TRANSACTIONS

OF THE

WOOLHOPE NATURALISTS' FIELD CLUB

HEREFORDSHIRE

"HOPE ON"

"HOPE EVER"

ESTABLISHED 1851

VOLUME XXXVII

1961-1963

Issued 1965

PRINTED BY THE HEREFORD TIMES LTD.

RULES OF THE WOOLHOPE NATURALISTS' FIELD CLUB
(HEREFORDSHIRE)

I.—That the Society be known as the "WOOLHOPE NATURALISTS' FIELD CLUB (HEREFORDSHIRE)" for the practical study in all branches of the natural history and archæology of Herefordshire and the districts immediately adjacent.

II.—That the Club shall consist of ordinary members (ladies and gentlemen) and such honorary members as may from time to time be admitted; from whom a president, four vice-presidents, honorary treasurer and honorary secretary shall be appointed at the annual winter meeting to be held in Hereford in the latter part of each year, and they shall hold office for one year beginning at the next annual spring meeting. The club may also accept for affiliation as approved such societies or groups as exist for the furtherance of similar purposes to those of the club. Each group shall be entitled to have one representative at all meetings of the club, to receive copies of the *Transactions* and generally be treated as one ordinary member.

III.—The management of the club shall be in the hands of a central committee consisting of the said seven officers *ex-officio* and twelve other members elected by ballot at the annual winter meeting. Each elected member of committee shall hold office for three years from the next annual spring meeting and four shall retire each year but be eligible for re-election. Every candidate for election to the central committee shall be individually proposed and seconded at the annual winter meeting and no proposal for election or re-election *en bloc* shall be accepted. In the event of ties the president or the chairman of the meeting shall have a casting vote. Casual vacancies may be filled at any general meeting and any member then elected shall hold office until the date when the term of office of the member whom he or she succeeds would have expired. The central committee shall be empowered to appoint an assistant secretary; its duties shall include making all arrangements for the meetings of the year. Seven shall form a quorum.

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 of such regular meetings be selected at the annual winter meeting, and that ten clear days' notice of every meeting be communicated to 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. The president shall have the privilege of choosing the place of one field day during his year of office. The committee shall also arrange such indoor meetings and lectures during the winter as they find possible.

V.—That the annual subscription for members and affiliated societies be thirty shillings, payable on the 1st January in each year to the honorary treasurer or assistant secretary. The subscription for additional members of the same household may at their option be reduced to ten shillings each, but those paying this reduced sum shall not be entitled to receive the publications of the club. Each member may have the privilege of introducing a friend to any field meeting of the club, but the same visitor must not attend more than two such meetings in one year. Members availing themselves of this privilege will be required to pay a capitation fee of five shillings for a full day meeting, or two shillings and sixpence for a half-day meeting, in respect of each visitor.

VI.—That the president be requested to favour the club with an address at the annual spring meeting on the proceedings of the year, together with such observations as he may deem conducive to the welfare of the club, and the promotion of its objects.

VII.—Every candidate for membership of the club shall be proposed and seconded by members. The central committee shall elect or reject the candidate and one black ball in five shall exclude.

VIII.—That members finding rare or interesting specimens, or observing any remarkable phenomenon relating to any branch of natural history, or making or becoming acquainted with any archæological discovery in the district, shall immediately forward a statement thereof to the honorary secretary or to the appropriate sectional editor.

IX.—That the club undertake the formation and publication of correct lists of the various natural productions and antiquities of the county of Hereford with such observations as their respective authors may deem necessary.

X.—That any member whose annual subscription is twelve months in arrear shall not be entitled to any of the rights and privileges of membership, and that any member whose annual subscription is two years in arrear may be removed from the membership of the club by the central committee.

XI.—That the assistant secretary send out circulars ten days at least before the annual spring meeting to all members who have not paid their subscriptions and draw their particular attention to Rule X.

XII.—That no addition to or alteration of the rules of the club be made except at a general meeting, after notice has been given of the proposed addition or alteration at a previous meeting, and the general purport of such addition or alteration has been circulated to all members with the notice of the general meeting.

XIII.—That no grant of money from the funds of the club exceeding £5 may be voted for any purpose, unless notice of such proposed grant has been given at a previous meeting, or has been approved by the central committee.

XIV.—That these rules be published in each volume of the *Transactions*.

LIST OF PRESIDENTS

1851 Club formed in the winter months.
1852 Lingwood, Mr. R. M.
1853 Lewis, Rev. T. T.
1854 Symonds, Rev. Wm. S., B.A., F.G.S.
1855 Crouch, Rev. J. F., B.D.
1856 Wheatley, Mr. Hewitt.
1857 Lingen, Mr. Charles.
1858 Bevan, G. P., M.D.
1859 Bevan, G. P., M.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.
1869 Rankin, Mr. James, M.A.
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.
1875 Robinson, Rev. C. J., M.A.
1876 Chapman, T. A., M.D.
1877 Morris, J. Griffiths.
1878 Phillott, Rev. H. W., M.A.
1879 Armitage, Mr. Arthur
1880 Knight, Mr. J. H.
1881 Ley, Rev. Augustin, M.A.
1882 Blashill, Mr. Thomas, F.R.I.B.A.
1883 Piper, Mr. George H., F.G.S.
1884 Burrough, Rev. Charles, M.A.
1885 Martin, Mr. C. G.
1886 Piper, Mr. George H., F.G.S.
1887 Elliot, Rev. William, M.A.
1888 Elliot, Rev. William, M.A.
1889 Southall, Mr. H., F.R.Met.Soc.
1890 Croft, Sir Herbert, Bart., M.A.
1891 Cornewall, Rev. Sir George H., Bart., M.A.
1892 Barneby, Mr. William Henry
1893 Lambert, Rev. Preb. William H., M.A.
1894 Davies, Mr. James
1895 Watkins, Rev. M. G., M.A.
1896 Moore, Mr. H. Cecil, F.R.C.S., E.
1897 Moore, Mr. H. Cecil, F.R.C.S., E.
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.R.I.B.A., 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 Moore, Mr. H. Cecil, and Rankin, Sir James, Bart., M.A.
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., M.Inst.C.E., F.S.A., F.G.S.
1917 Grindley, Rev. H. E., M.A.
1918 Bannister, Rev. Canon A. T., M.A.
1919 Watkins, Mr. Alfred, F.R.P.S.
1920 Humfrys, Mr. W. J.
1921 James, Mr. Francis R.
1922 Marshall, Mr. George, F.S.A.
1923 Bradney, Colonel Sir Joseph A., Knt., C.B., M.A., D.Litt.
1924 Durham, Herbert E., D.Sc., M.B., B.Ch., F.R.C.S.(Eng.).
1925 Mackay, Mr. J. C.
1926 Scobie, Colonel M. J. G., C.B.
1927 Day, Rev. E., Hermitage, D.D., F.S.A.
1928 Symonds, Mr. Powell Biddulph
1929 Smith, The Right Rev. Martin Linton, D.D., D.S.O., Lord Bishop of Hereford.
1930 Gilbert, Captain H.A.
1931 Symonds-Tayler, Lt.-Colonel R. H.
1932 Swayne, Lt.-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.
1936 Robinson, Mr. R. S. Gavin
1937 Morgan, Mr. F. C., F.L.A.
1938 Bettington, Mr. E. J., F.R.S.A.
1939 Benn, Mr. C. A., O.B.E., M.A., F.G.S.
1940 Benn, Mr. C. A., O.B.E., M.A., F.G.S.
1941 Martin, Rev. Preb. S. H., M.A.
1942 Martin, Rev. Preb. S. H., M.A.
1943 Waterfield, The Very Rev. R., D.D., Dean of Hereford.
1944 Templer, Mr. P. J. T.
1945 Templer, Mr. P. J. T.
1946 Richardson, Mr. L., F.R.S.E., P.A.Inst.W.E., F.G.S.
1947 Winnington-Ingram, The Venerable Archdeacon A. J., M.A.
1948 Gilbert, Captain H. A.
1949 Wallis, Captain O. B., M.A., LL.B.
1950 Clarke, Rev. B. B., M.A., M.Sc.
1951 Morgan, Mr. F. C., F.S.A., F.L.A., M.A.
1952 Salt, Major A. E. W., M.A.
1953 Cohen, Mr. I., M.I.Mech.E.
1954 Johnson, Colonel T. W. M.
1955 Moir, Rev. Preb. A. L., M.A., F.R.Hist.S.
1956 Winnington-Ingram, The Venerable A. J.
1957 Kendrick, Mr. F. M.
1958 Langford, A. W., M.D., B.Chir., M.R.C.S., L.R.C.P.
1959 Leeds, Mrs. Winifred, F.R.P.S.L.
1960 Maclean, Rev. D. A. L., of Dochgarroch, M.A.
1961 Stanford, Mr. S. C., B.A., F.S.A.
1962 Zimmerman, Mr. A. U.
1963 Coleman, Mr. V. H.

LIST OF MEMBERS

HONORARY MEMBERS

CHITTY, Miss L., F.S.A., Ingleside, Pontesbury, Salop.
COHEN, Mrs. H., 7 Angela Close, Hampton Park, Hereford.
THE EDITOR, *The Hereford Times*, Berrow House, Bath Street, Hereford.
KENYON, Dr. K. M., F.S.A., Old Brands Lodge, Terriers, High Wycombe, Bucks.
MARTIN, Mrs. C. H., 203 Hinton Road, Hereford.
MORGAN, F. C., F.S.A., 1a The Cloisters, Hereford.
PARKER, Rev. Preb. T. H., Vineyard Croft, Hampton Park Road, Hereford.
RICHARDSON, L., F.G.S., 6 Hill View Road, Hanbury Park, Worcester.
SHERWOOD, J. F. W., City Library, Hereford.
WATERFIELD, The Very Rev. R., Hereford, Swinly Road, Ascot, Berks.
WEBSTER, G., F.S.A., 98 Harbourne Road, Birmingham 32.

INSTITUTIONAL MEMBERS AND AFFILIATED SOCIETIES

BIRMINGHAM: Reference Library, Ratcliffe Place, 1.
BIRMINGHAM: University Library, Edmund Street, 2.
BRECON: County Library, High Street.
BRISTOL: City Library.
HEREFORD: Botanical Society, Orchard Gate, Winforton.
HEREFORD: City Library, Broad Street.
HEREFORD: College of Education, College Road.
HEREFORD: County Library, Widemarsh Street.
HEREFORD: Ornithological Society.
KIDDERMINSTER: Public Library.
LEICESTER: The University Library.
LIVERPOOL: The University Library, 3.
LONDON: Geological Survey and Museum, Exhibition Road, South Kensington, S.W.7.
LONDON: Society of Antiquaries, Burlington House, Piccadilly, W.1.
LONDON: Society of Genealogists, 37 Harrington Gardens, S.W.7.
LONDON: University of London, The Library, Senate House, W.C.1.
NEWPORT: Public Library, Dock Street.
ROSS-ON-WYE: Archenfield Archaeological Group, Westaway, Picts Cross.
SOUTHAMPTON: British Mycological Society, c/o Dr. J. G. Manners, Botany Department, The University.
WOLVERHAMPTON: Public Library.

Members' names and addresses have been redacted.

INDEX OF AUTHORS AND TITLES

VOLUME XXXVII; PARTS I, II, AND III; 1961, 1962, 1963

GENERAL INDEX

Compiled by Mrs. L. Duggan

Woolhope Naturalists' Field Club

(HEREFORDSHIRE)

PROCEEDINGS, 1961

FIRST MEETING: 19th January at 7 p.m.; the Rev. Preb. A. L. Moir took the chair in the absence of the President who was ill.

The following were declared elected members of the Club: Mr. I. Homes and Miss A. D. Ewing.

Mr. H. J. Powell, F.R.I.B.A., gave a lecture, illustrated by colour slides, on " Inspection and Maintenance of ancient churches ". He described modern methods and materials used in repair work.

A letter which had been received from the Council for British Archæology was read. This concerned the proposed demolition of Causeway Farm. The Secretary was asked to make further investigations and take any action possible in making representations to the authorities about its preservation.

SECOND MEETING: 16th February at 3 p.m.: the President, the Rev. D. A. L. Maclean in the chair.

Mr. F. M. Kendrick reported on Causeway Farm. The City Council was doubtful about its preservation as the necessary renovation would cost between five and six thousand pounds, but the matter was still under discussion.

The following were declared elected members of the Club: Mr. H. D. Fletcher, Mr. G. G. Nicholson, A.M.I.C.E., Mr. R. F. Williams and Miss Workman.

Mr. T. C. Gwynne reported that his grandson, Christopher, had caught a flounder weighing 2 lb. in the Wye at Holme Lacy. It is very unusual for this species to be found so far upstream.

Mr. A. L. Duggan gave a talk " A historical novelist's approach to history ", in which he discussed aspects of history especially stimulating to his thought and imagination.

THIRD MEETING: 4th March at 3 p.m., in Hereford Cathedral; the Dean of Hereford, the Very Rev. Hedley Burrows in the chair.

Canon A. J. Winnington-Ingram gave a lecture " Hereford and the English Bible ", to mark the 350th anniversary of the publication of the Authorised Version of the Bible. He showed how Hereford has been connected with the task of rendering the Bible into English (see *Transactions*, 1960, pp. 297–305). Books from the Cathedral Library, some of them once the property of Miles Smith, were placed on exhibition.

FOURTH MEETING: 16th March at 3 p.m.; the President, the Rev. D. A. L. Maclean in the chair.

On business arising from the minutes, the Secretary reported that an inquiry into the proposed demolition of the Causeway Farm would be held by an Inspector of the Ministry of Housing and Local Government. Mr. F. C. Morgan consented to act as the Club's representative at the inquiry.

The following were declared elected members of the Club: Lt.-Col. Morris Colquhoun Richardson, Mrs. Neil Richardson, Miss Irene Taylor, the Rev. J. Armentiers Croft, Archenfield Archæological Group.

Reports were received from the sectional editors for Mammals and Ornithology, Archæology, Botany and Geology (see *Transactions*, 1960, pp. 361–363, 371–374).

The Rev. Preb. A. L. Moir proposed that as many of the landscape gardens of the county were fast falling into decay, some record of them should be made by the Club. The President suggested that members interested should get into touch with Prebendary Moir.

SPRING ANNUAL MEETING: 6th April; the President, the Rev. D. A. L. Maclean in the chair.

The amendment to Rule V proposed at the Winter Annual Meeting of December 10th, 1960, was approved. By this, guests may attend field meetings on payment of a fee of 5s. for a full-day meeting and 2s. 6d. for a half-day meeting, but no one guest may attend more than two field meetings in any one year (see *Transactions*, 1960, p. xxv).

Mrs. M. U. Jones declined re-election to the Central Committee. Her suggestion that Mr. F. G. Heys should serve was approved.

It was announced that the excavation on the Castle Green would be continued in July or August.

A grant of £10 for the excavation at Buckton, recommended by the Central Committee, was approved.

The Treasurer's statement, showing a balance of £283 18s. 0d. at the end of December, 1960, was read and approved.

The Assistant Secretary reported on membership. At the end of 1959 the Club had 523 members. During 1960, 63 new members (one of whom re-joined) were elected but this number was almost balanced by a loss of 61 of whom 18 had died, 27 resigned, eight left and eight were struck off. At the end of 1960, therefore, membership stood at 525.

The following were declared elected members of the Club: Mr. A. C. Ellis, Lady Falkiner, Mr. W. D. Harrisson, the Rev. R. C. and Mrs. Moore, Mr. T. H. F. Adams.

The President gave his Presidential Address, "Lady Joan de Bohun and the descent of Kilpeck" (see the present number of the *Transactions*, pp. 9–20).

As retiring President, the Rev. D. A. L. Maclean then installed as President for 1961–2, Mr. S. C. Stanford, who expressed the thanks of the Club to Mr. Maclean for the service he had given in his year of office.

It was decided that of the two remaining field meetings for 1961, one should be held in the Bromyard area and the other in south-west Herefordshire.

The recording of inscriptions on grave stones was raised as a matter for the Club's concern. It was agreed that a sub-committee be formed to consider it.

FIELD MEETINGS

FIRST FIELD MEETING: 6th May.

Members visited the church at Burford (Salop), where the Rev. D. A. L. Maclean described the monuments, and then moved on to a worked-out quarry on the Titterstone Clee. Here Mr. F. M. Kendrick spoke about the geology of the Clee Hills. The Ddu stone found there has for many years provided road metal. The remains of the inclines terminating at Bitterley were seen. At the Heath the Rev. Preb. A. L. Moir described the small Norman church and pointed out how it still stands much in its original form and here, too, the President gave a talk on Nordybank Camp. A visit to this site had to be omitted because of the inclement weather. At a business meeting Mrs. E. Simcoe was declared elected member of the Club. The last visit was to the old church of Richard's Castle and to the castle site there where the President spoke on its significance. As undergrowth had been cleared it was possible to appreciate the impressive height of the motte.

SECOND FIELD MEETING: 27th May.

After visiting Hopton Castle where Mr. F. Noble spoke on its history members drove, by kind permission of Major W. M. Parish, through Walcot Park, to Lydbury North where they visited the church of which an account was given by the vicar, the Rev. G. E. M. Gardner-Brown. The Party went on to see the stone circle at Mitchells Fold about which the President spoke and then, the coaches having been left near the Bog, walked to Cranberry Rock, a striking formation, part of the Stiperstones ridge, where Mr. F. M.

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Kendrick discussed its geology. At a business meeting the following were declared elected members of the Club: Miss F. Baker, Mrs. C. Bullick, Mrs. Meredith, Derek Meredith, Mrs. Straughan. On the way home, traces of the abandoned Bishop's Castle Railway were seen in the Onny valley.

THIRD FIELD MEETING (Half-day): 15th June.

At Marcle Hill Mr. F. M. Kendrick gave an account of the geology of the Woolhope Dome. A visit was made to Kempley Old Church where the vicar, the Rev. J. W. J. Thackwell, gave an account of the wall-paintings and history of their discovery and restoration. Members visited Homme House by kind permission of Commander and Mrs. Kyrle Pope who showed them the house and gardens. On the way back to Hereford, the Iron age camp at Capler was seen, and was described for members by the President. At this meeting Mr. F. C. Morgan announced that he felt he must resign from the Editorial Committee. His resignation was received with very great regret. An appreciation of his editorial work for the Club appears on p. 7. The following were declared elected members of the Club: Mr. W. A. Blake, Col. and Mrs. F. C. Coy, Brigadier and Mrs. H. N. Sowden, Mrs. E. A. Probert.

FOURTH FIELD MEETING: 6th July.

At Risbury Camp, which was visited by kind permission of Mr. A. Bemand, members walked round the defences which were described by the President. The party then went to Brockhampton Old Hall, where Mr. H. J. Powell gave an account of its architecture, and saw the ruined Norman chapel. At a short business meeting the following were declared elected members of the Club: Mr. R. C. R. Blackledge, Major Bellville, Miss Mary West, Miss Isobel Mead, Miss G. Evans, Mrs. L. Kynaston Davies, Mr. Frank Constantine, Mr. Victor Hatley. Near Sapey Common a visit was made to see the traces of the Roman Camp where the President had conducted on behalf of the Ministry of Works a rescue dig which he described. At Southstone Rock Mr. F. M. Kendrick described the formation of this striking cliff of calcareous tufa. The next stop was made at the site of the Roman fort at Tedstone Delamere which had been revealed by Dr. St. Joseph's air photography. The last halt was at Bromyard where Mr. H. J. Powell gave an account of the Parish Church.

FIFTH FIELD MEETING: 3rd August.

The first halt was at Longtown Castle which was described by Mr. F. Noble and the party then went by the newly opened route, to the Daren. Mr. F. M. Kendrick gave an account of the region's

geology and botany. At a business meeting the following were declared elected members of the Club: Mr. and Mrs. H. Powell Tuck, Dr. J. Ross. The small and sequestered church at Partrishow was then visited and was described by the Rev. Preb. A. L. Moir. The last stop was at Llanvihangel Court where members saw the house and had tea in the garden.

SIXTH FIELD MEETING (Half-day): 2nd September.

At Kenchester Mr. F. G. Heys described for members the excavations at the West Gate. A visit was then made at Stretford church which the Rev. Preb. A. L. Moir described. The coaches next took the party by a steep rough climb to Ivington Camp where the President, Mr. S. C. Stanford, gave a talk. Members walked round the defences and saw the impressive southern entrance. The following were declared elected members of the Club: Mr. and Mrs. G. E. Archer, Mr. Stabler.

AUTUMN MEETINGS

FIRST MEETING: 9th November; the President, Mr. S. C. Stanford, in the chair.

Members stood in silence in memory of the late Mr. G. H. Butcher, an ex vice-president, and of Miss Armitage.

A large mouse with a yellow cross on its neck was exhibited by Mrs. Heath. This was identified by Dr. C. W. Walker as a de Winton mouse.

Mr. F. C. Morgan read a paper on the Causway Farm (see present number of the *Transactions*, pp. 21–31).

Mr. F. M. Kendrick spoke on recent work on the Silurian rocks.

SECOND MEETING: 29th November; the Rev. Preb. A. L. Moir in the Chair in the absence of the President who sent an apology for his absence.

The following were declared elected members of the Club: Miss Janet Baker, Mr. and Mrs. G. R. John, Mr. J. H. Bowles.

Mr. Basil Butcher gave a talk, illustrated with colour slides, on the River Arrow, in which he described the course of the river through its 28 miles from its source on Gwaunceste Hill to its confluence with the Lugg. Mr. F. M. Kendrick then described geological factors explaining changes in the river's course.

AUTUMN GENERAL MEETING: 9th December; the President, Mr. S. C. Stanford in the chair.

Unanimous agreement was given to Mr. A. Shaw Wright's suggestion, conveyed by the President, that the Club's appreciation

of the work done by Canon A. J. Winnington-Ingram be recorded in the minutes. His retirement to Winchester has brought his valuable services to the Club to an end.

The following Officers were elected for 1962:

President: Mr. A. U. Zimmerman.

Vice-Presidents: Mrs. F. Leeds, Dr. A. W. Langford, the Rev. D. A. L. Maclean of Dochgarroch, Mr. S. C. Stanford.

Members of the Central Committee: Miss M. Jancey, Mr. F. G. Heys, Mr. F. Noble, Mr. H. J. Powell.

Hon. Treasurer: It was agreed that Mr. J. E. Rosser's consent be accepted, and he be appointed as Hon. Treasurer in succession to Mr. D. A. J. Weedon to whom the President expressed the Club's thanks for his work and for taking care of the succession to the treasurership.

Sectional Recorders: Botany and Geology: Mr. F. M. Kendrick; Entomology: Dr. H. G. Langdale-Smith; Archæology: Mr. S. C. Stanford; Architecture: Mr. H. J. Powell; Dialect: Mrs. W. Leeds.

Editorial Sub-committee: Miss M. Jancey, Mrs. M. U. Jones, the Rev. Preb. A. L. Moir, the Rev. D. A. L. Maclean, Mr. S. C. Stanford.

Hon. Lanternist: Mr. W. T. Jones.

The President expressed the hope that more efficient black-out could be provided for the Club Room.

It was resolved to hold two extra half-day field meetings at either end of the usual programme of six field meetings, one to be a visit to Aconbury and the other a fungus foray. Full day field meetings were to be at Kington and Llandovery, and a half-day meeting at the southern end of the Malvern Hills.

The President announced that a survey of grave-stones would be under-way within the next few months and that the brochure explaining the Club's activities would be ready by the spring. Mr. F. M. Kendrick gave his report on botany and geology. From this the question arose of the access to the Doward of plant collectors in motor cars and it was suggested that he approach the Forestry Commission about the restriction of such access. He paid warm tribute to the willing co-operation the Commission gave to botanists. The President reported on archæology, stressing the generosity with which landlords and farmers had co-operated with the Club's archæologists and the welcome development of long term projects during recent years at Kenchester, Huntsham, Wallingstones, Leintwardine and Croft Ambrey.

APPRECIATION

On the Retirement of Mr. F. C. Morgan from the Editorial Sub-committee of the Club

At the Kempley field meeting we received Mr. F. C. Morgan's resignation from the Editorial Sub-committee. One does not readily accept the retirement of one so able but we could not complain. F. C. had served on that committee since 1938, and as chairman of it had taken the major responsibility for the editorial work since 1946. During the past 15 years he has not spared himself in maintaining the standard, scope, and annual publication of the *Transactions*, and inevitably his unsurpassed knowledge of the county has shown through these annual records of our proceedings. The widespread interest in its major articles shown by scholars in many distant parts testifies to the success of his work which included the editing of the centenary volume for 1951. The generosity with which he has expended his time, patience and skill on behalf of the Club can be but poorly repaid with our thanks and it is sad that it should be his resignation that offers us an opportunity of expressing them.

S.C.S.

PRESIDENTIAL ADDRESS

By The Rev. D. A. L. Maclean of Dochgarroch, M.A.

SOME OBSERVATIONS ON THE FAMILY OF LADY JOAN DE BOHUN

On the north side of the Lady Chapel in Hereford Cathedral there lies the effigy of a woman on an altar tomb under an arch. The beauty of the monument and the quizzical look on the lady's face attract interest. As the framed card put there for the information of visitors is misleading,* these notes, the result of two years' investigation as to who the lady was and what she did, are offered for the records of the Woolhope Club.

The Tomb

The Lady Chapel was used as the cathedral library from 1590 to 1841, and in 1717 R. Rawlinson says that between the bookcases there is a Lady in a nun's habit, holding up her two hands folded, without any inscription. He also gives a more detailed description, as follows: " Under the next window above the last, under an arch, lyes the effigies of a woman on a pillar, her hands lifted up, at her feet a dog. Over this woman was painted several portraitures, that of St. Ethelbert remains inclining his ear to some persons holding a book. Thereon this is inscribed: Salve sca parens. At the dexter corner of the arch of this monument are these arms, viz. Bohun, a bend cotised between six lions rampant. On the sinister corner of the said arch these arms, ermine, a bend indented gules ".[1]

In 1796, John Price tells us that the painting was still to be seen and echoes Rawlinson as follows: " Under the next window to the last, beneath an arch, lies the effigies of a woman on a pillow, with her hand lifted up, and at her feet a dog. There is an appearance of some portraits having been formerly painted upon the wall over this woman; that of St. Ethelbert is partly discernible at this time. He seems to be inclining his ear to some person holding a book ".[2]

In 1804, John Duncumb, who considered the adjacent monument of Sir Peter de Grandison to be that of a De Bohun, earl of Hereford, says: " the effigies of his (i.e. the earl's) lady, habited as a nun, lies under a plain arch in the same wall, on an altar studded alternately

* The card has now been corrected.

round the verge with roses and human faces; her hands are also clasped on the breast, and a dog lies at her feet; it has been painted in various colours, but has no arms nor inscription ".[3]

In 1827, Garbet describes the tomb as " Under a plain arch containing frescoes at the back of the foundress offering a chapel to the Virgin, Joanna Bohun, countess of Hereford, died 1327; coloured tomb and effigy ".[4]

In more recent times it has been decided that there is no connection between the Grandison tomb and the one under consideration; that this tomb is that of Joan de Bohun, who gave a benefaction to the cathedral in 1327 and died some two months later in the same year; but that she was not a countess of Hereford, despite the statement on the card.

A full description of the tomb is given in the Report by the Royal Commission of Historical Monuments, 1931, as follows: " In Lady Chapel against N. wall (1) to [Joan (Plunkenet) wife of Henry de Bohun, 1327], altar tomb with effigy in wall recess, plain altar-tomb with moulded top edge enriched with paterae and heads alternately, at head recumbent canopy with ogee cinquefoiled arch, crockets and finial, effigy of woman in wimple and veiled head-dress, tight sleeves and loose gown, head on cushion and feet on dog; all set in a 13th-century recess with moulded and segmental-pointed arch and label with head-stops and apex turned up to mitre with string-course of chapel; remains of black and red colour on effigy and arch, traces of painted figure and arch on back of recess and remains of decoration in spandrels of arch, including diaper of fleur-de-lis and rosettes, and two shields of arms (*a*) Plunkenet, (*b*) formerly Bohun, but now obliterated ".[5] The Report also gives a photograph of the monument which shows that the arms called (*a*) were on the sinister side, and those called (*b*) had been on the dexter.[5] In spite of the learned report, the lady's maiden name was certainly Plukenet and not Plunkenet, and she was equally certainly widow and not wife of Henry de Bohun in 1327.[5]

During the second half of the year 1946 the monument was restored under the care and advice of Professor E. W. Tristram.[6] The lady's hands and nose were repaired as were the noses of the two head stops of the arch. The repainting was done by Mr. Maurice Keevil. No attempt was made to restore the picture on the back of the recess but the shields were repainted—the one on the dexter as de Bohun, earl of Hereford, viz. azure, a bend argent, between two cottises and six lioncels or—the one on the sinister as Plukenet of Kilpeck, viz. ermine, a bend fusilly gules. It is probable that the de Bohun arms originally had silver cottises to distinguish them from those of the earl of Hereford. It would appear from Moor's

Knights of Edward I[7] that the de Bohuns of Haresfield, to which branch Henry belonged, bore azure, a bend cottised argent, between six lioncels or.

The judicious use of paint has certainly given character to the face of the lady and it is difficult not to regard it as a portrait. It is also tempting to see the head stop on the left side of the arch under the de Bohun shield to be another likeness of the lady, in which case the head stop on the right under the Plukenet shield may be a likeness of her brother Alan. The only regrettable part of the restoration is that of the lady's hands, which are too large and clumsy, and out of keeping with the beauty of the rest of the monument.

Before leaving the tomb, it should be noticed that the Report of the Royal Commission states that the recess and arch are the work of the thirteenth century and that the apex of the arch is turned up to mitre with the string course of the chapel. This suggests that the arch was built at the same time as the chapel, which was completed about 1225,[8] and that the lady Joan's tomb was inserted a century later.

The Lady

Joan Plukenet was one of the two children of Sir Alan Plukenet, lord of Kilpeck, and his wife Joan (Wake). The date and place of her birth are unknown, but her brother was born about the year 1276. There does not appear to be any contemporary mention of her until the death of her first husband in 1295. She was widowed a second time in 1314. She only became an important person when she succeeded her brother as lady of Kilpeck in 1325, and she died a little over two years later in 1327.

Both her father and brother are included in the Dictionary of National Biography—not without some inaccuracies—in a short article by C. L. Kingsford. A brief summary of their career will suffice here to include their Herefordshire connections and points in their rather intricate pedigree.

Her Father

Alan Plukenet was born somewhere about the year 1230. At an inquest held at Yeovil in Somerset in 1352, over 50 years after his death, it was said that he was an alien and a bastard.[9] At another inquest held in connection with the same suit it was said that he was born at Thornton in Dorset.[10] The former finding was certainly mistaken. He was neither an alien nor a bastard. His father was a previous Alan de Plukenet, who was serving abroad with Fulk Fitzwarine in 1230 when he and his wife, Alice, were sued by Richard de la Bere about a carucate of land in Kilmeston, Hants.[11] His

mother, Alice, was daughter and heir of Thomas de Rocheford by Isabel de Berkeley.[12] Alice had been married to Andrew de la Bere before her marriage to Alan de Plukenet.[12] (Andrew and Alice held lands in Ozleworth, Glos. from the Berkeleys in 1220.)[13] When Alice died in 1233, her heir was her son by her first husband, Richard de la Bere, who was under age and in the care of the Bishop of Winchester.[14]

Alan was therefore orphaned of his mother at a very early age and nothing more is heard of his father, who may have been killed fighting abroad. The orphan was evidently brought up by his mother's half-brother, Sir Robert Walerand, son of Sir William Walerand by Isabel (de Berkeley), widow of Thomas de Rocheford.[12] The Plukenet arms, " De ermyn a une bende engrele de goules ",[15] are only a differenced version of those of Walerand, " D'argent ung bend engrele de goules ".[16]

Sir Robert Walerand, who acquired the castle and manor of Kilpeck from his brother William in 1259,[17] the manor of Treville from Prince Edward in 1262,[18] and the manor of Lugwardine from Prince Edmund in 1270,[19] was an important official of King Henry III. He was at various times constable of royal castles, keeper of royal forests, and sheriff of several counties. In the turbulent reign of Henry III he was on the king's side, and he was well rewarded for his loyalty with grants of manors which had been forfeited by rebel barons. He was given licence on 5th December 1271 to hunt with his own dogs the hare, fox, badger, and wild cat in all forests south of Trent.[20] The Rolls are full of entries concerning him, and his story is given in the D.N.B. in an article by Mrs. Tout.

There is no doubt that Alan Plukenet was brought up to become his uncle's eventual heir. Sir Robert's legal heirs were his brother William's two sons, both of whom were idiots. When Prince Edward gave Sir Robert Walerand the manor of Treville, it was with the proviso that if he left no heirs of his body, Alan should succeed him.[18] Alan is said to have reclaimed that part of the forest of the Hay of Hereford now called Allensmoor, supposedly after him. His uncle, as Lord of Kilpeck, was the Keeper of the forest, and Alainesmor was so named by 1265.[21]

Alan fought for the King in the Barons' War and after the battle of Evesham in 1265 he was constable of Dunster Castle and was given the manor of Haselbury in Somerset for his services to the king and Prince Edward, to hold of the king in chief for the yearly rent of a rose-bud.[22] Haselbury is still called Haselbury Plucknett, which gives a clue as to the pronunciation of the name, as does Preston Plucknett in the same county.

Alan was already a knight in 1270 and constable of Corfe Castle in Dorset,[20] where his arms can still be seen on one of the towers (called, but only in recent times, the Plunkenet tower, in error for Plukenet).

In 1269 Sir Robert Walerand granted Alan his castle and manor of Kilpeck with the bailiwick of the King's forest of the Hay of Hereford, and Alan regranted them to his uncle for life—a not unusual arrangement to secure inheritance. After his uncle's death in 1273, Alan accordingly had possession of these lands and of Treville.[23]

Alan took a prominent part in the Welsh War, where he was said to have provoked the rising of Rhys ap Meredith. In 1287 he was appointed constable of Drosselan Castle, forfeited by Rhys. Alan held the castle for over two years.[24]

He continued his close connection with his surviving Walerand kin. In 1283 he was appointed custodian of the lands of Isabel Walerand, who was then infirm.[25] She was Isabel of Kilpeck, who had married Sir William Walerand, and with him had given Kilpeck to William's brother Sir Robert in 1259 in exchange for manors in Wiltshire.[17] On Isabel's death in 1284, Alan retained the custodianship of the lands which had now passed to her son Robert Walerand, an idiot.[26] In 1291 Alan was made custodian of the manor of Winford Eagle in Dorset for Robert's brother, John Walerand, also an idiot.[27]

From 1295 to 1297 he was summoned to Parliament as a baron,[28] which entitles him to a place in peerage books as Lord Plukenet.

He was one of the council to assist Prince Edward, the governor of the realm, during the king's absence in Flanders in 1297 and 1298. The chronicler calls him " a knight of tried distinction ".[29]

Alan died shortly before 25th December, 1298, when the writ for his inquest was issued. He held lands in the counties of Hereford, Berks, Oxford, Somerset, Wilts, Dorset and Hants.[30]

Her Mother

Joan Wake was a daughter of Sir Andrew Wake of Dowlish Wake in Somerset. Her father gave her in free marriage to Alan Plukenet with lands at Tangley in Hampshire and at Batcombe in Dorset as a dowry.[7] Alan provided lands at Mudford Terry, Somerset, part of his manor of Haselbury, to be held by them jointly for life.[31]

As executrix to Alan she had livery of the manor of Wynford Eagle in Dorset for the maintenance of John Walerand, the idiot,[32] and the custody of John was confirmed to her in 1308.[33]

She died in 1315, desiring by her will to be buried in Sherborne Minster, but her son Alan had her buried elsewhere.[34]

Her Brother

Alan Plukenet was 22 years old and over at his father's death in 1298.[30] He was summoned at intervals to serve in the war against Scotland between 1300 and 1319.[28] In 1304[35] he was styled King's Yeoman and was with others knighted with Edward Prince of Wales at Whitsun, 1306.[36] In 1309 he was granted a weekly market at his manor of Kilpeck and a yearly fair on the vigil and feast of the Assumption and the two days following.[37]

John Walerand, his cousin, died in 1308,[38] and an extraordinary scramble ensued to gain possession of the Walerand estates in ten counties. They included Lugwardine in Herefordshire. Thirty-five inquisitions were held. Some found Alan Plukenet the heir, on the plea that his grandmother, Alice, was the full sister, and the only sister, of Sir Robert and Sir William, John's uncle and father —which she was not. She was a half-sister on the mother's side. Others found that the heirs were John de Eddeworth, Bogo de Knovill, Alice de Everingham, Maud la Bret, otherwise de Croupes, and Cecily wife of Peter de Helion, as descended from other sisters. Their case was that Sir Robert and Sir William had a brother John, a clergyman, and five sisters: (1) Alice, abbess of Romsey; (2) Maud, who died s.p.; (3) Isabel, mother of Emery de Parco who died s.p.; (4) Alesia, mother of John de Eddeworth, who died before the case was finished, s.p.; and (5) Cecily, who had three daughters: (*a*) Joan, mother of Bogo de Knovill; (*b*) Alice de Everingham; and (*c*) Cecily, mother of Maud la Bret and Cecily Helion.[38]

It is certain that the brother John existed. He was the king's clerk and had dispensation 19th April, 1255, to hold benefices to value of 200 marks with Clent Rectory, Worcs.[39] He was presented by the king to various livings and in 1268 to the prebend of Barton (Colwall) in Hereford Cathedral, with a mandate to Giles de Avenesbiry, treasurer of the cathedral, to install him without delay should the dean refuse to do so.[40]

It is also certain that Alice was abbess of Romsey from 1268 [41] until 1298.[42] Sister Maud also existed. She and her maid were admitted to Romsey Abbey at the king's wish in 1253.[43]

So it may well be that Isabel, Alesia and Cecily also existed. The case went up for trial and the jurors brought in a verdict for Alan Plukenet, who had livery of the lands in 1310.[44]

Alan was summoned to Parliament as a baron in December 1311, but the summons was not repeated.[28]

As keeper of the king's forest of the Hay of Hereford, he was ordered from time to time to deliver wood to the sheriff of Hereford. On one occasion in 1315 he had to provide eight oaks fit for timber to repair the houses and bridges of Hereford Castle.[45]

In June, 1315 he was summoned by John Drokenford, bishop of Bath and Wells, to appear before him to account for his not having buried his mother at Sherborne Minster as she had directed in her will. It was said that in his anger Alan made the bishop's messenger eat the letter with the wax seal. Alan denied this, but admitted that he had the messenger so soundly beaten that in his terror he ate the letter and seal without compulsion. The bishop excommunicated Alan.[34]

In 1318 he obtained letters of protection from pleas by promising in court that he would go to serve in the Scots War and stay there in the king's service, but as he had suppressed the truth, the king's protection was withdrawn and the justices were ordered to proceed in the suits.[46]

In 1319, Alan tried to make something out of Lugwardine. On 12th January, Adam Orleton, bishop of Hereford, set up a commission to arrange an exchange between the dean and chapter of Hereford and the nobleman Sir Alan Plukenet, knight, lord of Kilpeck and of Lugwardine, patron of the church of Lugwardine. The dean and chapter were to get the advowson of Lugwardine and Alan was to get the manor of Homme Lacy of la Buryton.[47] Nothing came of this. In June, Alan gave a charter to Dore Abbey confirming his gift of the advowson of the church of St. Andrew, Lugwardine, with all the chapels in Archenfield.[48] In fact, the parish church of Lugwardine is dedicated to St. Peter.

In spite of this gift, Alan Plukenet presented Henry de Schorne to the benefice of Lugwardine with the chapels of Llangarron, Hentland and St. Weonards in 1320.[47]

In 1323, Bishop Orleton received a mandate from the Court of Canterbury to excommunicate Sir Alan Plukenet for having failed to pay a sum of 200 marks to his wife, Lady Sibyl, who had sued him to fulfil a contract made between them two years previously before the Bishop of Salisbury.[47] This suggests that his married life was not of the happiest.

In August, 1325 he had licence to grant the manor of Lugwardine to Mr. Thomas Chaundos to hold for life by a fine of £30.[49] Alan died before 6th September, 1325, when his goods were confiscated in payment of his debts.[50]

He was buried at Dore Abbey, where, according to Leland,[51] this nice heroic couplet marked his grave:

ULTIMUS ALANUS DE PLUKENET HIC TUMULATUR:
NOBILIS URBANUS VERMIBUS ESCA DATUR.

This could be rendered, " Entombed lies Alan, last of Plukenet's line; a noble, cultured man, that worms may dine ". But the

second line might also be translated, " A known, deceitful man, that worms may dine ".

Alan had married his wife Sibyl in 1295.[52] Her family is unknown, and there were no children. She married before 20th September, 1329, Henry de Pembrigg,[53] who died in 1341.[12] She died 14th February, 1353.[12]

Her First Husband

Thomas Corbet was the eldest son of Sir Peter Corbet of Caus. Sir Peter was a baron of Parliament and a man of consequence in the service of the king. Among many references to him, we may note a writ, in 1281, ordering him to destroy all wolves in the parks and forests of the counties of Gloucester, Worcester, Hereford, Salop and Stafford.[54]

Sir Peter died shortly before 10th August, 1300, holding Caus Castle and several manors in Shropshire as five Knight's Fees. At his inquest it was recorded that he had had an eldest son, Thomas Corbet, who at his father's wish espoused Joan, daughter of Alan Plukenet, and died without issue at the feast of St. Martin (November 11th), 1295. Sir Peter had then, without the king's licence, given Joan his manor of Binweston, Salop, as dower to hold for her life without service and to revert at her death to himself and his heirs.[55]

The age of Thomas can be approximately estimated from the age of his next brother, Peter, who was 30 when he succeeded his father as baron of Caus in 1300.[53]

Her Second Husband

Sir Henry de Bohun was a grandson of that Humphrey de Bohun, earl of Hereford and Essex, who died 24th September, 1275. The earl had married a second wife, Maud of Avenbury, and by her had a son, Sir John de Bohun of Haresfield, Glos.[7] Sir John was one of the witnesses to the marriage charter, 11th January, 1275, of his nephew Sir Humphrey de Bohun and Lady Maud de Fenles. Sir Humphrey succeeded his grandfather as earl eight months later. Sir John died in 1292, leaving a son and heir, Henry, aged 15.[56]

This son, Sir Henry de Bohun of Haresfield, was summoned to serve in Flanders in 1297 and in Scotland from 1298.[7] In October, 1306, his lands and goods were confiscated for his desertion from Scotland, but they were restored, and he was pardoned at the request of Queen Margaret in January, 1307.[57]

Sir Henry retrieved his honour and became a famous man, known by name to Englishmen who are interested in history, and to almost all Scots, by his action and death on Sunday, 23rd June, 1314, the day before the battle of Bannockburn.

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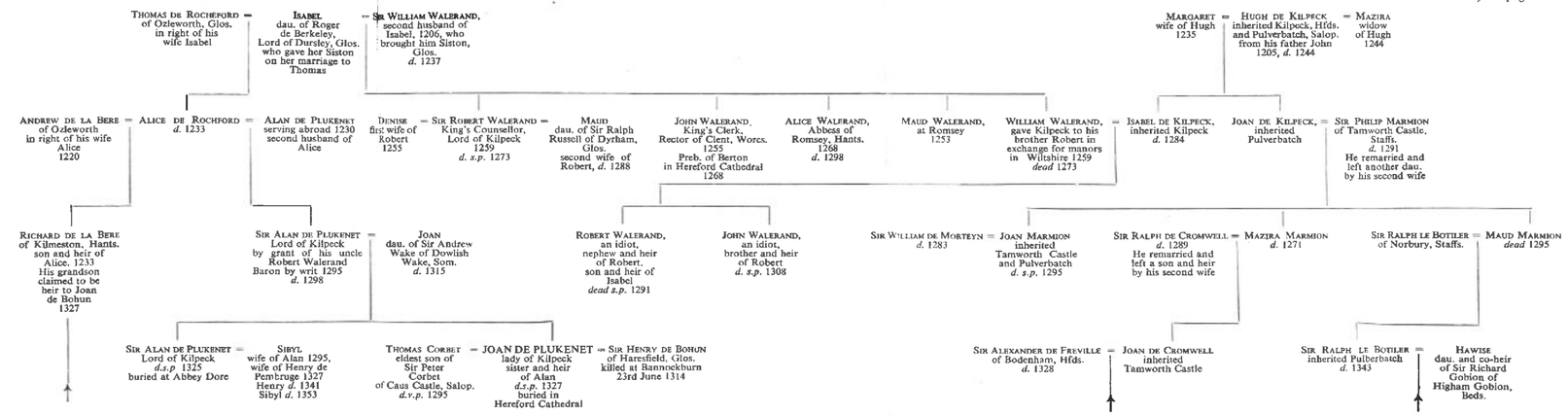

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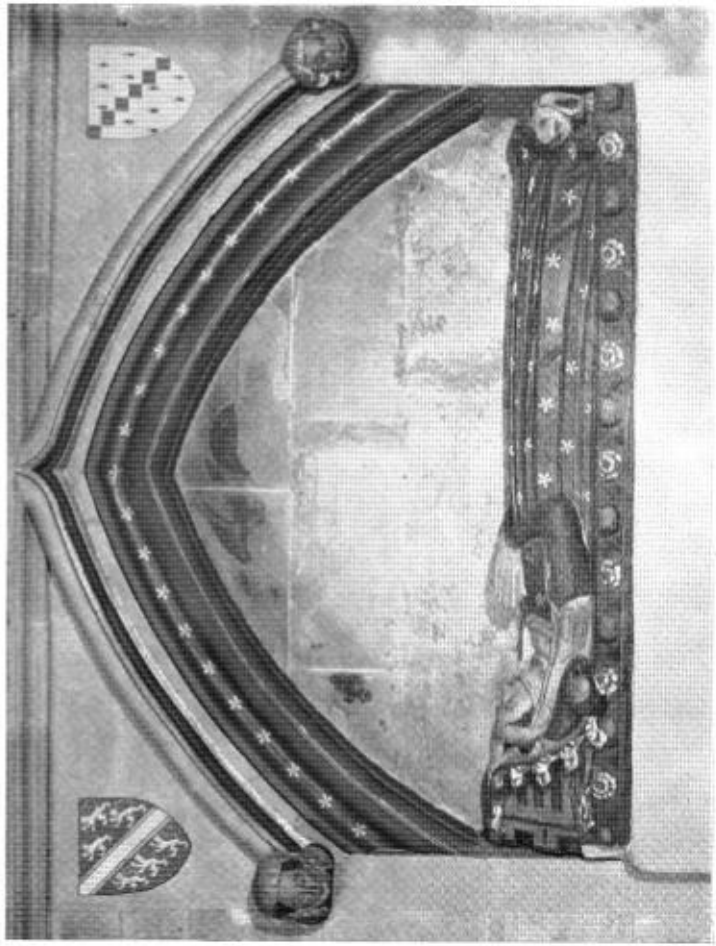

THE TOMB.

RIGHT HAND HEAD-STOP.

LEFT HAND HEAD-STOP.

" Bruce, unarmoured, and mounted on a sturdy Scottish pony (possibly like the present Highland garron), no doubt to keep his charger fresh, was riding round his forward troops encouraging them, when the leading English mounted patrols were seen just after crossing the Bannock burn. Recognising the Scottish king by the gold coronet he was wearing, one of the English knights, Sir Henry de Bohun, set his lance and charged. But Bruce skilfully avoided the deadly point and, rising in his stirrups, cleft de Bohun's helmet and skull with his battle-axe. On being reproached by his generals for the risk he had taken, it is said that he merely remarked, ' Alas, I have broken my good battle-axe ' ".[58]

There is a full account of the battle by Major A. F. Becke in the appendix to vol. xi of the Complete Peerage, 1949.

In 1313 the manor of Binweston was held by Henry de Bohun and Joan his wife for her life by demise of Peter Corbet.[59] In 1315 it was held by Joan, late the wife of Henry de Bohun.[60]

In 1316, the king's rights in any future marriage which Joan might make were granted to Robert Fitz Payn.[61] This grant brought no benefit to Fitz Payn, as Joan did not marry again after the death of de Bohun.

Her Tenure of Kilpeck

Joan de Bohun was heir to her brother Alan Plukenet, who died shortly before 6th September, 1325. She was now a tenant in chief and a lady of importance. The first business to be settled was the assignment of dower to Alan's widow, Sibyl, and this meant a suit in chancery in which Joan appointed Simon de Wyly and Godfrey Moriz to represent her interests.[62] The case was settled by 14th October, 1325, when Joan did homage and got possession of her inheritance.[63] On 17th October, Sibyl received as her dower one-third of the income from the following manors and lands, Kilpeck and Treville, Herefs.; Siston, Glos.; Haselbury, Som.; Kington, Dorset; Langford near Britford, Wilts.; Meonstoke and Tangley, Hants.; and East Ginge., Berks.—altogether £141 13s. 3d.[64]

Before the end of 1325 Joan founded a chantry at God's House, Portsmouth, where a chaplain was to say a daily mass for herself, for Robert de Harewedon, the late Warden of St. Nicholas convent, for William de Harewedon, the present Warden, and for their parents and friends.[65]

On 5th February, 1326 the Treasury demanded repayment of £518 13s. 4d. which had been advanced to Joan's father, Alan Plukenet, when he was King's Constable of Drosselan Castle in Wales 38 years before. Joan claimed that the money had been spent in repairing the castle and that her father had accounted for it a year later.[66]

On 20th April, 1326, she was ordered to deliver five oaks from the forest of the Hay, suitable for timber, as a gift from the king to the citizens of Hereford for the repair of the city gates.[67]

On 24th July, 1326, a licence was given for Joan to grant to Roger Corbet of Caus and Amy his wife and Roger's heirs her two-thirds of Haselbury manor and the advowson of the church and the reversion of the other one-third on Sibyl's death, and for the Corbets to regrant them to her for life.[68] This licence was not apparently used, as these Corbets made no claim to Haselbury afterwards.

Joan was granted licence, 18th February, 1327, at the request of A(dam de Orleton) bishop of Hereford, the King's treasurer, and Thomas de Chaundos, King's clerk, archdeacon of Hereford, to alienate in mortmain to the Warden and Chaplains of the church of St. Ethelbert, Hereford, the advowson of the church of Lugwardine, held in chief, with its annexed chapels of Llangarren, Hentland and St. Weonards, to celebrate Mass of the Virgin Mary in their church for the good estate of the king's father, the king, and Isabella his mother as well as of Joan herself, the bishop and the archdeacon and for the souls of the king's ancestors and successors.[69] It should be noted that " the king's father " means the unfortunate Edward II, who was murdered in Berkeley Castle on 21st September following this grant.

On 17th March, 1327, there was an order to deliver to Sibyl as part of her dower one-third of the profit of the serjeantry of keeping the forest of the Hay of Hereford.[70]

It must have been a considerable relief to Joan when on 26th July, 1327, there was an order to the treasury to cause Joan de Bohun of Kilpeck, sister and heir of Alan Plukenet, to have respite until All Saints next for all debts due to the exchquer.[71]

There may have been a sinister connection between this respite and her summons to answer to Eleanor de Bohun that she hold to a covenant made between them concerning the castle and manor of Kilpeck.[72] Eleanor was a protegée of Queen Isabella.

On 5th September, 1327, Godfrey Moriz (who had been one of Joan's agents in the settlement of Sibyl's dower) and Maud his wife were pardoned at the instance of Eleanor de Bohun for acquiring for life the house and lands and 40s. rent in East Ginge, Berks., which Joan had granted them without licence, and they were given licence to keep the same. This pardon was repeated by the king on 9th October, 1327.[73]

On 29th September, 1327, Joan was pardoned all debts due to the exchequer by herself and her ancestors leviable on the ancestral lands. This pardon was at the request of Queen Isabella in consideration of the affection which Joan had shown to Eleanor de

Bohun, one of the daughters of Humphrey de Bohun, late earl of Hereford and Essex, by enfeoffing Eleanor of the lands which were of Joan's own inheritance.[74] Licence followed on 10th October for Joan to enfeoff Eleanor of the castle and manor of Kilpeck, the manor of Trivel and the bailiwick of the forestry of the King's Hay of Hereford held in chief, and for the feoffee to regrant them to her for life.[75]

On 18th October, 1327, Joan granted in free alimony one acre of land in Lugwardine to the church of the Blessed Mary and St. Ethelbert, Hereford, and the Dean and Chapter thereof, warranting to the grantees with the acre of land the advowson of the church with its annexed chapels.[76]

This was followed on 5th November by a licence for her to grant the advowson of the church of Lugwardine which she holds of the king in chief, together with the annexed chapels of Llangarren, Hentland and St. Weonards to the Dean and Chapter, so that eight chaplains and two deacons would celebrate the Mass of the Virgin for the good estate of the King, of Isabella, Queen of England, his mother, and of Joan herself, and for the souls of the king's ancestors and heirs.[77]

This was Joan's last public act, for she was dead by 17th December, 1327,[78] but it was probably the reason why the chapter of the Cathedral allowed her burial in the Lady Chapel and the erection of her beautiful memorial.

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CAUSEWAY FARM, HEREFORD: ITS SURROUNDINGS AND HISTORY FROM *c.* 1190 A.D., AND ITS CONNECTION WITH ST. ETHELBERT'S HOSPITAL

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

The site of Causeway farm and some of the land around it belonged to the Dean and Chapter of Hereford from the end of the twelfth century to the year 1947 and it is possible to trace its history down the centuries, as a large number of deeds relating to the property are preserved in the cathedral archives.

About the year 1190, or earlier, Alexander de Winestune gave to the church of St. Mary and St. Ethelbert [the cathedral] for the salvation of the souls of himself, Sybil his wife, his parents and his friends, one half virgate of land in Winestune, by which name the district was then known. Some of the witnesses were Stephen the moneyer (there was then a mint in the city of Hereford), and his three sons (1263).[1] Another deed of nearly the same date records that he granted to Peter the clerk del Wiz another half a virgate in the same place with six acres and one messuage, in consideration of two marks paid to the grantor and two bezants (a gold coin varying in value between a sovereign and half-sovereign or less) paid to his wife (227). A short time afterwards the chapter granted land to Walter de Hasel at a rent of 2s. *aut augmentum cervisie nostre*. The land is described as that which Alexander de Winestun' gave to the cathedral near his *curia* or court yard (233).

The next records are two deeds relating to a grant made about 1200 by Richard, son of Peter de Wich' [or Wiz] to his sister Sybill, probably the wife of Alexander de Winestune, of all the lands he held of Randulf de Preston in the vill of Wyneston for twenty marks and a rent of 5s. to be paid to Randulf (229 and 240).

A few years later, Sybil, who is described as the daughter of Peter de la Wiz (or Wich), quitclaimed to Elyas de Bristoll the half-virgate and nine acres of land she had bought from Richard her brother, to be held as before in chief from Ranulf for 5s. and all services, saving the king's, to it pertaining (964). This is an early mention of Elyas, a benefactor to the cathedral, of which he was a canon. William Seisill was a witness to this and other deeds in the early thirteenth century; probably he was a member of the famous Cecil family. For this quitclaim Elyas gave twenty marks, six loads of maslin (mixed corn, especially wheat) and two loads of oats.

[1] These figures give the numbers of the various deeds. Names are spelt as in the deeds.

Elyas also received a quitclaim from Alice, wife of Hugh son of Richard, of a messuage her husband had sold him. This was between the cathedral cemetery and Elyas' own land (965). Another grant to Elyas was made by Margaret, daughter of Geoffrey of Sarnesfield, and consisted of a virgate and a nook of land with a messuage and garden in Wyneston, except one assigned acre. For this grant 25 marks were paid (987).

Now we come to an important archive (980). About the year 1225 Elyas of Bristol founded the almshouses of St. Ethelbert—still existing, though re-built in 1803–5 on a new site in Castle Street. For this purpose he gave in free almoin the land near the cemetery which had belonged to Stephen son of Hugh, land adjoining where he had his house, land beyond the Wye he had bought from *domina* Margaret de Grete, but paying 5s. annually to the vendor, and all the land he had bought from Sibil de Wyz in Wyneston. Other lands in the city, a rent of six and a half marks in Sutthun', and six loads of beans to be received in Hurlingham through the official of the abbot of St. Augustine [Bristol], were included in the grant, which he stated was for the sustentation of the poor.

Three other undated archives witnessed by several men whose names appear in the foregoing deed also were executed about the same time. One is a shortened version of the grant by Elyas (783), and another is a longer document giving full details of the property included in the canon's grant. It also states that this was made for the souls of king Richard [I], king John, the grantors, his ancestors, successors and all his benefactors. It is printed in full in Capes, *Charters and Records of Hereford Cathedral*, pp. 57–59, and an English translation by Dr. B. G. Charles and Mr. H. D. Emanuel is in the typed *Calendar of the Earlier Hereford Cathedral Muniments* at the cathedral library; this also appears at the end of this paper. The numerous lands, tenements and rents are of interest (2001). The third deed records the grant of Elyas of half a virgate and six acres of land which he bought of the before-mentioned Sibil, rendering 5s. annually to Ralph de Prestun (781).

Among many other gifts to the almshouse was one made by Hugh, son of Ailmund who gave various rents from property in the city including one of twelve pence from land on the south part against the church of All Saints in the corner of the street called *Vrenschemannestrete*. For this grant he received five marks (861).

Between the years 1225–30, Phillip de Sernesfeld made a grant in fee-farm for the souls of himself, his wife, parents, ancestors and successors of his right in a moiety of the dower of Sibil de Wineston both in lands and men: viz., three nooks and a half in the vill of Wineston, at a rent of one pound of cinnamon at St. Ethelbert's

fair or two pence annually for all services and suits of court saving those to the king and the chief lord. For this the treasurer and others gave twenty-one marks (890, 891).

Yet another grant of the same period was made by Geoffrey de Grete for the souls of himself, Agnes his wife and others. He gave a virgate of land, one nook of land with a messuage and garden in the vill of Winestun, *excepta una acra asisa* which the grantor's mother gave to Elyas de Bristoll and which he gave to the almshouse (893).

Other grants made about five years later were made by: (i) Walter Syward and Cecilia his wife, for one mark, of two acres of ten selions in Wyneston at a rent of three halfpence (887, 895); (ii) Reginald, custos, by consent of the dean and chapter granted to Richard that he should be fed daily as other paupers and the said Richard gave twenty marks for the purchase of land for the sustentation of three paupers (888, 994); (iii) John de Winestun gave an annual rent of 1s. in Winestun issuing from an acre of la Sloh (892).

On the 1st August, 1235, there was an agreement between Geoffrey, lord of Grete, and master Reginald, custos, whereby the former leased to Reginald all his rent in the vill of Wynestun for six years in consideration of seven marks (894). In the middle of the same century Walter son of Walter Syward granted in fee-farm one acre in Winestun containing five selions in Fuetecrofte between the land of the almshouse and that of the grantor. Rent ½d. (239); Howis Chaumpeneis, widow, granted to Ingan the clerk in fee-farm for twelve shillings two selions and two butts in Wineston, the selions lying in length from the land of the lord of Preston as far as Balibroc (231); and Aytrop, son of Aytrop de Malfeld quitclaimed to Symon, chaplain and custos, an annual rent of 1s. he was accustomed to receive from the almshouse. For this 8s. 6d. was given (865).

About 1272 Nicholas son of Roger de la Waie granted to *dominus* Simon de Bosebury, chaplain, for one mark, a close of land in Wyneston between the lands of the almshouses on both sides and extending from the land of the lord of Preston to Hocfurlong, at one halfpenny rent (230). On 28th February, 1271/2, Nicholas granted Simon for two marks, two acres, one in Wynestone field between lands of the almshouse, containing seven butts, and one in Ocforlonge with lands of *dominus* John de Turbervile on each side and reaching from the butts *ad haiciam Wasdewy*; rent one penny (232),

Before the end of the century Cecilia, widow of Walter Syward of Hereford, released to the dean and chapter three acres and a third part of all land formerly in the occupation of her husband in Wyneston and elsewhere in the suburbs of Hereford (1271).

We now move into the 14th century when, on St. Valentine's day, 1311/12, Richard called the clerk, son and heir of Richard le Clerke of Hereford, granted to *magistri* Thomas and Adam de Orletone, clerks, in return for a sum of money and for the usual services to the lord of the fee, the arable land which came to him on the death of his father, lying in the field of Wynestone, which his father and Roger Penck' bought from *dominus* John de Torbervile, knight, and divided between themselves (773). Eleven years later Alan de Leyntwardyn granted to William de Schelwyke, clerk and custos, for money, a garden in Wynestone between the grantor's land and some belonging to the almshouse (889). In 1327, on 29th June, John Dewy quitclaimed a messuage and the moiety of a croft in Wyneston to Ralph his brother and Alice his wife. The messuage was between the grantor's land and that of Stephen de Skydemor and extended to the highway at either end; the moiety lay between Dewey's land and the highway and reached as far as that of Adam le Shepherde (409). The next deed records an exchange by John, son of Phillip de Leominstria, who received five selions of land in Wynestone for a curtilage of Hugh de la Halle and Sibil his wife which was between one of Hugh's and land of the almshouse, and extended from some of Roger atte Tounesende and some of Alan de Leyntwardyn (395).

On 18th August, 1343, Roger de Breynton and Walter Carles, canons, granted all the lands and tenements in the city of Hereford and suburbs and in Wyneston, Clehungr' and Bullynghop' which they held as a gift of *dominus* Adam, bishop of Winchester, to the bishop and *magistri* John and Thomas de Trillek his kinsmen (1377). Among the witnesses to this deed were Richard de Penebrugg', knight, whose effigy is to be seen in the nave of the cathedral church and whose helm is in the National Museum of Scotland (his tabard which was in the cathedral in the nineteenth century is lost), and William Godknave. Does the last named give the origin of a part of Hereford called "Goodknaves Miskin" which frequently appears in archives of the seventeenth century in the Town Hall?

Henry le Glovere, executor of the wills of John Dewy and William de Werham, granted to John Dough*h*e and Alice his wife a toft in Wyneston (241) on 12th December, 1349; and on 2nd October, 1351, John Filly de Kilfodes(?) granted to Richard le White de Aylineston a messuage in Wyneston between a tenement of the said Richard and one of Thomas Polle (60). However on 1st June, 1355, there was an agreement between Simon de Thurkeleston and Rose his wife to cancel a bond of £20 0s. 0d. by Richard le Whyte son of William, if they have peaceful possession of a messuage in Wyneston (242).

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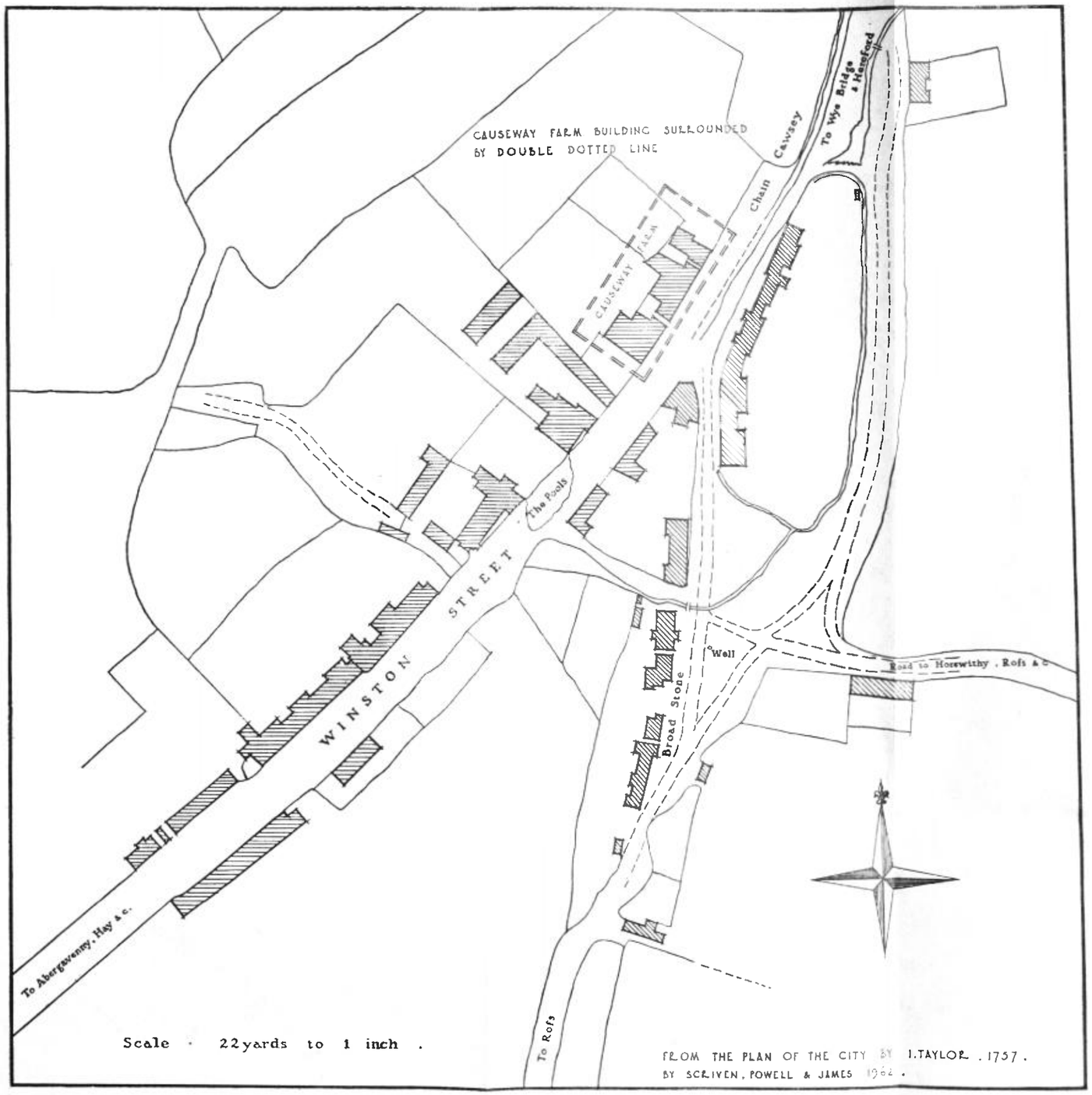

FIG. 3. PLAN SHOWING SITE OF THE FARM.

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FIG. 1. VIEW FROM THE NORTH-EAST OF THE FRONT AND SIDE ELEVATION SHOWING ITS SETTING IN THE STREET SCENE.

FIG. 2. VIEW OF THE BACK ELEVATION FROM THE WEST.

On 20th March, 1374/5, the before-mentioned Alice Dough' granted the croft, or toft, she had from Henry le Glover in 1349, to Robert Hundes (106), and twenty-four years later on 16th December, 1398, John Prophete, dean, and John Hoore, clerke, granted to Walter Mubbe and John Mey, clerk, citizens of Hereford, a messuage and forty shillings rent in Wynstone, formerly belonging to William Penreth by the gift of the son of William Wyne. Included in this grant were houses in Malieristrete which had belonged to Elias de Ardre and Araon le Blound, Jews of the city (1162).

The first fifteenth century archive records that on 11th November, 1426, William Lochard and William Jones, *custodes* of the St. Ethelbert almshouse, received from the abbot and convent of St. Augustine six loads of beans (2024). This was one of the clauses when Elyas of Bristol founded the almshouses about 1225.

On 26th October, 1464, letters of attorney of Walter Eckeley, clerk, and Thomas Brigge, executors of the will of John Berewe, late dean, were given to Richard Tayllour to deliver seisin to Thomas Berewe, his brother, of all lands and tenements in Wynneston between lands of Lewis Smyth and of John Brech'nok (2901), and on 19th March 1469/70 the executors released two tenements in Blakmaston between lands of Smyth and Brechnok extending from the highway to Wynneston field lately had with other lands of the bequest of Berewe, to Robert Terry, clerk (708). Eleven months later Thomas Melyn, citizen, released to Robert Kerver a messuage in Wynneston which he had at the same time as Robert by the feoffment of Adam Kerver (74).

The next archive dealing with the district is dated 6th August, 1481; by it John Mores and Alice his wife, daughter of Thomas Monnemouthe, granted to Roger Godwyn and Roger Clonne, chaplains, lands, tenements, reversions, and rents lately belonging to Monnemouthe in Wynston and Brandon outside the gate called Wyebruggeyate and elsewhere in the city (165).

The last pre-Reformation deed is a grant made on 18th December, 1484, from John Mountfort and Richard Gardyner, chaplains, to Ralph Hanyes and Thomas Edwardes, clerks, and Thomas Brugge-watir, butcher, of lands and tenements in Blakemonston in Wynston which formerly belonged to James de Hunderton, which the grantors had of the gift of Thomas Brugge, deceased (176).

Skipping one hundred years we reach the 7th April, 1585. No doubt the hospital continued to serve a fine useful service, but there are no records of grants to it, or to the chaplains, in the cathedral archives during this period. The religious unrest and dissolution of the monasteries, chantries and other foundations probably caused the cessation of gifts here as elsewhere. Fortunately the cathedral

being a secular foundation did not suffer by the changes as did those attached to monasteries, and the charities have remained under the control of the dean and chapter until today—St. Katherine's, Ledbury, being another of importance.

From 1585 there is a series of some 30 leases of the property belonging to St. Ethelbert's until it was sold in 1947; there being a break during the Commonwealth period when all the property of the bishop and of the dean and chapter was bought by the war profiteer, Colonel John Birch, one of Samuel Pepys' opponents, who is buried at Weobley. This he had to disgorge at the Restoration.[1]

The earliest lease was from Edward Cowper, the great canon of Hereford whose battles on behalf of St. Katherine's hospital and other details of his life are recorded in the *Transactions* for 1946, in a learned paper by A. J. Winnington-Ingram. He leased the messuage then called " The Allmeshall " or manor of Wynaston in Blackmarston to Foulke Howells and John and Thomas his sons for their lives at a rent of £10 0s. 0d. annually (4525, i–xli). This shows that the property was of value as the sum must be multiplied by at least 60 to give an equivalent rent for today.

The system of leasing for three lives, sometimes a very unfair one, was quite usual until recent times. A lease so made usually did not come to an end until the last survivor died; but generally the remaining lessees took out a new lease immediately after the death of the first, introducing a new name and paying an agreed sum to the lessor. This meant continuity of tenancy by a family. The system is now obsolete. In 1606, John Howells transferred the lease to Griffith Lewis, D.D., dean of Gloucester, canon of Hereford and custos of St. Ethelbert's hospital. Four days later it was re-granted to John for the life of his wife Ann and Thomas their son and Ann their daughter. It is curious that the same transaction with the same parties took place on 15th and 16th April, 1607, but this time a fine of £5 0s. 0d. was paid. There is another gap of 65 years in the leases (one now lost is referred to) owing to the Civil War. However, in 1672, George Benson, dean and custos, leased the manor to Thomas Howells, grandson of Foulke, who paid a fine of £1 0s. 0d. only and continued at the former rent. The small amount perhaps shows that unsettled conditions still prevailed. Eight years later Thomas Wotton, treasurer of the cathedral and custos of the hospital, renewed the

[1] Birch paid £4,210 5s. 2d. for the property of the dean and chapter, and £2,475 12s. 5½d. for the bishop's palace and manors. The conveyance was given to Hereford Corporation by Mr. Birch Peploe in the nineteenth century, and is now in the city library. It seems to have remained at Garnstone, the residence of Birch, together with two rare broadside Navy Lists of 1666 and 1672 which have notes in the actual handwriting (some in shorthand) of Samuel Pepys giving the names of the captains, numbers of the crews and other details of the various ships, with the fates of a few.

lease to Thomas Howells at the same rent and fine for twenty-one years from 3rd February, 1680/1, and in February eight years later, he leased it to Mary Howells, spinster, probably Thomas' daughter, but the amount of fine had risen to £16 0s. 0d. It was again renewed to Mary in October, 1708.

Mary Howells surrendered the lease to Daniel Philips, D.D., the next custos who, on 24th April, 1714, leased it to Mary Williams, spinster, and Roger Penner of Kenchester upon payment of a fine of £6 0s. 0d. and £10 0s. 0d. and two capons annual rent. Six years later, in March, it was taken by Hannah Penner, widow, for twenty-one years after the payment of £10 0s. 0d. for a fine. She was succeeded by Edward Penner in March, 1727, at the same rent and fine, and the lease was renewed thrice, the last time in 1763.

From the time of the last mentioned lease the amount of fines paid increased rapidly at each renewal. Susannah, widow of Edward Penner, paid £12 10s. 0d. to Humphrey Whishaw, custos. Her son and executor John Penner of Haywood paid £30 0s. 0d. for the lease in March, 1778, and James Birt, the next custos, received £60 0s. 0d. from Gilbert Jones the assignee of Penner in March, 1785. His lease was surrendered in March, 1792, and a new one granted to Peregrine Prince who paid £85 0s. 0d. to Joseph Guest, custos, in March of this year. The lease was renewed, each time for twenty-one years, in 1799 with a fine of £85 0s. 0d., and in 1806 when Hugh Morgan, to whom there are memorial windows in the lady-chapel of the cathedral, was custos, but the fine was £130 0s. 0d. and the payment of the capons was altered to five bushels of good, sound, sweet, clean, well-winnowed, dry and marketable wheat, every bushel of the weight of eight pounds . . . on every feast day of St. Michael the Archangel the said wheat to be for the use and benefit of the poor persons belonging to the hospital.

These increased fines and the payment of part of the rent in wheat reflect the result of the Napoleonic war. The price of wheat rose from 34s. 8d. a bushel at Oxford in 1779 to 133s. 10d. in 1801, it then dropped to 57s. 3d. in 1803, but rose again to 137s. 10d. in 1812. There is no wonder that in November the Corporation of Hereford set on foot a scheme to buy grain, coal, etc., to be sold to the poor at a reduced price and promised £20 0s. 0d. towards it. The following May they subscribed another £20 0s. 0d. to supply grain to the poor until the approaching harvest. On the 4th January, 1796, in response to a letter from the Duke of Portland, the rulers of the city of Hereford resolved to use in their bread not more than two-thirds of wheat and one third of rye or barley and to recommend the inhabitants to follow suit until the price of wheat was more reasonable. And on 26th of the same month they complained that

too much grain was exported down the Wye which they apprehended might cause an increased price, or even total deficiency. A public meeting was called for 30th of the month at the shire hall (the old market hall) to consider the purchase of a quantity of both wheat and barley for the poor of the six parishes to last until the following 15th September. The local farmers expressed apprehension of danger and tumult in bringing grain to market, so it was recommended that after supplying their own neighbourhood they should bring some in every week: measures would be taken to suppress disorders, and no toll would be taken.

In 1834, there seems to have been some disagreement over the boundaries of the hospital lands between the custos, the vicars choral, and F. Lewis Bodenham. Three deeds recording the settlement of this, and of land in Lugg meadow are dated April, August and September of that year. The last has a plan of the property.

Lord Saye and Sele, custos in 1848, granted a lease to Miss Elizabeth Prince on 23rd September, after payment of £200 0s. 0d. Seven years later John and Peregrine Prince her executors paid the same fine but had their rent increased to £12 0s. 0d. and 10 bushels of wheat. Peregrine as sole tenant in March, 1870, paid £275 0s. 0d. fine.

Later tenants were Edward Gough who paid a rent of £125 0s. 0d., no fine being mentioned. There is a schedule of dilapidations dated September, 1890, in which the sum of £54 18s. 0d. is said to be necessary for repairs. Probably these had to be attended to by Prince before he gave up the tenancy, and in future the occupiers paid the larger rents instead of fines. At this time the property is referred to as the Manor of Winston or *Causeway farm*. The last tenant was Richard Henry Clutterbuck who paid the same rent with an undertaking to pay an extra £20 0s. 0d. yearly for each acre of pasture converted into tillage without the consent of the landlords. This lease was made on 16th October, 1911.

In 1947, the Causeway farm with about ten acres of land was sold to F. J. Hyde, motor engineer of Gwynne street, Hereford, for £4,350 0s. 0d., and its connection with St. Ethelbert's hospital for upwards of seven and a half centuries came to an end.

It seems sad that the farm house should have been so ruthlessly destroyed in July, 1961, after a public enquiry on the previous 4th April. It was a picturesque building which could have been restored at a reasonable cost, its character kept, and used as offices or perhaps as a café. There is no place on the south side of the Wye where teas and luncheons are provided and it was ideally situated at the approach to the city of two main roads for a prosperous business of this character. There was ample space for parking cars in addition to the show ground for the caravan business now carried on there.

A most desirable result might have been achieved had the wish to preserve an ancient and historical building been evident. The lack of interest in the early landmarks of this city is deplorable; it is certain that our successors will not spare criticism of the short-sightedness of this generation. In places like St. Martin's Street haphazard ugliness is taking the place of the sensitively designed towns of our pre-Victorian ancestors whose builders and craftsmen knew by tradition, instinct and training how to make the best and most harmonious use of their materials, when profit was not the sole motive and when good design could be recognized and appreciated by the general public. Soon there will be no way of distinguishing one town from another, either at home or abroad, by the architecture, and a great attraction for visitors to England will have gone for ever.

The name "CAUSEWAY". From the seventeenth century, if not earlier, there was a raised causeway or footpath, apparently edged by a chain just beyond Drybridge. This and also the name of the street beyond, then called Winston street, are shown on Taylor's plan of the city dated 1757. A pool is shown in the middle of the highway. Canon A. T. Bannister could not find the site of the manor when he wrote his "Place-names of Herefordshire".

The Vicars Choral also owned part of the manor of Winston. In a manuscript volume "An Account of All the Estates held by Lease under The College of Hereford, Together with The Date of each Renewal since the year 1702, there is a record of the tenants, rents, fines, and dates of each renewal of the leases of the manor of Winston and Brandon. [The name Brandon is still in use.] A note at the foot of page 15 states that the whole of the estate is computed at 205 acres, of which 109 belong to St. Ethelbert's Hospital, 75 to the College, and 21 to James Donnithorne, Esqr. These quantities reduced to State Measure give to the Hospital $\frac{\text{A. R. P.,}}{76.2.39}$ to the College $\frac{\text{A . R . P}}{52.3.9}$, and to J. Donaldson $\frac{\text{A . R . P.}}{14.3.6}$

A manuscript "Book of Maps of the Estates of the Custos and Vicars of the Cathedral Church of Hereford, 1807", has schedules of the lands, etc., of Causeway farm and of Winston and Brandon. The former is said to measure A.146, R.1 P.27. A later note states that "By the award of R. J. Powell, Esquire under the Church Lands Boundary Act, Nos. 53 and 54 were awarded to F. L. Bodenham Esqr., also part of 43 and 44, and 45".

N.B. Among the cathedral archives are some few additional records of grants of other lands to St. Ethelbert's hospital.

APPENDIX

TRANSLATION OF A GRANT BY ELYAS DE BRISTOLL TO THE ALMSHOUSE OF ST. ETHELBERT OF HEREFORD.

Archive, circa. 1225. No. 2001.

GRANT for the souls of King Richard, King John, himself, his ancestors, successors and all his benefactors, of all the land with buildings and appurtenances formerly belonging to Stephen son of Hugh near the cemetery of St. Ethelbert, and all the land lying between the aforesaid land and the land of *Hawysia Pictrix* with appurtenances, saving the lord's services, for the maintenance of paupers in the said almshouse: also the land which he bought of *domina* Margaret de Grete at an annual rent of five shillings: all the land which he bought of Sibil, daughter of Peter de Wiz at an annual rent of five shillings payable to Randulf le Poer and his heirs, saving the king's service; also a rent of four pounds seventeen shillings and seven pence in the town of Hereford, viz., from the land formerly of John son Restoch twenty one shillings and four pence and the almshouse renders therefor to the said John eight shillings, from the land formerly of Walter Godive in Castle street eleven shillings and six pence, for which the almshouse renders twenty pence to the lady of Chilleshope from Hugh de Hulla a rent of six shillings from John son of Restoch three shillings and four pence and from William son of Stephen two shillings, and from John the miller twelve pence and he renders to the said Hugh fourpence, from the land formerly of Joche and Scissill de Gannou eight shillings and seven pence halfpenny and therefor the chapter of Hereford shall receive seven pence halfpenny at Michaelmas, from the land formerly of Richard Wasdey three shillings and three halfpence and therefor the chapter receives thirteen pence and a halfpenny, from the land of Juliana daughter of *magister* Gervase in the tenure of Robert the carpenter three shillings and to the hospitallers six pence [this and the rents in the following items are fee-farm rents payable by the almshouse], from the land formerly of Thomas Thailse seven shillings and to the chapter eighteen pence, from the land in the tenure of Christina Mone thirteen shillings and to the king twelve pence, from the land formerly of Hugh de Kerdiff half a mark and to Christina daughter of Walter son of Elyas fourteen pence, from the land formerly of Stephen son of Mary thirty-two pence and to the prior and convent of St. Guthlac seven pence, from a shop in the tenure of Nicholas de Walinton which formerly belonged to Hugh son of Terri nine shillings and to the said

Hugh one penny or gloves, from the land formerly of John de Haspheld ten shillings and to the king six pence, and from the land formerly of Hugh Kutch sixteen pence and to the aforesaid Hugh one penny, from the land which he bought of Roger de Troie in Castle street nine shillings and to the chapter six pence, from the land formerly of Stephen Gersent and the sons of Thomas his brother six shillings and to the bishop of Hereford twelve pence; also a rent of six and a half marks to be received annually from Roger de Munemue and six loads of beans in the vill of Herlingham to be received annually through the official of the abbot of St. Augustine of Bristol.

Witnesses: Martin, prior of St. Augustine of Bristol, William, prior of St. Leonard of Pyonia, hugh the canon of Pyonia, William Seisill, Henry Craft, William de Pypa, Nicholas the chantor, *magister* Reginald, Roger de Munemue, Adam the chaplain, Robert the cook, William his brother.

AGRICULTURAL CONDITIONS AND CHANGES IN HEREFORDSHIRE, 1660–1815

By E. L. Jones
(Nuffield College, Oxford)

No comprehensive description of the development of agriculture in Herefordshire during recent centuries is available. An assessment of the changes during the eighteenth century is indeed beset by peculiar difficulty. There are no obvious differences between the cash products at the beginning and end of the century, for the exceptionally varied pattern of the county's farming had been set early in the previous century,[1] and there was no strong movement to enclose or to reclaim land for tillage such as is used to give unity to accounts of the acceleration of agricultural change in some other counties. The best that can be done at present is to compare the exports of produce from the county at the beginning and end of the eighteenth century, in the hope that this will afford some clues as to the growth of production.

The progress of agriculture is commonly assessed by the rate of technological innovation. The criteria, so indiscriminately used by historians, on which judgment is based, are the improvements made in arable farming on free-draining, easily-worked land in the eastern half of England, improvements often grouped loosely as the "Norfolk system". Since these criteria are clearly inappropriate to much of the physical environment of the western side of England, they necessarily give an impression of agricultural backwardness there. Professor Ashton is perhaps the most authoritative holder of the view that innovations, implying mainly Parliamentary enclosure and the four-course rotation, with its "new" crops, "spread slowly. It was only in the East and East Midland counties that progress was marked, and in many parts of the country farming was carried on very much as it had been centuries before".[2] Other criteria than these are needed when dealing with a clayey, early-enclosed, stock-rearing county such as Herefordshire. Some attempt is made here to indicate the degree of receptivity among Herefordshire agriculturists to unfamiliar practices, by considering the chronology of introductions of "new" field crops and farming methods which can be seen from later experience to have been suited to the county.

Finally, the supply and return of landowner-capital, tenant-capital and labour, together with the landowner's rôle as an innovator, are considered briefly, in the hope of identifying those elements which most influenced the rate and nature of agricultural change.

I

The inadequacy of its road and river communications with the neighbouring English counties was long recognized as stifling to the economic development of Herefordshire. The absence of a sure navigation of the Wye, it was complained, "choaketh up the Commodities of Corne and fruite in plentifull yeares".[3] In most seasons a wide range of foodstuffs in excess of local requirements was produced in the county, whereas manufactured goods, coal and almost all the lime had to be imported. The irregularity with which barges could sail the Wye as far up as Hereford, and the consequent necessity of using the very bad roads, raised transport costs enormously[4] but by no means prevented the marketing of produce outside the county. Bristol, where prices for farm products were as high as anywhere outside London, was in 1700 the chief market. London took cattle and the better quality cider, which could bear the high transport charges from Herefordshire.[5]

Bristol received grain, cider and wool which had passed down the Wye. Some produce came down the river to Chepstow, whence it was shipped for Bristol, but much of the grain came as far as Monmouth from Hereford market by pack-horse.[6] Bristol merchants loaded "great quantities" of grain, notably wheat for Portugal, from Monmouth, which was largely supplied from Herefordshire.[7] The Bristol factors, who travelled widely for their supplies, almost certainly bought Herefordshire grain in Gloucester market, whither it was carried from the Ledbury district and from Wormelow hundred, "the hither side" of Herefordshire, although land carriage as far as Gloucester was uneconomic from further west in the county.[8] Evidently, in 1700, despite the difficulties of transportation, Herefordshire was important as a source of agricultural produce, especially of wheat, for the Severn vale area in which the focus of trade was Bristol. The schemes in the seventeenth century to improve the intermittent navigation of the Wye were aimed at developing this trade.

By the late eighteenth century the transport situation had hardly improved. The roads, which Celia Fiennes in the 1690s had found "pretty long miles", were to Marshall nearly a century later, still "such as one might expect to meet with, in the marshes of Holland, or the mountains of Switzerland".[9] Hope was no longer pinned on improving the Wye navigation and had been transferred to schemes for constructing canals, principally to connect Leominster and Stourport (put forward in 1777–8, again in 1790, and carried out in 1798) and Hereford and Gloucester, via Ledbury (put forward

in 1790 and completed from Newent to Ledbury by 1798).[10] As the Committee for the Hereford and Gloucester canal pointed out about 1790, even if the Wye proved navigable—and the constant frustrations of summer shoals and winter floods were widely felt to be insuperable—it was only the trade with Bristol which would be facilitated.[11] The canals on the other hand offered access to the fast-growing food markets and sources of manufactured goods in the midlands and north, and these by the end of the century were a greater attraction than Bristol.

A primary aim of the canal promoters was to reduce and stabilise the price of coal, and they succeeded in that the price at both Hereford and Leominster fell by half at the opening of the canals.[12] If coal could be brought cheaply into Herefordshire along a Hereford-Gloucester canal, it was thought that lime could be burnt in the vicinity of Ledbury and conveyed to the lime-deficient clays. Four thousand tons of goods, mainly lime, were indeed landed along the course of the Wye below Hereford in 1809.[13] Bricks could be burnt more cheaply and as a result farm buildings would be kept in better repair. Likewise the canal would mean " the roads, now bad to a proverb, being less worn by heavy carriages ", and that " the farmers, by diminishing the number of their horses, will have an opportunity of increasing their stock of oxen, which will cause a diminution of the consumption of oats, and a reduction in the excessive price of meat ".[14] Canals seemed to offer to reduce both the prices of " industrial " goods used in farming and the cost of marketing farm products. With these aims in view work on the Leominster-Stourport and Hereford-Gloucester canals began in the 1790s.

There was no large urban market within the county. The county town itself was thought to have grown by one quarter, to a mere 6,828, during the latter half of the eighteenth century. This was " not upon that rapid and extensive scale which we see in various other parts of the kingdom ",[15] and its effect on absolute levels of demand was minute. The markets for the county's now considerable agricultural surplus were perforce often far afield. A navigation to Gloucester, a nodal point for water-borne traffic, seemed vital for competitive marketing by the farmers of Herefordshire, since the uncertainties of the Wye meant that " the conveyance of corn, cyder, etc. to the port of Bristol, is sometimes delayed so long as to lower their price; that place being supplied with them in the intermediate time from Somersetshire and other counties; which will always operate to the disappointment of our own farmers, until some other mart is found for the disposal of the produce of the county ".[16]

The promoters of the Hereford and Gloucester canal accordingly made estimates of the actual road and river trade of Hereford and Ledbury, which provide a nucleus of information on the scale and composition of the agricultural export from Herefordshire at the end of the eighteenth century.[17] Nine thousand tons of grain and meal were sent annually from Hereford to Bristol down the Wye, which despite its " capricious " nature was necessarily prominent among existing trade routes.[18] Grain was also sent overland to towns in Gloucestershire and to Birmingham.[19] In the opinions of Knight in 1804 and Duncumb in 1805, the tillage acreage of the county had fallen owing to rising costs,[20] but, in view of the simultaneous rise in farm receipts and the especially rapid advance in grain prices, it seems unlikely that cereal cultivation was contracting at this time.

Five hundred tons of hops were despatched annually from Hereford, but the bulk of the crop was sold at Worcester, the main marketing centre for the West Midland hop district. The number of pockets sold at Worcester shows no sustained rise between 1787 and 1798, and hop-growing was somewhat depressed during the Napoleonic wars; nevertheless, the eighteenth century as a whole had seen an expansion of production.[21]

There was a sizeable traffic in cider, perry and fruit. In 1789 the principal cider markets remained Bristol and London, both of which re-exported bottled cider overseas, but the trade was shifting to the midlands and the north. Home markets were more important than the foreign trade, but both were supplied from the " Herefordshire district " (Herefordshire, Gloucestershire, Monmouthshire and Worcestershire), " in which, *only*, *sale* liquor is at present produced, in quantity ". The main buying centres were Ledbury and Upton-on-Severn, with some purchasing at Hereford, Gloucester and Worcester, while from Bristol and " of late years " from London travelling buyers were sent into the district.[22] Two thousand tuns of cider were being exported each year from Hereford alone in the late eighteenth century. Marshall in 1789 estimated the average annual production of the four counties at 30,000 hogsheads, roughly half for sale and half for consumption on the farm. Lodge in 1793 suggested that over 20,000 hogsheads were made in Herefordshire in a good season, and of these about 7,000 were sold to the merchants at Hereford and Ledbury.[23] These statements are not directly comparable, and in any case the measures used were variable, but they serve to indicate the scale of the trade.

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" The markets for *sale* liquor has hitherto been confined ", wrote Marshall, " but the late extension of canals . . . together with the

present facility of land carriage, have already extended, and will in all probability still farther extend the market".[24] A similar argument for the Hereford and Gloucester canal was that cider, "now carried to London by a circuitous . . . navigation, may be conveyed thither by way of the Stroud canal . . . [25] [and] be carried to Stourport, and from thence to Birmingham, Manchester, and all the manufacturing towns of the North". Lichfield was supplied with cider and perry from Ledbury in 1803 and Birmingham with cider from the Hampton Court estate, Leominster, in 1809.[26] During the French wars the traffic in apples was expanding even faster than that in cider. By 1795 the annual freight charge on cooking apples brought from the cider counties into Manchester alone exceeded £3,000.[27] Apples which were good keepers were sent from Herefordshire and the other cider counties to the west midland and northern towns for table use at more than twice the price which cider made from them would have fetched.[28] The trade in cider and apples illustrates more clearly than any other how the agricultural export of Herefordshire was increasing and reorientating at the end of the eighteenth century to cater for the growing markets of the industrial regions.

Livestock production shows signs of a comparable expansion. The traffic in bacon pigs fed on windfall apples or cider refuse for the London market, which had been thriving in the first decade of the century, may have been merged into the growing trade in hogs for fattening at distilleries in London and elsewhere.[29] Sixty tons of wool were sent from Hereford July fair, forty overland to Gloucestershire and Wiltshire, the remainder apparently to Yorkshire. Ross was an even larger wool mart than Hereford, while in 1800 some of the Gloucestershire clothiers had warehouses at Hereford, Ross and Leominster, as they may have had since the seventeenth century.[30] In the 1790s there was much experiment in cross-breeding Ryeland and longwool sheep for heavier carcases. Hereford cattle, which had been driven to the midland pastures en route to the London market for centuries, were spreading geographically "in every direction" and were now providing beef for a mass urban market.[31]

The traffic in farm products was not all outwards from the county. Herefordshire was poorly supplied with dairies and in consequence Cheshire cheese was brought in by canal, while tubs of Welsh butter came in overland.[32] Nevertheless, the impression remains that the production and export of the farm products of Herefordshire grew substantially during the eighteenth century, especially during the last two decades, although the range of commodities involved hardly changed.

II

The unifying concept of the "agricultural revolution" is the increase in output following such technological advances (in the broad sense) as Parliamentary enclosure, the Norfolk four-course rotation, and systematic stock-breeding. Although the development of a leading breed of beef cattle stands to the county's credit, on the first two counts Herefordshire would appear "backward". Neither of these, however, is an appropriate indicator of the progress of agriculture in such an environment.

Only a very tiny fraction of Herefordshire was affected by Parliamentary enclosure, and there were apparently no other formal agreements to enclose open fields.[33] It is doubtful whether more than a handful of townships in the county were ever farmed on a classic open-field system. The most diligent search by historians of field systems, notably H. L. Gray, who based his *English Field Systems* in large measure on Herefordshire material, has failed to produce evidence of more than thirty places where there may have been three-field farming. In 1675 only about 8 per cent. of the total county area was open, and only Kent and Essex were more enclosed. At the most, 4 per cent. was enclosed by Act, mainly in the nineteenth century, and this included some waste land. The historian of Herefordshire will be better employed in writing a systematic account of the farming of the enclosed land in the county than in seeking further dubious and abnormal instances of open-field survival.

A lengthy process of piece-meal enclosure and disintegration of an open-field pattern, which seems never to have been more than fragmentary, left so little of the county open that by the era of Parliamentary enclosure no Herefordshire township was still farmed predominantly on an open-field basis. This process may have been at its most rapid during the second and third quarters of the seventeenth century. There are some signs that adjustment to the downward trend of grain prices in the last quarter of that century took the form of the conversion of arable to grass; the income of the small tenant farmer, especially on clayland, in this part of England seems to have been squeezed hard at this time.[34] There were Parliamentary enclosures in 1607–08 (the second in the kingdom), 1779, and a faint burst of activity revealed by seven between 1797 and 1812, paralleled by the breaking-up of some wasteland in the interior of the county. A significant acreage of wood was felled and the land converted to tillage during the latter half of the eighteenth century[35] when grain prices were conducive to this. But, as Tate concluded (p. 190), "Parliamentary enclosure here was a kind of

" mopping up " process applied to the existing scraps of common which . . . had escaped enclosure in earlier years ". Clearly, apart from the slight activity in the final years, the development of agriculture in Herefordshire in the eighteenth century is not at all reflected by its parliamentary enclosure history.

Neither is the rate at which the Norfolk rotation was adopted a useful index of agricultural progress in Herefordshire. The new husbandry of the eighteenth century meant to many contemporaries and to most subsequent writers essentially the Norfolk four-course and, above all, the cultivation of the turnip. Farming everywhere was compared directly with that of west Norfolk, and the comparison was usually as unflattering as it is invidious. Such statements as that of an Essex farmer in 1783, that the growing of turnips in itself constituted " the basis of all good husbandry "[36] abound unchallenged throughout contemporary literature. Despite its unsuitability for the wet clay or hill lands, the four-course persists as the conventional standard of past agricultural advance.[37] With the rules thus framed with reference to the needs and potentialities of farming on free-draining, easily-worked land, and with propagandists who have never flagged, Norfolk and a handful of similar counties must appear far more " advanced " than all others.

Since sheep feeding on turnips in winter will poach the ground or pack it hard, it is not surprising that " this branch of cultivation [was in 1781] not yet generally practised in the Western counties ",[38] on clays or in wetter conditions than Norfolk men had to face. Yet turnips were grown much more in the west than the scarcity of fully-developed arable rotations with root-breaks would suggest. They were instead grown as supplementary food for stock-rearing.[39] The classic Norfolk rotation of wheat, turnips, barley and clover, with its counterpart arable flock, was unworkable throughout most of Herefordshire. Husbandry of the Norfolk type came to be tried in the western uplands of the county only during the Napoleonic wars, and from thence it rapidly retreated, as it had from parts of Scotland, although other less drastic changes in rotations became established in the uplands along the Welsh border.[40] The uplands were too wet for wheat,[41] and the sticky clays of the Plain of Hereford were too moist for the barley course and for folding sheep on turnips in winter.

Only on the sandy soils of the Ross district could a version of the Norfolk husbandry thrive. Here it was spreading in 1794 and well established by 1801.[42] This is late for so suitable a district, but the delay is perhaps not hard to explain. Turnip-fed sheep tend to develop a longer and coarser wool staple than those worse fed. The farmers round Ross would be reconciled to this only when

convinced that a heavier carcase and coarser fleece would pay better than the light carcase and fine fleece (reputedly the finest among British breeds) of their native Ryeland sheep. This reconciliation seems to have been effected by the rise in meat prices early in the Napoleonic wars. How alien the Ross district under its new regime seemed to farmers elsewhere in Herefordshire may be judged from a note in the account book of Sir George Cornewall's farm at Moccas, ten miles west of Hereford, in 1807: " on the Ross side, the Norfolk plough is much used—& generally, some plough with two horses, & *one* man—no white crops together—wheat every *4* years—many turnips—& eat off *by sheep* ".[43]

Herefordshire agriculturists were not, however, dilatory in adopting new practices and new crops where these were suitable for the locality. As John Beale wrote in 1657, " I observe the wisest and best of our Gentry to be very carefull in setting forward such kind of husbandry, as agrees with the nature of the soyl where he inhabiteth ".[44] This principle seems to have been followed, helped by the greater flexibility in management which came with the introduction of new field crops in the late seventeenth and eighteenth centuries.[45] Over much of the county turnips were useful chiefly as a supplementary feed for rearing cattle and sheep. There was not the urgent demand for roots to stall-feed fatstock, nor such a need for dung, as there was in the purely arable areas, with their excess production of straw which needed to be converted into manure. Local demand for meat meant that only a very few cattle had to be " finished ", while the riverside pastures could carry a high stocking density without artificial fodder. Large acreages of turnips, representing a fourth of the cropped area, were not therefore to be expected in the small fields of the Plain of Hereford, although moderate acreages were being grown quite early in the eighteenth century.[46]

Already in 1657 Beale knew that the Ross district was suitable for growing turnips, and it seems likely that he tried them elsewhere (in boggy ground) in 1662. John Noble introduced turnips, at least experimentally, at Much Marcle between 1696 and 1719, instructing his wife to plant them " in the Nursery " while he was away from home. In 1720–21 a yeoman of Moreton-upon-Lugg referred to " the country whence the King came, for there nothing did grow but Turnips " with a contempt doubtless born of some familiarity with the root. In May, 1726, William Brydges of Tyberton was promised " 50(lb.?) of new Turnips Seed ". Edmund Patteshall bought turnip seed for his farm at Allensmore as early as 1743, and limed nine acres of turnips there in 1755 and thirteen acres in 1756, while at Eywood twenty-four acres had been sown in 1755. Turnips

were grown at Canon Frome, at Moccas, and at Acton Beauchamp in the 1780s and thereafter; in the first-named locality they were sown with rye, presumably as spring feed for sheep. The crop returns of 1801 show that turnips were grown in many central Herefordshire parishes, and in the north-west in the vicinity of the Knight family homes at Elton and Downton Castle. They were usually grown as extra feed for young stock and feeding-cattle in winter, and some were given to ewes and lambs in spring. Only in the Ross district did they form a full course in an arable rotation. Although the farmers who grew them may have been the wealthier and more alert men, turnips were far from the prerogative of hobby-farming landowners.

The turnip was never rivalled as a symbol of agricultural progress, despite the earlier introduction, wider geographical spread and greater nutritional value of clover and the rotation grasses.[47] Clover leys provided winter feed for sheep on clay or other ill-drained land where turnips could not be fed off, while resting the wheatland and making a direct contribution to soil fertility. Since clover was better adapted than turnips to the conditions of husbandry in much of western England, including Herefordshire, its adoption is a more meaningful index of the assimilation there of novel farm practices. Andrew Yarranton, who had introduced clover into Worcestershire, aimed his book *The Improvement improved . . . by Clover* of 1663 at, among others, the farmers of parts of Herefordshire. He had an agent at Ross who sold clover seed and pamphlets on the cultivation of the crop. Yarranton claimed that clover had doubled the value of land in the Ross district. John Beale seems to have informed him in 1662 of the successful growth of some of his clover seed, presumably at Hereford.[48] Further west, a tenancy agreement appertaining to a Hay-on-Wye family refers to a direct re-seed with clover in 1686: the tenant " will not plough or break upp the same [meadow ground] unless it be to the end and intent to sow clover therein ".[49] Clover and the rotation grasses, notably rye-grass, were widely established in Herefordshire throughout the eighteenth century. Early in the 1760s Stillingfleet, the botanist, was carrying out a controlled experiment on grassland on the Price estate at Foxley.[50]

Another aid to stock-farming which was widely adopted in Herefordshire was the water-meadow. Grass could be made to grow faster and earlier in the year if covered for a series of short periods by a warming sheet of water. By this means the problem of the shortage of spring feed, especially acute at lambing, was partly solved. The first English account of floating meadows was written by Rowland Vaughan, who described his works in the

flat-floored Golden Valley in Elizabethan times.[51] Similarly, the diversion of streams at Wigmore in 1653 was probably for meadows of this sort, which cannot have been unusual by 1663 when Yarranton claimed that clover effected an improvement of comparable value. Beale remarked in 1657 that " other helps of pasture we do not omit, every rill of water is carefully conducted to the best use ", although this may refer to the more simply designed catchwork meadows. Construction of a large system of floated meadows in the vicinity of Staunton-on-Arrow was begun in 1660 and, after fifty years of spadework, was finally completed in 1710. Other floated meadows, where the water was periodically let onto the land through hatches from a stream and returned via channels and hatches lower down, were those trenched on Lord Scudamore's estate at Holme Lacy in February, 1709, and those which William Brydges was having laid out by specialist workmen at Tyberton in April, 1712: " 30 acres of new Ground laid under y^{e} Improvem^{t}. They have done for this spring & are to come again next Winter ".

The more usual water-meadows in Herefordshire were on the simpler catchwork system, whereby streams were run over hillside pastures, utilising some of their natural fall. In the 1770s the benefits of this were said to be immense, but the practice by no means general. It had apparently spread by the 1790s. Artificial water-meadows could not be constructed along the deeply-entrenched Wye, and some other waters were not being exploited because of the divided ownership of rights over meadows and streams, and the perennial conflicts caused when mills were robbed of their races. Despite these difficulties, water-meadows of one sort or another multiplied during the late eighteenth century, and a few additional meadows were floated in the first half of the nineteenth century.

