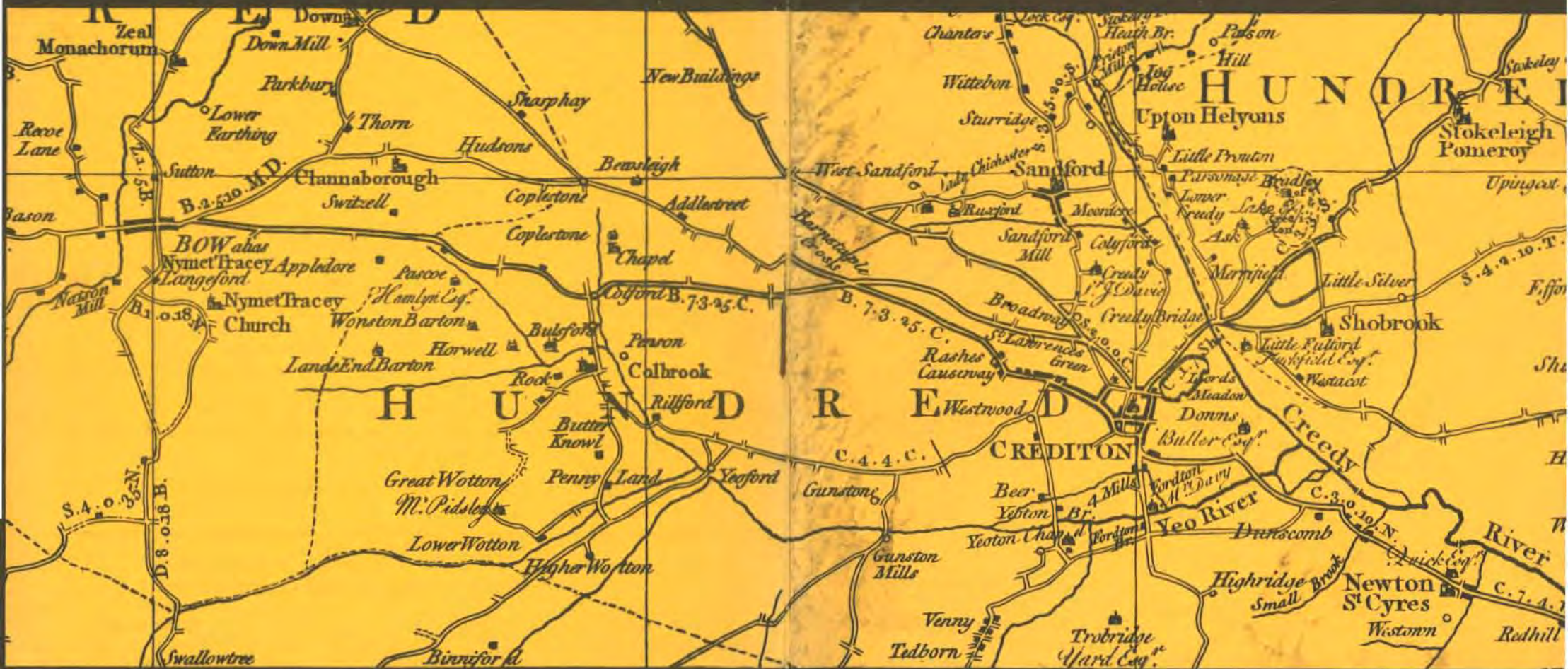


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The Devon Historian

October 1977

15



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The map on the cover is part of Benjamin Donn's Map of the County of Devon first printed in 1765 and reprinted in 1965 jointly by the University of Exeter and The Devon and Cornwall Record Society. It is available from the Academic Registrar, University of Exeter, price £6.00 post free and from book-shops.

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DEVON — STEADFAST AND CHANGING — An Essay in Analytical Local Administrative History

Jeffrey Stanyer

Introduction

There are few published studies of the evolution of the internal and external boundaries of the traditional units of English government — the geographical counties whose personal history is still one of the major influences on the Kingdom's administrative landscape. Though Devon is by no means typical, an examination of how and why in a changing world it has managed to survive in recognisably the same shape since before the Norman Conquest¹ may provide insights into a dimension of administrative history which involves not only elite behaviour in a remote metropolitan centre but also the reactions of citizens who experience the impact of government in their daily lives.

This paper does not try to present a sequential account of the changes in areas and boundaries in Devon but offers an analysis of the national and local forces which have moulded, and continue to mould, the territorial pattern of local authorities in one county. It is thus an explanation of the past and a prediction of the future. But there is a secondary purpose — to encourage more sophisticated case-studies of administrative history at the local level. Many books on individual towns and villages are disappointing because they give little or no indication of how and why the entity has the character that it does. Yet where the boundaries are drawn around (or through) settlement patterns this affects the local tax base, the redistribution of income within the area, the balance of the local political system, the range of influence of the village or city 'fathers' and the extent to which the area's problems are considered as a whole. An appendix lists some of the worthwhile projects in Devon and indicates the main sources that the local historian should use.

Social and Political Forces in Local Government History

All over the world local government systems are created by the confrontation of a downward thrust from the centre and an upward thrust from the localities. As the central government searches for ways of dividing the total area which it controls into smaller and smaller areas (often conceived on hierarchical lines) in order to further its purposes, local forces have sought to create a unit that protects and advances local interests and suits the special circumstances of the locality². The balance between central and local needs, demands and interests that these thrusts achieve has varied from place to place and time to time.

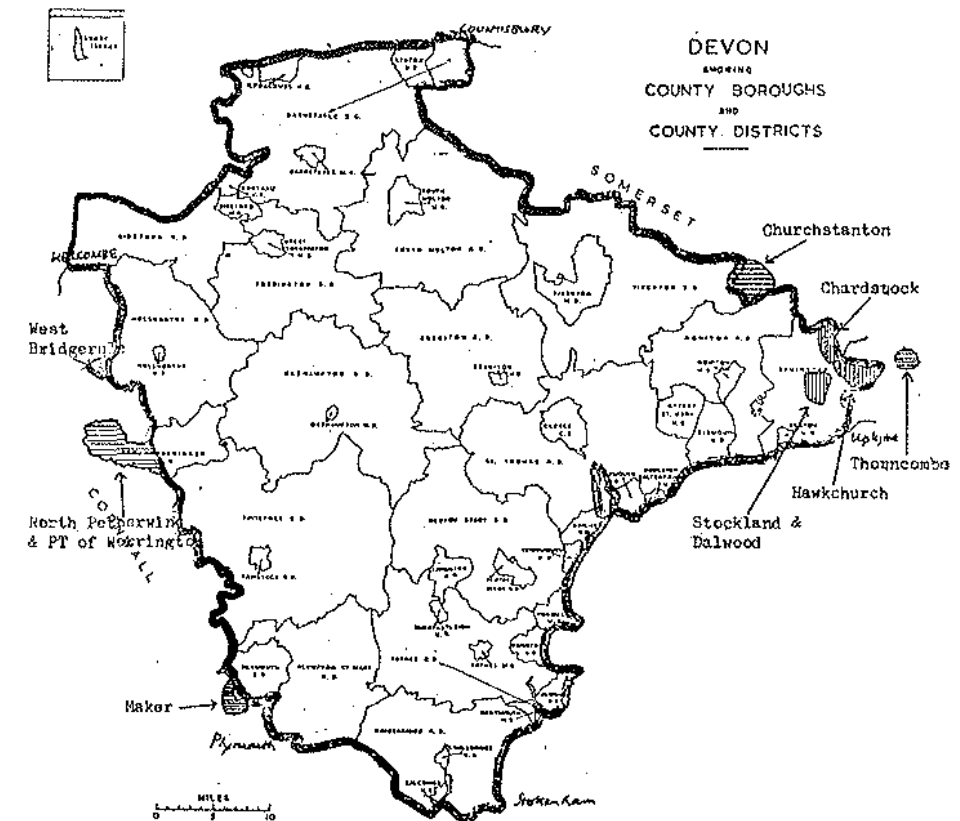
Of equal importance have been the forces created by the industrial revolution. Local government areas may and do stand in any one of a variety of relationships to the territorial pattern of daily life, and industrialisation acts to produce a divorce between the two, through urbanisation, rural depopulation and general change in settlement patterns. Unhappy relationships between governmental areas and the society they are supposed to serve are a world-wide phenomenon. The achievement of a 'harmony' between social and administrative boundaries is a major source of pressure for reform.

It might be thought that the relative stability of boundaries in Devon was accounted for by the weakness of the forces of industrialisation but though this is a contributory factor it will be shown that the special features of Devon's social geography are of equal or greater importance. Decisions about reform are taken by reference to a number of factors, but the constraints that these embody in the circumstances of this county effectively restrict the options to a very few.

Devon as an Area

The general shape of Devon from the time that counties became the basic units of English government to the present day has remained unchanged. There have been minor boundary changes, but all the radical proposals which would have made the traditional county into something that the Saxon, Norman and mediaeval administrators would not have recognised have been defeated. They are of two types: those that would profoundly modify the external boundaries of Devon and those that would divide Devon into separate parts or 'ridings'. Proposals of these sorts are discussed later in the essay.

Boundary Changes in Devon in the Nineteenth and Twentieth Centuries



The basic area of Devon is shown in Map 1; the thick black line is the boundary today, the horizontal shaded areas are those lost in the nineteenth and twentieth centuries and the vertical ones those gained during the same period. The population living in the areas of change was and is insignificant as a proportion of the total.

The reasons for this stability and the lesser stability of internal boundaries are to be found in the physical and social geography of the county. The geographical county has basically five distinct boundary lines: a north-west and north one running from Welcombe to Countisbury; a north-east one running irregularly from Countisbury to Uplyme; a south-east one swinging in a broad arc from Uplyme to Stokenham; a southern one from Stokenham to Plymouth; and a western one running almost due north from Plymouth to Welcombe. Three of these are coastal, thus effectively removing them from the arena of politico-administrative debate, especially as there are no large and contentious offshore islands³. Thus all pressures for change have been concentrated on the western and north-eastern boundaries.

Though Devon has no central core its population distribution is a relatively simple one. More than half of its people live in two areas occupying only a small part of its territory — one group being centred on Plymouth in the south-west corner and the other being a coastal strip running most of the length of the south-east shoreline and extending a few miles inland. The latter has two centres — Exeter and Torbay — and is much more fragmented and less concentrated than that of the Plymouth area. There is also a minor concentration in the north-west around Barnstaple Bay, including Bideford and Barnstaple. The rest of the population is distributed amongst a host of villages and the countryside, with towns of 5,000 inhabitants standing out as major centres in their area. As time has progressed some of the countryside has become suburbanised and small towns have become satellites, but even today large parts of the country are not closely associated with a major urban area.

This pattern of distribution of population can only be understood in the light of two factors; the pattern of communications and the process of economic change⁴. There are in effect only two major ways into, and therefore out of, Devon. From the east the lines of communication converge on Exeter, passing as they do through the relatively heavily populated parts of south-west Somerset and north-west Dorset, and skirting the southern fringe of Exmoor. Road and rail lines branch out from Exeter to all parts of Devon and North Cornwall, avoiding the high land to the north, east and south-west of the city. In the urbanised south and east coastal strips the density of communication lines is noticeably much greater than in the centre, west and north of the county. Thus internal communications within Devon are largely fashioned by the existence of Dartmoor and Exmoor, which form one sort of constraint, and the seas which form another.

The second route into Devon is from Cornwall. The greater part of the latter county's population is found in a long east-west strip in the very south, the entrance to which is guarded by Plymouth. The centre and north of the Duchy

are only sparsely populated and because of physical barriers to movement have tended to have more contact with Devon than with the main areas of south and west Cornwall.

The process of economic change has reinforced the pattern of communications in the process of creating the lop-sided distribution of population that characterises Devon today. Devon's importance as an English county has declined markedly since 1801, from 4.1% of the population then to 3.1% in 1861 and 1.9% in 1961. Exeter has completely lost its position in the league table of English cities, many of the small towns of the early nineteenth century have remained stable or gained so slowly that they have suffered a relative decline in population, and many villages now have much smaller populations than they did a hundred years ago. The only areas to make remarkable gains are those close to the sea; Plymouth which developed with the naval wars of the sixteenth to nineteenth centuries, and the Torbay area which increased its population over 2,500% from 1801 as it became a holiday resort and retirement town⁵.

The next step is to examine how this distinctive distribution of population has influenced the making of the county's administrative landscape.

Devon's External Boundaries: the West

In contrast to the north-eastern boundary the west has presented few problems because of the historic significance of the River Tamar. There are few parts of England that are distinct on a comparative perspective; for the most part alleged regional boundaries are socially, economically, geographically, politically and culturally meaningless — they are lines drawn by administrators or geographers on an *ad hoc* basis. The extreme south-west peninsula, however, is one area in which this is less true. Partly this is a result of geographical remoteness and the dominance of sea boundaries, partly because a local language survived until the eighteenth century (and has been the subject of a revivalist movement)⁶ and partly because there is a 'natural' boundary in the Tamar which can be perceived by those living on both sides of it. One boundary of Devon is thus protected by Cornish 'nationalism'.

The Tamar was established as the boundary between the two counties in the years immediately before and after the Norman Conquest, but for reasons that have been investigated by H.P.R. Finberg several exceptions came into being⁷. When in the nineteenth century social awareness of boundaries began to grow a pressure was created to remove the anomalies (Cornwall east and Devon west of the Tamar) and though it took over 120 years this pressure has finally been successful, with one justifiable exception⁸. With the detachment of the western part of Broadwoodwidge Rural District (RD) from Devon in 1966 a more convenient boundary was established for permanent residents and for tourists in difficulties who believed that it coincided with the Tamar for all its length⁹.

Later in the essay certain radical proposals for reform which would disregard the Tamar altogether will be considered but their weaknesses will be taken as evidence of its future permanence.

Devon's External Boundaries: the North-East

The north-eastern boundary is more complex. It contains at least three

major sectors. In the north it runs through the middle of Exmoor, the national park and corresponds to no obvious natural feature. In its middle sector it cuts across a belt of considerable geographical mobility (now including the M5 as well as the main railway lines from London and the Midlands) and by dividing two areas with much in common has no social counterpart. It then crosses a smaller line of hills and then divides an area of lesser mobility but which is a relatively homogeneous economic region.

This boundary has proved remarkably stable, despite its potential for change. Apart from minute adjustments in 1966, the only alterations have been nineteenth century exchanges of parishes with Dorset and Somerset. In 1842 there was an exchange of exclaves, in which Stockland and Dalwood, parts of Dorset detached from the rest, were incorporated in Devon and similarly Thorncombe, an exclave of Devon, was transferred to Dorset. In 1896 the parishes of Chardstock and Hawkchurch were transferred from Dorset to Devon whilst Churchstanton was transferred from Devon to Somerset.

Though there has been only one serious proposal for realignment on this boundary, it will be seen that along the whole of its length it poses problems. But as with the western boundary there are considerable difficulties in justifying radical changes.

