THE INDUSTRIALISATION OF THE LONDON BREWING TRADE: PART III

ALAN PRYOR

Chapter Six : A Knot of Rich Quakers; Brewery Management

In 1781, when London's second largest brewer, Henry Thrale died, his widow was so relieved to find a buyer with sufficient money to buy the brewery that she claimed that, 'God Almighty had sent us a knot of rich Ouakers'. The fact that it took the combined resources of an important Quaker banking family is indicative of the scale of porter-brewing by this time. The growing wealth of the London porter-breweries began to attract bankers and industrialists who were interested in long term investment opportunities. The seasonal nature of brewing meant that there were periodic fluctuations of capital which made banking a natural adjunct to ensure a smoother path to liquidity. Links between brewing and banking had been growing in the eighteenth century with many brewers using the rest period to branch into banking activities when their coffers were full.² On the other hand some brewers brought bankers in as sleeping partners, to guarantee funds in times great outlay when the price of malt and hops were unusually high.

Porter consumption had been rising since the end the 'Gin craze', and the industry had reached a maturity that brought new problems of management and continuity. Family ties were the traditional method of transferring ownership from one generation to the next. However, the lack of a male heir sometimes necessitated partnerships from outside the family which could create problems. With no precedents to follow, the leading London brewing dynasties each struggled to find solutions to these problems which were to become models of industrialisation. Thus, by the early nineteenth century there had been a dynamic change in the

management of London porter breweries, creating new types of corporate structures which we would recognise today. This chapter will illustrate this process by following the fortunes of some of the leading London porter breweries.

The capital porter houses of London

The annual brewers' list was placed in *The Times* and other contemporary newspapers and magazines such as *The Universal Magazine*, usually in July when the annual 'rest' began. The lists were often worded to look like official statements. However, they were in fact advertisements which were paid for by a trade levy on the amount brewed. By 1797 the annually promulgated list of porter-brewers had been reduced to a more manageable size than the original twenty four, finally settling on the twelve 'capital' porter houses of London which was published as in Table 7.

Further analysis of this particular list will reveal the wealth, power and status of these eighteenth century brewer-magnates. Samuel Whitbread had died in 1796, a wealthy landowner with an estate worth £400,000. He had married the daughter of Earl Cornwallis, and had been the M.P. for Bedford from 1768 until 1790 when his son took over the seat.³ Henry Thrale was MP for Southwark until 1780, the year before his death. Lack of a male heir necessitated the sale of the brewery which was partly executed by his friend Dr Samuel Johnson who, when asked the value of Thrale's brewery, offered the memorable reply, 'we are not here to sell a parcel of boilers and vats but the potentiality of becoming rich beyond the dreams of avarice'.⁴

Name	Barrels produced	
Whitbread	192,740	Chiswell St. Barbican
Thrale	147,590	Anchor Brewery, Park St. Southwark
Shum	119,820	Wood Yard Brewery, Castle St. Long Acre
Hanbury	117,180	Black Eagle Brewery, Brick Lane, Spitalfiels
F. Calvert	101,750	Hour Glass Brewery, Thames St.
Goodwyn	94,750	Red Lion Brewery, St. Katherines, Wapping
Meux	93,400	Griffin Brewery, Liquorpond St.
J. Calvert	70,000	Peacock Brewery, Whitecross St.
Clowes	58,680	Stoney Lane, Southwark
Elliot	55,800	Stag Brewery, Pimlico
Cox & Co.	46,100	City Rd., Old St., Shoreditch
Stevenson	45,810	Hore Shoe Brewery, Bainbridge St., St. Giles

Table 7. Statement of the Porter brewed by Twelve First London Brewers for the Year 1796.⁵

George Shum had made his fortune as a sugar refiner before becoming a brewer and M.P. for Honiton.⁶ Sampson Hanbury was connected by marriage to his partner Sir Thomas Buxton who went on to become MP for Weymouth.⁷ The Calvert family were well represented in Parliament with Nicholson Calvert standing for Hertford and John Calvert for Huntingdon.⁸ Finally, Meux had the services of their new partner Sir Robert Wigram, wealthy ship-owner and M.P. for Fowey, with a personal fortune of £500,000.⁹

Examination of each brewery's progress will reveal the difficulties in maintaining managerial control and continuity in the second half of the eighteenth century.

The Red Lion brewery, St. Katherines

Sarah Parsons died in 1759 and the Red Lion brewery passed to Sir John Hynde Cotton. With no knowledge of

the trade, Cotton tried a succession of managers, who were equally unsuccessful. ¹⁰ He finally decided to bring in an experienced brewer as a partner, Samuel Dickinson, to run the business in 1771, but by 1774 he was made bankrupt. ¹¹ It took Cotton six years to get Dickinson out of the brewery, including a court action for trespass in 1778. ¹² By that time Cotton was in bad health, which he attributed to his financial worries at the Red Lion brewery. ¹³ Thus, in 1780, he retired from politics and business, handing over the Red Lion brewery to Henry Goodwyn, a brewer from nearby Ratcliff Cross. ¹⁴

Goodwyn was another innovator like Whitbread, whom he beat to become the first London brewer to install a steam engine in 1784. It was used to grind malt and pump water and 'was found to answer the purpose so completely, that the other principal brewers in London were induced to order similar engines from Soho'. ¹⁵ He also invented his own mashing machine to be driven by the steam engine, which was patented in 1797. ¹⁶ Goodwyn restored production to seventh position in the annual porter production figures by 1787. ¹⁷ The future of the Red Lion brewery was now assured, and went on to produce London porter well into the twentieth century.

The problems experienced at the Red Lion brewery forewarned of those to come at the other great porter breweries. Each in its turn, failed to pass the torch from one generation to the next, for one reason or another, including Thrale, Truman and Whitbread. Just as the London brewers had pioneered the industrialised production of porter, they now had to grapple with the problem of managing these vast undertakings. The hierarchical management structures created by the old patricians like Humphrey Parsons simply could not cope with the complexity of the modernised porter breweries. As the 'porter revolution' reached its maturity in the second phase of growth in the late eighteenth century, the London brewers were in unknown territory as they struggled to find new corporate ways of organising the administration of these industrial giants.

The Anchor brewery, Southwark

The Anchor brewery at Southwark was owned Henry Thrale, who was second largest London porter-brewer after his great rival Samuel Whitbread. 18 Thrale died

without a male heir. His chief clerk John Perkins wanted a partnership in return for his continued presence at the brewery. Thrale's widow, Hester, resisted Perkins's wish 'to force himself into partnership, though hating the whole lot of us'. 19 The matter was resolved when Perkins approached his wife's wealthy family, the Bevans, one of the richest banking families of the City, for the financial support for a management buy-out. Mrs. Thrale expressed her relief on the sale, stating that it had, 'saved me and my coadjutors from brewing ourselves into another bankruptcy'. 20

The purchasers were the partners in Barclay's bank, Sylvanus Bevan and David Barclay, who bought the brewery for £135,000 which Mrs Thrale described as 'a prodigious bargain'. 21 David Barclay's nephew, Robert Barclay was installed as the managing partner and John Perkins was rewarded with a partnership in charge of brewing operations. A deposit of £30,000 was borrowed from the Norwich banker John Gurney and the purchase was spread over four years when the name was changed from H. Thrale & Co. to Barclay, Perkins & Co.22 A programme of expansion was then instituted funded by a further long-term loan of £20,000 from Gurney.²³ The Anchor brewery was now seen as a safe repository of investment funds. The leading porter breweries had now attracted wide circle of Quaker banking families who were related by marriage, including the Bevans, Barclays and Gurneys, and even their arch-rival Sampson Hanbury at the Black Eagle brewery, who was married to a Gurney.²⁴ Quaker dynasties like the Barclays, Hanburys, Buxtons and Pryors were able to provide greater continuity than Humphrey Parsons, Henry Thrale and Benjamin Truman.

The Wood-Yard brewery, Long Acre

The Wood Yard brewery, Long Acre was the third largest London porter brewery.²⁵ It was there that another head brewer reached the highest level of management in 1787. Joseph Delafield had worked for Samuel Whitbread for twenty three years to become his head brewer, when he was offered a partnership in a new concern to buy the Wood Yard brewery on the death of its proprietor, Mrs. Gyfford. Delafield was recruited for his technical expertise by his brother-in-law, Harvey Combe a malt factor of Upper Thames Street.²⁶ Once again family ties were an important factor in commer-

cial relationships, giving the necessary degree of trust to begin a new venture. Combe's mother was related to Nathaniel Jarman who was the leading London sugar refiner at the time.²⁷ The Jarman family had maintained a connection with the Wood Yard brewery from the 1739 and on learning of its impending sale, introduced his friend and fellow sugar refiner George Shum, to Combe with an investment opportunity to provide the backing for the asking price of £90,000.²⁸ The Wood Yard brewery under the new management of Shum, Combe & Delafield immediately increased production to 100,100 barrels of porter in 1788, overtaking the Black Eagle brewery to rank fourth behind the leading London porter-brewers.²⁹

The Black Eagle brewery, Spitalfields

Sir Benjamin Truman's Black Eagle brewery was located in Brick Lane, Spitalfields and was ranked fourth largest London porter-brewery.³⁰ It maintained a consistency in porter production figures unmatched by other breweries for over a century, despite interruptions in the continuity of its management. The brewery ranked third in the production of London porter in 1760, rising to first place by 1850,31 going on to become the biggest brewery in the world in 1873.32 Truman, who came from Quaker stock, was an exemplar of the protestant work-ethic who ploughed the profits back into the business. This was an age when the size of the brewery had not yet become unmanageable for one man, and Truman's records show a close attention to detail regarding the prices of malt and hops. As a porterbrewer, his philosophy was maximise profits from a low-value beer with small margins, using high volume production methods that minimised waste.

In the area around the Black Eagle brewery, new applicants were unlikely to obtain a licence without the endorsement of the brewery, which was given in return for an agreement to take their porter exclusively. Publicans were supplied on a month's credit. Inevitably this led to bad debts in some cases, which the brewer could choose to incorporate into a loan in return for holding the lease, but it meant the end of free choice for the publican. The increasing costs of fitting out a public-house and gaining a licence gradually gave rise to an informal system whereby the incoming publican applied for his loan from the start.

Thus, growth at the Black Eagle brewery was linked to the acquisition of tied-houses, which was an expensive business. Despite Truman's wealth, the business was often short of working capital like many of the large breweries, so in 1767, he took his brother-in-law, John Baker, as a partner. Baker was a perfect choice, a family member with his own money and a staunchly protestant Huguenot. He brought a string of public-houses in Spitalfields and £33,000 investment to the business, 33 but as a master silk weaver employing over 75 weavers, he was content to leave the management of the brewery to Truman.

