Vinegar and Sugar: the Early History of Factory-made Jams, Pickles and Sauces in Britain

Peter Atkins

Chapter 3 in Oddy, D.J. (Ed.)(2013) *The Food Industries of Europe in the Nineteenth and Twentieth Centuries* Farnham: Ashgate ISBN 9781409454397

Packaged goods preserved in sugar or vinegar appeared on an industrial scale in Britain in the eighteenth and early nineteenth centuries, yet they are rarely accorded any significance in food histories or histories of the retail grocery trade. Their extended shelf life was a very welcome feature in an era before refrigeration; in this they resembled hams and cheeses but they had the additional advantage that they were often in hermetically sealed bottles and so could be carried to the other side of world without deterioration. Where the bottles bore a label they were also standard bearers of the brand revolution to come. Customers learned to trust the brands and the implicit quality guarantee they bore. In several ways, therefore, these goods prefigured the globalization of foodstuffs that is commonplace today.

When did these particular British tastes begin (Table 3.1)? The scaling up of preserved fruits and vegetables from domestic to industrial products started in the 1760s but there was a long, drawn-out period from about 1830 onwards when factory methods, including mechanization and production lines, were adopted. This chapter will only be about those foods (mainly fruits and vegetables) that were preserved in vinegar or sugar. Unfortunately there is not space here to look at alternative preservation methods, such as drying, salting, smoking, fermenting, canning and freezing.

< Table 3.1 here>

The early years: 1760-1830

Vinegar is a strong preservative because of the acidic environment it creates. It was expensive but readily available from the increasing number of vinegar breweries. One unfortunate side effect is that acetic acid causes a chemical reaction with lead in the glaze of some earthenware, so, to avoid poisoning, pickles had to be stored in stoneware jars or in glass.[1] As a result, a pottery industry grew that was dedicated to producing 1 lb and 2 lb jars for pickles, jams and marmalades. Glass was reserved for bottled sauces, at least until

[1] Stoneware is a specialized type of pottery that is vitrified by firing at high temperatures, thereby becoming non-porous. Brears 1991.

technological developments in sheet glass made it possible to mass produce cheap jam jars from the 1920s onwards.

It is sometimes said that packaged goods, especially those recognisably branded, were an innovation of the second half of the nineteenth century, growing in parallel with the grocery trade and with the expansion of disposable incomes.[2] While this is true of jam, branded table sauces and pickles operated to a different chronology. In the last forty years of the eighteenth century some of the larger Italian Warehousemen in London began advertising in newspapers. John Burgess, for instance, offered West India Pickles, Cayenne Pepper, Bengal Currie Powder, Japan Soy, Lemon Pickle, Oyster Ketchup, Shallot Ketchup and Devonshire Sauce.[3] Other grocers listed a variety of other proprietary keeping sauces, along with generic ketchups and pickles and items such as capers, oils and mustard.[4] The evidence suggests that consumption of all of these items was restricted to those with middling to upper levels of disposable income.[5]

It is unclear how many Italian warehousemen were also manufacturers. A few claimed to be the originators of particular table sauces but their main function was as wholesalers to the grocery trade and retailers in their own right. Whenever a particular pickle or sauce became popular, demand was met by a gradual scaling up from a domestic to a workshop context. Lazenby's is a good example of this. In 1793 Elizabeth Lazenby was given the recipe of a fish sauce by her innkeeper brother, Peter Harvey, as a means of supporting her family. She manufactured it herself and sold it from Edward [now Wigmore] Street, Portman Square. It was advertised in the newspapers as Harvey's Sauce and sales over the years were sufficiently buoyant for her to receive an annuity in retirement of £300 a year.[6] Harvey's Sauce became well known and was frequently mentioned in the popular media but it was only one of a stable of products that in the early nineteenth century became known as Lazenby's Pickles. Steady growth meant moving to a factory in Southwark in 1808, where they remained until 1926, right in the centre of London's south bank cluster of food and leather industries.[7]

---

[2] Winstanley 1983.

[3] From about 1760 onwards, John Burgess was based in The Strand. His business flourished and his emphasis gradually shifted towards manufacturing.

[4] Cox and Dannehl 2007.

[5] Burgess's Fish Sauce retailed at 3s. and 1s.6d a bottle. *The Times* March 19, 1853, 7C.

[6] *The Times* January 14, 1819, 3B; July 29, 1829, 3C.

[7] Darlington 1955.