The introduction of the swede may be cited as a final illustration that Herefordshire agriculturists were swift to adopt such new crops or practices as were relevant to their needs.[52] According to Duncumb, the secretary of the Herefordshire Agricultural Society who surveyed the county on behalf of the Board of Agriculture, swedes had been introduced a few years before 1805 by the steward of the Guy's Hospital estates, although he added that T. A. Knight and Mr. Davis of Croft had sown them about the same time. Duncumb did not mention that swedes had been tried by Sir George Cornewall at Moccas in 1801 and by Edward Wallwyn at Much Marcle as early as 1795. Wallwyn had written to his agent on 1st May, 1795, sending some turnip seed " a Single Pound of a New Sort, called *The Sweedish Turnip* ", which, he said, " is a remarkable hardy Sort—Last Winter gave it a fair Trial, for the first Time, & it was found to stand the Frost when every other sort

was totally destroyed—It is expected to turn out the most useful & profitable Turnip that ever was grown in this Kingdom . . . I must have a fair Trial made of this single Pound, which I have sent, upon some of our Lands at Marcle—Desire M^r. Crump to put out a Bit of Ground . . . & sow some of the Seed—He may also have a little of it himself to sow in his own Ground—M^r. Clinton may also have a little of it—But I expect they will take Care & give it a fair Trial ". By 1805 swedes had made " very considerable progress " in the county.

Wallwyn also introduced Dutch clover at Much Marcle in 1795, when the seed of other clovers and grasses was exceptionally dear. Duncumb said that Dutch clover had been introduced in the west of the county about 1791; it was, however, sown at Canon Frome from 1780.[53] The war period was indeed characterized by the diversification of fodder crops, which doubtless reflects the heavier stocking which followed increasing meat prices. Clark, who first surveyed the county for the Board of Agriculture, had suggested in 1794 that for districts without water-meadow artificial grasses could supply the want of hay, while cabbages planted on the fallows would compensate for the lack of aftermath grass.[54] By this date cabbages, with turnips and potatoes, were commonly sown as a catch crop between the rows in hopyards, where they were fed off by hurdled cattle.[55] Rape was a widespread crop in the lowlands in 1801, and potatoes were becoming important, chiefly as pig food, in the first years of the nineteenth century, although they were also sown as an insurance against grain failures.[56] All these improvements in the supply of fodder in Herefordshire during the eighteenth and early nineteenth centuries were made at dates which compare favourably with similar introductions in more southerly and easterly counties.

It may be objected that the evidence cited refers mainly to innovations made by landowners. There is nothing, however, to suggest that their tenantry was slower to copy new methods than the tenantry elsewhere, and indeed may have been better able to do so than in the open-field counties. Certainly the bounty payments to encourage the spread of flax and hemp cultivation, authorised by an Act of 1796, attracted a growing number of claims from ordinary Herefordshire farmers who introduced these crops on a small scale.[57]

III

Herefordshire was not as isolated from external influence as may at first appear. Welsh cattle drovers, for instance, often passed to and from the London area. Members of the county's landed families were not infrequently in London, even when it was necessary

to sail Severn to go there, either on business, or taking a seat in either House, or to settle during term in one of the Inns of Court. When they were in the metropolis, they were able to meet as the Herefordshire Society, established there as a philanthropic institution in 1710.[58] Whilst in London the landowners seized the opportunity to sell the better quality ciders to their acquaintances, and they procured the seed of new crops and gleaned new ideas about improved breeds of sheep or varieties of apples which they put into practice when they returned home. Even their ornamental parks were utilised for grazing cattle " at tack ", that is, at so much per head from those who were short of feed. The landowners were preoccupied with agricultural matters. Where the land was the source of a large part of their incomes and where they had some farming in hand, they had good reason to be attentive to the weather and the harvest prospects, as their surviving letters show them to have been. Thus William Brydges of Tyberton inquired from London of his wife in the country in July 1715 " whether y^e Marketts doe not rise upon this wett weather, & how y^e corn is like to prove this year ".[59]

By custom the economic rôle of the landowner was that of provider of farm land and fixed capital. Beyond this, he often disseminated new techniques, and at least one Herefordshire landowner, T. A. Knight, sometimes called the father of horticultural knowledge, was famed as an initiator of experiments in husbandry. In Herefordshire, according to Beale in 1657, there was " a great number of admirable contrivers for the publick good ", among them Lord Scudamore, the populariser of redstreak cider; according to Duncumb in 1815 there were still plenty of experimentally inclined agriculturists.[60] Agricultural investment by the county's landowners tended to take the forms of reorganising the fragmented holdings on their estates,[61] providing the wide range of buildings required by grain, stock, cider and hop production, breeding cattle and sheep, and draining the clays. The priorities were quite different from those of, say, East Anglian landowners.

At the end of the eighteenth century the old, inconvenient timber and thatch farm buildings were fast being replaced by others built of stone and slate. " 'Tis a great fault in this County ", wrote a contemporary, " that of having twice as many Buildings as really ought to be ".[62] On the Herefordshire lands of Lord Malden's large estate, the nucleus of which was Hampton Court, Leominster, when Nathaniel Kent and his colleagues surveyed them in 1786–87, most of the farms had stables, barns with threshing floors, sheds, beast houses, cart houses, a hop kiln, a brew house and a cider mill-house, and some possessed in addition dovecots, pigsties,

sheep cotes and dairies.[63] Such a variety meant that the necessary expenditure on upkeep was vastly higher than for farms of equivalent acreages where the products were less diverse.

Similarly, at the end of the century it was noticeable that farms were being enlarged and consolidated. The surveyors of Lord Malden's estate recommended exchanges in order that certain parcels of land might be relet to neighbouring farms where land of that particular type was needed, and suggested that one or two small farms might with advantage be " melted down into the others ". This was already happening. Harris's and Fay's Farms (78 acres), Upper Moor and Wichurch Farms (77 a.) and Tedstone Court and Woods Mill Farms (153 a.) were pairs which had each been " now Consolidated in one ". At Newton Farm (177 a.) " there have been several temporary Exchanges made by the tenant, and if they can be confirmed will tend much to the Improvement of the Estate ". The result of none of these amalgamations was valued at over £106 p.a. and many farms less highly rented remained on the estate, so that ample scope for consolidation remained. One Herefordshire man recommended in 1791 that " farms from [£] 150 to 200 p^{r} year . . . are the size Estates to do good to Landlord and Tenant ".[64]

Nathaniel Kent and his colleagues would have happily seen consolidation continue. Sometimes they suggested laying two farms together, more often exchanging intermixed and scattered land between tenants or even with other landowners, in order to raise the estate's rentable value. They claimed that " the improvement most obvious to adopt will be a general Exchange among Lord Malden's Tenants, and if the Lifehold Tenants could be bought in, some material Advantages might be derived from it, as the Land belonging to them lies in small Pieces, and very much intermixed with the estates at Rack Rent ".

Other contemporaries were well aware that holdings were being thrown together. Duncumb feared that this " left very few opportunities by which an industrious couple can devote their 50l. and 100l. acquired by personal exertions, to stock the number of acres proportioned to their capital ".[65] He suggested that the farmers of relatively large acreages of the Herefordshire clays possessed important advantages over those of the smaller holdings in economies of scale, that is they had enough teams to haul lime and to plough thoroughly, and they had a large surplus to market and could hold it until prices were favourable. The number of tenants willing to stock the larger acreages rose during the Napoleonic wars, partly because the country banks were induced by agricultural prosperity to lend working capital to farmers.

The advantages to proprietors lay in economy of repairs, ease of collecting rents, and the richer, more reliable tenants. The whole subject of changes in farm size is bedevilled by the failure of contemporaries and of too many historians to distinguish between farm area and size of farm business in terms of total assets. Since, according to Duncumb, even the farms of larger acreage were often under-capitalised, the amalgamation of holdings may exaggerate the rate of increase in the true size of farm businesses, a matter more crucial than mere extensions of area since it relates to the intensity of farming and the production per acre.

The farmers had their own contacts with other districts. They imported seed wheat from the Cotswolds and even from the Berkshire Downs. Between the early 1790s and 1805 they completely replaced the heavy ploughs native to the county by lighter models, and by 1800 a few of them had tried light wheeled ploughs. In 1799 a tenant farmer of Moreton-upon-Lugg owned a winnowing machine made at Wolverhampton. Yet here again the landowners formed the spearhead of innovators. Sir George Cornewall had bought " a wheel plough " in 1783, a seed drill in 1785, a threshing machine in 1802 and a plough from Scotland in 1815. Drill ploughs, partly adopted by 1793, were still being tried out in 1805. At Bridge Sollars a landowner had introduced a locally-designed threshing machine.[66]

New ideas spread from the landowners, although a more general diffusion was assured from 1770 when the *Hereford Journal* was founded. One of Sir George Cornewall's farm account books contains a newspaper cutting of 1794 advertising a Radnorshire man's cure for scour in cattle, and another of about 1796 advertising a London sowing-hopper attachment for ploughs. The landowners were instrumental in establishing the Herefordshire Agricultural Society, with Duncumb as first secretary, in 1797. The society immediately set about promoting improved methods. Altogether, in Herefordshire as elsewhere, the landowners must receive much of the credit for initiating the technological changes which overtook farming during the eighteenth century.

IV

At the end of the century and throughout the Napoleonic wars the pace of technical and economic change accelerated. The only long series of farm receipts for an earlier period, those of the Rector of Whitchurch from his sales of cider, wheat, barley, ryegrass and clover seed, hay, straw, cows and calves, show no overall rise from 1730 to 1766. On the other hand, between 1783 and 1815 the profits

of farming may have been rising, as they seem to have done on the Canon Frome farm belonging to the Hopton family and on the Cornewall home farm at Moccas.[67]

As the net return from farming rose, so did the cash return to labour. At Moccas over 100 per cent more was spent on farm labour, excluding the regular farm servants, in 1799 than in 1786.[68] Data collected by the Board of Agriculture[69] show that the cost of labour on arable land in Herefordshire in winter had risen over 28 per cent. and in summer over 33 per cent. between 1790 and 1804. Reaping wheat cost 50 per cent. more and threshing over 33 per cent. more. Hands were scarce and the more efficient workers were said to be leaving the land. Duncumb claimed that the male population was " so much thinned by the levies and operations of war, that the farmer in particular has but little opportunity of selection ".[70] The four harvests of Herefordshire farming, the hay, grain, hops and cider (the last three overlapping) made heavy demands on labour during the third quarter of the year. Local labour was supplemented by contracting bands of men from South Wales for the grain harvest, and in the 1790s half the hop-picking was being done by Welsh women who came into Herefordshire and Worcestershire for that purpose.[71] Nevertheless, labour was so short that in a " hit " year for apples the overabundant fruit had to be knocked unripe from the trees, thus impairing the quality of the sale cider.

To Clark this scarcity of labour seemed ample justification for enclosing the remaining commons, since " where there is so much work . . . there are few poor that do not deserve to be ". And, enclosure, he thought, " would increase the number of hands for labour, by removing the *means* of subsisting in idleness ".[72] To Duncumb, a decade later, labourers' wages were lagging too far behind the cost of living (which does not mean that the rise in wages was in itself insignificant among farm costs), for wage regulation in Herefordshire had become ineffective in the late eighteenth century.[73] Nominal rates of pay were " ordered as usual " at each Quarter Sessions and did not reflect the movement of the market rates. The labourer's annual income had not risen fast enough to keep him, if he had a family, off the parish, except perhaps in those few parishes where wage rates were linked by a sliding scale to the price of bread. The labour bill in farming, in the form of cash wages and parish rates, was mounting but not so fast as to provide the labourer with a sufficient real income. Thus, while the cost of labour seemed burdensome to the farmer, the labourer's position continued to deteriorate.

In years of dear bread the labourer suffered direly. In July 1795 the government had to order a ship carrying 500 quarters of wheat

into Chepstow, to supply the Forest of Dean.[74] As early as March that year Edward Wallwyn had written to his steward at Much Marcle that " the prospect of a great Crop of Grain next Harvest is not at present promising—I fear Corn will be dear. I shall plant all the Potatoes I possibly can, and would advise every body else to do the same, & particularly the poorer sort of People ".[75] The same month and thereafter the Hoptons of Canon Frome were selling wheat " at 8/- to the poor tho' the mark[t] price was then 10/6 ".[76] In March, 1796, grain barges proceeding from Wilton, near Ross, to Bristol were boarded at Lydbrook by the Dean Foresters who removed much of the wheat and flour.[77] In November 1799, Wallwyn wrote that " the Crops of grain with us are greatly defective—particularly the lent Corn—Almost all the Barley (which on these Clays is a late Crop) is greatly injured & Much of it absolutely spoiled ".[78] In consequence prices were rising and distress threatened, for heavy rains, " bad for the Farmer, & still worse for the Poor ", continued to impede the sowing of the next season's wheat. In March, 1800 a mob seized the cargo of wheat and flour from a grain barge at Redbrook and sold it locally at 10s. 6d. per bushel, which was then a low price; the Hoptons of Canon Frome planted much more potato land that year.[79] In 1801, faced with an unprecedented rise in the price of bread and soaring poor rates, some Hereford shopkeepers were " compelled to dine frequently on potatoes and water, in order, that eighteenpence might be saved to meet the demands of the overseer ! "[80] That year a subscription flour company was formed in the town " ' for the purpose of reducing the unexampled prices of bread and flour, and to prevent the adulteration of these articles ' " and in 1802 the company ordered a 20 h.p. Boulton & Watt engine for its mill,[81] The company appears to have gone into liquidation when grain prices fell.

The attempts to cope with the plight of the poor seem to have been serious, and, although the poor were hard hit in the worst seasons[82] they apparently escaped the worst sufferings of their counterparts in some southern counties. Nevertheless, high grain prices were not entirely the farmer's gain. As Wallwyn argued, " tho' to a vulgar Age, it may appear to the Advantage of the Farmer, the fact is otherwise, for having only Half a crop he has only Half his usual Quantity to dispense of, & if he does it at a double price it produces only the same sum. Whereby with other loss of Straw & other Food for Cattle he is ultimately as great a Suferer [*sic*] as the rest of the Community—for as all must be supplied, Rates, Taxes and Wages increase in propt ". He was candid enough to add, " I will not tell you that I am labouring

absolutely in Vain ".[83] Wallwyn ignored the effects of the price-quantity ratio for grain, whereby a small deficiency of supply would cause a disproportionate rise in price, but his point that high grain and straw prices were disadvantageous to the livestock side of farming is a valid one, although not especially applicable to Herefordshire where few cattle were stall-fed.

There is little direct evidence as to the profits of farming in Herefordshire at this time. The Hopton and Cornewall farm accounts reveal no peaks of profit in the years of dear grain, 1795, '99 and 1801, but rather an uneven rise which became marked after 1805 and especially after 1808. Most farms were probably paying an adequate and increasing return during the wars, some were doubtless paying exceptionally well. The landowner, too, was able to cream off some of the profits by substituting leases determinable every seven years for those binding for a full twenty-one.[84] The boom in mansion building and estate landscaping in Herefordshire during the eighteenth and early nineteenth centuries, " especially in the richer parts of the county, and in the sections most readily in contact with, and open to influences from other English counties ",[85] perhaps reflected rising returns from landed property. Only the labourer's relative position was declining, as the rise in his wages was outstripped by an even more startling rise in the price of provisions.

V

The strain on the agricultural economy at the turn of the century prompted the government to collect information on the grain supply and the general agricultural situation. For Herefordshire only the returns made for the 1801 enquiry seem to survive. These have been analysed and mapped by David Thomas, but unfortunately, besides being incomplete, they are not directly useful for mapping types of farming.[86] Data on the distribution of hop-yards and orchards were interpolated from the 1807 Excise Returns and the original drawings of the Ordnance Survey respectively, but no comparable information was found on clover or the rotation grasses, and none on livestock. There is thus no clue as to how the various enterprises were combined on the farm. The maps which can be drawn are only of the distributions of some crops, not of complete and working farming systems.

The distributions serve to stress how varied were the products of farming in Herefordshire. The Ross district, especially west of the King's Caple meander of the Wye, stands out as an area of wheat and barley growing, where turnips and rape were important but hops were not grown. The main sources of receipts on farms

for which accounts survive were barley, wheat, sheep and oxen. Hops and cider were not sold. The proportion of pasture on the farms was small, and clover and rye-grass leys were the main sources of feed.[87] Elsewhere in the lowlands wheat was the dominant cereal. Turnips had not succeeded in the wet and clayey Golden Valley, where they were being tried in the early 1790s, and Thomas concludes that attempts to diffuse the Norfolk husbandry beyond the ecological limits of constituent crops in the western uplands were soon to prove abortive.[88] In the Plain of Hereford proper the importance of cereals, cider-growing and hop-growing gradually lessened from east to west.

" The Herefordshire farmers have so much business between corn, cider, hop, and fattening cattle, on their hands ", thought Clark, " that a part must be, and always is neglected ".[89] The resources devoted to the various enterprises differed from time to time, even from season to season. Hops were blamed for distracting the farmer from more certain lines of production and for absorbing manure needed elsewhere on the farm. During the French wars hop-growing was suffering from the depression of the parent brewing industry and probably from a reaction to earlier over-planting.[90] On the other hand, the production and the profitability of wheat, cattle and sheep, and cider were rising. By and large the county's farming seemed viable and prosperous. The main grievance was the state of communications. It was said of the London auctioneer, Christie, " that having an estate in Herefordshire to dispose of He had as usual set it off by a flowery oration, but before concluding He said that He felt bound to observe that Herefordshire was a county that had two peculiarities, viz.: ' Turnpikes without end ',—and ' roads without bottom '."[91] The improvement of local agriculture and communications promised dividends to the entrepeneur with capital and energy to spare, while the amenity value of the county was high. The largest purchase of land was that of the 6,000 acre Hampton Court estate, bought by Richard Arkwright, Jnr., the cotton manufacturer, for £230,000 in 1809. This was perhaps the best testimony to the potential rewards of owning agricultural land in the county.[92]

REFERENCES

[1] Notably the establishment of commercial hop-growing and cider making. See e.g. M. W. Barley, *The English Farmhouse and Cottage*, 1961, p. 156.
[2] T. S. Ashton, *The Industrial Revolution 1760–1830*, 1948, p. 63.
[3] Quoted by T. S. Willan, " The River Navigation and Trade of the Severn Valley, 1600–1750 ", *Econ. Hist. Rev.*, VIII, 1938, p. 75.
[4] Especially for bulky goods. See e.g. A. S. Wood, " Sale of Navy Timber on the Whitehouse Estate in the Years 1812–13 ", *Trans. Woolhope N.F.C.*, 1936, pp. 33–4.

[6] Daniel Defoe, *A Tour through England and Wales*, 1928 edn., II, p. 52. Lord Scudamore was making cider from the redstreak apples he had popularised in Herefordshire at his seat at Holme Lacy as early as 1667. Apples were also bought from local growers. The product was bottled and sent to London. Weekly Misc. Expenses 1667–68, Scudamore Papers, Hereford City L.C. 631.16. William Brydges of Tyberton was marketing cider to London acquaintances in the early eighteenth century, despatching it via Bristol and slow coastal shipping. See e.g. Bill of Lading 3/3 and letter to his wife 10/3/1713, Brydges Coll., uncat., Herefs. R.O.

[7] G. E. Farr, *Chepstow Ships*, 1954, p. 7; " The Weares . . . Wye and Lugg " 22/4/1696, Papers relating to Wye and Lugg Navigation in the possession of D. L. Arkwright, Kinsham Court.

[8] Defoe, *op. cit.*, II, p. 49. There was a similar export to Iberia from Exeter, E. A. G. Clark, *The Ports of the Exe Estuary 1660–1800*, 1960, p. 124.

[9] Papers *re* Wye and Lugg Navigation, *loc. cit.*; Petition to House of Lords from inhabitants of Eccleswall, etc., c1696, Hampton Court Collections, Herefs. R.O.; George Bennett, Agricultural Accounts 1705–07, Hopton Coll. pamphlet box, Hereford City 631.16.

[10] C. Morris (ed.), *The Journeys of Celia Fiennes*, 1949, pp. 233–4; W. Marshall, *The Rural Economy of Glocestershire*, II, 1789, p. 223; Edward Wallwyn of Much Marcle was unable to sell hay to owners of colliery horses in Dean Forest in March, 1795 because the roads were impassable. Various papers relating to Much Marcle, 1794–1803, Hereford City L.C. Deeds 4253.

[11] John Price, *An Historical and Topographical Account of Leominster*, 1795, passim; Report and Plan of Intended Hereford to Gloucester Canal, Hereford City, P.C. 626 [1790–91]; John Lodge, *Introductory Sketches towards a Topographical History of the County of Hereford*, 1793, pp. 20–21; I. Cohen, " The Non-Tidal Wye and its Navigation ", *Trans. Woolhope N.F.C.*, xxxv, 1956, pp. 83–101, and " The Leominster-Stourport canal ", *Trans. Woolhope N.F.C.*, xxxv, 1957, pp. 267–86; Charles Hadfield, *The Canals of South Wales and the Border*, 1960, passim. Neither canal was extended further before 1815 and neither was profitable.

[12] The Report of the Committee for the Herefordshire and Gloucestershire Canal, n.d. (c1790), Hereford City, P.C., 626, pp. 2–3. Joseph Farington's journey on the Wye in Sept., 1803, illustrates the difficulties of navigating the river. His boat had several times to be hauled over shoals between Wilton and New Weir, and from Monmouth to Chepstow the journey by boat had to be abandoned because the river was so low. J. Greig (ed.), *The Farington Diary*, 1923, II, p. 151.

[13] J. Priestley, *Historical Account of the Navigable Rivers* [*etc.*], 1831, pp. 363, 440.

[13] Hadfield, *op. cit.*, p. 188.

[14] Report Hereford-Gloucester Canal Committee, c1790, p. 4; J. Clark, *General View of the Agriculture of the County of Hereford*, 1794, *passim*, stresses the great need for lime and for better farm buildings, as do other authorities. For the similar aims of the Leominster-Stourport canal promoters see Price, *op. cit.*, pp. 190–1.

[15] John Price, *An Historical Account of the City of Hereford*, 1796; p. 59; John Duncumb, *General View of the Agriculture of the County of Hereford*, 1805, p. 151, states that the county's population rose 20 per cent over the same period, to 89, 191.

[16] Report Hereford-Gloucester Canal Committee, p. 1.

[17] The two reports relating to the Hereford-Gloucester canal, cited above, are the sources of the following estimates unless otherwise stated.

[18] Lodge, *op. cit.*, pp. 7–8.

[19] Samuel Rudder, *A New History of Gloucestershire*, 1779, p. 64; Simon Moreau, *A Tour to Cheltenham Spa*, 1783, pp. 85–86; G. E. Fussell and C. Goodman, " Traffic in Farm Produce in Eighteenth-century England ", *Agric. Hist.*, 12, 1938, p. 364; Duncumb, *op. cit.*, pp. 165–6.

[20] T. A. Knight in *Communications to the Board of Agriculture*, V, 1806, p. 54; Duncumb, *op. cit.*, pp. 60–63. The increase of cost on 100 acres of arable in

Herefordshire, 1790–1803, was reckoned at an average of 13·5 per cent., *Communications . . . ,* V, p. 31.

[21] John Price, *The Worcester Guide*, 1799, p. 51, and D. C. D. Pocock, " Hop Cultivation and Hop Regions in the West Midlands ", *Annual Report*, Dept. of Hop Research, Wye, 1958, pp. 75–80.

[22] Marshall, *op. cit.*, II, esp. pp. 380–1; Hadfield, *op. cit.*, p. 186.

[23] Lodge, *op. cit.*, p. 96.

[24] Marshall, *op. cit.*, p. 241; see also Clark, *op. cit.* p. 43, and Lodge, *op. cit.*, p. 99. However, Michael Biddulph of Ledbury was warned when about to send perry to Stone, Staffs., in 1785, that " it is not to be ventured on our Canal ". Letters to and from Michael Biddulph, Hereford City, Biddulph Coll., 535.

[25] But the Stroudwater Canal carried little cider and that not necessarily from Herefordshire. Tonnage Book, 1798–1813, Glos. R.O.

[26] Letters concerning Supply of Cider, 1803, Hereford City, L.C. 663.1; Disbursement Book " A ", 1808–18, Hampton Court Coll., Herefs. R.O.

[27] W. H. Chaloner, " Manchester in the Latter Half of the Eighteenth Century ", *Bull. John Rylands Library*, 42, 1959, p. 44.

[28] W. T. Pomeroy, *General View: Worcs.*, 1794, pp. 29–30; T. Rudge, *General View:. Glos.*, 1807, p. 238; W. Pitt, *General View: Worcs.*, 1813, p. 149. Apples were also sent by " the fruit boats " to Bristol. Marshall, *op. cit.*, II, 1789, p. 384.

[29] G E Fussell, " Crop Husbandry in Eighteenth-Century England—2 ", *Agric. Hist.*, 16, 1942, p. 43; Defoe, *op. cit.*, II, p. 49; E. W. Brayley and J. Britton, *The Beauties of England and Wales*, VI, 1805, p. 420, quoting Philips' Poem on Cyder (1706); P. Mathias, " Agriculture and the Brewing and Distilling Industries in the Eighteenth Century ", *Econ Hist. Rev.*, 2 ser., V, 1952, p. 254, n. 5; John Price, *The Worcester Guide*, 1799, p. 52.

[30] Lodge, *op. cit.*, p. 19; R. Perry, " The Gloucestershire Woollen Industry, 1100–1690 ", *Trans. Bristol and Glos. Arch. Soc.*, 66, 1945, p. 104; Arthur Young, *A Six Weeks Tour through the Southern Counties*, 1769, p. 151, stated that the best wool used by the Witney, Oxon., blanket makers came from Herefordshire and Worcestershire.

[31] T. A. Knight, " Account of Herefordshire Breeds . . . ", *Communications to Board of Agric.*, II, 1800, p. 177; R. Trow-Smith, *A History of British Livestock Husbandry 1700–1900*, 1959, pp. 102, 194.

[32] J. Duncumb, *Collections towards the History . . . of Hereford*, I, 1804, p. 177, and *General View*, p. 68.

[33] Enclosure material is drawn from Duncumb, *General View*, pp. 97, 101–2; W. E. Tate, " A handlist of English enclosure acts and awards Part 15—Herefordshire ", *Trans. Woolhope N.F.C.*, 1941, pp. 183–90; C. W. Atkin, The Evolution of Rural Settlement in Herefordshire, M.A. thesis, Liverpool, 1951; W. H. R. Curtler, *The Enclosure and Redistribution of our Land*, 1920, pp. 110, 197, citing Professor Gonner and Drs. Gray and Slater; H. L. Gray, *English Field Systems*, 1915, *passim*.

[34] See Joan Thirsk, *English Peasant Farming*, 1957, pp. 195–6, citing Richard Baxter, 1691. Arable land at Tyberton had been grassed down about 1680, " Wm Watkines affidavit about the Sheep pasture & tithes " [1718], Brydges Coll., uncat., Herefs. R.O.

[35] S. Robinson, " The Forests and Woodland Areas of Herefordshire ", *Trans. Woolhope N.F.C.*, 1923, pp. 200, 204.

[36] J.L., " On Sowing Turnips . . . ", 1783, in *Bath Soc. Letters & Papers*, II, 1788, p. 236.

[37] Evan Thomas, who himself demonstrated the unsuitability of the Norfolk rotation for much of the Welsh borderland, continues to use this and more specifically the adoption of the turnip as the index of agricultural change. " Agricultural Changes in the Welsh Borderland ", *Trans. Hon. Soc. of Cymmrodorion*, 1961, pp. 102–3, 114.

[38] E. N., " On the Turnip Husbandry ", 1781, in *Bath Soc. Letters and Papers*, II, 1788, p. 372.

[39] See, e.g. Thomas' map of the distribution of turnips in the Welsh borderland counties in 1801, " The Acreage Returns of 1801 for the Welsh borderland ". *Trans. & Papers I.B.G.*, 1959, fig. 6, p. 176, and John Rowe, *Cornwall in the Age of the Industrial Revolution*, 1953, pp. 223–31. Rowe mentions that potatoes were preferred in Cornwall to turnips, which were more demanding of lime and labour for hoeing. These may also have limited turnips in Herefordshire: of the neighbouring part of Monmouth it was said in 1812 that turnip-growing was concentrated in Abergavenny hundred because lime could be brought there cheaply from the Forest of Dean. C. Hassall, *General View: Monmouth*, 1812, p. 48.

[40] D. Thomas, The Agricultural Geography of the Welsh Border in the late Eighteenth and early Nineteenth Centuries, M.A. thesis, Aberystwyth, 1957, pp. 161ff. and 1961, *loc. cit.*, p. 114; M. Gray, *The Highland Economy 1750–1850*, 1957, p. 85.

[41] Knight, *loc. cit.*, p. 172.

[42] Clark, *General View*, p. 18; Thomas, *loc. cit.*, fig. 24.

[43] Sir George Cornewall, Farm Account Book 1800–19, Hereford City L.C. Deeds, 5871.

[44] John Beale, *Herefordshire Orchards, A Pattern For all England*, 1657, p. 2. Barley, *op. cit.*, pp. 98–99, remarks on the speed with which new styles of farmhouse construction were taken up on the Welsh border, especially in Herefordshire, from the end of the sixteenth century.

[45] Cf. the changes in the farming pattern of the Ross district described in John Aubrey, *Natural History of Wilts.*, Bodleian Aubrey MSS. II, fol. 152–3, " Remarques taken from Henry Milbourne, Esq., concerning . . . Herefordshire ".

[46] The following instances of turnip cultivation are from: Beale, *op. cit.*, p. 52, and " I.B." (probably Beale) in Andrew Yarranton, *The Improvement improved* . . . , 1663, pp. 34–43; C. Radcliffe-Cooke, " John Noble's Household and Farm Accounts ", *Trans. Woolhope N.F.C.*, XXXVI, 1959, p. 201; Papers relating to Earl Coningesby's Case, 1720–21, Hereford City L.C. 942.44/13, 298; Brydges Coll., uncat., Herefs. R.O.; Patteshall Coll., eighteenth century farm account books, Herefs. R.O. A95/-; Farm accounts at Eywood, 1756–62, Hereford City Hopton Coll. MS. 3652; Hopton family of Canon Frome, farm accounts 1779–87, Hereford City L.C. Deeds 8551; Sir George Cornewall, Farm Accounts 1786–99, Hereford City L.C. Deeds 5871; Accounts of farm at Acton Beauchamp, 1785–89, Hereford City L.C. large pamphlet box 631.16; Thomas, *op. cit.* p. 82, fig. 24; Knight, *loc. cit.* pp. 177, 84.

[47] For an authoritative assessment of the relative historical importance of turnips and clovers and rotation grasses see R. Trow-Smith, *A History of British Livestock Husbandry to 1700*, 1957, p. 256.

[48] Yarranton, *op. cit.*, pp. 31, 34–43; T. W. M. Johnson, " Captain Andrew Yarranton and Herefordshire ", *Trans. Woolhope N.F.C.*, XXXIV, 1954, p. 40; G. E. Fussell, " Agriculture from the Restoration to Anne ", *Econ. Hist. Rev.*, IX, 1938, p. 71.

[49] S. B. Stallard-Penoyre, personal communication.

[50] Nathaniel Kent, *Hints to Gentlemen of Landed Property*, 1793, p. 36; see also on clover R. G. Stapledon and W. Davies, *Ley Farming*, 1948, chap. 1; Aubrey, *loc. cit.*; Farm Accounts of Holme Lacy, Book C, 1708–09, Hereford City L.C. MSS., 631.16; W. H. Howse, " Farm Operations in 1719 ", *Trans. Woolhope N.F.C.*, XXXV, 1957, p. 301; Radcliffe-Cooke, *loc. cit.*, p. 201; Patteshall Coll. eighteenth century farm account books, entries for 1729 and 1740s and '50s, Herefs. R.O. A95/-; Daniel Renaud, Rector of Whitchurch, Farm Accounts, 1730–66, Herefs. R.O. A98/-; Farm Accounts at Eywood, 1756–62, Hereford City, Hopton Coll. MS.3652; Hopton family of Canon Frome, Farm Accounts, 1779–87, and 1788–99, Hereford City L.C. Deeds 8550, 8551; Sir George Cornewall, Farm Accounts, Hereford City L.C. Deeds 5871; Duncumb, *General View*, pp. 56, 70.

[51] Vaughan claimed to have discovered the principle of floating meadows some years before 1601, *Most Approved and Long experienced Water Works*, 1610, no pagination. Catchwork meadows were apparently widely used in the sixteenth century. See also A. S. Wood, " Comments . . . ", *Trans. Woolhope N.F.C.*, XXXVI, 1959, p. 203. The following section on water-meadows draws on D. G. Bayliss, The Leintwardine area of Herefordshire, M.A. thesis, Manchester, 1957, p. 81; C. R. H. Sturgess, " Land Drainage and Irrigation ", *Trans. Woolhope N.F.C.*, 1947, pp. 93–4; Beale, *op. cit.*, p. 52; Farm Accounts of Holme Lacy, Book C, 1708–09, Hereford City L.C. MSS.631., 16; Brydges Coll., uncat., Herefs. R.O.; Diary of John Holder of Taynton, 1691–1730, who was constructing floated meadows on the Herefordshire border 1706–11 (copy in possession of M. A. Havinden); Kent, *op. cit.*, p. 52; Clark, *General View*, pp. 12–13; Price, *Leominster*, *op. cit.*, p. 208; Duncumb, *General View*, p. 162; Lodge, *op. cit.*, p. 9; Cornewall Family correspondence, 13/11/1809, *re* Monnington water-course, Hereford City L.C. Deeds, 5217; Hampton Court Coll., Herefs. R.O., Memo 1820–1822, entries for 9/11/1820, 7/2 and 30/3/21, Thomas Blashill to John Arkwright, 12/5 and 2/12/1825, John Arkwright to Richard Arkwright 3/11/1829; *Hereford Journal* 20/11/1833; John Biddulph's Diary, 9/12/1833, Hereford City Biddulph Coll., 963; Hampton Ct. Coll. John Thomas to Edward Colley 22/2/1848, James Holland to Colley, 11/9/1861.

[52] On the following section see Duncumb, *General View*, p. 67; Cornewall Farm Account 1800–19, Hereford City L.C. Deeds, 5871; Various Papers . . . (Wallwyn to Harbut 1/5 and reply 12/5/1795), Hereford City L.C. Deeds 4253; on mangels see Cornewall accounts, 1813, and Letters to Thomas Bibbs . . . (16/5/1816), 1816–34, Hereford City Biddulph Coll., 536.

[53] Dutch clover was a white clover suitable for very short leys. See Various Papers . . . , (Wallwyn to Harbut, 16/3/1795), Hereford City L.C. Deeds 4253; Duncumb, *General View*, p. 72; Hopton family of Canon Frome, Farm Accounts 1779–87, Hereford City L.C. Deeds 8551.

[54] Clark, *General View*, p. 78.

[55] Hopton family Farm Account, Hereford City L.C. Deeds, 8550; Cornewall Farm Account, Hereford City L.C. Deeds, 5871; Lodge, *op. cit.*, p. 39.

[56] Duncumb, *General View*, p. 66; Thomas, *op. cit.*, pp. 72., 4.

[57] Bounty Payments for Flax and Hemp, 1792–97, Herefs. R.O., uncat.

[58] W. H. Howse, " A Harley Cash Book of 1725–27 ", *Trans. Woolhope N.F.C.*, XXXVI, 1958, p. 54.

[59] Brydges Coll., correspondence, uncat., Herefs. R.O.

[60] Beale, *op. cit.*, p. 37; Duncumb, *General View*, p. 52; for a less sanguine opinion see " Extracts from Letters . . . ," *Annals of Agriculture*, XXVI, 1796, p. 440.

[61] See, e.g. L. D. Stamp, *The Land of Britain: Its Use and Misuse*, 1948, p. 340, figs. 177–80. The gradual consolidation of holdings in Herefordshire is evident in contemporary documents. Brydges affirmed in 1717–8 that " it was certainly y^e^ Interest of every gentleman to gett his Estate as much together as he could both out of regard of Interest as well as conveniency of managem^t^ ". Brydges Coll., Herefs. R.O.

[62] T. Ravenhill to (? Michael) Biddulph, 22/7/1791, in Hereford City, Biddulph Coll., 539; cf. Duncumb, *General View*, p. 29.

[63] Survey and Valuation of the Estate . . . Lord Viscount Malden, 1786 and '87, in possession of D. L. Arkwright. In 1793 the larger Kentish hop kiln had ' lately ' been introduced. Lodge, *op. cit.*, p. 45.

[64] Hereford City, Biddulph Coll., 539.

[65] Duncumb, *General View*, pp. 32–5 and 152–3.

[66] *Ibid.*, pp. 45–8, 58; Clark, *General View*, pp. 24, 65; E. L. Loveden, " Notes in Herefordshire ", *Annals of Agric.*, XXXV, 1800, pp. 103–6; Cornewall Farm Account, Hereford City L.C. Deeds 5871; Lodge, *op. cit.*, p. 26; T. Westphaling, *Communications to Board of Agric.*, II, 1800, p. 422; the first agricultural machine tested by the Royal Society of Arts was a threshing mill by Lloyd of Hereford in 1761, D. Hudson and K. W. Luckhurst, *The Royal Society of Arts 1754-1954*, 1954, p. 81.

[67] Account Book of Daniel Renaud, Herefs. R.O. A.98/-; Hopton family of Canon Frome Farm Accounts, 1779–1815, Hereford City L.C. Deeds, 8551,

8550, 8547; Cornewall Farm Accounts, Moccas, 1781–1819, Hereford City L.C. Deeds, 5871.

[68] Viz.:

1786	..	£96	1793	..	£134
1787	..	99	1794	..	135
1788	..	103	1795	..	121
1789	..	118	1796	..	137
1790	..	126	1797	..	175
1791	..	123	1798	..	178
1792	..	160	1799	..	196

[69] *Communications to Board of Agric.*, V, 1806, pp. 23–31; see also *Select Comm. on Agric.*, 1833, Q.8361.

[70] *General View*, pp. 148–9. The scarcity was by no means confined to Herefordshire.

[71] See, e.g. Lodge, *op. cit.*, p. 45 note; W. T. Pomeroy *General View: Worcs.*, 1794, p. 49; Goode family Farm Accounts, Amberley, 1805–13, Herefs. R.O. B43/18. The influx of Welshmen at harvest was old-established, see, e.g. Patteshall Coll. Farm Account Books, eighteenth century, entries for 1740s and 1750s, Herefs. R.O. A95/-. In the 1770s most of the hop-pickers had come from Stourbridge and Broseley, Mathias, *The Brewing Industry in England 1700–1800*, 1959, p. 492. It is not clear why the Welsh had subsequently tended to replace the West Midlanders.

[72] *General View*, pp. 21, 27, 29, 42.

[73] *General View*, pp. 40–1, 64, 136–9; Quarter Sessions Minute Book 1792–97, Herefs. R.O., uncat.; R. K. Kelsall, " A Century of Wage Assessments in Herefordshire ", *Eng. Hist. Rev.*, LVII, 1942, p. 119, observes that the Herefordshire evidence does not support the view that wage rates were abnormally stable in the west of England during the eighteenth century. Cf. *Select Comm. on Agric.*, 1833, Qs. 8397–8.

[74] W. E. Minchinton, " Agricultural Returns and the Government during the Napoleonic Wars ", *Agric. Hist. Rev.*, I, 1953, p. 30.

[75] Wallwyn to Harbut, 16/3/1795, Hereford City L.C. Deeds, 4253. The neighbouring parish of Dymock, Glos., made strenuous efforts to relieve the plight of the poor from 1795, J. E. Gethyn-Jones, *Dymock Down the Ages*, n.d., p. 173.

[76] Hopton Farm Account, Hereford City L.C. Deeds, 8550.

[77] Cohen, 1956, *loc. cit.*, p. 97.

[78] Wallwyn to Mrs. Leech, 2/11/1799, Memoranda . . . , Hereford City L.C. Deeds 7833.

[79] Cohen, *loc. cit.*, p. 97; Hopton Farm Account, Hereford City L.C. Deeds 8547.

[80] Duncumb, *General View*, p. 41.

[81] R. A. Pelham, " Corn Milling and the Industrial Revolution . . . ", *Univ. Birmingham Hist. Jnl.*, VI, 1958, p. 173. It may be more than coincidence that potatoes were first planted at Moccas in 1801, Hereford City L.C. Deeds 5871.

[82] There had been many complaints in 1795 that Herefordshire millers, mealers and farmers withheld grain and overcharged their poorer customers. A. G. L. Rogers (ed.), *Sir Frederic Morton Eden: The State of the Poor*, 1928, p. 204.

[83] Hereford City L.C. Deeds, 8550.

[84] *General View*, p. 41.

[85] T. Overbury, " The Domestic Architecture of Herefordshire ", Woolhope N.F.C., *Herefordshire*, n.d., pp. 245–6.

[86] Thomas, 1959, *loc. cit.*, and thesis *cit.*, both *passim*.

[87] Dew family of Brampton Abbots, Hereford City, L.C. MSS., 631.16 nos. 20934, 20935; Farm Account for Weir End Farm, Bridstow, 1810–18, Hereford City L.C. MSS. no. 23,747; Lodge, *op. cit.*, p. 11.

[88] Clark, *General View*, p. 18; Thomas, *op. cit.*, p. 163.

[89] *General View*, p. 42.

[90] *Ibid.*, pp. 29–30; Mathias, *op. cit.*, p. 583.

[91] J. Greig (ed.), *The Farington Diary*, 1923, II, p. 149 (13/9/1803).

[92] Papers *re* the acquisition of Hampton Court, Hampton Ct. Coll., Herefs. R.O.; J. R. McCulloch, *A Statistical Account of the British Empire*, 1839, p. 534, estimated from the Property Tax Commissioners' figures that the average rent per acre in Herefordshire rose from 15/11¾ in 1810–11 to 19/- in 1814–15.

NOTE

This paper is taken from the writer's unpublished D.Phil. thesis (University of Oxford, 1962), " The Evolution of High Farming, 1815–65, with reference to Herefordshire ". This section dealing with events prior to 1815 was prepared because of the almost total lack of satisfactory background material on the agricultural history of Herefordshire. The course of change in Herefordshire may be compared and contrasted with that on a free-draining upland, described in the writer's " Eighteenth-century Changes in Hampshire Chalkland Farming ", *Agricultural History Review*, VIII, 1960, pp. 5–19. I wish to express my gratitude to Mr. D. L. Arkwright of Kinsham Court for providing me with much manuscript material relating to the Hampton Court estate.

For the sake of future students who, it is to be hoped, will be attracted to work on the material acquired by the recently-formed Hereford County Record Office full documentation is retained in this paper. To reduce the irritation to the general reader the references are however grouped at the end.

THE ROMAN ANVIL FROM SUTTON WALLS, HEREFORDSHIRE

By R. F. Tylecote*

This is the largest anvil of the Roman period known from the British Isles. On receipt, it weighed 111 lbs., and bears comparison with that recently found at Stanton Low, Buckinghamshire, which weighed 51 lbs.[1] and which was rescued during the quarrying away of a substantial Romano-British villa, a settlement with Iron Age and Belgic origins in Great Linford, Gravel Pit, Newport Pagnell, Bucks.

The larger anvil was found at Sutton Walls, Herefordshire, during excavations in 1948–51 by Dr. Kathleen Kenyon on behalf of the Ministry of Works, and the circumstances of its finding are reported elsewhere.[2] The site, a hill-fort, was occupied between about 100 B.C. and the third century A.D.

It is roughly cubic; the working surface originally measured about 9·0 x 9·0 ins. and the bottom 7·3 x 6·5 ins. It stands 10·5 ins. high and the narrow end was designed to be inserted in a piece of timber to raise it to a convenient working height, when it would look as shown in Fig. 1.

One of the faces (Fig. 2) bears the remains of two slits. These slits connected originally with two holes in the working surface, only one of which now remains (Fig. 3). The holes were intended for heading nails or rivets. These would first be made from thick bar (about 1¼ in. diameter) and pointed, as shown by Coghlan.[3] Then they would be cut off the bar and inserted, pointed end down, into the nail hole, whereupon the head would be formed. These holes and slits tend to weaken the anvil and in this particular case have caused a large piece to break off the left-hand side (Fig. 2). However, the anvil has continued to be used after this mishap.

The nail holes would have been made by drifting, that is, hammering a cold bar through the red hot mass, and removing the bar as soon as it was too hot and quenching it in water.

Views of the complete anvil are shown in Figs. 4 and 5.

Typology

Two anvils of similar shape have been reported from Germany. The first, which was found at Kreimbach (Pfalz) is described by Lindenschmit[4] and has been reproduced by Coghlan.[5] Its weight is not reported but the top face measured 7 x 7 ins. and the bottom 3·2 x 3·2 ins.; it was 8·3 ins. high. Dimensionally it is closer to that from Stanton Low rather than Sutton Walls, and therefore presumably weighs about 50 lbs.

* Of the Department of Metallurgy, King's College, Newcastle upon Tyne.

Fig. 1. Anvil supported on timber as in use (Face 4). × ⅓ approx.

Fig. 2. Face 5 showing nail slit. × ⅓ approx.

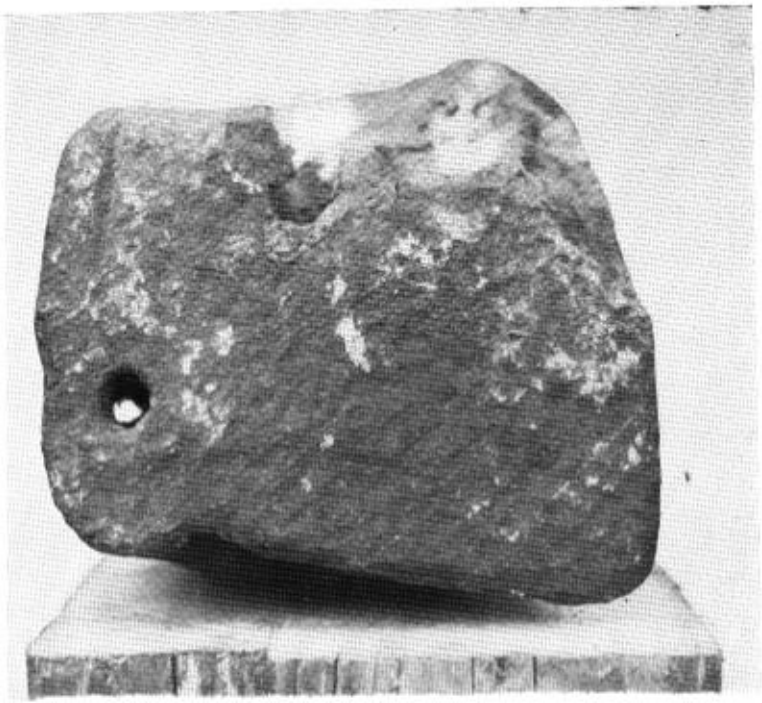

Fig. 3. FACE 6, WORKING SURFACE. TOP NAIL HOLE HAS BEEN CLOSED AFTER FRACTURE. × $\frac{2}{3}$ approx.

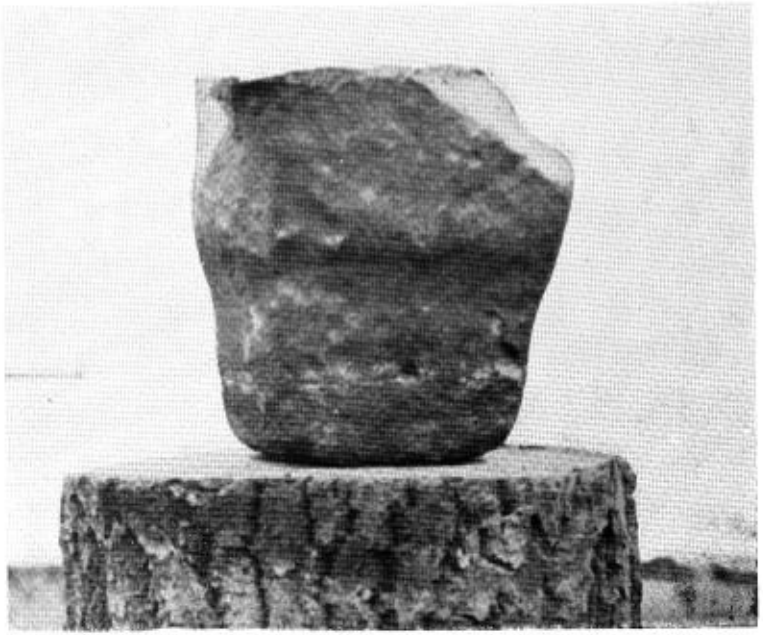

Fig. 4. FACE 3 AFTER CLEANING. × $\frac{1}{2}$ approx.

Fig. 5. GENERAL VIEW OF ANVIL; HEIGHT 10$\frac{1}{2}$ IN.

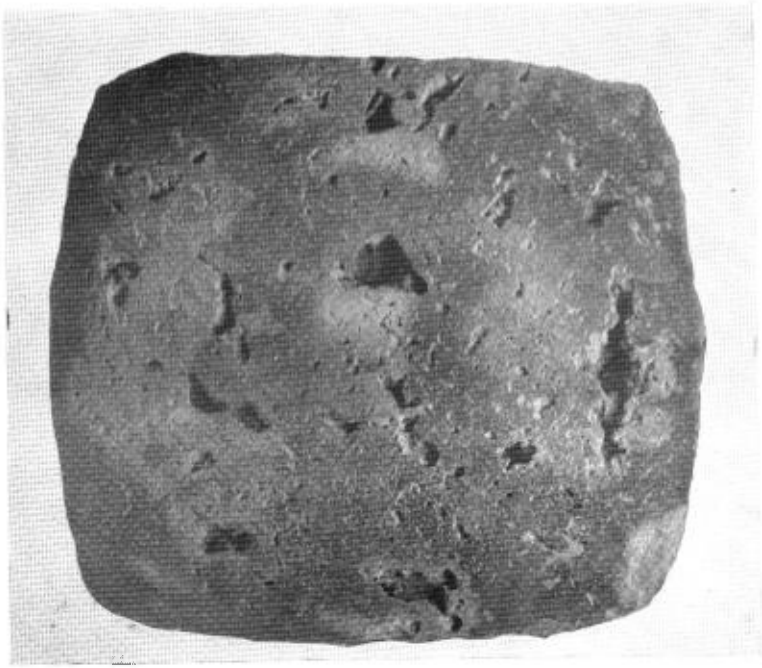

Fig. 6. SECTION AFTER ETCHING, SHOWING POROUS NATURE OF THE IRON. × $\frac{1}{2}$ approx.

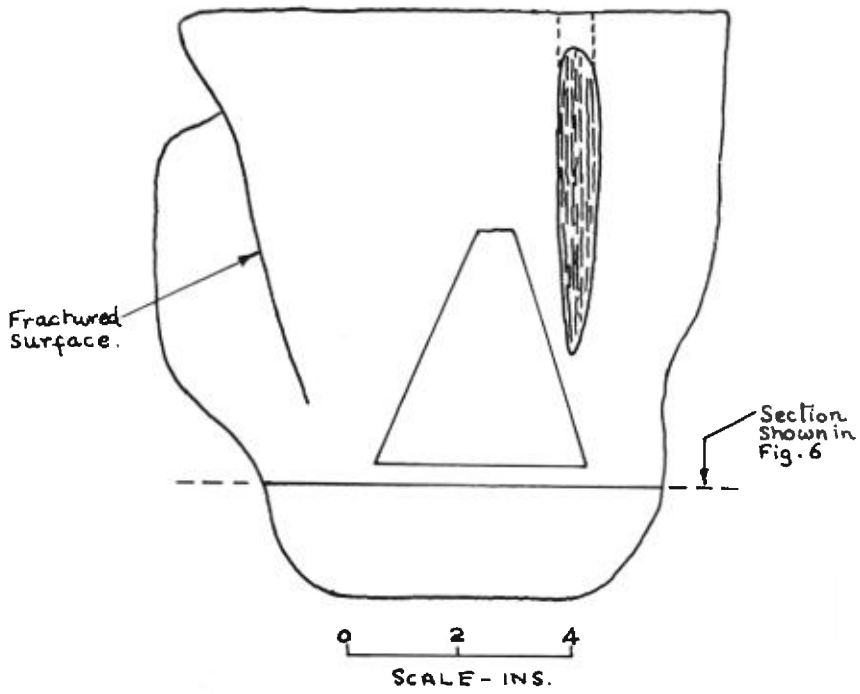

Fig. 7. FACE 5, SHOWING LOCATION OF PRISM-SHAPED BLOCK EXAMINED ON ALL ITS FACES, AND POSITION OF SECTION SHOWN IN FIG. 6

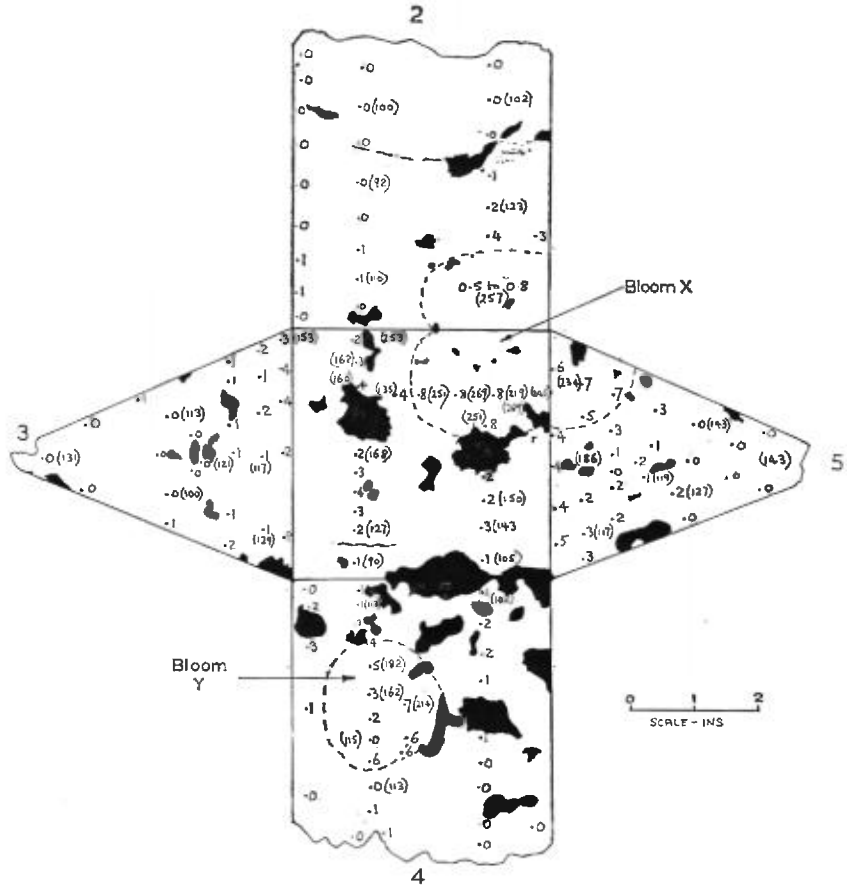

Fig. 8. DEVELOPED SURFACE OF PRISM-SHAPED BLOCK, SHOWING CARBON CONTENTS (0 TO 0·8 PER CENT.) AND HARDNESS (D.P.N.) AT VARIOUS POINTS. DOTTED LINES OUTLINE PROBABLE HIGH-CARBON BLOOMS. LARGE NUMBERS INDICATE FACE OF ANVIL NEAREST TO PRISM SURFACE.

Fig. 9. PHOTOMICROGRAPH OF SURFACE 4 SHOWN ON FIGURE 8. ETCHED. Magnification × 1·4

Fig. 10. PHOTOMICROGRAPH OF AREA TOWARDS THE CENTRE OF FACE 4, FIGURE 8.

LOW CARBON POROUS AREA ADJACENT TO HIGHER CARBON ZONES SHOWING COARSE WIDMANSTÄTTEN STRUCTURE. Magnification ×100.

The other comes from Mainz[6] but lacks the tapered bottom of the above three examples. The working surface measures 8 x 8 ins. and it stands 7·9 ins. high. The bottom surface measures 6·7 ins. square, and is flat and clearly designed to stand on a level working surface.

Both the German examples were found in Roman forts and there appears to be little doubt about their dating.

Chemical Analysis

The chemical analysis of swarf formed as a result of removing the 15 lb. piece from the narrow end was as follows:

Carbon . .	0·54 per cent.
Manganese	0·04 per cent.
Sulphur	0·035 per cent.
Phosphorus	0·11 per cent.

Apart from the comparatively high carbon content, this is a typical composition for the period.

A spectrographic analysis of surface 4, Fig. 8, gave the following additional information:

Manganese	trace
Silicon . .	0·02 per cent.
Copper . .	0·005–0·007 per cent.
Nickel	0·02 per cent.
Tin	0·002 per cent.
Chromium	not indicated
Molybdenum	faint trace
Vanadium	not indicated
Aluminium	trace
Titanium	faint trace
Magnesium	trace
Calcium	trace

Metallographic Examination

None of the anvils of the Roman period previously found had been subjected to a metallurgical examination. The only large pieces of fabricated iron work of this period that have been so examined are two large beams that had probably been made to span the stoke holes of bath houses at Corbridge[7] and Catterick.[8] These weighed 344 and 297 lbs. respectively and were found to have been made by welding up pieces of pre-forged wrought iron weighing about 15–20 lbs. Although these beams are somewhat larger than the Sutton Walls anvil, it seemed probable that the latter had been constructed in much the same way.

After cleaning one face (Face 3, Fig. 4) with a wire brush and a fine grinding wheel, it was examined carefully to see if there was any sign of the existence of individual blooms. Since the evidence was negative the anvil was sectioned by cutting 2 ins. from the narrow end. Examination of the ground section (Fig. 6) showed that it was generally porous but appeared to have been forged round the outside, so that it had a rim about ½ in. thick of less porous material. Unlike the beams, the disposition of the porosity gave no clue as to the manner of its construction. A sulphur print was made which indicated a low and even sulphur distribution. There was some concentration of sulphur at or near some slag inclusions. Macro-etching with 25 per cent. nitric acid and later with ammonium persulphate did not reveal any boundaries between separate blooms. Some light areas near the larger cavities had a hardness of not less than 150 D.P.N. A certain amount of rust and slag was evident. It was clear, however, that it had not been made from pre-forged blooms (small pieces of raw iron) but that it either consisted of a single mass of reduced iron ore (sponge iron) which had been hot-forged round the periphery, or a number of small pieces of equally porous material which had been welded together. Since the weight of the piece cut-off was only 15 lbs. it was possible that this was, in fact, a single piece, and the anvil itself had been made of a number of similar pieces. To test this possibility it was intended to section the remainder in a direction at right angles to the first piece. However, this would have meant further damage to the external surface which it was hoped could be avoided. It was therefore decided to remove a prism-shaped piece from the centre by drilling, as shown in Fig. 7. The resulting piece weighed 8 lbs. after planing and grinding and showed the same degree of porosity as Fig. 6.

This piece was the subject of an intensive microscopic and hardness investigation on all five surfaces. The disposition of the porosity gave little indication of the manner of its construction. A hardness examination of the finely ground surface ran into difficulties due to fine porosity. It was found possible to carry out a hardness test only when the surface had been finely polished and etched so that the fine porosity could be seen under the microscope and indentations made in areas free of this porosity. For this purpose the 1 kg. scale on the Vickers hardness machine was used. With this scale it was possible to pick out areas between pores and to avoid applying so much pressure as to cause collapse into the porous area that may have been present below. It was also possible with this method to relate the hardness measurements to the microstructure.

Fig. 8 shows the results of this investigation. It gives the approximate carbon content at any point and the hardness at some of these points. The dots indicate the point at which the observations were made. The unbracketed figures give the approximate carbon content in decimals, i.e. 5 is equivalent to 0·5 per cent. carbon, and the bracketed figures the corresponding hardness (D.P.N.). The carbon contents are only approximate and are estimated from the amount of pearlite present. It is probable that the accuracy is about ±·05 per cent.; 0 indicates a value between zero and 0·05 per cent.

The relationship between carbon content and hardness is what would be expected from annealed material with an average of 0·1 per cent. phosphorus. Isolated high hardness values which are not in keeping with the carbon content are possibly due to local high concentrations of phosphorus. Unexpectedly low values of hardness are very probably connected with hidden porosity.

Two areas are outlined; after etching, these were noticeably darker than the surrounding areas and represent areas of high hardness and carbon content. One of these areas, marked Y in Fig. 8, is shown in the centre of Fig. 9. The rest of the prism-shaped piece contained between 0 and 0·2 per cent. carbon, except for some areas with about 0·4–0·5 per cent. The junctions between the high carbon areas outlined and the rest of the prism are diffuse and do not show signs of welding. In some places the outline coincides with cavities but considering the number of cavities in the block this could be coincidental. These high carbon areas could be formed in one of two ways. They could be areas which had been in contact with a high concentration of charcoal during the reduction process, which have not been subsequently oxidised in front of the tuyere, or they could have been smelted individually. The latter seems more likely, and if it is the case gives us an indication of the bloom size. The part of bloom X (Fig. 8) contained within the block, is clearly the major part and probably represents two thirds of the bloom. The total weight of the bloom would be about 2 lbs. The other high carbon bloom, Y, is about 1½ ins. diameter, and the part visible must represent only a section near one end as it is not cut by face 2. This probably had much the same size as X. Thus, we have evidence that parts of the anvil were made of pieces of relatively small size and of high carbon content. As for the rest of the block we can only say that it is made of material of low carbon content and of unknown size, but most likely of pieces of between 2 and 20 lbs. in weight. The fact that the average carbon content of the sectioned surface of the anvil was 0·54 per cent. seems to indicate that it contains a large number of blooms of high carbon content.

In order to explain why the junction between blooms does not coincide with lines consisting of large cavities, as it appears to do in the case of beams, one must bear in mind the general level of porosity. The overall porosity is 21·7 per cent and much of this is in the form of very fine evenly dispersed pores. It seems that the anvil has been assembled from small raw (i.e. unforged) blooms. When these are hammer-welded together they are forged on the points of contact, so giving dense areas along the lines of welding. These areas of high density allow easy diffusion when a low carbon bloom is welded to a high carbon bloom, so making the weld line difficult to distinguish. Furthermore, during the heating of a high carbon bloom, it would be expected that decarburisation would occur on the surface. This area of decarburisation is quickly obscured by diffusion after welding.

The microstructure allows us to arrive at some conclusions regarding construction temperatures. Many of the ferrite-pearlite areas show marked signs of overheating (see Fig. 10). This shows that at least some of the material has been heated to about 1250° C, and this would have taken place during the heating of the bloom for welding. The pearlite from the centre of the anvil is very fine, which shows that it had formed during relatively fast cooling. However, a piece from the broken surface, i.e. much further from the centre than Fig. 10, contains massive cementite, indicating that it had had a long time at a temperature near to but below 700°C. The hardness of this area was 190 D.P.N. It would seem that the anvil had been assembled by hammering together blooms preheated to about 1250°C. After its rough construction, the whole anvil was heated in a fire so that the fractured surface reached a temperature of 700°C and the outside over 1000°C. It was then dressed to shape, the outside being forged to give a rim of high density material as shown in Fig. 6. During this heating the prism-shaped piece in the centre probably did not exceed 400°C.

Conclusions

Although the majority of welded joints are not visible, it is almost certain that this anvil has been made by welding up a number of porous pieces of iron, of varying carbon content, and of weights between 2 and 20 lbs. These appear to have been welded at a temperature in the range 1000–1250°C and the whole object has been forged on the outside after completion of the welding operation. During forging, the temperature in the centre did not exceed about 400°C and this part has not undergone any serious deformation; the external surface probably reached 1000–1200°C and has been well forged to a depth of about ½ in.

Although the carbon content was extremely variable, the average carbon content (0·54 per cent.) is high for iron of the Roman period. The high hardness resulting from this carbon content would have given the anvil a much better resistance to deformation by hammer blows and it is therefore probable that the high carbon content was intentional. But we cannot be sure of this until more anvils of similar type are examined.

Acknowledgments

Thanks are due to Hereford City Library and Museum for permitting me to examine the anvil; to Mr. L. Biek of the Ancient Monuments Laboratory of the Ministry of Works for helpful discussions, and to Mr. P. Whitaker of Stewarts & Lloyds Ltd., Corby, Northants, for carrying out a confirmatory metallographic investigation, supplying the spectrographic analysis, and Figs. 9 and 10.

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[1] Excavated by Mrs. M. U. Jones on behalf of the Ministry of Works in Great Linford Gravel Pit, Newport Pagnell, Bucks. v. *Records of Bucks.*: vol. xvi, pt. 3, 1957–8 pp. 198-215; *Journal of Roman Studies*, xliv. p. 119. A final report is forthcoming.

[2] Kathleen Kenyon, *Arch. Jnl.*, 1953, **110**, 1–87.

[3] H. H. Coghlan, Notes on Prehistoric and Early Iron in the Old World. Pitt Rivers Museum, Oxford, 1956, p. 122.

[4] L. Lindenschmit, Die Altertümer unserer heidnischen Vorzeit, Mainz, 1911, p. 256–7.

[5] H. H. Coghlan, *op. cit.*, p. 121.

[6] G. Behrens and E. Brenner, Mainzer Zeitschift, 1911, **6**, 114.

[7] Sir Hugh Bell, " Notes on a Bloom of Iron found at Corstopitum (Corbridge). *J.I.S.I.*, 1912, **85**, 118–128.

[8] Not yet published. Excavated at Catterick, Yorks., by J. Wacher on behalf of the Ministry of Works; Metallurgical examination carried out by Dorman Long & Co. Ltd., Middlesbrough.

THE HEREFORD CITY PROPERTIES OF JOHN HOSKYNS

By Baird W. Whitlock, ph.d.
(Department of Humanities, Case Institute of Technology, Cleveland 6, Ohio)

In an earlier contribution to these *Transactions* (1960, pp. 306–8), I discussed the important rôle Serjeant John Hoskyns played in early seventeenth century Hereford history. The purpose of this article is to describe the location and extent of his property holdings within the city. Our earliest record of his residence in the city is a letter to his bride of three months, " To m^{rs} Hoskyns at her house in Widmarshe streete in Heref," dated 13th November, 1601.[1] Letters from Hoskyns to his wife Benedicta continued to be addressed in this manner until the late spring and summer of 1621, when the family moved into their newly-acquired estate of Morehampton, on the road from Vowchurch to Abbey Dore in the Golden Valley.

Hoskyns continued to describe himself as a citizen of Hereford for at least a year longer, however. On 15th January, 1622, acting as Steward and Commissioner of lands for Lord Abergavenny, he identified himself as " of the Citie of Heref in the Com̄ of Hereff esqr.". By 1st March, 1623, he identified himself, still as Steward and Commissioner for Abergavenny, as " John Hoskins of Morehampton in the com̄ of Heref esqr.".[2]

The exact location of the Hoskyns residence on Widemarsh Street in 1601 is open to question, but it is likely that it was at least part of the property which remained in the family's hands until the latter part of the century. At first, however, the Hoskyns family were mere tenants and not property holders. On a 1605 election list Hoskyns' name is next to last.[3] On all the other extant election lists, which unfortunately begin again only in 1612, he is always third, after the Mayor and Sir John Scudamore. The chief reason for this position of pre-eminence appears to be his rôle as property holder.

In a bundle of the local collection deeds in the Hereford City Library[4] most of the questions concerning Hoskyns' city property are answered. There we find the history of several pieces of property, some owned by the " Mayor and Citizens of Hereford ", fronting on Widemarsh Street and extending back to Maylord Street. In

[1] Among the manuscripts in the possession of Henry Hornyold-Strickland, Esq., in Sizergh Castle in Westmorland.
[2] National Library of Wales, Abergavenny MSS., 675, 787.
[3] Uncatalogued records in the Sheepskin Bags in the Town Hall Muniment Room.
[4] LC 2045.

1557, one John Clarke leased, for a period of 99 years, a " messuage or Tenem^{te} " with " houses, buyldinge*s*, Chambers, loftes, sellers Roomes Stables Curtellages[1] backsides wth thappu*r*tenances " (formerly belonging to one Richard Phillipps, Anne his wife, and John Warnecombe) from the Mayor and Citizens of Hereford. By 1597 this lease cost 20s. a year. Although no dimensions of the property are given, we can make a guess about its size. The adjoining property, measuring 47 feet in frontage on Widemarsh Street, by 34 feet in depth, was leased for only 5s. a year in 1567 and had gone up in price only to 5s. 8d. by 1597. We may surmise, therefore, that the property leased by John Clarke in 1557 was about four times as large or approximately 660 square yards. It seems likely from other leases, however, that it was not a regularly-shaped piece of land. At least part of one garden extended behind the adjoining property.

On 12th January, 1567, " William Bulyne of Hereford Baker " leased all of his garden or Tenement " in leynghte ffyften Taylors yarde*s*[2] & in Broade eleven Taylors yarde*s* . . . in the pa*r*yshe of All Saynte*s* . . . in or bye a Strete there called Wydma*r*she Strete ". It stretched in length from the Tenement of the Mayor and Citizens of Hereford late in the tenure of Richard Phillipps, deceased, to the tenements of Harry Dudstone and William Bulyne himself on the other side. In breadth it stretched from the street to the garden of Harry Chippenham and the tenement of the Mayor and Citizens. The lease was again to John Clarke, for a period of 24 years at the annual rent of 5s. Nine years later the original indenture was renewed by Richard Bulyne, son and heir to William Bulyne " defuncti ", and the lessees were Anne Clarke " widwe " and Thomas Stevens.

On 5th March, 1577, John Bulyns (or Bulyne, or Bulyn), a tailor, sold his family's property outright to Thomas Clarke (John's son) and Mabel his wife for the sum of £8: " To have and to hold all the property by the said Thomas Clarke & Mabell his wieffe in fee simple ". Bulyns also gave up all his claims to rents, etc., for the property. From this indenture we also learn that one John Whytlocke now occupied Harry Chippenham's property and that Anne Clarke and Thomas Stevens still lived in the property of the Mayor and Citizens of Hereford. This means that by 1577 the Clarke family occupied a combination of houses and gardens fronting on Widemarsh Street of some 825 square yards or nearly one-fifth of an acre On 8th May, Richard Bulyns signed a release and bond to the Clarkes to clear the transaction.

[1] *O.E.D.:* A Curtilage is a small court or yard attached to a dwelling-house and forming one enclosure with it.
[2] A tailor's yard was 37½ inches in length, to allow room for wastage.

The two pieces of property seem to have satisfied Thomas Clarke's real estate interests until 1586, when, on 1st October, he both leased and sub-leased another piece of land, this time from Henry Chippenham. It was " one stable and one *parcell* of grounde therevnto adioynynge . . . which . . . strecheth from the backesyde or wood close . . . now owned by Thomas Flacher . . . vnto a garden of the said Harry Chipenham . . . and in breadeth contaynynge seaventeene foot from the said Stable vnto the ten*emen*te or backside of the maior and Citizens of the said Citie in the occupac*i*on of the said Thomas Clarke ". There was also a guarantee of " egress to the stable through Maylard*es* lane ". The lease was for 31 years at 8s. a year. This rather large rent would indicate that although the property was not particularly wide, it must have been quite long. At any rate it undoubtedly increased the total size of Clarke's holdings to between one-fifth and one-quarter of an acre. His property did not remain that size long, however, as he leased the stable and garden the same day to one Roger Phellpotts.

Eleven years later, on 9th July, 1597, the Clarkes turned all their property over to the same Phellpotts. By one indenture Thomas and Mabell Clarke leased the original Bulyn property to Phellpotts for 80 years at 5s. 8d. a year. By another, Thomas turned over the remainder of the 99 year lease from the city given to his father, John, to Phellpotts, who also assumed the 20s. annual rent to the city. This means that by 1597 all the property was in the hands of Roger Phellpotts.

As I have said, we know that John Hoskyns was living in Widemarsh Street as early as November 1601, but exactly where has not been known. Certainly he was not a landholder at that time, but in 1609 he became one. His position in the city, as Justice of the Peace for Widmarshe Ward, as Deputy Steward of the City, and as Member of Parliament for Hereford, certainly called for it. His law practice in London and his wife's inherited wealth made it possible. What they did was to take over title to the property they had been occupying.

On the last day of October, 1609, Roger Phellpotts did " demise release and quitclayme . . . for e*u*er all my ferme estate Right Tytle interest vse behoofe condic*i*on of Redemc*i*on vnto John Hoskins of the said Citie and countie esquior " all the property once in the tenure of Richard Phillipps and leased by the city to the Clarkes; also " a garden adioyning between the lands of George Hurdman, William Page and the said John Hoskins and Phillip Trehearne "; and " one stable and one backside thereto ". All of these premises " are in the tenure of the sd John Hoskins or John Clarke or theire Assignes and were heeretofore by me morgaged to the said John Hoskins ". Hoskyns also received " all and singular the wainscottes tables bedsteedes and other houshold stuff ". Unfortunately there is no record of how much money was involved in the transaction.

We know from this indenture, then, that Hoskyns had been living in at least part of the buildings leased by the city first to the Clarkes and then to Phellpotts. We also know that he occupied part of an adjoining property, and we can surmise that it was the original Bulyne property. There are no further indentures until after John Hoskyns' lifetime, but there are two other documents which deal with this property and indicate that Hoskyns was given full rights to the Bulyne property by the Clarkes at approximately the same time. On 4th September, 1610, in the City Court, Thomas and John Clarke contracted before two witnesses to turn over to John Hoskyns " such estate as we or eyth^{r} of vs or any oth^{r} wth vs hath in the house next adioyni*n*ge to the house of the sd John Hoskyns in heref afforsd wherin the sd John Clarke now dwelleth ". This was to be done only if Hoskyns could procure for the Clarkes a lease on the house formerly occupied by Anthony Pembridge, Hoskyns' co-representative from Hereford in Parliament, who had recently died (according to most published sources he did not die until 6th November, 1610, but that is obviously wrong). The price to be paid was to be determined by two other men, John Warde and Thomas Manne.

That the sale or transfer took place is evident from another document in the same collection, a letter from John Clarke to Hoskyns on 14th October, 1611. The letter begins, " Good m^{r} Hoskins I forgate to move yo^{w} before yo^{r} goenge vpp for the v^{li} behind of the xxx^{li} for the house . . .". There is much of interest in this letter and another written by Hoskyns to his wife Benedicta, telling her to give Clarke his £5, but most of it does not deal with our present subject. Hoskyns does say, however, " let hym haue 5^{li} vpon deliuery of the key for he hath kept the house this halfe yere when we called for it ". This is, incidentally, one of the few records which tell exactly how much Hoskyns paid for anything.

This evidence, then, would seem sufficient proof for us to claim that Hoskyns was possessor of all the property discussed so far: the Bulyn property, the leasehold from the City, and the garden, stable, and lane from the rear of the property to Maylord's Lane. The size of this property in comparison with other holdings in the City is made clear in the 1624 subsidy list. In that list Hoskyns is listed among the commissioners and pays £5 20s. " in terr*is* ", which gives us a good idea of the relative value of his land. This is over £2 more than anyone else in the city. None of the other commissioners, like James Clarke or John Warden (Mayor in 1604), paid more than

£3 12s. On the assessment for the first fifteenth, paid the same day, Hoskyns was once again the leading taxpayer.[1] There can be no doubt, then, of the relative size and importance of Hoskyns' property in the first quarter of the seventeenth century.

The property was still in family hands in 1672 and was still the largest in the Ward. It was clearly a two-part leasehold, however, and the Hoskyns family occupied neither part. John Clarke was tenant in one, and the other was now an Inn, called the White Swan.[2]

Exactly where was the property? We know that it did not reach to Maylord Street on Widemarsh, but that one section did belong to the City. It seems likely, therefore, that Hoskyns' property was next to and indeed formed part of the block of buildings on the site later used by the City as the Guildhall. It thus extended at least thirty and probably closer to fifty yards towards the High Street, taking up the whole of the block now occupied by the Electricity Board and part of the adjoining block to the south towards High Town. If there is any desire to perpetuate the memory of one of Hereford's leading citizens, it is now possible to locate the proper spot for erecting a tablet.

[1] *Hereford City MSS., vol. 4, 1600–1644*, ff. 40, 46.
[2] *Ibid., vol. 1*, f. 28v.

THE LORDSHIP OF MONMOUTH AND THE HEREFORDSHIRE-MONMOUTHSHIRE BOUNDARY

By M. P. Watkins

There is a story which has been quoted in the *Transactions* of the Woolhope Club and which seems to have been told by the ferrymen at Goodrich at the end of the 18th Century. It is recorded by Charles Heath in his *History of Monmouth* in 1799 and by Bonnor in his *Perspective Itinerary of Goodrich Castle* in 1798. I quote Heath, as being the more detailed; he is writing of Henry V:

> " He was born on the 9th August, 1387. . . . At the time the Queen was pregnant with this her son and heir, The King was engaged in state affairs at Windsor—but, at the approach of her delivery, His Majesty left town and proceeded to Monmouth. In his road hither he slept at Ross, and coming next day to Goodrich ferry, enquired of the boatman ' What news from Monmouth ? ' Here it was and from the ferryman, that the monarch was first acquainted with the safe delivery of the Queen, who, overjoyed at the intelligence, in the glow of his feelings asked his informant, ' if there was any favour he would wish to have conferred on him ' to which the boatman replied, ' Will Your Majesty give me this ferry ', which request was instantly complied with on the part of the Sovereign."[1]

Heath says that Mrs. Clarke of the Hill near Ross was then in possession of this grant under the hand and seal of Henry IV, that a barge master had cut the ferry rope and the grant had been produced to prove the lady's rights. He also says that the Goodrich ferry and surrounding land lay in Monmouthshire.

Heath seems to have been a painstaking recorder but he did not verify his references, and he has overlooked that the child's grandfather, John of Gaunt, was Lord of Monmouth in 1387 and for twelve succeeding years, and Henry V's father did not become king until 1399.

His story illustrates, however, an interesting feature in the history of the bounds marking Herefordshire from Monmouthshire. A study of the boundary reveals anomalies and irregularities interesting to the history of both counties, particularly with reference to three areas which used to be in Monmouthshire. They are all by the river Wye: one a patch of about 15 acres near Goodrich, referred to in Heath's story, the second consisting of the parish of Welsh Bicknor and the third a triangular piece of land in front of Wyastone Leys

[1] *Historical and Descriptive Account of the Ancient and Present State of the Town of Monmouth*, by Charles Heath, 1804.

at Ganarew. The first two, as detached portions, were incorporated in Herefordshire in the nineteenth century. Under the Reform Act of 1832 the inhabitants voted as if in Herefordshire. In 1844 these two detached portions were transferred to Herefordshire for all purposes.

An attempt is here made to discover the descent of these areas and explain, through their history, the divagations they have caused from the expected boundary line between the counties.

The boundary line between Herefordshire and Monmouthshire was only established as such in 1536 by the Act of Union with Wales. This, in addition to its other far-reaching effects, created the county of Monmouth. Herefordshire, on the other hand, is an ancient shire, its bounds described in an inquisition of probably between 1219 and 1232. The extract given below is taken from a sixteenth century copy transcribed by Mr. F. C. Morgan, referred to in the *Transactions* of the Woolhope Club, 1954, p. 152.

> " And all of Eston (Aston Ingham) as far as Longhope and all the land from there opposite Hopemaloysell (Hope Mansell) and all Hope Maloysel and all Waulford as far as Waya (the river Wye) and beyond Waya on the other side as far as Mona (river Monnow) where Mona runs into Waya. And all the three castles of the Lord Justice with their appurtenances (Grosmont, Skenfrith and Whitecastle) And all of Ewyas Harold and all of Stradel (the Golden Valley) as far as the boundaries of Ewyas Lacy . . . "

The inquisition gives the boundaries of the lordships within the county. Such bounds were doubtless well known at the time, as were the limits marking also the limits of the shire, which took in a great deal of land now in Monmouthshire.

The lordships contained within Monmouthshire were listed in the 1536 Act of Union.

> " The County of Monmouth shall consist of these Lordships Townships Parishes Commotes and Cantreds viz.:— Monmouth, Chepstow, Maherne Llanvihangel, Magor, Goldecliffe, Newport, Wenlong', Llanwerne, Caerlion, Uske, Trelecke, Tintern, Skinfreth, Grousmount, Wite-castel, Raglan, Calicote, Biston, Abergavenny, Penrose, Greenfield, Maghen, and Hochuystade, all which said places shall be hereafter guildable, and reputed as parts and members of the County of Monmouth, whereof Monmouth shall be reputed the Shire Town."

The lordship of Monmouth was thus made a component of the new county. It seemed likely that all the lands appertaining to that lordship passed with it into the new county and remained with it

until the boundary changes and reforms of the last century even though, geographically, they were more properly aligned with Herefordshire. If the three areas of land in Goodrich, Welsh Bicknor and Dixton Hadnock could be proved to have descended with the lordship of Monmouth then the explanation of their lying so long in that county yet beyond its expected boundary line would be found.

The descent of these lands was traced one by one and in order to be quite sure of the correct identification of the areas, it seemed best to work backwards from modern to more ancient records.

The land in Goodrich was described by Heath in *Down the Wye* in 1799 as consisting of two closes of land below the Castle and near it, of about 12 or 15 acres in area, nearly circular and completely surrounded by land in Herefordshire. The ferry, to which this land gave access, was also in Monmouthshire. The tithe map for Goodrich shows the ferry house and land as the only land in that parish owned by Kingsmill Evans, the heir of Mrs. Clarke named by Heath as the owner. From the Goodrich and Walford tithe maps, showing the property owned by Miss Clarke's heir in about 1840, the boundaries as given in Fig. 1 have been deduced.

A map of the Flanesford Priory Estate, 1704, shows a field east of the road to the boat and upstream from the Castle as not part of the Priory estate, which belonged to the lord of the manor of Goodrich and which was bounded by the road to the ferry as far as this field.[1] This same field is shown on the tithe map as part of the ferry land. The evidence of this estate map, that the field and ferry were not part of the Goodrich estate, is substantiated by lack of mention of the ferry and its adjoining land when Goodrich was sold to Admiral Griffin in 1740[2] and by a Goodrich Manor Terrier of about 1760.[3]

If the ferry and the adjoining land did not appertain to Goodrich it was possible that it belonged with the lordship of Monmouth. That lordship was surveyed in 1610 as part of the property of the Duchy of Lancaster, and is then described as including the ferry and land, as follows:—

> " and likewise the ancient meares of the said Manor of Monmouth doth contain the water and passage of Goddridge and both compass round aboute the same passage of Goodrige neere Ross and one Messuage and other buildings and tenne acres of meadowe two acres and a half of arrable land and the River of Wye which said messuage buildings seaven acres of meadowe and two acres and a half of arrable land doe lye

[1] Hereford City Library, L. C. Deeds, 4429.
[2] *Ibid.*, 4392.
[3] In private custody.

under the Castle of Gooderidge and doth extend in length from the lands of the said Castle unto the said River of Wye and in breadth from the highwaie unto the lands and meadowe under the said Castle, and three acres of meadow thereof lyeth together over the said River of Wye in length from the highwaie neere the water of the River aforesaid and neere a well called barge well and the lands sometymes of one Richard Sheppard deceased and the side of the River aforesaid on all partes, and which said last recited passage messuage buildings meadowe and lands neere Goodderige aforesaid are now in the occupacon of John Markye Gent. or his assignes."[1]

Records going backwards in time all lead to the same conclusion. A Commission of 1606 enquiring into heriots liable within the manor of Grosmont includes Monmouth in its survey and under Rockfield within the manor of Monmouth returned that: "John Markes holdeth one tenement and lands in the right of Anne his wife and one ditto at the passage of Goodrich ".[2] A rental of 1492 for the Manor of Monmouth includes a entry for Goodrich Ferry.[3] The survey of 1610 already referred to, however, produced even older evidence, that of the charter dated at Skenfrith, on the day after the festival of SS Peter and Paul in the seventh year of the reign of Edward II (29th July, 1314). This was a grant of the ferry made in perpetuity by Henry of Lancaster, Lord of Monmouth of the land and "the ferry and the barges and encroachments by land and water and right to take timber in our wood for making anew or amending and repairing the dwelling house and barges", at a rent of 2 shillings a year (a sum agreeing with the 1492 rental). It is probably on this grant that the medieval tradition as recorded by Heath, rests, but that story attributes the grant to the wrong people at the wrong time—the ferry had in fact already been granted long before the birth of Henry V.

That the land and ferry at Goodrich was part of the lordship of Monmouth, for centuries itself a part of the Duchy of Lancaster, and granted by Henry Duke of Lancaster in 1314 as a franchise at a fixed rent, seems fairly sure.

The baffling problem of why the land and ferry should have remained with the lordship of Monmouth still stands, for it would be expected that its history should have lain with that of Goodrich. The answer would probably be found if we could discover with more certainty the early history of Goodrich itself. It is not mentioned in

[1] *Survey of the Duchy of Lancaster Lordships in Wales* 1609–13, ed. W. Rees, University of Wales Press, 1953.
[2] *History of Monmouthshire* (sub. Rockfield). Bradney.
[3] Unpublished notes for a history of Monmouth, by Hobson Matthews, in Monmouth Local History Centre.

Domesday, but Hulla (identified by J. H. Round with Howle Hill) is given as held by Godric Mappesone from whom Goodrich probably derived its name.[1] In the Balliol Domesday manuscript "Cast' Godr'" is written in the margin against Hulla.[2] This may suggest that Goodrich castle was built on land which formed part of Hulla. It has been assumed that Goodrich fell

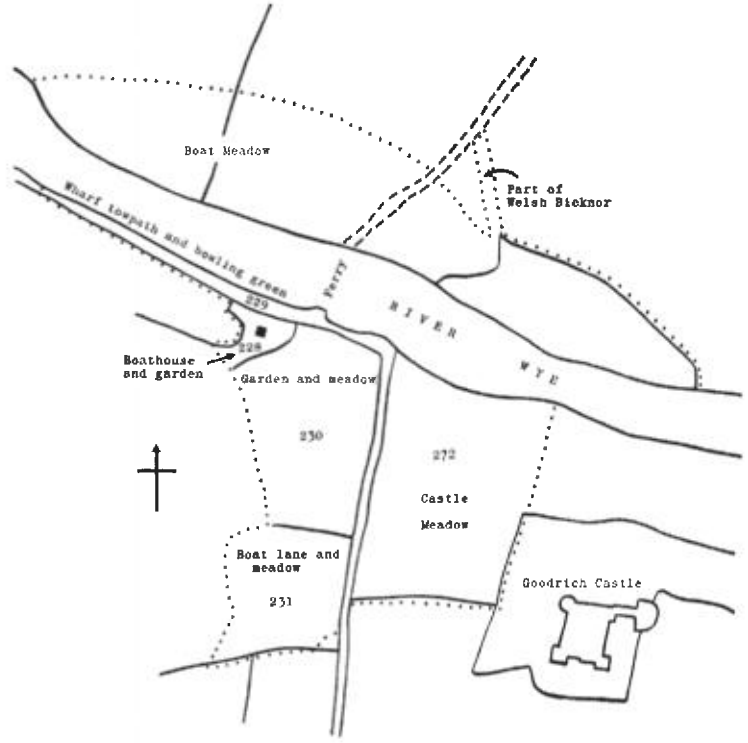

FIG. 1.

to the lords of Monmouth because they, in the eleventh century, made grants of land in that area to the church.[3] The grants to the church do not, however, necessarily mean that the lords of Monmouth held Goodrich itself though they may have held other land in the area. Goodrich certainly came to the Crown in the 12th century, but from whom we do not know. King John confirmed the

[1] See *Herefordshire Domesday*, ed. Galbraith & Tate, Pipe Roll Society, 1950, for support of Round's view.
[2] *Op. Cit.*
[3] History . . . of . . . County of Hereford. (Duncombe), Vol. VI, pt. 1, pp. 76–7.

great William Marshall, Earl of Pembroke, in the holding of it.[1] The point, however, is, that Goodrich was a separate entity from the Lordship of Monmouth even if held at some time by the same Lords (for which there is insufficient evidence) and that the ferry and land near the castle had always formed part of Monmouth Lordship, not Goodrich.

The second of these three areas under discussion, Welsh Bicknor, is easier to trace, for a whole parish is involved and can be traced on county maps with little danger of incorrect identification. Isaac Taylor's map of 1754 and Bowen's of 1755 show it clearly and much of the district's history is given in Duncombe's *History*. This can be substantiated from further evidence, including the survey of the lordship of Monmouth, 1610, already quoted, which says that the Ancient " meares " of the Manor of Monmouth contain within it (i.e., within the manor) " the manor of Bicknor now in the occupation of John Vaughan gent.". Bicknor's position as a component of the Monmouth lordship is clear. In the 11th century the church was granted to Monmouth Priory by the lord of Monmouth.[2] In a list of Knights' fees of what was later the Duchy of Lancaster of *circa* 1278 is

> " Wallesbekenore John de Montagu holds the Manor of Wallesbekenore by the service of one knight's fee and it is worth by the year 100s."[3]

The Supplement to Duncombe's *History of Herefordshire* shows that in 1362 it was still in the same family, being held by one knight's fee under Henry Duke of Lancaster as of his Castle of Monmouth.[4]

The Lordship of Monmouth had in 1267 become vested in the Earl (whose successor in 1351 became the Duke) of Lancaster and it formed for Centuries part of the Duchy of Lancaster. After the then Duke of Lancaster became Henry IV the Sovereign has been Duke of Lancaster and the Duchy estates have been administered as a separate holding from the Crown property.

In the 15th Century the Manor of Welsh Bicknor was forfeited when John de Montagu, Earl of Salisbury was beheaded for treason, but it was restored to his son Thomas and the inquisition held on Thomas' death in 1429 shows that he then held Welsh Bicknor manor " as of the Castle of Monmouth ". This was because land in the Duchy was forfeited to the Duke of Lancaster for treason and not to the Crown. Hence it remained in the Lordship of Monmouth, as part of the Duchy which was part of the King's patrimony.

[1] *Transactions* of the Woolhope Club, 1917, p. 266, and 1939, pp. 133–4.
[2] Bradney's *Monmouthshire* (*op. cit.*). See Monmouth.
[3] Hobson Matthews: Unpublished notes.
[4] Duncombe, *op. cit.*, Welsh Bicknor.

The third divagation of the boundary of Monmouthshire is the greater part of the flat land on the west of the Wye further downstream in front of Wyaston Leys in Ganarew parish. The house was built in the 18th century and owned later by ironmasters who bought out all the local cottagers and upon the enclosure of the common land bought most of it to make a deer park.

The land in Monmouthshire was not common land and is in the Tithe map of Dixton Parish in Monmouthshire.

There is an estate map of the English Newton (i.e., Newton Court) estate of 1808 showing that the pre-turnpike valley road turned inland here from the river, and probably formed one boundary, and this has some confirmation from Bradney's *History of Monmouthshire*.[1]

The land on the bank of the Wye opposite this is part of Hadnock in Dixton Parish. The Leys land, in effect an island of Monmouthshire, separated from the rest of that county by the River Wye (otherwise for a fairly long distance the Herefordshire County boundary) is not far north of the main East-West County boundary which passes through Chapel Farm to the River Wye along the line of an old stream bed. Chapel Farmhouse itself stands close to a ford over the River Wye.

This ford, which appears to have carried much traffic over the river, is about 300 yards south of this main East-West County boundary. The ford was approached from the East from the Forest of Dean by a road part of which is marked on the 2½ inch Ordnance Map as a Roman Road, and still plain to be seen on the ground for much of its length and for a stretch forming the Monmouthshire–Gloucestershire County boundary. Present day maps have had the old boundaries confused by the building of the railway in 1860, but a track can still be seen continuing North from the ford to the edge of a large riverside meadow facing the third " island ".

This " island " of Monmouthshire commences about a quarter of a mile upstream of the main Monmouthshire-Herefordshire border, and less than half a mile from the Chapel Farm ford, runs about 500 yards up the West bank of the Wye, and contains about 15 acres. It is a roughly triangular flat meadow, with the apex pointing up the line of the pre-turnpike road to Whitchurch.

It seems that the boundaries of the Counties were identical with the boundary of the Lordship of Monmouth in 1536. The main County boundary where it comes down to the Wye by Chapel Farm is identical with that in the description in 1610, and where the old descriptions are vague we can assume that local knowledge filled in details. This " island " has not been included in the 1610 description but this may well have been by an oversight.

[1] The map is in private custody.

It follows that all this land must have been retained in the Monmouth lordship (and so ultimately in the County) for good reason at some time. It is possibly that the further existence of a ferry may be the explanation for the retention of the Leys in Monmouthshire. The reach of the Wye by the Leys is among the best fitted for a ferry in this length of river. There is a rocky outcrop in the bed down stream, with the Chapel Farm ford at its lowest end, but by this " island " the river runs deep and slow, the banks are above normal flood level and easy of access, and ancient North to South and East to West routes join nearby.

There is a tradition in the Griffin family who have lived close by at Hadnock Court or Newton Court for over two centuries that the deep lane runing west from Chapel Farm up the ridge, where it cuts deep into the rock, and thence to Welsh Newton was the old road to Hereford and had been used by coaches.

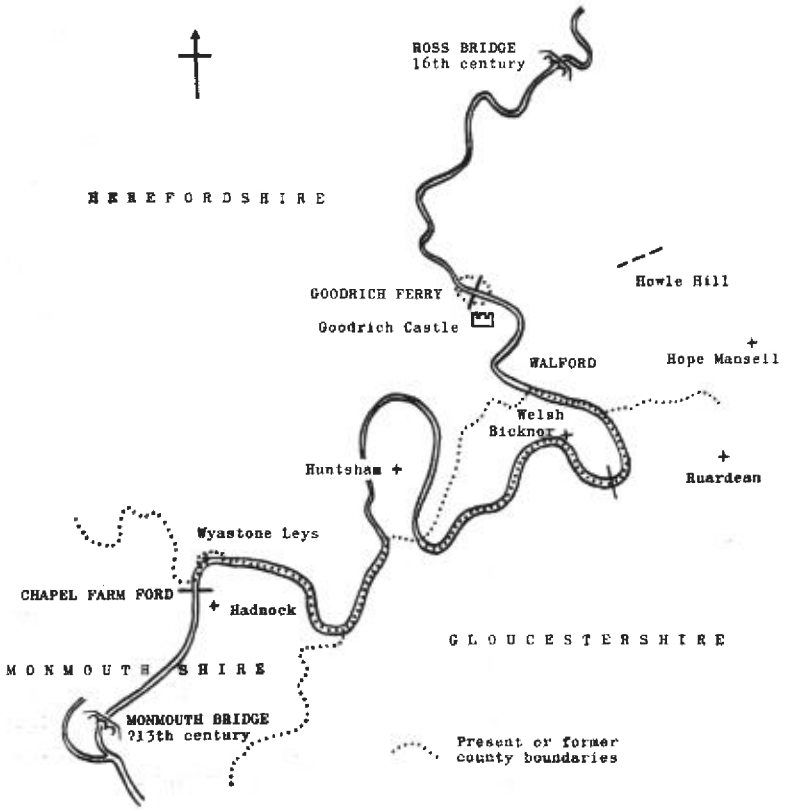

FIG. 2.

Fords and ferries have now largely become obsolete locally. The depth of water which can be forded depends on the speed of flow as all fishermen know: in a rapid stream it can be unsafe if over the knees and even in a gentle one three feet for footmen and four feet for horsemen is probably about the maximum. This means that on the Wye fords would only be passable when the river was low, and at other times a ferry would be required.

An 18th century guidebook shows the circumstances under which the Wye was forded. This again is Charles Heath who writes of the courage of some passengers who forded the river instead of taking the Goodrich ferry. He writes:—

> " The river is often fordable in the summer months—but it is wide, and rapid on the landing side, and in these *dry* times up to the *saddle cloth*. Regardless of danger, in they ride, and when they reach the middle of its course, are obliged to secure their legs and the skirts of the coat from immersion. Should the horse, by accident of the loose stones, make a false step, the riders life would, in all probability, fall a sacrifice; for the strength of the stream is too violent to oppose—and if he had the advantage of swimming well, he would be carried to a considerable distance before he could gain a landing."

The right to operate a ferry is a privilege derived either directly or indirectly from the Crown, or in a Marcher lordship from the Lord of it. It is also, like a bridge, a place where toll is collected and militarily the possession of a ferry can be of enormous value. It is not unusual for a ferry to have rights over some other Lord's land. In the Woolhope Club *Transactions* there is mention made of a claim that the River Severn and a bit of the south bank near Avonmouth (or a right to land on it) belonged to the Manor of Chepstow in Monmouthshire.[1]

When a bridge becomes available ferries nearby fall into disuse, and so any ferry there may have been at the Leys would probably cease to function when the Wye bridge was built at Monmouth.

The earliest references to such a bridge appears to be in a perambulation of the boundaries of the Forest of Dean in 1282 where reference is made to Monmouth bridge.[2] There is indirect confirmation that there was no bridge shortly after the Conquest from maps of Monmouth showing the extent of the Castle Bailey Ward, which, of course, includes the Castle as the centre of defence. Its boundaries are roughly rectangular but with a narrow outwork pointing towards the River Wye which would bring the shallows two hundred yards below the present Wye Bridge within the defenders' field of fire.

[1] *Transactions*, Woolhope Club, 1903, p. 195. [2] *Ibid.*, 1946, p. 26.

To sum up we know:—

(1) That Welsh Bicknor was owned by the Lord of Monmouth in 1075. It lies on the opposite bank of the Wye from Ruardean which is shown in the Domesday Book as owned by William Fitz Baderon Lord of Monmouth and may well have been treated as part of that holding.

(2) That Goodrich ferry certainly formed part of that Lordship in 1314.

(3) That the third "island" formed part of the Lordship in 1536, and it is submitted that it may well have done so before 1282 when the Wye is known to have been bridged at Monmouth.

These conclusions show us, perhaps rather surprisingly that not only was the Wye, the natural boundary, not used in all sections of the dividing line to mark the Herefordshire county boundary, but that its mere convenience as a boundary had never over-ruled other considerations and show how far back in history lay the reasons for some strange diversions from the river. In discovering the descent of these lands within the lordship of Monmouth another point has arisen, one of perhaps greater significance—that for a very long period the lords of Monmouth controlled the important crossings between Ross and Monmouth. This shows the importance of the lordship's position as a bastion against Welsh raiders from across the river desirous of by-passing Monmouth, a position which makes apparent the tactical reason for Ruardene to have been held by the de Baderons at Domesday. The ferry at Goodrich, the ford at Welsh Bicknor and the possible ferry at the Leys were all in the lordship. The importance of the crossing at Welsh Bicknor is made very plain in papers relating to the building of the Kerne Bridge.[1] These show that until that bridge was constructed in the 19th century the lord of Welsh Bicknor still took toll from carts using that ford when the river level was suitable "to avoid the circuitous route through Ross or Monmouth". Fig. 2 shows the main crossings of the river referred to in this paper.

I should like to express my thanks for their help in directing me to source material and making it available, to the Director of Monmouth Local History Centre, to the Archivists of Monmouthshire and Herefordshire, and to the Librarian of Hereford City Library.

[1] In the writer's office.

RECORDS OF SURFACE FINDS MADE IN HEREFORDSHIRE, 1951–60

By A. E. Brown, B.A.

The lists given below are divided into two sections, the first dealing with flint implements, the second with surface finds of various kinds from Hill Forts and Roman sites.

During the preparation of this paper I have received help from many quarters, and wish to record my thanks to Mr. J. F. L. Norwood, B.A., Assistant Curator at the Hereford Museum, Miss L. F. Chitty, M.A., O.B.E., F.S.A., Professor F. W. Shotton, F.R.S., and to Professor J. G. D. Clark, Sc.D., F.B.A., F.S.A., Mr. S. C. Stanford, B.A., F.S.A., and Staff of the British Museum, for their assistance in its compilation and in the identification of material.

The finds are at present in my own possession.

A. FLINT IMPLEMENTS: SURFACE FINDS

The objects to be described can be grouped according to provenance in five categories, viz. flints from the Golden Valley, the Fownhope area, Ledbury, Linton and from various miscellaneous sites in the county. In the description which follows implements are listed by the fields in which they were discovered. The fields are referred to by means of a National Grid Reference number (the 100 km reference letters are in all cases SO).

The figures in brackets refer to the numbers of the illustrations. See plates

GOLDEN VALLEY

Stockley Hill Area

367386 This field is site 2 in the list of Golden Valley sites published by R. S. G. Robinson in *Transactions*, Woolhope Club, 1933–35, pp. 61–2.

Carefully worked leaf-shaped arrowhead of Neolithic type. Light grey translucent flint (1). A similar local example is figured in *Transactions*, Woolhope Club, 1933–35, plate facing p. 54.

Finely worked tanged and barbed arrowhead of Bronze Age type. One barb missing. Similar flint to No. 1 (3).

Notched blade, thick creamy white patination. Smooth flake surface bears criss-cross impression (30). (*Transactions*, Woolhope Club, for 1942–45, p. xxi, for earlier finds from this area).

366385 Site 1 in 1933–35 list.
Rough knife with traces of extensive use along working edge. Grey mottled flint (43).

365382 Broken saw-edged microlith of grey flint (15).[1]
Untrimmed flake, length 3·1 cm., probably of a very fine devitrified rhyolite, material similar to No. 72. (Reference number in catalogue of the Council for British Archæology (West Midland Group) on the Petrological Investigation of Stone Axes: He 22/c.)

367384 Flake of devitrified rhyolite similar to the above, with a carefully trimmed notch. A hollow scraper or spokeshave (72). (Reference No.: He 21/c.)

373384 Dark grey blade, carefully notched at one end, with traces of use along sharp edge (32).

358389 Knife of light grey translucent flint, probably re-worked from an earlier implement (41).
Fine oval scraper, slightly concave, of pale blue lustrous flint with a broad cherty band. Finely worked edges (59).
Square ended scraper of pale blue opaque flint, carefully worked along edges (60).
Rough scraper of light brown flint (61).

Burnt flints, flakes and nondescript waste pieces, chiefly of grey flint, have been found in most of the fields listed above and in the other fields on the summit of the hill.

Wellbrook Farm Area

351387 Blade of microlithic type with some cortex (14).
Scraper with rounded end. Flint patinated a cloudy blue, with cherty patch at one end. Retouched at later date on one side to reveal original grey-brown flint (68).
Calcined and broken round scraper, when complete similar to No. 52. 2·7 cm. in diameter.
Rough knife of light grey opaque flint with little secondary working. 4 cm. in length.
Two poorly trimmed rough grey scrapers. Traces of use along edges.
A large number of chips, burnt flints and waste flakes have been discovered in this field. Neighbouring arable fields have yielded little, with the exception of the lower portion of a broken leaf-shaped arrowhead of dark translucent flint from 349388.

