THE DEVELOPMENT OF THE FRUIT INDUSTRY IN KENT 1680 - 1914, WITH PARTICULAR REFERENCE TO THE MID-KENT AREA

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PREFACE

The thesis examines the development of the fruit (principally apples) industry from 1680-1914. The experience of Kent, and particularly mid-Kent is put into the context of national developments. The cultivation of fruit was well established in the eighteenth century, around London and in the south-west. In mid-Kent it was cultivated on mixed farms specifically for the London markets.

Fruit growing expanded rapidly in the first thrity years of the nineteenth century. In mid-Kent there were emerging some specialist producers with considerable acreages. The Peel Estates provide an example of fruit production at farm level, on a unit that had a considerable hop acreage. Fruit was a crop that required large amounts of labour and labourers in fruit areas could rely on steady employment. The principal market for Kent fruit remained London, though some found its way North. After 1830 the prices of apples fell as orchards planted earlier came into bearing. Against this background of low prices the government reduced import duties to a nominal level, and despite organisation the growers failed to get the old duty reinstated.

In the second half of the nineteenth century there was a phenomenal increase in the fruit acreage, particularly soft fruit. The cultivation of fruit was widely argued as an antidote to agricultural depression. In Kent the cultivation of fruit expanded in traditional areas and there developed an extensive soft fruit industry in north-west Kent. A greater degree of specialisation was apparent on fruit farms with the abandonment of cereals, livestock and hops. The expansion of the jam industry provided an outlet for much low grade soft fruit. Though London was the major market for Kent growers more fruit was being sent to the northern industrial towns. Ultimately the expansion in production rested on rising real incomes. The contribution of the railways in transporting fruit was becoming a bottleneck on further expansion by 1900.

C O N T E N T S

INTRODUCTION

The development of Kent's fruit industry dates from the 1530's and was well established, in a limited sense, in the seventeenth century. It was primarily concerned with supplying the London market, with cherries and apples, and to a lesser extent pears. In the nineteenth century, however, with improved transport facilities the range of fruit produced widened to include soft fruit and more distant markets were sought.

The fruit industry is examined in its national context, and the experience of Kent is put into this broader perspective. Within Kent the changes in the fruit industry are examined with particular reference to the mid-Kent area, around Maidstone. Fruit was also cultivated in north-west Kent, north Kent and around Sandwich. At the end of the seventeenth century fruit growing in this area was part of a mixed farming economy. The cultivation of small parcels of orchard was undertaken by numerous farmers who also grew hops and cereals, and kept livestock. The fruit cultivated was mainly apples for the fresh fruit market, though some cider was produced.

From the late eighteenth century to the 1830's there was a considerable expansion of apple production for the London market, and while some cider continued to be made it was generally of poor quality and unsaleable. Cultivation continued to be within a mixed farming economy and there was no clear emergence of specialist fruit producers.

At the end of the nineteenth century the fruit acreage expanded at a phenomenal rate and major changes are discernible in the production of fruit. The orchard acreage increased but of greater

importance was the growth of soft fruit production. This took place particularly near London where there were new fruit growing enterprizes concentrating on strawberries and raspberries, but also in mid-Kent there were significant changes. In mid-Kent there was an increase in the traditional orchard acreage and also the development of soft fruit cultivation. The area remained one of mixed farming, but there emerged a number of growers who specialised in fruit production.

While London continued to be the main market for Kent fruit, fruit was also sent to the northernindustrial towns, and increasingly growers were sending it directly to these markets. The major marketing development of the late nineteenth century was the establishment of a jam industry. It was this that made possible the expansion of soft fruit, as jam factories provided a market for low quality fruit that would have glutted the fresh fruit market.

In the two hundred years from 1700 the cultivation of fruit developed from a minor aspect of mixed farming to being an important and specialised branch of agriculture.

SECTION ONE

THE EARLY DEVELOPMENT OF FRUIT CULTIVATION c.1680 - 1800

CHAPTER I

Fruit Growing at the End of the Eighteenth Century

The County Reports to the Board of Agriculture make it possible to place Kent's fruit industry in the national context of commercial fruit production, and see, to some degree, the markets served by the different counties. The early Reports, of 1793 and 1794, the printed manuscripts,are very weak on this aspect of agriculture, but the later Reports with their standardized format have a chapter on Garden and Orchards. Even when this brings out the response that there were no orchards, the chapter occasionally indicates the source from where the county obtained its supplies of fruit.

In the late eighteenth and early nineteenth centuries, there were two major areas of commercial fruit production, the counties around London, and those in the west of England; though there was fruit grown in some northern counties, for particular urban markets. In the west the most important fruit counties were Herefordshire, Gloucestershire and Worcestershire, while there were orchards also in Somerset, Devon, Dorset and Wiltshire.

In these western and south western counties the apple and pear orchards were mainly for the production of cider and perry.

> The cultivation of fruit trees, for the sole purpose of liquor, is peculiar to the western provinces. The southern counties, when the London markets are overstocked with fruit make a sort of liquor from the surplus : but the eastern, the northern and the midland counties may be said to be as much aquainted with

the business of the liquor orchard, as they are with that of a vineyard. 1

Herefordshire had the reputation of the premier producer of these cider counties. J. Duncumb, in his General View of the Agriculture of Hereford, provides a brief history of the fruit industry, tracing the introduction of orchards back to the sixteenth century and the revival that followed Harris's planting of fruit trees in Kent in the 1530's. The pre-eminence of Herefordshire he dates, however, from the reign of Charles I and the exertions of Lord Scudamore of Hom Lacey, and other gentlemen. There was then a period of decline and the decay of old and valuable trees, which was reversed in the last quarter of the eighteenth century. "Their renovation, or the introduction of others equally good, cannot be too strongly urged, and the public spirit of the present age has not been indifferent on the occasion; more endeavours have perhaps been directed towards this object within the last twenty years, than during a century preceding." 2 In Worcestershire, William Pitt wrote, "orchards have been long and successfully cultivated in this county, particularly in the middle, south, and western parts; where they are to be found, in the neighbourhood of towns, villages, and farm houses; and the various kinds of fruit trees are often dispersed over the county in hedgerows; and form one of the productive articles of a farm." 3

1. William Marshall, The Rural Economy of Gloucestershire, Volume II, (Gloucester, 1789), 239.
2. J. Duncumb, General View of the Agriculture of the County of Hereford, (1805), 79.
3. William Pitt, General View of the Agriculture of the County of Worcester, (David & Charles, Newton Abbot, Devon 1969) (1813) 148.

In the late eighteenth century there was much concern expressed at the management of orchards, or the lack of it, and the physical state of many orchards. William Marshall, W. T. Pomeroy, the author of the 1794 edition of the General View of the Agriculture of Worcester, and William Pitt, author of the 1813 edition, all list the many faults and bad practices in the orchards. The famous established stocks, on which the reputation of fruit growers rested, were losing their productivity and many of the orchards were old. They contained a mixture of varieties of apples and pears, the trees were crowded together, with much redundant and decayed wood and mistletoe. This, together with branches over-run with moss, prevented the air circulating and the sunlight reaching the lower branches. The fruit produced as a result was small. Marshall was very scathing of this lack of management.

> If we view the common practice of the district throughout, we may safely conclude, that, after the trees are out of danger of being thrown down by cattle, no attention whatever is paid to them, other than that of collecting the fruit when they happen to "hit".
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> Waterboughs are seen dangling, as bell-ropes, perhaps to the ground : while the upper-part of their heads are loaded with wood; as impervious to the sun and air as the heads of pollarded oaks, or neglected gooseberry bushes with, perhaps, an additional burden of mistletoe and moss to bear.
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> Indolence and false economy are, no doubt, the principles, on which this slovenly conduct is pursued. The improvident occupiers of those neglected orchards, unmindful of the damage they annually sustain by the encumbrance of the trees, refuse to

bestow a little leisure time, or lay out a few shillings, to render them more productive. 4

In Herefordshire Marshall saw several orchards entirely subdued by "vegetable vermin", 5 some trees had only one bough remaining alive, while others were entirely dead. The mistletoe he recommended to be used for livestock fodder, while as for the moss, "in Kent, there are men who make a business of cleaning orchard trees; being paid so much a tree, or so much for the orchard, according to the state of foulness." 6

The bad practices in orchard management were not, however, universal. "There are orchards, in every quarter of the district, which appear to have some little attention paid to them; and some few, which are in a degree of keeping, equal to the Kentish orchards". 7 Marshall held up Kent's practice as an example of how orchards should be managed, praising Kent's superiority in this area of husbandry. He made the very pertinent remark, though, that Kent's orchards were concentrating on fresh fruit production for the market, and they were managed in the same manner as garden fruit, rather than as a farm crop. 8

Marshall and Pitt, the latter drawing extensively on Mr. Pomeroy's earlier report on the agriculture of Worcestershire, have a lot to say on the improvements in management that were taking place in the late eighteenth century. The benefits of the better management they argued would accrue to the individual farmers and to the nation. Pitt noted the lack of attention that had been paid to the variety of fruit that had been grown, with all the varieties planted promiscuously. This led to considerable inconvenience in

4. Marshall, op.cit., (1789), 288-289.
5. Ibid., 292.
6. Ibid., 292.
7. Ibid., 289.
8. William Marshall, The Rural Economy of the Southern Counties, Volume I, (1798).

gathering and sorting fruit, if this needed to be done to any extent.

> A just idea of the importance of this neglect may be formed, by comparing the great difference in the price the better and the inferior sorts bear, and will no doubt have due influence with the planter of the present day. Indifference in this point, would be more unpardonable, as it is not for future ages alone he plants; he often lives to share abundantly the cheering offspring of his labours. 9

If due attention was paid to planting the same variety in a particular plantation, the farmer could market more easily a standard quality of fruit. The plantation could be gathered as a unit, and in sorting attention would have to be paid only to quality and not to distinguishing varieties. This advice was given to English fruit growers with increasing emphasis throughout the nineteenth century, when their marketed fruit was compared to the standardised quality and variety of imported fruit.

What would give the farmer a higher return, could also be of benefit to the nation.

> As the extension of orchards and the improvement of fruit, and the liquor obtained from it, seem objects of considerable national importance, more especially, if the quality of the liquor could be so improved, as to supersede, in some degree, the importation of foreign wines, and its quantity so increased as to lessen the immense breadth of land sown with barley ... 10

Pitt,.

9. Worcester, 168.
10. Ibid., 171.

J. Duncumb in The General View of the Agriculture of the County of Hereford, was also arguing that extending the orchards would have these beneficial effects. The quantity of hops needed would be less, more wheat could be grown and less land used to produce malting barley.

Improved management was to start with better stocks, "respecting the wearing out of the old sorts, I believe it is irremediable, and what must of necessity naturally occur to all vegetables not raised from seed, in a long course of time." 11 In the eighteenth century, it would appear, that stocks had been propagated by grafting though not always using the best available grafts and not on scientific lines; trees had also been grown from the kernel but without due regard to ancestry. Pitt stressed the need to return to sexual reproduction, arguing, rightly, that plants reproduced vegatively could not be improved. He argued that the way to preserve and improve was to grow healthy trees from seed, though he went on to say that a superior stock or variety could then be continued by grafting. Pitt did not seem to take into account that raising trees from seed could lead to inferior stock, though he admitted the converse, that it could lead to superior. He implied that all trees raised from seed would be healthy and as of high a quality as the existing stock. The improvement in stocks was an imponderable. There were, however, improvements in grafting techniques:

> An improved practice in grafting has been lately introduced, and deserves to be more generally adopted. Instead of taking off the entire head of the stock, it is left on till the boughs are large enough to receive the grafts. 12

11. Pitt, Worcester, 175.
12. Ibid., 164.

Stocks had been grafted by cutting off the head and grafting into saw cuts. This could lead to the splitting of the stock, allowing water to enter and leading ultimately to decay. It was also noted that where saw grafting was practised the circumference of the tree was larger above the graft than below it. If the new practice was followed and grafting undertaken on the boughs of the stock, there was less danger of spilling and the useful life of the stock was increased. Grafting was an important technique as fine quality fruit, from a stock that was not hardy, could be grafted onto the native crab stock. It also meant that the effective life of an orchard could be extended. Marshall mentioned an orchard in the Vale of Gloucester, where all the trees had been re-grafted. This considerably reduced the time in which the trees would come into profitable bearing.

Once established trees needed pruning. This had often been neglected to the extent that dead boughs were allowed to remain, apart from the advantages of removing crossing boughs to allow in more light and a better circulation of air, the heads of the trees needed to be kept within bounds to reduce the amount of bearing wood and ensure fair-sized fruit, that would be marketable.

Marshall advocated a change in the method of cultivating orchards; he noted the current practice in two counties :

> in Herefordshire, the soil of orchards is generally kept under tillage;-in Gloucestershire, in grass. Not,however, I apprehend so much in pursuance of different principles in the managing of orchards; as from the circumstances of Herefordshire being an arable, Gloucestershire a grassland county. 13

13. Marshall, op.cit., (1789), 285.

Both practices had their problems, tilling was andvantageous to young orchards, while livestock could damage young trees and eat the fruit on the boughs. In mature orchards, that were under a system of tillage, the trees tended to over shadow the crops, rain dripped on them and air could not circulate to dry them. If mature orchards were laid to grass, livestock would do no damage except in the cropping season. An amalgamation of both systems, Marshall considered, would be advantageous to the cultivation of orchards. In the Broomyard district of Herefordshire, and in Worcestershire, Marshall and Pitt observed the practice of planting orchards in hop grounds. The young fruit trees did little damage to the hops, while the manuring and cultivation of the hops was beneficial to the trees. The ground was exhausted for hop cultivation before the fruit trees started to interfere with their growth and the grounds could be returned to common cultivation or, as Marshall suggested, put down to pasture. 14 The practices concerning the cultivation of fruit trees were to a great extent based on local tradition; however, they were also affected by practical and economic considerations. During the nineteenth century these practices changed considerably, and in the twentieth century they underwent further modification.

The fruit growing of Gloucestershire, Herefordshire, and Worcestershire was primarily for the production of liquor, both cider and perry. The details of the manufacture, from gathering to milling and pressing was examined by the authors in considerable detail, with suggestions for improvement. Many farmers produced only sufficient for the needs of their households, though this was condemned as being enough to create a permanently fuddled workforce.

14. Marshall, op.cit., (1789) 288, Pitt, Worcester, 167.

It was also suggested that an extension of orchards, to produce liquor, would release land from barley cultivation for malting, though Marshall held that beer was better for the labour than cider.

> Give a Kentishman a pint of ale, and it seems to invigorate his whole frame; he falls to his work again, with redoubled spirit. But give a Devonshireman as much, or twice as much cider, and it appears to unbrace and relax,rather than to give cheerfulness and energy to his exertions. 15

Though most farmers had orchards, the markets for cider were supplied by the larger growers who had plantations of 30 or 40 acres.

The apples for the cider mills were gathered into heaps on the ground, in the open, being left to the weather to mellow. If they had not been ground before the first frosts they were covered with straw for protection, though in some areas this precaution was not taken. In some instances the fruit was sold on the trees to manufacturers; or the cider could be sold after a particular production process, straight from the press, after the first racking, in casks for marketing, or rarely in bottles.

In the first instance the liquor was sold to dealers, mainly in Upton and Ledbury,who then supplied the distant markets. Hereford, Gloucester, and Worcester had their dealers in liquor, 'cidermen',and Bristol, and even London, were sending buyers into the country to purchase cider direct from the manufacturers. London was the principal market for fruit liquor, though it was supplied to all the major towns in Britain and Ireland. A small proportion was exported to the East and West Indies, from London and Bristol. 16

15. William Marshall, The Rural Economy of the West of England, Volume I, (1796), 234-235.

16. Marshall, op.cit., (1789), 300-381.

Prices fluctuated considerably, "fruit is an article of uncertain or casual production, some years producing little, or nothing, more than a supply for the table". 17 In 1786, which accord-ing to Marshall was a scarce year for apples, dealers were paying 5 guineas a hogshead, of 110 gallons, for common cider, while the usual price was 25 shillings to 2 guineas. 18 Mature bottled cider sold at 1s. Od. a bottle and was unaffected by fluctuations in the price of ordinary cider. In a plentiful year when fruit was rotting on the ground, or being eaten by hogs because of an insuffi-cient supply of casks to hold the liquor, cider was sold in Worcester at 1 guinea a hogshead, while in the inns it remained at 1 shilling a bottle. 19

The writers on the agriculture of these three fruit growing counties tend to emphasise the importance of liquor, as Marshall said the cultivation of trees was for that sole purpose. Marshall concentrating his attention on Herefordshire and Gloucestershire has nothing specifically on the sale of dessert or culinary apples or pears. He does mention cherries, however.:

In the orchards of this district, we find the APPLE, the PEAR, and the CHERRY. The last, however, is only found near towns and in young orchards. 20

He could find no evidence that the cherries were being made into liquor, and from the proximity to the towns it would seem that cherries were being grown for the fresh fruit market. There was no mention of apples and pears being produced for market, and when he wrote of the extension of inland navigations, it was for encouraging the manufacture of sale liquor that he saw as their major benefit.

17. Pitt, Worcester, 148.
18. Marshall, op.cit., (1789), 385.
19. Pitt, Worcester, 148-9.
20. Marshall, op.cit., (1789), 243.

Duncumb's Herefordshire has no mention of sale of raw fruit; however, Pitt's Worcestershire has numerous reference to this aspect of fruit marketing.

Worcestershire as well as being an important fruit-growing county had extensive garden grounds within its borders, around Worcester and in the Evesham district. Ordinary garden produce was grown together with onions, cucumbers and asparagus, to supply the neighbouring towns, Bath, Bristol and Birmingham. From Evesham the produce was sent to the Birmingham market in wheeled carts. 21

In Worcestershire, though apples and pears were manufactured into cider and perry, the fresh fruit market was first satisfied, and only the surplus used for fruit liquor. In 1805, which was not a "hit year", Pitt wrote, "of apples and pears, a slight scattering for the table, or the supply of the markets only; little or none for cyder or perry". 22 Pitt recommended that farmers should produce fruit,as well as garden produce, for the market. He quoted a "Mr. C." and drew attention to the cultivation of wall fruits of fine quality, "pears, of the best kind, peaches, apricots, nectarines, and cherries, as well as strawberries". 23 These fruits fetched high prices in the markets, but were for a small luxury trade and they required particular cultivation and attention which most farmers were not able to supply. This range of luxury fruit was generally cultivated by professional gardeners in the employ of nobility and gentry, though there was probably a small amount produced commercially near fashionable resorts. Worcestershire could be tentatively distinguished from the other orchard counties as one in which there was an emphasis on fresh fruit and garden

21. Pitt, Worcester, 147.
22. Ibid., 148.
23. Ibid., 172.

produce for the market. This was not evident for Herefordshire and Gloucestershire, as these aspects of fruit and vegetable production did not attract the attention of the agricultural writers.

In the Worcester market two or three tons of cherries were often sold on a Saturday, and on occasion six tons were sold in a morning. Large quantities were sold to fruit dealers from Birmingham, Wolverhampton, Lancashire and Yorkshire. 24 Worcestershire was well supplied with transport facilities to these northern markets. The Avon was navigable from Tewkesbury, through Pershore and Evesham, and the Worcester Canal linked up the district with Staffordshire and the north. Charles Hadfield quotes a verse that was written when the Worcester and Birmingham Canal obtained its Act in 1791.

> With permains and pippins 'twill gladden the throng
> Full loaded the boats to see floating along;
> And fruit that is fine, and good hops for our ale,
> Like Wednesbury pit-coal will always find sale. 25

The navigation offered opportunities for greater quantities of fruit to be carried to the industrial markets of the midlands. Pitt observed, "the commerce of this county is considerable, from its own fertility and various products; the convenience of its navigable rivers and canals, and its situation near a populous mining and manufacturing county". 26 The principal source of wealth of the county arose from its trade with other counties in fruit, cider, perry and hops.

24. Pitt, Worcester, 149.
25. Charles Hadfield, The Canals of the West Midlands (David,& Charles, Newton Abbot, Devon, 1966) 136.
26. Pitt, Worcester, 280.

> The former is now growing into an article of considerable consequence, and deserves particular attention, more especially as the demand for it, in the large manufacturing towns of the north, and all the intermediate county, increasing yearly, promises a certain and ample recompense for the greatest exertions that can be made in this branch of its rural economy. 27

Very considerable quantities of fruit were sent from Worcestershire : in three years (probably 1791, 1792, 1793) an average of 1,500 tons were sent to the north by water, and in 1791 over 2,094 tons had been sent. In an unspecified year it was calculated that nearly 7,000 tons of fruit were transported along the Trent and Severn. In the Worcester market the fruit sold amounted to about 1,000 pots (a pot contained 5 pecks or about 60lbs.) a week during the last five months of the year,with a smaller quantity of more valuable fruit being sold in the two preceding months. In the whole county and in the markets of Bewdley, Kidderminster and Bromsgrove, Pitt calculated that the total amount of fresh fruit sold was 58,125 pots, the value being about £11,625, averaging the value per pot at 4s. 0d. 28 Pitt for this information drew extensively on the work of his predecessor, W. J. Pomeroy, General View of the Agriculture of Worcestershire,(1794).

Though the implication is that fruit sales were becoming more important, they accounted for much less than 10 per cent of the total trade in hops, fruit, cider and perry, which was estimated to amount to £173,125, this being the produce of some 8,000 acres.

27. Pitt, Worcester, 285.
28. Ibid., 285-286.

Value of the Products of Orchards and Hop Gardens in Worcestershire c. 1805

Hops	£126,000
Fruit	11,625
Cider	30,000
Perry	5,500
	£173,125

Source: William Pitt, General View of the Agriculture of The County of Worcester, (1813),169.

Hops constituted the major item, but it is possible that the expansion of fruit growing that Pitt hints at was at the expense of hops. Young orchards in Worcestershire were being planted in hop gardens. 29 The commercial production of fresh fruit in Worcestershire was to a great extent a recent development, largely dependant on the improvement of the inland navigation system that opened up the large and expanding midland and northern markets, in particular the urban markets, where the demand was unlikely to be supplied by local domestic production.

William Pitt was also the author of The General View of the Agriculture of Staffordshire : the fruit production of this County was insufficient for its own consumption, the farms and country houses producing only for their own use. The markets of Staffordshire were being supplied from adjoining Worcestershire, though Pitt recommended that the orchard acreage should be extended and that there was suitable soil for the growth of fruit trees. Apart from a lack of knowledge of the cultivation of fruit, farmers were also concerned that an expansion would prejudice their barley crops. This presupposed that the orchard fruit would be used to manufacture liquor, rather than marketed in the raw state, which Pitt advocated. An increase in apple production would not only supply the

29. Pitt, Worcester, 167.

wealthier section of society with fruit, but Pitt thought would also benefit the poor and enable them to enjoy boiled or baked apples, being not only "a delicious and comfortable, but an wholesome and nourishing repast for children". 30

This is one of the few indications as to who were the consumers of fruit in the late eighteenth century, but the extent to which the poor were able to benefit from consuming fruit was probably incidental to their residing in a fruit growing area. There is little evidence as to who were the consumers in urban areas, though as this fruit would have had to bear transport costs it must have been the wealthier sections of society. Even in the towns, however, the poor would have been able to obtain damaged fruit.

The remaining western counties of Cornwall, Devon, Dorset and Somerset concentrated to an even greater extent on the production of apples and pears for liquor. In these counties Marshall thought that more attention needed to be paid to management of orchards. In west Devonshire the pruning of fruit trees was neglected after they had left the nursery grounds, and the trees were hung with white moss and appeared to be "hung with hoar frost". 31 Stevenson writing on orchard management in Dorset, in 1815, also noted that the trees were often entirely covered with moss, and that white washing with lime and water did not seem to be made use of as a curative. 32

Charles Vancouver writing some twenty years later on the management of orchards in Devon noted considerable improvement.

30. William Pitt, General View of the Agriculture of the County of Stafford, (Second Edition, 1813), 123.
31. Marshall, op.cit., (1796), 222.
32. William Stevenson, General View of the Agriculture of the County of Dorset, (1815), 323.

> Instances, however, are not uncommon, of great improvements being made both in the quantity of fruit and quality of cider, by removing from one third to one half of the trees planted in the ordinary way, and subjecting the remainder to annual prunings, by cutting away all the dead, barren and unprofitable branches. 33

This would indicate that there had been an improvement in the cultivation of orchards, though it might be no more than the observation of practices in different areas.

The orchards in Devonshire were noted for being small, though in aggregate they amounted to a considerable acreage. On small farms an orchard was recommended as a source of profit, but on large farms orchards could lead to a neglect of ordinary husbandry. This was a criticism levelled against Wealden farmers and their hop gardens.

Apart from local markets, and Marshall considered that West Devonshire supplied only enough cider for its own consumption, some areas in Devon, notably the South Hams, produced for a wider market. From the Kingsbridge river area, and around the River Dart, large quantities of cider were shipped to London. From the latter in the five years prior to 1813, 2,639 hogsheads were shipped annually. 34 In Somerset high quality cider was produced from the orchards at the northern base of the Mendip Hills, and in the Taunton region cider was made to the highest perfection. This liquor was sold at from £5 to £6 a hogshead, compared to 30 shillings for cider produced elsewhere. 35

33. Charles Vancouver, General View of the Agriculture of the County of Devon. (1813), 239.
34. Ibid., 398.
35. J. Billingsley, General View of the Agriculture of the County of Somerset, (Second Edition, Bath, 1798), 282.

Some fruit was produced for marketing and vegetables were grown in the vicinity of towns. In north-east Somerset "a great variety and abundance of culinary productions" were grown to supply Bristol and Bath. 36 In West Devonshire, cherries, pears and walnuts were produced in great quantities, and from the district of Beer Ferries £1,000 worth of fruit, including strawberries, was sent annually. 37

Marshall's assertion that the western counties cultivated fruit trees for the sole purpose of producing liquor needs considerable modification. Though cider and perry were important products for local consumption and for exporting to other areas of Britain, fresh fruit was becoming increasingly important. There were urban markets within the region to be supplied, Bath, Bristol, Gloucester, Worcester and Cheltenham, while the Worcestershire growers were exploiting the developing inland navigation system to supply the midland and northern markets.

In many counties not immediately associated with fruit growing there was considerable production, both by the gentry and the labourers for their private consumption. In some areas local urban markets were supplied with fruit and many towns contained orchard grounds, as did Nottingham in the mid-eighteenth century. In the northern counties of Cumberland, Northumberland, and Westmoreland little fruit was grown, and in Northumberland it was estimated that nine-tenths of the fruit consumed came from Kent, Essex and other southern counties. 38 In Westmoreland there a few profitable orchards. Further south in Yorkshire orchards were not extensive,

36. Billingsley, op.cit., (1798), 124.
37. Marshall, op.cit., (1796), 215.
38. J. Bailey & G. Culley, General View of the Agriculture of the County of Northumberland, (Third Edition, 1813), 123.

and in the orchard district of Ryedale in the North Riding were said to have diminished. However, considerable quantities were sent from the North Riding to Leeds, and from there to Lancashire. 39 In the West Riding some fruit was grown around Sherborne, notably a plum known as 'wine sour', that fetched 21 shillings a peck in good condition and 4s. 6d. when damaged. 40 In the East Riding there was no reference to commercial fruit growing, though the 'higher orders' and labourers had gardens and fruit trees. This was for their private consumption and not for profit. 41

Across the Pennines in Lancashire more attention would appear to have been given to the cultivation of fruit and vegetables. This was particularly the case in the vicinity of Manchester and Liverpool, though there was very little apple orchard except near Barton. On the Inwell at Barton, about five miles from Manchester, was the only orchard that was deemed worthy of note. This orchard of some 64 acres was of recent origin having been planted in 1784 and finished only in 1794. It was planted with apple trees, between which were pears, plums, cherries and gooseberries. The intervening trees were to be grubbed when the apple trees reached maturity. The market for the produce was Manchester, fruit being "an article much wanted, but little cultivated". 42 Vegetables were widely cultivated around Liverpool, which was said to be better provided with vegetables than any other town except London. Much of the produce was taken to provision the shipping of the port. Lancashire was famed for one fruit, the gooseberry. Flowers and gooseberries were cultivated by mechanics in the gardens attached to their cottages.

39. John Tuke, The General View of the Agriculture of the North Riding of Yorkshire, (1800), 181.
40. Robert Brown, General View of the Agriculture of the West Riding of Yorkshire, (Edinburgh, 1799), 125.
41. H. E. Strickland, General View of the Agriculture of the East Riding of Yorkshire, (York, 1812), 174.
42. John Holt, General View of the Agriculture of the County of Lancaster, (1795), 79.

This practice was encouraged by the master tradesmen and gentry who sponsered flower, vegetable and fruit shows. The cultivation of small plots of land was advocated as a means of producing a sober and industrious work force. The gardens would fill the vacant hours that might otherwise be spent drinking, while the activity in the open air was healthy. It was also hoped that the meetings would "promote a spirit which may occasionally be diverted into a more important channel". 43 The master tradesmen presumably hoped that the competition in garden produce, would lead to a competitive spirit at work and to greater productivity. The gooseberries, besides being grown for private consumption, were also marketed. In 1793 they sold for 6d. a quart as they were in short supply. Apart from locally produced fruit which could hardly have supplied the demand, apples were brought from Worcestershire and the North Riding of Yorkshire, while some were also imported from America.

John Farey's General View of the Agriculture of Derbyshire, an extensive work of three volumes, contained a large section on 'Gardens and Orchards', supplying evidence of fruit and vegetable production for private consumption and sale. The county residences of the gentry were well supplied with fruit, and boasted curious pear trees trained to cover walls. Sir Joseph Banks at Overton had a gooseberry bush, trained along a wall, 51 feet 2 inches long and six feet tall, and at Newton Solney, Abraham Hiskins had a hot house with pineapples and vines bearing in it. Among other gardens noted as being well stored and walled was that of Sir Richard Arkwright at Willersley. It was not only the gentry who had their gardens,

43. Holt, op.cit., (1795), 81.

the farmers, tradesmen and labourers also grew fruit and vegetables, except in towns and large villages. 44

For those who did not grow their own fruit and vegetables there were several market gardens around the urban areas. Production was not only for the wealthy : Samuel Oldknow kept a gardener, on three acres of land by the river Goyte, to cultivate vegetables and common fruit which were sold to his work people in the cotton mill. The cost was deducted from their wages. Similarly at Belper John Gratian had a market garden, which made use of the sewerage from the new town that arose aroundStrutt's Mills. A wide variety of vegetables were grown, potatoes, greens, carrots, peas, beans, and cucumbers. Orchards were neglected in the county, though there were a number of apple and pear orchards, and in the vicinity of Derby, Fenny Bentley and Hackenthorp cherry orchards. 45

England's largest urban market in the late eighteenth century was London, and it provided opportunities for the production of fruit and vegetables in the surrounding counties. London's population in 1801 was a little over one million, but it offered a concentration of wealth and consumption as well as of people. Within it were the court and town houses of the aristocracy, and a wealthy middle class of merchants, lawyers, bankers and government officials. These provided the stable market for fruit, which in years of glut was also consumed by the poorer classes. Middleton estimated that the inhabitants consumed about £400,000 of fruit per annum. 46

44. John Farey, General View of the Agriculture of Derbyshire, Volume II, (1815), 213.
45. Ibid., 208-209, 215.
46. John Middleton, General View of the Agriculture of Middlesex, (Second Edition, 1807), 326.

Surrey and Middlesex supplied London with a wide range of vegetables and fruit for the luxury market. In Middlesex from Kensington to Twickenham there was an expanse of fruit gardens. The method of cultivation provides an idea of the range of fruits supplied :

> First, the ground is stocked with apples, pears, cherries, plums, walnuts, &c. like a complete orchard, which they call the upper crop. It is, secondly, fully planted with raspberries, gooseberries, currants, strawberries, and all such fruit,shrubs, and herbs, as are know to sustain the shade and drip from the trees above them, with the least injury. 47

The walled gardens carried in addition crops of nectarines, peaches, apricots and plums. The gardeners in Middlesex produced choice and rare fruits for the affluent society of London although the demand for peaches, nectarines, apricots and quince would not have been extensive.

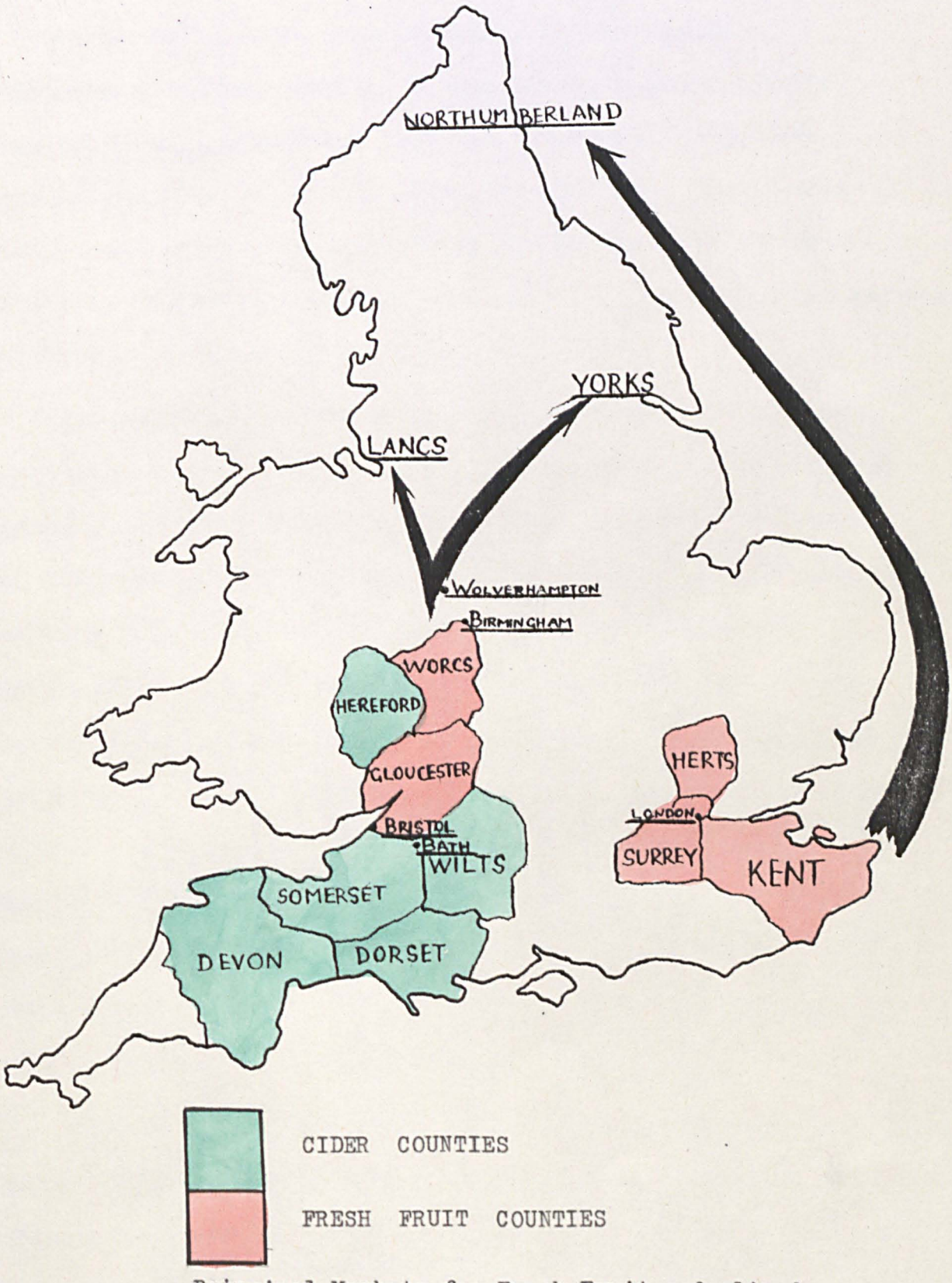
The report for Surrey is disappointing. W. Stevenson comments on the information supplied by Middleton and states that as it,

> ... relates to subjects that affect and interest the gardener and the nurseryman much more than the farmer, I have introduced merely some remarks on them. 48

Fruit growing and market gardening, though important, were not considered subjects of interest to farmers. Though fruit was probably grown in Surrey there is no reference to it, and Stevenson concentrates on vegetable cultivation. This was carried

47. Middleton , op.cit., 324.
48. W. Stevenson, General View of the Agriculture of Surrey, (1813), 414.

MAP I Fruit Growing in the Late Eighteenth Century



Principal Markets for Fresh Fruit underlined.

on in Barnes, Bermondsey, Camberwell, Lambeth, Mitcham, Mortlake, Putney, Rotherhithe and Wandsworth. 49 The apple orchards were in poor condition and principally grown for cider production for home consumption.

Apples and cherries were cultivated in Hertfordshire, particularly in Rickmansworth, Sarret, King's Langley, Abbot's Langley, Flauden, Bovington, Watford and Aldenham. They were principally grown on farms of from 20 to 50 acres, the orchards being 4 to 5 acres in extent. On the larger farms the orchards tended to be smaller. The fruit was grown for the fresh fruit market, the apples not for cider production. 50

Berkshire, although not a county specialising in fruit and vegetables, grew the latter widely for supplying local and distant markets. Around Reading onions were cultivated and asparagus was sent to Bath and London. Vegetables were grown in the vicinity of Newbury, Maidenhead, and Farringdon, and a few acres were cultivated around most towns. Apples and cherries were grown around Wantage, and were sent to Bath, Oxford, and London markets. To London the fruit was conveyed by river or in waggons. The apples were of the best domestic varieties, and were considered as more profitable than cherries, as they produced more regularly and could be stored. The cherries had to be gathered when ripe and there was not always a market for them, they were chiefly eaten as a dessert, but were also infused in brandy. 51.

A major supplier of fruit to the London market was Kent, where fruit was grown in the Maidstone area, and in North Kent from Faversham to Rainham. These areas had been supplying fruit to

49. Stevenson, op.cit., (1813), 418.
50. Arthur Young, General View of the Agriculture of the County of Hertfordshire, (1804), 143.
51. William Mavor, General View of the Agriculture of Berkshire, (1809), 299-306.

London since the late sixteenth century and its cultivation was of considerable importance to individual farmers. Before looking at fruit production in Kent at the end of the eighteenth century it is instructive to examine fruit growing in the late seventeenth and early eighteenth century within the county.

CHAPTER II

The Cultivation of Fruit in Kent c. 1680-1720

In the seventeenth and early eighteenth centuries great interest was being expressed in the expansion of fruit production as a means of improving English agriculture.

> I say, that is a great Deficiency in England that we have not more Orchards planted. Its true, that in Kent and about London, and also in Gloucestershire, Hereford and Worcester, there are many gallant Orchards, but in other countrys, they are very rare and thinne. 1

W. Blith and Samuel Hartlib writing during the Commonwealth placed considerable importance on orchards as a means of increasing rentals and land values. Blith wrote enthusiastically on the potential increases in value. The grass in an orchard was worth 30s. or 40s. an acre compared with 10s. to 13s. 4d. normally, and the fruit, in addition, could produce from £3 to £8 an acre. The trees, it was argued, benefited the grass by their shade in summer and their warmth in winter, the grass produced an early growth and a thick rich swath in dry summers. 2 In Kent the orchards were planted and the land remained in arable husbandry until the trees started to bear fruit, when the land was laid to pasture. The trees provided shade and shelter for cattle, or the orchard could be used for hogs. 3

1. Samuel Hartlib, His Legacie : or an Enlargement of the Discourse of Husbandry used in Brabant and Flanders, (Second Edition, 1652), 15.
2. Walter Blith, The English Improver Improved : or, the Survey of Husbandry Surveyed, (Fourth Edition, 1653), 265-266.
3. Hartlib, op.cit., 16.

In the south-eastern counties Blith asserted there were orchards of up to 30 acres, valued at forty or fifty pounds an acre. 4 Hartlib quoted an instance at Sittingbourne in Kent where an orchard of 30 acres of cherries was worth in one year over £1,000. 5

Mortimer drawing on these earlier writers praised the value and virtues of orchards, "there being nothing more profitable than the planting of Fruit Trees". 6 Fruit trees could be grown on any soil, while the consumption of fruit and fruit liquor, he thought, was universal. Indeed he extolled the wholesome quality of cider, as a beverage that occasioned longevity. On a practical economic level fruit growing was profitable, since the charges and expenses were small after the initial outlay. The only task was to gather the fruit, small compared with the labour involved in growing and preparing grain for marketing. 7 The implication that fruit production was widespread in particular areas of some counties, was well borne out by Celia Fiennes and Daniel Defoe.

In Kent the commercial cultivation of fruit was well established by the end of the seventeenth century, and supplied the London market with large quantities by water. Celia Fiennes as she passed from Rochester to Gravesend saw "Cherry grounds that are of several acres of ground and runs quite down to the Thames". 8 Daniel Defoe stressed the importance of the London market for Kentish cherries and apples, and the role of Maidstone in supplying the metropolis by hoy's.

4. Blith, op.cit., 266.
5. Hartlib, op.cit., 15.
6. John Mortimer, The Whole Art of Husbandry, (Second Edition 1708), 500.
7. Ibid., 500-501.
8. Celia Fiennes, The Journeys of Celia Fiennes, Edited C. Morris, (1949), 131.

> Round this town are the largest cherry orchards, and the most of them that are in any part of England; and the gross of the quantity of cherries, and the best of them which supply the whole city of London come from hence, and are therefore called Kentish cherries. 9

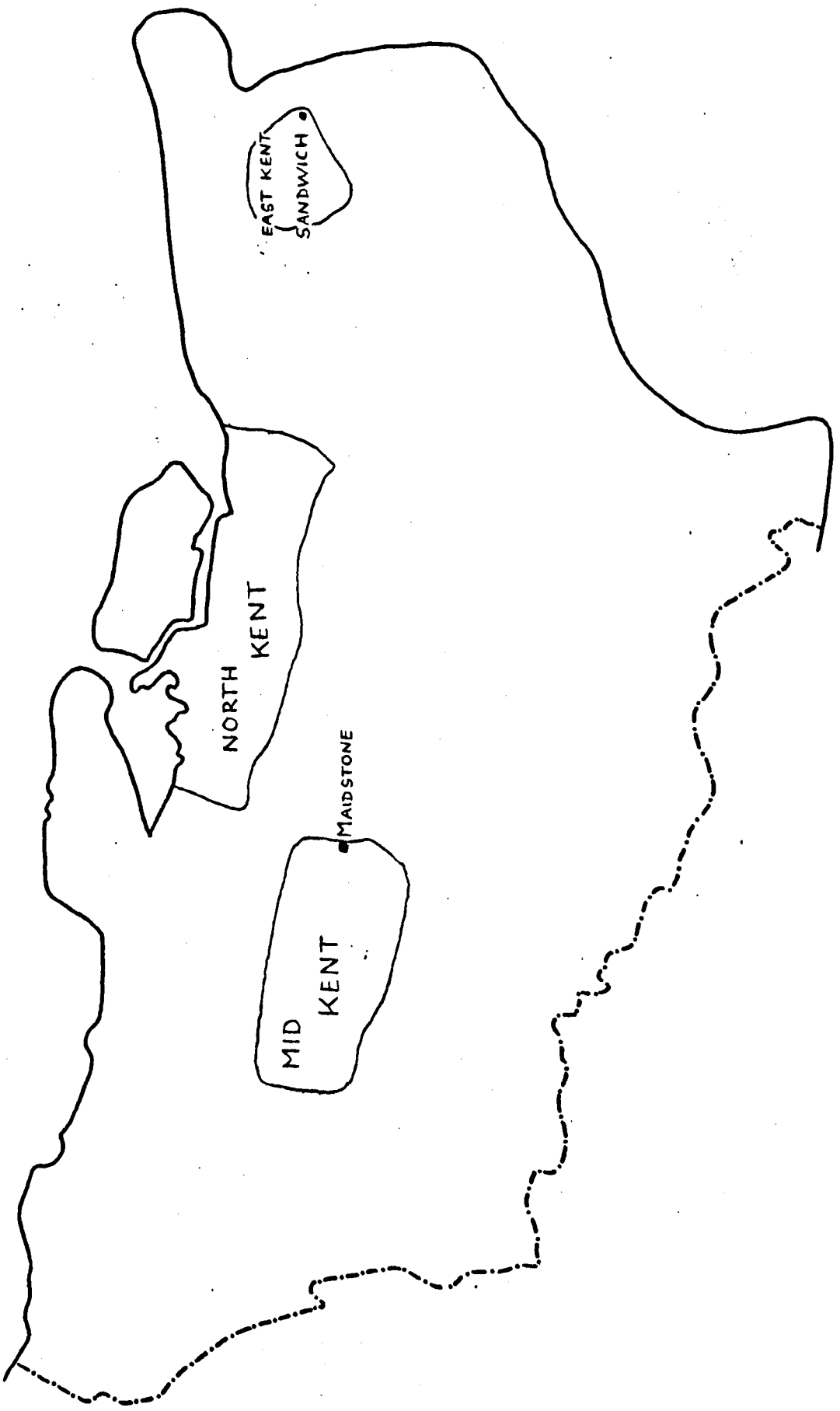
The Kentish apples, pippins and rennets, were sent to the Three Cranes Wharf at London. An agreement between Sir Edward Filmer and Mr. John Johnson for the sale of apples in 1724, specifies that the apples were to be delivered to Mr. Edmond's Quay at Maidstone, for the use of "Mr. Pollards at the Three Crains in Thames Street London". 10 Defoe said this was the largest pippin market in England, if not the world. 11 This, even if an exaggeration, emphasised the importance of the urban London market for fruit, a major factor in the subsequent development of Kent's commercial fruit production.