Two factors were important in this early period. First, most table sauces were described as being for use either with fish or meat and they were consumed by the kind of relatively prosperous urban middle class households whose intake of animal protein was increasing. Sauces and other condiments may have been ways of improving the palatability of foods that were often of low quality, given the problems in building efficient food supply systems in these early decades of rapid urbanization, and pickles gave access to vegetables in seasons when fresh greens were expensive. Eating out was also part of the changes taking place, and bottled sauces and pickles were used in the chop houses, taverns and Dining Rooms that abounded in the larger towns and cities.[8]

The second factor was that the increasingly global projection of British political power from the mid-eighteenth century onwards required preserved foods that could reliably be transported to different climates. Table sauces and pickles were frequently part-cargoes on ships sailing to India and Australasia, for instance. In the reverse direction, returning imperial servants brought ideas, such the former governor of Bengal, Lord Marcus Sandys, who asked the chemists Lea and Perrins to make up the recipe of a sauce that he had enjoyed in India. After a false start, they produced a spicy Worcestershire Sauce that was released in 1837 and was a great success. In less than three decades they were selling 300,000 bottles a year.

The mid-nineteenth century: 1830-1870

One of the earliest, largest and most successful manufacturing and wholesaling firms was Crosse and Blackwell. In 1830 Edmund Crosse and Thomas Blackwell purchased the business of West and Wyatt, oilmen of King Street, Soho, whose stock was mainly whale and seal oil and some casks of pickles. By moving into packaged groceries and receiving a Royal warrant (for 'oilery in ordinary') from the newly crowned Queen Victoria in 1837, they placed themselves firmly up market. Located in the cosmopolitan and culinary heart of London, they were well placed to benefit from the expertise of exiles such as the Italian chef, Qualliotti.[9] He brought with him a number of recipes, for potted meat, piccalilli and table sauces. In 1849 another celebrity chef, Alexis Soyer of the Reform Club, signed a contract

[8] Pickles were a common accompaniment to cold meat, and table sauces with hot meat or fish. Malden 1890.

[9] LMA/4467/A/03/001.

that allowed the firm to sell Soyer's Relish, Soyer's Sauce and Soyer's Nectar under their brand, with his face on the label.[10]

The 1840s were a threshold decade for Crosse and Blackwell. In 1840 they dispatched their first consignment to Calcutta: 80 cases of pickles, 20 of bottled fruits, nine of sauce, and also lesser amounts of mustard, vinegar and capers. This was the beginning of an export trade that was ultimately very profitable for them and within a few decades made them into a multinational company and a global brand. But India was not just a market; it also provided the inspiration for a number of products, including Captain White's Oriental Pickle, Col. Skinner's Mango Relish, and Crosse and Blackwell's Unsurpassed Currie Powder. Also in 1840 jam was added to their manufacturing portfolio.

1851 was a low point in firm's history, when they were named by Dr Hassall in the *Lancet*.[11] He was conducting a high profile survey of adulterated foods and he published the results, along with lists of offenders. Crosse and Blackwell were accused of producing pickles that were contaminated with copper sulphate. This was the result of boiling vinegar in the copper vessels. When called before the Select Committee on Adulteration of Food in July 1855, Thomas Blackwell confirmed that the company had immediately stopped this practice when they encountered the negative publicity and that they now used enamelled iron vessels for small batches of 12-15 gallons.[12] New vessels with a capacity of 325 gallons were purchased soon after, and these were heated by steam through a 32 foot platinum-coated coil.[13]

Crosse and Blackwell's pickle business dipped for a short period after the copper scandal but they received some credit for their openness and honesty. With growth resuming, in 1857 they added a second Soho Square property to one occupied in 1840. Together, these became the focus of an expansion into adjacent streets (Dean Street, Denmark Street, Stacey Street, and Sutton Street) and by 1865 they controlled 38,000 square feet of factory and warehouse space in the locality.[14] The economies of scale this brought and the use of technology reduced their costs per unit of output and a pot of jam that had cost 2s. in 1840 was now retailing at 9d.

---

[10] *The Times* March 13, 1849, 11A.

[11] Hassall 1855.

[12] First report from the Select Committee on Adulteration of Food, *British Parliamentary Papers* 1854-55 (432) Qq.1567-72.

[13] Mayhew 1865.

[14] Mayhew 1865.