Devon's Internal Boundaries: the Large Towns

The growth of urban areas has been one of the main sources of the upwards pressure for local autonomy and local self-government. Until the nineteenth century the only way that this could be expressed was through the achievement of borough status, which was in effect a grant by a higher authority of a degree of exemption from the jurisdiction of the area's normal political institutions. H.P.R. Finberg lists nearly seventy places in Devon which at some time or other before 1800 were reported as being boroughs, but by the mid-1830s only 12 were recognised as municipal corporations, of which one was a county corporate of itself (Exeter), five were municipal and parliamentary boroughs (Barnstaple, Dartmouth, Plymouth, Totnes and Tiverton) and six municipal but not parliamentary boroughs (Bideford, Bradninch, Okehampton, Plympton Earl, South Molton and Torrington). In addition there were four areas which were parliamentary but not municipal boroughs (Ashburton, Devonport, Honiton and Tavistock)¹¹. Of the 12 municipal corporations in 1835 nine were still boroughs in 1974, Bradninch and Plympton Earl had been demoted in 1835 and 1859 respectively, Devonport and Honiton were promoted in 1837 and 1846 and the parish of Tormohun became the borough of Torbay in 1892.

The **Local Government Act, 1888** introduced into English local government the distinction between the geographical and the administrative county, and by excluding the larger towns as county boroughs (CB) from county government was a major influence in Devon. This highly prized status, which of course had been prefigured by the earlier relationships between the charter towns and the county, was given to three urban areas — Exeter, Plymouth and Devonport. The original intention of the Government of the day had been to deny the smaller towns this status, but the upward pressures of the localities forced it to recognise many more urban areas as entitled to be county boroughs¹². These pressures

continued to operate after 1888 as a drive towards the consolidation of built up areas. As population grew in suburbs outside the traditional boundaries these were extended repeatedly but erratically so that by the 1970s the geographical and administrative towns were more or less coincident.

The main episodes in consolidation in the south-west of the county were the merger of Plymouth and Devonport CBs with East Stonehouse UD in 1914, and the addition of the eastern suburbs of Plymstock and Plympton in 1967, but there were also minor boundary extensions in 1896, 1939 and 1951. The major events for Exeter were the incorporation of St. Thomas UD in 1900 and Heavitree UD in 1913, and the addition of the parishes of Alphington, Pinhoe and Topsham in 1966, but there were also other extensions in 1937 and 1940.

Designation as a county borough was highly advantageous for growing urban areas and thus it was in localities' interests to strive for that status. The Torbay area only achieved a size which made this a possibility in the twentieth century, by which time the central government had made promotion much harder to win. A small amount of consolidation took place in Torquay in 1900 and minor extensions in 1928 and 1935, but the major event in this area was the creation of Torbay CB out of Torquay NCB, Paignton UD and Brixham RD in 1968. The achievement came too late for the area because the status disappeared from the English local government system in 1974.

Thus by the 1970s Devon had seen the working out of the interaction of the upward thrust of the growing urban areas with the national policies on local government structure, until it exhibited the classical pattern almost perfectly.

Devon's Internal Boundaries: the Main Features

Devon's other internal boundaries also illustrated the interaction between the two thrusts. The central government seems to have become conscious of the problems of boundaries as lines in the first two decades of the nineteenth century, and when it came to reorganise a major public service it found that traditional areas were useless. From the point of view of the centre England had been divided successively into counties, hundreds and tythings; the hundred was the area at approximately the right level for the reformed poor law, but the impracticability of it as an administrative area was well illustrated in the case of Devon.

The hundreds varied tremendously in size; the parishes of Winkleigh and Ottery St. Mary appear to be treated as units in their own right, Cliston contained only six parishes with 2,763 inhabitants whilst Black Torrington had 37 and 15,049. Many had exclaves; for instance the parish of Yarnscombe was an outlier of Hartland separated by several miles, and Wonford had two such separated parts. Some, like Stanborough, were long and thin, whilst others had boundaries of a most convoluted type. Braunton and Sherwill were intertwined in an almost obscene manner and Wonford looked like a dog devouring Exeter. It was clear that the hundred could not be the basis of a reformed public service.

Therefore in the late 1830s England was, for the first and only time, systematically divided up by central officials acting according to pre-determined principles. Rural Devon is a classic example of the work of these officials, the

poor law assistant commissioners, immediately after the passage of the **Poor Law Amendment Act, 1834**. The social geography of Devon was such that over large parts of the county it was almost as though it had been specially created to make the assistant commissioners' work easy. The county was divided into market town and their hinterlands, each such unit being made a poor law union¹⁴. The results of this work are still visible in the Devon administrative landscape; the **Local Government Act, 1972**, in Devon uses lines that were first drawn in the late 1830s and which were partially obliterated by the developments of the Victorian era.

Once the centrally inspired pattern had been established local forces began to modify it. In 1872 it was decided that the town around which the union was organised needed to be able to deal with its public health problems independently of the more rural peripheral parishes, and unions were divided into urban and rural sanitary districts. This pattern became the basis of the urban and rural districts created in 1894. Thus the two types of district tended to occur in pairs — Barnstaple, Bideford, Torrington, South Molton, Holsworthy, Tiverton, Crediton, Okehampton, Tavistock, Honiton, Axminster, Kingsbridge and Newton Abbot were the names of both a town district and a rural district. Usually the small town, whether an urban district or a non-county borough, was a shopping, market and entertainment centre, and housed the council offices of both districts. The divorce of urban and rural therefore was a reflection of the divergent interests of different types of locality, within a framework which was based on their common interests.

The same considerations which led market towns to become separate districts applied also to distinct and growing urban communities within the main bands of population increase and concentration. This was particularly true of the coastal parishes that wished to engage in primitive municipal capitalism and improve their position as resorts. Until the end of the first world war the acquisition of urban status was relatively easy; the result in Devon was that both coasts were lined with small urban districts. The process was complicated by the other local forces — those of consolidation already mentioned. Each of the main urban cores assimilated the adjacent urban districts over a period of nearly eighty years. Two districts disappeared into Exeter, Plymouth swallowed two, as did Torquay.

There were 24 urban districts in Devon in 1894 and in the next twenty years another five gained that status — Heavitree (1896), Ashburton and Tavistock (1898), Holsworthy (1900) and Axminster (1915). From the 1930s onwards the process was reversed. In addition to those that were assimilated to a county borough several free-standing towns reverted to parish status — Bampton and Ivybridge (1935), Axminster (1953), Holsworthy (1964), Tavistock (1966) and South Molton (1967). Two rural districts also disappeared — Culmstock into Tiverton (1935) and Broadwoodwidge into Launceston (Cornwall) and Holsworthy (1966). Table 1 summarises the changes¹⁶.

Devon's Internal Boundaries: Parishes

A large part of the land area of Devon has been and still is governed by a

third tier of local authorities — that is, one of the several forms of parish government. The pattern of parish boundaries has been extremely stable. Most of the changes have occurred on the fringes of the large urban areas. St. Thomas RD and Plympton RD have repeatedly lost parishes to their neighbouring county boroughs. Other changes have occurred as a result of the adjustments of the county boundary mentioned above. Apart from these there have been scarcely any noticeable mergers, realignments or divisions of units that existed in 1801. The names of parishes in that year overwhelmingly reappear in the Census of 1971.

The above, then, is an account of the ways in which the internal and external shapes of Devon have changed in the nineteenth and twentieth centuries. At the national level there have been distinct periods in central government thinking about the structure of local government. The first four decades saw the growth of a consciousness of the significance of boundaries, which led to the deliberate rationalisation of areas on a country-wide basis. From 1840 to 1880 was the period when local forces had their greatest scope for influencing the administrative landscape. The Acts of 1888 and 1894 were partly a reorganisation but more a recognition of a *status quo*, and the scope for local initiative was reduced. But there was sufficient flexibility for the central government to become worried about the overall effects of locally inspired piecemeal change, and in the 1920s substantial reorganisation was made almost impossible. The period of rigidity lasted until 1958, when the possibility of major changes was increased by the **Local Government Act** of that year. The changing pattern of national policy, however, has been modified by social geography and the forces it generates in its impact in Devon. For instance, the viability of the very small authority was never challenged until the late 1960s in Devon, but paradoxically this was one area where the processes created in 1958 did have an effect.

Local Government Act, 1972

From one perspective this Act represents a decisive victory for the Anglo-Saxon county over the separatist forces within it. The new county area is one that could be recognised by a Norman sheriff.

First, the boundaries with other counties were left completely unchanged so that the outline shape of Devon is clearly identifiable with that of Domesday Book, with small adjustments.

Secondly, the areas that had escaped, or had their independence recognised, from the jurisdiction of the county-wide authority in 1888 were brought back into the fold. The three county-boroughs were demoted to the status of county district, ending over a thousand years autonomy in Exeter's case and only six years in the case of Torbay.

However, our Saxon and Norman administrative officials would not have recognised Devon's internal boundaries at all. These are a result of two processes: that which created the county boroughs in the nineteenth and twentieth centuries, three areas that have been incorporated in the new structure with unchanged boundaries; and that which led to the division of the county into poor law unions in the late 1830s. The new districts outside the areas of the

former county boroughs combine urban and rural elements which were divorced during the last three-quarters of the nineteenth century. From the points of view of the 1830s the new Devon districts are merely unions of unions.

The Future of Devon

There is a sense in which the changes described above were only the tip of the iceberg. For over the years, particularly in the post-war period, many proposals have been put forward which would have radically altered the shape of Devon. Other suggestions, though relatively minor, would have been striking by comparison with those that actually occurred.

On occasions proposals have been made for the division of Devon into separate counties or regions. The Local Government Boundary Commission in 1947 wanted to make an enlarged Plymouth a new county within their overall pattern¹⁷. The Redcliffe-Maud Commission went further and proposed adding parts of south-east Cornwall to make a 'Greater Plymouth'¹⁸ and Derek Senior in his *Dissent* would have turned the peninsula into two regions, Plymouth with two districts within it (called 'Plymouth' and 'Truro') and Exeter with three ('Exeter', 'Torbay' and 'Barnstaple'). The Exeter region would have contained parts of west Somerset and north Cornwall¹⁹. These proposals were not implemented because of national political events. Considered by themselves there is much to commend them but they faced great local opposition and had objectionable consequences for other parts of the area.

On Socio-geographical grounds there are substantial cases for joining north Cornwall to north Devon and the west bank of the lower Tamar to Plymouth. The northern part of the Duchy has little contact with the southern, being separated by sparsely inhabited moors and lacking convenient road and rail links; economically and politically it resembles north-west Devon and its main communications lead eventually to Exeter and Plymouth. The case has received little support for three reasons; it offends county sentiment which is particularly strong on the Cornish side, it would add to the 'rump' problem for the rest of Cornwall, and anyway the gains from joining together two poor areas are not great. The problems of scattered rural areas are not the sort that can be tackled simply by structural reorganisation.

The first two reasons above also apply to proposals for a greater Plymouth. When the *Local Government Act, 1972*, was before Parliament strenuous efforts were made to get Plymouth made the centre of a new non-metropolitan county to be called 'Tamarside'. There were precedents for this in Teeside, Bristol and Cardiff. Tamarside would have been much smaller than these, however, because it would only have contained a large population if its boundaries had been cast very wide, something that would have created a geographically diverse area, would have offended the Cornish and would have left the rest of the Duchy as a rump which the central government would not have regarded as viable.

It may be concluded therefore that for the foreseeable future the western boundary of Devon will be protected by Cornish 'nationalism' and by the small size of Cornwall.

The eastern boundary poses rather different problems along its length. First, in the north it divides a national park — Exmoor — between Devon and Somerset. If the 'Cumbria' principle were to be adopted then it ought to be put under one authority¹². But the administration of a national park is only one function of county authorities and those living on its slopes naturally look away from its centre towards the urban areas in the west, south and east. It would be interesting to compare the effectiveness of unified control of Dartmoor with the divided control of Exmoor; it is very doubtful whether any evidence of disadvantage could offset the social considerations mentioned above, and thus this part of the boundary will stay unchanged for the foreseeable future.

Secondly, in its middle sector it cuts across one of the areas of intense mobility — the Exeter to Taunton axis. It is an area of population increase and economic growth by regional standards, and presumably the motorway will reinforce past tendencies. On socio-geographical grounds, therefore, there is a case for a new county carved out of Exeter, parts of east Devon, and south-west Somerset, possibly including parts of north-west Dorset. This proposal has never been seriously considered and I suspect that it will remain academic. Despite its internal coherence, it has three defects: it would divide Exeter from Torbay, with which it also has close links; it would leave parts of the three counties as rumps, and it would offend traditional county sentiments.

Thirdly, there is the question of the Devon-Dorset coastal region. In the late 1950s Lyme Regis Council made an effort to have the town transferred from Dorset to Devon, mainly on economic and accessibility grounds. This was accepted by Devon and authorities in the east of the county, but opposed by Dorset and eventually a majority of Lyme Regis electors¹². Though the Local Government Commission for England accepted the case the Government of the day refused to implement the change. But it still has much to commend it; west Dorset shares common economic and environmental problems with east Devon, and it is very remote from county headquarters and the main centre of Dorset population in the Bournemouth-Poole area.

The Future of Devon's Districts

With the exception of one rural district, every authority in Devon went as a whole into a new authority in 1974. The boundaries of the three large towns were left unchanged, all town districts were merged with their neighbouring rural district and two or more adjacent rural districts were merged. The one exception was St. Thomas RD which was split into two parts, east and west of Exeter. The creation of the new pattern of districts was done very rapidly and in a simplistic manner. It is to be reviewed in the light of the work of the Local Government Commission for England. What sort of changes, if any, may be expected in the next ten years?

The striking feature of the new scheme is that it restores many of the lines drawn by the assitant poor law commissioners to major significance. After 1840 the advantage to a town of being an urban sanitary area by itself created pressures which modified the union pattern as the system of basic areas of primary local government. It may be remembered that a union was usually based

on a grouping of parishes around a market town, which was the obvious place to locate the workhouse. But social geography has changed considerably since the 1830s; the social space that people inhabit is dominated by a hierarchy of centres which cast their influence over increasingly wide geographical areas. Because of the motor car the individual has to live much further away from the large centres before escaping from their influence.

The implications of these considerations is that the internal map of Devon ought to be redrawn in certain ways. Areas to the north and east of Plymouth, as far as Tavistock and Ivybridge at least, ought to be added to it. The sphere of influence of Exeter is divided between three new districts and that of Torbay between two. The Barnstaple-Bideford area is divided between two districts. But any significant departure from the traditional lines invariably meets the difficulty that when the obvious moves have been made there are rumps left over for which there is no feasible solution. The present pattern of districts will therefore probably be protected by the intractability of the problems created by the remoter areas of the county.

The basic features of the pattern of parishes have remained unchanged from time immemorial and only minimal redrawing can be foreseen in the future. In large parts of the county physical geography makes it unlikely that there will be an attempt to merge parishes; the settlement pattern has similar effect in other parts. Unless parish government becomes more important in terms of service provision there will be little pressure for reform at this level.

There are of course other boundaries that are important to the people of Devon, but as many of these derive from the local government pattern it is likely that they also will remain stable in the foreseeable future. The Devon administrative landscape will retain its familiar traditional appearance.

Conclusion

The evolution of Devon therefore still shows in the present pattern of authorities. It reflects the impact of successive episodes in central government thinking as applied to the county's social geography. It reflects the pattern of population distribution which has given the county a lop-sided appearance. It also reflects the constraints introduced by the existence of neighbours whose pedigrees are as ancient and respectable as that of Devon and whose social geography is also a source of problems.