354384 Small flake, 2·8 cm. long, trimmed along one edge and probably used as a knife, of translucent white chalcedony. (Reference No.: He 24/c.)
Flakes, chips and burnt flints.

[1] See *Transactions*, Woolhope Club, for 1952–54, p. 36, for lozenge-shaped arrowhead from this site.

Greenway Farm Area[1]

354396 Site 7 in 1933–5 list.
Well worked but broken circular scraper, 3 cm. in diameter, of dark grey translucent flint, carefully trimmed along edge. One half only remains. Also a smaller but complete oval scraper of common type, greatest diameter 2·3 cm.; similar but denser material.

355397 Small knife of light grey-brown translucent flint, with twisted profile (45).
Carefully worked oval scraper of opaque light grey flint. See *Transactions*, Woolhope Club, for 1933–35, plate facing p. 58 for other local examples of this common type (58).
Triangular flake, 2·4 cm. long, 1·8 cm. across, patinated cloudy blue, little secondary working on faces but trimmed along edges; possibly an arrowhead. Also a roughly trimmed triangular scraper.

351395 Site 6 in 1933–5 list.
Light grey knife, edges carefully trimmed (42).
Concave thumb scraper, bluish flint, carefully trimmed along its steep scraping edge (52). See *Transactions*, Woolhope Club, for 1958–60, p. 141, No. 15, for similar example from Gladestry.
Well-worked scraper on thin flake of cloudy blue flint, trimmed at a later period along the working edge to reveal the original grey flint (77).
Fragment of polished flint axe utilized as a knife or scraper. White mottled flint of the kind usually associated with Lincolnshire and Yorkshire, similar to No. 39 (81).
Fragment of polished stone, presumably from a broken axe. A welded rhyolitic tuff. This is not a recognised group but it is the same as a piece of polished axe (He 18/c) from Dorstone in the collection of Mr. W. R. Pye of Titley; see below for further examples from Fownhope and Tupsley (Reference No.: He 23/c).

Woodbury Hill Area

345414 Sites 12 and 13 in 1933–35 list.[2]
Blade, patinated cloudy blue, trimmed along one edge (26).
Large knife of rather coarse grey opaque mottled flint. Trimming on both edges (89).
Fragment of polished flint axe, light grey flint similar to No. 81.
Small spherical core, 2·3 cm. in diameter, patinated a creamy white.

Burnt flints, chips and nondescript waste pieces are not uncommon in these and neighbouring fields at Greenway and Woodbury.

[1] See *Transactions*, Woolhope Club, for 1936–38, p. 47, " Recent discoveries along the Greenway " by R. S. G. Robinson.
[2] *Ibid.*

ARTHUR'S STONE RIDGE

325427 Bronze Age tanged and barbed arrowhead of grey flint, slight filmy blue patination. One barb missing (5).
Broken arrowhead (10).
Obliquely blunted microlithic point, broken at top. Cloudy blue patination (23).
Small knife, broken, carefully trimmed along working edge. Mottled flint similar to No. 43 (44).

319431 Small neatly trimmed arrowhead of Neolithic type, white flint (2). For a similar arrowhead see Evans, p. 375, Fig. 288 (Yorkshire Wolds);[1] for local examples see *Transactions*, Woolhope Club, for 1933–35, plate facing p. 59, and for 1958–60, p. 141, No. 12.
Broken saw-edged blade carefully trimmed along edges. Light grey translucent flint (24).
Broken blade with carefully worked notch at one end, similar flint (25).
Two fragments of polished flint, presumably from broken axes, flint similar to Nos. 39 and 81. A small calcined oval scraper (greatest diameter 2 cm.) and a number of rough scrapers chiefly of bright dark grey flint.

313436 Almost complete Bronze Age tanged and barbed arrowhead of white flint (4). See Evans, p. 381, Fig. 308, for a similar example from the Yorkshire Wolds.[2]
Small broken blade with battered back, similar to No. 11.
Roughly trimmed scraper, broken, 3·3 cm. across; traces of use along edges, patinated cloudy blue.

316438 Light brown side scraper (90).
Small arrowhead similar to No. 2 in technique and size but more irregular in outline.

Chipping floor debris and burnt flints are abundant in the above fields; scattered chips and flakes have also been found in other fields along this ridge.

SHEGEAR FARM AREA

341369 Site 22 in 1933–35 list.
Dark grey blade, broken, carefully worked along one edge (33). Also a small calcined scraper 1·9 cm. in diameter, trimmed around edges. See *Transactions*, Woolhope Club, for 1958–60, p. 141, No. 14 for a similar example.

339368 Site 23 in 1933–35 list.
Scraper of translucent grey-brown flint, irregular in outline (67).

Burnt flints and chipping floor debris are abundant in these two fields. They are less common, however, in the arable fields near Dolward and Cothill farms; but a piece of light grey polished flint has been found at 345364 (material similar to Nos. 39 and 81).

[1] Evans: *Ancient Stone Implements of the British Isles*, 2nd ed., 1897.
[2] *Op. cit.*

URISHAY COMMON AREA

307377 Site 24 in 1933–35 list.[1]
Grey microlithic blade, broken, with carefully trimmed back (11).
Broken microlithic point trimmed along one edge. Patinated cloudy blue (16).
Piece of polished flint of the usual pale grey kind, similar to No. 81. Utilized as a knife (39).
Light grey flake carefully trimmed along edges (76).
Large oval scraper of dark grey translucent flint. Large patch of cortex on one side (82).
Four small circular or oval scrapers, all carefully worked, similar to No. 58.
Upper portion of broken leaf-shaped arrowhead, carefully trimmed. Grey flint.
A large number of chips, burnt flints and waste pieces.

309369 Plano-convex knife of grey flint, well used, especially on concave side (46).
Beautifully worked end scraper of translucent orange flint of a kind not common in the Golden Valley (54).
Carefully trimmed oval scraper, grey flint (similar to *Transactions*, Woolhope Club, for 1958–60, p. 141, No. 17) (55).
Also a number of less regular examples and a large rough scraper 6 cm. long and 3·7 cm. across.
Waste pieces and burnt flints are fairly plentiful in this field and its neighbours.

A few flakes have been picked up near the Wernderries long stone (305373), together with a fine oval scraper 3 cm. across (similar in shape to No. 53).

THE FOWNHOPE AREA

576362 Broken circular or oval scraper, carefully trimmed around edges; grey flint patinated a cloudy blue (57).
Well-worked scraper, dark grey translucent flint (66). Also a rough oval scraper of dark grey flint, coarsely flaked; greatest diameter 3 cm.

575363 Rough circular scraper of dark grey flint, much cortex on one face, underside smooth (62).
Piece of polished coarse yellow opaque flint, probably from a broken axe.
Narrow flake of translucent orange flint similar to No. 54.

A substantial number of burnt flints and waste pieces have been found in these two adjoining fields. Many small fragments of 12th and 13th century pottery have also been recovered.

580364 Small oval scraper of grey mottled flint, greatest diameter 2·2 cm. Similar in type to No. 55 but coarser. Burnt flints and chips.

[1] See *Transactions*, Woolhope Club, for 1924–26, p. 150 for bronze palstave found near this site.

577355 Pale blue fabricator or punch. Considerable traces of use on edges and at end (83). See Evans, p. 413, Fig. 347, for a very similar implement from Bridlington.

582355 Small flake of bright orange flint similar to No. 54.

585354 Microlith, light grey flint (12). Also a coarsely worked light brown oval scraper, 3 cm. across.
A number of burnt flints have been recovered from this area.

586353 Hollow scraper of orange-brown flint (84).

A few worked flints have also been found near Rudge Farm (597355) and Rudge End Farm (592355).

578338 Rectangular flake of black flint, triangular in section, carefully trimmed as a scraper along one edge and at one end (37).

577335 Tanged and barbed arrowhead from S.W. corner of field. Light grey flint, one side formed of smooth flake surface (7). For a similar arrowhead see Evans, p. 381, Fig. 310 (Yorkshire Wolds).[1]
Rectangular flake, triangular in section, carefully trimmed along both edges and one end (35).
Small oval scraper, light brown flint (64).
Calcined centre portion of narrow polished flint axe (85).
Chipped discoidal flake of acid welded tuff, Group VIII, perhaps from S.W. Wales, (86). A number of closely allied rocks have been assigned to other Herefordshire specimens. (Reference No.: He 28/c.)
Small fragment of side of polished flint axe. Rather coarse opaque grey flint.
A number of rough scrapers.

575335 Broken arrowhead, well worked, transparent light grey flint (9).
Burnt microlith (13).
Small flakes carefully trimmed around edges, similar to Nos. 20 and 22 (19 and 21).
Rectangular flake, triangular in section, with carefully worked notches (34).
Coarsely worked circular scraper, grey flint (56).
Small carefully worked concave thumb scraper, light grey flint (65). Also two finely worked oval scrapers similar to No. 58.
Scrapers, grey flint (73 and 75).
Knife or scraper on thin grey blade (78).
Small fragment of polished stone, presumably from a broken axe. The rock is a welded rhyolitic tuff similar to the fragments from Greenway and Tupsley (Reference No.: He 25/c).
Three pieces of light grey polished flint, probably from broken axes.
A dark grey gun flint.
A number of coarsely worked, irregularly shaped scrapers.

[1] *Op. cit.*

575333 Burnt spherical core, brown flint, 2·5 cm. in diameter.

574336 Broken Bronze Age tanged and barbed arrowhead. Light grey brown flint with slight cloudy blue patination (6).
Piece of broken polished flint axe, whitish mottled flint.

575336 Small flakes carefully trimmed around edges (20 and 22).
Hollow scraper, black flint (51).

575338 Light grey translucent blade with carefully worked notches.
A spokeshave (49).
Rectangular implement similar to No. 35 but slightly broader.
Roughly trimmed circular scraper, grey flint; also another similar implement with a thick creamy white patination stained with yellow, unusual in this area; resembles material from Ledbury.

578340 Well trimmed flake with notches, probably for hafting. Black flint (31).

Chips, flakes, waste pieces and calcined flints are very plentiful in these eight fields, which occupy a bluff overlooking the Wye S.W. of the village of Fownhope itself. The fields lying on the top of the bluff are especially prolific and it may be presumed that a living site existed here, which from the evidence of arrowheads would appear to be of Bronze Age date.

586337 Rectangular side scraper of opaque greyish brown flint (71).
Piece of light grey polished flint, probably from a broken axe. A number of burnt flints and chippings, a few of which have also been found in neighbouring fields.

CAPLER CAMP

A number of burnt flints and chips from the field immediately south of Capler Camp (N.G.R. 593327).[1]

PARK FARM, WOOLHOPE (N.G.R. 619379)

Carefully trimmed thumb scraper of pale blue flint, together with some burnt flints and flakes, found near the farm.

FAWLEY

Flakes and burnt flints from two fields (N.G.R. 581309 and 576306) near earthwork, marked " Camp " on O.S. map.

LEDBURY AREA[2]

716399 A considerable number of flakes, chips, burnt flints and cores have been found here (often with a thick creamy patination), but few definite implements. The most important exception is a calcined oval scraper 2·5 cm. across.

[1] See note in *Transactions*, Woolhope Club, for 1942–45, p. xxi, for other finds from this area, and Vol. for 1924–26, p. 88, for scraper found when Capler Camp excavated.

[2] *Transactions*, Woolhope Club, 1894, p. 191, and *Victoria County History, Herefordshire*, Vol. I, p. 158, for general account of Mr. J. E. Ballard's finds in this area (including leaf-shaped arrowhead and fragments of polished flint.)

715406 Long dark grey flake with notches unifacially worked (38). Chips and burnt flints.

764393 Hangman's Hill. Flakes.

LINTON AREA[1]

655260 Beautifully worked oval scraper, similar to No. 58.

658255 Hollow scrapers or spokeshaves (47, 48, 50). Rough scrapers, cores, chips and burnt flints have been found in quantity in this field, chiefly of grey flint; a number of specimens of bright orange flint have also been picked up.

643244 Near Bromsash. Part of cutting edge and side of polished flint axe. Whitish flint similar to Nos. 39 and 81 (87).

MISCELLANEOUS SITES

TUPSLEY

537398 Thick oval scraper, burnt (53).
Fragment of polished stone axe utilized on three sides as a scraper (88). Group VIII. Identical with axes from Merthyr Mawr, Glam. (N.M.W.41.305.1), Llandewi-Rhydderch, Mon. (N.M.W.20.11), Carno, Mont. (N.M.W.15.138/2) and Dol Berthog (in Llandrindod Museum). Similar specimens have been obtained from Shegear Farm (R. S. G. Robinson collection, Reference No.: He 2/c), Llanafon Farm, Dorstone (W. R. Pye collection, Reference No.: He 16/c) and from Sherridge House, Leigh, Worcs. (in Worcs. Museum, Reference No.: Wo. 16/c). Reference number of this specimen is He 26/c.

536398 Fragment of polished stone axe. A welded rhyolitic tuff similar to the specimens from Greenway Farm and Fownhope listed above. Reference No.: He 27/c.

These two fields, lying on a bluff overlooking the valley of the Lugg, have also produced burnt flints, chips and some rough scrapers. A spokeshave on a broad dark grey flake has been found at 534395.

BULLINGHAM

508377 Rough scraper of orange flint.

510370 Small dark grey flake trimmed around edges (18).
Rectangular implement, cloudy blue patination (36).
Scraper of light grey flint (79); also a number of burnt flints and other waste pieces.

CLEHONGER

A few casual finds have been made near Clehonger village: the most notable is a rough scraper from N.G.R. 464385.

BOLSTONE

548323 Thin flake of translucent grey flint trimmed along edges (29).

[1] *Transactions*, Woolhope Club, for 1927–29, p. 137, for general account by S. Cooper Neal of flint finds in the Linton area.

B. SURFACE FINDS FROM HILL FORTS AND ROMAN SITES

OLDBURY CAMP, MUCH MARCLE

Material from the interior of the hill fort.[1]

Bronze Age tanged and barbed arrowhead, grey flint. Worked on both faces, pointed tang and barbs. See Evans, *Ancient Stone Implements of the British Isles*, p. 381, Fig. 311 for a similar arrowhead from Yorkshire Wolds (8).

Broken microlithic point, cloudy blue flint (17).

Brownish grey flake carefully trimmed around edges (27).

Blade, triangular in section, showing two-period working (40). A knife.

Well trimmed rounded scraper, bluish flint (63).

Rough scraper similar to No. 73. Grey flint (74).

A large number of chips, burnt flints and waste pieces.

Fragment of Iron Age "duck" pottery from within ploughed-down rampart at N.E. corner of the hill fort. Coarse black pottery, white grits, similar to Sutton Walls vessels. Decorated with wedge pattern facing left, above which runs a grooved line. Slight internal hollow. See Kenyon, Sutton Walls, *Arch. Jour.*, Vol. CX., Fig. 9, No. 2, for a similar pattern (95).

Small fragment of side and neck of thin globular jar in fine light red ware. Romano-British. From West side of hill fort.

WALL HILLS CAMP, LEDBURY

Finds from the interior of the hill fort.

Small fragment of rim of straight-sided pot in dark grey/black ware with white grits. It may be compared with similar rims from the Herefordshire Beacon, Malvern, in the Hereford Museum. See *Report* of Royal Commission on Historial Monuments, Herefordshire, Vol. III (North), pp. lxvii–xlix (96). Also a sherd of similar fabric.

Rim of mug in light red ware with bead rim. See Kenyon, *Sutton Walls*, Fig. 16, Nos. 4 and 5 for similar examples. 1st–2nd century (97).

A number of abraded Romano–British sherds. Buff ware.

A number of flint flakes from interior of fort and from a field (N.G.R. SO/688382) immediately N.W. of West entrance.

See *Victoria County History*, Vol. I, p. 193, for reference to "Roman bronze coins, worked flints and British or Romano–British pottery" from this site.

BACKBURY CAMP

A number of cloudy blue flint flakes, two burnt flints and a core from the outer surface of the western rampart of the hill fort (N.G.R. SO/586389)

[1] See note in *Transactions* of Woolhope Naturalists' Field Club, for 1946–48, p. xxi, for other flints from Oldbury; *Victoria County History* Vol. I, p. 166 and Evans, *Ancient Bronze Implements*, p. 90, Fig. 78, for bronze looped palstave from this site (now in Evans' Collection in Ashmolean Museum, Oxford).

SUTTON WALLS

Pointed bone object, hollow, hole drilled through square end. Length 10·7 cm. From rubbish tips due to gravel working in interior of fort. See Wheeler, *Maiden Castle, Dorset*, pl. xxxiv, pp. 303–6 for a description of similar bone " gouges " or shuttles (94).

MATHON SANDPIT (N.G.R. SO/737447)

Rim of necked bowl in light red ware. See Kenyon, *Sutton Walls*, Fig. 20, No. 23. Late 2nd century (98).

BLACKWARDINE (N.G.R. SO/534565)

As well as fragments of Romano–British pottery, this area has yielded a number of worked flints, indicating either earlier prehistoric occupation of the area or extensive use of flint by its Romano–British inhabitants. Three well-worked scrapers have been found (Nos. 69, 70 and 80) besides numerous waste flakes and burnt flints.

KENCHESTER

Surface finds from site of Romano–British town.

Iron spearhead, 11·4 cm. in length; triangular blade, 2·3 cm. across at widest point; split socket 5·5 cm. long. See Wheeler, *Maiden Castle*, Fig. 91, No. 5, for a similar example (this specimen is Belgic, but the type is not out of place in Romano–British contexts; similar examples have been found at Hod Hill) (92).

Iron catapult bolt-head, much corroded, 9 cm. long; leaf-shaped head 1·5 cm. wide. See Ritterling, *Hofheim*, pl. xvii, 1; and Jack, *Excavations on the site of the Romano-British town of Magna, Kenchester*, 1912–13, pl. 46 and 47, for other iron spearheads from this site (93).

A number of worked flints, including No. 28 (cloudy blue flake, carefully worked at edges and reworked after patination to show original grey flint). Also a piece of very fine rhyolitic ash, trimmed and used as a scraper (91).

CLYRO, RADNORSHIRE

Three small Samian chips and fragment of flange of mortarium 14 inches in diameter in light buff soapy ware, found after ditching operations near centre of Roman fort. Nothing previously has been found at this site; see V. E. Nash Williams, *Roman Frontier in Wales*, p. 4.

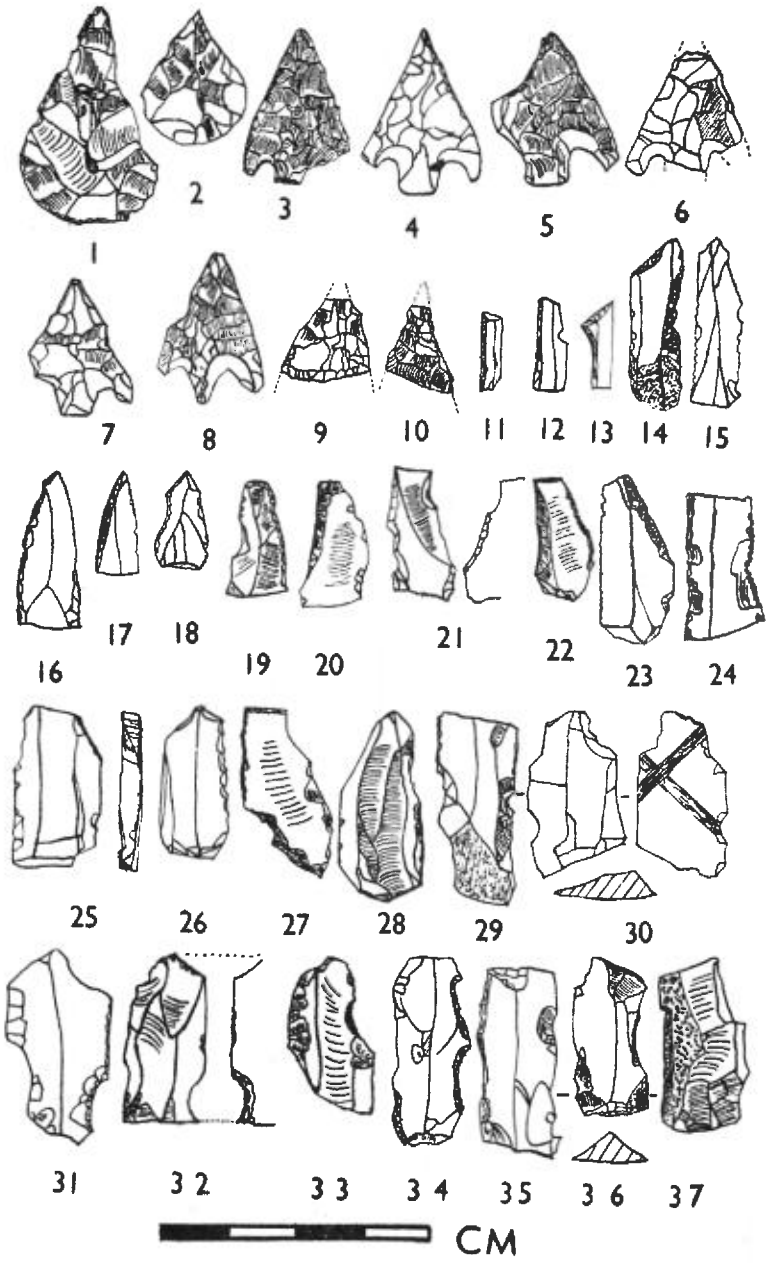

FIG. 1. FLINT IMPLEMENTS, HEREFORDSHIRE.

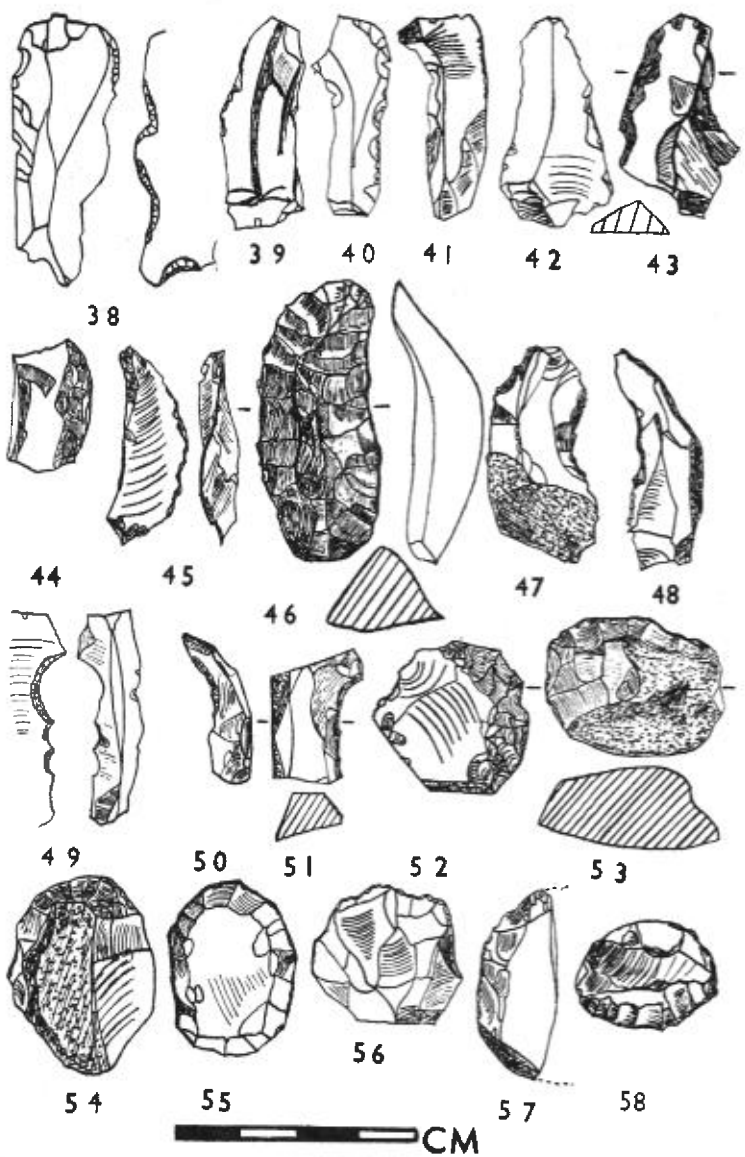

FIG. 2. FLINT IMPLEMENTS, HEREFORDSHIRE.

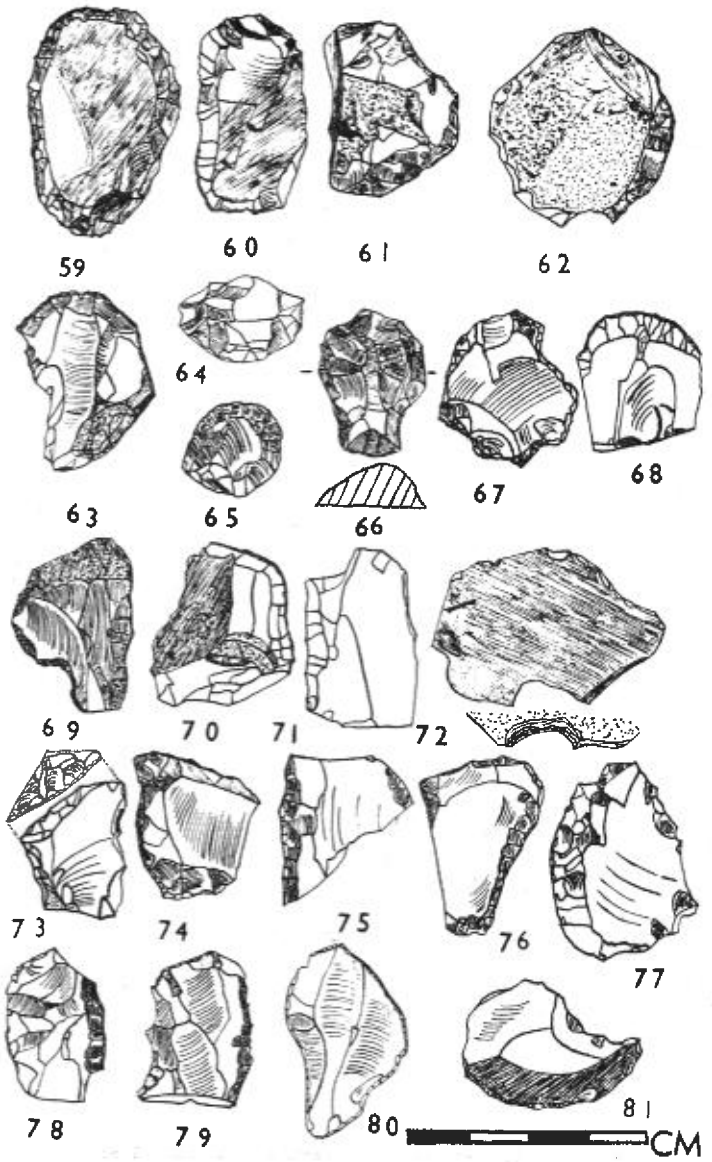

FIG. 3. FLINT AND STONE IMPLEMENTS, HEREFORDSHIRE.

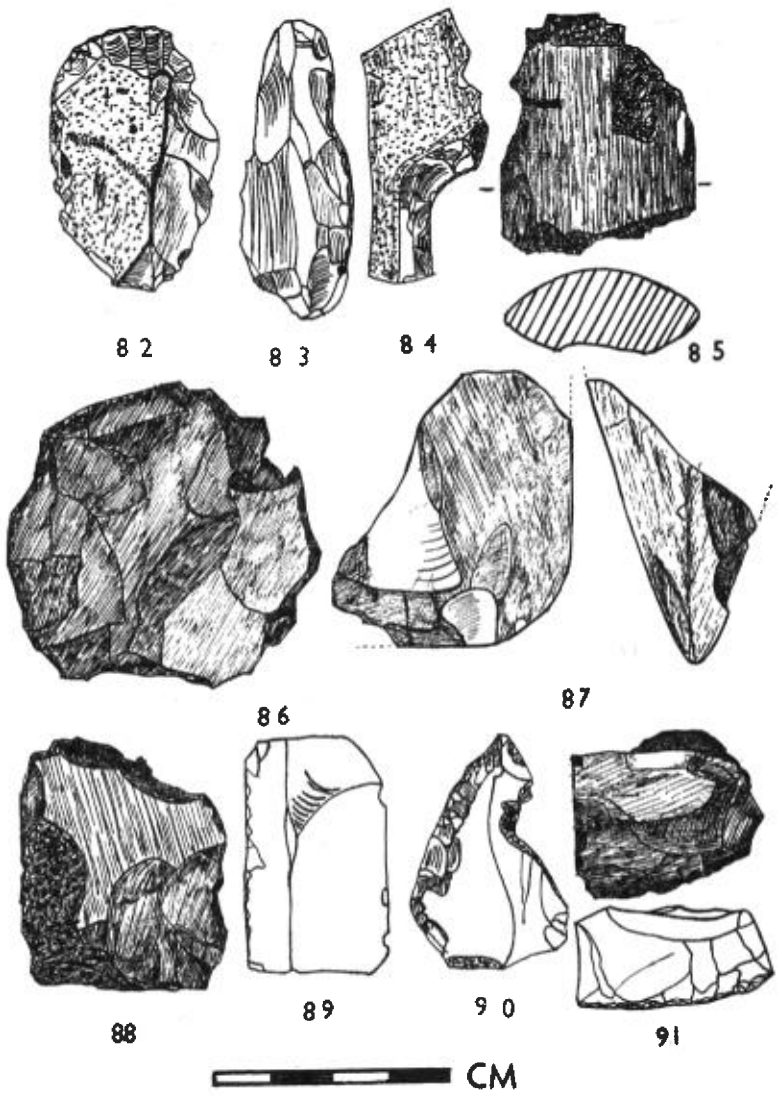

FIG. 4. FLINT AND STONE IMPLEMENTS, HEREFORDSHIRE.

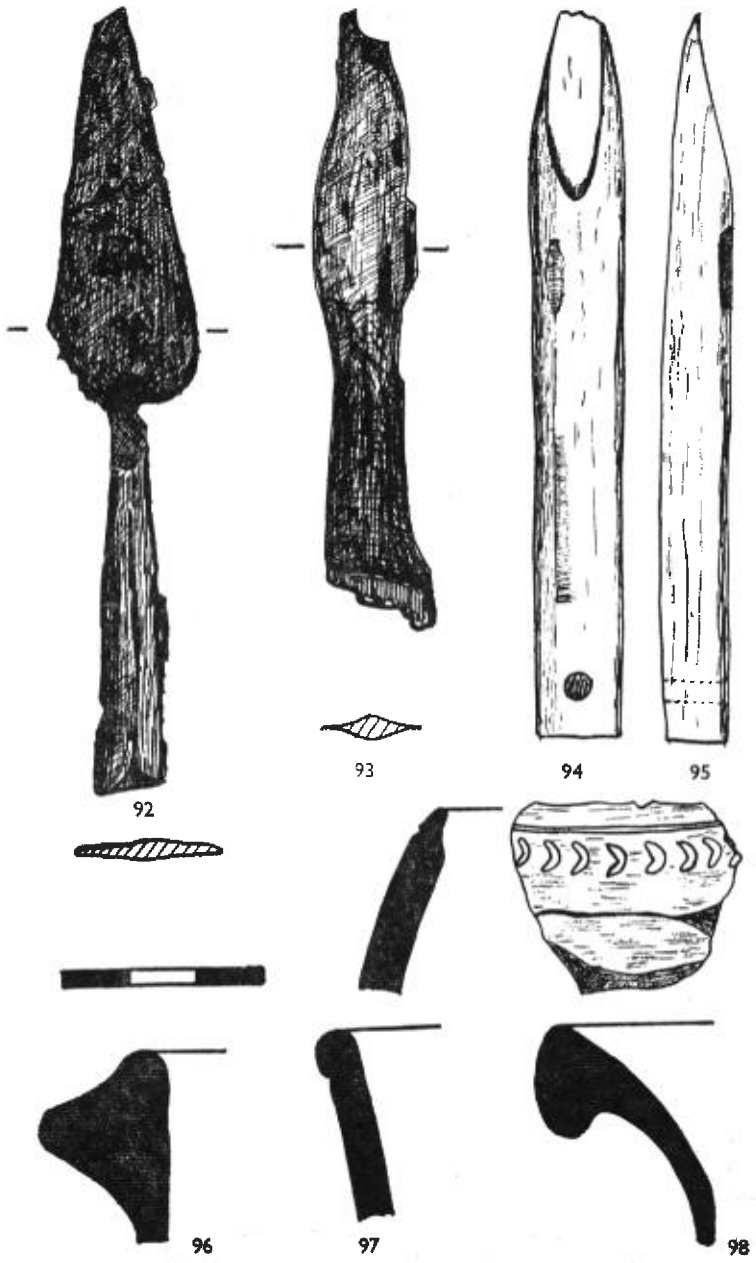

FIG. 5. IRON, BONE AND POTTERY OBJECTS, HEREFORDSHIRE.

NOTES

VOWCHURCH AND THE HOSKYNS FAMILY

By A. S. Wood

These notes have been submitted in view of the Club's interest in Sergeant Hoskyns (see *Transactions*, 1946, p. vii, 1957 pp. 229 and 249, and the present number pp. 62–66.) When the church of Vowchurch was being restored between the years 1848 and 1870 several monumental tablets were removed and are now lost. These included a memorial to Sergeant Hoskyns' wife, Benedicta (Moyle), and another to John Boorne, her son, both of whom died in 1625.

Fortunately a copy of the inscriptions and arms was drawn by T. Ballard in 1817, and this is now in Mr. Wood's possession. Another copy of the inscriptions was made in 1841 by Beresford Lowther, vicar of Vowchurch, and written by him on the fly leaf of the 1838 Marriage Register which is still in current use. These copies vary in details of the wording, but they can be collated and corrected to show this inscription:

> Benedicta, Roberti Moyle de Buckwell in com: Cantii Armigeri filia natu maxima, quondam uxor Francisci Boorne de Sutton St. Cleeres in com: Somerset Armigeri, deinde Johannis Hoskyns de Morehampton in com: Hereford Servientis ad legem, Pia, formosa, prudens, pudica, annos vixit 50, obiit 6° Octobris 1625. Hic expectat Jesu servatorem.
>
> Hic benedicta jacet de qua maledicere nemo,
> Cui genus aut virtus aut pia lingua, potest.
> Boorneii et Hoskyni conjux et prolis utrique
> Mater erat, Moyli filia, serva Dei.

In Ballard's drawing the tablet included beside the inscription the arms of Robert Moyle of Buckwell, co. Kent, esq. Quarterly, (1) Gules, a mule statant argent, within a bordure of the last (MOYLE), (2) Gules, two bars argent, and in chief three plates (MOWLES or WAKE); (3) Argent, a saltire sable between four estoilles gules (LUCOMB); (4) Quarterly, embattled argent and sable (CAYLE); above the shield upon a helmet this crest, a demi-horse or demi-mule (? a sea-horse) rampant gules with wings or drapes (? fins) or.

The second inscription, which appears to have been on the same tablet, reads thus:

> Leniter innocuos transegit Boorneus annos,
> Multa legens, callens plurima, pauca loquens,

> Juridicus, causis neque se ditavit agendis,
> Non in habendo locans sed moriendo lucrum.
> Jo: Bourne Ar: duxit . . . . filiam *Ed*: Kemp Ar: obiit 16 Julii 1625 reliquit proles Johem et Elizabetham.

The missing name of Mrs. Bourne is deciphered as " Margaret " by Ballard and as " quaere ? matrinis vis ? " by Lowther. John Bourne and Margaret, daughter of Edward Kemp of Chanston Court, Vowchurch, were married at Ledbury, 11th April, 1618 (see Robinson's *Mansions of Herefordshire*).

In Ballard's drawing these arms are beside the inscription. Argent, a chevron gules, between three lions rampant sable (BOURNE), impaling gules, a garb or, within a bordure engrailed of the last (KEMP). The whole shield has been drawn with a chief sable which cuts off the top of the Kemp bordure. There is no crest.

The heroic couplets were doubtless composed by the learned Sergeant himself in memory of his wife and his step-son.

VOWCHURCH CHURCH

By A. S. Wood

Following the paper upon John Hoskyns appearing in the Club *Transactions*, 1957, pp. 307—are notes by the Editor; the last paragraph, p. 309, reading thus:

> " The home of John Hoskyns at Moorhampton was demolished after his death in 1638. Local tradition states that the main timbers of the hall were used by John Abel to support the roof of Vowchurch church to avoid re-building the south wall of the chancel, which was giving way. Here they may still be seen. F.C.M."

To disprove this tradition is not difficult, as apart from the fact that there is no documentary support that John Abel (1577–1674), was concerned in any way with the restoration of the church, there exists the evidence that a major reconstruction of the roof of the church took place in 1613. This date is inscribed not only on a board referring to the chancel screen built in at each end to a pair of the oak posts, but also on the Rowland Vaughan shield hung on the eastern-most post on the south side of the nave. Therefore this date is 25 years earlier than the stated demolition of Moorhampton, and it needs no close scrutiny to observe that the queen post type of roof truss, and the posts situated under each tie beam against the walls, comprise new timber and exhibit no trace of previous use.

At this restoration, two of the original 1348 chancel collar beam arched trusses, which undoubtedly composed the form of support for the whole length of the roof of the church, being in sound condition (as they continue to be to the present day), were retained, and the walls showing no sign of spreading or weakness, renewal was not needed.

The assumption that the south wall of the chancel was giving way, cannot consequently be sustained.

In the R. C. H. M. Herefordshire S.W., p. 144, the 1348 chancel roof trusses are shown as a single dotted line, whereas the 1613 trusses are double dotted.

HEREFORDSHIRE SCHOOLMASTERS WHO SIGNED THE SUBSCRIPTION BOOKS, 1662–1665 (THE BISHOP'S ARCHIVES)

List contributed by F. C. MORGAN, M.A., F.S.A., F.L.A.

1662	25 Jul.	Thomas Spencer	Kington
	11 Aug.	Edward Waldron	,,
		Charles Seward	Leominster
	15 ,,	Nicholas Billingsley	Weobley
	16 ,,	Tobias Willes	Ledbury
		Richard Smith	Bromyard
	18 ,,	Samuel Jordan, usher	Monmouth
		Robert Frampton, master	,,
		Thomas Philpott, B.A.	Bosbury
	19 ,,	John Braster	Wormbridge
		Thomas Smith	Hereford Free School
	20 ,,	John Ward	Much Dewchurch
	21 ,,	John Smeethes	Bewdley
		Henry Walwyn	Colwall
		John Bateman	Whitbourne
		Lancelott Taylor	Eye
	23 ,,	David Phillips	Kinnarsley
	Undated	Thomas Prosser Dec. ?	Dorston
1665	4 Sep.	Ezerell Tonge	Leintwardine
	21 ,,	William Watts	Much Marcle

REPORTS OF SECTIONAL RECORDERS

ARCHÆOLOGY, 1961

By S. C. STANFORD, B.A., F.S.A.

One of the most encouraging features of recent years has been the development of long-term excavation projects. At Kenchester the sixth season was completed and work there is now approaching its conclusion. Three seasons have already been devoted to the Archenfield Group's site at Wallingstones and the same group has planned its work on the Huntsham villa on the basis of several years of excavation. This was the fourth year of the Club's work on the Roman fort complex at Leintwardine, and at the time of going to press permission has been given by the National Trust for the extension to six years of the Croft Ambrey excavations. These long-term excavations demand persistence from the excavators and cannot be achieved without the continued goodwill of landowners and tenants, to whom we owe a great debt of gratitude. Without their generous permission, the work could not proceed. Its justification is that only by projects such as these can we hope to arrive at an understanding of times for which archæology must provide our evidence.

EXCAVATIONS

IRON AGE

Croft Ambrey (SO 443668). The second season's work on the hill-fort brought the nett cost of the excavations to a total of £665. In 1961 especially important contributions were made by Lord Croft (£100), The River Wye Guild (£50), and the Carnegie United Kingdom Trust (£30), but we value no less the smaller donations, help and voluntary labour of more than two hundred friends who have together made it possible for us to begin to appreciate the full potential of the site. The significance of the Ambrey in the understanding of the Iron Age in Western Britain will be limited only by the amount of excavation which we are able to effect.

The following is a summary of the main results of the season taken from Interim Report No. 2.[1]

The earliest defences comprised a rampart of dumped earth and stone. Unstratified finds of iron brooches of Hallstatt D and La Tène Ic type and of saddle querns argue for an early date for the first, Iron Age A, occupation of the site, perhaps back into the fourth century B.C.

[1] Copies will be sent to members on receipt of a stamped addressed foolscap envelope, by Mr. S. C. Stanford, Ashfield Cottage, Luston, Leominster.

The Iron Age B defences with their massive dump rampart and stone-revetted gateway at the eastern end were shown to be the work of Western Third B people, identified by their characteristic stamped pottery. The late re-furbishing of these defences is reflected in a late repair of the east gate where semi-circular terminals to the corridor replaced the original rectangular ones, to be followed soon by dismantlement presumably at the hands of the Romans. An iron involuted brooch in the construction levels of the east gate, shows the B occupation to post-date *c.* 250 B.C. while the absence of any Roman pottery suggests that the site was abandoned at the Roman conquest. Eight successive roads through the east gate and the same number of superimposed hut levels in the Iron Age B quarry ditch show the Western Third B occupation to have been a lengthy and apparently peaceful one, and provide grounds for conjecturing that the arrival of these people may be placed towards the middle of the second century B.C. rather than later.

Roman

Buckton (SO 391733). A further fortnight's excavation on the Roman fort was made possible by generous grants from the Ministry of Works (£75), the University of Birmingham (£40), the Haverfield Trust (£25), the Society of Antiquaries (£25), and the Club (£10). The plan of the east gate was completed, and a trial trench across the south-eastern barracks showed two periods of timber buildings on different alignments. The Period II reconstructions were shown to post-date *c.* A.D. 125, but evidence for the initial and final dates of occupation remains slight.

Leintwardine, Jay Lane (SO 400746). The site of the Roman fort here, north-west of Leintwardine village, was discovered by Mr. Arnold Baker in 1960. His aerial photographs made possible the economical excavation of the defences at week-ends during the winter of 1961–62. Two small ditches enclose an area of 5½ acres. The rampart was probably a turf wall, and was provided with timber towers. Only first century pottery was found; and this coupled with its strong topographical situation allows us to be certain that Jay Lane was the first of the three Roman fort sites now known around Leintwardine.

Huntsham (SO 565175). Mr. N. P. Bridgewater, who is directing the work with the Archenfield Archæological Group, reports that an aisled barn, at least 60 ft. long and 44 ft. wide, has been completely planned. This contained the corn-drying kiln found last year, and its debris was cut through by a pit containing a coin of Crispus (A.D. 317–326) and fourth century pottery.

Kenchester (SO 438428). Mr. F. G. Heys, who with Miss M. J. Thomas has directed the excavations, reports that the complete plan of the west gate has been excavated showing the existing foundations to be not earlier than the mid-fourth century. This gateway with twin portals is associated with the wide defensive ditch and was itself reduced to a single carriage way presumably late in the fourth century. Earlier road levels and a culvert are the only remains of any earlier gateway on this site.

Medieval

Wallingstones, Llangarron (SO 503222). The discovery of 70 ft. of the curtain wall of the early castle has been reported by Mr. Bridgewater. In the next field a ring-work has been identified. Domestic items found in the rubbish thrown in the guard-tower and an internal room are from the occupation of the manor house which succeeded the castle, and include table knives, a carpenter's gouge, bronze buckles, a finger ring, a fourteenth century rowel spur and a medieval jetton. The earliest documentary record of Wallingstones is to *Waldyngeston* in the reign of Henry VII, and fifteenth-sixteenth century glazed table ware shows that occupation of the manor house on the mound continued until then.

Post-Medieval

Glasshouse Farm, St. Weonards (SO 474230). Excavations directed by Mr. Bridgewater following a proton magnetometer survey by Dr. M. J. Aitken of the University of Oxford Research Laboratory for Archæology, have revealed the furnace bed of a glass-making establishment. The site has been heavily robbed but appears to have been of rectangular plan.

Observations and Casual Finds

Mr. M. P. Watkins has drawn attention to the interesting character of the Fish House, Ganarew, and has deposited a note on the building with the Club, together with one on a possible ford in St. Maughans parish above Tregate Bridge.

Miss D. Harrison observed a number of old roads exposed in trenches on the site of the new Wigmore School. Slip-ware recovered from beneath one of them may suggest that here, east of Wigmore Hall, was a sixteenth-seventeenth century extension of Wigmore village. A sketch-plan of the roads prepared by the Rev. W. N. Tavernor, has been deposited with the Club.

SCHEDULED AS AN ANCIENT MONUMENT

No. 152. Hereford Castle (Keep Site, Castle Green and Castle Pool).[1]

ARCHITECTURE, 1961

By H. J. POWELL, F.R.I.B.A.

CONINGSBY'S HOSPITAL

In September, 1961, the President asked me if I would inspect the old cottage attached to the almshouses as it appeared to be the same date as the Hospital and worth preserving. I met Mr. Harris, secretary of the Coningsby Hospital Trust, on the site and made an examination of the building.

This building is undoubtedly of the seventeenth century but not part of the hospital. It was no doubt the Gatehouse to Sir Thomas Coningsby's house. The archway next to the street and the one at the rear have been filled in and the whole converted into a cottage.

The building is certainly not past repair and rehabilitation and my opinion was that an effort should be made to put the work in hand. I suggested at that time that the work would certainly cost £2,000, but that estimate has increased during the last nine months.

Mr. Harris was very keen on the idea of restoration and hoped that the money could be raised to carry out the work.

BOTANY, 1961

By F. M. KENDRICK

It is with great regret that I have to record the death of Miss Elenora Armitage during the year 1961. As a constant and valued contributor to the Club's Transactions for at least half a century, it was only fitting that she was elected to Honorary Membership of the Club as one of our first lady members. A distinguished amateur botanist and past President of the Bryological Society, it was natural that her most valued contribution to the Club's records was a paper on the Hepatics of Herefordshire published in the Transactions for 1923. She also helped in the revision of the records of the county mosses undertaken by the Reverend C. H. Binstead.

Even at the great age of 95, her knowledge of the county flora was remarkable, and she was always ready to discuss any new

[1] This is an addition to the list of scheduled monuments given in W.C.T.' 1960, pp. 330–333.

species that had been found in the county. During these discussions she would regale one with her memories of the past great botanists of the Club, and descriptions of some of the incidents that had happened during the early botanical excursions.

Her copy of the *Flora of Herefordshire*, which was freely annotated, has been given to the Club and will prove most valuable for record purposes.

In spite of the somewhat unfavourable weather conditions during the year, the botanists succeeded in adding another new record to the county flora and made several other interesting finds of rare and unusual plants.

A fungas foray was held at Croft Castle in September and 102 different species found. Of these, 20 were frequent, 43 occasional and the remainder rare. Mr. M. P. Watkins reports that the fungi were very poor in the Doward area this year so the Croft expedition can be considered most successful.

The most important records received during the year are as follows:

[Figures refer to the *Flora of Herefordshire* districts].

(*a*) Not previously reported.

PILULARIA GLOBULIFERA. 13. Dried-up pool Little Mountain (L. E. Whitehead, E. Lloyd and A. Powell).

(*b*) New districts.

BOTRYCHIUM LUNARIA. 2. Pagets Wood near Fownhope (M. Marklove).

MOENCHIA ERECTA. 10. Ballsgate Common, Aymestrey.

(*c*) Plants of interest.

RANUNCULUS TRICHOPHYLLUS—Brampton Bryan.
FUMARIA SSP BORAEI—Brampton Bryan, Belmont.
TRIFOLIUM STRIATUM—Shucknall Hill.
DROSERA ROTUNDIFOLIA—Huntington.
DATURA STRAMONIUM—Holmer.
OROBANCHE ELATIOR—Fownhope.
OROBANCHE MINOR—Hereford (Sewage Works).
ACINOS ARVENSIS—Hereford (Sewage Works).
LITTORELLA UNIFLORA—Little Mountain.
DORONICUM PARDALIANCHES—Aymestrey.
SILYBUM MARIANUM—Shucknall.
POTAMAGETON OBTUSIFOLIUS—Mynd Park, Much Dewchurch.
KOELERIA CRISTATA—Shucknall.

(*d*) **Casuals.**

AMARANTHUS THUNBERGII—Hereford.
TRIFOLIUM ANGUSTIFOLIUM—Hereford.
FRAGARIA INDICA—Hereford.
POLYPOGON MONSPELIENSIS—Hereford.

It is interesting to record that I found MIMULUS MOSCHATUS (Musk) growing alongside a stream above Forest Farm, Hay. Though just outside the county boundary, the stream flows into the Dulas brook and the plant therefore may spread into this county.

GEOLOGY, 1961

By F. M. KENDRICK

The most important item I have to report this year is the discovery by Dr. B. Miles of the fossil SPONGARIUM EDWARDEII in the large quarry in the upper Ludlow formation on Bircher Common.

The affinity of this fossil is doubtful. It is listed as a plant in Murchinson's *Siluria*, but the specimen from Bircher contained no trace of carbonaceous matter either on the fossil or its cast. Dr. G. Bennison, who kindly identified the fossil, was unable to find any mention of it in recent palaeontological works. The photograph of this fossil (Fig. 1) was taken by Mr. L. W. Vaughan, F.I.S.T.

Attention is drawn to the new road which the Forestry Commission have constructed just south of Mordiford. It has been cut into the side of the hill and provides excellent sections of the Bodenham, Sleeves Oak and Wootton Beds and also the Wenlock Limestone. The upper section consists of a hard grey nodular limestone that is mostly unfossiliferous but the lower part contains an abundant fauna. About halfway up the slope, a hard dark shale yields a good supply of Graptolites (*Monograptus spp.*). A peculiar feature of the lower slopes is that there appears to have been considerable sorting of the fossils, probably by currents, so that small areas are found to contain large quantities of one particular fossil which is scarce in the remainder of the exposure. This exposure would repay careful investigation.

There is a small exposure of Pre-Cambrian Conglomerate near the south wall of Old Radnor Churchyard that is not shown on the map of the Old Radnor Inlier in the Regional Handbook. The pebbles in this exposure are small, but of the same material as those in the large exposure in the fields to the west of the church.

My attention has been drawn to a vein of copper ore at Dolyhir Quarry by Mr. F. Noble. It was about nine inches wide and

To face page 100

FIG. 1.

contained both malachite and azurite. An exposure of Pre-Cambrian grits on the opposite face of the quarry would seem to indicate that the vein lies in close proximity to these grits.

MAMMALS, 1961

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

Mr. E. A. Lloyd reported that on 12th February when motoring on the Brilley-Kington road he saw a stoat cross the road in front of him. It was snow-white except for the dark tip of the tail. It is unusual for the perfect ermine-coloration to be seen as far south as this, though normal in north Britain. In winter the Herefordshire stoat usually retains a good deal of the summer coat, often giving it quite a skewbald appearance. Mr. T. C. Gwynne reported on February 17th that large numbers of long-tailed field mice had invaded his garden, eating stored potatoes, etc. The fur is described as brownish-yellow above, under parts white with a large ring of buff across the breast. The description suggests the de Winton type of long-tailed fieldmouse, which has been reported from different parts of Herefordshire (see J. E. M. Mellor's map in Centenary Vol. p. 106), but measurements would be necessary to make the identification certain.

A specimen of the de Winton mouse was sent to the November meeting of the Club by Rev. D. A. L. Maclean: it was caught at Putley. It measured 4·65 inches from tip of nose to root of tail, and the tail measurement was 3·95 inches, making a total length of 8·6 inches. Its colour was golden-brown above and it showed the characteristic yellow collar of Apodemus flavicollis wintoni.

Miss Marklove, of Fownhope, reports that in June last she saw, high up on a grass stalk, a harvest mouse. Its tail was coiled round the stalk to which it was clinging, and its weight was insufficient to bend the stem. Mellor states that there are only five previous records of harvest mouse from Herefordshire. Dr. Malkin, however, informs me that he saw one of these tiny creatures a few years ago at Fownhope. It climbed up and down grass stems biting off the seed-heads.

ORNITHOLOGY, 1961

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

During the past year disquietude has been steadily growing among ornithologists, with reference to the effect on bird-life of the insecticides now widely used on farms and gardens. Many of our bird

species appear to be diminishing in numbers, though Herefordshire is not as yet affected as disastrously as some counties in eastern England where certain species, including even chaffinches, have been virtually wiped out. Insect-eating, as well as seed-eating birds, are affected, and among the species which appear to be declining in the county are stockdoves, turtle-doves, yellow-hammers, the common whitethroat—to name only a few. By banning the potent forms of sprays and dressings members of the Club would be helping in the cause of bird preservation.

Last summer saw a great increase in the number of quail seen and heard in the county. The piping of the birds were heard in six areas, and breeding was successful in at least two districts, King's Caple and Shobdon. Some factor favourable to the gallinaceous type of birds appears to have been responsible for this, for partridges and french partridges are again plentiful, whereas a few years ago very few indeed were to be seen.

Among the rare birds reported during the year were a Black Redstart seen at Hereford on 13th January, by Mr. A. J. Smith, and a White Wagtail on 29th April—also at Hereford and by the same observer. Major W. D. R. Verdin reported the presence for several days in March (20th–23rd) of a small herd of Whooper Swans at Old Court Pool, Whitney. Several observers, including Dr. and Mrs. Chandler of Kingstone, had views of a pair of Golden Orioles in April. A flock of seven Snow-buntings were seen on the Malvern Hills by Mrs. J. L. Fox on 7th November. The birds were in Worcestershire and flew over the border into Herefordshire, where the species last occurred in the cold winter of 1947. Hawfinches were seen in August at King's Caple by Mr. Coombe Richards, and Mr. J. G. Murray reported seeing a Waxwing in a Ledbury garden in the bitter weather at the end of the year (28th and 29th December).

REPORT FROM HEREFORD MUSEUM

I. PREHISTORIC ACCESSIONS TO HEREFORD MUSEUM 1960–1961

By J. F. L. Norwood, B.A.

The specimens described below are the more important implements to have been given to the Museum in the last two years. It is pleasing to record the growing readiness of members of the public to bring such finds to notice, and it is to be hoped that the Museum will increasingly be recognized as the proper repository for what are in many cases important historical documents. Thanks are due to Miss L. F. Chitty, O.B.E., M.A., F.S.A., and Professor F. W. Shotton, M.B.E., M.A., D.SC., F.R.S., who have again been of the greatest help in examining specimens. The Museum accession number precedes each description.

7415. Quern (upper stone) found on Parc-y-Meirch, Craswall, Nat. Grid Ref. SO 267372. Given by Mr. R. E. Kay, 28 Belmont Avenue, Hereford. Diameter *c.* 440 mm., thickness 110 mm., diameter of perforation 57 mm. Iron Age B, of Wessex type (see note on 7691 below). Sandstone.

7451. Whetstone (Fig. 1, 1) found on Dorstone Hill, near Moccas Park, Nat. Grid Ref. SO 331424. Given by Philip Hughes, Pentre Farm, Bredwardine. Length 90 mm., width 33 mm., thickness 24 mm. A ground rectangular sandstone bar, perhaps longer originally, with almost cylindrical perforation. Whetstones of similar form were in use until the middle ages, but from Bronze and Iron Age associations elsewhere, and the proximity to other prehistoric finds on this ridge it is reasonable to infer that this example is prehistoric.

7691. Quern (upper stone; Fig. 1, 2) found at Vowchurch, Nat. Grid Ref. SO 363362. Given by Mr. F. J. Parker, Chanstone Court, Vowchurch. Diameter *c.* 400 mm., thickness 90 mm., diameter of perforation *c.* 110 mm. This hard sandstone quern has had a long life. In form it is similar to Curwen's " Wessex type ",[1] the grinding surface forming the segment of a circle, with perhaps a shallow hopper above originally. The radial wooden handle was at first wedged into the vestigial socket now seen on the right of the section, but removal of the grinding surface in use also destroyed this socket. A fresh one was made on the opposite side and this too, damaged in use. Finally, it seems, the stone was turned over and the upper surface used as a grinding face, since it shows signs of considerable if uneven wear. A

[1] *Antiquity*, XI (1937), p. 142.

simple calculation based on the probable relation of the first handle socket to the original grinding surface shows that the stone must have been at least 30 mm. thicker when new, indicating either very heavy wear or use over a long period of time. Such rate of wear is difficult to calculate, but this specimen may have seen use for upwards of a century. Wessex type querns are frequently found in Iron Age B contexts, so it is not surprising that it was found within a mile of Poston hill fort.

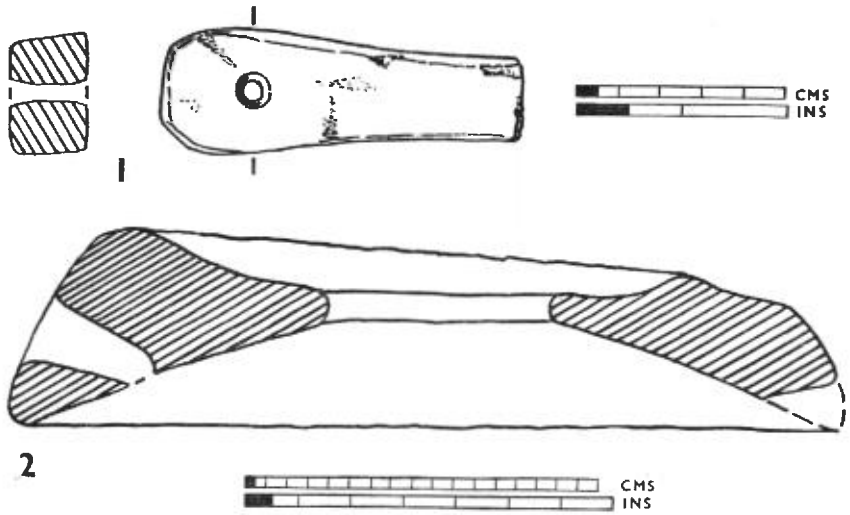

FIG. 1.

7800. AXE (Fig. 2, 3) found at Letton Farm, in the parish of Walford, Letton and Newton, Nat. Grid Ref. SO 383713. Given by Mr. M. P. Morgan of that address. Length 173 mm., width 73 mm., thickness 41 mm. Petrological Survey No. He 15/c. The rock is a fine-banded felspathic ash with mica, and does not match any of the Survey groups. This implement, one of the largest recorded in the county, clearly shows the original roughing out which has only partly been removed by subsequent grinding. Grinding is more advanced on the face not illustrated, and the edge has been retouched by the removal of three flakes. Neolithic.

7801. AXE (Fig. 2, 1) found at Marresses, St. Margarets, Nat. Grid Ref. SO 330347. Given by Mr. S. J. Went of that address. Length 101 mm., width 48 mm., thickness 37 mm. Petrological Survey No. He 9/ah. The rock is a greenstone of Group 1[1] from a factory site

[1] Described in Proceedings of the Prehistoric Society, VII (1941), pp. 51, 55.

which is now probably submerged beneath Mount's Bay, Penzance, Cornwall.[1] Apart from the unfinished perforations, the axe closely resembles other Group 1 examples which tend to be stout in section.[2] The axe probably followed a trade route up the Bristol Channel, like those from North Tawton, Devon,[3] Portbury, Somerset,[4] and Somerford Keynes, Gloucestershire,[5] its ultimate arrival in the Black Mountains area being " due to diffusion from the Usk—upper Wye route, which conveyed a Group 1 axe to Rhayader " (Miss Chitty). Many axes of this group found their way into Wessex.

The unfinished perforations of this axe are a puzzling feature, since perforated implements are not characteristic of the Group 1 factory. Professor Shotton suggests that they may represent a local attempt to turn it into an axe-hammer. This design may have been abandoned when it was seen that perforation would considerably weaken the implement.[6] Late Neolithic or Bronze Age.

7802. AXE (Fig. 2, 2) found at a depth of 30 in. in clay marl at Dinmore Fruit Farm, Wellington, Nat. Grid Ref. SO 502501. Given by Mr. T. E. Powell of that address. Length 117 mm., width 59 mm., thickness 29 mm. Petrological Survey No. He 36/c. The axe is a well-ground example, pale grey-green in colour, only marred by slight damage at the butt end. Professor Shotton reports that it is " typical Group VI in form but it is not typical Group VI lithology, though it is a fine andesitic ash with much epidote . . . I have no doubt whatever it is Lake District in origin and comes within the cultural influences of the Langdale workers ". An axe of very similar form (Group VI) was found at Alvescot, Oxfordshire and a fragment of another at Andoversford, Gloucestershire.[7] Late Neolithic.

7803. HOE (Fig. 2, 4) found *c.* 1945–50 in the Brampton Bryan or Leintwardine area. Given by Mr. R. G. Gurney, 597 Rayners Lane, Pinner, Middlesex. Length 93 mm., width 72 mm., thickness 30 mm. Petrological Survey No. He 10/ah. Professor Shotton reports that the rock is a micaceous schistose granulite. " It is made of quartz grains with evident signs of shear, with development of muscovite in longish laths and very many biotite crystals. It could be a pebble out of glacial drift and various grooves on its surface are suggestive of glacial striæ, but they need not be this. As a rock, however, it is most likely to be of Scottish origin, but I would not have expected Scottish erratics in Herefordshire . . .".

[1] *Ibid.*, XVII (1951), p. 103.
[2] *Ibid.*, VII (1941), fig. 1, p. 54, nos. 113, 116.
[3] Exeter Museum No. 40.1917.
[4] Bristol Museum No. F.2380.
[5] Malmesbury Museum.
[6] For an interesting discussion on perforation, see Evans, *Ancient Stone Implements* (1872), pp. 213–218.
[7] Proceedings of the Prehistoric Society, VII (1941), fig. 2, p. 57, nos. 212 and 121.

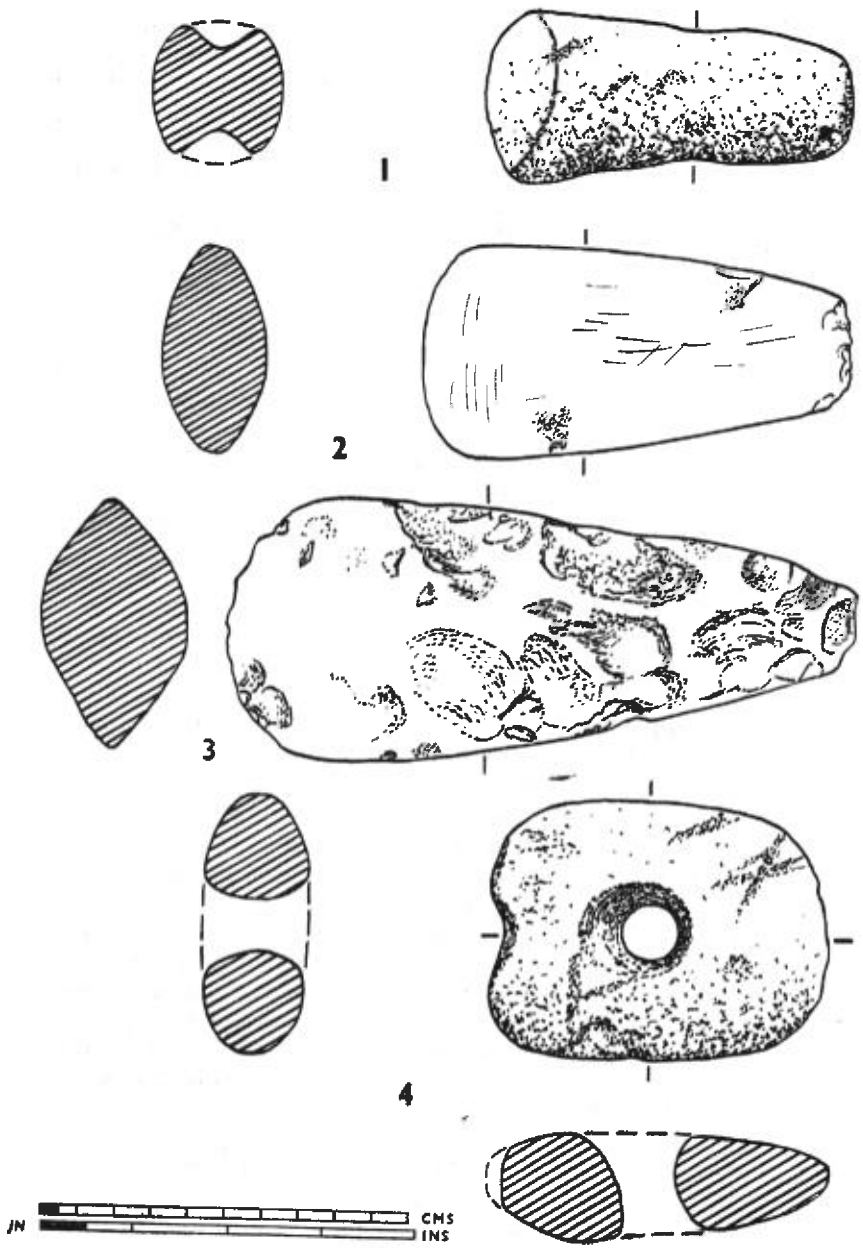

FIG. 2.

Miss Chitty points out that this is in fact a dual-period implement that probably began as a " Curwen-type " adziform macehead[1] and was adapted (? after breakage) as a hoe. Such maceheads are characteristically oblong in form, about 150–170 mm. long and about 70–90 mm. wide, with the " blades " at right angles to the axis of perforation. A fine example was found at Dudmaston in Shropshire.[2] Thus the present specimen shows the vestigial first perforation, which if central would make the original length about 190 mm. The secondary perforation, it will be noticed, has not been made at right angles to the implement, and when hafted it could only have been used in an adze- or hoe-like manner. As there is no sign of an edge being put on the implement, the latter use seems more likely. Late Neolithic or Bronze Age.

II. COIN FINDS IN 1961

By J. F. L. NORWOOD, B.A.

Abbreviations: Obv. = Obverse; *Rev.* = Reverse; *Mm.* = Mintmark. R.I.C. = Roman Imperial Coinage.
Orichalcum = a copper/zinc alloy.
Billion = a silver/bronze alloy, often debased to a silver wash.

ROMAN

1. Orichalcum sestertius of Antonius Pius (138–161 A.D.).
   Obv. ANTONINVS AVG PIVS PP Laureate bust right.
   Rev. VO)TA SVSCEPTA DEC III (COS IIII) SC Antoninus standing left sacrificing with patera over tripod.
   R.I.C. No. 794. Minted 145–161 A.D. Found at 40 Moorfield Street, Hereford, and given to the Museum by Mr. D. Emery, 71 Park Street, Hereford. (Accession No. 7614.)
2. Sestertius of the usurper Postumus (259–267 A.D.).
   Obv. ...POSTV(MVS PF AVG Radiate cuirassed bust right.
   Rev. FIDES MILITVM Fides standing left holding two standards.
   Found at Kenchester, and given to the Museum by Mr. H. Bolt, 1 Tower Road, Hereford. (Accession No. 7547.)
3. Billon antoninianus of Claudius II, Gothicus (268–270 A.D.).
   Obv. DIVO CLAVD(IO Radiate bust right.
   Rev. C)ONSEC(RATIO Altar.
   Mintmark illegible through faulty striking. cf. R.I.C. No. 261. Found in Kenchester excavations, 1961.

[1] Sussex Archæological Collections, LXIX (1930), pp. 83–89.
[2] *Transactions* of the Shropshire Archæological Society, LII (1947), pp. 129–138.

4. Billon antoninianus of the usurper Victorinus (265–270 A.D.).
   Obv. IMP C) VICTORINVS PF AVG Radiate draped bust right.
   Rev. IN)V(ICT)VS Sol walking left, right hand raised, left holding whip. Star in field.
   Mint of Colonia Agrippinensis (Cologne). R.I.C. No. 114. Found in Huntsham excavations, 1961.

5. Billon antoninianus of Victorinus.
   Obv. IMP VICTORINVS PF AVG Radiate draped bust right.
   Rev. PIET)AS AVG Pietas standing left by altar, holding patera and box of perfumes.
   Southern mint. R.I.C. No. 60. Found in a house at Eardisland, and examined for Mr. J. Taylor, Spring Cottage, Dilwyn.

6. Bronze of the usurper Tetricus I (270–273 A.D.).
   Obv. IMP TE)TRICVS PF AVG Radiate cuirassed bust right.
   Rev. LAETIT(IA AVG Laetitia standing left, holding wreath and anchor.
   Found at Kenchester, and examined for Mr. M. Garfitt, 35 Hampton Dene Road, Hereford.

7. Bronze of the usurper Tetricus II (270–273 A.D.).
   Obv. . . . TET)RICVS C(AES Radiate bust right.
   Rev. Illegible.
   Found at Kenchester, and examined for Mr. W. P. Nash, Cranwell, Dinedor.

8. Bronze of Tetricus I or II.
   Obv. . . . TETRIC(VS . . . Radiate bust right.
   Rev. Illegible. ? Altar.
   Found at Kenchester, and examined for Mr. W. P. Nash.

9. Billon antoninianus of the usurper Carausius (287–293 A.D.).
   Obv. IMP) CARAVSIVS PF AVG Radiate cuirassed bust right.
   Rev. PAX AVG Pax standing left holding olive branch and vertical sceptre.
   Mm. $\frac{S|C}{MLXXI?}$ —Londinium or Camulodunum (Colchester).
   Found in Huntsham excavations, 1961.

10. Billon antoninianus of Carausius.
    Obv. IMP CAR)AVSIVS PF (AVG Radiate cuirassed bust right.
    Rev. PA(X AV)G Pax standing left holding olive branch and vertical sceptre.
    Mm. Illegible. Londinium or Camulodunum.
    Found in Huntsham excavations, 1961.

11. Bronze of Maximinus II, Daza (as Caesar, 305–307 A.D.).
    Obv. MAXIMI(NV)S NOB C(AES Laureate, draped and cuirassed bust right.
    Rev. GENIO POPVLI ROMANI Genius standing left, holding cornucopiae and patera.
    Found at Kenchester, and examined for Mr. H. Bolt.

12. Bronze quinarius of the usurper Allectus (293–296 A.D.).
    Obv. IMP C ALLECTV(S PF AVG Radiate cuirassed bust right.
    Rev. VIRTVS AVG Galley right.
    Mm. QC—Camulodunum.
    R.I.C. No. 128.

13. 2nd bronze ? follis of Constantine I (as Caesar, 306–308 A.D.).
    Obv. FL VAL CONSTANTINVS NOB C Laureate cuirassed bust right.
    Rev. MARTI PATRI CONSERV Mars standing right holding spear and shield.
    Mm. $\frac{S|A}{PTR}$ —Treveri (Trèves).

14. 4th bronze of Constantine I (Augustus, 308–337 A.D.).
    Obv. VRBS ROMA Helmeted bust of Roma right.
    Rev. Wolf suckling Romulus and Remus.
    Mm. PLG—Lugdunum (Lyons).

15. Bronze follis of Constantine I.
    Obv. IMP C CONSTANTINVS AVG Laureate draped bust right.
    Rev. SO)LI INVICTO CO(MITI Sol standing left.

16. 3rd bronze of Constantine I.
    Obv. Illegible. Diademed bust right.
    Rev. Illegible. Female figure standing right.
    The above five coins were found at Kenchester, and examined for Mr. W. P. Nash.

17. Third bronze of Constantine I.
Obv. CONSTANTINOPOLIS Head of Constantinople left, with sceptre.
Rev. Victory standing left with spear and shield.
Mm. TRS—Treveri.
Found at Kenchester, and examined for Mr. M. Garfitt.

18. Bronze of Crispus (Caesar 317–326 A.D.).
Obv. IVL CRISPVS NOB C Laureate head right.
Rev. CAESARUM NOSTRORVM VOT X within wreath.
Mm. PTR—Treveri.
Minted 320—Nov. 324 according to Maurice. Found in Kenchester excavations, 1961.

LATER

19. Groat of Mary (1553–54). Found at Fishpool Cottage, Byford, and examined for Mr. S. D. Worgan of that address.

NOTES FOR CONTRIBUTORS

Contributions in the form of short papers, longer articles, or brief notes (suitable for inclusion in a " miscellanea " section) on any of the aspects of the Club's concern with the natural history, antiquities, archæology, or history of the city and county, will be welcomed by the Editorial Committee to be considered for publication in the *Transactions*. Such contributions should, preferably, be in typescript, double-spaced, on one side of the paper only, and should be directed to Miss M. Jancey, Frankhurst, Sutton St. Nicholas, near Hereford.

THE CLUB LIBRARY

The Hon. Librarian, Mr. Sherwood, asks that members borrowing books from the Club's Library in the Woolhope Room at the City Library be particularly careful to sign in the register for books as they take them out and as they return them.

Woolhope Naturalists' Field Club

(HEREFORDSHIRE)

PROCEEDINGS, 1962

SPRING MEETINGS

FIRST MEETING: Thursday, 18th January at 3 p.m.: the President, Mr. S. C. Stanford in the chair.

The President gave information of excavations planned in the coming year: at Richard's Castle in April and September by Dr. Thompson of the Ministry of Works: at Jay Lane Fort, Leintwardine during week-ends in February and March, and at the Third Century Fort, Leintwardine, in April, these last with the support of the Club.

The Secretary read a letter from the City Surveyor asking for suggestions for the naming of roads on the Causeway Farm and Prospect estates. It was suggested that names of eminent Hereford ladies be used.

Dr. H. G. Langdale Smith then read a paper " An Introduction to the Lepidoptera ". In this delightful and amusing talk the speaker classified butterflies according to their habitat—woodland, open space or garden. An oak wood with wide rides and growing sallow, blackthorn, honeysuckle, violets, bugle, thistle and teasel, offers gatekeepers, ringlets, wood argus, commas, white admirals (the most graceful of our butterflies), fritillaries, green veined, wood whites, purple and white letter hair streaks. In the central midlands, with great good luck, black hair streaks and purple emperors may be added to this list. Open spaces and roadsides offer orange tips, meadow brown, holly blues, small heaths, marbled white graylings, dark green and small pearl bordered fritilliaries. In the garden the types of butterfly depend on the plants grown—if buddleia, hyssop, sedum spectabile, asters and candytuft are grown, tortoiseshell, peacock, red admirals, painted lady, orange tip, small copper and wall butterflies should be found. Moths may be classified according to their flight by day or night and these again divided into those attracted by light and those by sugar. It is possible to assemble Emperor Moths and Kentish Glories by bringing a female to an area where moths are plentiful. Sometimes in a short time as many as 20 or 30 may appear. This does not always work—a freshly emerged female Emperor Moth which had travelled by post from Scotland in a match box only attracted one male as she was small and puny. A female Kentish Glory failed to attract an assembly until removed by car, when it was seen that a solitary male was flying behind the car. Moths in great quantities can be attracted at night

by vapour lights and by " sugaring " trees by painting rum and treacle on the trunks—a mixture that seems to occasion a degree of tipsiness in the moths so attracted. The study of ecology, of the relations between the lepidoptera and their habitats is of great fascination. Dr. Langdale-Smith illustrated this interest with examples which served to pose questions and to answer some as well—that although butterflies are widely distributed, they breed in only a few districts: that in industrial areas the peppered moth becomes quite black: that the large blue butterfly seems to have disappeared from its haunts in Gloucestershire, possibly because the absence of rabbits allows the grass to grow tall on the ant heaps and so smother the thyme, the foodplant of this butterfly.

SECOND MEETING: Saturday, 17th February at 3 p.m.: the President, Mr. S. C. Stanford in the chair.

The following were declared elected members of the Club: Miss C. M. Bedson, Miss C. H. Gwilliam, Mrs. V. H. Buchanan, Mr. K. Siggers, Miss K. L. Lomax.

Miss M. Jancey read a paper " The Pateshall Family of Allensmore ". This talk, based on a large collection of documents housed at the County Record Office, outlined the history of the Pateshall family from the seventeenth to the early nineteenth century as it is revealed in surviving records which range in kind from deeds to photograph albums, and include a family chronicle written probably in the mid-eighteenth century by Jane Pateshall whose maiden name was Allen. In 1700 she married John Pateshall " who came first to my eldest sister, but having a denial from her, he told my Father he had a great liking for me ". They lived at Pembridge on the Weston estate which John Pateshall inherited from his father, who had died in 1687 and until John's death, tended there the children of his brother Edmund, a draper of Shrewsbury whose wife Mary, Jane's younger sister, had died of smallpox in an epidemic of 1716. Of these children the girl, Jane, married Scudamore Lechmere of Fownhope. On the death of her brother her second son Edmund inherited the Pateshall estates which included Allensmore bought by his grandfather, and took the name of Pateshall. Edmund married Anne Burnam and settled at Allensmore where the house was improved and enlarged to a modern mansion and where a large family was born to them. He died in 1790. The correspondence of his children survives in considerable quantity. The eldest son, Edmund Burnam Pateshall, inherited Allensmore. His brothers entered different professions. One of them, William, a lawyer, was Town Clerk of Hereford. Another, Nicholas Lechmere, who entered the navy, sailed on H.M.S. Calcutta on the voyage of 1803 which

led to the settlement of Hobart in Tasmania. This correspondence is full of information about country life, local politics and the Herefordshire scene in the first two decades of the nineteenth century. The speaker explained that the brief outline of the family's history was really in the nature of a first report of an exploration of the records and was intended to indicate ways in which a family collection of this kind contained information on many subjects, and rather to demonstrate the wealth of material available than to provide a full study of the family's history.

THIRD MEETING: Thursday, 15th March, at 3 p.m.: The President, Mr. S. C. Stanford in the chair.

The following were declared elected members of the Club: the Right Reverend the Lord Bishop of Hereford and Mrs. Hodson; the Rev. and Mrs. C. J. Cotterell.

Members stood in silence in memory of the Rev. C. L. Money-Kyrle who had been a member of the Club since 1899.

The President referred to the Club's great pleasure in congratulating the Rev. Preb. J. H. Parker on his hundredth birthday. It was agreed that he should be made a member emeritus.

Canon E. F. H. Dunnicliff read a paper on Robert de Melun, Bishop of Hereford (see present number of the *Transactions*, pp. 123–134).

SPRING ANNUAL MEETING: Thursday, 5th April at 3 p.m.: The President, Mr. S. C. Stanford, in the chair.

The following were declared elected members of the Club: Mr. J. E. Rosser, Mr. and Mrs. A. E. Rimmer, Mrs. M. Bennett, The Rev. R. P. Price.

The President, after reviewing the Club's activities during his year of office from Spring 1961, gave his Presidential Address " Seven Roman Forts at Leintwardine ". This is not printed, as is usual with the Presidential Address, in the present number of the *Transactions*, as it is hoped that a full report on the site will appear in the number for 1963. Mr. Shaw Wright expressed the Club's thanks to the President.

As retiring President, Mr. Stanford then installed as President for 1962–3 Mr. A. U. Zimmerman, who said that he greatly appreciated the honour given him, and that he would assist the Club in any way he could.

It was decided that for the field meetings as yet unplanned in 1962, one should be in the Cotswold area, another in Monmouth and the Forest of Dean, and that for half-day meetings, one should be at Croft, the other at Whitfield.

Mr. Christopher Cadbury urged that a County Naturalists' Trust be formed for Herefordshire. It was agreed that Mr. Cadbury be asked to meet the members of the Central Committee at their next meeting so that the project could be explained for the Club's fuller understanding.

Field Meetings

Field Meeting (additional half-day): Saturday, 14th April, Aconbury.

Members visited Aconbury Church where the Rev. Preb. A. L. Moir gave a talk on the Church and discussed its interesting and somewhat puzzling features. It is now virtually all that remains of the buildings that once formed Aconbury Priory, a house of Augustinian canonesses. With the aid of a ladder lent by Mr. Leighton, members were able to look at the small chamber high in the thickness of the south wall.

Mrs. Leeds spoke on Herefordshire folklore, mentioning particularly the Aconbury district.

The party then moved by coach to the south side of Aconbury Hill where Mr. Kendrick gave a description of the geology and of the botany of the district. The dry, cold weather had not, however, been propitious, so that botanical finds were few. Members walked up through the woods to the top of the hill and arrived at the iron age camp which Mr. Bridgewater described and looked at the North East gateway, the ramparts and a quarry. At the South West entrance, where the soil was disturbed, what appeared to be stone-walling was discovered, but only excavation could establish this with certainty. A picnic tea was eaten in the woods and the party then returned to the coaches for the drive back to Hereford through Little Dewchurch, Bolstone and Holme Lacy.

First Field Meeting: Saturday, 12th May, Kington.

The first stop was at Almeley Wootten where Dr. C. W. Malcomson and Mrs. Megan Jenkins talked to members about the interesting Friends Meeting House, given to the Friends by Roger Pritchard in the seventeenth century. It had originally been two cottages and was converted to its purpose as a Meeting House for which it is still used. The party then drove to Kington for coffee and a short business meeting. The following were declared elected members of the Club: Mr. and Mrs. K. S. J. Chamberlain, Mr. John Duggan, Mr. C. Gorman, Mr. and Mrs. A. Heatherington, Mr. W. Woodgett.

It was announced that members wishing to have their numbers of the *Transactions* bound should take them to Mr. Milligan, County Libraries, Hereford, who would arrange for this to be done.

The next visit was to Dolyhir Quarry where members saw lime kilns still used in the traditional way, and where Mr. F. M. Kendrick discussed the geology of the district, and then to Old Radnor Church which was described by the Rev. Preb. A. L. Moir who directed attention particularly to the fine screen, organ case and font.

After a picnic lunch the party drove through Walton to the Four Stones where Mr. S. C. Stanford described the stones as probably the remains of a prehistoric burial chamber of which the capstone has gone.

At New Radnor, Mr. F. Noble gave a talk from the castle mound on the history of the castle and town. The line of the town's old walls could be clearly seen.

At Cascob Church which Prebendary Moir described, the party was able to see another example of a fine screen. The mound near the tower is not likely to be a pre-historic remain but more probably is formed from the debris of an earlier tower.

The party had tea and then drove back to Hereford through Pembridge.

Second Field Meeting (half-day): Saturday, 2nd June, Ledbury and the South Malverns.

On arriving at Ledbury from Hereford the party divided.

Some members visited Ledbury Church which was described by Mrs. Farquharson and then moved on to Bronsil Castle, of which the Rev. D. A. L. Maclean gave an account, and from there to the Hollybush for a picnic tea.

Members in the other party went by coach to the British Camp and from there walked to the Midsummer Hill camp which was described by Mr. Bridgewater. Mr. F. M. Kendrick pointed out the features of interest of the geology of these, our oldest hills, on the walk to join the first party at the Hollybush for tea.

Third Field Meeting: Thursday, 28th June, Llandovery.

After coffee at Brecon the party drove to Trecastle and turned off the main road to see the new Usk reservoir, a water supply for Swansea. From there the mountain road to Llangadock was followed, a stop being made at the crossing of the Usk by its first bridge for lunch and another at the Roman camp of Garreg Lwyd, though few traces of it can be seen.

At Myddfai the party visited the church and heard a talk by Mr. P. G. Jones on the remarkable family of physicians of Myddfai.

Then Llanvair Church near Llandovery was visited and described for members by Canon Tree, master of Llandovery College. Mr. V. H. Coleman spoke on the Roman fort on which the church had been built; some recent excavations had been done there. At a short

business meeting after tea at Llandovery the secretary read a letter from the Council for British Archæology asking for a donation towards the cost of purchasing a proton gradiometer for use in archæological work in the West Midland region. A grant had been obtained, but to meet the balance, an appeal was made for a donation of £2 from local archæological societies. Mrs. Leeds proposed, and Mr. Rimmer seconded, that as the Club had a large membership, £5 should be given, and this was agreed. A second letter from the Council asked for co-operation from members in recording sites and objects of interest in the study of industrial archæology, and gave a list of speakers who could explain this subject. It was agreed to ask one of them to give a lecture to the Club during the winter. The Rev. D. A. L. Maclean showed some large bones, identified by a veterinary surgeon as those of an ox or some large animal, which had been found below the Roman road at Pixley Court.

After the meeting the members walked to Lloyd's Bank where they were met by the manager Mr. Davies, who explained that the premises were once those of the Black Ox Bank founded by David Jones, a drover, and showed some examples of early cheques.

Then, at the Castle, Mr. F. Noble spoke on its history and its connection with Clifford Castle in our own County.

FOURTH FIELD MEETING: Thursday, 12th July, THE COTSWOLDS.

After coffee at Birdlip the party drove to Elkstone, where they were met by the Rector, the Rev. Stuart Wall, who guided members round the beautiful Norman Church which has a dove-cot over the chancel, and gave the Club the hospitality of his grounds for a picnic lunch.

Afterwards a visit was paid to Filkins, the home of the late Sir Stafford Cripps who founded there a museum where members, under the guidance of the curator, Mr. George Swinford, saw the collection of 18th and 19th century craft work as well as earlier material. In a series of short visits members then saw the church of Broughton Peggs described by Mrs. M. U. Jones, the twin villages of Eastleach Martin and Eastleach Turville connected by a stone footbridge over the river Leach, and Arlington Row in Bibury.

After tea in Cirencester a short business meeting was held. The following were declared elected members of the Club: Mr. R. C. Floyd, Rev. W. Price Johns, Miss Gough, Rev. J. E. Gethin-Jones, Miss K. E. Attenborough, Mr. J. G. Hillaby, Mr. N. E. Eggerton. Mr. F. M. Kendrick outlined the purpose of nature trusts lately formed in many counties, and now proposed to be formed for Herefordshire and also asked members to tell him of buildings they considered to be of historic interest.

Before setting out for the return journey, members visited the excavations at the Bull Ring once a Roman ampitheatre, where work was in progress at one of the entrances.

FIFTH FIELD MEETING (half-day): Thursday, 16th August, CROFT and EYE.

On this excursion the party divided. Some visited Eye Manor where they were met by Mr. Christopher Sandford who showed them over the house and also the neighbouring church.

Others walked up to Croft Ambry to see the excavations. Mr. Stanford, who was directing the work, took members over the site where, in this the third season, work was concentrated on the quarry ditch and western gateway.

The two parties joined at Croft Castle for a picnic tea and a short business meeting at which the following were declared elected members of the Club: Miss E. Cardey, Mr. M. C. Beecher, Mr. E. H. L. Sexton, Rev. J. C. de la Tour Davies, Mrs. W. M. D. Jaine. It was agreed that £5 be given towards the expenses of the excavations at Cirencester.

SIXTH FIELD MEETING (half-day): Saturday, 22nd September, WORMBRIDGE DISTRICT.

At Abbeydore members saw part of the Roman Road within the old station yard where a stretch of the metalling is exposed. This stretch has recently been fenced in at a cost generously met by Mr. E. W. Fowler of Panteg. Mr. V. H. Coleman gave the history of the excavation of this piece of the road and discussed the road's route.

Members then drove to Wormbridge where the rector the Rev. C. W. Windsor Richards guided them round the church and pointed out the Clive family monuments, and from there to Whitfield Court, by kind invitation of Lady Mary Clive, who provided tea for the party and showed the members the house and its portraits and the gardens.

SEVENTH FIELD MEETING: Thursday, 4th October, FOREST OF DEAN.

A stop at the Speech House for coffee enabled members to see the Verderer's Court there. They then drove to Lydney Park, where by kind permission of the Rt. Hon. Viscount Bledisloe they saw, under the guidance of Mr. W. C. Sherston, the agent, the remains of the temple of Nodens. He pointed out the bank and ditch, the defences before Roman times of the promontory camp. An underground passage, intrepidly explored by a former President of the Club, proved an interesting relic of iron working. Members ate a picnic lunch here overlooking the Severn estuary with a view of the Berkeley atomic power station in course of construction.

They then moved on to see the ancient iron ore workings, the Scowles. Mr. Kendrick spoke about these and about the geology of the Forest. St. Briavels Castle was passed, and Mr. Kendrick gave a brief account of this.

Mr. Richard Wheeler kindly met the members at his house, Tre-owen, designed by Inigo Jones, and showed them round.

Tea at Monmouth was followed by a short business meeting. The following were declared elected members of the Club: Mr. M. J. Barnsley, Mrs. Macauley, Miss M. J. Jones, Mr. R. A. Page.

Autumn Meetings

First Meeting: Thursday, 22nd November at 7 p.m.: the President, Mr. A. U. Zimmerman in the chair.

Mrs. Joan Jegan was declared elected member of the Club.

Miss Biddulph resigned her membership of the Club as she was leaving Herefordshire, and this means the Club has lost her services on the Central Committee.

The Secretary read a letter from the Royal Society for the Protection of Birds, asking members to report on mortality of birds, and on cases of the harmful effects of chemical fertilizers on breeding.

Dr. C. W. Walker reminded members that a public meeting to inaugurate the proposed Naturalists' Trust for Herefordshire and Radnorshire would be held on 29th November.

Mr. Inett Homes then gave a talk on Caving in South Wales. He spoke of the many interests which find a reward in caving. The archæologist and palæontologist find material for their discoveries in cave mouths where early man sought shelter. The geologist may study rock formations deep below the ground. The hydrologist can discover much about water supplies and the connection of underground systems with surface springs and streams. For many there is the joy of exploration in which the Hereford Caving Club has been fortunate, as in their exploration of the cave on the Llangattock escarpment behind Crickhowell, discovered in 1949 and by the Caving Club's explorations over a period of several years up to 1961 found to form part of a system extending nearly 10 miles. The cave entrance is in the Craig y Cilau Nature reserve and, in the interests of safety, admission is controlled.

The study of underground water supplied to surface streams is of great fascination. Waters in caverns often run through passages where they cannot be followed, but their course can be traced by adding dye or salt and looking for the coloured or salted water at likely points of its resurgence. Fluorescein is one of the best dyes:

it colours the water bright green and can be detected at a dilution of one in forty million parts of water. A very satisfactory method, devised by the Bradford Pot Hole Club, is by the use of Rhodamin B. A detector of chemically treated cotton placed at all likely points of resurgence will, by turning pink, show the presence of the Rhodamin. Iron, in the water may, of course, have this effect, but can be removed from the detector and still leave the Rhodamin dye which in small quantities is non toxic to plant and animal life, and will not, again in small quantities, colour the water itself. By use of this method, Mr. Homes has proved that all the streams in Agen Allwedd join to form one water course which rises in the bed of the Clydach river at Black Rock, the water taking seven to eight days to achieve its rising.

Caves provide fields, too, for the entomologist and zoologist—gnats, spiders, springtails, millipedes may abound, shallow pools afford habitats for water creatures of many kinds, the fauna proper to caves. There are also, of course, the strays such as eels, frogs, and the like which have been washed or carried in.

Our knowledge as to the existence and size of caverns has practical bearing on modern life. The proposal to build a housing estate over a cavern at Penpark in Bristol necessitated discovering the cavern's bounds by electronic methods. The accuracy of these can be improved by the use of radio transmitters.

The speaker ended with a warning—caving has its dangers as well as its rewards. The caver must learn special techniques so that he may competently carry out his explorations and studies.

Autumn General Meeting: 8th December at 3 p.m.: the President Mr. A. U. Zimmerman in the chair.

The following were declared elected members of the Club: Mrs. K. Williams, Miss J. E. Coockham, Mrs. K. H. Brooksbank, Mr. W. S. Wareing.

Officers were elected to serve 1962–1963. Their names are given on p. vii. Mr. V. H. Coleman was elected President to serve 1963–4.

Mr. C. J. Price was elected a Vice-President on Mr. Stanford's proposal in place of himself. This created a vacancy on the Central Committee to which Mr. Stanford was elected.

Field Meetings for 1963 were planned (full days) in the Presteigne and Ystradfelte areas, and to Kentchurch and the Frome Valley (half-days).

The Recorders for Archæology, Botany, Dialect, Entomology, Geology, Mammals and Ornithology gave their reports (see pp. 230–40 of the present number of the *Transactions*).

CONGRATULATIONS

To Prebendary T. H. Parker, Vineyard Croft, Hereford, on his one hundredth birthday, 7th February, 1962.

" Salve festa dies
Centum Silvaticus pastor perfecit honore
annos, conspicuus nobilitate senex."

" Hail festal day
One hundred years has Parker now attained
with great repute
a Christian pastor, graced with noble traits
true veteran."

NOTE.—Parker = *Silvaticus*, derived from *silva*, a wood or park.

A. L. MOIR, Hereford.

PAPERS, 1962-3

ROBERT DE MELUN, BISHOP OF HEREFORD (1163–1167)

By CANON E. F. H. DUNNICLIFF

The tomb of Robert de Melun is near to the door of the Dean's Vestry, in Hereford Cathedral, and is the most easterly of the Bishops' tombs on the south side of the south choir ambulatory.[1]

The original apexed tomb covers over the sarcophagi of the early bishops were replaced in the fourteenth century by large recumbent effigies in stone of bishops; these effigies are in nowise portraits, but look as if they were originally carved to stand upright on some outer wall of a church; they may well have been bought or commissioned at the same time; and they are the work of one mason's yard.

Bishops were buried in the walls of both north and south choir ambulatories in places of honour, for these ambulatories were the ceremonial way to what became the Lady Chapel, which enshrined both a tooth of St. Ethelbert, and the body of St. Thomas Cantilupe; each bishop, according to the oldest statutes and laudable customs of the Cathedral (*c.* 1245) was commemorated on the anniversary of his death by burning two candles before his tomb.

Robert de Melun had been known to students of mediaeval history as one of the more obscure philosophers and theologians of the twelfth century—obscure in the sense that little was known of his writings, and less of his life had been collated from mediaeval documents. However, from 1932 onwards, the University of Louvain began the publication of theological works of Robert de Melun, under the editorship of Father Raymond Martin, a Dominican monk. Acknowledgment is here gratefully made to him for much factual information. It is clear from the material that has come to light that Robert played a considerable part in establishing rational methods of enquiry and discussion in the education of his age: for instance David Knowles, in his recent book on *The Evolution of Mediaeval Thought* (p. 179) says of him:

> " He is remarkable chiefly for his great Liber Sententiarum, a collection of expositions, opinions and decisions covering the whole of theology, and distinguished by the purity of its doctrine and the acuity of its reasoning . . . the desire for a synthesis, a text-book, was in the air, and as so often happens, a single writer succeeded in doing just a little better than others what

[1] See Fig. 2.

many were attempting to do. His name remains, while those of his all-but-equals fade. Here the name that became famous, and joined the ranks of the immortals in Dante's *Paradiso* and Raphael's *Disputa* was not that of Robert of Melun, but that of his contemporary and fellow-bishop, Peter the Lombard—'Who with the poor widow, offered his treasure unto Holy Church'."[1]

The age was also one in which "educated Western Europe formed a single undifferentiated cultural unit. In the lands between Edinburgh and Palermo, Mainz or Lund, or Toledo, a man of any city or village might go for education to any school, and become a prelate or an official in any Church, Court, or University (where these existed) from north to south, from east to west"—and many a man did the most valuable part of his life's work "far from the land of his birth and boyhood".

Robert de Melun was born in England sometime towards the end of the 11th century:[2] it is guessed that he studied first at Oxford, and later in Paris.

He appears to us first as a professor of the Schola Artium of Mount St. Geneviève, in Paris about 1137 A.D.[3] He is thought to have been the pupil of Peter Abelard; he certainly followed him at St. Geneviève. When Abelard resigned, under the pressure of his opponents in theology, and went to the synod at Sens in order to defend his views, Robert succeeded him. Abelard never returned to Paris, and indeed died soon after in 1142 in a Cluniac priory at Châlon-sur-Saône.

The schools in Paris, led each by outstanding scholars, were precursors of the university of Paris—a good teacher gathered illustrious pupils: of Robert's students the most famous was John of Salisbury, later to be bishop of Chartres, who attended his lectures for two years, and has left us quite the best information we have about personalities, education and religion in the 12th century.

It had long been known that Abelard and John of Salisbury were among the ablest men as thinkers and teachers in the middle ages—what of Robert de Melun who forms a link between them?

John of Salisbury has recorded that Robert taught him the first part of the Trivium, i.e. the mediaeval course in grammar, rhetoric and logic, and says that his master had a clear mind excelling in the precise distinctions between the meanings of "questions". (These questions were passages inviting comment, discussion, and if possible "solutions": given out to be written down, they formed a basis for learning by disputation.) Indeed the idea of disputation upon

[1] *Paradiso* X, pp. 107–8.
[2] *Dictionary of National Biography*, Vol. XLVIII, pp. 366–368.
[3] John of Salisbury, *Metalogicon* II, Ch. X.

questions derived something from the collection of subjects discussed by Aristotle in the *Topics*—a work which Robert was among the first to introduce to students: this was an original thing to do, for a thorough knowledge of Aristotle really began with Robert Grosseteste, fifty years later, who was the first man to give Europe a complete translation into Latin of the Nicomachean Ethics of Aristotle. He was more honoured as a great bishop of Lincoln than Robert de Melun was at Hereford.

Yet both were pioneers: John of Salisbury suggests that Robert de Melun liked to be praised for having created new theories. There are odd echoes of his teaching while at St. Geneviève in contemporary writers—thus Godfrey, a member of the Augustinian abbey of St. Victor on the left bank of the Seine (which produced famous educationists such as William of Champeaux, Hugo and Richard of St. Victor), wrote some doggerel verses that refer to the toughness and difficulty of the intellectual discipline imposed by Robert:

"Herent saxi vertice turbe robertine
Saxee duritie vel adamantine
Quos nec rigat pluvia nec ros doctrine."

"Groups of Robert's adherents cling tight to the summit of the rock, rock of unbreakable hardness: they are men who are watered neither by the rain nor the dew of doctrine."

It seems that Robert did not stay long at St. Geneviève, but went on to Melun, and also moved on from dialectic to theology proper. He kept the surname Melun, taken from the town near Paris, at the time a place of some importance: it was the seat of a bishopric, and the king, with his court, stayed there for a season each year. The schools here would have some connection with those in Paris itself.

Peter Abelard says of himself that in 1103 he established a chair of dialectic at Melun, when he was 23 years of age, in competition with one set up by William of Champeaux; Abelard left and returned in 1110, some time before moving to Paris to found the school of St. Geneviève: truly the teachers of those days were ready to migrate and return as it suited them.

John of Salisbury in his *de Melidunensibus*, says that there was during those years a flourishing school of philosophy which devoted itself to correcting what was supposed to be erroneous in the philosophy of Abelard. But it is not clear whether Robert de Melun was for or against Abelard in this: probably he supported his master. John of Salisbury speaks well of him in letter 183, quoting as Abelard had of St. Anselm, the silver Latin poet Lucan—"Stat magni nominis umbra": the fame of the Paris teachers and their disputations had certainly spread to England, for the 12th century

chronicler of St. Edmundsbury Abbey, Jocelyn of Birkland or "Brakeland" reports:

> "Duo sunt que multum de vobis: unum est quod adhoc in tali statu fovetissent entiam Melidunensium dicentium ex falso nichil sequi, et caetera frivola".
>
> "There are two matters that greatly concern you. The first is that, under present circumstances, men should have favoured the metaphysics of the men of Melun, who affirm that no conclusion follows from a false premiss, and other superficial statements."

Again, according to John of Salisbury, Robert eschewed fame and praise, and mistrusted wealth, when many distinguished teachers were open to criticism for sycophancy. In 1148, Robert joined forces with Peter Lombard in rigorous criticism of Gilbert de la Porrée at the council of Reims. Peter Lombard was then head of the school at Notre Dame in Paris: again Jean de Cornuailles, a pupil of Robert, says in his *Eulogium* (ch. 4) that Robert and Maurice de Sully often analysed Peter Lombard's theories, and shewed up their fallacies.

The overall impression left upon a student of these mediaeval teachers of dialectic and theology is one of great mobility and swiftness of thought. A point of insight is seen, and they are gone to something else: whatever in their work seems ponderous to us, is largely due to the distance between their ways and vocabularies and ours. At heart they were free lance philosophers, and any crystallisation of views that suggests that one teacher was eternally at variance in opinion with another, can only come from overlooking their many-sided, kaleidoscopic interests and knowledge.

We next hear of Robert in connection with the abbey of S. Victor, from S. Thomas Becket[1] and Richard of S. Victor:[2] in two letters he is praised for his teaching both by former pupils, and by the Canons of S. Victor: and it seems that by now S. Thomas Becket (then Chancellor of England) had discerned his eminence, and thought to get him back to England. And this happened in 1160. Henry II recalled him: he was still a layman, or at the most in minor orders.[3]

> "Item. Cancellario Thoma suggerente, pauperes Angligenas morantes in Galliis, quos fama celebrabat bonos, vel monachum in religione, vel magistrum in studio, rex revocabat, et tales in regno suo plantabat personas—ut magistrum Robertum de Meliduno in episcopali ecclesia Herefordiae, William monachum Sancti Martini de Campis in Abbatia Rameseiae."

[1] *Patrologia Latina*, CXC, 687. [2] *Ibid.*, CXCVI, 1225.
[3] Cf. Will. "Filius Stephani: Vita S. Thomae Cantuariensis Episcopi", *Patrologia Latina*, CXC. 117.

> "At the instance of Chancellor Thomas, the king made a practice of recalling Englishmen living in France, and who were without patrons and of good repute: and of settling such persons in his own kingdom: for example master Robert de Melun at the episcopal church of Hereford, and William, monk of S. Martin de Caen as Abbot of Ramsey."

Having arrived, Robert is next found at Oxford: Gilbert Foliot, Bishop of London and formerly Bishop of Hereford, writes to Robert, not yet fully ordained, yet acting as an archdeacon, and representing the Bishop of Lincoln among the students: he is thought to have been teaching theology.[1] He was elected by the Dean and Chapter to the See of Hereford, and Gilbert Foliot wrote to Pope Alexander III asking for the choice to be confirmed.[2] Among other things he wrote:

> "Quantis enim virtutum insignibus Herefordiensis electus effulgeat, fama loquitur, probat opinio, una in ore omnium testatur assertio, qui Robertum Oxoniensium Archidiaconum omnes aetatis suae gradus adeo innocenter et honeste percurrisse denunciant, ut ei vel in modico nunquam fama detraxerit, conversationem eius sinister rumor nullatenus obfuscare, potuerit, aut pravitatis eloquio denigrare."

We may paraphrase the Bishop's distinguished Latin thus:

> "How great are the marks of virtue that shine in radiance in our Bishop elect of Hereford is a theme that is on men's lips: their judgement affirms it, their words are unanimous—they all proclaim that Robert, Archdeacon of Oxford has traversed every stage of his career with such integrity and honour, that his reputation has never suffered in the slightest: no untoward rumour has been able to cast the slightest shadow on his character, no wicked scandal to blacken him!"