There was little direct evidence of fruit cultivation in the late seventeenth and early eighteenth centuries in Kent. The probate inventories are disappointing. As Miss E. Melling has pointed out.

> ... in legal theory a distinction was made between cultivated crops and such produce as grass growing for hay, hops, and fruit on fruit trees. According to Burn's Ecclesiastical Law all these, because they came from the soil "without the industry or manurance of man" were considered to be real not personal property, part of the land itself, which went direct to the heirs to the land and was not dealt with by the executors and so not included in the inventory. The friends,

9. Daniel Defoe, A Tour Through the Whole Island of Great Britain, (Republished Penguin Books 1971), 130.
10. Kent Archive Office (hereafter K.A.O.), Filmer MSS, U120, E5.
11. Defoe, op.cit., 131.

MAP 2 Areas in Kent examined for evidence of fruit cultivation in Probate inventories c. 1680-1720.



> neighbours and relations of the deceased who usually acted as the appraisors of the inventories, often people of little education, did not always make this distinction in practice but its existence in theory helps to explain why Kentish inventories throw so little light on fruit growing in a county noted for its orchards ... 12

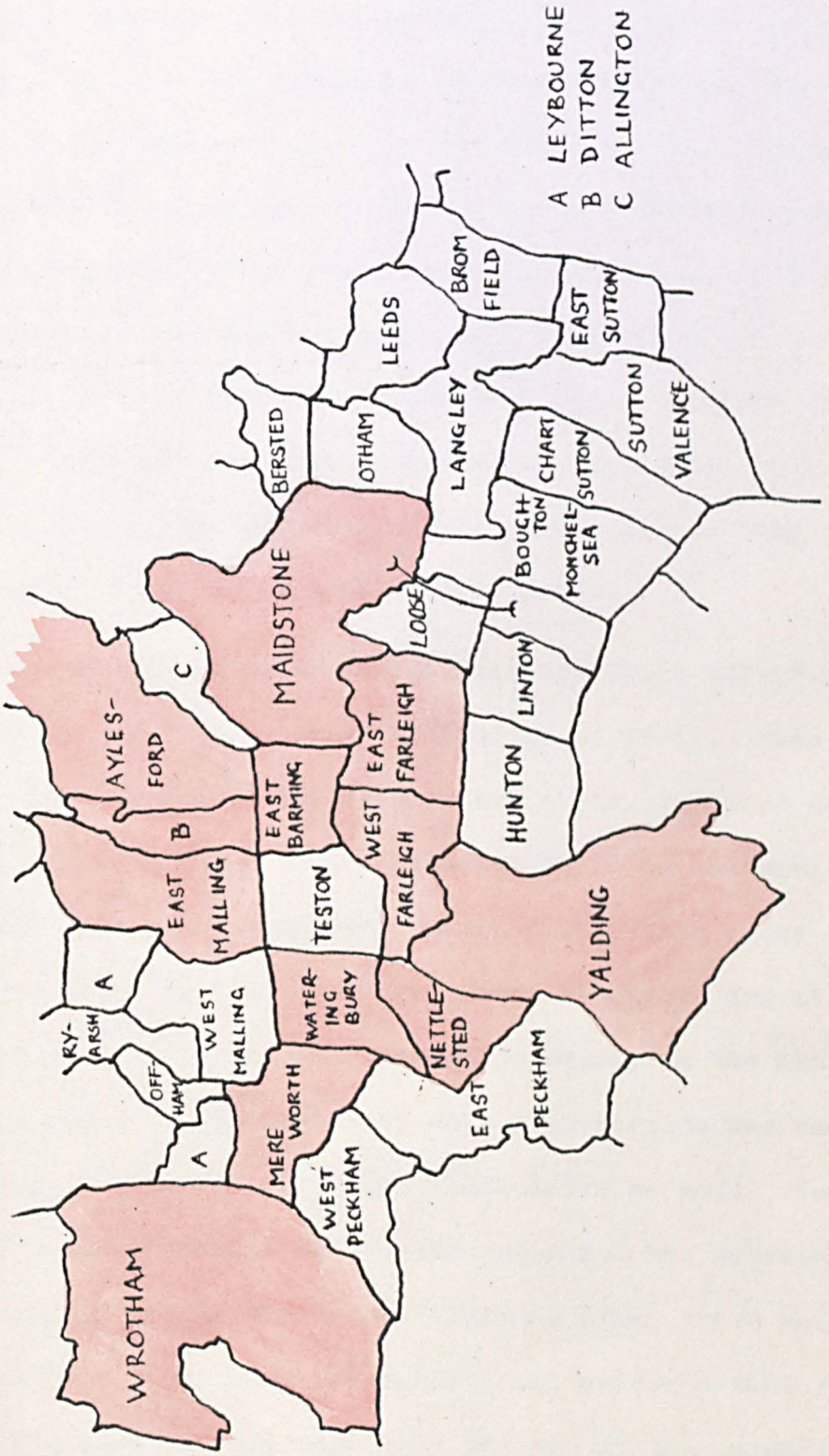
As the fruit acreage was not valued in inventories, the only indication of fruit growing comes from valuations of fruit on the trees, fruit in store, and debts owing for fruit sold. For the first to be applicable the inventory would have to have been taken in late July or early August, and because of the usual method of disposal of fruit that stored on the farm would probably represent only a small proportion of that grown, while debts were not always detailed in full. There were also references to cider presses : these may indicate only that apples were being grown for home consumption, but probably only a small portion of the fruit grown was made into cider.

Defoe emphasises the importance of the Maidstone area for both cherry and apple production. The Maidstone inventories, however, give very few references to cherries, except the occasional valuation of a cherry sieve. Fruit was referred to either as "fruit", or it was specified as apples and pears. Fruit in store from September would certainly be apples or pears, and fruit valued on the trees from late July to the end of August would refer to apples. In no inventory examined was there a specific reference to the valuation of cherries.

Fruit was being grown in a number of parishes around Maidstone. There are indications of its being cultivated in Wrotham, East Malling, Wateringbury, Nettlestead, Ditton, and West and East Farleigh. In examining the probate inventories evidence of fruit.

12. Kentish Sources. III. Aspects of Agriculture and Industry Edited E. Melling, (Maidstone 1961), 7.

MAP 3 Parishes of Mid-Kent : those shaded red examined for evidence of fruit cultivation in Probate Inventories, c.1680-1720.



cultivation was found in thirty cases. In particular 122 inventories for the parishes of East Malling and East Farleigh were examined. 13 In East Malling three valued fruit on trees, four valued fruit in store, while six listed a cider press among the goods. In East Farleigh none had fruit on trees, one valued fruit in store, while seven had cider presses. The remaining parishes were taken at random and the inventories were not systematically searched. These yielded two which valued fruit on trees, four fruit in store, and two were noted that had cider presses. The inventories covered the period from 1672-1724, and from their evidence it was not possible to elucidate, in detail, the development of fruit growing, the total extent of fruit cultivation, or the importance of fruit to the individual farmer.

The valuation of cider presses was the least satisfactory of the evidence for the presumed cultivation of fruit. They were, however, independant of the seasons and their undoubted status as personal property meant their existence would be uniformly recorded. Their inclusion in an inventory recorded only that cider production was possible and that apples were presumably grown for at least home consumption. In an area noted for supplying the metropolitan market it could be inferred that only a proportion was used to manufacture cider, and that some fruit would be sold. George Evernden's inventory listed a cider press and two hogsheads of cider, 14 while John Moystead's listed a cider press and hop-poles in the orchard. 15 Both gave additional evidence that fruit was being cultivated, rather than only hinting at the possibility.

13. 90 for the Parish of East Malling, and 32 for East Farleigh.
14. K.A.O., PRS/I/5/33.
15. K.A.O., PRS/I/8/109.

The valuation of fruit in store provided firmer evidence of cultivation, but because of the method of marketing, it probably did not reflect the full significance of fruit to the individual farmer. The fruit in store, where it was being grown commercially, would have been only that proportion kept for home consumption. The value of this information is further reduced because the fruit was often valued together with the other contents of the room, and the quantity rarely given. The value of fruit in store ranged from 10 shillings including other items, 16 to £7 10s. 0d. in the inventory of Francis Cheeseman of East Malling. In this instance the total value of the goods and chattels was only £69 13s. 6d., the fruit representing a high proportion of the personal estate. 17 In only one case was the quantity of fruit specified, William Turner of Wrotham had 60 bushels of apples valued at £3 0s. 0d. 18

Finally there was the evidence of fruit valued on the trees. For this information to be recorded the inventory required to have been taken during the months from June to August. In only one instance was the acreage stated : John Pott of East Malling had half an acre of grass and fruit on the trees valued at £3 0s. 0d. 19 In the other inventories examined only the value was recorded and the importance of fruit to the farmer can only be estimated from the value of the fruit as a proportion of the total value of the husbandry activity. This assumed that the fruit was accurately valued and the season was not exceptional; no estimate of acreage could be attempted from value alone.

The inventories did indicate that fruit growing was not a specialist activity, but was undertaken within the context of a mixed farming economy. The quantities of fruit, which Defoe described as

16. K.A.O., DRb/PI21/22.
17. K.A.O., PRS/I/3/73.
18. K.A.O., PRS/I/6/68.
19. K.A.O., PRS/I/16/78.

coming from mid-Kent, were purchased by the fruiterers from a multitude of farmers in the area. In three cases the inventories had no reference to other farming activity. A widow in Wrotham had fruit in the orchard valued at 11 shillings, out of a total value of £33 18s. 6d., 20 and Stephen Crowe, of East Farleigh, had five cherry sieves and a cow out of an inventory of £23 8s. 4d. 21 It was not possible to infer that Stephen Crowe was a specialist fruit grower; and Edmund Gilder, of East Malling, who had apples and pears on the trees valued at five shillings was recorded as a Linen Weaver. 22

The remaining inventories suggested that regardless of the scale of operations the farmers were engaging in a range of agricultural activities. Thomas Ashdowne, of East Malling, with an inventory of £222 6s. 6d. had apples in store, wheat, barley, oats, and peas in the barns. He grew some hops, having hop-poles valued at £ 4 Os. Od. and kept cows, sheep, and pigs. 23 This reflected the general pattern of the more wealthy farmers. John Pott, of East Malling, with an inventory valued at £149 15s. Od. had ½ acre of fruit and grass, 11 acres of wheat, 11 acres of barley, 16 acres of oats and 9 acres of peas and tares. In livestock he had 18 hogs and pigs, 8 cows and 39sheep and lambs. 24 The less wealthy farmers were also engaging in mixed farming, Stephen Bossock, of East Malling, left £39 18s. 10d. in personal property. He had fruit in the orchard valued at £1 Os. Od., 9 acres of wheat, 4 acres of peas, 1½ acres of tares, and 1 acre 3 yards of white peas. In livestock he kept 20 pigs and sows and 19 lambs. 25 One farmer, Francis Cheeseman of East Malling, might be described as a specialist. The fruit in store in October was valued at £7 10s. Od., he had hops and hop-poles valued at £21 10s. Od. and apart from this he had beans valued at

20. K.A.O., PRS/I/3/24.
21. K.A.O., PRS/I/3/124.
22. K.A.O., PRS/I/7/16.
23. K.A.O., PRS/I/1/124.
24. K.A.O., PRS/I/16/78.
25. K.A.O., PRS/I/2/50.

£2 10s. Od. and six pigs. 26 Out of the thirty inventories that indicate the existence of fruit growing, eleven have also evidence of hop cultivation, but the two specialist crops were not inseparably linked.

The relatively few records of valuations of fruit in store, was partly accounted for by the method of disposal. The Filmer papers contain a number of contracts drawn up between Sir Edward Filmer and various Maidstone fruiterers, together with valuations of fruit in orchards in the early summer. The papers covered the period from 1713 to 1735 and referred to two orchards that contained 4A-2R-35P. They did not form a continuous series : the material for 1713 to 1718 was contained in an account book and does not include the years 1714 and 1715. The material for 1719 to 1735 was on loose paper, and consisted of contracts and valuations, with no evidence for the years 1721 and 1725, or 1728 to 1734.

The fruit was sold between mid July and early August on the estimated yield of the orchard. In the case of the Filmer estates a specified quantity of certain varieties was reserved for the use of the household, and the crop of plums and medlars was also kept for their own use. Between 1716 and 1727 the annual average recorded price for the fruit sold was £18 2s. 7d., the price varying from £7 10s. Od. in 1722 to £42 Os. Od. in 1719.

26. K.A.O., PRS/I/3/41.

TABLE I Annual Fruit Sales from the Filmer Estates

Year	Price £	s	d	Purchaser	Additional Information
1713	12	0	0	Mr. Oliver	Refers to Orchard 3A-0R-29P 240 bushels at 1s. 0d. a bushel (10s. 0d. a Maund)
1716	25	0	0	Mr. Oliver	All subsequent entries refer to two orchards 4A-2R-35P. 43 Maunds 8 bushels at 11s. 7½d. a Maund.
1717	8	12	0	Mr. Matthews	
1718	25	0	0	Mr.H. Porter	36 Maunds sold (360 bushels) at 2s. 6d. a bushel £45 0s. 0d) Lost £20 in sale.
1719	42	0	0	Mr.T. Kedwell	25 Maunds sold
1720	14	14	0	Mr. Porter	22 Maunds sold
1721-1722	7	10	0	Mr.R.Southgate	Orchard laid at 130 bushels, 100 bushels for sale at 5s. 0d. a bushel (£15 0s. 0d.)
1723	19	16	0	Mr.J.Johnson	Sold at 12s. 0d. a maund. To be delivered at Edmondes Key, Maidstone
1723	2	0	0	Mr. H. Wells	40 bushels at 1s. a bushel
1724	14	8	0	Mr.J.Johnson	36 maunds at 8s. a maund. To be delivered at Edmond's Key, Maidstone.
1725				Mr.J.Johnson	Sold at 11s. 0d. a Maund (4A-3R-0P). To be delivered at Clerkes Key, Maidstone
1726	14	14	0	Mr. H. Wells	
1727	7	12	0	Mr. H. Wells	
1735	17	0	0	Mr. T. Beal	

K.R.O. Filmer MSS U120 A14; K.R.O. Filmer MSS U120 E5

N.B. Maund contained ten fruiterer's bushels of nine or ten bushels.

The Table illustrates well the fluctuations in the value of the fruit sold, and in the yield of the orchards where that information is available. It was a speculative crop and there was uncertainty as to the number of trees that would produce fruit. In 1719 130 trees were listed as being "taken", and 99 as "not taken", while in 1720 71 trees had "taken" and 147 trees "not taken". 27 The sale price on the contract did not always accord with the details of yield and price per bushel or "maund", where this information was recorded. The contract signed on 7th August, 1722, between Sir Edward Filmer and Mr. Robert Southgate stated that all the apples and pears in the two orchards had been sold for £7 10s. 0d. The orchard list for the same year noted that 100 bushels were for sale at £15 0s. 0d. 28 As the contract did not state the quantity it was not clear whether Mr. Southgate purchased only half the fruit, or that, more likely, Sir Edward Filmer accepted his offer and ultimately lost on the deal. In 1718 there was similarly a shortfall between the potential value of the crop and the price received : in that year of £20 0s. 0d. Mr. Humphrey Porter purchased the fruit in the orchards for £25 0s. 0d., while the 36 maunds were valued at £45 0s. 0d. 29 It may be significant that there was an entry after this.

> N.B. Never sell y^{e} Apples by the Lump till after St. James's Day y^{e} 25 of July because they are so small before that no one can judge of y^{e} Quantity. 30

27. K.A.O., Filmer MSS, U120, E5.
28. K.A.O., Filmer MSS, U120, E5.
29. K.A.O., Filmer MSS, U120, A14.
30. K.A.O., Filmer MSS, U120, A14.

This observation was supported by the evidence of 1720 when on the 25th July the fruit in the orchards was sold to Mr. Porter for £14 14s 0d., and it was noted that it was undersold by five or six guineas. 31

The fruit was sold to different fruiterers each year, who put in bids during July and August. The records for 1719 illustrate in detail the method of disposing of the fruit. On the 29th June the orchard was examined row by row and a list of the trees "taken" and "not taken" made, along with the varieties. The orchard was then estimated at 33 maunds. On 25th July two fruiterers put in bids for the two orchards : Mr. Oliver offered £20 0s. 0d. for the fruit; Mr. Porter estimated the yield at 25 maunds and valued them at £1 10s. 0d. a maund, a total of £37 10s. 0d. and he bid £35 0s. 0d. The fruit was finally sold on 1st August to Thomas Kedwell for £42 0s. 0d., and between 5th August and 26th August 26 maunds were gathered, of which two maunds were reserved for the household. 32

The fruit seems usually to have been sold to one purchaser, though in 1723 while the bulk of the fruit was purchased by Mr. John Johnson for £19 16s. 0d., Mr. Henry Wells purchased 40 bushels for £2 0s. 0d. In 1726 and 1727 Mr. Wells purchased the entire produce of the orchards. 33

The fruit was gathered by the fruiterer's own men and they were paid 9s. 0d. a week; a maund took about a day to gather costing 1s. 6d.; the cost of packing and carrying to Maidstone cost a further 1s. 6d. 34 In some contracts it was specified that Sir Edward Filmer was to find straw for packing the fruit, and pay the

31. K.A.O., Filmer MSS, U120, E5.
32. K.A.O., Filmer MSS, U120, E5.
33. K.A.O., Filmer MSS, U120, E5.
34. K.A.O., Filmer MSS, U120, E5.

tithe on the fruit. In 1723 it was specified that the purchaser, Mr. John Johnson, was to pay the costs of gathering the fruit and Sir Edward Filmer was to pay the costs of carriage to Mr. Edmond's Quay at Maidstone. The purchase money was usually paid in two portions, one at Michaelmas and the other after Christmas, with a nominal sum changing hands at the signing of the contract as a show of good faith. In 1719 payment was to be completed by a month after Michaelmas, and Mr. Kedwell was to pay for the previous load of fruit when he collected the subsequent one. 35

While the fruiterers were expected to pay their debts by Christmas, they in turn gave long-term credit. Mr. Richard White a fruiterer at Maidstone at the time of his death 21st April 1719 had good debts owing for fruit of £57 10s. 0d. He also had a large sum of ready money in the house, £103; these two sums were more than half the value of his total inventory. 36

Fruit was also cultivated in East Kent in the area from Rainham to Boughton-under-the-Blean, and in a number of parishes around Sandwich. Defoe, while he eulogised over the Canterbury hop gardens, was silent about this cradle of English fruit production. The probate inventories were again disappointing, but they indicated a similar pattern of cultivation as in the Maidstone area, and hinted at a similar method of the disposal of fruit.

In the Sandwich area there were references to fruit in six probate inventories for Ash, Goodnestone and Staple, and one exists for a fruiterer in Sandwich. Fruit was not always valued separately, and valuations include fruit in the orchard, and fruit in store. Cherries and apples were being cultivated as a part of a mixed farming economy, and in terms of value represented a small proportion

35. K.A.O., Filmer MSS, U120, E5.
36. K.A.O., PRC27/40/206.

of the total value of the farming activity. In only one instance was fruit the only item of agricultural produce listed. Henry Hatcher of Staple had an inventory of total value £58 7s. 8½d., of which apples in the Apple Loft were valued at £1 1s. 3d., with other things. 37 There was no indication that he was a specialist fruit grower, though he had no debts outstanding from fruiterers. The inventory was taken in November which would account for the low value of fruit in store, but as fruit appears to have been paid for in two instalments there would possibly have been money outstanding.

For the parish of Ash three of the four inventories value fruit on the trees. In the case of George Foy, taken in July 1716, he had apples valued at £5 0s. 0d. and cherries at £4 0s. 0d., out of a value for agricultural stock of £63 10s. 0d. The value of his fruit was more than his barley and peas, and slightly below that of his wheat. 38 Fruit would appear to have been an important aspect of his farming activity, 14% of the total value, and in terms of the value of the orchards, rather than their produce, would represent a considerable investment. Thomas Hogg of Ash, was stated as being a carpenter, and the bulk of his inventory valued at £159 15s 0d. was money out at interest (£139 10s. 0d.); farming was a minor activity, though fruit was prominent. The inventory was taken in May 1701, and the fruit in the orchard, valued at £1 0s. 0d., presumably referred to cherries. His total farming stock was valued at £11 10s. 0d., and he had only three and a half acres cultivated with wheat, beans and barley, his livestock consisting of two yearling calves and a pig. 39

37. K.A.O., PRC27/41/181.
38. K.A.O., PRC27/40/39.
39. K.A.O., PRC27/35/120.

A substantial yeoman of Ash, Solomon Jefford, with a total inventory valued at £181 15s 2d., had £164 2s. 0d. of this tied up in agricultural activity. Fruit in the orchard and in the house was valued at £6 0s. 0d., while his 32½ acres of wheat, barley, beans and tares were valued at £80 0s. 0d. and he kept sheep, cattle, pigs and poultry. 40 Fruit was similarly a minor part of William Safery's farming : he had three sacks of apples but cultivated 18½ acres of wheat, barley, beans, yellow pease and canary seeds, and kept a flock of 23 sheep, cows and poultry. 41. Fruit was prominent only on the smaller farms; it did not keep its proportionate importance in the larger farms.

The most important area of fruit production in East Kent stretched from Gillingham to Boughton-under-the-Blean, the North Kent fruit belt. It was an area of well drained rich loamy soils, with low annual and summer rainfall, a high level of sunshine and freedom from damaging frosts. 42 The parishes near Faversham were famed for their high standard of cultivation of orchards and cherry gardens, and in the sixteenth century had produced fruit for the London market. This had previously been imported from the Low Counties where 'petit culture' was more highly advanced. William Lambarde recounted how Richard Harris, fruiterer to King Henry VIII, had planted 105 acres of fruit in 1533 in the Parish of Teynham; by the 1560s cultivation had spread to the neighbouring parishes. 43

Probate inventories of 141 Yeomen and Husbandmen in 15 parishes were examined, and four were noted, in addition for Boughton-under-

40. K.A.O., PRC 27/39/211.
41. K.A.O., PRC 27/36/52.
42. S. G. McRae and C. P. Burnham, The Rural Landscape of Kent, (Wye College, University of London, 1975), 117.
43. William Lambarde, Perambulation of Kent, (London, 1826; First Published 1576; Reprinted, Adams and Dart, Bath 1970), 222-223.

MAP 4 Parishes of North Kent : those shaded red examined for evidence of fruit cultivation in Probate Inventories, c.1680-1720.

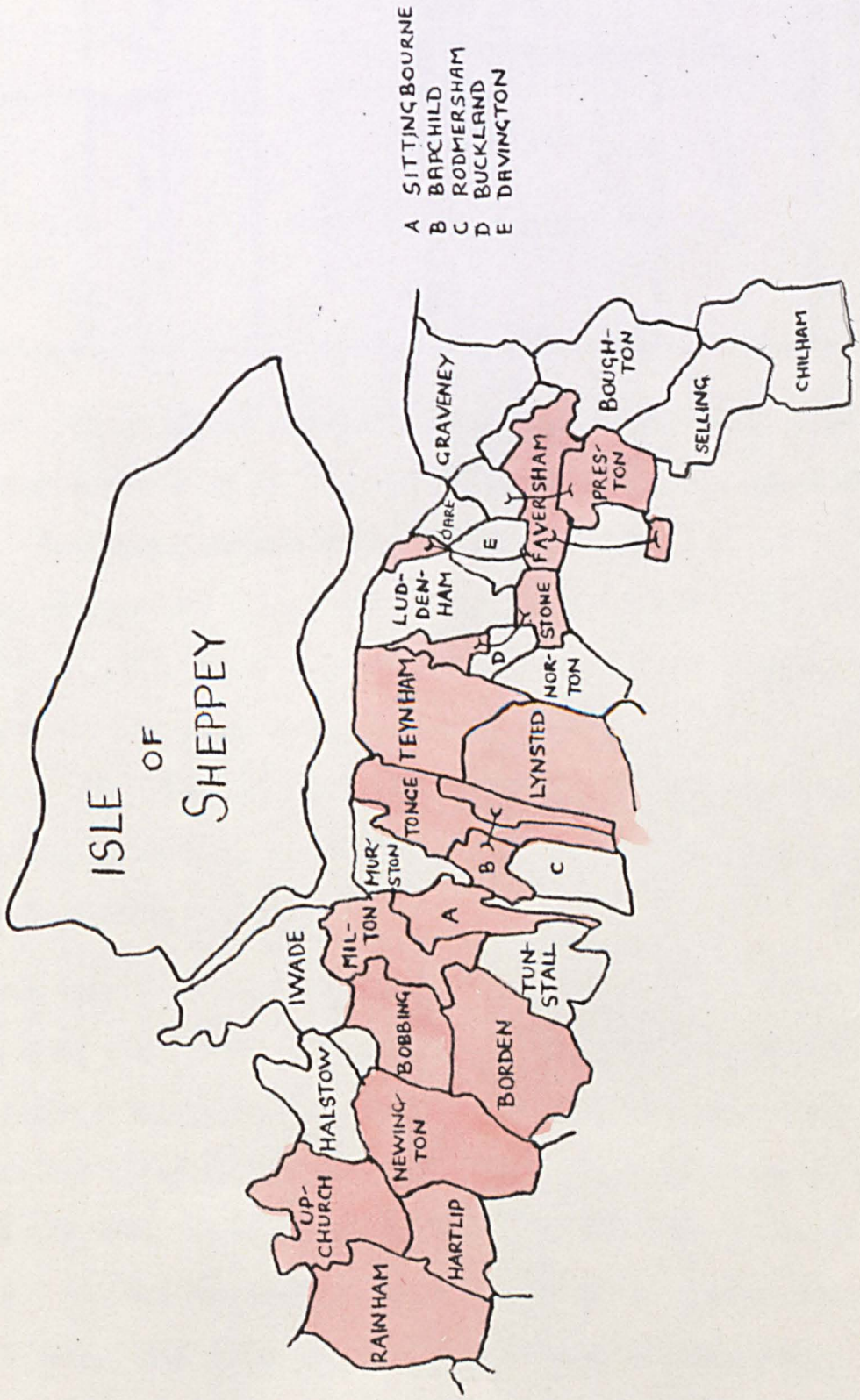


TABLE 2 North Kent Parishes, number of Probate Inventories Examined and Number with fruit mentioned

Parish	Number Examined	No. with Fruit	Parish	Number Examined	No. with Fruit
Bapchild	5	1	Preston	1	0
Bobbing	5	0	Rainham	13	1
Borden	9	1	Sittingbourne	15	0
Faversham	15	0	Stone	1	0
Hartlip	7	0	Teynham	12	3
Lynsted	13	3	Tonge	10	0
Milton	22	1	Upchurch	2	1
Newington	11	0			

the-Blean. The evidence for fruit production in the North Kent fruit belt relies entirely on 15 inventories taken during the years 1700 to 1725. They may conveniently be examined in terms of the evidence that they present; the conclusions they suggested were similar to those for the other areas in Kent. Three inventories referred to fruit on trees, while a further four, because of the date they were taken, suggested the fruit was valued on the tree, four mentioned fruit in store, three gave amounts owing for fruit sold, and one referred to a cherry garden.

There were seven inventories that gave values of fruit on trees, of these four were those of substantital yeomen farmers engaged in a wide range of agricultural activity. William Keetly of Lynsted had fruit and cherries valued at £15 18s. 6d., which except for his 11½ acres of wheat at £23.0s. 0d. and his husbandry tackle at £17 3s. 0d. was the highest value placed on an item of his crops and livestock. The total value of his farming activity was £117 7s. 0d., the fruit representing about 10% of this, though

the real value of the orchard would be higher. 44 Richard Vinall of Upchurch farmed on a larger scale; his agricultural activity was valued at £151 15s. 0d. and his fruit was about 15% of this total at £20 0s. 0d. This was worth more than his flock of 30 ewes and 33 lambs, though his 51 acres of arable were valued at £87 0s. 0d. 45 Two yeomen of Lynsted had small amounts of fruit valued on the trees, Edward Lee possessed fruit and wood worth £7 0s. 0d. out of a total of £282 11s. 6d. for his farming activity, 46 while Daniel Brad had £6 0s. 0d. out of £348 12s. 0d. 47

A husbandman of Bapchild engaged in agriculture in a small way had fruit, together with a cow and two pigs, all valued at £3 18s. 0d. 48 Two tradesmen also had fruit valued on trees, a maltster from Rainham with £3 0s. 0d. 49, and a carpenter from Teynham with £9 0s. 0d., together with seven acres of cultivated land and livestock valued at £14 10s. 0d. 50

Four inventories valued fruit in store, though in two of these the fruit was not stated separately but included with other items. Edward Webb, a yeoman of Teynham, had £8 0s. 0d. of fruit in store in an inventory taken in September, out of a total for farming activity of £174 10s. 0d. 51 Hugh Gilman, a husbandman of Borden, had 8 bushels of apples worth £1 0s. 0d., while his farming activity was valued at £23 1s. 0d. 52

Three persons engaged in farming in Boughton-under-the-Blean had money owing for fruit sold before their decease. Henry Underdown had £4 0s. 0d. owing for fruit sold the previous year, he also grew hops as well as keeping livestock and cultivating some

44. K.A.O., PRC11/66/5.
45. K.A.O., PRC11/63/164.
46. K.A.O., PRC11/77/56.
47. K.A.O., PRC11/69/4.
48. K.A.O., PRC11/71/141.
49. K.A.O., PRC11/70/24.
50. K.A.O., PRC11/62/225.
51. K.A.O., PRC11/74/163.
52. K.A.O., PRC11/71/193.

arable. 53 The remaining two farmed on a small scale, and their fruit was relatively more important. Ann Poope had £4 18s. 0d. owing for fruit, while the total value of her farming activity was £35 19s. 10d. 54, and John Lacey had £1 14s. 6d. owing, while his farming was valued at £9 13s. 3d. 55

Fruit in East Kent was part of a mixed farming economy cultivated by large and small farmers, very important in total, but of small importance to individual farmers, though it could be as valuable as other single crops. In north Kent, unlike the Maidstone area, there was no indication of cider production, the fruit being produced almost exclusively for marketing. Cherries were the most important fruit crop, and there was ready access to the London market by water from the ports of Faversham and Rochester. The use of inventories to provide evidence on fruit production would probably tend to under-estimate the extent of cultivation and its importance. Fruit would appear in the inventory only when it was valued on the tree or in store or when a fruit debt was specified. The relatively few inventories make it impossible to trace the development of fruit growing from 1680 to 1725. The inventories only verify that fruit was widely grown in the areas examined.

53. K.A.O., PRC27/40/42.
54. K.A.O., PRC27/38/168.
55. K.A.O., PRC27/40/42.

CHAPTER III

The Cultivation of Fruit in Kent, c. 1800

There is no consistent source to examine for detailed evidence of fruit production in the eighteenth century. The probate inventories, which in spite of their weaknesses provided a detailed and country-wide source for the period 1680-1720, become too brief after the 1720's. The accidents of time have provided a sample of farm accounts that do not include fruit growers, presupposing they kept adequate books. It is necessary therefore to continue an examination of Kent's fruit production with a general survey. The County Reports to the Board of Agriculture, and William Marshall's Southern Counties provide an agricultural interpretation, while Edward Hasted's History of Kent indicates the fruit growing areas in the parish descriptions.

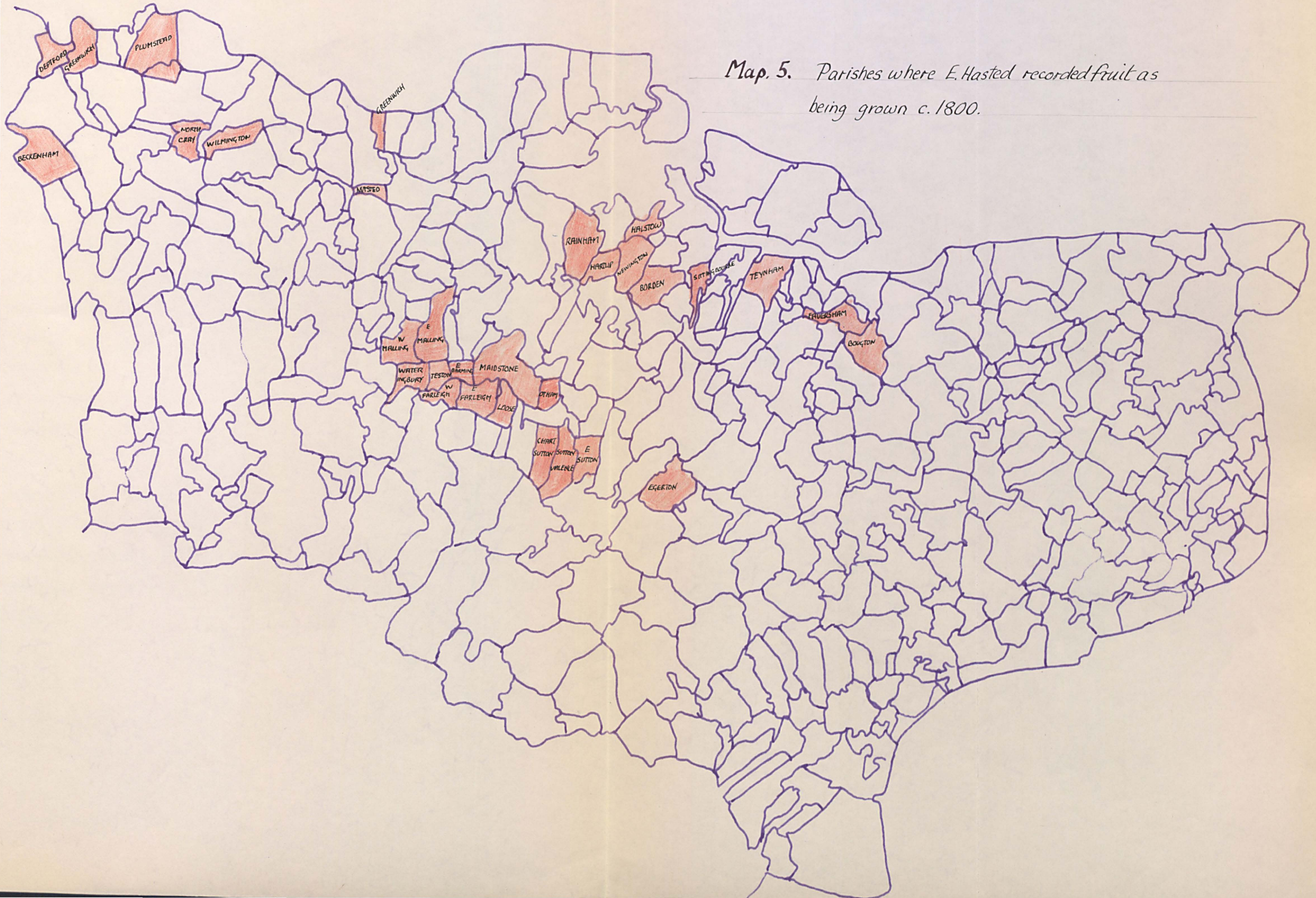
In the late eighteenth century fruit-growing was established in mid-Kent around Maidstone, in north-Kent between Rainham and Boughton, and there were some orchards in north-west Kent near London. There was also some fruit grown around Sandwich. These areas are indicated on Map 5 and are based on Hasted's parish description. While fruit production was very important in Kent, it would be mis-leading to imagine the county as one well cultivated orchard. Commercial fruit growing was very localised in the areas specified, though many farmers would have had orchards for their own consumption. Large areas of the county were unsuitable for fruit cultivation or more suitable for other farming activities. The Isle of Thanet was almost devoid of orchards, as was Romney Marsh, there were few on the chalk uplands and on the better clays of the Weald. The area of cultivation at the end of the eighteenth century was limited by agricultural technology, the limited demand for fruit and problems

of transport. The Kent fruit industry was primarily supplying apples, pears and cherries for the fresh fruit market of the Metropolis, though low quality cider was manufactured from surplus apples. This was mainly for the consumption of the agricultural labourer.

In north-west Kent Hasted noted fruit was being grown in Deptford, Greenwich, Beckenham, North Cray, Plumstead, Wilmington, Nutsted and Gravesend. These parishes were mainly concerned with producing vegetables for the London market. In this area fruit was grown by market gardeners rather than farmers. In Deptford Hasted noted that the lower part of the parish was rich and fertile and let to gardeners at high rents. He estimated that about 500 acres were used for market gardening out of 1,800 acres in St. Nicholas. 1 In Greenwich there were 160 acres let to gardeners who would have found a ready market for their produce among the inhabitants, who were "persons of rank and fortune". 2 Gravesend had seventy acres of market gardens supplying the town, shipping, and the London market. The speciality was asparagus which was highly esteemed in London. 3 In Plumstead the soil varied considerably from poor gravel and clay to a rich fertile area containing ninety acres of market gardens growing principally peas, and a hundred acres of cherry orchards. 4 Wilmington was noted also for its cherry orchards which surrounded the town. 5

This north-west Kent area was not mentioned by William Marshall who concentrated on orchard management in the mid-Kent district. John Boys commented on the quantities of vegetables raised in Gravesend and Deptford for the London market, but stated that a

1. Edward Hasted, The History and Topographical Survey of the County of Kent, Volume I (Canterbury, 1797), 340-343.
2. Ibid., 373.
3. Hasted, op.cit., Volume III, 324.
4. Hasted, op.cit., Volume II, 204.
5. Ibid., 329.



Map. 5. Parishes where E. Hasted recorded fruit as being grown c. 1800.

description of their cultivation was beyond the limits of his book. 6 Fruit growing in this area was not as extensive as in mid-Kent and was principally undertaken by market gardeners rather than farmers. The organisation and management of the undertakings was smaller and more intensive than where fruit growing was part of the farming economy. Fruit as a horticultural crop rather than an agricultural crop distinguishes north-west Kent from the other fruit growing areas of the county.

In the vicinity of Maidstone fruit was widely grown in the parishes of Loose, East Farleigh, East Barming, East Malling, West Malling, Wateringbury, Teston, West Farleigh, Chart, Sutton, Sutton Valence, East Sutton, Otham and Egerton. In these parishes "The soil, not only adjoining the town (of Maidstone) but throughout the neighbourhood of it, is remarkably kind for hops, orchards of fruit, and plantations of filberts .....". 7 The soil in these parishes was described as a loam on quarry rock and very fertile for hops and fruit. The general appearance in the area was of neatness with green clipped hedges like a well kept garden ground. 8

The management of orchards in the Maidstone area was judged superior by William Marshall to that of the other fruit counties, "in many respects, it might well be held up, as a pattern, to what may be emphatically termed the fruit liquor districts". 9 However, he considered the production of table fruits was a gardener's occupation rather than a farmer's, and consequently devoted less attention to the subject than he had in other counties. It is also unfortunate, considering the importance of fruit in Kent, that John Boys was not

6. John Boys, General View of the Agriculture of the County of Kent, (1796), 112-113.
7. Hasted, op.cit., Volume IV, 262.
8. Ibid., 360.
9. William Marshall, The Rural Economy of the Southern Counties, Volume I, (1798), 304.

more fully conversant with the industry. Marshall wrote that this was the least estimable article, together with his article on hops, but that as an East Kent farmer, this might be expected. 10.

The fruit in the Maidstone area was grown on a deep loam soil on a rocky base. The young orchards were laid out with applies and cherries, spaced at a distance of from 20 to 40 feet, and the spaces between cultivated with hops and filberts. When old hop gardens were converted to orchards the filberts were not planted. In this way the ground was fully utilised and the hops and filberts removed as the orchard trees matured. The management of Kent orchards was held as an example for the other fruit counties. Though there were orchards full of wood and moss, there were more instances where orchards were lavished with the care usually given to wall or espalier fruit. Superfluous branches and twigs were removed. 11

Cider was manufactured from the surplus apples in plentiful years, and from those unfit for marketing in normal years. 12 There was not the same attention to the details of manufacture that characterised the production in Herefordshire, and the cider was not made from purpose-grown fruit. 13

As well as cider, and with more success, gazle wine was produced at Maidstone. This was a fermented juice of blackcurrants, indicating that these were also grown in the parishes bordering on the Weald. Marshall considered this drink an acceptable substitute for port wine. 14

The apples for domestic use were sent to London by hoy, and to the North of England by coal vessels, this availability of water carriage was an important factor in encouraging the development of the fruit industry around Maidstone. 15 The apples were also sent to

10. William Marshall, The Review and Abstract of the County Reports to the Board of Agriculture, Vol. 5, (York, 1818), 444-445.
11. Marshall, op.cit., (1798), 312-313).
12. Ibid., 317.
13. Boys, op.cit., 115.
14. Marshall, op.cit., (1798), 318-319.
15. Boys, op.cit., 113.

the ports in Norfolk and other Eastern counties. The fruit for London was bought by dealers in the country, or sent by the growers to the fruit factors at the different markets. Marshall observed the practice of growers selling their fruit on the trees, in the manner by which Sir Edward Filmer had disposed of his fruit in the 1720's. The dealers arranged for the gathering of fruit under the watch of a nominee of the owner. The fruit was packed in baskets of straw for transporting and sorted for size and quality. 16 The cherries were also sent to the London fruit factor, or sold to 'higlers' who retailed them at the coastal resorts of Kent. 17

The local markets for fruit were limited by the small numbers of wealthy consumers in the town. Fruit was relatively expensive and locally a market only existed during years of glut.

Fruit was also grown in north-Kent in the parishes of Rainham, Hartlip, Halstow, Newington, Borden, Sittingbourne, Teynham, Faversham and Boughton. Cherries, pears, and apples had been extensively cultivated in this area but at the time of Hasted 's writing many orchards were being grubbed up. Hops and fruit tended to alternate as crops, as Hasted explained in the parish of Newington.

> The Parish contains about thirteen hundred acres of land, exclusive of about two hundred acres of wood, great part of it, especially in the environs of the street, was formerly planted with orchards of apples, cherries, and other kind of fruit, but these falling to decay, and the high price of hops yielding a more advantageous return, many of them were displanted and hops raised in their stead, the scite of an old orchard, being particularly adapted for the purpose, which

16. Marshall, op.cit., 316.
17. Boys, op.cit., 116.

> with the kindliness of the soil for that plant, produced large crops of it ... but these grounds wearing out, and hops not bearing so good a price, tother (sic) with other disadvantages to the growers of them, orchards are again beginning to be replanted in Newington, to which these grounds afford a good nursery, till the trees by their increased size are less liable to hurt ... 18

As the price of one crop rose, so farmers planted more of it at the expense of the other. That consequently became scarce and in turn the price of it rose, so the farmer occilated between the two crops over a period of twenty-five to thirty years. The farmers engaged in a game of chance that was exacerbated by the nature of the crops, they gambled on the weather to provide "hits". In Sittingbourne, in Hasted's time, young fruit trees were to be seen in the hop. plantations, and in Faversham hop plantations were giving way to orchards. 19 In the parishes of Rainham, Hartlip and Teynham fruit was being replaced by hops. 20 The apparent discrepancy in the information is probably accounted for in the different times at which Hasted collected his material. According to Marshall it had been the case that at some time before many orchards had been converted to hop gardens and this had created a scarcity of fruit and an over supply of hops. However, by the 1790's the reversal of the situation was taking place and hop ground was being planted with orchard trees. 21

Neither Boys nor Marshall mention the north-Kent fruit area, which the probate inventories indicated and to which Hasted's parish descriptions bear testimony. The area was one in which cherries were the main orchard fruit, these were grown on grass and required the

18. Hasted, op.cit., Vol. VI, 42.
19. Ibid., 151, 318.
20. Ibid., 5, 15, 291.
21. Marshall, op.cit., (1798), 303, 304.

minimum of management. Marshall was intent on describing the careful management that mid-Kent farmers gave to their orchards, while in north-Kent the cherry orchards were managed almost as pasture that contained trees. The cherries were not given the detailed aare and attention that was lavished on the apple trees. It is, however, extraordinary that Boys should not comment on the existence of orchards in the area, though his chapter on fruit is short, and in describing the agriculture of the area concentrates on the four course systems the soil would support.

Boys does comment on the growth of fruit around Sandwich. From here apples were sent to London, but the principal markets for this fruit were Sunderland and Newcastle. The apples were packed in baskets or old sugar hogsheads and conveyed north by coal vessels. 22

While Kent was supplying some fruit for the northern markets, and there was some fruit sold locally, the prime market was London, which dominated the Kent fruit industry. It was only in London that there was a large wealthy population that provided a steady market for fruit (see above page 25). In the period to 1800 the farmers concentrated on the production of fresh fruit, principally apples and cherries. Cider was manufactured for home consumption, but the fresh fruit market was too important for apples to be diverted into liquor production. Fruit growning was an adjunct of a mixed farming economy, but while, (from Defoe's account of the trade) the total produced must have been considerable, to the individual farmer it was another aspect of his agricultural activity. It was in some respects similar to hop growing , in that the size of the harvest

22. John Boys, General View of the Agriculture of the County of Kent, (Brentford, 1794), 55.

and its value fluctuated considerably from year to year. Fruit production was well established by 1800 on the lines that have been described in more detail in Chapter II, and had a history going back to the sixteenth century. The organisation of fruit production remained similar in 1800 to that already established in 1700 and it was marketed in the same manner. The market for fruit was limited and the sustained expansion and diversification occurred after the mid-nineteenth century.