There may have been additional reasons for this development. Truman's wife had died in June 1766,34 followed shortly by his only son in November.³⁵ Truman now had to look to the next generation for continuity. He placed his faith in his grandson, William Truman Read, to be groomed as his successor, but the evidence indicates that he was an unenthusiastic trainee. Truman was confronted with the problem of succession, which was familiar to many industrialists of the time. In an age when family ties were vitally important in securing trustworthy partners, the sudden death of an heir, was a threat to brewing dynasties like the Trumans. His answer was to draw up a complex and detailed will of fifteen pages, giving directions for the management of the brewery after his death. Read was to be given a small share in the brewery and was to represent the Truman family as the head of the brewery. However, he named his head clerk, James Grant as his executor, saying, 'He will be well qualified to conduct my trade upon the same plan as it has been carried on for years past'.³⁶ This was a stop-gap measure, for a longer term solution Truman placed his hopes on his two great-grandsons, John and Henry Villebois aged seven and three respectively, the sons of his granddaughter Frances and her husband William Villebois. The will dictated that, 'my said two great grandsons, the Villebois, are to be bred up to the business'.37

When Sir Benjamin Truman died in 1780, he had left the running of his brewery to his chief clerk James Grant. Truman had left generous amounts from his personal fortune to his immediate family, but only a minor share of the business to his grandson William Truman Read, who represented the Truman family at the brewery, until the Villebois brothers came of age.³⁸ In 1788, Read he sold this share to Grant, who he had left to run the brewery on his own,³⁹ but he still represented the

brewery on ceremonial occasions, being elected the Master of the Brewer's Company for the year 1793.⁴⁰

Grant did not enjoy his status as partner for long, dying in 1789.⁴¹ In his will, he stipulated that the shares he had bought from William Truman Read should be sold, and that, 'the first preference of my share should be given to any of the grandchildren or great grandchildren of the late Sir Benjamin Truman'.⁴² None of the family chose to buy this share which was duly sold to Sampson Hanbury, the youngest son of Osgood Hanbury from Coggeshall in Essex who had married Mary Lloyd, sister of Sampson Lloyd, the founder of Lloyd's bank of Birmingham.⁴³ The Hanbury family had made their money in tobacco, before moving into banking and brought much needed capital to the Black Eagle brewery.⁴⁴

On the face of it, the acquisition of a partnership by James Grant at the Black Eagle brewery seems to be similar to that of John Perkins at the Anchor brewery. However, there was a fundamental difference. Perkins knew how to brew, whilst James Grant, who was head clerk, did not. Truman specifically stipulated that even his trusted servant Grant was to have no part in the actual brewing process, when Truman stated that 'it is not my intention that he should interfere or direct in the brewing branch of my trade'. 45 Truman paid little attention to the need for continuity in that sphere, merely stating, 'if one of my brewers should die, one of my storehouse clerks should be trained to fill up the place'.46 This was borne out by John Richardson in his important work on brewing The Philosophical Principles of Brewing, first published in 1788, he criticised the brewing industry on this point, saying:

the acting brewer being no other than one of the common servants of the office, preferred to this charge on the sole consideration of his having been employed in the brewhouse somewhat longer than his fellows; whence arises those disagreeable qualities so often complained of in the beer of many common brewhouses.⁴⁷

With so little significance attached to the brewing process, it is unsurprising that complaints about the quality of porter were rising.

Sampson Hanbury brought stability to the brewery, taking 16 years to build up his share of the business from one eighteenth to one third by 1805. This left the two

sleeping partners, John and Henry Villebois with one third each. In 1808 Hanbury complained of the burden of running the brewery single handed to his sister Anna Buxton. She persuaded him to take her son Thomas Fowell Buxton into the firm, reminding him that he could keep the family represented at the brewery if Hanbury was to die. 48 Hanbury offered his nephew a position keeping the ledgers with the promise of a partnership after three years' probation. 49 This promise was duly honoured and the Black Eagle brewery traded under the new name of Truman, Hanbury & Buxton.

Buxton reflected on the miserable state of the brewery and thought that the only way forward was to return to the basic principle of brewing good beer. His daughter described this as follows:

Another grand reform he introduced in imitation of Barclays was the system of making a good article- at all events making the beer good if they made no profit. But the profit soon came, for the character of their beer rose- custom increased and it was the right system. Barclays began this first. They followed and now it is followed by all the London brewers. ⁵⁰

The problem for Truman, Hanbury & Buxton was to find someone with brewing experience who could be trusted. When their head brewer left they had trouble replacing him and thought that they needed a partner rather than a brewer with a large salary.⁵¹ By 1815 the need for someone brewing experience had become critical when, 'a large quantity of beer was sent to the vinegar vards at City Rd. & Westminster, 30 barrels at a time'.52 However, they had a stroke of good fortune in 1816, when neighbouring brewers Robert and Thomas Pryor at the Bell brewery, Shoreditch were unable to renew their lease and asked to join Truman, Hanbury & Buxton as partners. Thomas Pryor was married to the daughter of the City banker, Samuel Hoare junior, a Quaker who was related to the banking families of Gurney, Barclay and Buxton.53

Hanbury saw this connection as vital source of capital which he thought to be, 'positively necessary'.⁵⁴ However, he thought their brewing experience was even more important, saying:

one of these gentlemen is particularly competent if not both ... I see no regret in adding those who will bring abilities we do not possess, we allude chiefly to brewing and the manage-

ment of beer - we feel this more because since Christmas we had more trouble about our beer than we ought to have and we could continue to bear 55

The Pryors' offer was accepted and their business merged with that of the Black Eagle brewery. Robert was bought in to manage the brewery, but he was not made a partner until 1821 after the death of his brother Thomas.⁵⁶

Under Robert Pryor's management the Black Eagle brewery prospered, as the quality of the beer improved, overtaking Whitbread and Shum, Combe & Delafield to become London's second greatest porter brewery.⁵⁷ Despite this success, Pryor's partnership status was always second class and his name was not added to those of Truman, Hanbury & Buxton. Sampson Hanbury brought another nephew, Robert Hanbury into the firm in 1820, who gradually took over Pryor's role in the 1830s. Sampson Hanbury died in 1835,58 which precipitated a power struggle in the boardroom. Thomas Buxton and Robert Hanbury managed to get their sons in to the partnership in 1836,59 but when Robert Pryor tried to get his nephews Henry and Robert Pryor in to the partnership, he was opposed by the Hanburys and the Buxtons. Things came to a head in 1837, when the board, excluding Pryor, resolved that:

Mr. Henry Pryor shall neither now or any future time be a partner in our brewery. That we will take his brother Mr. Robert Pryor for a trial for a year and if his conduct is satisfactory we will consent that he shall become an acting partner. 60

On hearing that his brother Henry had been refused, Robert Pryor junior walked out of the firm leaving his uncle, Robert Pryor senior, alone on the board. Pryor then tried to introduce another nephew, Arthur Pryor, but was again opposed by the Hanburys.⁶¹ Eventually, after Robert Pryor died in 1839, the board were forced to accept at least one of the three nephews who had each been nominated in turn by Pryor to succeed him.⁶² Two months later, they reluctantly accepted Arthur Pryor as, 'partner on probation'.⁶³

The Griffin brewery, Clerkenwell

There is no better example of the changes in brewery management structures in the late eighteenth century, than the Griffin brewery. Richard Meux was a new entrant to the brewery trade in 1757, taking a partnership with Mungo Murray at a brewery in Seven Dials. After that burnt down in 1763, they built a new brewery called the Griffin brewery in Liquorpond Street, Clerkenwell. It was a small concern, producing about 10,000 barrels a year,64 until they acquired the 23 public-houses from the Hucks family who were retiring from brewing about 1780.65 Hucks's brewery in Bloomsbury had been ideally placed to serve substantial public-houses in the West End and with these new customers to serve, the Griffin brewery began to grow. By 1787 it was the seventh largest porter brewery in London, producing nearly 50,000 barrels in that year.⁶⁶ Meux took a new partner in 1792, Andrew Reid, who had Irish connections which helped to increase exports of porter to Ireland.⁶⁷ Trading as Meux, Reid & Co., the Griffin brewery was rebuilt with the addition of the largest porter vat in London. An aggressive programme of procuring tied-houses resulted in the acquisition of the leases of more than a hundred public-houses over a wide area, including Plumstead, Greenwich, Dartford, Shoreditch, Kentish Town and Poplar 68

At the turn of the century the company was completely re-organised. Richard Meux retired and left the management of the brewery to a team consisting of his three sons, Richard, Henry and Thomas. Reid continued as senior partner and his son John joined the company which was valued at nearly £500,000. £100,000 of new money was brought in from Robert Wigram, one of the largest ship-owners and ship-builders in London. 69 Production rose as Meux, Reid & Co. overtook Whitbread, Thrale and Hanbury to become London's largest porter-brewer with over 170,000 barrels produced in 1803.

There were problems with the new board which are indicative of the change from the relatively amateur style of a patrician figure like Richard Meux senior, to a more professional approach required by a major investor like Robert Wigram. The three Meux brothers lacked experience and were said to argue constantly, to the despair of Wigram. Matters came to a head in 1807 when the eldest son Richard was declared insane. It then came to light that the youngest son, Henry had secretly become a partner with one of the company's broad clerks, James Deady, in a distillery, Deady & Co. Furthermore, they were acting as agents for this distillery in the company's public-houses, espe-

cially those with a small turnover which were little more than gin-shops. ⁷² Publicans were offered large loans in return for dealing exclusively with Deady & Co. for their spirits, which collectively amounted to £167,000 of the company's money. ⁷³

Henry Meux claimed in his defence that he was compelled to use this money to buy up more leases of public-houses due to competition from the new Golden Lane brewery which was selling porter at a halfpenny less than the usual price.⁷⁴ There may have been some truth in this. Many of London's porter-brewers scrambled to buy up public-house leases in order to resist the inroads of the Golden Lane brewery. In 1807 it became the fourth largest porter-brewery after only two years trading. 75 Meux, Reid & Co., now had the leases of 162 public-houses on their books, more than their main competitors, Whitbread & Co., Barclay & Perkins, and Truman, Hanbury & Buxton.⁷⁶ Whether Henry Meux had defrauded the company in spending £167,000 on tied-houses or not, is impossible to say. However, what is apparent is the complete lack of financial scrutiny within the company in finding that amount of money to be missing. Clearly, the corporate management of the London brewing trade still needed much improvement.

The rift in the company was now so great that matters could only be resolved in the high court. The Lord Chancellor decreed that the Griffin brewery should be sold and the proceeds be distributed between the partners. Two of London's leading brewers, John Martineau of Whitbreads and John Calvert, were appointed by the court to run the brewery while the legal arguments continued. The brewery, which was to be sold by auction, was described as follows, 'this house has for these past ten years paid annually into their banker's hands from £500,000 to £800,000'. The It was sold for £173,360 to a bidder who was a nominee of Reid, Wigram and Thomas Meux.