By 1860 the firm was using contracts to tie in their suppliers. At this point they were sourcing onions from East Ham, cauliflowers and beans from Deptford, Greenwich, Kent and Bedfordshire, soft fruit from Fulham, cabbages from Essex, and mushrooms from Leicestershire.[15] Unusually for manufacturers at this date, they bypassed the wholesale markets such as Covent Garden. Instead agents were sent out to check the produce in the fields and make arrangements for transport direct to the factory in central London. As a result, Crosse and Blackwell were able to establish a system of farm to factory quality control, a major advantage over their competitors at a time when the adulteration of foodstuffs was at an all-time peak and the deterioration of fruits and vegetables was common before they reached market.[16]

In 1845 the number employed by the firm in manufacturing was only 15 but this had grown to 386 by 1865, with 300 more in the summer when fresh vegetables and fruits were arriving daily by the ton.[17] In 1864 they used 140,000 gallons of vinegar, 225 tons of sugar and 18,000 gallons of olive oil, 16 tons of capers, 80 tons of anchovies, 5,000 gallons of shrimps, 20 tons of Labrador salmon, 14,000 bushels of pickling onions, and 450 tons of fruit for jam.[18]

What may have been workshop output in 1840 had certainly become industrial in scale twenty years later. In 1864 Crosse and Blackwell were producing 27,000 gallons of ketchup annually, along with one million bottles of pickled walnuts, 160,000 bottles of anchovy sauce, 250,000 bottles of table jelly, 17,000 one pound tins of peas, 420,000 bottles of preserved fruit, 200,000 gallons of pickles (equivalent to 1.6 million bottles), 338,000 tins of sardines, and 200,000 one pound tins of Nova Scotia lobster. In all, nine million Crosse and Blackwell labels were used in 1864 on bottles and pots.[19] This astonishing throughput, among the largest in the world at this time, was matched by a vast storage capacity. The Soho warehouses at any one time held in barrels and tanks on average 20,000 gallons of ketchup, 6,400 gallons of olive oil, and 2,300 gallons of soy sauce.

It is difficult to estimate Crosse and Blackwell's market share. In 1868 they were said to supply one-quarter of the jam and marmalade consumed in London and this represented

[15] Whitehead 1878.

[16] Atkins 1985.

[17] By 1881 there were 1,200 employees.

[18] Mayhew 1865.

[19] Mayhew 1865.

about 25 per cent of their total output of sweet spreads.[20] Their main export markets were in India, Australia and China.[21]

Throughout the nineteenth century Crosse and Blackwell advertised extensively in newspapers and magazines. Although no doubt an expensive strategy, this reached their target middle class audience and helped to make them into a household name. In 1835 they started with national titles such as the *Morning Post* and by the early 1840s they had extended to the provincial press. In the 1850s grocers were giving them free publicity in their own advertisements in the local press by listing the luxury products they had in stock, such as Crosse and Blackwell sauces and Huntley and Palmer's biscuits. The products named in Crosse and Blackwell's own advertisements came and went in a rapid cycle of innovation. In the 1830s it was Soho Sauce and Dinmore's Essence of Shrimps. In the early 1840s Oriental Sauce was on offer 'to late residents of India and other hot climates', along with Sir Robert Peel's Sauce, Essence of Anchovies, Strasbourg potted meats and Imperial Pickle. By 1845 Abdool Fygo's Chutney and Fyzool Kurreem's Currie and Mulligatawny Pastes had been added to the list. Royal Table Sauce was new in 1846 and Soyer's New Sauce arrived in 1849. This was a company that did not stand still; they were constantly seeking new opportunities.

It is difficult to say what proportion of British exports of pickles and table sauces was represented by Crosse and Blackwell but it was probably a substantial one. In terms of declared value, this category in the *Annual Statement of Trade* rose from £146,380 in 1852 to £435,194 in 1870. The majority of goods at both dates went to British possessions around the world, notably to the settler colonies in Australia, New Zealand, Southern Africa and Canada. The Empire took 69 per cent in 1860, 60 per cent in 1870, 67 per cent in 1880, and 62 per cent in 1890.[22] In 1875 pickles and sauces outshone the value of several other major food exports, notably butter, cheese, biscuits, cereals and flour, and they were bettered only by refined sugar and fish. There was genuine marketing skill here by several companies in carving out new markets, assisted no doubt by the need of colonists, the armed forces and imperial civil servants for a taste of home. The problem with this type of market, though, was that it had an upper limit. Products had to appeal to more than Britishness to be a long-term global success equivalent to the later achievements of Heinz.

