

Chapter 2

On the Road

The truth is that when you are right and when you know your preparation is as good and better than anyone else's, it is pretty hard to put you down.¹

Philadelphia, ‘The City of Brotherly Love’, was in the 1870s one of the largest cities of the world, an exciting metropolis of international importance with a thriving bustling commercial centre. It was proud then, as it is now, of its rich history, home to the Declaration of Independence in 1776 and holder of the Liberty Bell. During the 19th century it became the first major industrial city in the US, attracting many European immigrants; with the advent of railways it also became a major railroad hub. Buffalo had been big after Medina, but ‘Philly’ was vastly more exhilarating, and Burroughs could enjoy its vibrant social and intellectual life, with numerous libraries, literary, scientific and art institutions. He witnessed daily changes to the city, and many of the major buildings were constructed when he was there, one of the largest being the gigantic Norman-style Masonic Temple, which was situated virtually in front of one of his lodgings. For a time he lived in a comfortable row of terraced houses in an attractive, mainly Quaker area in the centre of town, at 1319 Arch Street. This was close to the College of Pharmacy, at 820 Arch Street, and opposite the Arch Street United Methodist Church; his Presbyterian church was not far distant, at 2014 Arch Street.

Wyeths presented Burroughs with a tremendous opportunity to learn about pharmaceutical manufacturing at a time when pharmacy was emerging as a dynamic and rapidly expanding profession. Philadelphia

boasted the country's oldest school of medicine and the greatest number of physicians in America, and its College of Pharmacy, founded in 1821, was the first such college in the country.² In 1860 John Wyeth and his brother Frank opened a drugstore and small research laboratory at 1410 Walnut Street; their timing was fortuitous, coinciding with the new opportunities to pharmaceutical manufacturers created by the Civil War. The firm expanded rapidly, supplying a diverse range of products, including medicines and beef extract to the Union Army, and obtaining government contracts for basic drugs such as opium, quinine and ergot, which could be made using machinery. Before long they produced a catalogue, sold a wide range of elixirs and tonics, and by 1873 had started manufacturing compressed medicines at the suggestion of one of their employees, Henry Bower, who developed and patented one of the first rotary compressed machines in the US.

The firm soon found that, in Burroughs, they had a highly energetic employee whose work as their salesman, or 'detail man', involved travel all over America. A travelling agent or commercial salesman needed many talents, not least of which was a high degree of self-confidence, assertiveness and quick thinking. The travelling man also knew that his personality was his capital. As Arthur Miller wrote, they 'lived like artists, like actors whose product is first of all themselves, forever imagining triumphs in a world that either ignores them or denies them altogether.' The salesman (and it was very much a male-dominated occupation during the 19th century) also epitomised and spoke for many of the changes in society at this period.³ Such was the growth in the numbers of this body of workers that in 1870 the US government introduced the occupational class 'commercial traveler' in the census for the first time.⁴ 'Drummers', as travelling salesmen were known, became an important feature of post-bellum America's economic growth. By the 1870s their reputation had improved and they were no longer perceived as the hard-drinking womanisers who in earlier decades had peddled goods. One writer noted simply: 'he is less of an animal and more of a man.'⁵ Advice given to the traveller by William Mather in his biography *On the Road to Riches* stressed that the salesman, in addition to being a good judge of human nature, must 'arrange his work well, understand his business and not misrepresent his goods, have knowledge of business law, and a good memory. He should be a gentleman with good manners, pleasant, dress neatly and create a good impression.' Importantly, he must be educated with an ability to talk intelligently about other matters than business: 'a man will not buy from a salesman he dislikes, no matter how low the prices quoted.'

Burroughs fitted all these requirements. He was handsome, 5 foot 6½ inches tall, and his appearance was compared to that of Kaiser Wilhelm; they shared the same shaped face and piercing light blue eyes. Photographs of him taken around this time show an intelligent, alert countenance with a fashionable handlebar moustache; he was fair haired and smartly dressed in a well-cut jacket and tie, often sporting a buttonhole flower. He always looked spruce and tidy in spite of the dirt and grime of travel. He once noted observing that the fingernails of someone he met were less than clean, so he clearly paid great attention to being well turned out himself. His voice was reportedly soft and pleasing, his American upstate New York accent being a gentle one. It was said of him that he had a 'keen and attentive eye ... piercing in its glance ... and when in a reverie, with a particularly dreamy introspection.'⁶ His handwriting was large, bold and clear, with flourishes, suggesting an easy self-confidence.

Wyeths used a system known as 'detailing' to sell the firm's drugs, whereby sales were made directly to the medical profession rather than to the consumer, and Burroughs became a detail salesman. His work experience had given him all the basic knowledge he needed, added to which he had a way with words – remarked on by many – as well as a charming open and frank manner and an enjoyment of people and conversation. These traits, combined with a lively mind and natural curiosity, made him a good companion. He often acted on instinct, his trust inspired friendship, and on the whole his judgement was sound.

Travel was becoming much easier as railroad and telegraph opened up the country, creating the possibility of a new national market across America.⁷ In 1870 the first trans-US rail service began, following the connection of the Union Pacific and Central Pacific lines at Utah, near Great Salt Lake, the previous year: it was said that the 'entire nation cheered' when this happened. Rapid progress was made towards the adoption of a standard gauge all over America. Undoubtedly journeys were still exhausting and uncomfortable but were relieved by the new Pullman sleeping cars, which were likened to 'first class hotels'. In 1865 the 3,000 miles from New York to San Francisco could be covered in six days and nights, and the journey would have taken the traveller through some of the most dramatic and beautiful scenery the country had to offer.