It had been necessary to recruit fifteen new partners to help finance the purchase. 80 This made a total of 20 partners in all, which would have been an even more cumbersome in operation. However, lessons had been learned and only five partners, who were termed 'directors', were to be concerned with the management of the brewery. Provision were also made for partners to check on each others actions and on brewery expenditure, but the division of responsibility for departments continued

to rest with individual directors. The brewery soon returned to profitability but problems returned with complaints of bad beer. The brewing department was under the management of Thomas Meux, who constantly over-ruled the head brewer, William Prior. In 1813, Thomas Meux was prosecuted by the excise for using, 'certain material and ingredient other than malt and hops'. 81 The material in question was salts of tartar, used for correcting acidity in the beer and 'throwing a good head on porter'. 82 Prior resigned soon after, and Thomas Meux was voted off the committee of directors to restrain him from entering the brewing department. 83

Once again, difficulties in management had resulted in a reduction in the quality of the porter. Brewery employees were paid well enough. An experienced brewer from nearby Charrington & Co.'s brewery was brought in to replace Prior at £800 a year, more than was paid to Thomas Meux as a director.84 When the head clerk died in service in 1811, his estate was worth £30,000.85 It was management style that was at fault. The committee had allowed Thomas Meux a free hand in the brewing department which proved disastrous, as it had when his brother Henry had gone unchecked in the property department. Eventually, Thomas Meux withdrew from the company, the name was removed and henceforth the Griffin brewery traded as Reid & Co.86 Henry Meux was bought out of the company for £67,000.87 He took the money and with the help of his father, Richard Meux senior he began a new venture in rebuilding an existing brewery in Tottenham Court Road, renaming it the Horse-shoe brewery.88

Henry Meux took James Deady with him as a partner, later joined by the brewer William Prior and eventually, his brother Thomas Meux. In his first year of trading, Meux produced 40,663 barrels at the Horse-shoe brewery in 1809 compared with 150,105 barrels produced at the Griffin brewery. 89 In 1811 Meux produced 102,493 barrels to be ranked sixth largest porter-brewer against the Griffin brewery's second place with 188,978 barrels. 90 Clearly, Henry Meux was back in business for the mass production of porter, a position he held for the next 30 years.

The White Hart brewery, Moorfields

The White Hart brewery, more commonly known as Mr. Whitbread's brewery due to his longevity, was located

in Chiswell Street, Moorfields. Samuel Whitbread had dominated the porter-brewing industry for nearly 40 years, creating the greatest brewery in England, by the time he died in 1796.91 During that time he had pioneered changes in brewing and amassed a vast estate in Hertfordshire. However, he had one great disappointment in that his son showed no interest in the brewery.92 Martin Wiener describes how the children of businessmen were only accepted by the upper class if they discarded their production-oriented culture in *English Culture and the Decline of the Industrial Spirit 1850-1980*. He describes the process of gentrification as follows:

as capitalists became landed gentlemen, JPs and men of breeding, the radical ideal of active capital was submerged in the conservative ideal of passive property, and the urge to enterprise faded beneath the preference for stability.⁹³

Samuel Whitbread junior had been educated at Cambridge, had done the 'grand tour', and was more interested in a career in politics than business. In 1791, Whitbread senior finally accepted it and put the brewery up for sale. Negotiations with interested parties continued over several years but none came to fruition before Whitbread died. The problem had been that he wanted £300,000 for the business, which no-one could afford. There were many that would have paid to become a partner, but Whitbread was a self-made man who could not bear to share his life's work with anyone other than his son.⁹⁴

Thus, Samuel Whitbread junior had no choice but to take up the brewing trade. He sought to distance himself from it as far as possible by bringing in various partners for financial support. The most important of these was a merchant banker Timothy Brown, who bought a third of the company for £100,000, which brought relief to the financial situation. However, in 1799 the price of malt and hops rose sharply and the malt duty was increased. Production was reduced to 137,000 barrels, back to the level of 1785. As a result, the head-brewer David Jennings resigned, to be replaced by Samuel Green. How the same sharple in the same sharple is to be replaced by Samuel Green.

Output continued to fall throughout the decade until 1809, when only 100,275 barrels were produced. Relations between Whitbread and the main investor Brown had deteriorated to the point that the banker wanted to withdraw his investment. As a price could not

be agreed, an independent arbitrator was appointed, another brewer, John Martineau. ⁹⁷ The price was finally resolved at £50,000 and Brown left the partnership in 1810. Throughout all this time the head-clerk Robert Sangster, who was also a minor partner, had loyally stayed at his post even though he was growing too old for the responsibility. ⁹⁸ None of the other partners had any idea or interest in how to run the brewery. Green, the replacement brewer had proved to be incompetent and was eventually dismissed. The fortunes of the White hart were at an all time low, what was needed was a man with brewing experience not just another manager.

Sangster decided to approach John Martineau, who had arbitrated in the departure of Brown, with an offer of joining the company. John Martineau and his two brothers. David and Peter were partners in a brewery on the Thames at Lambeth, which was much smaller than the White Hart. Like Whitbread they were forced to take action in the face of high prices in 1799. The Martineau brothers' response was to diversify into sugar-refining in 1800. In 1810 they moved larger premises in Shadwell, and John dropped out of the partnership, leaving David and Peter Martineau to pursue a successful trade as sugar-refiners. 99 John continued at the Lambeth brewery where he was considered a first rate brewer and much respected in the trade. 100 He had represented the brewing trade on a committee to consider brewing from sugar, 101 and was also appointed by the high court to manage the Griffin brewery during its break-up. In 1812 the two companies merged as Whitbread, Martineau & Co., the Lambeth brewery was closed and their customers were brought on the books of the White Hart. 102 The brewery returned to prosperity and continued brewing successfully. It was a portent of the future as mergers and takeovers became a feature of the London brewing trade in the nineteenth and twentieth centuries.

One thing remains to be said about the financial difficulties of the White Hart brewery. Not once did Whitbread put money into the brewery himself. He was more interested in politics and the life of a country gentleman than the brewery, which was just a means to an end. His money was invested in his country estate at Southill in Bedfordshire, which was redeveloped by Henry Holland, 'regardless of expense'. ¹⁰³ This ostentatious display of wealth did not go unnoticed by the population. Porter-brewers were beginning to be singled out for the attention of a rioting crowd, when the house of

Henry Meux was attacked on 8 March 1815.¹⁰⁴ Four months later, when Samuel Whitbread was subjected to public abuse from footmen in Drury Lane, he confided to his companion, that he was worried that, 'the populace will pull down my house'.¹⁰⁵ The next morning he cut his throat with a razor.

The Golden Lane brewery, Barbican

The opening of the nineteenth century was a period of national emergency. Wartime conditions brought an end to the long period of price stability and the price of porter rose from $3\frac{1}{2}$ d. a quart in 1799 to $4\frac{1}{2}$ d. in 1802. In 1803 the price rose again to 5d. and then in 1804 the price jumped to 6d., causing widespread complaint against the porter brewers. ¹⁰⁶ There followed a revolutionary event in brewing history, the creation of a new company to rival the oligarchy of the London porter brewers. It was called the Golden Lane brewery.

In 1804, William Brown and Joseph Parry began their new enterprise, with the purchase of Gideon Combrune's old brewery in Golden Lane, Barbican. William Robert Henry Brown, who was the driving force in this partnership, had enjoyed a long association with London's publicans. He had been the secretary of the Society of Licensed Victuallers Society when it founded the *Morning Advertiser* in 1794.¹⁰⁷ He named the new concern the 'Genuine Beer brewery', but it was more usually known as the Golden Lane brewery.

The new brewing company was different from the others, instead of capital accrued from an established brewing dynasty it was funded entirely by public subscription. The proprietors proclaimed that they were 'determined to deliver to the public an unadulterated brewage under the name of *Genuine Beer*'. ¹⁰⁸ The brewery was furnished with a signboard displaying the motto, 'Pro Bono Publico'. ¹⁰⁹ In an age where advertising was non-existent, this was a clear attempt at creating an image for the new concern.

There had been little prospect of achieving the status of an incorporated joint-stock company, as the necessary parliamentary approval would certainly have failed at the hands of the brewers in parliament. Thus subscribers, by purchasing share certificates in units of £50, were deemed to be partners in the new unincorporated joint-stock company. 110 Another reason for their reluctance to seek a charter was a more general resistance to large mechanised projects in the metropolis, since the destruction of the Albion Flour mill by fire in 1791. The fire was a notorious spectacle. It burned with great intensity and was quite beyond the capacity of the rudimentary fire services of the time, leaving a legacy of disquiet about future industrial projects in the centre of town. 111

The proposed Golden Lane brewery scheme also had other critics. This was a time when joint-stock companies were being presented to the public on a weekly basis, many of them fraudulent. Many companies adopted similar titles to that of Brown and Parry, The Genuine Wine Company, The London Genuine Malt Distillery and The Genuine Wine and Foreign Spirit Company are just a few examples. 112 They were the subject of much ridicule in the press where they were likened to the infamous South Sea Scheme of 1720 and lampooned as follows:

At a certain (sham) place, on Tuesday next, books will be opened for the subscriptions of two millions for the melting down of sawdust and chips, and casting them into deal boards, without knots or cracks. 113

Brown and Parry were subject to similar suspicions when they advanced other ventures, The London Bank, capital £5,000,000, shares £100 each, and The Hope Assurance Company. Brown was described as 'a gentleman who has his pigeonholes filled with new schemes, to be brought out one after the other'. 114 The subscribers to the Golden Lane brewery were also the subject of similar scornful comments, being described as:

... a Joint Stock Company of Publicans! Now more deeply and irrevocably tied down to a particular brewery, than they were before to a brewer. They cannot help themselves; they must take their beer from their own brewery, however wretched the trash may be; for every one of the subscribers is liable to the last shilling for the whole transactions of the Company. 115

This was a reference to Brown's long association with publicans, but also reflects the fact that many of the subscribers were publicans.

From the beginning it is clear that his purpose was to bring down the price of porter, being described in a *Times* editorial as follows:

... it was set on foot by Mr Brown in 1804, at a time when the opulent London Porter-Brewers made an attempt to raise the price of porter to sixpence a quart, and which the establishment of the Golden Lane brewery entirely prevented by effecting a competition with the trade at large, which until then had been monopolized by persons of wealth and onulence. 116

Although the brewery did not produce porter until 1805, the effect on the price had been immediate. When the porter-brewers heard of the new competition, they took a full penny off the price. 117

The Golden Lane brewery scheme came to fruition in 1805. They had realised from the start of the difficulties which they would encounter from the established oligarchy of the London porter brewers. Their plan was to establish a large-scale, modern porter brewery which could produce better quality beer for a lower price. ¹¹⁸ A 36 horse-power steam engine was installed, which dwarfed those in use in the main porter breweries. Whitbread, Thrale, Calvert and Clowes each had engines of 10 horse-power. ¹¹⁹ The only way to raise the capital for that degree of investment was by public subscription.