[20] Routledge 1868.

[21] Mayhew 1865.

[22] In 1900 the percentages were 64 for pickles and sauces and 63 for confectionery and jam.

The period 1830-70 was so dominated by Crosse and Blackwell that it is easy to forget that other enterprises were producing preserved goods on an industrial scale. One of the most intriguing was James Keiller and Son of Dundee. Their beginnings were small. Keiller was a grocer and in 1797 he experimented with some overripe bitter Seville oranges and produced a variant of the already well-known sweet marmalade. There were other marmalade manufacturers but Keiller's masterstroke was in recognising that the duties on sugar were holding down a potentially large market. In 1857 the firm opened a factory in Guernsey, where the duty was lower and for twenty years this accounted for one-third of their 1,000 ton a year output.[23] In 1879 they moved this operation to Silvertown, near London but continued production in Dundee and still sold their marmalade in stoneware jars made in Newcastle at the Maling pottery.[24]

Another famous marmalade manufacturer was James Robertson, who in 1856 was apprenticed to a grocer in Paisley. Three years later he had his own shop and was producing marmalade in a back room. This was scaled up to factory production in 1864 and in 1890 he moved to Droylesden, Manchester, to be closer to the market and later had another factory at Ledbury near to the fruit growers. The main products were Golden Shred (orange) and Silver Shred (lemon) marmalades, along with jam and mincemeat.[25]

The late-nineteenth century: 1870-1914

The significance of the date 1870 is that this was the year that the sugar duty was halved, followed in 1874 by its abolition. A major factor in the subsequent growth in jam and marmalade manufacture, the reduced retail price also attracted more low-income consumers than had participated in the preserved goods market hitherto. The upward trend in the real wages of artisans at this time made it possible for them to pay more visits to their local corner shop or to the High Street grocer, and they were now able to choose from a number of jams. But a substantial portion of working families continued to live in or close to a state of chronic undernourishment and, for them, even the cheapest of jams (6d per pound in 1900) would have been unaffordable unless as part of a strategy of making palatable a diet mainly of

[23] Bremner 1869; Mathew 1998a, 1998b.

[24] These white ware jars were Malin's stock in trade for decades and in the 1860s represented 90 per cent of the jam and marmalade jars made in Britain. At one point they claimed to be the biggest pottery in the world.

[25] The company trademarks are now owned by Premier Foods.

bread. Butter was too expensive and margarine only just appearing.[26] According to Drummond and Wilbraham, 'bread and jam became the chief food of poor children for two meals out of three'.[27] Many of the household budgetary surveys from the 1870s and 1880s onwards mention tea, white bread and jam as an increasingly well-established combination, and consumption amongst this social group was a major factor in the doubling of the sugar intake that took place between 1863 and the 1890s.[28] Pickles and table sauces were rarely mentioned in these surveys.

The story of jam-making is more complex than a simple model of increasing demand and reduced prices suggests. There were, for instance, several hundred small jam factories serving their local areas, with concentrations particularly in the large cities and industrial districts. Because this was a highly competitive sector, profit margins were tight and there were many company failures in the forty years before the First World War.[29] Very few of this type of jam-maker made it through to national exposure, exceptions being E. and T. Pink and Wood Brothers, the latter producing 3,500 tons a year.[30] Where they did grow, this type of firm did so using imported fruit pulp and industrial glucose.[31] The pulp came from Australia, New Zealand and Canada during the off season and so kept the factories working throughout the year.[32] At this cheap end of the market various colorants were added, and salicylic acid and boric acid were also widely used as preservatives until banned in 1927.

In contrast, at the top end there were two categories of jam-makers. First, there were the high volume manufacturers, who could keep costs low and who had extensive distribution networks. Lipton's are one example and Crosse and Blackwell another, although the true metier of both was in other food sectors.[33] Second, there was also a small group of elite producers of jam, whose clientèle was amongst those for whom changes in sugar duty meant little.

---

[26] Johnston 1977, 49.

[27] Drummond and Wilbraham 1959, 332.

[28] Torode 1966; Oddy 1970.

[29] Haggard 1902, vol. 2, 52.

[30] A 3 lb jar of Pink's jam cost only 6½d. Departmental Committee on Fruit Culture in Great Britain, *British Parliamentary Papers* 1906 (Cd.2719) xxiv.Q.11,849.

[31] *British Parliamentary Papers* 1906 (Cd.2719) xxiv.Q.5249.