SECTION TWO

THE FRUIT INDUSTRY IN KENT IN THE FIRST HALF OF THE NINETEENTH CENTURY

INTRODUCTION

It is possible to examine in depth the Kentish fruit industry during the first half of the nineteenth century, and in particular for the years 1830 to 1839. In this period fruit farming was organized in the manner indicated by the evidence for the eighteenth century. Fruit was cultivated predominantly as an aspect of mixed farming, though there were a few specialist growers. The evidence of the Select Committee on the Fresh Fruit Trade in 1839 indicated a greater proportion of specialist growers than an examination of the tithe awards confirmed. The majority of the fruit was sold in the London market, though some was sold locally and some was sent by coastal vessels to the North of England. Cider was produced from surplus low-quality apples but had a low market value and was used to give to the labourers instead of beer.

A major source for this period is The Select Committee on the Fresh Fruit Trade (1839 (398) VIII 377), where the minutes of evidence provide information on all aspects of the fruit industry. Fruit growers, salesmen and importers were called as witnesses to state the effect of the reduction of the duty on imported fruit on their industry. The growers were concerned to emphasise the potential harm that would be inflicted, but also provided evidence on the state of the fruit industry since the Napoleonic wars. The evidence relates almost solely to apples, there is some mention of cherries, but there is no detailed examination of the soft fruit.

Kent sent eleven witnesses, seven representing the mid-Kent area, three from north-Kent and one from north-west Kent. These witnesses provided evidence on the price of fruit from the beginning of the century, the cost and methods of cultivation and the marketing of fruit.

The Tithe Awards provided a valuable source of evidence on the distribution of land, and it is possible to reconstruct the land use within farms. A number of mid-Kent parishes have been examined and information on those farmers who grew fruit extracted. This material was further supplemented for the parish of Loose by reference to the 1851 census. This provided a tentative assessment of fruit growers in the mid-nineteenth century.

Evidence of fruit growing at farm level was provided by a set of account books relating to the Peel estates in the parishes of Loose and East Farleigh. The books covered the period 1811 to 1861, though after 1855 their quality deteriorated. The credit accounts were examined to provide evidence on fruit income and its importance. The Peels seem to have been fairly typical of the larger farmers who cultivated fruit.

The local newspapers for mid and north-Kent the Maidstone Journal and Kentish Gazette, were examined when looking at the organization of fruit growers in their response to the changes in import duty on fruit. The papers staunchly supported the growers in their efforts to petition the government for a reimposition of duty, and reported all the meetings and manoeuvres of the growers.

CHAPTER IV

The Cultivation of Fruit in mid-Kent, 1800 - 1850

The commercial cultivation of fruit was carried out in three distinct areas of the county, as described in the last chapter. It was in these areas that fruit was of importance to the farmer, and while much of the evidence relates to apples, as the most widely grown fruit, pears and cherries were also cultivated as top fruit, as well as a range of soft fruits. This chapter concentrates on fruit cultivation on farms in the mid-Kent area, looking in particular at the Peel estates in the parish of Loose.

The cultivation of fruit in Kent was estimated to extend to 15,000 acres in 1830, 1 while the Tithe Returns of c.1840 record 13,000 acres. 2 There were probably about 5,000 acres in eastern Kent (including the north Kent fruit area), and 10,000 acres in mid-Kent. 3

In the areas between Canterbury and Rochester apples, pears and cherries were principally grown. 4 The three witnesses from this area, who gave evidence to the Select Committee on the Fresh Fruit Trade confirmed the predominance of apples, though cherries were quite extensive and some gooseberries and currants were cultivated.

In the north-west of the county around the parishes of Deptford, Greenwich, Charlton, Woolwich and Plumstead the land was intensively cultivated by market gardeners. While they concentrated

1. Report from the Select Committee on the Fresh Fruit Trade; together with the minutes of Evidence and Appendix, (1839, 398, VIII), IV. (Hereafter abbreviated as S.C.F.F.T.)
2. D. Harvey, "Fruit Growing in Kent in the Nineteenth Century", Archaeologia Cantiana, LXXIX, (1964), 97.
3. S.C.F.F.T., 102.
4. George Buckland, "On the Farming of Kent", Journal of the Royal Agricultural Society of England, VI (1845), 264. (Hereafter abbreviated as J.R.A.S.E.)

on producing vegetables for the London market some fruit was grown in the area. 5 Mr. H. Morris stated that fruit was extensively grown in the Dartford area. 6 While apples and top fruit were grown the preference was for soft fruits, and plantations of these were being increased in the late 1830's. 7

Mid-Kent was probably the major producer of fruit, particularly apples :

> The district of Mid Kent supplies Covent Garden with probably near two thirds of home grown fruit, - a few miles south of Maidstone, comprising the parishes of Barming, the Farleighs, the Suttons, Loose, Boughton, Linton &c., being the best adapted localities. 8

Apples were the main crop, and some pears were cultivated but in addition small fruit was grown. Gooseberries, raspberries, white and blackcurrants were planted between the top fruit to utilize every available space. 9 Israel Harris Lewis of East Farleigh cultivated mixed fruit plantations with gooseberries, plums and currants, and during the early stages of the orchards potatoes were planted to lessen the expense whilst the trees matured. 10

TITHE AWARDS

The Tithe Awards have been analysed for a number of mid-Kent parishes and the acreage of fruit related to farm size. The awards are laid out in alphabetical order of owners, and under each owner the land holding of the occupier. It is possible by cross-checking names of occupiers within a parish to extract details of total

5. Buckland, op.cit., 267.
6. S.C.F.F.T., 82.
7. Ibid., 110.
8. Buckland, op.cit., 278.
9. Ibid., 279.
10. S.C.F.F.T., 43.

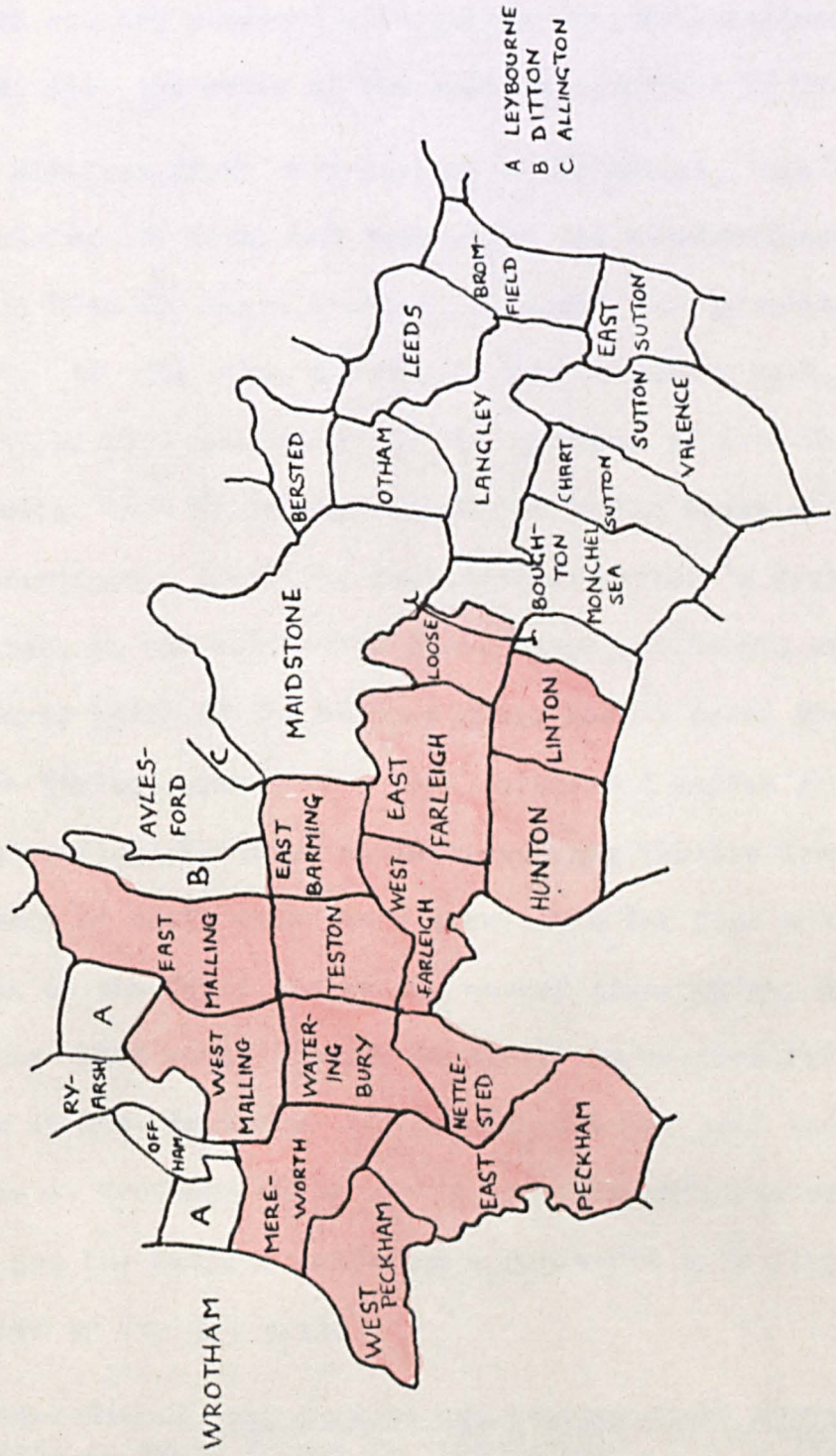
holdings of the occupiers of land. In theory it should also be possible to cross check between parishes to establish total land holdings, in practice it proved a difficult and uncertain operation matching names. From this the agricultural land use of a particular farm can be reconstructed. The acreage of fruit can be related to the size of the holding providing evidence on the importance of fruit to individual farmers, indicating specialist growers, and which groups of farms were of importance to total fruit production.

Problems exist in the recording of fruit in the Tithe Awards, where the state of cultivation refers to fruit, orchards, fruit and arable, fruit and hops and fruit plantations. It may be assumed that orchard refers to apples, pears and cherries, while fruit might indicate the presence of soft fruit, in particular gooseberries and currants. It would be difficult to make a distinction on the basis of the information in the Tithe Awards between orchard fruit and soft fruit, and it is impossible to allocate acreage between fruits. In the parish of East Peckham fruit was not given as a state of cultivation in the award, the only indication that fruit was grown was in the description of the land. 11 The problems that arose later in the century in collecting statistics on fruit growing exist for the Tithe Awards, where the state of cultivation of land under the trees was given. The size of the land holdings of those farmers growing fruit has been ascertained, the total for fruit including all categories that indicated fruit was cultivated.

The parishes which comprised the mid-Kent fruit growing area are indicated on Map 6 and centred around Maidstone. To the south

11. K.A.O., Tithe Award, East Peckham, CTR 284A.

MAP 6 Parishes of Mid-Kent; those shaded red examined for evidence of fruit cultivation in Tithe Awards.



the parishes bordered on the Weald where the soil was a miry clay, while to the north of the rich loams on quarry stone that were so favourable to hops and fruit there was infertile sand and red earths. The History of Kent by Hasted provides a sound topographical description of the parishes, which though written in the late eighteenth century remained accurate for the mid-nineteenth century. Map 7 indicates the soils of the area as described by Hasted.

The mid-Kent fruit area centred on Maidstone, "the soil, not only adjoining the town, but throughout the neighbourhood of it is remarkably kind for hops, orchards of fruit, and plantations of filberds". 12 The soil, a fertile loam on quarry rock, was excellent for hops and fruit and the parishes of West Malling, Teston, East Barming, West Farleigh, East Farleigh and Loose all abounded with plantations. Loose was described as having "a general neatness kept up here in the culture of them, (hops and fruit) which is particularly noted in the clipped green hedges round them, which gives the whole the appearance of a well cultivated garden ground". 13 The neighbouring parishes, while containing fertile loam, also had their share of soils which were unsuitable for hops and fruit. Those bordering on the Weald, below the quarry stone ridge, had heavy miry clay soils which could provide an excellent pasture for fattening oxen, as at East Peckham. 14 To the west the soil became sandy and infertile at Wrotham, while to the east the parishes of Otham, Langley and the Suttons contained a red earth with flints that was productive of coppice wood.

12. Edward Hasted, The History and Topographical Survey of the County of Kent, Volume IV, (Canterbury, 1798), 262.
13. Ibid., 360.
14. Hasted, op.cit., Volume V, (Canterbury, 1798), 92.

MAP 7 Soils of Mid-Kent Parishes

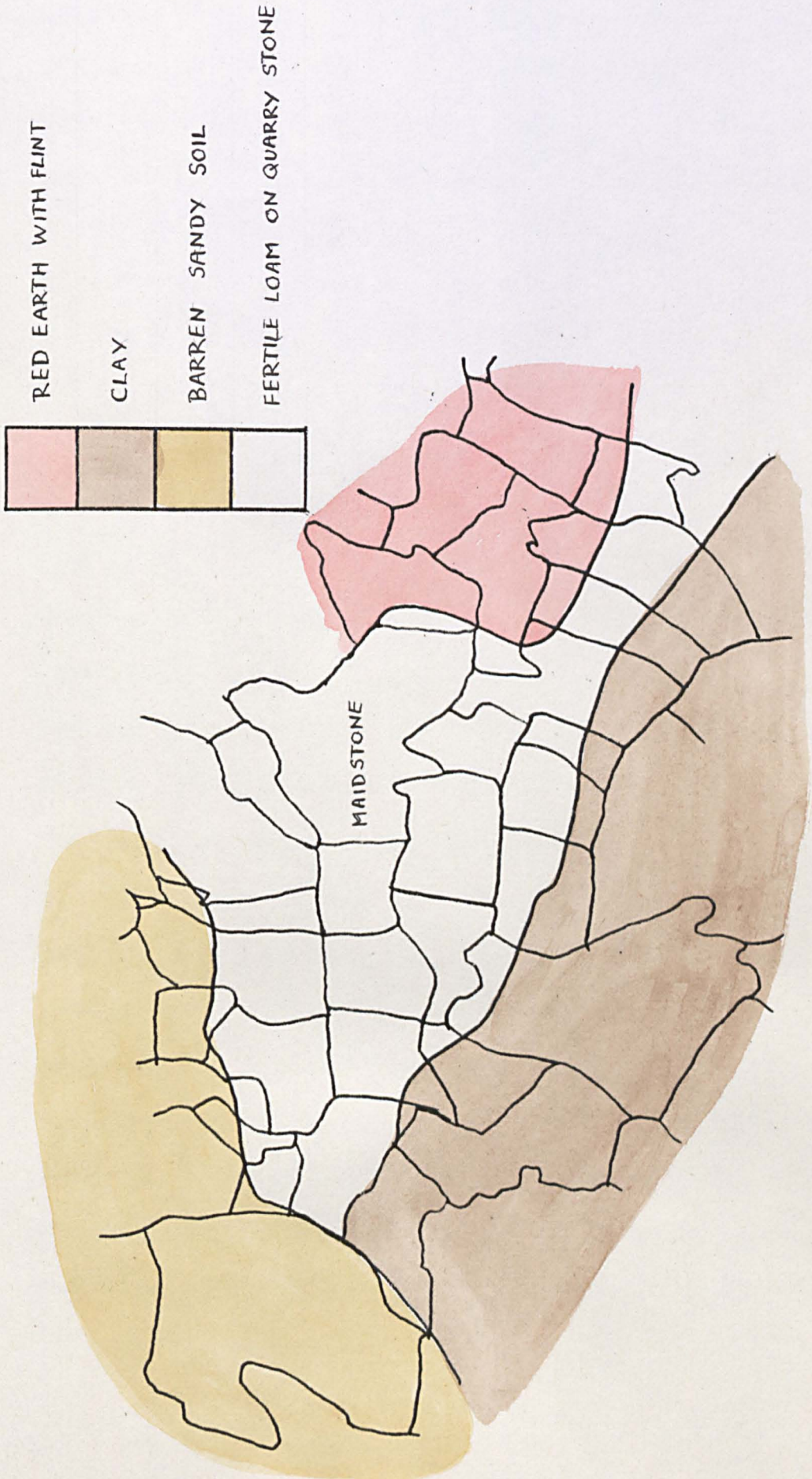


Table 3 provides a summary of the Tithe Award material for some of the mid-Kent fruit growing parishes, including Loose and East Farleigh, where the Peel Estates were situated. The table indicates that while in some parishes small farms of less than 10 acres had together considerable holdings of fruit, the acreage of fruit was greatest on farms of more than 50 acres. The total acreage of fruit on the large farms was four times that on farms of less than 10 acres, and greater than that on all farms under 50 acres. It is assumed that an acre of fruit was of equal productive value on the large and small farms.

The acreage would not all represent fruit that was available for market, some of it was for consumption by the families concerned. Potentially a greater proportion of the acreage on the small holdings would be used in this way; the fruit was part of a garden ground rather than a small farm. On some larger holdings also fruit land was part of non-agricultural estates, featuring along with gardens, pleasure grounds, copse and pasture.

A closer examination of the farmers who grew fruit in the parish of Loose reveals some of the problems inherent in using the Tithe Awards, and the difficulty of finding a typical or average fruit grower. To obtain more information on the fruit growers, the 1851 census enumerators' schedules were consulted to attempt to trace occupiers who were listed in the Tithe Award for Loose in 1840. The lapse of eleven years raises doubts as to the value of using the two sets of data together, the divergences might represent changes that had taken place rather than gaps in one set of material.

TABLE 3 The Fruit Acreage of Farms related to Farm Size

PARISH	Farm Size 0-10 acres		Farm Size 10-25 acres		Farm Size 25-50 acres		Farm size Over 50 acres	
	No. of Farms With Fruit	Total Fruit Acreage of Farms	No. of Farms With Fruit	Total Fruit Acreage of Farms	No. of Farms With Fruit	Total Fruit Acreage of Farms	No. of Farms With Fruit	Total Fruit Acreage of Farms
		A R P		A R P		A R P		A R P
Barming	5	11- 0- 1	5	25-0-26			3	31-2-33
E. Farleigh	16	39- 0- 4	5	18-3-21	7	90-3- 2	6	82-3-14
W. Farleigh	3	8- 0-21	2	13-3-18	2	14-3-19	4	76-3-16
Hunton	7	6- 1-20	4	11-0-20	5	26-0-18	9	57-3-29
Linton	1	3- 0-20	1	1-0- 2	2	8-1-11	4	51-0- 0
Loose	10	17- 1-27	5	29-2- 4	3	37-1- 4	5	63-1-16
E. Malling	9	10- 2- 7	4	30-3-38	2	14-1-31	13	169-1-34
W. Malling	5	5- 1-16	5	12-2-28	2	11-1-36	2	38-3- 7
Mereworth	15	14- 3-32	4	16-0-30	1	13-2- 2	7	71-2-38
Nettlestead	4	10- 1- 7	2	10-0-35	2	11-1-23	5	13-3-31
E. Peckham	5	6- 0- 6	4	5-1-12	1	2-0-20	19	70-0-33
W. Peckham	13	24- 2-20	1	0-1-15			5	41-2- 1
Teston	5	6- 1-28	1	9-2-17			1	9-2- 2
Wateringbury	24	61- 3-10	5	26-2-16	2	34-1-18	4	141-3-13
TOTALS	122	225- 0-19	48	211-2- 2	29	264-2-24	87	920-2-27

Twenty-three fruit growers were found in the Tithe Award (see Table 3) and ten of these were identified with some degree of certainty in the 1851 census. It is proposed to examine the growers in four categories of farm size used above and to introduce the additional census material where available and with suitable reservations. No specialist fruit growers can be definitely identified though some smallholders occupied only fruit land in Loose; for others fruit was a part of their farming and other business activities. On some of the smallholdings fruit was probably for family consumption, as was also the case with some large landholdings. There is always the possibility that occupiers in Loose also occupied land in adjoining parishes; an attempt was made to check with other parishes, but the name was the only link, and there was no means of cross-checking.

There were ten occupiers in Loose who had less than ten acres, their holdings ranging from 0A-1R-0P to 8A-0R-38P. On some holdings the fruit acreage could have contributed towards an income, while on others it was probably only enough to supply the needs of the family; in six cases over an acre was grown. A small number of trees would have produced a surplus of apples which could have been marketed locally or sent through a larger grower to London. 15

Two occupiers were identified in the 1851 census. The Misses Edmeads were four spinsters aged 60 to 80 in 1851 when they were stated to occupy 25 acres of land on which they employed four labourers. In Loose in 1840 they had 2A-0R-12P of land, of which 1A-1R-31P was fruit, which would have produced some surplus. Joseph Amies in 1840

15. See Chapter V.

owned and occupied 8A-OR-38P of land and also owned 16 cottages which probably brought in a small income from rent. The 1851 census enumerates a Joseph Amies aged 74 with a young wife of 38 and two children born after 1840. There was no reference to land ownership and he was described as a Papermould maker. There was a paper industry around Maidstone, and Mr. Robert Tassell, who gave evidence to the S.C.F.F.T., was a paper manufacturer and fruit grower. 16 It was possible that he followed a main occupation and supplemented his income, or his land might have been rented out in 1851.

There were five occupiers with land holdings in Loose in 1840 of between 10 and 25 acres. They all had a high proportion of fruit land, in three cases over 50%, three farms had arable land and two had hop grounds. John Randall, in addition to agricultural land, possessed eleven cottages, owning ten of them and rented a house. William Wood occupied fruit, pasture, arable and hop ground which comprised a small farm. The three remaining occupiers were traced in the 1851 census.

Thomas Thompson occupied 18A-OR-5P in Loose comprising fruit, hop and arable land, but in addition he occupied a timber yard. The 1851 census gave the occupation of a Thomas Tompson (sic) as builder with two men employed as carpenter; no indication of farming was given. The timber yard seems to confirm identity, and the agricultural land might have been rented out or was not considered of importance compared to building operations. John Wilson who occupied 15A-2R-0P in 1840 was described as a miller and farmer in 1851, employing two millers and four labourers. It was possible his business had expanded, as in 1851 he was 40 and would have been 29 in 1840. The material relating to Thomas Kemp is open to similar

16. S.C.F.F.T., 86.

interpretation. The Tithe Award recorded him occupying 14A-2R-9P of which 4A-1R-31P was fruit and 3A-OR-8P was orchard, but in 1851 he farmed 165 acres. Kemp might have occupied land outside Loose in 1840, or may have expanded his operations in the eleven years. In addition to farming he was described as a Malster and Corn Factor in 1851 and in 1840 he did occupy a Malthouse and Brewery.

Three occupiers had between 25 and 50 acres in Loose in 1840, and all were traced in the 1851 census where they were recorded as having more land, two substantially more. Joseph Green occupied 33A-OR-8P in 1840 including fruit, hops, and arable; he was also the occupier of the Swan Inn. In 1851 his widow occupied the Swan Inn and she farmed 45 acres and employed seven labourers. John W. Braddick occupied 25A-3R-8P in 1840, but in 1851 farmed 300 acres and employed 25 men. In 1851 he was 32 years old and it was possible he had come into land since 1840 or he may have occupied land outside Loose. He ran a substantial establishment,with a butler, two nurses, cook and housemaid. William Skinner who occupied only 35A-1R-11P in Loose in 1840 was recorded as occupying 420 acres in 1851 with 25 labourers, he was a working farmer with six sons and daughters aged 12 to 25 at home but only one servant.

There were five occupiers with over 50 acres. Mrs. Catherine Jones owned and occupied 54A-2R-23P in 1840 of which 46A-2R-14P was pasture. The description suggests that the property was the Mansion of Hale (sic) Place and its surrounding parkland and gardens. This was confirmed in the 1851 census which described her as a widow of 68 and a landed proprietor. Her household was one that befitted her station, a cook, two lady's maids, laundrymaid, housemaid, kitchen maid and two footmen. The fruit acreage of 1A-OR-24 would have supplied the household.

Richard Startup and Henry Allnut both occupied mixed farms in 1840 of 73A-1R-16P and 58A-0R-23P respectively, and these were two substantial farmers. William M. Penfold farmed 192A-2R-28P in 1840 which included 30A-2R-36P of fruit and 1A-3R-11P of orchard, and the Peales (sic) occupied 140A-1R-27P in Loose in 1840. The Peels' farms are examined in more detail in the following section. The Peels occupied land in East Farleigh as well as Loose and it was in the former that they had their main fruit holding. The farm was distinguished by the very large acreage of hops, a feature that occurs on some other farms : James Ellis farming 177A-3R-37P in East Farleigh had 143A-1R-21P of hops, and on smaller farms the proportion could be high.

This examination of one parish illustrates the problem of distinguishing the typical fruit growing farmer. Fruit growing, and farming could be allied with other occupations and in some cases was only one of a number of sources of income. The Peels represented the group of large farmers who were important in terms of the contribution they made to the total fruit acreage. They occupied a mixed farming unit with a large acreage of hops, a feature which was not unique. Fruit cultivation was present at all farm sizes and there were some fruit growers whose acreages indicated a considerable degree of specialization. This was not to the extent that became apparent in the late nineteenth century when fruit was cultivated to the exclusion of other farming activities.

Production at Farm Level. The Peel Estates

The Tithe Awards produce a static picture of fruit acreages in the years 1838 to 1846, depending on when the award was drawn up. They do not indicate changes in acreages or annual fluctuations in

the value of fruit to individual growers. Farm accounts can provide some evidence on these areas, indications of the type of fruit that was grown and the method of marketing. The problems in using them are numerous, particularly when seeking evidence on something as elusive as fruit production. Continuously kept farm accounts are uncommon and those containing information on fruit are likely to be untypical. It might be suggested that any farmers who kept accounts were untypical. Further, the sheer bulk of information can be intimidating with each item separately detailed, though without this the accounts are of little value for reconstructing the farming activities.

The accounts which form the basis of this analysis run from 1811 to 1861 and relate to the Peel Estates in the parishes of Loose and East Farleigh, near Maidstone.[17] Three books were consulted, two account books containing debit and credit accounts, and a labour book of weekly bills for the years 1838 to 1846. The analysis was based on the credit accounts for the years 1811 to 1855. After 1856 the accounts deteriorated, probably due to the age of the farmer, but those for 1856 were probably accurate, while those for 1857 were not balanced, and the 1858 accounts were incomplete. There were none for 1859 and 1860, and only partial debit accounts for 1861.

I considered that a careful analysis of the credit accounts would yield useful evidence on fruit growing and the importance of fruit to the farmer. The debit accounts appeared to relate to a greater extent to the other aspects of the farm and would be only of marginal value to the study of fruit growing. In examining the accounts only those items that related directly to farming income were taken into account. The profit and loss on annual income related,

17. K.A.O., Coles MSS, U106, Peel Estate, A1,A2,A3. (All the material is drawn from this source in this section).

however, to total takings, including that from sales of shares, and interest paid on shares. Though the debit account was not analysed it did contain expenditure of a capital nature in addition to working expenses.

The purpose of examining these accounts was to make an estimation of the importance of fruit to the farmer in the mid-Kent area. The credit accounts were used to draw up an annual table of income from the various farming sources. In addition there were details of acreage for the Loose estate from tithe payments; for East Farleigh only the total cash paid was given.

The most important crop cultivated in terms of value was hops, and during the years 1811 to 1855 the acreage was considerably extended. In 1811 hops were cultivated on 23 acres; by 1821 this had been extended to 39 acres, 20 roods, in 1831 there were 106 acres and the peak was reached in 1837 with 119 acres. The total hop acreage from the tithe returns of 1844 gave 87 acres 1 rood 32 perches. The income from hops fluctuated mildly, and there were years when it brought in no income. It was, however, over the period the most important source of income, bringing in between £1,000 and £12,000 in the years when hops were sold. The table below gives total income and average income for ten-year periods from 1811 to 1850 and the average for 1851 to 1855.

TABLE 4 Income and Average Income for Hops 1811-1855

Years	Total Income For Period			Annual Average Income			No. of Years No Hops Sold
	£	s.	d.	£	s.	d.	
1811-1820	30,464	17	10	3,046	9	9	3
1821-1830	22,942	19	11	2,294	5	11	6
1831-1840	47,773	4	5	4,777	6	5	2
1841-1840	40,874	16	4	4,087	9	7	1
1851-1855	36,468	10	10	7,293	14	2	0

Until the mid 1820's the farm appears to have been organized as a mixed farming unit. Wheat was sold regularly until 1826, though only in small amounts and from 1811 to 1826 the annual average income from wheat was only £41 11s. 3d. Barley was sold intermittently, as were roots and potatoes. Income from sheep seems to have been quite important until 1825, and cattle were being sold until 1830. These were probably kept mainly for providing manure for the hop gardens. Small quantities of wool were sold in 1813, 1815 and 1823, but the sheep seem to have been mainly kept for fattening. In addition, from 1821 to 1825 money was received for sheep keep, these being sheep wintering on the farm probably from Romney Marsh graziers. Pigs were also kept until 1821.

In the 1830's, apart from some sales of cattle between 1833 and 1837, the farm concentrated its resources on three crops, hops, fruit and potatoes. The latter were not of great importance and the acreage was small, averaging 2 acres, 2 roods, 26 perches from 1831 to 1836. In the 1840's wheat was again being sold, and its acreage was recorded as titheable in 1840 and 1841. No wheat or lent corn was recorded as titheable from 1828 to 1837. No cattle were recorded as sold from 1838 to 1852, though there was some income from cowkeep. An indication of the lack of livestock on the farm was the sale of hay and straw off the farm from 1844 to 1852.

Apart from hops, fruit was the most important single source of income particularly after 1822. The acreage of orchard in Loose was recorded as 7 acres until 1814 when it was reduced to 4; by 1820 it had been further reduced to 2½ acres, but in the 1820's and 1830's it rose to 6. In 1840 and 1841 it was recorded at 10 acres, in spite of the abolition of an import duty in 1838, though it may be that the acreage was increased earlier but did not come to maturity until 1840.

In the 1844 tithe apportionment 33 acres 2 roods and 19 perches of fruit were recorded, this included the acreage at East Farleigh. It is probable that throughout the period fruit was being grown at East Farleigh, though the tithe payments for that parish were not detailed.

Mr. William Thorpe, a fruit salesman from Covent Garden who dealt extensively with Kent, regularly purchases the bulk of the fruit and filberts after 1840. Mr. Thorpe had been connected with Loose, since 1833 when he had managed a Mr. Penfold's business there, and he spoke with some first-hand knowledge of the Peels. He stated that the Peels were large growers with 50 to 70 acres, though it is possible he was referring to other Peels in the area who were related. 18 The fruit on the estate covered by the account books extended to only 33 acres in 1844 according to the tithe apportionments. Mr. Thorpe thought that the Peels had been improving the quality of their apples. In 1839, 1840 and 1842 despite the reduction in duty on imports there was considerable grafting of apple trees undertaken. In the three years 5552 heads were grafted and subsequently in 1846 a further 948 were grafted, and in 1847 1,332 apples and pears.

In terms of fruit growing the years covered by the account books may be conveniently divided into two. The years from 1811 to 1834 were a time when the whole growth of the orchards were sold to a single fruiterer. The same salesman did not always purchase the fruit, though for several years together one might get preference. The first four years of the accounts detailed the money received and indicated the fruit that was grown as cherries, apples, pears and filberts. After 1815 only the total value of the fruit sold was recorded, and it was stated as having been sold by agreement. Mr. Skinner, a fruiterer from

18. S.C.F.F.T., 14.

Loose, who gave evidence to the Select Committee in 1839 was a regular purchaser from 1820, though not the sole purchaser. From his evidence it was apparent that he purchased the fruit on the trees and disposed of it through his salesman in the London market. 19 The income from fruit was liable to violent fluctuation as was that from hops. The annual average income from fruit apart from the years 1816 to 1820 increased slightly in the period to 1835 particularly after 1825, when it remained steady for ten years. In the immediate post-

TABLE 5 Income and Average Income from Fruit 1811-1855

Years	Total Income			Annual Average Income		
	£	s.	d.	£	s.	d.
1811-1815	809	10	0	161	18	0
1816-1820	468	10	0	93	14	0
1821-1825	715	0	0	143	0	0
1826-1830	905	0	0	181	0	0
1831-1835	924	0	0	184	18	3
1836-1840	1,100	8	7½	220	1	8
1841-1845	1,896	5	8	379	5	1
1846-1850	3,232	17	10	646	11	6
1851-1855	1,652	4	11	330	8	11

war years though the fruit acreage had been reduced the fall in income was disproportionate. In 1814 fruit had brought in £270 0s. 0d., the best year for the five year period, but in 1817 it brought in only £23 10s. 0d. and was below £100 in each year apart from 1819, when it sold, for £230 0s. 0d. In the years after 1823 to about 1835 there was less fluctuation in income from fruit on the average.

19. S.C.F.F.T., 155.

In 1835 there was a marked change in the method of disposing of fruit, which set the pattern for the next twenty years for which there were accounts. While the majority of fruit was sold to a single salesman, increasingly small lots were sold to other individuals. The number of individual purchasers varied from year to year, though in each year there was one individual who bought the bulk of the crop. From 1840 this was Mr. Thorpe who sold through Covent Garden Market : he always purchases the filberts and on occasion the apples or part of them. In some years the apples were sold in small quantities but one buyer over the course of the year bought the bulk of the crop. It is problematic who these purchasers were, or what the nature of the business was of those who bought a large quantity in small amounts during the year. It is probable that the advent of these sales indicates problems with selling apples through Covent Garden and the need to seek new purchasers.

The accounts were kept on a January to December basis, which is the basis on which they have been examined. The filberts were sold soon after gathering and the apples were usually sold in the calendar year of gathering. On occasion, however, the sales spread into the following year. In 1838 there were sales, of small quantities of the 1837 crop, in February and March; in 1848 money was received from Mr. Thorpe for the 1847 crop; and in 1850 the previous year's apples were being sold until the end of March, as was the case in 1851 and to a lesser extent in 1854. As the accounts specified the quantities and the variety sold to the individuals and did not indicate a settlement of outstanding accounts, it can be assumed that they record actual purchases of stored apples. In general, however, the fruit was sold soon after gathering.

In 1848 another major change became apparent when soft fruits entered the accounts, with regular annual sales of gooseberries and blackcurrants. These were sold through Mr. Thorpe at Covent Garden, and in 1848 they realized £15 11s 11d. The amount fluctuated but in the period 1848 to 1855 they bought in an average of £57 7s. 11d. per year.

This diversification into soft fruit may have been encouraged by the opening of the branch line from Paddock Wood to Maidstone in 1844. East Farleigh was provided with a station, and the Peels had property in the parish. The weekly bills for labour undertaken records blackcurrants and gooseberries being gathered from 1848. There was no specific mention of the work of planting them but in 1843, 1844 and 1845 over 10 acres of fruit plantations were dug and manured with sprats. Two of the four entries referred to plantations in East Farleigh. This may refer to the preparation of land for soft fruits, though it is not specified. The value of the labour book is reduced as work undertaken is not usually mentioned; only the name of the labourer and days worked are recorded, while the women employed gathering soft fruit were paid by the day.

Fruit was an important item of income, and increased in value, apart from the years 1816 to 1820. In the 1840's and 1850's filberts may have been an important part of this total of fruit grown. It is not possible always to distinguish how much income derived from this source. Mr. Thorpe when he settled his account did so for apples and filberts together. The selling of apples in small quantities after 1835 might indicate the increasing problems being experienced in the over-burdened London markets and need to seek new sales outlets. The Peel estates appears to be fairly representative in terms of acreage

and land use of those farms that engaged in fruit production according to the tithe surveys. It was this size of unit that was of importance in terms of their share of total fruit acreage, rather than that of the more numerous small holders.

Employment for Labourers on Fruit Farms

The cultivation of orchards provided additional steady employment for agricultural labourers and their families, they also benefited from the hops produced in these areas. The fruit pickers were women who were resident in the area, not from London or adjacent towns as were hop pickers. 20 Mr. Langridge of Wateringbury thought that the best labourers and their families could earn £150 p.a. when employed on fruit land, 21 though this was probably a generous over estimate. Certainly those involved in fruit growing could earn considerably more than ordinary labourers.

In mid-Kent, where there were cultivated orchards, the variety of fruit produced gave a long period of employment to families as well as consistent employment for men. Though day wages in mid-Kent at 12s. 0d. a week were similar to those in other areas in the county the work was more regular. 22 There were also the benefits of piece work which Charles Gustavus Whittaker, a fruit grower in Barming, considered was more highly paid, labourers being able to earn 16s. 0d. a week. 23

During the winter months of January to March men were employed to dig orchards for which they were paid £1 an acre. In a week a man and boy could dig an acre, a man on his own digging ¾ acre in a week. To prepare the orchard for digging women and children were employed to clear the ground of wood and stones, at 1s. 0d. and 6d. a day respectively.

20. S.C.F.F.T., 99.
21. Ibid., 73.
22. Ibid., 62.
23. Ibid., 18.

In June men and boys were employed to hoe orchards. Working by the piece at 5s. Od. an acre a man and boy could hoe about 3½ acres a week. 24 Mr. Harryman, a fruit grower in Mereworth, calculated that an acre of orchard cost £5 in cultivation costs before the crop was ready. The picking, sorting and marketing put another £10 an acre on the cost of an acre of fruit. 25

Around Maidstone there was employment for families from June to the end of October. In June boys and girls gathered the soft fruits, gooseberries and currants, while women and older boys gathered cherries.26

Cherry picking was a remunerative occupation for the women : picking at 1s Od. a sieve they could "earn good wages", each acre costing £5 to pick. 27 The cherry harvest was almost entirely gathered by women.

The plums were gathered by women and boys, who also picked the filberts. 28 The apple harvest was gathered by men with women and boys to assist. 29 Women and children were employed to gather, sort, pack and store fruit, and during the winter months they prepared the stored fruit for marketing. 30

There were fears expressed by witnesses that if orchards were grubbed there would be less employment on the land. In Barming, with 100 acres of fruit land, 14 families (man, wife and three children) were employed entirely upon fruit cultivation. Mr. Whittaker thought that if 60 acres were taken out of fruit growing six families would be unemployed and other would lose a part of their earnings. 31

On grassed orchards there was no winter employment for the men, but from June to harvest women were employed in picking. 32 The

24. Reports of the Special Assistant Poor Law Commissioners on the Employment of Women and Children in Agriculture, (1843), 187. (Hereafter abbreviated as Report on the Employment of Women and children in Agriculture.)
25. S.C.F.F.T., 24.
26. Report on the Employment of Women and Children in Agriculture, (1843), 187.

employment opportunities were of considerable importance to agricultural labourers in fruit growing areas, particularly where orchards were cultivated the threatened reduction in acreage would have had a detrimental effect on the earnings of families and caused some unemployment.

Markets for Kent Fruit

The prime market for Kent fruit was London : nearly two-thirds of Covent Garden's fruit came from mid-Kent. 33 The growers gave no serious consideration to any other market, the local markets could not sustain them and the distant markets were too speculative. From north-Kent fruit went by sea, but from mid-Kent considerable quantities went by road as being less hazardous and quicker than the journey by water. In 1839 the growers had not had time to consider the possibilities of the railways, though it was thought that cherries would be adversely affected by the jolting. 34 The problem arose from the use of trucks without airbrakes, and the jarring as they banged into each other as the train slowed down. It was too early to see the advantages that could be gained and the specific problems growers would face from the railway companies. These became clear later in the nineteenth century with the expansion of the railway network and the increased scale and importance of fruit. In 1839 carts took fruit from Maidstone to London. Mr. Langridge of Wateringbury said that where he had met, earlier in the century, one cart going to London he met in 1839 twenty or thirty. 35 This marked a change from the early eighteenth century when Defoe had written of the fruit being sent by hoy, and indicated a considerable improvement in the road system.

27. S.C.F.F.T., 81.
28. Report on the Employment of Women and Children in Agriculture, (1843), 187.
29. Ibid., 188.
30. S.C.F.F.T., 19.
31. Ibid., 19.
32. Ibid., 99.
33. Buckland, op.cit., 278.
34. S.C.F.F.T., 20.
35. Ibid., 75.

London was the main market for high quality fruit and Mr. Robert Francis of Canterbury maintained that Covent Garden was the best outlet. He sent only lower grade apples to the local markets of Dover and Canterbury. The Dover market, he asserted, had been lost since the reduction in duty because of the quantity of foreign apples imported into coastal towns. 36 Mr. William Smart from Rainham sold his main crop through Covent Garden, but he did sell small quantities elsewhere, including high quality dessert apples to confectioners at 8s. 0d. a bushel. 37 Mr. Wakeley of Rainham sold fruit locally only when prices were low, as in 1837 when he sold two or three thousand bushels at 1s. 0d. each. There was, however, no profit in apples sold locally at that price, even though the foreigner could not compete. 38 During 1837 when the apple crop had been abundant Mr. Wakeley had sold 16,000 bushels of apples at 1s. 6d. a bushel to a man engaged in the coal trade, who had hoped to make a profit by sending them north in coal vessels. The venture, however, made a loss. 39 The stable profitable market remained in London. While growers sent their fruit to salesmen in the London markets, some fruit merchants still purchased fruit off the trees in the same manner as they had done in the eighteenth century. Mr. Skinner, a fruiterer from Loose in Kent, purchased fruit on the trees in 1838 prior to the removal of the protective duty and made a loss which he estimated at £150 on the deal. 40

The Kent growers dealt with London markets, but from these markets fruit was distributed to other non-fruit growing areas of the country. Mr. James Godwin, a fruit salesman of Covent Garden sent consignments of apples to Scotland. 41 In August 1842 The Times reported that 100 tons of English fruit was being sent to Leith in Scotland from

36. S.C.F.F.T., 105.
37. Ibid., 94.
38. Ibid., 98, 99.
39. Ibid., 100.
40. Ibid., 155.
41. Ibid., 11.

London by steamship. 42 The railway network was beginning to become important in the 1840's as a means of opening new markets for fruit. In 1842 there was a prolific crop of cherries, but quantities of early fruit arrived from the continent depressing the price received by the English growers at the start of the season. Some of the abundant Kent crop was sent by railway to Leeds, breaking into what had hitherto been a small market monopolised by local growers. The effect of these Kent cherries was, of course, to reduce prices in the Leeds market. Cherries were sent to other provincial markets by railway, helping to ease the problems of over-supply in Kent. Prior to the opening of the railways long-distance transport of cherries was impracticable, as the fruit would have been injured by the long journey. 43

The Quarterly Review reported in 1849 and 1854 on the extent to which railways took the surplus of London's fruit to the industrial and commercial centres of the North. The London and North Western Railway conveyed quantities of fruit to Manchester and Glasgow and relieved the problems of London salesmen's over-supply. 44 By use of the telegraph it was possible to ascertain the potential demand for fruit in various northern towns and reduce the speculative element in the redistribution of fruit from London. 45

The direct sale of fruit to northern markets by the growers was not a major feature of Kent's fruit production, though it did increase in the later nineteenth century. For Kent growers London acted as a barrier to direct contact with northern salesmen, and was too great an attraction as an easily accessible market for fruit.

The final market for the bulk of the fruit was the tables of the upper and middle classes. It was they who consumed the high quality

42. The Times, 19 August 1842, 6b.
43. The Times, 19 July 1842, 6b.
44. "The London and North Western Railway", The Quarterly Review, 84, (1849), 24, 25.
45. "The London Commissariat", The Quarterly Review, 95, (1854), 299.

apples, early cherries and the choice soft fruits. The Select Committee, however, was concerned to demonstrate that the reduction in duty benefited the lower classes and that fruit, rather than being a luxury, was a necessity. Salesmen produced considerable evidence that fruit was hawked around the poorer streets and consumed in puddings and pies. John Davies stated that the poor were great consumers of the common and middling sort of apple. 46

Mr. Thomas Brushfield, Chairman of the Board of Guardians for the Whitechapel Union, gave evidence of the practice of hawking fruit around the streets. The Board of Guardians had on many occasions given paupers money to buy a basket and stock it with fruit or fish. This enabled them to make a living for their families outside the workhouse. 47

The representative of the Board of Trade maintained that apples were a necessity for the poor.