I am conscious that this essay does no more than sketch out the main factors at work in the nineteenth and twentieth century in Devon and indicate the areas in which change has or has not taken place. There is thus great scope for the local historian to study the details of local administrative history, and it can be argued that research into boundaries has a priority, because the drawing of the lines themselves affects the identity and personality of the local community. Should not histories of individual towns and villages begin by explaining how and why the area came to have the shape that it has today?

Footnotes and References

1. W.G. Hoskins, *Devon*, David and Charles, new edition 1972, pp. 9-11;

H.P.R. Finberg, 'The Making of a Boundary' in W.G. Hoskins and H.P.R. Finberg, *Devonshire Studies*, Jonathan Cape, 1952, pp. 19-39.

2. For an hierarchical system of areas see the division of France into departments, arrondissements, cantons and communes. American local government generally shows a balance in favour of local forces.
3. Lundy has been a problem for different reasons, but its small size makes it irrelevant to mainland Devon.
4. See F.M.M. Lewes et al, 'The Holiday Industry' in F.J. Barlow (ed.), *Exeter and Its Region*, Exeter University Press, 1969, pp. 244-258; also the references in that chapter.
5. W.G. Hoskins, *op. cit.*, pp. 453-61; F.M.M. Lewes et al., *op. cit.*
6. W.B. Lockwood, *The Languages of the British Isles*, Andre Deutsch, 1975.
7. H.P.R. Finberg, *op.cit.*
8. The parish of Bridgerule would have to be divided into two; its western half is across the Tamar. There are also some other minute anomalies created by the changing line of the river.
9. For the arguments about this boundary in the 1960s see the evidence given to the Local Government Commission for England, the transcripts of its Statutory Conference and the Inquiry into Objections, and its *Final Report and Proposals for the South-West General Review Area*, HMSO, 1963, ch.4.
10. H.P.R. Finberg, 'The Boroughs of Devon', *Devon and Cornwall Notes and Queries*, vol. 24, 1951, pp.203-209.
11. *Report from the Commissioners on Municipal Corporations in England and Wales, 1835*, Appendix, Tables 1-3.
12. V.D. Lipman, *Local Government Areas, 1834-1945*, Basil Blackwell, 1949, pp.145-50.
13. The institution of the Census and the Ordnance Survey were factors in this, and enquiries were made into boundaries in the 1820s.
14. V.D. Lipman, *op.cit.*, pp. 36-54.
15. V.D. Lipman, *op.cit.*, pp. 84-97, 156-64.
16. Table 1. *Changes in Numbers of Local Authorities, Devon 1894-72*

type	number in 1894	losses	gains	numbers in 1972
CBs	3	1	1	3
NCBs	10	2	0	8
UDs	24	13	5	16
RDs	18	2	0	16

[B = county borough; NCB = non-county borough; UD = urban district; RD = rural district]

17. Local Government Boundary Commission, *Report for 1947*, HMSO, 1948 pp. 55-56.

18. Royal Commission on Local Government in England, **Report**, vol. I, Cmnd. 4040, pp. 261-2.
19. Royal Commission on Local Government in England, **Memorandum of Dissent**, vol. II, Cmnd. 4040-1, pp. 230-33.
20. Cumbria is a new non-metropolitan county centred on the Lake District National Park, and includes Westmoreland and the northern part of Lancashire as well as Cumberland.
21. Local Government Commission for England, *op.cit.*, pp. 62-66.

Appendix

Studying Local Administrative History: Areas and Boundaries

First, students should familiarise themselves with the changing national policies in respect of local government structure. Most of the period is very well treated in V.D. Lipman, **Local Government Areas, 1834-1945**, Basil Blackwell, 1949; for the postwar period see H.V. Wiseman (ed.), **Local Government in England, 1958-1969**, Routledge and Kegan Paul, 1970, chs. 1, 2, and 5. The new local government system is described in J. Stanyer, **Understanding Local Government**, Fontana, 1976, ch.2. The period divides into a number of different phases, all of which may have had significance for any individual areas, as follows:

- | | |
|-----------|--|
| 1830-40 | reform of the poor law and municipal corporations. |
| 1840-80 | growth of special purpose authorities — improvement commissions, highway districts, school boards, sanitary districts etc. |
| 1880-1900 | consolidation and systematisation in a pattern of general purpose authorities (which lasted until 1974). |
| 1900-26 | expansion and increase in numbers of county boroughs; increase in numbers of urban districts. |
| 1926-58 | stability in county and county borough boundaries. |
| 1930s | county reviews of own district structure by county councils. |
| 1945-49 | Local Government Boundary Commission. |
| 1958-65 | Local Government Commission for England. |
| 1966-69 | Royal Commission on Local Government in England. |
| 1970-74 | reform of local government by Conservative Government. |
| 1974— | Local Government Boundary Commission for England. |

The best place to start research on an individual town or village is with the Census of 1801; this should be followed by an examination of each successive decennial Census until 1971 (except 1941 which was omitted). The sections or reports on Devon will provide names and characteristics of the areas, and the hundred, union, district etc. in which they were located. Changes in boundaries and status during inter-censal periods are reported in the Census volumes from the later nineteenth century onwards. These also give the authority for the change — whether a private act or a ministerial order.

Once the date and nature of the change has been identified a detailed study can be made by using council minutes, local newspapers and the reports of inquiries into specific proposals (these may be either parliamentary proceedings or the transcripts of hearings before government inspectors). Some councils' records and archives will contain unpublished material but the availability of this will be found to be highly variable.

Other evidence may be found in official publications, but whether or not a particular area is dealt with in any individual work can only be determined empirically. Amongst the important ones are:

Returns from Clerks of the Peace of Insulated Parcels of Land, House of Commons Papers, 26 May 1825

Returns of All Parishes ... which Extend into Two or More Counties, House of Commons Papers, 17 May 1826

Reports of the Poor Law Commission, published annually after 1834 (later of the Poor Law Board, Local Government Board, Ministry of Health and Ministry of Housing and Local Government; now Department of the Environment)

Report from the Commissioners on Municipal Corporations in England and Wales, 1835

Report of the Select Committee on the Areas of Parishes, Unions and Counties, 1873

[many more reports relating to aspects of areas in general or to those of individual services are cited in an Appendix in V.D. Lipman, *op.cit.*]

For the most recent times the work of the Local Government Commission for England, 1958-65 in the South West General Review Area is most helpful; see the **Final Report and Proposals**, HMSO, 1963, and the unpublished evidence given by individual local authorities. Transcripts were also taken of the verbal evidence given at the Statutory Conference and the series of Inquiries into Objections held under the 1958 Act.

No complete listing of significant research topics can be given but amongst those which have high priority are the following :

- The consolidation of the major urban areas in the past 150 years
- The modification of the Devon/Dorset/Somerset boundaries in 1842 and 1896
- The modification of the Devon/Cornwall boundary in 1844 and 1966
- The creation of the unusual conglomerate urban districts of Sidmouth and Northam
- The County Review Process of the 1930s
- The reasons for the demotion of small town districts in the 1950s and 1960s
- The drawing of union boundaries in the 1830s and their evolution into rural districts

Mention must also be made of the possible changes that did not take place.

Why did some villages become town districts and others did not, even though they appear to be geographically similar? Why have some awkward boundaries been maintained whilst others have been changed? Why have some towns, such as Tiverton, South Molton and Ottery St. Mary, large rural areas included within their limits whilst others, such as Okehampton, Crediton and Holsworthy have tightly drawn boundaries?

The study of these requires more skill because it is first necessary to identify the major relevant factors which might be thought to favour change before isolating the special factors that have prevented or diverted any pressure that might exist. No generalisations can be offered under this heading.

Finally, mention must be made of the successive Ordnance Survey editions of maps showing administrative boundaries which are vital for the most detailed work.

AN APPEAL

The Devon Historian is intended to be of interest and use to those interested in Local History in Devon. It is clear that a good many events take place, exhibitions, lectures, courses, projects of all kinds, all relating in some way to Devon's history, news of which does not reach the pages of the Devon Historian. Many of these are covered by local papers as they occur but too late of course for the Devon Historian. Similarly readers may know of books that they would like reviewed or noted in these pages. All new books on Devon are recorded in the Devon Union List (see review in this number) but a direct note to the Editor would still be useful. The Editor would much appreciate it if readers who know of events that are due to take place would write an account of them for publication in the Devon Historian bearing in mind that publication dates for the paper are April and October.

OIL FOR THE LAMPS OF DEVON

William Reader

Anyone who knew farmhouses before electricity spread over the countryside will recall the warm smell of paraffin, especially from the kitchen stove, and the soft lamplight after dark. Eighty or ninety years ago, in towns as well as in the country, the housewife who had no access to gas depended very heavily on paraffin and from that commodity, rather than from any of the other derivatives of petroleum, John D Rockefeller and the other early giants of the oil industry made their fortunes.

From the giants' end, which might be in America or Russia, a chain of supply stretched out towards the Devon housewife and one of the last links in it was an Exeter firm of general wholesalers, J.L. Thomas & Company. Thomas's dealt in many things besides paraffin: lamps, for instance, to burn it in and tallow and in the 1890s they began making soap, not in large quantities but enough to alarm bigger competitors. J. Langdon Thomas, the senior partner, was evidently a lively and enterprising provincial business man, quite ready, if he could, to play off the suppliers of imported oil against each other.

In July 1889, along with half a dozen other West of England firms — four in Bristol, one in Cardiff, one in Exeter — J.L. Thomas set up The Bristol, West of England & South Wales Petroleum & Storage Association Limited with capital of £50,000 in £10 shares. The promoters of the Association intended to give themselves a strong bargaining position in the battle, which they could see developing around them, between rival suppliers of American and Russian oil. Their strength was based on a tank farm at Avonmouth which enabled them to guarantee storage and distribution for any oil they might contract to buy and on the other hand to make life difficult — or so they hoped — for any supplier who did not come to terms with them.

When the West of England merchants formed the Association, they had recently made a contract of exactly the kind they liked. It was with Bessler & Waechter, importers of Russian oil supplied by Robert and Ludwig Nobel, elder brothers of Alfred, inventor of dynamite and originator of the Nobel prizes. It bound the Nobels to grant the Association the sole right to import their oil through Avonmouth for five years but it expressly left the Association free to deal in other suppliers' oil if they chose.

Why were Robert and Ludwig prepared to make so one-sided an arrangement?

The answer probably is that this was a tactical move in their fierce and, so far, successful fight to carve themselves a share of the British market, against the competition, in Russian oil, of Rothschilds and, in American oil, of Rockefeller's Standard Oil and other suppliers. Russian oil first came on the British market in 1883. By 1888, the Nobels and Rothschilds — not in alliance — had about 30 per cent of the trade, gained chiefly at Standard's expense. Standard in that year set up their own British marketing company, the Anglo-American Oil Co. Ltd. The West of England merchants were entering a jungle inhabited by very large, very ferocious predators.

This was pointed out to Langdon Thomas by George Bowring, of the firm of C.T. Bowring, who imported oil from the Bear Creek Refining Company of Pittsburgh, allied to the Mellon interests in U.S.A. and bitterly hostile to Standard Oil. George Bowring, very nervous of Standard, wanted to make a contract with the West of England merchants before Anglo-American could do so, being sure that Anglo-American, unlike Nobels, would seek to bar other suppliers. He was willing to offer a contract "as nearly identical with the Russian contract as I could make it". When in the spring of 1890 the Association turned him down, for reasons which are not clear, he remarked to Langdon Thomas: "It is odd that some members of the Association do not see what wolves in sheep's clothing the Anglo are. The only way they will ever lie down in peace together is as the lamb does after being eaten by the wolf inside him". George's feelings evidently overcame his regard for punctuation.

George argued that Anglo-American, unlike his own firm, which was simply an importer, were competitors with the West of England merchants in distribution. If the Association contracted with Anglo, rather than with Bowrings, there would come a day when, having built their own depot at Avonmouth and made their own arrangements for distribution, they would tell the Association "that the exigencies of trade force them to distribute their own oils", the demand for which has in the meantime been fostered by the West of England Association. Standard he hated. He called them 'those hated monopolists, who would, if they could, "hang draw and quarter you and ourselves et id omne genus" '.

In the autumn of 1890 Anglo-American, just as George Bowring had predicted, came to the West of England merchants with the offer of an agreement which, after the lapse of the Bessler contract, would have barred them from dealing in any other oil brands owned or controlled by Standard, with minor exceptions in favour of brands belonging to the merchants themselves. With their Russian contract and their base of operations at Avonmouth, the little firms felt secure. They turned the big firm's offer down.

Within two years, Anglo-American had bulk storage facilities of their own at Bristol, as well as other depots covering the rest of the country. Anglo's tank cars were on the railway and its barges were on the rivers, including the River Severn. The threat to the West of England firms was clear and in the autumn of 1892 Anglo was back on their doorsteps, offering a pure monopoly agreement.

Anglo-American's real interest was not in the puny West of England firms, but in their battle with the other international oil giants. The small firms had, however, a passing value as expendable pawns and Anglo offered to agree to sell only to them and to fight for them any battles that might be necessary against Russian oil in their territory. In return the merchants were to undertake 'not to purchase any Refined Petroleum, Benzine, Naptha or Gasoline except from the Anglo-American Oil Company, and not to sell any not purchased of that Company'. Moreover the merchants' terms of sale were to be fixed and for all practical purposes they would lose their independence and become agents of Anglo-American.

To these proposals, based on Standard's practice in America and dictated from New York, there was no resistance. The Russian contract must somehow have been disposed of, though how is not clear, for the new agreement came into force on 31st March 1893, to run for seven years. Clause 15 of the agreement provided that 'the existence of this Agreement shall not be divulged to anyone not parties to the Agreement'. Was some one, perhaps, a little nervous of public opinion?

Anglo-American moved swiftly to take over the share capital of the Petroleum & Storage Association and with it control of the Avonmouth depot. Thomas Harding, of Colthurst & Harding, Bristol, remained chairman of the Association 'but this of course', as Anglo-American's London solicitors observed, 'is quite nominal'. Indeed it was. Standard Oil, acting through Anglo-American, had destroyed any independent power which the little firms might once have possessed and could now concentrate on the main objective: destruction, or at least containment, of the trade in Russian oil.

This was no longer a straightforward matter of competition between American and Russian suppliers. Bear Creek, Bowring's principals, had a large interest in a company, managed by Bowring's, which in the mid-1890s was energetically pushing Russian oil at cut prices into the West of England. Small tank steamers delivered it wherever they could, at Southampton, Portsmouth, Poole, Plymouth, ports on the Bristol Channel, Bristol itself. The merchants demanded the protection assured to them by the new agreement but they found Anglo-American infuriatingly dilatory in providing it. One meeting in Bristol broke up in bad temper and distrust with Frank Bliss, Anglo-American's man, telling the merchants "I am really afraid to reply to New York".

What the wretched merchants did not know was that in 1895, probably about the time of their meeting with Bliss, Standard Oil, in pursuit of inter-continental grand strategy, took over Bear Creek. In the following year the merchants discovered that an agreement existed between Anglo-American and Bear Creek's shipping subsidiary. They demanded to see any clauses that might affect their interests. Bliss turned them down flat, in spite of the fact that he was asking them for a letter of consent to the agreement.