Many of the subscribers were publicans and the success of the first full year of brewing placed them eighth in the list of leading porter brewers with a production of 57,404 barrels in 1806.¹²⁰ The following year saw them go to fourth place, overtaking such established brewers as Whitbread, Shum, Goodwyn and Calvert. In 1808 they passed Hanbury to take third place in the league table, producing 131,647 barrels of porter.¹²¹ The six month period between July 1806 and January 1807 was particularly intense when their production figures took them to second place to Meux, Reid & Co., at which point it was decided to only supply public-houses that took their beer exclusively.¹²²

In 1807 the Commissioner of Excise withdrew the allowance for spillages and waste that was only extended to common brewers. The reason given was, that because 120 of the company's 600 subscribers were publicans, the owners of the Golden Lane brewery were deemed not to be common brewers. They were regarded as retailers who were selling their own beer and were therefore liable to the full duty. 123 In defence Brown contended that the subscribers who were publicans paid

exactly the same as 'any indifferent person', that bought beer from the brewery. 124 Brown claimed that the case had been orchestrated by the other porter-brewers and eventually won his case in court, which was worth around £6,000 a year with the resumption of the allowances. 125 However, the legal costs were high and the case had revealed that the company, not being an incorporated body, was vulnerable to such legal attack.

The Golden Lane brewery was beset by rumours of the adulteration of their beer from the start. In April 1806 they offered a reward of £50 to any one who could give information on the source of a report circulating that officers of the Excise had seized a quantity of 'pernicious ingredients' from the brewery and that also of, 'the many other reports which enemies of this concern are daily propagating to prejudice the public mind against it'. ¹²⁶ In May 1809, officers of the Excise, acting on information, did indeed enter the brewery. Brown and Parry immediately issued a statement:

... lest any report be circulated to the prejudice of the concern; they understand that for nearly a month the avenues to their premises have been watched; they have no objection to the same vigilance being continued ... that the beer produced by them shall be the sole production of Malt and Hops. ¹²⁷

In fact the Excise officers had removed six barrels of finings from the brewery, which they deemed to be an illegal ingredient. This was because it was a substitute for Russian isinglass which had become expensive and scarce. The substitute, called British isinglass, had been developed by the famous inventor William Murdoch whereby fish skins were sieved into a mixture of stale beer and vinegar. 128 The committee of the porter brewers had paid Murdoch £2,000 for the rights to use his recipe and a manufactory was opened in Golden Lane to produce it on a commercial scale. 129 Brown and Parry were the first to use it and were 'immediately pounced upon by the Excise', but were 'triumphantly acquitted'. 130 Again, the legal costs were high and the reputation of the Golden Lane brewery continued to sustain attacks from the established brewers.

There was increasing public concern over the new joint-stock companies like the Golden Lane brewery which was reflected in May 1808 with the prosecution of Ralph Dodd, an entrepreneur not unlike Brown and Parry, held to be in contravention of the 'Bubble Act' of

1720. The court declared Dodd's project was 'mischievous' and should serve as a warning to joint-stock projects of a similar nature. ¹³¹ After the Dodd prosecution, there followed a stream of cases against similar unincorporated companies, the British Ale Brewery, the Globe Insurance Company and in 1812, the Golden Lane brewery. ¹³² In this case, *Brown v. Holt (1812)*, the proprietors of the Golden Lane brewery were trying to recover a debt from Holt who claimed in defence that the company was a public nuisance under the 'Bubble Act'. ¹³³ Brown had lent the money to Holt to furnish a public-house. The court acknowledged that the Golden Lane brewery was a nuisance because they had opened a subscription for shares which were transferable, but they refused to set aside Holt's confessed debt stating:

... that they refused however, in a matter of so great importance, considering how much property was at this time was embarked in speculations of a like nature, to entertain the question on this summary proceeding. 134

One interesting point that arises from this case, was that Brown and Parry had been making loans to publicans, and were involved in 'tying' public-houses in the same way as the other big porter-brewers.

However, the judgement highlighted the company's difficult legal position, particularly in prosecuting debts through the courts. In February 1809, Brown and Parry had petitioned Parliament for more corporate power with the right to sue in the name of the company. The matter was deferred to a committee then quietly dropped. ¹³⁵ In March 1814 another bill was presented to the House of Commons to enable the proprietors to be able to sue in the name of the secretary. ¹³⁶ At the second reading in May an amendment forced a delay of six months. ¹³⁷ The porter-brewers' parliamentary power was now being exercised to the full and the bill never reached the second reading.

The second application was in the name of the secretary because Brown and Parry had been replaced. The new managing partners, J. Cox and J. Campbell, had taken over the management after the 1812 court case. ¹³⁸ The company was now in serious financial trouble as production continued to fall from 51,974 barrels in 1812 to 36,101 barrels in 1816. ¹³⁹ Initially, Brown and Parry had paid large dividends which Cox considered to be responsible for the financial difficulties of the company

by reducing the liquidity of the company at the same time as rising prices for malt. 140 The commitment to sell at 5s. a barrel lower than their competitors meant that company was left with no option other than to reduce the strength of their porter. 141 This led to complaints from publicans and further losses of sales. At one stage, the brewery was left with 40,000 barrels of porter which they could not sell, it was eventually bought by a rival brewer for half price. 142

After the accession of Cox and Campbell, dividends were small or not paid at all, and shares were changing hands for as little as £8.¹⁴³ The company was still plagued with rumours which necessitated the following statement in 1817:

 \dots a malicious and injurious report has been circulated by the of this concern, stating that the GOLDEN LANE BREWERY has been SOLD, which report is utterly without foundation; and has evidently been invented to drive customers into other trades. 144

However, this was not successful in stopping the decline and the partnership of Cox and Campbell was dissolved in 1819.¹⁴⁵ By the 1820s the company no longer appeared in the annual list of porter production and was finally put up for sale in 1826.¹⁴⁶ A public meeting was held at the London Tavern in 1828 when disgruntled shareholders insisted that reporters were allowed in:

... as a caution to the public how they trusted their property under the management of directors and joint-stock companies, if publicity had been given to former meetings the proprietors would not have to lament the loss of their splendid capital of near four hundred thousand pounds ... a vote of censure proposed on the directors for dividing amongst themselves the salaries of fifteen directors and five auditors after the numbers had been reduced to nine directors and three auditors. 147

The brewery was demolished in 1829,¹⁴⁸ and the company began winding up its affairs in 1831.¹⁴⁹ Finally, a court of compensation met in 1832 to determine the residual value of the company's assets, which the jury determined to be 1,000 guineas.¹⁵⁰

The advent of the Golden Lane brewery is a classic story of mechanisation, industrialisation and capitalization, rather than that of free trade. William Brown was the driving force behind the venture and his aim was to carve out a portion of the lucrative business of brewing porter for the growing metropolis. His method was to raise capital by public subscription to invest massively in technology to reduce the cost of labour sufficiently to under-cut the prices of the established porter-brewers. He was entirely successful in achieving that aim, but did not foresee the managerial problems to be encountered in joint ownership.

The business affairs of the leading porter-brewers were conducted as gentlemen, where meetings were held at the Brewers' Hall or at each other's houses, and were always convivial. The collective shock at the arrival of Brown, who they regarded as a parvenu, must have been huge. They were not slow to respond, with various government agencies being used to prosecute the new brewery. Although the legal proceedings all failed, the brewers had successfully attacked the brewery's reputation, which was already vulnerable because the controversial status of joint-stock companies at that time. Brown did not help his case by his proclivity towards showy, innovative ventures. His ostentatious behaviour emulated that of Whitbread, Thrale and Meux when he organised a ball, 'in an immense vat of the Golden Lane Brewery, the company amounting to one hundred and fifty people'. 151

After his initial victory on price, Brown's determination to maintain a price difference of ½d. per quart pot lower than the established brewers, proved to be a millstone around his neck. The established porter brewers had vast reserves of capital to weather fluctuations in supplies of raw materials, whilst Brown had dividends to pay. The decision to pay high dividends highlights the managerial difficulties encountered by the new joint-stock companies, compared with cohesive policies of the patriarchal organisation of the established brewers. The proprietors of the Golden Lane brewery were unable to raise their price unless the rest did, and were therefore prisoners to the results of the price-fixing meetings of others and forced to make economies elsewhere by reducing the quality of the beer.

In later debates, the Golden Lane brewery was portrayed as a *cause celebre* for free trade, but Brown deployed many of the tactics of the porter-brewers 'monopoly'. Publicans were only supplied if they took their beer exclusively and many were tied with loans

or mortgages. However, there is little doubt that the example of the Golden Lane brewery led to early discussions on free trade. The London brewing trade was moving to the centre of that debate, which was not an abstract consideration of the principles of competition. It was grounded in the minutiae of the price and taste of porter, the conditions that accompanied its consumption and of course, the morality that surrounded it.

Summary

By the late eighteenth century, the London brewing industry was of national importance. The taxes on beer generated one quarter of Britain's tax revenue, which attracted political honours and influence. In 1784, the duty on beer raised just under two million pounds nationwide, of which a quarter was raised on beer produced in London.¹⁵² In 1780, the Stag brewery, Pimlico, was insured for a massive £47,000, when it headed a list of the Sun insurance Company's wealthiest clients, including Britain's merchants, bankers and nobility. 153 The London porter-breweries had developed into massive undertakings, operating on a scale far beyond their competitors, with the three leading breweries producing a quarter of London's annual porter production of over 1½ million barrels. 154 When Henry Thrale died in 1781, his widow sold the Anchor brewery for £135,000,155 when the largest steam-powered cotton mills in Lancashire could be bought for a little over £10,000.156

The management of London's porter breweries was in a state of transition. The administration of these large concerns were now beyond the capability of a patrician gentleman-brewer with a legion of clerks to support him. Partnerships were seen to be the answer, but the delegation of responsibility to individual partners brought its own difficulties. The problem with taking in partners was finding the right ones, and each brewery had to find its own solution. Multiple partnerships proved to be unwieldy, as at the Griffin brewery, where we saw the emergence of the committee of directors. Even that did not prevent the debacle of the prosecution of the company and a long wrangle to remove the culprit from the board. The Golden Lane brewery proved no better than the others, eventually choosing the easier option of a reduction in the quality of beer which was supplied to tied-houses. Bad management led to bad beer at the Golden Lane brewery, just as it did at the Red Lion, Black Eagle, Griffin and White Hart breweries and many others. Collective responsibility for the execution of the various processes associated with porter brewing was difficult to achieve. These were the first faltering steps in the development of corporate structures by an industry which was far ahead of other businesses in the manufacturing sector.

Chapter Seven: Porter, Monopoly and Free Trade

In the late eighteenth century the porter-brewers faced two problems, rising prices of raw materials and government interference. They dealt with the former by the application of scientific improvements wherever possible. The latter was addressed with collective action by the Porter Brewers' Committee. They were only partially successful in both areas. In this chapter we will follow the difficulties of the industrialisation process when it reaches a certain degree of maturity.

There was widespread criticism of the porter brewers in the first two decades of the nineteenth century. Wartime conditions demanded economies in production which led to complaints over the quality of porter. Price increases drew the inevitable accusations that the large porter breweries were fixing the price between themselves and making huge profits at the expense of the labouring classes. This led to a Select Committee on adulteration and monopoly in the brewing trade.

Politically, the London porter-brewers were forced on to the defensive, despite the weight of their parliamentary influence, as the emerging debate on free trade focussed on the drinking habits of the labouring classes. This eventually culminated in an unprecedented revision of the liquor licensing laws in 1830, despite the combined opposition of the brewers, publicans and licensing magistrates.