> ... the apple, from its excellent properties, may be said to be a necessary, leading to the consumption of flour, rice etc.; that the importance and utility of the apple will also appear, if considered with the benefits deprived by the poor in the various ways of it being consumed, affording a source of retail-trade when our own apple and other fruit cannot be obtained, and which by thousands are enabled to assist in support of themselves and their families. 48

It was not an unanimous view, however : Mr. Laporte considered that apples were a luxury rather than a necessity. 49 The poor consumed fruit when it was cheap, and in particular the inferior

46. S.C.F.F.T., 28.
47. Ibid., 175.
48. Ibid., 158.
49. Ibid., 39.

quality of apples. There had been a great increase in apple consumption in London dating from about 1830 when the price fell. The demand for apples was increasing as the population rose. 50

The production of cider did not offer a profitable alternative to the fresh fruit market for Kent's apple growers. Apples were made into cider only when their value in the London market was such that they would not bear the cost of transport. The cider produced was of low quality and was given to the labourers in lieu of beer. 51 Kent's apple growers would rather make a small profit than produce cider, and they did not plant varieties specifically for cider. 52

In 1836 and 1837 with the low price of apples considerable quantities of cider were manufactured. Mr. Harryman in those years made about 36 pipes of cider because the London price was low, 53 and Mr. Staples of Dartford made 2,000 bushels of apples into cider in 1838 when the duty was reduced and the price in London fell. The cider was valued at under 1s. 0d. a gallon and did not pay for its manufacture. 54 When the price of apples was high no cider was made, 55 and when the price was low that cider made was not of a saleable quality. 56 The Kent growers were orientated towards the fresh fruit market and their expensive cultivation methods made cider unprofitable.

In the mid-Kent area, in the period from 1800 to 1840, fruit was still being produced as part of a mixed farming economy. The principal fruits grown on the farms were apples and cherries, and fruit was only one aspect of the activity on an individual farm. The farmers were likely to have a hop garden, an arable acreage and keep livestock, as well as cultivate fruit. The tithe awards provide some evidence

50. S.C.F.F.T., 33.
51. Ibid., 34.
52. Ibid., 18.
53. Ibid., 23.
54. Ibid., 110.
55. Ibid., 25.
56. Ibid., 61.

of the extent to which fruit growers engaged in other farming activities, indicating acreages of arable, pasture and hops, In this period there do not emerge farmers who were concerned solely with fruit cultivation. Fruit held a similar position in the organisation of the farming economy as it had in the eighteenth century, but it seems that the volume of fruit produced was greater. However, there were indications that the organisation of fruit production was beginning to change. In particular soft fruit was being introduced to the range of traditional orchard fruit that were cultivated.

As in the eighteenth century the main market for Kent fruit was London. The witnesses all emphasised the importance of London, while they maintained that the local markets would only take low grade fruit and did not offer a profitable outlet. The local market for fruit was small and would be easily satisfied, indeed many potential purchasers would consume their own produce or have access to that grown by relatives. There were some confectioners who sold quality fruit, but their demand was easily satisfied by the numerous producers. The local towns offered a substantial market only when prices were low and farmers sought to offload their surplus. The coastal towns were being supplied with French fruit as well as vegetables and eggs, and were effectively lost to English producers. London offered the prospect of good prices, and there were well established contacts with the salesmen at the major markets. The distant large provincial towns were not readily accessible until the advent of the railways and time was needed for contacts to be established. However, London salesmen did despatch fruit north.

In many respects 1840 marks a point when a number of changes in the organisation of production and marketing were incipient in a nascent fruit growing industry.

CHAPTER V

The Course of Fruit Production and the Effect of Imports, 1800-1840.

During the Napoleonic Wars the price of apples was generally high : between 1802 and 1816 apples fetched as much as £5 a bushel and common culinary ones 10s. Od. a bushel in the London markets. 1 The witness stated that there were no imports of foreign fruit during that time, but that from 1816 to 1818, when foreign fruit again entered the market, prices fell. He also stated that the orchard acreage had been considerably extended, for every one acre planted in 1802, he thought there were ten acres in 1819. 2 John Boys had reported in 1816 that small occupiers along the Kent coast had been hard hit by the import of fruit as well as poultry, vegetables, butter and eggs from France and Flanders. 3 Imports appeared to be the major cause of the price fall, though of importance was probably the extension of the fruit acreage, and fruit would also have been affected by the deflation in the economy. In common with other branches of agriculture the fruit growers obtained additional protection when as a result of petitioning the duty on imported apples was raised from 3s. 2d. to 4s. Od. a bushel.

In the 1820's the price of apples was steady, but at a sufficiently high level to induce farmers to plant more orchards. In the years 1819 to 1827 the price of apples in London was probably influenced by the quantity of imports, but in the 1830's the extent of home production governed price. 4 Table 6 gives the price of apples from 1827 to 1838, clearly illustrating the low prices obtained in the 1830's.

1. S.C.F.F.T., 21.
2. Ibid., 21.
3. The Agricultural State of the Kingdom, 1816, (Reprinted with an introduction by G.E. Mingay, 1970), 130.
4. S.C.F.F.T., 92.

TABLE 6 The Price of English Apples per Bushel in the London Markets.

Year	Price In * Spitalfields	Price In ** Covent Garden
1827	4s. 2¼d.	4s. 6 d.
1828	5s. 4 d.	5s. 6 d.
1829	2s. 11½d.	3s. 0 d.
1830	5s. 3½d.	5s. 6 d.
1831	6s. 6 d.	6s. 6 d.
1832	3s. 6 d.	3s. 6 d.
1833	3s. 0¾d.	3s. 2 d.
1834	3s. 4 d.	3s. 4 d.
1835	2s. 11 d.	3s. 3 d.
1836	3s. 5½d.	3s. 6 d.
1837	2s. 1½d.	2s. 0d.
1838	4s. 5½d.	4s. - 4s. 6d.

* S.C.F.F.T., 34. Evidence of Mr. Laporte, Spitalfields Market.

** S.C.F.F.T., 2. Evidence of Mr. Godwin, Covent Garden Market.

The price of culinary apples and the better sort of apple declined in a similar manner. The inclusion of dessert fruit in the calculation tended to raise the average price. Until 1831 the price of apples remained high, and in 1831 ordinary culinary apples averaged 4s. 8d. a bushel, while higher quality Non Pareils, Golden Pippin and Golden Knobs fetched 8s. 6d. a bushel. 5 The major expansion of orchards took place in the years to 1831; Mr. William Harryman thought the extra duty imposed in 1819 gave a definite stimulus to the expansion of fruit. 6 These orchards were coming in to bearing in the 1830's and the increased production was apparent in the falling prices and the lower level of imports.

5. S.C.F.F.T., 98.
6. Ibid., 22.

TABLE 7 Total Apple Imports into U.K. in Bushels

Year	Quantity	Year	Quantity
1819	92,212	1829	31,093
1820	45,374	1830	22,462
1821	80,887	1831	52,615
1822	45,830	1832	16,537
1823	31,123	1833	27,087
1824	68,758	1834	18,447
1825	68,304	1835	11,574
1826	40,865	1836	14,859
1827	28,670	1837	20,502
1828	48,202	1838	2,162*

*To 16 August 1838
Source. Foreign Apples, Pears, and Cherries. An Account of the Quantities of Apples, Pears and Cherries, imported into the United Kingdom since 1819., 1839 (229) XLVI, 9.

Table 7 shows the extent to which apple imports declined during the 1820's and particularly in the 1830's. There was a rise in 1831 when there was a poor English crop and high prices. Despite the low prices of 1837 there was a fairly high level of imports, which did not accord with Mr. Humes evidence, quoted below, but this might have been due to imports in the first half of the year and the fact that Mr. Humes figures related only to London.

In the 1820's English production and imports combined to supply the consumer at a reasonable price, and provide a remunerative return for the producer. In scarce years imports increased to make up the deficit, but in good years the duty inhibited foreign growers from flooding the market. After 1832 the price of ordinary apples fluctuated between 1s. 6d. in 1837, and 3s. 2d. in 1836, while quality

apples were between 3s. 2d. and 5s. 8d. 7 English growers were supplying the consumer with apples at a price less than the import duty, and at a price which they considered was not remunerative. The witnesses thought they needed to sell apples at 4s. 0d. to 4s. 6d. per bushel on average to give them a fair return. At this price in the London market the grower was able to pay his rent, land taxes, costs of gathering and marketing; below this price his profits were encroached upon. In years when apples were scarce the higher price was compensation for the smaller crop, while in more abundant years the return per acre could be equalized by marketing a greater quantity.

In the 1830's it was becoming increasingly clear that home production had been overdone, and the grubbing of orchards was inevitable. This was a familiar part of the Kent hop and fruit cycle. Too much home-grown fruit was on the market for all the orchards to remain remunerative. Mr. Israel Harris Lewis had ceased to plant new trees after 1831 because of the low prices, and in 1837 had grubbed seven acres. 8 Mr. Staples, a land agent near Dartford, had seen fruit being grubbed because of the low price of apples. 9 Apples were cheap in 1837, not from foreign competition but from competition between English growers. 10 The new plantations of the 1820's were in full bearing and produced the situation in 1837 when Mr. Tassell of East Malling stated apples were worth no more than potatoes. 11 In north-west Kent the changing market had caused growers to stop planting apple orchards, to grub some and resort to making plantations of soft fruits, mainly gooseberries and currants. 12

7. S.C.F.F.T., 98.
8. Ibid., 45.
9. Ibid., 110.
10. Ibid., 112.
11. Ibid., 90.
12. Ibid., 110.

Up to August 1838, imported apples were subject to a duty of 4s. Od. a bushel and with the increased home production it conspired to reduce the level of imports. Quality apples continued to be imported, particularly when the English crop had been consumed. Mr. Laporte, of Spitalfields, stated that the import of apples had declined since the mid-1820's. In his father's time apples had been imported all the year round, but since 1826 he had not been abroad to purchase and had imported only in the spring. 13 Mr. Ramsdale, among other salesmen called as witnesses, stated that in recent years apples had been imported mainly after Christmas when there was a shortage of English fruit. 14 The English growers were supplying the bulk of the apples and the markets were being supplemented, out of season, by quality fruit.

> There are certain qualities of fruit that come from abroad, and which always sell after a particular period of the year, that is from January to May; these are a sort of apple that come from France that supersede our English apples, called the royal russet; that is an apple that is much liked by the people. 15

Mr. James Deacon Hume, a secretary of the Board of Trade, provided evidence of apple imports into the Port of London, stating that these represented about half the total imports for the country. The table of seasonal imports clearly indicates the influx of foreign fruit when the English crop had been consumed. In 1834-1835 when English apples fetched about 3s. 3d. a bushel in London the main imports entered after Christmas, and a similar pattern was observed in 1837-1838.

13. S.C.F.F.T., 32.
14. Ibid., 134.
15. Ibid., 3.

TABLE 8 Apple Imports into the Port of London 1834-5 and 1837-9

Period		Quantity
Michaelmas Quarter	June 24-Sept 29,1834	121 bushels
Christmas Quarter	Sept 29-Dec 25, 1834	481 bushels
Ladyday Quarter	Dec 25-March 25,1835	1,294 bushels
Midsummer Quarter	March 25-June 24,1835	1,229 bushels
Michaelmas Quarter	June 24-Sept 29,1837	Nil
Christmas Quarter	Sept 29-Dec 25, 1837	35 bushels
Ladyday Quarter	Dec 25 - March 25 1838	9 bushels
Midsummer Quarter	March 25-June 24, 1838	293 bushels
Michaelmas Quarter	June 24-Sept 29, 1838	£108 value
Christmas Quarter	Sept 29-Dec 25, 1838	£14,760 value
Ladyday Quarter	Dec 25-March 25, 1838	£8,520 value
Midsummer Quarter	March 25-June 24, 1838	£920 value

Source S.C.F.F.T., 159-160.

The English growers were producing, in good years, an over-abundance and supplying the market at a moderate price; in such circumstances it was considered extraordinary that the duty should have been reduced in 1838. 16

Prior to the 16 August 1838 there had been a duty of 4s. 0d. a bushel on apples, 7s. 6d. a bushel on pears and 18s. 8d. on a cwt. on cherries; after that date a duty of "£5 per centum, ad. valorem" was imposed. 17 A fixed duty is more effective in protecting the market when home prices are low, while an ad valorem duty is more effective when prices are high. The growers favoured a fixed duty that allowed imports of quality and end of season fruit while maintaining a minimum price. An ad valorem duty would not have prevented the quality fruit entering and would have been ineffective on lower value fruit.

16. S.C.F.F.T., 90.
17. Ibid., iii.

The Select Committee Report stated that in 1837 there had been an abundant crop with an average price in London of 2s. 3d. and there had been only 337 bushels of apples imported into the Port of London. The crop in 1838 was deemed to have been deficient, and it was estimated that 120,000 bushels had been imported, but that the price had been as high as 4s. 9d. 18 The growers argued that the reduction in the duty meant that in scarce years the price of apples did not rise sufficiently to compensate for the smaller quantity produced. Mr. Israel Harris Lewis, a grower in East Farleigh, stated that in 1838 the crop was worse than that of 1831, but that in 1831 apples sold for an average of 6s. 10d. a bushel, while in 1838 the average was only 4s. 6d. Prices early in the 1838 season had been 5s. 0d. or 6s. 0d. a bushel, but had fallen to 3s. 0d. or 3s. 6d. because of the influx of imports when the duty was reduced. 19 The lower rate of duty might have encouraged importers to test the market, which would account for the high level of imports in the quarter to 25 December 1838, when £14,760 of apples were imported.

The 4s. 0d. duty had not prevented apples being imported during scarce years, but it was feared there would be unrestrained importing without that degree of protection. The growers would have expected some importation after the 1838 crop, Mr. Lucas thought :

> two thirds of the apples at least that we had last year (1838) would have come in and paid the 4s. duty. It has been injurious to those persons who grew fruit, because the quantity grown was not very considerable and they would have had the advantage of getting a higher price for it. 20

18. S.C.F.F.T., iii.
19. Ibid., 44-45.
20. Ibid., 65.

The Board of Trade case was succinctly put in the Report. During abundant years the low price of fruit in the London market would deter imports, which had to bear the costs of shipping and handling. Conversely it was argued that in scarce years the price of apples would not be reduced to such an extent that the grower would not be renumerated. 21

The main sources of the foreign apples that competed directly with the English were France and the Low Countries, though considerable quantities also came from the United States of America. In the early 1820's Germany had been an important supplier but after 1826 only small amounts had been brought from there. Some apples also came from British North America. 22 The apples from North America were expensive and bought almost exclusively by the wealthier classes. 23 Apples were imported in casks and wooden cases, and generally came over in steam vessels. 24 Mr. Isaacs imported apples by steamboat, and though the cost was higher than with sailing boats, it was cheaper when losses of apples were taken into account because of delays at sea. 25

There was disagreement among the witnesses as to the cost of importing apples and whether transport costs were cheaper for the foreign or English fruit. Mr. Day, of Spitalfields Market, had been engaged in importing fruit for about sixteen years and was adamant that it could not be accomplished for under 5s. Od. a bushel. 26 This contrasted with the figure given by Mr. Skinner who imported apples from Rotterdam at a total expense to the quay at London of 2s. Od. a bushel. 27 The fruit growers were particularly concerned at the relative costs of marketing, and asserted that it was cheaper

21. S.C.F.F.T., iii.
22. Foreign Apples, Pears and Cherries, imported in to the United Kingdom since 1819, (1839, 229, XLVI), 9.
23. S.C.F.F.T., 8.
24. Ibid., 10.
25. Ibid., 169.
26. Ibid., 113.

to import foreign apples than to market English apples. This was stated by Mr. Robert Francis of Canterbury, 28 and Mr. Whittaker said that the cost of carriage for a bushel of apples from Maidstone to London was 10d. 29 This compared with 9d. for transporting the same from France. 30 The question of the cost of importing was clouded by the complexities of the various 'local' measures used. The baskets from Kent varied in different areas and those from abroad came in a variety of packages. While the Committee attempted to adjust all costs to the Imperial Bushel, the witnesses differed in their opinions as to what the equivalents were. Mr. Thorpe, a salesman from Covent Garden, maintained that he could purchase apples at the waterside, all expenses paid, cheaper than the English growers could send them to London.

The over-production of apples in England had caused some growers to grub their orchards, and growers feared the reduction in the duty would cause more orchards to be removed. Mr. Whittaker, of Barming, thought there would be an increase in grubbing and that there would be no new plantations to replace orchards as they failed. 31 The low price of apples and the consequent reduction in the orchard acreage, it was feared, would particularly affect two groups. The labourers who worked the plantations would be unemployed and become a burden on the Poor Law. In addition attention was drawn to the small occupiers, those with up to ten acres, and those labourers who in their gardens grew sufficient fruit to pay their cottage rents.

The orchards provided considerable employment for labourers and their families. Mr. Langridge, of Wateringbury, emphasised that the benefit of fruit to the labourers was the steady employment it

27. S.C.F.F.T., 166.
28. Ibid., 109.
29. Ibid., 17.
30. Ibid., 9.
31. Ibid., 18.

afforded. The poor rate had been reduced because labour was more regularly employed, and the labourers earned more though wage rates were the same. 32 Mr. Whittaker estimated that in Barming there were 100 acres of fruit that employed 14 families, and that on the 12,000 acres in West-Kent, 900 families were employed. 33 If the orchard acreage were reduced these families would be threatened with unemployment.

Mr. Robert Tassall and Mr. Henry Morris both stressed the adverse effect the removal of the duty would have on the small occupier. They were "perhaps the most industrious and most deserving class of persons in the country". 34 In the Parish of East Malling Mr. Tassell stated there were many persons who made a living out of fruit growing and gardening on a small acreage, some as small as one or two acres. Some of these were owner-occupiers who would have had no problem in borrowing £800 on the security of 10 acres of fruit. The reduction in duty would reduce the value of the orchards and put their livelihoods in jeopardy. The loans would be foreclosed and their holdings taken over. 35 This fall in the capital value of orchard land would affect all classes of farmer, though the small farmer would be worse hit and unable to make a living from an alternative use of his land.

There is a lack of evidence for the period following the lowering of duty to make it possible to ascertain the effect on growers. There were considerable sums of money invested in orchards that acted as a brake on farmers who considered grubbing. Mr. Wakeley, of Rainham, had 50 acres of fruit that represented a capital investment of £2,500, and to grub would have meant an immediate loss. These orchards were grassed and the grazing of sheep would offset the lower value of the

32. S.C.F.F.T., 76.
33. Ibid., 17.
34. Ibid., 88.
35. Ibid., 88.

fruit. He thought that it would be the Maidstone growers, who cultivated their orchards, who would be induced to grub fruit by the low prices. Those growers who had grass orchards and could hold out would benefit from the reduced acreage. 36

The other major fruit to be affected by a reduction in duty was the cherry. Foreign cherries came onto the London market a week earlier than the English crop, and had the benefit of the high prices at the start of the season. They could not compete directly with the English cherry as they did not arrive in a peak of condition, even though they were brought by steamship. 37 The first cherries were "an article of luxury to the unsullied palate" and fetched 15s. 0d. to £1 a sieve. The growers feared that with the imported cherries taking the early market home growers would be left with lower prices. This would reduce their average receipts for cherries and impair their profitability. 38 The use of cherries for preserving by confectioners was not affected, as they were almost entirely home grown, as were those used in cherry brandy. 39

This pattern was confirmed in 1841 when imports were confined to early perishable fruit, which stopped when the home crop came onto the market. 40 In 1846 there were also large supplies of cherries imported in early June from France and Holland. 41 In 1842 large imports of cherries from France amounting to 12,000 lbs. lowered the price of English cherries at the commencement of the season. 42

Some soft fruit was imported : Mr. Isaacs imported currants from Holland. 43 There was a duty of 5% ad valorem on these which had been imposed in 1833. 44 The Kentish Gazette reported in 1836 that large

36. S.C.F.F.T., 98.
37. Ibid., 36.
38. Ibid., 81.
39. Ibid., 36.
40. The Times, 16 September, 1841, 7d.
41. The Times, 11 June, 1846, 3e.
42. The Times, 19 July, 1842, 6b.
43. S.C.F.F.T., 169.
44. Ibid., 162.

quantities of currants were imported from the Low Countries. The fruit was packed in baskets containing 20 to 30 lbs. and arrived in good condition and sold at a moderate price. 45 Mr. Laporte stated that the import of currants had increased, but the bulk of demand was met by home production. 46 The import of soft fruits was limited by the distance and the perishable nature of the fruit. It was an area of cultivation where English growers were expanding their own production.

The market for apples appears to have expanded in England in the years after the lowering of the duty. In 1852 465,194 bushels of apples 47 were imported compared with an estimated 120,000 bushels in 1838. By the end of the century when statistics were again produced 3,796,592 bushels of apples were imported in 1888. 48 Similarly there was an increase in the import of cherries, in 1839 of £259 19s. 0d. in terms of value. 49 In 1852 this had risen to £10,280 value of cherries imported, 50 and to £134,847 in 1892. 51 The main increase in the import of fruit took place after the mid-century and included tropical as well as temperate fruits.

If this increase in imports reflected an increase in demand the English growers, or least those in Kent, did not respond to take advantage of it until the 1880's. The orchard acreage in Kent which was estimated at 15,000 in 1839 was only 11,429 in 1872, 52 and did not exceed 15,000 until 1881. The Kent fruit industry seems to have stagnated in the mid-nineteenth century. The energy which the fruit growers put into organizing their response to the reduction of duty was directed at restoring protection, not at meeting the competition.

45. Kentish Gazette, 13 September, 1836, 3a.
46. S.C.F.F.T., 35.
47. Manufactured Articles and Agricultural Produce, (1852, 267, L1), 7.
48. Annual Statement of the Trade of the United Kingdom 1892, (1893-4, C.7042, LXXXVIII), 10.
49. Fresh Fruit, (1841, 299 XXVI), 141.
50. Manufactured Articles and Agricultural Produce, (1852, 267, L1), 7.
51. Annual Statement of the Trade of the United Kingdom 1892, (1893-4, C.7042, LXXXVIII), 13.
52. Agricultural Returns of Great Britain 1872, (1872, C.675, LXIII),10.

There are problems in using the evidence of the S.C.F.F.T. to provide a survey of fruit production between 1800 and 1840. The fruit growers were anxious to stress the detrimental effect on their orchards and the employment of farm labourers that would ensue from an increase in fruit imports; while the Board of Trade position was that fruit should be more widely available, and the reduction of the duty would encourage a greater supply at a lower price. The fruit growers had to put their case to a committee that was selected by the President of the Board of Trade and likely to be heavily packed with "Free Traders". In such circumstances the growers were unlikely to have an impartial hearing. It is perhaps significant, though, that some of the evidence presented by the Secretary of the Board of Trade, seems to support the growers assessment of the situation regarding home production and imports.

In the period to about 1830 imports of fruit seem to have come in regularly to meet the demand that home production was incapable of supplying; if the fruit had not entered the price would have been higher. However, after 1830, when recently planted orchards were coming into bearing the market was adequately supplied by English growers. Imports became of less importance on a regular basis but came in to make up the deficit when there was a failure of the domestic crop. There was, however, always a demand from confectioners for high quality imported apples and apples came in after Christmas when the English crop was consumed.

The English growers were concerned and surprised at the reduction in the duty because they seemed to have been adequately supplying the market, while the duty did not prevent quality apples being imported, or the import in years of scarcity. They feared the

effect of imports on the market when they were already thinking in terms of over production. This fear was probably responsible for some of the vehemence of their reaction to the reduction in duty.

CHAPTER VI

The Fruit Growers and the Repeal of the Protective Duty

The Repeal of the Corn Laws in 1846 was only one stage in the removal of the protection from the agricultural interest, and the move towards free trade. It was a change that has received much attention because of the nationwide propaganda organised by the Anti-Corn Law League and the vigorous opposition of a substantial group of the agricultural community. In 1838, however, there was surreptitiously put through Parliament, in a general Customs Duties Bill, a clause which reduced the protective duties on fruit. These duties had been 4 shillings on a bushel of apples, 7s. 6d. on a bushel of pears, and 18s. 6d. on a hundred weight of cherries. After 16 August, 1838, they were replaced by an ad valorem duty of 5 per cent. 1 Though nationally this move would have seemed of little importance, it had considerable significance for Kent fruit growers. They organized into two groups in East and West Kent coming together in early 1839 to protect their interests. Though ultimately they were unsuccessful in their opposition to the change in duty they were a powerful enough group for Parliament to appoint a Select Committee to examine their complaints.

This account of the organisation of the fruit growers' lobby is based on newspaper reports of the Maidstone Journal and the Kentish Gazette. The growers of mid-Kent organised in the summer of 1838, after the Maidstone Journal had featured the headline "IMPORTANT TO THE OWNERS AND OCCUPIERS OF FRUIT PLANTATIONS". It then proceeded to detail the measures that were being proposed for altering the duties. These came at a time when, "with the present protecting duty

1. S.C.F.F.T., iii.

farmers are often losers to a great amount by the fruit they send to market, and would frequently save money by feeding their pigs with it." 2 The paper appealed to the agriculturalists to call a public meeting and organise a petition for Parliament. A week later no action had been taken, though the subject was causing considerable anxiety. 3

The Maidstone Journal was vigorously protectionist, and took the opportunity of the repeal of the duty on fruit to attack the government's commercial policies, and its failure to protect the agricultural interest. 4 The paper regarded this attack on the fruit growers, whose numbers were small, as a prelude for an assault on the Corn Laws. It was argued that if they could withstand this, the agricultural interest would be able to postpone indefinitely the repeal of the Corn Laws. The whole agricultural community, the paper urged, should come to the support of the fruit growers. 5 The Kentish Gazette, serving East Kent, carried a similar article, which had been taken from the columns of the Morning Herald. Both papers in the major fruit producing areas of mid and East Kent staunchly supported the growers, and gave full coverage to their committees that were concerned to combat the reduction in duty.

In Mid-Kent the fruit growers held a meeting in August at the Corn Exchange, Maidstone. The meeting was chaired by Mr. Thomas Law Hodges, a member of Parliament for the West Kent division of the county. The others involved with the proposed memorial and deputations to the Lords were Alderman Lucas, Mr. Whittaker, Mr. Harryman, Mr. Skinner and Mr. Edward Filmer. 6 The first four all

2. Maidstone Journal, 31 July, 1838, 4d.
3. Maidstone Journal, 7 August, 1838, 4c.
4. Maidstone Journal, 16 October, 1838, 4c.
5. Maidstone Journal, 30 October, 1838, 4c.
6. Maidstone Journal, 9 August, 1838, 4c.

subsequently gave evidence before the Select Committee : Mr. Whittaker and Mr. Harryman were landowners who cultivated some fruit though only about 30 acres each, Alderman Lucas was a landowner with fruit land on his estate, while Mr. Skinner was a fruiterer in the Maidstone area. 7 The County Committees appear to have attracted those interested in all aspects of the fruit industry. The memorial they organised, which detailed the effects of the reduction in duty on the growers and the labouring classes, had no effect on the passing of the Customs Act. It was intimated, however, that if the growers could make out a case that they had been materially injured, the clauses relating to fruit duties would be repealed. 8 The Customs Bill was presented to Parliament at the end of the Session, without notice being given of the important clauses it contained. Sir Edward Knatchbull and Mr. Plumtree, M.P.'s for Kent were not in The House when it was debated and it slipped through with no opposition. 9 The growers were now faced with the task of persuading a free trade Government to pass a protectionist Bill, rather than trying to maintain what had been status quo.

The growers in East Kent appear to have been slower in organising. There were no reports of meetings in August, when the Bill first became public knowledge. There was, however, a meeting of owners and occupiers of orchards and fruit land at the Rose Inn, Sittingbourne on 8th October, 1838. Robert Francis, a fruit grower from Canterbury, was in the Chair and the Committee was composed of Messrs. Smart, Barling, Gascoyne, Goord, Stunt, Shepherd, Harrison, Dadds, Coleman and Dorman. These members were to collect subscriptions in their

7. S.C.F.F.T.
8. Maidstone Journal, 14 August, 1838, 4d.
9. Kentish Gazette, 22 January, 1839, 3a.

respective areas. The Committee proposed to petition both Houses of Parliament on the injurious effect of the repeal to the fruit growers. To gain support for their petition they sent copies to the Bank and Saracen's Head at Ashford, the Banks and Market Room at Canterbury, the Bank and Ship Inn at Faversham, the Bank and Ship Inn at Sittingbourne, the Lion Inn at Wingham, and to Minster, for signatures. They aimed at a complete coverage of the East Kent area. For wider advertising they inserted a copy of the petition in the Kentish Gazette and the Kentish Herald. This report was accompanied by a leader which called on all to aid the fruit growers. 10 The support they gathered was considerable, the petition at the Corn Exchange in Canterbury received about 200 signatures. 11

The fruit growers again began to consider petitioning Parliament in December 1838. Charles Gustavus Whittaker wrote to the Editor of the Maidstone Journal calling on all fruit growers to have a meeting to draw up a petition for both Houses of Parliament. 12 At about the same time a meeting was held at the King's Arms Tavern, Palace Yard where the report of a previous committee was heard. The fruit growers and dealers present proposed that the Committee should meet the Members of Parliament for Kent and the neighbouring counties.

> It was finally resolved that a recommendation be given to all persons interested in the abolition of obnoxious regulations, to promote local meetings and petitions, and to call upon all connected with horticulture to sign them. 13

In the same week as this report appeared, C. G. Whittaker placed an advertisement in the Maidstone Journal, 18 December, 1838,

10. Kentish Gazette, 16 October, 1838, 2a, 3b.
11. Kentish Gazette, 30 October 1838, 3b.
12. Maidstone Journal, 11 December 1838, 3f.
13. Kentish Gazette, 18 December, 1838, 2e.

requesting fruit growers to attend a meeting at the Corn Exchange, Maidstone, 10 January, 1839. It was a move that the paper fully endorsed.

> We rejoice to find that a spirited fruit grower of this neighbourhood has invited his brother sufferers from the recent unwarrantable tampering with their interests, to attend a public meeting in this town. 14

In January 1839 a deputation from the London Market Gardeners' Association and the Fruit Growers' Committees of East and West Kent had an interview with the President of the Board of Trade. 15 The interested groups, which had been unable to organise in the time available in the summer of 1838, worked together to try to secure a protective duty. Mr. Francis of the East Kent Committee reported on this meeting, and stated that it was intended to organise another deputation to put forward the growers' case. They intended to press for a duty of 3s. Od. on a bushel of apples, 5s. Od. on a bushel of pears, and 10s. Od. on a cwt. of cherries, or a general duty of 10s. Od. on a cwt. of all fruit. 16

In early March a memorial was presented by Mr. Thomas Law Hodges from the fruit growers of West Kent, and on the same day a deputation saw the President of the Board of Trade. This included Lords Strangford and DeLisle, the M.P.'s for the County of Kent and Members of the Committees of fruit growers from East and West Kent and Middlesex. 17

In April Lord Melbourne and the President of the Board of Trade met another deputation. At this meeting Lord Melbourne promised to

14. Maidstone Journal, 18 December, 1838, 4b.
15. Kentish Gazette, 15 January 1839, 2e.
16. Kentish Gazette, 22 January 1839, 3b.
17. Kentish Gazette, 5 March 1839, 3a.

consider the case presented by the fruit growers and give them an early answer. 18 When the Customs Bill was originally debated in the House of Lords, Lord Melbourne had assured the Duke of Wellington that if it was allowed to pass, a new bill would be introduced to protect the fruit growers. 19 By April Lord Melbourne was asserting that this promise had been conditional, but he would consider the objections raised by the fruit growers. 20

Lord Melbourne's early answer came in June 1839 and was reported to a meeting of the East and West Kent growers, London Fruit Salesmen and Middlesex Market Gardeners held at Sittingbourne. As far as the Government was concerned no valid case had been made for altering the duty of 5 per cent ad valorem. 21

On the 7 June 1839 the duty on fruit was debated in the House of Commons. Mr. Hodges moved that a Select Committee should be appointed to consider the case of the fruit growers, and examine the effect the reduction in duty was having. 22 This was passed by a vote, though opposed by the President of the Board of Trade, and the report came out on 12 July 1839. It was clearly in favour of the continuation of the amended duty of the Customs Bill of 1838.

Mr. Hodges who had been involved with the fruit duty question since August 1838, was condemned in August 1839 for the inept manner in which he had handled it. The Select Committee had been loaded in favour of free trade by Mr. P. Thomson, the President of the Board of Trade, whose selection of members was a condition of his agreeing to the Committee being set up. 23

18. Kentish Gazette, 20 April, 1839, 3b.
19. Kentish Gazette, 15 January 1839, 2e.
20. Kentish Gazette, 30 April 1839, 3b.
21. The Times, 13 June 1839, 4f.
22. Hansards Parliamentary Debates; Third Series, Volume XLVIII, (1839), 82.
23. Kentish Gazette, 20 August 1839, 3c.

This was not the end of the campaign. In January 1840 the Market Gardeners' and Farmers' Association met at The Rainbow Tavern, Covent Garden, to press for a public meeting to draw up a petition to put to Parliament against the new duties.[24] It was also reported that Mr. T. Selby, Secretary of the West Kent Fruit Grower's Committee, had been in correspondence with the Board of Trade to no avail and the nominal duty would continue.[25]

The fruit growers were unable to obtain the reinstatment of the protective duty, but the manner in which they organised themselves indicates their importance. The farmers who grew fruit emerge as a distinct group, who identified themselves as sharing a common interest. Fruit was an important enough sector of the mixed farm economy for farmers, who were engaged in its cultivation, to come together to try to protect their investments. They formed a lobby that persuaded Parliament to appoint a Select Committee to examine their particular branch of agriculture. The very existence of these local fruit committees in mid and east Kent to petition Parliament would indicate the importance of fruit growing to those farmers who were engaged in it. In this period may be seen the development of a distinct body of farmers for whom fruit growing was of considerable importance, but who engaged also in a wide range of agricultural activity.

24. Kentish Gazette, 28 January, 1840, 3f.
25. Maidstone Journal, 21 January 1840, 4d.

SECTION THREE

THE FRUIT INDUSTRY AT THE END OF THE NINETEENTH CENTURY

INTRODUCTION

In the second half of the nineteenth century and particularly after 1880 there was a considerable expansion of the fruit acreage. Orchards were planted for dessert fruit and there was an unprecedented expansion of soft fruit for the table and jam production.

The Agricultural Returns, despite their limitations, give a clear indication of the acreage increases. These do not, however, indicate the immeasurable increase in production that arose from better management and the cultivation of more prolific stock, or improvements in quality. The fruit acreage expanded in traditional fruit growing counties, but there was also a development of fruit production near large centres of population and in new areas.

From the 1880's fruit cultivation was seen as an answer to the "agricultural depression"; it was widely advocated as one means of making the land profitable along with other branches of petite culture. Politicians and writers advocated that farmers should develop poultry breeding, dairying and market gardening, as well as fruit growing to combat low cereal prices.

In areas of Kent where fruit growing was established, it probably helped to maintain the profitability of agriculture, and there were opportunities in the county for an expansion of fruit production. In north-west Kent there were considerable new soft fruit growing enterprises, and in mid-Kent soft fruit was increasingly cultivated together with traditional orchards. There was also a new

development with the emergence of the specialist fruit grower.

The fruit industry benefited from the marked rise in real incomes in the late nineteenth century and an expanding market for semi-luxury agricultural products. This contributed to the expansion of the jam industry aided by the advent of cheaper sugar. The jam industry was a new market for soft fruit and made its further expansion practicable. Jam manufacturers took low quality fruit that would have glutted the fresh fruit markets, and made possible the sale of the total fruit crop to different markets.

The fresh fruit markets remained important as they provided the highest returns, and for Kentish growers London remained dominant. Increasingly, however, Kent growers were consigning their fruit direct to markets in northern towns. The railway network made this possible, and growers were aided by railway companies which put on special fast trains.

Despite expansion that was recorded and the optimism expressed on the future of the fruit industry, the growers felt they were facing considerable problems. These grievances were examined in detail in 1904 and 1905 when the Departmental Committee on Fruit Culture in Great Britain gathered evidence from those engaged in all aspects of the fruit industry.

In Kent the fruit growers were concerned with the treatment they received from the railway companies. From the 1880's they complained at various aspects of company policy, on rates for carriage of fruit, on the facilities that were offered to fruit growers and they maintained that foreign producers were given preferential treatment.

CHAPTER VII

The Expansion of Fruit Growing At the end of the Nineteenth Century

The Agricultural Returns provide an overall view of the expansion of the fruit acreage, which it is convenient to examine in terms of orchard fruits and soft fruits. The former comprised apples, pears, cherries and plums, the latter gooseberries, red and black currants, raspberries and strawberries. The history, accuracy and the refinements made in the collection of agricultural statistics since their commencement in 1866 has been examined in detail in two articles by J. T. Coppock. 1 The orchard acreage was first collected in 1871, and in 1872 the market garden acreage was also collected. In 1887 the area under small fruit was returned, and the following year small fruit in market gardens included. The data was further refined in 1907 when details of the acreage of different types of fruit were collected. 2

Considerable problems arose with the collection of the statistics because of the manner in which fruit was cultivated. Orchards might be raised on grass or cultivated, producing situations where land might be double-counted as orchard and pasture, or returned as pasture, which was the least important crop. The use of the classification Market and Nursery Garden was most unsatisfactory, since it included orchard and soft fruit as well as vegetable crops.

The returns of orchard acreage in 1872 were judged to be considerably more accurate than those of 1871; the collection of the additional data on Market and Nursery Gardens revealed that land had been wrongly returned in 1871 as orchard. 3 While the orchard

1. J. T. Coppock, "The Statistical Assessment of British Agriculture", Agricultural History Review, IV, (1956).
2. Ibid., 76.
3. Agricultural Returns of Great Britain 1872, (1872, C.675, LXIII),10.

acreage expanded with new plantations of fruit trees, some of the additional area arose because land was returned as orchard where it previously returned only as pasture. 4 In 1888 the figures revealed a slight decline which reflected the more accurate collection of orchard acreage with the exclusion of some small fruit from it. 5 The returns of 1907 were further refined with orchards being classified under five headings, including mixed fruit. The growers were required also to state how much land was returned as under orchard and small fruit combined. 6

The statistics of orchard acreage, despite their short-comings, revealed the extent of the expansion of top fruit production. The orchard acreage rose from 156,007 in 1872 to a peak of 245,657 in 1909, and then fell slightly to 240,110 in 1914. The orchard acreage in Kent rose from 11,429 in 1872 to 39,227 in 1914, a more than three-fold increase with no decline after 1909. In 1872 Kent's orchard acreage was exceeded by that in the cider counties of western England, but in 1901 Kent had the greatest orchard acreage of any county. Table 9 reveals the increasing importance of Kent as an orchard county with a steadily rising proportion of the orchard acreage of England. This more than doubled from 7% in 1872 to 16% in 1914. The expansion of orchard fruit production in the last quarter of the nineteenth century was principally an expansion of fresh fruit rather than fruit for liquor production. Kent's share increased relative to that of the traditional cider counties. However, these aggregate figures concealed the relative importance of the different fruits, and the dominance Kent had as a supplier of fresh fruit.

The more detailed figures after 1907 indicate the relative importance of the different orchard fruits in England and Kent, see tables 10 and 11.

4. Agricultural Returns of Great Britain, 1885, (1884-5,C.4537,LXXXIV), 11
5. Agricultural Returns of Great Britain, 1888, (1888, C.5493, CV1), 10.
6. Agricultural Statistics 1907, (1908, Cd.3870, CXXI), 15.

TABLE 9 Orchard Acreage for Kent and total for England 1872-1914, with Kent's acreage as a percentage of total

Year	Kent Acreage	%	England Acreage	Year	Kent Acreage	%	England Acreage
1872	11,429	7.3	156,007	1894	22,041	10.5	208,821
1873	10.161	7.0	143,295	1895	23,260	10.9	212,963
1874	11,168	7.6	145,622	1896	24,093	11.1	215,642
1875	12,032	7.9	150,600	1897	24,212	11.0	218,261
1876	11,666	7.6	153,277	1898	25,050	11.3	220,220
1877	13,097	8.2	159,095	1899	25,749	11.5	222,717
1878	11,589	7.1	161,228	1900			
1879	13,614	7.9	170,218	1901	27,175	11.8	228,580
1880	14,645	8.3	175,200	1902	27,638	11.9	230,673
1881	16,673	9.2	180,038	1903	28,046	12.0	233,285
1882	16,861	9.2	182,703	1904	29,055	12.2	236,705
1883	17,417	9.3	185,782	1905	29,304	12.3	238,021
1884	17,494	9.2	189,757	1906	29,788	12.3	241,341
1885	17,926	9.3	192,344	1907	31,837	13.0	244,117
1886	13,290	6.8	195,071	1908	32,751	13.3	244,430
1887	18,030	9.1	196,986	1909	33,930	13.8	245,657
1888	17,114	8.8	194,040	1910	34,702	14.1	245,171
1889	17,301	8.8	194,696	1911	35,921	14.6	245,402
1890	18,168	9.2	197,076	1912	36,187	14.9	241,497
1891	20,130	9.8	204,530	1913	37,782	15.7	240,568
1892	20,258	9.9	203,520	1914	39,227	16.3	240,110
1893	21,809	10.5	206,914				

Source : Compiled from Agricultural Statistics for Relevant Years.

TABLE 10 Acreages of Orchard Fruits in England, 1907-1914.

Year	Apples	Pears	Cherries	Plums	Others & Mixed	Total
1907	168,575	8,634	11,952	14,571	40,384	244,117
1908	168,762	9,351	11,790	15,306	39,219	244,430
1909	169,296¾	9,229	11,415½	16,412½	39,303¾	245,657
1910	168,302	9,399	11,530	16,016	39,923	245,171
1911	166,522	9,163	11,952	16,418	41,345	245,402
1912	159,821	10,389	12,663	17,351	41,270	241,497
1913	157,829	9,998	11,308	17,378	44,055	240,568
1914	155,543	9,677	10,637	16,549	47,704	240,110

Source : Compiled from Agricultural Statistics for Relevant Years

TABLE 11 Acreages of Orchard Fruits in Kent, 1907-1914, with Kent's Acreage as a percentage of total.

Year	Apples	%	Pears	%	Cherr -ies	%	Plums	%	Others & Mixed	Total
1907	12,394	7.3	935	10.8	6,215	51.9	3,080	21.1	9,211	31,837
1908	13,089¼	7.7	889¼	9.5	6,348½	53.8	2,990½	19.5	9,434	32,751½
1909	12,850	7.5	836	9.0	6,114	53.5	3,283	20.0	10,845	33,930
1910	13,358	7.9	943	10.0	6,229	54.0	3,196	19.9	10,904	34,702
1911	13,733	8.2	847	9.2	6,570	54.9	3,269	19.9	11,500	35,921
1912	13,931	8.7	1,010	9.7	7,000	55.2	3,513	20.2	10,731	36,187
1913	14,772	9.3	1,095	10.9	6,167	54.5	3,783	21.7	11,964	37,782
1914	15,168	9.7	1,004	10.3	6,064	51.0	3,767	22.7	13,224	39,227

Source : Compiled from Agricultural Statistics for Relevant Years

Apples were an important orchard fruit representing over a third of Kent's total orchard acreage, and nationally they were of even greater significance, occupying two-thirds of England's total orchard acreage. In 1907 the apple acreage in Kent was equalled by Worcestershire (12,601) and Gloucestershire (13,412), but the prime cider counties of Hereford (24,196), Devon (26,984) and Somerset (25,231) each had more than double. 7 These were the six major apple producing counties which between them contained 114,818 acres out of a total for England of 168,575 in 1907. Nationally the apple acreage declined from a peak of 169,296 in 1909 to 155,543 in 1914, a fall of nearly 14,000 acres. In terms of total orchard acreage there was a decline of only 5,500 acres as mixed orchards increased by 8,800 acres.

Among the major apple producing counties only Kent showed an increase, from 12,394 acres in 1907 to 15,168 acres in 1914. The counties of Hereford, Devon and Somerset each showed a small fall, that of Worcestershire fell from 13,600 acres in 1910 to 12,300 in 1914, and Gloucestershire's apple acreage declined from 13,400 in 1907, to 10,700 in 1914. In Gloucestershire there was no offsetting rise in mixed orchards, but in Kent this too increased from 9,211 acres in 1907 to 13,224 in 1914. The Kent apple industry seemed to benefit from the proximity of the London market, even when other areas experienced stagnation or slight decline.

Kent was dominant in the cultivation of cherries, accounting for over half the cherry orchards in England. The acreage remained fairly stable, though nationally there was a decline between 1907 and 1914, the peak year being 1912. The pear acreage increased slightly from 1907 to 1914, but showed a slight decline from a peak in 1912. Kent contained about a tenth of the pear orchards. The plum acreage in England was 2,000 acres higher in 1914 than 1907 but it had fallen by

7. Agricultural Statistics, 1907, (1908, Cd. 3870, CXXI), 62.

800 acres from its peak in 1912. In Kent the plum orchards increased by 700 acres over the period. The mixed orchard category was the only one to increase markedly over the whole period, both nationally and in Kent. The national figures might suggest a greater accuracy in recording, but the evidence of Kent suggests a real increase in this category. It possibly represented the planting of pyramid apples and pears with standard cherries.

The statistics available after 1907 clearly showed the importance of both apples and cherries in Kent's fruit industry, and the mixed orchards also probably contained a high proportion of apples. Kent was an important producer of soft fruit for the London market, a side of the fruit industry that had become of greater significance since the 1850's.