As far back as 1889, George Bowring had predicted that Anglo-American's policy "would mean the extermination of the oil merchants of England as petroleum oil merchants". So far as the West of England merchants were concerned, and probably merchants elsewhere in the country too, he was right. They were caught in the midst of forces which they had no hope of controlling or even influencing. J.L. Thomas moved away from oil towards soap-making and the processing of bones and fat, eventually becoming a subsidiary of Unilever. Colthurst & Harding to-day makes paints and varnishes. Bowrings remained in oil but in a different class from the small provincial firms.

The episode we have been looking at was a small and not particularly bloody engagement in a world-wide commercial war. One effect of it was to set up a new distributive system for the oil trade in the United Kingdom. What Anglo-American and their competitors did, as they swept the West of England

merchants out of the way, was to destroy the old, comfortable and — one suspects — rather inefficient local arrangements and substitute a national organisation.

The same thing was going on at the same time in other trades supplying consumer goods — the soap trade, for example, and some branches of the food trades, and it was bound to happen as the growing economy of the United Kingdom attracted the attention of businesses conducted on an international scale. Economic change is rarely painless and the oil companies were not unduly concerned to conduct their operations under anaesthesia. Their enemies, however, and they were many, would find it hard to deny that the marketing organisation set up by Standard Oil and the rest of the giants was likely to serve the ultimate consumer — the Devonshire housewife — better than the system destroyed to make way for it.

This article originally appeared, in a different form, under the title **Oil for the West of England**, in *The Business History Review* XXXV 1. (1961).

Sources

Chiefly papers in the archives of Unilever Limited, to whom I am indebted for permission to use them. See also Ralph W. and Muriel E. Hidy, **Pioneering in Big Business: History of Standard Oil Company** (New Jersey), 1882-1911, Vol. 1 (New York, 1955).

THE EARLY YEARS OF HYDROELECTRICITY FOR PUBLIC SUPPLY IN DEVON

D.G. Tucker

Hydroelectricity plays a very small part in Britain's electricity supply; in England its role is negligible. The reasons are obvious: no large rivers and no really large mountains. In the early days, before the electricity grid, what mountains we have were too remote from the centres of demand to be useful except in special cases, such as the electrical smelting of aluminium, where in 1896 works were set up at Foyers in Scotland near to a large source of water power. For public electricity supply, hydroelectricity has never had, in Britain, any very important place. Nevertheless, there have always been some hydroelectric stations and of the nine water-powered electricity stations set up for public supply in Britain before the end of 1894, no fewer than three were in Devon; moreover, all three were long-lasting, while some of the others were only transitory. The three were at Okehampton, Lynmouth and Chagford. There were abortive proposals for hydroelectricity in three other Devon towns: Exeter, Plymouth and Tiverton (out of at least 45 abortive proposals by 1894 in Britain generally). The story of these six early hydroelectric schemes is the subject of this article. It is of interest to note that Devon's early pre-eminence in hydroelectricity has been maintained in one sense; the county now has England's only three public hydroelectric generating stations, at Mary Tavy, Morwellham and Chagford; these are, however, very small stations compared with those in Wales and Scotland.

It is worth listing the nine British hydroelectric stations used for public supply up to 1894. They were, with dates of opening:

Godalming, Surrey, September 1881
Greenock, Renfrewshire, March 1885
Wickwar, Gloucestershire, 1888
Blockley, Gloucestershire, 1888
Okehampton, Devon, about January 1889
Keswick, Cumberland, January 1890
Lynmouth, Devon, March 1890
Chagford, Devon, September 1891
Worcester, October 1894

The first two were basically experimental and were very short-lived. The next three were casual, in the sense that they grew out of existing water-powered activities. Keswick was the first purpose-built permanent public hydroelectric station but even so it used an old mill site with its existing water supply only slightly extended. Lynmouth, which followed Keswick so closely, was purpose-built entirely and by 1895 had what was probably the world's first pumped-storage system and a most interesting arrangement of turbines. With the exemption of Chagford (also in Devon), Lynmouth had the longest life.

The demand for a public electricity supply was stimulated by the invention of the incandescent filament lamp by Swan, in Britain, in 1878, and by Edison,

DEVON RECORD OFFICE

Exhibition of Silver Jubilee documents

An exhibition of the documents used in the Silver Jubilee booklet for Devon school children will be held in the West Country Studies Library of Exeter Central Library, Castle Street, Exeter from 25th September to 7th October (Mondays to Fridays 10 a.m. to 5 p.m.), in the Scott Lecture Theatre of Plymouth Central Library from 18th October to 21st October (Tuesday, Wednesday and Friday 10 a.m. to 5 p.m. and Thursday 10 a.m. to 12 noon), in the Pilton School and Community College, Barnstaple on 1st November from 10.30 a.m. to 4 p.m. and at Torbay at the School of Art, Fleet Street, Torquay on 8th November from 10.30 a.m. to 4 p.m.

in the United States, in 1879. The earlier arc-lights had been unsuitable for general use; with about 1200 candle-power, they were suitable only for lighting public places, halls, large stations, etc. The small filament lamps, of perhaps 8 to 16 candle-power, were attractive for domestic, business and industrial use and demand for them and for a public electricity supply from 'central stations' (as opposed to local private stations serving only one set of premises) grew rapidly from 1881 onwards. Inhibitory legislation in 1882 rather impeded development in Britain but after the amended Electricity Act of 1888, which gave companies security from compulsory purchase by municipal authorities for 42 years and established a fair basis for such purchase, expansion was as rapid as the demand. By 1894 there were in Britain at least 100 central stations, mostly driven by steam or gas engines, with an average capacity of about 350 kW for those stations outside London. Of the hydroelectric stations, only that at Worcester was above this average capacity; the rest were well below it. The early central stations were all operated by companies but in the 1890s many municipal authorities set up their own electricity undertakings in the belief — often justified — that they would show a profit and help the rates. In Devon, all three hydroelectric systems which materialised were company-operated. The system at Exeter, which was to have been water-powered, was also in company hands; but those at Plymouth and Tiverton were municipal.

There were, as has been mentioned, a large number of abortive hydroelectric schemes. It was natural for companies and local authorities to think first in terms of water power, for it was the general nineteenth century experience that water power, when available, was cheaper than steam power, especially in places, like Devon, not very close to a coalfield. The very limited operating data on the early hydroelectric stations suggests that they were indeed cheaper per unit generated than steam stations of the same size. Nowadays this is no longer true in Britain; high interest rates on the greater capital expenditure and the costs of transmission have made hydroelectricity generally more expensive than thermally-generated supplies.

THE THREE SUCCESSFUL SYSTEMS

Okehampton, 1889

Public electricity supply at Okehampton was an offshoot of a private installation. Mr. Henry Geen (who became the principal of the firm of Blatchford, Ash & Company) was a builder and timber merchant in quite a large way of business and had installed a turbine to drive the machinery of his sawmill, using water from the East Okement river. He also coupled to the turbine a 110 volt dc dynamo and used the electricity to light the sawmill and possibly also to drive some motors.

In December 1888 it was announced that Geen was about to undertake the public supply of electricity in Okehampton upon a very limited scale; 125 incandescent lamps was quoted as the limit of load for which power was available. Several houses were being wired and the supply lines were to be put underground. In March 1889 it was announced that the system had proved successful and that the gas company now wanted to supply electric light too! Although the

gas company took the matter a little further, nothing came of their proposal and in 1890 Geen's supply was recorded as having a capacity of 220 8-cp lamps — about 8 kW.

The demand for Geen's public supply grew and in 1896 he supplemented the water power with a 50 hp Worth-Mackenzie compound vertical condensing steam engine supplied by a Babcock and Wilcox water-turbine boiler which was fired mainly by wood refuse from the sawmill blended with steam coal. This was later replaced by a 30 hp Crossley suction gas engine and suction gas plant. After World War 1 two 60 hp Gardner petrol-paraffin 4-cylinder direct-coupled generating sets were bought from the War Office. Still at the sawmill, and providing about 110 kW, this plant was taken over by the West Devon Electricity Supply Company in 1930 and eventually dismantled when their new Mary Tavy hydroelectric station was opened in 1937. (This was, and remains, England's largest hydroelectric installation with a capacity of 2.6 MW). Whether the turbine at Okehampton continued to contribute to the generation of electricity right up to the end of the Okehampton plant is not quite clear.

In the early 1920s the Okehampton Town Council was negotiating with the proprietor of the generating station (then shown as G.K. Blatchford, presumably a partner of Geen's) for the purchase of the undertaking. Evidently nothing came of this for in 1925 the works were owned by W.H. Heath & Company of Plymouth, the manager being W. Leigh, who had been manager under Blatchford.

The weir on the East Okement river still exists, at grid reference SX 590951 (see Plate A) and the buildings remained until recently at SX 590952.

Lynmouth, 1890

The initiative for the provision of electric lighting in the twin towns of Lynton and Lynmouth was taken by Mr. Charles Geen, a brother of the Henry Geen who had set up the system at Okehampton. He formed the Devon Electric Light Company in early 1889 and proposed a system which included the lighting of the public places, streets, etc. in the twin towns. In August 1889 the Lynton Local Board (which also administered Lynmouth) accepted his terms and the work went ahead. The hydroelectric generating station was at Lynmouth and is shown in Fig. 1. It had three floors, the lowest being occupied by the turbines and generators, the next by offices and workshops and the top floor was used for stores.

The generating plant as initially installed was simple enough. The water power was obtained from the East Lyn river by way of a weir, then an open leat, 6 ft. wide by 3 ft. 6 ins. deep, for the first 400 yards, and finally a 30 inch iron pipe for 520 yards to the station (see Fig. 2). The head at the turbine was about 90 ft. A horizontal-shaft reaction turbine of the 'Little Giant' type was used, made by Hett of Brigg in Lincolnshire; it could develop a power of around 150 hp. It had a draught pipe into the tail race. Regulation was by hand-wheel control of a slide valve controlling the flow of water. Two Mordey alternators were driven by the turbine on a single shaft, as shown in Fig. 3; each could develop about 37.5 kW at 2000 volts. Distribution was at this voltage using

Callender's bitumen-covered, lead-sheathed cables laid underground, some directly but mostly in bitumen-sealed wood casing. Transformers were used to step the voltage down as required; the frequency was 100 Hz (or cycles per second).

The cables gave a lot of trouble at first and during the first winter after the opening in March 1890 the supply failed entirely for about two months because of cable faults. The difficulty was apparently with the joints, which could not be kept waterproof in spite of being 'boiled in pitch in situ, and then protected by soldering a lead sleeve over all'. But by January 1892 it was becoming clear that the electric light was much appreciated; in June the surveyor to the Local Board gave a very satisfactory report upon it; and business expanded so fast that the company began to have difficulty in meeting the demand, especially when the water flow in the river was low. Pressure was put on the company to install more machinery.

Geen sold his company to Mr. H.H. Benn at the beginning of 1892. Benn apparently had not the money to increase the plant and in October 1893 he suggested to the Local Board that it should take over the undertaking at a rental of £193 per annum. The Board declined and by December Benn had to refuse to take on any more business. By the end of April 1894 he had sold out to a new company, the Lynton & Lynmouth Electric Lighting Company, who were stated to be prepared to generate more power and thus give a more efficient service. The Local Board promised that if they were satisfied that the new company could meet the demand, they would extend the contract for public lighting to the new company for 14 years.

The new company's plans included not only new turbines and alternators, but also a pumped storage system. Evidently they were able to provide a new injection of capital but where it came from is not clear, as the only directors in 1896 were Benn and Geen, the latter being managing director up to at least 1923. The company was a new legal entity but comprised the same people! At any rate, the new plant was actually installed.

The Lynmouth pumped storage system may well have been the first in the world used in connection with electricity generation. During periods of low demand (i.e. normally during the daytime), a turbine driven by the river was used to pump water up a pipeline to a reservoir on Summerhouse Hill, some 760 ft. above the generating station, and of a capacity of 190,000 gallons, being 50 ft. in diameter with a depth of over 16 ft. at the outlet side. Then, when the heavy demand developed (in the evening), this water was fed back to drive two high-pressure turbines or Pelton wheels which were coupled to two alternators (the original ones) on one shaft, and a new 75 kW ECC alternator on another. The original low-head turbine and a new low-head Pelton wheel were coupled in parallel with the corresponding high-pressure turbines, so that it was possible to drive the generators from the river flow, from the reservoir or from both together. This made for very flexible operation and enabled the company to put off having auxiliary engines for a long time.

By 1899 the public lighting comprised 59 incandescent lamps of 32 cp and

one Brush arc lamp of about 2000 cp on the Rhenish Tower at the end of the pier at Lynmouth. Iron poles were used in the main roads and wooden ones elsewhere. The Local Board paid the company £3 per incandescent lamp per year.

For private consumers, a contract basis was also used, this being at the rate of £1 per year for each 16-cp lamp installed. Some consumers, however, were provided with meters and they were charged 8d. per unit in summer and 5d. in winter, for the first hour; all subsequent hours in the same day were charged at 4½d. per unit summer and winter.

The supply was commenced each day at 30 minutes before sunset and closed down at midnight. In December and January supply was given additionally between 6.30 a.m. and 9.00 a.m.

Up to July 1889, when the original system was planned, it was confidently believed, on the basis of local experience, that the minimum summer water flow would be sufficient to provide at least 200 hp. However, it seemed that the flow diminished every summer until by August 1898 only 20 hp was available. The pumped-storage system considerably alleviated the difficulty but at times in 1898 there was insufficient flow to enable the reservoir to be pumped full and restrictions had to be put on the supply to consumers. It was at this point that a decision to install a steam engine was announced.

There is contradiction in the various records and it has not been possible to determine if a steam engine was actually installed. Whether it was or not, two Parsons oil engines totalling 100 hp had been installed by 1923.

In later years, demand continued to increase. It was nearly quadrupled between 1903 and 1920 and by the end of its life the station supplied a peak load of about 440 kW. The Parsons engines were supplemented by a 100-hp 3-cylinder Ruston-Hornsby engine (installed new in about 1928), a 160-hp 4-cylinder Sulzer engine (second-hand, about 1933), a 90-hp McLaren-Benz 4-cylinder engine (second-hand, about 1938) and a 165-hp 5-cylinder Ruston-Hornsby engine (second-hand, about 1947); and a number of new and second-hand alternators were also added. All this plant was still functional in 1952.

It was in August 1952 that the terrible floods struck Lynmouth and along with much other serious destruction of life and property, put an end to the hydroelectric station. At this time the South Western Electricity Board, which had by then become responsible for the local system, was in process of changing over the district to a supply on the standard frequency of 50 Hz and a 33 kV transmission line, operating for the time being at 11 kV, had been put in to connect the area to the grid. Parts of Lynton were already using the new supply. So presumably the days of the hydroelectric system were numbered anyway and the floods merely accelerated its demise.

There are very few remains of the system now to be seen.

Chagford, 1891

The hydroelectric supply at Chagford was provided from a woollen mill, the water wheel of which was used to drive a 20-kW alternator; it was thus more in the class of the Okehampton system than of the specially-built Lynmouth installation.