Transport improvements

Brown malt from Hertfordshire was the main raw material for the London porter-brewers. In 1751, it was reported that, '5,000 quarters of malt a week are sent to London by barge from Ware in Hertfordshire'. The barges carried the malt, 240 quarters at a time, down the

River Lea to its confluence with the Thames at Blackwall.² However, there had been an increasing problem with low water in the river, which was impeding the movement of barges at certain times. This was blamed on the extraction of water from the river by the New River Company at Ware. To solve the problem, Parliament passed an Act to set up the Trustees of the Lee Navigation which included representatives of all the interested parties of Hertfordshire. The London porter-brewers were represented by Ralph Harwood, Rivers Dickinson, Peter Calvert and Felix Calvert.³

Initially, the trustees were largely ineffective and there was little improvement, but the machinery for improvement had been put in place. John Calvert, of the Hour Glass brewery, became MP for Hertford in 1761 and led a campaign to canalise the Lea.⁴ He persuaded the trustees to approach the civil engineer, John Smeaton, to carry out a feasibility study. The scheme was presented to the House of Commons in 1766, where it was passed despite many objections. The work was carried out between 1767 and 1771 under Smeaton's general direction. Smeaton's original estimate had been for improvements for the twenty five miles from Hertford to Bow-bridge, at a cost of £23,000.5 However, the scheme was extended to include a new 1½ mile cut from the river Lee at Bromley Lock to the Thames at Limehouse Hole, costing £5,310.6

Despite the disproportionate cost of the Limehouse Cut, it went ahead because it was vital to their interests of the brewing trade which was now the predominant influence on the committee of trustees. The numbers of trustees had been expanded to include more representatives of the malting interest and their customers, the porter-brewers. This included John and Peter Calvert of the Hour Glass brewery, Sampson Hanbury and Robert Pryor from the Black Eagle brewery, Sylvanus Bevan and David Barclay from the Anchor brewery, William Prior from the Griffin brewery, George and Mark Hodgson from the Bow brewery and Samuel Whitbread senior and junior. The was a demonstration of commercial power, both within parliament and without. The new twenty seven mile water highway brought their main raw material from the barley fields of Hertfordshire and Essex to their doorstep in Limehouse basin. It was one of the first canals to be built in the country, and a prime example of London's industrialisation (see Appendix C, Brewery History No. 161, p.90).

Water supplies

Leonard Schwarz claimed that London's few large-scale manufacturers, including brewers, were to be found south of the Thames where water supplies were plentiful.⁸ Out of the leading 24 brewers listed in 1760, only one was south of the river. In 1786 it had only risen to four (see Appendix C). In fact, potable water fit for brewing, was available in the districts north of the Thames for those who could afford to pay for it.

The New River Company supplied most of London north of the river, and faced competition from lesser water companies in specific areas. The more important of these were the Hampstead Water Company in north London, the Shadwell Waterworks Company in east London, and the Chelsea Waterworks Company in west London. The London Bridge Waterworks was the sole supplier of Thames water to south London and a small part of central London along with the York Buildings Waterworks Company.⁹ However, the most important source of water for London brewers was from the reservoirs belonging to the New River Company.

By the early nineteenth century most of the porter breweries had opted for their own water supplies from artesian wells within the curtilage of the brewery. Some of the deepest wells in the capital were in breweries, listed as follows.

Brewery	Depth
Black Eagle: Brick Lane, Spitalfields	520 ft.
Stag: Elliot & Co., Castle St., Pimlico	390 ft.
Anchor: Barclay & Perkins, Park St. Southwark	367 ft.
Griffin: Reid & Co., Liquorpond St., Clerkenwell	260 ft.
Hour Glass: Calvert & Co., Upper Thames St., City	240 ft.
Wood Yard: Shum, Combe & Delafield, Long Acre	190 ft.
Horse-shoe: H. Meux & Co., Bainbridge St., St. Giles	180 ft.
White Hart: Whitbread & Co., Chiswell St., Moorfields	160 ft.

Table 8. Artesian wells in London breweries. 10

There were many problems with these wells, many of which had to be deepened as the supply of water diminished. The wells at the Hour Glass and the Anchor breweries were drawing from the same source, even though they were on opposite sides of the Thames; the two firms eventually agreed to pump on alternate days. 11 These installations did not come cheap. The cost of the well at the Griffin brewery was £7,000 and at the Black Eagle brewery it was £5,795.12 The cost of maintenance was also high, as many wells had to be deepened as subterranean water levels fell. 13 However, another advantage with water from wells was that its temperature varied from only 52° to 54° Fahrenheit from winter to summer. This offered the possibility of using this water to cool worts in the summer to allow brewing to continue all year round, a prize for which the porter-brewers were willing to pay a high price. 14

The brewery steam engine and other inventions

There were several inventions, called 'attemporators', patented in the late eighteenth century, which sought to exploit the cooling effect of water from artesian wells. Henry Tickell, a brewer from Whitechapel, was the first to patent a 'refrigerator' for cooling worts in 1804. 15 There were a succession of similar appliances in the next 20 years, which were all criticised as being difficult to keep clean. 16 The first to be a commercial success was the 'refrigerator' of James Yandall which was patented in 1826. It employed the conductive properties of thin sheets of copper to create a early example of an heat exchanger to cool worts. The brewing trade was now able to derive enormous benefits in production costs from brewing throughout the summer. 17

The most celebrated invention to be introduced to brewing was undoubtedly the steam engine. However, it was probably not the most important as it did little to alter the actual brewing process. Boulton & Watt were the first to manufacture steam engines to produce rotative power. Initially, these were just coupled to the horse wheel to carry out the same functions that the horse-engine had been doing throughout the eighteenth century. Henry Goodwyn at the Red Lion brewery was the first to buy a steam engine in London in 1784 for £750. This seems cheap in comparison with the price of a well, but it should be remembered that the only justification for its purchase was the replacement of

mill-horses. Many brewers were reluctant to relinquish the reliability of the horse-engine for the untried technology of the new 'fire engine'. There was no great incentive to invest in a machine that merely carried out the work done by the horses, which was to drive the grist mill and pump water and wort to where it was needed.

London was considered a lucrative market by Boulton & Watt and they were looking for a showcase for their product. There is a distinct impression that the Red Lion brewery was not considered the most prestigious of sites. When Goodwyn learned that Whitbread had also ordered an engine, he was forced to remind the Soho works that he would be greatly disappointed if, 'this Engine is not fixed by you before any other in the Brewing trade'. 19 In the event, Goodwyn got his steam engine a few months before Whitbread and honour was satisfied. Whitbread, MP and wealthy landowner, was considered the ideal customer, especially when the Royal Family visited the White Hart brewery to view the new wonder, as previously discussed. The royal visit of 1787, which James Watt attended in person to answer questions, was said to have, 'completely established their reputation'.20

In the eighteenth century, reputation was everything and Boulton & Watt swept all competition to one side. By 1805 they had installed 112 steam engines in London, with breweries taking seventeen, by far the largest sector in the metropolis. ²¹ The London porterbrewers played an important role in this aspect of the industrial revolution. They were crucial in allowing Boulton & Watt a showcase for their new rotative engine in London. The other London brewers soon followed the lead of Goodwyn and Whitbread and it was said:

the success which attended the first application of Mr Watts rotative engine to the machinery of the breweries, occasioned a great and increasing demand for them ... after Whitbreads, another at Mr. John Calverts brewery, and others at Mr. Felix Calvert's, at Messrs. Gyfford's, and at Mr. Thrale's; all these were single-acting engines of about 10 horse-power.²²

Although these were not massive engines, their success led to orders in other industries, such as the bigger, 50 horse-power steam engine at the Albion Flour mill in

Blackfriars in 1786.²³ By the late eighteenth century London had more steam engines than Lancashire.²⁴ Even by 1827, London had 290 steam engines (5,460 horse-power) compared with Manchester with 240 steam engines (4,760 horse-power).²⁵

Orders for bigger engines eventually came from within the brewing trade. By 1805, Whitbread's brewery was, 'no longer considered to be the most scientifically arranged brewing establishment ... today that claim is due to the Golden lane brewery'. ²⁶ An insight into the steam-engine's capabilities is given in the following description of this brewery which was rebuilt by Brown & Parry:

with the new improvements in this manufacture with a 36 horse-power steam engine ... a vertical shaft which is distributed with wheel-work throughout the brewery ... raises water from the well via an 8 barrelled pump ... drives four millstones for grinding the malt...a screw for lifting the grist from the mill to the mash tuns by a broad endless belt with small tinplate buckets fixed to it (called a Jacobs Ladder) ... sacks of malt and hops are drawn up from the street by a sack-tackle ... the excellent provisions for diminishing labour in every department, the steam engine being the chief agent.²⁷

The introduction of the steam engine into the brewery gave rise to other improvements which were equally important. In the 1780s there was a surge of patents relating to brewing with steam engines, including various ancillary processes, such as lifting malt and hops and cleaning casks. However, the most important of these was probably the development of the closed copper.

The original idea had begun with Henry Goodwyn at the Red Lion brewery about 1780. He had arranged for a pan of water to be placed over the copper, which was then heated from the boiling water below with a consequent saving of fuel in using that warmed water in the copper instead of cold.²⁸ The next development was to fit a pan with a concave bottom over the open copper to heat the water in it, and capture the steam from below for use in the brewery. The first attempt at this was by an Oxford brewer, Sutton Thomas Wood which, despite a patent of 1784, was copied by Richard Hare of the Ship brewery, Limehouse.²⁹ He claimed that his invention differed from Wood's apparatus, because it was designed to prevent the evaporation of the volatile oils

from the hops so that they could condense and run back into the copper.³⁰

The process was complete when Hare brought in the inventor, Joseph Bramah who designed a 'close copper', which held 300 barrels and was spherical in shape, with a flattened bottom to stand on the fire place. The fitting of a dome on the old open copper meant that the hops could be added through a watertight man hole and none of the 'virtue of the hops' would be lost.³¹ An integral cylindrical pan sat on the top of the spherical copper, to which water was added whilst the main copper was boiling below. The steam from the boiling water in the copper was taken by a tube from the centre of the dome, which discharged it below the surface of the water in the pan above. It was allowed to bubble through the water in the upper pan, raising its temperature to almost boiling point. When the main copper was emptied, the opening of a valve allowed the heated water from the pan above to fill the empty copper below.³² The saving in fuel in preheating the water is obvious, but there was a bigger saving in not extinguishing the fire, which made the process continuous. It also made for greater quality control of the product where the hops were infused with greater consistency. It was soon adopted throughout the trade.

The thermometer, saccharometer and pale malt

Michael Combrune first advocated the use of the thermometer in his *Essay on Brewing* in 1758, where he complained that too many brewers were prejudiced against 'having recourse to books'.³³ He was right, despite his call for a more scientific approach to brewing, 'according to the known rules of Chemistry', he was widely ignored. Most brewers preferred the traditional method of waiting until the water in the copper had cooled sufficiently that, 'the steam is near spent, and you can see your face in it',³⁴ or when adding yeast to the wort it was to be 'blood warm'.³⁵

The same was true of the hydrometer. Whitbread scorned its use saying that, 'he had got a large and successful trade without ever having used such an instrument'. However, in 1770 Henry Thrale ran tests on its use at the Anchor brewery and endorsed its use as, 'an instrument of great use to the brewer in various parts of his business'. The hydrometer had been widely

adopted by the distilling industry, so that a specifically calibrated hydrometer for use in brewing was developed, which was called a saccharometer.