The small fruit acreage was first collected in 1887 but it was "imperfectly successful, in as much as the acreage intended for small fruit in orchards only, has in several localities been found to comprise some of that belonging properly to Market Gardens". 8 The table of small fruit was felt to be misleading as it did not represent the entire acreage grown in orchards and market gardens. 9 The incomplete returns of 1887 produced only 18,476 acres of small fruit in Great Britain, while those for 1888 gave nearly double at 36,700 acres. In 1897 there was a further refinement in the collection of the small fruit acreage, which showed an apparent reduction of 6,000 acres compared with 1896. The report stated this was because of the revisions made in collecting the data which also made the two sets of figures incomparable. The imprecise classification of market gardens was discontinued. 10.

8. Agricultural Returns of Great Britain 1887, (1887, C.5187, LXXXVIII), 13.
9. Ibid., 13.
10. Agricultural Returns of Great Britain 1897, (1898, C.8897, CII), 17-18.

The small fruit acreage in England increased by over 100% in eight years, from 32,776 in 1888 to 69,610 in 1896. In 1897 after the revision of the basis for collecting the data 63,535 acres of small fruit were recorded : there was a continued expansion to 1909 after which there was a slight decline. It was this expansion of small fruit production that was the significant feature of what was becoming a "fruit industry" in the second half of the nineteenth century. Kent was pre-eminent with about a third of the total soft fruit acreage of England, and in 1897 contained five times the acreage of its nearest rival, Middlesex. 11.

However, Kent's share of the total showed a slight decline over the period from 1888 to 1914, falling from 37% to 31% of the acreage in England. It would seem that after 1899 the Kent acreage was reaching its limits for the supply of London, but the small fruit acreage continued to expand elsewhere to meet local regional demands. The slight percentage fall does not detract from the dominant position Kent held throughout in the small fruit producers league. In 1907 Kent's share of the various soft fruits was in proportion to its share of the total acreage. While Kent was

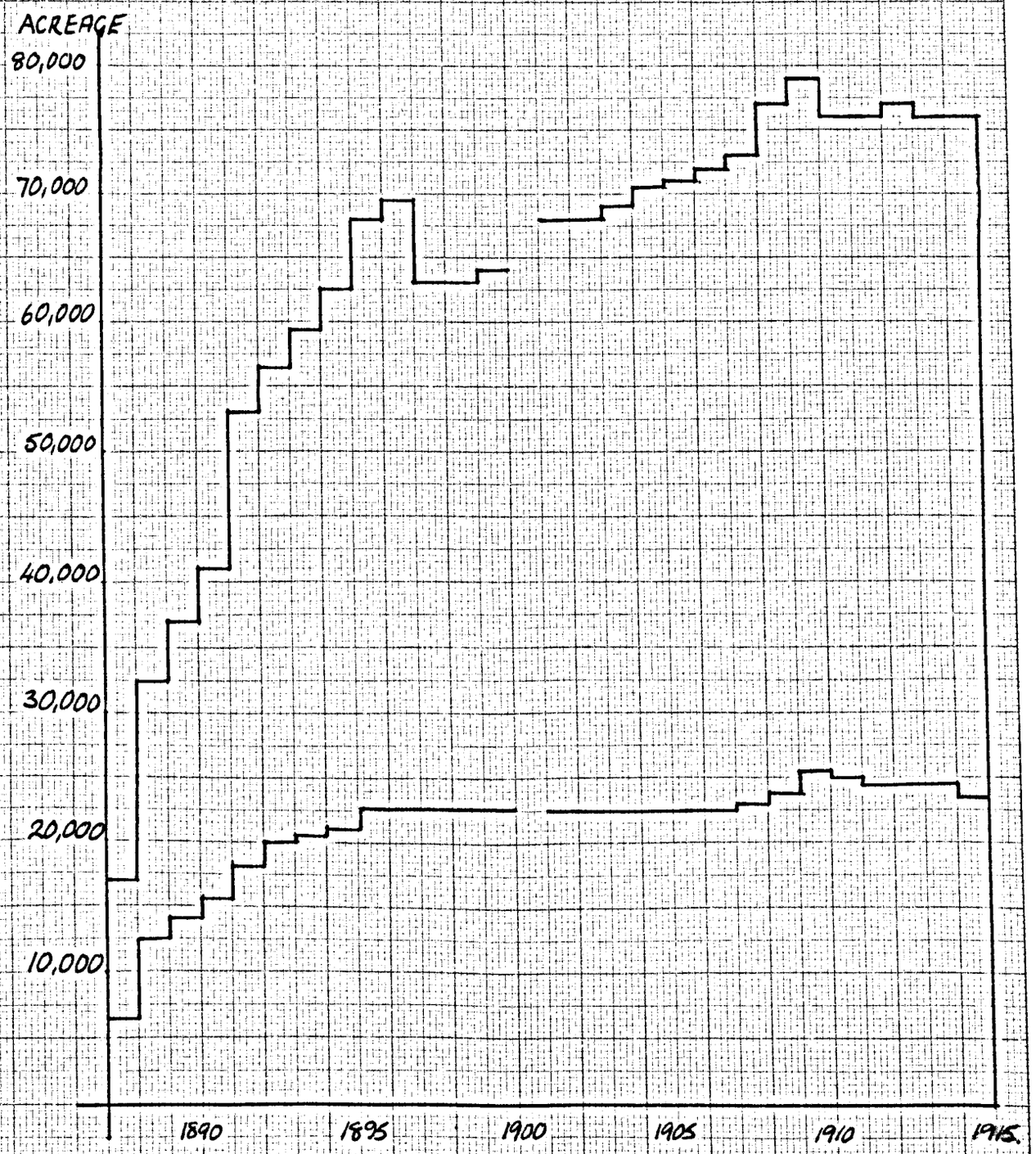
TABLE 12 Small Fruit Acreage for Kent and total for England 1887 to 1914, with Kent's acreage as a % total

Year	Kent Acreage	%	England Acreage	Year	Kent Acreage	%	England Acreage
1887	6,495	37.8	17,153	1901	22,778	33.5	67,828
1888	12,344	37.6	32,776	1902	22,495	32.9	68,263
1889	13,959	37.3	37,338	1903	22,446	32.5	68,968
1890	15,329	37.3	41,089	1904	22,549	31.9	70,612
1891	18,061	34.0	52,969	1905	22,050	31.0	71,119
1892	19,821	35.0	56,502	1906	22,146	30.7	71,978
1893	20,458	34.2	59,694	1907	23,019	31.3	73,371
1894	20,817	33.3	62,457	1908	24,137	31.8	75,749
1895	22,272	32.6	68,122	1909	25,498	32.6	78,124
1896	22,632	32.5	69,610	1910	24,785	32.5	76,038
1897	22,080	34.7	63,535	1911	24,497	32.1	76,287
1898	22,031	34.7	63,438	1912	24,622	32.0	76,886
1899	22,521	34.7	64,867	1913	24,298	32.0	75,784
1900				1914	23,677	31.0	76,331

Source : Compiled from Agricultural Statistics for Relevant Years.

11. Agricultural Statistics 1907, (1908, Cd. 3870, CXXXI), 62.

SMALL FRUIT ACREAGE IN ENGLAND, AND KENT'S SHARE 1887 TO 1914.



the major producer, supplying the London market and directly and indirectly the northern industrial towns, soft fruit was cultivated to some extent in every English county to meet the demands of local markets. In some areas fruit was grown extensively for particular urban markets and to take advantage of slight climatic variations. As the jam industry expanded some integrated fruit farms and jam factories were established in counties without a tradition of fruit cultivation.

In 1888 Kent had 12,444 acres under small fruit cultivation, and there were seven counties (Cambridgeshire, Cheshire, Gloucestershire, Lancashire, Middlesex, Worcestershire and Yorkshire) with over 1,000 acres each; these between them accounted for two thirds (22,933) of the small fruit acreage. 12 In the 1890's there was a rapid increase in the acreage in England and while the acreage in Kent expanded its share of the total declined slightly, which shows clearly in the histograph. The Agricultural Returns in the 1890's noted the expansion of soft fruit production in new localities and the provision of jam factories to dispose of the surplus. 13 The largest acreage increases in 1893 took place in Kent, Essex, Cambridgeshire, Sussex, Gloucestershire, Norfolk, Hampshire and Devon. 14 This was a clear indication of the development of fruit growing outside the traditional areas of production. These counties, together with Cheshire, Cornwall, Lancashire, Lincolnshire, Middlesex, Surrey, Worcestershire and Yorkshire, each had over 1,000 acres of small fruit in 1897. Together with Kent they had 54,143 acres of small fruit out of a total for England of 63,535. The maps indicate the concentration of fruit

12. Agricultural Returns of Great Britain 1888, (1888, C.5493, CVI).
13. Agricultural Returns of Great Britain 1890, (1890, C.6143, LXXIX), XV.
14. Agricultural Returns of Great Britain 1893, (1893-4, C.7256, CI), xxi.

production to serve the major urban markets.

The fruit acreage continued to expand in the early twentieth century. In 1899 it was reported that "both in Orchards and Small Fruit the greatest increase took place in Kent and Worcestershire, where the extension of the fruit growing areas suggests that the industry remains successful" 15 In 1906 it was noted particularly that Scotland had witnessed the greatest expansion in the soft fruit acreage in Perth and Lanark. 16 The expansion was slower, however, after 1898, rising to a peak of 78,124 acres in 1909. In 1907 Herefordshire was added to the list of counties with over 1,000 acres, and together they had 64,258 acres of a total of 73,371.

In 1907 an attempt was made to ascertain the relative importance of the various fruits.

> Occupiers were requested to return small fruit under four and orchards under five headings ... The acreage under mixed small fruit, containing more of one sort than another, should be entered against the sort to which the larger proportion of the fruit belongs. Where the sorts are equally mixed the entry should be made against "Other Kinds". 17

The soft fruit acreage declined in 1910 in all parts of Great Britain except the West Midlands and the South Western Counties; the strawberry acreage fell by 2,600, of which 1,000 were lost in Kent. 18 The total acreage remained the same in 1911, for although strawberries fell by a further 3,000 acres there was an increase in raspberries, currants and gooseberries. "The collectors generally

15. Agricultural Returns for Great Britain 1899, (1900, Cd.166,Cl), xiv.
16. Agricultural Statistics 1906, (1906, Cd.3281, CXXXIII), 13.
17. Agricultural Statistics 1907, (1908, Cd.3870, CXXI), 15.
18. Agricultural Statistics 1910, (1911, Cd.5585, C), 16.

note a tendency to substitute other fruit for strawberries, which appear at present to have reached the limit of profitable cultivation in this country". 19 In 1912 there was a further reduction in the strawberry acreage, which was followed in 1913 and 1914 by an increase. Tables 13 and 14 give the acreage of soft fruits for England and for Kent from 1907 to 1914.

TABLE 13 The Acreages of Soft Fruits grown in England 1907-1914

Year	Straw-Berries	Rasp-Berries	Currants & Goose-Berries	Other and Mixed	Total
1907	23,623	6,479	24,178	19,090	73,371
1908	24,601	6,636	24,881	19,630	75,749
1909	25,937	6,614	24,714	20,858	78,124
1910	23,684	6,447	24,180	21,724	76,036
1911	20,766	6,679	26,150	22,691	76,287
1912	20,365	6,688	26,519	23,313	76,886
1913	21,013	6,980	26,694	21,096	75,784
1914	22,718	6,933	26,001	20,669	76,331

Source : Compiled from Relevant Agricultural Statistics

TABLE 14 The Acreages of Soft Fruits Grown in Kent 1907 -1914, and as a percentage of total acreage.

Year	Straw-Berries	%	Rasp-Berries	%	Currants & Goose-Berries	%	Other and Mixed	Total
1907	7,628	32.2	2,380	36.7	7,501	31.0	5,509	23,019
1908	8,008	32.5	2,258	34.0	7,589	30.5	6,280	24,137
1909	8,502	32.7	2,363	35.7	7,474	30.2	7,158	25,498
1910	7,522	31.7	2,364	36.6	7,482	30.9	7,416	24,785
1911	6,733	32.4	2,291	34.3	8,168	31.2	7,304	24,497
1912	6,408	31.4	2,281	34.1	8,549	32.2	7,383	24,622
1913	6,392	30.4	2,312	33.1	8,538	31.9	7,055	24,298
1914	6,365	28.0	2,433	35.0	8,078	31.0	6,801	23,677

Source : Compiled from Relevant Agricultural Statistics.

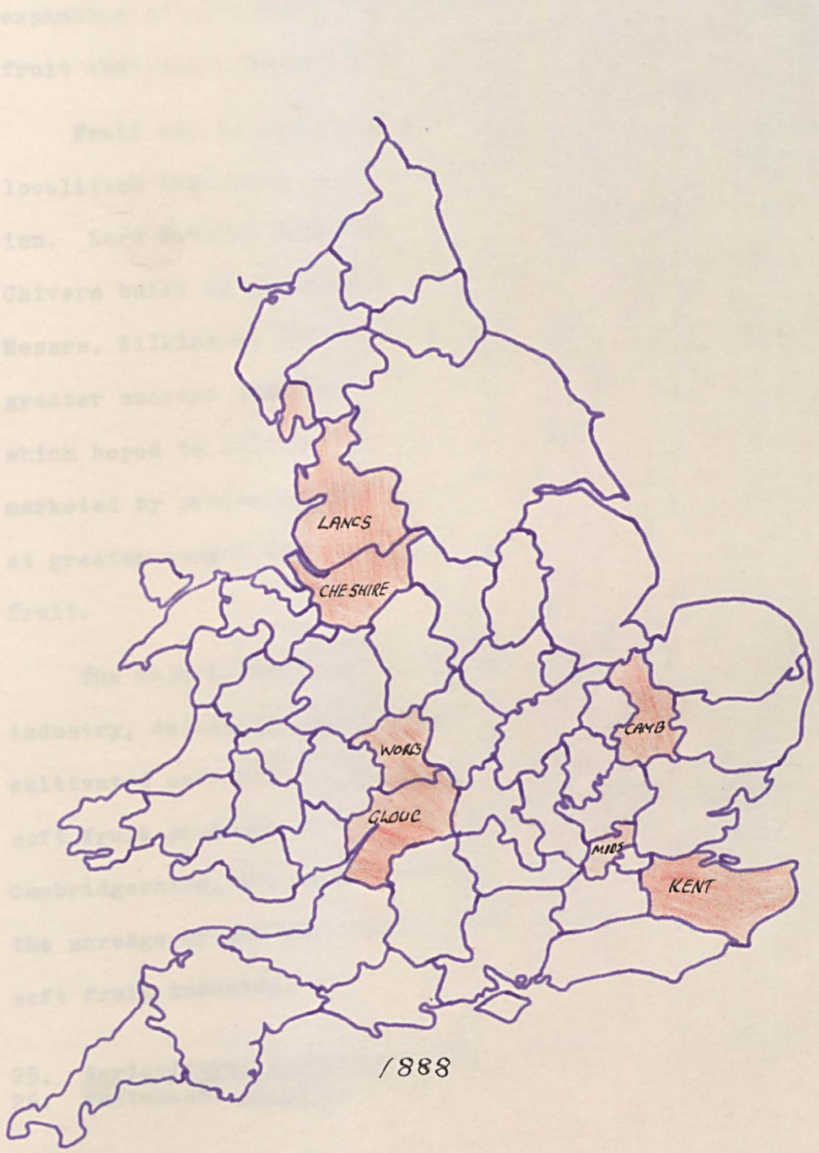
19. Agricultural Statistics 1911, (1912-13, Cd.6021, CVI), 14.

Strawberries were the most important single crop both nationally and in Kent, though they were equalled by the mixed acreages. It was in strawberry production that a specialised industry developed to take advantage of slight climatic variations. By 1889 Cornwall had established itself as an early supplier of strawberries for the London market. The first English fruit came from this area,and as a consequence commanded high prices. Also Cornwall produced blackcurrants for the Bristol market and had a fruit industry centred on Penzance and along the Tamar Valley. 20 Strawberries were grown in neighbouring Devon around Devenport, Tavistock and Plymouth. 21

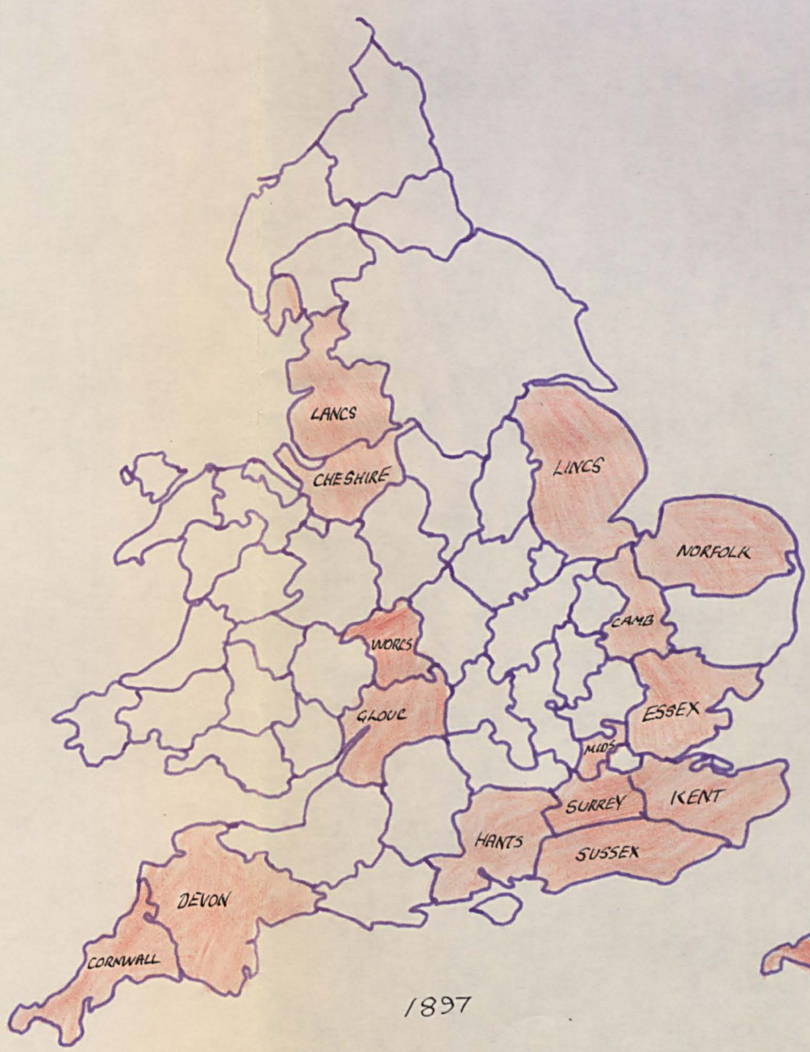
It was near Southampton, however, that the specialist strawberry industry was being extensively developed. In 1883 it was reported that there had been a large increase in acreage in the area. 22 The cultivation of strawberries around Southampton was in the hands of small growers who rarely cultivated more than twenty acres. Indeed the majority of holdings were under five acres and there were very few with more than 20 acres. The fruit that was gathered during the first week was nearly all sent to London, but later the crop was sent to the Midlands, Scotland and Ireland. 23 The industry was concentrated in the villages of Swanwick, Botley, Burlesdon, Netley, Titchfield, Warsash and Wickham. C. J. Gleed in 1931 considered that the industry had been at its height from 1900 to 1914 when there had been heavy yields and high financial returns. 24 Thus London was supplied with strawberries from a succession of localities, the bulk of the crop coming eventually from Kent. In 1907 Cornwall had 654 acres, Devon 430, Hampshire 2,154 and Kent 7,628; strawberry culture

20. Charles Whitehead, "Fifty Years of Fruit Farming", J.R.A.S.E., Second Series, XXV, (1889), 166.
21. Charles Whitehead, "The Cultivation of Hops, Fruit & Vegetables", J.R.A.S.E., Second Series, XIV, (1878), 746.
22. Charles Whitehead, "The Progress of Fruit Farming", J.R.A.S.E., Second Series, XIX, (1883) 384.
23. W. E. Bear, "Flower and Fruit Farming in England", J.R.A.S.E., Third Series, X, (1899), 75-6.
24. C. J. Gleed, "The Strawberry Industry of South Hampshire", J.R.A.S.E., XCII, (1931), 201.

Map. 8. Counties with over 1000 acres of Small Fruit.



1888



1897

1907

was also important in Cambridgeshire (1,851 acres), Norfolk (1,770), Worcestershire (1,288) and Chester (713). 25 These last counties produced primarily for the midland and northern markets, as well as for local jam factories.

"Strawberry culture is a great feature of modern fruit production ..." so Whitehead said in 1889. 26 The strawberry epitomised the expansion of soft fruit that took place from the 1870's. It was a fruit that was a superb dessert fruit and made excellent jam.

Fruit was developed in conjunction with jam factories at several localities that were not traditionally associated with fruit production. Lord Sudeley grew fruit on his Gloucestershire estate, Messrs. Chivers built up an extensive industry in Cambridgeshire, as did Messrs. Wilkins at Tiptree in Essex. These enterprises met with greater success than the independant jam factories established in Kent which hoped to rely on the local surpluses of independant growers who marketed by preference in London. The jam manufacturers are discussed at greater length when examining jam factories as a market for Kent's fruit.

The Maps illustrate the regional development of the soft fruit industry, detailing the counties where more than 1,000 acres were cultivated over the period 1888 to 1907. Kent was, however, the major soft fruit producer with 23,019 acres in 1907 compared with 6,257 in Cambridgeshire, its nearest rival. No other county equalled Kent for the acreage of any soft fruit, though some counties were developing a soft fruit industry.

25. Agricultural Statistics, 1907, (1908, Cd.3870,CXXI), 162.
26. Whitehead, op.cit., (1889), 169.

CHAPTER VIII

Fruit and the "Agricultural Depression"

The expansion of the fruit industry was encouraged by the low prices of the staple agricultural products in the years after 1879. As well as fruit, farmers turned their attention to a wide range of 'minor' farm activities and were encouraged to pursue them by politicians and agricultural journalists. Charles Whitehead writing in 1899 saw the importance of these to the Kentish farmer.

> There is probably no county in the Kingdom in which there are so many different kinds of crops and industries in connection with the cultivation of land, concerning which many pages could be written. Some of them may be classified as 'minor industries', as they are often called in somewhat derisive terms, but they are of the greatest importance to Kentish cultivators, without which they would have been in an almost hopeless state of depression. 1

That was the verdict after the worst years of the agricultural depression; Mr. Little, one of the Commissioners of the 1882 Royal Commission on Agriculture, saw the opportunities available at the beginning. "On the whole the fruit growers of Kent, while they have suffered with other classes, have a hopeful future before them". 2 Charles Whitehead giving evidence before the Royal Commission on Agriculture in 1882 had faith in the future profitability of fruit growing.

The fruit growers had suffered a fall in their profits because of bad weather in 1877, 1878 and 1879, but despite this and the need for

1. Charles Whitehead, "A Sketch of the Agriculture of Kent", J.R.A.S.E., Third Series, X, (1899), 485.
2. Royal Commission on Agriculture, Mr. Little's Report 1882, (1882, C.3375, XV), 42.

changes in their marketing methods Whitehead thought the fruit industry would continue to expand. 3 Fruit growing when combined with a farmer's other business operations could help him make a profit, if he concentrated on the fruit suited to his area. In particular he felt that the extension of jam production offered considerable opportunity to growers. He thought it might be possible to export jam and preserves,and even to develop a fresh fruit export market. 4 Charles Whitehead hoped that farmers would be encouraged and helped to cultivate fruit. The cost of establishing an acre of fruit land was between £14 and £20 at a time when tenants were pressed for capital. They would need the assistance of rent and rate reductions, and he hoped banks would lend money for a business that was less speculative than hops. 5

From the 1880's farmers were being advised by writers and politicians to adopt the minor farming activities as a means of making a profit from the land. They were advised to produce those goods for which demand was buoyant and the prices of which were not adversely affected by imports. H. P. Dunster considered dairy farming, the production of bacon and hams, poultry farming, rabbit farming, flower growing, bulb production, vegetable growing, sugar beet farming, mushrooms, osiers and watercress, flax growing, beekeeping and fish farming, as well as fruit growing, when examining profitable small agricultural industries for farmers and smallholders to adopt. 6 There was no lack of advice from those urging farmers to make the land pay. A further strand in the argument was the adoption of these branches of agriculture by those who wished to see the re-establishment

3. Minutes of Evidence taken before Her Majesty's Commissioners on Agriculture, II (1881, C.3096, XVII), 904.
4. Ibid., 906.
5. Ibid., 904.
6. H. P. Dunster, How to Make the Land Pay, (1888), vii-xii.

of an English peasantry. The smallholding was seen as the ideal economic unit for petite culture, with the individuals co-operating for marketing. Though, in fact, the adoption of petite culture by farmers was a factor in the slow growth of smallholdings.

There was a considerable literature in the late nineteenth century informing the public and farming community of the opportunities for fruit growing. The Times carried articles that summarised a wealth of information that was given in more detail in The Quarterly Review, The Nineteenth Century, and The Contemporary Review. The agricultural community was kept informed through the Journal of the Royal Agricultural Society, which contained articles on all aspects of fruit cultivation. At the end of the nineteenth century and in the early twentieth century the Board of Agriculture published a number of pamphlets designed to help the fruit grower. They included a number on the insect pests of fruit trees and bushes and how to treat them, fungi that were injurious to fruit trees, advice on treating neglected orchards and how to grade and pack fruit. 7 The opportunities were explained, the profits indicated and advice on all aspects of cultivation given.

Mr. Gladstone spoke on the subject of the agricultural depression in his speeches in the 1880's, making reference to "the subject which is called in France the small culture - the rearing of the smaller living creatures, such as poultry, and the culture of vegetables and of fruits." 8 He drew attention to the luxury products that people were demanding, including the demand of the "well-to-do portion of the working classes" for jam.9

7. Board of Agriculture and Fisheries, leaflets Nos. 1-200.
8. The Times, 13 January, 1882, 6c.
9. The Times, 10 January, 1884, 7c.

> While it was evident that no great amelioration in the condition of farmers can ever be brought about in any such way; but after all this, I think the farmer ought to bear in mind that there is in this country unbounded capacity for consuming luxuries ... and wherever the circumstances of the farmer enable him advantageously to devote any portion of his land to purposes of this kind, in my opinion it is no irrational thing to say that he should examine carefully, and ascertain whether he can derive advantage from it or not. There may be cases where fields may be divided, where vegetables not commonly grown by farmers may be raised or fruits reared, and, where access to market is available may be found a source of no inconsiderable profit. 10

Mr. Gladstone was acquainted with the writings of Charles Whitehead, who contributed a great deal of material to arguments in favour of "small culture".

Whitehead was aware of the vital need to educate farmers, to provide evidence for them that there were opportunities in fruit growing to make profits. They had to be persuaded that fruit growing was an occupation for farmers and not merely specialist gardeners. 11 Farmers objected to becoming fruit growers because it was not their legitimate business, which was to produce corn and meat, milk, butter, cheese and wool. 12 There was resistance to change from the farming community, farmers were fettered by the customs and covenants of their leases which prevented innovation. There were also practical problems for tenants on finding the capital to invest and in ensuring compensation for the improvements. Landlords were not keen to sanction work that would mean heavy payments to an outgoing tenant. 13.

10. The Times, 13 January, 1882, 6c.
11. Charles Whitehead, Profitable Fruit Farming, (1884), 2-3.
12. Whitehead, op.cit., (1883), 369.
13. Whitehead, op.cit., (1884), 5-6.

The public and farming community were made aware of the opportunity for domestic production. The quantities of imported fruit in 1881 and 1882 were indicated by H. P. Dunster:

> We can hardly be far wrong in estimating the value of such imported produce at £2,000,000. This immense sum, which goes into the pockets of foreign growers .... seems to be the ordinary condition of things .... an item too of our imports in which the average is on the increase. 14

J. A. Morgan in 1888 estimated that of about £8,000,000 paid annually for imported fruit, half could be provided by home production. The remainder consisted of tropical fruit that it was not possible to cultivate profitably. 15 It was argued that there was a lot of potential for home production to replace imports before there was a real concern of over-production.

Farmers and prospective cultivators were enticed in to fruit growing by the example of others; there was the lure of large profits and success :

> Within a mile or two of our own study there is a market gardener cultivating three or four acres of ground who from his own growth and what he collected from cottages near, sent off to Manchester, and elsewhere, while currants were in season last year, quantities that returned to him £300 a week and sometimes more. A few miles further we can point out another small occupier who sent to Newcastle, last summer, no less than twenty-two tons of raspberries collected in the same manner. These two small facts may serve to show not only that there is at the present

14. Rev. H. P. Dunster, "Our Orchards and Paraffin Oil", The Nineteenth Century, XIV, (1883), 864.
15. F. A. Morgan, "The Fruit Growing Revival", The Nineteenth Century, XXIV, (1888), 885-886.

time a demand for, and also a supply of, home grown fruit, but that there are large sums to be made out of such small industries. 16

If corn and traditional farming activities did not pay, or could only be made to pay with difficulty writers were clear where profits were obtainable.

While it was important to make farmers see the logic of growing fruit, it was as important also to supply them with the information to enable them successfully to cultivate the fruit. Numerous small books and pamphlets were published, as well as articles in the Journal of the Royal Agricultural Society, detailing cultivation methods and explaining the rudiments of marketing.

George Bunyard's Fruit Farming for Profit had gone through three editions by 1890 and gave practical advice on cultivation. It covered all fruits, their purchase, planting, care and prices. There were sections on marketing and profits, and on treatment of insects and diseases. The advertisements showed a range of equipment available for the fruit grower, sprays, pruners and fruit preservers, as well as fruit stocks. The author had an interest in the expansion of the fruit industry, being the proprietor of an old-established nursery at Maidstone. Manuals were available on the cultivation of specific fruits and the identification and treatment of fruit diseases.

Charles Whitehead contributed Profitable Fruit Farming in the mid 1880's, with information on soils, root stock, cultivation distances, fertilizers, pruning, varieties of fruit and advice on packing and marketing. The information was available in printed form, but this does not take the place of practical advice, and there is no indication how widely the information was read.

16. Rev. H. P. Dunster, "England as a Market Garden", The Nineteenth Century, XVI, (1884), 606.

There was a need for information on all aspects of fruit cultivation, even in those areas where it was a well established feature of the farming economy. In the late nineteenth century fruit growing was of increasingly greater importance to the farmer, and there were emerging specialist fruit farmers. The profits of these farmers depended solely on the cultivation of fruit. They needed to know the most efficient way to use their land, and what layout of trees and bushes to adopt to maximise the output per acre. In selecting the varieties to grow they wanted advice on which would suit their soils, what were the more prolific varieties and which were marketable. The greater concentration of fruit trees meant greater problems with pests, and these had to be controlled. Fruit growing was a major industry in some areas of the country and it was becoming more scientific. No longer was a small fruit acreage on a mixed farm a source of bonus income. Fruit growing was moving out of the realm of a 'profitable gamble' into a steady source of income for a specialist producer.

CHAPTER IX

The Fruit Industry in Kent, 1870-1914

The Areas of Production

While the cultivation of fruit was a well-established feature of Kent's agriculture, there was considerable development and expansion of the fruit industry in Kent in the second half of the nineteenth century. From the 1860's fruit production was developing along new lines with a greater emphasis being placed on perishable soft fruits. Strawberries, raspberries, red and blackcurrants and gooseberries were being cultivated on an unprecedented scale.

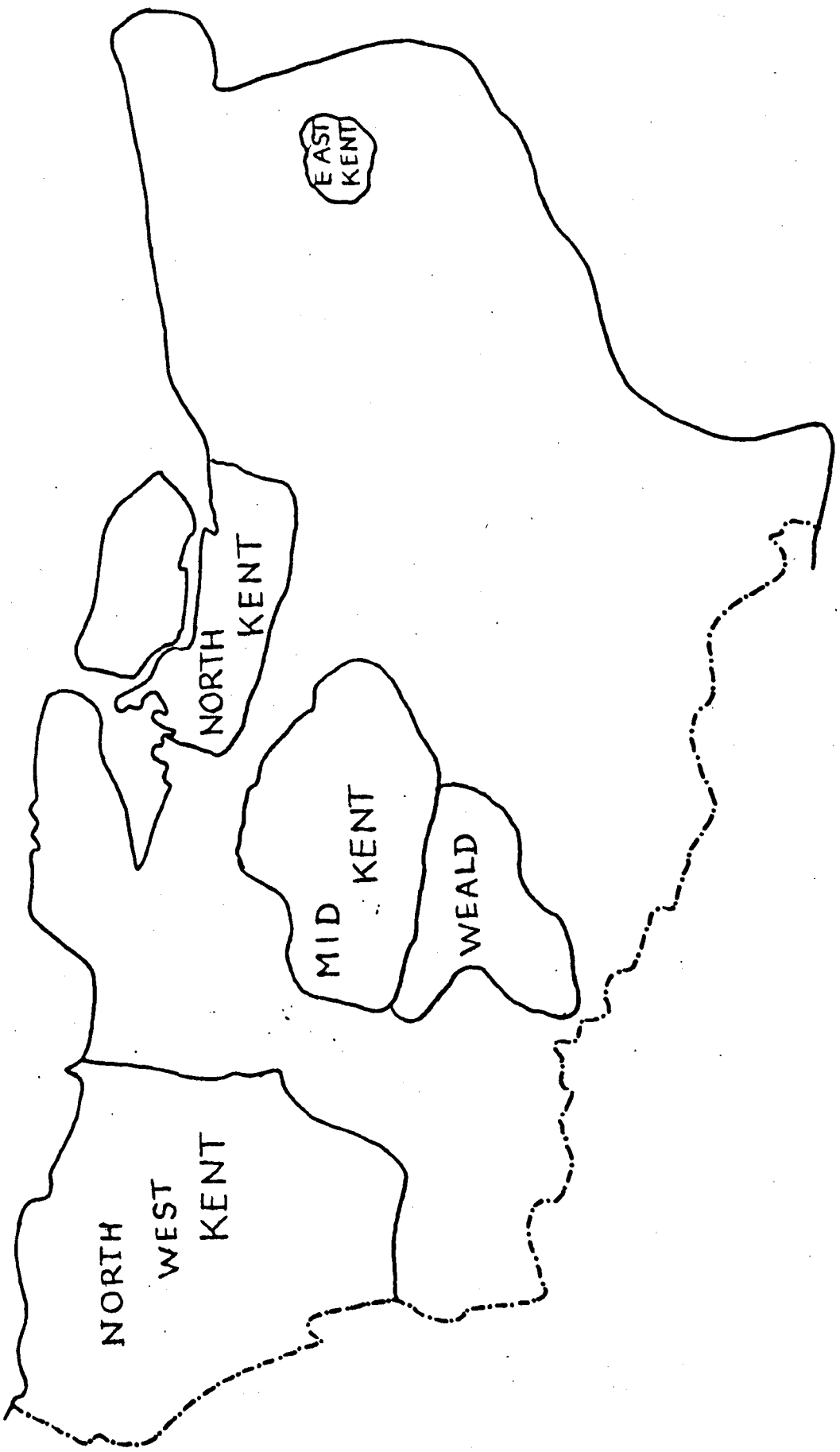
Fruit was still principally grown in three confined areas, in north-west Kent near to London, mid-Kent around Maidstone, and north-east Kent from Rainham to Faversham. Some fruit was grown around Canterbury and Sandwich in east-Kent. Though there were no absolute divisions between the fruit growing in the different areas, certain fruits and methods of cultivation did predominate. Strawberry and raspberry production was concentrated in north-west Kent, in mid-Kent top and bottom fruit was grown, while in north-east Kent cherries and grass orchards were the rule. 1

North-West Kent

In north-west Kent the Thanet Sands and Chalk Loams provided an ideal light soil for fruit, particularly strawberries, raspberries and red currants. 2 The soil was inherently suitable for soft fruit cultivation, but it was the proximity to the London market and the increasing demand for soft fruit that made production profitable.

1. Bear, op.cit., (1899), 43.
2. A. D. Hall and E. J. Russell, A Report on the Agriculture and Soils of Kent, Surrey and Sussex. (Board of Agriculture and Fisheries, 1911), 149.

MAP 9 Fruit Producing areas of Kent in the late Nineteenth Century.



Between Orpington and Crayford, land which had been poor quality woodland growing birch and beech trees was being brought into fruit cultivation in the 1860's and 1870's. In particular strawberries were grown, "as the distance from London is short, and the fruit can therefore be sent in fresh and early to the markets". 3

The large-scale cultivation of strawberries was a new development and was confined to north-west Kent. There were individuals having 100 acres of strawberries set out to facilitate horse-hoeing and reduce labour costs. The fruit for the fresh fruit market was picked between 3 a.m. and 7 a.m. and sent by early train to Covent Garden. The strawberries were put in pound punnets which in turn were packed in deal boxes, five dozen to a box. Some growers, rather than take the risk of marketing, sold to middlemen at £18 an acre, others contracted with jam manufacturers at £18 to £28 a ton. 4

Raspberries were also extensively grown in north-west Kent. The bulk went for jam manufacture, and was sold to contractors, packed in tubs to preserve the juice, only "the largest, firmest and best fruit is sent to market in punnets for dessert ...." 5 Both raspberries and strawberries could be profitable : Mr. Little reported in 1882 to the Royal Commission on Agriculture, that in the "miserable year" of 1879, there were growers of these fruits who had made £45 an acre. 6

In north-west Kent growers benefited from their proximity to London and were able to send their fruit to market by road or rail. The primary consideration of the growers was to convey their soft fruit quickly and smoothly to reach market in sound condition. The

3. Charles Whitehead, "Fruit-growing in Kent", J.R.A.S.E., Second Series, XIII, (1877), 94-95.
4. Ibid., 117-118.
5. Ibid., 118-119.
6. Royal Commission on Agriculture, (1882, C.3375, XV), 45.

highest prices were paid for fruit that was firm and unbruised. It is difficult to ascertain to what extent growers used road transport in the 1870's. In 1889 Charles Whitehead stressed the importance of the railways in the development of fruit farming as "absolutely essential in the case of soft, juicy, soon decomposing material", 7 but because of high railway charges some growers near London had "reverted to the old custom of sending it in vans by road". 8 By the end of the century road transport would appear to have been increasingly important for growers near London in marketing soft fruit.

There was considerable evidence given by the Select Committee of 1905 witnesses on the benefits of road transport and the extent to which it was used by growers in west-Kent. Mr. W. Chambers, Mr. J. Wood and Mr. E. Pink all used road transport in preference to the railway. Mr. Wood of Swanley was only sixteen miles from London, and he sent all his fruit by motor engine and horse,having nothing to do with the railway.9 Mr. Cecil W. Hooper, of the National Fruit Growers' Federation, thought that in 1906 only a tenth of the quantity of strawberries was sent by train from Swanley, as had been sent 14 or 20 years previously. The late delivery of fruit at the market, where it fetched lower prices than early arrivals, encouraged growers to use road transport. 10 Mr. Pink and Mr. Chambers used road transport because they felt that fruit was badly handled by the railways. Fruit was placed in wagons that were bumped along sidings destroying quantities of it, 11 while Mr. E. Pink stated that fruit sent to London in a common unsprung farm wagon arrived in better condition than that sent by rail. 12 Mr. Chambers, at Southfleet, sent his fruit by motor vehicle and horse, although rail was cheaper. 13 The expense of road transport was offset, however,

7. Whitehead, op.cit., (1889), 176.
8. Ibid., 176.
9. Departmental Committee on Fruit Culture in Great Britain, Minutes of Evidence, J. Wood, (1905, Cd.2719), 53.
10. The Times, 21 August, 1906, 10e.
11. D. C. On Fruit Culture, W. Chambers, (1905, Cd.2719), 404.
12. Ibid., E. Pink, 46.
13. Ibid., W. Chambers, 404.

by the higher price the fruit fetched at market because it arrived in better condition.

In the period to the end of the century soft fruit cultivation continued to expand in the area with the emergence of large-scale producers. "Messrs. William and Edward Vinson together have about 1,000 acres of strawberries and raspberries in the Orpington and St. Mary Cray districts; and when in partnership, until the end of 1897, they were the most extensive growers of these fruits in England". 14 The Messrs. Wood brothers were also extensive growers in north-west Kent with 2,000 acres under fruit, their land scattered in Swanley, Sevenoaks, Lee, Farningham and East Farleigh. 15

There was also an important glasshouse industry in Swanley and the surrounding parishes. It was largely involved with the cultivation of luxury fruits such as grapes, peaches, nectarines and the increasingly important tomatoes and cucumbers; however, there were a number of growers who were principally involved in the cultivation of early strawberries. These were mainly in Belvedere, Erith, Eltham, Swanley and Bexleyheath. At Belvedere strawberries occupied cool glasshouses from Christmas to the middle of June, when they were followed by tomatoes or cucumbers until mid October when chrysanthemums were planted. In cool houses strawberries were expected to fruit from mid-May to mid-June; in hot houses in Kent growers hoped to pick in early April. The growers in Swanley operated on similar lines. In Kent growers did not cultivate the very early strawberries as their counterparts did in Worthing. 16 In the Worthing area strawberries were forced in hot houses for late January when they fetched 2s. 6d. an ounce, though the price quickly fell to 1s. 6d. 17

14. Bear, op.cit., (1899), 43-44.
15. Ibid., 46.
16. W. E. Bear, "Fruit Growing under Glass", J.R.A.S.E., Third Series, X, (1899), 296-306.
17. Ibid., 292.

Mid-Kent

In mid-Kent the soil is suited for either fruit or hops, as the ragstone soil is light and easily worked. The hop gardens tended to be on the lower slopes of the escarpment while the fruit was higher up and on the crest. 18 The cultivation of hops and fruit had alternated for generations depending on the profitability of each crop, both of which did well in similar conditions. Hops could produce large spectacular profits, but they were uncertain, while fruit could be depended on to produce a steady income. A feature of many farms in mid-Kent was the co-existence of hop gardens and orchard. 19 At the end of the century Mr. Whitehead noted that the acreage of hops had declined because of low prices, but there had been a continual expansion of fruit. 20

The emphasis in fruit growing around Maidstone was traditionally on apple production, but the orchards which had been grassed were being replaced by cultivated orchards. 21 The best apples were grown on the ragstone soils near Maidstone itself, and from the 1870's more attention was being paid to their cultivation. Growers were careful to plant choice apples having flavour and colour, and were tending them more carefully. 22 Though growers were noted for their apples, they also cultivated plums and damsons as top fruit, and gooseberries, and red and black currants as bottom fruit. Exclusive to mid-Kent was the cultivation of cob nuts as a bottom fruit. Mr. F. Smith of Loddington had taken on a farm in 1881 and in 1897 had 200 acres of orchard cultivated along these lines. 23 The cultivation of plums and damsons was extended in the 1870's and 1880's, and as they matured earlier than apples trees they were grown in cultivated orchards with bush

18. Hall and Russell, op.cit., 117.
19. Whitehead, op.cit., (1877), 94.
20. Whitehead, op.cit., (1899), 443.
21. Whitehead, op.cit., (1877), 101-102.
22. Charles Whitehead, "Some Leading Features of the Agriculture of Kent", Journal of the Bath and West of England Society, Third Series, XII, (1880), 205.
23. Bear, op.cit., (1899), 47-52.

fruits. 24

Mr. Leney's farm at Wateringbury in 1871 indicates the mixed agriculture of this area, where fruit was an increasingly important crop. The 370 acres included 130 acres of hops, 30 of fruit, 130 of arable and 80 of grass. The established fruit consisted of cherries, apples and plums with some nuts, gooseberries and pears. There were also a further 30 acres of cherries planted in the hop gardens. These cherries were to be laid to pasture in 14 years. The established cherries had been improved by the application of manure and stocking the pasture with sheep fed off linseed cake. To help prevent insect attacks the stems and branches were dusted with lime. 25

Fruit growers were improving their cultivation methods to increase yields and produce better quality fruit. The more informed growers were applying various washings and dustings to destroy insect pests, while there was generally a greater use of manures, which had traditionally been confined to hop gardens. In mid-Kent and north-east Kent cultivated fruit plantations were manured with shoddy at 1 or 2 tons per acre, also fish-manure, rape dust, or the refuse from furriers' and tanners' shops. These manures were applied early in the winter before bloom buds developed. 26

Wealden District

Adjoining the mid-Kent area in the High Weald fruit plantations alternated with hops. In the parishes of Cranbrook, Lamberhurst, Goudhurst and Horsmonden apples, blackcurrants and nuts flourished. There were also some fruit plantations on the better soils in Staplehurst and Marden. 27 The diversification of fruit growing in the Wealden

24. Charles Whitehead, "Fruit Farming in Kent", Journal of the Bath and West of England Society, Third Series, XV, (1883-4), 155.
25. H. Evershed, "Report on the Farming of Kent, Sussex, and Surrey", Journal of the Bath and West of England Society, Third Series, III (1871), 60.
26. Whitehead, op.cit., (1877), 106.
27. Hall and Russell, op.cit., (1911), 126, 134.

district took place in the late 1860's : where apples had been the only crop blackcurrants, gooseberries and plums were being planted. 28 In the Weald apples were grown principally on grassland, it being held this gave a better colour and size and made a better cider. In Kent, however, very little cider was produced and its quality was poor, the labourers preferring beer. 29

Whitehead thought that much of the Weald of Kent could profitably be laid down to grass, and apple, pear, plum and damson trees could be planted. The Weald farmers, however, lacked the capital to turn arable to pasture or stock it with fruit trees and they were not encouraged by their landlords to change their farming systems. 30

Growers in mid-Kent and the Weald relied on the railways for transporting their fruit. The area around Maidstone was well served by the lines of the South Eastern and London, Chatham and Dover Railways. The former company reached Maidstone from Paddock Wood in 1844, while the L.C.D.R. extended their line to Maidstone in 1874 and to Ashford in 1884. The South Eastern Railway had greatly helped fruit growers in the Weald with the main line from Redhill through Tonbridge, Paddock Wood, Headcorn and Ashford in 1842. 31

North-East Kent

In north-east Kent between Rainham and Faversham the rich brick earths provided a soil that produced the best cherry orchards, and was ideal for apples, gooseberries, currants and plums. 32 This area of Kent was particularly noted for its cherry orchards : "this is the cherry-garden of England par excellence". 33 Cherries were grown on grassland, except for the initial period of establishing them when the

28. Whitehead, op.cit., (1877), 95.
29. Ibid., 102, 108.
30. Whitehead, op.cit., (1883-1884), 163.
31. F. W. Jessup, Kent History Illustrated, (Maidstone, 1966), 52-53.
32. Hall and Russell, op.cit., 69.
33. Whitehead, op.cit., (1877), 95.

land was cultivated with bush fruits. The grass was not mown but fed off with fatting sheep, and manured with London dung. 34 It was in north-east Kent that Whitehead noted the greatest improvements in fruit cultivation and the management of orchards. Land was being more widely manured, the gaps in orchards were being filled and approved varieties of cherries planted. 35

Pears were widely and successfully cultivated in this area, though not to any extent elsewhere in the county, and their culture had improved considerably in the past forty years. 36 Greengages were also extensively grown in the Sittingbourne area, where the soil particularly suited them. 37 Greengages did not thrive in other areas of Kent. 38

In north-east Kent, as in mid-Kent, the farmers took every advantage of market opportunities, raising a succession of crops for sale. The farmers in mid-Kent grew fruit, hops, corn and potatoes, while in north-east Kent they also cultivated turnips, mangolds, radish and canary seed. 39

In this area a large proportion of the cherries was sold on the trees by public auction or private treaty in June or July. The buyers took all the risks and the expenses of marketing the fruit, organising the picking, packing, carriage and sale. 40 This practice of selling fruit on the trees was extended to apples, pears, plums and nuts. It was particularly prevalent in north-east and mid-Kent, where fruit growers were also involved with hop production, and that harvest required their full attention. The fruit was purchased by individuals who made this their regular business, they were sometimes connected with salesmen, and understood the picking and packing of fruit. 41

34. Whitehead, op.cit., (1877), 110.
35. Whitehead, op.cit., (1889), 165.
36. Ibid., 165.
37. Whitehead, op.cit., (1878), 478.
38. Whitehead, op.cit., (1889), 165.
39. Whitehead, op.cit., (1883-1884), 155.
40. Whitehead, op.cit., (1877), 111.
41. Ibid., 106.