Robert was ordained priest on 1st January, 1163, and consecrated bishop on 22nd December, 1163 in Canterbury Cathedral by S. Thomas Becket. He was without pastoral experience, but his repute as a scholar was notorious.[3]

> "Hic quippe doctor magnus tam vita quam scientia tamquam luminare magnum per universum ecclesiarum orbem erat rutilans, et discipulorum multitudinem eruditam tanquam varios per orbem lucis suae radios a se emittens."

[1] Cf. Pelster, in *Zeitschrift fur Kathol. Theologie*, Vol. 53, 1929, pp. 577–8.
[2] *Patrologica Latina*, CLXIX and CXC.
[3] Cf. Herbert of Bosenham, "Life of S. Thomas of Canterbury", *Patrologia Latina*, CXC. 1125.

> " For you see, this doctor, as great in his life as in his systematic knowledge, shone like some great candle throughout the entire world of the churches, and sent out a mass of learned pupils throughout the world as so many different rays of his own light."

It is difficult for an aging man to become a bishop, and exchange the study and classroom for a prelacy at court: Robert, formerly the protégé of S. Thomas Becket, became inevitably involved in Henry II's disputes with Becket, and Robert did not side with the bishop who had ordained him. A letter of S. Thomas survives calling Robert his first born son: he complains bitterly of Robert's lack of activity, and of his negligence, and begs him to show more enthusiasm for the Church.

At the Council of Northampton in October, 1164, Becket tried to bring the king to be in a better mind about the church: Robert with other Bishops sided with Henry II. Henry of Bosenham in the life of Becket quoted above, writes prophetically, though after the event:

> " If it should befall, that our lord archbishop be slain in this cause for the liberty of the church, should we or should we not count him to be a martyr ? To die for mother faith is to be a martyr ! "

Henry calls this the " lachrymabilis quaestio "—the dilemma that is full of tears; it was a dilemma that presented itself to all the Bishops as well as to the King. Yet, it would seem, Becket was not the easiest man to lead the Church, nor yet a good diplomat.

There survives, among historical documents of the period, a letter of Gilbert Foliot, Bishop of London, to Becket, that is very significant:

> " Let us recall to mind what took place at Clarendon, where for three whole days the sole object was to obtain from us a promise to observe unconditionally the customs and the privileges of the realm. We stood by you then, because we thought you were standing courageously in the Spirit of the Lord . . . on the third day the princes and nobles of the realm, waxing hot in their wrath, burst into the chamber where we sat . . . shook their fists at us and said . . . ' Take fresh counsel, and bend your minds to the King's command.'
>
> " Did anyone flee or turn tail ? Let God judge who it was that fled: for assuredly it was not that noble and most constant champion of God's cause, Henry of Winchester, nor Nigel of Ely, nor Robert of Lincoln, nor Hilary of Chichester, nor Jocelyn of Salisbury, nor Bartholomew of Exeter, nor Richard

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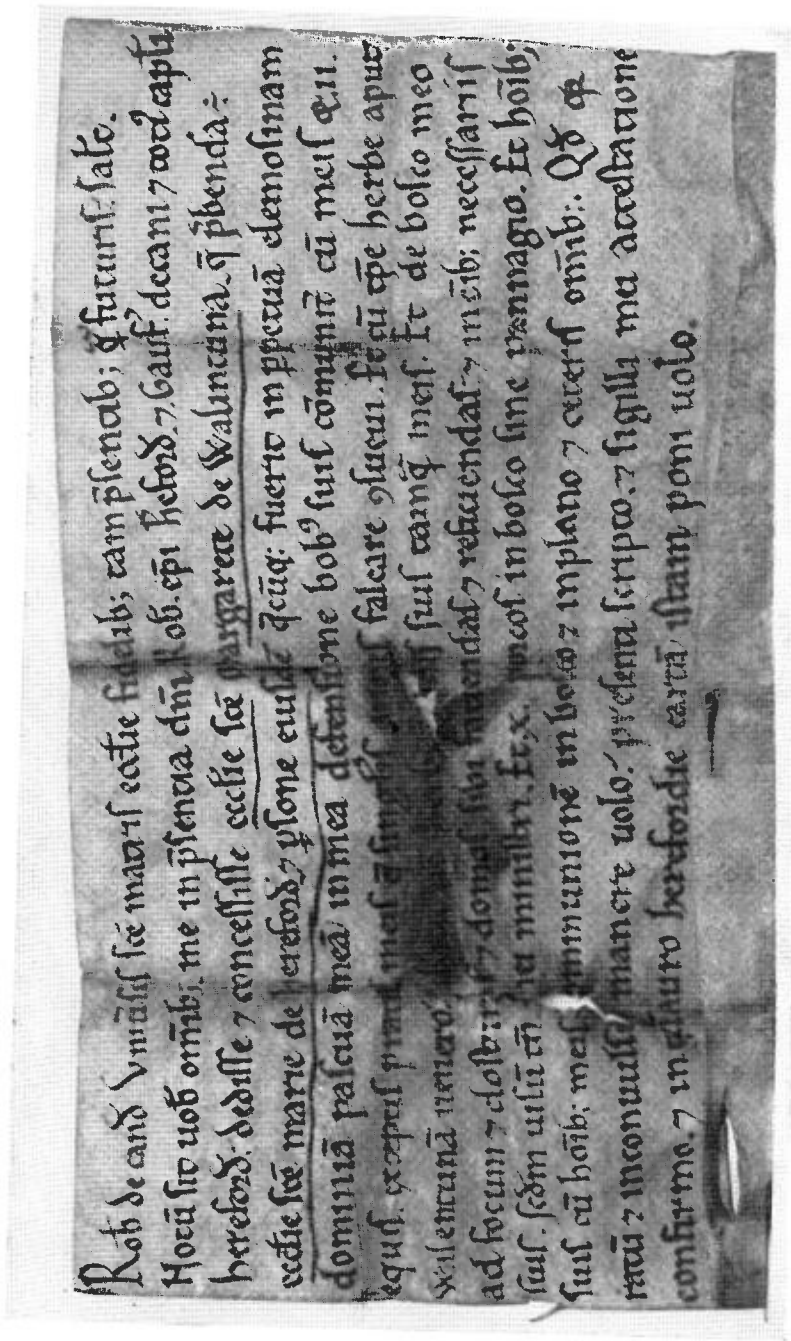

FIG. 1. GRANT OF PASTURE LAND AT WELLINGTON. (Hereford Cathedral Archive, No. 2769)

FIG. 2. TOMB OF ROBERT DE MELUN, SOUTH PROCESSIONAL CHOIR AMBULATORY

of Chester, nor Roger of Worcester, nor Robert of Hereford, nor Gilbert of London.

"All these lacked not courage, but none were found to strike them: they accounted temporal things as dross, and exposed themselves and their possessions fearlessly for Christ and his Church . . . It was our leader who turned his back."

On the 7th December, 1165, Robert was detached by Pope Alexander III to serve together with Gilbert Foliot, on a mission with Henry II and his troops in Wales. Both bishops as successively holding the see of Hereford, knew the risks of turbulence from that quarter.

Later there seems to have been some healing of the broken relationships between Becket and Robert: Becket was in exile at Pontigny in France from 1154, and at the end of 1166 he invited Robert to join him there. Robert got as far as Southampton, when the King prevented him from proceeding. Disappointed, he returned to Hereford, where he died, shortly after on 27th February, 1167. He was buried in the tomb in the south processional ambulatory of the Cathedral.

Robert de Melun, we may judge, was poor as a man of affairs, poor too as a diocesan bishop: it was too late for him to become one—often at court, away from home for long periods, absorbed in matters of state that must have remained mostly unfamiliar to him, he succeeded another great man who had to do the same. Undoubtedly the diocese suffered, and for a long time, so that when a man came in the next century, who showed sustained care and affection for the people, the contrast was great, and this man, Thomas Cantilupe, was soon sanctified.[1]

The great days of Robert de Melun preceded his coming to Hereford, and of his thinking and writing some account must now be given.

His pure philosophy no longer survives—neither notes nor commentaries exist, nor is there mention in the ancient catalogues.

But three works on metaphysical questions springing out of a consideration of the Christian religion are undoubtedly attributed to Robert of Melun. They are:

Quaestiones de divina pagina;
Quaestiones de epistolis Pauli;
Sententiae;

[1] The Hereford Cathedral Muniments contain only one contemporary record bearing Robert's name. This is the grant (see Fig. 1) made by Robert de Candos in the presence of Robert, bishop of Hereford, Geoffrey, dean, and the whole chapter, to the church of St. Margaret, Wellington, a prebend of the church of St. Mary, Hereford, and to the incumbent, rights of pasturage and other privileges in Wellington. This grant is printed in W. W. Cape's *Charters and Records of Hereford Cathedral*, p. 18, but Robert is there wrongly identified as Robert de Bethune, Bishop of Hereford, 1131–1148.

and this paper will only take us into the first of these, *Quaestiones de divina pagina*—the MSS is in the Bibliothèque Nationale in Paris Cod. Lat. 1977, and is the only manuscript known. It is thought to have come from a Cistercian abbey—it was bought by J. B. Colbert, a minister of Louis XIV, and passed thence to the library of Louis XV, being sold by Colbert's grandson. It is a composite volume, with a modern stamped calf binding: the book contains: Comments on the epistle to the Romans, sermons influenced by S. Bernard of Clairvaux, extracts from the general writings of S. Bernard, verses on S. Mary Magdalen, homilies, verses on the life of the Blessed Vitalis, founder of the monastery at Savigny, and as well as an epitaph for S. Bernard, attributed to Adam of S. Victor, the *Quaestiones de divina pagina* of Robert de Melun, and other material.

It is tempting to believe that the book once belonged to Savigny; the *Quaestiones de divina pagina* occupy 11 pages in the middle of the volume.

Let us now look together at what is involved in these so-called " questions ": they concern 125 problems which follow one another without apparent order, and deal with widely diversified subjects; each " question " has at the least two parts:

Queritur—in which the problem is posed, and
Solutio—the answer.

Often a third part is introduced in the form of short quotations from authors:

Auctoritates or some brief discussion, sometimes Scripture, sometimes a Father of the Church, or a gloss, that is an official comment on Scripture, a theological statement, or an extract from Canon Law.

Most of the questions arise out of a text of scripture, principally S. Matthew, chapters 5 to 27; some in the middle section of the work deal with the Incarnation, the Trinity, or Divine omnipotence; the whole is in a state of confusion—a not uncommon event in manuscripts of the period.[1] His favourite authors are S. Matthew, the gloss attributed to Strabo, a book of sententiae, " sentences ", of the school of Abelard, but not yet rediscovered, the theories of Gilbert de la Porrée, the *Decretum* of Gratian, and others as well.

Here then are some typical questions; they represent in their laconic desiccated language the outcome of considerable discussion, and may be regarded as minuted findings set down by someone who

[1] Cf. the *Problemata Heloissae* and the *Sic et Non* of Abelard, or, it is said, the *questiones* of Odo of Ourscamp.

was present on the original occasions; much as a student or a secretary might take notes; in this respect they are not unlike much of what has come down to us of Aristotle; taken together they stand for a mediaeval thinker as part of a patchwork quilt of knowledge; each answer or solutio is " true ", and no wider consideration of facts and relationships would be thought likely to invalidate any specific answer—it is the honeycomb method of working; men like bees have a pattern to which their thought always conforms in our period.

We may be sure that the occasions represented by these dried-up sentences were full of vigour, and alas, our imagination cannot recreate the classroom atmosphere of a mediaeval lecture or disputation.

77. *Queritur*

What happened to that food which Christ took after his resurrection from the dead ? Since the very Truth Himself bears witness—everything which enters the mouth goes to the belly, and passes into the bowel—and since after the resurrection He had a spiritual body, which before the resurrection had been an animal body—on the analogy of the bodies which we shall have after resurrection, bodies that need neither food nor drink ?

Solutio

Some say that we ought not to enquire about this; others, that there is nothing remarkable about this, since even angels are said to have received hospitality at people's homes, and to have had a meal (angels, who have neither belly nor mouth nor bowel), and what was taken for food by them was consumed without delay, like some inflammable thing placed in the fire.

81. *Queritur*

Could God do today everything that He could do yesterday ? Yesterday He could prevent X from being born, or something similar, and so as time passes His power is diminished day by day.
Therefore He is not able to do today all the things that he could do yesterday, for today He cannot prevent X's birth.

Solutio

Certain people say that God can do even this, namely, see that a man once born is not born—in other words make what has happened not to have happened.
But S. Augustine, in the work entitled *Against Faustus*, the Manichee says, on the other hand, " As what will happen cannot

possibly not happen, so things that have happened cannot be undone and made never to have happened. For it is no part of Divine wisdom to find anything to be untrue in respect of that by virtue of which it is true ".

7. *Queritur*

Whether or not every wrong done is to be considered as an act of the will, since S. Augustine says: " The will is involved in every moral wrong that is done, and if it is not so involved, it is not a moral wrong ".

So, should someone by chance cause a man's death while trying to lift a stone for the fabric of a church, he does not act wrongly, for this wrong is not voluntarily inflicted. But the Church imposes upon him a sentence of penitence. So it is a sin, a moral wrong.

Solutio

The word " wrong " is used in many senses, i.e., an evil will, a bad action, the penalty for wrong action (some kind of suffering), waywardness (which is found even in children). So when S. Augustine says what he does, he is speaking of an evil act and a bad will. A thing which happens by chance as a side effect of a purpose which is good is not morally wrong; some clear minded investigators say, " If the accident happens after every care has been taken and there was no personal carelessness the man cannot be accused of homicide."

83. *Queritur*

Whether more is expected from that servant to whom two talents were committed, namely intellect and practical ability, than from him who has only one, to wit, intellect.

From him to whom one talent was committed it is expected that he use his intellect.

From him to whom two talents were committed the same is expected and no more. Therefore no more is demanded of the one than of the other.

But more is given to the one than to the other; therefore more is expected from him, or else the authority of scripture is false.

Solutio

More is expected from him to whom much is committed because he is expected to be both proficient with his intellect, and also to make others intelligent and understanding, and also to deal with practical matters, because he has this kind of ability too, so that he must set a continuous example in charitable actions by provision of alms and skilful acts of practical goodness.

From the man of less endowments only this is expected—to use his intelligence and make other people intelligent.

These extracts may sound more than a little parched and arid but as with a mummified Pharoah, it is not easy to restore the full presence of a living being, so here only limited reconstitution is possible: the teachers of this 12th century anticipate the beginnings of the mediaeval university; they are men each with his following of devoted pupils, whose learning was mediated as much through society as through books; and they were surprisingly well read. Robert de Melun is at home with a wide range of standard literature, little of which is known or considered today; there is the great classic of St. Ambrose, the *de Officiis Ministrorum*, the earliest of all Christian treatises on moral theology, based on Cicero; there is the whole range of S. Augustine of Hippo, there are the Venerable Bede's commentaries on the Synoptic Gospels, the work of S. Bernard of Clairvaux, S. Gregory the Great, the encyclopaedia of S. Isidore of Seville (which largely determined the subject matter of our *Mappa Mundi* in the Cathedral), the works of S. Jerome, the *Decretum* and *Panormia* of Yves de Chartres, the works of Abelard, S. Anselm of Canterbury, Boethius and Cassiodorus.

Much work remains to be done on Robert's *Sententiae*, both in recovery of the complete text, and in interpretation of it. Suffice it to say that he was viewed by contemporaries as helping to start the educational process which culminated in the comprehensive treatises such as the Summa Theologica and Summa contra Gentiles of S. Thomas Aquinas, or the writings of St. Bonaventure.

His pupil, John of Salisbury, in the Metalogicon (1.7–8), writes of the dialecticians of his day:

> " Disdaining everything except logic, they spend their entire lives on it: having become old they are puerile doubters: they discuss every syllable and every letter of every word and every book: they hesitate over nothing, they search everywhere and they never come to knowledge."

But Henry II would not have chosen a man to preside over the Church in the Welsh marches, who was just a dialectician. Undoubtedly Robert's first love was learning and teaching—about this more is beginning to be known: virtually nothing, except by slender inference, has survived about his character.

The English court and king could bring an aging man only a lesser joy after his main work was done.

To be the pupil, successor and friend of Peter Abelard, in some ways the most eminent philosopher and teacher of the 12th century, to be the tutor and friend of John of Salisbury, Bishop of Chartres, whose Cathedral was in building, when Hereford Cathedral was being reconstructed, is to be in noble company. It was an unusually active period in the work of the spirit, formative and creative, and lasting in its influence on the Christian and civilised view of life. Robert de Melun is deservedly to be rescued from oblivion.

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SOME NUNS, EX-RELIGIOUS AND FORMER CHANTRY PRIESTS LIVING IN THE DIOCESE OF HEREFORD (c. 1554)

By F. C. MORGAN, M.A., F.S.A., F.L.A.
and
PENELOPE E. MORGAN, F.L.A.

The suppression of the monasteries is a matter of permanent interest and with the advance of time and the acquisition of new material one is able to give a more balanced judgment. The destruction which took place must be deplored, the loss of countless manuscripts cannot be estimated and the economic effects must have been serious. It is an interesting question whether the monasteries could have survived quite apart from the actions of Henry VIII. Some were overburdened financially, and in some the number of inmates had decreased. There had been, too, a change in public sentiment for during the whole of the 15th century only eight new religious houses had been founded, apart from a few by Henry VII. Instead, people were building schools, hospitals and parish churches.

The main interest for this paper, however, is the treatment of the displaced men and women. By the terms of the Act of 1536 the superiors of dissolved monasteries with an income under £200 were granted a pension for life. Some disbanded monks and nuns found homes in other houses and others sought a livelihood in the secular world, being granted dispensations from their vows to do so. In no instance among the early dissolutions was an entire community pensioned. Later, however, when the larger houses were dissolved pensions were granted to most of the members of the community, provided, of course that they did not resist the king. No pension was paid without a patent and Gasquet, in his *Henry VIII and the English Monasteries*, notes that under 4,000 patents for pensions are recorded in the Augmentation Office. It would seem that the friars as a class had no yearly pension.

Considerable research has taken place in recent years about the adequacy of the pensions and the success of the " religious " in finding another source of income. The amount allotted to the pension was not fixed by statute but was left to the discretion of the commissioners appointed for the suppressions. Nevertheless, there is a similarity throughout the whole of England because account seems to have been taken of the wealth of the house, especially in the case of the superior officials, and of the age of the pensioners. In *The Religious Orders in England*, Knowles states that monks received an annual average pension of about £5 10s. 0d. and chantry

priests between £4 and £5. On the whole, pensions were paid fairly regularly by successive governments whatever the religious belief.

During the years after the suppression of the smaller monasteries no doubt many of the disbanded monks—if priests—obtained livings, some even dignities in the cathedrals, and others became chantry priests, and then, when these were dissolved in 1546 they enjoyed a second pension.

It appears that the lists of pensions were checked at intervals and records remain among the archives of the Augmentation Office.

What happened in Hereford diocese? To get an exact picture it would be necessary to know the total number of evicted monks and nuns and the total number of pensions paid and if these were temporary or continued. Unfortunately, the documents in the cathedral archives only refer to ex-religious monks and nuns and ex-chantry priests actually living in the diocese of Hereford at one date—? 1554. Nevertheless, the following is an attempt to draw some conclusions about the state of these pensioners—a picture very similar to that for the rest of the country.

Among the archives of Hereford cathedral are 79 certificates of 5 nuns, 22 regular priests, 43 secular priests, 8 priests (? secular or regular but probably the former) and one ex-novice, who were living in the diocese of Hereford and were in receipt of pensions as a result of the dissolution of the monasteries and chantries.

All are written in English on separate sheets of paper except those for Fowler and Keylyng and for Cooley and Jones which are coupled together. With a few exceptions, all are in a similar form giving the name, the monastery or church where the pensioner had served, the amount of the pension, any other source of income, present address, morals, if married, age and sometimes the bodily health; 51 bear the signatures of the pensioner, indicating that at least 64 per cent were literate.

Only one is dated—that of Thomas Blockeley, whose certificate is endorsed: "This byll made the ixth day of Ap'll in the fyrst yere of the Rayng of o^{r} sov'aynge lady mary Quene of onglande ffrance & Ireland . . . [etc.]" i.e. 1554. It would appear that they were all submitted at the same time—perhaps as the result of an order for information from the Queen. Similar information has been recorded for Lincolnshire in the Exchequer records for 1554 and this has been printed.[1]

Probably most of the pensions were originally granted by Henry VIII and later confirmed by subsequent monarchs. Nearly all are described in the certificates as being "by patent" or "by patent of the Queen's Majesty" or "by the Queen's Majesty by patent"—a few are just recorded as "a pension". Five exceptions are

Roland Gosnall who showed a grant of an annuity granted by the prior of Wenlock; Roger ap Loies who had a pension as a late chantry priest granted by King Edward VI; John Ree who had a licence from Henry VIII as a schoolmaster and a pension of £5 14s. 0d. but no letters patent for the payment; John Rode, another schoolmaster with a pension of £3 13s. 4d. during the reign of Edward VI paid by the hands of his "awdytours"; and Robert Worall, a late chantry priest of Leominster with a pension of £6 "by the Kyngis honorabil paten".

The pensions paid to the five nuns who were then resident in the diocese of Hereford range from £1 13s. 4d. to the £9 paid to Johan Scudamore, the late prioress of Aconbury, who was then living at Holme Lacy. The other four nuns (who had an average pension of £3) were resident in the Shropshire part of the diocese. Two had come from Oxfordshire, one from Dorset and one from Limebrook in Herefordshire. These four signed their certificates.

The largest pensions granted to an ex-religious were those of £20 paid to Roger Stroty, formerly prior of Wormesley (he also had the parsonage of Pencombe valued at £13 6s. 8d.) and of £16 13s. 4d. paid to Thomas Cleubery, the former abbot of Dore. Humfrey Barkeleye and Thomas Blockeley both received pensions of £8 as ex-monks of the monasteries at Gloucester and Worcester respectively. Even William Symes, a novice at the age of 13 years at Gloucester, who never took orders, had a pension of £5, equal to that of an ex-canon of Wormesley. Two ex-canons of Wigmore had £5 each, and a third £5 6s. 8d.

No ex-religious of a community had a pension of less than £2, one had £2 16s. 8d., three had between £4 and £5, and 18 had £5 and over. A total of 21 pensions are recorded to ex-religious as ex-monks or their superiors—an average of £6 12s. 0d. or of £5 7s. 0d. if the two ex-abbots are excluded.

Michaell Hodgeson, who had been a Grey Friar, in common with others of this Order, did not receive any pension when they were disbanded, but by 1554 he was in receipt of a pension as a late chantry priest, a position which he had obviously obtained when ceasing to be a friar.

Of the secular priests, the smallest pension was one of 10s. 9d. paid to Edmund Jones for a service in the church at Aymestrey, but as he also had a pension of £6 from another chantry he was well provided for. Richard Cooley had a pension of 16s. 1d. as an ex-chantry priest but had no other living. Four ex-seculars had pensions of £1 to £2; five had £2 to £3; eight had £3 to £4; twelve had £4 to £5; and twenty had £5 or over. A total of 56 pensions are mentioned for ex-chantry priests (either regular or secular and including schoolmasters). The average paid was over £4.

It appears, therefore, that on the whole the pensions were adequate, although Thomas Dayson, who had a pension of £1 10s. 10d. and the benefice of Willersley valued at £3, did ask for " some better p'motion for the love of God or ells I shall not be hable to lyve ". John Thomas with a pension of £2, included a similar request " being soe evell paid ". In both cases the words of these petitions have been ruled out in the certificates.

Three of the ex-monks living in Herefordshire in 1554 had two pensions. William Austen received a pension of £6 as an ex-monk and £4 as an ex-chantry priest; Humfrey Barkeleye had £8 and £4 11s. 9d., and John Perkes £5 6s. 8d. and £4 16s. 7d. One secular priest, Edmund Jones, was in receipt of two pensions, having held two different chantries.

Six regular priests with pensions as ex-religious also held benefices, one (Thomas Hopkins) having two with a total income of £46 6s. 8d.

Fourteen secular priests had benefices in addition to pensions as late chantry priests, including Robert Grynsell, David Mey, Henry Tanner and David Watyes who had " vicarages in the chore " of the cathedral. These were really " concealed " chantries. Watyes was also parson of St. Devereux. Wotton had two benefices in addition to the pension but one of these " The Mawdlens " was also probably a concealed chantry.

Two pensioners only call attention to the fact that their pensions were in arrears—Sir Thomas Nicolles of Dilwyn who had a pension of £3 9s. 8d. as a schoolmaster there " who is an hole yere behind unpaid of his said pention " and John Thomas with a pension of £2 as a some-time stipendary at Churchstoke " wc pention was not paid hym this twelvemonethe & a half ". This last statement, however, like his request for a larger pension already referred to, has been ruled out in his certificate.

The ages are recorded in 22 cases—the majority of these being stated as " aged ", " an old man " or of a specific age over 60 years. Sir Thomas Howell of Ross was aged about 80 " beyng ympotent and notabele to Ryde nor goe ".

Only five certificates record that the pensioners were married—four secular priests and the ex-novice from Gloucester who did not take orders. Gosnall stated that he had been married for three years so he must have been among the first to take advantage of the legalisation of clerical marriage in 1549.

Eight certificates mention schools or schoolmasters. They are those of John Bastynhale of Bromyard, Laurence Johnson of " Buckenehill ", Thomas Nicolles of Dilwyn, John Perkes of Richard's Castle, William Pyke of Kinnersley, John Ree of Rock, John Rode of Pembridge and William Storre of Eardisley. In addition the Survey of Chantries, etc. made by Edward VI in 1547 (P.R.O. E301/25) records that Richard Cooley (or Cowley) of Staunton was conveniently learned, which doth teach many poor men's children.

The following is an abstract of the 79 certificates. The original spelling of the personal names only has been retained.

Information given in the footnotes, unless otherwise stated, is taken from A. T. Bannister, *Diocese of Hereford, Institutions, etc.* (*A.D.* 1539–1900), 1923, or from the printed registers of Bishops Bothe and Foxe.

CERTIFICATES OF PENSIONED NUNS, MONKS AND PRIESTS LIVING IN THE DIOCESE OF HEREFORD, PRESERVED IN THE ARCHIVES OF THE DEAN AND CHAPTER OF HEREFORD (Ref. no. 5602)

N.B.—An asterisk (*) indicates that the certificate is signed. A dagger (†) indicates that the name is recorded in the Survey of Chantries, etc. made by Edward VI in 1547. (P.R.O. E.301/25).[2]

Nuns

*Margery Higgyns of Pontesbury, Salop. Sometime a religious woman of the monastery of Godstow, Oxon. Pension £3. Of honest life and never married.

*Alice Rogers of Ludlow, Salop. Sometime nun of the monastery of Shaftesbury, Dorset. Pension £4 13s. 4d. Of virtuous life and never married.

Johan Scudamo' professed nun and late prioress of Aconbury. Pension £9. Lives at Holme Lacy. Of virtuous life, aged 60 and never married.[3]

*Mary Sturie of Plowden, Salop. Sometime nun of the monastery of " Lynebroke " [Limebrook, Lingen]. Pension £2 13s. 4d. Of honest life and never married.

*Alice Yomans late a sister of the priory of Studley, Oxon. Now dwelling at Meole Brace, Salop. Pension £1 13s. 4d. Of good conversation and never married.

Monks and Secular Priests

*William Austen alias Holder of Dixton, Monmouthshire. Sometime monk of St. Peter's, Gloucester. Pension £6. Also had a chantry called the King's Service in Berkeley, Glos. Pension £4. Unmarried.

ap Hugh. *See under* Hugh.

ap Huye. *See under* Huye.

ap Loies. *See under* Loies.

*Thomas Ball of " Northeburye " [Norbury ?], Salop. Sometime monk in Wenlock. Pension £5 6s. 8d. Of honest conversation and never married.[4]

*†Humfrey Barkeleye of Hereford. Regular priest, sometime monk in St. Peter's, Gloucester, Pension £8. Had also a chantry in the chapel of St. Katherine near the Cathedral of Hereford. Pension £4 11s. 9d. Never married.[5]

*†John Bastynhale of Bromyard. Secular priest and schoolmaster there. Pension £3 9s. 11d. Of honest fame and never married.[6]

*Thomas Blockeley of Bosbury lately professed monk of the monastery or cathedral church of Worcester. Pension £8. Has also the benefice of Bosbury where he now dwells of the yearly value of £10 3s. 9d. Aged 60. An impotent man of good name and fame and never married.[7]

Endorsed " This byll made the ixth day of Ap'll in the fyrst yere of the Rayng of o^{r} sov'aynge lady mary Quene of onglande ffrance & Ireland defender of ye fayth & in yerth next unto christ of the churche of Irelande."

Willia' Boothe of Cradley. Secular priest, late chantry priest of Our Lady in the church of Aldermary, London. Pension £6 13s. 4d. Has also the benefice of Cradley, value £18. An honest man and never married.[8]

Walter Broughton of Ludlow, late of the House of Reading. Pension out of the cell of Leominster annexed to Reading £2 16s. 8d. Never married.

*†Thomas Buckeley late chantry priest of the chantry of Our Lady in Weston Beggard. £4 7s. 8d. Of honest fame and never married.[9]

*†Roger Caradyne of Hereford. Secular priest, sometime chantry priest of St. Anne, Clehonger. Pension £6.[10]

Thomas Cherme sometime monk of Reading and late of the cell of Leominster. Pension £5. Of honest life and never married.

Dom̄p Thomas Cleubery, professed monk of Dore, " afterward elect into abbot of the same mōstery then gov'nyng the same did Resigne ". Pension £16 13s. 4d. " Hath lyved on the same dwellyng and remayng continually in the Cyte of Hereford ". Not married and of honest and religious conversation. Aged 71 years.[11]

†Richard Cooley, secular priest, late chantry priest of the service of Our Lady in Staunton. Pension 16s. 1d. Never married. Now lives at Byton.[12]

*†Thomas Dayson of Eardisley. Secular priest, sometime chantry priest of Our Lady, Lyonshall. Pension £1 10s. 10d. Has also a benefice called Willersley, value £3 " of the gift of maistres Havard ". Never married and " hath ben knowen and

of a good conv'sation w'in this dioc' all the dayes of his lieff (desyring you of som̄e better p'motion) for the love of god or ells I shall not be hable to lyve) ".[13]

*Willia' Edwardes of Shelve, Salop. Sometime monk in Bordesley, Worcs. Pension £4. Has also a benefice called Shelve, value £2 13s. 4d. Never married.[14]

Willm' Elkes of Montgomery. Secular priest. Pension £4 out of a service in the church of Montgomery. Of honest conversation and never married.[15]

†Syr Gryffyth Fowler, secular priest. Pensioner of the service of " saynt tann yn ledburye ". Pension £5. Of honest conversation. Aged 53.[16]

*Willm̄ Gilbert, priest. Late canon of the priory of Wormesley. Pension £5. Has also a parsonage in Herefordshire [unnamed] value £5 6s. 8d. Of honest name and fame and never married.

Roland Gosnall, clerk. He showed a grant of an annuity of £2 4s. 0d. yearly out of the manor of Madeley, Salop, granted by John Cressage prior of the late monastery of Wenlock under the priory seal to Edmond Gosenell, Thom̄ Fermor and Hu'frey Hubbold. Paid for the past 25 years. Roland Gosnall has also a benefice with cure at Oldbury, Salop, value £5, where he lives. Married for 3 years.[17]

†Sanacre Gough, secular priest. Sometime chantry priest of Our Lady in Stoke Edith. Pension £5. Of honest fame and never married. Aged 79.[18]

*†John Grene of Kington. Secular priest, sometime chantry priest of Our Lady in Kington. Pension £4. Unmarried.[19]

*William Gryffyth of Over Sapey. Secular priest, late prebendary of Wodcott and Byketon in the collegiate church of St. Chad's, Shrewsbury. Pension £3 4s. 0d. (And also is parson of Over Sapey value £9 13s. 4d.) Never married and of honest conversation.[20]

*†Robert Grynsell, secular priest. Sometime chantry priest of one of the chantries in St. Katherine's adjoining the cathedral of Hereford. Pension £4 11s. 9d. Also has a vicarage in the " Chore of the same Chathedrall " value £3 0s. 10d.[21]

†Sir Rowland Harley, secular priest. Sometime chantry priest of the chantry in Leinthall Starkes. Pension £4 3s. 10d. Aged 60. Never married.[22]

Michaell Hodgeson of Fownhope. Regular priest, sometime a Grey Friar late serving the service of Our Lady in St. Chad's, Shrewsbury. Pension £4 5s. 8d. Of honest conversation and never married. Aged 60.

*Thomas Hopkins of Ludlow. Late a religious man of the monastery of Hayles, Glos. Pension 8 marks. Has also the parsonage of

Ludlow by the donation of Lord Feryes, value £18. Has also the benefice called Bewdley by donation of Sir Robert Acton, knight, value £23. Unmarried.[23]

*†John Hopkyn, secular priest of Welsh Bicknor. Sometime chantry priest of the chantry of Our Lady in Whitchurch. Pension £2 11s. 11d. Also parson of Welsh Bicknor, value £4 6s. 8d. Not married and an aged man.[24]

*Christopher Horton, professed monk in the Abbey of St. Peter's, Gloucester. Pension £6. Lives at "Madbley" [? Madley] in the county of Hereford. Of honest fame and never married.

†Sir Thomas Howell of Ross. Had a service of St. George, Ross. Pension £4. Unmarried, aged about 80 " beyng ympotent and notabele to Ryde nor goe ".[25]

*Moris ap Hugh, secular priest, sometime chantry priest of Our Lady at Clun, Salop. Pension £2. An aged man and never married.

*†William ap Huye, secular priest. Late chantry priest of Our Lady at Linton. Pension 5 marks. Of honest conversation and never married.[26]

*†Richard Hyll of Leintwardine. Secular priest, late chantry priest of Our Lady, Leintwardine. Pension £5. Also vicar of Leintwardine, value £8. Married.[27]

*†Laurence Johnson of " Buckenehill ", Herefords. [? Bucknell, Salop, or Buckenhill, Bromyard or Buckenhill, Woolhope]. Secular priest. Pension of £5 6s. 8d. " for the keping of a scole ". An aged man and never married.[28]

†Edmund Jones, secular priest. Late chantry priest of Mary Magdalen in Woodstock, Oxon. Now lives at Yarpole. Pension £6. Also has another pension of 10s. 9d. for a service in the church of Aymestrey. Never married.[29]

Syr Thomas Keylyng, pensioner of the service of St. Anne at Ledbury. Of honest conversation. Aged 80. Pension £4 6s. 8d. Of St. Bernard's order in Staffs.[30]

Phelip Kyngley, secular priest. Sometime serving in Presteigne, Radnorshire. Pension £5. Married.

†Sir Roger ap Loies [? Lewis], late chantry priest of St. Mary Magdalen in St. Peter's church, Hereford. Pension £5 granted by King Edward VI. Unmarried.[31]

†Rychard lln [Llewellyn] of Dorstone. Secular priest, late chantry priest of Our Lady in Dorstone. Pension £3 1s. 4d. Never married. Aged 58.[32]

*Thomas Longford of Leintwardine. Sometime canon of the monastery of Wigmore. Pension £5. An aged man, of honest conversation and never married.

*†Davyth Mey of Hereford. Secular priest, sometime chantry priest of the Trinity in St. Peter's church, Hereford. Pension £6. Has also a vicarage in " the chore " of the cathedral, Hereford value £3 6s. 8d.[33]

*†Thomas More, secular priest, had a service in Much Cowarne. Pension £2 2s. 0d. Lives at Leominster. Of honest name and never married.[34]

*†James Morgan of Weobley. Secular priest. Pension £5. Of honest fame and never married.[35]

*Willia' Morthowe of " Morfild " [Morville], Salop. Sometime monk of Wenlock. Pension £5 6s. 8d. Never married.

*†Henry Mynde of the county of Hereford. Secular priest, sometime chantry priest of Our Lady in Hampton Bishop. Pension £3 17s. 8d. Has also a vicarage called Holme Lacy, value £8. Never married.[36]

*†Phelip Nicholas, secular priest, had a service of Our Lady of Pity in Leominster. Pension £1 19s. 10d. Lives in Leominster. Of honest name and never married.[37]

*†S^{r} Thomas Nicolles of Dilwyn. Priest of 66 years of age and schoolmaster there. Pension £3 9s. 8d. Of honest name and fame and not married. " Who is an hole yere behind unpaid of his said pention."[38]

†Roger Notte, secular priest, late chantry priest of Our Lady in St. Peter's church, Hereford. Pension £4 6s. 11½d. Now lives at Whitbourne. Never married.[39]

*†John Perkes, sometime canon of Wigmore. Pension £5 6s. 8d. Also has a pension of £4 16s. 7d. out of the chantry of Our Lady in Richard's Castle " for the Kepyng of a scole ". Of honest life, never married and an aged man.[40]

†Sir Robert Phelpet. Pension £4 out of Our Lady's Service at Weston. Unmarried and a virtuous priest.[41]

*Thomas Philipps of Lindridge. Late monk of Bordesley, Worcs. Pension £5. A very old man and never married.[42]

*†John Potter, secular priest. Late chantry priest of Our Lady in Ledbury. Pension £6. Has also the benefice of Tedstone Wafre, value £1 10s. 0d., where he now lives. Never married.[43]

*Thomas Pulkeriche of " Brokynton ", Herefordshire. Professed monk of the monastery at Reading who lived at Leominster at the time of the dissolution. Pension £5. Aged 65, of virtuous life and never married.

Wyll$\overline{m}$ Pyke of Kinnersley. Secular priest, late chantry priest of Our Lady service in Kinnersley. Pension " under the name of a scolemayst^{r} " of £6 2s. 0d. Is " cōv'sant at the sayd place & hathe & instructeth at the lest xl or l scolers ". Of honest conversation and unmarried.[44]

*†John Raullyns, secular priest. Aged 60. Pension £5 from the chantry of Wigmore called Brygges chantry. Not married.[45]

John Ree, schoolmaster of the Free school of Rock founded by Sir Humfrey Conyngsby, Kt. " & havyng his lycence of Kyng Henry the eyght by vertue of his letters patentes ther unto to be shewed remaynyng in the handes & keapyng of Humfrey Conyngesby esquyer his eyre apparant ". Pension £5 14s. 0d. Has no letters patent for the payment, but " by warand or dead payd ". Has never had other living and never married.

†John Rode, " bacular of arte " at Pembridge. Secular priest. Not married. Of good conversation and schoolmaster there " who Instructethe forty scolers comonly w^{t} good and honest larnȳg ". For this he was paid a pension of £3 13s. 4d. during the reign of King Edward VI by the hands of his " awdytours ".[46]

*Moris Rowland, secular priest. Late chantry priest of Our Lady service in Knighton, Radnorshire. Pension £1 17s. 8d. Never married.

*Hugh Rumsye of Joynton, late of the priory of Leominster dissolved and suppressed monk. Pension £5. Not married.

†Thomas Seybright, secular priest. Late chantry priest of Trinity service in Leominster. Pension £5. Lives in Leominster. Of honest name and never married.[47]

*Richard Sherer of Sutton, Salop. Secular priest, sometime vicar of the " quere " in the College of St. Chad, Shrewsbury. Pension £3 6s. 8d. Never married.[48]

†Harry Stephyns, secular priest. Late chantry priest of Our Lady in Marden. Pension £4 1s. 9d. Aged 62. Never married " but have byn allweys a ma' of good cōv'sacon ".[49]

†William Storre, secular priest. Late chantry priest of the service of Our Lady in Eardisley. Pension £4 13s. 4d. " for the keping of a Scole in Erdisley ". Aged 60. Lives at Eardisley and is of good fame and never married.[50]

*Rogeris Stroty. Late prior of Wormesley. Pension £20. Now parson of Pencombe, value £13 6s. 8d. Of honest fame and never married.[51]

*Wyllyam Symes " was a Novys in the abba off seynt peters in Glowtur at the age of xiij yeres & nev' Recd any orders ". Pension £5. Lives in the " cytye of Harforde & ys maryed ".

*John Symkyns, professed cannon in the house of Wigmore. Pension £5. Of honest fame and never married.

*†John Tailior of Ross. Secular priest, late chantry priest of Our Lady service in Ross. Pension £6. Never married.[52]

*†Henry Tann' of Hereford. Secular priest, sometime chantry priest of All Saints, Hereford. Pension £5. Has also a vicarage in the " chore " of the cathedral, value £3.[53]

*John Thomas of Hussington, Montgomery. Secular priest, sometime stipendiary priest in Churchstoke, Mont. Pension £2 (" w^{e} pention was not paid hym this twelvemonethe & a half "). Of good conversation, and never married. (" Desyring you of some better p'motion or ells he cānott be hable to lyve being soe evell paid and this for goddes love ").[54]

*Edward Toye of Cleobury Mortimer, Salop. Secular priest, sometime chantry priest of St. Nicholas service in Cleobury Mortimer. Pension £4 6s. 8d. Has also a benefice called " Cliberie Mortim' ", value £13, where he now lives. Never married.[55]

*†Hugh Watcham, secular priest. Late chantry priest of St. John, Bromyard, Pension £1 15s. 9d. Lives at Bromyard. Of honest fame and never married.[56]

*†David Watyes of Hereford. Secular priest, sometime chantry priest of Bishop Audley's chantry in the cathedral of Hereford. Pension £6. Has also a vicarage in the " Chore " of the cathedral, value £2 10s. 0d. Also parson of St. Devereux, value £6 13s. 0d.[57]

Henry Welington, secular priest, late serving the service of Our Lady of Pity in Presteigne, Radnorshire. Pension £4 10s. 8d. Lives at Presteigne. Married.[58]

*Reginald Werstane of Coddington. Professed monk of " Moche Mawlvern ", Worcs. Pension £6. Has also a benefice called Coddington, value £4 18s. 4d. where he now lives. Of good fame and never married.

Endorsed: " John Elkes of muntgōmy is no prest but a singeingman ".[59]

*†Robert Worall, late chantry priest of Our Lady in Leominster. Pension £6 " by the Kyngis honorabil paten'." Aged 66.[60]

†Richard Wotton of Hereford, secular priest, late chantry priest of Our Lady in St. Martin's, Hereford. Pension £3 12s. 5d. Has also a benefice called Hopesolers, value £4 3s. 4d., and a benefice called the " mawdlans " in Hereford, value £3. He lives in the " mawdlens ". Never married. Of virtuous life and was never a " religiose " man, and aged.[61]

NOTES

[1] Lincoln Record Society, Vol. 53, 1959. *The State of the ex-religious and former chantry priests in the diocese of Lincoln, 1547–1574, from returns in the Exchequer, edited by G. A. J. Hodgett.* (Pages 55–100 give the returns of the dean and chapter of Lincoln to Mary's enquiry into pensioners in the diocese in 1554 (E 101 76/26).)

[2] A microfilm and typescript are in the Cathedral Library. Entries for parishes in Herefordshire only have been noted.

[3] Probably went to live with her family after the dissolution of Aconbury priory of which she was the last prioress. Her name does not appear in any of the Scudamore pedigrees in Robinson's *Mansions and Manors*.

[4] Ball took a funeral at Wenlock in 1559 " by chance being there " (*see* W. G. Clark-Maxwell, " The Monks of Much Wenlock " in *Trans. Shrops. Arch. Soc.*, 4th Series, Vol. IX.

[5] Barkeleye aged 50 in Survey. Instituted to Ocle Pychard, 1 Aug., 1554.

[6] Survey states that Bastynhale was well learned and brings up children virtuously in reading, writing and grammar.

[7] Blockeley instituted to Bosbury, 10 July, 1547.

[8] Wm. Bothe instituted to Cradley, 7 Sept., 1526. Made sub-deacon, 15 June, 1527; priested 27 March, 1529.

[9] Buckeley instituted to St. Mary's chantry, Weston, 20 May, 1536.

[10] Caradyne instituted 31 Dec., 1537. Died in 1567 and bequeathed 5s. to each of his brethren of the vicars choral, Hereford and his best gown and surplice to John Brown. (Havergal's *Fasti*, p. 93.)

[11] Cleubery may have lived in a house in St. Nicholas parish for which the abbot paid five pence annually to St. Guthlac's priory before the dissolution. (See article by A. T. Bannister in *The Transactions of the Woolhope Club*, 1918, p. 38).

[12] Cooley or Cowley as in Survey which states he was an aged man, conveniently learned which doth teach many poor men's children. This certificate is on the same piece of paper as that of Edmund Jones.

[13] Sir Thos. Dayeson, aged 40, in Survey. Words in brackets are crossed out. Duncumb's *History: Huntington Hundred*, p. 98 records 155—Thomas Deios as rector of Willersley.

[14] Edwardes instituted to Shelve, 23rd Jan., 1549.

[15] Elkes was keeper of the choir in the fraternity or late service of Our Lady in Montgomery. The visiting commissioners evidently debated as to his pension " being a pore man ". The figure " 40/2 " [or 40/11] is jotted down beside his name on one side, and " enter him in the warrant of continuance " on the other. In the margin among further scribbles is the sum of £2 4s. 11d., also " allow him X/sh." Wm. Elkes is written down as Willm. Ilkes, Penc. £4. (P.R.O. E 301/76/13). *See also* endorsement on certificate of Reginald Werstane.

[16] Fowler instituted to chantry, 3 Oct., 1537. Aged 50 in Survey. This certificate followed by that of Keylyng on the same sheet of paper.

[17] Rowland Gosnyll instituted to Oldbury 6 March, 1539. Deprived and succeeded by R. Sherar, 5 Dec., 1560. Instituted to Tenbury 5 June, 1562. A Roland Gosnell, S.T.B. instituted to Tenbury, 27 June, 1555. There is a chapter on Roland Gosenell, prior of Wenlock, 1521–6, in R. Graham's *English Ecclesiastical Studies*, S.P.C.K., 1929, pp. 125–145. *See also* W. G. Clark-Maxwell's *The Monks of Much Wenlock after the Suppression*; in Shropshire Arch. Soc., 4th Series, Vol. IX; and Bishop Bothe's *Register*, pp. 106–114. There may have been more than one Rowland Gosnell.

[18] Sir Seveacre Gogh, aged 70 in Survey.

[19] Sir John Grene, aged 36 . . . a good clerk in Survey.

[20] Wm. Gruffyth instituted to Upper Sapey, 15 May, 1543. Words in brackets crossed out.

[21] Grynsell was vicar of Lydney, 1554. Instituted to the Prebend of Colwall, 20 Sept., 1561. Archdeacon of Salop, 20 Oct., 1561. Died 1579. Admitted " ad vicaria de credley, als dict vicaria ste anne " [in Hereford cathedral] 12 Sept., 1537. (Hereford cathedral chapter act book, fol. 80r.)

[22] Harley, aged 53, in Survey. Instituted to Aston, 5 April, 1557.

[23] A Thomas Hopkyns, instituted to Ribbesford, 30 Jan., 1545. A Thomas Hopkyns, B.A., instituted to Monmouth, 30 April, 1545. A Thomas Hopkyns instituted to Rock ?, 1 Aug., 1565.

[24] John Hopkyns instituted to Welsh Bicknor, 8 July, 1547. Name given as Hoskyns in the Survey.

[25] Howell was aged 80 in the Survey.

[26] Signed " Wyll$^{a}/_{m}$ Aphuy ". Survey states that incumbent was Sir Wm. Aphuy, aged 49. A William ap Huy of Aconbury nunnery was made a deacon, 22 Feb., 1524 and was priested 9 March, 1524.

[27] Sir Richard Hill, aged 31 in Survey. Instituted to Leintwardine, 3 March, 1552.

[28] Sir Lawrence Johnson, schoolmaster, aged 60 who was competently learned in the Survey.

[29] His age is omitted in the Survey under Aymestrey. This certificate follows that of Richard Cooley on the same sheet of paper.

[30] In the Survey Sir Thomas Keyling is recorded as schoolmaster for the past four or five years at Bosbury. Aged 75. This certificate follows that of Syr Gryffyth Fowler on the same sheet.

[31] In the Survey Sir Roger ap Rice (not Loies) was aged 41 " a syngynge man and a competent grammaryon ".

[32] In the Survey Sir Richard Lleu was aged 61.

[33] In the Survey Sir Davy Meyo was aged 55 " a syngyngman and competent grammaryon ". Hereford Cathedral Archive No. 3186 gives a copy of a Mandate of the president of the chapter to Thos. Heiward, verger, to affix in the stall assigned to *dominus* David Mey, vicar-choral, their decree suspending him from entry into the cathedral because of his contumacy in not appearing at a certain time and place after receiving due notice from the said president and chapter. Dated 11 July, 1522.

[34] In Survey More was aged 60, indifferently learned who taketh pains in teaching children daily.

[35] In Survey Morgan was the incumbent of the chantry in the chapel of St. Nicholas. Aged 30. He keeps a school and doth teach children and bring them up in virtue. A James Morgan was instituted to Glazeley, 20 Aug., 1554.

[36] Mynde was aged 30 in the Survey. Instituted to Holme Lacy, 24 July, 1548.

[37] Age omitted in Survey.

[38] In Survey Nicolles was aged 60 and bringeth up many children in virtue and learning.

[39] In Survey Notte was aged 38 and a syngyng man and competent grammaryon. A Roger Notte of Whiston monastery was made sub-deacon, 9 Dec., 1517 and priested 3 April, 1518.

[40] Name given as Sir John Perkyns aged 60 in Survey. A competent and learned man.

[41] Sir Roger Phylpott, aged 44 in Survey. A Robert Phelpottes was instituted to Linton, 1 Aug., 1555.

[42] Bordesley is in the diocese of Worcester although certificates states " dioc' of Hereford ".

[43] Potter was aged 50 in Survey. Instituted to Chantry in Ledbury, 27 Sept., 1538. Duncumb's *Broxash Hundred*, p. 264 gives John Potter as incumbent at Tedstone Wafre in 1550, followed by William Morton in 1556 and John Potter in 1561. Bannister's *Institutions* does not record the John Potter in 1550. A John Potter was instituted to Lower Sapey, 3 July, 1554.

[44] No name of incumbent given in Survey.

[45] John Rawlyns, aged 60 in Survey. A John Rawlins instituted to Burghill 29 April, 1557.

[46] Age omitted in Survey.

[47] A Thomas Sebright of Wormesley was made deacon, 7 June, 1533.

[48] A Richard Sherar was instituted to Oldbury on the deprivation of Roland Goswell (? Gosnall), 5 Dec., 1560.

[49] Aged 39 in Survey. Henry Stephens instituted to Sutton, 15 Oct., 1554.

[50] Age omitted in Survey.

[51] Roger Struttye instituted to Pencombe, 7 Oct., 1545. Roger Stretye instituted prebendary of Eigne in Hereford cathedral, 7 June, 1555.

[52] Aged 40 in Survey. John Tayleur instituted to chantry of John Ross in Ross, June, 1531.

[53] Survey states that Tanner was chantry priest of Our Lady and aged 28. A Henry Tanner instituted to Colwall, 6 April, 1557, Prebendary of Wellington, 19 Oct., 1568; instituted to Little Marcle, 12 May, 1571. Henry Tanner appointed a vicar choral in 1567. In 1576 he was " warned to depart his chamber and commons before Christmas day next following " (Havergal's *Fasti*, p. 95). Hereford Cathedral Archive No. 1467 records the appointment of Henry Tanner, a minor canon in the cathedral, as a proctor for the installation of John Scory as bishop. 21 Dec., 1559.

[54] Signed " Johine ap thomas ". Words in brackets crossed out.

[56] Instituted chantry priest at Cleobury Mortimer, 11 Feb., 1532; and to the benefice, 5 March, 1552.
[56] Recorded as a Stipendary in the Survey. Age omitted.
[57] Aged 47 in Survey. David Watyes of a stall in Hereford cathedral and Wormesley priory was priested 15 March, 1527. Appointed to the vicarage of Caukbruge "ad altar sct nicholas", [in Hereford Cathedral] value £2 10s. 0d., on 3 March, 1527. (Hereford cathedral chapter act book, folio 42 v.). Hereford cathedral archive No. 4495 (i) is an assignment of a lease by John White, custos of the vicars choral to Philip Knyvin, prebendary of Colwall, of part of the schoolmasters house in the East part of the churchyard of the cathedral; formerly in the possession of David Wattes. Dated 7 May, 1601.
[58] A Henry Wellington was instituted to Stokesay, 19 March, 1555.
[59] Bannister's *Institutions* records the institution of Reginald Yerwood to Coddington, 24 Sept., 1551.
[60] Age omitted in Survey. Instituted to chantry at Leominster, 15 Oct., 1533 A Robert Worall instituted to Lyonshall, 19 Feb., 1520, and Richard Rawlyns instituted 18 Oct., 1533 on resignation of Worall on a pension of 26s. 8d.
[61] Aged 64 in Survey. Instituted to Hope Sollers, 28 Jan., 1521. The "mawdlens" may possibly have been the upper chapel of St. Mary Magdalen in the palace garden.

EXCAVATIONS ON THE DEFENCES OF THE ROMANO-BRITISH TOWN AT KENCHESTER

FINAL REPORT

By F. G. Heys and M. J. Thomas

Two interim reports[1] have already been published covering the excavation of the town wall, ditches and north-west bastion at Kenchester from April, 1956, to July, 1958. Operations were resumed in April, 1960, and continued, at intervals, until April, 1962. During this period an extensive examination was made of the west gate and its related features. The results are embodied in this report and bring to a conclusion the investigation of the defences on the west side of the town. It is now possible to distinguish at least three periods in the evolution of the defences, the first being not earlier than the middle of the second century and the last at some time later than the middle of the fourth century. The construction date of the town wall remains uncertain but it must lie within the span of the first two periods, i.e. *c.* A.D. 150–350.

The West Gateway (Figs. 1, 2. Plates 1–4)

The north gatehouse was excavated in 1956 and the findings summarized in the first report. At that time the remainder of the gateway lay under a portion of the old cottage garden which was still being cultivated as an allotment. This land only became available for excavation after attention had been turned to the north-west bastion and, consequently, in the second report only a few speculative paragraphs were devoted to the west gate. Subsequent excavation proved the surface indications to be deceptive and revealed a more elaborate plan than had been tentatively envisaged. It is appropriate, at this point, to recall that in 1721 enough of the structure of the gateway was in evidence for Stukeley to recognise it as such and include it on his plan[2] of the Roman town. Thereafter the site was stripped to foundation level and intensively cultivated to this depth for many years. In front of the gateway, where the depth of topsoil was small, two Roman roads had been removed completely in the interests of better cultivation. Evidence of the roads was, therefore, slight except near the east hedge where the soil depth was greatest and there was little stratified material associated with the later stages of the evolution of the gateway.

[1] *Transactions Woolhope Club*, Vol. XXXV, Pt. II, 1956 and Vol. XXXVI, Pt. I, 1958.
[2] *Transactions Woolhope Club*, 1912–3, for a facsimile, facing p. 173.

The gateway consisted of two flanking towers with semi-circular fronts enclosing, at the date of its construction, a dual carriageway with central *spina*. The overall dimensions were as follows: maximum depth (along south side of south tower), 26 ft.; minimum depth (along north side of north tower), 21 ft.; front of gateway (including flanking towers), 53 ft.; rear of gateway, 50 ft. The length of the *spina* was 17 ft., with a width of 3 ft. 6 in. at its eastern end, widening to 6 ft. in the middle of the gateway. The flanking towers and the *spina* were joined by a cross-foundation varying in width from 4 ft. to 4 ft. 9 in. The carriageways divided by the *spina* were not of equal nor constant width. That on the north side was 9 ft. wide at the town end and a little narrower at the front of the gateway; for the south carriageway the measurements were 10 ft. and 9 ft., respectively. The semi-circular front of the south tower had a projection of 7 ft. compared with 6 ft. 6 in. for the north tower.

These measurements are sufficient to indicate the irregular setting-out of the gateway foundations. The inaccuracies may have resulted, partly, from the desire of the builders to effect a change of direction at this point (see Fig. 4) and they allowed it to occur, awkwardly, in the middle of the gateway instead of at either one side or the other. Clearly, the discrepancies must have been adjusted as the building proceeded above ground level to produce a more symmetrical shape than the existing foundation plan.

The South Tower

The foundations of the south flanking tower were not only more complete than those of the north gatehouse but were also on a more massive scale. The maximum outer dimensions, excluding the semi-circular front, were 17 ft. 6 in. × 15 ft., compared with 14 ft. 9 in. × 12 ft. for the north tower. The semi-circular front of the south tower was also slightly larger but of similar pattern, exhibiting, like the other, a slightly flattened arc on the inward, or entrance side. The two towers were different in conception and layout as well as in size. Whereas the north one, with its 3 ft. wide foundation walls, would have provided an interior space of about 7 ft. × 12 ft., suitable for a guard chamber, the substantial foundations of the south tower on all but the south side left an interior space of little more than 4 ft. 6 in. × 8 ft.

The soil above the foundations consisted of a thick layer of humus overlying loose rubble in brown loam and it varied in depth from 3 ft. 6 in. at the east end of the excavation to 1 ft. 6 in. at the west. The foundations themselves were 3 ft. deep, cutting through earlier occupation of first and second century date on the south side, and resting in natural red clay. They consisted for the most part of large angular sandstone pieces similar in shape and appearance to those

Fig. 1.

in the bastion core and north gatehouse foundations. Between each layer of stones was a thick packing of red clay except at the junction between the tower and the town wall where hard gritty mortar had been used to bond the two topmost layers. The remains of a thick mortar spread over the top of the semi-circular front foundations were also in evidence and represented the conclusion of the foundation stage in this portion of the structure, a fact confirmed by comparing its level with that of the road. Below this mortar layer the foundations consisted of an outer skin of stone blocks containing a rubble core. The construction was comparable to that of the north-west bastion but on a smaller scale, since here there was only one layer of stone blocks, the remainder of the lower foundations being composed of tightly packed sandstone to a depth of 2 ft. below the blocks. Where the semi-circular front extended over the in-filled Period I ditch an outward thickening of extra foundation had been provided as a precaution against subsidence. None of the few remaining stone blocks possessed noteworthy characteristics but the general appearance of one or two was such as to suggest that, like the bastion blocks, they had been brought from demolished buildings for re-use in the defences. A post-hole for one of the scaffold poles used during the construction phase was found on the north-west side of the semi-circular front (see Plate 1).

The foundations of the south tower were constructed, initially, in three separate parts and only married together in the upper levels (see Fig. 2, section Uv). The semi-circular front formed one of these parts; the middle portion consisted of a solid rectangular foundation, more than 7 ft. wide, which continued the line of the town wall, although separate from it, and east of this was the third part, represented by the remaining three sides of the tower. This method of construction must have been adopted in order to facilitate division of the work amongst the gangs employed and it may, in turn, account for the varying quality of the work, the pitching and packing of the stones being more expertly carried out in some parts than others. The poorest construction was to be found on the south side in the upper levels, where the foundations, in addition, were of no great width. On the north side solidity and thickness were more apparent and very necessary since the tower was adjacent to an earlier culvert and precautions had to be taken against subsidence.

No significant dating material was recovered from the south tower site. A coin of Crispus of *c.* A.D. 320–24 came from the top of the foundations on the north side, but it was not sufficiently well stratified to be regarded as satisfactory evidence. Nevertheless, a date *c.* A.D. 350 was established for the south tower on the evidence revealed in the gateway itself, with which the tower formed a continuous whole.

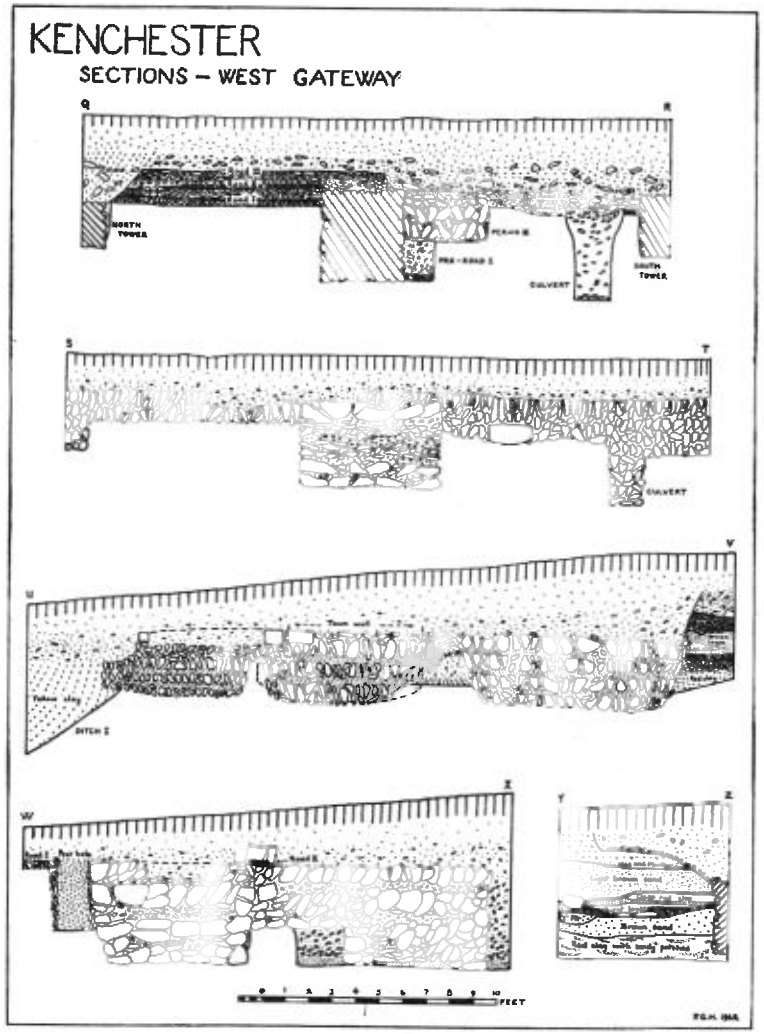

FIG. 2.

The Culvert

The most important feature of earlier date than the gateway foundations was the culvert because of its well-stratified and datable material and its intimate relationship with the developments in the gateway area. At the east end of the site it was 3 ft. 9 in. deep, measured from the surface of Road I, through which it was cut, and at points west of this there was no significant alteration in depth. In section it was funnel-shaped, the wide mouth being necessary, originally, to facilitate the excavation of the narrow lower part, the width of which was 1 ft. 6 in. Into this channel a wooden box drain was inserted. It is probable that it was extracted again at the end of its useful life, since no traces of a wooden structure were apparent during the excavation of this feature. There was a residue of clean brown silt in the bottom of the culvert but no more than might have been caused by seepage and the process of natural silting when the cavity was open before or after the box drain was in position.

The drain must have carried waste from some important building adjacent to the east-west road in the south-west sector of the town. The furthest point east at which it was located during the excavations was in the town field 12 ft. from the gateway (see Fig. 4). In the middle of the gateway a change of direction through 12° seemed to correspond with a similar new alignment of Road I, into the south edge of which it was cut, at least up to this point. The culvert running due west now, was traced to a distance of 40 ft. beyond the gateway front; thence it must have continued to some point south of the modern road to discharge into the low-lying ground in that area.

It was not possible to assign a date to the construction of this feature, although it did not appear to be earlier than Road I. When the stone gateway was built the culvert was deliberately filled. Whether it had already ceased to function as a drain could not be determined. The fill consisted of loose brown loam and refuse material, a prolific source of pottery sherds. A large quantity of black burnished and coarse red ware fragments, nails and bones were recovered. The more interesting finds included a number of roughly shaped stone bungs or counters and part of the handle of a glass vessel. The datable sherds showed that the in-filling occurred *c.* A.D. 350. This proved to be critical evidence, since excavation revealed that the foundations in the front of the gateway linking the south tower and *spina* had been constructed across and into the culvert at the same time.

The *Spina* and the Roads (Figs. 2, 3. Plates 3, 4)

The *spina*, or central spine and the flanking towers were all of one build, connected by a substantial width and depth of foundation

across the front of the gateway. This lent greater strength and solidity to the arched superstructure, ensured that the in-filled culvert would give no trouble, and served as the base for Road II, the road contemporary with this evolutionary phase of the west gate.

A section along the *spina* (Fig. 2, section wx) disclosed that its depth of foundation was greater at each end, where it would be subjected to the maximum stress, than in the middle which consisted of a portion 4 ft. long with foundations only 2 ft. 6 in. deep. Slightly larger stones had been used in these foundations than in the flanking towers and the layers of clay packing contained many small stones.

The *spina* had cut through Road I and, below it, an even earlier feature. This consisted of a slot about 1 ft. 6 in. wide and as deep as the *spina* foundations, running parallel with the latter for a distance of 9 ft. to the extremity of excavation on the east side. There was a 4 in. layer of hard packed gravel and fragments of mortar at the bottom, but the remainder of the fill was clean stony loam from which half an early Romano-British quern stone was recovered. The feature was sealed by Road I (Fig. 2, section QR), a road of considerable width but no great thickness, although it had a good tightly packed pebble surface. It was found to extend across the whole width of the gateway and was still in evidence even where the later Road II was fragmentary or had disappeared altogether. The camber of the road proper began 2 ft. north of the culvert and beyond again, a well-defined wheel rut was revealed (Fig. 3). Its line of direction relative to the camber and the culvert gave good grounds for assuming that the road followed the same alignment as the culvert beyond the gateway.

In order to determine the north boundary of Road I it was necessary to examine the situation in the town field, east of the gateway. A more detailed investigation was made than in 1958, when there was opportunity only to inspect the road surface in order to determine its position in relation to the north tower. The current excavation showed that of the three roads, which were now clearly distinguished, the earliest road, only, extended 9 ft. beyond the south side of the north tower, the last 4 ft. being a side-walk bordering a small drainage ditch, 2 ft. wide and 8 in. deep, which marked the boundary of the road proper. The width of Road I, therefore, from drainage ditch to the end of the camber on the south side was 20 ft. and the total width, including the side-walks, was 29 ft. to the north edge of the culvert. It was not possible to relate this road to any defensive features which might have existed before the stone gateway or to the occupation levels on the south side of the south tower. No datable material was recovered from this level of the excavations, but it should be noted that it is not the earliest feature on the site

and that, probably after a long life, it was superseded by Road II in the middle of the fourth century.

Road II was laid down as an integral part of the stone gateway. In the north-east sector of the gate, like Road I it was securely sealed under Road III. Here the road was seen as a more substantial structure than the earlier one, consisting of some 5 in. of cobbles with about 3 in. of tightly packed pebbles as a surface. By the wall of the north tower a curb of two rows of three large cobbles and a narrow side-walk of pebbles and gravel were recorded in 1956. On the south-east side of the *spina* little remained of this mid-fourth century road, chiefly because of subsequent alterations in this area. The evidence showed, however, that it had been built over the culvert to reach the north side of the south tower and, to provide a firm foundation, the top of the culvert had been closely packed with stone rubble. On the north side in the front half of the gateway nothing remained of either Road II or III, but on the south side, where part of the top layer of the cross-foundation remained *in situ*, it was seen that these stones had formed the basis of Road II. Most of the stones had been smoothed and rounded by wheel action and here and there fragments of the pebble surface were evident in the joints between the stones. The adjacent sides of two of the larger stones had been worn down into a wheel rut which ran from the gateway at the same angle as the wheel rut of Road I (Fig. 3). The total width of this road on the town side of the gateway proved to be 23 ft., though it may have been wider in the middle of the town.

The date at which Road II was succeeded by Road III could not be determined. At some point after the mid-fourth century an important alteration in the gateway defences occurred. This involved the construction of a new road and a revised plan for the middle of the gate. The dual carriageway was abandoned in favour of a single road which, of necessity, had to be wider than the individual Period II carriageways had been. Consequently, Road III, occupying the north side of the gateway, was 12 ft. 6 in. wide within the gate. It was constructed upon the two earlier roads and consisted of 8 in. of packed cobbles and gravel, finished off with a good surface of large flat stones. Within the town field it was conterminous with Road II on the north side and had a substantial curb of stone blocks of cross-section approximately 8 in. square. Its width, however, was no greater than that recorded in the gateway and it was, therefore, at this point, a much narrower road than either of the earlier ones.

The construction of a wider single road within the gateway involved the disappearance of the *spina* as it had existed up to this point, since now the road covered nearly three quarters of its foundations. As part of the reconstruction an additional foundation,

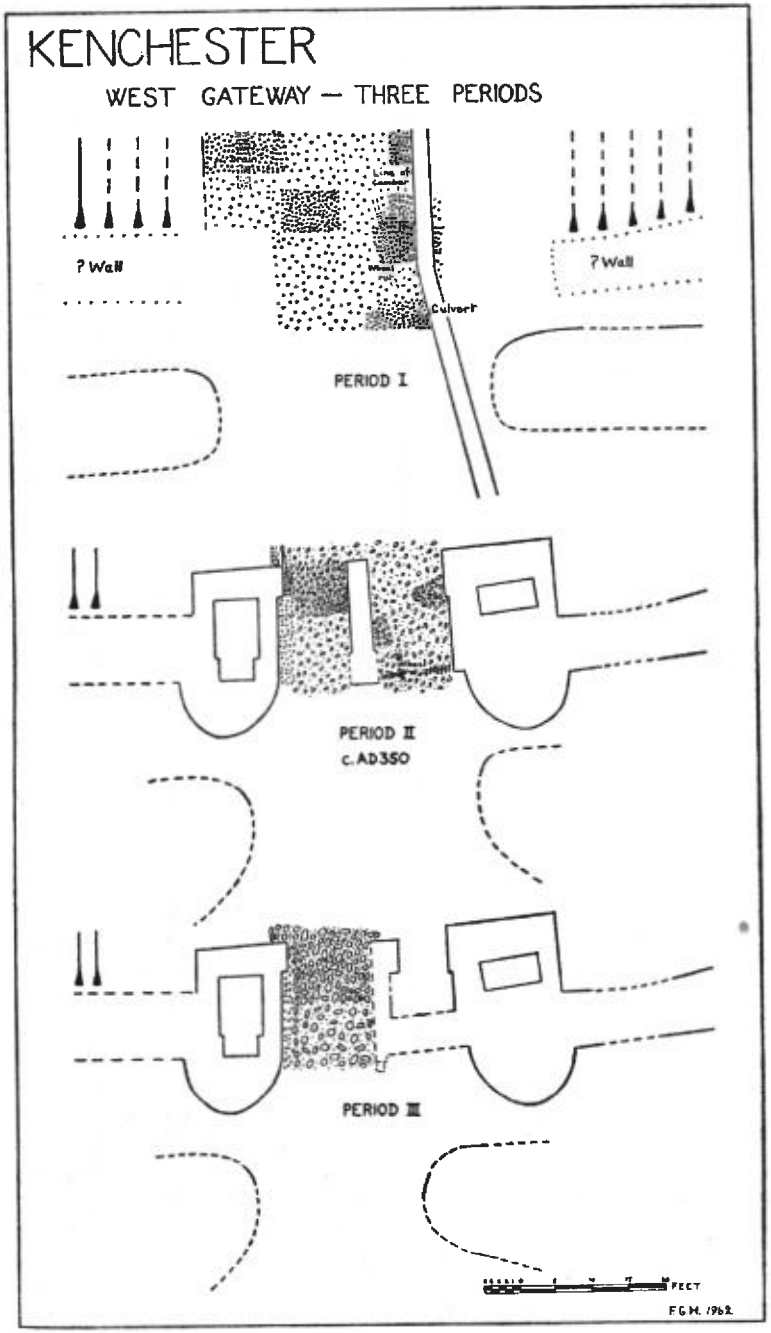

FIG. 3.

3 ft. 6 in. wide, 5 ft. long and 2 ft. deep was inserted at the south-east end of the *spina*. Its make-up of smooth flattish stones in gritty loam was different from the foundations of Period II and another unusual feature was the presence of two small dressed stones—foundation material not met with elsewhere. The nature of the revised gateway plan would have remained a matter for speculation were it not for the fact that the only above-ground Roman work still *in situ* was, fortunately, of Period III origin. This consisted of a small group of first-course stones situated on the edge of the *spina*, east of the cross-foundation (see Plate 4). Road III was in contact with the north side of the stones, the upper third of which showed above the level of the road surface. The stone at the south-east corner of this group rested directly upon the surface of Road II, preserving the only fragment of road surface in this sector of the gateway and providing clear evidence that this was Period III work. The conclusion was drawn that in Period III the *spina* was replaced by a wall, approximately 2 ft. 6 in. wide, based partly upon the *spina* foundations and partly on Road II, which increased to a width of about 4 ft. in the area where the additional foundation had been inserted. It is probable that at the same time the front of the south carriageway was blocked by a wall built directly on to the cross-foundation (i.e. the surface of Road II) but the extensive stone robbing to foundation level made it impossible to determine whether this was so.

Also associated with this period was a large post-hole on the south side of Road III at the front of the gate. It was lined with small stones and the filling consisted of stony brown loam. Excavation of this feature produced no evidence of its purpose or the length of time it was in use.

The Ditch System (Fig. 3, 4)

The ditch system has been dealt with in some detail in the previous reports and a great deal of further elaboration would be out of place here. Basically, the earlier findings relating to what are now termed Periods I and II were confirmed and the chief problems were to locate the butt ends of the ditches and to investigate any changes resulting from the alterations of Period III.

The early (post *c.* A.D. 150) ditch lay partly under the south tower foundations. It was also observed in a trench cut close to the hedge on the south side of the site. The filling of yellow clay was reminiscent in colour, at least, of the material found in the rampart. A few coarse red rim sherds of second century date were recovered from the filling. On the north side of the gateway the position of this ditch had already been determined in 1956.

The wide shallow ditch of the mid-fourth century was 6 ft. west of the north tower and only 3 ft. west of the south tower. The distance

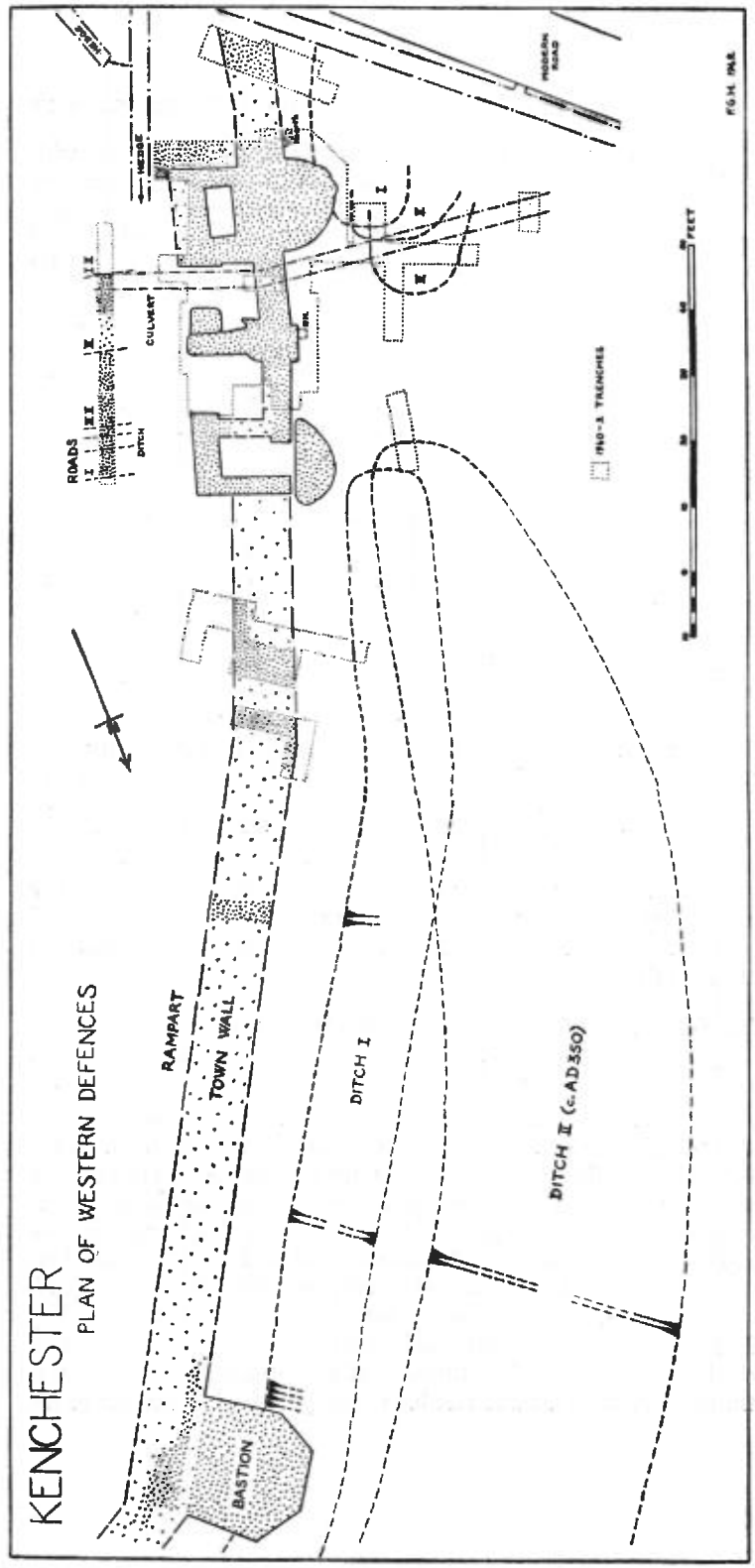

FIG. 4.

across the gateway between the butt ends was 31 ft., compared with a distance of about 37 ft. for the earlier ditch system. With the restriction of the road, later, to a single carriageway of 12 ft. 6 in. a ditch extension on the south side was necessary to carry this part of the defences right up to the new road. Accordingly, in Period III the ditch was recut on a slightly different line and extended northwards some 8 ft., giving a measurement of about 23 ft. between the two butt ends. There was no evidence of alteration to Ditch II on the north side of the gateway, where the lip of the ditch had been considerably disturbed by the later structure of the cottage. On the south side the butt ends of both Period II and III had been packed with stones, forming a revetment 1 ft.—1 ft 6 in. thick to lend additional strength at these points.

A section cut across the extension of Period III showed a maximum depth of little more than 4 ft. and a width of 14 ft. From this point the ditch must have increased in width and depth rapidly to attain its maximum dimensions along the walls of 41 ft. × 9 ft. There was evidence in the section of two recuts, each producing a wider and shallower butt end. The first probably occurred almost immediately and resulted from a collapse of the ditch sides, since the clean red clay in the bottom of the ditch was practically indistinguishable from the natural clay on which it rested. Very little silt was visible in the bottom of the first recut but a layer approximately 3 in. thick was present in the final ditch. Above this the successive layers of grey sandy loam and dark brown loam indicated that the ditch had filled by natural processes over the course of time. Only a few sherds were found in the ditch and these were in the upper levels where pieces from the in-filled culvert had found their way into the ditch at the point where one had cut into the other.

The Town Wall and Early Occupation Levels

Excavation was carried out in two places north of the north tower in search of more information about the town wall. It had been noted in 1958 that the gateway stood back from the general line of the wall on the west side of the town and it was assumed that a change in the alignment of the wall must lie about 30–40 ft. north of the north tower. The change in direction was established and is recorded on the general plan, but the possibility that there might be a bastion at this point proved to be unfounded. The wall foundations in this area were 10 ft. thick, the complete width being present although the remains were not as substantial as those uncovered in the 1956 section. Between this point and the north tower the position was less satisfactory. An outhouse of the cottage, one of its walls still standing two or three feet high, occupied part of the site of the

town wall.[1] Most of the town wall foundations had been removed to clear the ground and provide stone for the building and the rampart had also been considerably disturbed. As the 1956 excavations proved, no foundations at all exist now near the north tower, but at about 20 ft. from that point a small strip still remained at the back of the wall (shown in close stipple on the general plan). The foundations here were shallower by about 1 ft. than elsewhere along the west wall and this may perhaps explain why the stripping was so thorough in this area. A few sherds of indeterminate date were recovered from the wall foundations and there were signs of early second century occupation under the rampart.

At the south end of the site the primary task was to establish the position of the south west corner. A trench across the wall, close to the hedge, revealed that the corner lay just beyond the limit of excavation, for the back of the wall had already begun to swing a little towards the east preparatory to making the full turn. The width of the foundations, which were composed of river-washed cobbles and angular sandstones, was 8 ft. 6 in. Between the wall and the early ditch in the south half of the trench there was a deep area of post-medieval disturbance.

Fuller information was obtained about the nature of the front of the wall in the portion exposed immediately south of the south tower. Here, the base of the foundations was composed of small rounded cobbles upon which, inset 1 ft. 6 in., rested the mortared stone blocks of the wall front. Below Roman ground level there were originally three courses of these blocks, each a little larger than the usual dressed facing stone, and some of them were still *in situ*. Behind this mortared front the rubble core extended to the back of the wall, which was evidently not faced below ground level. Whether this mode of construction applied all along the west wall is not certain. The only other place where the conditions appeared to be comparable was at the north-west bastion where small round cobbles were found at the lowest level but nothing remained above them. The width of the wall foundations by the south tower was 7 ft. 6 in. but, measuring from the faced front to the back the effective width above ground level could only have been 6 ft. Even the maximum width here is less than at any other point examined along the west side. A few sherds of a hand-made calcite gritted vessel, probably discarded by one of the workmen employed upon the construction of the wall, were recovered from the butt end of the foundation trench.

The wall at this point had cut into a hearth containing a coin of Trajan in good condition. A layer of charcoal and burnt clay

[1] The position of the outhouse wall in relation to the town wall and the north gatehouse is shown in *Fig.* 3 of the 1956 Report.

spreading from over the hearth to the edge of Ditch I and sealed by loose brown loam indicated that occupation here had ceased and the site had been levelled before the digging of the ditch. Behind the town wall further signs of occupation and destruction were evident extending to a depth of 3 ft. below the top of the wall and tower foundations, (Fig. 2, section YZ). In a thick layer of brown sand at the lowest level sherds of first century decorated samian and a quantity of rustic ware were recovered. This deposit was sealed by a well-packed stone surface through which the south wall of the south tower had been cut. The stone layer sloped gently southward to beyond the limit of excavation and extended west to the town wall, becoming increasingly loose and fragmentary beyond the point where section YZ was drawn.

There was no sign of the stone surface in the interior space of the south tower although the destruction layer of burned material and charcoal which covered it carried through into the south-west corner, extending about 1 ft. 6 in. into the interior and filling a small post-hole, 7 in. in diameter and 9 in. deep. These features within the tower were sealed by a 5 in. layer of clean red clay, bringing the surface level with the top of the tower foundations. The pottery from the stone layer included a fragment of late first or early second century decorated samian and samian from the burnt layer above it was Hadrianic or a little later. A relatively large amount of pottery came from these levels and nails and fragments of bone were also met with. The termination of occupation in the first half of the second century in this area is consistent with the situation found under the rampart elsewhere along the western defences. The burnt layer was covered by a band of red clay and sand, topped by a thick layer of brown sand. Above this, again, was the trampled clay and mortar surface from which the Period II defences had been constructed. At this level, at the south-east corner of the tower, about 2 ft. of well made road or path, 9 in. thick, came within the area of excavation (Fig. 2, section UV). It is likely that this stone surface, of unknown width, ran the length of the east wall of the tower, but it certainly did not extend any further south than the south-east corner

Conclusions (Figs. 3, 4)

Little can be said for certain about the evolution of the west gateway before the mid-fourth century, since the substantial stone structure erected then removed such evidence as there might be of earlier periods. Road I, Ditch I, the rampart and the culvert have all for convenience been termed Period I and it seems certain that their terms of existence or use coincided at some stage, but it is not to be assumed that they were contemporary in construction. It may be considered, for example, that Road I must date from the early

years of the town's history, since it is part of the vital Roman artery running through Herefordshire to the Welsh uplands, around which Kenchester sprang up. This would place the road in the Flavian period. On the other hand, it was of comparatively slight construction for one that was to last for nearly three hundred years, although the crown of the road may have been remade many times during this interval; furthermore, an undated structure below it showed that it was not the earliest feature on the site. It is appropriate to recall that G. H. Jack reported finding " a layer of burnt material about 2 in. thick just below the base of the Roman work " in both 1912 and 1925 which indicated " some constructions on the site prior to the laying out of the main artery of the town ".[1] It would appear that there is still more to be learnt about the early road, but it is difficult to believe that the main outlet of the town on the west side was anywhere but here, on the site of the later stone gateway. The culvert was closely associated with Road I and although its construction date is unknown, it seems likely to have been a later addition.

The earth rampart and Ditch I can be more firmly dated to a period not earlier than the middle of the second century, with the latter already obsolete by the middle of the fourth century when further defensive activity was necessary. The rampart, however, remained an integral part of the defences and from the mid-fourth century, at least, was fronted by the town wall. The date of construction of the wall must lie within the period *c.* A.D. 150–350. A more specific date can not be upheld with any degree of confidence since the evidence is both inconclusive and conflicting. The points may be enumerated as follows:

(1) The datable sherds from the wall were not later than the mid-second century. The thick hand-made pottery in native tradition from near the south tower is usually found in first and second century contexts but may have a long life in this region outside the towns.

(2) The milestone of Numerianus (A.D. 283–4), found on the north side in 1796, may have come either from the wall or from a bastion. The latter have already been proved of fourth century date. If it was from the wall, however, it can be argued that it either (*a*) makes a mid-fourth century date a probability or (*b*) indicates a repair to the existing wall at that time.

(3) In the section through the town wall excavated in 1956 a construction trench into the rampart was found behind the wall and the back of the wall was faced. This may signify a later date for the wall than the rampart or, again, may indicate the repair of an earlier wall that had become derelict.

[1] *Transactions Woolhope Club*, 1924–5, pp. 6–7 and Plate 11, Section AB.

(4) The lower foundations of the wall at the south tower were separate from those of the tower although the two foundations were firmly bonded and mortared in the upper levels. The possibility that the first few feet of the wall were stripped and rebuilt cannot be overlooked, particularly as the use of mortar below ground level is an unusual feature. At the north-west bastion the wall and bastion foundations were not well integrated. The natural slope of the ground away from the town wall may explain the marked difference in levels here, if the bastion and wall were contemporary, but an element of doubt exists.

(5) There were no stone chippings, wall rubble or traces of mortar on the berm or in the portion of the early ditch examined in 1956. This would suggest that the wall was not of Period I build.

From the foregoing the only conclusions that can be drawn are that either (*a*) the wall was constructed before the stone gateway and was later repaired or (*b*) the wall came into existence at the time of the stone gateway in the middle of the fourth century. If the former was the case, it may be that there was a timber gatehouse at the gateway. There would be room for one, since the wall would have terminated 15 ft. south of Road I. This, however, is a possibility which is not subject to verification, the foundations of the south tower being so extensive and deep as to have removed the evidence, if indeed it ever existed.

The important developments of Period II, on the other hand, could be clearly deduced from the existing remains. The culvert was filled in, a double-arched gateway was constructed with flanking towers, a narrower road was laid on top of the old and a wide shallow ditch completed the alterations. For a small town it appears to be redevelopment on an ambitious scale, although not enough is known about the gateways of the smaller Romano-British settlements to be certain of this. It is more imposing than such examples as the east gate at Petuaria and the south gate at Caerwent, but not on such a scale as the main gates of the larger cities. In fact, it may be regarded as a smaller edition of the London Gate at Verulamium, as depicted in the familiar reconstruction drawing,[1] except that at Kenchester there would not have been room for the pedestrian archways.

From the 16–20 ft. high walls the castellated flanking towers would rise another storey, with small arched windows sited to command a field of fire along the walls and across the ditch. The south tower may have been higher still since, unless there was a bastion at the south-west corner of the wall, the defenders, here, would have to cover this line of approach with their *ballistae*. The town wall would

[1] An easily accessible reproduction is to be found in I. A. Richmond's *Roman Britain* (Penguin Books), Pl. 4.

be carried through between the towers, perhaps reaching a greater height than the wall elsewhere, with its arches spanning about 10 ft. across each of the carriageways. The outer face of the gateway and town wall was of local dressed sandstone with, probably, tiled courses at intervals and strong wooden doors at both front and back of the arched entrances. Within the north tower there was adequate room at ground level for a guard chamber, but the south tower was more characteristic of a bastion. The interior space was only large enough to allow access to the upper storey from which the defence of the gate and corner could be conducted. The entrances to the towers would normally be within the gateway, and this could safely apply to the north tower. In the case of the south tower it is less clear since the thinnest width of foundation was on the south side.

How long the mid-fourth century layout lasted is not known. At some time in the turbulent period towards the end of the fourth century or, perhaps, in the early fifth century, when British cities were left to fend for themselves, the inhabitants took steps to reduce the vulnerability of the west gate and to provide better accommodation for those engaged on defensive duties. There is nothing to suggest that this was the hasty action of a threatened or panic-stricken community. On the contrary, Road III was the most substantial of the three roads, stoutly constructed in an expert manner at a time when, if some accounts of the period are to be believed, a little patching of Road II in the gateway might have been considered sufficient. At the same time, the volume of wheeled traffic through the town would seem to have diminished. No marked wheel ruts were found in this late road surface and, moreover, there was a contraction in the width of the road not only in the gateway but also in the town itself.[1]

Considerable effort had also been expended on the structural alterations in the gateway where additional foundations were added, although for the most part it was considered sufficient to build straight on to the existing surfaces. A new wall was built, based partly on the *spina* and the south carriageway entrance was probably blocked to enclose a space of about 9 ft. square with a wide entrance of 6 ft. 6 in. which could be used as an additional guard chamber. The purpose of the square post-hole at the front of the gate remains uncertain. A large notice-board may have been sited here or, it has also been suggested, it may have held a post on which the heads

[1] It would appear from G. H. Jack's description and sections in the 1912 and 1924 excavation reports that in the middle of the town this late road varied considerably in width from about 29 ft., at 180 yards east of the west gateway to as little as 18 ft. 6 in. elsewhere. Even at its maximum width it was 5 ft. short of the drain on the north side, which seems to have been the earlier road boundary, and in the other places it was as much as 10 ft. 6 in. short of it.

of malefactors were displayed. Subsequent excavations of civic gateways will show whether this is a feature common to other towns and, in the process, may shed more light on its function.

A natural consequence of the alterations in the gateway was the extension of Ditch II across the former south carriageway to the verge of the new Period III road. How long the new defensive arrangements were operative is not known, but the ditch was certainly recut after this period. The current excavations have taken the history of the town to the brink of the Dark Ages, disclosing the continued existence of an active community, watchful over its interests and mindful of its safety. Fortunately for the people of Kenchester, central and southern Herefordshire became a backwater as the Dark Ages closed in, fostering Celtic Christianity and perhaps preserving something of the old culture. Kenchester appears to have lived on as a local capital sufficiently long to give its name to the people of the region, the Magonsaetan. When the end came it was probably quietly, with a steady drifting away, leaving the defences which had served for so long to crumble and decay, but so slowly that even after medieval times the walls, gates and bastions were still visible as a reminder of a bygone age.

Summary of Excavations, 1956–62

During the years 1956–62 all the significant features of the western defences were examined and recorded except for the south-east corner, which lay under the hedge and modern road. The information below is a brief summary of the findings described in this and the two earlier reports:

The recent series of excavations succeeded in adding another period, of post-A.D. 350 date, to the defences and hence to the history of the town as a whole. The features uncovered on the site ranged from first to, probably, fifth century date. Prior to the construction of the earliest defences a substantial amount of first and early second century occupation had stretched along the line subsequently taken by the rampart. The extent to which it spread westward is not known, but an occupation level was found beyond the fourth century ditch.

Period I. Not earlier than the middle of the second century an earth rampart and ditch were constructed, bringing about a contraction of the limits of the town on the west side. This phase may also have included the building of a town wall which, otherwise, came into existence not later than the middle of the fourth century. The situation at the gateway, where there was a wide pebble-surfaced road, is uncertain, the later stone foundations having obliterated any evidence there might be of Period I structures.

Period II. Mid-fourth century. A stone wall was added in front of the rampart or, alternatively, if the wall was already in existence, repairs were carried out. The west gateway was built in stone with two flanking towers and a dual carriageway road was constructed on top of the earlier road surface. A culvert through the gateway, in use during Period I, was filled in. Bastions[1] were added at intervals along the wall to house *ballistae* and provide wider arcs of fire. On the western side of the town there was a bastion at the north-west corner. The Period I ditch, which had ceased to exist by this time, was succeeded by a wide shallow ditch.

Period III. At some later stage, perhaps early in the fifth century, the *spina* was removed and structural alterations were carried out to provide additional space for a guard chamber. This involved blocking the south carriageway entrance and an enlargement of the north carriageway. A new substantial road was constructed which was narrower in the town than its predecessors and the mid-fourth century ditch was extended across the front of the gateway to meet it. There was evidence to show that the ditch was later recut.

Acknowledgements

The excavations were carried out by the Hereford Archaeological Research Group and the writers wish to record their thanks to the many volunteers who, at various periods over the seven years of active operations, made their valuable individual contributions to its success. They are also conscious of the great debt they owe to: Dr. G. Webster for his constant encouragement and ready advice; Prof. I. A. Richmond for helpful discussion and advice on the plans and sections before the report was written; Mr. B. R. Hartley for his report on the samian finds; Dr. D. B. Harden for his observations on the portion of glass handle; Mr. J. F. L. Norwood and the Hereford City Museum for coin identifications and the cleaning of metal objects.

Finally, the writers must once more express their gratitude to Mr. Price of Magna Castra Farm for his permission to dig on an extensive scale in the gateway at a time when he had hoped to build on the site of the demolished cottage.

The finds have been placed in Hereford City Museum.

The Pottery (Figs. 5, 6)

Apart from the large quantity of pottery found in the culvert there was a surprisingly small amount on the site as a whole. It was

[1] In *Fig.* 4 the foundation plan of the gateway is recorded, but an attempt has been made in the case of the north-west bastion to show the plan as it might have been above ground. This involves compromise and is necessarily conjectural since the foundations are not symmetrical. A detailed foundation plan is included in the 1958 Report.

disappointing that no rims or datable sherds were recovered from the metalling of the roads. The early ditch produced only one piece worthy of illustration and this was of no dating value. No pottery was found in the foundations of the gatehouse. Described below, however, are two interesting groups of early pottery and a small selection of pieces from the culvert.

An examination of all the pottery from the site revealed a large variety of forms and fabrics. It is interesting to note that even among the unstratified pottery there was a very small amount which can be given a date later than the second century. With few exceptions all the third and fourth century sherds were from the culvert.

The numbers of the drawn sherds are continued from the 1958 Interim Report.

From below the stone layer behind the town wall

This group of early second century pottery was found in an occupation level which was sealed by the stone layer. Most of the pottery was well made in hard grey and red fabrics. Many of the sherds were decorated with bold horizontal or diagonal grooves, combed patterns and irregular lattice designs. In addition to the illustrated pieces there were several examples of brown ware with a soapy surface and burnished line decoration. A few pieces of heavy calcite gritted vessels were recovered and some thick buff mica-dusted sherds.

33. Narrow necked jar in hard dark grey ware burnished on outer surface of neck and shoulder with rusticated decoration on body of jar. (Cf. Atkinson, *Wroxeter*, 1923–7, p. 285, no. A4. First century.)
34. Hand made jar in native tradition. Brittle brown gritty fabric, black exterior surface with thick upright burnished rim and rough diagonal burnished line decoration. (Cf. Stanford, *Leintwardine, Woolhope Transactions*, Vol. XXXVI, Pt. 1, p. 99, no. 1. Antonine.)

From above the stone layer behind the town wall

The pottery in this group represents a late second century occupation. Most of the sherds were recovered from a heavily burnt destruction layer which extended behind and in front of the town wall and included the hearth level which contained a coin of Trajan. The deposit was cut through by the foundation trenches of the town wall and of the gatehouse. The levels were probably once covered by the early rampart and the pottery corresponds to that from other pre-rampart levels on the site. There was a large amount of pottery and in fabric and decoration it was similar to that found below the stone layer and described above. In addition to the illustrated sherds

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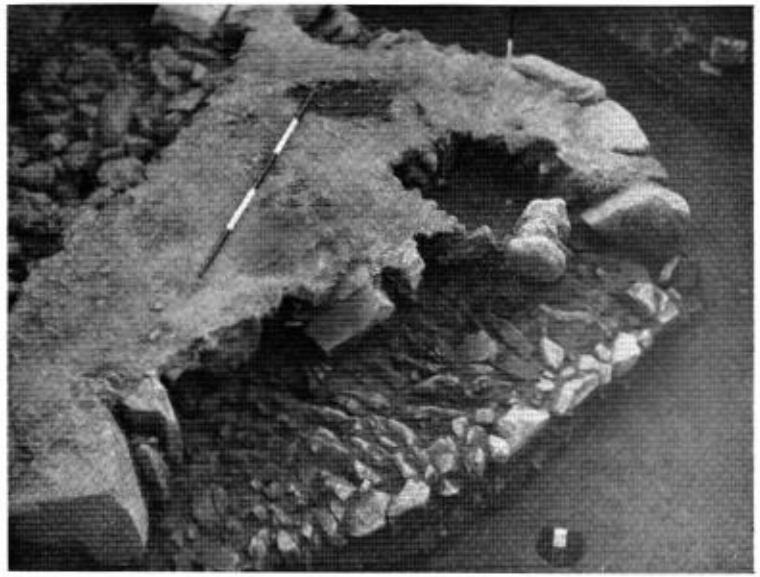

PLATE 1. KENCHESTER. WEST GATEWAY. SEMI-CIRCULAR FRONT OF SOUTH TOWER FROM NORTH-WEST

PLATE 2. KENCHESTER. WEST GATEWAY. SEMI-CIRCULAR FRONT OF SOUTH TOWER AND ADJOINING TOWN WALL FROM WEST

PLATE 3. KENCHESTER. GATEWAY FROM WEST, SHOWING ROAD I AND EDGE OF CULVERT (*top right*), PERIOD II AND III FOUNDATIONS (*centre*) AND ROADS I—III (*top left*)

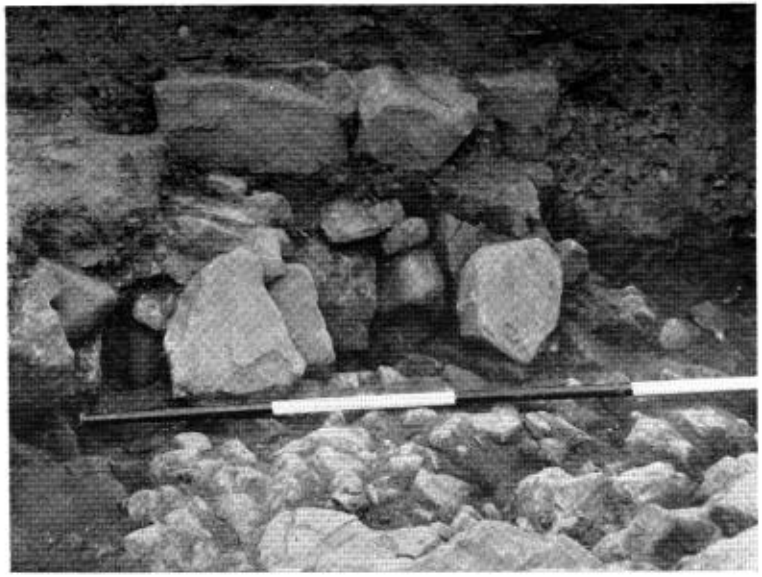

PLATE 4. KENCHESTER. PERIOD III STONEWORK IN MIDDLE OF GATEWAY FROM WEST

PLATE 5. KENCHESTER. EARLY ROMANO-BRITISH QUERN STONES

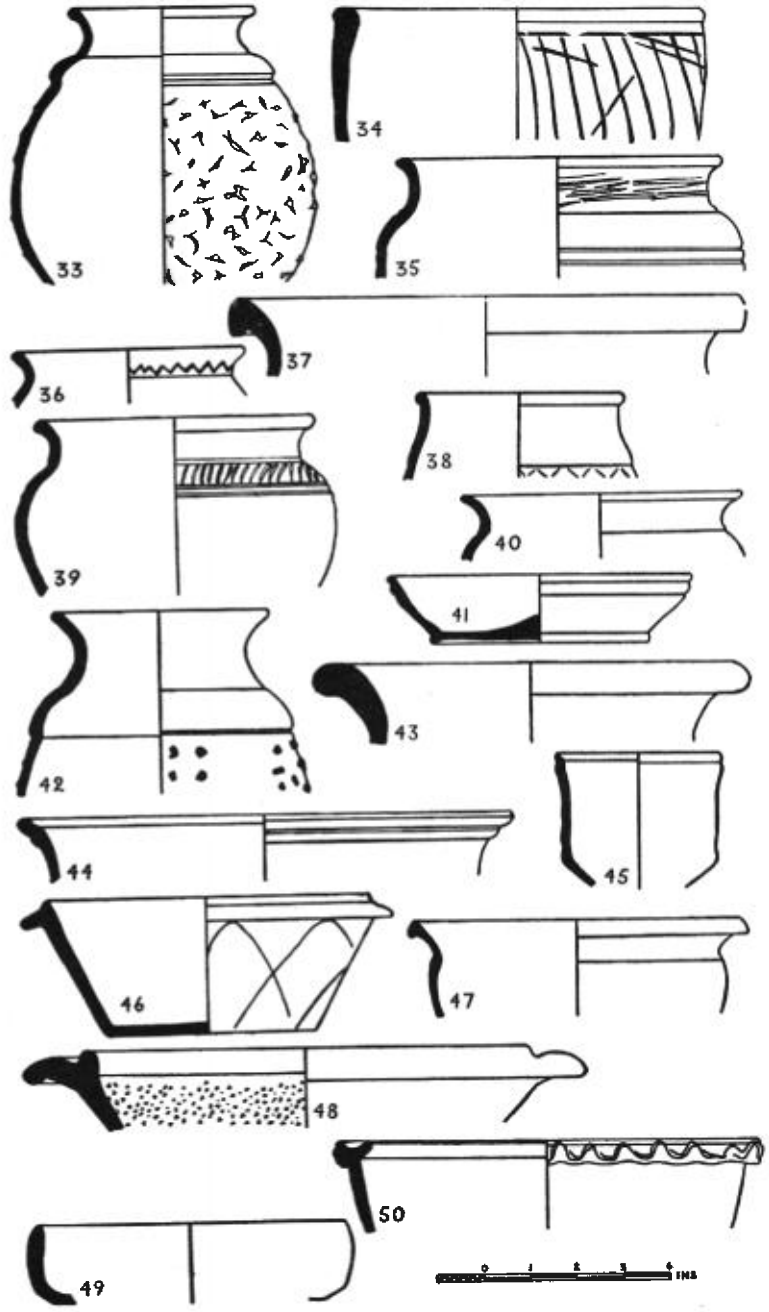

FIG. 5.

the group includes several grey vessels with small neat rims, a large number of pinkish sherds including one flagon neck, some large buff storage jars with deep angular rims and pieces from several small jars in black burnished ware. Many of the sherds were heavily burnt. The Samian ware was of good quality and is described at the end of the pottery report.