In 1784, John Richardson published his *Treatise on the* Application and Use of the Saccharometer, where the process of attenuation was explained. Any fermentable liquor that produced alcohol, lost weight during the fermentation; the process was called attenuation. Furthermore, alcohol was produced in proportion to the degree of attenuation. Thus, a barrel of wort that lost 40 pounds in weight due to fermentation, would produce twice as much alcohol as that losing only 20 pounds.³⁸ The saccharometer was calibrated to measure the process of attenuation by taking the specific gravity of the wort before and after fermentation, when the alcohol content could be quantified against the amount of malt used. Richardson was clear in his purpose, which was improve the efficiency of the brewing process. By eliminating wasteful practice in the fermentation, the brewing industry was able to maintain the price of a barrel of porter at 30s., after a rise in the malt duty in 1780.³⁹

The use of the saccharometer, in conjunction with the thermometer, established that a wort made from pale malt was much stronger than that made from brown malt. This had always been known to some degree, but the accurate measurement of the alcoholic content proved that, despite its higher price, the use of pale malt was more cost-effective than brown. Thus, in the wartime conditions of the 1790s:

 \dots pale malt was substituted for brown malt in the brewing of porter. The wort, of course was much paler than before and it wanted that agreeable bitter flavour that characterised porter, and made it so much relished by most palates. The porter brewers attempted to remedy these defects by several artificial additions. 40

These 'artificial additions', eventually became a public scandal which resulted in a parliamentary enquiry into the affairs of the London porter-brewers. However, from a business point of view, their behaviour was entirely rational. The porter-brewers did not break the law on adulteration, except in one isolated case, but they went as close to it as they could. They used the science of the saccharometer to their advantage, as any modern business would. They just happened to be one of the first industrialised trades to catch the public attention.

Monopoly and the adulteration of porter

The most common adulteration was with water, a common practice with publicans when faced with rising costs. It was called 'dashing' in the trade, which a publican sardonically explained to a parliamentary committee as, 'pumping the New River' into his beer. 41 Most of the other illegal adulterations took place in the publican's cellar. In evidence to a select committee on adulteration the illegal, poisonous substance called cocculus indicus was said to be 'sold to publicans and was used to replace the spirit which had vanished by dilution with water', 42 which gave a thickness and inebriating quality to the indoctrinated porter. 43

This was commonly known as 'fuddle berry', ⁴⁴ and was the fruit of *menispermum cocculus*, a plant grown in Ceylon and the East Indies. ⁴⁵ Its effect was said to be 'stupefaction, not exactly intoxication but a sort of waking dreaminess' according to Professor Alfred Taylor of Guy's Hospital. ⁴⁶ It was probably an hallucinogen. Its use had been prohibited since the beginning of the eighteenth century, but its detection was almost impossible because of the small amount used; a small bag of berries allowed to soak in a cask of porter was all that was needed. Its use began to increase during the French Wars, when the amounts imported rose steeply, along with the price. ⁴⁷

Whilst many publicans refused to engage in such a clearly illegal activity as using fuddle berry, there were many other additives available which were not proscribed quite as precisely. Patrick Boyle, in his late-eighteenthcentury trade journal for publicans, The Publican and Spirit Dealers' Daily Companion, gives an insight into various practices and chemicals for altering the taste, texture and colour of the beer. He condemned the use of cocculus indicus as unlawful.⁴⁸ However, he then went on to list materials which could be used which were not prohibited specifically, but were certainly not wholesome ingredients. Sand and salt for clearing porter that was 'grey or stubborn'.49 A mixture of copperas, molasses and berries could be used to give a better colour to a pale beer which would give it a 'beautiful head'. 50 Two spoonfuls of fullers earth or oyster shells, burned and ground to a powder would clear a butt of beer when finings had been unsuccessful.⁵¹

He then gave a comprehensive summary of the issues facing the brewing industry at that time. Pale malt was beginning to replace the use of the highly-fired brown malt, which although more expensive, produced sufficiently more alcohol per quarter to be profitable. However, this did not produce porter of the traditional dark colour. This necessitated the use of colouring, which he recommended be made from sugar, which had been, 'boiled till it obtains a middle state between bitter and sweet, and which gives to porter that fine mellow colour so much admired in good porter'.⁵²

Furthermore, he recommended sugar as a substitute for malt in the brew, with molasses or more probably treacle, being a cheaper alternative still. This typifies changes in the brewing process as many sought expedient measures to combat wartime shortages of raw materials, particularly malt. The reader was then assured that:

any person may brew as good, if not better porter than can be supplied from the brewers. The public opinion is, that porter requires to be brewed in large quantities, and so be long stored.⁵³

Boyle was clearly referring to the porter-brewers' claim that porter could only be brewed in large quantities. This myth was reinforced by the publication of the annual list of production porter, which was no more than a device to advertise and promote the sales of the larger breweries and preclude any smaller brewers from the market. He then made a further attack on the large breweries by claiming that the high cost of malt meant that porter could only be retailed at 4d. a quart if the alcoholic content had been enhanced with the use of, 'stupefactive ingredients'. ⁵⁴ Concern over claims like this were further increased when the authorities suspected that opium, was being used to adulterate porter.

In 1802, the Government prohibited the use of beer grounds, stale beer, sugar water, distillers spent wash, sugar, molasses, vitriol, quassia, cocculus indicus, grains of paradise, Guinea pepper, opium and 'any other material or ingredient except malt and hops'. ⁵⁵ This would not affect the large brewers who had generally refrained from the use of the more noxious ingredients, but they had begun to use the sugar recipe for adding colour which was now clearly outside of the law which stipulated, 'malt and hops only'.

To remain within the law, they adopted a new process which had been developed, whereby a quantity of the wort was boiled down until it reached the colour and consistency of burnt sugar. As it was derived solely from malt, it was therefore legal. Initially, this was resisted in parliament, but eventually a compromise was found, whereby the use of muscovado as a colouring agent instead of refined sugar was sanctioned, which satisfied the powerful West Indian interest. However, it was more likely that they used treacle, which was available from London sugar refiners as a cheap by-product, as porter brewers with sugar refining connections such as George Shum and John Martineau would have known. Eventually, this too was banned in 1817, because it was thought to be 'a pretext for the use of illegal ingredients'. 57

The nineteenth-century term for adulteration was sophistication, which is not without irony. The porter-brewers obeyed the letter of the law, not the spirit. For example, using unmalted barley instead of malt had never been specifically banned, so the brewers that were scientifically minded, experimented with its use as described by chemist, Daniel Booth in *The Art of Brewing*:

the extraction of wort from raw grain was not resorted to by the brewers until the enormous additions to the malt duties in 1802 and 1803. From that period until the year 1811, when the practice was checked by the Excise, the more scientific brewers were able to save two thirds of the malt duty.⁵⁸

Today, all these measures would be deemed to be tax avoidance rather than evasion, no worse than relocating a company off-shore. However, in the late eighteenth century this was seen by the public as deceitful, and even worse, unpatriotic in a time of national crisis. Adulteration became a national disgrace in nineteenth-century Britain, but it was usually perpetrated by the retailer, rather than the manufacturer. This was true of the porter trade where the large brewers stopped short of adulteration, but only just. Their reputation was tarnished. The porter-brewers needed to act collectively to counter this adverse publicity and the Government's proclivity for raising the tax on malt; their answer was to form the Porter Brewers' Committee.

The Porter Brewers' Committee

Traditionally, brewers had been organised through the Brewers' Company, one of London's earliest liveried companies established in 1437.⁵⁹ However, by the late eighteenth century London porter-brewers were beginning to work together over specific issues, particularly over impending tax rises on malt or beer. Following the increase of 1762, the retail price of porter remained stable at 3½d. a quart for almost 40 years. The rise in malt tax in 1780 had been a close thing but the successful application for a drawback for London brewers had allowed the price to be held.

In 1782 a leading porter brewer Robert Barclay, proposed to stop brewing for two months as a lever in the negotiations with the government over impending tax rises, stating in a letter to his partner John Perkins:

I rec'd with much pleasure your account of the Congress of Brewers at Felix's ... Your idea of brewing short I think most expedient, but perhaps were we to stop directly for two months, I believe it would prove a more powerful argument to Lord Shelburne, who would clearly be convinced that our union gives us a consequence he is little aware of.⁶⁰

The 'Congress of Brewers' is a reference to the standing committee of porter-brewers and signifies the growing tendency of the porter-brewers to work outside of the organisation of the Brewers' Company.

The onset of the war with France in 1793 brought such unprecedented pressure on supplies, that the porter brewers were driven into a tighter alliance within the Porter Brewers' Committee, meeting more frequently as the price of malt soared. The threat to stop brewing was used again in 1794, when it was reported, 'the Porter Brewers have had a general meeting at which they have unanimously agreed to stop brewing in order to reduce the high price of malt'.61

In 1795, the affairs of the London porter brewing industry finally passed from the Court of the Brewers Company to the Porter brewers' Committee. 62 The 'Committee' soon began to feature in the press as it was seen to flex its muscles in a campaign to secure government relief from taxation. In January, it sanctioned a complete stoppage of brewing, creating 'great hardship for the want of yeast for bakers'. 63 This brought criticism from the press urging the public to support the government in standing firm against the brewers. 64 The adverse reaction now focused on the brewers' excesses in the building of giant vats, which then described, 'as

proof of the oppression the Brewery of London labours under, there is a cask now building at the expense of £10,000 $^{\circ}$.65

However, the Porter brewers' Committee pressed on with their campaign, holding several meetings with William Pitt to negotiate a drawback of 2s. a barrel due to the high price of malt and hops. Pitt firmly rejected this request with the observation that, 'if the Committee could show him that their business was conducted at a loss, he would consider to grant them relief'.66 The Porter brewers' Committee declined this offer and abandoned their strategy of confrontation with the Government in favour of improving their public image.

Anonymous or pseudonymous letters to influential magazines were a route by which the brewers could promote their case under the guise of impartiality. In the August 1795 edition of The Universal Magazine, an unsigned letter appeared under the heading, 'The History of the London Brewery'. 67 It was an exact replica of the Poundage's article published in The Annual Register in 1760. In November, the same letter was again published in The Weekly Entertainer, with the same title. The article was completely anecdotal in nature, full of self-congratulatory accounts of the brewers' contributions to society. However, it ended on a more serious note, stating, 'The last advance upon porter took place in 1762, and some may remember, occasioned very dangerous commotions among the people', 68 an implicit warning to the Government if it was considering a future rise in the tax on beer.