141

Sandwich Area

In east-Kent fruit was grown around the Sandwich area; in the 1870's raspberries were cultivated 42 and by the end of the century the acreage had been considerably extended. 43 Soft fruit needed to be placed on the markets as soon as possible after picking, but there was not the same urgency with apples. In 1887 as a result of the high charges imposed by the railway companies growers around Sandwich turned to water transport. A steam hoy was chartered to carry fruit to Londonbridge, making the journey three times a week. The journey took thirteen hours, and the fruit was placed upon the early morning markets at a considerable saving on the rail carriage. 44 For growers in east and north-east Kent water transport was a feasible and cheap alternative, particularly for less perishable fruits. Cherries had been sent to London by water since the sixteenth century, and apples sent to north-east England in coal boats in the eighteenth century.

Mid- and east Kent were traditional fruit growing areas, but where they had been associated with grass orchards of apples and cherries, they were developing cultivated orchards and producing soft fruit. In these areas fruit was an integral part of the mixed farming economy, taking its place with hops, arable and livestock. However, fruit was becoming of increasing importance and the dominant sector on many farms. Fruit provided an important source of income and a regular one. In west-Kent near London fruit had always been cultivated but to a great extent within a market garden system. In the later nineteenth century, however, fruit growing moved further from London

42. Whitehead, op.cit., (1877), 118.
43. Whitehead, op.cit., (1899), 438.
44. The Times, 27 August, 1887, 4f.

and there emerged some growers with very large acreages of soft fruit.

The farmers who have been quoted as examples in the different areas would probably not be representative of the average fruit grower. They represented the best practices, and were amenable to meeting and talking to agricultural journalists. They were successful growers who were proud of their cultivation methods and practices which embraced up-to-date knowledge and ideas. These growers felt they could stand the scrutiny of their colleagues. The Chambers family's fruit farms, in mid and north-east Kent, will be examined in detail during the years 1877 to 1914 as an example of a mixed farming unit where fruit became increasingly important. This will afford a comparison with the Peel Estate in mid-Kent, examined for the first half of the nineteenth century.

While the Kent orchards had been cited as examples of how they should be managed in the late eighteenth century, Whitehead at the end of the nineteenth century indicated what improvements needed to be undertaken and also what had been achieved. In 1883 there remained orchards that needed pruning, where grass was mown, or fed off by animals not eating oil cake. In many cases there were trees covered in lichens and moss. 45 Progress was made, and by the end of the nineteenth century basic management had improved widely while science made its contribution to ensure consistently good crops.

> Apple trees are grease-banded and sprayed systematically by advanced fruit-growers, to prevent or check the onslaughts of destructive insects. Far more attention is being paid to the selection of varieties of apples and pears having colour, size, flavour, keeping qualities, and other attributes to meet the tastes of the public, and to compete with the beautiful fruit that comes from America and Canada. 46

45. Whitehead, op.cit., (1883-1884), 164.
46. Whitehead, op.cit., (1899), 465.

There was a great advance in the scientific treatment of insect pests of orchards and fruit plantations, but the practical application of this knowledge was limited.

The diversity of Kent's agriculture and the extent to which individual farmers engaged in a range of farming activities contributed to the prosperity of the farming community. In 1899 Whitehead wrote,

> Without hops, fruit, and vegetables Kent would have felt the depression in Agriculture quite as much as any county in England, as there is so much poor land within its borders and - excepting in districts especially well farmed, like the Isle of Thanet - many of its agriculturalists who have neither hop nor fruit land have either succumbed or are in a sorry plight. 47

The Chambers Family's Fruit Farms

In the second half of the nineteenth century mid-Kent became to a greater extent an area of mixed fruit growing within a mixed farming economy. The traditional dependence on apples was supplemented by a greater production of soft fruit, and fruit was becoming a more important element in the agricultural economy in providing a stable income. The Chambers family's farming activities provide a detailed example of this process in operation. Their farm accounts seem to confirm the agricultural writers' observations on mid-Kent.

The survival of farm accounts is of course fortuitous and there is the additional problem of the rare survival of accounts relating to specialist activities like fruit growing. The very existence of a set of accounts may indicate that they are untypical and do not represent the experience of other fruit growers. These accounts

47. Whitehead, op.cit., (1899), 457.

provide an example of the developments that were taking place, but it would be unwise to draw conclusions from them for the whole of mid-Kent. An attempt was made to locate comparable records, but there were no relevant accounts at Reading and several fruit farmers who were contacted were unable to assist.

The accounts have been examined primarily for the information they contain on fruit production, in particular the importance of fruit as a source of income and the marketing of fruit. The data has been taken from the figures for receipts, with references to expenditure where it related directly to fruit. A more detailed analysis of the profitability of each farming activity would be difficult as it is not possible to accurately allocate labour costs.

Members of the Chambers family were engaged in farming, primarily in mid-Kent, and farm accounts exist from 1877 to the mid 1960's for the various farms they occupied. The farm accounts examined cover the period 1877 to 1914 and relate to two separate farm groupings. There are accounts for the years 1877 to 1899 for three farms of John Thomas Chambers contained in a single account book, 48 which also has notes of his other financial transactions. The relevant farm accounts of his brother, Reverend Francis Chambers, exist from 1893. There are five books relating to this group of farms, two containing general farm accounts and three with details of fruit sales. 49

J. T. Chambers

It is possible to examine in some detail the developments that were taking place in mid- and north-east Kent in the last quarter of the nineteenth century by reference to the farms of J. T. Chambers.

48. K.A.O., Chambers MSS, U1383, B3/1.
49. K.A.O., Chambers MSS, U1383, B3/2; B3/3; B4/1; B4/2; B4/3.

He farmed three separate units, though the accounts for Fir Tree Farm exist only for the years 1877 to 1886, while the accounts for the other two farms exist from 1877 to 1898. Oversland Farm was situated at Boughton near Faversham, the other was at Otham near Maidstone. This was probably Simmons' Farm that he leased to his brother Francis Chambers. The agreement was drawn up on 28 September 1900 giving Francis Chambers the management of the farm on payment of £140 p.a., this being raised to £180 p.a. in 1907. 50 The accounts are of varying value as the method and detail of keeping them varied considerably from year to year. They were all kept for the agricultural year and commence in early October; they include, therefore late apples from one calendar year and soft fruit and early apples for the following year.

Fir Tree Farm in mid-Kent was organised as a mixed farming unit, with hops but no fruit. The accounts exist for 1877 to 1885 and during the eight years showed a profit in five years. The average annual profit for the eight years was £56 12s. 7d., though in 1879 to 1880 the profit had been £956 12s. 0d., while in the previous year there had been a loss of £838 3s. 2d. The deficits represent a loss on normal farm activities, as the debit accounts do not contain items of extra-ordinary expenditure. In 1884-5 when there was a loss of £582 15s 0d., the farm expenditure was at its lowest for the eight years.

50. K.A.O., Chambers MSS, U1383, B3/1

TABLE 15 Summary of Income and Expenditure with profit and loss on Fir Tree Farm, 1877 to 1885.

Year	Credit £ s. d.	Debit £ s. d.	Profit £ s. d.	Loss £ s. d.
1877-8	3,239-13-11	3,145- 5-11	94- 8- 0	
1878-9	1,369-19- 0	2,208- 2- 2		838- 3- 2
1879-0	3,092- 7- 7	2,136-15- 7	956-12- 0	
1880-1	2,124- 5- 0	2,372-18-10		148-13-10
1881-2	3,377- 6-9½	2,723- 9- 0	643-17-9½	
1882-3	2,695-15- 3	2,684-11- 4	10- 3-11	
1883-4	2,903- 1-3½	2,586- 0- 1	317- 1-2½	
1884-5	1,429-17- 9	2,012-12- 9		582-15- 0

K.R.O. Chambers MSS, U1383, B3/1

Hops were the largest single source of income, except in 1878-1879 and 1884-1885, and generally contributed 50% or more to total income. There was some arable and the accounts list sales of wheat and in some years barley and oats. Sales of grain were of less importance than livestock : in 1877 - 1878 they accounted for 10% of total income and in 1881-1882 13%. The farm was well stocked with cattle, sheep and pigs, and there was a considerable turnover of stock during the year. At Michaelmas 1877 the stock consisted of 78 ewes and lambs, including three rams, 32 pigs, 16 cows and calves, and five team horses and a driver. Excluding the horses the stock was valued at £396 5s. 0d.; the turnover, however, in 1877-1878 was over double at £965 14s. 5d. The income from stock was greater than that for grain, representing 29% of total income in 1877-1878; however, the profitability may have been less, as hop growers kept cattle mainly for the manure they provided. Poultry were kept, as some eggs were sold, as were small amounts of butter and milk, though they were of no

great importance, contributing less than 5% of the income. The horse team was occasionally used at the Otham Farm, which paid the Fir Tree Farm account for it. The profit of the farm during the eight years was small in proportion to the income and outgoings.

The accounts for the Otham Farm, when under the management of J. T. Chambers, exist for the years 1877 to 1899. The farm was consistently profitable with an annual average profit of £420 15s. 7d. The profits at this farm were a much higher proportion of income than at Fir Tree Farm, and financially it seems to have been a sounder proposition. Table 16 indicates a steady rise in income which was particularly marked after 1889 and well maintained through the 1890's. This was partly offset by higher costs, but profits were higher in the ten years from 1889 to 1899 than 1879 to 1889, average annual income being respectively £512 13s. 8d. and £390 14s. 9d.

It was a mixed farm with the emphasis very heavily on fruit and hops, though after 1886 a small proportion of income came from sheep. In the first years of the accounts hops and fruit were of about equal importance, with the value of both fluctuating. The fruit was, however, the more stable source of income.

The hop gardens were small compared to those on Fir Tree Farm or Oversland Farm, as the income was considerably smaller than on either of those farms. The hops were eventually phased out of the farm and after 1891-1892 no income from their sale was recorded, the finality of the decision not to cultivate hops was indicated by the letting of the oast-house in 1894-1895. The decline in hops was offset by an increased cultivation of fruit, indicated by the purchase of trees and a steady rise in the income from fruit.

TABLE 16 Summary of Income, Expenditure and Profit on the Chambers Farm at Otham 1877 to 1899.

Year	Credit £ s. d.	Debit £ s. d.	Profit £ s. d.	Profit As a % of income
1877-78	868-11- 8½	564-11- 6½	304- 0- 2	33.8
1878-79	369-15-11	260-19- 4	108-16- 7	29.2
1879-80	694- 3- 4½	301-12-10½	392-10- 6	56.4
1880-81	876-16- 0	277-16- 6½	598-19- 5½	68.2
1881-82	986-11- 1	324- 8- 1	662- 3- 0	67.0
1882-83	606- 8- 5	286- 6-11	320- 1- 6	52.8
1883-84	872-12- 4	282- 1- 1	590-11- 3	66.5
1884-85	726- 4- 1	349-13- 0	376-11- 1	51.7
1885-86	740- 2- 4	439-15- 2½	300- 7- 1	40.7
1886-87	859-13-11	619-12-11½	240- 1- 0½	27.9
1887-88	903-14- 3	580- 2- 4½	323-11-11½	35.7
1888-89	936-16- 5	834- 3- 5½	102-12-11½	10.8
1889-90	1,674-11- 0	886- 2- 4	795-12- 3	47.4
1890-91	1,381-12- 7½	922- 7- 7	459- 5- 0½	33.2
1891-92	966- 8- 3	667-12-11	298-15- 5	30.8
1892-93	1,066- 0- 8	667- 2- 0½	398-18- 8	37.3
1893-94	1,292- 0- 1	619-17-10½	672- 2- 3½	52.0
1894-95	1,195-10- 8	713- 6- 1½	482-13- 6½	40.3
1895-96	1,175- 9-10	697-13- 4	477-16- 6	40.6
1896-97	1,438-19- 4	910-10-10½	528- 8- 6½	36.7
1897-98	1,341- 0- 9	795- 4- 2	546-16- 7	40.7
1898-99	1,157-15- 5	681- 7- 6	476- 7-11	42.1

K.R.O. Chambers MSS. U1383, B3/1

The debit accounts itemise purchases of fruit trees, also manure and materials for crop spraying. However, while hops were cultivated these spraying materials were probably used for the hops rather than fruit. There was an increase in the top fruit and soft fruit acreages. In 1880-1881 800 blackcurrant bushes were purchased together with 14 trees, while in 1882-1883 200 damsons and 3 bush plums were bought. After 1892-1893 trees were purchased in every year until 1896-1897 and again in 1898-1899. The still surviving Maidstone firm of Bunyard's was one supplier of trees. The income from fruit, while it fluctuated showed a mjor rise at the end of the 1880's, and in the 1890's was about £900 p.a., compared with £500 in the 1880's.

The income from sheep was a small proportion of total income, although it became of greater importance during the 1890's. There were three years from 1880-1881 to 1882-1883 when a total of £17 was received for sheep keep. This was an indication of the practice of farmers on Romney Marsh, the north-east Kent marshes, and the Isle of Sheppey of wintering sheep on inland farms. After 1886-1887 the farm had sheep in its own right and they featured regularly in the accounts. A small income was derived from wool sales. Otham farm developed in the 1880's as a successful fruit growing unit with some livestock, but abandoning hop production.

Oversland Farm at Boughton was consistently profitable during the period of the accounts from 1877 to 1898. The profit fluctuated considerably, from as low as £2 19s. 3d. in 1878-1879, to £2,911 5s. 9d. in 1889-1890, but it averaged £905 10s. 11d. per annum, making this the most profitable of the three farms. The income was derived principally from hops and fruit, though in some years a minor part of the income came from pigs, sheep keep, sheep and wool; sheep appeared regularly in the accounts after 1888.

The accounts varied considerably in quality, in some years all the fruit sold to individual salesmen was listed, while in other years only a list of names and sums of money was recorded. There exists for 1886, however, the details of the spatial distribution of land.

Land use, Oversland Farm 1886

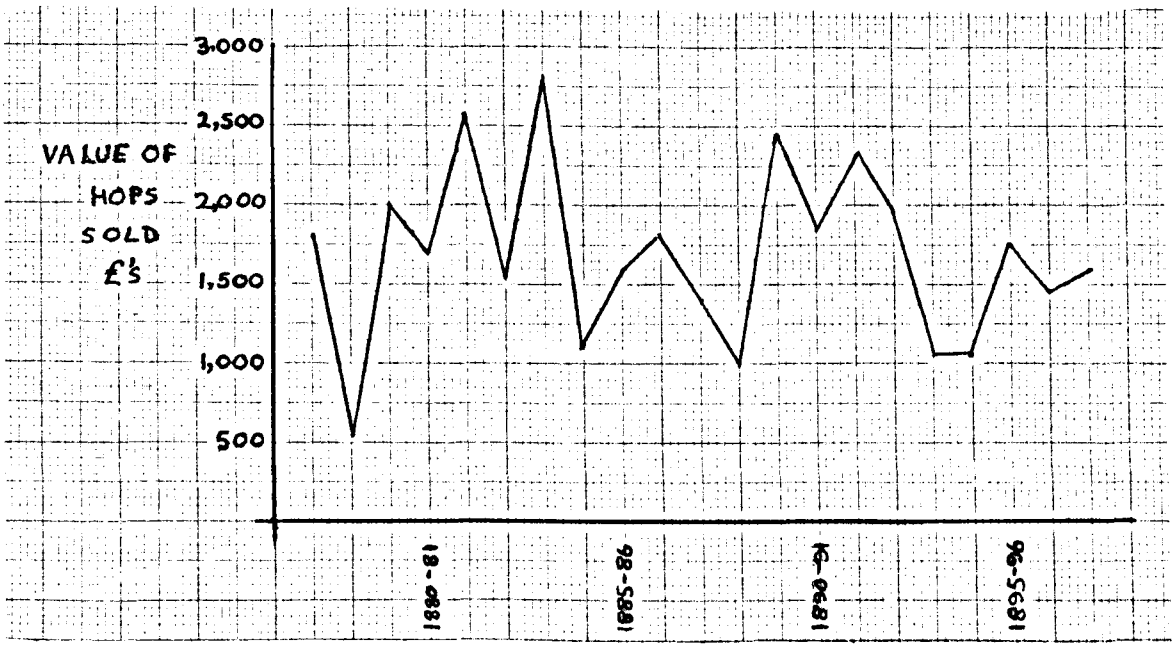
	A	R	P
Hops	23	3	18
Currants Plums side	1	2	0
Old Red Currants	1	2	16
Strickfast Black Currants	2	1	7
Woodpiece Black Currants		2	11
Woodpiece Brambling Reds	1	1	0
Woodpiece Black and Red Currants	5	1	30
Nursery		1	16
Plantation		1	0
Home Orchard	2	0	16
House Orchard	1	3	35

Source K.A.O. Chambers MSS. U.1383 B3/1, 1886.

The accounts from 1878 to 1880 list pears, damsons, black cherries, plums, apples and red and black currants as sold. The table of land distribution illustrates the predominance of hop cultivation, and gives an idea of the extent of soft fruit and orchard production. The descriptions of the state of cultivation are not full and should not be too literally interpreted. The importance of fruit on the farm increased during the 1880's which is clearly seen in the graph.

The two graphs plot the income from hops and fruit during the period of the accounts. The income from hops fluctuated considerably over the period, as would be expected from such an unpredictable crop. No marked trend is discernible in the graph of income from hops, though there was a trough from 1884 to 1889 and again after 1894.

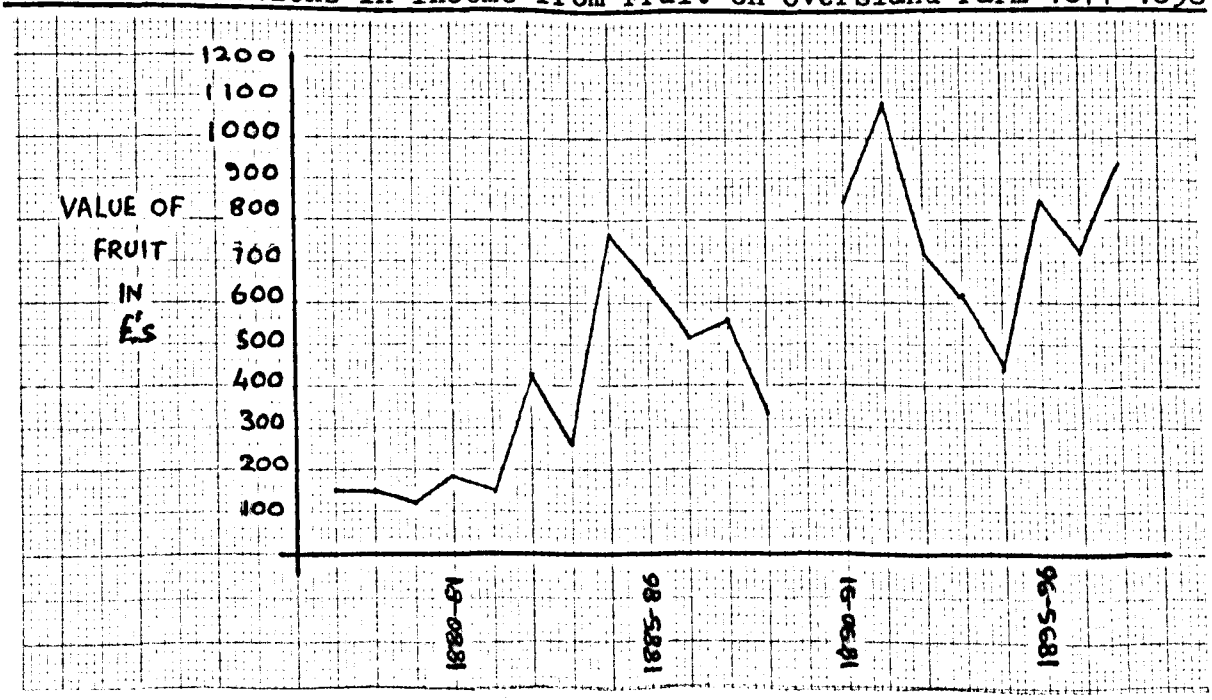
Annual Fluctuations in Income from Hops on Oversland Farm, 1877-1898



K.R.O. Chambers MSS. U1383 B3/1

The income from fruit varied but not to the same extent, and there was a distinct upward trend discernible through the annual fluctuations. The income from fruit was increasingly important towards the end of the nineteenth century while the income from hops was lower. In absolute terms, however, hops remained the most important source of income. On both Otham Farm and Oversland Farm fruit production became important in the 1880's, on the farms of Francis Chambers fruit was the most important source of income.

Annual Fluctuations in Income from Fruit on Oversland Farm 1877-1898



K.R.O. Chambers MSS. U1383 B3/1

The apparent discrepancy between the contention that fruit produced a steady income and the fluctuations in fruit income at Oversland Farm can be reconciled with a quotation from Charles Whitehead.

> In the parts of the county suitable for fruit-growing, almost all the farms have a certain proportion of fruit-land, as a hedge against the contingencies of hop-growing. The profits of fruit-growing are not so large as those of hop-culture in good seasons; on the other hand, the chances of possible losses are not nearly so great. Men may make or lose fortunes by hop-cultivation; but fruit-land of fair quality will show a steady remunerative return upon an average of many years. 50a.

The implication was that the cost of cultivation of fruit was a small proportion of the income produced, unlike hops where a large investment in cultivation might produce a crop that would not cover costs. As fruit became of greater importance the costs of cultivation rose and the margin of profitability would be squeezed. The profitability of fruit was not possible to ascertain from the data available.

50a. Whitehead, op.cit., (1877), 94.

Francis Chambers

The accounts that relate to the three farms of Francis Chambers exist from 1893 and have been examined to 1914. The accounts from 1893 to 1896 related to one farm unit that was referred to in the debit accounts as Lested Lodge and Gurney's, and after 1897, when the buildings at Gurney's were sold, as Lested Lodge and Sutton Valence. In 1896 it was distinguished in the credit accounts as 'Chart', when a second farm called 'Otham' was included. This farm was distinguished as Bishop's in 1901 in the credit accounts, and after 1903 as Langley in the debit accounts. In 1901 a third farm was included, which was rented from J. T. Chambers. It was called 'Otham' in the credit accounts and Simons (also spelt Simmons) in the debit account. In 1912-13 Simons Farm was given up and Redwater Farm was taken on. The accounts of these three farms were regularly and consistently kept, and allow an examination of the organisation of the business at the end of the nineteenth century.

Francis Chambers was almost solely concerned with the production of fruit, though he had some sheep, pigs and poultry. The accounts for these were kept separately and the profit or loss was entered in the General Account, while fruit sales were all entered in the General Account from the totals in the fruit books. The general credit accounts gave the totals of fruit sold to each salesman, and from 1896 to 1906 distinguished between the different farms; after 1907 the sales were totalled for the general accounts. Fruit books exist, however, which make it possible to distinguish between the fruit produced on the farms of Chart, Simon's Otham, and Bishop's Otham. The general debit accounts listed rents paid, together with the cost of the money invested in the farms, and the cost of hand labour, horse labour, general purchases and losses incurred.

TABLE 17 Annual Balances 1892 to 1921 on the farms of Francis Chambers

Year	Profit £ s. d.	Loss £ s. d.	Credit £ s. d.	Debit £ s. d.
1892-93	33- 7- 2		1,314- 5-10	1,280-18- 8
1893-94	93- 8 - 4		1,432-11- 6	1,339- 3- 2
1894-95	264-16- 2		1,546- 6- 3	1,281-10- 1
1895-96		86-18- 1	1,700-15-11	1,787-14- 0
1896-97	745- 7- 0		2,423- 5- 6	1,677-18- 6
1897-98	963-15-10		2,659-17- 8	1,696- 1-10
1898-99	318-11- 5		2,033-11- 7	1,715- 0- 2
1899-1900	21- 7- 9		1,830-17- 7	1,809- 9-10
1900-01	586-18- 8		2,985-15- 6	2,298-16-10
1901-02		204- 2-10	2,080-13- 2	2,284-16- 0
1902-03		499-10- 3	1,463-19- 9	1,963-10- 0
1903-04		100- 1- 0	2,218- 4-10	2,318- 5-10
1904-05		309-13- 5	1,716-15-11	2,026- 9- 4
1905-06	737- 8- 2		2,778- 8- 2	2,041- 0- 0
1906-07	462-16- 9		2,637- 1-11	2,174-5 - 2
1907-08	277-10- 0		2,745- 8- 4	2,467-18- 4
1908-09	126- 5- 0		2,453- 9- 3	2,327- 4- 3
1909-10		387-1 - 8	1,662- 0-10	2,049- 2- 6
1910-11	643-17- 8		2,839-17- 9	2,196- 0- 1
1911-12	733-10- 4		2,883- 8-11	2,149-18- 7
1912-13	446-16- 6		2,357- 3- 9	2,040- 8- 3
1913-14	1,105- 2- 4		2,801-18- 0	2,085- 3-11
1914-15	596- 5- 8			
1915-16	1,995- 0-11			
1916-17	3,943- 5- 0			
1917-18	949-12-10			
1918-19	4,908-13- 0			
1919-20	1,305- 2-10			
1920-21		1,571- 2-10		

K.R.O. Chambers MSS. U1383, B3/2, B3/3

The farms, over the period 1892 to 1914, made losses in six years. The losses were incurred in the course of farming activity and not because of any extraordinary expenditure. There were no large fluctuations in expenditure, which increased significantly in 1895 - 1896 and again in 1900-1901 when new farms were taken on. In the three years to 1895 rent and interest on money invested in the farms averaged £402 12s. 0d., while farming costs were £890 2s. 2d. per annum. The addition of Bishop's Farm increased costs, and in the five years from 1895 to 1900 rent and interest averaged £481 14s. 4d. while farming expenses were £1,260 3s. 5d. per annum. Simon's farm was taken on in 1901 and there was a further rise in costs : rents and interest averaged £614 8s. 4d. while farming expenses were £1,577 7s. 4d. per annum in the 12 years to 1912. Redwater Farm was taken on in 1912 when Simon's farm was given up. The losses incurred in the four years from 1901 to 1905 were due to a reduced fruit income rather than increased costs of cultivating an additional farm. In 1905 profitability came with improved income figures rather than a reduction in expenditure. In the years after 1913 and particularly during the war the farms made consistently good profits. The figures must have encouraged F. Chambers to make the purchase of Stonebridge Farm at Egerton for £3,300 in 1916.

The fruit accounts have been examined to provide information on the type of fruit grown, but more particularly on the marketing of fruit. There were no details of acreages of different fruits on the farms, though there were references to plantings. However, the year 1896-7 has been examined in detail to ascertain the quantities of each fruit marketed. While this method has its limitations it does give an indication of the importance of each fruit grown. The destination of fruit was a simpler matter as the fruit was totalled under salesmen and their addresses provided.

The year 1896-7 provides a good indication of the range of fruit cultivated, as obtained from the sales in the Chart and Bishop's fruit books. These books detailed each year for each salesman the amount of each variety of fruit despatched to them. The major obstacle to using this source was the bulk of detail when fruit was sent in half sieves. Messrs. Paine Rogers & Co. purchased, for example in 1896-7 £30 10s. 9d. in value of fruit which comprised 171 half sieves of 14 varieties of fruit, while Jacob's & Son purchased £530 12s. Od. in value of fruit comprising 1775 half sieves, 9 sieves and 15 pecks of 51 specified varieties of fruit.

Chart and Bishop's were mixed fruit farms typical of those described by the agricultural writers for mid-Kent. They produced a comprehensive range of fruit, strawberries, raspberries, gooseberries, black and red currants, cherries, damsons, plums, apples, pears, cobbs and filberts. Francis Chambers was not reliant on one crop, nor did he concentrate on one or two varieties but grew a broad mixture. Comparing him with the fruit growers of the late seventeenth to the mid-nineteenth century he stands out as a farmer specialising in fruit production, and even comparing him to his brother, J. T. Chambers, there is a marked distinction in terms of the importance of fruit.

Some fruit was sold : generically strawberries, red and black currants, raspberries and damsons were only sold as such but gooseberries, and more particularly plums, cherries, apples and pears, were sold by variety. The table gives an indication of the importance of the various fruits according to the quantity sold, the various volume measures being converted to weight for easier comparison.

The strawberries and raspberries were all grown on Chart, the former producing 16 tons, 9cwt. 52lbs. which were marketed in pecks of 12lbs. The raspberries, apart from 13 half-sieves which would have

contained 24 lbs. each, were sold in 262 gallons and 305 tubs. The latter were bulk containers, the fruit in them being suitable only for manufacture into jam. The black and red currants were sold in half-sieve quantities each weighing about 12lbs., 15 tons, 8 cwts.

TABLE 18 Table of Fruit Recorded in the Chart and Otham Fruit Books 1896-7, in order of quantity

Fruit	Quantity tons cwt. lbs.	Observations
Gooseberries	20 - 16 - 0	
Strawberries	16 - 9 - 52	
Blackcurrants	15 - 8 - 0	
Apples	14 - 1 - 66	
Plums	14 - 0 - 12	
Cobbs	9 - 11 - 38	
Pears	4 - 1 - 78	
Damsons	3 - 13 - 56	
Filberts	2 - 17 - 96	
Hazels	2 - 3 - 14	These may be Hessels, a variety of Pear.
Cherries	1 - 8 - 32	
Redcurrants	15 - 48	
Greengages	5 - 84	Probably a variety of Plum

The raspberries were sold in bulk; 13 halves; 262 gallons; and 305 tubs. (See Appendix A for approximate weight of containers used for fruit.)

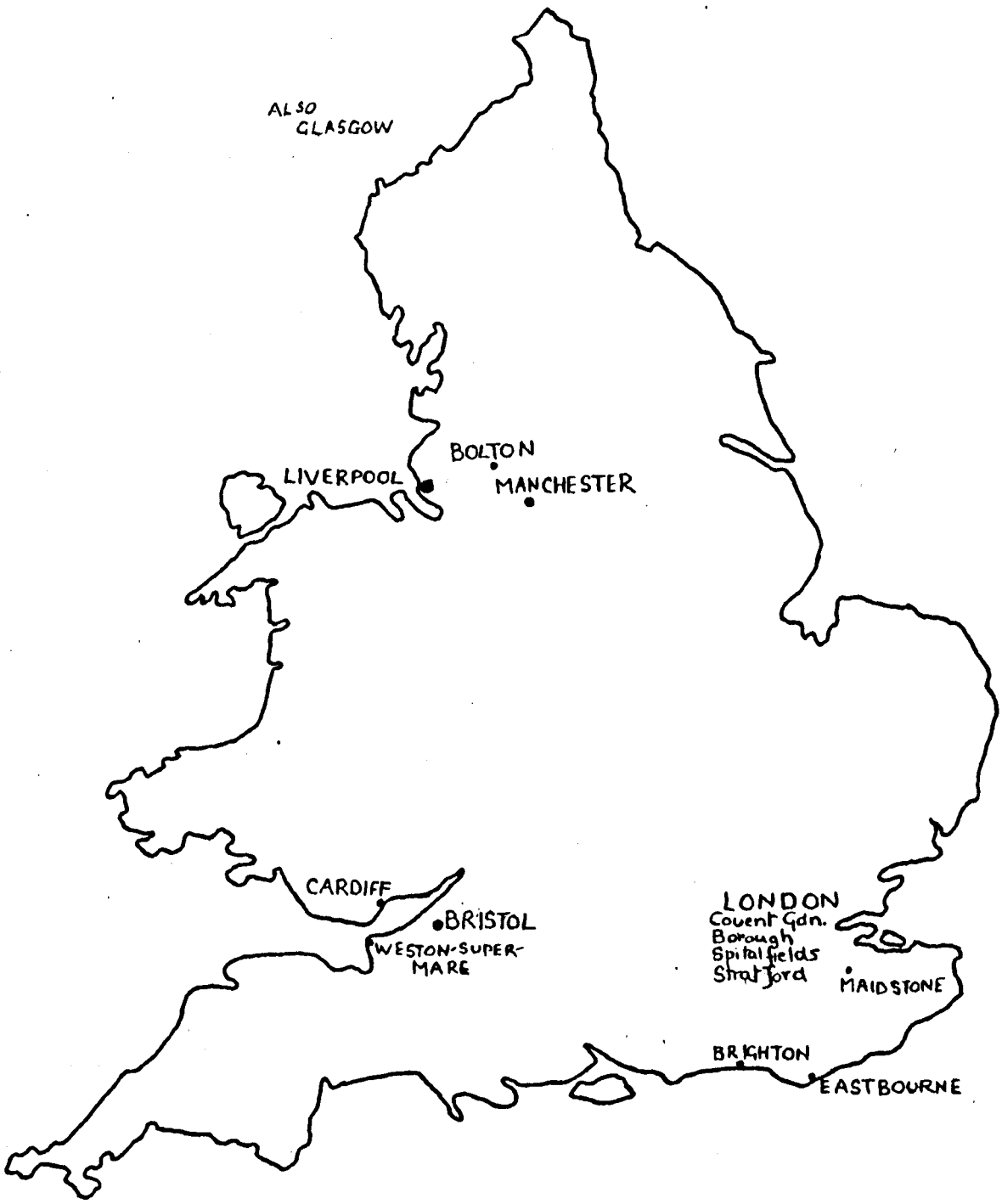
of the former were sold but only 15 cwt. 48lbs. of the latter. There was a strong demand for blackcurrants as fresh fruit and for manufacture into jams and cordials. Damsons, which were also in demand from jam manufacturers, produced 3 ton, 3cwt., 56 lbs. The majority of the gooseberries were sold undifferentiated by variety, and assuming that the fruit specified as "berries" in the fruit books were gooseberries, 14 ton, 1 cwt. were sold in this way. In addition, a further

TABLE 19 Table of Apples Recorded in the Chart and Otham Fruit Books 1896-7, in order of Quantity Grown.

Variety	Weight Tons	cwt.	lbs.	Culinary /Dessert
KESWICK CODLIN	2	14	96	CULINARY
LORD DERBY	2	6	32	CULINARY
MANKS CODLIN/CRAB	2	3	4	CULINARY
WARNERS' KING	1	10	96	CULINARY
KING OF PIPPINS (Golden Winter Permain)		18	54	CULINARY OR DESSERT
HAWTHORNDEN		15	72	CULINARY
QUARRENDEN (Devonshire)		12	96	DESSERT
COL. VAUGHAN'S		9	72	DESSERT
WELLINGTON		8	16	CULINARY
BLENHEIM ORANGE		5	16	CULINARY
WINTER QUEENING		3	48	CULINARY or DESSERT
MR. GLADSTONE		3	48	DESSERT
SUMMER PIPPIN		2	88	DESSERT
DUCHESS OF OLDENBURGH		1	104	DESSERT
CELLINI PIPPIN		1	104	CULINARY
WORCESTER PERMAIN		1	104	DESSERT
NON PAREEL		1	80	DESSERT
ECKLINVILLE SEEDLING		1	56	CULINARY
BRAMLEY SEEDLING		1	56	CULINARY
NON SUCH		1	8	CULINARY
COX'S ORANGE PIPPIN			96	DESSERT
RIBSTON			96	DESSERT
POTTS SEEDLING			96	
LORD SUFFIELD			72	CULINARY
WINTER GREENING			72	CULINARY
NORTHERN GREENING			72	CULINARY
NON SPECIFIED APPLES		10	104	

Quantities converted from Half-Sieves and bushels at 24 lbs. to the half-sieve and 48 lbs. to the bushel.

MAP 10 Markets for Fruit from the farms of Rev. Francis Chambers.



6 ton, 15 cwt. of gooseberries were sold by variety, including 2 ton, 7 cwt., 56 lbs. of Winham's Industry, 1 ton, 16 cwt., 56 lbs. of Keen's Seedlings, both ripe and green, and 1 ton, 3 cwt., 56 lbs. of Lancashire Lad's.

The cherries, plums, apples and pears were sold primarily by variety, and while a few varieties dominated, small quantities of a wide range of varieties were sold. Pears and cherries were not of great importance, 4 ton, 1 cwt., 78 lbs. of the former were sold, and 1 ton, 8 cwt., 32 lbs. of the latter. Of the pears 2 tons, 16 cwt., 18 lbs. were sold by variety, mainly Bishop's Thumb, but also small quantities of Williams, Winter Windsors and Hessels. In mid-Kent cherries and pears were not of such importance as in east-Kent.

Plums were an important crop producing 14 tons, 12 lbs., the three main varieties being Victorias, producing 7 tons, 12 cwt., 12 lbs., Rivers 3 tons, 6 cwt., 28 lbs. and the Prune Damson 1 ton, 6 cwt., 96 lbs. In addition, there were 2 tons, 2 cwt., 56 lbs. of Orleans, Morroccos, Diamonds, Pond's Seedling, Goliaths, White Damson and White Magnum and 19 cwt., 28 lbs. of the fruit sold as plums. The Victoria was described as a market favourite, producing heavy crops, 51 while the Rivers was deemed to be the best early plum, seldom failing to produce. 52 The Prune Damson, which Dr. Hogg included under plums, 53 should perhaps be included with damsons, though it produced a larger fruit than the ordinary damson and in Covent Garden was called the Pruant Plum. 54 The Orleans was a favourite plum in London, with a large early fruit but it was not a heavy cropper, 55 Chambers produced only 13 cwt. of it. The Diamond was a native wild plum of Kent which produced a fine fruit abundantly in some years, 56

51. George Bunyard, Fruit Farming for Profit, (Third Edition, Maidstone, 1890), 55.
52. Ibid., 54.
53. Robert Hogg, The Fruit Manual, (Third Edition, 1866), 377.
54. Bunyard, op.cit., 58.
55. Ibid., 54.
56. Ibid., 55.

Chambers marketed 18 cwt., 84 lbs. in 1896-7. On the Chambers farms the Victoria plum dominated, accounting for over half the plums marketed.

A wide range of varieties of apples was cultivated, twenty-seven different ones being identified from the fruit books, and a total of 14 tons, 1 cwt., 66 lbs. were sold, including those of no specified variety. Only four varieties sold over a ton, while there were six varieties of which less than a hundredweight was sold. The four main varieties were, Keswick Codlin, Lord Derby, Manks Codlin and Warners' King. The Manks Codlin and Crab are placed together as, though apples, it was not possible to find the latter listed. The Keswick was a culinary apple, an excellent bearer producing in August and September, 57 the Lord Derby was a popular culinary apple producing good crops in most years, 58 the Manx Codlin was described as one of the best culinary apples, 59 and the Warners' King "a monster bearing freely". 60 None of the other varieties were produced in such quantities.

The principal market for the fruit was London with Covent Garden of prime importance though it was also sent to Borough Market, Spitalfields and, on occasion, Stratford. Though London was of paramount importance Chambers disposed of fruit in a number of markets, supplying local retailers, and northern industrial towns. Locally fruit was sold in Frittenden, Maidstone and at Plumstead, though in any year the amounts were small. There was also some fruit sold in the seaside resorts of Brighton, Eastbourne, and Weston-Super-Mare. The industrial towns were of greater importance and increasing in their importance, Cardiff, Bolton and Glasgow were supplied but more

57. Hogg, op.cit., 26.
58. Bunyard, op.cit., 45.
59. Hogg, op.cit., 30.
60. Bunyard, op.cit., 42.

TABLE 19a The Value of Fruit sent to various Markets by Francis Chambers

MARKET	1892-1893 £ s. d.	1894-1895 £ s. d.	1900-1901 £ s. d.	1906-1907 £ s. d.
LONDON				
Covent Garden	531-14- 8	788- 6-11	1196-17- 6	1758-17- 6
Borough	297-18- 0	210-14- 9	941- 0-11	134-16- 8
Spitalfields	69- 0-11	218- 6- 7	307- 4-11	63-17- 0
Stratford				98-14- 2
BRIGHTON	4-19- 5		72- 6- 6	39-11- 2
CARDIFF	25-12- 8			
GLASGOW				55- 2- 2
LIVERPOOL	4-17- 3			6-14- 6
MAIDSTONE	11-19- 4	5-17- 8	1-11-1	
MANCHESTER	46-10- 9		73- 7- 6	202-18- 9
PLUMSTEAD			39-11- 6	8- 0- 0
UNATTRIBUTED	18- 4- 4	172- 6- 8	215-17- 5	92-14-11

Source : Extracted from relevant fruit books for farms.

especially Manchester, while some fruit was sold in the ports of Liverpool and Bristol. The table (19a) emphasises the dominance of London as a market but indicates the increasing importance of the provincial markets, though in some years very little fruit was sold outside London. In 1894-5, apart from some sold in Maidstone, all the fruit went to London, and in 1896-7 Eastbourne was the only place supplied outside London. The agricultural commentators, like Charles Whitehead, were keen to emphasise the development of this direct trading with the provincial markets but the evidence puts it in a clearer prospective as a small proportion of the trade.

Francis Chambers was not reliant on one market and neither was he reliant on one salesman. In the London markets he dealt with a number of salesmen, as he did in Manchester, but in the other towns he had only one contact. In London the largest proportion of the fruit went to Covent Garden, in the early 1890's to Skinner, Lewis and Champion at Covent Garden, and to Southwell at the Borough. At the turn of the century Jacob, Champion and Southwell still took the majority of the fruit. In the years 1900 to 1905 while Jacob remained important Champion became less so, a Mr. Ford and Mr. Walker featured for a year or two but after 1907 Pankhurst of Covent Garden was increasingly important. In the years immediately before the First World War Pankhurst and Knight were of equal importance.

Chambers made contracts with the Salesmen to supply specific quantities of fruit during the season. In the period to 1900 black-currants, raspberries, gooseberries and damsons were supplied, and after 1900 the contracts were for gooseberries, plums, damsons and apples. The plums were contracted for by variety. The fruit was supplied from all the farms managed by Francis Chambers and on the occasions when he was unable to supply all the fruit he bought it in.

The fruit was sent by rail to London and the provincial markets, and it was carted to Maidstone station by local carriers. Two men were responsible for most of the carrying, Mr. Thomsett and Mr. Ledger, but some fruit was transported by Mr. Hooker and Mr. Honey. The Chambers family farming activities illustrate the development of mid-Kent fruit growers at the end of the nineteenth century. There was an expansion of fruit, to a great extent at the expense of hops, and the cultivation of mixed plantations. Growers concentrated on the London markets while they developed contacts in the major provincial industrial towns.

