



The Drugging of the Empire: The relationship between the Society of Apothecaries and the British East India Company 1706 to 1858

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1. Introduction

The quest for treasure, trade and empire has been the driving force for exploring distant lands across the world for centuries. Many European countries acquired substantial empires as a result of these exploits. Today, imperial history is an established field of study in its own right, and there is now a vast literature relating to it, both in research-based peer reviewed papers and in books. The role of empire in the history of medicine has now also been extensively studied, particularly since the 1980s, and there are now a large number of publications in this area; many of these relate to the British Empire. Notable amongst these are the work of David Arnold,^{1 2} Roy MacLeod^{3 4} and Mark Harrison.^{5 6 7}

However, to date little has been written about the trade in medicines between Britain and its colonies. Yet for much of the eighteenth and nineteenth centuries two great British institutions worked together to ensure that the developing empire was supplied with the medicines it needed. At the same time they both had an interest in ensuring that opportunities for trade in this area were maximised. The East India Company ('the Company') had been founded in 1600, and was finally dissolved in 1858. The Society of Apothecaries ('the Society') was founded in 1617, and continues in existence to this day. The relationship between the two appears to have become a contractual one in 1706, and for over one hundred and fifty years these two organisations had a fruitful and profitable relationship, indeed until the demise of the Company. During this time large quantities of drugs were shipped to countries around the world. The fortunes of the Company and the Society were often closely related.

Extensive archives exist for both organisations, and a large number of histories have been written about each, over a period of many years.⁸ Of those relating to the British East India Company some have been general histories,⁹ whilst others have described how the trade of the Company fluctuated over time.¹⁰ There have also been a number of official histories of the Society of Apothecaries.^{11 12 13} Some of these have referred to links with the other institution, most notably Penelope Hunting's recent



history published in 1998.¹⁴ But few have investigated the dynamic and fluctuating relationship between the two organisations. However, in recent years further light has been thrown on the relationship in histories of medicine and pharmacy in India, most notably Harkishan Singh's series of books on the history of pharmacy in India and related aspects.^{15 16 17 18}

This paper explores the relationship between these two great institutions, from its origin until the eventual demise of the Company. It explores how the demand for medicines from the Company arose; it demonstrates how the Society of Apothecaries came to be the principal supplier of its medicines; and it describes the strategies adopted by the Society to meet the increasing demand for medicines by the Company. It also illustrates the type and volume of medicines that were distributed across the empire. Finally, it investigates the reasons why the Society was able to retain the business over such a long period. It argues that despite their great differences the Society and the Company depended heavily on each other, and that ultimately it was a profitable and rewarding relationship for them both.

2. The growing demand for medicines

With the founding of the East India Company, the early seventeenth century saw a rapid change in the nature and type of trade in drugs and medicines between the East Indies and England. There was a dramatic increase in the quantities of drugs imported into England; in 1588 only 14 per cent of the drugs used in England were imported from outside Europe; by 1669 this figure had increased to 70 per cent, with most coming from the East Indies and India.¹⁹ The imports were sold to wholesale druggists, who repackaged them into smaller quantities for use by apothecaries in towns and rural areas.²⁰ Most of these imports came into Mincing Lane, London, which was later to become famous as the world's leading centre for tea and spice trading after the British East India Company took over the trading ports of the Dutch East India Company (V.O.C.) in 1799.²¹

The expansion of trade with the East Indies brought with it opportunities for potentially huge exports of many commodities, including medicines. Increased trade also meant more trading ships and naval ships to protect them, increasing ex-patriot communities to administer the trade and the growing colonies, and increasing armies to defend the territories involved; all of these had need of medicines. It has been suggested that the trading life of the Company falls naturally into four main periods.²² Growth in the trade came gradually, although there were wide fluctuations depending on events in India. The Society



had had a contract to supply medicines to the navy from the middle of the seventeenth century; it was a natural progression for it to supply the ships of the East India Company. The periods referred to provide a useful basis on which to consider the relationship between it and the Society. They are summarised in Table 1.