35. Necked jar of hard brownish-red ware with burnished lines under rim and two deep shoulder grooves (cf. Nash-Williams, *Caerwent. Archaeologia*, Vol. 80, p. 249, no. C16. Mid-second century).
36. Small grey ware jar with slightly outward sloping rim and running chevron decoration. A similar vessel in black ware appeared at Caerwent (*op. cit.*, p. 285, no. C16. Mid-second century).
37. Wide mouthed jar of hard brownish-red ware with heavy square undercut rim. At least four similar vessels were found in the same layer inside the gatehouse. (Cf. 1958 Report, *Woolhope Transactions*, Vol. XXXVI, p. 113, no. 11.)
38. Narrow necked bead rimmed jar of dark grey ware burnished outside and decorated with lattice pattern.
39. Necked jar of hard grey ware fired red on exterior. A band of roughly hatched diagonal lines on the shoulder is enclosed by one deep groove above and two below. For an example of similar shape and size, but without decoration, *see* Kenyon, *Sutton Walls*, p. 56, no. 1. Late second–early third century.
40. Necked jar of hard brownish-red ware, exterior slightly polished. (Cf. Kenyon, *op. cit.*, p. 49, no. 14. Early second century.)
41. Shallow dish in red ware with footing and two deep grooves below rim.
42. Storage jar with outward sloping rim and prominent bulging shoulder band at base of neck. The body of the jar is decorated with panels of raised rusticated dots.

From Ditch I

43. Light red, wide mouthed storage jar with coarse grey core, neck inclined out. This is a difficult vessel to date as the type was used throughout the Roman period. A jar of similar size and shape appeared at Caerwent (*op. cit.*, p. 249, no. C2), but this example is in hard light grey ware. Mid-second century.

From the town wall

A small number of sherds were recovered from the trench into which the butt end of the wall foundations had been built. These could all be assigned to the second century and were similar, in every case, to pottery from the destruction layer described above. The group included a hand made vessel in native tradition exactly like

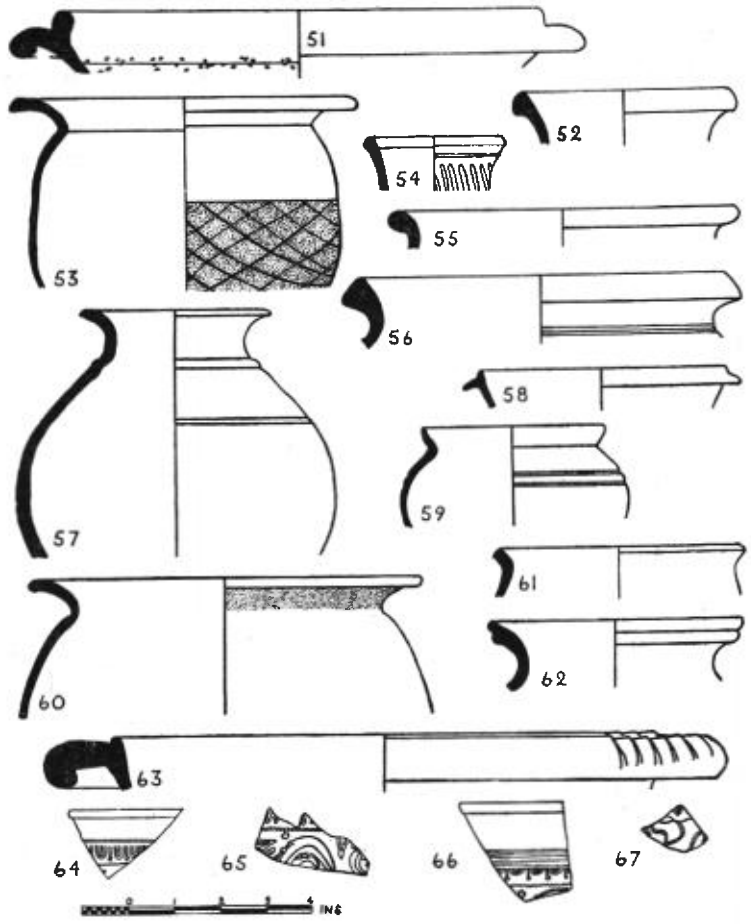

FIG. 6.

no. 34, above, and several other similar heavy calcite gritted pieces. In the other section of the wall, north of the north tower, some rustic ware and sherds from several hard red vessels with the familiar burnished line pattern were found.

From below the rampart

In the section north of the north tower a small area of rampart was removed and in the occupation layer below it were found some sherds of hard light grey ware with combed decoration (cf. 1958 Report, no. 13), one piece of very high quality rouletting and another hand made vessel similar to no. 34, above. All these can be safely dated to the early second century.

44. Wide mouthed jar in red ware with neck sloping slightly outwards and two shallow grooves under rim. There is also a groove on the inside of the rim which could have supported a lid.
45. Straight-sided carinated beaker with narrow upright rim.

From the culvert

It would be impossible to describe here more than a few of the hundreds of pieces recovered from this area. Over fifty rims of black burnished vessels alone were recorded and an interesting feature of the ware was the large number of bases of dishes found with an intersecting curved line decoration (cf. Kenyon, *Sutton Walls*, p. 49, no. 1). The imitation Samian ware included a flagon neck and a mortarium. The Samian ware was of good quality but rather badly worn. The culvert fill also contained a sherd of a colour coated beaker, numerous rims of red and brownish-red storage jars and in the silt at the bottom, a large amount of buff and brown pottery.

The dates of this assortment varied from the first to the mid-fourth century and as the culvert contained a greasy dirty loam with bones and charcoal, one might assume that the make-up of a rubbish dump was used to fill it.

46. Straight-sided flanged dish of black burnished ware with crossed curved line decoration. (Cf. Gillam, *Types of Roman Coarse Pottery in Northern Britain*, p. 64, no. 228. A.D. 310-370.)
47. Wide mouthed jar of hard red ware with overhanging rim (cf. 1958 Report, *Woolhope Transactions*, p. 113, no. 26).
48. Creamy-buff mortarium with downward curved flange curled under squarely. Plentiful small brown grits. (Cf. Gillam, *op. cit.*, p. 68, no. 276. A.D. 250–330.)
49. Shallow dish in black burnished ware (cf. Gillam, *op. cit.*, p. 71, no. 329. A.D. 190–340).
50. Straight sided dish of hard red ware with thickened upright rim, pinched " pie-crust " decoration and deep lid-seating.

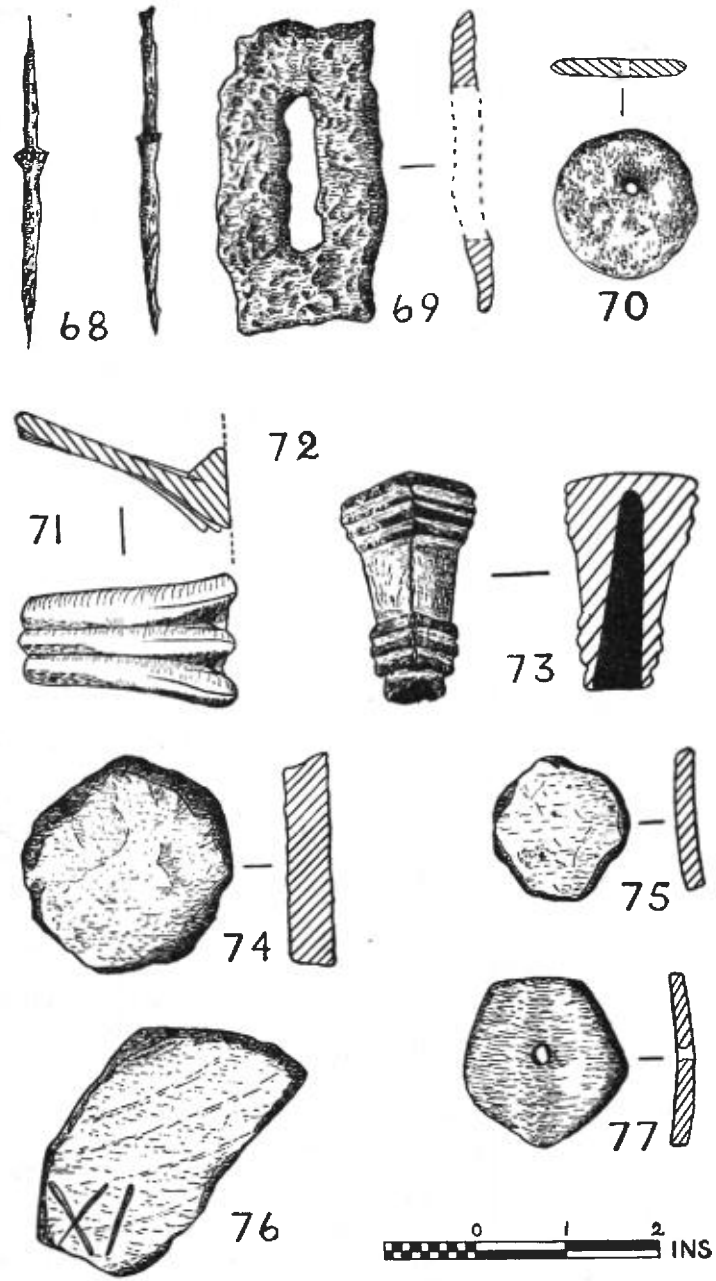

FIG. 7.

From thin sandy layer above Road I

This layer seemed to level-off the camber of the early road and was probably the lowest layer of the build-up for Road II above it.

51. Pinkish mortarium similar to no. 48, above, but with a brownish-orange coating inside (below line on illustration). Sparse brown grits.
52. Small necked jar in soft red ware with thickened rim. (Cf. Atkinson, *Wroxeter*, 1936–7, Fig. 10, no. 24. Extremely common second-early third century type.)
53. Black, highly burnished cooking pot with overhanging rim and obtuse angled lattice decoration on a roughened band round body of pot. (Cf. Nash-Williams, *op. cit.*, p. 287, no. C69, Fourth century.)

Unstratified

54. Neck of small jar or beaker of hard reddish-brown ware, burnished on exterior. The rim is upright and thickened slightly and the neck has a decoration of rough diagonal burnished lines. From area north of north tower.
55. Heavy rolled rim of hard grey jar. From above roads.
56. Wide mouthed jar of soft red ware with several shallow grooves between neck and shoulder. From above roads.
57. Narrow necked jar of hard red ware slightly polished on exterior. From above roads.
58. Small light grey dish with downward sloping flange (cf. Kenyon, *Sutton Walls*, p. 51, no. 4. *Jewry Wall*, Fig. 19, no. 28, where it first occurs in the early fourth century, but on other sites it may appear by A.D. 200). From above town wall south of south tower.
59. Small bowl of red ware with high rim, almost upright, exterior slightly burnished and mica-dusted. Two girth grooves on shoulder. An example in light grey ware appears at Sutton Walls (*op. cit.*, p. 50, no. 1). This one has a combed pattern below the grooves. An Augustan date is suggested. In area of town wall north of north tower.
60. Black burnished cooking pot with wide sloping rim (cf. Gillam, *op. cit.*, p. 56, no. 138. A.D. 180–250). From above roads.
61. Small jar with neat everted rim of hard pale creamy fabric. From surface of Road III.
62. Narrow mouthed jar of soft red ware with thickened rim. A vessel of similar pattern in light grey ware appears in *The Town and Villa of Great Casterton, Rutland*, p. 29, no. 14. This example is fourth century. From surface of Road III.

63. Heavy pink mortarium with low rim and broad flange curled under sharply. The rim has been deeply scratched, probably in preparation for a repair. From above *spina*.

THE SAMIAN

No. 64, below, was from below the stone layer behind the town wall. The remaining sherds (including three undecorated pieces which are not illustrated) were from the destruction layer above the stone layer behind the town wall.

Mr. B. R. Hartley, who kindly studied the Samian ware, reports as follows:

64. Rim and ovolo of a small South Gaulish form 37 with brilliant glaze. The narrow ovolo with four-pronged tongue turned to right occurs on stamped bowls of M. CRESTIO (e.g. Grimes, *Holt*, Fig. 40, no. 70). *c.* A.D. 75–100.
65. Two joining fragments from a South Gaulish form 37 with chevron wreath above a large scroll with stirrup leaves. Dull brown glaze and thick cable borders. As both the features of the decoration can be matched in the Pompeii Hoard of A.D. 79 (*Journal of Roman Studies*, IV, plate XV, 77), the style was current by that date. However, the poor moulding and fabric suggest slightly later manufacture for this piece, *c.* A.D. 85–105.
66. Form 37 rim with upper part of decoration. Heavily burnt. The ovolo (partly sheared off in attaching the rim) is an uncommon one noted only on bowls by AVSTRVS (cf. Stanfield and Simpson, *Central Gaulish Potters*, pl. 95, 13–14). As an unpublished bowl from Godmanchester in the style of AVSTRVS has this ovolo combined with the same type of sharp wavy line and the rosette of the Kenchester piece, attribution to him seems the more probable. (This ovolo does not occur in the work of his Blickweiler period, so a Central Gaulish origin is certain.)

    I know no evidence to suggest (with Stanfield and Simpson) that AVSTRVS was still working in the Antonine period. Dr. H. Schönberger kindly tells me that in his opinion there is no reason to put any of the German pieces so late. On the whole, then, a date *c.* A.D. 115–140 seems preferable.
67. A scrap of form 37 with the characteristic stalks and leaf of DRVSVS I (Stanfield's X3) of Martres de Veyre (Stanfield and Simpson, *op. cit.*, pl. 12, 143). *c.* A.D. 100–120.

    Form 18/31R or, less probably, 31R. Heavily burnt. Form 18/31R was not uncommon in Hadrian's reign (*Trans. Cumberland and Westmorland Soc.*, N.S. XXX, p. 184, with fig. 11, 1–3), though this piece could be rather later, if form 31.

Form 37 rim. Heavily burnt. Not closely datable, but unlikely to be pre-Hadrianic.

Form 18/31 (Ludowici Tq), Central Gaulish. Hadrianic or early Antonine.

The Small Finds (Fig. 7)

The numbered objects are illustrated in Fig. 7 and the two quern stones in Plate 5.

Iron

68. Small tool. ? Auger or awl. Shank may have a screw point, but poor condition makes it difficult to be certain about this. Ring of small indentations at junction of shank and haft. From above Road III. Two different planes illustrated.
69. Rectangular object with central slot. Possibly a bracing piece used in constructional work. Badly corroded. From destruction layer above second century stone layer behind town wall.

    Badly corroded fragment with one relatively smooth concave face. Length: 1·4 in.; width: 0·5 in.–0·9 in.; thickness: 0·4 in.–0·7 in. From Road I.

    ? Head of boss or large nail. Corrosion makes it impossible to determine purpose with certainty. Diameter of head: 1·8 in.; thickness: 0·4 in. Small portion of ? shank (diameter: 0·6 in.) remaining. From above Road III.

    Nails. Large number recovered, chiefly from second century destruction layer south of south tower (8), culvert (20), outer ditch extension (3) and Road III (6). Those in the destruction layer south of the south tower measured up to 2·6 in. in length. The nails of the later period averaged about 3·0 in. and some were even a little longer.

    Fragments of slag were met with in the culvert filling, Road III and the destruction layer south of the south tower.

Lead

70. Loom weight. Heavily encrusted with sand. From Trajanic hearth level in front of town wall.

    Disc. Plain with superficial scratches. Diameter: 1·5 in.; thickness: 0·15 in. From above gateway foundations, unstratified.

    Rough fused strip. Approx. dimensions: 2·6 in. × 1·1 in. From gateway area, unstratified.

Bronze

Six small fragments. From culvert filling.

Glass

71. Part of handle of cylindrical jug or amphora of colourless glass. Mid-third to early fourth century (cf. C. Isings, *Roman Glass from Dated Finds*, form 126 or 127, pp. 156 ff.).[1] From culvert filling.

Bone

72. Pin with rounded head. From outer ditch extension.

    Large quantity of bones of domestic animals, chiefly unstratified, from east side of site and upper levels of the culvert.

Stone and ceramic

73. Alabaster finial. Purpose unknown, but probably decorative. No sign of metal staining in central socket, making it likely that the object was fixed onto a staff or stone spike. Blue-grey colour with a creamy white vein down one corner and side. Though extensively scratched and chipped, it retains a dark glossy finish, particularly on the top and projecting surfaces. Top slightly convex and worn down at the edges; rim of socket also distinctly worn down at one side. The carving lacks precision and toolmarks are visible. From unstratified level south-west of south tower.
74, 75. Stone and ceramic counters or bungs. All approximately circular in shape and crudely finished. Six of sandstone; diameters: 3·5 in., 2·75 in., 2·5 in., 2·0 in., 1·5 in. 1·0 in. Five of red ware, one a base; diameters: 1·8 in., 1·5 in., 1·5 in., 1·5 in., 0·8 in. One of white ware, a base; diameter: 1·5 in. From culvert filling. Two illustrated (sandstone, 2·0 in. and red ware 1·5 in.) as typical of the group.
76. Graffito. Red ware sherd inscribed XI (or IX). from above town wall on south side of site, unstratified.
77. Loom weight. Red ware. From second century stone layer south of south tower.

    Quern stone of puddingstone. Early Romano-British (*see* E. C. Curwen, *Querns. Antiquity*, Vol. XI). Nearly half of lower stone, broken away at perforation, which is slightly offset from centre. Diameter: 8·8 in. Thickness: at perforation 3·3 in.; at outer edge, 1·5 in. Diameter of perforation: at top, 0·8 in.; at bottom, 1·5 in. Angle of grinding surface: 15°, although greater than this on one side where the stone has been subjected to excessive wear as a result of the asymmetrical positioning of the perforation. Grooving in parallel lines tangential to centre on remaining segment. Rough, more or less flat bottom. From below Road I. (Plate 5, right).

[1] Identification by Dr. D. B. Harden.

Quern stone of puddingstone. Early Romano-British (Curwen, *op. cit.*). Half lower stone, including all central perforation and raised lip. Diameter: 8·5 in. Thickness: at perforation, 4·5 in.; at outer edge, 2·3 in. Diameter of perforation: at top, 1·8 in.; at bottom, 1·0 in. Angle of grinding surface: 10°. Grooving in parallel lines tangential to central perforation. From south-west of south tower, unstratified. (Plate 5, left.)

Flint scraper. Little worked and with broken tip. Length: 2·3 in.; width: 1·7 in. From Trajanic hearth level in front of town wall.

Tesserae: One (grey) from foundations of south tower; one (white) from culvert filling.

The Coins

The coins were identified by Mr. J. F. L. Norwood, who has recorded them in detail in his annual review of coin finds (*Woolhope Transactions*, 1960 and 1961).

Copper as of Trajan. *Roman Imperial Coinage*, 440. Minted A.D. 101–3. From hearth cut into by town wall, south of north tower.

Orichalcum sestertius of Trajan, post *c.* A.D. 106. Unstratified. From above semi-circular front of south tower.

Billon antoninianus of Postumus (A.D. 259–267). *R.I.C.*, 59. Unstratified. From above semi-circular front of south tower.

Billon antoninianus of Carausius (A.D. 286–93). *R.I.C.*, 888. Unstratified. From south of south tower.

Bronze of Crispus Caesar, minted *c.* A.D. 320–24. From above foundations of north wall of south tower.

Commemorative antoninianus of Claudius II Gothicus (A.D. 268–70). Originally silver washed. *R.I.C.*, 261. Unstratified. From above foundations in the middle of gateway.

Bronze of Tetricus I (A.D. 270–73) in poor condition. Unstratified. From above town wall foundations.

THE HUNTSHAM ROMANO-BRITISH VILLA

FIRST REPORT

By N. P. Bridgewater, B.Sc.

Summary

This report describes the excavation in 1960 and 1961[1] of one building—an aisled (or basilican type) barn—on an extensive site in South Herefordshire (N.G.R. SO/565176).

The barn, measuring 65 feet by 44 feet, was in use for possibly 70 years, from the late third to mid-fourth century, when it was demolished.

Three functional periods, with only approximate dates, can be distinguished:

I.—The main barn structure with stone walls and probably a timber superstructure, stone-tiled roof, and earthen floor. The date of erection is not known, but about A.D. 280 is suggested.

II.—A double T-shaped corn drier was constructed in a space dug out for this purpose at the north end of the hall. It was in use in A.D. 300 and was discarded in A.D. 320.

III.—Two washing tanks were inserted into the northern end of the western aisle, and partly overlying the corn drier. These were in use until about A.D. 350.

An underground water collecting tank was constructed in the eastern aisle during either Periods II or III.

Description of the Site

The whole site, thought to occupy twenty acres, lies on the First Terrace Gravel in a loop of the Wye, below Huntsham hill. Large quantities of gravel occurred at most levels, and the site was obviously chosen because it was then, as it is now, well above the surrounding flood plain.

The settlement was probably reached by a crossing of the river at the point where the present lane crosses. This would have linked it with the Roman road to Monmouth.

[1] Grateful acknowledgement is given to Major J. H. Vaughan for permission to excavate, and to Mr. F. W. Green for his co-operation and interest and for practical help in backfilling. The work was carried out by members of the Archenfield Archæological Group, in particular, Col. A. Bellhouse, A. Clarke, A. Fleming, H. Armstrong, R. E. Kay, A. Jennings, and also A. Selway, S. Clarke, and K. McCarthy. Thanks are also due to Dr. G. Webster, M.A., F.S.A., and Mr. S. C. Stanford, B.A., F.S.A., for useful advice on technical details.

The Group is indebted to the Carnegie United Kingdom Trust for financial help toward the purchase of equipment, which has been of help in training members in excavation techniques.

Surface finds produced by deep ploughing suggested that the site had been occupied. Aerial photographs taken by Mr. A. Baker made conjecture certainty.[1] An interpretation of these crop marks in sugar beet suggests the presence of a complex site (see Fig. 1), and trial excavations have confirmed the existence of some of these features.

The position of the aisled barn is shown in Fig. 2, and Enclosure A is also included because ground photographs revealed the relevant crop mark very plainly. One arm of this enclosure has been sectioned, giving the footings of a robbed precinct wall.[2]

Proximity to the multivallate hill fort behind the Yat-rock must not be overlooked and the relationship between the Iron Age and Romano-British occupations in this area should prove to be an interesting study.

Ekwall[3] records that Huntsham was called *Hondsum* in A.D. 1200, and *Hunsum* in A.D. 1233, and suggests the probable use of O. E. hondsum (=handsome) as a byname and personal surname which was later transferred to the place.

Nature of the Problems

This site represents the settlement of successive Romanised native communities, possibly lasting for three centuries,[4] and embracing several structural elements. At present we have proof for the use of a dwelling house, a barn, and an enclosure. Excavation of these and other structures, singly and completely, is planned in order to piece together the history of the community.

Apart from fragments of stonework and pottery revealed by ploughing, there are no surface indications of the structural features. Crops of barley and beet are regularly grown here; hence the excavations are backfilled at the completion of each season's work.

The Excavation (plan of barn, Fig. 3)

The Walls. The remaining trench-built wall footings were sectioned in several places. The upper wall structure, which had been mortared, was missing, but this had been laid upon two courses of unmortared stones of roughly shaped sandstone, resting upon large irregular pitched footings (see section A, Fig. 4). The depth of footings varied; at the bonded joints of the inner walls with the southern end-wall, this was about 5 feet. The western inner wall adjacent to the corn drier was 4 feet deep, whilst the same wall was only 14 in. deep at a point 5 feet south of the rectangular tank. The north end-wall

[1] Crop density measurements were made across one arm of Enclosure A.
[2] Enclosure A will be thoroughly excavated in the future.
[3] *English Place Names*, Ekwall, 1960.
[4] Second century pottery has been found.

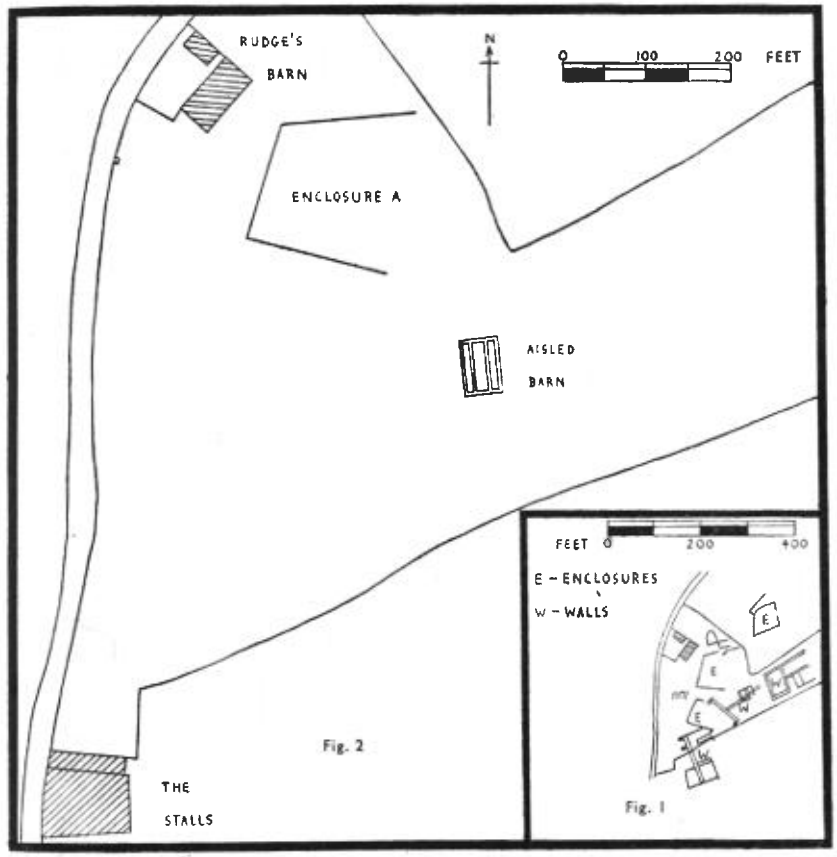

Fig. 1. Interpretation of aerial photograph
Fig. 2. Showing two identified features

footings had been robbed down to subsoil level, but the backfill of the robber trench could be distinguished, and at the top of it was found a thirteenth century cooking pot rim.

In the south-west corner of the barn, provision for drainage had been made, because here the bottom wall courses were omitted. In the north-east corner, too, traces of an external drainage channel were discovered.

The Corn Drying Unit consisting of two T-shaped flues built side by side, occupied the whole width of the hall near the north end, the flues being 13 feet long. The two flues were contemporary, and the single cross arm appears to have been blocked up between them. As the superstructure was missing, it cannot be decided whether the two flues could be worked independently, but this seems likely.

Section A, Fig. 4, shows that the supporting wall of the western-most drier is not bonded to the building wall. It was solidly built of well-square sandstone blocks, resting upon the natural red sandy loam, the floor of the flues sloping up behind the stoking end, to the subsoil level. In each flue there was a uniform thickness of ash layer, covering a hard pan near the stoking end. The western flue ash, which was 8 in. thick, contained three late third century coins,[1] badly worn. A very good specimen of a hunting spearhead[2] was found at the bottom of the layer. A similar coin occurred in the destruction layer above. The ash layer of the eastern flue was only 4 in. thick, and contained a storage jar rim (No. 1, Fig. 5). There were charred sticks and a little coal in both ash layers.

The Rectangular Processing Tanks. These two tanks are similar, but not identical, in size, shape, and construction, the chief feature being the use of *opus signinum* for the walls and the quarter-round fillet sealing the bases and corners of the tanks. The westernmost tank, however, had a single stone slab as its base, and possessed only an outlet, whereas the other tank had an *opus signinum* base, together with both inlet and outlet.

The original wall height could not be determined, but portions up to one foot high were found standing, and the presence of stone packing around both tanks indicates the need for supporting the walls, which were only 2½ in. thick, against the outward thrust of contained liquid.

In each tank, the outlet consisted of a lead pipe, diameter 2½ in., encased in a channel constructed of red brick, both discharging into a common drain. Unfortunately the inlet to the eastern-most tank had been demolished. The drain was also well constructed, the length

[1] Kindly examined by C. Scott-Garrett, D.SC., and J. F. L. Norwood, B.A.
[2] Drawn and described in the *Journal of Roman Studies*, Vol. LI (1961), 172.

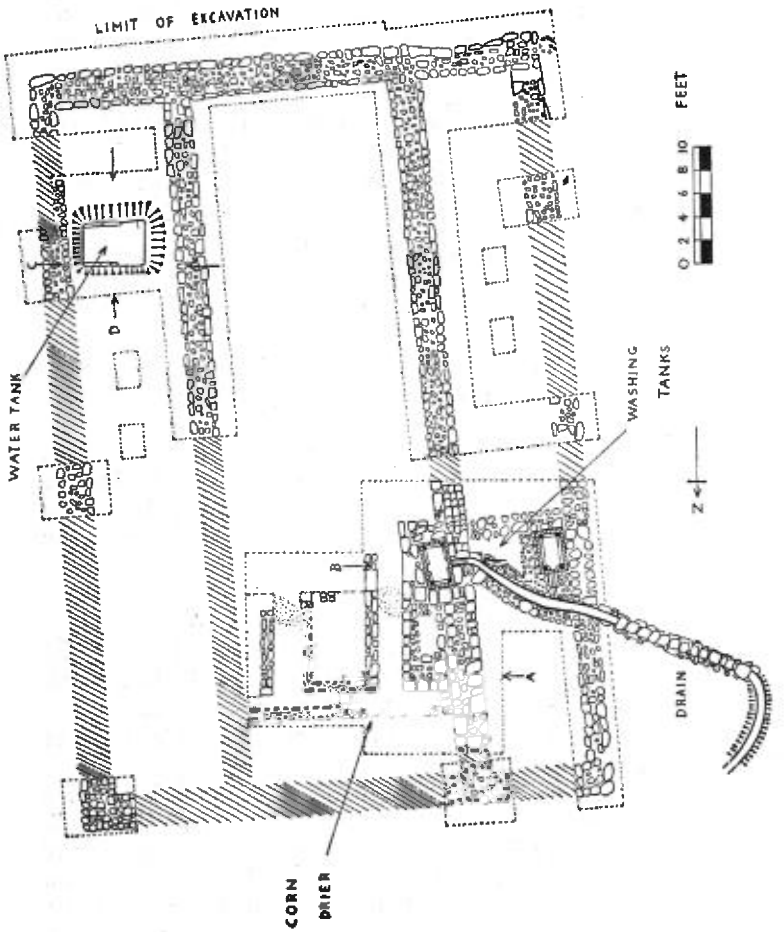

FIG. 3. PLAN OF AISLED BARN

inside the building having sides of *opus signinum* resting upon stone slabs which were set in purple-coloured clay. At one place, a tegula cover was discovered *in situ*. The character of the drain outside the barn was different; here the sides and covers were all of sandstone, there being no laid floor. Beyond this stretch, the drain curved to the north, and deteriorated into a V-shaped gulley cut into the subsoil. At this point the hollow had been filled with rubble containing pottery (Nos. 8, 12, 13, Fig. 5), and a round sandstone drain cover, 13 in. diameter and ½ in. thick.

The construction of the eastern-most tank, and its relationship to the inner wall and corn drier is shown in section B, Fig. 4. The whole area around and between the two tanks and the drain had been set with stones which rested upon the natural.

The Underground Water Tank. At the south end of the eastern aisle was an underground tank (sections C and D, Fig. 4). Its base was a single sandstone slab resting upon an applied layer of green clay, which also formed the backing to the vertical stone slabs lining the sides of the tank, but only a few of these remained. Probably there had been a cover, resting upon the clay sides, but of this no trace was found.

There was some evidence for an overflow, as one of the side slabs was notched, and a channel was found in the sandy fill behind the clay wall adjacent to it. If this is accepted, the effective tank capacity was 140 gallons, whereas the total capacity without an overflow would have been 170 gallons.

As excavated, the tank floor was covered with broken sandstone roofing tiles, these being hexagonally shaped and 1½ in. thick, in contrast to those discovered in the dark fill (layer 3) which had curved tops and were 1⅛ in. thick. The pottery found in the dark fill consisted of bowls and cooking pots of third to fourth century forms (Nos. 5, 7, 9, 10, Fig. 5), and there was also a third brass of Crispus in almost mint condition.[1]

The green clay used in the construction of this tank is of some interest, as it is likely to have been brought from Huntsham hill, close at hand. It was noticed that many fragments of charcoal were embedded in it, and this suggests that such clay had been stored on the site prior to use in the tank. It is possible that a stock of clay was held for pottery making, and in fact it has recently been used successfully for this purpose.[2]

The post-building topsoil in the area adjacent to the tank contained coarse pottery of fourth century forms (Nos. 4, 6, 11, Fig. 5).

[1] I am indebted to Dr. J. P. C. Kent for his opinion on this coin.
[2] A model Roman lamp has been made with this clay in a gas-fired kiln by Mr. O. Macieg, of Monmouth School.

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UNDERGROUND WATER TANK, FROM WEST

EASTERN PROCESSING TANK, FROM EAST

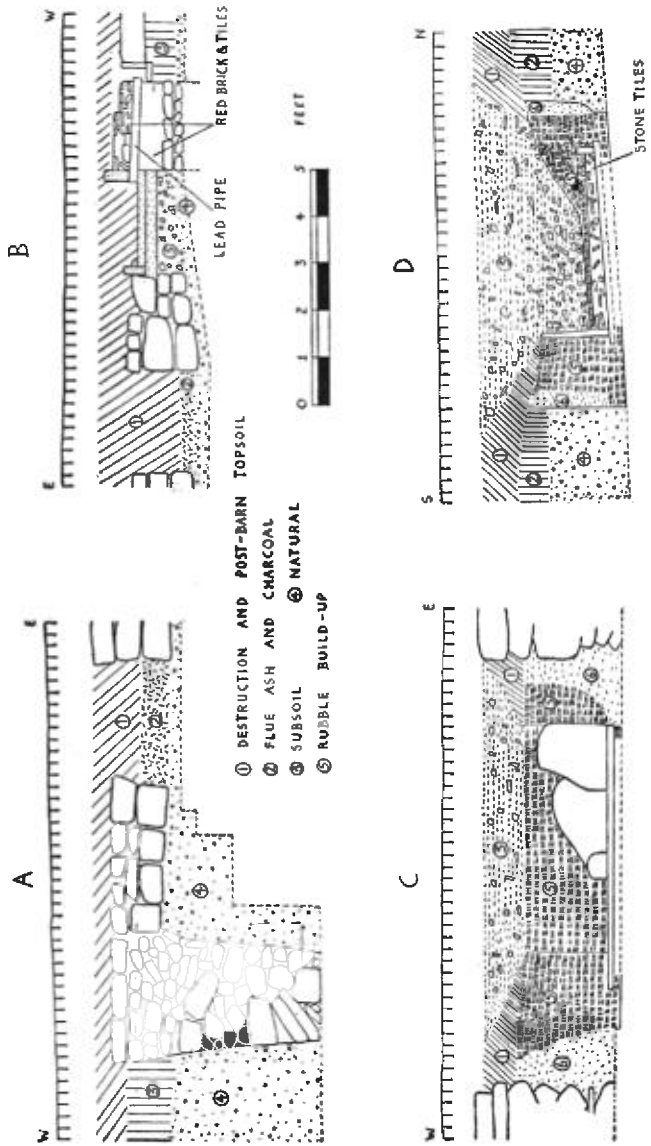

FIG. 4. EXCAVATION SECTIONS

THE FINDS

A. *Coarse Pottery* (see Fig. 5)

1. Storage jar, buff-grey, of hard-textured fabric, with fine burnished rilling. Very wide rim with pronounced roll-over. Suggestive of New Forest forms. Probably about A.D. 300. See Heywood Sumner. *Excavations in New Forest Roman Pottery Sites*, plate XI, no. 7, and plate XVIII, no. 6.
2. Necked bowl. Light brick-red, soft fabric with grey matrix containing a few gritty particles. Second–fourth century form. *Sutton Walls*, fig. 16, no. 11.
3. Necked jar. Light brick-red soft fabric. High, slightly flaring neck, rim thickened. Second–fourth century form. See K. M. Kenyon. *Excavations at Sutton Walls, Herefordshire, 1948–51*, 1954. Fig. 16, No. 12.
4. Black burnished cooking pot. Possibly fourth century. See V. E. Nash-Williams. *The Roman Villa at Llantwit Major, Glam.* Arch. Cam., 1953, Fig. 17, No. 163.
5. Black burnished cooking pot. Possibly third or fourth century form. *Gillam. Arch. Ael.*, 4th series, Vol. XXXV, No. 147.
6. Decorated sherd of beaker, soft light-red coloured fabric. Fragments of colour coating remain.
7. Grooved rim of bowl, in buff ware of hard texture.
8. Bead rimmed bowl, of black burnished ware. Second to fourth century form. Common in period VI, A.D. 220. See K. M. Kenyon, *Jewry Wall*, p. 86.
9. Wide-mouthed bowl, with high flaring neck, rim turned out and thickened, rounded shoulder. A hard-textured fabric of brick-red colour. Second to fourth century form. See *Jewry Wall*, Fig. 24, No. 12.
10. Black burnished flanged pie dish. Mid-fourth century form. *Jewry Wall*, Fig. 19, No. 28.
11. Black burnished pie dish with curved flange. Mid-fourth century form. *Jewry Wall*, Fig. 19, No. 31.
12. Black burnished pie dish. Rim forms a sharp angle with wall, both inside and out. Traces of acute lattice pattern externally. A common second century form, Type A, *Jewry Wall*, Fig. 19, No. 10.
13. Wide-mouthed bowl of soft-textured, light-red fabric. Simple rim, short shoulder, and girth groove. This form cannot be identified.

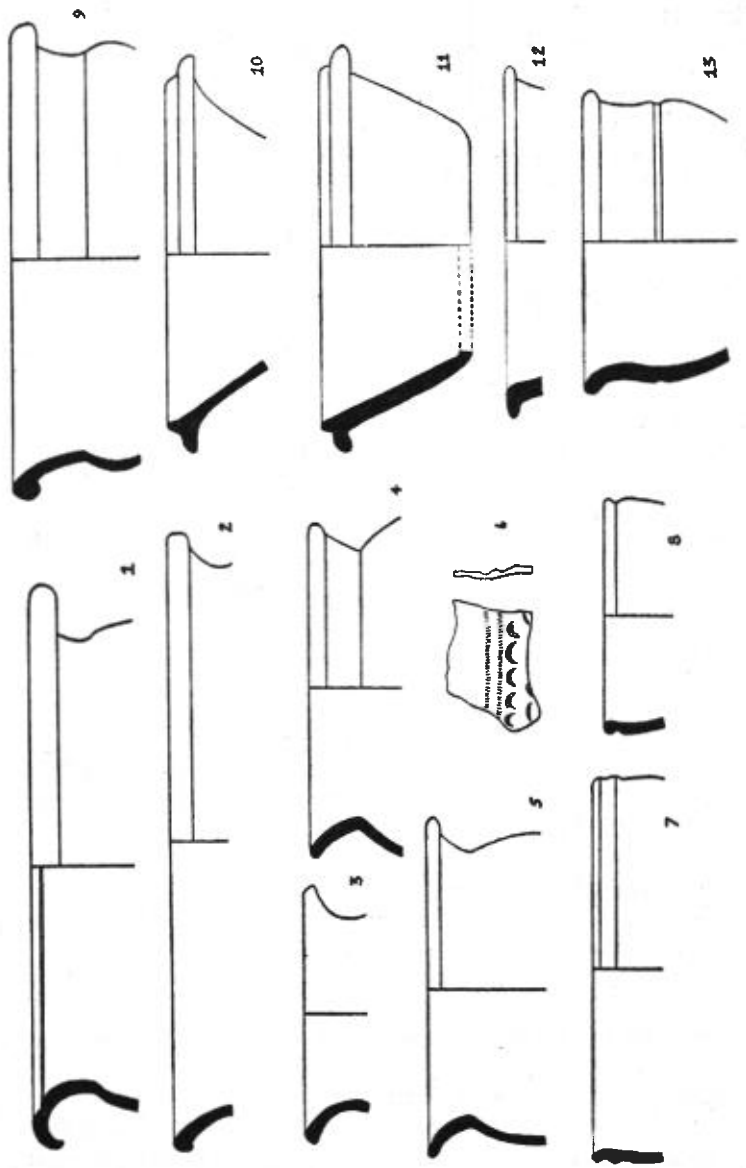

FIG. 5 POTTERY (¼)

Some of the fabrics and forms here shown are paralleled at Cirencester and Wroxeter, and the Corinium Museum, Cirencester possesses a decorated sherd very similar to our No. 6.

B. *The Hunting Spearhead*[1]

Found in the corn drier ash layer, this was of heavy iron, 1 lb. 5½ oz., in weight, and 20 in. in length. It appears to be a thrusting spear, used in hunting from horseback, and there are spurs on each side to prevent the spear penetrating too deeply, and to facilitate withdrawal. When found, the socket contained fragments of wood.

There is a similar spear in Mainz Museum, described by Lindenschmidt.[2] Couissin[3] refers to them as " throwing spears " and thought the type was used in the late Roman army, and referred to by Vegetius (as " vericulam nunc verutum dicitur ") who believed they were originally used by the Germans.

C. *The Coins*

1. Billon antoninianus of Victorinus (A.D. 265–270). Badly worn.
   Obv. IMP C) VICTORINVS PF AVG. Radiate draped bust right.
   Rev. IN) V (ICT) VS. Sol. walking left, right hand raised, left holding whip. Star in field.
   Mint of Cologne (Colonia Agrippinensis). Roman Imperial Coinage No. 114.
   Found in bottom quarter of ash layer of western-most corn drying flue.
2. Billon antoninianus of Carausius (A.D. 287–293). Badly worn.
   Obv. IMP) CARAVSIUS PF. AVG. Radiate cuirassed bust right.
   Rev. PAX AVG. Pax standing left holding olive branch and vertical sceptre.
   S/C
   Mm: MLXXI London or Camulodunum.
   Found on surface of ash layer of western-most corn drying flue.
3. Billon antoninianus of Carausius. Badly worn.
   Obv. IMP CAR) AVSIVS PF (AVG. Radiate cuirassed bust right.
   Rev. PA (X AV)G. Pax standing left holding olive branch and vertical sceptre.
   Mm: Mint of London or Camulodunum.
   Found on surface of ash layer of western-most corn drying flue.

[1] I am obliged to Miss M. V. Taylor, C.B.E., F.S.A., for the identification and for the following references. Cleaning and treatment of the spearhead was kindly undertaken by Mr. G. C. Boon, F.S.A., National Museum of Wales.
[2] *Das roemisch-germanische Central-Museum* (Mainz, 1899), Taf. XIII, 14 or 23.
[3] *Les armes romaines* (1926), 482, f., fig. 180–1.

4. Billon antoninianus of Carausius. Badly worn.
   Obv. IMP CARAVSIVS PF AVG. Bust with radiate crown right.
   Rev. PIETAS AVG G. Piety standing before altar left, holding hasta in left arm.
   Mint ML. London.
   Found in destruction and post-barn topsoil near corn driers.
5. Third Brass of Crispus, in almost mint condition (A.D. 320–321).
   Obv. IVL CRISPVS . NOB . CAES. Bust in armour and laureated, holding spear over right shoulder, facing left.
   Rev. BEATA TRANQVILLITAS around altar bearing VOTIS XX three stars over.
   Mint STR)– Trier.
   Found in dark fill of underground water tank.

D. *Lodgement of Finds*

These are in the possession of the writer, but their final deposition will be decided by their owner, Major J. H. Vaughan. The hunting spearhead is on loan to the Hereford City Museum.

Discussion and Interpretation

The evidence of the wall structures and their relation to the corn drier (see section A, Fig. 4), shows that they were constructed in Period I, and as the corners and junctions were all bonded, all the walls were contemporary.

There was no indication of the kind of superstructure carried by the walls, but it could well have been timber framed, resting on stone sills. The wall footings were, in most places, carried to a great depth, and it can be calculated that the roof weight was about 36 tons.[1]

No evidence of floor construction was found but probably the original ground surface was sufficient. The presence of several stone roof tiles suggests that these were used on this building. The provision for drainage at the south-west and north-east corners suggests that at one time cattle were housed in the aisles.

In the absence of sealed dating materials, it can only be asserted that the Period I barn was in use before A.D. 300.

In Period II, the northern end of the hall was dug out to receive the corn drier, and section A, Fig. 4, shows the absence of the subsoil layer (No. 3) to the east of the trench-filled footings, whereas it was present behind the stoking end of the flues. The arched effect produced by the upper courses of flue stones is noteworthy, and this

[1] The stone tiles would overlap to give a diamond pattern. Hence each tile has an exposed surface about 12 in. × 6 in., and weighs 12 lb. Assuming that one roof covers the whole barn, at a 30 degrees pitch, the number of tiles would be 2 × (65 × 52)=6760.

design probably facilitated the floor construction above. As neither the corn drier floors remained, nor could any carbonised grain be found, the identification of this feature rests solely upon a knowledge of the standardised pattern of corn driers frequently found in the excavation of villa sites.

A tentative dating for the use of the drier is supplied by the coin evidence, allowing 30 years for their circulation. The coin of Victorinus (A.D. 265–270) was found in the bottom quarter of the ash layer, whilst two coins of Carausius (A.D. 287–293) lay at the top. The other coin of Carausius was found in the destruction and post-barn topsoil. Hence the corn drier was in use around A.D. 300 and was discarded by about A.D. 320.

Some consideration must be given to the mode of formation of the ash layers, because, whereas soot would be expected to form on the roof and sides of the flues, ashes would accumulate at the stoking end and be removed by frequent raking. The spearhead was discovered at the far end of the flue, lying under the ash, upon the natural and it is possible that it was thrown in at the time of flue construction.

Consideration of the eastern rectangular processing tank (see section B, Fig. 4 and Plan, Fig. 3), shows that in Period III it was built over part of the corn drier and its packing (layer 5) and base are supported by the rear of the flue wall. It is also clear that the upper part of the inner wall was either absent at this time or had been dismantled to receive the tank.

No satisfactory explanation of the function of these tanks can be given. Of the various possible processes, such as malting, dyeing, tanning, the most likely is that of wool washing, and the presence of both an inlet and outlet in the eastern tank suggests the application of an oil flotation principle. The effluent from wool washing would have been obnoxious and the lengthy drain would have carried it clear of the building.

Some support for the suggestion of wool washing exists in the alleged use, in the 19th century, of a rectangular stone tank for this purpose, now lodged in the basement of the High House (formerly The Woolhouse) at Notgrove, on the Cotswolds.[1]

The finding of mid-fourth century forms of pottery suggests a tentative dating of A.D. 320–350 for our Period III.

It is unlikely that the barn was used as a granary, although a small temporary stock of dried grain may have been stored in the central part of the barn. No traces of ventilators were found, but the robbing of the lower courses was probably too drastic to show this feature. It has been suggested that corn was gathered green and subsequently

[1] Kindly shown to the writer by the owner, Mr. Goodfellow. The existence of this tank was revealed by Mr. R. D. Abbott, Curator of Gloucester Folk Museum.

parched to make it keep.[1] Another possibility, however, is that the drying of ripe corn may have been carried out annually as a routine procedure, which would have been essential if climatic conditions were slightly wetter than at present.

The underground water tank in the eastern aisle could belong to either of Periods II or III, but the date of insertion cannot be determined. Section C (Fig. 4) shows that the necessary space was dug, cutting into the fill of the barn wall foundation trenches. Into this pit was laid a green clay, upon which was placed the sandstone base. The sides of the pit were then probably boarded, and clay built up on all four sides, covering the edges of the base to seal it. The inner faces of the clay walls were lined with slabs, but at one point a notched slab was used to take the overflow, connecting with the channel behind. This tank was probably used to catch rain water for domestic use and an overflow would have been essential; drainage through the underlying sandy and pebbly soil is naturally rapid.

The subsequent history of the tank is revealed in the stratification (sections C and D, Fig. 4). The small quantity of stony destruction around the building and the scarcity of nails suggests a complete and rapid dismantling of the barn soon after abandonment. The layer of broken roofing tiles on the tank bottom could represent a few which had been broken during removal, which were simply thrown into the convenient pit. We can therefore visualise a removal of all useful building materials, including robbing of the walls down to ground level, for use in rebuilding elsewhere. The site would have been levelled out, but the tank left open as a useful receptacle for domestic rubbish, and the layers 1 and 3 (section C, Fig. 4) illustrate this point. Pottery of fourth century form was also found in the post-barn topsoil near the walls in this area.

Why it should have been expedient to demolish the barn is not yet apparent, but one may surmise the existence of later buildings in the settlement.

In conclusion, a picture emerges which is comparable with countryside economies in the other parts of Britain. Here is the barn of a farming community, either owned or supervised by a Romano-British farmer, taking in the grain from the surrounding broad acres which after threshing and drying, was despatched to other parts. If the interpretation is correct, there was, too, the possibility of sheep farming. We can also see the barn serving as a dwelling for farm workers, and possibly as a shelter for livestock. This scene of activity was spread over 70 years or more, so that several generations are involved; and there are hints that both before and after these times the settlement was flourishing.

[1] *Roman Britain*. I. A. Richmond, p. 126.

THE STREET NAMES OF HEREFORD, 1757–1961

By David Spiers

Isaac Taylor's plan of the city produced in 1757 gives the names of the streets as they were then but since that time many changes have taken place. The town has outgrown the framework of its ancient walls and suburbs near the gates so that now its suburbs stretch far beyond the old limits into areas once open country. Much of this development followed the city improvements of the eighteen-fifties. A study of the names given in the last two hundred years to the streets—new names for old streets and old names for new streets—reflects something of the city's social and economic development.

It seemed therefore that an attempt to find all the names that any street has had since Taylor's Map, and to determine the origin of these names might be of value in illustrating and recounting one aspect of the town's development. This is realized when the types of names found are seen to fall into groups. First there are the old and ancient names for the old streets of the city, e.g. Widemarsh Street; then there are the new names given in the nineteenth century to old streets under the improvement schemes (such as Commercial Street for Bye Street); a third group is that of new streets named after topographical features (Canal Road near the wharves of the Hereford–Gloucester Canal, Bath Street, giving access to the John Venn's baths for the labouring classes); then fourthly are the new streets which have sprung up so rapidly with the developments of the late nineteenth century, the 'twenties and 'thirties, and those since the end of the 1939–45 war.

Here it will be informative to study the relevant population figures and the reasons behind the growth of the city. In 1851 the population was 11,156; 1861—15,585; 1871—18,347; this period coincided with the coming of the railways and consequently development took place around the railway sidings (e.g. Moorfields), and along the main roads. From 1871–1931 population growth was gradual, but since that date right up to the present, expansion has been rapid, as can be seen from these population figures: 1921—23,322; 1931—24,159; 1951—32,501; 1961—40,431. In the 1930's development was speeded up by slum clearance schemes and over the last ten years or so, development has been initiated mainly by the coming to Hereford of the Henry Wiggin firm. These two periods of development, marked by the growth of housing estates and the city suburbs stretching further and further into the country, have made it increasingly difficult to find suitable names which are both original and meaningful. Thus streets have been artificially named in groups

according to fashions (e.g. trees, bishops and villages), and this has become a distinct and accepted policy. These fashions and policies are themselves indicative of prevalent taste and changes in social life.

The present list cannot be wholly definitive and the author would be grateful for any further information which could amplify or correct that given here. Hereford will continue to expand and the naming of new streets will be a necessary part of that expansion. This is an attempt to record what has been done up to and including the year 1961.

Sources and Abbreviations Used

I. Taylor: Plan of Hereford, 1757 (Taylor).
H. Price: Plan of Hereford, 1802 (Price).
J. Curley: Plan of Hereford, 1858 (Curley).
Canon Bannister: *The Place Names of Herefordshire* (Bannister).
Canon Capes: *Some Notes on Old Hereford* (Capes)
W. Collins: *Modern Hereford*, Part II (Collins).
A. Watkins: " Hereford Place Names and Sites " (*Woolhope Transactions*, 1931–32) (Watkins).
Hereford City Council Road Committee Books, 1880–1961 (C.M.).
Memo by Councillor F. R. James, Council Minutes, 1934 (James).
Information from Mr. G. W. H. Williams, City Treasurer (Williams).

Post Office *Directories*, 1856, 1863, 1870, 1879
Kelly's *Directories*, 1895, 1909, 1934, 1937, 1939
Littlebury's *Directories*, 1868, 1885
Hereford Journal *Directories*, 1912, 1914
Jakeman and Carver's *Directory*, 1902
} (Dir.)

A date preceded by * denotes the existence of a road before the current name was allotted it.

Capital letters indicate that the roads have preserved their given names since 1757. Italics indicate names which have been replaced by more recent ones.

Research was confined to the period after 1757 and street names of earlier date (e.g. Hongery Street for St. Owen Street) do not appear. For the same reason the older street names are not followed by a date since the documentary evidence for their existence is to be found in the period before 1757.

Name	*Derivation*	*Date*
Above Eign ..	*See* Whitecross Road	
Aconbury Avenue	Aconbury Hill (one of two streets named after hills, *see* Dinedor)	1938
Ainslie Close ..	Mrs. Janet Ainslie, Mayor of Hereford, 1955–56	1959
Albert Lane ..	Albert, Prince Consort (*see* Coningsby Street	

Name	*Derivation*	*Date*
Alexandra Avenue	Commemoration of birth of Princess Alexandra, 1936 (Royalty Group) ..	1938
All Saints Street ..	Adjacent to All Saints Church	*1939
Andrews Close ..	The church of St. Andrew, better known as St. Owen, once stood nearby but was destroyed in Civil War	1922
Angela Close ..	The daughter of the builder (Warwick Blake) had just died (Williams)	1959
Arkwright Close ..	The Herefordshire poet, Sir John Arkwright. One of a series of roads named after famous men of letters	1957
Arran Avenue ..	One of a small group of roads named after West Scottish islands	1936
Ash Avenue ..	One of a later group of roads named after trees..	1959
Atlay Street ..	James Atlay, Bishop of Hereford, 1868–94. One of three streets named after Cathedral dignitaries	1926
Aubrey Street ..	The Aubrey family of Clehonger. .. Formerly known as Wroughtall Lane (Taylor) *q.v.* The Pig Market (Collins) *q.v.*	*1855
Audley Crescent ..	Edmund Audley, Bishop of Hereford, 1492–1502. (Associated with Courtenay Rise)	1955
Australia Gardens Lane	*See* Westfaling Street	
Backbury Road ..	Backbury Hill	1946
Bagallay Street ..	Sir Richard Bagallay, Conservative M.P. for Hereford, 1865–1868	1877
Bailey Brook Road	The Bailey Brook which is nearby ..	1938
Bannut Tree Lane ..	A name peculiar to Hereford .. .. *See* Hazel Grove	1938
Barrack Street ..	*See* Harold Street	
Barrie Road ..	J. M. Barrie, the dramatist (*see* Arkwright Close)	1959
Barroll Street ..	J. Barroll, Mayor of Hereford, 1639. 1858 Barroll's Lane (Curley)	1860
Barrs Court Road..	This was the site of Barrs Court, the home of the de la Barre family (Price) .. .. 1858 Stonebow Road *c.* 1860–1909 North Villa Road (*see* North Villa Road)	*1909
Barton Road ..	In the neighbourhood of the Barton Fields 1757 Barton Lane (Taylor) .. .. Before 1946 generally known as Barton Street	*1946

Name	*Derivation*	*Date*
Bartonsham Road..	The district of Bartonsham is situated nearby	*c.* 1865
Bath Street ..	The site of Hereford Washing Baths formerly stood nearby—established in 1853 by the Industrious Aid Fellowship .. Early 19th century—Sally Walk (before road made up) (Watkins)	1855
Baysham Street ..	Baysham Court, Ross, former home of Thomas Duckham an eminent agriculturist and editor of *Herd Book of Hereford Cattle* (*see also* Ryeland Street)	1895
Baynton Lane (Dir.)	Sir Andrew Baynton, M.P. for Hereford, 1780–84	
Bedford Street ..	Town of Bedford, one of three streets named after " —ford " towns	*c.* 1869
Beattie Avenue ..	Lt.-Cmd. S. Beattie, v.c., World War II, son of Prebendary Beattie	1946
Beech Grove ..	One of an earlier " tree " group	1937
Belmont Road ..	The road to Belmont .. .. .. Parts of it formerly known as: Chain Causeway The Pools Winston Street (Taylor) *q.v.* Blackmarstone Street (Dir.) *q.v.*	*c.* 1880
Belvedere Lane ..	Named by the inhabitant, Mr. P. Taylor, a landscape gardener	1950
Berrington Street ..	The Berrington family of Berrington Hall .. .. Formerly known as Plow Lane (Taylor)	*1824
BEWELL STREET	A corruption of By the Wall or Behind the Wall Street Bewall Street (Taylor)	
Birch Grove ..	Tree Group (*see* Beech Grove)	1937
Bishopstone Road..	Bishopstone, Herefordshire	1954
Blackfriars Street ..	The site of Blackfriars stands nearby ..	*
Blackmarstone Road	The district of Blackmarstone lies nearby	1946
Blackmarstone Street (Dir.)	Near Blackmarstone, *see* Belmont Road	
Blueschool Street ..	A contraction of Blue Coat School Street Formerly known as Town Ditch (Taylor) Blue School Lane (Collins)	*1855
Bodenham Road ..	F. L. Bodenham, Mayor of Hereford, 1840, 1857	1883
Boulton's Road (Dir.)	The builder (*see* Rockfield Road) ..	
Bowsey Lane (Taylor) ..	*See* Wall Street	
Boycott Road ..	William Boycott, Mayor of Hereford, 1890..	1922

Name	*Derivation*	*Date*
Brampton Road ..	Brampton Brian Castle, one of a group of roads named after castles in and around Herefordshire	1961
Bredwardine Close	Bredwardine. One of a series of roads named after West Herefordshire Villages	1961
Breinton Avenue Breinton Road	The road to Breinton	1922
Breinton Street (Dir.)	The district of Breinton is situated nearby *See* Windsor Street.	
Bridge Street ..	The street leading to the Wye Bridge. Formerly known as Wye Bridge Street (Taylor)	*
Britons Street .. (Taylor)	*See* Mill Street	
Broadlands Lane ..	The surrounding district of Broadlands ? Formerly known as Baynton Lane (Dir.)	
Broad Leys Crescent	The Broad Leys Public House stands nearby	1935
BROAD STREET	Descriptive	
Brockington Drive	Brockington House in the vicinity ..	1957
Bronsil Close ..	Castle Group (*see* Brampton Drive) ..	1961
Brookside	Descriptive	1959
Broomy Hill Road	The road over Broomy Hill	1885
Broxash Drive ..	Broxash Hundred	1952
Burcott Road ..	Burcott district lies in the neighbourhood	*c.* 1885
Burden Road ..	A Captain Burden who lived in the district (Williams)	1956
Bullingham Lane ..	The road to Bullingham	
Bulmer Avenue ..	Edward Frederick Bulmer, who, during his period of mayoralty, 1908–09, initiated the suburb of Garden City. Also Mayor, 1925–26	1910
Bute Avenue ..	Scottish Island Group (*see* Arran Avenue)	1936
Bye Street (Taylor)	*See* Commercial Street	
Cagebrook Avenue	The Cage Brook runs nearby	1946
Camperdown Lane	.. ..	*c.* 1897
Canal Road ..	The site of the Hereford-Gloucester Canal wharves .. .. Formerly known as Chapel Street *q.v.*	*c.* 1860
Canal Wharf ..	*See* Canal Road above (Collins)	
Canonmoor Street	The Canon's Moor field (Price) lay nearby	*c.* 1863
Canon Pyon Road	The road to Canon Pyon..	*1961
Canterbury Avenue	A Group of streets named after Cathedral cities	1957

Name	*Derivation*	*Date*
Cantilupe Street ..	Thomas Cantilupe, Bishop of Hereford, 1275–82	1883
Great Capuchine Lane	*See* Church Street (Taylor)	
Little Capuchine Lane	Passage, Church Street–High Town	
Carless Road ..	Joseph Carless, Mayor of Hereford, 1861	1959
Carr Lane	C. Lisle Carr, Bishop of Hereford, 1930–41. One of a series of roads named after Bishops in the Hunderton District ..	1952
Castle Hill .. CASTLE STREET	The old Hereford Castle stood nearby ..	1884
Catherine Street ..	*See also* Cats Lane	*1855
Cats Lane (Taylor)	Probably a shortened form of its present name (see above)	
Catty Lane .. .. (C.M. 1937)	*See* Hampton Dene Road	
Central Avenue ..	Descriptive	1922
Chandos Street ..	The Chandos family of Wilton Castle, Ross. (Notable Herefordshire Families Group)	1883
Chapel Street .. (Curley)	*See* Canal Road	
Charles Witts Avenue ..	Charles Witts, J.P., Mayor of Hereford, 1904–05. Mayoral Group in Hunderton district	1931
Charlton Avenue ..	Lewis Charlton, Bishop of Hereford, 1361–69. (*See also* Carr Lane)	1952
Chestnut Avenue ..	Tree Group (*see also* Beech Grove) ..	1937
Church Road ..	Leading to Tupsley Church	1914
Church Street ..	Leading to the Cathedral.. .. .. Formerly known as Cabbage Lane (19th century sources). Great Capuchine Lane (Taylor). 1934—a move to call Upper Church Street, Kemble Street (C.M. 1934).	*1855
Clifford Street ..	The Clifford family of Clifford (*see* Chandos Street)	*c.* 1869
Clifton Road ..	Gamaliel Clifton, Dean of Hereford, 1530–41 (*see also* Waterfield Road) ..	1959
Cliveden Road ..	Derivation uncertain	1954
Clive Street ..	The Clive family of Whitfield Court, Thruxton	1873
Cobhall Close ..	One of a group of roads named after fields and land in the county	1960
Coleridge Crescent	Samuel Taylor-Coleridge the poet (*see also* Arkwright Close)	1959
College Road ..	The road to the Training College ..	1884
College Street .. (C.M. 1884)	*See* Quay Street	

Name	*Derivation*	*Date*
Commercial Road	Descriptive Formerly known as Bye Street without the Gate (Taylor) and New Street (19th century sources)	*1855
Commercial Street	Descriptive Formerly known as Bye Street (Taylor).	*1855
Coningsby Street	The Coningsby Hospital, founded in 1614 by Sir Thomas Coningsby, is situated nearby Formerly known as Fryers Lane, Albert Lane (Collins; see above).	*1855
Cornewall Street	The Cornewall family of Moccas Court *see* Chandos Street	*c.* 1865
Cotterell Street	The Cotterell family of the Garnons, Byford. *See* Chandos Street	*c.* 1865
Court Crescent	The site of Hinton Court	1937
Courtney Rise	William Courtenay, Bishop of Hereford, 1370–75. (*See also* Audley Crescent)	1955
Croft Close	Castle Group. *See* Brampton Drive	1961
Crossfields	" The Whitecross Fields "	*c.* 1950
Cross Street	Joins Victoria Street to Friar Street Formerly known as Cross Lane (Collins)	*1855
Crownlea Close	In the vicinity of Rose and Crown Inn and built in meadow pastures (Williams)	1959
Cumbrae Avenue	Scottish Islands Group	1936
Daws Road	Mr. F. Daw, owner of the land and builder of the property	1913
Deerfold	Forest in N.W. Herefordshire (*see also* Cobhall Close)	1963
Delacy Street	The Delacy family	1883
Dinedor Avenue	Dinedor Hill	1938
The Dingle	Descriptive, " a deep dell "	1952
Dormington Drive	Dormington, Herefordshire	1946
Dry Bottom	Descriptive. *See* St. Martin Street (south end) (Taylor)	
Dulas Avenue	Dulas Brook. One of a group of roads named after streams and rivers in South Herefordshire	1957
Eardisley Close	Village Group (*see* Bredwardine Close)	1961
East Street	Descriptive Formerly known as Packers Lane (Taylor), *see* Packers Lane, *see also* West Street.	*1844
Edgar Street	King Edgar (*see also* Harold and Offa Street) 1858—Portfield Street (*see* Portfields Street).	*c.* 1855

Name	*Derivation*	*Date*
Eign Hill Eign Road	The Eign Brook runs nearby 1934—move to call it Crozen Road or Eign Crossen Street (C.M. 1934)	
EIGN STREET		
Elgar Avenue	Sir Edward Elgar the composer, closely associated with the Three Choirs Festival	1959
Elizabeth Place *Elizabeth Street*	*See* Portland Street (Collins) (Curley)	
Elm Road	? Descriptive	1898
Emlyn Avenue	Emlyn Williams, the dramatist (*see* Arkwright Close)	1957
Endless Lane (Watkins)	Victoria Street—Boothall Passage	
Escley Drive	River Group (*see* Dulas Avenue)	1957
Esmond Road	Esmond Bulmer	1934
Ethelstan Crescent	Ethelstan, Bishop of Hereford, 1012–56 (*see* Carr Lane)	1952
Farr Close	Albert Edward Farr, Mayor of Hereford, 1952–54 (*see* Ainslie Close)	1959
Fayre Oakes Drive Fayre Oakes Greene	Descriptive	1952
Ferndale Road		*c.* 1911
Ferrers Street	The Ferrers, Earls of Derby, once had a town house here Formerly known as Fullers Lane, Ingrams Lane (James).	
Foley Street	The Foley family of Stoke Edith	*c.* 1873
Folly Drive Folly Lane	The " Folly " stood nearby (Price) 1940—A move to call Folly Drive, Firhill or Pinehill Road (C.M. 1940) *c.* 1940—Incorporated Y-Wurree Drive.	1940 1884
Friars Lane	*See* Coningsby Street. Near the site of Blackfriars	
Friars Street	Near the site of Grey Friars Formerly known as Quakers Lane (Taylor)	*
Frog Lane (Collins)	*See* Blackfriars Street	
Frome Avenue	River Frome (*see* Dulas Avenue)	1957
Fullers Lane (James)	*See* Ferrers Street	
Gaol Lane (Taylor)	*See* Union Street	
Gaol Street	Site of County Police Station once used as a gaol Formerly known as Grope Lane (Taylor) 1884—A move to call it Bastion Street after the building ceased to be used as a gaol (C.M. 1884).	*1841

Name	*Derivation*	*Date*
Garrick Avenue ..	David Garrick, famous Hereford actor (*see also* Kemble Close)	1935
Geoffrey Avenue ..	Geoffrey A. C. Thynne, Mayor of Hereford, 1920–21	1927
Golden Post ..	The district of Golden Post lies nearby..	1950
Goodrich Grove ..	Castle Group (*see* Brampton Road) ..	1961
Gomond Street ..	Thomas Gomond, Mayor of Hereford, 1753, 1777 .. .. Formerly called Gomonds Lane (Taylor)	*1855
Grandstand Road	Adjacent to the Race Course .. .. Formerly known as Race Course Road.	1865
Greencroft	Small piece of land adjoining farm (Williams)	1956
Greenland Road ..	G. B. Greenland, Mayor of Hereford, 1913–16	*c.* 1922
Green Street ..	Formerly known as Green Lane (Taylor)	*1855
Grenfell Road ..	William Henry Grenfell, M.P. for Hereford, 1892	1895
Greyfriars Avenue	Site of Grey Friars	1934
Grope Lane (Taylor)	*See* Gaol Street	
Grosmont Grove ..	Castle Group (*see* Brampton Road) ..	1961
Gruneisen Street ..	Derivation unknown, but probably connected with those of Ingestre, Meyrick and Ranelagh Streets	1877
Guildford Street ..	*See* Bedford Street	*c.* 1869
Gunners Lane ..	Probably after siege of 1645 .. .. Formerly known as Gilford Street (Taylor)	*
Gwynne Street ..	Site of birthplace of Nell Gwynne .. Formerly known as Pipe Lane (Taylor). 1934—A move to call it Nell Gwynne Street (C.M. 1934). Formerly known as: 1778 Harford Shute (Bannister).	*1855
Hafod Road ..	The land belonged to Dr. Bridstock Harford, M.P. for Hereford, 1679–85, Mayor of Hereford, 1697 (Bannister) .. .. 1882—Harford Road (C.M. 1882).	*1883
Hampton Dene Road	In the district of Hampton Park.. .. Formerly known as Catty Lane and School Lane (C.M. 1937).	*1937
Hampton Park Road	The Canons had had a park here since 1400 Formerly known as either Hampton Park or Mordiford Road.	
Hampton Street ..	Near to the district of Hampton Park ..	*c.* 1865
Harley Court (Dir.)	Harley Family of Brampton Brian	

Name	*Derivation*	*Date*
Harold Street ..	King Harold who re-fortified the city in the 11th century (*see* Edgar and Offa Streets) .. .. 1858 known as Barrack Street (Curley).	*c.* 1865
Hawthorn Grove ..	Tree Group (*see* Beech Grove)	1937
Haylease Crescent..	Probable farm land connections (Williams)	1946
Hazel Grove ..	Tree Group (*see* Beech Grove). Incorporated Bannut Tree Lane *c.* 1939	1939
Highmore Street ..	Highmore House is situated nearby ..	1891
Hillside Avenue ..	Descriptive; the side of Red Hill.. ..	1958
Hinton Avenue Hinton Road	Leading through the Hinton district .. Formerly known as Hinton Lane.	1934
Hoarwithy Road ..	Leading to Hoarwithy	
Hollybush Walk ..	Tree Group (*see* Beech Grove)	1937
Holme Lacy Road	Leading to Holme Lacy	
Holmer Road ..	Leading to Holmer	
Holmer Street ..	Near to the parish of Holmer	*c.* 1865
Home Lane ..	Near to the Home Farm	1959
Homestead ..	Name of a neighbouring field	1950
Honddu Close ..	River Group (*see* Dulas Avenue) ..	1957
Hopton Road ..	The Hopton family of Canon Frome Court	1909
Hunderton Avenue	Situated in the Hunderton district ..	*c.* 1947
Hunts Lane ..		
Ingestre Street ..	Ingestre Hall, Staffs., home of the Earl of Shrewsbury, joint owner of the land at the time (*see also* Meyrick Street) ..	1877
Ingrams Lane (James)	*See* Ferrers Street	
Jewry Lane (Taylor)	*See* Maylord Street (E. End)	
Kemble Close ..	John Kemble, famous Hereford actor (*see also* Garrick Avenue)	1935
Kennel Lane (Curley)	*See* Union Walk	
Kilpeck Avenue ..	Castle Group (*see* Brampton Road) ..	1961
Kilvert Road ..	The Reverend Francis Kilvert of Clyro, diarist	1952
King's Acre Road	Name of the district (Price)	*c.* 1901
King Street.. ..	Named after King's Ditch which crossed it (Taylor)	*
Kingsway ..	King George VI, Royalty Group (*see* Alexandra Avenue)	1938
Kinnersley Close ..	Village Group (*see* Bredwardine Close)	1961
The Knoll	Sited near to the Knoll, Tupsley.. ..	1961

Name	*Derivation*	*Date*
Kyrle Street ..	John Kyrle, 1637–1725—the "Man of Ross" .. .. Not accepted as a public street until 1891 (Collins).	*c.* 1890
Laburnum Grove ..	Tree Group (*see* Beech Grove)	1937
Langland Drive ..	William Langland, the poet (*see* Arkwright Close)	1957
Laysters Avenue ..	Laysters parish, North Herefordshire (*see also* Marlbrook Avenue)	1956
Ledbury Road ..	Leading to Ledbury	*c.* 1873
Leigh Street ..	James Leigh, Dean of Hereford, 1894–1919 (*see* Atlay Street)	1926
Lewis Smith Avenue	J. F. Lewis Smith, Mayor of Hereford, 1930–31 (*see* Chas. Witts Avenue) ..	1931
Lichfield Avenue ..	City of Lichfield	1938
Lilac Grove ..	Tree Group (*see* Beech Grove)	1937
Lime Grove ..	Tree Group (*see* Beech Grove)	1937
Lingen Avenue ..	Dr. Lingen, highly esteemed local physician died 1878	1910
Link Road	Descriptive	1925
Little Berrington Street	Leading from Berrington Street .. .. Formerly known as Pinner's Lane (Taylor).	*
Little Castle Street (Collins)	*See* St. Ethelbert Street	
Little Packers Lane (Taylor)	*See* West Street	
Lloyd Street ..	Benjamin Lloyd, Mayor of Hereford, 1859	1925
Longmeadow ..	Name of a neighbouring field	1950
Longworth Road	Tom Longworth, Bishop of Hereford, 1949–61	1957
Luard Walk ..	Mrs. Louise H. Luard, Mayor of Hereford, 1929–30, 1936–37 (*see* Chas. Witts Avenue)	1931
Ludlow Place ..	Castle Group (*see* Brampton Road) ..	1961
Lyde Street	Near to the parish of Lyde	1891
Lyndhurst Avenue	Lyndhurst, Hampshire (*see* Seaton and Welbeck Avenues)	1936
Macaulay Avenue	Thomas Babington Macaulay, historian, essayist and poet (*see* Arkwright Close)..	1957
Maidstone Close ..	Maidstone, Kent	1960
Manor Road ..	Situated near Putson Manor	1938
Maple Grove ..	Tree Group (*see* Beech Grove)	1937
Marlbrook Road ..	Marlbrook, Leominster (*see also* Laysters Avenue)	1956

Name	*Derivation*	*Date*
Marlowe Drive ..	Christopher Marlowe, dramatist (*see* Arkwright Close)	1957
Marshall Close ..	George Marshall, local historian and past President of the Woolhope Club ..	1957
Masefield Avenue ..	John Masefield, famous Herefordshire poet laureate	1952
Maylord Street ..	Maylord family, four members of which were Mayors of Hereford between 1560 and 1687 .. .. Formerly known as St. Thomas Lane (Taylor). 1875—A move to rename it Hop Market Street (C.M. 1875). 1934—A move to rename it David Garrick Street (C.M. 1934).	*1855
Meadow Close ..	Adjacent to Bishop's Meadows	1958
Melrose Place ..	.. ..	*c.* 1878
Merestone Close ..	Field-name Group (*see* Cobhall Close)..	1960
Merryhill Crescent	Near to Merry Hill	1946
Meyrick Street ..	Col. A. W. H. Meyrick of Park Street, Grosvenor Square, London, joint owner of the land at that time (*see also* Ingestre Street)	1877
Millbrook Street ..	Near the site of the Widemarsh Mill which stood on the Canonmoor Brook ..	*c.* 1857
Milk Lane (Taylor)	*See* St. John Street	
Mill Street	The Castle Mill stood nearby .. .. Formerly known as Britons Street (Taylor)	*1855
Monkmoor Street	The Monk Moor lay in the neighbourhood .. .. Formerly known as Canal Wharf and Moor Street.	*c.* 1859
Monnow Close ..	River Group (*see* Dulas Avenue) ..	1957
Moor Street ..	The Canon and Prior Moors lay nearby	*c.* 1907
Moor Street ..	*See* Monkmoor Street	
Moor Farm Lane ..	Leading to Moor Farm	*c.* 1934
Moorfields Street ..	Ancient name of the district	*c.* 1858
Moreland Avenue	Harry Moreland who had recently died	1928
Moor Park Road	Name of the district (Price)	*c.* 1934
Mortimer Road ..	The Mortimer family of Wigmore ..	1884
Mostyn Street ..	.. ..	*c.* 1870
Mount Crescent ..	Descriptive, incorporating Mount Road, Chester Avenue and The Crescent (C.M. 1951)	*1951
Nelson Street ..	Lord Nelson who received the freedom of Hereford in 1802	*c.* 1865
New Street (Collins)	*See* Commercial Road	

Name	*Derivation*	*Date*
New Market Street	Descriptive; the new market was built in 1853	1855
Newtown Road	Descriptive; indicative of City's development	1884
The Nook	Descriptive	1936
Norgate (Taylor)	North end of Broad Street	
North Villa Road (C.M. 1909)	Descriptive of the houses. *See* Barrs Court Road	
Norton Avenue	Named from the Norton Brook which flows into the Wye below Putson	1938
Oak Avenue	Tree Group (*see* Beech Grove)	1937
Oak Crescent	Tree Group (*see* Ash Avenue)	1952
Oatfield Close	M. C. Oatfield, Mayor of Hereford, 1921–22	1959
Offa Street	Offa, King of Mercia, the Saxon Kingdom in which Hereford lay. (*See also* Edgar and Harold Street)	*c.* 1869
Old Eign Hill	Descriptive Formerly known as either Old Eign Hill or Hampton Park Road (C.M. 1950).	*1950
Old School Lane	Descriptive	1937
Old Skull Street (James)	*See* Gaol Street	
Old Tram Road	The Hereford-Abergavenny Tramroad ran nearby	1946
Orchard Gardens	Descriptive of the site	1951
The Oval	Descriptive	1954
Overbury Road	Near to the old site of Overbury House (Watkins)	*c.* 1869
Oxford Street	Oxford. *See* Bedford Street	*c.* 1869
Packers Lane (Taylor)	*See* East Street	
Palace Yard	Adjacent to the Bishop's Palace	1951
Park Street	Near to Hampton Park; *see* Hampton Street	*c.* 1865
Parsons Place	Richard Parsons, Bishop of Hereford, 1941–48	1961
Pembridge Close	Village Group; *see* Bredwardine Close	1961
Pencroft Road	Field-name Group; *see* Cobhall Close	1961
Penn Grove Road	Near the site of Pengrove House Formerly spelt Pengrove Road.	*c.* 1914
Pentwyn Avenue	Field-name Group; *see* Cobhall Close	1960
Percival Street	John Percival, Bishop of Hereford, 1895–1917 (*see* Atlay Street)	1926

Name	*Derivation*	*Date*
Perseverance Road	1884—Proposed to be called Prince Edward Street (C.M.).	1884
The Pig Market (Collins)	Descriptive; *see* Aubrey Street	
Pilley Road	Walter Pilley, Mayor of Hereford, 1901–11	1959
Pine Grove	Tree Group (*see* Beech Grove)	1937
Pinners Lane (Taylor)	*See* Little Berrington Street	
Pipe Lane	*See* Gwynne Street	
Plough Lane	Probably originally descriptive Formerly known as Plough Street (C.M. 1937).	*1937
Plow Lane (Taylor)	*See* Berrington Street	
Poole Close	Probably derived from the name of the district shown as The Pools on Taylor's map	1958
Portfields Street (Curley)	*See* Edgar Street. The district was known as the Portfields	
Portfield Street	The Priory Portfield which was sited nearby	*c.* 1873
Portland Street	Portland, Dorset; *see also* Richmond and Walmer Street Formerly known as Elizabeth Place (Collins).	*1855
Powys Walk	Derivation unknown	1961
Prince Edward Road	Prince Edward who was imprisoned at Hereford in 1263	*c.* 1938
Princess Avenue	The present Queen or the Princess Elizabeth. Royalty Group; *see* Alexandra Avenue	1938
Prior Street	In the vicinity of the Prior Moor (Price)	*c.* 1901
Priory Road (Dir.)	*See* Stonebow Road Near the site of St. Guthlac's Priory.	
Putson Avenue	Situated in the Putson district	1951
Quakers Lane (Taylor)	*See* Friar Street	
Quarry Road	Near to Quarry House	1954
Quay Street	There was a coal wharf situated nearby on the Wye during the 18th and 19th centuries Formerly known as St. Ethelbert's Lane (Capes). 1875–1884 College Street (C.M. 1884).	*1884
Queensway	Queen Mary. Royalty Group; *see* Alexandra Avenue	1938

Name	*Derivation*	*Date*
Race Course Road	*See* Grandstand Road	
Raglan Place ..	Castle Group, *see* Brampton Road ..	1961
Ranelagh Street ..	Name of pleasure gardens in 18th century London, *see* Meyrick Street	1887
Red Hill Avenue ..	Situated at the foot of Red Hill ..	1938
Richmond Street ..	Richmond, London, *see also* Portland and Walmer Street	*c.* 1859
Riddimore Avenue	Field-name Group, *see* Cobhall Close ..	1960
Ridgeway Avenue	Descriptive of the site	1951
River View Panson	Descriptive	1955
Rockfield Road ..	Probably descriptive .. .. .. *See also* Boulton's Road.	*c.* 1893
Rogers Avenue ..	Henry Rogers, Mayor of Hereford, 1883–4, *see* Charles Witts Avenue	1931
Roman Road ..	The Roman road running through Kenchester and Stretton Grandison	
Ross Road ..	Leading to Ross	*c.* 1865
Ryeland Street ..	The Ryeland breed of sheep; *see also* Baysham Street	1883
St. Ethelbert's Lane (Capes)	*See* Quay Street	
St. Ethelbert Street	St. Ethelbert to whom the Cathedral, which is sited nearby, is dedicated ..	*1843
St. Guthlac Street	Near the site of St. Guthlac's Priory ..	*c.* 1912
St. James Road ..	Leading to St. James Church	*c.* 1882
St. John Street ..	Formerly the site of part of St. John's Parish (Price) .. .. Formerly known as Milk Lane (Taylor).	*
St. Margarets Road	St. Margarets parish, south-west Herefordshire	1891
St. Martin's Avenue	Near the site of the earlier St. Martin's Church	
St. Martin Street ..	Prior to the Civil War St. Martin's Church stood at the junction with Wye Street. The portion near St. Martin's Avenue was known as Day Bottom or Dry Bridge	
St. Nicholas Street	Adjacent to St. Nicholas Church .. Formerly known as St. Nicholas Square (Collins).	*1855
St. Owen Gate ..	Near the old site of St. Owen's Gate ..	*c.* 1911
St. Owen Place ..	Adjacent to St. Owen Street	1938
St. Owen Street ..	St. Owen Church stood nearby but was destroyed in the Civil War	*
St. Paul Road ..	St. Paul's Church stands nearby.. ..	1954
St. Peter Street ..	Adjacent to St. Peter's Church	*
St. Thomas Lane .. (Taylor)	*See* Maylord Street (west end)	

Name	*Derivation*	*Date*
Salisbury Avenue	Cathedral Cities Group	1957
School Lane .. (C.M. 1937)	*See* Hampton Dene Road	
School Lane .. (C.M. 1937)	*See* Old School Lane	
Scudamore Street ..	Scudamore family of Holme Lacy; *see* Chandos Street .. .. 1855—Scudamore Road (Collins).	1855
Scutt Mill Road (Dir.)	*See* Upper Ledbury Road	
Seaton Avenue ..	Seaton, Devon. *See also* Lyndhurst and Welbeck Avenues	1936
Shakespeare Road	William Shakespeare, dramatist; *see* Arkwright Close	1957
Sheridan Road ..	Richard Brinsley Sheridan, dramatist; *see* Arkwright Close	1954
Sidney Box Avenue	Sidney Box who did much for the good of old people, especially the agricultural worker, died 1958	1959
Skenfrith Walk ..	Castle Group, *see* Brampton Drive ..	1961
Sollars Close ..	In direction of Bridge Sollars, *see also* Stretton Close	1959
Southbank Road ..	Descriptive; the south slope of Aylestone Hill	1878
Springfield Avenue	.. ..	*c.* 1947
Stanberrow Road } Standale Road }	Derivation unknown. Probably corruptions of Stanbury, Bishop of Hereford, 1453–74	1956
Station Road ..	Descriptive	
Stonebow Road ..	Former name of the surrounding district (Curley) .. .. Formerly known as Priory Road (Dir.) *q.v.* Also former name of Barrs Court Road *q.v.*	*c.* 1893
Stretton Close ..	In direction of Stretton Sugwas, *see* Sollars Close	1958
Symonds Street ..	John Reginald Symonds, Mayor of Hereford, 1892–93, 1901–03	1925
Templars Lane ..	The Templars' round chapel, excavated in 1927, stood nearby	1947
Tennyson Close ..	Alfred, Lord Tennyson, poet, *see* Arkwright Close	1957
Thompson Place ..	Dr. Thompson, who had his surgery nearby in Cornewall Street	1960
Three Elms Road ..	Probably originally descriptive	*c.* 1907
Tillington Road ..	The road to Tillington	*1961
Tower Road ..	Near to the Water Tower	1885

Name	*Derivation*	*Date*
Town Ditch (Taylor)	*See* Victoria Street *See* Blue School Street	
Treago Grove	Castle Group; *see* Brampton Road	1961
Trilleck Avenue	John Trilleck, Bishop of Hereford, 1344–60, *see* Carr Lane	1952
Trinity Road	Near to Holy Trinity Church	1954
Turner Street	Dr. Turner, honorary surgeon at Hereford Hospital for 43 years, resigned 1907	1922
Underhill Road	Descriptive	1957
Union Street	The Union (Hereford Board of Guardians) Workhouse, established in 1839, stood nearby Formerly known as Gaol Lane (Taylor).	*
Union Walk	Formerly known as Kennel Lane (Curley)	
Usk Close	River Group, *see* Dulas Avenue	1957
Vaga Street	Latin form of name of the river Wye.	1891
Vaughan Street	Alderman J. C. M. Vaughan, Mayor of Hereford, 1922–23	1925
Venns Lane	Rev. John Venn, M.A., vicar of St. Peter's Church, died 1890—a great social worker	1883
Venn Road (Dir.)	*See* Kyrle Street	
Vicarage Road	The St. James vicarage stands nearby	1935
Victoria Street	Queen Victoria Formerly known as Town Ditch (Taylor).	*
Villa Street	Descriptive of the property	1891
Vineyard Road	Near site of old vineyard of St. Guthlac's Priory (Price)	1891
Wallis Avenue	E. L. Wallis, Mayor of Hereford, 1911–12; *see* Charles Witts Avenue	1931
Wall Street	The site of the City Wall Formerly known as Bow's Eye Lane, Bowsey Lane (Taylor).	*
Walmer Street	Walmer, Kent; *see also* Portland and Richmond Streets	1861
Walney Lane	Walney House stands nearby	
Walnut Tree Lane	Tree Group (*see* Beech Grove)	*1937
Waterfield Road	Reginald Waterfield, Dean of Hereford, 1919–47, *see also* Clifton Road	1960
Watery Lane (Dir.)	Descriptive. *See* Winston Road	
Webtree Avenue	Webtree Hundred	1935
Welbeck Avenue	Welbeck, Nottinghamshire (*see also* Lyndhurst and Seaton Avenues)	1936
Wellington Place	Wellington, Herefordshire	1954

Name	*Derivation*	*Date*
Weobley Close	Village Group, *see* Bredwardine Close	1961
West Street	Descriptive Formerly known as Little Packers Lane (Taylor).	*
Westfaling Street	Westfaling family of Rudhall, *see* Chandos Street Formerly known as Australia Gardens Lane.	1883
Westfields Street	On the site of the West Fields	1891
Weston Close	Weston Beggard (Williams)	1957
Westminster Avenue	Cathedral Cities Group, *see* Canterbury Avenue	1957
White Cross Road	Leading to the White Cross erected after the Black Death Formerly known as Above Eigne (Taylor). Pre-1947 known often as Whitecross Street.	*1947
Whitehorse Square Whitehorse Street	Reputed to be the White Horse on which Prince Edward escaped in 1263	1938 *c.* 1870
WIDEMARSH STREET	Leading to the district of Widemarsh	
Wigmore Grove	Castle Group, *see* Brampton Road	1961
Willow Grove	Tree Group, *see* Beech Grove	1937
Wilton Avenue	Castle Group, *see* Brampton Road	1961
Winchester Avenue	Cathedral Cities Group, *see* Canterbury Avenue	1957
Windsor Street	Windsor, Berkshire Formerly known as Breinton Street (Dir.).	*c.* 1901
Winston Road	Derived from the old name for Belmont Road Formerly known as Watery Lane.	1951
Winston Street (Taylor)	*See* Belmont Road	
Wordsworth Road	William Wordsworth, the poet, *see* Arkwright Close	1957
Wroughtall Lane (Taylor)	*See* Aubrey Street	
Wye Bridge Street (Taylor)	*See* Bridge Street	
Wye Street	Near the river Wye	*c.* 1860
Yazor Road	The Yazor brook runs nearby	1954
Y-Wurree Drive (Dir.)	*See* Folly Drive	

WILLIAM BRYDGES AND THE REBUILDING OF TYBERTON CHURCH[1]

By Bruce A. Bailey

Among the many patrons of the arts in early 18th century England was James Brydges, first Duke of Chandos. His part in the building of Cannons Park, Middlesex, until it was demolished one of the most renowned houses in England, is both recognised and well documented.[2] It is not surprising that many who came into contact with the Duke, either in social or business life, were influenced by this patronage. His cousins in Herefordshire were some of the first to try to emulate his noble example. The Duke himself had been born in Herefordshire in 1674, at Dewsall, the home of his paternal grandmother. The principal seat of the Brydges family in the county was Wilton Castle in the parish of Bridstow, near Ross on Wye, while another branch had an estate at Bosbury. A member of this Bosbury branch acquired land at Tyberton, a village to the west of Hereford, in 1652 and although we are here concerned with the improvements carried out in the 18th century it is interesting to note that some building took place in the 17th. For instance, in the manuscript collections which John Duncumb[3] made for his *Collections towards the History and Antiquities of the County of Hereford*, we find reference to a new steeple being added to " the chapel " at Tyberton about 1655, the bells being brought from the old steeple which had stood detached and at some distance from the main building. Also, in June 1655, John Abel, the noteworthy Herefordshire carpenter, who built the town hall at Leominster, was paid £28 for " the new building at Tibberton ".[4] Perhaps these two buildings are the same, for timber steeples are not uncommon in the West Midlands, but without direct evidence it is impossible to say.

The Tyberton estate was settled on William Brydges, the Duke of Chandos' cousin, in 1711 on his marriage to Jane, daughter of Andrew Card, who was, incidentally, the Duke's lawyer. The church at that time was an ancient building dating back at least to the late 12th century, the date of the present south doorway. During the 17th century it had received some new fittings. Panelling incorporated in the pews at the back of the church and some simple pierced baluster rails, now decorating the inside walls of the tower, are of that period, and, as already noted, a new steeple had been built in 1655. Despite these attentions the church was, like so many others in England at that time, in a poor state of repair and soon after taking over the estate William Brydges decided to rebuild it. He and his wife probably planned it together, but early in 1718, before the

building had began, Jane Brydges suddenly died. It seems possible that William, in his mind at least, dedicated the new church to her memory, for she has no memorial save the placing of her coat of arms with her husband's on the keystone of the chancel arch, and a brief mention on his memorial tablet. The keystones of the windows also bear coats of arms, this time for earlier members of the family.[5] The new church became, therefore, to some extent a memorial to the Brydges family.

William Brydges was by profession a lawyer and spent most of his time in London. Matters at Tyberton were left in the hands of his father, Francis Brydges. Fortunately many of the letters which Francis wrote to his son have survived and provide an illuminating account of the rebuilding of the church.[6]

The task was by no means a straight-forward one. The patrons were the Dean and Chapter of Hereford Cathedral and early in the proceedings a dispute arose with them concerning the rebuilding of the chancel, that portion normally regarded as the responsibility of the patron. William made it quite clear that he would, on behalf of the parish, accept responsibility for the body of the building but that the chancel was not his affair. Dr. Phillips, Master of the Fabric for the Cathedral, seems to have sided with the Brydges in the dispute and when he surveyed the building in April 1719 " was convinced the work was really necessary as well as honourable and pious " and also that " the rebuilding of the Chancel is more needful than that of the Church as being more ruinous, and that whoever sets it to right, it must be done by rebuilding only ". He promised to make representations to the Dean and Chapter, but the dispute was not so easily settled and it ran on until the body of the church was finished and the workmen were waiting to begin the chancel. Any further comment on it is best left until discussion of that stage of the building is reached.

There does not appear to have been an architect as such for the new church. William himself laid down the basic principles of the building but had the plans drawn for him by a surveyor in London. The mason in charge of the work was Robert Pritchard of Clehonger, a village about 4 miles from Tyberton. The walls were of brick, a material in vogue at the time, and, as was not uncommon, the bricks were made on the estate. Three main sizes were used : " Common Brick ", " Common Bricks made larger and thicker every way for Rubbing ", and " Long Brick for the arches of the windows ".[7]

In March 1719 Andrew Card sent his hearty wishes for the success of the building so that work probably started about then. At the end of April Francis Brydges was conferring with Stephen Reeves of Gloucester about the carved stonework he was providing. Reeves was a member of a family of masons and stonecarvers. His father,

Francis, had made a monument to the memory of Anne Brydges, wife of Francis' brother Edmund, who had died in 1696.[8] Stephen himself signs only one known monument, a mural tablet with architectural details to the memory of Beata Johnson, d. 1722, in the north chapel of Barnwood church, just outside Gloucester. He was followed in the business by his son, who is mentioned as being with his father at Tyberton in 1719. Stephen Reeves died in 1724 and was buried in the church of St. John the Baptist at Gloucester, where he is commemorated by an inscription on the base of the tablet which he himself had almost certainly carved at the west end of the south aisle to the memory of his wife.[9]

While Reeves and his son were at Tyberton they had orders to take down the earlier monuments of the Brydges family in the church and remove them to one of the rooms in the house until the new building was ready to receive them. Among the carved work they provided for the new church were the carved heraldic keystones for the chancel arch and the windows and the font. The font (Fig. 2). is a delightful example of rustic Georgian art : a fluted stem supporting a bowl carved with acanthus leaves and cherubs, all in stone but painted to look like grey-veined marble. Indeed, the first proposition had been for a marble bowl on a stone pedestal and Francis wrote to his son : " You or I should speak with Reeves to ascertain prices and not to be entirely at the mercy of a mason. I think a Portland Stone Pedestal and Marble Basin will do best and very decent and that by the accounts sent with your drafts will come to £3 or £4. Whether Reeves will talk of the same prices is a question ". Reeves obviously did not talk of the same prices and the Brydges had to make do with stone painted to look like marble.

The initial stages of the building progressed well, and by May 1719 the walls were rising. It was hoped to have them finished by the first fortnight of July, although there was some doubt about this as Pritchard had engaged on other work at Clehonger and Sugwas, a village near by, and there were few workmen at Tyberton. Francis wisely advised his son to write to Pritchard to urge him to finish the tower before the bad weather set in. All went well however, for on July 4th Francis wrote : " The building of the Church goes on prosperously. The Carpenters are setting on the Roof and the Tilers will I hope soon be employed. The Masons are upon the steeple having resolved to finish it before Michaelmas or by that time, so that I hope you will see it so far finished before you leave the country ". At the end of July there was a lag due to the harvest. Some of the building hands were purely local labourers and were called off to help gather the crops. Another cause of unrest was the fact that William himself had not been to see how the work was progressing for some time. He had promised to come on several

occasions but had been prevented at the last minute from making the journey. In his anxiety Francis wrote to his son : " Your Church building goes on smartly again but should the workmen know your coming down is so uncertain they would flag again I fear ". By the end of September the roof was completed and Pritchard was asking for directions for the ceiling. " He wants to know what cornice you will have," wrote Francis, " Desires you send a draft of one and also whether you will have any covy moulding in the middle of the roof in a round or oval form to drop a sconce or candlestick from ". By November the structure was complete but some of Reeves' carved work still had not arrived. When Francis enquired about it Reeves replied : " The works have been done this three months but could not send them for want of waters ". This letter reveals the dependence at this period on water transport for the carriage of heavy loads. The roads, as soon as the autumn rains set in, often became impassable and those in Herefordshire in particular were notorious for their appalling condition.

By the end of 1719 the body of Tyberton church was finished. The tower was built and ready to receive the bells and clock, the nave was roofed and ceiled, and the floor paved. The bells had been cast by Abraham Rudhall, a member of the famous bell-founding family of Gloucester,[10] and the clock was presented by Francis Brydges as his own personal contribution. He was determined that it should be worthy of the new church and letters to his son during the early months of 1720 contain more references to it than any other subject. William recommended an eight day clock, pointing out that with this there would be no need for a servant to go up every day to wind it, which would be considered an extra burden to them " so that probably it may sometimes stand still half the week ". The number of dial plates needed was also a problem. There must be one on the south, Francis argued, to cure " the eyesore " of the window (had Pritchard's masonry gone awry ?), but if another were placed on the west, so blocking two out of the four windows, the sound would be deadened too much. The clockmaker, one Voice,[11] also argued in favour of one dial, especially if the full effect of his striking mechanism was to be obtained. William seems to have solved the problem simply by curing " the eyesore window ", for early in November he sent his assent for alterations to the tower. The dial was finally placed on the west face looking across to the house. Voice at first suggested £16 as the price but when the agreement was finally signed it had been lowered to £12. William was well pleased, for, as he told his father, it was less than half what the London clockmakers were asking. In the letter which William wrote concerning the alterations to the tower comes the first intimation that he was thinking of building a new house at Tyberton.

In commenting on Pritchard's stock of brick for the coming year he says : " I only design a plain house and the fronts alike . . . It will lead me into a great expense to be making one front finer than another ".

But what of the chancel ? With the body of the building complete the time had now come to settle the dispute that had continued for almost two years. Unfortunately no records remain that give us any clue as to how it was solved. Surviving letters contain no reference to a settlement and the archives of the Dean and Chapter are also silent. The first reference to the new chancel occurs in a letter of December 1720 when Francis wrote : " I will also order Robin Pritchard to make a step out of the Church into the Chancel as you directed, so there will be a rise of three steps of 6 inches each up to the Altar ". Obviously the building was sufficiently advanced for Pritchard to start making plans for the paving. There are today only two steps up to the altar, but it is clear from a description of the church in 1843[12] that there were originally three. No doubt the level of the floor was altered during the restoration in 1879.

On 5th December William wrote to thank his father for the present of the clock and to give details of his agreement with Lawrence, " the brickburner ". The prices agreed upon were : " 4s. 6d. a 1000 for the Common Brick, 5s. a 1000 for Common Bricks made larger and thicker every way for Rubbing, and 7s. a 1000 for long brick for the arches of the windows ". The remainder of the letter concerns the furnishing of the church and deserves quotation:

" As to the Doors between the Church and the Steeple, it would certainly be best to have close doors up to the top, for keeping the Church clean and entire to itself, for Compass doors will not only admit of being climbed over by the boys and ringers but will also let the pidgeons and birds in out of the Bell Sollars [*belfry*], where there are no windows. So that if you approve of it, I am for Close doors, and Perkins [*the carpenter*] must make the top of them humour the arch as well as he can or else the arch must be cut to make them open as they should . . . I talked to Rob. Pritchard about leaving the ceiling of the chancel unwhitewashed but particularly the Arch or Compass over the Altar . . . which in process of time I would willingly have painted with nothing more than a Glory[13] darting down (as it were upon the Altar), so that in that part of the work Goats hair may be made up. If Robin were a Master in Art work something of that nature might be prettily designed over the Altar, but as he is not the other is the surer way of making that place most decent and solemn ".

This extract shows that the semicircular headed alcove at the east end of the chancel (" the Arch or Compass over the Altar ") (Fig. 3) was part of the original design and not a later alteration as has been

suggested. The " Glory " was probably never added, for seven years later, as will be seen, William was forming a new set of designs for that part of the church.

In January 1722 the finishing touches were added to the furnishings and at the end of March the church was ready to be opened. Proudly on 7th April Francis wrote : " R. Pritchard has done the Ceiling and Paving of the Chancel very neat, and it looks very well. Tomorrow senight there is to be a Communion there ". Stephen Reeves of Gloucester came in July to re-erect the monuments he had taken from the decayed chancel two years previously, and thus William Brydges' first building project assumed successful completion.

* * *

In 1723 William married again, taking for his second wife Catherine, daughter of Griffith Rice of Newtown, Carmarthen. His friends were delighted with the match and congratulations flowed in from many sources, including the Duke of Chandos. For the next few years a peaceful and happy life was spent at Tyberton, only to be broken in October 1727 by the death of Francis Brydges. He was laid to rest in the church upon which he had devoted so much care. The epitaph on his monument reads: " He was a true member of that pure part of the Catholic Church of England ".[14] That this was true we have seen.

The loss was a considerable one to William but he was determined to carry on the schemes he and his father had planned. In particular he began a project which had been in his mind for some years, the building of a new house at Tyberton. But to whom was William to turn for advice now that his father was dead ? The ideal person was, of course, his cousin, the Duke of Chandos, and it was fortunate for William that, at that time, he was not far away, at Bath, where he was improving property he had lately purchased for the reception of his guests who came to try the waters of the Spa. The Duke had brought with him from London a young architect then just embarking on his career, John Wood.

The details of Wood's career are well known[15]. He was born in 1704, the son of a carpenter of Bath. Early in life he worked for Lord Bingley at Bramham Park in Yorkshire. Lord Bingley took great interest in Wood's education and no doubt it was from the architectural works in the library at Bramham that Wood gained much of his knowledge of the works of Palladio, becoming later in his career one of the most successful provincial architects of the English Palladian style. He gained introduction to the Duke of Chandos in 1726 soon after the Duke had purchased the Bath property, and in 1727 he returned to the city of his birth to become one of her most famous sons, " Wood of Bath ".

In 1727 when William Brydges approached his cousin about the building of his new house, Wood had just begun his work for the Duke. What more natural, therefore, than that the Duke should recommend the young architect to his cousin? On April 12th, 1728,[16] he wrote : " I am glad to hear you intend to consult Mr. Wood in relation to your building at Tyberton, for I take him to be an able and honest man. He has agreed to carry up another Range of Building at Bath upon another part of the Garden I bought of Mr. Gibbs and I hope it will turn me to as good Account as the last has done ". Wood seems to have had great faith in his own capabilities for not content with his work for the Duke of Chandos at Bath and William Brydges at Tyberton, he also contracted at the same time for the " restoration " of Llandaff Cathedral and a little later prepared designs for a new bank in London. The result was that he never succeeded in overseeing any one of his projects properly. Nor was this all : Palladio may have provided him with rules for facades, but for plumbing and other internal arrangements he had to turn elsewhere, and his second authority does not seem to have been as reliable as Palladio ! The Duke of Chandos was particularly unfortunate in this respect, and throughout his dealings with the architect there ran a constant stream of disagreements. At Tyberton also things did not always run smoothly. On one of his early visits Wood met with an adverse reception from the workmen. They were apparently uncertain of his capabilities for they " seemed to be very uneasy at a Surveyor coming amongst them and the one Man said a Surveyor would be very serviceable to the Country yet there was ten that said Surveyors were all Rogues and good for nothing but to make mischief between Gent. and their workmen ". However, relations improved and later Wood wrote ; " I am glad I am so much in favour with the Bricklayers as to have their prayers " though determined to show that he was still master, he added ; " I am sure what they are about will teach 'em to use their plumb Rules with more exactness than any work they have hitherto been employ'd in "!

