to work from.

The recent appearance of Mr. C. A. Bradford's *Life of Blanche Parry* (London, privately printed, 1935) relieves me of the necessity of saying anything about that interesting personality, for he has diligently collected all the known facts about her, and has thrown light on circumstances connected with her and her relations which previously were in doubt or misstated. He makes more than one reference to the blindness with which she was afflicted in her last years. It may be remembered that, on the Club's visit to Bacton a few years ago, a member pointed out that in her monument her eyes appear to be represented as sightless.

¹ *Visitation of Herefordshire*, 1569, p. 4.

REPORTS OF SECTIONAL EDITORS, 1935

BOTANY.

By the REV. W. OSWALD WAIT, M.A., B.C.L.

There are but few observations to put on record for this year, as few members have sent in any records. Dr. Gray, of Dorstone, found the purple variety of *Oxalis acetosella* near Snodhill. A curious feature of this variety is that it has been found in two localities in Radnorshire on the borders of the county, but not hitherto in Herefordshire, and, in the one locality where it occurs, it is not very far from the Radnorshire border.

Cardamine impatiens has been found at Fownhope.

Scleranthus perennis has been found at Stanner rocks by Miss Marsh.

Chrysanthemum segetum. This field plant I found growing in a road-side ditch in Stansbatch, near Pembridge, but it has not recurred.

Spergularia rubra. Strangely this little plant found a resting place among the cobble stones at Titley Vicarage, where it has spread until it now presents a sheet of its pink flowers, in a stable yard!

The Rev. H. Richardson, of Hereford, reports *Euphorbia esula*, *Salvia verticillata*, which would appear to be a casual, *Echium vulgare*, and *Cichorium Intybus*, on waste ground near the Railway, Hereford. This latter would also appear to be a casual, as it has been reported in various years from many stations, but is never permanent anywhere.

ARCHÆOLOGY.

By WALTER PRITCHARD.

Mr. Frank James reported that workmen digging opposite the old Judges' Lodgings, in Commercial Street, had cut through a stone wall about four feet below the level of the ground in the

roadway. The wall was six feet high, three to four feet in thickness, and seemed to run parallel with the street, about thirteen to fourteen feet from the pavement.

Mr. Edward Bettington made an examination of the wall and sent a report as follows:—

“ I examined the wall opposite the Judges' Lodgings exposed by the excavation made for a sewer connection to the new Cinema. The wall, about 3 feet 6 inches thick, was on the native gravel bed, and constructed with rubble stone laid without mortar, although a little mortar appeared in the top layer. I could find nothing to enable me to put a date to it.

Some of the stones were water worn, similar to stones found in excavating trenches at Bobblestock. Similar water-worn stones were used in the chimney at the Old House. Many of these stones were like enormous pebbles out of the river bed. The wall appeared to me to be the foundation of a building which ran parallel with the front wall of the Judges' Lodgings.

There is much that is hidden underground in this old City. There is a fine stone cellar and fireplace under Messrs. Symonds and Co.'s premises, No. 4, Widemarsh Street. It is worth a good photograph.

Colonel Symonds-Tayler reported an old stone which he had seen on the roadside between Pontrilas and Pandy with lettering, “ The end of Hereford District.”

Mr. R. S. Gavin Robinson reported the finding of two large upright stones at Tyberton in the grounds of Major C. B. Lee Warner.

TWO BRONZE AGE IMPLEMENTS.

The Late Bronze Age Dagger or Knife, seen in the illustration, No. 1, on the opposite page, was recorded in the *Transactions* for 1932, p. 188, as having been found at Lyonshall, and a drawing of it, which should have faced p. 188, will be found in the same volume at page LXXXIX wrongly labelled a spearhead.

The Middle Bronze Age Spearhead, No. 2, is fully described by Miss Chitty in the *Transactions* for 1932, pp. LXXXVIII, LXXXIX, and reference is made to an illustration of it, which was not inserted.

These two implements are in the Hereford Museum.



Photo by

F. C. Morgan, F.L.A.

1. LATE BRONZE AGE DAGGER OR KNIFE FROM LYONSHALL.
2. MIDDLE BRONZE AGE SPEAR-HEAD IN HEREFORD MUSEUM.

Obituary Memoir.

ALFRED WATKINS, F.R.P.S., J.P.

BORN 27TH JANUARY, 1855—DIED 7TH APRIL, 1935.