Table 1: Periods in Company's trading history and sources of demand for medicines

Period	State of Company's trade	Type of Society's business
1600 to 1657	Early successes followed by decline, followed by near cessation of trade	Supplies to the Navy
1658 to 1703	Period of growth following introduction of new charter and advantageous conditions	Supplies to East India Company Ships
1704 to 1773	Period of regulation and consolidation of trade	Supplies to the Company's outposts
1773 to 1834	Return to diversification in response to changes in pattern of trade	Supplies to the Indian Army and local communities

2.1 Demand from ships

The origins of the relationship between the Society and the Company, then, are to be found in the Society's links with the navy. All naval vessels carried surgeons, and an essential part of the surgeon's kit was the medicine chest. Initially both the Navy and the British East India Company obtained their medicine chests from private apothecaries, since in the early years the Society of Apothecaries did not have manufacturing facilities. We know, for example, that the apothecary George Haughton was supplying medicine chests to the East India Company as early as 1634.²³ The Society of Apothecaries began manufacturing medicines in the early 1670s with the opening of its laboratory, but not until 1702 did it obtain the privilege of supplying the Fleet with medicines from Queen Anne. A special company called the 'Navy Stock' was set up by the apothecaries to fund this venture.²⁴

Initially the 'Navy side' of the business at Apothecaries Hall consisted largely of supplying medicine chests for surgeons. It expanded only slowly, sales averaging about £200 a year during the first two years. But in 1704 the British Fleet in the Mediterranean was desperately short of medicines. As a matter of urgency the Society's Navy Stock was instructed to supply internal and external medicines,



which were to be transported by the next convoy leaving for Lisbon. From there, Vice-Admiral Sir John Leake was to distribute the chests to thirteen of Her Majesty's ships in the Mediterranean.²⁵

As bases were established overseas an additional demand arose to supply the garrisons with medicines. The Society obtained contracts to fit out surgeons' chests for both hospital ships and the garrisons at Gibraltar and Lisbon. Sales increased to about £800 by 1740, rising to a peak of £1,700 a year in 1768. After this they settled at around £700 a year. By the end of the eighteenth century naval surgeons' chests from Apothecaries Hall were being sent to Newfoundland, Minorca, Jamaica, Gibraltar and Lisbon, as well as to the ports of the East Indies and Australia.²⁶ This monopoly of supply to the navy was only discontinued in 1805, after over 100 years.²⁷

To conduct its trade with the east the British East India Company hired ships in London. From the beginning every ship carried a surgeon, and the larger ones carried up to four: all required a substantial medicine chest, and this represented a substantial trade in its own right. The demand for medicines for the Company grew steadily as British activity in India expanded. The fleet of the East India Company also needed medicines. With each phase in the Company's history the number of ships involved, known as 'Indiamen', increased. Over the nearly 250 years of its life the Company used a vast number of ships; some 1,200 ships were either hired or owned by it, and nearly 10,000 voyages were completed.²⁸ At various points in its history the Company also had its own shipyards, its own dry docks for repairs, and its own docks to load and unload them. The total number of ships is listed in Table 2.

Table 2: Ships of the East India Company 1600 to 1834

Period in company's history	Years	Number of ships
Period 1: Initial development	1600-1657 (57 years)	130 ships
Period 2: Consolidation	1658-1703 (45 years)	290 ships
Period 3: Expansion	1704-1773 (69 years)	391 ships



Period 4: Final stages	1774-1834 (60 years)	427 ships
	Total:	1,238 ships

2.2 Demand from the army

The years of peace, between 1713 and 1739, brought an initial lull in demand for medicines by the Company. But war broke out again in 1739, continuing until 1748, which generated increased demand for the restocking of surgeons' medicine chests. The year 1747 saw a new development: in that year a squadron of East India Company ships set sail from Spithead, the departure point for its ships in times of war. Each ship carried a detachment of royal troops, sent to relieve Fort St David at Cuddalore in India, where the Company's staff had retreated following the fall of Madras in the same year. These were the first ever troops to be sent to India.²⁹ Thus arose another source of demand for medicines; that of supplying medicines in medicine chests for the use of army surgeons employed by the Company.