In November 1890, the registration of the Chagford and Devon Electric Light Company was announced; it had a registered office in London and a capital of £2,000. Public lighting commenced on 1st September, 1891 and presumably, there were private consumers also. By 1900 there were the equivalent of 600 8-cp lamps connected, with 16 lamps for street lighting.

The water power came from the river Teign by a leat, as shown in Fig. 4. The generating plant was at grid reference SX 694878. The water wheel was of under-shot type, 14 ft. diameter and 14 ft. wide, and, by means of belts, drove two Siemens alternators with Crompton exciters. The voltage generated was 2000 volts at a frequency of 99 Hz. Transformers were used to change this down to 100 volts at the consumers' premises. By 1900 the distribution was by lead-covered, paper-insulated cable.

The company expanded financially, having, by 1922, expended over £7,500 on plant, although there were still only 22 public lamps and 80 consumers. The expenditure on plant included the purchase of a gas engine made by the National Gas Engine Company, a suction gas plant and a storage battery. By now the system had been changed to a 200-volt dc basis and the water wheel had been replaced by a 30-hp turbine, which certainly gave over 50 years service and may possibly be still in use. The old mill buildings no longer exist and the generating station is housed in a separate small building (see Plates B and C). The company became part of the West Devon Electricity Supply Company in 1930 and it is now (i.e. in June 1977) still in operation, with an installed capacity of 26 kW, 3-phase ac, under the CEBG and connected to the national electricity grid system.

THE THREE ABORTIVE SYSTEMS

Exeter

As early as January 1882 a proposal was received by the City Council from a company desiring to provide electricity, generated by water power, for lighting in Exeter. Nothing came of this but a similar proposal was made in 1887 and it was even reported in June that year that the company was about to make a start. It does not seem to have got started but certainly some temporary electric lighting provided in the streets made an impression, for in February 1888 a public meeting of 2,000 people urged that permanent electric lighting of the streets be provided and agreed that water power should be used. The Council advertised for tenders and the Exeter Electric Light Company made detailed proposals for a system based on turbines to be fitted at Trew's Weir; there were to be four, each of 24 hp. Unfortunately the Council (with other objectors) could not agree to the weir being used in this way and the company had to abandon its plan to use water power; it acquired another site at Rockfield Factory and by mid-1889 was supplying electricity to consumers.

It is perhaps ironical that Trew's Weir has for many decades been providing water power for a turbine at the paper factory.

Plymouth

In September 1891 the Borough Council set up a sub-committee to confer with the Devon and Cornwall Electricity Supply Company regarding the pro-

vision of electric light in Plymouth. It was suggested by a correspondent in the local paper that water power should be used, based on the head available at Drake's Place, at the King's Mill site and at the old Providence Mill site, all three belonging to the town. Within two months the Council had instructed the Works Committee to consider whether the Council ought to obtain powers itself for providing electricity, negotiations with the company having failed, and to confer with the Water Committee as to whether water power could be made available.

It was late in 1893 before Council resolved to apply for a Provisional Order under the 1888 Electricity Act. (The significance of a Provisional Order was that it gave statutory powers to open up roads, etc., for the laying of cables and other plant; although many of the smaller undertakings, such as those at Okehampton and Lynmouth, did not bother with such things because of the legal costs, it was accepted as obligatory on Councils to do so.) 'They were hopeful that at some time they would be able to provide their own power for electric lighting in connection with the water supply....' The Provisional Order was obtained in July 1894 and the Council consulted Professor J.A. Fleming about the system to be adopted. He reported in October 1895, proposing a site at Cattewater with steam power; the idea of water power was not pursued further but the reasons for dropping it were not explicitly stated.

Plymouth commenced its public electricity supply in September 1899.

Tiverton

It was again the Devon and Cornwall Electricity Supply Company that stimulated consideration of electric lighting by the Council. The company had given notice in October 1889 of its intention to apply for a Provisional Order but the Council had considered it undesirable that a company should have the monopoly of electricity supply for 42 years and so decided to oppose it and to apply for a Provisional Order itself. This was granted in August 1890. Companies were then invited to make offers to take over the order for a more limited term but no offers were received. The Borough Surveyor, Mr. J. Siddalls, was requested to make his own proposals for electric lighting, in consultation with an expert, Mr. F. Christy of Chelmsford, and other advisers. His report of February 1893 was a very thorough and careful statement of the position. He recommended the use of water power from the river Exe near the sewage farm, below the confluence with the river Lowman, using initially two 100-hp turbines driving two 60-kW alternators for a high-voltage ac distribution. Later expansion of demand could be met either by the use of gas engines or by a pumped-storage system with a reservoir 400 ft. above the station. Siddalls described the latter system as a hydraulic accumulator and it is noteworthy that the proposal ante-dated the Lynmouth pumped-storage system, although it is, of course, possible that the latter had been talked about before 1893, even though my first record of it is in 1894. The initial water-powered system, in spite of interest and depreciation on about 33 per cent higher capital cost, was estimated to cost only three-quarters as much to operate as a corresponding steam-powered system.

The Council seemed to consider the proposal too ambitious and let the scheme go into abeyance. In 1894 they were considering whether they could

acquire the gasworks and run a joint gas and electricity undertaking. By 1899 they were considering an electricity scheme of about half the size of the 1893 proposal, with low-voltage dc distribution. By 1900 they were back to the water-powered scheme and were seeking sanction for a weir. In November 1901, a new site at Washfield Mills, about two miles from the town, was being considered. Expert after expert was consulted. By November 1902 the Council went back to the idea of a site by the gasworks, using gas engines, and also to the idea of getting a company to take over their latest Provisional Order. By 1903 or 1904 it was clear that the idea of water power had been finally abandoned, seemingly due to difficulties raised by the Fisheries Department of the Board of Trade. But the Board of Trade did not approve the company proposal either, as it did not think it gave enough protection to the ratepayers.

In spite of all this consideration and negotiation, Tiverton failed to get a public electricity supply until the mid-1920s!

SOURCES OF INFORMATION

About 100 separate reports, articles, communications, etc., have been used in the preparation of this article and it is not worthwhile to cite them all individually. The main sources are the contemporary technical journals, **The Electrician**, **The Electrical Engineer** and **Engineering**, and E. Garcke's **Manual of Electrical Undertakings**, published annually from 1896. Local newspapers have also been used. Particularly valuable items have been the following :-

J. Hellier, 'The pioneers who gave Devon the lead in hydroelectric power', **Western Morning News**, 18th February 1967, p.10.

J.H. Fooks Bale, 'The Electric Lighting of Lynton and Lynmouth', **Electrical Engineer**, 23 (1899) pp.430-3.

'A Pioneer Pumped-Storage Scheme', **Water Power**, 7 (1955) p.76.

Helen Harris, **Industrial Archaeology of Dartmoor** (Newton Abbot, 1968) pp.119-20 (concerning Chagford).

The national background of early hydroelectricity is set out in: D.G. Tucker, 'Hydroelectricity for public supply in Britain 1881-1894', **Industrial Archaeology Review**, 1 (1977) pp.126-63.

I have also had the benefit of information supplied privately in correspondence by the following :- Dr. R.L. Taverner (re Okehampton), and Mr. T. Brookhouse and Dr. R. Ferrer (re Lynmouth). I am very grateful to all three for the very considerable help they have given me.

Finally, I must add that my search for information has not been exhaustive and that there is still plenty of scope for local historians to fill in the details (and gaps) in my story!



Plate A Present-day view of the weir on the East Okement River which formerly provided the head for the Okehampton hydroelectric station. (Photo by D.G. Tucker)



Fig. 1 The hydroelectric station at Lynmouth in 1899. (From **Electrical Engineer**, 23, 1899)

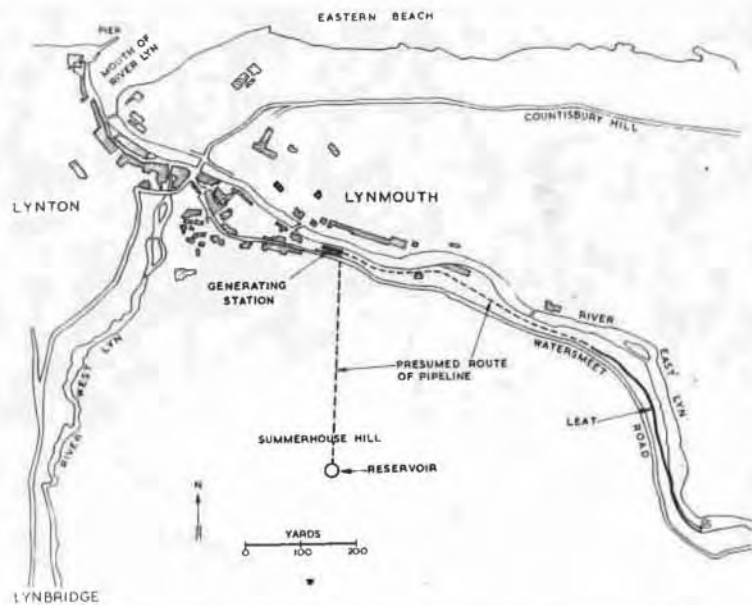


Fig. 2 Map of the hydraulic arrangements at Lynmouth.

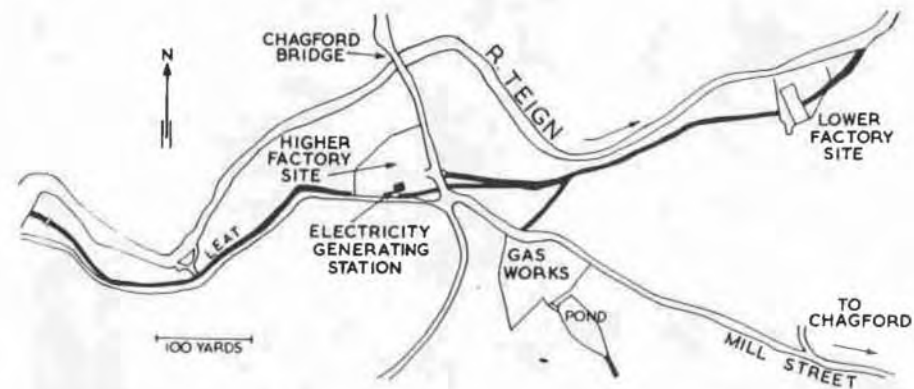


Fig. 4 Map of the leat and generating station at Chagford.

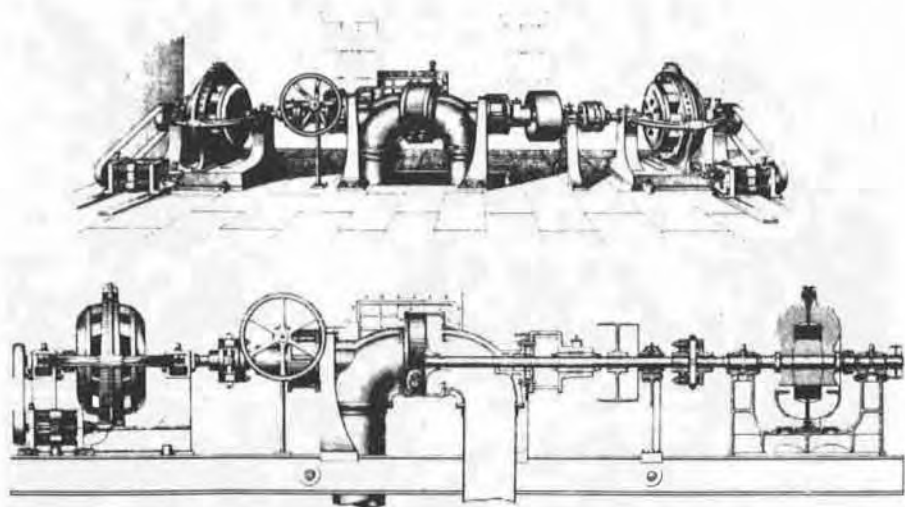


Fig. 3 General view and diagram of the equipment at Lynmouth when first opened in 1890. (From Proc.Inst.Civil Engrs., 102, 1890)

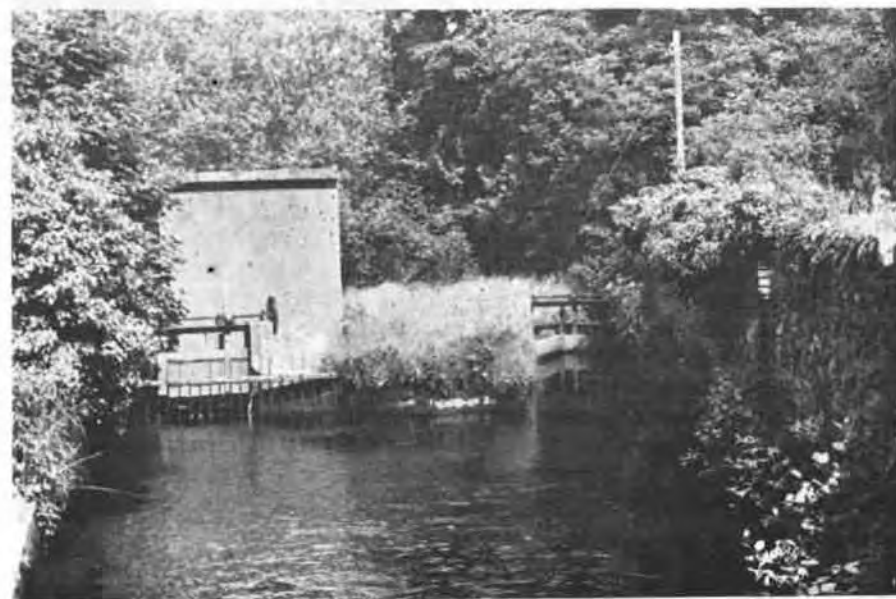


Plate B Present-day view from upstream of the hydroelectric station at Chagford. (Photo by D.G. Tucker)



Plate C The present equipment of the Chagford station: the turbine is below the floor and directly coupled to the flywheel; the generator (26 kW, 420 volt, 3-phase, made by the Electric Construction Co.) is driven by belts from the flywheel. (Photo by D.G. Tucker)

THE TIVERTON MUSEUM

W.P. Authers

Tiverton Museum, which this year attained an award in the national "Museum of the Year" competition, began modestly and almost casually in 1960. Having, as a newish town councillor, rashly undertaken to make an inventory of an accumulation of articles in the lumber-room of the Town Hall, the writer threw out the suggestion that a town of such historic association might sustain a local museum. This found immediate practical support from another councillor, Mr. V.J. Broomfield, who loaned two rooms in which to make a start. The acorn thus planted made rapid and consistent growth and we find ourselves today administering one of the largest and most comprehensive local museums in the West country.

That is not to say that the going was easy. Building up steadily meant that we soon outgrew not only the first two rooms but our second home, the 17th century Chilcott School in St. Peter Street. Then finally in 1969 we acquired the 19th century National Schools in St. Andrew Street. In three planned phases, these buildings have been converted into a museum complex which has to house and to display suitable exhibits ranging from tiny flints to bulky waggons and agricultural implements.

To make the original 1844 school premises structurally sound was the first task. When people congratulate us on having a building of historic and architectural interest which is itself a museum piece, we recall ruefully the trouble and expense such buildings involve. For instance, the floor of our large Agricultural Hall is of concrete because it was necessary to remove and burn every piece of wood to eradicate the various infestations of dry-rot, wet-rot, furniture-beetle and other well-established unwelcome guests. Equally unwelcome was the problem of condensation. This bane of all museums necessitated expensive heating bills for several years to ensure the walls were thoroughly dried out. The problem is a continuing one.