In the last quarter of the nineteenth century a number of major changes are discernible in Kent's fruit industry. The changes related to the increased production of soft fruit and the organisation of the industry to accommodate it. In north-west Kent near London some soft fruit had been produced in market gardens, but in the late nineteenth century the scale of production changed dramatically. Soft fruit, particularly strawberries were cultivated on a large scale as a farming enterprise. The rows were laid out to facilitate horse hoeing, and some growers had over 100 acres. The area of soft fruit cultivation was extended well into the county as railways made it possible to transport the fruit quickly to London. Soft fruit as a farm, rather than a market garden crop was a new development.

The expansion of soft fruit was not limited to the area where it had been traditionally grown as a market garden crop, and to the area where no fruit had been grown; in the areas associated with orchard fruit there was an expansion of soft fruit production. In mid-Kent though apples, pears and cherries remained the dominant crop, increasingly plums, damsons, gooseberries, and red and black currants were grown, as well as some strawberries. While it would be

unwise to compare the Peels and Chambers farms too closely they do seem to reflect the type of enterprise that were representative of the two halves of the nineteenth century. The Peels cultivated very little soft fruit, introducing it only in the 1840's while it was an important crop on the farms of the Rev. Francis Chambers.

The Peels operated a mixed farming enterprise where hops dominated and the fruit was primarily apples. The Chambers enterprises were markedly different. J. T. Chambers on his Otham farm was moving out of hop production and increasing that of fruit. The farms of Francis Chambers, though nominally mixed with sheep, pigs and poultry were dominated by fruit. The Peels could be described as farmers who grew fruit, but Francis Chambers was a farmer specialising in fruit. The late nineteenth century saw the emergence of the specialist fruit grower.

The predominant market remained London, though Chambers was sending some of his fruit to the major provincial manufacturing towns and some seaside resorts. However, though the Kent growers continued to send fruit, by preference, to London their fruit was sent by salesmen to the provincial markets. London acted as a distribution centre for Kent fruit.

What does emerge from a study of Kent's fruit industry was the lack of organised co-operation among the growers. Co-operation was being urged by various writers and organisations as a means for small independent producers to benefit from bulk purchase and sale. The lack of co-operation in Kent was probably because fruit growing was indigenous and expanded within the existing farming system. Large estates were not being cut up into smallholdings of roughly equal size but large and small farms co-existed. There is some

evidence that the large farmers helped small growers market their crops, but there was no systematically organised co-operatives.

The cultivation of fruit emerged as a distinct branch of agriculture between 1870 and 1914 comparable to stock breeding or dairying as a separate agricultural activity.

CHAPTER X

The Marketing of Fruit

The Kent grower traditionally produced for the London fresh fruit market which offered the potential of a steady demand, and high prices and profits. The producers had the apparent advantage of proximity to the market, but they were also developing markets further afield, in northern England. Kent had sent apples to the north in coal boats at the end of the eighteenth century, and from the 1840's Kent fruit was despatched north from the London markets. At the end of the nineteenth century, however, Kent growers were consigning soft fruit direct to the north, a trade that was increasing in size and importance. The profitability of soft fruit rested to a great extent on the existence of jam factories. These provided an outlet for low-grade fruit that could glut the fresh fruit market. Ideally the two markets needed to be kept separate, and some growers did consign direct to jam factories, but others put large quantities of low quality fruit on to the fresh fruit market, depressing the price.

Jam Factories

In 1889, at the Royal Agricultural Show held at Windsor, there was an innovation when jam and preserved fruit manufacturers were invited to display their products. Jam making had become an important industry and was of considerable importance to the profitability of fruit growing. The low price of sugar gave English manufacturers an advantage over the foreign producer, and for the grower the jam factory was seen as a means of disposing of surplus fruit. 1 Mr. J. Chivers, in 1904 reiterated the importance of the jam industry for fruit growers,

1. Charles Whitehead, "Report of the Steward of Farm Produce at Windsor", J.R.A.S.E., Second Series, XXV, (1889), 747.

TABLE 20 Price of Raw Sugar per cwt. in London, 1872-1904

Year	Price s.	d.	Year	Price s.	d.	Year	Price s.	d.
1872*	25	6	1883	19	0	1894	11	3
1873	22	6	1884	13	3	1895	10	0
1874[x]	21	6	1885	11	9	1896	10	9
1875	20	0	1886	11	9	1897	9	3
1876	21	6	1887	11	9	1898	9	6
1877	24	6	1888	13	0	1899	10	6
1878	20	0	1889	16	0	1900	11	3
1879	19	0	1890	13	0	1901+	9	3
1880	20	6	1891	13	0	1902	7	3
1881	21	3	1892	13	6	1903	8	6
1882	20	0	1893	14	0	1904	10	3

G. N. Johnstone, "The Growth of the Sugar Trade and Refining Industry". The Making of the Modern British Diet, D. J. Oddy and D. S.

Duty
* 11s. 8d.
x Abolished
+ 4s. 2d.

TABLE 21 Sugar Consumption, in pounds, per capita.

Year	lbs.	Year	lbs.	Year	lbs.
1850	25.26	1883	68.41	1900	85.53
1855	30.38	1884	68.60	1901	91.39
1860	34.14	1885	71.84	1902	73.86*
1865	39.69	1886	64.05	1903	66.99
1870	47.11	1887	72.00	1904	78.16
1871	46.73	1888	69.02	1905	70.41
1872	47.32	1889	74.92	1906	77.08
1873	51.50	1890	71.09	1907	78.83
1874	53.07	1891	78.01	1908	77.19
1875	59.35	1892	75.15	1909	80.42
1876	54.74	1893	75.49	1910	78.00
1877	60.98	1894	76.92	1911	80.27
1878	55.14	1895	85.15	1912	79.53
1879	63.03	1896	82.19	1913	77.19
1880	60.28	1897	78.12	1914	80.42
1881	64.44	1898	82.73		
1882	67.31	1899	82.07		

* From 1902 statistics relate to equivalent in refined sugar.

B. R. Mitchell and Phyllis Deane, Abstract of British Historical Statistics (C.U.P. 1976), 356-358.

> ... if the jam making industry was discontinued, it would be impossible to find a profitable market for half the fruit grown ... the jam industry is the outcome of cheap sugar. Before the duty was taken off sugar the manufacture of jam on a large scale was not known. 2

Charles Whitehead also considered that "the abolition of the duty upon sugar in 1874 gave a great impetus to jam making, and consequently fruit production". 3 While the abolition of the sugar duty was probably of some significance it would be easy to over-estimate its initial effect. The price of sugar did not fall to any extent until the mid 1880's : in 1883 it was 19s. 0d. a cwt., and in 1884 13s. 3d., falling to 11s. 9d. in 1885. Per capita consumption of sugar rose slowly, and in the early 1890's sugar consumption had increased by only a half from 1874. In the early twentieth century to 1914 consumption remained fairly stable.

There was a ready demand for all varieties of fruit, gooseberries, raspberries, strawberries and apples, by the jam factories. 4 The demand by the manufacturers was such that it could materially affect prices, and in 1882 it had spread to affect damsons and blackcurrants. 5

Jam factories were established in the main centres of consumption and there were successful manufacturers attached to large fruit farms. In 1878 an estimated 400 tons of jam were made daily in Great Britain during the fruit season at the preserve manufacturers in London, Liverpool, Manchester, Birmingham and Glasgow. 6 At the producing centres Lord Sudeley, who had started planting fruit trees on his

2. D.C. On Fruit Culture, J. Chivers, (1905, Cd.2719), 281.
3. Whitehead, op.cit., (1889), 173.
4. Charles Whitehead, "Hints on Vegetable and Fruit Farming", J.R.A.S.E., Second Series, XVIII, (1882), 103.
5. Whitehead, op.cit., (1883), 370.
6. Whitehead, op.cit., (1878), 748.

Gloucestershire Estate in 1880, had let the attached jam factory to a Mr. Beach for a period of ten years. Mr. Beach was to take the fruit of 500 acres at a fixed rate for 10 years and could dispose of it in the most profitable manner. 7 Mr. Beach took the financial risks though he had not made the initial investment.

There were attempts in the early 1880's to establish jam factories in Kent, but these had been largely unsuccessful. There was one at Maidstone which C. Whitehead stated had failed because neither the growers nor landowners were interested in the undertaking. 8 In 1899 Whitehead wrote.

> Jam factories were established in several parts of Kent about ten years ago, but most of them collapsed either from want of capital or from bad management. 9

The jam factories in Kent, of course, had to compete with the London markets and the prospect of higher prices for the growers.

The problems of these small rural firms arose from the role they set themselves to perform and the limitations of their access to the markets. Their prime aim was to utilise the surplus fruit of the areas where they were situated during periods of glut. Their location in the fruit producing areas was ideal for this purpose, but the supply existed only when growers thought the fresh fruit market was saturated. Fruit growers preferred the risk of dispatching to the central markets, where there was a probability of high prices, to the lower prices offered by the jam factories. The rural jam factories could not easily take advantage of temporary gluts that developed in the central markets, and they were not well situated for receiving

7. Whitehead, op.cit., (1883), 380.
8. Ibid., 379-180.
9. Whitehead, op.cit., (1899), 468.

fruit from other producing areas. These rural factories found their attempts to develop markets posed problems. Locally they were competing with home made jams, while they were too small to enter the mass market. The jam factories that succeeded in rural areas were closely associated with an estate producing fruit and did not have to rely on purchasing on the open market.

The example of Lord Sudeley was "followed by growers in Kent and elsewhere, who had found it most useful and economical to have an outlet for fruit that cannot be sold at market". 10 The most successful of these factories were integrated with fruit farms. There was one at Swanley which took the fruit that was not suitable for market off 2,000 acres, and a factory near Sittingbourne flourished on the same lines. 11 This latter one had access to the urban markets of Chatham and Gillingham, two industrial towns in Kent that were expanding at the end of the nineteenth century.

The jam factory at Swanley belonged to Messrs. Wood Brothers who had plantations at Swanley, Sevenoaks, Lee, Farningham and East Farleigh. The factory in 1898 had produced 3,500 tons of jam, as well as 850 tons of candied peel and 750 gross of bottled fruit. Blackcurrants and raspberries were pulped during the season for manufacturing into jam in the winter months. Some foreigh fruit was bought in, apricots being purchased from France and Spain. 12 This factory had been owned by Mr. Thomas Wood, their father, and in 1890 the Kentish Farmhouse Jam Company (Ltd.) had been formed to acquire the business as a going concern. 13.

10. Whitehead, op.cit., (1889), 174.
11. Whitehead, op.cit., (1899), 468.
12. Bear, op.cit., 46-47.
13. The Times, 14 July 1890, 11b.

These jam factories were the exception in Kent, and the generally held view that there were not many jam factories in the county is upheld by the evidence of Trade Directories. The 1882 edition of Kelly's Directory of Kent listed only one jam manufacturer for the county, an Ebenezer Steer who had premises at Maidstone in the heart of the fruit growing area. The 1899 edition of Kelly's Directory of Kent listed four factories, which included the Thomas Wood Enterprise and the Sittingbourne factory of George Hambrook Dean. The remaining two factories were at Ramsgate and Rochester, well sited for their markets. Though there may not have been all the jam factories operating in the county, merely those that had taken the decision to be included in the Directory, jam manufacturers were not particularly noticeable by their presence in a county that was noted for the cultivation of fruit.

The lack of jam factories emphasises the nature and direction of the Kent fruit industry and the importance of the London market. However, it would be wrong to assume that the jam industry was not of importance to the Kent grower. The bulk of the fruit from Kent was sent to the London fresh fruit markets where, at least potentially, the prices were higher. Fruit that was sent directly to jam factories automatically made a lower price than it might make in the fresh fruit market. In Kent, therefore, fruit would be sent to jam manufacturers during glut years when there was little hope of the higher prices of the London markets. However, even though the Kent grower hoped for the higher price for his fruit he was not always successful. The fruit entering the London markets was purchased initially to meet the demands for fresh fruit in the Metropolis, after which salesmen in the provincial markets purchased fruit, finally when their demands had been satisfied the remaining fruit was bought by jam manufacturers at considerably lower prices. The fruit from Kent was used in the manufacture of jam, but it reached the factory

indirectly through the London markets rather than being consigned directly. There was always the hope for the individual grower that his fruit would make the higher price and not be remaindered for manufacturing into jam.

Mr. Chivers did not think that it was generally advantageous for growers to enter into jam production : "in Kent especially there have been a great many fruit growers who have tried the experiment, and it has failed". 14 However, those who grew fruit on a large scale had considerable success when the estates were managed in conjunction with jam factories.

The Toddington Estate in Gloucestershire, which had belonged to Lord Sudeley, and in 1905 was owned by Mr. Hugh Andrews, was organised on that basis. On the estate of 8,000 acres, 800 were under fruit cultivation with plums occupying 600 acres, apples 100 acres and cherries 25 acres. In addition to the top fruit a considerable quantity of bush fruit was grown, either with top fruit or separately. Strawberries, blackcurrants, red currants and gooseberries were cultivated and there were six acres of glasshouse production. The bush fruit acreage was in the process of being expanded. The majority of the fruit went to jam manufacturers, including Messrs. T. W. Beach & Sons Ltd., who rented a factory on the estate. 15 Mr. Beach had taken the lease on the factory in the 1880's.

The Chivers family of Histon near Cambridge, had entered into the jam industry in the 1870's, to provide an outlet for their own fruit. They manufactured for the high-class market, producing a quality jam. They stressed that only fresh fruit was used in the preparation, and that no artificial colouring was used. However, they did use some imported fruit pulp. 16 Mr. A. C. Wilkin, of Tiptree in Essex, had entered into the fruit industry as early as 1862 with two acres of strawberries after concluding that wheat was unlikely to pay such dividends. A jam factory was added to the farm in 1885, and in 1887

14. D.C. on Fruit Culture, J. Chivers, (1905, Cd.2719(, 283.
15. F. A. Pratt, The Transition in Agriculture, (1906), 62-64.
16. D.C. on Fruit Culture, J. Chivers, (1905, Cd.2719), 281-5.

the business was made a limited company. The company produced two distinct qualities of jam; a whole fruit preserve for the expensive market, and a cheaper 'Household Jam'. 17 The factories were supplying a select market which would be unaffected by minor changes in the price of the product. As has been noted the expansion of jam industry and the development of the mass market for the product was associated with cheap sugar. In 1905 the discussion of the future of the fruit industry and its associated jam industry was conducted against rising sugar prices. The jams produced for the mass markets were sensitive to small price changes, while the price of sugar had risen from under £10 a ton to £17 a ton, being a ½d. a lb., since the imposition of the sugar duty imposed in 1901.

Sir Thomas Pink, a manufacturer at Staple Street in Bermondsey, producing for the cheap market stated the effect of a small price rise :

> If a three pound jar of jam can be bought, we will say for 6½d., she will buy it (working class housewife) but if the three pound jar costs 7d. she only buys a two pound jar, and the balance in favour of herself is spent on something else. 18

It was the manufacturers of cheap jam who would be affected by a rise in sugar prices : the demand for their product would fall and they in turn would require less fruit. The extent to which the fruit-grower was affected depended on the proportion of home-grown fruit the jam industry used.

There were in 1905 between 200 and 300 jam manufacturers, and E. A. Pratt stated that they depended on English fruit for their supplies. This was in contrast to the situation a few years previously when they had depended on foreign fruit, which was cheaper and readily available.19

17. Bear, op.cit., 71-73.
18. D.C. on Fruit Culture, Sir Thomas Pink, (1905, Cd.2719), 405.
19. Pratt, op.cit., 52.

T. F. Blackwell, of Crosse and Blackwell, thought there would be an increase in imported fruit for preserving in the form of pulp. 20 Jam manufacturers had always relied on imports of apricot pulp, but he thought that English growers might have to compete with imports of raspberry, blackcurrant and red currant pulp. Raspberry pulp had been imported from Canada, Australia, and New Zealand when the English crop was small in 1903. 21 That was rather an exceptional year with fruit almost a complete failure; 22 in a good year the price of English raspberries would probably make it unprofitable to import pulp. Mr. Idiens, who gave evidence on behalf of the National Fruit Growers' Federation, was concerned about the quality of imported pulp and the quantity that might come in the future. Inferior fruit and plum pulp had been imported in 1903 from Holland, and Dutch raspberries, adulterated with analine dyes and preservatives, had been purchased by low-grade jam houses. These manufacturers who contravened the p preservative requirements could undercut those who used pure ingredients. 23 Mr. Smith of the Maidstone Farmer's Club was also concerned at the import of fruit pulp which he thought had increased considerably in the last few years, and unless checked would be serious for growers of soft fruit in the future. 24 Crosse and Blackwell manufactured pulp for their own use when they could not get all their fruit into sugar, 25 but growers, it was pointed out, did not produce pulp on any scale, since common pulps would not be saleable when sugar was expensive. 26

The jam manufacturers in the towns purchased their fruit either direct from the growers or from the markets. Crosse and Blackwell

20. Fruit pulp was made without the use of sugar and the product was stored in hermetically sealed tins, or bottles. It was produced when there was a glut of fruit for manufacturing into jam at a later date, and could be kept for several years before use.
21. D. C. on Fruit Culture, Blackwell, (1905, Cd.2719), 266.
22. J. M. Stratton, Agricultural Records, A.D. 220-1968, (1969), 131.
23. D.C. on Fruit Culture, Idiens, (1905, Cd.2719), 170.
24. Ibid., Smith, 47.
25. Ibid., Blackwell, 268.
26. Ibid., Berry, 43.

purchased fruit direct from the growers, making contracts before the season commenced, or at its very beginning; however, they also purchased fruit in the markets at Covent Garden and the Borough. 27 This was the pattern with other jam manufacturers in urban centres. Crosse and Blackwell did specifically state that they purchased foreign plums in preference to English. When they bulk purchased a hundred tons of foreign plums they could guarantee they would be of one variety, while in contrast a hundred tons of English plums would probably consist of twenty different varieties. 28

While some fruit had been sold on contract to jam manufacturers in the 1870's, a major source for factories in Liverpool, Manchester, Birmingham and Glasgow had been the London markets where agents had made purchases. 29 However, as the fruit industry had expanded, so increasingly growers cut out the markets and sold on contract to jam manufacturers. The jam manufacturers purchased at a more uniform price without the fear of undercutting by temporary gluts at the market. The growers, for their part, were ensured of the price for their crop, and as large quantities were kept off the market the price for fresh fruit was higher and steadier. 30

Mr. Berry, a fruit grower of Faversham, instanced the economics of the situation, in the case of strawberries. The top quality fruit that went to the fresh fruit market paid the expenses of the crop, but the small fruit that was left was sold for jam and made the profit. 31 The grower needed the availability of both markets for the success of the fruit industry, and particularly the low-grade jam factories that supplied the mass markets. The important relationship of the jam industry and the fruit industry was recognised by the representatives

27. D. C. on Fruit Culture, Blackwell, (1905, Cd.2719), 267.
28. Ibid., Blackwell, 267.
29. Whitehead, op.cit., (1877), 98.
30. Pratt, op.cit., 53.
31. D.C. on Fruit Culture, Berry, (1905, Cd.2719), 42.

from both branches. The development of the jam industry from the 1870's is a separate topic; for the fruit industry the major consideration was its importance for the continued profitability of fruit growing. Mr. Whitehead in 1889 was sure of the importance of jam :

> Among the factors of the advance of fruit farming in these latter times there is none of more prominence than jam. It has been the fashion to sneer at jam; but the demand for it had enormously increased, and the jam, preserve and essence-making industry is now of much importance, and will yet have a far wider development. 32

The Marketing of Fresh Fruit

While the existence of the jam factories had greatly aided the expansion of fruit growing, it was the fresh fruit markets that provided the high prices. The situation had changed since the first half of the nineteenth century : there was a greater demand for fruit, and transport developments made it possible to satisfy it. In particular there was the expansion of demand for soft fruit, strawberries, currants and raspberries as well as the traditional cherry. These fruits needed to be speedily marketed and to be placed before the consumer in prime condition. The markets of the north of England were becoming of greater importance than they had been in the early nineteenth century, though for the grower in Kent there was always the magnetic attraction of London. London acted as a psychological barrier to the more complete exploitation of other more distant markets.

Charles Whitehead summarised the changes that had taken place in marketing between 1839 and 1889, particularly as they related to Kent :

> Fifty years ago almost all the fruit was consigned to London markets, or to the markets of a few large towns, or to markets

32. Whitehead, op.cit., (1889), 173.

near the places of production. It was sent direct to salesmen, who sold it to dealers, retailers and costermongers. At that time the area of distribution was most limited. In the case of such a perishable commodity as fruit the slowness and uncertainty of transport caused a most circumscribed trade. The metropolis and two or three thickly populated centres were the only possible markets for fruit growers upon anything like a large scale. At this time enormous quantities of fruit are still sent by growers to the various London markets, which now serve not merely as centres of distribution in and around the metropolis, but as centres from which fruit is distributed to all parts of the United Kingdom. Orders are received by telegraph for fruit from many markets in the Kingdom where fruit runs short, which is dispatched at once by fast trains. Growers now frequently, though London is their nearest centre, consign fruit direct to Manchester, Birmingham or Liverpool, or other popular places, either as a speculation or upon telegraphic advice. 33

The northern towns had been supplied with Kent fruit indirectly through the London markets since the 1850's; the development in the 1870's was the direct consignment of fruit to these markets by the growers. In particular it was through the organisation of the fast fruit trains to the northern towns, carrying perishable summer fruits, strawberries, cherries, currants and raspberries. 34 In the 1870's this traffic was in its infancy. The trade had commenced when the Great Northern Company agreed to put one coach each night on a mail train. The trade by 1890 had expanded considerably with frequently

33. Whitehead, op.cit., (1889), 175.
34. D.C. on Fruit Culture, Berry (1905, Cd. 2719), 37.

two special trains a night run by each of the northern lines, the Great Northern, the Midland, and the London and North Western. The rate was high : 4s. a cwt. for this fast goods service. 35 From the mid 1880's cherries from Kent, which had always had a ready market in London, were being consigned directly by growers to other distribution centres. 36

In the mid 1890's this practice was being encouraged :

> London is the great market for the fruit grown in Kent, but I was told that the railway companies are doing all they can to facilitate access to the northern markets. Apples, plums and damsons are sent from Kent to Scotland, the first part of the journey being by rail to London, and thence by steamer. More than half the total cost of freight is incurred between the orchards and London. 37

According to Mr. Whitehead, five years later a great deal of fruit was "sent to Manchester, Birmingham, Liverpool, Sheffield, Newcastle, and other large cities. Some is sent even to Edinburgh. Many large growers send no fruit to London now". 38 Mr. W. W. Berry, of Gushmere Court, Faversham, farmed 600 acres which included 70 acres of fruit, sent no fruit to London. Most went to Manchester and Liverpool, but some to Newcastle and other northern towns. 39

The cost of transport aided the expansion of these new markets :

> railways rates from Kent to the great manufacturing towns, and to Scotland are very much less proportionally than those to London, and consequently Kent growers send increasing quantities

35. First Report from the Select Committee on Railway Rates and Charges, (1893-1894, XIV), 233.
36. Whitehead, op.cit., (1889), 158.
37. Dr. W. Fream, "Report on the Andover District of Hampshire and Maidstone District of Kent", Royal Commission on Agriculture, (1894, C.7365, XVI), 68.
38. Whitehead, op.cit., (1899), 469.
39. Bear, op.cit., (1899), 57.

> to these distant markets, where prices are better, not being so directly interfered with by imported fruit, which generally finds its way to London. 40

While these northern markets were of increasing importance to some larger growers their significance for Kent producers can be over-estimated.

Mr. Hill, the General Manager of the South Eastern and Chatham Railway, provided evidence to the Select Committee on Fruit Culture concerning the quantity of fruit conveyed on the line in 1901. He chose that as being a fair year for fruit, unlike 1902 and 1903. In 1901 43,557 tons of English fruit were carried on the railway, of which 36,147 tons were to London and 7,410 tons were carried via London to northern towns. 41 Less than a sixth of the English fruit carried was sent direct to northern markets, though a proportion of that consigned to London would eventually go to northern towns.

The Faversham farm already mentioned, Mr. Berry, had the most experience of using railway transport of the Kent growers who gave evidence. The other Kent witnesses farmed nearer London and concentrated on that market, using road transport in preference to the railway. The through trains to the north went from station to station as far as London, whence they were sent by the various lines. 42 The vans were supplied by the northern companies which had running rights over the South Eastern and Chatham Railway. Mr. Berry assured the committee that there was no shortage of vans for this very lucrative trade. 43 The service they provided was satisfactory for marketing perishable soft fruits. He had sent cherries from Selling station at 4.00 p.m. and they

40. Whitehead, op.cit., (1899), 469.
41. D.C. on Fruit Culture, Hill, (1905, Cd.2719), 364.
42. Ibid., Berry, 37.
43. Ibid., Berry, 40.

had arrived at Manchester at 1.30 a.m., or Glasgow at 6.00 a.m. the speed of delivery making special vans unnecessary beyond their having adequate ventilation. 44

Manchester, among the northern markets, was of considerable importance. Its population, including Salford, was 749,616 in 1897, and within fifty miles of Manchester there was a population of eight million. 45 It represented an important marketing centre, though still not so important as London. Manchester as a market for summer fruit was increasing in importance annually, being second only to Covent Garden. From Manchester fruit was distributed to Oldham, Bolton, Stockport, Blackburn, Ashton, Hyde and other populous towns. 46

By 1880 considerable quantities of fruit were already sent to Manchester market from the more distant counties and from abroad. Early strawberries came from France, followed by those from Cornwall, Worcestershire, Kent and Cheshire. The first cherries were imported from France, though their condition was not perfect after the three days spent in transit. They were superseded by cherries from Kent and Worcestershire, which reached Manchester overnight. In addition to imported soft fruit there were plums from Germany and greengages from France, and apples came from the United States of America, Canada, and Europe. 47

Smithfield Market was the principal wholesale and retail market for fruit and vegetables, and was open from midnight on Sunday to midnight on Saturday continuously. A result of this practice was the consigning of unsold fruit and flowers from Covent Garden when that

44. D. C. on Fruit Culture, Berry, (1905, Cd.2719), 43.
45. W. E. Bear, "The Food Supply of Manchester", J.R.A.S.E., Third Series, VIII, (1897), 205.
46. "Fruit in Manchester", The Journal of Greengrocery, 27 June 1896, 611.
47. J. Page, "The Sources of Supply of the Manchester Fruit and Vegetable Markets", J.R.A.S.E., Second Series, XVI, (1880), 482-484.

market closed at 9.00 a.m. 48 From the 1880's the retail fruit and vegetable markets were of less importance as their role was superseded by the fruit and vegetable shops. 49 At the end of the century there were salesmen who wished to see the Smithfield Market converted to wholesale only with a fixed time of closing, but this, it was felt, would adversely affect the small local producer who still sold direct to the consumer. 50

The sources of supply detailed in 1897 were the same as those in 1879. Kent was an important supplier of fruit, along with the other producing counties so that a flow of fruit arrived throughout the season. The early autumn apples were principally English, from Worcestershire and southern England. The bulk of winter apples, however, came from the United States of America and Canada, and pears were mainly of foreign origin. Kent was a major supplier of cherries, currants and plums, and had its turn in the extended strawberry season. Strawberries from the Swanley area picked in the morning arrived in Manchester in the afternoon, as many as 300 tons a day from this one district. 51 However, the importance of Kent as the supplier of strawberries was being undermined by the expansion of the acreage in Cambridgeshire, Cheshire, Hereford and elsewhere. 52

While growers developed their links with the larger northern towns for the marketing of soft fruits, there were other markets awaiting exploitation.

> Many complaints have been made lately of the scarcity of fruit in many places, and it was justly remarked by Mr. Bartley ..., this scarcity is due to the centralization of the fruit supply

48. Bear, op.cit., (1897), 207-208.
49. Page, op.cit., 485.
50. Bear, op.cit., (1897), 208.
51. Ibid., 217-218.
52. "Fruit in Manchester", The Journal of Greengrocery, 27 June 1896, 611,612.

> in London and other large towns, caused obviously by the reason that the scale of consignments is practically certain at some prices ... inhabitants of the towns and villages within twenty miles of the metropolis, even in the fruit-growing district, can hardly get fruit at any price. 53

Twelve years later Whitehead thought there was still need for improvement in the marketing of fruit in seaside towns where there were shortages. But in fact there had been some attempts in the mid 1880's by growers in the Faversham area to sell cherries through agents in towns where it was scarce. 54

In 1888 at the Conference of Fruit Growers at the Crystal Palace Mr. D. Tallerman read a paper on the "Science of Fruit Distribution", reiterating the problem of fruit supply for towns. He stated : "There was an enormous number of small towns that would welcome a supply of fresh fruit which they did not now obtain". 55

It was London, however, that remained the dominant market for Kent fruit, whether it was the soft perishable summer fruits or the more easily transported apples. To the north of England all the fruit was carried by rail, but to London the choice of transport depended on the distance of the Kent grower from the market. The growers in north-east Kent sent their fruit by rail or steamboat to London, while nearly all the fruit from mid-Kent was sent by rail. Closer to London many growers in west Kent, sent their fruit by road. 56 The growers in west-Kent were involved to a greater extent than growers elsewhere in the county in the cultivation of soft fruits. Strawberries were largely cultivated in west-Kent because of the proximity of the London markets.

53. Whitehead, op.cit., (1877), 120.
54. Whitehead, op.cit., (1889), 175-176.
55. The Times, 10 September 1888, 7c.
56. Whitehead, op.cit., (1877), 98.

There were three main fruit and vegetable markets in London, Covent Garden which dealt with choice and scarce fruit, Spitalfields market which was well situated to supply the East End, including the City, Tower Hamlets, Bethnal Green and Whitechapel, and Borough market on the south of the river which supplied Lambeth, Bermondsey, Battersea, Newington, Kennington, Rotherhithe, Deptford, and the suburbs of Brixton, Clapham, Balham and Tooting. There was also a small market at Farringdon. 57 From these markets the fruit was distributed by retail shops and costermongers, while large amounts were consigned to country markets in populous towns and to jam manufacturers. 58

The wholesale fruit trade was organised by distributors who offered specialist services. The brokers were in the import business and sold fruit by auction for overseas shippers. They acted as intermediaries between the foreign supplier and the home wholesale merchants and large retailers. The home producer was in contact with commission salesmen and wholesale merchants. The former sold the growers' produce deducting their commission and expenses from the price realised. They acted as intermediaries with the grower, taking the risks, placing the fruit with wholesale merchants and retailers. The wholesale merchants purchased primarily from commission salesmen, but were involved in direct purchases from growers. In Covent Garden there were also commission buyers, who were employed by provincial wholesale merchants to make purchases for them. As the provincial markets became more organised and retailers dealt more with wholesale merchants, this group became less important, particularly after the First World War. 59

57. W. W. Glenny, "The Fruit and Vegetable Markets of the Metropolis", J.R.A.S.E., Third Series, VII, (1896), 54.
58. Whitehead, op.cit., (1883-4), 160.
59. Ministry of Agriculture and Fisheries, Report on Fruit Marketing in England and Wales. Economic Series, No. 15, (1927), 72-77.

The fruit industry in the late nineteenth century depended on the existence of both the fresh fruit market and jam factories. The two outlets took all grades of fruit, the quality fruit was purchased by the retail trade and the low grade fruit was used for manufacturing into jam. In some cases fruit growers sorted their fruit and consigned the best to the wholesale markets, while the low grade fruit was sent direct to jam factories on contract. However, even if the growers sent all their produce to the fresh fruit markets in the major towns it was likely to find its way to the two separate outlets. The fruit that was left after the retail trade had been satisfied was invariably purchased by jam manufacturers at a lower price. The jam makers took that fruit, which in their absence would have found no sale. The low price paid by the jam makers was preferable to no sale and was instrumental in making the expansion of the fruit industry possible. Thus the lack of jam factories in Kent did not signify that Kent's fruit was not used in the manufacture of jam. However, the Kent growers sent their fruit to London because there was always the possibility that it would command the higher price, if fruit was sent to a jam factory it automatically fetched a lower price. The Kent growers preferred to gamble on the possibility of higher prices obtainable for fresh fruit.

CHAPTER XI

Fruit and Jam Consumption

The expansion of commercial fruit production rested ultimately on increased demand by the consumers. The growers benefited from the rising real incomes experienced by a large section of the population. There was an increased demand for fresh fruit, and jam, preserves and soft drinks. The manufacture of these products was encouraged by low sugar prices. It is too easy to assume the increased demand by examining the evidence of increased production, as direct evidence on consumption is sparse and offers no firm conclusion as to who the new consumers were. The surveys, possibly, did not examine the relevant social groups, but concentrated on those who were not benefiting to any extent from rising real incomes. In many cases they found only the poverty for which they were looking.

Fruit Consumption

The years from 1850 to 1896 were ones of rising living standards for the majority of the population, particularly after 1880,

> for those who could keep their jobs ... falling prices brought increased purchasing power, and the lower cost of basic foods in particular left a bigger margin which could go towards providing a far more varied diet. 1

From 1896 to 1914 there was a deterioration in the standard of living of wage earners as the cost of living rose and real incomes fell. 2 Per capita consumption of a range of luxury and semi-luxury products increased, but it is more difficult to find direct evidence of increased consumption of a particular food in a particular social

1. John Burnett, Plenty and Want, (1968), 125.
2. Ibid., 125.

class. Evidence on increased fresh fruit consumption is almost non-existent and is sparse for jam consumption. It is probably significant that John Burnett in Plenty and Want has no reference to fruit in the index.

There was considerable commentary on increased fruit consumption at the end of the nineteenth century :

> The increase in the consumption of fruit in this country is described in the Report of the Departmental Committee on the Fruit Industry of Great Britain, issued in the summer of 1905, as "phenomenal". "In the last thirty years", the Committee say, "not only has the production doubled, but our importation of fruit (after deducting re-exports) has risen from an insignificant quantity to the colossal amount of 13,000,000 cwt. per annum; and so expansive has been the public taste for fruit that this enormous increase in the supply has in many cases not affected the average prices realised to any appreciable extent". There can be no doubt, the Committee think, that fruit is becoming more and more a regular article of food for all clases. 3

However, reliable consumption figures are almost impossible to determine. Some nineteenth century commentators calculated consumption on a per capita basis from estimates of home production and import figures. More recent studies have used similar data and have encountered similar problems of interpretation. 4 All writers point to the expansion of the orchard and small fruit acreage and the large rises in imports that indicate increased consumption, but with closer examination the apparent solidity of such statistics evaporates.

3. Pratt, op.cit., 41.
4. Angeliki Torode, "Trends in fruit consumption", T. C. Barker, J. C. McKenzie, John Yudkin, Our Changing Fare, (1966), 115-134.

The statistics on the fruit acreage give an indication of the increase in production, and indirectly in consumption. The apple acreage increases probably understate the increase in the quantity of the fruit marketed. The use of pyramid stocks, the better cultivation methods and the grubbing of old orchards probably led to an increase in output per acre. However, a substantial proportion of the apple acreage went into cider production. While there were phenomenal increases in the soft fruit acreage, a large proportion, of these fruits, was used in jam manufacture and was not consumed as fresh fruit.

Whitehead estimated production of fruit in 1883 at 9,000,000 bushels, making with imported raw fruit a total of 13,000,000 bushels. From this he deducted 3,000,000 bushels of apples and pears used in cider and perry manufacture. "This would leave only 10,000,000 bushels of raw fruit for the consumption of 35,246,562 inhabitants of the United Kingdom, to make all the jam, and to supply all the fresh fruit for puddings and pies, and all the fruit that is eaten raw by the whole community". 5 These figures, however, have little significance, since Whitehead calculated production from the orchard acreage with no allowance for soft fruit production. The soft fruit acreage was not collected until 1887.

Angeliki Torode in Our Changing Fare after considering the validity of production statistics devotes space to import figures. These give an indication of the increasing quantities of fruit consumed but the aggregate figures were only slowly broken down into their constituent fruits, and they did not represent the total of fruit eaten. The case study of bananas while instructive represents a late arrival on the fruit market, against oranges which had been imported for over two hundred years. 6

5. Whitehead, op.cit., (1884), 7-8.
6. Torode, op.cit., 115-134.

Contemporary writers who alluded to the enormous imports of fruit into the country concluded that these indicated there was a demand for fruit, and that demand was capable of expansion.

> We, in England, do not consume the same amount of fruit per head, according to our population, as is consumed generally in continental countries. Scarcity slackens the demand which a more liberal supply would generate ... No well-to-do mechanic in France or Germany would consider that he had dined satisfactorily unless he finished his meal with fruit. How very, few of his class in our country have this boon within reach. 7

In 1888 The Times reported from the Fruit Conference that in England not enough attention was paid to fruit as a good.
It was regarded as a luxury when it should have been on everyone's table. The poor were able to afford only poor quality fruit in a bad state of preservation. 8 A letter to The Times in 1867 was concerned with the scarcity of fruit, even of ordinary fruit like the apple. "The poor cannot buy it, it never finds a place upon the tables of thousands of families even in the country; and I believe that tens of thousands in towns have never tasted an apple pudding." 8a

Despite the apparent lack of improvement, F. A. Morgan stressed the increase in demand. "During the period 1867 to 1887 the consumption of fruit (fresh and preserved) has risen from 1s. 0d. to 2s. 8d. per head of the population, the increase being particularly noticeable during the past ten years." 9 The basis for these figures was not given, however, and it included fruit that had been made into jam. The figures are not available to produce tables of per capita consumption, and it is only possible to speculate on its distribution between social classes.

7. Dunster, op.cit., (1883), 864.
8. The Times, 8 September, 1888, 9b.
8a. The Times, 11 September, 1867, 5f.
9. Morgan, op.cit., 886.

Torode has also used contemporary cookery books as an indication of the extent of fruit consumption, 10 but more direct evidence is available in the form of household budgets collected at the time. The detailed expenditure table calculated by Charles Booth is, however, best examined when considering jam consumption, as he combined fruit and jam into one category. 11 There remained two collections of budgets that included material on fresh fruit consumption : Family Budgets compiled for the Economic Club in 1896, and B. S. Rowntree's Poverty. A Study of Town Life, first published in 1901. In a number of studies fruit was notable by its absence. M. Pember Reeves in Round About a Pound a Week produced no evidence of fruit consumption among the working class in the Lambeth district of London, though jam was recorded. 11a The budgets were not presented, however, in a manner to make comparison between them possible. The work by B. S. Rowntree and M. Kendal on the families of agricultural labourers again indicated that little fruit was consumed. Forty-two budgets were collected of which seven recorded apples being consumed. 12 Investigations by government departments into the working class in 1905 and 1912 gave no retail prices for fruit or jam, 13 and the inquiry in 1899 produced information only on jam. 14

The budgets collected for the Economic Club and published in 1896 tabulated in exceptional detail how the income of 28 families was spent. They included the amount spent on dried fruit and jam as well as fresh fruit. The sample of families was drawn from London, provincial towns, and rural areas, and covered a range of occupations. The sample was too small, however, to make any generalisations about the pattern of fruit

10. Torode, op.cit., 115-134.
11. Charles Booth, Labour and Life of the People of London, Vol. I. East London, (Third Edition, 1891), 136-138.
11a. Maud Pember Reeves, Round About a Pound a Week, (1979, First Published, 1913).
12. B. S. Rowntree and M. Kendal, How the Labourer Lives, (1913).
13. Cost of Living of the Working Classes, (1908, Cd. 3864), Cost of Living of the Working Classes, (1913, Cd. 6955).
14. Labour Statistics. Returns of Expenditure by Working Men, (1899, C. 5861, LXXXIV).

consumption of a particular occupational or socio-economic group or region. An additional problem arose because the budgets were not kept for comparable lengths or periods of time.

The budgets were collected between 1891 and 1894 and for periods ranging from 1 week to 52 weeks. There were six families which were examined at different periods, one family, a skilled assistant to a watchmaker in Cambridge was looked at for the three years 1892, 1893 and 1894; four families in Leicestershire were examined for two six-week periods in August and September 1891 and 1892; finally a jobbing plumber in Camberwell provided budgets for three periods from February 1891 to December 1892.

Table 22 relates expenditure on fresh fruit to total expenditure in terms of the order of magnitude of the latter. There was no absolute correlation, but as expenditure per week rose the amount spent on fruit increased, and above £1 8s. 0d. fruit was purchased regularly. Six budgets representing five families had no purchases of fruit but were recorded as having gardens. There were, however, six families which made no purchases of fruit and had no gardens. The common factors were low income, large families and budgets collected at a time of year when fruit was likely to be scarse. One of the budgets which recorded no fruit was that of the jobbing plumber in the period April to May 1891, though that family did purchase fruit in the two other periods when it supplied budget information. 15 This reveals the weakness of budget material, particularly when they were collected for short periods of time, the omission of a food may merely mean that it was not purchased while the data was collected, not that it never featured as an article of consumption.

15. Family Budgets : being the Income and Expences of twenty-eight British Households. 1891 - 1894, Compiled for the Economic Club (1896), 70-76.

The budgets Rowntree collected in York indicated a lack of fruit in the diet of the working class. The only fresh fruit consumed among the fourteen families with less than 26 shillings a week was by one of them when lemons were purchased in the week ending 30 June, 1899, and oranges in the week ending 12 January 1900. 16 Two families of the four represented in Class Two consumed fruit, a foreman purchases 1 lb. of grapes in the week ending 30 September 1898; 16a while a railway employee purchased six bananas in the week ending 28 June 1901. 16b These again indicate the problems of budgets collected for limited periods of time.

In all the six budgets of the servant-keeping class fruit was represented in the diet, both fresh and bottled fruit. Oranges, bananas and apples made up the greater proportion of purchases, the latter being consumed in pies. Fresh gooseberries as well as bottled cherries and gooseberries were recorded as purchases and a pineapple that was served stewed. 16c It was this class that appears to have regularly made purchases of fruit, while the evidence for an increase in fruit consumption among the working class is meagre and inconclusive. These studies of diets highlight the problems that information on fruit is often not available, or in the sample of budgets taken was not statistically significant. It is difficult to ascertain to what extent fruit was consumed in the different social classes. The direct evidence of working class family budgets was disappointing and surveys tended not to enquire into the eating habits of those above skilled manual or low white collar level.

The findings of two recent studies confirm these problems of seeking direct evidence of fruit consumption. D. J. Oddy dismissed claims that fruit consumption was increasing among all classes, and was of the opinion that the working class ate fruit only during gluts. 17 His analysis of the nutrient content of working class diets refers to

16. B. S. Rowntree, Poverty, A Study of Town Life, (New York, 1971; First Published 1901), 312-313.
16a. Ibid., 338.
16b. Ibid., 342.
16c. Ibid., 343-348.
17. D. J. Oddy, The Working Class Diet, 1886-1914, (University of London, unpublished thesis, 1970), 177.

fruit only in the conclusion, commenting that there were "prejudices against fruit, vegetables and milk" 18 until the twentieth century. Consumption of these items was very small and did not lend itself to statistical analysis, as the amounts would not have been significant. Similarly E. Roberts study of working class living standards in Barrow and Lancaster in the late nineteenth and early twentieth centuries produced little evidence of fruit and jam consumption. There was, however, the possession of allotments and gardens which permitted fruit as well as vegetables to be grown. 19 This needs to be born in mind when considering consumption and one set of income data quoted above indicates access to gardens. It seems it would be unwise to place too much emphasis on either the figures for home production and imports or the more direct evidence of budgets; while recognising the consumption of fruit must have increased any statement as to the magnitude of that increase would be hypothetical.

Jam Consumption

In the last quarter of the nineteenth century there was a large increase in the consumption of fruit and sugar in the form of jam and preserves, and non-alcholic beverages. Statistics of consumption and production are also difficult to arrive at. The commodities were produced by numerous small firms, the fruit coming from local growers on contract or through the large central markets.

In 1904 at a conference on the Sugar Question held by the Confectionery and Allied Trades, which included confectionery, bakery, mineral water and jam manufacturers, it was estimated that the country imported 1,600,000 tons of sugar, of which 400,000 tons went into manufacturing. 20 The 1907 Census of Production put the output of jam, marmalade and fruit jelly for the United Kingdom at 2.7 million cwts. 21

18. D. J. Oddy, "Working Class Diets in late Nineteenth Century Britain", Ec.His.Rev., Second Series, Vol. XXIII, (1970), 322.
19. E. Roberts, "Working Class Standards of Living in Barrow and Lancaster, 1890-1914", Ec. His. Rev., Second Series, Vol. XXX, (1977), 316.
20. The Times, 22 December 1904, 5d.
21. Oddy, op.cit., 188.