The return to peace following the end of the war against the French in India in 1748 again resulted in reduced demand for medicines from the Company, both for its ships and the army. But the Society's lucrative contracts with the navy and the Company were the source of substantial envy in some quarters. A pamphlet in 1748 drew attention the previous dealings that the East India Company had had with the Society, stating that the Company had dealt 'for several thousand pounds a year with these emulsioneers, this bunch of pulp-pated pill gilders' of Blackfriars.³⁰ However, the Company also appears to have placed some of its business elsewhere from time to time, to 'the Bevans of Lombard Street and to Johnson of Fenchurch Street, since they were cheaper'.³¹

The scale of the Company's operations in India escalated with the taking and development of Madras, and Clive's later adventures in Bengal. During the Seven Years' War, between 1756 and 1763, there were some 20,000 troops in India. The pacification of Bengal in 1766 brought generous dividends to shareholders in the East India Company, and improved business opportunities. In October 1766 the directors of the Company again looked to the Society of Apothecaries for the supply of the medicines it needed, and awarded a new and bigger contract to the Society, or the 'Best-side Banditti of Black



Friars' as the anonymous pamphleteer described them.³² The directors of the Society took the opportunity to produce 'an enticing catalogue of the chemical preparations available from the Hall'.³³

However, the Company suffered another reversal of fortune at the end of the eighteenth century, as a result of armed conflict in central India and mismanagement back in London. As a result the Company was stripped of its trading privileges. Yet medical supplies were still needed for an Indian Army which was to grow to around 300,000 men by 1820.³⁴ In 1810 the Army Medical Board approached the Society with an urgent request: the Society quickly confirmed that it could supply medicines for an army of 30,000 men from Apothecaries Hall within ten days.³⁵ The Society was proud to boast that 'the whole army of India (we believe exclusively) is served under the direction of the Honourable United India Company from our establishment'.³⁶ This privilege yielded the Navy Stock an average of £20,160 a year for the first decade of the nineteenth century.

2.3 Demand from civilian communities

As the activities of the British East India Company expanded the directors decided that, in future, not only the ships and army but also all the outposts of the Company should be supplied from Apothecaries Hall 'with the drugs and medicines that may be wanted for the several Presidencies, notwithstanding their prices exceed those of other persons, as there is a certainty of being supplied by them with the best of medicines and drugs, every article coming under the inspection of a deputation from the College of Physicians and the Surgeons Company'.³⁷

The influence of the surgeons employed by the East India Company extended far beyond that of the ships on which they worked. Many stayed on in the company's outposts, in both India and elsewhere. Medical personnel employed by the Company, and later by the British Crown, were instrumental in introducing the western medical system in India and turning it into the official system of health care in that country, as well as others.³⁸ The Indian Medical Service traces its origins to the beginning of the seventeenth century as a component of the empire-building exercise.³⁹ The impact of colonialism was seen in medical education. In 1827 a series of lectures was started in Indian colleges based on European teaching.⁴⁰ The medical acumen of two legendary figures, Gabriel Boughton and William Hamilton, has been stated to have aided the East India Company in establishing a foothold in the sub-continent.⁴¹



India itself was a staging post for the much longer journey to the islands of the East Indies, to Indonesia and later Singapore. On their return journey from India the company's ships stopped off at St Helena, and a thriving British community sprang up there to supply them. The actions of medical personnel and others further increased the demand for medicines from England, which would be brought out on the ships of the East India Company.