Unfortunately both the designs and accounts for Wood's work at Tyberton have disappeared. Tyberton Court, for so the house was called, was demolished in 1952 and few records of its appearance survive. However, he did other work at Tyberton, namely creating for William Brydges a new east end for the church and this can still be seen. Although this account is confined almost solely to the church the salient points in the building of the house will be mentioned.

John Wood began work at Tyberton in the Spring of 1728. By the middle of May the foundations of the house had been raised to floor level. About this time the first ideas for a new altar piece for

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FIG. 1. TYBERTON CHURCH FROM THE S.E.

FIG 2. THE FONT BY STEPHEN REEVES.

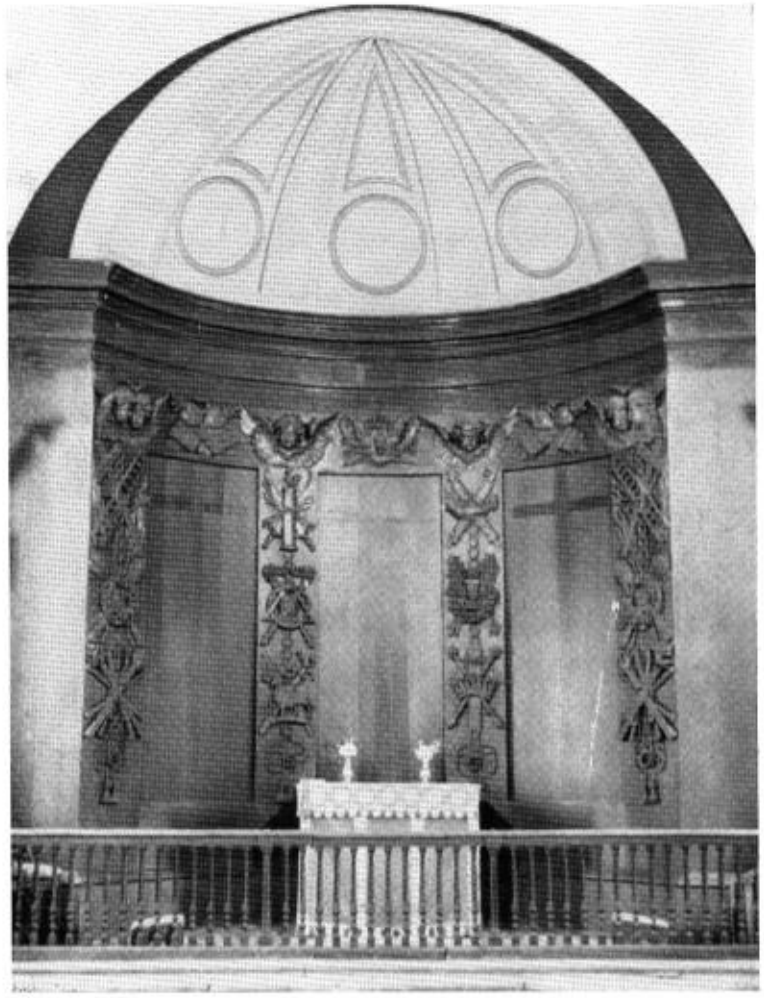

FIG. 3. TYBERTON CHURCH. THE REREDOS
(Showing semi-circular headed arch).

FIG. 4. THE REREDOS (the outer festoons).

FIG. 5. THE REREDOS (the inner festoons).

the church began to germinate. Once again, William Brydges himself appears to have laid down the principles of the design, employing Wood purely to put the scheme into effect. The design is, indeed, extraordinary for the period (Fig. 3). It consists of oak panelling, lining the eastern alcove of the chancel, divided into three sections by hanging festoons carved with religious symbols denoting the Passion of Our Lord. Among the emblems are, in the outer festoons (Fig. 4) (which are mirror images of each other) the Cross, ladder and pincers, the Crown of Thorns, scourges, swords and staves (for the Crucifixion); in the inner right-hand festoon, spears and swords, one of which bears Malchus' ear (the Garden of Gethsemane); the cock crowing (Peter's denial); the triangle of the Trinity and serpent of Eternity ; and in the inner left-hand festoon (Fig. 5.), a chalice, grapes and wheat (the Communion), the Heavenly Coronet and a mailed arm (perhaps symbolising the blow on the cheek before the High Priest). Over the centre panel is the Holy Dove in Glory and inlaid in each panel is a cross of mahogany. This reredos is one of the most extraordinary examples of religious symbolism of the 18th century to be found in a parish church. It has remained comparatively little known yet it should have become the object of pilgrimage for anyone interested in 18th century art. The symbolism must have been thought out by William Brydges, the artistic aspects of the design being entrusted to Wood, and, as it happened it was one which caused him considerable trouble.

In June 1728 Wood sent his designs for the Hall and the Drawing Room of the house. Most of the craftsmen were employed by then. Robert Pritchard, who, it will be remembered, built the church, acted as head mason, with Walter Matthews and his son as bricklayers. The carpentry was in the hands of Bejamin Fussel and Michael Bray, although the more detailed work was done by " Mr. Sydall ". The carved stonework was executed by Thomas Greenway of Bath, an artist employed by Wood on several of his buildings.[17]

One of Wood's first tasks in regard to the altarpiece was to get a model of it made. He had more difficulty in this than he expected, and, having decided that a plaster model would be best, spent some considerable time in London trying to find an artist to execute it. Everyone he went to—and he aimed high, for the famous Italians Artari and Senari[18] were on his list—wanted between £40 and £50, and this he thought far too much. Eventually he returned to the country disappointed but promised William he would make one himself from clay. He had also intended getting the actual carving done in London, but having had such a trying time with the model abandoned the idea in favour of finding a local carver. To bring the design within the scope of the provincial carvers he had to modify it a little and finally he found a man in Bristol whom he thought

capable of it. Once again he was disappointed, for some eight months later he wrote to his patron from Bath : " I was forced to get it done here, both Joyners work and Carving. The Carving is a little backwards but it will be well done and according to your directions ". This final delay had been caused, he informed Brydges, because " A Certain man, whom you know by taking his Prices, made it his business to go to the several People and told 'em that as to you, you take People's prices and gave 'em trouble only for your own information and that you delighted in making disputes with those you employ, and as for me, I ought not to be regarded, and there is no way to deal with me but getting the money before hand. More of this you shall know when I have the honour to see you ". No doubt Brydges waited impatiently to hear more !

Delay followed delay. Wood was, of course, still engaged on work for the Duke of Chandos and by the autumn of 1730 had started the " restoration " of Llandaff Cathedral. To add to matters Brydges does not seem to have replied very promptly to his architect's letters. Things were still very behind in October and Wood was forced to give the carver " a sever reprimand ". " Workmen nowadays ", he wrote, " are got to such a Pitch that it is quite vexatious to have anything to do with 'em. They have no regard to their words and will say anything to carry themselves thro' their Course of business ".

Throughout all the correspondence about the altarpiece no mention is made of the name of the carver. The only comparable work is the reredos of the Redland Chapel at Bristol, which also has festoons, but there of foliage, flowers and fruit, and was carved by Thomas Paty between 1740 and 1747. Paty worked with Wood on several of his buildings, but as he was not born till 1718 he cannot be responsible for the Tyberton reredos. There was a James Paty, another member of the family, at work in Bristol during the 1720s and '30s, about whom little is known, save that he was principal mason and carver for the Bristol Library in King Street between 1739 and 1741. He also carved monuments and is therefore a possible candidate. However, speculation as to the authorship of anonymous works of art is always hazardous and the only reason for putting forward the Patys as candidates is the strong ' family ' likeness that is to be seen between the two reredoses.[19]

By November 1728 all was ready and Wood returned to London to prepare designs for a projected bank there. All that remained to be done was to transport the sections of the altarpiece from Bath to Tyberton, but by that time the winter was well advanced and it was useless to consider moving such a delicate cargo until conditions improved. The journey was to be made in two parts, firstly by water from Bath, presumably via Bristol and the Rivers Severn and Wye,

to a point close to Tyberton (Sugwas, a village a mile or two away, is mentioned), and secondly by road from the river to Tyberton. It was also found that the altarpiece would not comprise a full load and Wood wrote to Brydges suggesting that the cargo be made up with more deals and stone for the house. He waited in vain for a reply and becoming impatient wrote again, leaving Brydges in no doubt as to his feelings : " The whole affair concerning this Altar has been quite perplext to me and if it had not been purely to oblige you I wou'd not have meddled with it upon any Acct. after all the Lyes and disappointm'ts I receiv'd from the Bristol People ". By early February, however, all was ready and the cargo was loaded onto barges. It consisted of :

" Two Hampers and one Hogshead[20] of Carving.
An Altar Peice of Norway Oak Containing 11 Panels or flat Peices, 2 Bundles of small Peices ; 2 Peices of Circular Cornice and 2 other Circular Peices of Plinth.
Two Boxes of Ballisters.
Three Mahoggony Boards.
104 Double 12 ft. 2½ inch. Deals.
102 Single 10 ft. Deals.
24 Peices of Timber each peice about 30 ft. long."

"the Goods are 15 Tun ", wrote Wood, " for whch I offered 20s. a Tun and 40s. Extra for his [*Bradley, the bargeman*] care of the Altar ".

This is the last reference to the altarpiece in surviving correspondence. The house meanwhile was still in building and in April 1729 Wood sent his designs for the internal decoration of the Saloon and Sydall was working on the details of the staircase.

The last surviving letter, dated May 3rd 1735, supplies perhaps the reason why there are no accounts of the building now extant, for Wood wrote : " Our correspondence has been so many years standing that I am really at a loss what method to take to make my demands. The particulars of what I have done are out of my memory, having so many others to deal with, and I have no other way to come to 'em but overlooking my Letter Books and Mem. Papers, which will be a work of considerable time. Therefore I must entreat the favour of you to fix the sum that will be agreeable to you, and I dare say it will be the same to me, and the sooner you'll do this the more I shall be obliged to you ". Thus it would appear that, during his early years at any rate, Wood kept no strict accounts of his spending.

So the letters from John Wood to William Brydges close. Tyberton Court, as was mentioned earlier, has been demolished and only the stable block and cellars remain, incorporated in a modern house.

The church, however, is more or less as Wood left it. It was restored in 1879 when an attempt was made to Gothicise the Georgian church. Fortunately the restorers did not expend much effort in this direction and all that happened was that the round-headed windows were converted into lancets, a change that detracts from the exterior but is not so noticeable within. Inside only slight rearrangement of the pews and pulpit took place. The pulpit was formerly higher and abutted on to the east wall of the nave, where a mark, discernable beneath the limewash, shows its former position. It also lost its domed sounding board, which found its way to the court where it served as a dog kennel![21] (It has since disappeared). However, the main features of the church still convey the intentions of its builder, and as we look at it today we should pause before the tablet erected to the memory of William Brydges and remember him, who " ended a well spent life . . . 20th August 1764 and by whose sole Munificence this Church was begun and finished ".[22]

REFERENCES

[1] This article is compiled chiefly from the surviving papers of the Brydges family of Tyberton made available through the kindness of Miss Lee Warner. The records are now partly in the City Library, Broad Street, Hereford, and partly in the County Record Offices, Shirehall, Hereford. The papers in the City Library are generally those of the earlier period discussed, and those in the County Record Office of the later period. Neither collection when I referred to them (1959–60) was catalogued to allow references to individual documents, and references will therefore be given to the collections only at the beginning of each section.

All the quotations in the article are taken from the documents concerned. The original spelling is retained but adjustments are made to punctuation occasionally to clarify the sense.

I am indebted to the staffs of both offices for their kindness in looking out material. In particular I must mention Miss Meryl Jancey, the Assistant County Archivist, who answered many queries which arose during the compilation of the article. To Mr. Victor Hatley and Mr. Howard Colwin I owe my thanks for their help during the writing of this article.

Throughout the whole enterprise I have received every help and encouragement from the Rev. W. L. Paterson, Vicar of Madley and Tyberton, and his family.

[2] Collins Baker, C. H. and Baker, M. I., *The life and circumstances of James Brydges, first of Duke Chandos, Patron of the Liberal Arts*, (Oxford, 1949).

[3] Duncumb's MSS are in the City Library. Only part of them was published, from 1804–12 in 3 vols.

[4] Receipt, etc. in City Library, Brydges Collection, 3471. For John Abel see also Royal Commission on Historical Monuments (England), Herefordshire, 3 vols. A useful collection of cuttings about him, taken from various sources, is in the City Library.

[5] A full discussion of the heraldry of Tyberton Church is given by Paul Morgan," Brydges and Lee-Warner Hatchments and Coats of Arms in Tyberton Church," *Transactions of the Woolhope* N.F.C., 1952–4, pp. 278–84).

[6] The papers quoted for the first part of this article, on the building of the church, are in the City Library, Brydges Collection, 5225, 6929 and 6941 unless otherwise noted.

[7] The nomenclature of the bricks is taken from a letter in the County Record Office, Brydges Collection, A/81, dated Dec. 5, 1721, quoted more fully later.

[8] The receipt for this monument dated Oct. 18, 1696 is in the County Record Office, Brydges Collection, A/81.

[9] For the Reeves family see also R. Gunnis, *Dictionary of British Sculptors*, 1660–1851, (London, 1953).

[10] For the Rudhalls see also H. T. Ellacombe, *The Church Bells of Gloucestershire*, (Exeter, 1881).

[11] Nothing is known about Voice, the clockmaker. Voice is a fairly common name in Gloucester but no clockmakers with it appear to be noted. Mr. T. Lloyd of Tyberton tells me the clock has since been rebuilt.

[12] This description occurs in " Herefordshire Collections . . . Vol. 12, Visitations of Churches, made by John Bird, A.M., Rector of Mordiford . . . ", p. 48, in the City Library.

[13] [14] " A Glory ": A cloud or clouds, often with cherubs' heads, from which dart out rays of light, supposed to represent the heavens opening.

[14] Judging from the style of this monument it also came from the yard of Reeves of Gloucester. It was erected by Francis Brydges in memory of his first wife, Elizabeth who died in 1691. The inscription Francis was added afterwards.

[15] For John Wood see also :
H. M. Colvin, *Dictionary of English Architects*, 1660—1840 (London, 1953).
W. Sydie Dakers, *John Wood and His Times*, (For the Bath Assembly, 1954).
Walter Ison, *Georgian Buildings of Bath*, (London, 1948).
John Summerson, *Architecture in Britain*, 1530–1830 (London, 1953).
John Wood's work for the Duke of Chandos is described very fully in Collins Baker (Footnote 2), which throws more light on Wood's character than any other work.

[16] The quotations from here onwards are taken from documents in the County Record Office, Brydges Collection, A/81.

[17] For Thomas Greenway see: Gunnis, *op. cit.*, Ison, *op. cit.*

[18] For Antari and Senari see: Margaret Jourdain, *English Decorative Plasterwork of the Renaissance* (London, 1926); Geoffrey W. Beard, *Plasterwork in England*, (" Country Life ", 1960, 24 Nov. and 8 Dec.).

[19] For Thomas Paty and other members of the family see: Gunnis, Colvin, Ison, *op. cit.*

[20] " Hogshead ": a large cask.

[21] This information was conveyed to me by Mr. W. Lloyd of Tyberton.

[22] A quotation from the epitaph on the monument.

SOME COLLEMBOLA (INSECTA: APTERYGOTA) FROM HEREFORDSHIRE

By H. E. Goto and R. E. Blackith*

During the course of a study on the distribution of the springtails (Collembola) of the British Isles it became obvious that some areas were apparently very poor in numbers of species recorded. This, in most cases, is undoubtedly a reflection of the distribution of collectors rather than of the Collembola. One such area was the County of Herefordshire. Until recently, only a single species of this order of primitive wingless insects was known from the whole of the county. This species, *Cyphoderus albinus* Nicolet, 1841, was recorded by H. M. Hallett in his list of Herefordshire insects published in 1954.

The springtails of the adjacent counties, with the exception of Gloucestershire, are hardly better known. In Gloucestershire over forty species have been taken, almost entirely by Womersley (1923–8). In Shropshire, Worcestershire, Monmouthshire, Brecknock and Radnor the numbers of species recorded are respectively 0, 12, 0, 0 and 1.

A short collecting trip principally in and between the parishes of Eastnor and Bosbury in south-eastern Herefordshire was made in order to find some of the common species inhabiting this part of the county. These parishes cover the two main geological formations of Herefordshire; Bosbury is on the transition beds at the base of the "Old Red Sandstone" (Downtonian) and Eastnor is on the Silurian limestones and mudstones with some surface peri-glacial drift. Several species of Collembola were found in moss, on the surface of the soil in pasture and in woods, on tree stumps and in other damp situations. Some of the specimens were collected by means of an aspirator and others were extracted from their habitat by using a modified Tullgren funnel. The collections were made in the last week of March in 1958. During the period which has elapsed since then some of the specimens and some of the data have been lost and it is only possible to record sixteen species in this list; where possible these are accompanied by the original collection data.

The following list represents a very small part of the three hundred or so species of Collembola which are at present known from the British Isles and many species undoubtedly remain to be found in the county.

The synonymy given in the list is not a complete one but it includes those names which have been commonly used in the literature on the Collembolan fauna of the British Isles (in the following text the British Isles includes Eire).

* Of the Department of Zoology, Imperial College, London.

ORDER COLLEMBOLA

Sub-Order Arthropleona

Superfamily Poduroidea.
Family Hypogastruridae.
Sub-family Neanurinae.

NEANURA MacGillivray, 1893

Templeton, 1835; *Achorutes* ad part.
Stach, 1951; *Biloba.*

NEANURA MUSCORUM (Templeton, 1835).

Templeton, 1835 *Achorutes muscorum.*
Stach, 1951; *Biloba muscorum.*

A widely distributed holarctic species commonly found in decaying wood, moss, leaf litter and under bark. Previously recorded from thirty-two counties of the British Isles.

Herefordshire: On oak stump, Eastnor Hill, near Ledbury.

Superfamily Entomobryoidea.
Family Isotomidae.
Sub-family Isotominae.

ISOTOMIELLA Bagnall, 1939

ISOTOMIELLA MINOR (Schäffer, 1896).

Schäffer, 1896; *Isotoma minor.*
Bagnall, 1939; *Isotomiella distinguenda.*

A not very common but widely distributed species previously recorded from the Holarctic zone and from Hawaii and New Zealand. It is found in many habitats including moss, under bark and beneath fallen timber and stones. The species is known from seventeen counties of the British Isles.

Herefordshire: in Bryophyte mat (including *Theridium tamarisinicum, Lophocolea bidentata, Plagiothecium sp., Eurynchium* sp. and *Plagiochila asplenioides*) southern end of Eastnor Hill, near Ledbury.

ISOTOMA Bourlet, 1839

Sub-genus *PSEUDISOTOMA* Handschin, 1924.

ISOTOMA SENSIBILIS (Tullberg, 1876).

A common holarctic species frequently found in moss and more rarely in other damp situations. It has been recorded from twenty-eight British counties.

Herefordshire: In Bryophyte mat with *Isotomiella minor* (see above), southern end of Eastnor Hill.

Sub-genus *VERTAGOPUS* Börner, 1906

ISOTOMA CINEREA (Nicolet, 1841).

Nicolet, 1841; *Desoria cinerea.*

A widely distributed holarctic species particularly in woodland and forest where it is commonly found under loose bark of various conifers and deciduous trees. Previously recorded from fifteen British counties.

Herefordshire: Bosbury, Temple Court.

Sub-genus *ISOTOMA* s. str

ISOTOMA VIRIDIS (Bourlet, 1839).

Lubbock, 1862; *Isotoma anglicana.*
Lubbock, 1862; *Isotoma lineata.*

A large and very common species, widely distributed in the holarctic zone, to be found in numerous damp habitats. Previously recorded from forty-eight British counties.

Herefordshire: In grass above the Old Lime Kiln Quarry, Eastnor Park: in grass and moss at the bottom of the Old Lime Kiln Quarry, Eastnor Park: on a tree stump, Eastnor Hill.

Family Entomobryidae.
Sub-family Entomobryinae.

ENTOMOBRYA Rondani, 1861

Nicolet, 1841; *Degeeria* (nec Meigen, 1838).
Gistl, 1848; *Mydonius.*

ENTOMOBRYA ALBOCINCTA (Templeton, 1835).

Templeton, 1835; *Podura albocincta.*
Lubbock, 1873; *Degeeria cincta.*

A common European corticicolous species found under the bark of both coniferous and deciduous trees. The species is also found under fallen wood, under stones and sometimes (as here) in moss. It has previously been recorded from thirty-five British counties.

Herefordshire: In Bryophyte mat (see above under *Isotomiella minor*) from the south end of Eastnor Hill: in moss on the bark of a rotten tree stump, Eastnor Hill: on a tree stump by the roadside ditch, Temple Court, Bosbury.

ENTOMOBRYA NIVALIS (Linnaeus, 1758).

Linnaeus, 1758; *Podura nivalis.*
Templeton, 1835; *Podura nigromaculata.*
Lubbock, 1873; *Degeeria annulata.*

A very common and widely distributed (probably cosmopolitan) species frequently found on the foliage of shrubs, on bark, in moss and in other situations. It has been recorded from forty-eight British counties.

Herefordshire: On a moss covered oak stump, Eastnor Hill: leaf litter in oak wood, Castle Frome: Bosbury (data lost).

This species is variable in colour pattern. Seven varieties of *Entomobrya nivalis* have been recognised by South (1961).

Sub-family Lepidocyrtinae.

LEPIDOCRYTUS Bourlet, 1839

LEPIDOCYRTUS CYANEUS (Tullberg, 1871).

Geoffroy, 1762; *Podura violaceus.*
Lubbock, 1873; *Lepidocyrtus purpureus.*

A common and widely distributed (probably cosmopolitan) species found beneath fallen wood and stones. It is also common under bark of various trees where the *violaceus* form is common. *L. cyaneus* is more rarely present in moss and leaf litter. The species has been recorded from thirty British counties.

Herefordshire: On a tree stump by the roadside ditch, Temple Court, Bosbury (*f. violaceus*).

LEPIDOCYRTUS LANUGINOSUS (Gmelin, 1788).

Gmelin, 1788; *Podura lanuginosa.*
J. Fabricius, 1775; *Podura lignorum.*
Nicolet, 1842; *Cyphodeirus aeneus.*
Nicolet, 1842; *Cyphodeirus gibbulus.*
Bourlet, 1842; *Lepidocyrtus rivularis.*
Bourlet, 1842; *Lepidocyrtus argentatus.*

A common and widely distributed holarctic (and ethiopean) species frequently found in moss. It has previously been recorded from thirty-seven British counties.

Herefordshire: In Bryophyte mat (see above under *Isotomiella minor*) at southern end of Eastnor Hill: on tree stump by the roadside ditch, Temple Court, Bosbury.

Sub-family Orchesellinae.

ORCHESELLA TEMPLETON, 1835

ORCHESELLA CINCTA (Linnaeus, 1758).

Linnaeus, 1758; *Podura cincta.*
Templeton, 1835; *Podura cingula.*
Templeton, 1835; *Orchesella filicornis.*

A common and widely distributed holarctic species found under fallen wood and stones, and in leaf litter. It has previously been recorded from forty-three British counties.

Herefordshire: In leaf litter in oak wood, Castle Frome: in larch litter in the Old Lime Kiln Quarry, Eastnor Park; on tree stump, Eastnor Hill.

Sub-family Cyphoderinae.

CYPHODERUS Nicolet, 1841

Nicolet, 1841: *Cyphodeirus.*
Lubbock, 1869; *Beckia.*

CYPHODERUS ALBINUS (Nicolet, 1841).

Lubbock, 1869; *Beckia argentea.*

A fairly common holarctic myrmecophilous species. Previously recorded from nineteen counties of the British Isles.

Herefordshire: Hallett (1954).

Family Tomoceridae.

TOMOCERUS Nicolet, 1841

Bourlet, 1839; *Macrotoma* (nec Laporte, 1832).
Denis, 1931; *Architomocerura.*
Linnaeus, 1758; *Podura* (sensu Kloet & Hincks, 1945).

Sub-genus *TOMOCERUS* s. str.

TOMOCERUS MINOR (Lubbock, 1862).

Lubbock, 1962; *Macrotoma minor.*
Tullberg, 1862; *Macrotoma tridentifera.*
Lubbock, 1873; *Tomocerus plumbeus* (nec Nicolet, 1842 et Lubbock, 1862).

A widely distributed holarctic species (also recorded from Australia) common under fallen wood and on the surface of grassland soil. Previously recorded from forty-four British counties.

Herefordshire: In Bryophyte mat (see above) at southern end of Eastnor Hill: in grass at roadside, Hope End, Coddington: on tree stump, Eastnor Hill: on rotting tree, Eastnor Hill: on ground in oak wood, Castle Frome: on moss-covered oak stump, Eastnor.

TOMOCERUS VULGARIS (Tullberg, 1871).

Tullberg, 1871; *Macrotoma vulgaris.*

A less common holarctic species recorded from ten counties of the British Isles. The species is found under fallen wood and stones, and beneath loose bark of various trees.

Herefordshire: On fallen oak tree, Ridgeway, Eastnor.

Sub-genus *POGONOGNATHELLUS* Paclt, 1947

Börner, 1908; *Pogonognathus* (nec Bleeker, 1849).

TOMOCERUS LONGICORNIS (Müller, 1776).

Müller, 1776; *Podura longicornis.*
Nicolet, 1842; *Tomocerus plumbeus* (nec Lubbock, 1873).
Lubbock, 1862; *Tomocerus plumbeus* (nec Nicolet, 1842 et Lubbock, 1873).
Bagnall, 1940; *Architomocerura litsteriana.*

A common palaearctic species found under fallen timber and bark, on the surface of grassland soil and in moss. This species has been previously recorded from twenty-six counties of the British Isles.

Herefordshire: On moss-covered oak stump, Eastnor: in grass above the Old Lime Kiln Quarry, Eastnor Park: in grass and moss at the bottom of the Old Lime Kiln Quarry, Eastnor Park: at roadside, Hope End, Coddington.

Sub-order Symphypleona

Family Neelidae.

NEELUS Folsom, 1896

Sub-genus *MEGALOTHORAX*, Willem, 1900

Collinge & Shoebotham, 1909; *Amerus.*

NEELUS MINIMUS (Willem, 1900).

Willem, 1900; *Megalothorax minimus.*
Coll. & Shoeb., 1909; *Amerus normani.*

A holarctic soil-dwelling species also found in moss, leaf litter, under stones and in some other damp situations. The species is not often observed, probably owing to its minute size (the maximum length attained is a little under 0·5 mm. and many are considerably smaller). It has previously been recorded from twelve British counties.

Herefordshire: (data lost).

Family Sminthuridae.
Sub-family Sminthurinae.

SMINTHURINUS Börner, 1901

SMINTHURINUS sp.

A common cosmopolitan genus with nine British species.

Herefordshire: Eastnor (data lost).

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South, A. (1961). The taxonomy of the British species of *Entomobrya* (Collembola). Trans. R. ent. Soc. Lond. **113** (13): 387–416.

An up-to-date and very reliable key to the European species of Collembola is to be found in:

Gisin, H. (1960). Collembolenfauna Europas. *Mus. Hist. Nat. Geneva,* pp. 312.

NOTES

HERALDRY IN THE MERTON HOUSE HOTEL, ROSS-ON-WYE

By the Rev. D. A. MACLEAN of Dochgarroch

On the bosses of the ceiling in the chief bedroom are shown the following shields which suggest a display of the ancestors of Queen Elizabeth I and King James I.

1. K. Edward the Confessor.
2. K. Henry I and Maud of Scotland.
3. Geoffrey, C. of Anjou and Empress Maud.
4. K. John and Isabel of Angoulême.
5. K. Henry III and Eleanor of Provence.
6. K. Edward II and Isabel of France.
7. K. Edward III and Philippa of Hainault.
8. Lionel, D. of Clarence.
9. John of Gaunt, D. of Lancaster, and Katherine Roet.
10. Edmund Mortimer, E. of March, and Philippa of Clarence.
11. Roger Mortimer, E. of March, and Eleanor Holland.
12. John Beaufort, E. of Somerset, and Margaret Holland.
13. Richard, D. of York, and Cecily Nevill.
14. John Beaufort, D. of Somerset, and Margaret Beauchamp.
15. K. Edward IV and Elizabeth Wydville.
16. K. Henry VII and Elizabeth of York.
17. John Howard, D. of Norfolk, and Katherine Moleyns.
18. Sir William Boleyn and Margaret Butler.
19. Thomas Howard, D. of Norfolk, and Elizabeth Tilney.
20. Thomas Boleyn, V. Rochford, and Elizabeth Howard.
21. K. Henry VIII and Anne Boleyn.
22. Archibald Douglas, E. of Angus, and Margaret Tudor, Q. Dowager of Scots.
23. Henry Stuart, L. Darnley, and Mary, Q. of Scots.

The only shields not impaled are No. 1 and No. 8. The former may be included to represent the descent of Maud of Scotland from the ancient royal line of England. Perhaps the artist did not remember the arms of Elizabeth de Burgh, wife of Lionel, D. of Clarence, No. 8. There are only four missing shields to complete the

descent of Q. Elizabeth I from K. Henry I. No. 22 and No. 23 appear to have been added to include ancestors of K. James I.

In the proprietor's sitting room, which appears to have been an oratory, are these arms: Quarterly of 4 impaling Quarterly of 6. Dexter quarterings—1. Or, on a fess gu., betw. 3 falcons close az., as many besants (HOOPER). 2. Gu., a fess betw. 6 fleurs de lis arg. (? THORP). 3. Sa., a chevron betw. 3 unicorn's heads arg. (? HEAD). 4. Az., a lion ramp. or., Sinister quarterings—1 & 6. Sa., a dolphin embowed holding in his mouth a fish arg. (SYMONDS). 2. Sub-quarterly (i) & (iv). Gu., 3 towers arg. (MORGAN). (ii) & (iii) Arg., a dragon's head erased az., holding in his mouth a hand gu. (WILLIAMS). 3. Az., a chevron betw. 3 suns in splendour or. (HINSON). 4. as 2. (POWELL of PENGETHLY). 5. Gu., a lion pass. erm., betw. 3 hawk's lures arg. (CHESTER).

These arms undoubtedly represent the marriage of William Hooper with Sarah, dau. of Joseph Symonds, Rector of Dinedor and Abbey Dore (who d. 1 Sept. 1801, aged 35), and niece of Thomas Powell Symonds of Pengethly, M.P. for Hereford, and Lt.-Col. of the South Gloucester Militia (who d.s.p. 29 Aug. 1819, aged 56), and of William Symonds, M.D., the grandfather of the Reverend W. S. Symonds, of the Woolhope Club.

Other shields in the same room display: (1) England, (2) Angoulême, (3) Provence, (4) France ancient, quartering England, (5) France quartering England, (6) Mortimer, (7) Normandy, (8) Paly per fess counterchanged az. & or, an escutcheon gu., (9) Or, a lion ramp. vert. (10) K. Stephen, (11) Aquitaine, (12) Az., a cross pommée or.

REPORTS OF SECTIONAL RECORDERS

ARCHÆOLOGY, 1962

By S. C. STANFORD, B.A., F.S.A.

IRON AGE

Croft Ambrey (SO 443668). The extension of the Club's third season of excavation on the hill-fort to almost two months brought the total cost of the project to £993. In 1962, we were especially indebted once more to Lord Croft (£100) and the Carnegie United Kingdom Trust (£30). It is a fair reflection of the enthusiasm that the excavation has evoked that it has been possible to carry out this initial programme on the scale originally envisaged. Even without paid labour the maintenance of our present effort until 1965 will require £500 and contributions towards this are urgently needed. They will be gratefully acknowledged by the Hon. Treasurer of the Excavations Committee, Mr. J. Cecil Price, The Garth, Kingsland, Leominster.

The results of the 1962 season are summarised here, and appear in greater detail in Interim Report No. 3 which will be sent to members on receipt of a stamped addressed foolscap envelope by the writer.

The discovery and excavation of the west gate of the plateau camp showed it to have three periods of construction following an earlier occupation. Although undated by associated finds these defences confirm the impression that the site has a long history before the lengthy occupation already evidenced for the subsequent occupation of the Main Camp. A further area of the quarry-ditch of the latter camp was completely excavated showing that most of the "floors" found before are not for huts, and that the structures in this part of the quarry-ditch are rectangular timber granaries of Little Woodbury type. The recognition of these and further finds of storage pits, carbonized grain and quern stones allow insistence upon the arable basis of the Iron Age economy of Croft Ambrey.

ROMAN

Huntsham (SO 565175). A report on the aisled barn of this Romano-British villa appears on pp. 179–191. Mr. N. P. Bridgewater reports that work is now proceeding on another building, possibly the farm-house, three rooms of which have been found, with some intact flooring and a channelled hypocaust. Coins suggest the building was abandoned about the mid-fourth century.

Kenchester. The excavations directed by Mr. F. G. Heys and Miss M. J. Thomas over the past six years have now been completed and are reported on pp. 149–178.

Leintwardine (SO 403740). Work on the Roman fort complex here has been limited to the early fort by *Jay Lane* (SO 400746) and an examination of the south-western corner of the Leintwardine Village fort. At Jay Lane the complete plan of the timber interval, corner and gateway towers of the mid first century fort has been ascertained, while in Leintwardine village a ditch found within the Antonine defences suggests that the site had been previously used for a fort before those defences were erected. It now seems likely that the sequence of forts at Leintwardine is as follows: First century—Jay Lane followed by Leintwardine I and then Buckton I. Second century—Buckton II followed by Leintwardine village II. The area of the last-named fort will be about 10 acres within its ditches compared with the 5·6 acres of its predecessors. It is this fort that remains in use through the third and fourth centuries.

Leominster (SO 495595). Through the efforts of Mrs. M. U. Jones, a Samian bowl of Form 37 found in new sewage trenching in the gas-works was brought to notice, and represents the first recorded Roman pottery from the town.

Pixley (SO 659390). Road widening near Pixley Rectory revealed three levels of Roman road. Attention was drawn to this by Mr. W. J. Davies, and a sketch section and plan of the exposure has been deposited with the Club.

MEDIEVAL

Breinton (SO 473396). Mr. Heys reports further work carried out to complete the proposed excavations on this moated site.

Craswall (SO 273377). Excavations directed by Mr. C. Wright enabled detailed drawings to be made of a large part of the Abbey which had been buried by stone.

Leominster (SO 499585) Castle Moat. A rescue excavation in advance of building was directed by Mrs. M. U. and Mr. W. T. Jones on behalf of the Ministry of Public Buildings and Works. In contrast to the site at Breinton where massive masonry has been found Castle Moat produced no stonework.

Richard's Castle (SO 484703). The first season of excavations by Dr. M. W. Thompson and Mr. P. E. Curnow revealed a complexity of stone structures on this impressive motte and bailey site.

Wallingstones (SO 503222). Mr. Bridgewater reports that the large room within the curtain wall appears to be a basement workshop attached to the manor house on the mound, the occupation of which is now seen to extend from the late thirteenth century to Tudor times. Further work is planned on a ditch discovered under the centre of the mound.

SITES SCHEDULED AS ANCIENT MONUMENTS

No. 153 *Tędstone Wafer* (SO 676602)—Site of Roman fort.

No. 154 *Weston-under-Penyard* (SO 645240)—Roman town of *Ariconium*.

No. 155 *Shobdon* (SO 402631)—Arches in Shobdon Park.

BOTANY, 1962

By F. M. KENDRICK

The weather this year was again not favourable to the botanist, but four new county records have been recorded, and several new stations found for other unusual plants.

The most important records received during the year are as follows:

(*a*) Not previously recorded:

GERANIUM ENDRESSII (Gay)—Kingswood; Kington.
EPILOBIUM NERTERIOIDES—Brampton Road, Ross.
EUPHORBIA ESULA—Great Doward.
VALERIANA PYRENAICA—Bulls Grove, Putley.

(*b*) New districts.

RANUNCULUS LINGUE—Hope End; Wellington Heath; Kington; Mahollam; Eywood; Brilley.
TROLLIUS EUROPAEUS—Little Merthyr; Brilley; Tuthill Farm, Kingswood; Empton Farm, Huntington.
VIOLA PALUSTRIA—Oak Hill; Willey.
KICKXIA SPURIA—Overdine; Caplar.
LAMIUM HYBRIDUM—The Fossbury, Putley.
LITORELLA UNIFLORA—Pool, Vagar Hill.
VALERIANELLA LOCUSTA—Stapleton Castle.
SENICO VULGARIS VAR RADIATUS—Southbank Road, Hereford.
EPIPACTIS PURPURATA—Bulls Grove, Putley.

The fungus foray held in Dinmore and Burghope woods in September recorded 119 different species of fungi found in these woods.

DIALECT, 1962

By MRS. W. LEEDS

A good beginning has been made in an endeavour to record dialect words, phrases, proverbial sayings, in use in Herefordshire during this present century, but few instances have been received so far of dialect pronunciation or grammatical peculiarities.

Many words in general country use at the start of the century are fast disappearing, so every effort should be made to record them before they are lost.

I am most grateful to all those who have helped in starting this section of the Club's activities and am glad to take this opportunity of thanking non-members such as Professor Orton of Leeds University for his valuable suggestions to me on starting this work; Mrs. Whitehead of the Botanical Society for her contributions to the list of country flower names; the Herefordshire Women's Institutes for a number of local words and phrases and the Whitney and Clifford W.I. for a wonderful collection of weather lore sayings; and lastly the Headmistresses of two country schools for a list of words.

I am much indebted to many members of the Woolhope Club for various words and expressions and am particularly grateful to Mr. M. P. Watkins, not only for the number of examples he has sent in, but for the meticulous care with which they are presented: (1) the word or expression; (2) its meaning; (3) the district from which it comes; and (4) the context in which it was heard. This last is most helpful in discovering the exact shade of meaning, e.g., to send= to see off, to accompany to somewhere; district: Welsh Newton and Monmouth border district; context: "To send my Auntie at the bus station." Another and most amazing word from Welsh Newton is "selion", used by an aged farmer for "ridge and furrow". What makes it so astounding is that it is Norman or Anglo-Norman and has been out of use for centuries.

Many items sent in are duplicated, but that is all to the good as it shows the area of use. Country names of birds and animals are widespread, e.g., Blue Isaac, mum- or mummy-ruffin, yaffle, quist. The cry of the latter according to Kentchurch is: "Take two cows, Taffy, take two!" Stockeagle, or Stockicle as it is pronounced in the Ledbury district is perhaps becoming less common.

Examples of animal names are: moggie, fitchuck, urchin, oont; and we can picture a child sitting on an oonty-tump making a tisty-tosty (cowslip ball).

Most of the flower names sent in are from the south-eastern part of the county. Others from the Welsh border would be welcomed.

Several members have commented on the mix-up of pronouns heard so often here, e.g., "Er do give I a nod and us do go", the "er" being masculine.

The interpolation of "do" is widespread, as in the foregoing sentence, but it has no emphatic use as in modern usage.

The sound "or" as in daughter, Orcop, awkward, orchard, tends to become "ar"—darter, Arcup, Arkut, archat—the final "d" becoming "t", e.g., "Herefut". A "y" is often pronounced in a

word beginning with " e ", thus " ear " becomes " year "; " elm ", " yelm "; and in the Ross district " head " becomes " yud ".— " The boy gave him a polt on the yud ".

Here, too, I have heard the old English plural ending in " en ", e.g., " housen ", " chicken ", e.g., " Childer and chicken are allus a-pickin ", and the old English " boughten " is in general use as an adjective, e.g., " A boughten cake ".

The tendency to prefix words with an " a " (pronounced " e(r) ") is widespread, e.g., " What be you a-doing ? "; " I can't a-bear it ".

The verb to be (present tense) is conjugated throughout with " be " and in the negative " be-yunt ", e.g., " I be ", " he be-yunt ", " they be-yunt ", etc., and in the expression " away from " away is often omitted, e.g., " I must be from here by 4 o'clock ".

There must be many more examples of grammatical oddities and pronunciations, so may I ask you to make particular note of any you come across as well as of words and phrases.

Phrases

The edge of night=dusk (Kimbolton). I am nurped or nurped up=very cold (Llangrove and Much Marcle). She was in her dishabels=in dressing gown or old clothes (widespread use). Ah ! the poor thing is in her doubles=getting old and bent (Ross). It's a dabbledy day=mixture of sunshine and showers (widespread). Him do meet himself a coming back=said of a man who rushes about to no great purpose (Ross). She's as soft as a piece of soap after a hard day's work=soft in the head (Bridstow). It's a lazy wind=said of one which goes *through* you and not round (Tarrington, Much Marcle). It's just gnats flying over=said of a light afternoon shower (Much Marcle). You must come to Ross to be sharpened (Ross).

Words

Daps=sand shoes. To dap=to bounce. Diddikoy=gipsy. Bait=elevenses. Boosey=cow shed. Beethy=become pulpy, rotten. To kowch down=to squat. Nisgal=youngest of a litter. Glatt, glat=a hole in the hedge. To teel=to set up against a wall, e.g., to teel a poker in front of a fire. Tump=a small mound. Prill=a small stream. Pooned=hit hard. Snook=sneaked, stole (Kimbolton). Snithing or sniving=a number, e.g., a snithing of foxes (N. Herefordshire). Skein of people=a number of people (Ross, Bredenbury). A butter mit=a wooden bowl (N. Herefordshire). A cream steen=earthenware vessel with a spout. A peel=a wooden shovel. Stocking=hoeing up weeds, breaking up ground (Llangrove). Mulkin=scarecrow. " You silly little mulkin ", said to a child=" You silly little thing " (Whitney). A gawby=a silly person. Voity=

forty (Welsh Newton). Heathings=long stems laid in hedging (S. Herefordshire). Sid=seed. Ship=sheep (widespread).

Weather Lore

The blackest month of all the year
Is the month of Janiveer.

Foggy weather in January brings a frosty spring.

If February give much snow,
A fine summer it doth foreshow.

Fogs in February mean frosts in May.

Where the wind is on Candlemas Day,
There 'twill remain till the 2nd of May.

If Candlemas Day be wet and foul
Winter then was gone at Yule.
Candlemas Day, bright and fair,
Half the winter to come, and mair.

March winds and April showers
Bring forth May flowers.

Frost in November to hold a duck,
Then follows a winter of slush and muck.

Hours of sun on Christmas Day,
So many frosts in the month of May.

Rain on St. Swithin's means 40 days rain.

North wind doth blow
And we shall have snow.

East wind—good for neither man or beast.

When the rain is from the east
It is for 24 hours at least.

When the rain is in the west
The fish bites best.

As the days lengthen
So the cold strengthens.

Cruddledy sky, cruddledy sky,
Not long wet and not long dry.

Red sky at night, shepherd's delight.
Red sky in the morning, shepherd's warning.

Rain before seven, fine before eleven.

Dew before midnight,
Next day will be bright.

A fog in summer is followed by heat; in autumn by rain; in winter by frost.

Cloudy mornings turn to clear evenings.

The higher the clouds the finer the weather.

If the sun sets in a muddy mist,
Be sure rain's at hand.

Much twinkling of the stars foretells bad weather.

Moon on its back, holds water in its lap.

If the moon is misty or appears in a circle, wind or rain will follow.

Oak before ash, we shall have a splash.
Ash before oak, we shall have a soak.

If the cows be down in the field before eleven, we shall have rain before night.

Before rain, moles throw up the earth more than usual.

One swallow does not make a summer.

If the Scarlet Pimpernel is open it means a fine day; if closed, a wet one.

A peck of dust is worth a king's ransom (Doward).

Never come Lent never come winter (widespread).

March dust on apple leaf
Brings all kinds of dust to grief (Ross observatory).

If birds sing before Candlemas, they will cry before May. (Kentchurch).

Till St. James' Day be come and gone
There may be hops, and there may be none (Stoke Edith).

Flower Names

Crazies or creeping buttercup=Lesser celandine.
Madnep or Mad Meg=White bryony.
Devil's guts=ground elder.
Smart Arse=Knotweed.
Curlock or Kedlock=charlock.
Jack in the hedge=Hedge garlic.
Pincushions=Field scabious.
Bird's eye=Speedwell.
Cuckoo flower, Milkmaid's or Lady's Smock.
Granny's gown=Fumitory.
Lady's parasols=Star of Bethlehem.
King's crown=Wayfaring tree.
Skewerwood=Spindle.

Shepherd's delight or Poor man's weather glass=Pimpernel.
Star of Bethlehem=Stitchwort.
Butter and eggs=Yellow Toad-flax.
Kiss-me-quick or Kiss at the garden gate=Woodruff.
Hariff=goosegrass.
Pepper and salt=Field woodruff.
Jack in the green
Parson in the pulpit } =Lords and ladies=Wild arum.
Cuckoo pint
Queen's needlework=valerian.
Honesty=Old man's beard.
Shoes and stockings=Bird's foot trefoil.
Hard heads=Knapweed.
Noah and his wife=Lungwort.
Mouse-ear=Myosotis, Forget-me-not.
Thunder and lightning=Herb Robert.

ENTOMOLOGY, 1962

By H. G. Langdale-Smith, M.B., Ch.B.

It is sad to report that butterflies were very scarce this year. There may be several factors to account for this:

1. Climatic conditions.
2. Spraying (even oak woods are now sprayed).
3. Diseases.
4. Predators: Sparrows, chaffinches, starlings all seem to enjoy a butterfly diet nowadays. I have seen spiders capture butterflies from flower heads.
5. Ichneumon flies.

Migratory butterflies also seem much scarcer, so probably the continent is affected.

Very few hibernated tortoiseshells appeared (urticae), orange tips (cardamines) scarcer than usual, no holly blues (argiolus) were seen. Pearl bordered fitillaries (cuphrosyne) green veined white (napi) were plentiful. Wall butterflies (megera) fairly numerous. I saw no white admirals (camilla) or silver washed fritillaries (paphia) and there were no marbled whites (galatae) at Checkley.

White letter hair streaks (w. album) in fair numbers in one locality. No grayling (semile) by British Camp.

I saw only one painted lady (ardui) one peacock (io), two or three commas (c. album).

Gamma moths in fair numbers, a few ghost moth (humili), one humming bird hawk moth.

A 5-spot burnet (trifolii) was reported in June and in July, a chalk hill blue (corydon) was reported. This has never been reported in Herefordshire before and I think it may have been a second brood holly blue. I could see no horseshoe vetch its food plant in the district. It will be interesting to hear if any are seen this year.

In November, numerous large white caterpillars (brassicas) were reported on a wall of a cottage at Stretton Grandison. They all had been attacked by ichneumon fly.

GEOLOGY, 1962

By F. M. KENDRICK

In these days where so few quarries in the county are being worked for stone, any freshly exposed sections are always welcome. Two such sections in the Ledbury area have been exposed this year.

Firstly forestry work in the Conegree wood has given a long section through the Wenlock Limestone which should yield some interesting fossils.

The second and perhaps more interesting section is that made during road widening operations at the Hollybush. Here a large section of Hollybush sandstone has been exposed whilst nearer Ledbury one of the igneous intrusions has been cut through, though unfortunately there has been very little exposure of the Bronsil shales.

During a recent visit to the Wayne Herbert Quarry I found that the overburden from the top had fallen down and completely covered the fossiliferous layer at the base. A search in the debris resulted in finding a head shield of a *cephalaspid* by a junior member of the party.

Whilst walking in the Rowlestone area I met an Edinburgh geologist who showed me two dorsal shields of a *pteraspid* which he found in the Pool Quarry.

MAMMALS, 1962

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

Mr. M. P. Watkins, Great Doward, writes (July, 1962):

" Yellow-necked field mice moved into this area in the autumn of 1960 (identified by Brit. Mus.). Every autumn we are troubled by mice and I have inspected all caught, but never found this species until that date. Since then most mice have been yellow-necked field mice. We have also caught a pygmy shrew in the larder, and Col. Bellhouse of Whitchurch told me that he had caught one there also."

Mrs. Heath, Putley, Ledbury, writes (4th December, 1962):

" Several more de Winton's mice have been caught in the loft of my house since November, 1961, when one was shown at a meeting of the Woolhope Club. The first appeared in the late autumn of 1960, and they have come at intervals till October of this year, since when they seem to have ceased for the time being."

These interesting reports on the yellow-necked field mouse bring out the fact that it tends to appear suddenly in some numbers in a locality and dies out only to reappear in numbers some years later.

Mr. P. H. Lee, Backbury House, Checkley, showed me an adult dormouse found recently (November, 1962) hibernating in a nest among dead leaves in the bottom of his garden hedge. It is remarkable how seldom anyone finds a dormouse in this county !

Mr. M. P. Watkins reports re wild fallow deer in the south of the county, that the official Forestry Commission deer-killer says that in the last two seasons he has killed over 100 fallow deer on both sides of the Wye.

ORNITHOLOGY, 1962

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

Among our " lost or vanishing " birds we now have to class the corncrake, nightjar, hobby, hawfinch and sparrowhawk. The corncrake was seen in May at Yarpole, and heard at Eastnor—only two records for this season. The nightjar, until recently a fairly common bird, has been reported as having been heard at two places only—Wapley and near Rhydspence. There is now no known nesting-place of the hobby in Herefordshire, though a single bird was seen in a central district of the county by Major W. R. D. Verdin, on 2nd August. Hobbies appear to have bred this year in Radnorshire, however, though the locality must remain a secret. Apart from the statement that the hobby is " known to have bred " in Radnorshire (Davies, 1912), this is the only known successful nesting. The sparrow hawk, recently a common bird, is now alarmingly rare, and the only two nests reported this year were at Kingsland and near Llowes: it is feared that protection of this bird may come too late to save it from extinction. The hawfinch remains very rare, but has been seen this season at Kington and at Goodrich. The water rail is seldom seen but this autumn brought three dead specimens, one found on 30th September, at Winforton, and one 8th October, at Madley, both birds apparently killed by flying against overhead wires; a third at Ullingswick.

The Wye was visited last winter from the end of January to 25th March, by Whooper and Bewick's swans in varying numbers and at different places from below Whitney to above Glasbury. The largest numbers on any one date were five Whoopers and 24 Bewicks. Though "wild swans" were recorded by Cambridge Phillips as having been seen on the Wye near Builth in 1891, their species was not mentioned: the present record must therefore rank as the first Radnorshire record both for Whooper and Bewicks.

Another first record for Radnorshire was a drake garganey seen on Rhosgoch on 20th May.

Two young broods of Tufted Duck (six and seven ducklings respectively) were seen on pools at Brampton Bryan on 28th July. There are few records of Tufted nesting in the county, and none for many years back.

Quail again bred in Shobdon district, the call having been heard in the growing corn, and as many as twelve birds having been seen at cutting-time.

This has been a "crossbill year" and parties of these birds have been reported from Moccas, Weston-under-Penyard, Kington, Michaelchurch and Croft at various dates from July 1st onwards.

Mr. R. H. Baillie had a near view of a Roller near the Birmingham Waterworks, Elan Valley, on 12th July. This large bright-blue winged bird, a rare vagrant for England, had never before been recorded in Radnorshire.

Remains of dead birds picked up below the feeding perches of a pair of merlins in Radnorshire by A. S. Norris, were examined by British Museum experts and were found to include the leg and wing of a rock pipit. The only previous record of this bird in the county is of a rock pipit's nest found above Llanfared by J. Walpole-Bond in 1902.

In view of the steady spread of the collared dove over England it is interesting to note that it has not yet been seen in Herefordshire, though it has been present (and has bred) these last two years as near here as Spetchley Park, Worcester.

REPORT FROM HEREFORD MUSEUM

COIN FINDS IN 1962

By J. F. L. Norwood, B.A.

Abbreviations: *Obv.*=Obverse; *Rev.*=Reverse; *Mm.*=Mintmark; *R.I.C.*=Roman Imperial Coinage.

Billon—a silver/bronze alloy, often debased to a silver wash.

Orichalcum—a copper/zinc alloy.

Roman

1. Orichalcum sestertius of Faustina I (d. 141 A.D.).
   Obv. DIVA FAVSTINA Draped bust right.
   Rev. AVGVSTA SC Vesta standing left, holding sceptre and palladium.
   This coin bears a beautiful portrait, and was struck as a memorial to Hadrian's wife after her death.
   R.I.C. No. 1124. Found at Dinedor, and given to the Museum by Mr. R. G. Jenkins of Dinedor (Accession No. 8012).

2. Billon antoninianus of the usurper Carausius (287–293 A.D.).
   Obv. IMP CARAVSIVS PF AVG Radiate, draped bust right.
   Rev. FORTVN(A AV)G Fortuna standing left holding rudder or anchor and cornucopiae.
   Mm. $\frac{\text{L}\,|\,\text{O}}{(?\text{M})\text{L}}$ —Londinium.
   cf. *R.I.C.* No. 34. Minted 288–292 A.D. Found at Credenhill and examined for F/Sgt. Banks, 2 Oak Road, Credenhill.

3. Billon antoninianus of Carausius.
   Obv. IMP CARAVSIVS AVG Radiate, cuirassed bust right.
   Rev. VLTOR(A) AVG Pax or Laetitia standing left, holding vertical sceptre and ?sacrificing at altar.
   Not in *R.I.C.* Found at Credenhill, and examined for Kevin Wood, 8 Oak Road, Credenhill.

4. Billon antoninianus of Carausius.
   Obv. IMP CARAVSIVS (. . .) AVG Laureate, draped, cuirassed bust right.
   Rev. PAX AVG Pax standing left holding ?wreath and cornucopiae.
   Mm. Illegible.
   Found in garden at 3 Elm Road, Hereford, and examined for Mr. R. Davies of that address.

5. Bronze of Licinius I (joint Emperor 307–324 A.D.).
   Obv. IMP LIC LICINIVS (. . . Laureate bust right.
   Rev. IOVI) CONSERVATORI AVGG N(N I in field. Jupiter standing left, holding sceptre and figure of Victory; to left, an eagle.
   Probably found in the Aymestrey area, and examined for Mrs. A. M. Taverner, Leintwardine Vicarage.

MEDIEVAL

6. Groat of Henry VI (1422–61).
   Obv. HENRIC DI GRA ANGLIE Z FRANC
   Rev. POSVI DEV AD IVTORE MEVM CIVITAS LONDON
   Mm. Pierced cross with rounded inner corners.
   Brooke, *English Coins*, Class I. Found at Bromyard, and examined for Mr. Thacker, Tedstone Court, Bromyard.

7. Half-groat of Henry VII (1485–1509) struck jointly with Archbishop Morton.
   Obv. HENRIC DI GRA ANGL Z F
   Rev. POSVI DEV AD IVTOR MEV CIVITAS CANTOR (Canterbury).
   Mm. Tun (1486–1500).
   Found in garden at 49 Mount Crescent, Hereford, and examined for Mrs. J. Skultety of that address.

8. Brass jetton (counting token).
   Obv. Medieval ship.
   Rev. Four lys in lozenge.
   Legends illegible and probably fictitious. Early 16th century, probably French.
   Found in West Street and examined for Mr. M. A. Crump, 8 Stanberrow Road, Hereford.

NOTICES

SURVEY OF TOMBSTONES

A sub-committee was formed for the survey of gravestones up to the year 1900. The Rev. D. A. L. Maclean of Dochgarroch was elected chairman and Miss Helen Gwilliam of the County Record Office appointed secretary.

A form was devised for the description of each tombstone and duplicated at the County Libraries. Members were informed of the project and told that they could get forms from the Secretary.

Some members applied for forms and the chairman organized groups to visit churchyards in the area near his home. Forms completed by these groups, and giving valuable information, have been returned to the Secretary.

A great many graveyards have not yet been tackled and help from members to survey the churchyards in their own parishes would be greatly appreciated.

Woolhope Naturalists' Field Club

(HEREFORDSHIRE)

PROCEEDINGS, 1963

SPRING MEETINGS

FIRST MEETING: Thursday, 17th January at 3 p.m.: the President, Mr. A. U. Zimmerman, in the chair.

Declared elected members of the Club: Miss K. McCormac, Miss M. A. Mycock, Dr. R. G. Watkinson, Mr. G. W. Wilde.

The curator of the museum asked members to send in specimens of birds and mammals found dead in the present cold spell as they were needed for the museum's collections.

Dr. C. W. Walker gave a talk on " Wild Life in Herefordshire ". This was particularly opportune as a nature trust has so recently been formed for the county and he was able to stress the importance of safeguarding the rarer kinds of mammals found in Herefordshire.

SECOND MEETING: Saturday, 23rd February at 3 p.m.: the President, Mr. A. U. Zimmerman in the chair.

Mr. F. C. Morgan was asked to convey to Mr. W. H. Howse the best wishes of all members for a speedy recovery from his eye operation.

Mr. Michael Rix gave a talk on " Industrial Archæology, " the study of the relics of the industrial revolution. He spoke of canals and tramways and of the remains left by the industrial revolution of the later eighteenth century. Of especial interest in the West Midlands is the Coalbrookdale area of East Shropshire, where a museum has now been established.

Mr. E. S. Higgs and Mrs. E. Wareing were declared elected members of the Club.

THIRD MEETING: Thursday, 21st March at 7 p.m.: the Rev. D. A. L. Maclean of Dochgarroch in the chair.

It was with deep regret that members heard of the death of Mr. A. U. Zimmerman, President of the Club, and stood in silence as a tribute to his memory. An obituary appears on page 255 of the present number of the *Transactions*.

Mr. H. J. Powell lectured on the Bishop's Palace, Hereford. His paper is printed in the present number of the *Transactions*, pp. 320.

Mr. Martin Rhodes was declared elected member of the Club.

SPRING ANNUAL MEETING: 4th April at 3 p.m.: Mr. S. C. Stanford in the chair.

After the Honorary Treasurer had submitted his report the proposal, made by Mrs. M. U. Jones, that separate statements should be made for printing and stationery accounts, was carried.

The death of the President while in office robbed members of hearing him give his own presidential address to the Club he had served so well. It seemed fitting that to mark Mr. Zimmerman's interest and support for all the Club's activities, the Honorary Secretary should speak on some of the Club's past achievements in the fields of study it took for its own, and suggest ways in which this tradition might be upheld. This paper is printed on pp. 259 of the present number of the *Transactions*.

Mr. V. H. Coleman was installed as President of the Club for the ensuing year, 1963–4.

FIELD MEETINGS

FIRST FIELD MEETING (half-day) Saturday, 27th April, KENTCHURCH AND ROWLESTONE.

Commodore and Lady Lucas Scudamore kindly welcomed members to Kentchurch Court and showed them round this most interesting and beautiful house. The party then went to Rowlestone where the Norman Church, remarkable for its fine tympanum over the north door and the carving of the chancel arch, was described by Prebendary A. L. Moir. At a short business meeting, Mr. and Mrs. Marples and the Misses D. and E. Powell were declared elected members of the Club.

SECOND FIELD MEETING: Saturday, 11th May. PRESTEIGNE AREA.

After coffee at the Bull Hotel, Presteigne, members drove to Monaughty, formerly the home of the Green-Price family, where Mr. Noble described the house, dating from the sixteenth century, and outlined its history. The party then moved on to Bleddfa where Mr. Noble described the church, explaining that the mound at the west end of the church has been discovered to be, not as was thought, a prehistoric remain, but the debris accumulated when an earlier tower collapsed. On the way back to Presteigne members stayed to see the site of the battle of Pilleth or Bryn Glas, at which Owen Glendower's army defeated the English. After passing through Presteigne again, the party saw the multi-vallet iron age camp on the summit of Wapley Hill, where Mr. S. C. Stanford gave an account of this important site. A short business meeting was held at Walton, where members had tea. At that meeting the question of the removal of the Norman tympanum in Hereford Cathedral to a position

where it could be more easily seen, was discussed. An article on the tympanum is printed in the present number of the *Transactions*, p. 316. Mr. S. C. Stanford made a plea for some organisation to be set up for the recording of old timber buildings, so many of which were fast disappearing from the Herefordshire scene. The following were declared elected members: Mr. J. Tullock, Mr. D. Williams, The Rev. and Mrs. H. L. Brooksbank and Mrs. Spink.

THIRD FIELD MEETING (half-day): Saturday, 8th June. THE FROME VALLEY.

Members visited the 13th century church at Much Cowarne, which was described by the Rev. D. A. L. Maclean of Dochgarroch. He made a special reference to the monuments and hatchments which the church contains. At Cowarne Court the medieval dovecot was seen, by kind permission of Commander J. S. K. Oram. From there the party visited Canon Frome Court, by kind permission of the Headmaster of the school which now uses the building. Miss E. M. Jancey gave a brief account of the history of the Hopton family, owners of the Court for nearly three hundred years. The house, as it now stands, is an eighteenth-century rebuilding of an earlier mansion. The Headmaster of the school, Mr. A. W. Godrey, showed the party over the house and grounds, where members had a picnic tea. They then moved on to Shucknall, where Mr. Kendrick gave a talk on the geology of the district, explaining its connection with the structure of the Woolhope dome. Mr. Sowden and Mr. Peters were declared elected members of the Club.

FOURTH FIELD MEETING: Thursday, 27th June. PERSHORE and THE COTSWOLDS.

After a stop at Pershore for coffee, a short business meeting was held. Miss Crompton and Mr. Macauley were declared elected members of the Club.

The party then visited the Abbey, under the guidance of the Vicar of Pershore. A picnic lunch was eaten at the next stop—Broadway Tower—and the party then moved on to Chipping Camden, where the Verger described the magnificent church, and gave apologies for the Rector who could not be present to welcome the party. The final visit of the day was to the wonderful gardens at Hidcote Manor.

FIFTH FIELD MEETING (half-day): Thursday, 18th July. CREDENHILL.

The first stop was at Burghill Church which was described by Preb. A. L. Moir. Then the party divided, some members climbing the hill to see the excavations then being carried out under the direction of

Mr. S. C. Stanford at Credenhill Camp, and others going on by coach through Brinsop and Wormsley to King's Pyon to see the gate/pigeon house which the Honorary Secretary described. At a short business meeting Mrs. Perkins was declared elected member of the Club.

SIXTH FIELD MEETING (President's Day): Thursday, 1st August. YSTRADFELLTE.

After coffee in Brecon, members went to see the site traditionally known as the grave of St. Illtyd and here Mr. P. G. Jones gave a short talk on the saint and the grave. The party then drove over the Brecon Beacons to Ystradfellte to stop at the confluence of the rivers Dringarth and Ilia where Mr. Noble spoke about Castell Coch or the Red Castle. After a picnic lunch the party moved on to the lane leading to the Porth yr Ogof cave which Mr. Inett Homes described for members, some of whom walked down the valley of the Mellte past the Clyn-gwyn waterfall to join the coaches on the road.

SEVENTH FIELD MEETING: Saturday, 14th September. COALBROOKDALE.

After a beautiful drive along Wenlock Edge, the party arrived at Buildwas to see the ruins of the Abbey.

Then after lunch a visit was paid to Coalbrookdale, where Mr. Noble gave a short talk on the history of the Coalbrookdale Company with which lies the real beginning of the Industrial Revolution. Members were shown round the museum there, and then went on to see Ironbridge, the first cast iron bridge in the world, still spanning the river Severn. The next visit, a short distance away in space, but a world away from Coalbrookdale, was to the ruins of the Cluniac priory of Much Wenlock. It was of particular interest to be able to study on the same day the ruins of Buildwas and Much Wenlock, and in describing these two beautiful monastic sites, Preb. Moir stressed the contrasting ideals of Cistercian and Cluniac Orders as shown in their buildings, the one exemplified by Buildwas, the other by Wenlock.

The ascetic Cistercians were restricted by a rigid discipline, and extreme simplicity. The cross must be of wood, the single candlestick of iron. Gold and silver ornaments were forbidden, silk was banned. Thus, Buildwas stands supremely simple. The late Norman church, without even a west door, had a plain nave of seven bays with circular piers and scalloped capitals, a straight-ended chancel flanked by similar chapels. The nave, 105 feet long, was divided by a pulpitum or screen, separating the monks from the lay brethren. The conventual buildings round the cloisters, included crypt,

sacristy, chapter-house, parlour and lay-brothers' quarters, all designed with the same restrained simplicity, the quality which, expressed in the perfect architectural proportions, gives Buildwas its beauty.

The ruins of the Cluniac Much Wenlock Priory, which was built on the site of a seventh-century nunnery, conjure up a different picture, this time of a magnificent and majestic building of the early English period, exuberant with decorative ornament and architectural refinements. In the church itself, three times the length of that at Buildwas, there are traces of eight bays in the nave and seven bays in the extended Lady Chapel. There are piers with four major and four minor shafts, indications of a triforium with paired lancets, a clerestory with wall passage, caulting shafts, spandrels, and, in the chapter house, a profusion of intersecting arches with geometrical motifs. Within the lavatorium, the monks' washing quarters, was characteristically ornate. A circle of columns surrounded a well, sculptured panels depicted scriptural scenes, and, originally, the structure was surmounted with a leaden bell and a dovecote.

The prior's house, of a later date (c. 1500), still retains its imposing long gallery with series of windows, and buttresses between each pair. Much Wenlock priory is an outstanding example of the exuberance of Cluniac architecture as compared with restraint of the Cistercians.

At a short business meeting Miss Caldecott was declared elected Member of the Club.

EIGHTH FIELD MEETING (half-day): Saturday, 5th October, 1963. MARDEN.

The first stop was at the old bridge over the Lugg at Walker's Green, Marden, where Mr. Kendrick gave a short talk. The party then drove on to Amberley Court where the members were kindly welcomed by Mr. D. G. Powell, who showed them the timbers of the open medieval hall, and where they visited also the tiny Amberley Chapel in the grounds. A visit was then paid to Mr. Bishop's house to see, by his kind invitation, the Roman pottery discovered on the site of his garage and which Mr. Stanford described. Then, at Marden Church, the members were guided round by Mr. Hillaby who gave a brief talk on the church's history and architecture, and Mr. F. C. Morgan described the interesting monumental brasses. The last stop of the day was at Sutton Walls, where Mr. Stanford described this important iron age site and the excavations that had taken place there. A short business meeting was held at which the Rev. and Mrs. C. Beverly-Davies, Mr. Haworth, Miss Gwatkin and Mr. and Mrs. A. Barker were declared elected members of the Club.

Autumn Meetings

First Meeting: Thursday, 31st October at 3 p.m.: the President, Mr. V. H. Coleman, in the chair.

The following were declared elected members of the Club: Mr. R. Pearse, Mr. R. Shoesmith, Mr. J. Calderbank.

Mr. F. C. Morgan gave a talk on Dr. William Brewster of Hereford (1665-1715) who bequeathed his library to be shared between the Bodleian Library, St. John's College, Oxford, and All Saints' Church, Hereford, where the collection he gave exists today as the parochial chained library in that church.

Dr. William Brewster was the only child of John Brewster of Burton Court, Eardisland by Margaret his first wife. John Brewster died in 1684 and was buried near his first wife in the chancel of Eardisland church. From his father William inherited houses in Gloucester and Hereford, some silver and household goods and £1,800 in money. He was educated at the Cathedral and then went to St. John's College, Oxford, studied anatomy in London and after a period in Gloucester and Brecon, settled in Hereford as a successful practising physician, and acquired there in 1697 the *Blewhouse* and adjoining houses in Widemarsh Street, and built on the site an elegant house of which the main structure still stands and in which he lived until his death in 1715. He left the house to his wife Susan for her life and afterwards to William, son of Francis Brydges. It remained in that family until it was conveyed in 1763 to the City Corporation in trust for providing funds for a minister of the Church of England to attend the prisoners in the gaol and became known as the Mansion House.

For a knowledge of Dr. William Brewster as a Hereford personality some information may be gleaned from the letters in the Bodleian Library of William Brome, his friend and overseer of his will, written to Hearne and Rawlinson, members of a learned and scholarly circle, in which Brewster was known. More may be guessed by the study of the contents of his library, of which lists have survived in the Brydges Collection (Hereford County Record Office). His collection of books was a very wide one. There is scarcely a subject of interest to any educated man of the period which is not represented—books on medicine, theology, astronomy, mathematics, gardening, agriculture, architecture, heraldry, geology, and other branches of science, as well as pure literature, were all there. Of these the books on Divinity, Morality and History were left to All Saints' " to be set up and kept in the vestry or any other convenient place in the church for the use of the said Rector or Vicar for the time being for ever ".

In this year (1963) the Pilgrim Trust granted £100 for the repair of the books and they have been full catalogued.

This library in All Saints' is not the only relic of the Brewster family in Hereford. Many of the family portraits from their seat at Burton Court, together with records, were bequeathed to the Hereford City Library and Art Gallery in 1949. Among them is a portrait of William Brewster himself, a good-looking young man with dark eyebrows and a well-shaped mouth. Some of these portraits illustrated Mr. Morgan's paper, which was printed in *Medical History*, vol. VIII, No. 2, April 1964, and offprints may be obtained from All Saints' Church.

Second Meeting: Thursday, 21st November at 3 p.m.: the President, Mr. V. H. Coleman, in the chair.

The following were declared elected members of the Club: Mr. Booth, Mr. Philips, Mr. Neal, Mr. Slocombe.

It was announced that a new screen for the projection of slides had been purchased for the Club's use.

Preb. A. L. Moir then read his paper on Inn Signs, which is printed in the present number of the *Transactions*, pp. 295. In the discussion that followed, Mr. F. C. Morgan suggested that a list of inn signs in Herefordshire should be compiled.

Winter Annual Meeting: 7th December: the President, Mr. V. H. Coleman, in the chair.

The following were declared elected members of the Club: Mr. C. E. Gordon Smith, Mr. and Mrs. E. W. Lucas, Mr. J. Bishop.

The following officers were appointed for 1964:

President—Mr. F. Noble; Vice-Presidents—Mrs. Leeds, Mr. C. J. Price, Mr. Coleman, Mr. H. J. Powell; Treasurer—Mr. Rosser; Librarian—Mr. Sherwood; Secretary—Mr. Kendrick Auditor—Mr. Widgery; Secretary (Field meetings)—Mr. Coleman; Committee—Miss Jancey, Mr. W. Pile, Mr. V. Higham, Mr. E. Ball, Mr. W. T. Jones, Mr. N. Bridgewater; Sectional Recorders—Archæology, Mr. S. C. Stanford; Architecture, Mr. H. J. Powell; Botany and Geology, Mr. Kendrick; Dialect—Mrs. Leeds; Entomology, Dr. Langdale Smith; Ornithology and Mammals, Dr. C. W. Walker; Industrial Archæology, Mr. H. Hillaby; Ancient Buildings, Mr. Tonkin.

It was agreed that two full day meetings should be held, one in the Clun area, and one in the Abergavenny area, and that a half day meeting should be held in the Ross-on-Wye area.

The sectional recorders for dialect, archæology, entomology, botany and geology presented their reports. There was nothing to report on architecture and the ornithological report was postponed.

THIRD MEETING: 17th December, 1963.

This was an Open Meeting, to which the public were invited as at it was given the first of the F. C. Morgan Lectures, founded to mark the Club's appreciation for all the work done for it by Mr. Morgan. Prof. G. Zarnecki, of the Courtauld Institute, was the first lecturer on this foundation, and delighted his audience with a talk on the Herefordshire School of Architecture.

At a short business meeting held before the lecture, the following were declared elected members of the Club: Mr. Skelton, Miss Barber, Mr. Jeremy, Mr. Tomkins, and Miss Pearce.

OBITUARIES

WILLIAM ORMSTON BACKHOUSE 1885–1962

Herefordshire has produced some remarkably successful plant breeders, including Thomas Andrew Knight (1759–1838), a pioneer, and still perhaps the greatest. To him we owe, among many other things, the green pea as we know it to-day. The modern bearded irises and hemerocallis were first bred by George Yeld (1845–1938) who had been head boy at Hereford Cathedral School. Ernest Ballard (1870–1952) was largely responsible for the present-day Michaelmas daisy, as well as other distinguished hybrids.

The county cannot, however, claim the first of the three plant-breeding generations of the family of Backhouse. (The geneticist, surely, should be interested in this inheritable faculty: for example, the Rev. G. H. Engleheart (1851–1936) often called the father of the modern daffodil, was descended from the Hon. Rev. W. Herbert (1778–1847) along with Knight, one of the early significant experimenters in hybridization.)

It was, in fact, the work of Herbert, whose concern was mostly with bulbous plants, that inspired his fellow north countryman, William Backhouse (1807–1869), a banker, of Wolsingham, Durham, to experiment with the genus *Narcissus*. (He was not connected with the celebrated Backhouse family of nurserymen from Darlington.) Until the middle of the nineteenth century, the daffodil, unlike such plants as the carnation and the tulip, was not a florist's flower. Backhouse was one of the first to make it so. The principal professional nurseryman concerned with this movement to develop the daffodil was the enthusiastic Peter Barr (1825–1909) a great traveller and collector. Backhouse was forced by ill-health to give up his breeding and his stock was acquired by Barr, who put them on the market as the first of the " Barrii " daffodils, subsequently further developed. Some of these early short-cupped kinds can still be found in old gardens.

William Backhouse's son, Robert Ormston (1854–1940) came south and settled at Sutton Court, Hereford, where he and his wife Sarah Elizabeth (1857–1921) bred daffodils, lilies and colchicums. At first, Mrs. Backhouse was the better known. She produced one of the earliest successful strains of hybrid lilies, on which she began to work in 1890. The Backhouse hybrids, as they are known—crosses between the martagon and *Lilium hansoni*, are still cultivated. She exhibited her daffodils with considerable success at the Daffodil Shows.

But it was her husband who eventually achieved sensational fame. In 1923 he exhibited the first pink-cupped daffodil which he named

after his wife, " Mrs. R. O. Backhouse ". This was something completely new.

It was into this tradition of plant breeding that William Ormston Backhouse was born on 20th February, 1885. He went to Bradfield College and Trinity, Cambridge where he studied agriculture and forestry. He then worked at the Cambridge Plant Breeding Station and the John Innes Horticultural Institute.

However, his life work really began when he was appointed geneticist to the Argentine Government, and later agricultural adviser to the Argentine railways. It was here that he made his reputation, producing the famous M38 wheat which completely altered the practice of wheat growing in South America. This was produced in one of several wheat-breeding stations he established. He was also concerned with scientific modernization of pig-breeding, fruit-growing and large scale honey production.

He imported daffodil bulbs from Sutton Court into the Argentine and began breeding there. When he returned home after the last war his bulbs were flown back, and he continued his work on them. Mr. B. R. Hilliard writing in *The Gardener's Chronicle* of October 27th, 1962, described the types that Backhouse bred. They were yellow daffodils with orange-red full trumpets, large-cupped early flowering red-and-white narcissi, and narcissi with large truly pink crowns. He was not a frequent exhibitor at shows, and his ideals were not those in fashion; he wrote for the 1963 *The Daffodil and Tulip Year Book* an illuminating article on the origins of the red trumpet and referred to wasted years in endeavouring to produce something for which " the fancy " had no use. There seems no doubt, however, that his work will prove of considerable significance in future developments.

To visit the garden at Sutton Court at flowering time was interesting. Daffodils grew here, there and everywhere, apparently in disorder. Those forms which he was breeding, however, were enclosed in bee-proof cages. Elsewhere, in trim beds between clipped hedges he grew large numbers of magnificent daffodils and narcissi for market.

At a time when we are assured that successful plant breeding is merely a matter of scientific routine, it is well to recall that the parentage of " Mrs. R. O. Backhouse ", one of the biggest breaks in the history of daffodil breeding, is unknown—though its raiser was working to that end.

That W. O. Backhouse appreciated that there was much more to the matter than the cold science of genetics is, I think, shown by the following passage in a letter I had from him (he had been at some trouble to obtain biographical information about his grandfather). It also shows his modest nature. Referring to his

" attempts at red trumpet daffs ", he wrote that they were getting " better and better, and this year one appeared with a very good colour . . . and a perianth which needs few apologies. I had not expected anything like this for some years, but I seem to have been lucky ".

Backhouse died on August 7th, 1962.

M. H.

Edward Dunnicliff

In the Club we first knew Edward Dunnicliff as the country rector with the fascinating Dyndor Hill and Holme Lacy House in his parishes, and also a much-loved piano in his rectory.

The country rector changed into the Canon-Residentiary and Precentor of the Cathedral with wider scope for his scholarship and musical gifts. How at home he was in the atmosphere of the Three Choirs Festival. How he loved the Cathedral and its treasures, the chained library and world map. He found unexpected meanings in its monuments. In his lecture to the Club on that dreary effigy just outside the Dean's vestry of Bishop Melun he vividly unravelled the story of a scholar of long ago linked with Peter Abelard. Abelard ! composer of the hymn O quanta qualia, " Oh what the joy and the glory must be . . .". A hymn that was sung in the Cathedral at Edward Dunnicliff's funeral service.

Before he died he was able to see his lecture in print in the *Woolhope Transactions*. It was a delight to him, and to us too for it perpetuates the memory of a loved and distinguished member of our Club.

A. L. M.

A. U. Zimmerman

It was with great regret that members heard of the death of our President for 1962, Mr. A. U. Zimmerman, in March, 1963, after a very short illness. He joined the Club in 1931 and served on the Central Committee for many years. He was an active member of the Club and his genial and friendly personality will be missed on the field meetings. His rather shy and retiring nature led him to profess that he knew little of the Club's learned activities, but quiet conversation with him rebutted this statement. He was a regular attendant at field meetings and lectures and was always ready to do his best to further the interests of the Club. His interest in motor sport made him a well-known figure in the West Midlands and Wales, where he was associated with many events in an official capacity.

F. M. K.

Miss Constance C. Radcliffe Cooke

By the death in October, 1963, of Miss Radcliffe Cooke, the Club lost an old and valued member, whose deep interest in social and local history must be well known and much appreciated by those who have used her fine catalogues and lists of the Hellens records now housed at the City Library and the Hereford County Record Office. That interest had its roots in her abiding love and understanding of the rural way of life and in a profound concern with social welfare. An early member of the Fabian Society and supporter of the suffragette movement, she was especially interested in the move to improve the status of women, and was at one time concerned with the education of girls in domestic science. She herself wrote a book on *The Cooking Box*, published in 1917, designed to give guidance in fireless cookery at a time of poverty and shortage.

She spent many years in the Isle of Wight, but returned to Much Marcle, with which her family was so closely connected, for an old age in which she gave much help from the store of her knowledge to those who shared her interests. In later years she turned to the study of the roots of language. The notes she compiled are now to be housed at Keele University.

E. M. J.

STATEMENT OF ACCOUNTS

GENERAL RESERVE ACCOUNT

1963		£	s.	d.
January 1st	Balance at Bank	262	0	9
December 31st	Bank Interest	5	4	6
December 31st	Balance at Bank	£267	5	3

HEREFORDSHIRE FLORA ACCOUNT

1963		£	s.	d.
January 1st	Balance at Bank	88	2	6
December 31st	Bank Interest	1	15	0
December 31st	Balance at Bank	£89	17	6

MERRICK BEQUEST FUND

1963		£	s.	d.
January 1st	Balance at Bank	38	11	0
December 31st	Interest on 3½ per cent War Stock ..	3	10	0
December 31st	Bank Interest		15	6
December 31st	Balance at Bank	£42	16	6

GEORGE MARSHALL FUND

1963		£	s.	d.
January 1st	Balance at Bank	71	14	9
December 31st	Interest on 3½ per cent War Stock ..	8	9	8
December 31st	Bank Interest	1	9	6
December 31st	Balance at Bank	£81	13	11

WOOLHOPE NATURALISTS' FIELD CLUB, HEREFORDSHIRE

HONORARY TREASURER'S CASH ACCOUNT FOR THE YEAR ENDED 31ST DECEMBER, 1963

Dr. RECEIPTS	£ s. d.	£ s. d.
Balance, 1st January, 1963—		
Cash at Bank	362 8 0	
Cash in Hand	7 19 8	
		370 7 8
Interest on £590 6s. 6d. 3½ per cent War Stock		20 13 2
Proceeds of Sale of "Transactions" ..		11 13 5
Subscriptions		600 10 0
Surplus on Field Meetings		35 12 2
		£1,038 16 5

Cr. PAYMENTS	£ s. d.	£ s. d.
Fire Insurance	2 0 0	
Printing, Binding, etc.	328 11 0	
Stationery	71 6 0	
Postage	31 7 5	
		433 4 5
Subscriptions—		
Council of British Archaeology ..	4 0 0	
Prehistoric Society	4 4 0	
Bristol and Gloucester Archaeological Society	1 1 0	
Cambrian Archaeological Society	1 5 0	
		10 10 0
Honoraria to Assistants		40 0 0
Bank Charges	3 8 0	
Fencing Road	5 5 0	
Lecture	2 2 0	
Screen (half Cost)	11 7 6	
Miscellaneous	1 0 0	
		23 2 6
Balance, 31st December, 1963—		
Cash at Bank	498 9 9	
Cash in Hand	33 9 9	
		531 19 6
		£1,038 16 5

AUDITOR'S CERTIFICATE

I have audited the above Honorary Treasurer's Account, together with the General Reserve Account, the Herefordshire Flora Account, the Merrick Bequest Fund and the George Marshall Fund, and certify them to be in accordance with the books and vouchers of the Woolhope Naturalists' Field Club.

HERBERT S. WIDGERY, F.C.A.,
Honorary Auditor.

9th July, 1964

IN PLACE OF A PRESIDENTIAL ADDRESS

Some thoughts on the history of the Club's activities and on their direction in the future.

By F. M. KENDRICK

The illness and sudden death of our President for the year 1962–63 meant that the main feature of the Spring Annual Meeting, the address from the retiring President, could not take place.

As the late President was deeply concerned with the well-being of the Club and supported by his interest its many activities, though he claimed no specialised field for his own, it was thought that a general talk from the secretary might be a suitable way of meeting this situation.

It is interesting to discover, from an analysis of the Club's *Transactions*, the history of its activities. This history has been governed partly by the interests brought by individual members and partly by modes of thought in the world of scientific and historical thinking affecting the direction and choice of those activities.

The Woolhope Club was founded in 1851 in an era which saw the formation of many such similar clubs in various parts of the country.

That the Club's first interests should be botany and geology was almost inevitable. Barely 20 years before its formation Leyell had published his *Principles of Geology* (1830–1832), Hugh Miller his *Old Red Sandstone* in 1841 and Murchinson's *Silurian System* followed in 1845. Many of the founder members had direct contact with Murchinson. The Rev. T. T. Lewis is acknowledged in his *Siluria* and the earlier copies of the *Transactions* reproduce correspondence he had with various members. In the botanical connection, whilst Leyell was working on his geological treatise, Hooker was initiating his Field Botany at Glasgow and by 1841 had taken over Kew and laid the foundations of its famous Herbarium. Many of our founder members were clergymen who, no doubt, had been imbued with this new passion for collection and classification whilst at the university.

It was only natural that the first meetings should be confined to areas in close proximity to Hereford because of the difficulties of travel. It was not until 1855 that the railway is mentioned in connection with a Field Meeting held at Ludlow. After this period excursions were frequently held beyond the county boundary,

though it was generally the practice to combine with clubs from the area to be visited whose members acted as guides.

The publication of Darwin's *Origin of Species* must have drawn the Club's attention to the value of meticulous observation and scientific recording of species, for by 1861 we have the first published lists of Herefordshire Birds and Coleoptera. It may be the controversy raging over this work inhibited any open commentary, for it was not until 1867 that we have a lecture on the differences between the higher apes and man.

One wonders if Dr. H. G. Bull became aware of Pasteur's work on yeasts and moulds in 1864 through his medical papers, and if this stimulated his interest in the fungi as evidenced by his paper on edible fungi in 1867. This was followed by other papers on the fungi and by 1875 we have the first of the famous Fungus Forays. No doubt the improved microscopes and laboratory techniques developing in Germany under Abbé and Strasburger were found useful in these studies.

The year 1870 saw the introduction of dry plate photography and shortly after this photographs of large trees in the county began to appear in the *Transactions*.

Highways Boards established in 1882 gradually took over from the Turnpike Trusts and the increased development of road maintenance and reconstruction led to the opening of many local old quarries which gave geologists a fruitful field for their enquiries. In 1884 the extension of Ledbury Tunnel enabled Piper, W. S. Symonds and Henry Brooks to make the famous collection of fossils from the passage beds.

The gradual improvement in roads meant that villages and towns which had formed largely self sufficient units had easy access to other parts and the opportunity of easier travel acted as an incentive to the educated and intelligent man and woman. This was helped by the bringing into use of the modern bicycle between 1889–1891, and by the macadaming of roads. Larger areas were opened to field workers and the additions to the county flora, which was published in the volume for 1905–7, is the fruit of these researches.

The advent of the motor car in 1904 and the demand for petroleum products stimulated interest in geology once more and this is reflected in the very comprehensive survey of the county geology, the Richardson, in 1905.

It is difficult to account for the introduction of archæology into the Club. It may be that the discovery of Roman remains during railway work at Abbeydore and Blackwardine shortly after 1904, together with the interest over the Piltdown remains, may have stimulated interest in this subject. How far this was due to the admission of new members it is difficult to assess, but it is noticeable

that in the volume of the *Transactions* for 1909–11 archæology displaces natural history as the Club's first interest.

The Great War of 1914–18 saw the rapid development of the motor vehicle and by 1920 the present pattern of the field day excursions developed, for in that year we find recorded that the Club travelled by motor-brake.

During the depression of the 1930s public works were undertaken to relieve unemployment. These included road works for which such quarries as Wayne Herbert, Castle Mattock and the Pool were opened, all of which yielded fossils of the Old Red fishes. It is noticeable, however, that the interest in these were national rather than local as only a short report appeares in the *Transactions* for 1936.

Today the changing conditions of employment have lead to Saturdays sharing the honours with Thursdays for the field days. More leisure has lead to increased membership whilst television programmes on archaeology and natural history have led to a quickening interest in these things.

Finally, one may speculate as to what the future holds for clubs such as ours. Science is becoming even more complex, and the experts in limited fields more numerous so that the amateur may feel he no longer has a place. This is not true, for in Clubs such as ours the recording of detailed accurate observation in local natural history, archæology and related subjects can always add to the total sum of knowledge.

NOTES ON SOME FACTORS WHICH AFFECT THE HYDROLOGY OF THE PENTALOE BASIN, N. WOOLHOPE, HEREFORDSHIRE

By G. W. Wilde

(1) Introduction

Four miles to the S.E. of Hereford the Pentaloe Brook escapes from the Woolhope Inlier into the Lugg and the Wye. Size is no criterion of interest and although it drains a mere 4,000 acres and only contributes half a million gallons of water each day in August to the 250–290 million gallons which flow down the Wye, the Pentaloe has a fascinating course.

The Woolhope Inlier of Silurian rocks has attracted the attention of many geologists since Murchison first described the area in 1839. Many botanists have studied the flora of this elevated and somewhat isolated region. No geographer has, however, sought to relate the various factors which affect the Hydrology of this small river basin. These notes are a beginning in this direction and, since the initial impetus arose from the need to train Sixth Form boys in Field Work, they will have succeeded if they suggest lines of research for future students.

(2) The Geological Factors

The geology of the Woolhope Inlier has been studied in detail by H. C. Squirrell and E. V. Tucker.[1] Their thesis portrays not a simple denuded anticline but rather an asymmetric pericline which pitches both to the N.W. and to the S.E. Where the Pentaloe "escapes" through the gap at Mordiford the strata are inclined at an angle of 35° to 40°.

The crest of the Broadmoor Common "dome" is in the vicinity of Broadmoor Farm (603362) and it is from this water shed that the Pentaloe, the Tanhouse and the Sollers Hope Brooks all begin their courses. The radial pattern is not a simple one, however, and has been profoundly influenced not only by the concentric outcrops of limestone ridges and shale vales but also by a complex fault pattern.

The source of the Pentaloe is in Middle Park (617383) at a height of 585′ O.D. (Fig. 1). It rises near the junction of the Sleaves Oak Beds (which represent the Aymstrey limestone in this area) and the Wootton Beds. The Canwood Farm Fault has helped the brook to cut through the Wenlock limestone ridge at Canwood Knoll (6137)

[1] "The Geology of the Woolhope Inlier, Herefordshire", *Quat. Journ. Geol. Soc.*, vol. CXVI, pp. 139–185 and plate XV, 1960.

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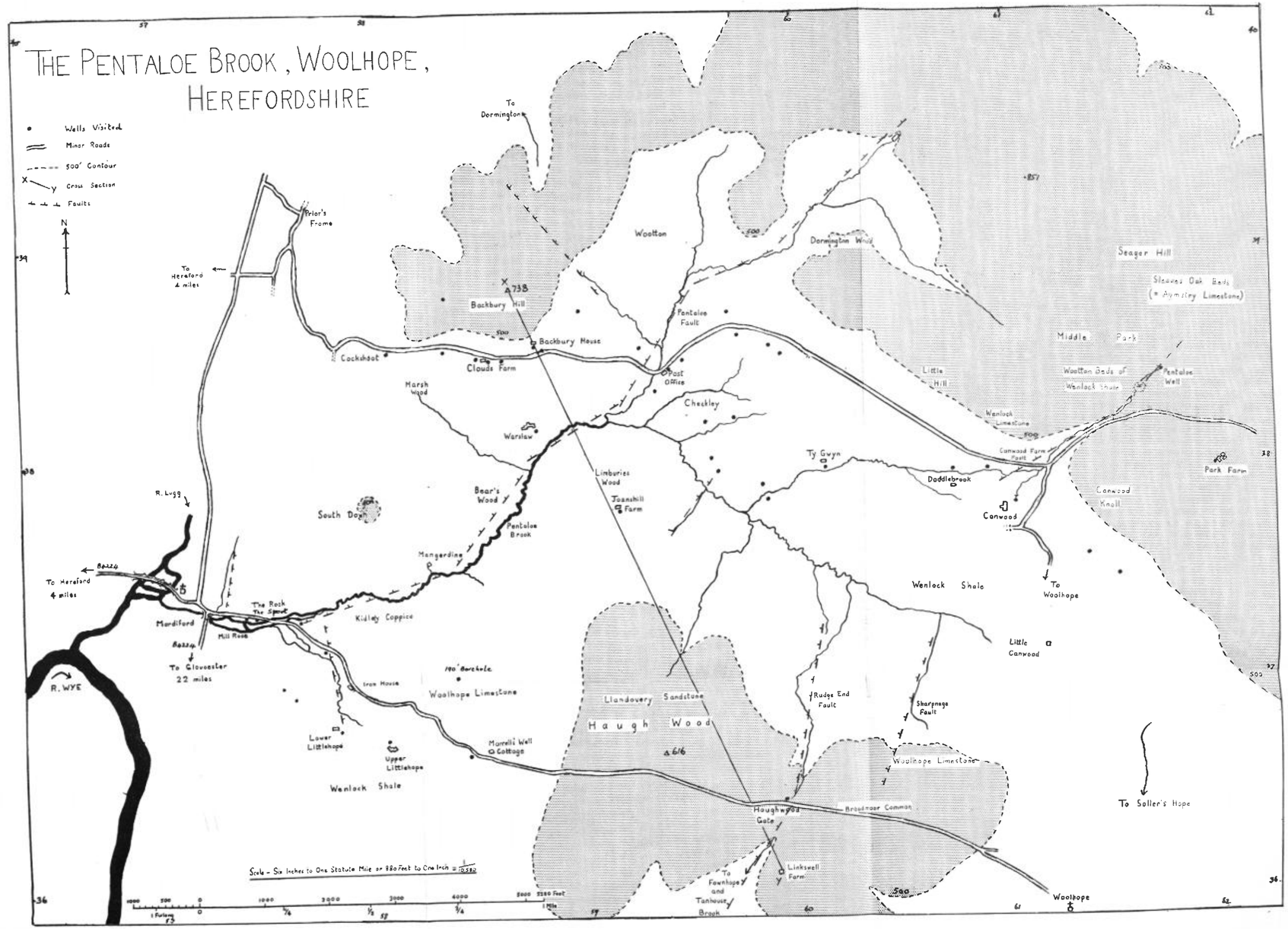

FIG. 1

CROSS SECTION THROUGH THE PENTALOE VALLEY TO SHOW ROCK STRUCTURE AND TYPE

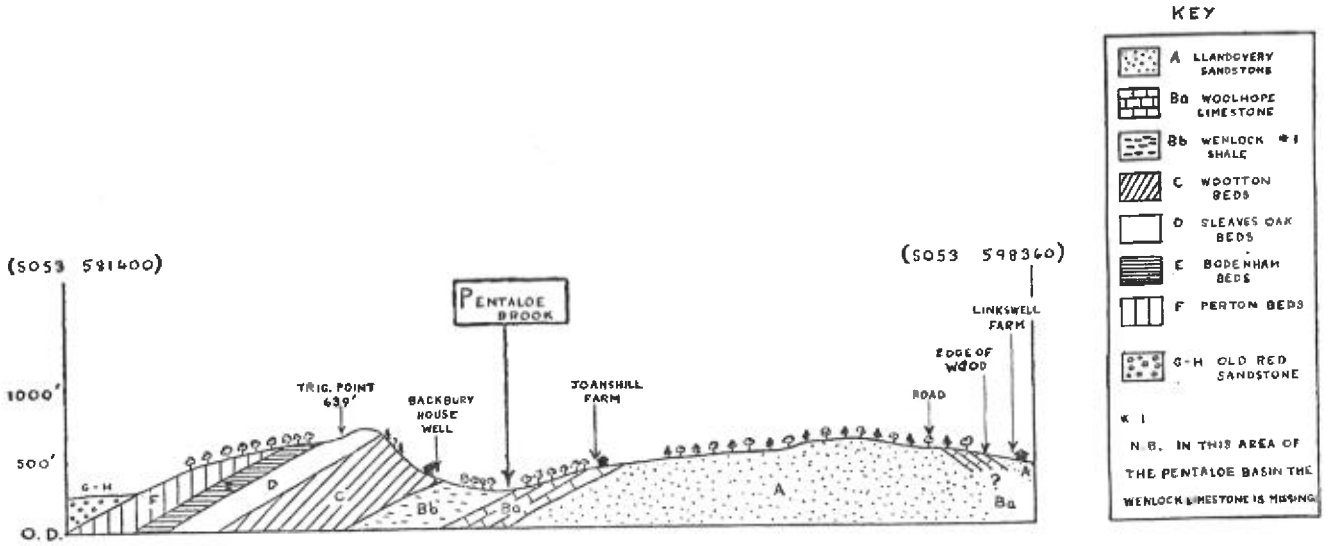

FIG. 2

after which the stream flows westwards along the deep Wenlock shale outcrop. The northern side of the valley is made up by the discontinuous ridge of Wenlock limestone and it is through this ridge that the Checkley Brook cuts to join the Pentaloe at 591382. The flow of this brook at Checkley Post Office on August 2, 1963 was ·3 cu. secs., which represents 180,000 gallons per day (1 cubic foot per second is 538,000 gallons water per day).

To the S.W. the watershed between the Pentaloe Basin and the Sollers Hope Brook Basin occurs in the vicinity of Little Canwood (6137). This low watershed is due to the undulations in the Wenlock shale caused by the tougher calcareous bands which occur here. North eastwards from Little Canwood the Pentaloe skirts round the Woolhope Limestone and swings south westwards towards the Wye north of Limburies Wood (591382). (See cross section Fig. 2.) At Mangerdine (584375) the bed of the Pentaloe is cut into the oldest rocks in this area—the Haugh Wood Beds of Llandovery Sandstone.

The compression forces which accompanied the Armorican Orogeny some 320 million years ago not only folded the rocks of the Woolhope area but also produced a complex pattern of faults. Springs often occur at faults—as at Wootton (596393), or springs may utilize faults to cut through limestone ridges—as at Canwood Knoll (613380) and Dormington Wood (601391). Moreover, the Pentaloe has been influenced in its course by the main N.E.-S.W. line of fractures represented by the Pentaloe and Rock Faults. Both of these faults have been displaced sinistrally by N—S wrench faults, e.g. The Perton Fault. The pattern of faults in the lower Pentaloe is extremely complex and " The Spout " at The Rock (573373) is one visible result.

(3) The Climatalogical Factors

Since Pierre Perrault completed the first quantitative investigation of the relation between rainfall and stream flow it has become almost a matter of common sense to realise that the rainfall exceeds the stream flow. As a first approximation it is usually estimated that one third of the rainfall runs directly down surface slopes into valleys, one third percolates into the rock and one third is evaporated.

The results of using a simple but ingenious evaporimeter (Fig. 3) such as that devised by the National Vegetable Research Station at Wellesbourne (Warwickshire) along with climatic data from the Ross Observatory show that *more* than one third of the rainfall is evaporated. (The experiment has not yet been carried out over a long enough period of time to give an annual figure). Previous to H. L. Penham's study of the factors which affect evaporation,[1]

[1] *Quat. Journ. R. Met. Soc.*, vol. 76, p. 372.

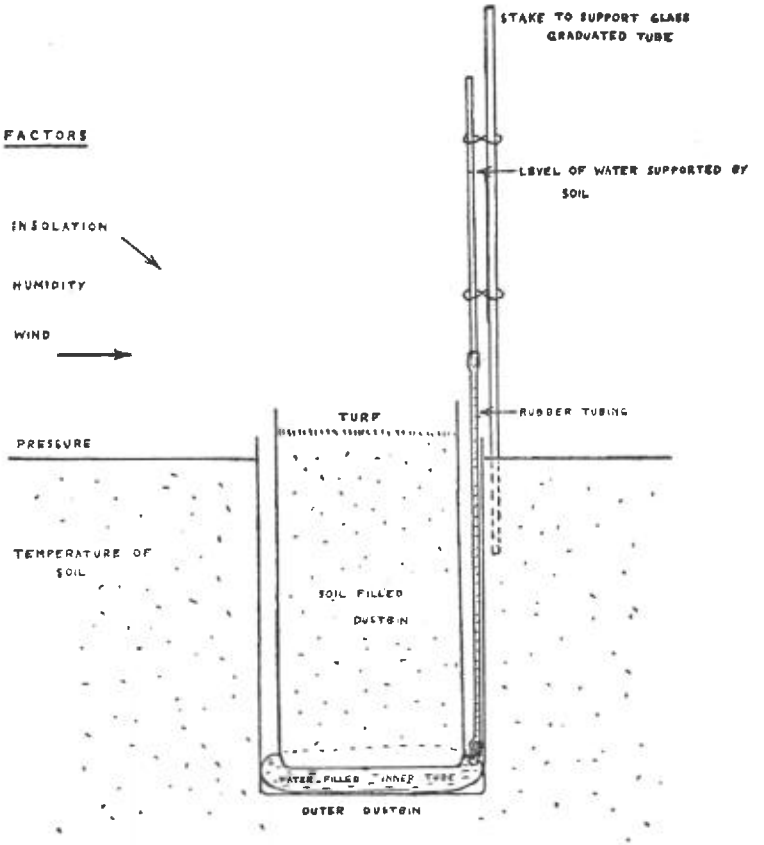

Fig 3.

Diagram of a simple Evaporimeter

Lloyd offered a useful formula for calculating the annual amount of soil evaporation loss, viz.: 0·57R ·87+110 (T°F −48)+ ·006 (S −1400) where R=Rainfall, T=Temperature and S=Sunshine.

Using Lloyds formula and monthly means for air temperature and rainfall, the following evaporation losses may be expected:

	Mean Air Temp. (°F.)	*Mean Rainfall* (inches)	*Evaporation Loss* (inches)
January ..	39·4	2·47	0·42
February ..	40·1	2·07	0·39
March ..	42·9	1·97	0·39
April ..	47·5	1·90	0·87
May ..	53·3	2·13	1·21
June ..	58·6	1·92	1·70
July ..	61·8	2·36	2·28
August ..	60·9	2·50	2·32
September..	56·7	2·38	1·91
October ..	49·7	3·03	1·52
November..	43·9	2·69	0·54
December ..	40·4	2·79	0·48
	(Average 49·6°F.)	(Total 28·18″) over past 90 years	(Total 14·03″)

On average, therefore, it appears that 50 per cent of the Rainfall is lost by evaporation. But averages deceive. These figures obscure the fact that in the summer, evaporation may exceed the *actual* amount of rain which falls. Moreover, the amount of rain which falls in the Woolhope may vary from 16·21″ (in 1921) to 41·48″ (in 1872). Yet again, whilst the month of October is usually the wettest month, in October, 1962 only 0·58″ fell.

An interesting situation must have arisen in the summer of 1949 when for the months of June, July and August only 1·53″ fell in all. Many wells dried up until a wet October (6·14″) replenished the supply of ground water. How quickly, one wonders, and by how many feet did the level of water rise in the wells? The rate at which soil absorbs water varies greatly. Not only does it vary with the rock type but also with the land use. (Figures for the Mississippi Basin suggest that for a cover of pine trees about ·35″ an hour; for bare soil 0·14″ an hour, for poor grazing 0·15″ an hour, and for good grazing land 1·17″ may percolate). The infiltration capacity of Silurian rocks is not good but the amount of pasture land is great in the Pentaloe Basin.

The extensive faulting in the Woolhope makes the task of drawing anything but local water tables very difficult. The level of water in certain wells has been measured at infrequent intervals and it has

been possible to arrive at a rough guide in estimating how many feet an inch of percolation gives in a well. Using the dry weather depletion curve on a graph of the level of water in Park Farm Well it appears that in 1962 the level varied by about 5 feet for every inch of rain which percolated to the water table.

(4) Human Factors

The Pentaloe Basin affords examples of three different kinds of settlements. (*a*) The small hamlet at Canwood (609378) extends along the Pentaloe and uses shallow wells. (*b*) At Checkley there is a nucleated " scatter " of dwellings between the Pentaloe and the

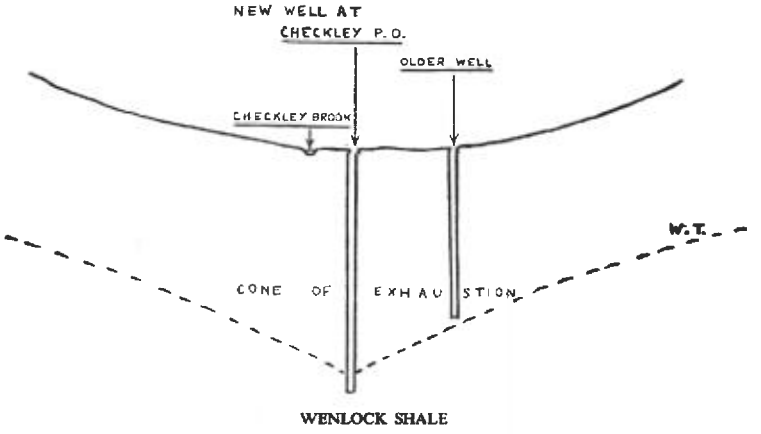

FIG. 4

Diagram to show how the sinking of a new well at Checkley Post Office has caused a nearby well to dry up. (The older well was originally below the water table but is now deprived of its supply.)