[32] Departmental Committee on Fruit Culture in Great Britain, *Minutes of Evidence*, *British Parliamentary Papers* 1906 (Cd. 2719) xxiv.Qq.8,008-8,185. Evidence of T.F. Blackwell.

[33] From 1892 Lipton produced about 8,000 tons of jam a year but factory in Bermondsey was closed in a phase of rationalization. Haggard 1902; Mathias 1967.

In addition to these considerations of market niches, there were also several routes into jam-making. The first was through agriculture. It is sometimes asserted that the depression in cereal prices from the 1870s was a push factor in persuading arable farmers to convert to fruit.[34] This seems unlikely, not least because of the change in mind-set that was required. Rider Haggard made this point clearly: 'A good fruit farmer is in his way something of an artist and, although the skills were plentiful in specialist districts such as the Vale of Evesham, they were absent in many wheat-growing counties'.[35] Also the uncertainty of tenant rights in some districts discouraged investment in tree, cane and bush fruits, which had to be spread over a number of years. Farmers who were habituated to rotational cropping were better off growing vegetables.[36] It is much more likely that the rapid increase in fruit growing from the 1870s was the result of demand from jam and bottling factories, met especially by small holders in their immediate locality and by the expansion of production in the traditional fruit-growing regions.[37] Examples include Chivers of Histon, near Cambridge, and Wilkin of Tiptree Heath in Essex.[38]

The second route into jam-making was the grocery trade. Typically it was grocers in the industrial districts who saw a growing demand and sought to meet it. William Hartley of Pendle, Lancashire is an example. He began in 1871 when a supplier failed to meet a contract and his own home-made substitute sold well.[39] Within three years he had moved to a factory at Bootle, near Liverpool, and then in 1886 to larger premises at Aintree, nearer to the railway. Hartley sold mainly to working-class consumers in industrial Lancashire and a tithe of his profits was always devoted to local philanthropy, including the so-called Hartley Village near the factory. As business expanded into the Midlands and south of England, he opened another factory, in Southwark, in 1901 and was soon producing a total of 1,000 tons of jam a week in season. Other grocers who went into jam-making include Margetts, Duerr's and Baxter's (later of soup fame).

---

[34] Fruits and vegetables increased from nine to thirteen per cent of total value of crop output between 1875-9 and 1895-9. For fruit, one estimate has increases from 1890-6 to 1911-14 of 38 per cent by tonnage and 46 per cent by value. Perren 2000, 215, 591-2.

[35] Haggard 1902, Vol.1, 339.

[36] Perren 1995.

[37] Jam-makers took 90 per cent of the country's raspberries, 60 per cent of the strawberries, and 40 per cent of the plums. Departmental Committee on Distribution and Prices of Agricultural Produce. Interim report on fruit and vegetables, *British Parliamentary Papers* 1923 (Cmd. 1892) ix.231.

[38] Horridge [1984]; Bear 1899; Benham 1985.

[39] Peake 1926; Beable 1926.

As a result of these two types of jam-makers, it is not surprising that their factories were differentiated by location strategy into the rural, raw material orientation and urban market orientation.[40] The former had the advantage of fresher fruit but the latter, although generally taking second or third rate raw material, had a ready pool of casual labour to hand and reduced transport costs on the final product.[41]

In 1906 there were 2-300 jam-makers, the five largest between them using 20,000 tons of fruit a year.[42] The Census of Production the following year recorded an output of £3.8 million in marmalade, jams and fruit jellies, which was significantly ahead of the £0.6 million for sauces and condiments, £0.4 million for pickles and preserved vegetables, and £0.3 million for other preserved fruits.[43]

Throughout the nineteenth century much continued to be done by hand, for instance the sorting and grading of fruit, and the podding, skinning, washing, trimming and dicing of vegetables.[44] For pickling there was soaking in brine to be done and boiling in vinegar. This was labour-intensive work and, as a result, manufacturers often employed the cheapest hands – women and girls – particularly as casual help in the high season. Hours of work were long and working conditions were notoriously bad, leading occasionally to strikes, such as the 1911 walk out at Pink's jam factory in Bermondsey.[45]

Although, as we have seen, some factories were mechanized in the second half of the nineteenth century, this was not implemented on the basis of any knowledge of organic chemistry.[46] There is no evidence of companies employing full-time chemists; any analytical input came through consultancy. Even as late as 1900 there was a reliance upon hand stirring in jam factories and 'customary means of knowing how long to boil and how to get the jam to set'; there was also some reluctance in adopting the jam-boiling thermometer.