Detailed records remain of some of the cargoes carried by the Company's ships. In one year alone the consignment included 10,000 pounds of Glauber's Salts and 28,000 pounds of Epsom Salts.⁴² These were part of the Indian order made up and packed at Apothecaries Hall for shipment to Bengal, Bombay, Madras, Fort Marlborough, Prince of Wales Island and St Helena. Details of the consignment are given in Table 3.

As trade expanded further trading stations were established around the Indian coastline, and an additional need arose to supply these with medicines. But the British presence was concentrated in the main cities, which in the early nineteenth century were Calcutta, Bombay and Madras. In due course British pharmacists began to set up businesses across India, and substantial quantities of medicines were imported to meet local demand.⁴³ Eventually however, pharmaceutical manufacturing was established in India itself, and the need to import vast quantities of medicines diminished rapidly.⁴⁴

Table 3: Consignment of medicines to India 1821

Medicinal substance	Quantity
Glauber's Salts	10,000 pounds
Epsom Salts	28,000 pounds
Citric acid	large quantities
Terebinth	large quantities
Arsenic	large quantities
Ointments	Many casks

3. Supplying the needs of the company

Growing demand for medicines from both the navy and the East India Company created increasing challenges for supply to the Society of Apothecaries in the early years. Initially, the Society acted only



as a retailer, buying its medicines from other local suppliers. As the trade grew it first set up its own laboratory to manufacture what it could on a much larger scale. As time went by it recognised the need to grow its own herbs and medicinal plants, setting up the Chelsea Physick Garden in 1673. It even acquired its own mill to powder its solid plant medicines. These developments are now briefly described.

3.1 The Society's laboratory

The Society had established a laboratory for the compounding of vegetable medicines as early as 1623, but this was only for the instruction of apprentices. The College of Physicians had previously set up a manufacturing facility, but this was destroyed in the great fire of London in 1666.⁴⁵ Following the fire, in 1672 seventy apothecaries subscribed a total of £1,205 to set up a company, then known as a 'stock', to establish their own manufacturing facility. This took the form of an 'elaboratory' at Apothecaries Hall, and the stock became known as the 'Laboratory Stock'. This allowed the Society to manufacture a range of medicines on a large scale, with the benefits of reduced costs resulting from mass production. It also gave it the capacity to guarantee the purity of commercially produced drugs for the first time.

When the contract was granted to supply the navy with medicines in 1702 an additional joint stock company, the 'Navy Stock', was established. This supplied medicine chests to the navy, but these were actually prepared in the laboratory. By the early nineteenth century the laboratory was supplying not only the East India Company but also the army, the prison service, the crown agents, convict ships to Australia, chemists, druggists and infirmaries.⁴⁶ The two stocks were merged in 1822, forming the 'United Stock,' and manufacturing continued on the premises of the Society until 1921.⁴⁷

3.2 The Chelsea Physick Garden

In due course the Society found it necessary to develop the capacity to grow its own herbs and plant medicines. With this in mind it set up the Chelsea Physick Garden shortly after the establishment of its laboratory, in 1673.⁴⁸ The Society rented four acres on the Chelsea riverside from Lord Cheyne. Three years later a wall was built around it, and both the garden and the wall survive today. The garden's original purpose was to grow plants that were no longer easily found in fields and woods, along with the exotic plants being imported from the East in ever greater numbers.⁴⁹ It also had an important educational function, but increasingly it became a source of raw materials needed by the laboratories.



3.3 The Society's windmill

As trade increased still further the volume of plant material that needed to be transported by horse and cart across London from Chelsea to the laboratory in Blackfriars was substantial. Late in the eighteenth century the Society acquired an old 'horse-mill', across the river from the gardens in Battersea.⁵⁰ The mill had previously been used by John Field, who was Master of the Society between 1785 and 1786, and his son Henry, who was Apothecary to Christ's Hospital and was Treasurer to the United Stock. Here the drugs were ground before being sent to the Hall for final preparation.⁵¹ The volume of powdered drug to be transported was clearly a fraction of that of the unprocessed plant material.