The first phase was the conversion of the rooms on the periphery of the block — two large, lofty halls linked by two classrooms. Next, the headmaster's quarters, two rooms upstairs and two downstairs, were gutted to make two more useful galleries, for loan exhibitions and costume respectively.

The third and final stage was to build a two-storey annexe and a separate Waggon Gallery. The latter was designed by Mr. A.A. Cumming, Director of the Area Museum Council of the South West and Mr. Geraint Jenkins of the National Folk Museum of Wales, a leading authority on the English Waggon. Mr. Broomfield, as our Honorary Surveyor, worked on their basic ideas to provide an attractive and very functional building.

Thus the completed complex now comprises eleven galleries, a lobby, three courtyards (all in use) and there is the G.W.R. locomotive, the "Tivvy Bumper" on a separate site in Blundell's Road. The layout embodies the following sections:

The Amory Gallery: a large hall dealing with various aspects of the life and history of the district, from fossils millions of years old to a miscellany of Victoriana and a large collection of old photographs.

The Exhibition Gallery: in continuous use for loan exhibitions from the Area Museum Council, the Science Museum and local societies and schools, it has become a focal point. A change every few weeks brings variety and vitality.

The Costume Gallery: recently extended.

The Britton Gallery: devoted mainly to mechanical devices such as clocks, sewing-machines, typewriters, gramophones, wireless-sets, cameras and musical instruments.

The Dicken Gallery: with its domestic utensils and appliances, appropriately introduces a farmhouse atmosphere for it leads into —

The Agricultural Hall: almost a mini-museum in itself with a comprehensive collection of implements and tools, including some rarities.

The Lobby: houses the Chanter-Lethbridge Collection of model soldiers portraying the regiments of Devon from 1685 to 1955 — a colourful encapsulation of the county's military history. Dioramas alongside re-enact the epic stands of the Devons at Waggon Hill in the Boer War and at Bois des Buttes in the First World War. How Tiverton's V.C., Private Thomas Sage, earned his award is similarly shown in three-dimensional detail.

The Wartime History Room: with wartime relics of the last 200 years brought up-to-date with a fine model of the aircraft-carrier H.M.S. Hermes supported by current charts and photographs to keep the town in touch with its adopted ship.

The Small Natural History Room: introduces the wildlife of the district and inevitably in this hunting country the red deer, fox and otter are featured. Curiosities include a squirrel's drey made of paper tissues and a wren's nest built inside a wasp's nest.

The Victorian Laundry Collection: has been widened to embrace washing appliances from the massive box-mangle to the earliest washing machines.

The Industrial Gallery: is a large section covering in some depth the history of the restored Grand Western Canal and the development of the principal local industries. The diversity surprises many people and the section is of obvious importance to students of all age-groups. Each subject has been researched to provide a concise chronological summary.

Across the Rear Courtyard with its towering 16 ft. overshot waterwheel, which was restored by volunteers, is the **Waggon Gallery** housing an exceptional cross-section of the waggons and carts made and used in the region over the last 200 years. The original makers and the subsequent usages of the vehicles having been ascertained, the captions give insight into the social history of the region. One is apt to forget that before the advent of the ubiquitous motor-car, farm waggons were of necessity a means of transport on such communal occasions as Sunday School outings.



The Amory Hall



The Costume Gallery

The collection includes such contrasting items as a parish bier, the rare three-wheeled "Bampton Butt", a governess-car or "jingle", two splendid and rare Devon "Ship" Waggon and another which for a wager was driven from Netherex to Exeter, fully loaded, pulled by three horses in tandem but with no reins, the driver depending on his skill and words of command. The feat is not likely to be repeated.

Our next major project is to re-erect a 200 year old smithy from Silverton.

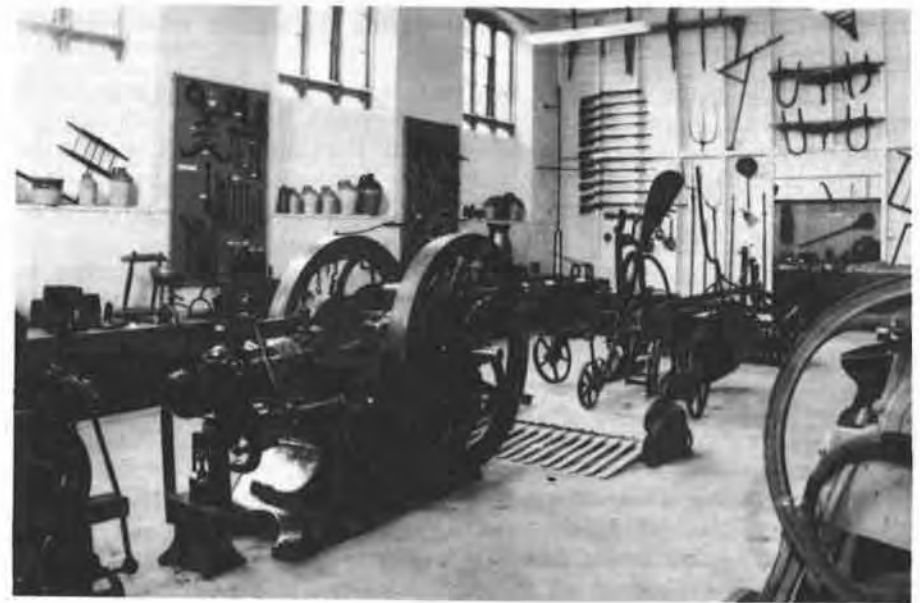
Although finance has been a continuing problem, we have so far avoided making an admittance charge. Crucial has been the generous monetary support and encouragement of our President, Viscount Amory. Our only endowment is £5,000 given by his brother, the late Sir John Heathcoat-Amory, to provide a useful regular income. Grants have been received from the Area Museum Council, the Devon County Council, Tiverton District Council and the Heathcoat Trust to supplement the donations and subscriptions from the public. A major factor in maintaining viability is the voluntary work enthusiastically undertaken by some of the committee members and other helpers. Continuing financial stringency makes the do-it-yourself principle unavoidable.

Sufficiently comprehensive to reflect practically every facet of the history and life of the region, the exhibits naturally place an emphasis on the rural and agricultural but balance is maintained by the industrial section. It is difficult to pinpoint the unusual but perhaps the biography section condensing many years' research on local celebrities is an example as is the copious collection of 19th century ephemera. Official notices, documents, posters, correspondence and reports offer a rich field of original sources for the historian. This wide selection of hoarded history is conveniently displayed to permit casual browse or serious study. In effect it is a massive scrap-book containing a wealth of information. The highlight of these finds, a Cromwell Charter, has special protection.

Throughout the museum an attempt is made to provide interpretive texts that are not only concise, accurate and informative but interesting. Examples are the chronological accounts of the industrial developments; the regimental history of Devon; the vicissitudes of the Grand Western Canal; the local water supply; the melancholy Tiverton tradition of devastating fires and the evolution of sewing-machines and typewriters.

In the seventeen arduous years since the museum opened, two basic points of policy have emerged: to concentrate on exhibits of local provenance or relevance and to accept outright gifts rather than loans. Purchases are ruled out as resources barely keep pace with the expense of running a museum of this size and scope. Because likewise the employment of salaried staff cannot be contemplated, we have every reason to be grateful to the generosity which has provided exhibits, money and personal service to enable such a rich and varied collection to be gathered and cared for.

High importance is attached to the service we can render to the schools of Devon and further afield and the hope is that many a budding Devon historian will gain help and inspiration. To open every weekday morning and afternoon throughout the year and to maintain free admission is perhaps unusual these



The Agricultural Hall



The Waggon Gallery

days. It should encourage school visits during the months when traffic is reasonable.

An official guide, published this year, is a help to teachers and others organising visits. Another publication is "Tiverton's Industrial Archaeology" which was produced jointly by the Museum and the University of Exeter on the initiative of Professor Walter Minchinton. The horological section has provided a basis for a definitive work on "The Clocks and Clockmakers of Tiverton" which is being published this autumn.

Being an independent institution has advantages and disadvantages. In various ways the museum aims to make a worthwhile contribution to the study of Devon history. Already it is larger than people expect to find and we do not contemplate further physical expansion. The task ahead is to conserve and enrich the collection and to ensure that the fullest use is made of the considerable resources which collective effort, with much voluntary involvement, has gathered.

NOTE

Devon Tollhouses

Mrs. Ison in her review of this book in D.H. No. 14 p.31 pointed out that the numbering on the larger map was incorrect. This faulty map was printed in the first few copies only and a new map correct in all details appears in the later numbers.

Jeffrey Porter

The inter-war years are a neglected period in Devon's history and the intention of this bibliographical essay is to provide an indication of some of the printed sources available to those interested in the labour history of Devon in the hope that these might provide an encouragement to advance Devon history into the more recent period. Such a list is inevitably selective and if readers consider important items have been omitted the author will be grateful for information which might be included in a future revision.

(The place of publication is London unless otherwise stated.)

General histories of Devon usually contain small scattered items for our period, for instance William G. Hoskins', **Devon** (1964), as do community studies which may be exemplified by Ernest W. Martin's **The Shearers and the Shorn** (1965) and books of photographs like Walter E. Minchinton's **Devon at Work** (Newton Abbot, 1974). Newspapers are a major source for the Devon labour historians and Lorna Smith, **Devon newspapers — a finding list** (Exeter, 1973) deals with their location, Kelly's **Directories of Devonshire** for 1923, 1926, 1930-31, 1935 and 1939 also provide commercial information for the period. The files of the **Ministry of Labour Gazette** for the years 1919-39 provide information on working conditions, unemployment and disputes for the country as a whole and for the county when the Ministry judge it appropriate.

The Devon labour market is influenced on the supply side by changes in population and the location of that population is in part determined by the changes in the agricultural and industrial structure. That structure in its turn influences the state of industrial relations in the county. The principal source on population is the **Census of England Wales** for 1921 and 1931 and specifically the volumes for the **County of Devon**. John Saville in his **Rural depopulation in England and Wales 1851-1951** (1957) has worked on the 1931 census and inter-war years population trends are discussed by the Survey Committee of the University College of the South West, Exeter, in **Devon and Cornwall: a preliminary survey** (Exeter, 1947). The health of that population is considered by the Annual Reports of the Medical Officers of Health and by Mary Griffiths', 'A case study in medical geography, Wonford Ward Exeter' in Kenneth J. Gregory and William Ravenhill's **Exeter Essays in Geography** (Exeter, 1971) and 'The association between mortality in Exeter from the seventeenth century to the present' in Walter E. Minchinton's **Population and Marketing**, Exeter papers in economic history No. 11 (Exeter, 1976). The ultimate student of population is death and in 1937 Plymouth was the only Devon authority to send a representative to the **Sixth Joint Conference of Cemetery and Crematorium Authorities held at Torquay 1937, Report of Proceedings** (1937).

The inter-war farming population and farm work in 1939 is studied by L. Dudley Stamp in 'Devonshire' Part 92 of the **Report of the land utilisation survey of Britain** (1941) and by the Survey Committee in **Devon and Cornwall: a preliminary survey** (which also gives catches of fish landed in Devon 1932-38)

and by Saville in **Rural Depopulation**; J.R. Currie and W.H. Long in **An agricultural survey in south Devon** (Newton Abbot, 1929) look at farm labour on 205 Devon farms. Henry W.B. Luxton's article 'Agriculture' in Frank Barlow's **Exeter and its Region** (Exeter, 1969) and Michael Havinden and Freda Wilkinson's article 'Farming' in Crispin Gill's **Dartmoor: a new study** (Newton Abbot, 1964) are also useful. Illustrations of the tools farm workers used may be found in J. Kenneth Major's **Guide to Finch Brothers Foundry Sticklepath** (Newton Abbot, 1974). The effect of new industry on Lapford and Dartington is examined by F.G. Thomas in **The changing village** (1939) and the disruptive effect of hunting by Ernest W. Martin in **The case against hunting** (1959). Co-operative activities in Devon's agricultural sector are listed by the Horace Plunkett Foundation in **Agricultural Co-operation in England** (1936).

Various studies of the industrial development of the region may be used to provide background to the industrial relations of the period but on the whole they do not deal with working conditions or do so only in a perfunctory manner. Michael P. Fogarty in **Prospects for the industrial areas of Great Britain** (1945) details the industrial structure as does the Survey Committee in **Devon and Cornwall** which also deals specifically with china and ball clay. The clay industry is also the subject of the Devon and Courtenay Clay Company's book **Devon clay and the part it plays in making commercial pottery** (Newton Abbot, 1927) and in L.T.C. Rolt's **The Potters field** (Newton Abbot, 1974). Saville in **Rural Depopulation** has a section on those in papermaking and W. Gore Allen in **John Heathcoat and his heritage** (1958) has a little on working conditions in the inter-war years. J.A.R. Stevenson in **The din of a smithy** (1932) writes of current practice in smithy work at Whimble. Unemployment was a marked feature of the period and William H. Beveridge in **Full employment in a free society** (1944) gives unemployment figures for Devon, Tiverton and Bideford for the years 1934-37.

Industrial relations in transport were of importance to the Devon economy both in terms of direct employment and the tourist trade. O.S. Nock, in the **History of the Great Western Railway, volume 3 1923-47** (1967) looks at the question from a company point of view and Philip S. Bagwell in **The Railwaymen** (1963) from the union viewpoint and has references to Plymouth and Exeter. Michael Ewans 'Railways' in Crispin Gill's **Dartmoor**, also has some information on this period. Conditions in road transport may be drawn from Alan Bullock's **The life and times of Ernest Bevin, volume 1 trade union leader 1881-1940** (1960) and Trevor Evans', **Bevin** (1946); while the latter treats Bevin as a saint he does deal with his early life at Coplestone. Conditions for crews in maritime transport are given by W.J. Slade in **Out of Appledore** (1959 Ed by Basil Greenhill.) The most noteworthy dispute to affect Devon was the General Strike of 1926. Information on Devon may be found in the **British Worker**, 6-17 May 1926 and **British Gazette**, 5-13 May 1926. The Great Western Railway in **The General Strike May 1926** (1926), shows the impact on the company and **Doige's Annual**, 1927 has an illustration of strikers marching to St. Andrew's church in Plymouth. The work of the Plymouth, Exeter and Newton Abbot trades councils is dealt with by Emile Burns, in **The general**

strike May 1926: trades councils in action (1926, reprinted 1975) and Harry B. Williams, **History of Plymouth and district trades council 1892-1952** (Plymouth, 1952). **Hansard** gives the reaction of local MPs to the dispute and Christopher Sykes in **Nancy: the life of Lady Astor** (1972) reveals one Member's inadequate response.

At the opposite pole from conflict is co-operation. There are two histories of local retailing societies, **Torquay Co-operative Society 1890-1950** (Torquay, 1950) and Robert Briscoe's **Centenary history. A hundred years of co-operation in Plymouth** (Manchester, 1960) while Percy Redfern's **The new history of the C.W.S.** (1938) contains some material relating to C.W.S. depots in Devon.