---

[40] For comments on the London and Scottish industries, see Copy of a report to the Board of Trade entitled 'Progress of the sugar trade', *British Parliamentary Papers* 1884 (325) lxxiv.426; and Sugar trade. Return, *British Parliamentary Papers* 1888 (353) xciii.554.

[41] Whitehead 1878.

[42] Pratt 1906.

[43] The figures in the 1924 Census of Production were £11.0 million for marmalade, jams and fruit jellies, £3.1 million for pickles and sauces, and ££0.2 million for other preserved fruit.

[44] Samuel 1977.

[45] Annual report of the Chief Inspector of Factories and Workshops for the year 1898. Part II: Reports, *British Parliamentary Papers* 1900 (Cd.27) xi.181-96; De la Mare 2008.

[46] 'Makers of excellent jams had probably never heard of pectin, the substance in fruits that causes jams and jellies to set'. Morris 1958, 38.

The period 1870-1914 was undoubtedly the era of jam but sauces and pickles also continued to prosper as middle class demand consolidated and some popular products reached the market, for instance various 'brown' sauces, such as HP (1875), OK (1885) and Daddies' Sauce (1904).[47] Crosse and Blackwell continued to strategise. In the spirit of backward and forward integration, they owned a vinegar brewery and transported their own products on the River Thames, first from Victoria Wharf, Puddle Dock until this was swept away by the Victoria Embankment in the late 1860s and later from Soho Wharf at the eastern end of Westminster Bridge. When this in turn became the site for County Hall, the company occupied Imperial Wharf at Battersea (1907), whence they barged 46,000 tons of products to the docks in just one year (1899).[48]

At the beginning of the twentieth century Crosse and Blackwell became increasingly acquisitive. In 1919 they took controlling interests in Keiller (marmalade) and Lazenby (pickles),[49] and the following year in Batger and Co. (preserves and confectionery) and Alexander Cairns (glass jars and patent lids). Their capital value at this time was £10 million.[50] In 1920 a parliamentary enquiry on the fruit industry was alerted to concerns about the firm's power nearing that of a 'combine' but the charge was rejected by the committee and instead they reported that Crosse and Blackwell had been operating responsibly during a period of high soft fruit prices. We can see why the company's competitors were worried if we consider their declaration to the committee that they were by then in control of between 17 and 20 per cent of the nation's jam output.[51]

Crosse and Blackwell had already, before the war, opened manufacturing capacity in Hamburg and in the 1920s they added factories in Baltimore, Brussels, Buenos Aires, Paris and Toronto, and moved their London factory from Soho to Crimscott Street, Bermondsey. In 1929 Sarsons and Champion and Slee, both vinegar brewers, were acquired, with obvious further benefits of integration for pickle and sauce manufacture. One of their most famous investments after the war was in 1922, when they purchased a redundant arms factory at

[47] Landen and Daniel 1988.

[48] Royal Commission on the Port of London. Minutes of evidence taken before the Royal Commission on the Port of London, *British Parliamentary Papers* 1902 (Cd.1152) xliii.Q.9,119.

[49] The issued capital of the three companies at the time of merger was Crosse and Blackwell £568,000, Keiller £344,000, Lazenby £249,000. *Economist* March 13, 1920, 612.

[50] *Economist* May 29, 1920, 1222.

[51] Findings and decisions of a sub-committee appointed by the Standing Committee on Trusts to inquire into the price of fruit in the United Kingdom, *British Parliamentary Papers* 1920 (Cmd.878) xxiii.491.

Branston, near Burton-on-Trent and started making their iconic Branston Pickle, still a market leader today.[52] Despite their growth and outward-looking strategy, Crosse and Blackwell, along with other contemporary British food companies, are seen as conservative by historians of capitalism and brands.[53]

Conclusion

My argument in this paper has been that the better off members of the middle classes were the ones influenced by table sauces and pickles in the period 1760 to 1870 and the lower income groups by jam from 1870 to 1914. These time periods and food groups were not mutually exclusive though because there is evidence of small scale domestic production of sweet spreads throughout the period under discussion and working people eventually participated with gusto in the application of mustard and sauces to their food from the end of the nineteenth century.