Not all the jams manufactured were of the highest quality. Indeed, it was alleged that in some factories the process could be carried on without fruit being present. Turnips were used to produce the body of the product, while the flavouring was extracted from coal tars. The resemblance to raspberry and strawberry jam was enhanced by the addition of small innocuous seeds. Sugar was described as the only honest ingredient in a product that was labelled as made from "this season's fruit". 22 Cheap jams could also be made from the common varieties of apples and pears to which small quantities of the more expensive soft fruits were added. 23 With these cheaper jams it was debatable what exactly the consumers wanted to purchase; the fruit, the flavour, or a convenient way of consuming sugar. "In jam factories ... excessive quantities of sugar are added, which makes jam sweet and mawkish, depriving it of all real fruit flavour". 24

In a letter to The Times in 1904, the importance of sugar in the diet was stressed particularly when taken in the form of jam : "Alike in town and country bread spread with jam has become the staple food of the young of the poorer classes". 25 The letter assumes that sugar was largely consumed in the form of jam, and that jam was used as a substitute for butter. From the 1880's it had been observed that jam was being used in this way, which was a new development in its use. Home-made jam had been regarded as a luxury to be used sparingly, and its use, except on special occasions, was regarded as an extravagance. However, with the advent of cheap sugar and low-cost jams, commentators on working-class consumption patterns argued that it was more economical for the poorer classes to take energy in the form of sugar rather than fat. It was implied, moreover, that the fat might not be butter, but

22. The Times, 9 November 1882, 10c.
23. Whitehead, op.cit., (1882), 97.
24. Charles Whitehead, "New Modes of Disposing of Fruit and Vegetables", J.R.A.S.E., Third Series, III, (1892), 591.
25. The Times, 22 December 1904, 5c.

was likely to be a foreign-manufactured margarine. Advocates of the use of jam as a palatable alternative to this product, desired to encourage the consumption of a British product, rather than a foreign one. 26

Between the 1880's and the early twentieth century, from the literary evidence on nutrition it would appear that there was a considerable increase in the consumption of jam. This was related to a change in the patterns of consumption : bread and jam were becoming an important item in the diets of the children of the working classes. Sir Thomas Pink, of E. &. T. Pink, a jam factory in Bermondsey near the Borough Market, commented :

> The great consumers of jam are the working classes. The jam that is consumed in the middle class house, or the class above that,does not practically count, in my opinion, in the whole consumption of jam in England. It is the working classes that count. 27

The dietary surveys have a limited value when assessing the jam consumption of the working class. The sample examined was small, only 110 families' diets were looked at for the years 1890 to 1900 and industrial workers were under-represented. The Booth and Rowntree surveys concentrated on non-industrial labour, as would be expected for London and York. They were also concerned more with the extent of poverty, rather than the extent to which the working classes were benefitting from rising living standards. However, the budgets collected by the Economic Club and particularly the Board of Trade have a greater variety of industrial trades represented and were more concerned with improvements.

26. The Times, 17 January 1884, 11c.
27. D.C. on Fruit Culture, Pink, (1905, Cd. 2719), 405.

Charles Booth combined jam and fruit into one category, and recorded the amount spent on both items. Jam and fruit appeared in the diets of all but four of the thirty collected. Booth divided the population into eight classes, the first five according to the nature of their earnings. Classes B and C comprised the poor with casual and intermittent earnings, Class D had small regular earnings, Class E was above the poverty line with regular standard earnings, and Class F was designated as higher class labour. 28

According to Booth's survey jam and fruit were only rarely purchased by the classes below Class F. The six families represented in Class B spent only 3½d., on average, on fruit and jam in a five-week period, while three of the families made no purchases. In Classes C and D only one family of the ten purchased no fruit and jam, but the average spent was only 6½d.; in Class E the amount rose to 1s. 8½d. while Class F spent 2s. 6½d., or an average of 6d. per week per family. 29 Charles Booth remarked on the fundamental change that took place in consumption habits as income rose:

> With Class F, so far as four examples can show it, a marked change occurs. Fish comes in, not as a substitute, but in addition to meat, and eggs are a considerable item; while the amount for fruit, jam, and such things as rice is 5 times that for Class D, and 10 times that for Class B. 30

The income and expenditure data of Booth indicate that fruit and jam consumption became marked when the weekly income reached about 32 shillings. The most important factor, however, was not weekly income, but income per capita. In Class F this was about 15 shillings or above,

28. Charles Booth's London, Edited Albert Freis and Richard Elman, (1971), 54.
29. The price of jam varied depending on the fruit season and the standard of the product, but a 3 lbs. jar of plum jam could be purchased for 5½d. D.C. on Fruit Culture, Sir Thomas Pink, (1905, Cd.2719), 406.
30. Booth, op.cit., 135.

while in Class E it ranged from about 9 shillings to 11 shillings. This evidence was confirmed by Rowntree's survey of York, which also provided some evidence on the consumption patterns of the servant-keeping class. The diets indicate that jam was rarely consumed by those who had an income of 26s. a week. Indeed from the sample of fourteen diets only two included evidence of jam consumption. A labourer's family on 22 shillings a week, with three children from 2 to 8 years old, had jam only for Sunday tea, while a polisher on 25 shillings a week, with three children from 5 to 12 years old, had bread and jam for breakfast and tea through the week. This family also purchased jam during the week the data was collected, and 3 lbs. cost 10½d. (3½d. a lb.). Only one of the four budgets obtained from those earning over 26 shillings had information on jam consumption. Two pounds of blackcurrant jam were purchased on a Wednesday when a jam pudding was eaten. 31

In the servant-keeping class jam and marmalade were purchased and formed a regular part of the diet. One menu actually listed jam as being consumed for afternoon tea everyday, while another mentioned marmalade, which also featured as an item at breakfast. The menus of this class included jam and marmalade as part of a substantial and varied diet. 32

The Inquiry by the Board of Trade in 1899 into working class patterns of expenditure produced 34 printed returns from the 730 detailed questionnaires that were sent out. The returns, however, covered a wide cross-section of the labour force, including miners, engineers, shoemakers, joiners and clerks and came from all parts of the country. The individuals were all members of co-operative societies;

31. Rowntree, op.cit., 317, 277, 340.
32. Ibid., 343, 343, 345, 346, 298, 347, 348, 349.

TABLE 22 Fruit and Jam Consumption as Indicated by Income Data Collected in 1891-1894.

Total Weekly Expenditure £	s.	d.	Fresh Fruit s.	d.	Jam s.	d.	Occupation	Locality
14	0	7	9	0	20	6		Highgate
2	14	8½	1	11¾	0	4½	Assistant to Watchmaker	Cambridge
2	13	3½	2	4½	0	5	Assistant to Watchmaker	Cambridge
2	10	2¼	0	5¾	0	8¼	Slipper maker	Whitechapel
2	9	8½	1	11½	0	3½	Soapboiler	Paddington
2	3	9	0	11¾	0	2¾	Dispencer	Paddington
2	2	10	1	6¾	0	5	Assistant to Watchmaker	Cambridge
2	1	7¾	0	8½	0	0¼	Assistant to Relieving Officer	Paddington
1	19	4½	0	4¾		-	Painter's Labourer	Paddington
1	17	10	0	5	0	1½	Carpenter	Liverpool
1	17	0	0	4	0	10¼	Artisan	Scotland
1	13	0	GARDEN			-	Colliery Groom	Leicestershire
1	9	3¾	0	2¼		-	Colliery Tool Sharpener	Leicestershire
1	9	0¼	0	2¾		-	Bobbin Turner	Cumberland
1	9	0	0	5		-	Colliery Blacksmith	Leicestershire
1	8	6½	0	4¾	0	2½	Railway Foreman	Ashford
1	7	8¾		-	0	1¾	Jobbing Plumber	Camberwell
1	6	0		-	0	9½	Painter	Scotland
1	5	7¾	0	5½		-	Collier	Leicestershire
1	4	10¾	0	1	0	0¼	Journeyman Carpenter	Sussex
1	1	11¾		-		-	Labourer and Gardener	Surrey
1	1	3½	0	9		-	Bootmaker	Leicestershire
1	0	1½	0	3		-	Collier	Leicestershire
1	0	1		-	0	3	Painter	Stepney
	19	3¾	0	3		-	Bootmaker	Leicestershire
	17	11½	GARDEN			-	Colliery Groom	Leicestershire
	16	0			0	8½	Railway Labourer	St. Ives
	15	0		-		-	Widow & Son	Manchester

TABLE 22 Fruit and Jam Consumption As Indicated by Income Data Collected in 1891-1894.

Total Weekly Expenditure £ s. d.	Fresh Fruit s. d.	Jam s. d.	Occupation	Locality
14 9¾	0 ½	0 1½	Jobbing Plumber	Camberwell
14 4½	GARDEN	-	Woodman and Gardener	Somerset
12 2½	GARDEN	0 2½	Agricultural Labourer	Somerset
11 6¾	0 ½	0 1	Jobbing Plumber	Camberwell
11 3½	-	0 0¾	Widow and Daughter	Manchester
9 9¾	0 1¼	-	Fisherman	St. Ives
7 10	GARDEN	0 1¾	Agricultural Labourer	Somerset
3 6	GARDEN	-		Surrey

Source: Family Budgets : being the Income and Expenses of twenty-eight British households. 1891-1894, Compiled for the Economic Club (1896).

TABLE 23 Jam and Treacle Consumption, 1899.

OCCUPATION	RESIDENCE	WEEKLY INCOME £	s.	d.	AMOUNT SPENT ON JAM AND TREACLE	NO. IN FAMILY
Engineer	Birmingham	4	0	0	6 d.	4
Cutter	Sheffield	1	14	0	2 d.	6
Printer	Manchester	1	13	0	-	8
Printer	Manchester	1	13	0	1s. 0d.	3
Printer	Manchester	1	13	0	6 d.	6
Engineer	Glasgow	1	13	0	-	4
Clerk	Motherwell	1	12	0	-	9
Engineer	Hartlepool	1	12	0	-	9
Engineer	Liverpool	1	12	0	-	4
Engineer	Leeds	1	10	0	5 d.	5
Clerk	Sheerness	1	10	0	10d.	3
Joiner	Leith	1	9	9	8 d.	8
Joiner	Edinburgh	1	9	6	6 d.	6
Joiner	Glamorgan	1	9	3	6 d.	8
Engineer	Govan	1	9	3	4 d.	4
Engineer	Greenock	1	9	3	4 d.	4
Engineer	Leeds	1	8	0	6 d.	3
Joiner	Dumfries	1	7	7½	-	-
Labourer	Kent	1	7	0	5 d.	9
Cord Cutter	Hebden Bridge	1	5	0	-	4
Engine Tender	Durham	1	4	10	3 d.	3
Miner	Northumberland	1	4	10	10½d.	5
Weaver	Huddersfield	1	4	0	2 d.	4
Miner	Northumberland	1	2	6	3 d.	5
Stoker	London	1	1	0	-	2
Screener	Northumberland	1	0	10	4 d.	4
Miner	Northumberland	1	0	7	-	8
Shoemaker	Kettering	1	0	0	2½d.	4
Screener	Northumberland		18	0	-	6
Screener	Glamorgan		18	0	3 d.	8
Shoemaker	Stafford		18	0	1 d.	3
Agric. Labourer	Kent		16	6	6 d.	5
Agric. Labourer	Kent		15	0	1½d.	4

Source : Labour Statistic, Returns of Expenditure by Working Men, (1899, C.5861, LXXXIV), 100.

the Board of Trade thought they were likely to be thrifty and more willing and able to provide the material wanted. 33 By the same token the individuals were probably not representative of the working class, they were the respectable and generally better off section. In replying to the questionnaires they set themselves aside as individuals who were literate and probably careful managers of their income. They represented the better paid, and though five received less than £1 a week there were twenty who had an income of over 25 shillings a week, and of these eleven received more than 30 shillings. They were also in trades where employment was likely to be steady. Jam was a regular item of consumption, occurring in over two thirds of the budgets. While in some instances only 1d. or 2d. was spent, in eleven budgets between 6d. and 1 shilling was spent on jam. 34

The family budgets collected for the Economic Club also indicated the extent that jam was purchased among the better paid, those with more than twenty-five shillings a week. The group who were not regular purchasers of jam were those who lived in the rural districts and had gardens. It could be assumed that these families made their own. 35 These two surveys provided a much clearer indication of the extent of jam consumption, which the Booth and Rowntree surveys would seem to indicate was almost non-existent.

While jam and fruit consumption rose in the years 1870 to 1914, it is very easy to enter a circular argument and cite the statistics of increased production as evidence for increased consumption. Studies of working class diets have produced little direct evidence of wide-spread consumption of fruit and historians have tended to avoid it in

33. Labour Statistics, Returns of Expenditure by Working Men, (1899, C.5861, LXXXIV), 100.
34. Ibid., 100.
35. Family Budgets : being the Income and Expences of twenty-eight British Households. 1891-1894, Compiled for the Economic Club, (1896), pp. 70-76.

dietary studies. There is more evidence of jam consumption, suggesting that this was a "necessary" luxury to make palatable and interesting otherwise bland meals. However important the sugar in jam was for the dietary needs of the working class; they ate jam because it was a cheap and sweet commodity to spread on bread when butter was expensive and margarine in its unpalatable infancy. 36 At the level of consumption the amounts spent on fruit and jam were a small proportion of the household budget, but translated into total demand represented two aspects of an important industry.

36. W. H. Fraser, The Coming of the Mass Market, 1850-1914, (1981) 30-33.

CHAPTER XII

Fruit Growers and the Railway Companies

In July 1880, at a special meeting of the East Kent Chamber of Agriculture in Canterbury, it was stated that the South Eastern, and the London, Chatham and Dover Railway Companies were charging excessive rates for agricultural products and were giving preferential rates to foreign producers. 1 Periodically complaints about the railway companies were heard from traders and agriculturists during the years from 1870 to 1914. These centred around the rates that the railway companies charged for conveying goods which in many instances were considered to be too high, or higher than rates charged on foreign goods. The element for terminal charges within the rate was thought to be disproportionate on short distances. Furthermore, the additional cost of sending goods at company risk was considered prohibitive. There were also complaints about the lack of facilities offered by the railway companies, particularly for fruit growers concerned with the problems of conveying perishable soft fruit. They desired the provision of special vans and fast trains, with rapid unloading and delivery to market.

The questions of what rates the railways ought to charge and the service they were expected to provide were of considerable importance to Parliament. The Railway and Canal Traffic Act of 1854 maintained that

> every company was required to afford all reasonable facilities for the receiving, forwarding and delivery of traffic; undue or unreasonable preference or prejudice in favour of or against any particular person or company, or any particular description of traffic, was prohibited. 2

1. The Times, 27 July 1880, 11c.
2. E. A. Pratt, Railways and Their Rates, (Second Edition, 1906), 15.

The Act was intended to enforce the railways' position as public carriers, while recognising their monopoly position. As companies applied to Parliament to amalgamate, a Committee of Inquiry was established in 1872 to study the railways and the problems that could arise for users.

The Railway and Canal Commissioners were created in 1873 to enforce the 1854 Act. The Committee of Inquiry recommended that a new uniform classification of goods was desirable and that companies should adopt the Railway Clearing House Classifications and adapt their statutory rates to the classification. Friction between companies and traders continued, particularly over terminal charges which the railways charged in addition to the statutory rate for transporting the goods. A Select Committee was set up in 1881 to examine relations between the railway companies and traders, and it also advised on a uniform system for the classification of goods.

The Railway and Canal Traffic Act, 1888, required the companies to revise their rates and classification schedules, the Board of Trade acting as arbiter and final judge on differences arising with the traders. The new classifications were presented to the Board of Trade in 1889, and a revised classification based on a simplified Clearing House system was made. The revised rates and schedules were passed by Parliament and were to come into effect on 1st January 1893. However, the companies being pressed for time to compile new rate books, introduced the new maxima as provided in the Provisional Orders. While some rates were reduced, others were raised and special rates were suspended and traders put on ordinary rates.

The traders complained, and though the companies were within their statutory powers, the railways accepted the rate reductions and assured that there would be no increases to interfere with trade or

agriculture, and only exceptionally would increases be over 5% above the 1892 rates. A further Railway and Canal Traffic Act was passed in 1894 that tacitly accepted the 1892 rates as fair. The Railway Commissioners, made permanent in 1888, were to hear complaints by traders concerning rate increases since 1892. The companies had to accept rate reductions and had to prove increases in rates were necessary and reasonable. Railway rates became inflexible, and the companies, finding profits squeezed, were unable to provide the services traders desired. 3

Kent fruit growers were exceptionally well provided with a railway network. The county was covered with the competing lines of the South Eastern Railway and the London, Chatham and Dover Railway, though the two companies came together in 1899 in a working union as the South Eastern and Chatham Railway. Competition between the two companies had been limited to line building and establishing their respective territorial spheres of influence. The companies had reached agreement on competing fares in 1865, and intermediate fares were above the national average. 4 The fruit growing areas were well covered by the railway network, and the growers had the potential advantage of a good service to London.

The complaints of the growers were concentrated in the three periods when the railway problem was examined, in the early 1880's, in the early 1890's, and the years 1904 to 1906. The growers complained about all aspects of the rates charged for the carriage of fruit, but from the 1890's, and particularly after 1900, the growers in mid- and west Kent were more concerned with deficiencies in the service offered. In west Kent, however, growers were sending more fruit to London by road, as they found the rail service inadequate.

3. Pratt, op.cit., 15-28.
4. P. S. Bagwell, 'The Rivalry and Working Union of the South Eastern and London, Chatham and Dover Railways', The Journal of Transport History, II, (1955), 67.

Mr. James Staats Forbes, Chairman of the London, Chatham and Dover Railway, put the problem of fruit transport succinctly in 1881,

> Kent is a very large fruit-growing county, and everybody knows the difficulty connected with what is called soft fruit; it is very tender, and it is packed in sieves and half sieves, of which a great number go by weight to the ton; it has to be packed at the last moment, to be conveyed with speed, to be delivered with great dispatch and care to Covent Garden Market, or it perishes. 5

For a county then lacking in mineral resources goods traffic was restricted to agricultural produce, of which fruit was a valuable part. The railways, of course, wanted to carry it at a profitable rate. However, the growers felt the charges for the carriage of fruit were excessive, and that preferential rates were given to foreign producers. Mr. S. Skinner, from Leeds near Maidstone, thought the fruit rate was excessive, and that it operated, in abundant years, to restrict the traffic in fruit. 6 The existence of competition at Maidstone did not produce a lower rate, the two companies charged the same. 7

Mr. Skinner's ground for complaint was that 32s. 6d. a ton for 40 miles for the fruit rate was excessive. 8 Elsewhere in his evidence he quoted a series of rates from various stations in London indicating that the rate per ton did not increase proportionately with distance, and stated that rates on the Great Western Railway were lower for similar mileages. 9 Mr. Sankey, from Margate, produced similar evidence but related it to rates charged by the South Eastern Railway for foreign produce.

5. Report from the Select Committee on Railways (Rates and Fares), (1882, XIII), 151.
6. Report from the Select Committee on Railways, (1881, XIII), 278.
7. Ibid., 281.
8. Ibid., 281.
9. Ibid., 278.

> As I understand, with regard to the charge for fruit which comes up from East Kent to London, you do not object to their bringing fruit from Boulogne for 20s.; but what you say is, that as you live so much nearer, and have so much less distance to bring your produce, you ought to be charged absolutely a less price; I do not say that we should be charged a less price per mile; the company can carry a long distance, no doubt, more cheaply in proportion than they can carry a short distance. 10

The growers expected rates from stations nearer London to be proportionately lower, and rates from stations in Kent to be less than that from Boulogne. In stating their case they lacked the detailed evidence of rates and the method of their composition and compilation. Mr. Jabez Light, the Goods Manager of the South Eastern Railway, with access to relevant information had no difficulty in justifying the rates.

He initially stated that fruit was not carried by the ton but by the sieve and half-sieve. Growers were being charged for the carriage of fruit in small amounts, a sieve of hard fruit weighing 56 lbs., and of soft fruit 48 lbs. Mr. Light took the example of the fruit rate from Ashford to London. For soft fruit it was 25s. 3d., and for hard fruit 21s. 8d. including delivery. The terminal charges were 1s. 6d. at Ashford and 8s. 6d. at London, which included delivery to Covent Garden. This left 3.39d. per ton per mile for soft fruit and 2.59d. for hard fruit, these were less than the fixed rate of 4d. The soft fruit was expensive to transport and the company had to allow for additional deliveries from growers at rural stations which put pressure on delivery to Covent Garden. 11 The high fixed cost of terminals in a rate explains why there was no proportionate reduction in the total charge as distance decreased.

10. Report from the Select Committee on Railways, (1881, XIII), 326.
11. Ibid., 797.

When examining rates charged for English and foreign fruit there appears to be little substance in the claim that foreigners were given preference. Fruit sent from Boulogne was usually carried by passenger train at a higher rate than that quoted, which was for the goods service. Mr. Light considered that with delivery the rate would be 40s. a ton from Boulogne. 12 Professor Hunter, a barrister retained by the Farmers' Alliance to state their case, had given the charge for foreign fruit at 20s. a ton for goods train and 25s. per ton for passenger train. This compared with the charge from Ashford of 25s. a ton with delivery, concluding that the rate from Ashford at 20s. was the same as from Boulogne. Professor Hunter further confused the argument by stating "that foreign fruit is carried by special trains to Cannon Street without stopping, and very conveniently for the market". 13 Where fruit was sent by special trains it was subject to additional charges, effectively raising the rate. The evidence would seem to indicate that the rate actually charged for carriage and delivery of foreign fruit was considerably higher than that quoted in the Rate Book and that in fact rates charged for English fruit compared favourably.

Fruit growers complained that when fruit was lost there was difficulty in getting the claim for loss settled by the railway company. This was in cases where the fruit was sent at company risk rates. Mr. Skinner did note, in 1881, however, that claims were being settled faster and more pleasantly than they had been two years previously, though the claims could still take six months to settle. 14 It seems that the railway companies, while they were not competing through rates reductions, could have been settling claims more rapidly as a public relations exercise.

12. Report from The Select Committee on Railways, (1881, XIII), 797.
13. Ibid., 20.
14. Ibid., 279.

The growers also mentioned the delays in the delivery of fruit to Covent Garden from the London terminii, but Mr. Skinner stated that this was not the complaint they were making. 15 Indeed, the railway companies maintained that the problem of delivering fruit to Covent Garden was a reason for the high terminal charge. 16

The fruit growers and railway companies had, to a certain extent, irreconcilable differences. The growers wanted their fruit carried as cheaply as possible, particularly in years of glut when prices were low and transport costs were relatively high. The railway companies in Kent had an intensive network carrying goods over a short distance and collecting from a multitude of stations. The soft fruit season was short, from day to day the traffic was unpredictable, and the fruit was easily damaged. In many instances it was consigned in small quantities from numerous growers to different agents and had to be delivered to meet the times of the market.

When the railway rates revision was being undertaken following The Railway and Canal Traffic Act, 1888, two main areas of contention were examined. The South Eastern and the London, Chatham and Dover Railways were apprehensive that a change in the classification of fruit would lead to an actual reduction in their receipts. The fruit growers were more specifically concerned about the policy of the two companies in insisting on an inclusive delivery charge with the station to station rate.

For a company like the South Eastern fruit was an important part of its goods traffic, unlike the northern companies that carried industrial products. Mr. Light argued for the keeping of fruit in a high classification, maintaining that if placed in a low one there

15. Report from the Select Committee on Railways, (1881, XIII), 278.
16. Ibid., 797.

would be an absolute loss of revenue. 17 In justification of the higher classification it was argued that the fruit traffic of three southern companies (London and Brighton; London, Chatham and Dover; and South Eastern Railways) was exceptional compared to that of other companies. These companies carried a great deal more fruit than the northern companies, and fruit of a considerably higher quality. 18 The fruit required careful packing and handling to reduce claims against the companies; it was not the same as carrying low-grade cider apples. 19

In particular Mr. Light of the S.E.R. was concerned with the soft fruit traffic. This was uncertain in its quantity from year to year and from day to day; on a Saturday the London goods terminal could require 180 to 200 teams to transport fruit to the markets, but on a Monday only 25 or 30. Staff, however, had to be maintained to deal with these peak demands. The trade required special trains, and in one year over 19,000 miles of special fruit traffic had been run, while in the twelve years prior to 1891 there had been an average of 6,000 miles of this traffic per season. 20 The London, Chatham and Dover Railway Company had made its position clear in 1890, when the Kent Fruit Growers' Association had bought a complaint "that the delivery rates were unreasonable", and the company excluded traders' vans until 9 o'clock. The company had to keep a large special staff to deal with the fluctuating fruit traffic which was conveyed to market in special vans. To admit traders' vans would lead to chaos in the goods yards. 21 The traffic was all carried at night for the London markets, and was completed by 10 a.m. 22

17. Report from the Joint Select Committee of the House of Lords and House of Commons, on the Railway Rates and Charges Provisional Order Bills, (1890-1891, XIV), 547.
18. Ibid., 545.
19. Ibid., 544.
20. Ibid., 543.
21. The Railway and Canal Traffic Act, 1888, (Section 31) Report by the Board of Trade, Appendix. (1891, LXXIII), 6.
22. Report from the J.S.C. on the Railway Rates and Provisional Order Bills, (1890-1891, XIV), 546.

It was this problem of delivering the fruit from the London terminii to market that concerned the fruit growers. The companies charged an inclusive rate that covered the cost of delivery. Mr. Berry quoted the rate for apples from Rainham to London : the station to station rate was 7s. 6d. per ton, and the total rate charged £1 0s. 10d., 13s. 4d. representing the cartage charge. 23 The company excluded all but their own vans from the goods station until 7 a.m. or 8 a.m., thus procuring an effective monopoly of delivery. The growers maintained that they could make their own arrangements to have it carried for less if they had access to the trains. 24

Access after 8.00 a.m. was of no practical value, as the wholesale markets were over by that hour. 25

The railway companies argued that they had a duty to maintain a service for all the growers, which a concession on cartage would have made more difficult. The monopoly ensured equal treatment and allowed the company to keep sufficient carters to meet peak demands. While traders' carriers might have been able to charge a lower rate the result would have been increased congestion and a reduction in the service offered for all the growers. The railway companies had to unload and deliver a large amount of produce in a short period of time and maintain the facilities that were necessary during periods when they were under-utilised. The fruit growers were unreasonable in expecting the railway company to make allowances during peak times and disrupting the delivery service.

In 1893 the railway companies had introduced new railway rates and W. W. Berry complained that

> The companies have, however, defeated the intention of the Board of Trade in reducing the cost of the carriage of fruit

23. Report from the J.S.C. on the Railway Rates and Provisional Order Bills, (1890-1891, XIV), 546.
24. Ibid., 133.
25. Ibid., 137.

> and vegetables by more advantageous classification by putting into force exorbitantly high rates, as nearly as possible their maximum powers ... we are really paying more today on the reduced classification than we were paying on the old class rates on the old classification, that was not so advantageous. 26

The Board of Trade had reduced the classification of soft fruit from Class 4, distributing it over classes 1, 2 and 3, predominantly Class 2. The growers wanted fruit to be charged at a rate similar to other articles in that class, when they would have a reduction. Mr. Berry quoted the example of the rate from Selling to London, which had been 7s. 11d. station to station, and had now been raised to 13s. 11d. 27 The railway company had raised the rate while the intention would seem to have been to effect a reduction.

Mr. Berry expressed the feeling that the railway companies were a monopoly that was in danger of stifling industry and agriculture. The London, Chatham and Dover Railway Company, on the other hand, had pledged

> No rates are to be raised which would interfere with trade or agriculture ... (Mr. W. W. Berry did) not think that the railway managers are able to judge as to what rates would interfere with trade or agriculture; they are only able to judge as to what rates are profitable or otherwise to themselves. 28

The trade in fruit was increasing in spite of the railway rates, but Mr. Berry expected a reduced rate would serve to encourage the expansion of fruit production, "we find it a very profitable business to grow fruit, and there is a very large demand for English grown

26. First Report from the Select Committee on Railway Rates and Charges, (1893-1894, XIV), 232.
27. Ibid., 234.
28. Ibid., 37.

fruit when it can be got into the market whilst it is fresh, and we had hoped that a great stimulus would be given to our business by the reduced charges which we were likely to get in consequence of the revision in classification made by The Board of Trade .....". 29 The fruit growers seemed to be putting forward the proposition that the railways companies should have operated more to the benefit of their users rather than the profit of their shareholders.

In the years to 1900 the fruit growers appear to have been satisfied with the service the companies provided but after 1900 they felt increasingly it was deficient. In Kent the two railway companies had been brought together in 1899 in a working union, and with the friction of competition removed there was the possibility of savings through co-operation.

The fruit growers were particularly vociferous in their grievances with the railway companies in the years 1904 to 1906. The problems were examined by the Departmental Committee on Fruit Culture, there were numerous letters in The Times, questions were asked in The House of Commons, and they were discussed at a Conference on Fruit Growing held in 1905. While there were some complaints that rates were too high, particularly in relation to the rate charged for foreign produce, the main area of contention was in the services and facilities provided. Growers alleged that fruit was delivered late to market because either trains were unpunctual or there were delays at the London depots. The growers were having problems, along with other traders, in settling claims for loss, as the companies were reluctant to pay. In their expansion into the northern markets Kent growers had co-operated with the companies, but wanted lower rates. The railway

29. First Report from the Select Committee on Railway Rates and Charges, (1893-1894, XIV), 235.

companies after 1894 were hampered for their part in reducing rates, even provisionally as a trial, as they would subsequently have to provide evidence that a return to the original rate was justified. For the trader there was the complexity of the rating system, and with millions of rates in operation on one railway anomalies and grievances were almost bound to occur.

Complaints about railway rates arose periodically, particularly in years of abundant fruit crops. The markets were glutted with fruit which in consequence made low prices. In 1904 growers in Kent complained that when they had paid commission and railway rates there was not enough margin for a profit. In some instances they lost money on the transaction and the fruit was left to rot in the orchards. The inference was that if rates were lower the grower could make a living, ignoring the exceptional situation of gluts. 30 The South Eastern and Chatham Railway, created by the ~~amalgamation~~ working union of the two Kent companies in 1899, had been accused in 1904 of charging higher rates than northern companies. The President of the Board of Trade had denied this, and also stated the company was spending large sums to improve conditions and facilities. 31 When examined the rates do not appear excessive. One example quoted in The Times gave the rate from Maidstone to London, including delivery to market, at 14s. 9d. a ton for gooseberries, cherries, raspberries or strawberries. This charge of 9d. a cwt. for carriage by special goods train could not have been said to have materially affected the final price. The transport cost in a pound of fruit was only a fraction of a penny. Other rates produced an equally low rate of carriage per pound. 32 Even allowing higher rates for small consignments fruit growers were not charged excessively.

30. The Times, 19 September 1904, 6d.
31. The Times, 24 June 1904, 6b.
32. The Times, 19 September 1904, 6d.

Fruit growers in Kent were concerned, also, by the rates they were charged compared to those charged for conveying foreign produce. They maintained that the foreigner was given preference and an unfair advantage in the English market. The Times reported in 1905, on the evidence before Lord Jersey's Committee :

> The rates were not so unfavourable in reality as they were in appearance, because the fruit growers did not take sufficiently into account the different circumstances attending long distance and short distance traffic. 33

In 1904, E.A. Pratt wrote a series of articles for The Times on railway rates, one dealing with fruit from the continent. He agreed that the rates from Boulogne to London should be governed by cost and the competition of the steamship companies. The railway had the advantage of speed and could guarantee the fruit reaching the London market. He did not agree with the contention that the rate should reflect what it might cost to transport fruit from Dover or Folkestone, nor that rates from places near London should be proportionate. He also pointed out that foreign produce came in large consignments and was easier to handle than the small packages of English produce. 34 W. E. Bear, a staunch protectionist refuted these statements.

Mr. Bear stated that the import of fruit, particularly at the commencement of the season, was not in large consignments. This fruit, moreover, had an extremely damaging effect on the home market, taking the best prices prior to the English fruit season. There were no advantages to the railway companies of bulk and a single destination as the fruit was sent to London and towns in the Midlands and the North. 35 There was no relevant evidence offered, indeed these

33. The Times, 19 June 1905, 13c.
34. The Times, 19 September 1904, 6b, 6c.
35. The Times, 21 September 1904, 5b.

questions of packaging could only be answered by a detailed examination of freight handled. Mr. Pratt did produce a statement of business done on the South Eastern and Chatham Railway on an unspecified day. The average weight of consignments of fruit sent to the London depots was 6 cwts. : 2 qts. : 14 lbs.; which may not have compared with van loads, but was above the 3 cwt. minimum for ton rates. 35 Mr. V. W. Hill considered that fruit growers and agriculturists should avail themselves of the opportunities for combining to send their produce in large lots at reduced prices. 37

> The growers' main grievances concerned the facilities offered : They suffered in comparison (with foreigners) in the matter of speed, punctuality, careful handling, prompt delivery, and in all the details which were essential for the successful transit of fruit produce. 38

They regarded these as inadequate, however, without comparing them with the transit of foreign produce.

Fruit was delivered late to the London markets, either because the trains were unpunctual or there were problems of congestion of vans driven into the markets. The growers in the Maidstone area were unable to rely on the goods service to London, and consequently had to pay the higher rate for the passenger service. It was essential for their high-class fruit that there should be no delays which could lead to lower prices. 39

Mr. Hooper in 1906 alleged that a fruit special took four hours to reach London at 10.30 a.m., from Sevenoaks, 40 the implication being that the train was consistently late as were other trains

36. The Times, 19 September 1904, 6d.
37. The Times, 29 August 1905, 11f.
38. The Times, 19 June 1905, 13c.
39. Ibid., 13c.
40. The Times, 21 August 1906, 10e.

carrying fruit. Mr. E. A. Pratt contended that this special train, which ran from 25 June to 21 July, 1905 was on an average only 20 minutes late, and was never later than 8 o'clock in reaching London. Delays that did occur were due to the varying quantities of fruit that had to be collected from stations en route. 41 These problems could be compounded, for the railway companies, by the congestion of vans taking fruit from the London depots to the fruit markets.

With late delivery and a supposed financial loss to the grower there were contentions over the payment of claims. The railway companies were less willing to pay claims than previously, and the claims were considered by a committee of the Railway Clearing House. This procedure was intended to reduce bogus claims and stop companies gaining an advantage over other companies by paying them. 42 Fruit growers were inhibited from sending their consignments at company risk rates as they were considerably higher than owner risk rates. 43 However, when paying claims under owner's risk, the companies only paid where there was wilful misconduct on the part of the companies' employees. The growers were at a considerable disadvantage as wilful misconduct was difficult to prove.

There were periodic complaints about the shortages of vans for fruit. These arose at specific stations and indicate the problems of estimating demand. Mr. Hooper quoted the examples of Chelsfield and Knockholt where horseboxes and third and saloon carriages had been used. These were unsatisfactory as the fruit was apt to be upset during shunting. 44

Despite the problems that could arise there was a considerable amount of co-operation between growers and companies for transport to

41. The Times, 23 August, 1906, 8e.
42. Ibid., 8e.
43. The Times, 21 August 1906, 10e.
44. Ibid., 10e.

the northern towns. Mr. V. W. Hill, the General Manager of the S.E. and Chatham Railway, emphasised that at the commencement of the fruit season arrangements were made for through transport to all parts of England. 45 However some growers wanted a degree of flexibility that was unreasonable, changing the destination of their fruit at short notice of a few hours. 46

Lord Jersey's Committee, which examined the charges levelled at the railway companies for giving preferential rates to foreigners, found that only fifteen witnesses came forward to support the charges. The railway companies were completely exonerated and the answer for the fruit growers was to co-operate for lower charges. 47 The Departmental Committee on Fruit Culture reported in 1905 and made eight recommendations that it was hoped would ease the transport of fruit by the railway companies. None of the recommendations were of such significance to suggest that the complaints levelled were of great importance, or that the policies of the railway companies seriously worked to the detriment of the fruit growers.

The companies were urged to simplify the system of rates for fruit and carry fruit at company risk not owner risk. The rates reflected the variety of fruit carried in different containers while claims for losses were small. Though the companies were asked to provide suitably ventilated fruit vans, most growers were content with those provided making only the proviso that there should be an adequate supply. The companies made every effort to convey the fruit to market on time and did not deliberately obstruct it; delays were not so great as some growers maintained. The government already exercised

45. The Times, 29 August 1905, 11f.
46. The Times, 19 June 1905, 13c.
47. The Times, 30 August 1906, 4f.

considerable control over the railway companies, and there was adequate machinery to deal with complaints. The only significant recommendation was that companies be permitted to reduce rates temporarily during periods of glut. 48

To a great extent the complaints of the fruit growers were unfounded, but represented the normal friction that existed between two groups intent on making profit. In many respects the growers were expecting, of the railway network, a degree of flexibility that only the motor vehicle could provide. The success of the fruit producers was putting a strain on the existing marketing facilities, and the railways which had helped in expansion of soft fruit in the 1870's were beginning to become a bottleneck.

48. The Transport and Railroad Gazette, 7 July 1905, 302e.

CONCLUSION

By the early twentieth century a fruit industry had been established that produced in 1908 an estimated £4,495,000 of fruit. Apples were the most important crop, valued at £1,490,000, but strawberries were second at £1,036,000 which emphasised the nature of the expansion of the fruit industry in the late nineteenth century. 1

The industry had reached a peak of expansion in about 1910 and some major changes were needed for fruit production to continue to expand. Problems were arising in the marketing of fruit, which some writers had been aware of since the mid-1880's, and had been discussed at a Conference on Fruit Growing in 1905. 2 It was urged that more attention needed to be paid to the grading of fruit and its presentation in attractive packaging to the consumer. To further increase the market fruit needed to be available in the smaller provincial towns, where it was often impossible to purchase it.

It was all aspects of the marketing of fruit that concerned the Ministry of Agriculture and Fisheries in the inter-war years. In a series of pamphlets the Ministry examined the problems and tried to convince the growers of the need for a more efficient and united marketing system.

In the three years between 1927 and 1930 five pamphlets were published which looked at the markets and Fairs of England and Wales, including the operation of fruit and vegetable markets. 3 There was a general report published in 1927 on the marketing of fruit that looked comprehensively at marketing methods; the picking, and

1. The Agricultural Output of Great Britain, Board of Agriculture and Fisheries, (1912, Cd.6277), 8.
2. 'Conference on Fruit Growing', Journal of the Royal Horticultural Society, XXX (1906).
3. Report on Markets and Fairs in England and Wales, Economic Series, Numbers, 13 (1927); 14 (1927); 19 (1928); 23 (1929); 26 (1930).

grading of fruit, the use of returnable or non-returnable packages and the need for standardization in these fields. Transport was looked at and particularly the development in motor vehicles which combined flexibility and large loads, allowing new markets to be reached. 4 Two reports examined the preparation of fruit for the market stressing the need for fruit to be sold on uniform size, attractive in appearance and well packed. 5 A further report in 1931 examined The Agricultural Produce (Grading and Marking) Act, 1928. It was an attempt to lay down standards for grading combined with an advertising campaign to promote quality English fruit. While tomatoes and cucumbers came into the scope of the Act in 1928, cherries only came under the Act in 1930, and fruit growers generally were not keen. 6

The growers remained obstructive to the marketing schemes that were promoted under the Marketing Acts of 1931 and 1933 which were part of the new agricultural policy. A fruit Marketing Scheme proposed by the National Farmers' Union in 1933 was abandoned because of objections from growers in the major producing areas. The scheme would have promoted market intelligence, negotiated conditions and terms of contracts with processors, organised grading and negotiated reduced transport charges. 7

These developments that were discussed in the first half of the twentieth century came to fruition in the years after the Second World War with the improvements in road transport. Ultimately in the mid-1960's the customer was brought to the fruit fields with the advent of "Pick Your Own", and the fruit growers took advantage of the greater mobility of the consumer.

4. Report on Fruit Marketing in England and Wales, Economic Series, Number 15, Ministry of Agriculture and Fisheries, (H.M.S.O., 1927).
5. Report on the Preparation of Fruit for Market, Economic Series, Number 21, Ministry of Agriculture and Fisheries, (H.M.S.O., 1928).
6. Report on the Preparation of Fruit for Market, Economic Series, Number 24, Ministry of Agriculture and Fisheries, (H.M.S.O., 1931), 19, 20.
7. Agricultural Register, 1935-1936, University of Oxford, Agricultural Economics Research Institute, (Oxford, 1936), 113.

In the period under consideration the cultivation of fruit became an important aspect of agriculture. The cultivation of orchard fruits increased, and in the second half of the nineteenth century there was a phenomenal increase in the acreage of soft fruit. At the end of the eighteenth century improved water and road transport coupled with urban and industrial growth in the midlands gave an impetus to orchard fruit in Gloucestershire and Worcestershire. Fruit production in the home counties, particularly Kent was encouraged by the continued expansion of London. While there was a limited amount of soft fruit grown near London and the major provincial towns, the main production was apples, and in north-Kent cherries. Production was limited by the small proportion of consumers with sufficient income to purchase fruit at a price which renumerated the grower.

In the first half of the nineteenth century there was a great expansion of fruit growing, particularly apples. Farmers were encouraged to plant orchards by the high price of apples in the years to 1830 and an import duty of 4s. 0d. a bushel. When these orchards came into bearing the price of apples fell and the duty which was designed to maintain prices became inoperative. The price of apples in England was governed by the size of the domestic crop and not by the level of imports. In these circumstances it was a surprise to the growers when the government reduced the duty to a nominal level.

The growers despite their protests and the setting up of a Select Committee failed to re-establish a protective duty. However, in the second half of the nineteenth century the fruit industry was affected by a number of favourable factors that encouraged its expansion. Transport improvements brought large northern urban markets within easy reach of the fruit growing areas of the south and

south-west. In particular the railways aided the marketing of soft perishable fruit and extended the area within which it was possible to produce these fruits.

The fruit found a ready market among an increasing number of consumers who experienced a rise in their real incomes. Part of this extra money was spent on a range of semi-luxury food products, and as well as fruit there was an increase in jam consumption, the jam manufacturers being helped by the fall in sugar prices. The existence of the jam industry made possible the enormous expansion of soft fruit, the fresh fruit and the preserve markets provided outlets for all of a grower's fruit. While some growers undertook to send fruit to jam factories on contract, the bulk of fruit for jam was purchased at the major markets when the quality fruit had been sold for immediate consumption.

Fruit growing was widely advocated by politicians and agriculturalists as a partial solution to the low prices experienced in cereal production. However, it had a limited application to those areas where conditions were suitable and the finance and expertise available. Despite the apparent profits the growers at the end of the nineteenth century thought their position was threatened by the policies of the railway companies. In particular the cost of transporting fruit and the lack of specialist facilities seemed to be inhibiting expansion. The problem, with hindsight, was the need for a radically new marketing approach that became possible in the inter-war years with the improvements to the motor lorries.

The most important producing county, for the fresh fruit market, was Kent and the basis of its importance was its proximity to London. Fruit was grown as part of a mixed farming economy and the probate inventories of the late seventeenth century record fruit being grown

together with hops and cereals and the keeping of livestock. Fruit was cultivated in specific areas of the county, around Maidstone apples predominated while in north Kent cherries were grown.

This pattern of production remained stable until the mid nineteenth century, though the amount of fruit grown increased considerably between 1800 and 1830. Fruit was an important crop and the growers identified themselves as having a common interest that needed defending against the reduction in duty in 1838. The Kent growers were organised into two committees in mid- and east-Kent, but despite petitions and giving evidence to the Select Committee they failed to win a return to the protective duty. The evidence indicates the emergence of specialist growers, though fruit was mainly cultivated on mixed farming units. Apples remained the main crop in mid-Kent and cherries and apples in north-Kent, however from the 1840's there were signs that soft fruit was being more extensively cultivated.

At the end of the nineteenth century fruit growing was greatly extended in Kent. The cultivation of soft fruit was introduced in north-Kent and mid-Kent, though orchard fruit predominated, and in north-west Kent there developed a major soft fruit industry to supply London. In the Sandwich area fruit growing expanded, and there was new apple and blackcurrant cultivation in the Weald of Kent.

The late nineteenth century saw a greater degree of specialisation in fruit production by farmers, and there emerged large scale growers with several hundred acres of fruit. The Chambers records illustrate the move away from mixed farming with the gradual abandonment of cereals and hops. The Kent grower traditionally produced for the London market, though there were exceptional examples of fruit being sent to the north of England by coal boat. In the second half of the

nineteenth century fruit was sent to the northern towns from the London markets and there was a new development with fruit sent direct to the north by the growers. This attracted attention but remained a small proportion of the fruit marketed. Indeed London was so attractive a market that it proved difficult to establish a local jam factory, the growers would send to London by preference.

The Kent fruit industry remained closely tied to London, with Covent Garden and the other markets acting as important distribution centres for the country.

APPENDIX A Table of Fruits and their approximate Weight per container.

FRUIT	CONTAINER	WEIGHT
APPLES	HALF SIEVES	20 to 24 lbs.
APPLES	BUSHELS	40 to 48 lbs.
CHERRIES	HALF SIEVES	24 lbs.
CHERRIES	PECKS	12 lbs.
CHERRIES	STRIKES	10 lbs.
COBNUTS	HALF SIEVES	20 lbs.
CURRANTS	HALF SIEVES	12 lbs.
CURRANTS	PECKS	12 lbs.
CURRANTS	STRIKES	12 lbs.
DAMSONS	HALF SIEVES	28 lbs.
DAMSONS	BUSHELS	56 lbs.
FILBERTS	HALF SIEVES	20 lbs.
GOOSEBERRIES	HALF SIEVES	28 lbs.
PLUMS	HALF SIEVES	28 lbs.
PLUMS	BUSHELS	56 lbs.
PLUMS	PECKS	12 lbs.
RASPBERRIES	PECKS	12 lbs.
STRAWBERRIES	PECKS	12 lbs.

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