Checkley Brook. Here again the wells are either catchment pits or in the region of 20—25′ in depth. (*c*) A line of settlements between The Clouds (587385) and Backbury Hill—the latter dwellings having a southerly or a south easterly aspect and wells from 12—80′ deep.

In general, however, the settlements are well dispersed and the presence of numerous fault springs and natural seepages where pervious and impervious strata meet make this pattern possible. The increase in dairy farming has increased the need for water. A dairy cow in full milk (say October) requires 20 gallons of water and a further 10 gallons for the cooling of her milk. Therefore a farm with a herd of 32 cattle requires nearly a 1,000 gallons each day.

New wells are being dug (as at Backbury House) and boreholes being made. The older and shallower wells had a lining of moss between the bricks to filter the water. (This lining is called " kitten "). Wells up to 25′ deep (as at Haughwood Gate (598364) and Ty Gwyn (602379) are often lined with blue stone which is a stratum in the Wenlock Limestone.

When water is continuously pumped from a well so that the rate of flow through the rocks is not sufficient to maintain the level of water in the well a conical depression in the water table results. This cone of exhaustion has occurred at Checkley Post Office and an adjoining well has run dry. (See Fig. 4.)

The following table summarises the information in July, 1963 by sixth-form geographers from the High School for Boys who visited all the wells in the Pentaloe Basin:

WELL SURVEY FROM MIDDLE PARK TO THE ROCK

Map reference	*Name of Settlement*	*Depth of Well*	*Comments*	*No. of people supplied*
619379	Park Farm	63′	Dairy herd	4
611379	Pentaloe Farm and Bungalow	5′ 6″	Was Catchment Pit until 1956 "Kitten" is layer of moss between bricks in well —to purify water	4
609377	Canwood Farm			3
612375	Bungalow	80′	Borehole	
615374	Woodcroft	35′	Fault Spring nearby	4
607378	Daddle Brook	6′	Catchment Pit for Pentaloe	4
602379	Ty Gwyn	25′	Lined with Bluestone. 5′ of Silt	2
601385		85′	Borehole	3
597382		13′	After 300 gallons empties —fills overnight	5
597383		13′		2
598383	Checkley	18′	Enlarged Catchment Pit—fed by Spring	2
598385		14′	Old 1905 well dried up	4
598385	South View	8′	Fed by spring: inadequate supply. Dry for 4-6 weeks in 1962	3
598385		8′		1
598385				2

Map reference	*Name of Settlement*	*Depth of Well*	*Comments*	*No. of people supplied*
597386	Woodbine Cottage	10′		2
597387		30′	Quick response to thunderstorm	1
594384	Brookside	10′	Inadequate supply	4
594384	Checkley P.O.	20′	Piped 10 yards to house	3
593384	The Dingle	3′	Catchment Pit: Rain water tanks as supplement	2
593384		60′	6′ of water on June 10th, 1963	2
592377	Joanshill Farm		Disused well: piped water from underground lake	6
587383	Warslow Farm		Piped from spring 200 to N.	3
579383	Keeper's Cottage		Inadequate supply	4
581385	Cockshoot	80′	Sealed well	2
586385	Clouds Farm	18′	Dried in 1947 and 1959. Dairy cattle	2
587385	Clouds	12′	Not used	2
587385	Warne Grove	18′	Not used	4
588386	Backbury House	80′	4′ water July, 1963—near fault. New catchment pit dug 1963	5
588385	Waltham	6′	Pumped	3
588385	The Clouds	27′		2
583375	Mangerdine		Spring—Pumped	2
588387	Brooky Green	80′		
575374	Rose Cottage	8′	Pump in well	2
575374			From Pentaloe	5
575375	The Rock Area		"The Spout" 573373 used	10
574369	Ladygrove Cottage		Borehole owned by Lower Littlehope	4
583363	Woodlands	30′	Occasional occupation	2
578368	Lower Littlehope	190′	Borehole plus spring. Borehole located by Water Diviner at 581369 and gives 1,800 gallons per day	4

Map reference	*Name of Settlement*	*Depth of Well*	*Comments*	*No. of people supplied*
578369	Ty Nant		Also uses borehole	
581367	Upper Littlehope	20′		
577372	Kidley's Kopse	80′	Borehole — Artesian effect	2
577373	The Stream	80′	Borehole	2
	Total number of people dependent on wells or spring ..			128

Thirty-three wells and boreholes were visited and they varied from 5′—6′ catchment pits along the Pentaloe Brook to recent boreholes 80′—190′ deep. The older wells which penetrate the Wenlock and Woolhope Limestone strata vary from 60′—80′ in depth—though the exact depth of the well is difficult to determine precisely when a layer of silt has accumulated in the bottom of the well. Great faith is placed in Water Diviners some of whom dig wells by hand and some of whom own modern boring equipment. The deepest borehole (at 581369) penetrates the Woolhope Limestone in the vicinity of the Woodfield Fault and supplies 1,800 gallons a day to Littlehope Farm and drinking water to two adjacent settlements. When the 80′ borehole at Kidley's Kopse was made the water was under sufficient pressure to cause an artesian effect. Throughout this region the water is extremely hard. On Clark's scale the degree of hardness is 31—32. (1° of Hardness represents 1 grain of Lime Bicarbonate in 1 gallon of water.)

(5) Summary and Synthesis

The area drained by the Pentaloe and its small tributaries is approximately 4,000 acres. If one assumes that each 1,000 acres provides $\frac{1}{6}$ cubic feet of water per second the flow of the Pentaloe in its lower reaches would be ·8 cu. sec. or 436,000 gallons per day. Measurements of the flow at the Rock (575373) give a somewhat higher figure than this "assumed" figure. The flow on August 2nd, 1963, was 0·92 cu. secs. which is almost half million gallons a day. (The flow of the Lugg was then 70-90 million gallons a day and the Wye 180-200 million gallons a day). No figures are available for the record floods of December, 1960 (the highest since 1795) but some indication of the maximum flow may be calculated from the flow of the Wye which was 15,000 million to 18,000 million gallons per day. (The minimum being 62 million gallons per day in 1949 and 1959.)

The folded and faulted alternations of pervious and impervious strata in the Pentaloe Basin produces many springs and natural

seepages. These, together with shallow wells in the shale and deeper wells in the limestone, allow a dispersed pattern of settlement. The actual course of the Pentaloe is not only influenced by the Wenlock shale outcrop but also by N.E.—S.W. faults—especially the Canwood Farm Fault, the Rock Fault and the Pentaloe Fault itself. So complex is the pattern of faulting that the sinking of wells involves a high element of risk. (The well which was dug at Ladygrove Cottage produced no water at all.) Not least among these risks is the possibility of modern deep boreholes producing cones of exhaustion which may cause older wells to dry up.

Figures 1–4

(1) Map of the N. Woolhope showing the course of the Pentaloe, some of the faults which have affected its course and the wells investigated.

(2) Cross Section through the Pentaloe Valley to show rock structure and type.

(3) Diagram of a simple evaporimeter.

(4) Diagram to illustrate the " Cone of Exhaustion ".

Acknowledgements

I wish to thank Mr. Parsons of the Ross Observatory for his help in supplying climatic data. I am also indebted to the Wye River Board for figures of the flow of the Rivers Wye and Lugg and to R. N. Wilson for his assistance in completing the maps and diagrams.

EXCAVATIONS ON A MEDIEVAL SITE AT BREINTON, HEREFORDSHIRE

By F. G. Heys, M.A.

The earthwork known as Breinton Camp at Lower Breinton, Herefordshire (O.S. Grid Ref. SO 473396) has been variously accepted as a small hill fort of the Iron Age[1] or as a defensive fortification of the Roman[2] or Anglo-Saxon[3] period. The dimensions and ground plan of the feature rendered the first two attributions doubtful, and the claims were unsupported by pottery or other material evidence. The suggestion of an Anglo-Saxon origin was tentatively made as a result of a Woolhope Club excavation in 1921 under the direction of Mr. George Marshall. A full examination of the site was intended but not carried out, and the only report of the work done is contained in a few lines in the Transactions for 1922.[4] Two parallel walls were found on the inner side of the ditch and at two points in the ditch natural gravel was reached at 6 ft. 6 in. below ground level. A trench across the middle of the enclosure disclosed no further features.

The most significant part of the 1922 report, however, was the few words about the pottery which was described as "consisting of coarse black Romano-British ware and coarse red ware with rough glaze mottled green, found in the vallum and ditch at all points opened". This was written at a time when medieval pottery often passed unrecognised or unrecorded, and the Breinton excavators were obliged to fall back on intelligent speculation in the absence of adequate information about post-Roman pottery. Rapid advances have been made in this field and in the sphere of medieval archæology generally during the past decade, and it seemed to the present writer, in the absence of the pottery, that what was being described was ware of this period. It was to see if Breinton Camp would provide evidence of medieval occupation that the excavation of the earthwork was begun in the summer of 1959.

Work in the 1959 season was carried out at week-ends. The exceptionally dry conditions of that year created difficulties in the interpretation of strata and even brought work to a standstill for a time. Good progress was made, however, since not only were the results of the 1921 excavation confirmed on Site I (see Fig. 1), but evidence of foundations within the enclosure was disclosed (Fig. 1,

[1] K. M. Kenyon, *Excavations at Sutton Walls, Herefordshire*, 1948–51, Arch. Journal, Vol. CX, plate XIV.
[2] W. H. Cooke, *Duncumb's County of Hereford*, Vol. IV, p. 11, among others.
[3] *Transactions*, Woolhope Club, 1921–3, pp. lxviii–lxix.
[4] *Ibid., op. cit.*

Site V). In April, 1961 a full week of excavation produced even more fruitful results, especially on Site V and in the gateway (Site VI). Another week at Easter in 1962, whilst adding to the knowledge already gained, failed to throw as much light as had been

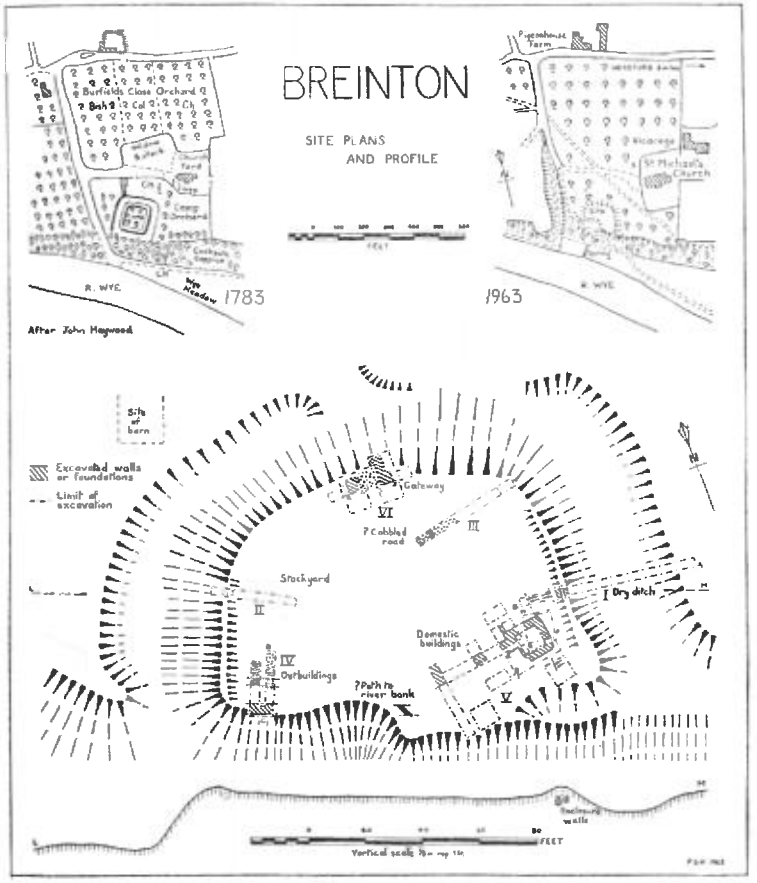

FIG. 1

hoped for on the nature and extent of the main building. The writer left the Hereford district at the end of 1962 and was obliged to discontinue the excavations. Consequently a full investigation of the site and its surrounding area was not completed and the conclusions reached in this report are in many respects more speculative than the writer would have wished.

The Site

The earthwork is situated on a bluff above the left bank of the River Wye at 229 feet O.D. Fig. 1 shows the surrounding features and the general plan, and Plates 1 and 2 are ground views of the site. The position has obvious natural advantages, commanding the river and the valley side to the south from the top of a steep 30 ft. slope. Looking in this direction one is conscious of the military possibilities of the site. To a lesser degree this applies to the western sector too, where there is a difference of about 11 ft. between ground level outside the ditch and the top of the perimeter, but to the north and east the situation is less impressive. On the north side the difference in levels is small and the slope gentle except where the cutting of the ditch has produced a steeper gradient. In the eastern sector there is no significant difference between ground level inside and outside the ditch. Thus, the original intention seems to have been to create an enclosure, or living space, with some regard to good position, but where defensive requirements were not paramount. To meet these conditions it was sufficient to cut off a small spur of slightly higher ground on the edge of the steep river slope.

The central enclosure is of irregular semi-circular shape, covering an area approximately 120 ft. × 80 ft. The flanking ditch, or dry moat, is not present on the south side where defensively it was unnecessary. Its general condition is poor and it fades out towards the northern sector where for 60 ft., in the area of the gateway, it disappears completely.

There are other points of interest in the locality that deserve mention. Some of them are apparent in the maps of Fig. 1 where John Haywood's plan[1] of 1783 and the present-day features are shown on the same scale. In particular, an ancient track runs down through a miniature ravine to the river at a point where a ford previously existed.[2] It lies 30 yards west of the earthwork, but since 1783 the southern part of the track has been incorporated in the grounds of a private house and the modern path deviates and passes closer to the earthwork before dropping diagonally down the bluff. At the bottom of the bluff a spring of pure water flows out from the rock and into the river. This is not shown on Haywood's plan or, for that matter, on the 1:2500 Ordnance Survey map, although it appears to be an ancient feature of the site and still flowed freely in the drought conditions of 1959.

[1] A plan of the Freehold and Copyhold lands and also the Leasehold lands held under the Dean and Chapter and Custos and Vicars of the Cathedral Church of Hereford late in the possession of Richard Aubrey, Esq. Surveyed by John Haywood, London, anno 1783. Hereford City Library. Only the relevant portion of the plan, which measures 38½ in. × 30⅜ in., is shown here. (Fig. 1)

[2] A. H. Lamont, *Fords and Ferries of the Wye*, Transactions Woolhope Club, 1921, p. 81.

Immediately north of the earthwork the ground is uneven with marked hollows amongst the fruit trees, and on the north side of the path to the church a well-defined earth platform extends westwards for some yards from the churchyard wall. It seems likely that these surface features indicate the sites of other buildings. This is certainly the case in respect of a rectangular depression at the north-west corner of the ditch which is readily identifiable as the site of the building shown on Haywood's plan. Local enquiries have revealed that this was a barn of unknown age pulled down at the end of the 19th century.

The Ditch (Figs. 1, 2)

A trench (Site I) was cut across the perimeter of the earthwork and the ditch parallel to and 5 ft. south of the trench of the 1921 excavations, which could still be traced. The medieval nature of the site was soon established. From the first there was a steady yield of coarse grey, brown and black sherds and fragments of roof tiles with golden and green mottled glaze. Excavation revealed that the ditch had been recut. Only the inner slope and a small part of the flat bottom of the original remained. It was steep-sided with a depth of 3 ft. 4 in., but the width could not be ascertained as the later ditch, greater both in width and depth, had obliterated the eastern part of this feature. The recut ditch was 17 ft. wide with a long sloping berm, 4 ft. wide at the bottom and 6 ft. 3 in. deep, measuring from present ground level. Most of the spoil from the ditch had been thrown up on the outer side where, at this point on the circuit, it filled a natural depression (section AB, layer 5) and there was, consequently, no marked counter-scarp. The results of this operation were more evident on the west side of the earthwork, where the irregular counter-scarp is a notable feature.

On the east side, however, some of the ditch spoil was also used to fill in and level off the depression west of the enclosure walls. This depression was associated with a compact layer of dark loam and burnt material (section AB, layer 2) which appeared to be the earliest stratified deposit on the site. It produced a good representative group of 12th century unglazed sherds and rims. Charcoal, one or two lumps of burnt clay and stone rubble were recovered from the depression, which subsequent excavation showed to be a gully extending in a southerly direction and becoming increasingly cleaner, with silty clay, until it ended in the spoil of a robber trench (Fig. 1, Site V). Although the gully was not examined at any point north of Site I it seems unlikely that it was constructed for anything but drainage purposes. Both it and the dark loam layer appeared to be associated with the clearing, draining and construction phase. It may be supposed that this activity was combined with the cutting

of the original ditch, although the essential linking strata are no longer in evidence, the berm of the ditch having been denuded in the course of time. Another shallow gully, with a high content of burnt material, was located on the berm of the ditch (Plate 3). It was also a feature of this early phase, but an insufficient length was excavated to form any firm conclusion about its purpose.

It appears likely that the ditch was recut and enlarged at an early stage since the enclosure walls were constructed into the ditch spoil thrown up on the enclosure side. This may even have occurred before the main building was completed. The filling stages of the later ditch were well-defined, the two most important being the layer of dark silt at the bottom, which was clean except for a few animal bones, and a compact stone layer covered by loose sandy loam 3 ft. 6 in. below ground level. The latter contained a number

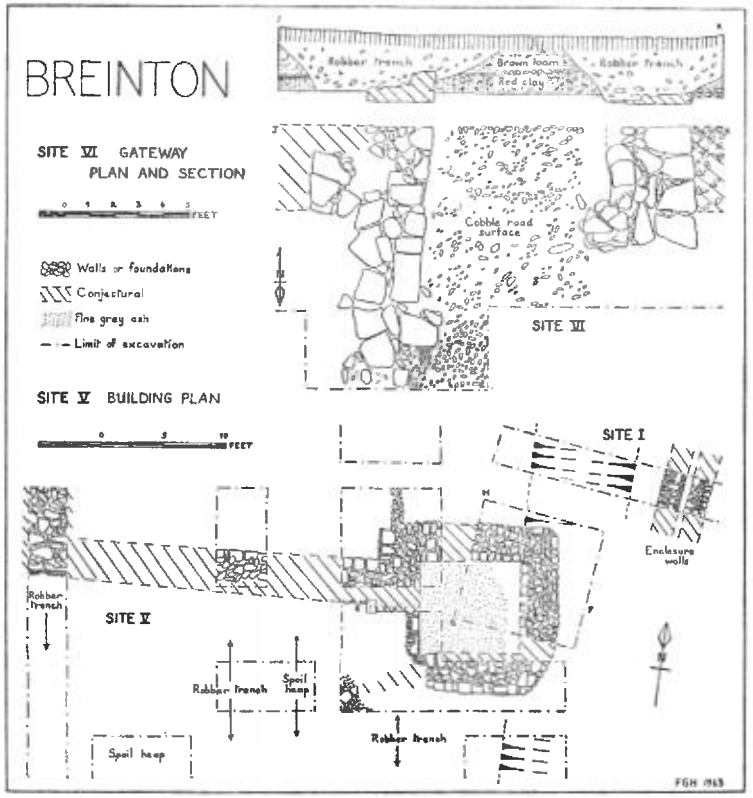

FIG. 2

of roof tile fragments with yellow or golden and green mottled glaze, some small pieces of plaster and several 12th–13th century sherds. This was clearly the level of secondary silting in the ditch at the time when the main building was destroyed.

THE ENCLOSURE WALLS (Figs. 1, 2, 3; Plate 3)

An unexpected find in the 1921 excavations was two parallel walls on the perimeter of the enclosure with a space of less than 1 ft. between them at the base. This situation was verified on Site I where examination showed that they were indeed two separate walls and not parts of the same construction. There was a difference in the make-up of each and their foundations did not lie at the same level, but, in particular, the east side of the inner wall had once been an exposed surface with a pronounced batter to its upper face.

The foundation of the inner wall was composed of rounded river-washed stones set irregularly in red clay. At 2 ft. below the present ground surface the foundation was levelled off with a line of flatter stones to form an offset. Above this the stones were laid as regularly as the shapes would allow and those with a flat surface had been used for the outer face. At foundation level the wall was 1 ft. 8 in. wide, but at the top of the portion remaining the batter had reduced this to 1 ft. 3 in. Judging by its width and the shallowness of the foundations this wall could not have been more than a few feet high. The outer wall, although of no greater width and also lacking depth of foundation, was more solidly constructed. It was faced on the east (outer) side with rounded cobbles but the remainder of the wall was chiefly composed of flat angular stones packed in orange-red clay. Nothing above foundation level remained, but it would seem that this wall, also, could not have been very high.

On the south side of the perimeter the enclosure wall was located in two places. An exploratory trench west of Site V disclosed a very fragmentary portion of the lower foundations, whilst in the south-west corner of the enclosure enough of the feature still existed to show that reconstruction had taken place here also. In this instance a more substantial second wall had been built on top of the earlier one. Some of the original foundations remained, partly sealed by a burnt layer (Fig. 3, section CD). The stones were loosely laid and comparable in character to those which made up the inner wall on the east side of the enclosure. The foundations of the later wall, similarly, possessed characteristics of the outer wall on the east side. Here, however, the base of the construction was more substantial and the wall of greater width. In the eastern half of the portion uncovered on this site large stone slabs measuring approximately 1 ft. 10 in. × 10 in. × 3 in. had been laid on a levelled surface and two layers of smaller flat stones were still in

position above them. These included two pieces of sandstone roof tile with dowel holes and some fragments of glazed roof tiles. In the western half of the trench the foundations had suffered from later disturbance.

On Sites II, III and VI, the western and northern sides of the perimeter, the enclosure walls had been completely removed. There were signs of disturbance on Site III and more definite indications of a robber trench on Site II. Although the lower foundations of the gateway were still *in situ* on Site VI, virtually nothing remained of the enclosure walls with which it had been connected. This would suggest, when taken with evidence from elsewhere, that the enclosure walls were left standing after the site had been stripped of its building stone down to ground level.

It is clear that, whilst affording protection and shelter of a sort, the enclosure wall was not constructed with a military purpose in mind. Considering its narrow width, inadequate foundations and modest height, it would have constituted a singularly poor form of defence. For domestic purposes, however, it was sufficient, particularly as it was placed on the crown of the perimeter which, on the east side at least, was 3—4 ft. higher than the general ground level of the enclosure. It was impossible to determine with certainty the length of time that had elapsed between the construction of the first and the later wall or why, at one point, the second was built outside the first instead of on top of the earlier foundations. The evidence suggests that after the earthwork had been abandoned as an occupation site, the enclosure walls remained. Perhaps the area still performed a useful function as a cattle compound. It was not until this stage, or at some later date that the rebuilding was carried out, since on Site IV the roof tiles found in the second wall were salvaged from the debris of the buildings in the enclosure. Eventually, it would appear that in order to facilitate access to the northern sector of the earthwork, no doubt for agricultural purposes, the whole of the shallow-based enclosure wall was removed from this part of the perimeter.

The Buildings (Figs. 1, 2, 3; Plates 4, 5)

Substantial remains of the main building were found in the south-east area of the enclosure (Site V) and traces of less permanent structures to the south-west. The plan of part of the east side of the main building was recovered. This consisted of a space 8 ft. square with foundation walls approximately 3 ft. thick. Internally, the foundations were composed of well-laid stone blocks backed by a core of packed rubble, the whole liberally bound with mortar near ground level. Since this portion of the building was built into the low perimeter bank there was no corresponding facing of stone

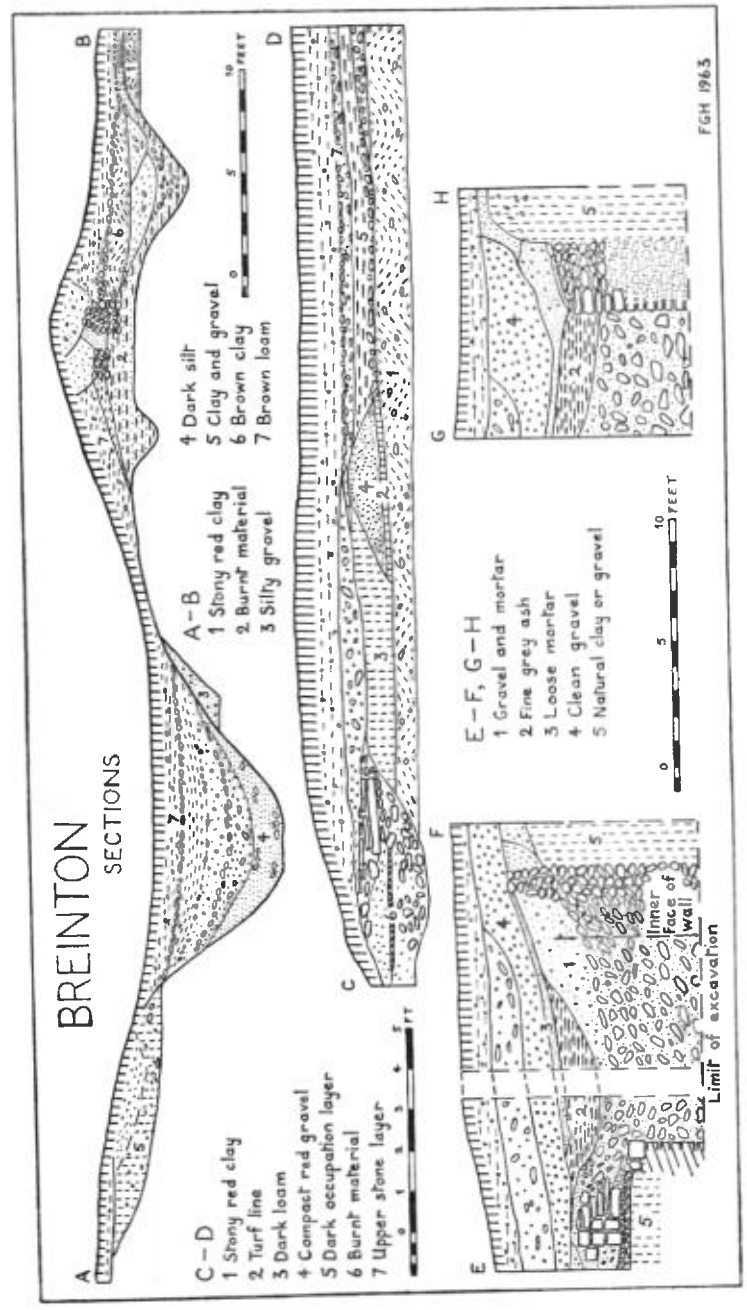

Fig. 3

blocks on the exterior surfaces of the existing remains. As excavation proceeded within this portion of the building, the existence of a cellar or some similar construction became apparent. The walls were traced to a depth of about 10 ft. below present ground level, which was 3 ft. 6 in. deeper than the base of the foundations of adjacent walls on Site V. The east wall of this cellared portion had collapsed, although the remaining walls were still in fairly good condition, and the treacherous mass of loose gravel, mortar and large stones made excavation in a confined space increasingly dangerous. Eventually, work had to be abandoned before the bottom was reached, the intention at the time being to return to the problem with more adequate resources at a later date.

There was an entrance 3 ft. 6 in.wide at the south-west corner of this part of the building (Plate 5). To the west and south of this widespread robber trenching extending down into the natural gravel had removed all traces of the extension of the south wall of the cellared portion except for three stone blocks resting on a layer of close-packed pebbles which remained at the lowest foundation level. The outer faces of these blocks were dressed and shaped in a curve. At first sight they seemed to suggest an external approach to the cellared portion from the riverside slope but if, as is possible, the main part of the building lay on this side they must have been an internal feature. Four areas to the south and south-west of the cellar were excavated and in each case it was found that the site had been quarried into from the direction of the riverside slope. This is believed to have taken place in fairly recent times with the object of collecting gravel, a thick layer of which covered the cellared portion and seems to have extended over this area, too. Large quantities of small flat stones of the type used in the wall foundations were met with, the most southerly trench consisting entirely of debris of this nature.

On the north side of the entrance to the cellared portion another wall, running parallel to the north and south walls of the cellar, was traced westwards for a distance of 28 ft. At this point a 7 ft. length of wall foundation was uncovered in what subsequently proved to be the last trench cut in the excavation. Consequently, the discovery was not followed up, although the evidence was sufficient to indicate a wall running northwards from this point. It may be that this marks the western limit of the main building. If so, the building was less than 45 ft. in length. A substantial depth of foundations remained at the junction of the east-west wall and the cellar area. The large quoin stones at the north-west corner of the latter were dressed and laid with care (Plate 4) as were the smaller stone blocks of the offset on the south side of the same wall (Plate 5). The east-west wall was similar in composition to the

cellar foundations and contained a liberal application of gritty white mortar in the upper levels. Much less of the wall was in evidence in the two wall trenches west of the cellar area. In one, about half the width of the foundations remained, standing to a height of 2 ft., a robber trench having removed the rest. In the other, at the western limit of Site V, the foundations reached a height of no more than 1 ft. and were loose and fragmentary at the north end of the trench.

A band of stone cobbles in red clay running in a northerly direction from the north wall of the cellar area (Plate 4, left foreground) has been shown on Fig. 1 as a possible wall line, but the evidence of the section presented difficulties of interpretation. This feature may be the remains of a low stone revetment to the tail of the perimeter bank which terminated at this point. This might seem to be the answer in view of the fact that the width of the band was only about 1 ft. and there was nothing to indicate extensive stone robbing in this area. The feature was not in evidence in the most northerly trench of Site V. Although part of the line of the perimeter bank was observed here, the area covered by the trench had suffered extensively from later disturbance. In this case the blame seemed to be attributable to the uprooting of one of the fruit trees shown on Haywood's plan of 1783.

At the point when excavations were discontinued in 1962, the work on the buildings was still in its exploratory stage. There is no doubt that, had subsequent operations been possible, more rapid strides would soon have been made. As it is, the existence and general situation of the main building have been established beyond question. The overall dimensions are not yet known, but it extended for more than 42 ft. in one direction. Beyond this no specific conclusions can be drawn from the material evidence. A little more speculation, however, seems called for and it is with some trepidation that the following tentative observations are made.

It would appear from the general layout of the site that the dwelling is quite small in size, and it is reasonable to assume that it was probably an Upper Hall type of house.[1] That is to say, it was arranged with a greater and lesser chamber on each of its two floors. In this case the cellared portion would be an addition on the east side of the building. A comparable variant of this arrangement is to be seen at Little Wenham Hall, Suffolk,[2] a semi-fortified manor house, built c. 1280, where the extension leads off from one of the long sides of the building, resulting in an L-shaped plan. At its simplest the archaeological remains of an Upper Hall house would be revealed to the excavator as a rectangle of wall foundations

[1] For a fuller description see P. A. Faulkner, *Domestic Planning from the Twelfth to the Fourteenth Centuries*, Arch. Journal, Vol. CXV, pp. 150–83.
[2] P. A. Faulkner, *op. cit.*, p. 154 and p. 156, Fig. 8.

within which would be a crosswall dividing the greater from the lesser chamber.[1] In some instances the division may have been effected by nothing more substantial than a timber partition. This straightforward plan may be varied by the existence of outside stairs and garderobes as well as additional rooms.

Bearing this in mind, it will be seen that the evidence of foundations running in a northerly direction in the western trench of Site V does not necessarily imply that the bulk of the main building lies on the north side of the length of wall already excavated, although this may indeed be so. A possibly stronger case can be argued for the southern area of Site V which has been extensively and deeply disturbed. The robber trench activity suggests the presence of archæological features here, and, though it appears to have been very thorough, future excavation, if extensive enough, may disclose some points where fragmentary evidence still exists. If the main part of the building was in this southern area it could have been only about 20 ft. wide since this brings one almost to the riverside slope. The east wall would run in a southerly direction from somewhere near the entrance to the cellared portion. The west wall would lie beyond the western trench on Site V, but probably no more than a few feet further on at the most. The total dimensions, excluding the cellar area, would thus be, say, 30—35 ft. × 20 ft. Should the main part of the building lie on the north side of the excavated east-west wall, in the absence of any limiting factor, the width could be greater.

Having dealt with all the significant aspects of the main building except its ultimate destruction, which will be considered later, attention must now be directed to the south-west corner of the enclosure (Site IV). Here, in trenches dug to examine the perimeter, were found signs of occupation, in this case related to buildings of a less permanent nature. Excavation was not extensive enough to recover adequate ground plans, but a baulk of gravel and stone, its top 7 ft. north of the enclosure wall, appeared to be a rough base for a timber wall. It rested directly on the original ground level, and though constructed entirely of red gravel in the eastern trench, it had the hardness of mortar. To the west it became a mixture of gravel and stone.

The interior of the building lay to the north of the timber wall Fragmentary remains of two stone surfaces stretched for 10 ft. from the wall base to the limit of excavation. The early floor was little more than a rough scatter of stones on the ground and had been badly broken up with continued use. A 6 in. layer of dark rich loam (section CD, layer 5) containing sherds of 12th century pottery

[1] The ground plan of Boothby Pagnell Manor, Lincolnshire, is typical. See P. A. Faulkner, *op. cit.*, p. 153, Fig. 1.

and a length of cracked and worn bone which may have been a knife handle, had accumulated over the stone floor. This deposit strengthened the impression that the structure under investigation was a cowshed or stable. In the course of time a new floor was seen to be necessary to improve conditions under foot. The upper floor level was also in a poor state, but a small area about 1 ft. 6 in. square by the wall base showed that originally a compact pebble surface had been laid upon a scatter of larger stones. A sandstone roof tile, cracked into two pieces by its fall and since undisturbed, lay directly on top of this pebble surface. It would appear that the upper floor was kept cleaner than the earlier one and it seems likely that the sweepings were deposited between the south wall of the building and the enclosure wall. A thick accumulation of dark loam (section CD, layer 3) was found here, containing some pottery sherds which may be a little later in date than those found in layer 5. Eventually, the edge of this dark loam layer was cut into when the later enclosure wall was constructed. As has already been stated, this wall contained two sandstone roof tiles which, the evidence suggests, was the form of roof covering for the outbuildings.

The Gateway (Figs. 1, 2; Plate 6)

It had been assumed from the first that the entrance to the enclosure lay on the north side, which was the logical point of access. There was no surface evidence of the ditch here and the ground sloped gently down from the perimeter to the surrounding area. At the outset there seemed little hope of uncovering material remains in the entrance, since no wall foundations had been recovered on Sites II and III. In the event, good fortune prevailed and the lowest foundation levels of the gateway proved to be *in situ*, the stones in the northern portion being only half a spade's depth below the surface.

The gateway was a narrow passage-like entrance about 6 ft. wide. The foundations on the west side extended for 5 ft. and those to the east were 9 ft. 6 in. long. At the northern end the excavation was so shallow that it was impossible to tell whether the foundations were originally the same length on both sides. The ground plan of the remains suggests that they were not, since the last 2 ft. of both lengths were increased in width by 1 ft., the offset in each case being into the entrance. If this was not an accidental effect it indicates that there was an intention to restrict or control the angle of approach to the gate.

The foundations were made up of large flat slabs of stone in red clay as a base with smaller, but still substantial, stones in subsequent layers. Within the entrance scattered traces of a stone cobble surface were found approximately 1 ft. above the base of the foundations,

It is probable that this cobbled road extended across the enclosure to the main building. A considerable spread of cobbles was encountered on Site III 1 ft. below the surface. For the most part they were loose and without depth, but towards the middle of the enclosure the layer became thicker and 7 ft. from the western end of the trench there was a shallow trough, 1 ft. 6 in. wide, which was filled with slightly larger stones.

Although the main entrance to the enclosure was on the north side, it was not necessarily the only means of access to the site. A possible " back door " route to the river bank and the spring is marked on Fig. 1. At this point on the perimeter a bowl-shaped hollow with a more gentle slope, affords the easiest path for anyone wishing to climb up the steep side of the bluff to the enclosure. Excavation may show that there is a way through the enclosure wall here and that this route was adopted or even created to provide easier access to the water supply.

THE DESTRUCTION PHASE (Figs. 2, 3; Plate 5)

From the excavations a picture emerged of a protected medieval domestic site possessing a building of apparently substantial construction upon which much labour had been spent. The result seems invested with an air of permanence and yet, from the evidence of the pottery, within about a hundred years the building was destroyed and the earthwork abandoned as a living site. The explanation for this turn of events was found in the destruction levels of the cellared portion. The east wall had suffered a catastrophic collapse which must have brought about the ruin of the whole building or, at least, rendered it unsafe for further habitation. Perhaps the fault lay in the excessive use of inferior sandy mortar which failed to bind the building stone firmly enough. The decision was taken to pull down what remained and accordingly the site was stripped to ground level. Consequently, on both Sites V and VI the height of the foundations now remaining varies in accordance with the slope of the ground as it was then. Fragments of red clay floor tiles from the building were fortuitously spread about the area during this operation. Next, the combustible debris on the site was burnt. This produced a thick layer of pure ash, which covered most of the cellar and spread over the stripped walls (Figs. 2, 3, Plate 5). The fine powdery ash clearly indicated that thatching material formed the chief constituent of the bonfire. This evidence of the roof covering was in accord with the conclusions drawn from the roof tiles, since most of the larger pieces were identifiable as portions of ridge tiles. The ash layer contained a few sherds of 12th—13th century date, characteristic of the pottery found in all parts of the site, and part of the handle and rim of a glazed jug. Finally, a large quantity of

PLATE 1. BREINTON. SITE FROM NORTH-WEST.

PLATE 2. BREINTON. SITE FROM EAST.

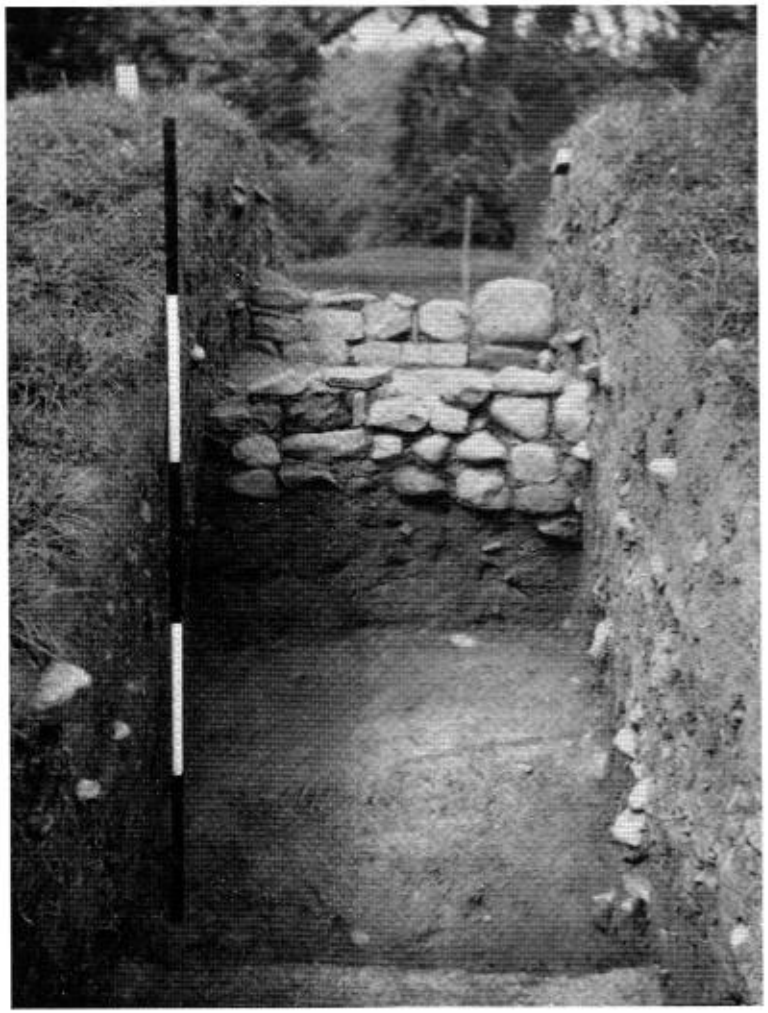

PLATE 3. BREINTON. ENCLOSURE WALLS FROM EAST.

PLATE 4. BREINTON. NORTH-WEST CORNER OF CELLAR AREA.

PLATE 5. BREINTON. ENTRANCE TO CELLAR AND ASH DESTRUCTION LAYER.

PLATE 6. BREINTON. GATEWAY FOUNDATIONS FROM EAST.

red gravel was spread over the site of the building to level the surface, perhaps because the earthwork was still a useful enclosure in which to keep animals.

Inevitably, the abandonment of the earthwork as a domestic site poses a question to be answered. It would seem to have had many advantages of situation and convenience and so much work had gone into its ancillary features that rebuilding would normally be expected. Future excavation may show that the domestic buildings were transferred outside the enclosure to the area west of the church. Several possible explanations for such a move may be advanced but as yet none of them is susceptible of proof. Perhaps, for example, domestic and agricultural needs had outgrown the restricted enclosure and required room to spread, or the sticky clay soil had created constant drainage difficulties. The documentary evidence, which must now be considered, supplies no solution to this question but does provide enough additional information to suggest the most profitable line of future investigation.

THE HISTORICAL BACKGROUND

During the course of centuries all knowledge of the nature and origins of this site seems to have been lost. There does not appear to have been any local legend, however distorted, on which the 18th and 19th century antiquaries could base their speculations. Consequently, the assumption arose that the earthwork belonged to an age of respectable antiquity earlier than the medieval period. It remained for archaeological excavation to determine the date accurately and lay bare the possibilities of a real connection between the earthwork and the land interests in Breinton of the Dean and Chapter of Hereford Cathedral.

Exactly when land holdings at Breinton were first acquired by the Chapter is not certain, although it was at some period in the 12th century, probably a short time before the earthwork and its buildings were constructed. The sale by Roger Fitz-Maurice to the Dean and Chapter of his interest in land at Breinton held under the Chapter, recorded in a document of c. 1201,[1] is evidence of the latter's interests in the area before this date. There is reason to believe that the Chapter's land holdings at Breinton go back to a little before 1150 and are associated with the endowment of a College of Secular Priests at the Cathedral. According to W. H. Cooke,[2] Reynel, Bishop of Hereford 1107–1115, initiated the gradual change from a monastic to a secular body of Cathedral clergy. An essential feature of this operation was the provision of land to support such important offices as Dean and Treasurer. Usually the Dean was the first of the

[1] W. W. Capes, *Charters and Records of Hereford Cathedral*, p. 38.
[2] W. H. Cooke, *Duncumb's County of Hereford*, Vol. IV, p. 11.

great dignitaries to be installed[1] and at Hereford, with the appointment of Ralph, c. 1135, comes the first reference to this office. From this period through to recent times the manor of Breinton remained in the hands of the Dean and Chapter and it is, thus, chiefly in ecclesiastical documents that the history of the area is to be found.

It is significant that not only the earthwork and its buildings, but also the much-restored Church of St. Michael, 60 yds. to the north-east, may date from the 12th century.[2] This building activity seems to follow from the acquisition of the land by the Dean and Chapter, though no documentary evidence on this point exists, the first mention of buildings at Breinton being in 1275, when Thomas Le Breton leased the manor.[3] In this deed there is no information about the actual site of the dwelling. Subsequent medieval, and later, documents refer specifically to the Dean's or, in the 16th century, the Treasurer's manor house at Breinton.[4] It is evident that all these references to manorial buildings relate to Breinton Manor House, which lies three-quarters of a mile to the north-west and consequently they throw no light on the history of the earthwork.

The surviving terriers and title deeds of the 18th century distinguish more clearly the holdings of different tenants and there are more positive references to the land on which the earthwork stands. Only one of them, however, a deed in the Hill MSS.,[5] provides a clue to the likely pattern of events on this site. The document is a loose paper in Vol. 3 and relates to the holdings of the Badham family. The relevant portion reads, " to this estate . . . is annexed an old house which was the Parsonage now very much decayed situate near the western angle of the churchyard ". Mr. George Marshall, having examined the Hill MSS. in 1921, was of the opinion that the paper was in the same handwriting as the MSS., that is, c. 1718.[6] The old parsonage was pulled down during the 18th century, perhaps at the time in the 1730s when Breinton Church was annexed temporarily to the living of St. Nicholas Church, Hereford. At all events it was no longer in existence in 1783. The description of its situation clearly fits the area north of the earthwork where there are surface indications of building remains, and it is significant that the portion of land on which this vicarage

[1] K. Edwards, *The English Secular Cathedrals in the Middle Ages*.
[2] Royal Commission on Historical Monuments, *Herefordshire*, Vol. II—Breinton. " . . . the nave may date from the 12th century as indicated by the w. doorway and two buttresses on the s. wall ".
[3] W. W. Capes, *op. cit.*, p. 141.
[4] *Ibid.*, p. 227; A. T. Bannister, *The Register of Charles Bothe, Bishop of Hereford* 1516–35, pp. 69, 172.
[5] The extract was noted by W. H. Cooke during his researches. Hereford City Library. Herefordshire MSS., W. H. Cooke, 942.44.
[6] Information kindly supplied by Mrs. Constance Ball from her father's MS. notes.

is believed to have stood is shown as tenanted by Widow Bullock on Haywood's map. The leasing of the razed building site to needy parishioners over the years would provide a logical explanation for the otherwise apparent anomaly of a single smallholding in the middle of the extensive leasehold of Richard Aubrey which stretched from the river up to King's Acre.

It has already been noted that the church and earthwork seem to have originated in the same period and from their very situation, taking the scattered settlement pattern of Breinton into account, are closely associated. There are, therefore, grounds for suggesting that the earthwork and its buildings was the first vicarage of the priests of St. Michael's Church. In the 12th century the priest cultivated his glebe and received the tithes of the parish and his house and holdings in all essentials would exhibit the character of a small farmstead.

Since the site was abandoned after about a century, the explanation presupposes the occupation of the second vicarage " near the western angle of the churchyard " from the late 13th century onwards. This, in turn, became ruinous and was pulled down before 1783. To complete the story, it was not replaced until the second half of the 19th century when the present vicarage was built on the east side of the church, where the priest once tilled his glebe. Only further archaeological excavation will show whether the history of the vicarage by the churchyard began when that on the earthwork ended. If it is proved that the buildings were contemporary, then the site under review, in the light of available evidence, can only be described as a medieval grange on the land of the Dean and Chapter at Breinton.

Summary of Excavations

The excavations on the site of the earthwork known as Breinton Camp at Lower Breinton, Herefordshire, were carried out at intervals during the period April 1959—April 1962.

The site was medieval and domestic in character. It was occupied c.1150, or soon after. It consisted of an enclosure about 120 ft. × 80 ft. surrounded by a low perimeter bank and wall, with a ditch on all sides except the south where the ground falls away steeply to the river bank. On the east side the ditch, originally 3 ft. 4 in. deep, had been recut and was 6 ft. 3 in. deep and 17 ft. wide in its final form.

The entrance to the enclosure was on the north side where remains of the stone gateway, 6 ft. wide, and a cobbled surface were uncovered. Part of the foundations of the main building, including a cellared portion, were located in the south-east corner and there was evidence of timber outbuildings to the south-west. The remainder of the enclosure served as a stockyard for animals.

The earthwork was abandoned as a dwelling site after the collapse of part of the main building. The medieval coarse pottery from all levels of the site was of the same general type, making it difficult to determine with precision when this event occurred, but it must have been some time in the 13th century. The enclosure was perhaps still used as an animal compound after this date as the enclosure wall was repaired and, in some places, rebuilt.

It is thought that the site may have been the first vicarage of the priests of St. Michael's Church and that when the earthwork was abandoned another building for the same purpose was constructed near the western angle of the churchyard.

ACKNOWLEDGEMENTS

I am indebted to Mr. Humphrey Marshall and the Ministry of Public Building and Works for permission to excavate the site. My grateful thanks are due to the following for their kind co-operation in various ways: Mr. Humphrey Marshall and his sister, Mrs. Constance Ball for their great interest in the work and the valuable information they have supplied from their fund of local knowledge; the Rev. G. Redmond and the present incumbent of St. Michael's Church, the Rev. W. B. Haynes, for easing the administrative problems by placing storage space at my disposal; Miss M. Jancey, Mr. K. J. Jones, Mr. E. R. Davies and the staff of Hereford City Library for help or advice. Finally, I owe a great debt of gratitude to Miss Mary Thomas and Mr. Martyn Turner who assisted in the direction of the excavations in 1959–61 and 1962 respectively, and to the boys of the Kenchester Club of Hereford High School for their expert labour.

THE FINDS (Figs. 4, 5)

These have been placed in Hereford City Museum.

Medieval pottery. All the pottery finds were of 12th—13th century or 17th—18th century date. No other periods were represented on the site. The large majority of the sherds recovered were from unglazed medieval cooking pots with everted rims. The fabrics and rims were characteristic of this region as it is becoming known through increasing medieval excavation, exhibiting generally familiar shapes and textures and yet displaying local variations of working and firing. In many cases the difference between one rim and another was the result of different placing of the potter's fingers rather than a conscious effort to create a new form. Most of this medieval ware was of coarse-textured gritty clay fired to produce predominantly brown or black surface layers with a dark grey core. Several sherds had a brown exterior and black or grey interior

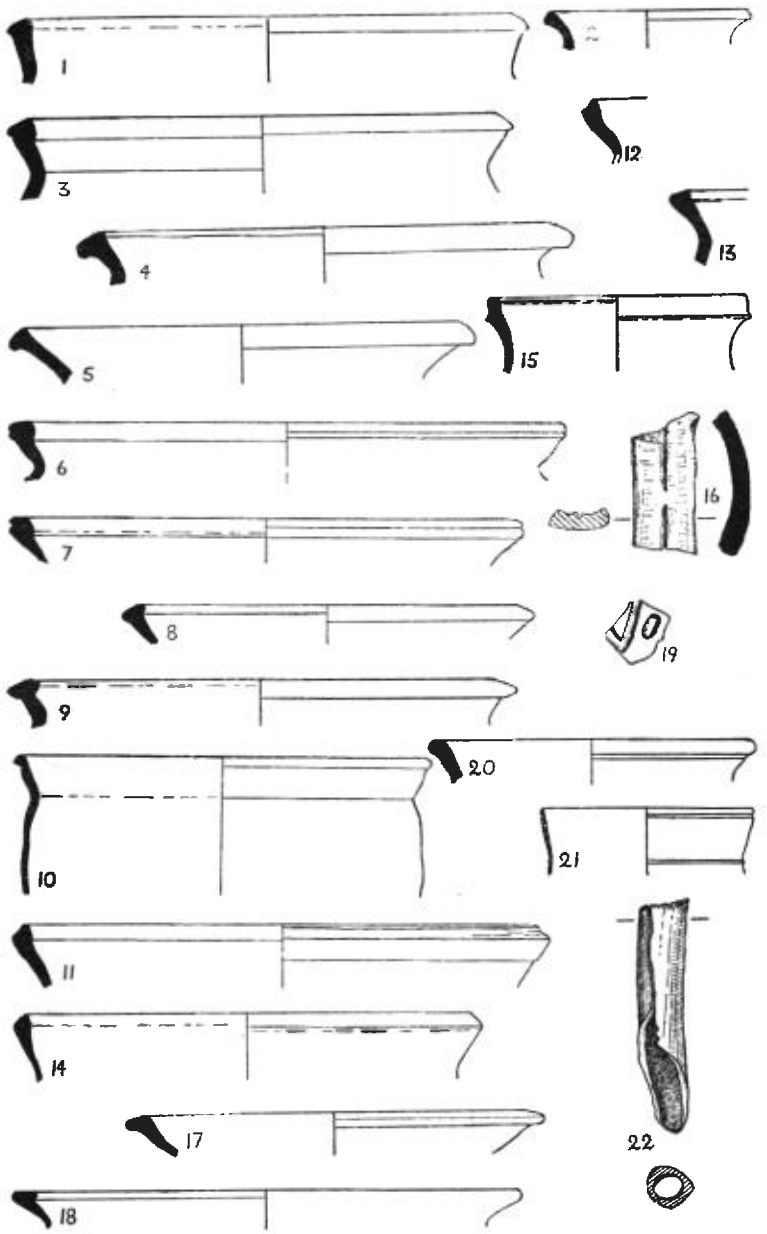

FIG. 4

surface. Occasionally a mottled red and buff or black and brown effect was produced. The exterior finish was usually uneven, but not unduly rough to the touch. Interior surfaces were frequently lumpy, having been smoothed by the fingers while the clay was wet, causing the grits to stand out though still covered by a thin film of clay. Rims were for the most part crudely shaped by the fingers and thumb and their thick heavy appearance was emphasised by the weak shoulder shapes of the pots to which they belonged. These features were probably dictated by the quality of the clay and the degree of firing to which the vessels were subjected.

Of over 300 medieval sherds recorded only about 20 per cent were red ware. Nearly three-quarters of this group were glazed sherds in the green, yellow or brown colours common to this period. It is likely that all of these were fragments of jugs; certainly, none of them came from cooking pots. Judging from the differences in fabric and technique it is probable that this type of ware was supplied from a different source than the cooking pots.

The medieval pottery was fairly evenly distributed between Sites I (west end), IV and V, but very scarce elsewhere.

Roof tiles. Six identifiable pieces of sandstone tile with pecked dowel holes were found. These were chiefly in Site IV, where two had been incorporated in the wall repair and another rested on the upper stone surface (Fig. 3, section CD, layer 7).

Examination of the large number of fragments of manufactured roof tiles disclosed two different types: A. Coarse gritty red fabric with thin and poorly spread ochre and green speckled glaze. These tiles were thick and crudely made. B. Grey clay fired red with golden yellow and green mottled glaze. The fabric was close-textured and the glaze well applied.

Type B tiles were more in evidence, 189 pieces being recovered compared with about 50 of Type A. Moreover, the majority of the latter were quite small fragments. The evidence suggested that the Type B pieces came from ridge tiles and several crests were found. Type A specimens were scattered over the sites but not found in the area of the main building (Site V), whereas the bulk of Type B fragments were found to the south-west of Site V and in the ditch (Site I), with a moderate number in the destruction levels of the cellar area. There were no tile fragments in the early layers of Sites I and V.

Floor tiles. More than 50 small pieces of floor tile with light red core and brown surfaces were recovered, most of them unstratified. The tiles had worn upper surfaces and on one or two there were traces of green glaze at the edges. The largest corner piece had incomplete sides of 2 in. and 4 in. long. Most of

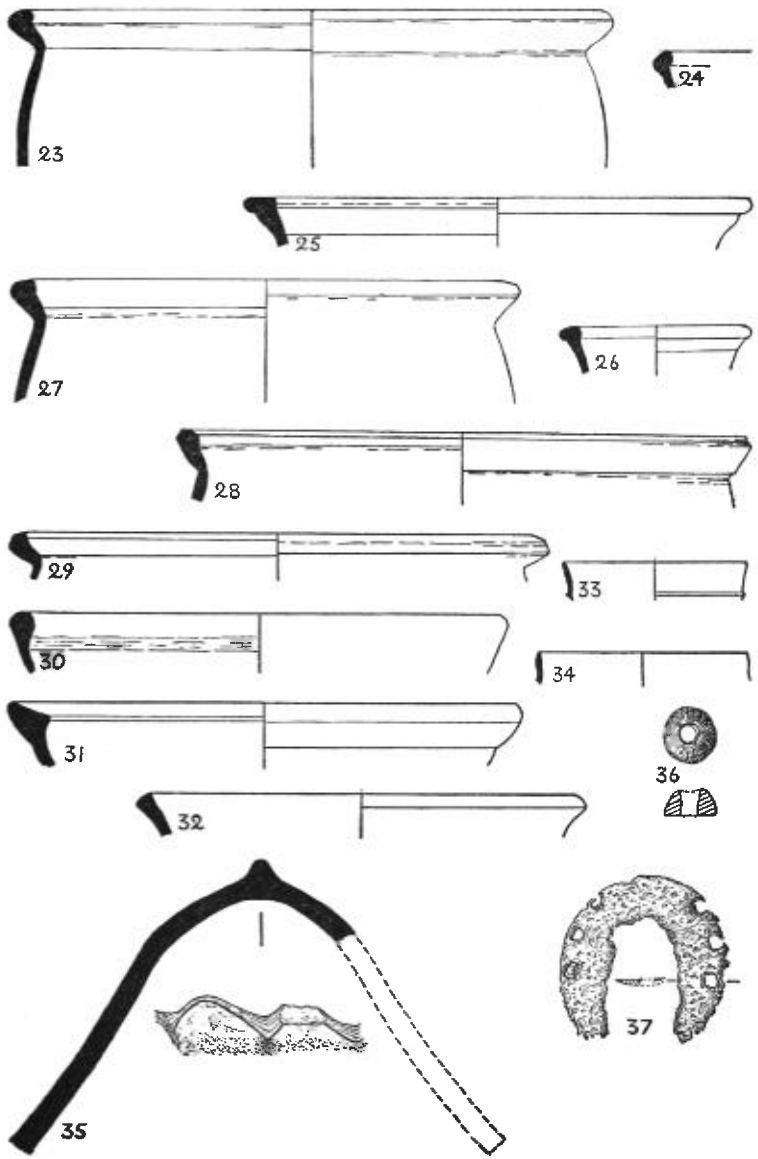

FIG. 5

the floor tile fragments came from the south-west of Site V and from Site IV.

Post-medieval pottery. This group consisted of about 60 sherds of 17th and 18th century ware, all of types familiar in the district, of which the most representative have been drawn. Nearly half the sherds were recovered from Site VI and the remainder were fairly evenly distributed over Sites II, III and IV.

From Site I. Layer 2, dark loam with burnt material below enclosure walls

A good 12th century group, typical of the site as a whole.

1. Cooking pot. Gritty grey core with black interior surface and brown exterior. No moulding of the inner side of the rim apart from a shallow depression made by the fingers. Middle-second half 12th century.
2. Jug of light red ware. Smooth to the touch.
3. Cooking pot. Grey core with brown surface. Exterior smooth but uneven.
4. Cooking pot of coarse black gritty fabric.
5. Cooking pot. Grey core with hard rough brown exterior. High mica content. Compares well with a rim from Lydney Castle (*Ant. Journal*, Vol. XI, p. 258, no. 15). Mid-12th century.
6. Cooking pot. Hard dark grey fabric.
7. Cooking pot. Grey core with brown surface. Similar to no. 6 except that in this case the interior of the rim is poorly shaped and merges unevenly into the body of the pot.

From Site I. East of enclosure walls and immediately above layer of dark loam and burnt material

8. Cooking pot. Hard dark grey fabric with marked mica content. The inner flange of the rim is more pronounced than in the previous group and the general effect is lighter and more pleasing. ?13th century.

From Site IV. Layer 3, dark loam north of enclosure walls.

9. Cooking pot. Gritty grey core with dark brown interior and reddish-brown exterior. A hard, strongly moulded rim. 13th century.
10. Cooking pot. Grey core with black surfaces. The fabric is hard and brittle with thin walls and a lumpy finish. Although not identical in rim shape this pot compares well with cooking pots from White Castle in general profile and fabric (Ant. Journal, Vol. XV, p. 331, no. 19). 13th century.

11, 12. Cooking pots. Grey core with brown surfaces.

From Site IV. Layer 5, dark loam above stone surface

13. Cooking pot. Dark grey fabric. Crudely made, with lumpy surfaces.
14. Cooking pot. Grey core with brown surfaces.

From Site V. Layer 2, fine grey ash

15. Jug. Grey core fired light red with thick greenish-brown glaze on exterior below rim flange and traces of glaze on interior surface. A rather crude uneven rim. Rough, pitted surfaces.
16. Jug handle with vertical slashes. Gritty grey core fired light red with uneven greenish-brown glaze. Rough, poorly finished surface. This and no. 15 almost certainly formed part of the same vessel.

From Site IV. Unstratified.

17. Light grey fabric with traces of interior glaze.
18. Cooking pot. Hard black fabric.
19. Decorated sherd. Grey core with light red interior and mottled green glaze on exterior surface.
20. Jug. Hard red ware with brown glazed interior. Cf. post-medieval pottery from King's Ditch, Hereford (Heys and Norwood, *King's Ditch*, Transactions Woolhope Club, Vol. XXXVI, Pt. I, p. 148, no. 9.) 17th-18th century.
21. Tyg. Fine hard brown ware with thick manganese glaze. 17th century.

From Site V. Unstratified

23. Cooking pot. Grey core with brown surfaces and infolded rim. (Cf. Barker, *Town Wall, Roushill, Shrewsbury*, Med. Arch., Vol. V, p. 199, no. 55 and Heys and Norwood, *op. cit.*, p. 148, no. 3). 12th—early 13th century.
24. Cooking pot. Grey core with brown surfaces.
25. Cooking pot. Gritty grey core with brown surfaces. A thick rim, poorly shaped, in a hard fabric that is rough to the touch. Comparable with rims from King's Ditch, Hereford. (Heys and Norwood, *op. cit.*, p. 148, nos. 11, 13) although more crudely executed.
26. Jug. Red core with brown surfaces. Hard close-textured fabric with strongly moulded rim and slight traces of interior glaze.

27, 28, 29. Cooking pots. Grey core with brown surfaces.

30. Cooking pot with infolded rim. Grey core with dark grey surfaces. See no. 23 above.

From Site II. Unstratified

31. Pie dish. Coarse red ware with traces of interior ochre glaze. 17th century.

From Site III. Unstratified

32. Jar. Hard red ware with brown glazed interior. 17th-18th century.

33, 34. Tygs. Fine hard brown ware with thick manganese glaze. 17th century.

Small finds

22. Bone ?knife handle. A well-worn piece of bone, hollow and cracked along its length. From Site IV, layer 5, dark loam above stone surface.

35. Ridge tile. Close-textured red fabric with golden and olive green mottled glaze. Rounded and cut-away knobs with tool incised line pattern. From Site I, stone layer in ditch, 3 ft. 6 in. below ground level.

36. Spindle whorl. Light grey sandstone pebble. From Site VI, unstratified.

37. Horseshoe. In poor condition, corroded and pitted. (Cf. Biddle, Barfield and Millard, *Manor of the More, Rickmansworth*, Arch. Journal, Vol. CXVI, p. 183, no. 28, dated c. 1250–1300.) From Site VI, layer above cobbled surface.

EDITORIAL NOTE

A grant in aid for the publication of the above paper was made to the Club by the Council for British Archæology.

INN SIGNS

By PREBENDARY A. L. MOIR

The forerunner of the English inn was the guest-house of the abbey or monastery to entertain guests or cater for pilgrims on their travels. The monastery's guest-house would naturally have a religious symbol for its sign. This was in keeping with the custom of shops in displaying signs to indicate their trade; a shoe for a shoemaker, a fleece for a wool-merchant, golden balls for a banker. Shop-signs were optional, but it became compulsory in 1393, in the reign of Richard II, for ale-houses to display a sign, or their ale was liable to forfeit. The monastic guest-houses or inns still retained Church signs even though they became less restricted and open to the public, and inn signs originating from the church abound, though the religious implication has been lost. Ecclesiastically, the anchor signified the Christian symbol of hope, the crown or crown and harp was the celestial crown, three crowns representing the crowns of the Wise Men, or the papal tiara; the lamb was the Lamb of God (Agnus Dei), the lamb and flag being the emblem of Christ's Passion, the sacrificial lamb bearing a cross with banner attached.

The cross keys are St. Peter's keys of heaven and hell.

The Salutation signified Elizabeth saluting her cousin the Blessed Virgin Mary before the birth of Christ. The ship stands for the Church, or its prototype Noah's ark. The bull, from the Latin bulla, a seal, was originally the seal of the abbey, monastery, or pope. The lion may suggest the lion of St. Mark, or the lion of Judah, before becoming heraldic. The mitre is the badge of a bishop, the shaven crown that of a tonsured priest, St. George, with or without a dragon, changed into King George, or simply Old George. The crusades are commemorated in the ancient inn at Nottingham, Ye olde trip to Jerusalem, and more commonly in the Saracen's head or Turk's head.

Though many inn signs may have an ecclesiastical origin, not all the lambs, lions, harps have any connection with the Church, but have developed independently. For instance, the lambs, golden fleeces, wool-packs in sheep-growing districts are agricultural. The Lamb in Hereford is a Ryeland lamb depicted at the request of the Ryeland Lamb Society correct in every detail, and with no reference to Agnus Dei.[1]

In Herefordshire there are examples of designs with an ecclesiastical flavour. In Hereford there are Three Crowns, the Ship and Saracen's Head. Elsewhere in the county the Lamb, Saracen's Head

[1] See Fig. 1.

and Noah's Ark are found at Ross, Angel at Callow, Anchor at Fownhope and Leominster, Cross Keys at Goodrich, Salutation at Weobley, Bell at Tillington and Ring of Bells at Ledbury.

Royal Inn Signs

Inns started as guest-houses of monasteries, built on church lands and displaying church signs. The number of inns increased and were no longer the monopoly of the monasteries but were becoming public houses, and many of them were built on Crown lands. If inns on church lands had church signs, inns on Crown lands should have royal signs. The most obvious was a crown, no longer a heavenly but an earthly crown, and the Crown and Sceptre superseded the Crown and Harp. It was felt that the sovereign would give a more personal touch than the impersonal crown, and in Tudor times the King's Head became popular, usually being identified with Henry VIII, his head often replacing that of an abbot or pope, for political reasons. Inns with royal signs became widespread and were not confined to crown lands.

Kings and queens were specified by name from Charles I to modern times, foreign potentates were included, the Shah of Persia, the Czar's Head, the King of Prussia. Distinctive badges of members of the royal family are common, White Hart of Richard II, White Boar of Richard, Duke of York, Rising Sun of Edward III, Red Lion of John of Gaunt.

Nobility

The nobility followed royalty. The Duke's Head or Old Duke, then specifically Duke of Wellington, Duke of Marlborough, Duke of York, Earl of Essex, Marquis of Granby.

Gentry

First royalty, next the nobility, then the gentry. Locally there are Baskerville Arms at Clyro, Bateman Arms at Shobdon, Foley Arms at Tarrington,[1] Mynors Arms at Carey, Scudamore Arms at Pontrilas and Walwyn Arms at Much Marcle. The inns were built on the estates of the gentry.

Natural History

A new field for inn signs was derived from natural history. It now becomes clear that the sign-painter had a subject suggested to him, perhaps a swan or an oak, and he portrayed it on his own lines, disregarding any ecclesiastical, historic or heraldic association it may have had.

[1] See Fig. 2.

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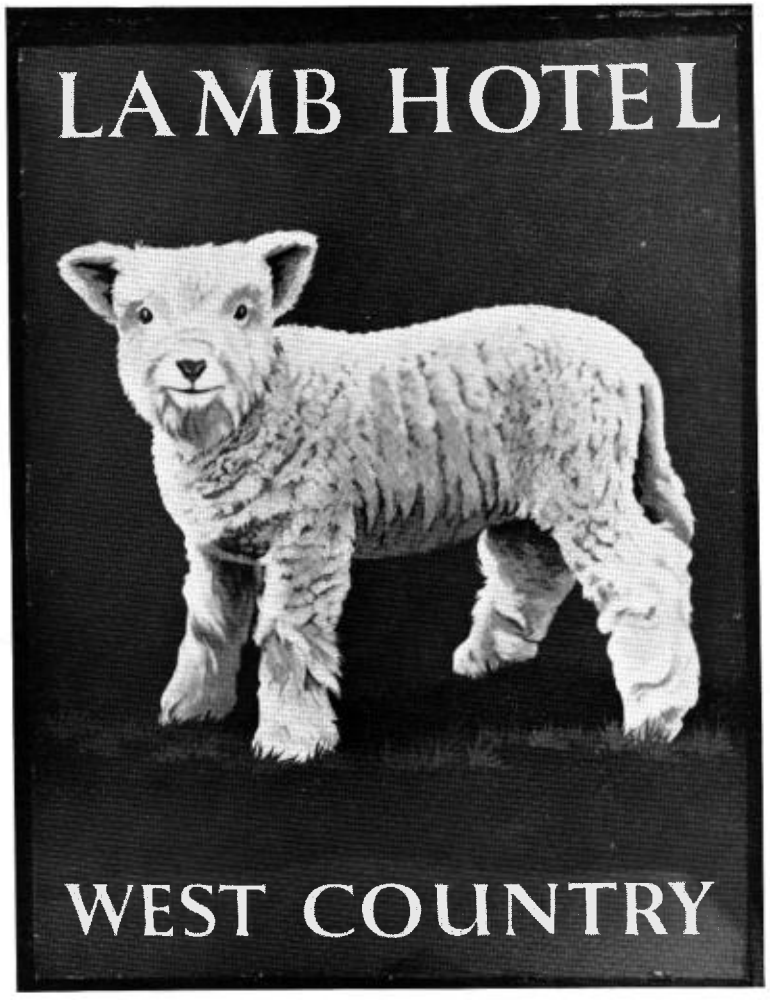


Fig. 1

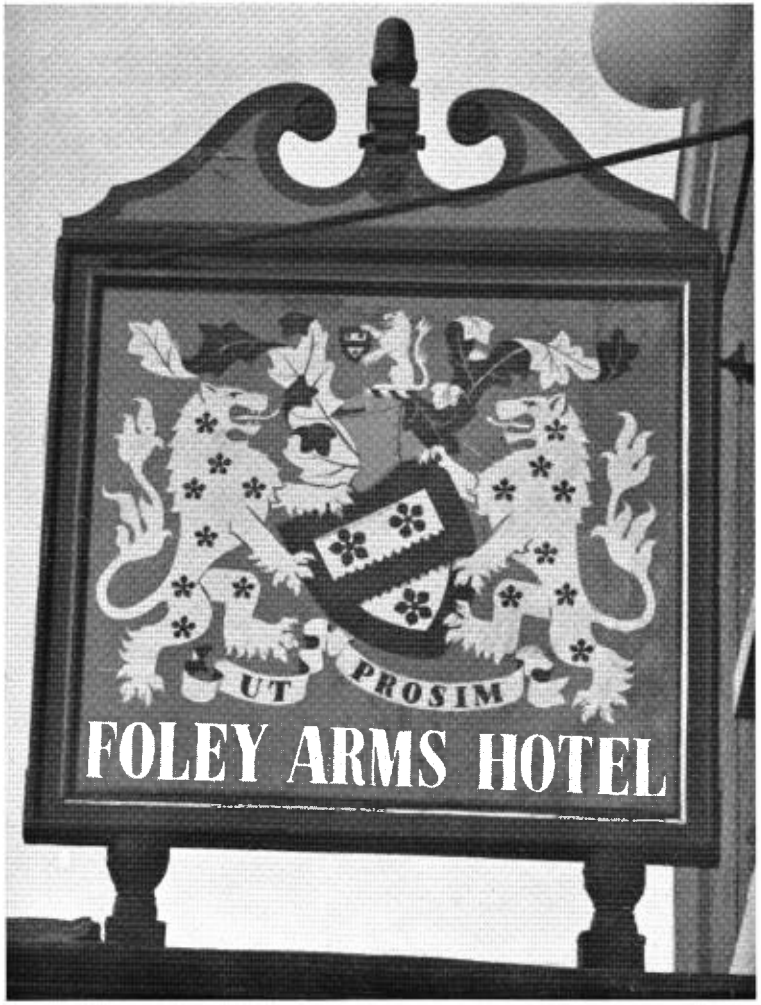


FIG. 2

FIG. 3

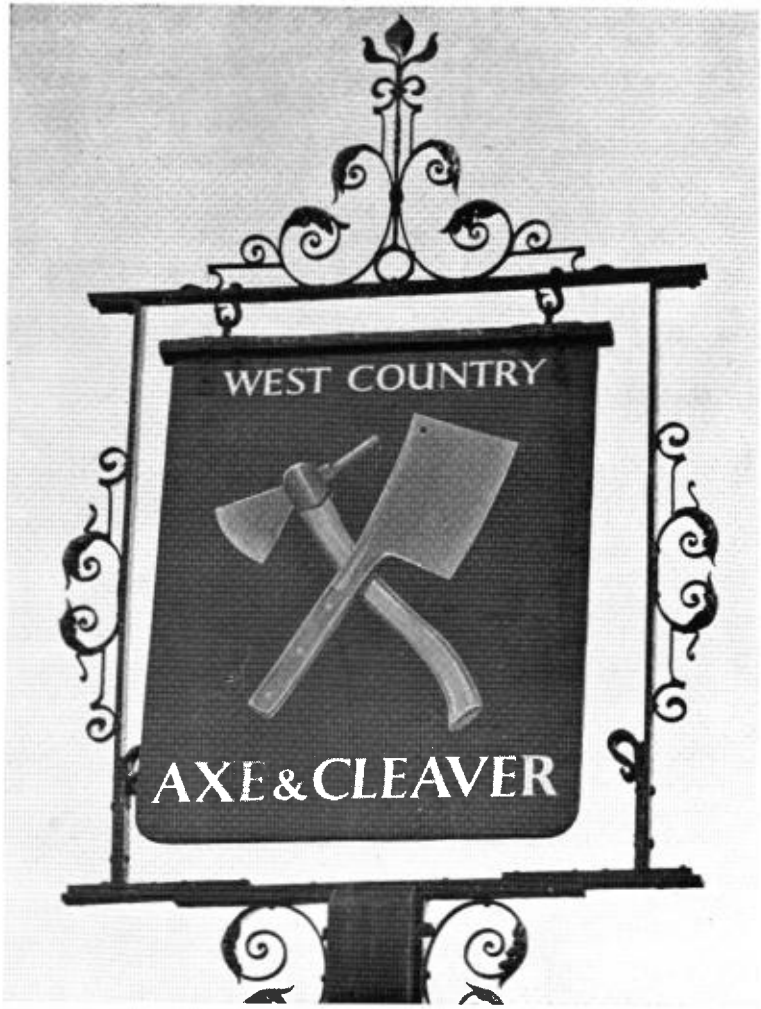


FIG. 4

BEASTS

The Lion. There are said to be a thousand sign-boards with a lion, usually the lion rampant of heraldry but red, white, golden or black, according to the artist's taste.

The Bull. Ignoring the derivation from the Latin bulla (seal) the bull became the animal, black, white, grey, pied; or just the bull's head. If a bull, why not a cow ? So the cow appeared—red, brown, white, dun, spotted or spangled. A strange evolution from the monastery's seal.

The Bear. Black, brown, white, red leading on to the bear's head or muzzled bear, suggestive of bear-baiting.

The Horse. Inn signs demonstrate the Englishman's love of the horse from the primitive White Horse at Ashdown in Berkshire, to Colonel Llewellyn's Foxhunter, three times Horse of the Year.

The Dog. White, red, blue and black; blue being the Whig political colour, and black suggesting the sinister apparition of the countryside. The talbot, a large hunting-dog was associated with the Talbot family, earls of Shrewsbury. The Tabard Inn at Southwark the starting point of the pilgrims of Chaucer's Canterbury tales was originally the Talbot.

In Herefordshire the favourite animals are the lion and the horse: Red Lion at Hereford, Kingsland, Madley and Peterstow, Golden Lion at Leominster, White Lion at Bridstow, Lion at Leintwardine. Bay Horse at Hereford and Bromyard, Foxhunter at Hereford, Nag's Head at Canon Pyon, Racehorse and Starting Gate adjoining Hereford racecourse. There is the Fox at Ledbury, Greyhound at Pembridge, Greyhound Dog at Hereford.

BIRDS

The Cock. Cicero noted a tavern named the Cock in ancient Rome. The cock, like the weather-cock, had a religious significance but this was forgotten when cock-fighting came in, and the Game-cock or Fighting Cocks appeared.

The Swan. The heraldic swan was white, but the black swan was introduced as a fanciful variation, and it came as a surprise when an actual black swan was imported from Australia. The Black Swan at Much Dewchurch, according to the manager Mr. John Bishop, started in 1516 as a white swan or sitting swan, and was changed into a black swan in compliment to the owner of the Mynde, Mr. Symonds, who had visited Australia, the home of this bird. Ornithologists might complain that the beak is yellow instead of red.[1]

[1] See Fig. 3.

There is also a Black Swan at Hereford, White Swan at Eardisland and Leominster. Other birds are Spread Eagle (the emblem of the Holy Roman Empire), at Hereford and Walford, Falcon at Bromyard, Kite's Nest at Stretton Sugwas and Gamecock at Putson.

Fish

The salmon, three salmons, trout and pike are found and Hereford has its Anglers Inn, but usually exotic marine creatures are preferred such as the dolphin, sea-horse, sea-serpent or mermaid.

Trees

In ancient Rome the original sign for a tavern was an evergreen bush. "Good wine needs no bush" to advertise it. The bush changed into a clump of ivy and vine leaves in honour of Bacchus, god of wine. Evergreens to be found in Herefordshire are Box Bush at Ashperton, Yew-tree at Peterstow and Preston-on-Wye, Fir-tree at Much Cowarne. The oak had historical associations with Charles II's dramatic escape in an oak at Boscobel after his defeat at the battle of Worcester, hence Royal Oak at Kington and Gladestry, King's Oak. Then the historical link was lost in Round Oak, Hearts of Oak, Oak and Acorn, Evergreen Oak, Holme Oak and at Leominster and Wigmore Ye Olde Oak. The Broad Leys at Putson is a landscape scene.

At Hereford there is an Orange-tree and Hop-pole. The Bunch of Grapes is countered derisively by the Bunch of Carrots.

Miscellaneous

There are innumerable inn-signs representing various activities and recording victors and victories as Wellington and Waterloo or Nelson and Trafalgar. There are Jolly Carters and Farmers' Arms.

Some inns have a local interest; the Tram Inn, built in 1794 on the line of the horse-drawn tram from Newport via Hereford to Birmingham, re-built in 1868 as a railway inn.

The Angel at Callow was built in 1826 in connection with a road scheme after the Napoleonic wars, replacing the Guy's Arms at Callow. The Axe and Cleaver at Much Birch, according to local tradition, used to be run by a butcher, and Mr. Cook, the chief artist of West Country Breweries, designed a pole-axe borrowed from a local butcher, shortening the handle simply to match the cleaver.[1]

Whimsical Signs

A Man loaded with Mischief, a man carrying a woman who holds a glass of gin with a monkey in attendance.

[1] See Fig. 4.

The Quiet Woman is headless.

The Five Alls, The king, I rule over all. The soldier, I fight for all. The lawyer, I plead for all. The parson, I pray for all. John Bull, I pay for all.

Nowhere. A convenient answer to the question, Where have you been ?

Meanings That May be Missed

Green Man, as at Hereford. The grotesque figure peering out of green foliage is not a forester but Robin Hood, Jack of the Green or even some primæval deity of the forest.

The Feathers at Ludlow. It may not be realised that the triple feathers of the Prince of Wales at the Feathers Hotel definitely refer to Arthur, Prince of Wales, son of Henry VII, who died at Ludlow Castle in 1502 practically on his honeymoon with Catherine, Princess of Aragon. His heart is said to have been buried in a tomb in Ludlow Parish Church, or under the misericord that bears his feathers.

Bull and Bush. "Down by the old Bull and Bush" runs the refrain of the ever popular music-hall song, and the singers are blissfully unaware that they are perpetuating the memory of a papal bull and the evergreen bush of the taverns of ancient Rome.

The most famous inn of all time might well have been called the Star, famous because on a particular night there was no room in the inn and the only alternative accommodation was a stable.

Some Books and Pamphlets

The Inns of Herefordshire, a list issued by H. P. Bulmer & Co., available free at Hereford Town Hall.

A Brief Guide to Inn Signs, by Eric R. Delderfield; The Raleigh Press.

English Inns, by Burke; Collins, 1944.

English Inns Illustrated. Odhams, 1951.

English Inn Signs. Chatto & Windus, 1951. Revision by Larwood and Hotten.

Inns of the Midlands. Tiptaft, 1951.

Old Inns of England, by Richardson. In colour. Batsford, 1958.

Old English Coaching Inns, by J. C. Maggs. John Dewar & Sons.

The Old Inns of London. Batsford, 1957.

Grateful acknowledgment is made for information from these publications. I am especially indebted to Mr. Albert D. Cook, the chief artist of West Country Breweries, for giving particulars about some of his own pictorial inn signs.

GLASSHOUSE FARM, ST. WEONARDS: A SMALL GLASSWORKING SITE

By N. P. Bridgewater, B.Sc.

Summary

This article describes the discovery and excavation of an Elizabethan glassmaking site in south Herefordshire (N.G.R. SO/474230). A rectangular furnace bed was found, along with large quantities of late 16th century glass. The results of chemical analysis of fireclay crucible, glass and local sandstone are tabulated in Appendices I and II.

For permission to excavate I am indebted to Professor Sir Roger Mynors and Mr. H. M. Evans, and the interest and encouragement of Mr. and Mrs. T. Matthews of Treago are gladly acknowledged. The excavation was done by members of the Archenfield Archæological Group, namely Col. A. Bellhouse, A. Clarke, H. Armstrong, A. Fleming and R. E. Ray. Special acknowledgement is made to Mr. G. H. Kenyon, F.S.A., for his interest in this work, and for discussing contemporary glassmaking in the Weald; and to Dr. Harden for his report on the glass.

The Circumstances of the Excavation

Glasshouse Farm was examined by Mr. B. P. Marmont in 1922,[1] who found specimens of the glass and crucible pots.[2] In 1959, large quantities of the glass were found by the writer in the bank alongside the farm trackway (Fig. 2G) and were identified by Dr. D. B. Harden, O.B.E., F.S.A., Director of the London Museum, as material of the late 16th–early 17th century. In consideration of the interesting historical associations suggested by this combined information, it was decided to search for the remains of the furnace in order to study its construction and method of operation.

Trial excavations in 1959 at A, B, C and D, on Fig. 2, failed to expose the site of the furnace. In area A, the footings of a demolished building were found and the presence of a barn here is confirmed by the standing walls shown in Mr. Marmont's photograph.[3] Area C revealed a compact surface of rubble containing crucible pot fragments, and its appearance suggested that it was a damaged trackway.

In 1961, a proton-magnetometer survey was kindly undertaken by Dr. Aitken's staff of the Oxford Research Laboratory for Archæology and the History of Art. This provided rapid and indeed,

[1] *Transsactions*, Woolhope N.F.C., 1922, p. 69.
[2] Although he mistakenly judged the furnace to lie in the holloway (see site plan, Fig. 2F).
[3] See footnote 1.

spectacular results. A concentration of fired clay lumps in area E (Fig. 2) held a high thermo-remanent magnetism, and this suggested that a structure associated with a heating process must lie in the vicinity.[1]

This was followed by the main excavation in area E to the south of the farm buildings of Glasshouse Farm, at the bottom of a sloping field in which the flaggy sandstone bedrock lies close to the surface. The bedrock here forms a natural platform, occurring at about 2 ft. below the furnace bed but rising to a higher level south of it.

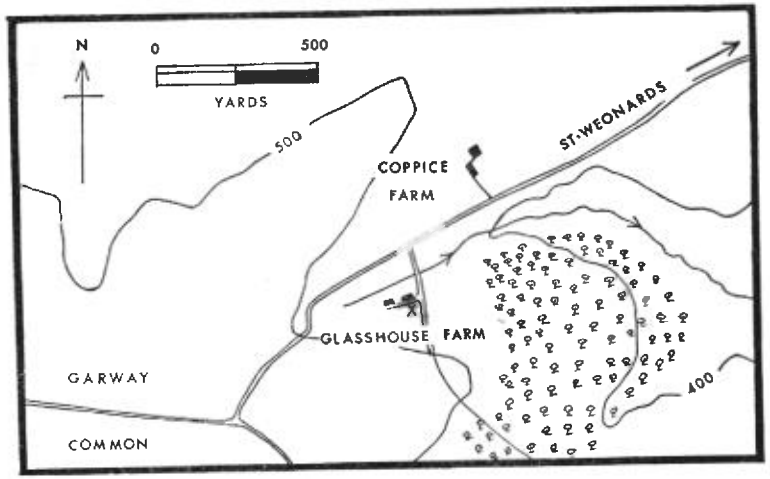


Fig. 1. Glasshouse Farm. Topographical map showing site X. (Contours in feet above O.D.)

The Excavation in Area E (Fig. 3)

Over the bedrock is a subsoil of yellow-brown clayey loam in which was set, 6 to 8 ins. deep, a roughly rectangular bed of small rough sandstones. Adjacent to, and beneath this was an area of burnt subsoil 12 to 18 ins. thick. The burning was absent at the west end of the stone bed and the red colour was more intense at the east end. Lying on the bed were some large flagstones, but these had not been burnt on either face. The whole area was covered by a destruction layer, 6 to 8 in. thick, resting directly upon the subsoil or stone bed. This layer consisted predominantly of crushed brick and loam in which were embedded bricks, stones, burnt clay, glass frit, crucible fragments and broken glass. It was covered by 8 to 12 ins. of humus.

[1] Subsequent measurements taken for magnetic dating are recorded in *Archæometry*, vol. V, 1962, Appendix I, p. 19.

Although no walling was found *in situ* the burnt subsoil beneath and around the stonework indicates that this must have been the bed of the furnace. Its destroyed walls are presumably represented by the several large sandstone blocks in the destruction layer, some of which were coated with glass and others with fused porous matter. The numerous bricks found in the destruction were red and crudely shaped, measuring 9 by 4 by 2½ ins., and some were poorly fired, being of a bluish colour. These would probably have come from the surrounding building and possibly also from the furnace and floor. Lumps of burnt clay indicate that the furnace was packed with clay.

A small free-standing brick and stone structure, of which only the bottom course remained, had been built south-east of the furnace.

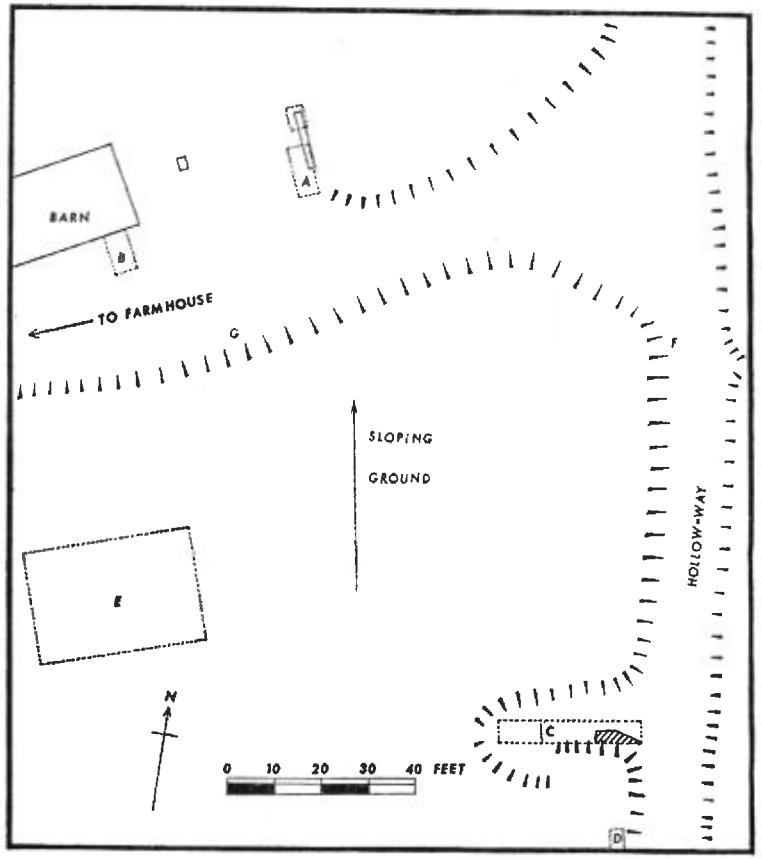


FIG. 2. GLASSHOUSE FARM. SITE PLAN.

This may well have been the annealing chamber, although no sign of burning survived here.

A curved gully, 18 in. deep, surrounded the site and had been cut into the bedrock to the south. This was an obvious necessity on a sloping site for catching downwash in wet weather. West of the furnace was a heap of charcoal which partly covered the dark loamy fill of the gully. The absence of stone in the gully below the charcoal heap (which must represent charred fuel raked out from

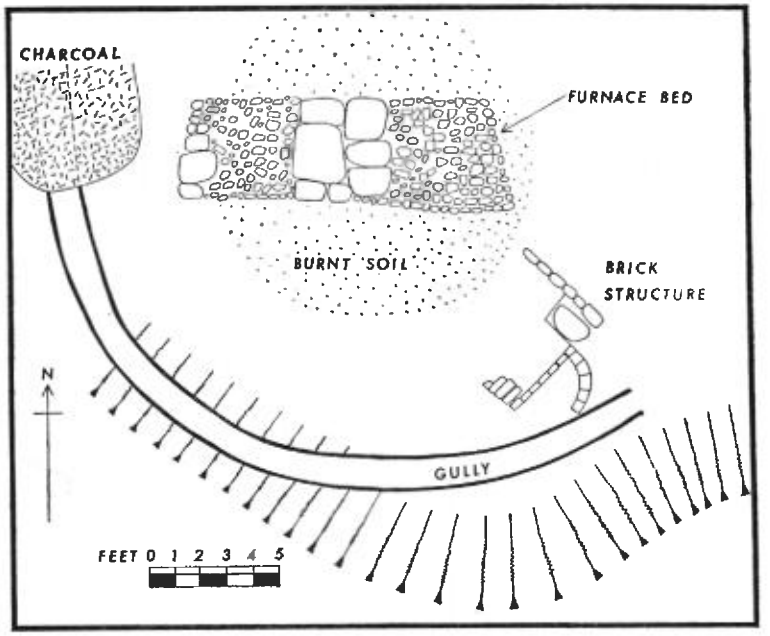


FIG 3. GLASSHOUSE FARM. PLAN OF FURNACE SITE. (Area E).

the furnace) shows that any covering over the gully must have been of perishable material, probably wooden planks. That stoking of the furnace took place at the west end is confirmed by the condition of the burnt subsoil, indicating more intense heat at the east end.

The type of furnace with which ours may be compared is the rectangular one found at Bishopswood, Staffordshire[1]—a structure of sandstone blocks, with siege platforms along its length, and a central fire-trench. As shown by the table in Appendix III the St. Weonards' furnace was probably larger.

[1] T. Pape, "An Elizabethan Glass Furnace", *The Connoisseur*, Sept. 1933, p. 172.

Finds

Crucible pot fragments, consisting of bases, sides and rims, were obtained in large quantities. The fabric of these was very hard and finely textured, with a cream-buff colour. Several sizes of pot were apparently represented, the wall thicknesses varying from ½ to 1½ ins., but some of these measurements may refer to different parts of the same pot. External fluting was present on the walls of some specimens. It was possible to calculate the rim diameter of one pot, this being about 17 ins. Although the total height could not be obtained, comparison with a similarly sized pot from Woodchester[1] suggests it to be about 20 ins. Such a pot would hold about 400 lbs. of molten glass.[2] Several of the fragments were coated with glass inside, outside and across the fracture; this shows that some pots were broken during use, and a high breakage rate is indicated.[3]

A Comparison of Refractory Fireclays[4]

At Glasshouse Farm, the finding of crucible pots made from such good quality refractory fireclay invites a consideration of its source. It must also be asked whether the crucibles were made near the fireclay deposits or at the glassmaking site. The heavy weight of the crucibles and the apparently high breakage rate suggests the latter; whether their manufacture at Glasshouse Farm would have been technically possible may be doubted, because very high temperatures and lengthy heating periods are required.

Fireclays[5] are often found as the underclay, or seat-earth, of coal seams, and in prehistoric times supported plant life. The degree of bleaching and removal of fluxes in subsequent ages have produced clays with a wide range of chemical composition. One might have expected that the relative proportions of alumina, silica, iron oxide and titania would be specific to clays from particular districts, but a study of the analyses (Appendix I) does not support this view.

This report is mainly concerned with two possible fireclay sources, Stourbridge and the Forest of Dean; but in view of the wide variation in their chemical composition it cannot be asserted, on this basis, that either district was the source of our fireclay.

[1] J. S. Daniels, *The Woodchester Glasshouse*, 1950, Plate XIV, fig. 68.

[2] Assuming a density of 2.5. The bottom diameter would actually be slightly less than the top.

[3] For an analysis of one crucible fragment, see Appendix I. Grateful acknowledgement is made to Dr. S. C. Waterton, formerly of J. J. Pearson Ltd., Stourbridge, for submitting the analysis of this fragment, together with that of the glass adhering to it. His keen interest and advice on this work are much appreciated.

[4] I am indebted to the Director and staff of the Geological Survey and Museum, South Kensington, for useful assistance in the study of fireclays.

[5] *Geological Survey Memoir. Special Report on the Mineral Resources of Great Britain*, vol. xxviii. Refractory Materials and Fireclays, H.M.S.O., 1924.

Nevertheless, there are two of the Stourbridge clays (DE and DL) whose composition is similar to that of our crucible sample (Appendix I). Apart from this, there are reasons, on general grounds, for identifying Stourbridge as the source:

(1) The British Ceramic Research Association give the opinion that it is unlikely, though not impossible, for fireclays of high quality to be found in the Forest of Dean.[1]

(2) Surface coal would have been dug in early times in the Forest, but the fireclay not exposed, because it occurs at some depth in the Trenchard series. Deep coal mining was not in operation there in A.D. 1600.

(3) There is no tradition or record of a ceramic industry in the Forest. The Stourbridge industry, however, is quite old.

It is therefore suggested that our crucible pots came from Stourbridge in their manufactured form. However, it appears that on one Wealden site the crucibles were made on the spot using local clay.[2]

Glass Objects found included parts of drinking vessels, window glass, bottles and linen smoothers, in addition to wasters.

The vessel forms are very good and are comparable to those from Woodchester,[3] and it is this similarity of style which suggests work by the same group of glassmakers. Representative samples of the glass are shown in Fig. 4, and a descriptive catalogue is given in Appendix IV.

The glass on the sandstone blocks was blue and green of varying tints.

The analytical characteristics of the glass, as shown in Appendix II,[4] are a high iron content, a high proportion of potash to soda and a high lime content. Some of the iron would be derived from the sand, but most of it would be supplied by impurities in the potash or be contributed by admixture of cullet. A wood-ash, not barilla ash, is certainly indicated.

Other materials discovered were several lumps of glass frit, burnt clay and limestone, together with a fragment of an iron blowpipe. Professor Sir Roger Mynors has kindly agreed that the finds shall be offered to the Hereford City Museum.

[1] Information from Dr. S. C. Waterton.

[2] At the Knole (Sevenoaks) furnace in 1585-86, the accounts include "two loads of clay for making 12 pots". Information from Mr. G. H. Kenyon.

[3] I am obliged to Mr. R. D. Abbott, Deputy Curator of Gloucester Folk Museum, for permission to examine the Woodchester material. Much of this glass is clear and only slightly tinted by impurities; some is almost colourless.

[4] I am much indebted to Mr. R. F. Sykes, B.Sc., Department of Glass Technology, University of Sheffield, for undertaking these analyses, together with that of the Upper Drybrook Sandstone. The analysis of the glass adhering to the used crucible was supplied by Dr. S. C. Waterton.

Method of Manufacture and Materials Used

The siting of glassworks of this period was determined by the presence of nearby beechwoods to provide billets for fuel. Such woods are associated with all known glassworks of this time, and the importance of beech as an efficient fuel is attested in various records. Close to Glasshouse Farm is Werndee Wood, of about 80 acres, towards which a hollow trackway leads from the furnace site. The wood is now mostly coniferous but was formerly under beech.[1]

As the craft was very mobile, and the process only a small one, light structures were sufficient—probably a half-timbered building on walls of brick or sandstone, with a brick floor. There were two types of furnace, the beehive and the rectangular, the latter being the size of a large bread oven.[2] The batch materials received a preliminary roasting to produce a " frit " which was then broken into pieces and put, together with cullet, into fireclay pots, already heated, standing on a siege platform. After melting the mix, the vessels were blown and shaped with various tools, and then set to cool slowly in an annealing oven.[3] The main raw materials were sand, alkali and lime, and cullet was probably a regular constituent, often obtained from supplies of waste window glass.

The sand was rarely free from iron salts which imparted the characteristic green or blue-green tint. No supplies of sand suitable for glass making were found during the excavation, but this is not surprising because the stock of sand would probably have been stored in a neighbouring building. The nearest likely source is the Upper Drybrook Sandstone, exposed at Hangerberry Hill, Lydbrook, 10 miles away. This consists of fine, windblown, rounded quartz grains, possessing only a light-brown tint, and the chemical analysis confirms that its iron content is fairly low (see Appendix II).

It may be remarked that our excavations did not reveal either " calcined flint " or the clear glass to be associated with its use, both of which were special features of Mr. Marmont's examination of the site.[4]

Two types of alkali were commonly used as a fluxing agent—potash (pearl ash) and soda (barilla). It is reported that an impure carbonate of potash was obtained by burning bracken gathered green and subsequently dried, followed by lixiviation and evaporation.[5] Brushwood may also have been burnt. Soda ash was derived from the barilla plant grown in Spain, and was exported to all parts of the world from the early 17th century until 1850.[6] A marked

[1] Information from Mr. H. M. Evans.
[2] Dimensions, see Appendix III.
[3] S. E. Winbolt, *Wealden Glass*, chp. X, p. 53.
[4] See footnote 1.
[5] J. S. Daniels, *The Woodchester Glasshouse*, 1950, p. 3.
[6] Information from Dr. S. C. Waterton.

distinction is made between the " fougère " type of glass and the " barilla " glass produced after 1567, on the basis of using woodash or barilla ash, respectively.[1] As indicated above, the analyses of the St. Weonard's glass suggests that pearl ash, produced from bracken or brushwood, may have been used. It is much more likely, however, that the wood ash from the furnace was the major source of the alkali. There are few available analyses of wood ash, but a comparison of these[2] with our glass analyses indicates a high proportion of wood ash in the mix, possibly about 50 per cent by weight. Such a proportion would also account for the amounts of lime and magnesia present in the glass.

Cullet may have been imported from other districts. The possibility of mixes of differing composition having been prepared for various types of glass (e.g. drinking vessels, window glass) must not be overlooked.

Historical Context

In the mid 16th century, Lorraine glassmakers moved to Sussex, where abundant supplies of beechwood and suitable raw materials were available. Such families included those of De Hennezel, Du Thisac and De Thietry, and their names appear in parish registers, both in Sussex and Staffordshire, as Henzey, Tyzack and Tyttery. In 1567, Jean Carré brought over skilled glass makers, and in this year he applied for a patent; this event marks a great improvement in the quality of glass produced in England.[3]

These, and other families of glass makers, spread to Hampshire (Buckholt), Gloucestershire (Woodchester, Newnham, Newent) and Staffordshire (Eccleshall), and in these places glassworks have been found.

Unfortunately, there is no knowledge of early deeds for the St. Weonards' glasshouse and farm, nor are there parish records at St. Weonards and Garway for the early 17th century. It was not possible therefore to search for names of the glassmakers' families, but in any case they may not have lived in the district long enough to have become established.

The dating of the glass found on the site to within the period 1580—1620 (Appendix IV) provides, however, a satisfactory link with the activities of these Lorraine workers, and is confirmed by the similarity of vessel forms with those from dated sites. The period of activity at St. Weonards was not necessarily as long as the forty

[1] The present writer considers there to be insufficient evidence for this attribution, and believes that the main factor for the difference was the *technique* of glassmaking (see Appendix V).
[2] R. F. Tylecote, *Metallurgy in Archaeology*, Appendix Table G.
[3] G. H. Kenyon, " Some comments on the medieval glass industry in France and England ", *Trans. Society of Glass Technology*, 1959, vol. XLIII, pp. 17–20.

years suggested above, and, when they left, their furnace and buildings were completely demolished.

Neither the routes nor the reasons for the migrations of these glassworkers in this country have been fully or satisfactorily explained. An over-riding necessity to move to fresh districts owing to depletion of local fuel supplies is one obvious answer, but there were probably also subsidiary factors responsible for some movement. The Forest of Dean was a vital source of oak for shipbuilding at this time and the glassworkers at Glasshouse, near Newent, may have been forced to move from the fringe of that area[1] to the St. Weonards' site.

[1] I am obliged to Mr. W. A. Thorpe for this suggestion.

APPENDIX I CHEMICAL COMPOSITION OF FIRECLAYS (IN PERCENTAGES)

	Used Crucible Glasshouse Farm[1]	Forest of Dean Clay[2] No. 1		Forest of Dean Clay[2] No. 2		Stourbridge Clay						
		Burnt	Raw	Burnt	Raw	D.C.	D.E.	D.F.	D.G.	D.H.	D.I.	
SiO_2	75·93	64·44	58·90	69·06	62·00	68·58	71·93	60·46	57·35	68·82	66·64	
Al_2O_3	20·06	23·31	21·31	21·16	19·00	25·21	23·41	31·67	37·27	27·04	28·02	
TiO_2	1·05	—	—	—	—	1·75	1·06	1·32	1·20	1·39	1·41	
Fe_2O_3	1·25	2·65	2·43	3·34	3·00	2·52	1·96	2·83	2·19	1·60	1·83	
CaO	0	—	—	—	—	0·33	0·51	0·40	0·48	0·22	0·38	
MgO	0	—	—	—	—	0·28	0·28	0·92	0·45	0·33	0·55	
TiO_2 + CaO + MgO	—	7·38	6·86	6·44	5·78	—	—	—	—	—	—	
K_2O	1·22	—	—	—	—	0·96	0·74	2·19	0·42	0·60	1·13	
Na_2O	0·17	—	—	—	—	0·37	0·11	0·20	0·67	trace	0·04	
TOTAL	99·68	97·78	98·10	100·00	100·00	100·00	100·00	99·99	100·03	100·00	100·00	
Ignition Loss	0	0	8·60	0	10·22	8·31	8·10	10·08	13·48	9·20	9·45	

	Stourbridge Clay						
	D.J.	D.K.	D.L.	"Strong" Clay D.B.	3	3	3
SiO_2	56·52	69·61	75·58	85·45	55·36	51·62	53·36	49·14
Al_2O_3	36·61	25·39	21·70	13·21	29·63	30·82	29·25	29·46
TiO_2	1·54	1·44	1·43	—	0·71	—	1·35	1·25
Fe_2O_3	2·71	1·75	1·39	0·69	1·80	2·00	2·18	2·83
CaO	0·32	0·18	0·34	0·10	0·45	0·84	0·03	0·05
MgO	0·54	0·44	0·29	0·16	0·21	0·30	0·84	0·83
TiO_2 + CaO + MgO	—	—	—	—	—	—	—	—
K_2O	1·67	1·18	0·85	trace	1·84	0·98	0·72	1·08
Na_2O	0·09	trace	0·41	0·55		0·52		
TOTAL	100·00	99·99	99·99	100·16	100·00	97·96	99·38	99·61
Ignition Loss	14·95	8·57	7·51	—	9·80	10·88	11·46	14·74
SO_3	—	—	—	—	—	—	0·19	0·23

[1] Analysed by Dr. S. C. Waterton. [2] Quoted by the British Ceramic Research Association.
[3] Quoted by the Geological Survey and Museum.