There is some scope for arguing that the use of sauces, pickles and jams was one of the facilitating mechanisms behind the modernization of the food system in as much as they lubricated the difficult transition from traditional rural to modern urban diets. Britain's was the earliest and most rapid such change in Europe. It happened in the face of an ideological commitment to free trade that undermined several sectors of British agriculture and at a time when the integration of the British economic was so powerful that many distinctive regional foods were overpowered by cheap ingredients such as the potato, and imported cereals, frozen meat and dairy produce.

Some writers seem to argue that the period of the rise of preserved foods coincided with a 'deterioration' of the quality and variety of the British diet in the nineteenth century.[54] Jam most closely fits this description for low-income families since the cheap versions contained very little fruit and they did facilitate the consumption of items generally frowned upon in our own age, notably sugar and poor quality white bread made out of roller-milled

[52] The original recipe included sugar, beetroot, carrot, malt vinegar, onions, white vinegar, cauliflower, water, dates, salt, courgette, apple purée, cornstarch, tomato paste, gherkins, caramel, lemon concentrate, and spices. Because of inefficiencies, in 1924 production moved to London.

[53] Chandler 1980, 401; Collins 2009.

[54] An example is Spencer 2002, 288-92. The eight factors he mentions are not unique to Britain and so the argument overall is unconvincing.

flour. Yet, on the other hand, we might point out that jam did at least offer a small nutritional bridge for poor families who had little choice but to go for the cheapest options.[55]

[55] One 20 gm serving of jam contains 55 kcal (230 kj).

Table 3.1 **Origins of successful brands in pickling, potting, jams, sauces and essences**

Start	Company name	Factory location	Principal products
1750	Shippams	Chichester	Potted meat paste
1760	John Burgess and Son	London	Anchovy Essence
1793	E. Lazenby	London	Sauces and pickles
1797	James Keiller and Son	Dundee	Marmalade
1802	Cocks and Co.	Reading	Reading Sauce
1824	Batty and Co	London	Nabob Pickles
1824	H.W. Brand	London	Essence of Chicken; A1 Sauce
1828	John Osborn	?	Gentlemen's Relish
1830	Crosse and Blackwell	London	Pickles, sauces, jam
1837	Lea and Perrins	Worcester	Worcestershire Sauce
1837	Goodall, Backhouse and Co.	Leeds	Yorkshire Relish
1853	Kenyon, Son and Craven	Rotherham	Jam, pickles, sauce, confectionery
1857	Barnes and Co.	London	Nile Sauce, Scarlet Strawberry Jam
1859	James Robertson and Sons	Paisley, Manchester	Marmalade
1867	T.W. Beach	Brentford	Jam
1869	Margetts and Co	London	Preserves
1869	Hayward Bros	London	Pickles and sauces
1868	W.A. Baxter and Sons	Fochabers	Soup, jam
1870	Holbrooks	Birmingham	Sauce
1871	William Hartley and Sons	Liverpool, London	Jam
1872	Clarke, Nickolls and Coombs	Hackney	Confectionery (Clarnico), jam
1873	Chivers and Sons	Histon	Jam
1873	Maconochie Brothers	London	Pan Yan Pickle, sauces, jam
1874	Frank Cooper	Oxford	Marmalade
1875	F.G. Garton	Birmingham	HP Sauce
1880	T.J. Brewer	Plymouth	Colonial Fruit Sauce
1881	Duerr's	Manchester	Jam
1882	Allen Jeeves and Sons	Sandy	Pickles and sauces
1885	Wilkin	Tiptree, Essex	Jam
1885	George Mason and Co.	London	OK sauce
1880s	E. and T. Pink	Bermondsey	Jam
1889	Sharwoods	London	Chutney, pickles, curry powder
1892	Lipton	Bermondsey	Groceries, tea, jam
1893	Elsenham Quality Foods	Elsenham, Essex	Jam

Sources: Jeremy (1984-86); Slaven and Checkland (1986-90); Harrison (2004); various others.