It appears that the windmill in Battersea was only used for a relatively short time. Plant material and other crude drugs also arrived at the docks in London from India and elsewhere, and there was a need to process drugs nearer the laboratory site. The proportion of raw material provided by the Physick Garden became ever smaller. An opportunity to extend the trade premises at the Blackfriars site came in 1801, with the purchase of land to the north of the laboratory. This was used to erect a Mill House and a separate engine house to drive the mill.⁵² The new Mill House accommodated three pony-powered stone mills, and was only demolished in 1915.⁵³

4. The nature of the relationship

The close relationship between the Society and the Company thus continued largely unbroken for over one hundred and fifty years. There were many alternative sources of supply available to the Company. But the significance of the medicine business was rather different for the Society than it was for the Company. Despite the sums involved the trade in medicines was always only a small part of the business of the Company, which was vast. By the 1720s the paid-up share capital of the Company was almost £3.2 million, with an annual turnover of many hundreds of thousands of pounds.⁵⁴ But for the Society the trade with the Company and the Navy represented the core of its business for many years.

In this section the factors that accounted for the enduring nature of the relationship over such a long time are explored. Three key features stand out as important in establishing and maintaining the relationship. These were the willingness and capacity of the Society to remain focussed on the quality of the products supplied, and its motivation for doing so; the ways in which trust between the two



institutions was built and maintained over an extended period; and the common interests that bound them, including the fact that their headquarters were located within a mile of each other.

4.1 An emphasis on quality

One of the main reasons why the Society was able to retain its contract with the Navy over such an extended period was that it placed great emphasis on the quality of its products. Clear arrangements were in place to ensure that this happened, with regular monitoring of production processes and final products. Its operations were headed by a Court of Proprietors, with a committee of managers, a purchasing committee, an inspection committee and another to regulate prices. These measures enhanced the Apothecaries' reputation for good quality medicines and drugs, but made them expensive.

The quality of the Apothecaries Hall medicines and drugs was widely recognised at a time when the quality of what was offered by many suppliers was highly questionable. For example, the apothecary John Quincy noted approvingly 'the care of the Apothecaries Company, who with a joint stock have these medicines made at their Hall under such careful management and inspection as cannot give any possible opportunities for impositions.'⁵⁵

Like its contract with the Company, the contract that the Society had with the navy was not without its detractors. The naval surgeons resented the high prices charged for medicines and drugs, which they were obliged to obtain from Apothecaries Hall, as a result of the Order signed by Queen Anne in 1702. It could cost between £80 and £90 to fit out one chest.⁵⁶ There were also complaints about 'the system of certificates, delays, burnt hartshorn [ammonium bicarbonate], and insufficient supplies'.⁵⁷

Despite the initial difficulties and complaints from the navy, in the early eighteenth century the focus on the quality of its medicines by the Society and its resulting reputation resulted in the approach from the Company to supply the medicine chests for the surgeons on its ships. The Company put quality before price when it came to medicines.⁵⁸ Representatives from the Company first inspected the surgeons' chests at Apothecaries Hall in 1706, and it seems likely that a contract to supply them over the following years resulted from that visit, although evidence of a formal contract is lacking.⁵⁹

4.2 The building of trust



As a further safeguard against the quality of the medicines supplied by the Society, the East India Company employed its own Inspector of Medicines, indicating the scale of its purchase of these items. The inspector, along with the officers of the Royal College of Physicians, the Physician to Greenwich Hospital and the First Commissioner for the Sick and Wounded, were given places of honour at the Apothecaries dining table, held in the Great Hall, for what has been described as ‘the eighteenth century equivalent of corporate hospitality’.⁶⁰ Thus was the relationship between the Society and the Hall sealed.