APPENDIX II

Chemical Composition of St. Weonards Glass

	Sample A	*Sample B*			*Sample C*
		Piece 1	*Piece 2*	*Piece 3*	
	%	%	%	%	%
SiO_2	56·41	57·11	60·21	58·67	57·98
Fe_2O_3	1·63	1·12	1·32	1·40	1·46
"R_2O_3"	6·33	5·80	5·65	5·80	5·33
CaO	21·44	19·14	18·96	18·47	19·94
MgO	3·71	4·41	3·97	3·72	3·94
MnO	0·25	0·37	0·31	0·25	0·41
Na_2O	2·00	1·97	3·27	1·02	1·75
K_2O	8·31	10·68	6·32	10·54	9·44
	100·08	100·60	100·01	99·87	100·25

Chemical Composition of Glass attached to Used Crucible

	%
SiO_2	59·90
TiO_2	0·42
Al_2O_3	7·13
Fe_2O_3	1·04
CaO	18·25
MgO	2·87
Na_2O	1·16
K_2O	7·48
Loss	0·10
	98·35

Chemical Composition of Upper Drybrook Sandstone

	%
SiO_2	93·54
TiO_2	0·50
Fe_2O_3	0·26
Al_2O_3	4·96
CaO	0·11
MgO	0·12
MnO	0·01
Na_2O	0·07
K_2O	0·24
Cr_2O_3	0·014
	99·82

APPENDIX III

Recorded Dimensions of Known Glassworks

Site	*Type of Furnace*	*Size of Building*	*Size of Furnace*
Hazelbridge, Weald	Rectangular	25 × 20 feet	—
Bishopswood, Staffordshire	Rectangular	—	4 feet 5 in. × 2 feet 10 in.
Woodchester, Gloucestershire	Round	50 feet square	16 feet diam.
St. Weonards, Herefordshire	Rectangular	—	12 × 4 feet

APPENDIX IV

Description of Representative Samples of Glass found during Excavation[1]

Dr. Harden has kindly examined these specimens and his report is as follows:

Fragments Nos. 1—16 are all very uniform in colour (a dull, dark green), metal (good, with some bubbles) and weathering (usually dulled in whole or in part, with some iridescence at times, but only occasional pitting of the surface and no flaking or other disintegration), and they must all be from very similar batches and of very similar composition.

I have no doubt that G. H. Kenyon's dating of *c.* 1580–1620 fits these fragments very well. They can mostly be paralleled in J. S. Daniels' Woodchester publication (see reference below). I cannot find much like them in S. E. Winbolt's *Wealden Glass*, but his illustrations are so few and so poor that this is perhaps not surprising and does not prove that these types did not exist there. Indeed, we know that they did and that they were current in general both in England and on the Continent at this period.

1—4 Four bottom fragments of goblets with pushed-in base-rings with deep kicks. A very typical late 16th to early 17th century shape: cp. J. S. Daniels, *The Woodchester Glass House*, p. 14f, pls. i-iv., vii-viii; and see also *Dark-Age Britain; studies presented to E. T. Leeds* (ed. D. B. Harden), p. 166, where I discuss some similar fragments alleged to be Saxon, but which are undoubtedly Tudor.

[1] Kindly drawn by Mr. R. E. Kay in Fig. 4.

5 Rim fragment of a goblet, D.*c.* 9 cm., probably comparable with the Powell imitation of a Woodchester fragment illustrated by Daniels, *Woodchester*, pl. ii, no. 4.

6-7 Fragments of handles of linen-smoothers(?). Cp. Daniels, *Woodchester*, pl. iv, no. 21 and the Powell imitation, pl. iii, no. 16.

8 Fragment of handle of jug with one eccentric vertical rib.

9 Solid, slightly tapering stick; probably a waster.

10 Fragmentary long curving tube. Perhaps part of a long spout or handle. There are curious tea-pot like spouts on certain Venetian-type Persian and Spanish glasses illustrated by W. B. Honey, *Glass*, pl. 29F, 37B, and 38C. There are also examples of alchemical glass alembics with, I seem to remember,

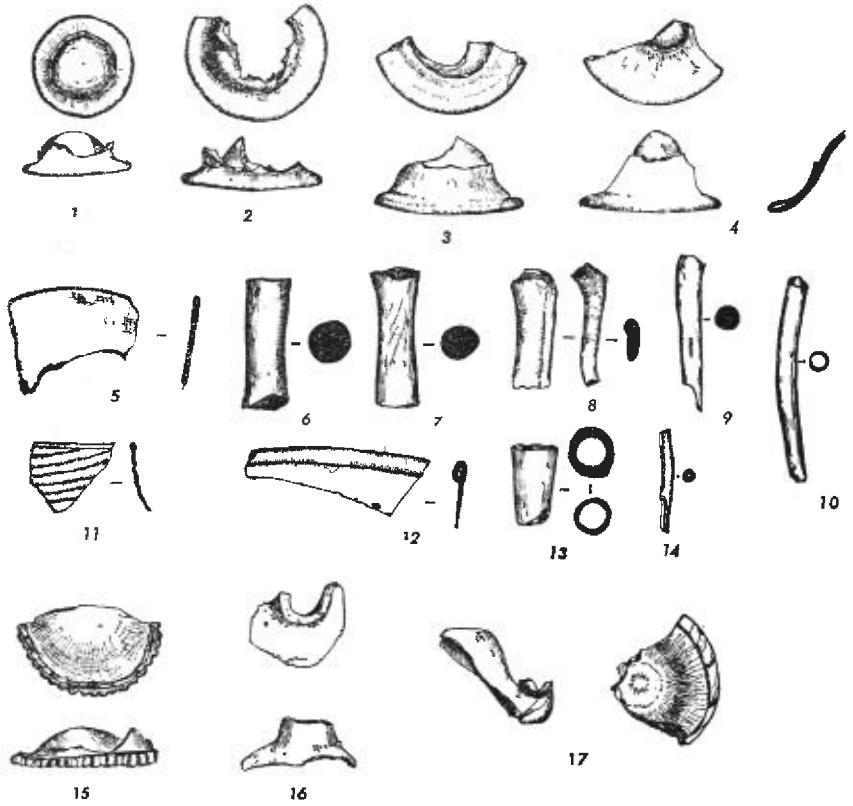


FIG. 4. GLASSHOUSE FARM. REPRESENTATIVE SAMPLES OF GLASS.

tubular handles, somewhat curving at times. But I doubt if any of these are relevant parallels for this fragment.

11 Fragment of side of bowl or goblet, D. *c.* 9 cm., with pre-moulded sloping ribbing; cp. Daniels, *Woodchester*, pl. vi, nos. 45 and 47.[1]

12 Fragment of crown disk with folded edge. No doubt a waster, after glazing diamonds had been cut out. From a very large disk, perhaps 4 ft. in diameter.

13 Fragment of the tapering neck of a bottle, thick-walled, D. 2 cm. at middle. Cp. no. 16.

14 Part of a thin tube; no doubt a waster.

15 Base of goblet with applied frilled (or nicked) ornamental edge-piece, the frilling being at the side and the bottom of the edge-piece being flat. Bottom of vessel concave, with pontil-mark. Cp. Daniels, *Woodchester*, pl. ix, nos. 78–9 and the Powell imitation, pl. iii, no. 19.

16 Base of neck and part of shoulder of a bottle; very bubbly glass; neck thick-walled and exactly similar to no. 13 above, but they do not join.

17 Fragment of base of bottle, D. *c.* 7.5 c.m., with deep kick ending in a flattened knob, 2.5 cm. in diameter. Extremely symmetrical and undoubtedly blown into a mould. The metal is bright olive-green and still possesses completely its original glossy surface with no weathering whatever. Good glass with only some very tiny pin-prick bubbles.

This fragment is very different from all the others, and I find it difficult to believe that it can be contemporary with them. It is almost certainly fairly modern, though the breaks are old and no longer sharp-edged, and this suggests that it must be at least of some moderate age. Its lack of weathering also makes an early date for it suspect, for, though Roman and Saxon glass, which is normally a soda-lime variety, sometimes remains unweathered in our soil, medieval and 17th century glass is usually highly weathered.

[1] By "pre-moulded" I mean that the paraison was blown into a cylindrical mould with vertical ribs and then, on release, further blown and swung to expand and twirl the ribbing.

APPENDIX V

A Consideration of Certain Properties of Glass

The difference in textural quality of ancient glass of different historical periods, and also of glass from various glasshouses within the same period has prompted enquiry into the reasons for these differences. The following summary[1] attempts to clarify this point.

(1) The chemical composition of the glass has little effect on differences in textural appearance, with the possible exception of varying proportions of lime, which affects not only the water solubility of glass but the temperature necessary for melting the mix.

(2) It is suggested that soda or potash have no intrinsic properties resulting in different types of glass.

(3) The physical characteristics observable by eye, and with a lens, are probably due to variations in manufacturing technique, internal changes with time and external decomposition caused by soil reaction and weathering. These factors are:

   (*a*) Temperature of melting. The temperature of the melt must be high enough to expel gas bubbles, to produce a clear glass. If it is not, opalescence and opacity result.

   (*b*) Rate of heating and cooling. If either the heating or cooling (i.e. annealing) is too rapid, the glass tends to crystallise, giving opacity and, in extreme cases, brittleness.

   (*c*) De-vitrification. This occurs either with storage of the glass for a considerable time, or with poor annealing, resulting in a loss of transparency or translucency.

   (*d*) Dirty glass, due to impurities in the raw materials, which must affect the appearance. These impurities include sandy and black particles, and a white scum from the slag formed in melting the mix.

   (*e*) Decomposition by weathering—surface dulling, frosting and strain-cracking, surface pitting and iridescence—due to exposure to water, sunlight, acids and other soil agents.

Archæologically, a distinction should be made between glass turned in ploughing and thus subject to true weathering, and glass sealed in deeper layers and subject only to soil reaction. It must be remembered, too, that other materials may be present (e.g. crushed brick) which may give a reaction quite different from that of the surrounding soil. Thus there may well be apparent differences in textural quality of two specimens of glass, when excavated, though both may be the same type of glass.

Colour differences are influenced by the quantity of iron and other salts in the raw materials, and cannot be used as a criterion of glass type, except in the sense that a glassmaker would insist on obtaining a particular kind of sand. Moreover, the cullet added to a mix would not only contain such impurities but might also introduce a decolourising agent, the proportion varying with the source of the cullet.

[1] The opinions expressed are those of the present writer. The facts given in items (3) *a-e* are from *History of Technology*, ed. C. Singer, ch. IX, "Glass and Glazes", Dr. D. B. Harden.

Editorial Note

A grant in aid for the publication of the above paper was made to the Club by the Council for British Archæology.

AN ELEVENTH CENTURY TYMPANUM

By THE REV. J. E. GETHYN-JONES

The presence of a tympanum high up in the external face of the wall of the presbytery triforium in Hereford Cathedral has long been known. Sir Alfred Clapham gave a brief description in Vol. I of the Herefordshire survey by the Royal Commission on Historical Monuments, 1931: " On the outside face of the E. bay, W. of the arch and above it (visible above the aisle-roof), is a narrow window-opening, now blocked and having a round head and a solid tympanum carved with crude foliage; if this window is *in situ* it is difficult to imagine what purpose it could have served." Mr. George Marshall also mentioned it in his book on Hereford Cathedral (1950): " There is also the evidence of a small window-like opening in the north wall of the triforium near the inside of the south-west corner of this tower. This aperture is about 2 feet 6 inches high and about 8 inches wide, and its head is of three receding arches like those on the triforium stage at the east end of the presbytery, below which is the tympanum carved with a rudimentary Tree of Life " (Fig. 1A).

Its position, however, made a detailed examination impossible, though a flash photograph taken in March, 1963 (Fig. 1B) revealed more of the carved surface than had been seen before, and suggested that the significance of the tympanum was sufficiently great to warrant further study. To this end, by permission of the Dean and Chapter and under supervision by the Dean and his Clerk of Works, the stone was removed and placed in the Cathedral where it could be easily seen and where it would receive protection from the weather. The cost was generously borne by the Woolhope Naturalists' Field Club and other interested parties.

This removal gave the first opportunity for a very long time for the tympanum to be seen in its entirety, and an examination made in June, 1963, by Professor Zarnecki and the writer suggested that the tympanum was not only interesting of itself, but that it provided interesting evidence for the possible dating of the building of the south transept of the Cathedral. In assessing this evidence, two things are to be borne in mind—the typological evidence of the carving itself, and the nature of its position if it was, as seems most likely, *in situ*, in the position for which it was designed at the head of a narrow window-like opening (now blocked).

Sir Alfred Clapham and Mr. Marshall pointed out that the E. bays of the N. and S. presbytery aisles were designed to support towers, and that traces of these features have survived. The opening containing

To face page 316

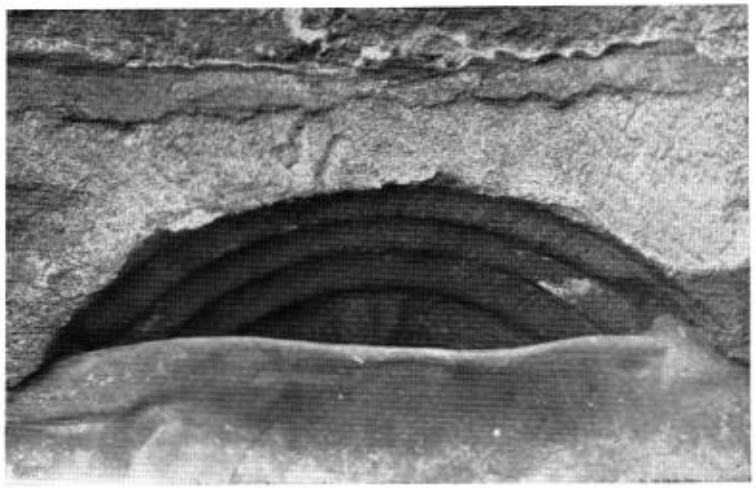


FIG. 1A. THE TYMPANUM BEFORE EXAMINATION IN 1963.

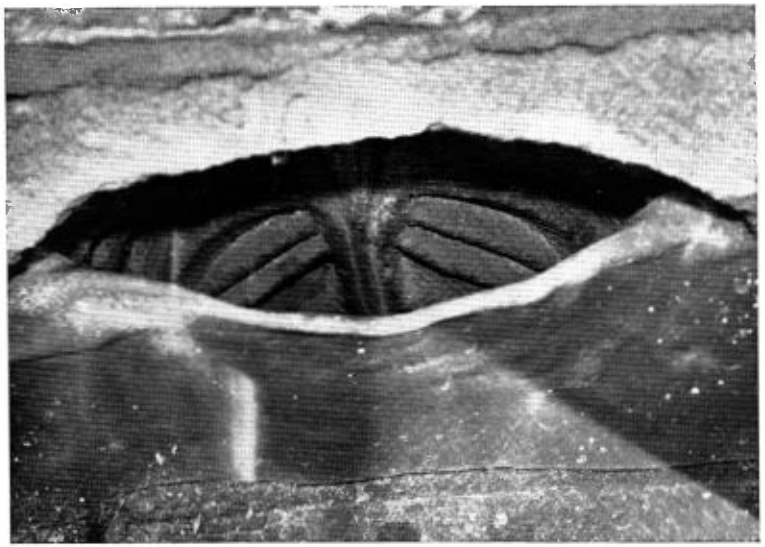


FIG. 1B. THE SAME. A FLASHLIGHT PHOTOGRAPH.

FIG. 2. THE TYMPANUM TO-DAY. Dimensions: 11½ in. × 18⅛ in. (approx.)

FIG. 3A. THE TYMPANUM, CHEPSTOW CASTLE.

FIG. 3B. CHURCH OF S. ANDREW, TANGMERE, SUSSEX. A WINDOW TYMPANUM.

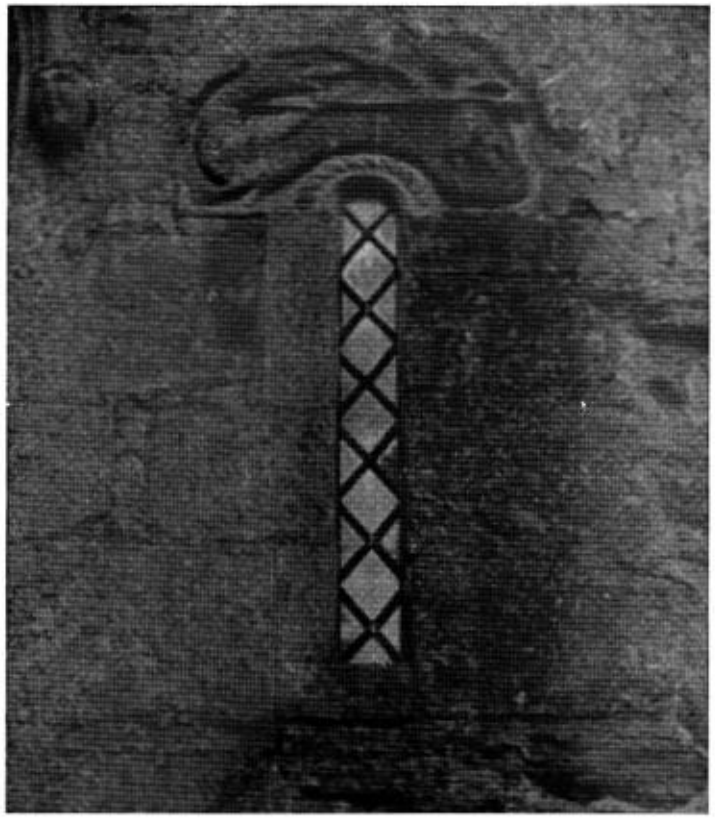


FIG. 4A. CHURCH OF S. MARY, STOKE SUB HAMDEN, SOMERSET.
A WINDOW TYMPANUM.

FIG. 4B. CHURCH OF SS. PHILIP AND JAMES, TARRINGTON, HEREFORDSHIRE.
THE CHANCEL WINDOW, NORTH SIDE.

the tympanum was sited in the S.W. corner of the S. wall of the N. tower, if this latter structure was ever completed. The measurements will be found on the attached sketch.

Tympana above doorways are a common feature in Anglo-Norman architecture. Mr. Charles Keyser in his monograph on English Tympana and Lintels (London, 1904) stated that, although some tympana undoubtedly date from Saxon times, most belong to the period 1080–1200. Sir Alfred Clapham largely agreed, but Professor Zarnecki is of the opinion that they are all of a post-Conquest date. The earliest datable tympanum within the counties of Gloucester, Hereford and Monmouth is in the Great Keep in Chepstow Castle, built by William Fitz-Osbern between 1067 and 1071.[1] This tympanum is, undoubtedly, the work of a Norman craftsman. The doorway, which has but a single order with plain jambs, is in the E. wall of the ground floor. The round-headed arch above the doorway is of two orders square in section, the voussoirs of which are enriched with a sunken star motif. The tympanum, composed of stones set diagonally, and its base have the same ornamentation (Fig. 3A). This type of tympanum is found in several churches within the boundaries of the medieval diocese of Hereford, e.g. Churcham, Edvin Loach, Hampton Bishop, Hatfield and Letton. None of these examples, however, are enriched with carving, except at Churcham (Glos.) where the few original stones of the tympanum have a pattern of incised crossed lines.

The tympanum at Preston near Dymock, carved with a crude Agnus Dei which is kneeling and supporting a pole on which is mounted a circular Maltese cross, is another example which, probably, is of a late 11th century date.

The Hereford tympanum is enriched with a tree motif of a most elementary pattern with an embryonic root formation. It is, as may be seen in Fig. 2, extremely simple in design and executed with a chip-carving technique. Keyser enumerates forty-one tympana in which a tree occupies a prominent place in the carved scheme.[2] His list is by no means exhaustive, for, among others, the tympanum forming the subject of this article and that over the S. doorway of the ruined chapel at Yatton (Herefordshire)[3] are not included.

Tympana at the head of window openings and blind arcadings are less frequently found. Examples, however, have survived, and some are in close proximity to Hereford, e.g.:

(*a*) Stoke-sub-Hamdon (Somerset). There is in this church, dedicated to St. Mary, at the head of a very small window at the

[1] Ministry of Works Official Guide Book, pp. 1, 22–23, and also plan.
[2] Twenty-nine examples are given in the first edition. Twelve others, making the forty-one, were added in the second edition published in 1927.
[3] This tympanum, also, has a tree motif.

W. end of the N. wall of the nave, a tympanum with a crude carving of St. Michael and a dragon. This is accepted by authoritative opinion, e.g. Professor Zarnecki and Dr. Pevsner, as of eleventh century date (Fig. 4A).

(*b*) Dymock (Glos.). St. Mary's church, Dymock, has two surviving panels of blind arcading in the outside of the S. wall of the chancel. At the head of both bays are composite tympana formed of stones set diagonally. These are plain and probably date from the late eleventh century.

(*c*) Chepstow Castle. Here in the Great Keep there is blind arcading. It is on the inside of the S. and W. walls of the second storey. The head of the second bay on the W. wall, reckoning from the S., is decorated with the same diagonally set stone pattern. In this instance it is achieved in plaster. In this case, too, a late 11th century date is indicated (Fig. 3A).

(*d*) Tarrington (Herefordshire). SS. Phillip and James. There are two windows in the N. wall of the chancel of Tarrington church. The head of each of these openings has been cut out of a single large stone. The one to the E. has upon it four vertical registers of interlocking circles (Fig. 4B). Four vertical registers of platted pattern and a large rosette have been carved upon the other stone. The method of carving is similar in technique to that employed by the sculptor of the Hereford Cathedral window tympanum. These two Tarrington stones are not fragments of a standing cross —c/p the lintel at Acton Beauchamp—but appear to be genuine window tympana. They are not carefully cut to shape at the face, as is the Hereford example but, like the Tangmere tympanum (Fig. 3B), are irregular in outline. Sir Alfred Clapham claimed that the chancel and nave of this church were built in the " second half of the 12th century."[1] The presence of these tympana, however, and the method of carving employed upon them, i.e. a shallow chip-carving treatment, appear to be more suggestive of a late 11th century date, to which we must assign this example in Hereford Cathedral.

It is worthy of notice that on the outside of the E. wall of the S. transept (next to the tower) of Hereford Cathedral there are several blind arcaded bays with round-headed arches of four orders square in section similar to the arch carved upon the tympanum stone (Fig. 2). The S. transept is described both by Sir Alfred Clapham and Mr. Marshall as one of the oldest parts of the cathedral.[2] If this is so, and if the very small late eleventh

[1] R.C.H.M. (Herefordshire), vol. 2, p. 182.
[2] Clapham, *op. cit.*, Vol. 1, pp. 90–99; Marshall, *op. cit.*, pp. 30, 31, 44, 45. It will be noticed (Clapham, plate iii) that the arcaded bays have been partly renewed.

century tympanum recently removed from the N. wall of the presbytery triforium was in fact *in situ*—and it appears to have been so—then the S. transept also may well have been built late in the eleventh century. Consequently, it would appear that a careful review of the Anglo-Norman portions of Hereford Cathedral is now called for.

THE BISHOP'S PALACE, HEREFORD

By H. J. Powell, F.R.I.B.A.

During the recent change of Bishops of the Diocese, the Palace was empty for a time. This afforded an opportunity for a detailed investigation of the building. The chance was the more welcome as certain features do not correspond with opinions expressed by John Clayton, an architect who, in 1847, read before the Royal Institute of British Architects, a paper on "The Halls of Hereford and Oakham" and on whose work much later writing has been based.[1]

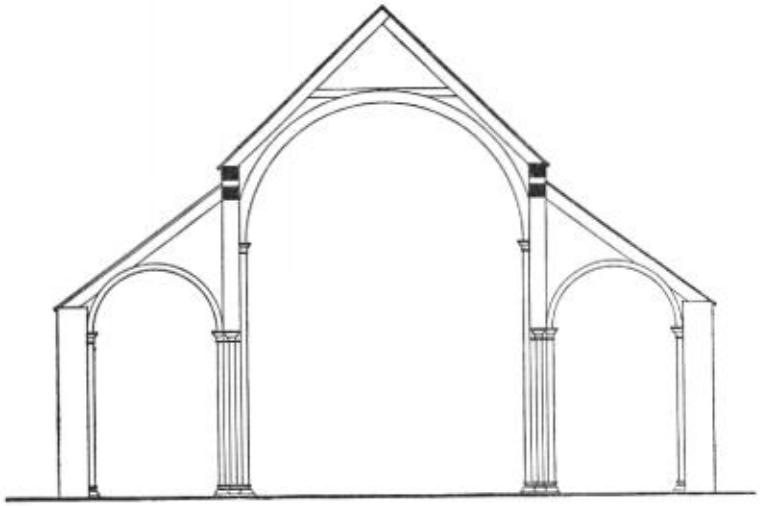
This paper is the outcome of the work done during that investigation and aims to consider the problems of the original plan of the great hall of the Palace and of the subsequent alterations to it, problems not fully dealt with either in the account given in the Report of the Royal Commission on Historical Monuments, or in the article in the *Journal of Medieval Archaeology*, vol. IV, 1960 by Mr. J. T. Smith, who is there dealing with the technicalities of the structure rather than with the original plan of what he describes as the most complete timber building in England to have survived from the twelfth century.

The hall runs from the Bishop's Cloisters on the south side of the nave of the Cathedral to the river bank, i.e. from north to south. It consisted of a nave with an aisle on either side, the aisles being divided from the nave by timber arcades consisting of oak posts, which had been cut from timber about 2 ft. 6 in. square, joined together at the head by timber plates with semi-circular arches below (Fig. 1). The middle and side aisles may have been originally spanned by semi-circular arches, but the exact arrangement cannot be determined, nor is it clear whether there was ever a clerestory above the aisles. Opinions have differed, too, as to the material of the outer walls, whether they were timber-framed, or of stone. The Royal Commission report speaks of timber walls, but the porch is stone, and though it is a rebuilding made in the time of Bishop Hampden (1847–1868), it was done on the lines of the original porch and this was what Clayton saw.

From what remains of the structure today we can trace the whole or parts of the six timber posts and one arch of the east arcade (*Transactions for* 1918–20, facing page 164). Other arches may have been plastered over during reconstruction. The main transverse arches have all been removed. The Royal Commission Report gives a lengthy description of the structure as a "large timber building

[1] See Havergal, *Fasti Herefordenses*; Alfred Watkins, "the Early Timber Halls in the City of Hereford", *Woolhope Club Transactions*, 1919, and Bishop Linton Smith, *The Palace, Hereford.*

with a stone base to the outer walls and perhaps a stone porch on the west side" and suggests that it was at least three bays long . . . "the bay at each end north and south now form cross wings but may originally have formed part of the hall, in which case it would have had five bays". The structure was remodelled by Bishop Bisse (1712–1721).



SECTION THROUGH HALL

Fig. 1

Clayton, in his account reproduced in the *Fasti*, gives the dimensions of the hall. "The original dimensions of this hall were 110 feet by 55 feet. It was divided into a centre and two side divisions by two ranges of columns, which likewise divided it longitudinally into five compartments". Now each bay remaining is 24 feet long so that the three measure 72 feet. If two more are added, the total length becomes 120 feet, and this does not allow for the thickness of the end walls. This discrepancy alone suggested the need for further work. It proved to be not merely a discrepancy caused by error in the printing of Clayton's account in the *Fasti*, for his original manuscript in the possession of the Library of the Royal Institute of British Architects agrees with the *Fasti* account. Unfortunately, it has proved impossible to trace the three drawings showing the reconstruction which Clayton made in 1846, and only that of the

exterior perspective has come to light, now in the same Library. Also, there is a print showing the interior perspective at the Palace (Fig. 2).

It began to seem unlikely that the Hall had ever been of five bays, as the Royal Commission Report tentatively suggests.

When it was first erected, in the late 12th century, the hall was really the main part of a typical manor house of the period, and as such was the chief room in a building in which it would be supplemented at one end by a solar and at the other by kitchen and butteries. J. A. Gotch, in his book *The Growth of the English House*, describes as the finest example of such a hall in its original estate, that at Oakham Castle in Rutland, where a space as large as a church is covered by a structure with nave and aisles. The whole enclosure in which the hall stands once contained, as well as the hall, four chambers and a kitchen, two stables, a grange for hay, a house for prisoners, a chamber for the porter and a free chapel. The Bishop's Palace at Hereford was conceived on a similar scale and contained accommodation such as this. We know, indeed, that there was certainly a chapel and a prison. Clayton, however, does not seem to have thought of the hall of the Palace as a house at all, but refers to it as a Norman refectory and makes no reference to a solar or to domestic offices, and though he refers to such structures in his account of Oakham, he again does not treat the hall as a mediæval house.

Isaac Taylor's map of Hereford, published in 1757, proved to make valuable suggestions as to old form of the palace building and from his map the plan and section of Figs. 1 and 3 have been drawn out. The Palace finished at the north wall of the present conference room and at the south end finished in the same position as at present. The kitchen wing that was built in 1533 was probably positioned as shown in Fig. 3 to avoid coming up against the side of the hall. In one of the marginal vignettes of the map the Palace is shown as having an eighteenth century wing, sash-windowed, probably built by Bishop Bisse, part of which survives to this day. Taylor's map goes far towards demolishing the theory that Bishop Bisse in his reconstruction work which created five compartments in the great hall did this to correspond with the original number of bays. Taylor's drawing taken alongside the measurements of the building to-day are evidence that in Taylor's time the great hall consisted of four bays, each of 24 ft. plus the south wing which was approximately the same width as the present wing, viz. 22 ft. 9 in.

For what lay beyond the north end before Taylor's time, and for the answer to the question whether there was another bay at the south end where the new wing was built, further considerations have to be taken into account. It is most likely that the hall did

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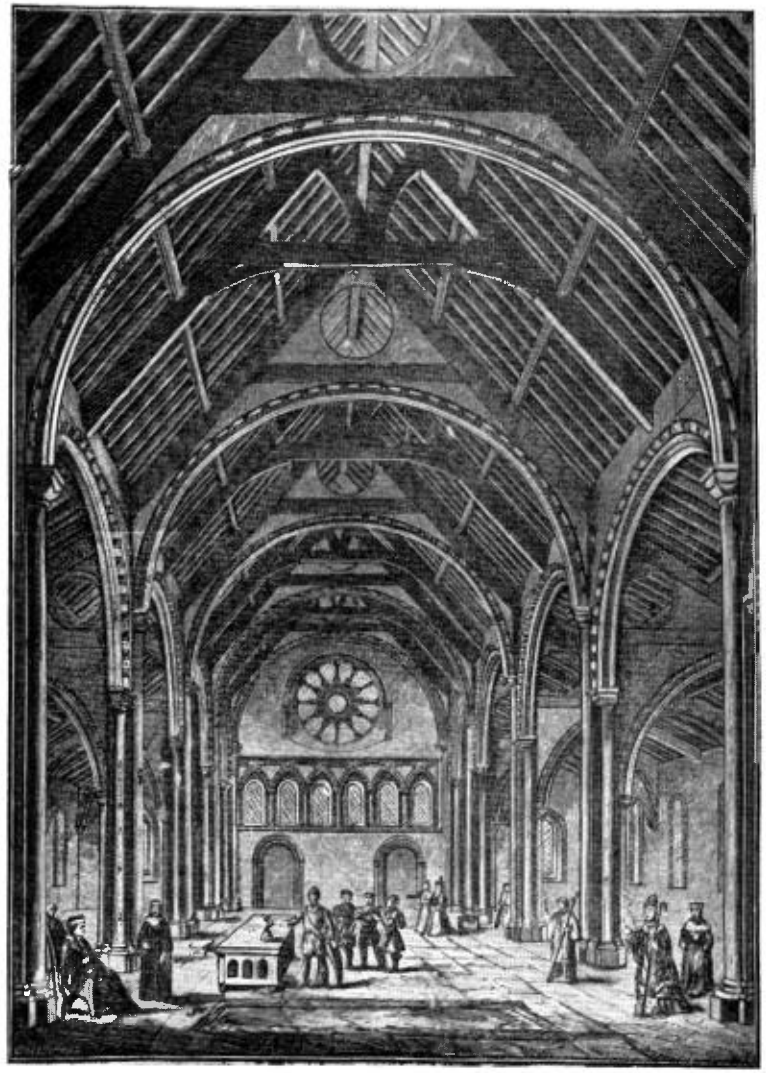

FIG. 2

not extend beyond the present north wall of the conference room which is the extremity of the hall shown on Taylor's map. Had it done so, not only would it have lain beyond the sixteenth-century kitchen wing, which had been built in such a position as to cause no obstruction to the hall, but it would have been within 6 feet of the ancient Bishop's chapels of which the position is shown by Taylor, and this would seem hardly reasonable. The position of the porch is also a helpful indication. The entrance to a medieval hall was always at the servant's end so that the bulk of the floor space was left clear for daily life to be carried on away from draughts. The entrance door in its present position is not in the end bay but in the next bay to it. If the hall had extended further north it would have been even further from the end.

It is possible that Bishop Bisse moved this porch one bay south in order to form a dining room near the new kitchen wing. The entrance door to Oakham has been moved from the end in this manner. The original kitchen wing may well have been on this site and demolished before 1757, possibly at the same time as the chapel in 1737. In his *Historical Account of the City of Hereford* (1796), John Price mentions the demolition of the Bishop's chapel and says, " There was also a mansion house contiguous belonging to the chaplains of the said chapel ". Possibly this wing had been converted into a separate house for the Bishop's chaplain after the new kitchen wing had been built, and then demolished at the same time as the chapel. Two chaplains were certainly mentioned in a paper on this chapel which was read to the Club in 1957. This site at the north end apparently remained vacant until the existing chapel building and wing were built in the time of Bishop Butler (1788–1802). This wing gave access and made a connection between the Palace and the sixteenth-century kitchen wing. This chapel is now used for storing archives. All this seems fairly conclusive evidence that the hall did not extend further north than shown on Taylor's map and than, in effect, the north wall of the present conference room which is the same position.

Now for the question of the south end. Clayton says in his paper that the two end compartments or bays of the roof had been removed and when he wrote his paper in 1846 the north bay had certainly been demolished and re-built by Bishop Musgrave and replaced with the wing which we see now, but the Bishop could not have demolished a similar bay at the south end as one did not exist: what was there in the nineteenth century was Bishop Bisse's eighteenth century wing. Did Bishop Bisse demolish the south bay to build this wing ? The answer must be that he did not. The present wing, which followed the plan of Bishop Bisse, is only 22 ft. 9 in. wide. A bay of the hall would have been 24 ft. plus the thickness of

the end wall. It may be thought that the new wing is narrower than the original bay, which, if it had existed, would have made the plan longer than at present. The steep fall to the river is, however, against this. This fall is shown on Taylor's map, which represents the bank; indeed, as it still is. Had it been desired to make the hall longer, surely the whole building would have been built further to the north to avoid the steep fall in the ground at this point. The Palace may indeed have extended as far south as at present, but the existing south wing stands on the site, not of a fifth bay of the hall proper, but of the original solar, which may have been only a single storey block but would not have been as wide or as high as one bay of the hall. Had the south bay been no wider than at present the hall would have been approximately 120 feet long and had the bay been the same length as the others (i.e. 24 feet) the hall would have been approximately 123 feet long. How, then, can it have been 110 feet as stated by Clayton ? This question brings us to the answer to which this paper has been moving—that the original hall was four bays long, not five, as thought by Clayton and as accepted almost without question since that time, and that the Bishop's hall was very like that at Oakham, a structure of four bays, with a kitchen wing at the north end and a solar with probably other chambers as well at the south end.

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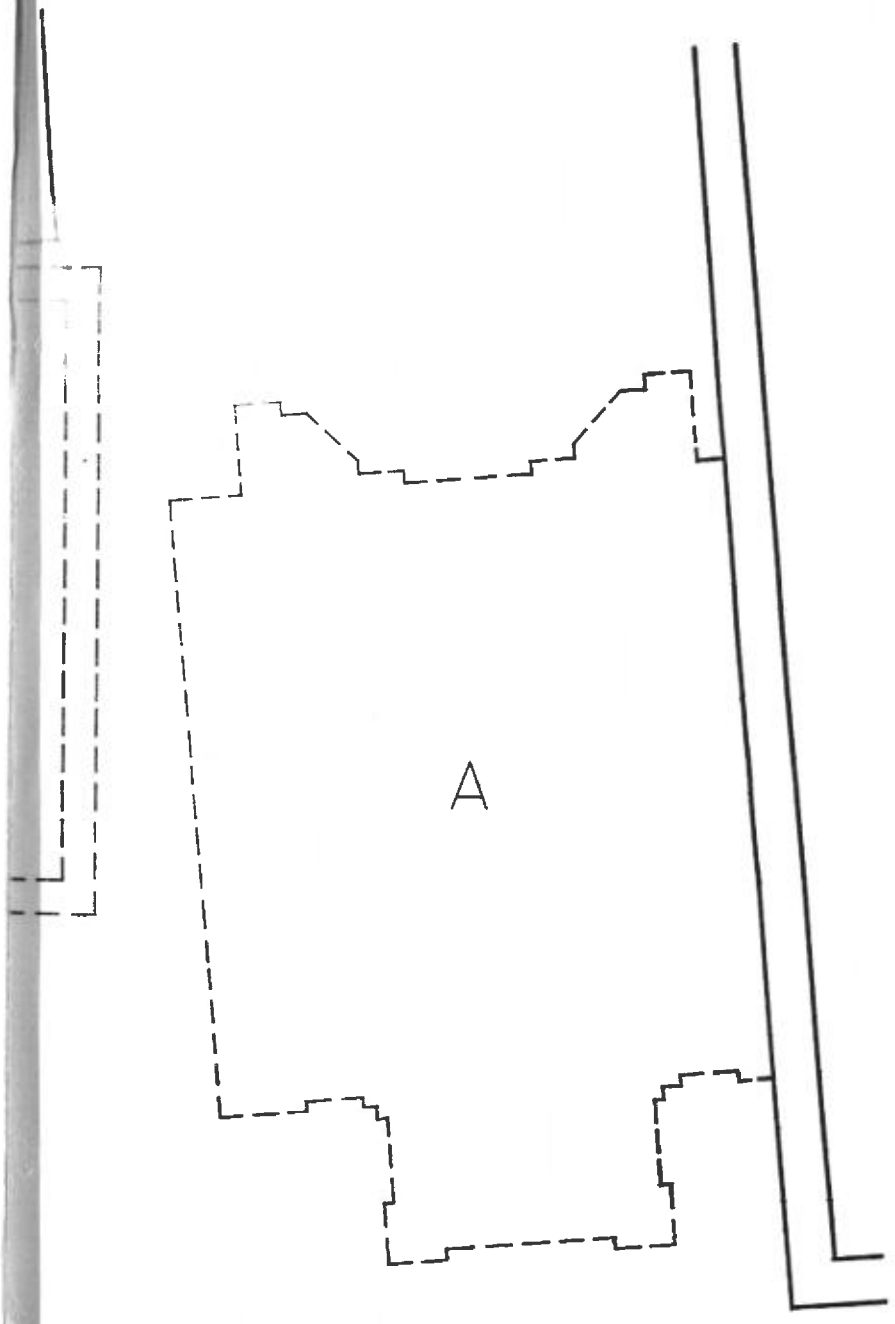

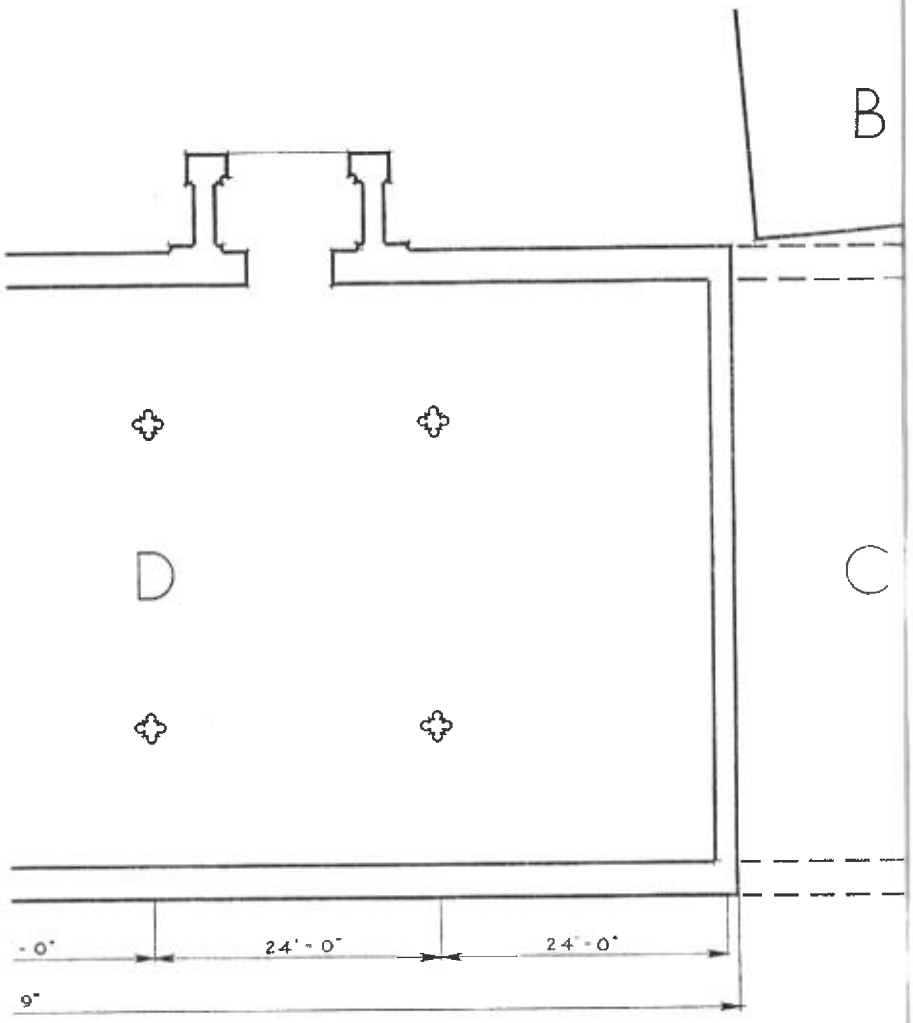

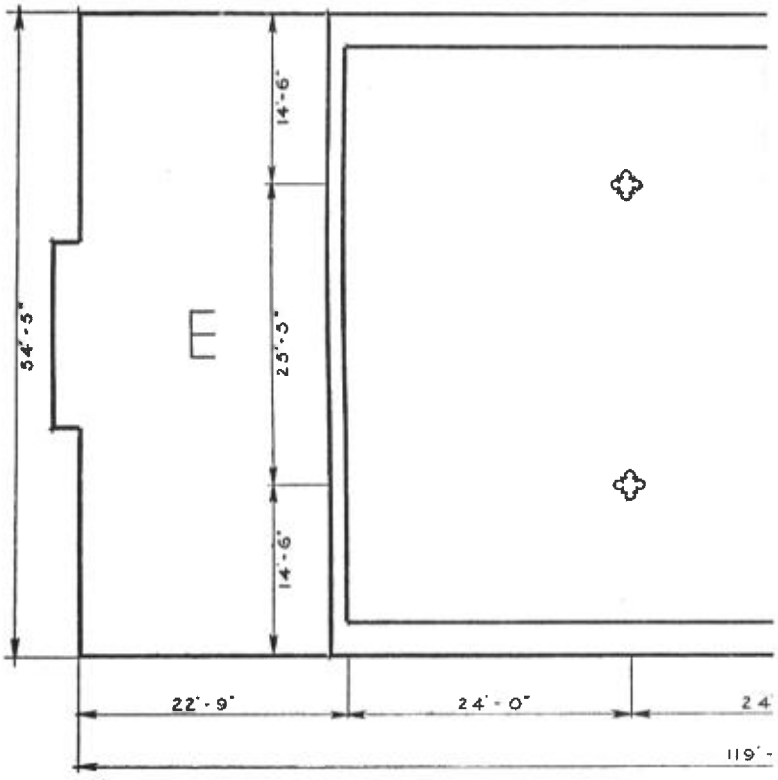

KEY.

D Norman Hall.

E Probable position of solar.

A Site of Norman Chapels.

B Position of 16th century l

C Probable position of orig

citchen wing.

inal kitchen.

FIG. 3

NOTES

A TERRIER OF THE LANDS AND POSSESSIONS OF THE RECTORY OF TURNASTONE

By A. S. Wood

The document transcribed below has survived among the records of the Whitehouse estate where it accompanies a deed dated the 20th November, 5 James I (1607) to lead the uses of a fine thereby Rowland Vaughan of Newcourt, acquired properties in Turnastone and Vowchurch, and also the advowson of the parish church, rectory and parsonage of Turnastone with all the tithes thereto appertaining. The terrier describes these appurtenancies. Some of the pieces of Glebe land described can be identified to this day, and have now been united with fields of the owners of adjoining lands.

Rowland Vaughan also carried out the extensive waterworks of which the remains can still be seen in the Golden Valley is a figure of great interest, and though this document may not add much to our knowledge of him, it yet illustrates his importance as a land owner and accompanies a record proving that at this time he was increasing his inheritance in the Vowchurch and Turnastone district.[1]

A tearear of the Lands and Posshons Belonging to the Rectorrey of turneston and those whose names Are under ritten 1607.

Thare is belonging to the Rectorry of turneston The Gleib Lands a houes and garden and one medow Containing by Estymation one Acer of grownd being by Vowchurch bridg.—one Acer of Arable Land in the Cros fild.

Three Acers of Arable Land on the top of the hill and too Acers of Arable land in the fild Calld nuics A dilad and one Acer or thare A boute in it pastuour of Rowlond Vahens Esq Call the birches which Acer shouteth and yoyeneth into one of the two Acers in the fild call nuce A dilad shouteth upon the brook calld Slough and so runeth from the said Acer through the said pastuour Almost from The top of the hill Extendeth upwards A very Littel—

The parson hath all and singuler the teythes and offerings what sum Ever in the said parrish of al Corn hay hemp flax appels wool lamb biges gees and all other teithes what sumever in the said parrish the parson is to have the teythes of a Cartaine parcell of lands of rowland vahan Esqr with in The parris of turneston liing

[1] For further reference to Rowland Vaughan. see especially *Transactions*, W.N.F.C., 1958–1960.

between a Cartain fild of one john parrys esqr. and An orchard of one Abraham powells gent which archard is the Lands of one humphry bashfilds Esqr and held by lesc by the said Abramham powell. Item the parson hath Common in all the filds whare in his la[nd] lyeth which filds ware common and without in Closer untill they wure in Closed by Rowland vahaen Esqr. Thomas barnsly parson thare humphrey baker hendry scudermore his mark.

CARVINGS FROM HEREFORD CATHEDRAL CHURCH

By F. C. Morgan

Stone carvings from Hereford cathedral church, dating from early Norman times, have been displayed in the passage leading from the cathedral to the vicar's cloisters. All had been removed at various times from the church and were formerly lying in the transepts and in the area surrounding the building.

The earliest are three that almost certainly came from the two-storeyed chapel that stood in the palace garden, and which was destroyed except for the north wall (now part of the south wall of the south cloister) by Bishop H. Egerton in the early part of the 18th century, much to the disgust of the townsfolk. They are capitals with volutes, and are among the very earliest Norman carvings in England and date from the 11th century.

There are a number of Norman capitals of a little later date with good designs. These perhaps came from the triforium of the nave which was so badly damaged by the fall of the western tower on Easter Monday, 1786; or they may have come from the original west front. The anonymous author of *Picturesque antiquities of the county of Hereford*[1] states that when the foundations of the old west cloister were excavated (apparently a short time before the publication of this work), some "curious relics" were found. They consisted of a great number of fragments of carved stones, "the remnants of the ill-fated west cloister [and] lower down a considerable number of Norman bases and capitals, some painted, and several of which are preserved in the south cloister". Where are they now?

There are three emblems of the evangelists: S. Matthew (an angel); S. Mark (a lion), and S. John (an eagle). Two of these were broken in half and were found in different places but are now placed

[1] Published by T. N. Webb, of Hereford, about 1840, in a large folio volume with lithographic illustrations. The excavations were made for gravel for use round the cathedral. These statements appear on p. 14.

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Carvings from Hereford Cathedral Church as now arranged in the passage leading to the Vicars' cloisters.

together.[1] A fourth shows "The Harrowing of hell"[2] a design popular with early artists, a fifth shows the Almighty in the act of blessing, and there is also a conventional "Tree of life".

Another carving has volutes on two sides with a ram's head at the corner, and one has a man's head with foliage issuing from his mouth (a fertility emblem) but the surround is unusual. It is on a square stone with loops on all sides. Other subjects are not yet identified.

All the foregoing work is Norman.

There are also specimens of the interlacing arches and the conventional foliage of the Early English or early 13th century carving, and of the ball-flower ornament (believed to have originated in Hereford) and others of the Decorated, or late 13th century, period.

In all probability the Norman carvings were made from stone imported from Caen, Normandy. Professor F. W. Shotton of Birmingham University says that it is somewhat similar to the oolitic limestone brought over in considerable quantity for church buildings. A less likely material is the Cotswold hill oolitic limestone, but transport by sea and river was probably easier than by land in unsettled country with primitive roads. Local Old Red sandstone was used for the later carvings.

AN OLD HOUSE AT STAUNTON-ON-WYE

By J. W. Tonkin

Lower House Cottage gets only two lines in the R.C.H.M. Report on Herefordshire. What exactly lies behind this brief description?

On a detailed examination, which the R.C.H.M. did not have time to do, a number of fascinating facts emerge about this house. The western portion, shown black on the plan, seems to be of early sixteenth century construction, and to have consisted of an open hall and farm buildings all under one long stone-slate roof with a door leading from the one to the other. This part of the house is characterised by heavy timbers and less regular panels between the studs than the later parts. In the hall against the wall dividing it from the farm buildings there was a passage with a door at each end. Of these that facing the road is now blocked.

[1] Since the above was written, repair work has revealed further details. The figure of a man wearing a long cloak and leaning backwards bestrides the lion. Lady Trenchard Cox has suggested the subject may be David, but that if so this is a very early representation. The angel is clearly flying, and this, says the same great authority, indicates that it has nothing to do with S. Matthew.

[2] When Gilbert Scott restored the east end of the choir it seems that he copied this carving for one of the capitals.

The eastern part of the house appears to date from the early 17th century when a major reconstruction of the dwelling part of the older building took place. A floor was inserted into the hall and the fireplace and chimney stack were built. This new floor is supported by two fine chamfered and stopped beams. Upstairs a four light window with eight sided mullions was inserted at floor level.

An entrance lobby was formed between the end of the chimney stack and the new front door (see plan) a feature found in houses of the period in various parts of the country. This new, eastern part of the house seems always to have been divided into two rooms downstairs by a timber-framed screen, and has a stairway with shaped, flat balusters typical of the period. The two downstairs gable windows are now blocked, but the upper floor is still lit by a gable window. The timbers in this part of the house are lighter, while the panels are smaller, squarer and regular.

Later again, probably at the end of the seventeenth century, a lean-to was added necessitating the blocking of the gable windows already mentioned. It once had a door at each end, but the northern is now blocked. The dormer window in the bedroom over the hall was quite probably added at the same time.

Other alterations have been made since including a second stairway, a fireplace built on to the back of the earlier one and screens making a third room downstairs and a second upstairs in the eastern part.

The roof throughout is a through purlin tie-beam construction. There are altogether eight different series of carpenters' marks still clearly visible in the house and differing with the various periods. A point of interest is the different treatment of farm buildings and dwelling, the timbers of the latter being blackened, the former untreated.

It seems probable that this was the original Lower House Farm before the mid-17th century house across the road was built.

Perhaps the most interesting feature of the house is the direct communication between the dwelling and farm portions. The floor of the latter is partly cobbled. This direct access is strongly reminiscent of the long house usually found on higher land though the building lacks the feeding walk of the true long house. This seems to be a " type " in the county, for a house with similar dating, enlargements and measurements is to be seen at Burrington, and buildings with the direct communication between house and farm buildings have been examined by the writer in the parishes of Adforton, Elton, Leintwardine and Richard's Castle, some with the same difference of treatment of timber between the two parts.

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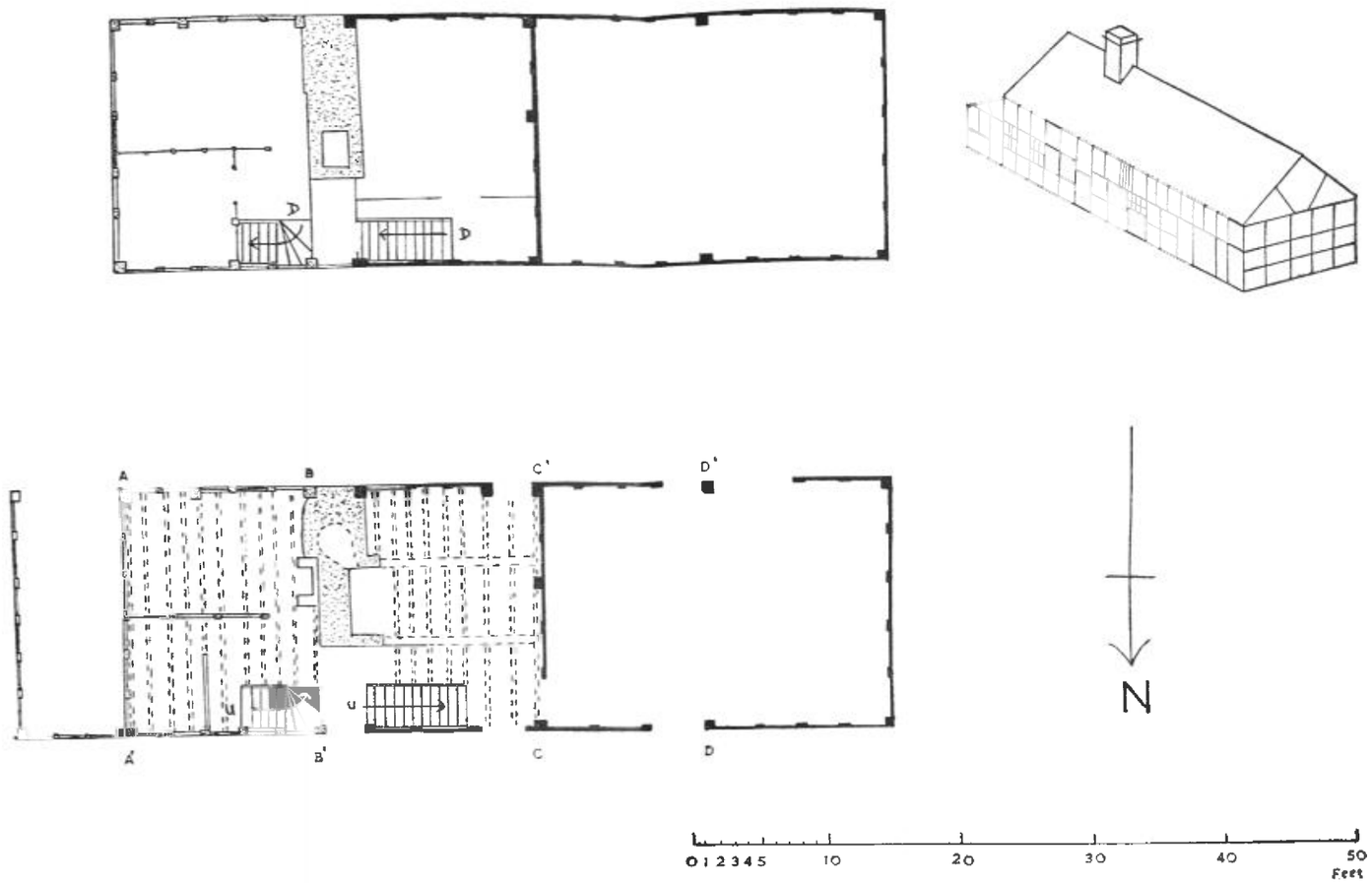

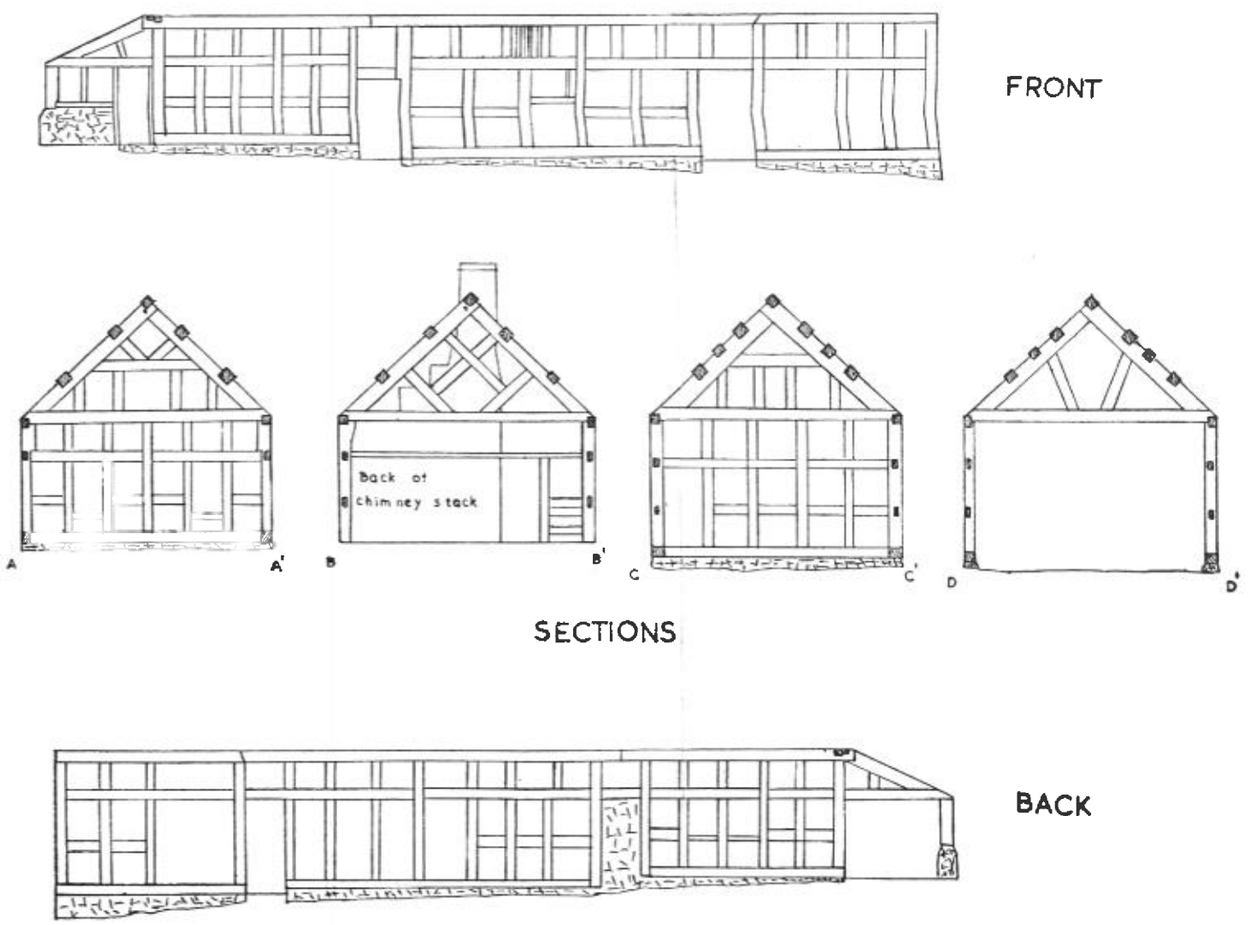

Whilst these houses are not plentiful they do not at any rate seem to be really rare in the county, and the writer hopes he may have the opportunity to do further work on them.

THE DOMESDAY MORE

By A. S. Wood

The exact location of More (alias Moor, Moore) entered in the Domesday Survey under the lands belonging to the Canons of Hereford states that (translated from the Latin) " in Stradel Hundred they had one hide worth 5/- in More " (1 hide=120 acres). This was a source of perplexity to the late George Marshall, F.S.A., in compiling his learned analysis, appearing in the Club Transactions of 1938, pp. 154–5, upon the Norman occupation of the lands in the Golden Valley and adjoining areas.

The suggestion in the Victoria County History that the land was on the outskirts of Hereford was dismissed by him as impossible, but far more probable that it was a part of the King's enclosure of the Forest of Treville, which extended westward to the banks of the Dore, but in the absence of *later evidence*, identification could not be definitely established. Had Marshall been aware that Simon aparrye, esquire, in his Will (proved 23rd June, 1573) is described as of the Moore, in the parish of Fowerchurch, it would have afforded a clue, but still leave in doubt the present day situation of the More of Domesday Book.

Simon Parry of the Moor, left his mansion house and lands in Vowchurch, Turnastone, St. Margarets, and Bacton, to Griffith Joanes and Jane his wife. Jane was a daughter of Simon Parry.

In the Will, proved in 1578, of Griffith Joanes of Llowes, Co. Radnor, H.S. in 1567, the estate is therein described as " Whitehouse or Moor ". It is situated in the parishes of Vowchurch and St. Margarets, the boundary running through the house.

Thus it is not an unreasonable deduction that the present-day Whitehouse is identical with the More of former times, although admittedly a long interval elapsed between D.B. 1086 and the 1573 will of Simon Parry. Any intervening documentary data in support of this conjecture, extracted from Feudal Aids, Pipe Rolls, etc., if it exists, would be of interest. As Marshall remarked, the subject of the location of the Norman Manors and land holdings is obstruse, and needs further research. Many of the D.B. place-names are obsolete or distorted to a degree of being unrecognisable with current names.

of the plateau, the western quarry-ditch and the south-western gate of the main camp. On the plateau, where last year it was conjectured houses must be, an extensive excavation was rewarded with the discovery of a timber house site lying well back from the early plateau rampart. Present indications are that the large number of post-holes so far revealed belong to a circular wooden house of Little Woodbury type that has been repaired and even rebuilt several times. Its internal diameter is 36 feet and it has a southward facing porch and central square of posts. To the south of this appears to be a street which has persisted in use throughout the Iron Age occupation, while to the south again immediately within the early camp's rampart a series of large post-holes may indicate a similar siting of granaries to that employed during the Main Camp occupation by Western Third B people. The higher levels accumulating over the back of the downthrown plateau rampart produce lighter timber structures and a sherd of Western Second B pottery.

Excavation of the western quarry-ditch has shown that at no period was this used for granaries. The activities in this part of the village during the Western Third B occupation are only indirectly indicated by the finding of a group of clay loom-weights, and elsewhere, inside the south-western gate, by layers of ashy soil and large quantities of animal bones. During its later occupation, by Western Second B, part of the ditch here was used for clay ovens, of which the floors of a succession of three were found along with Second B pottery.

Work on the south-western gateway continued through the autumn. A series of nine road levels have been recorded here and the complexity of gate-post pits suggests that each road surface will have to it an associated repair of the gate. Such a correlation would prove of enormous value in interpreting the numerous road surfaces frequently found in Iron Age gateways, and it is now clear that we have to amend our previous interpretation of local hill-fort defences, under which repairs were seen to be occasioned only by immediate threats—to one which will allow for villages even as small as Croft Ambrey to maintain their defences in good order throughout their occupation. The walling of those post-pits which had cut through earlier disturbances indicates attention to the careful centring of posts, in the manner of Roman fort engineers, and implies either a developed form of joinery perhaps with ready morticed timbers, or the re-use of old gates on new posts.

A number of small finds were obtained, including a complete involuted iron brooch and two other fragmentary iron brooches. Three bronze rings and a delicate ring from an open-work ornament, along with two glass beads are this year's addition to the collection of ornament from Croft.

We have been again indebted to a number of subscribers led by Lord Croft (£100) who have made the excavation possible. On the site the success of the season's work is mainly due to the enthusiastic team of volunteers under the site supervision of Mr. and Mrs. D. Whitehouse, and Messrs. P. Bradley, A. Flatley and C. D. Miller.

Roman

Huntsham (SO 565175). Excavations by the Archenfield Archæological Group on this Romano-British villa site have revealed three rooms outside the south wall of a building 300 ft. south of the aisled barn. Mr. Bridgewater reports that these contained a corn-drier and a stoke-hole, and that ten coins, including those of Constantine, Tetricus and Valens, have been found.

New Ariconium (SO 643244). Work in a small area on land adjacent to and north of the Roman settlement of *Ariconium* has revealed several rock-cut hollows containing remains of iron-smelting furnaces with associated slag-pits. Mr. Bridgewater reports that these are shaft-type furnaces similar to those found at Ashwicken, Norfolk. Roasted ore, slag lumps and runners, cinders, hammer scale, coal and charcoal, with burnt clay have been found. Seventeenth-century material in the deposits filling the hollows shows that the original slag heaps were sorted over in later times; this backfill contains large quantities of Roman pottery of which a small amount was also obtained from sealed layers.

Mediæval

Richard's Castle (SO 484702). Dr. M. W. Thompson and Mr. P. E. Curnow report the continuation of the excavations begun in 1962. More of the basement of the octagonal keep on top of the motte, found in the first year, was exposed, and traces of post-holes of a stockade were found on the berm of the motte. Further work in the gatehouse revealed it to be of two periods, while a large keep-like tower was found on the curtain opposite the church with a spiral staircase in its south-west corner. The section through half the ditch at the base of the motte in the bailey was completed. It is hoped to conclude work at the castle in 1964.

Wallingstones (SO 503222). Further work by the Archenfield Archæological Group has revealed a ditch system, beneath the mound, cut into the mediæval land level. The mound contains much 13th century material, including building stones, ridged roofing tiles and a coin of John minted in the period 1210–1250. This indicates the presence of a building in the vicinity that pre-dates the mound. Further lengths of the curtain wall have also been traced.

SCHEDULED AS ANCIENT MONUMENTS

The following additions have been made to the list of ancient monuments in Herefordshire, by the Ministry of Public Buildings and Works.

No. 156 Rowlstone (SO 375273)—Castle mound west of Court Farm.

No. 157 Buckton (SO 392734)—Roman fort at Buckton Park Farm.

No. 158 Leintwardine (SO 400744)—Roman fort at Jay Lane.

No. 159 Adforton (SO 397723)—Rectangular enclosure north-west of Brandon Villa.

No. 160 Adforton (SO 395714)—Roman marching camp south of Walford Bridge.

No. 161 Buckton (SO 386735)—Roman temporary camp at Buckton Park Farm.

No. 162 Buckton (SO 376735)—Ditched enclosure west of Buckton.

No. 163 Putley (SO 643370)—Roman site east of the Rectory.

No. 164 Bolstone (SO 545324)—Moated site in Trilloes Court Wood.

BOTANY, 1963

By F. M. KENDRICK

Once again the weather was not favourable for botanical field work and during most of the days organised by the Botanical Society it was poor. However, during Whitsuntide we had a visit from the Botanical Society of the British Isles during which we were blessed with a spell of wonderful weather.

We have one new record for the County—the Marsh dandelion (*Taraxacum paludosum*) which was found on a tributary of the Olchon. The splitting of the dandelion family is quite recent, and this plant may be fairly frequent in suitable habitats.

The more important records received during the year are as follows:

(*a*) New record:

TARAXACUM PALUDOSUM—Marsh dandelion, District 14, head of Olchon valley.

(*b*) New Stations:

VIOLA PALUSTRIS—Marsh violet, District 14, tributary to Olchon.

(*c*) Old records still existing:

CAREX DIGITATA—Fingered sedge, District 2, Roadside Caplar (reported 1880 Ley—in small quantity).

CIRCEAE INTERMEDIA—Enchanter's nightshade, District 2, on bank of Wye below Caplar (ill-defined species in 1889 when specimen was queried as *C. alpina*).

CERATOPHYLLUM DEMERSUM—Hornwort, District 6, old Canal, Monkhide.

(*d*) Interesting records of unusual plants:

DIPLOTAXIS MURALIS—wall or sand Mustard, District 7, Hereford footpath to railway station; District 11, garden wall, Kington.

BERULA ERECTA—narrow leaved water Parsnip, District 4, old canal beyond Upleadon Court; District 9—Berrington Lake.

ONORPORDON ACANTHUM—Scotch Thistle, District 2, edge of road in Pencraig, Ross; District 8, Kinnersley Castle.

LACTUCA SERRIOLA—prickly Lettuce, District 7, waste ground, Barrs Court.

CICERBITA MACROPHYLLA—blue Sow Thistle, District 3, Putley; District 7, Marden.

LAMIUM HYBRIDUM—cut leaved Dead Nettle, District 3, The Fosbury, Putley.

PRIMULA VULGARIS—Primrose, District 12, green flowered plant, near Kinnersley.

CLAYTONIA PERFOLIATA, District 3, Garden Weed, Fownhope.

CAREX PSEUDOCYPERUS. Cyperus Sedge, District 9, Berrington lake.

CATABROSA AQUATICA—Water whorl-grass, District 4, old canal beyond Upleadon Court; District 9, Berrington lake.

Two interesting records for Mistletoe were on Walnut at Putley and Lombardy Poplar at Ledbury. Both these hosts are rare, and it may be that the latter is new for Britain.

September proved as perverse as the other months. It turned out cool and dry, which was not promising for the annual Fungus foray. This was held in the Caplar area, and though the number of species found (some sixty) was not large there were many rare species amongst them.

I have had a record from Mr. F. Fuicher, of the fungi *Lepiota ochraceofulva* being found at Eastnor—this would appear to be a

new record for the British Isles. I have also had the following records from Mr. T. Palmer of Stockport for Moccas Park.

RUTSTROEMIA ECHINOPHILA on involucreo of CASTANEA SATIVA.
RUTSTROEMIA SYDOWIANA on petioles of leaves of CASTANEA SATIVA.
GEOGLOSSUM FALLAX—mossy grass, Moccas Court.
GEOGLOSSUM GLUTINOSUM—mossy grass, Moccas Court.
HYMENOGASTER TENER—path from road to Moccas Court.
AURICULARIA MESENTERICA—on trunk, Moccas Court.

He also collected a species of *Rutstroemia* which he has collected in the North, which may be a new species. Also collected were some undetermined *sclerotiniaceous* fungus and a *Botrytis*.

DIALECT, 1963

By MRS. W. LEEDS

Progress has been made during the year in recording dialect words and expressions, but more needs to be done on pronunciation —especially on the vowel sounds.

I have noticed, for example, that in the south and south-east of the county, the sound " er " becomes air. Thus " bird " is pronounced " baird "; certain " kertain ". Does this apply to the rest of the county ? In country districts long " ee " in a monosyllable becomes short—" widds " for weeds; " ship " for sheep.

Long " o " in whole, wholely, becomes short and we hear " whul ", " whully ", and " tooth " becomes " tuth ". Contrariwise, the short " o " in plover becomes long; plover to rhyme with " rover ".

On the Shropshire border the long sound in " beast " is lengthened into two syllables—" be-east ".

Initial " T " and sometimes a middle " t " becomes " D ", e.g. " twaddle " is pronnounced " dwaddle " and " moithered " (bothered) as " moidered ".

An end " d " tends to become " t ", e.g. Hereford ; Herefut, but on the Gloucestershire border I have heard " tallet " (a lift) pronounced " tallard ".

SIMILES

There must be quite a number of local ones, but only one has reached me: " As hard as bones " (Monmouthshire border).

PROVERBS AND SAYINGS

Herefordshire farmers *live* rich, but Radnorshire farmers *die* rich.

He's full of fads and fancies as a dancing bear, and cheese wouldn't choke him.

As well try to put a pudding into a gatepost (Kentchurch).

The east wind always finds out the holes in your coat.

A man does not wake up his second child to see it smile (Kentchurch).

When a roadman sweats you will find a quicksand under him (Kentchurch).

If you don't like the sound of the bell you shouldn't pull the rope (Staunton).

Cider is fit to drink when the parson has preached over it, i.e. after the first Sunday (Staunton).

Apple tart without any cheese,
Is like a kiss without a squeeze (St. Weonards).
Go to Weobley to sweep the tide away with a broom.

PHRASES

How's your health and temper ? Quite all right. (An ordinary greeting and response in E. Herefordshire.)

Binna yo gwine to put your hand down ?

Aren't you going to stand treat ? (N. Herefordshire.)

He must put the bill to go=He must toll the bell. (Fownhope.)

I'm half clemmed=I am very hungry.

He put the field *to* the farm, i.e. It had not formed part of the farm before (Goodrich). The *to* is stressed.

The hedge is thin on places (Gt. Doward).

In dribs and drabs=In bits and pieces.

The lop and top=brushwood.

He runs his word, i.e. he goes back on it (Llangarren).

To work the seeds=to plough them in (Llangarren).

She was so big-sorted I couldn't stand her. (Said of a neighbour who put on airs—Ross district.)

There was nowhere for the slugs to harbour much=hide (Monmouth border). N.B.—It is rare to find the verb to harbour used intransitively.

He is a comical quist=a weird bird, a peculiar person.

They won't come now, sure to=They are sure not to come now (Gt. Doward).

WORDS

The words " like ", " mind " and the expression " and all " seem to have a special meaning when used at the end of a sentence.

" Like " is merely redundant as is " well " in starting a sentence. That is what she told me, like "=" Well that's what she told me ".

" Mind "—this is used for emphasis. " You won't be able to talk about hard weather after this, mind ".

" And all " seems to express surprise, and sometimes indignation. " There's Mr. Smith, and she's getting on the bus, and all."

The following paragraphs list the words and their usages sent in to me from various parts of the county.

Bodge (akin to botch)—to do a job in a very rough and ready fashion. Bodge also means to hit or bang. To bodge one's hand (Gt. Doward). Bodger=an implement for driving in hedge-stakes (Golden Valley). Baint=is not. The usual word is " be-yuynt ". Browst=brushwood from the top of tree (Gt. Doward).

Caddling= foolish, silly (Aston Ingham). Cavings=hulls of the wheat (Goodrich). Charm= a confused noise, hum of birds. It is also used to mean the clacking of women's tongues. Comical=odd, peculiar, unwell. I felt comical=I felt unwell.

Dead=unconscious, faint. She was dead for quite a time. Doty or mosy=soft, sleepy (pears). (E. Herefordshire).

Face=surface. The field had been worked to a good face (S. Herefordshire and Monmouth). Fled=flew. The door fled open (Ross). Flabber=to whip up, to make into a lather. It forms part of the word flabbergast, and has the same root as flabby. A child in the Leominster district, wanting to blow bubbles, was told to flabber up the soapy water to make a good flawn. Flawn=In medieval English, a custard. Hence something of the consistency of a custard. Frightful =easily frightened.

Gound=a gown. Gwarrel or gwammel=something of no account, a white elephant, rubbish (N. Herefordshire).

Hasper=to hasten, to hurry (Leominster). High-breasted=proud, arrogant (Ross.)

Ill-blended=irritable (Ross).

Keggie-fisted, keg-fisted=left-handed, awkward. Keerf, or stocker =a hoe (widespread). Krile=a flail (Goodrich).

A lay-about=a lazy fellow (S. Herefordshire).

Nearst=near to. He won't come nearst him (Gt. Doward).

Pike=a pitch fork (general). Pikel, pykel=a pitchfork (Shropshire border). Pitched (of a road)=cobbled. To pitch=pave. To pug= To pall or pull out hair or a tooth (S. and W. Herefordshire). To take out the small feathers after feathering a bird (E. Herefordshire.)

Racks=ruts (S. Herefordshire). Reen=division between two turns of ploughing. To rear up=bring up a child.

Wankling=tottering, insecure.

Yimp=a small twig (Kingsland).

To show that our dialect is still a living language and can take in new words, here are two examples: to tire=to retire. " I am tired now," said a farmer. Aeriated=to get " het " up. To get in a " stew ".

FLOWER NAMES

Fireweed=the plantain (Kentchurch).
Morthen=field scabious; also called fireweed.
Bloody butcher=early purple orchis.
Ettles=nettles.
Sperwerwood=spindleberry.
Thunder and lightning=Herb Robert (Marden).

INSECT AND BIRD NAMES

Blee=gad-flies.
Evets=newts, and in the south and west—lizards.
Old-maids=horse-flies.
Dish-washer=a wagtail.
Shreek=shrike.
Scrubbling schoolmaster=a yellow-hammer.
Squab=a baby wood pigeon.
Pie-finch=chaffinch.

I am most grateful to the following members of the Woolhope Club for their help: Mr. and Mrs. M. P. Watkins, Mrs. Coy, Mr. Kendrick, Mrs. I. Meredith, Mr. Stanford, Mr. Price and Dr. Miles. My thanks are due, too, to the members of the Herefordshire Federation of Women's Institutes and to the many others who have aided me.

ENTOMOLOGY, 1963

By H. G. LANGDALE-SMITH, M.B., CH.B.

As last year, butterflies have been very scarce and because of so much rain and so little sun, there has been little opportunity for them to fly at all and I will enumerate those I have seen, in order of their appearance.

I only saw one hibernated tortoiseshell (urticae) in the spring, and no holly blues (argiolus). Orange tips (cardamines) appeared in average numbers, pearl bordered frittillaries (euphrosyne) were scarce. No silver wash (paphia) or high brown frittillaries (cydiplae) were seen.

Wood whites (sinapis) appeared in greater numbers than for several years. Ringlets, (hyperantus) speckled wood (aegeria) and green veined whites (napi) all in fair numbers. A few gate keepers (tithonus), no white admirals (camilla). I only saw two small coppers (phlaeas) this year. No white letter hair streaks (w. album)

in their usual haunts. No grayling (semele) were in the British Camp area; meadow brown (jurtina) and small heath (pamphilus) were in much reduced numbers.

In the autumn, only six tortoiseshell, one comma (c. album), no red admiral (atalanta) or peacock (io). From this it seems that woodland species have flourished more than the butterflies of the open spaces. It is difficult to give any explanation to this interesting ecological problem.

If all field naturalists would pool their observations perhaps one day the explanation will be found.

Moths this year, too, have been very little in evidence. The only hawk moth I have seen was a poplar hawk moth (populi). No report of humming bird (stellatarum) or death's head (atropos). Outside this county the same scarcity of butterflies and moths has prevailed.

GEOLOGY, 1963

By F. M. KENDRICK

Last year I mentioned that the Forestry workers in the Conigree Wood, Ledbury, had cut roads through the Wenlock Limestone. I have since been able to visit this site and find that the lower track is in parts very fossiliferous. Close to the first entrance into the wood from Ledbury the exposure consists of Nodular Limestone and Mudstone. The mudstone is well weathered and it is possible to extract complete fossils very easily. Although I could only spend a short time there I found, amongst others, the Brachipods *atrypa reticularis*, *Leptaena rhomboidalis*, *strophonella euglypha*, and *Meristina obtusa* and the Corals *Favosites gothlandica* and *Syringophora bifyrcata*.

In Eastnor Park a bank beside the track that leads from the Gullett just to the west of a small quarry proved to be very fossiliferous and yielded Brachipods and Solitary Corals of apparently Llandovery Age.

It will be remembered that in the Club's Centenary Volume the Rev. B. B. Clarke drew attention to the bands of limestone, akin to that at Abdon, near the summit of the Black Mountains. Whilst botanising in the Alchon Valley recently I followed the tributary from the West that joins the Olchon brook near the head of the valley to its source. I found the limestone here well exposed and underlying it was a band of Calcaerous Conglomerate about 5 feet in thickness. This had developed a curious honeycomb weathering and in parts had worn away to give a shallow cave. It would appear

that this conglomerate is continuous as I have found it on the east face of the Cats Back and have also seen blocks of it at the foot of the Black Darren.

MAMMALS, 1963

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

The polecat continues to make its sporadic appearances in scattered localities around the county. Seven were shot at Brampton Bryan in 1961, and six at Berrington in 1962. One was caught in a squirrel-trap in October 1962 by E. D. Rogers at Lucton. In 1963 one was killed near Presteign, and another[1] was found dead (cause unknown) in a hay-barn at Birtley, Lingen.

A report has been received from Mr. I. M. Evans, Keeper of Biology, Leicester Museum on seven yellow-necked mice, caught in Herefordshire in the spring of 1963 (5 at Putley, 1 at Llanarth, and one at Kington). The head-body length varied between 93 and 115 mm., and length of tail from 91 to 108 mm. This species is looked upon as one of the specialities of this county.

Examination by Miss M. Hooley, Hereford Museum, of mammalian bones found in brown owl pellets collected recently in Dinmore Wood showed almost as many bank voles' as field voles' remains to be present, i.e. field voles, 14 individuals; bank voles, 12 individuals. E. M. Mellor, in his note on the bank vole (*Clethrionomys Evotomys glareolus britannicus*) remarks, in view of the paucity of local records, " apparently this vole is rare in Herefordshire ". In view of Miss Hooley's report this statement must now be reconsidered, and further series of specimens obtained with this in view.

ORNITHOLOGY, 1963

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

The hard winter which ushered in the year 1963 reduced our resident bird life more severely even than that of 1947. Many small birds flocked into towns, villages and farmsteads, leaving the fields and woods empty of birdlife. Practically every household put out food daily, and innumerable lives were saved by this means. The species hardest hit, perhaps, were wrens, goldcrests, thrushes, owls of all kinds, wagtails, long tailed tits, and wood pigeons; and

[1] This specimen has been preserved and is in Hereford City Museum.

also all those frozen-out water-side species such as heron, moorhen, snipe and kingfisher. The few open stretches of the Wye, however, were frequented by astonishing numbers of goosanders—flocks of up to 50 being recorded in January and February.

The collared dove (*streptopelia decaocto*) has now reached Herefordshire. A native of the east, this bird began to colonise Europe from the Balkans about 50 years ago, and had spread to the North Sea by 1950. In 1954 it appeared in Norfolk and has gradually spread across England. On May 7th one was seen at Ivington by Mrs. John Bentley-Taylor—a first record for the county—and on August 1st it was seen by the writer at Ross-on-Wye, where it has since been noted by several other observers.

An interesting first record for Radnorshire was that of a Rough-legged Buzzard seen at close quarters near Lanbister by Mr. Patrick Lee on October 10th. This migrant species differs from the common buzzard in having dark carpal patches on wings, dark belly, and a white tail with a broad black terminal band.

Another rare visitor was a Grey Phalarope seen on the Wye at Turner's Boat on October 30th and 31st.

Quail were again present at Shobdon, and breeding was successful.

A nesting-box scheme designed to increase the numbers of hole-nesting species, especially the Pied Flycatcher, was tried out this year by the Herefordshire and Radnorshire Nature Trust. Sixty nesting boxes were erected in five woodland areas and were well utilised by great tits, blue tits and pied flycatchers, of which last species 10 nests all fledged successfully, yielding 67 young birds.

A pair of hobbies nested in Herefordshire this season, under strict protection which gained for their warden a grant of £5 from the Royal Society for the Protection of Birds.

REPORTS FROM HEREFORD MUSEUM

I. TWO INTERESTING FINDS FROM KENCHESTER

By Meryl Hooley, B.Sc., F.R.Z.S.

The first of these casual finds was made at Kenchester by a schoolboy, Roger Calow, in December, 1963, half way along the road excavated by G. H. Jack in 1924–25, which had been freshly ploughed at the time.

It appeared to be a small oculist's stamp, 35mm. × 20 mm. × 6 mm., in very fine condition (Fig. 1). It was taken to the British Museum, where it was examined by Mr. Kenneth Painter, who confirmed our identification. It was later sent to Mr. R. P. Wright, editor of *The Roman Inscriptions of Britain*, who kindly translated the legends on each of the four edges of the stone. He also obtained a geologist's report, which identified the material as fine siltstone.

These stamps were used by oculists to stamp prescriptions, as an advertisement, and usually included the name of the oculist and several remedies for eye disorders.

Mr. Wright's identification of the texts is as follows:

Side 1. POLYCHRONI DIACHOLES (Polychroni(des) gall-salve).

Side 2. AVRPOLYCHRONIDI ADYOLITHONPOST (Aurelius Polychronides' heliotrope salve after [the onset of ophthalmia]).

This salve is a mis-spelling of adialyton, one name for the plant heliotrope.

Side 3. POLYCHRON DIALEPIDO(S) (Polychronides' copper-oxide salve).

Side 4. AVRPOLYCHRONI CYCNVMATINPET (Aurelius Polychronides' swan-white salve for the onset [of ophthalmia]).

AT for AD; INPET for IMPET(UM) (LIPPITUDINIS).

No other instance of this oculist has come to Mr. Wright's notice. Mr. Painter states that only about nine other stamps have been found in the British Isles, one of these also being from Kenchester, and now in the British Museum. Hereford has only a cast of this. It is inscribed with the name T. Vindaci Ariosti, and is described in the British Museum *Corpus Inscriptionum Latinarum*, vii, 1320, *VCH Hereford*, 1, 181. Mr. Wright is to prepare a report on the latest stamp for the *Journal of Roman Studies*, vol. LIV, 1964.

The second find was made soon after the stamp was discovered, by another schoolboy, Robert Davies, also near the 1924–25 excavations.

This proved to be a small bronze lugged brooch, of a well-known Roman type, of which, however, examples are fairly uncommon (Fig. 2). Mr. M. R. Hull of Colchester has described it as follows: A flat disc-brooch, diameter 36 mm., with six oval lugs and central stud. The lugs are comparatively large and bear no ornament, save for one which has a crudely incised cross. The field of the disc is enamelled blue, in which are set, in mosaic, four white spots; the top of the stud is not enamelled and bears an incised cross. The enamelled field is surrounded by a knurled ring, and the pin was hinged.

Nearly all other examples known have concentric circles or " eyes " stamped on the lugs, and the central stud is usually missing. They have been mostly attributed to the factory at the Villa of Anthee in Belgium, but another factory has recently been found at Nor'nour in the Scillies, and this brooch could well have come from there.

Mr. Hull gives a comparison with other brooches on the Continent and in the British Isles:

Continental

In Exner's survey of the enamelled brooches of the Rhineland his type 26c is described as circular, with disc-like appendages and no stalked disc, but in Hull's opinion it did have a stalked disc, which has been lost.

His list comprises two examples from *Heddernheim* (Frankfurt Museum), one from *Köln*, and one from *Wiesbaden*.

His type 26d is similar, but with stalked disc (i.e., central stud), and comprises the following examples: *Bingen* (Darmstadt Museum); *Hofheim* (Wiesbaden Museum); *Mainz* harbour, two examples (Altertums Museum, Mainz); *Trier* (Trier Museum).

British

Aldborough, Yorks. (Isurium Museum). Lugs eyed, stud present, its top enamelled; disc bears squares of blue and some other colour, alternating.

Silchester (Reading Museum). Six eyed lugs, stud, disc of crazed yellow and blue enamel.

York (Yorkshire Museum). Four lugs, red enamelled; stud small, pointed; enamelled disc surrounded by a knurled ring; enamel alternately blue and white.

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Fig. 1.

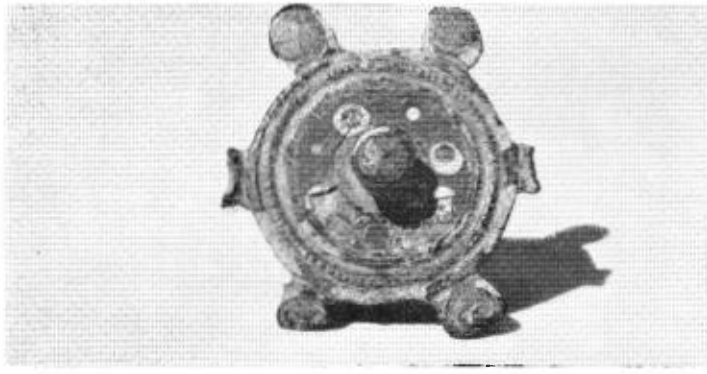

Fig. 2.

Colchester (Colchester Museum). Very battered; six eyed lugs; enamelled in concentric bands, but enamel perished. Stud ?

Nor'nour. Six eyed lugs; open centre. Enamelled disc blue with white spots.

Nor'nour. Six plain lugs (very small); disc green (?) with six blue spots with white eyes; stud, a cup with nipple.

Nor'nour. Six plain, very small lugs; pin sprung, enamel and stud gone.

Apart from the above, examples with eight lugs come from St. Albans, Camerton, Corbridge and Ixworth.

That from St. Albans resembles the Kenchester brooch—eight eyed lugs, knurled ring round the enamel which is green and red alternately, with a second knurled ring inside; the stud is quite like that of the Kenchester one, but is enamelled red on top.

There is little evidence for the date of these brooches as yet, but they would certainly have been in use in the second century A.D., possibly also late in the first century, but this is uncertain; whether they reached far into the third century is equally uncertain.

Both finds have been donated to the City Museum, and form most interesting additions to the collections.

II. PREHISTORIC ACCESSIONS TO HEREFORD MUSEUM 1962–1963

By J. F. L. Norwood, B.A.

There has been a continued steady flow of prehistoric finds to the Museum over the past two years, and the Donors, to whom warm thanks are expressed, can take satisfaction in knowing that they have directly contributed to the fuller understanding of prehistoric man and his movements in the county. The Museum's claim to be the place where all important finds should be lodged ought to need no stressing, for here alone are they freely available to research workers and students and their preservation assured. Members of the Club can be of assistance in propagating a public spirit in the matter.

I am happy to acknowledge once again the valued help of Miss L. F. Chitty, O.B.E., M.A., F.S.A., and Professor F. W. Shotton, M.B.E., M.A., D.SC., F.R.S., both of whom have kindly allowed me to quote from their reports on the implements. For forwarding implements and information I am grateful to Miss M. Hooley, B.SC., and similarly to Mr. A. Lloyd, B.A., to whom some are on loan for display at Lady Hawkins' School, Kington.

Each description is preceded by the Museum accession number.

7804. HAMMERSTONE (Fig. 1.1) found at Middle Cefn Farm, Dulas, Nat. Grid Ref. *c.* SO 365305. Given by Mr. R. F. Phillips of that address. Length 101 mm., width 78 mm., thickness 36 mm. Petrological Survey No. He 11/ah. The battered ends of this implement, made from a pebble, leave its use in no doubt, and the large flake detached from one side suggests that it had some heavy wear. Fairly recent use is indicated by an area of fresh battering on the face illustrated. The perforation is of slightly eccentric hourglass type, made irregular in plan view as a result of scoring at the waist, perhaps through use as a smoothing device, but more probably as a loom- or rick-weight in recent times. The circumstances of the find are unknown though it is almost certainly local, and the implement had been kept in a barn for many years. Professor Shotton writes as follows on its petrology: "Many angular grains of quartz, considerable plagioclase, some schistose grains and some dark fragments, much interstitial sericitic/chloritic material. This is a Greywacke. It is not Group XV (micaceous sub-greywacke) for it lacks microcline and the abundant muscovite flakes of XV. Possible provenance—N. Wales (e.g., Denbighshire), but could also be Scotland and probably Lake District ".

7849. AXE (Fig. 1.2) found at Harewood End, Hentland, Nat. Grid Ref. SO 531273. Given by Mr. A. Fleming, The Old Vicarage, Hentland. Length 100 mm., width 48 mm., thickness 26 mm. Petrological Survey No. He 39/c. The rock is identified by Professor Shotton as "a quartzo-felspathic ash with a fine matrix, streaky opaque minerals and scattered particles of calcite. Apart from the calcite, it is extremely like Sh 30/c, Treflach, near Oswestry, which was doubtfully referred by Houlder to (Group) XXI. This Herefordshire specimen is equally doubtful". It must originally have been somewhat larger, for the axe, which is moderately-smoothly ground and has pronounced edge facets, has been rechipped at blade and butt. This is a familiar technique with flint axes, but here not very successful and the blade can have been little improved. The chipping at the butt is difficult to account for unless as the result of abuse. Neolithic.

7853. AXE (Fig. 1.3) found at Sherrington Barn Farm, Weobley, Nat. Grid Ref. SO 380547. Given by Richard Wellings of that address. Length 184 mm., width 78 mm., thickness 40 mm. Petrological Survey No. He 37/c. Petrologically this is a most interesting find, as the rock is a rhyolite or rhyolitic welded tuff of unknown provenance which, according to Professor Shotton, is not significantly different from the axe from Brampton Bryan (He 13/c; Hereford

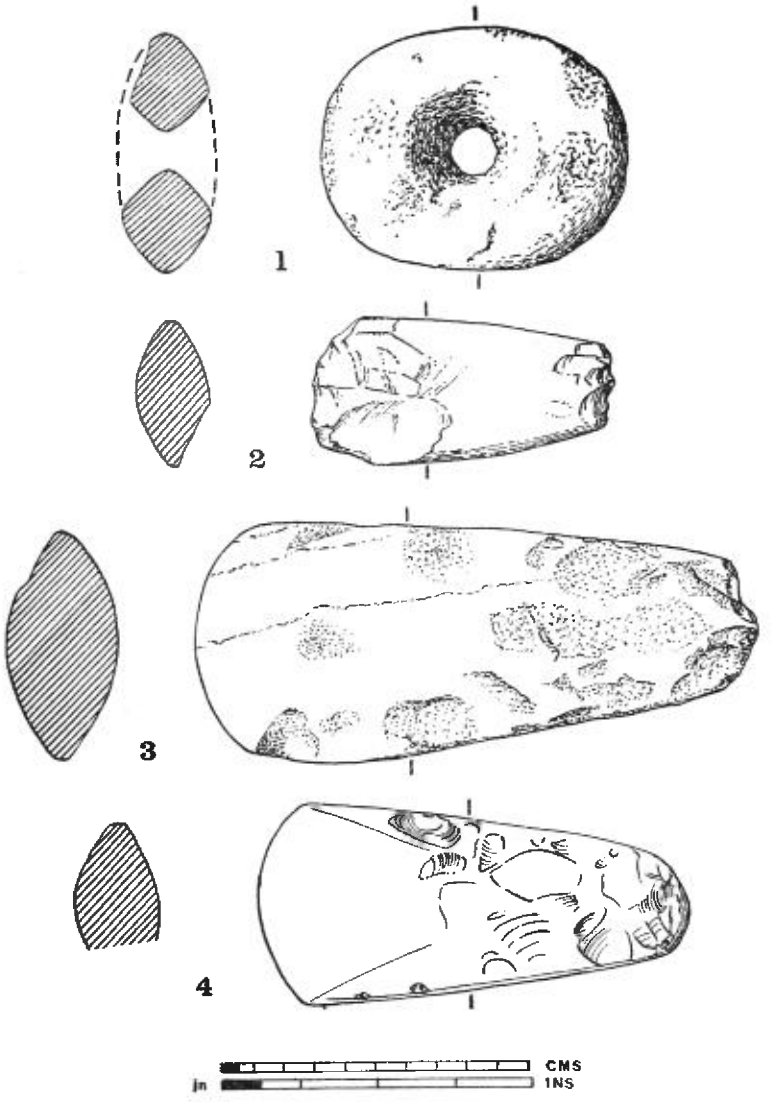

FIG. 1

Museum 6602).[1] The surface of the latter is a dark mottled bluish grey, but the Weobley axe is a light grey with patchy variations rather than mottling, and slight veining. It is considerably longer, but lacks the edge facets and highly-finished appearance of the Brampton Bryan example as the roughing-out has not been entirely eliminated. The axe is of somewhat adzeform longitudinal section, but this seems to be due to the cleavage of the rock rather than any intention on the part of the user. Neolithic.

7854. KNIFE found at Arrow Court, Kington Rural Parish, Nat. Grid Ref. SO 279545. Given by Miss Marian Williams of that address. Length 37 mm., width 15 mm. According to Mr. A. D. Lacaille this dark grey flint blade with battered back may be a survival of the Gravettian tradition in the Mesolithic period.

7855. ? CORE CHISEL. Provenance and Donor as No. 7854. Length 50 mm., width 36 mm., thickness 25 mm. Cream-patinated flint with ochreous stains. Mr. D. Moore of the National Museum of Wales writes that it "could be of Mesolithic date, but patina is suggestive of Palaeolithic age". With the preceding, this and a number of other finds[2] raises again the issue of the Mesolithic in Herefordshire and it would be a useful thing if all probable items were to be re-examined as a contribution towards reappraisal of this obscure period in the county's prehistory.

7857. SCRAPER. Provenance and donor as No. 7854. Length 61 mm., width 27 mm. A dark grey flint blade heavily patinated on two faces, with secondary working on the nose. Neolithic.

8149. AXE (Fig. 1.4) found at Priors Court Farm, Weston Beggard, Nat. Grid Ref. SO 419587. Given by Mr. R. Hollis of that address. Length 140 mm., width 63 mm., thickness 28 mm. It is scarcely possible in a drawing to do justice to this implement, which is probably the finest ever discovered in the county. Miss Chitty's report indicates the degree of craftsmanship involved in its manufacture.

> The axe is of golden-brown flint, the greater part of the surface highly polished, with lustrous narrowly-flattened sides expanding with a slight entasis to a fine cutting edge. The end of the slightly peaked butt has been smoothed off and blunted. The butt half of the implement retains large original flake scars (through which the greyer core of the flint is visible) with some secondary retouching, but their arrises have been rubbed down and polished over. The blade half has been brilliantly polished after grinding: the edge is sharp, a trifle oblique, and shows a low double curve when viewed from the end. On one face the blade has a panel of glassy surface sharply defined by rectilinear flanking facets (perhaps the result of secondary grinding). The sharpness of the facet angles is remarkable, as is that of the junction of the sides with the cutting edge: each edge angle is almost imperceptibly everted, particularly that on the slightly shorter side, which is also sharper than the other angle. The cross-section is a truncated oval, highly pitched on one face, less so on the parallel face; hence the profile is a trifle adzeform. The weight of the axe is 9 oz.
>
> Such slight out-turning of one side to meet the edge-angle is a feature not uncommon in fine axes of flint and is found occasionally in those of stone (e.g., several in a group from the Oswestry district of N.W. Shropshire). It is, however, far less pronounced than in the edge-angles of the "Bridlington" type of conical-butted axe (of which some examples have now proved to be of Cornish rock, Group I, etc.).
>
> An axe of grey flint patinated a rich golden brown was found at Haston, near Hadnall, Shropshire, in 1911, and presented to the Shrewsbury Museum in 1951: it is almost a duplicate of the axe described above in size and character, including the angled blade panels. Shrewsbury Museum has also a somewhat smaller axe of similarly-coloured flint and similar technique with a well-defined panel behind the edge: its history is uncertain . . . it was labelled as "Stone Celt, found nr. Abbey-cwm-Hir, Penybont". Years ago Sir Cyril Fox recognized it as of East Anglian type (but cf. also report on the flint axe from Weobley, Herefordshire).[1]

Neolithic.

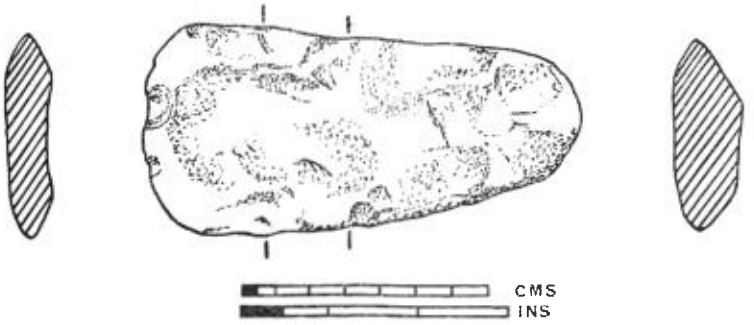

FIG. 2

8152. AXE (Fig. 2) found in the Garway Brook, Orcop, Nat. Grid Ref. SO 457260. Given by Stephen Williams, Garway House, Garway. Length 123 mm., width 59 mm., thickness 19 mm. Petrological Survey No. He 42/c. A weakly-shaped implement which has been partially-ground at the blade and butt; the blade half of one face shows dark brown staining consistent with partial exposure in

[1] *Transactions of the Woolhope Club*, XXXV (1957), p. 316, where the description should read: . . . the colour does not penetrate the body.

[2] E.g., from Titley, *Transactions of the Woolhope Club*, XXXV (1957), p. 323; Staunton-on-Arrow and Dorstone, *ibid.*, XXXVI (1958), pp. 80–83; various provenances in Mr. A. E. Brown's collection, *ibid.*, XXXVII (1961), pp. 77–91, and in the R. S. G. Robinson collection (Hereford Museum 7172/1–531).

[1] *Transactions of the Woolhope Club*, XXXVI (1959), pp. 236–7.

the bed of the stream. "The rock is a fine siliceous ash with spongy patches of sphene (leucoxene) and is certainly to be included in Group VIII, though I think that is a group of multiple origin. The poor quality of the implement makes me believe that the rock is not from a very distant source, and certainly more likely to be Welsh than to be from the Lake District". (Professor Shotton). An origin in the Lower Llanvirnian of South-West Wales has been postulated for Group VIII,[1] and it is significant that of the 14 items assigned to this Group and published to date, 12 have been found between Pembrokeshire and Hampshire.[2] A number of others from Wales and Herefordshire await publication.[3] A Welsh origin thus seems probable, but it must be remembered that the apparent distribution of finds to some extent reflects the work of the Petrological Survey, which has so far been chiefly active in southern England. The possibility of multiple origin arises from the finding of a solitary flake assignable to Group VIII among the quantities of debris at the Group VI axe factory site at Pike of Stickle, Westmorland, suggesting an additional outcrop of the parent rock.[4] Late Neolithic.

8166. QUERN (lower stone) found during extensions to Messrs. F. W. Woolworth's premises in Eign Street, Hereford, Nat. Grid Ref. SO 508400. Diameter 360 mm., thickness 95 mm. The upper, slightly convex surface shows the usual wear, and there is some on the under surface also; it is too irregular for the reversed use sometimes met with but might possibly have been caused by use as a paving stone. Iron Age B.

[1] Proceedings of the Prehistoric Society, XVI (1950), pp. 191–3.
[2] Full list in Proceedings of the Prehistoric Society, XXVIII (1962), pp. 243–6.
[3] E.g., *Transactions of the Woolhope Club*, XXXVII (1961), pp. 82, 84.
[4] Proceedings of the Prehistoric Society, XV (1949), pp. 1–20.