References

Atkins, P.J. (1985) The production and marketing of fruit and vegetables 1850-1950, pp 102-33 in Oddy, D.J. and Miller, D. (Eds) *Diet and health in modern Britain* London: Croom Helm

Beable, W.H. (1926) *Romance of great business* London: Heath Cranton

Bear, W.E. (1899) Flower and fruit farming in England, III: fruit growing in the open, *Journal of the Royal Agricultural Society of England* 3rd series, 10, 30-86

Benham, M. (1985) *The story of Tiptree jam 1885-1985* Tiptree: Wilkin and Sons Ltd

Brears, P. (1991) Pots for potting: English pottery and its role in food preservation in the post-mediaeval period, pp 32-65 in Wilson, C.A. (Ed.) *Waste not, want not: food preservation from early times to the present day* Edinburgh: Edinburgh University Press

Bremner, D. (1869) *The industries of Scotland* Edinburgh: Black

Chandler, A.D. (1980) The growth of the transnational industrial firm in the United States and the United Kingdom: a comparative analysis, *Economic History Review* 33, 396-410

Collins, E.J.T. (2009) The North American influence on food manufacturing in Britain, 1880-1939, pp 153-76 in Segers, Y., Bieleman, J. and Buyst, E. (Eds) *Exploring the food chain: food production and food processing in western Europe, 1850-1990* Turnhout: Brepols

Cox, N. and Dannehl, K. (2007) *Dictionary of traded goods and commodities, 1550-1820* University of Wolverhampton

Darlington, I. (Ed.) The Trinity House Estate, pp 105-16 in *Survey of London, volume 25: St George's Fields* London: London County Council

De la Mare, U. (2008) Necessity and rage: the factory women's strikes in Bermondsey, 1911, *History Workshop Journal* 66, 62-80

Haggard, R. (1902) *Rural England* London: Longmans, Green and Co.

Harrison, B. (Ed.)(2004) *Oxford dictionary of national biography* Oxford: Oxford University Press

Hassall, A.H. (1855) *Food and its adulterations: comprising reports of the Analytical Sanitary Commission of 'The Lancet' for the years 1851-1854* London: Longmans

Horridge, G. [1984] *The growth and development of a family firm: Chivers of Histon, 1873-1939* [n.p.]: Ammonite Books

Jefferys, J.B. (1954) *Retail trading in Britain, 1850-1950* Cambridge: Cambridge University Press

Jeremy, D.J. (Ed.)(1984-86) *Dictionary of business biography* London: Butterworths

Johnston, J.P. (1977) *A hundred years of eating: food, drink and the daily diet in Britain since the late nineteenth century* Dublin: Gill and Macmillan

Landen, D. and Daniel, J. (1988) *The true story* of *HP Sauce* London: Methuen

Malden, W.J. (1890) Crops for pickling and conserving, *Journal of the Royal Agricultural Society of England* 3rd series 1, 710-32

Mathew, W.M. (1998a) *Keiller's of Dundee: the rise of the marmalade dynasty 1800-1879* Dundee: Abertay Historical Society

Mathew, W.M. (1998b) *The secret history of Guernsey Marmalade. James Keiller and Son Offshore 1857–1879* St. Peter Port, Guernsey: La Société Guernesiaise

Mathias, P. (1967) *Retailing revolution* London: Longmans

Mayhew, H. (1865) The establishment of Messrs Crosse and Blackwell, sauce and pickle manufacturers, pp 174-88 in Idem (Ed.) *The shops and companies of London*, volume 1 London: Strand Printing and Publishing Co. Ltd

Morris, T.N. (1958) Management and preservation of food, pp 26-52 in Singer, C.J., Holmyard, E.J., Hall, A.R. and Williams, T.I. (Eds) *A history of technology, volume 5* Oxford: *Clarendon Press*

Oddy, D.J. (1970) Working-class diets in late nineteenth-century Britain, *Economic History Review* 23, 314-32

Peake, A.S. (1926) *The life of Sir William Hartley* London: Routledge

Perren, R. (1995) *Agriculture in depression, 1870-1940* Cambridge: Cambridge University Press

Pratt, E.A. (1906) *The transition in agriculture* London: Murray

Routledge, J. (1868) The food supply of London (No. II), *Contemporary Review* 9, 502-518

Samuel, R. (1977) Steam power and hand technology in mid-Victorian Britain, *History Workshop* 3, 6-7

Slaven, A. and Checkland, S. (Eds)(1986-90) *Dictionary of Scottish business biography, 1860-1960* Aberdeen: Aberdeen University Press

Spencer, C. (2002) *British food* London: Grub Street

Torode, A. (1966) Trends in fruit consumption, pp 115-34 in Barker, T.C., McKenzie, J.C. and Yudkin, J. (Eds) *Our changing fare* London: MacGibbon and Kee

Whitehead, C. (1878) The cultivation of hops, fruit and vegetables, *Journal of the Royal Agricultural Society of England* 14, 455-94

Winstanley, M.J. (1983) *The shopkeeper's world 1830-1914* Manchester: Manchester University Press