If there was trust between the Society and the Company the same could not be said of the different groups of the Society’s stockholders. The award of the new East India Company contract in December 1766 necessitated the establishment by the Society of new Articles of Agreement, allowing for an increase in the capital of the Navy Stock to £12,000. As on previous occasions there were serious disputes amongst the members of the Society about who should benefit.

There were two main classes of membership of the Society; the elite Liverymen, and the more junior Yeomanry. In addition to the rights of the Yeomanry, Liverymen also had the right to take on two paying apprentices, as well as to vote for the Aldermen and Lord Mayor of London. Only Liverymen who were Proprietors (or stockholders) of the so-called ‘Laboratory Stock’ were permitted to take up the new shares in the Navy Stock, a condition that elicited an angry response from the disgruntled Yeomanry. ‘The great increase and extension of the trade’ continued during the Napoleonic wars, extending from the end of the eighteenth century up to 1815. This was to be of greatest benefit to the Liverymen, the sole Proprietors of the Navy Stock.

The anger of the Yeomanry appears to have been more than justified. In the 1730s profits from the Navy Stock were modest, estimated at around £175 per year. The year 1739 to 1740 was exceptional, with profits surging to £843. It was followed by an increase in the capital of the company the next year. As a result of the East India Company’s new contract profits reached £1,677 for the year 1766-67, and shareholders received good dividends.⁶¹ But only the Liverymen benefited.

4.3 Other common interests

The two institutions had much else in common. The Worshipful Society of Apothecaries was founded in 1617, just 17 years after the founding of the British East India Company. The headquarters of these



two great institutions were located about a mile from each other in the city of London; the Society was located in Blackfriars Lane, close to the River Thames, where it is still located. The headquarters of the East India Company were in the City of London, initially at Cosby Hall, and then in Lime Street, before moving the short distance to Leadenhall Street in 1817.⁶² This building was eventually demolished in 1929. Thus throughout their history the headquarters of the two institutions were no more than a short distance from each other, and easily travelled on foot.

It seems highly likely that, as a result, there were a number of further close financial links between the two institutions. At least some of the investors in the Society were likely also to be investors in the Company. During its lifetime many thousands of well-to-do individuals chose to invest in Company stocks and bonds.⁶³ Some of these are likely to have been apothecaries. It seems probable that at least some of the Liverymen who held shares in either the Laboratory or Navy Stocks also held shares in the East India Company. Further research on this point is needed.

Both institutions, but particularly the British East India Company, were significant employers in the area. It also seems quite probable that there was at least some movement of staff between the two institutions. Again, further research on this point is needed.

5. Conclusions

Some of the key watersheds in the history of the relationship between the Society of Apothecaries and the British East India Company can now be identified. These are summarised in Table 4. Over the period discussed in this paper business between the Society and the Company fluctuated widely. It was a period during which the British Navy was busy fighting wars around the world, and the Company itself was heavily involved in controlling large areas of India through its army. For the Society at least, war was good for business, and the Company was actively involved in wars over an extended period.

Table 4: Defining moments in the relationship between the Society and the Company

Date	Key event	Features of relationship
1600	Formation of East India Company	Apothecaries in Grocers Company
1601	Company's first voyage	Each ship has between one and

		three surgeons on board
1617	Formation of Society of Apothecaries	Company's medicine chests supplied by private apothecaries
1672	Society establishes Laboratory	Able to control quality
1673	Society sets up Physick Garden	Growing exotic plants from India
1702	Society awarded contract to supply fleet with medicines	Navy contract awarded by Queen Anne
1706	Initial approach from Company to Society to supply chests for Indiamen	Follows visit to laboratory by Company officials
1766	Company awards new and bigger contract to Society	Results in conflict between Liverymen men and Yeomanry
1747	Company departs with first detachment of troops	Expansion of Society's trade as army grows
1805	End of Society's navy monopoly	Navy orders continue
1811	First chemists shop opened in Calcutta	Supplies from the Society
1817	Company moves to Leadenhall Street	Close to Society of Apothecaries
1822	Society merges Laboratory and Navy stocks	Range of customers include army, prisons and crown agents
1833	Charter Act	Company divested of commercial activities by British government
1857	Indian Mutiny	Control of India transferred from Company to British government
1858	East India Company dissolved	Society's trade continues through Council of India