It is impossible to assess too highly the debt the Members owe to Alfred Watkins for his contributions to, and support of, the Woolhope Club during a period of nearly half a century. His death causes a void in our ranks which will be felt for many years to come. Born in the City of Hereford he lived his whole life in the county, and in an age when motor transport was unknown he had acquired a more intimate knowledge of the byeways and remote regions of the county than anyone had or has since obtained.

He joined the Club in 1888, and was elected a Member of the Central Committee in 1893, and in 1915 became a Member of the Editorial Committee, and acted as Archæological Editor from the creation of that office in 1917. In the latter capacity he contributed annually Reports on Archæological matters that came under his notice during the year, and these copiously illustrated with reproductions of his excellent photographs have been the means of recording many important observations which otherwise might have passed into oblivion.

In 1919 he occupied the Presidential Chair, and dealt in his Presidential Address with Early Local Bee-keeping, illustrated with photographs that he had taken many years previously and which must be unique.

During his long life his activities ranged over a wide field and his knowledge of many and varied subjects was considerable. His reputation as a photographer and inventor of photographic appliances was world wide. Of his inventions the Watkins' Bee Exposure Meter was probably the most extensively used and best known, and proved a boon alike to professional and amateur photographers.

From 1900 onwards he furnished our *Transactions* with over ninety per cent. of the illustrations, until they became known as the best illustrated publications of any local Archæological Society.

His literary contributions also were many and valuable. One of the early ones was a list of the Pigeon Houses of the county, well illustrated and with descriptive particulars. The publication of this list drew attention to these now disused but once very

important adjuncts to every manor, and has been the means of saving a number from demolition, a fate that unfortunately has befallen others since the record was made.

The "Papers" from his pen ranged over a wide field, including Local Potteries, Offa's Dyke, ancient buildings, old trackways, and many articles on antiquities in the City of Hereford. His lectures on "Elizabeth Barrett of Hope End," and "The Ledbury of John Masefield" recalled many incidents in the lives of these poetical geniuses not before recorded. An excellent piece of work was his *Old Standing Crosses of Herefordshire*, published in a separate volume under the auspices of the Club in 1930. This is an exhaustive catalogue of these religious remains in which the county is so rich, and each cross is illustrated from one of his fine photographs.

In his later years he took up the study of ancient trackways and the question of their alignment in straight lines through ancient sites, and if the arguments he brought forward in support of these did not always commend themselves to the more sceptical archæologist, yet in his book, *The Old Straight Track*, he has left behind much food for thought, and a wealth of illustrations which will be a source of pleasure and instruction for years to come.

Another subject in which he took a special interest was milling and the appliances connected therewith. Being a miller by trade, owner of The Imperial Flour Mills in Hereford, which were founded by his father, Charles Watkins, he was particularly qualified for such research. He gathered together a collection of milling tools, mostly local, which he presented, from time to time, to the Hereford Museum.

Alfred Watkins was an individualist and in his antiquarian researches his records were all made from his own personal observations and to that extent are of greater value in not relating anything from hearsay.

His sense of the beautiful in nature and art was highly developed as is apparent in his writings, and more so in his photographs, although he suffered from the severe handicap of colour blindness. In spite of such a disability he tried his hand at coloured photography, and an early specimen of his work in this direction is an illustration of a stained glass window in Eaton Bishop Church, to be found in the *Transactions*.

The writer, who over a period of twenty years, was privileged to consult with him in connection with the editing of the *Transactions*, and who also had to make constant appeals to him for help in arranging the Meetings, can testify that he always found him a willing helper and one to whom no trouble was too great if it would in anyway further the interests of the Club.

An appreciative summary of his merits is given by the writer of his obituary memoir in the *Hereford Times* and may well be repeated

here: "Disinterested service seems to have been the main-spring of his existence. All his knowledge he gave freely and eagerly, with no thought of material advancement. He worked hard all his life in gaining knowledge and imparting it. He loved his native city and had its interests ever at heart. Under his brusque manner lay a kindly nature, generous and just".

His portrait, from a recent photograph, forms a frontispiece to this Volume.

He was laid to rest on Wednesday, April 10th, in the cemetery at Hereford, leaving a widow and son and daughter to mourn his loss.

G. M.

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 „ 24, line 14, *for* outside *read* inside; *and delete* but to county.
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