In 1797, when the brewers went a step further in calling for the suspension of corn exports, it attracted the following criticism from the landed interest:

The country gentlemen in Parliament tamely suffer a few individuals to carry a measure so detrimental to the country interest as that of restraining the exportation of corn ... because the porter brewers are those for whose interest the restriction has been continued; the House of Commons has assumed an aspect entirely mercantile ... are we to judge of this being a losing trade, from the splendour, luxury and carelessness with regard to expense, in which the numbers of porter brewers live. 69

Thus, over the course of 40 years, porter brewers had succeeded in attracting criticism from nearly all sections

of society, including the porter drinkers from below and the landed gentry from above. The crisis was resolved when the price of malt fell back from the highpoint of 45s. 6d. a quarter in 1795 to 35s. in 1797.⁷⁰

In 1799, the price of malt rose again to 44s. a quarter and the Porter brewers' Committee met in almost continuous session to determine the appropriate policy over price until in November, it was reported:

The brewers have had their final meeting, and unanimously resolved against the remonstrance of the Minister to raise their porter a halfpenny a pot: finding all remonstrance in vain, Mr. Pitt has told them, if they lay on this additional impost, the public shall at least share it with them, by Government drawing from it an additional public revenue.⁷¹

The warning was ignored and the price was increased by a full ½d. to 4d. a quart.⁷² There was widespread criticism in the press, which recognised the wartime effects on the malt prices but called for an improvement in the declining quality of porter, stating:

If the brewers are to raise the price of porter, it is to be hoped that they will improve the quality by strengthening it without the infusion of pernicious herbs or drugs.⁷³

In January 1801, with malt at 70s. a quarter, the porter brewers raised the price again to 4½d. a quart. The Chancellor of the Exchequer admitted in Parliament, that the circumstances of the time had justified these two increases.

However, when falling malt prices allowed the porter brewers to reduce the price to 4d. in January 1802, it presented him with the perfect opportunity to increase beer and malt duty in April, which resulted in an immediate price rise back to 4½d. a quart. A Samuel Whitbread fought a lone battle in Parliament against this proposal, but William Pitt dismissed his complaints, saying:

The reduction that has recently taken place is one halfpenny in the pot; if a duty is imposed, adequate to that, a revenue may be raised, without entitling the brewers to make any higher advance in price.⁷⁵

The porter brewers had proved easy targets for the trap set by the Government, where they had set the precedent of the price at 4½d. themselves and could scarcely

complain at this measure at a time of national emergency. The Porter brewers' Committee, headed by their parliamentary representatives Samuel Whitbread and Harvey Combe, were now seen to be in open conflict with the Government. In 1803 the price rose again to 5d. and then in 1804 the price jumped to 6d.,⁷⁶ causing widespread complaint against the porter brewers. These complaints were now based on a wide range of issues; high prices, low quality, tied-houses, adulteration. This was all set against the background of their extravagant lifestyles and their exclusive club, which was in open conflict with the government in the time of a national emergency. Clearly, their patriotic image was in need of repair as Britain began to question the morality of the industrialisation process.

Monopoly, licensing and the tied-house system

The history of the tied-house system of London is one of control, as much as profit. The London porter brewers, unlike rural brewers, tended not to deliberately take ownership of public-houses at this time. As the authorities began restrict new licenses in some areas, brewers began to compete to ensure that they gained a fair share of the growing metropolitan market. At the same time, the licensing magistrates were requiring alterations to the premises of applicants, which had the effect of licensing the public-house instead of the applicant, which gave added value to the premises. The only way that prospective publicans could afford this premium was to borrow the money. However, the licence could be lost at any time so the usual sources of capital were wary of the risk.

Brewers had the means and incentives to provide a loan, which was cheaper than owning the property outright. The publican owned the lease but it was kept by the brewer who had lent him the money. The publican was responsible for maintenance and had to agree to take his beer from that brewer. The brewer gained an outlet for a product that was perishable, which helped to match demand with supply as far as possible. Furthermore, he retained some degree of control over the handling of his beer, which was susceptible to adulteration, dilution or just plain neglect. The brewer's name went up over the door of the public-house as an early example of product branding and the tied-house was the best way to protect that name.⁷⁷

The inability to obtain licenses for new public-houses was one of the main reasons given for the downfall of the Golden Lane brewery, 78 which calls for a brief history of the liquor licensing system in England before 1800. The central government had always had an interest in promoting the consumption of alcohol as a source of revenue from various taxes and duties on malt and beer. However, the social consequences of increased drinking had been delegated to those stalwarts of local government, the justices of the peace. These magistrates were given the absolute power to select which applicants were suitable to sell alcohol, to impose conditions surrounding that sale and to withdraw that permission if the conditions were not met.⁷⁹ Curiously, the last of these powers is the oldest, with the power withdraw the right to sell alcohol being enacted in 1495 to empower any two justices of the peace:

to reject and put away Common ale-selling in towns and places where they should think convenient and to take sureties of keepers of alehouses in their good behaving. 80

In 1552 this power was extended to both licence and suppress alehouses. This was further changed in 1729 when these powers were exercised annually at the General Sessions of the Justices, usually in September, and were known as the Brewster Sessions. These three Acts of Parliament, despite many other minor statutory amendments, were the foundation for the licensing system which persists to this day.⁸¹

In the 1790s, licensing magistrates began to restrict the amount of new licenses in the London area due to concern over public morality, particularly in the new suburbs. 82 These concerns increased greatly after the ending of the French Wars in 1815 and culminated in the appointment of a 'Select Committee on the State of the Police of the Metropolis' in 1816. In May, John Beaumont, a Middlesex magistrate, was called to give evidence saying:

... it is decidedly my opinion, that the low public-houses, flash-houses and gin-shops, compose the foundation and hot-bed of nearly all the vices and crimes which disturb the Metropolis ... the effect of the Law is to throw a great proportion of the public-houses into the hands of brewers and gin-sellers, whose interest consists in procuring the greatest possible consumption of their liquors.⁸³

Beaumont's evidence carried considerable weight. He was a respected magistrate, the founder of the Provident Life Insurance Co. and the County Fire Office.84 He was also a prominent developer of five hundred houses and two manufactories in Mile End, with Beaumont Square being named after him.85 The law that he was referring to, was the licensing system, which he had encountered when attempting to obtain a licence for a new public-house in White Horse Lane. He had been approached by agents of the brewers Truman, Hanbury & Co., to persuade him to take their beer, but declined because he wanted to run a free house. The licence was refused. The following year in 1814, Beaumont was again approached by Hanbury's agent who told him that 'it would be licensed directly if he gave Messrs. Hanbury the trade'.86

Another witness, William Morgan described his experience as publican in Gill St., Limehouse when he had failed to get a licence and was approached by Hanbury's agent who told him that unless he agreed to deal exclusively with Hanbury, his public-house would never be licensed, adding, 'if there was a coal-shed in that street I could license it'.87 Morgan agreed to trade with Hanbury, but later reneged on the agreement by taking beer from Meux & Co. Sampson Hanbury's answer was to send twenty of their drays to fill the street and intimidate Morgan, who stated that, 'fearing further damage and that the licence might be taken away, I granted a lease to Meux & Co., who are now in possession'. 88 He had been forced to sign over his lease to Meux in return for his protection. Hanbury would not sanction attacks on a rival brewer's property, because there was an 'honourable understanding in the trade not to interfere with each other's trade'.89

From this it would seem that a prospective applicant would only be successful in acquiring a new licence if he accepted the sponsorship of a protective brewer within the any given area. This was confirmed by the evidence given by Reverend Edward Robson, a licensing magistrate for Whitechapel. He was asked whether, in Hanbury's neighbourhood, a prospective licensee who came before the magistrate as a customer of Hanbury's brewery, was almost certain to have his house licensed. Robson stated that if two license applications came before him he would give the licence to Hanbury because he was a man, 'of so much public spirit in the public charities'.90 However, in law the only

criterion the magistrates should have considered was whether there were sufficient public-houses within the applicant's area already. He also went on to say, 'Hanbury in this neighbourhood is the Whitbread of Whitechapel, or the Meux and Reid of the other side of town'. 91 The implication from this is clear. Some brewers considered certain districts to be their 'home' territory and that they used the licensing system to prevent others from competing in that area. Thus, the West End belonged to Meux, Whitechapel was for Whitbread, and Bethnal Green took Hanbury's beer. 92

Brewers who owned or leased public-houses were debarred from sitting at the Brewster sessions, but they could still influence their decisions. Evidence of bribery surfaced when Joseph Merceron was called before the committee. Merceron, was a magistrate who had gained notoriety by being indicted for corruptly forging the records of the poor rates in Bethnal Green to cover his misappropriation of money. Although the case was dropped by the prosecution over the complexities of the case it was widely considered to true. 93 He owned or leased twenty two public-houses in the area of Bethnal Green and was also Hanbury's agent and rent collector. 94 The rector of Bethnal Green, Reverend Joshua King, gave evidence that Merceron once told him:

... that Hanbury was a devilish good fellow, and that he was always sending him presents; and that he supplied his house with beer *gratis*, and that the week before he had sent him half a barrel of porter.⁹⁵

In reply to the committee, Merceron admitted that this was partly true and under questioning admitted that most of the public-houses in the area, including his own, took Hanbury's beer. 96

There were similar discrepancies in the system of renewing old licenses, where the criterion for refusal should have been limited to evidence of disorderly behaviour on the premises. This type of house was prevalent in Shadwell, a notorious riverside district populated largely by sailors, which had a ratio of one public-house to every twelve houses in the High Street, which rose to an incredible ratio of one public-house for every six in Lower Shadwell.⁹⁷ The churchwarden of that parish, Joseph Fletcher, gave evidence of the closure of three particularly disreputable houses in 1813, describing how they had large rooms for dancing which were:

the constant resort of the lowest class of prostitutes; there were sometimes 150 to 200 assembled, and the officers of the parish went several times to remonstrate with the landlords on the impropriety of their conduct. 98

In 1814, despite objections from respectable parishioners and the churchwardens, they were allowed to reopen. Fletcher detailed how the objectors had been duped on the licensing day, which been brought forward without notice so that their detailed incriminating evidence would not be heard. Fletcher indicated that Merceron was the author of these intrigues along with the chief magistrate at the Brewster Sessions for Whitechapel, Sir Daniel Williams. At the second licensing hearing Fletcher requested to be sworn in to give his evidence, to which Williams said, 'We do not chuse [sic] to swear you'.99

Williams had a nephew who was a partner in the spirit dealers, Stables & Williams, which had been established with money from Hanbury. Thus prospective licensees, who approached Hanbury to see if he would use his influence to ensure that they were successful in their application, were required to take their beer from Hanbury and were then directed to Stables & Williams for their spirit trade. 100 Many of these applicants sponsored by Stables & Williams, did only a nominal trade in beer, their main trade being gin, for which they were not licensed. Thus, with public-house licences they evaded the authorities attempts to suppress licensed 'dram houses'. The widespread concern over the increasing consumption of gin, was reflected in an open letter from John Beaumont to the Lord Chancellor, Lord Sidmouth, where he claimed that even 'respectable coffee houses, chop-houses, hotels and taverns fall into the distillers hands, we see daily converted into gin-shops'. 101