For the East India Company the beginning of the end came in the form of the Charter Act of 1833. Through this the British government divested the Company of its commercial functions, but renewed its political and administrative authority for another twenty years. The end of the Company itself came as a result of the Indian Mutiny in 1857, although in truth it slowly faded away rather than suffering a sudden death. It was formally dissolved in 1858, although core staff continued to be employed for a



number of years afterwards. Its headquarters at India House were demolished in 1862, after which staff moved to a succession of rented addresses. The Company was finally wound up in 1873, but even then a number of transactions were still being followed up, and the last cheque was finally honoured by the Bank of England only in 1884.⁶⁴

The nineteenth century treated the Society of Apothecaries more kindly. It continued to receive substantial orders from the Navy even after the ending of its monopoly position in 1805. Indeed, between 1806 and 1811 the cost of drugs, medicines, pill tiles, bottles, corks, galley pots, mortars and pestles, needles, funnels, sponges, and many others, supplied to the navy by the Society averaged £24,917 per year.⁶⁵ This was in fact the Society's largest account, being even bigger than that of the East India Company. During the same five year period the average annual bill for drugs and medicines supplied to the Company was £21,582, some £3,000 less than that for the navy.

The Indian Mutiny of 1857 also produced a very different outcome for the Society of Apothecaries. The Council of India renewed the contract for drugs and medicines the Society had with the East India Company that it replaced, providing the United Stock with a regular income, until the final payment of just £19 in 1881 concluded the business. In that year the United Stock was dissolved, and thereafter the Society's trade relied on contracts with the Crown Agents, the Army Medical and Veterinary Departments, merchants, hospitals and retail customers, until it, too, ended in 1921.⁶⁶

For the Society the emergence of the British Raj provided additional opportunities for business, with the growth of business within India itself. Although the medicines originally supplied were for the use of the navy and the company's staff, increasingly they were traded on. The history of the development of western pharmacy in India starts with a young Scot by the name of Bathgate.⁶⁷ He came to India as an employee of the East India Company, and opened his first chemist's shop in Calcutta in 1811. At that time Bathgate's shop was the most familiar centre for the supply of medicines for the citizen's of the town. The firm that he founded eventually took up drug manufacturing for the Indian market, especially of tinctures and spirits, in 1910.⁶⁸

India slowly began its journey towards self-sufficiency in key medicines and drugs. The first opium factory in India was started in Ghazipur in 1820, with further centres opening up in later years. A government circular in 1871 from the Inspector General of Hospitals in Bengal informed medical



officers about the local manufacture of morphine and nicotine at a much lesser cost than the English price, and recommended their free use wherever indicated, discarding the past consideration of prohibitive price.⁶⁹ By 1872 a factory existed in Banaras for the production of morphine. A few years later two other doctors bought the concern, and renamed it Messrs Smith Stanistreet and Co. After 1918 this company began the large scale production of drugs, including strychnine and caffeine.

In India itself, consumption of European medicines kept increasing enormously throughout the nineteenth century.⁷⁰ Drug manufacturing in India began in earnest in India towards the end of the nineteenth century. P C Ray started a small concern in Calcutta in 1892 with a modest capital of 700 rupees. In 1899 Ray joined forces with others to form the first pharmaceutical company entirely under Indian management, named the Bengal Chemical and Pharmaceutical Works. Thus began the gradual rise of India to becoming what it is today; one of the largest exporters of pharmaceuticals in the world.

End

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