The inter-war years saw increased intervention in economic and social life by local government. Exeter City Council's **Reports and Minutes** and those for Plymouth and Devon County Council contain much on the activities of these authorities. Education in Devon is also surveyed by Roger R. Sellman, in **All in school, one hundred years of education in Devon** (Exeter, 1970) and at the embryo university in 1927 by Harold Perkin, in **Key profession, the history of the A.U.T.** (1969) and by Hector Hetherington in **The university college at Exeter 1920-25** (Exeter, 1963).

Housing authorities and critics were much exercised in the 1930s by slums and overcrowding. Political and Economic Planning in **Housing England** (1934) looks briefly at Barnstaple. Of greater importance are the Ministry of Health's **Report on the overcrowding survey in England and Wales** (1936) and **Rural Housing** (1944) which provide county figures. Harry W. Richardson and Derek H. Aldcroft's **Building in the British economy between the wars** (1968) look at slum clearance in Plymouth and Exeter council housing is recorded by E.H. Johns in 'The growth of Exeter from 1840 to the present day' in **Barlow's Exeter and its region**.

Finally, an unregistered occupation — crime. **Watch Committee Minutes** have quarter sessions crime statistics and Adrian R. Poole's 'Aspects of crime in Exeter 1900-65' in **Barlow's, Exeter and its region** has details of crime in 1938. Dartmoor prison and the mutiny there in 1932 have attracted attention and three books provide us with examples of the life of the inmates and of the warders: Justin Atholl's, **Prison on the Moor** (1953); Baden P.H. Ball's, **Prison was my Parish** (1956); and A.J. Rhodes', **Dartmoor Prison** (1933).

THE DROUGHT IN THE SOUTH WEST by Frank Booker and James Mildren. Department of Economic History, University of Exeter and Exeter Archaeological Group, 1977. pp.115. £1.50. ISBN 0 95017789X.

Drought in the South West makes thirsty reading but it is certainly not a dry book. Its 115 pages tells rather a remarkable tale, the style is racy and there is a strong story line almost worthy of a Greek tragedian. Although the book is about the great 1976 drought, it is also the epic of the rise and fall of the S.W. Water Authority chairman, George Gawthorne. Like any work which reflects the real world, there is a strong element of ambiguity — was George Gawthorne a victim of the sport of the gods, or did he fall through his own fault? Was he hero or villain? You have to read the book and decide for yourself.

The authors draw heavily on newspaper files and the work is largely a day by day record of how the drought progressed and of how Devon's citizens reacted under stress. The reaction was not edifying. It is a story of how powerful interest groups, like farmers and hoteliers, scrambled for exemption at the expense of poor householders; how volunteers failed to come forward to help with emergency services but were eager to fill halls at protest meetings; how car owners refused to stop washing their cars; indeed the authors comment on the complete lack of the spirit of 1940.

The tendency of Devonians to blame the water officials personally for the drought went beyond any rational criticism of their policies and came to resemble some primitive people lynching the tribal rainmaker who had failed to whistle up the clouds. Indeed the protesters eventually obtained Mr. Gawthorne's head and it has never stopped raining since.

This book is also about reservoirs. As north Devon suffered from water shortages and Plymouth was threatened with them, the watermen designed two reservoirs on Dartmoor. Meldon was built and Swincombe was not — yet it was north Devon, served by Meldon, which went onto stand-pipes and Plymouth, which still awaited a reservoir, which did not. Did the drought reinforce the case for a new reservoir in Devon? Those who read the book carefully cannot mistake the note of doubt in the author's own minds about the answer to this question.

As they point out, Plymouth has a higher water consumption than the rest of Britain — a lot higher. Whereas the average Englishman consumes 38 gallons a day, the Plymouthian consumes 55 gallons. The question naturally arises, why should not Plymouth's water problems be solved by cutting consumption — as in fact was done during the drought. Indeed this question can be asked about other areas, for it is likely that at least a quarter of all water consumed is water wasted.

Here I can add a revealing foot-note to the book. Sometime before the drought I had occasion to meet Mr. Slocombe privately to discuss Devon's water problems. "Are you taking measures to economise on water use in the South West?" I asked. "Who? Us?" was Mr. Slocombe's reply. He was genuinely surprised that the water authority should be expected to try to promote economy in water use. Its job was simply to provide all the water which the people of the South West chose to waste — and no questions asked.

Yet when economies in the use of water became a crying necessity at the height of the drought, the Water Authority had no effective means of achieving it. It had to appeal, largely in vain, to a public which for years had cheerfully installed in its homes every variety of water wasting appliance, and to industry which had never bothered to recycle water and had no incentive to do so.

The breakdown in relations between Water Authority and water user is another unmistakable refrain of this work. There was no body which could call the SWWA to account; no procedure for dealing with complaints; or for testing ideas; or for stating the preferences of various sectors of the water using public. Take the Daymond case — would it have ever occurred had water rates been reviewed periodically by a Consultative Council, as are electricity rates? Would the public have welcomed the opportunity to control their own water expenditure through metering? Would meters not have enabled the Water Authority to have rationed water earlier and in a fairer manner? Would they not have made it easier to pay for the drought in an equitable manner? We shall never know because there is no consumer council for the water industry.

This book charts clearly a failure in the political process — a failure to win public support, a failure to examine all the options. These failures are common enough in public life but they are seldom exposed in such a ruthless manner by the whims of the gods and are seldom chronicled in such detail and with such penetration.

M. Newitt

NOTES ON NEW CONTRIBUTORS

W.P. Authers, M.B.E. is a Honorary Alderman of Tiverton and Curator of the Tiverton Museum.

William Reader is a writer of Business Histories.

Jeffrey Stanyer is Senior Lecturer in Politics at the University of Exeter and the author of a number of books on Local Government in Britain.

D.G. Tucker is Emeritus Professor of Engineering at Birmingham University.

DEVON UNION LIST. A collection of written material relating to the County of Devon. Gathered and arranged by Allan Brockett. Exeter. The University Library, 1977. pp.571. ISBN 0 902746 06 5.

This book is invaluable. It is a list of all written material available in book or pamphlet form relating in some way to the County of Devon that can be found in one at least of the main libraries of the County, that is, Exeter City Library, Exeter Cathedral Library, Plymouth Central Library and Torquay Central Library.

Begun as an idea of Professor Minchinton's in 1969 the list was complete by 1973 and now appears in book form. It lists some 8,321 books on every aspect of the County of Devon and, as well, books by Devonshire authors that do not relate to the County specifically. Each book in the list is numbered for reference and its whereabouts in one or other of the libraries is indicated by a symbol. The entries are arranged alphabetically according to author or title. The index however lists, as well, editors, co-authors, people written about, places and subjects such as, for instance, geology, mining, agriculture, hospitals, lace, and includes under those headings all works on the subject. So it is, for the first time, possible by using this list to find out the name of any book written about a place in Devon or a Devonshire character, or about any subject in its Devonshire aspect provided that the book is in one or other of the libraries. This is of enormous value to scholars and others and it is unlikely that many printed books on Devon have escaped Mr. Brockett's net though, of course, there must be some.

Mr. Brockett says quite clearly that this is not a learned bibliography but it is the next best thing. It fills a long-felt gap and from it a good county bibliography could be compiled. At some future date it would be valuable to have a list of articles in learned journals that relate to Devon but this would be another and a very considerable task and it is not attempted here. There is, of course, already an index to the Devonshire Association Transactions.

Although this is only claimed as a list it is surprisingly stimulating. What for instance is the 'Rhythmical History of Exeter' by F. Burrington, or 'This Creeping Evil' by 'Sea Lion'? The great number of contemporary pamphlets relating to the Civil War in the County are noteworthy as in another sense are the two hundred and seventeen books written by Eden Philpotts and in yet another the great output of sermons by the Devonshire clergy or the startling 'The Merciful Assizes', or a panegyric on the late Lord Jeffreys hanging so many in the West', printed in 1701.

Mr. Brockett and his assistants, in particular Mr. Paley and Mr. Hunt have, compiled this list in their spare time. It is a considerable achievement and scholars and others interested in Devon will remain gratefully indebted to them. It is to be hoped that occasional supplements to the list can be issued.

R.G.F.S.

DOORWAY TO DEVON, Devon C.C., 120pp., £1

This is another publication in same series as **Devon Town Trails**, available from the County Library. It consists of sections by different authors locally known for expertise in their own fields, on Geography (plus historical developments), National Parks, History, Archaeology (plus historical comments), and Buildings large and vernacular (with historical background), followed by notes on outstanding museums and an appendix listing various categories of 'what to look for and where to go'.

The production is handsome, the illustrations plentiful and good, and the text for the most part full and informative. But a lack of overall editing is apparent, particularly where other sections overlap with the historical. We find for instance two different dates for Dartmouth Castle and for the establishment of Devonport Dockyard; one writer tells us that Domesday Exeter was 'truly urban', and another that it was distinguished only by burgage tenure like the village 'boroughs' of the 14th century; and the 5th-6th century migration to Brittany is said to be a result of the Saxon invasion of the South-Western Peninsula (which is correctly dated to the 7th). Much historical information is needlessly repeated in different sections; and more careful proof-reading would have eliminated spelling errors and some rather slipshod statements such as 'water power ...includes several canals'.

However, the purpose of this publication is to inform residents and visitors of the 'what to look for' resources of the County, and to provide a succinct factual background to assist their appreciation and understanding of what they see. As such, it should serve its purpose well; and its defects, if at times irritating, do not seriously detract from its value.

R.R.S.

CONFERENCES

The AGM of the Standing Conference took place at the University on the 14th May. The main speaker was Dr. Alan Rogers of the University of Nottingham. There was also a 'Brains Trust' on Devon History in the afternoon.

The Autumn Conference will take place at Crediton on 5th November.

The Spring Conference will take place at Newton Abbot on 15th February.

This is a revised and enlarged edition of Mrs. Bidgood's compilation on Morteheo and Woollacombe, bringing recent developments up to date and also including further material on earlier times. The main basis is local lore and memory, and 19th-20th century printed sources, but it is good to see that more has now been made of the original parish records for an earlier period. The same useful map appears, and the number of illustrations has been increased from 14 to 22.

Mrs. Bidgood has worked long and diligently to assemble her material, which constitutes in the main a very full account of events and changes in the last 150 years. It is hard to fault her on matters of fact, though one may doubt the ascription of pre-1832 franchise to 'potboilers' in Morteheo, and the involvement of Henry IV in the 1411 Battle of Harlaw (which was an internal Scottish conflict between Celts and Lowlanders).

For anyone who lives in, or knows, this area, this can be warmly recommended for its wealth of interesting 'bygones' and information on local people, places and activities.

R.R.S.

THE SAILING PILOTS OF THE BRISTOL CHANNEL by Peter J. Stuckey. Newton Abbot; David & Charles, 1977, 158 pp. illus. £4.95. ISBN 0 7153 7373 0.

Linking together the researches of Graham Farr into the history of the Bristol Channel pilots, recollections of Captain George Buck, a Pill pilot early in this century, reminiscences of Captain William Barlett of his apprenticeship to a Newport pilot and an account of the experiences of Lewis Alexander, a Barry pilot in the late nineteenth and early twentieth centuries, the author has produced a useful account of the sailing pilots in the Bristol Channel. His own interest is in the pilot cutters themselves. He supplements his own knowledge of these boats — fore-and-aft rigged craft, 40-50 ft. long, 10-11 ft. beam and 7-10 ft. draught, sturdily built and painted black — with the detailed study by J.F. Coates of the Swansea Bay cutters, whose rig differed considerably from that of the boats from other ports. For the Devon reader, the interest of this book is that for many years in the days of sail it was regular practice for the pilots based on Pill near the mouth of the Bristol Avon to pilot vessels from Bristol down the Bristol Channel to the neighbourhood of Lundy where they would be dropped off. Using Ilfracombe as their outport, they would then wait for vessels to pilot up the Bristol Channel. In the middle of the nineteenth century the search for vessels became extremely competitive and pilots would sometimes range off the southern coast of Ireland and from fifty miles south-west of Lands End to Start Point in the English Channel. Successive steps from 1880 restricted the area of operation of the pilots and brought about a system of co-operative working which greatly reduced the number of boats needed. Today a few survive as yachts or house-boats and two have been preserved.

Celia King

Dorothy Bowhay

Four hundred years ago this year, Francis Drake set out upon the epic voyage which led to his becoming the first Englishman to circumnavigate the globe.

This occasion is being celebrated in Plymouth as "Drake 400" and a number of celebrations have already taken place.

One of these was an Elizabethan Pageant by a local writer, performed in full period costume, with appropriate speeches and music, on the historic Barbican, at the actual spot from which Drake sailed.

Other events have been a concert consisting of music connected with the sea, and the production of a musical at Buckland Abbey, which Drake bought and lived in.

Another very interesting happening took place on August 5th when Her Majesty the Queen, on her Jubilee Tour of the Westcountry, was received by the Lord Mayor of Plymouth, who, after introducing various local notables and officials, presented Mr. Robert Power, President of the Californian Historical Society, a Californian business man who owns many priceless relics connected with Drake, which he personally brought over from America for Plymouth's "Drake 400" exhibition.

These were on show at the Civic Centre on the day of the Queen's visit, and were inspected with considerable interest by Her Majesty.

After the Royal Visit was over, the valuable objects lent by Mr. Power, together with others from various parts of the country, were transferred to the City Museum, where the exhibition was officially opened by Mr. Alfred Newman, Secretary of the Californian Sir Francis Drake Commission.

Among the items from Mr. Power's private collection were books of navigation possibly consulted by Drake himself upon his famous voyage.

Also from his collection were a number of other books about the life of Drake some written by 17th century authors and others of a later date. These are of interest to Mr. Power because of his wish to discover precisely why, and where, Drake stayed during his landing in California. The actual logs from this part of the voyage have been lost and historians have to use later accounts.

An item of enormous interest, on loan from the Middle Temple, London, was one of the largest and heaviest pieces in the exhibition. It was a table actually made from the timber of the Golden Hind. Also on show was Drake's sea chest used on his voyage of circumnavigation, and lent to Plymouth from Berkeley Castle.

Some exhibits have also come from the Naval Shore Establishment H.M.S. Drake. Drake's sword was on show, and one of his own curiosities, a coconut cup. This is mounted in silver, and engraved with the Royal Coat of Arms as well as those of Drake.

There was also Drake's cup, preserved in Plymouth's own Civic collection. It is of silver gilt with a global motif. This is a prize exhibit, and was given to Drake by Queen Elizabeth soon after his return in the Golden Hind.

Perhaps the most famous object of all Drake's Drum, usually housed and carefully guarded at Buckland Abbey, was on display for the Queen, but was then returned to its glass case there, a replica being on show at the exhibition.

This was a remarkable collection of objects, perhaps insufficiently publicised elsewhere, unlikely to be brought together again for perhaps another century.

Editors Note

This exhibition closed on September 11th. This number of The Devon Historian appears far too late for proper publicity for it. The editor would be glad to receive and publicise notices of any exhibitions or functions of interest to readers of this journal.

Devon Record Office,
Castle Street,
EXETER.

30th May, 1977.

The Editor,
The Devon Historian.