Beaumont, while acknowledging the corruption of Sir Daniel Williams, Merceron and the other magistrates of Tower Hamlets, took the wider view that it was the system which was flawed. He took issue with the 1756 amendment to the licensing system which concentrated the power into so few hands that it would inevitably would lead to bribery of one form or another:

The Act of Geo. II 26. confining the licensing to a single annual session, supplied the means of upholding monopolies and, and the interests of particular individuals. Previously if a Victuallers was improperly refused a license, a licence

might be procured by other justices; no corrective of this kind is now practicable. The licensers now carve out the licensing into their separate localities. 102

These revelations were reported in detail in the major daily newspapers under the heading, 'Police Report', bringing the issue of liquor licensing to the forefront of national debate on crime and disorder. Whilst the *Times* put the blame solely on the lower classes for their profligacy, immorality and addiction to ardent spirits, the *Morning Chronicle* reminded its readers that the 'flagrant delinquencies of the Magistracy form the most frightful feature of this interesting document'.¹⁰³

When the subject was debated in the House of Commons, Henry Bennet, the chairman of the Police Committee blamed the Lord Eldon for the behaviour of these magistrates by saying that the Lord Chancellor had not done his duty, 'by allowing that shuffling Magistrate, Mr Merceron, to remain in his Commission, after the evidence he had given against himself'. 104 Despite all the evidence given, the licensing system remained unaltered. Merceron was only removed from the list of magistrates in 1818, when he was found guilty of illegally licensing several public-houses and sentenced to twelve months in the Marshalsea prison of the King's Bench. 105

The overall effect of these malpractices and inconsistencies was to create a surplus of public-house in some districts and a shortage in others, which created a premium on obtaining a licence. Henry Bennet succinctly described this process in a parliamentary debate:

An artificial value has been given to public-houses throughout the country, by the licenses given to them; the consequence of which was, that they generally fell into the hands of the brewers themselves, who were thus enabled to sell a deleterious compound, very injurious to the health of their customers. 106

The restriction of licenses created a scarcity which was reflected in the price of the lease which could vary from £1,200 to £1,600 reaching as high as £2,000 where gin sales were high.¹⁰⁷ New applicants were unlikely to be able to raise that sum of money and were compelled to borrow money from the particular brewer who was dominant in his area and therefore prepared to supply him. Brewers in London rarely bought the public-house

outright at this time, preferring to hold the lease which the publican had to assign to the brewery in exchange for the loan. The increased cost to the publican in interest payments to the brewer would inevitably have to be passed on to the customer in the increased price except, as shown earlier, the price of porter was determined by the meetings of the Porter Brewers' Committee. This often left the publican with little choice other than to adulterate his beer.

The all powerful porter-brewers were now being forced into a more defensive stance in Parliament, following the revelations of the 'Select Committee on the State of the Police of the Metropolis' in 1816. John Beaumont, who had been one of the principal witnesses to the Select Committee, was now the instigator of a petition to the House of Commons. It was signed by 14,000 persons, 'inhabitants of the metropolis and its vicinity, complaining of the monopoly carried on in the brewing of porter by certain brewers in the metropolis'. 108

The petition was presented on 10 March 1818, by MP John Lockhart, who had business connections with William Brown of the Golden Lane brewery. 109 Naturally, the brewers defended themselves in the ensuing parliamentary debate. Charles Calvert stated that the petition of Mr Beaumont was scandalous, because he had only been concerned about obtaining licenses, 'but having failed in this, had been induced, in the bitterness of disappointment, to bring this charge against the brewers'. 110 The battle lines were drawn. Lockhart challenged the brewers to submit to an inquiry if they had nothing to hide. He reminded the House of Commons that Beaumont's evidence had been given due weight by the committee on the police. The motion was passed and a committee appointed. 111

The Committee on public breweries

The Committee sat throughout May in 1818, taking evidence from twenty eight witnesses, including excise officers, publicans, chemists and four porter brewers; Charles Calvert, Charles Barclay, Frederick Perkins and John Martineau. 112 The excise officers were questioned on the who was responsible for adulterations of porter in their domain, and it was quickly determined that the small brewers and publicans were the main culprits. However, when they were pressed to say if any of the

eleven main brewers were responsible they seemed to hint that this might be true, but quickly retracted it by saying that it was just hearsay or that they had no proof. In fact, apart from the one case where Meux & Co. had used salt of tartar to correct acidity, ¹¹³ none of the eleven were ever found guilty of adulterating their beer in the brewery. John Martineau, a partner of Whitbread & Co., was questioned on adulteration in this typical exchange between the Committee and the porter-brewers:

What opportunities have the Excise have of finding out any deleterious articles in brewers vats or vessels, if they make search? - They have access to every part of the premises, both by day or by night. - If deleterious materials were put in, do you think it would be in their power to detect it if they did their duty? - It would be impossible to carry it on in a large concern without being known to the officers, it must also be known to the servants of the house ¹¹⁴

The brewers' response was reasonable, any large business would be incapable of preventing its employees from informing the authorities. Insinuations that employees were paid sufficient money to be sworn to secrecy were easily dismissed by such articulate politicians as Barclay or Calvert.

However, Charles Barclay was less at ease when the direct question was put, 'Is sour or stale beer used in your vats with new beer, to your knowledge?'. A long, rambling answer ensued, where Barclay's embarrassment clearly showed, as he explained how stale beer that had been returned was mixed with the new. Sometimes, this even went to the extent of buying stale beer from other brewers, which he justified by saying that the price would be higher without this practice. The following editorial comment in *The Times* was laced with irony:

The present entire beer, therefore, is a very heterogeneous mixture, composed of all the waste and spoiled beer of the publicans - the bottoms of the butts - the leavings of the pots - the drippings of the machines for drawing the beer - the remains of the beer that lay in the leaden pipes of the brewery, with a portion of brown stout, bottling beer, and mild beer. 116

Clearly, Barclay's attempts to assure the committee that the taste would be different without these measures and that the public liked it that way, were being widely ridiculed. It also indicates how the use of the word 'entire' was no more than an advertising slogan; it had been a long time since porter was entirely the product of one cask

The brewers were also questioned as to whether the beer supplied to a tied-house was inferior to that sent to a free house. In general they denied it but Martineau, whilst carefully absolving Whitbread & Co. from such practices, said that it was generally true. 117 Even Barclay admitted, 'if a brewery is supported by the public-houses they have purchased, they must deteriorate the quality of their beer'. 118

The whole question of the taste of porter is elusive, the nineteenth-century lexicon needs deciphering before a description can usefully be considered. It is made a little more clear by the evidence of Arthur Aikin, a witness to the Committee who was a chemist of the Society for the Encouragement of Arts. He likened porter's taste with dry wine, compared with that of ale which was more like sweet wine. 119 When the Committee asked Aikin whether the taste of unwholesome ingredients could be tasted in porter, he replied 'generally the empyreumatic flavour is so prevalent I do not perceive any other flavour in London porter'. 120

This unfamiliar word is to be found in a contemporary chemical dictionary where it was described as 'a disagreeable, burnt smell ... empyreumatic oils are acrid and soluble in alcohol'. 121 Another witness, Daniel Wheeler, had been introduced to the Committee as the patentee of a new malt colouring used the same word, when he was asked about its taste. He replied, 'empyreumatic - rather a burnt flavour - like toasted bread'. 122 Thus, it seems that the traditional brown malt had created a flavour which had the pleasant bitterness of a dry wine, the new roasted malt flavouring gave the beer a more acrid, burnt flavour. Undoubtedly, this could serve as a cover for other ingredients including narcotic agents such opium and cocculus indicus. This also explains why there was so much controversy over a seemingly innocuous material such as colouring. It was not harmful in itself, but its powerful taste could mask any adulterations that unscrupulous individuals had added to their beer.

The repercussions of these practices showed in the evidence given to the committee. Barclay was trying to excuse the mix of weaker beer to porter when he stated:

... every publican has two sorts of beer sent to him ... one is mild beer, which is beer sent out exactly as it is brewed; the other is called entire brewed expressly for the purpose of keeping, it contains a proportion of returns from publicans ... the taste of the town is continually changing, so that now they use but very little of this entire beer ... the beer which previously was kept for a twelvemonth would not be drunk by the public, their taste is for mild beer. ¹²³

This reference to 'mild beer' marked the beginning of a drift away from porter, a process which would accelerate over the next twenty years and which would eventually allow mild-ale to become the staple drink of the working class in London.

The Committee's findings were published in a report in June 1818, which can only be described as anodyne. They thought the price of porter and the profits of the brewers to be fair. They called attention the tied-house system but made no recommendations on the causes of it. The 'eleven great breweries' were cleared of adulteration but the practice of mixing weaker beer with porter bought them 'into a degree of discredit; to excite a distrust in the minds of the public'. 124 Adulteration by lesser brewers and publicans was predictably condemned, but the only remedy recommended was the stricter enforcement of the existing law and the refusal of a licence to any one convicted of this offence. The case against the monopoly was found to be not proven, although it was thought that any decrease in the number of free houses in London could lead to future abuses of power. However, the practice of a tied-house being compelled to take an inferior product to that of a free house was strongly condemned as 'so disgraceful a practice'. 125 Finally, on the question of licensing, they recommended that the legislature should consider a law to direct magistrates to refuse licenses to public-houses which were, either directly or indirectly, the property of a brewer. 126 This was not enacted.

Summary

The 'monopoly' and its tied-house system had survived. The appetite for publicly funded breweries had diminished with the failings of the Golden Lane brewery and the free trade movement was only just stirring. The porter-brewers had successfully defended themselves against accusations of adulteration in the select commit-

tee hearings. They had not been so foolish as to take the risk of unlawful practices. However, it had been revealed that they had reduced the strength of the porter by diluting it with returned or weaker beers, which was not illegal but was condemned by the committee and more widely in the press. By reducing the quality and fixing the price of their beer they had attempted to insulate themselves from the economic pressure of the rising price of raw materials. Complaints about the reduced strength of porter were voiced in the public-house rather than the brewery, thus if any one was compelled to take risks it would have to be the unfortunate publican.

Technical advances had resulted in better conversion rates from pale malt, but the consequential use of colouring agents brought the simple purity of 'malt and hops only' into question. With the few exceptions that were extremely poisonous, which have been specified, many of the materials used to adulterate beer were not particularly harmful. Nevertheless, they were used to manipulate the taste artificially, and that brought the name of porter into disrepute. The more serious adulteration of using narcotics to augment a reduced alcohol content in porter was not universal. It was probably only practised in the lower type of public-house and a few of the lesser breweries to compete with gin for its anaesthetising effect, but it seriously damaged the brand name of porter generally. Many respectable people simply would not drink it and abandoned it for ale, which was not so easy to adulterate without being apparent. The eventual demise of porter as London's favourite drink took a long time, but the seeds of its downfall were sown at this time. The next chapter will follow that process, whereby London's working classes began to turn to mild-ale as the healthier alternative to porter, along with the development of brand identity in the brewing trade.

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- 113. This was said to be no more than a culinary article to be found in domestic cookery books, PP (1819) 'Minutes taken (in session 1818) before the Committee To whom the

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