Dear Sir,

Devon Record Office

I refer to the note on the above on page 46 of Volume 14 of **The Devon Historian**. I also regret that financial stringency has caused a further reorganisation of the Devon Record Office, not least because the 'area' arrangement established in April 1974 offered the prospect of providing accommodation for properly equipped branch offices in North and South Devon. It is hoped that this scheme can be implemented when the economic climate improves. Meanwhile, however, I think the inconvenience to the public using the archives in Exeter will not be as considerable as the writer of the note envisages. I estimate that the 30% stored in Castle Street will account for 95% of the usage of the records by local historians and genealogists. During the past ten years a great deal of work has been done on modern records and although these have been subjected to systematic weeding their bulk remains considerable. Therefore other Council departments are likely to be inconvenienced because the modern records are at Marsh Barton but not, I feel, the local historian. Parish registers and other parish documents, Bishops' transcripts, tithe maps and apportionments, land tax assessments, Devon Quarter Sessions records, most of the Diocesan records, all the Hospital records, school log books, admission registers, etc. and Devon Voters' lists up to 1900 are now housed in Castle Street as are the major private deposits (Bedford, Sidmouth, Courtenay, Mallock, Chichester, Iddesleigh, etc.). The Exeter City Archives listed in the Historical Manuscripts Commission's report have also remained in the same building. Nor has any searcher failed to find a seat so far and the new map room/overflow search room is not yet fully in use. The same could not always be said of the Public Record Office.

Mrs. M.M. Rowe

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Gandy Street,
EXETER,
EX4 3QN.
Tel. 77911 Ext. 424
31st July, 1977.

The Editor,
The Devon Historian.

Dear Sir,

The Plymouth Athenaeum

Admittedly Mr. Young in your May 1977 edition was merely seeking to outline the history of the Plymouth Athenaeum/Institution, but I feel that in the pre-1941 section he was rather too ready to take the traditional view of events and to suggest that the history of the Institution was one of smooth and untroubled advance. I would like to comment on five areas.

1. The dates of the earliest meetings

An history of the Institution was a favourite topic for Presidential addresses. Thus, although the broad picture of the formation of the Institution is clear, there is some disagreement on detail. Mr. Young seems to follow Mrs. (Dr.) Wilson's paper, which in turn appears to draw on Henry Woolcombe's Journals as recorded and edited by Mr. J. Stevens. Thus he notes 4th October 1812 as the date of the meeting at which the idea was floated.

Mr. Stevens' extract from Woolcombe does indeed give 'Tuesday, 4th October 1812' for this event, but 4th October was a Sunday. Both J.B. Rowe (TPI 1868/9) and W.H.K. Wright (TPI 1898) quote a 'small book' given to J.N. Bennett by Dr. Cookworthy, one of the original Presidents, in which this meeting is attributed to Saturday, 3rd October. This day and date are correct and it seems more likely that the meeting did take place on that day rather than on the Sabbath. This view is perhaps supported by the fact that neither of the two subsequent significant meetings is on a Sunday: the meeting to draw up the Winter programme on Monday, 12th October and the formation of the Institution itself on Saturday, 17th. Both dates are from Woolcombe's diary, though only the second is given its day of the week.

There is a similar discrepancy over the date of the first meeting. In Stevens' transcript of Woolcombe's Journals, the date is given as 22nd October, but in an extract from the diary itself the phrase used is 'Thursday sennight' in an entry for Saturday, 17th October; that is Stevens has extrapolated the actual date. J.B. Rowe gives the complete list of lectures for the first session, apparently from Dr. Cookworthy's book. Ten of them are on Thursdays but the first is shown against 21st October (= Wednesday) and the fourth against 14th December (= Monday). This suggests that Dr. Cookworthy kept the more accurate list whereas Mr. Woolcombe relied on his memory of the usual lecture day or possibly what was originally intended to be the date of the first lecture.

Mr. Young states that the first lectures were given in Mr. Woolcombe's house. Woolcombe's journal notes that the first lecture was given in Mr. Ogg's house (Mr. Ogg was the speaker) and that the remaining lectures in 1812 were given in members' houses. Wright, doubtless quoting Cookworthy's book, says that the first four lectures were held in the houses of Messrs. Ogg and Woolcombe. J.B. Rowe's list shows five lectures in 1812 given by Ogg, Fox, Woolcombe and Adams (2). Thus meetings at the houses of Ogg and Woolcombe are feasible, but meetings at the home of the speaker seem equally likely. Everyone seems agreed that when Dr. Cookworthy spoke in January 1813, it was in the Public Dispensary.

2. Early Literary and Philosophical Societies

Mr. Young follows Mrs. (Dr.) Wilson very closely in describing the early development of these societies in London and the North of England. What seems slightly odd is that neither of them refers to the Dock (Devonport) Literary and Philosophical Society which was formed in July 1808, antedating the Plymouth Institution by four years, and apparently one of the earliest in the country. It survived until 1821. Perhaps even more odd is the absence of any reference to this society in Woolcombe's Journals as they are reported by Mr. Stevens. Woolcombe does not record the establishment of either the Plymouth or the Devonport Mechanics Institutes either and this may suggest an explanation. Despite the Dock Society's title, the majority of its members re-appear as earnest supporters of the Devonport Mechanics Institute. Woolcombe may well not have considered any of these people or these bodies equal in academic status to the Plymouth Institution and therefore not worthy of mention. Although Woolcombe himself does not appear to have been a social snob, this attitude does occasion the first split in the Institution.

3. The Select Society: the Devon and Cornwall Natural History Society

The first crisis occurred within two years of the establishment of the Plymouth Institution. George Harvey, a mathematician of considerable ability, who was later elected to the Royal Societies of both London and Edinburgh, was proposed for membership. There could have been no doubts about his intellectual quality, but he was of humble origin and was therefore opposed by some members. Although Harvey did not become a member, the feelings generated by the dispute led the anti-Harvey group to resign from the Institution and to form their own Select Society. This lasted for two years when the rift was healed and they returned to the fold.

The second split was of a very different kind. Mr. Young merely noted the amalgamation of the Devon and Cornwall NHS and the Plymouth Institution in 1857. This glosses over the fact that the Society was a substantial rival of the Institution during most of its twenty years existence. By 1838 the Institution was concerning itself primarily with literary topics. The Society was formed to accommodate those people whose interests were scientific. It seems likely that the Society attracted members from the Institution and a larger total number. Gradually the stupidity of maintaining two separate bodies with effectively the same aims and a substantial number of common meetings was borne home on

both bodies. Thus the union was more in the nature of a merger. The Society had 88 members to the Institution's 75; the Society's name was added to the title of the Institution and the Society's President, Colonel Smith became Honorary President of the combined body, an entirely new office.

4. Lady Members

Mr. Young, following Mr. Stevens, probably under-estimates the involvement of ladies in the Institution. The Dock L. and P. Society had admitted ladies on equal terms with gentlemen; all three Mechanics Institutes did the same, while the Devon and Cornwall NHS admitted them to 'suitable lectures'. Thus when the Society and the Institution merged, it was likely that there would be some change. There was, but it was small: ladies were admitted to a conversation for the first time at Christmas 1856, but it was not until 1873/4 that the first (7) Lady Associates were admitted. They were closely followed by the first lady member in 1876/7. The number of Lady Associates reached a peak of 25 in 1882/3, that is rather more than 1 in 10 of normal membership. It is true that full membership did not attract the ladies to the same degree and the highest number in any one year was never more than three up to the First World War and the same is true of Associate membership as opposed to Lady Associate membership. Presumably the lecturing requirement in the first case and the higher subscription in the second were not generally acceptable.

5. Merger with Plymouth Mechanics Institute

Mr. Young notes the increase in the number of Lady Associates and the opening of the Lending Library but does not give the reason for these events. The merger with the Mechanics Institute was agreed only after long negotiation and the eventual agreement was probably more favourable to the Institution than circumstances warranted. It seems likely that common membership helped once again and that faced with the choice of which body to preserve, a majority supported the Institution. By the agreement the Institute transferred investments to the Institution to be used for the building of a Library and Reading room and for paying the difference between the Institute's and the Institution's subscription for the 168 Institute members who joined the Institution. As a result the number of Lady Associates increased from 8 to 97. Since the Institution was not in a very flourishing state at this time, the influx of members and money and the elimination of some form of rival was most beneficial for it.

Yours faithfully,

C.A. Lewis

Felstead,
Bowden Hill,
ASHBURTON,
TQ13 7EA.

6th July, 1977.

The Editor,
The Devon Historian.

Dear Sir,

Toll Houses

The loss of Devon Tollhouses, referred to in Mrs. I.C.W. Ison's review of "Devon Tollhouses" in the May issue of "The Devon Historian" and her suggestion that 'Perhaps we could follow Shropshire's example and regard them as worthy of care and preservation' brings to mind the demolition of the Tollhouse which stood at Dart Bridge.

When the dual carriageway was about to be constructed and it was discovered that this tollhouse would be demolished, the Ashburton & District Amenity Society asked the Department of the Environment if it could be bypassed and thus left for all to see. It was also suggested that if it was absolutely impossible to avoid it, it might be re-erected on a nearby site. The Department replied in due course that it had given careful consideration to the request and to the suggestion but had decided that it was impracticable to construct the new road system round the tollhouse and that the cost of removing it to another site would be prohibitive. At about that time another Devon tollhouse disappeared, with less good reason in my view, that at True Street on the Paignton-Totnes road.

It might be helpful to others concerned with the preservation of tollhouses to know who met the cost of removing that tollhouse to the Ironbridge Gorge Museum, and how the money was raised. Presumably it was the responsibility of the Museum Trustees.

Yours faithfully,

L.E. Smith

The sudden death of Miss Hilda Walker on Friday, 17th June, has deprived Devon, and Torbay in particular, of one of its leading exponents of local history. Her championing of archaeological and historical causes over many years had won Miss Walker the respect and affection of a wide circle of friends.

Hilda Walker graduated in History from Leeds University in 1921. She subsequently taught at Westhill and Audley Park Boys School in Torquay. For many years she had been active in the affairs of the Torquay Branch of the Historical Association, the Torquay Natural History Society, the Devon Archaeological Society and the Devonshire Association. Her published works include histories of the last three of these organisations, that of the Devonshire Association being the subject of the Centenary Lecture delivered at its A.G.M. in Exeter in 1962. The story of the Torquay Natural History Society, published in 1969, marked the first hundred and twenty-five years of the Society.

Miss Walker's services to the Historical Association began with the organisation of Field Meetings, under the leadership of the late Mr. A.C. Ellis, and culminated with her Presidency of the Branch in the late fifties. While President, Miss Walker sought to identify the branch with the Borough of Torquay to the extent that it came to be regarded locally as the 'Torquay Historical Association' rather than as a branch of a national body. During this period the branch was honoured by a visit from the national President, the late Professor R.F. Treharne of University College, Aberystwith.

Miss Walker served as Editor and Vice-President of the Torquay Natural History Society, and in 1972 was elected an Honorary Vice-President for life. Much of her research on the history of Torre Abbey and related subjects was published in the Society's annual journal. Undoubtedly her work on Torre Abbey and its outlying manors represents a substantial contribution to our knowledge of the history of Torquay.

At one time Miss Walker was a member of the Council of the Devonshire Association, and represented the D.A. on the Court of Exeter University. Her contributions to the Association's Transactions include a notable article on Bishop Walter de Stapeldon, Bishop of Exeter and High Treasurer to the ill-fated Edward 11 (1961), and shared authorship of others on Father John MacEnery (1964) and James Lyon Widger (1967), both of whom played a significant part in local cave studies at Kents Cavern and Torbryan respectively.

From 1971 to 1973 Miss Walker was President of the Devon Archaeological Society. The History of Kingskerwell was the subject of her Presidential address. A review conference on the future of archaeology in Devon was held under her Presidency. In 1973, on her retirement from office, Miss Walker presented the Archaeological Society with an insignia to be worn by future presidents.

Having published work on the medieval demesne boundaries in Torquay (1965), Miss Walker was currently engaged on an investigation of knights' fees with reference to the nine Domesday manors recognised as lying totally, or in part, within the bounds of the borough.

At the time of her death Miss Walker had been nominated for election to a Fellowship of the Society of Antiquaries of London, an honour which she had undoubtedly earned and which she would have greatly appreciated.

J.B.

Editors Note.

Miss Walker was an early member of the Standing Conference for Devon History and spoke on the 'History of Kingskerwell' at the meeting held in Torquay in November, 1972.

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EXETER UNIVERSITY PUBLICATIONS

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Leofric of Exeter: four essays to commemorate the foundation of Exeter Cathedral Library in AD 1072, £1.00.

Exeter Essays in Geography edited by K.J. Gregory and W.L.D. Ravenhill, £4.00.

Exeter and its Region edited by Frank Barlow, 1969, £5.00.

The Maritime History of Devon by M. Oppenheim, 1968, £2.50.

Tuckers Hall Exeter by Joyce Youings, 1968, £3.00.

The Ports of the Exe Estuary, 1660—1860 by E.A.G. Clark, 1968, £2.50.

Industry, Trade and People in Exeter, 1688—1800 by W.G. Hoskins, 1968, £2.50.

Exeter Houses, 1400—1700 by D. Portman, 1966, £3.00.

Nonconformity in Exeter, 1650—1875 by Allan Brockett, 1962, £2.30.

Benjamin Donn's Map of Devon: 1765, 1965, £6.00.

The Franciscans and Dominicans of Exeter by A.G. Little and R.C. Easterling, 1927, 50p.

The South West and the Land edited by M.A. Havinden and Celia M. King, 1969, 75p.

Industry and Society in the South West edited by Roger Burt, 1970, £1.00.

Ports and Shipping in the South West edited by H.E.S. Fisher, 1971, £1.50.

Farming and Transport in the South West edited by W.E. Minchinton, 1972, £1.00.

Provincial Labour History edited by J.H. Porter, 1972, £1.00.

Henry de Bracton 1268—1968 by Samuel E. Thorne, 1970, 50p.

The Expansion of Exeter at the close of the Middle Ages by E.M. Carus-Wilson, 1963, 50p.

John Norden's Manuscript Maps of Cornwall and its Nine Hundreds with an introduction by William Ravenhill, mounted in book form £10, in a wallet £8. Individual maps £1.50 each.

Henry Francis Lyte: Brixham's Poet and Priest by B.G. Skinner, 1974, £3.00.

Transport and Shipowning in the West Country edited by H.E.S. Fisher and W.E. Minchinton, 1973, £1.00.

Husbandry and Marketing in the South West 1500—1800 edited by M.A. Havinden, 1973, £1.00.

Roman Exeter — Excavations in the War-Damaged Areas, by Aileen Fox, 1952, £2.00.

Some Disputes Between the City and the Cathedral Authorities of Exeter by Muriel E. Curtis, 1932, £1.10.

Exeter Papers in Economic History — No. 9 Population and Marketing. Two Studies in the History of the South West edited by W.E. Minchinton (forthcoming).

Exeter Papers in Economic History — No. 10 Education and Labour in the South West edited by J.H. Porter, 1976, £1.20.

Education in the West of England, 1066—1548 by N.I. Orme, 1976, £7.50.

Early Tudor Exeter: The Founders of the County of the City, by Joyce Youings, 1974, 30p.

Available from:

The Registry, University of Exeter, The Queen's Drive, Exeter, EX4 4QJ.

*Published by The Standing Conference for Devon History
Printed by Torbay Borough Council*