Burroughs always enjoyed travel, but it was far from easy. Journeying on from a railhead meant using stagecoaches, buggies, gigs, wagons and horses along rough roads and tracks. Hotels in the poor towns were basic, many simply small shabby houses, offering stale food in unsanitary conditions. As well as being physically and emotionally

demanding, the travelling salesman's job was dangerous: accidents and attacks were always likely. Mastering the physical contingencies of road life and the props of the trade, such as baggage, product samples and catalogues, 'required practical imagination and knack for persuasive, sometimes histrionic self-preservation'.

Burroughs spent weeks and months at a time on the road, meeting people from all walks of life. His firm's samples were his vital baggage, and he would invariably have carried one of the latest new manuals and guides, such as Brockett's *The Commercial Traveller's Guide Book* or the Claremont Manufacturing Company's *The Pocket Companion*, which gave advice on how to get to any town and whether it would pay to go there.⁸ Travellers recognised the advantages of mutual help, and after the Civil War many fraternal and insurance organisations developed: based on collective needs, they offered advice and assistance with issues such as discounted travel rates, better hotel services, and life and resident insurance. Burroughs probably joined one of the many newly founded national associations for commercial travellers, the first of which started in New York state around this time.

As Wyeths' agent, Burroughs travelled to California on at least two occasions, in 1873 and again in 1875–6. California was still frontier country: the Mexican–American War, the gold rush of the late 1840s, and America's expansion west were comparatively recent events. San Francisco was described as looking mostly like a sand heap in 1850, though it was fast changing, and by 1881 it had fine streets, shops, public buildings, a telegraph in every office, and one of the largest hotels in the world. Mining was giving way to agriculture and commerce, and people had more money to spend on medicines and toilet preparations. The social life in San Francisco was described by one visitor as having very little restraint, formality or stiffness: 'all may do as they like. Life is very public' – and the writer



5: Burroughs in San Francisco, aged c. 27.

also noted that everyone was out for money.⁹ Los Angeles saw similar changes: the Clarendon Hotel, where Burroughs stayed in 1875, had been transformed over the previous quarter-century, from a basic single-storey structure surrounded by shacks occupied by Mexicans to a three-storey much improved building. Yet two years after his stay it was described as 'a low price lodging house, serving an increasingly poorer and diverse population'.¹⁰

Burroughs was clearly very successful, as he himself boasted some years later. 'When I first went to San Francisco I took or had sent to me \$2,500 worth of goods which I had no difficulty in selling right off and the Drs began prescribing them the day they were distributed.'¹¹ Work did not stop him from enjoying the Californian springtime in the company of at least one young lady. The attractions of a certain Emily Bernal led to Burroughs picking her flowers and carving her initials on a tree. Clearly smitten, she wrote to him two years later, in 1878, when she heard a rumour that he had become engaged, to remind him of their romantic meeting under cherry trees. Although he had not kept in touch, young Emily nursed a hope that one day he would return, writing: 'Must my heart wither as those flowers, once picked wither to dry away! No, Mr Burroughs, your [*sic*] a man with a noble heart you know the feebleness of a womanly heart. I have loved ... believe in the affection with which I cherished you.' In San Francisco he had his photograph taken by the celebrated photographers Bradley & Rulofson and took advantage of being near Yosemite to ride on horseback there, admiring the view and musing that when he married it would be a good place to honeymoon.¹²

During a hectic schedule Burroughs managed to return to Medina for brief visits to see his family and friends in January 1873 and again that March, possibly as a result of learning that his uncle had been seriously ill with typhoid. Given the hard living conditions, it is not surprising that, while in San Francisco, he himself was ill for several days with pleurodymia.¹³

In August 1876 Burroughs returned to Medina from California before heading back to Philadelphia, this time joined by his sister Lina and their friend Hattie Acer so that they could all visit the Centennial Exposition. As a child he may have attended the large 1853 Buffalo Fair, and he would have known of the sanitary fairs, held from 1863 to mobilize civilian support for the war effort. America's first world's fair, the Centennial Exposition, was on a different scale from anything seen before in the country. About 10 million visitors attended between May and November, equivalent to about 20% of the population. Modelled on London's 1851 Great Exhibition, it introduced exciting new technologies

and machinery to the public and brought innovative designs and ideas to manufacturing and the decorative arts. More than 50 nations displayed exhibits in over 200 buildings in the 3,000 acres of Fairmount Park, and it was a huge success, attracting millions of visitors.

The main exhibition building was the largest in the world and dealt with mining, metallurgy, manufacturing, education and science – including pharmacy. Pharmaceutical firms from 51 countries were represented, including of course Wyeths.¹⁴ The American Pharmaceutical Association (APhA) took advantage of the exhibition to promote the new changes in their industry, and its Exhibition Committee drew attention to pharmaceutical exhibits by sending out a circular to all exhibitors from home and abroad. Wyeths did exceptionally well and won five awards, its compressed powders being praised as ‘superior to any other similar pills manufactured’.¹⁵

Careful planning ensured that those attending the APhA’s 24th annual meeting could also visit the exhibition. Some members questioned whether they should be enjoying themselves in this way, but opposers contended that the display of the pharmaceutical, chemical and botanical items would be of great interest: ‘We are now in the one hundredth anniversary of this country’s independence, and on an occasion of this kind we can drop the usual routine of business without interfering with it; we can cultivate our minds ... this is pre-eminently an age in which we are taught more by object-instruction than by any other means!’¹⁶

Here Burroughs had an opportunity to meet manufacturers and learn about new goods and designs from all over the world. Here too he learnt much about the importance of high-quality displays, packaging and promotional literature and how exhibitions could be used in marketing, methods he later employed in his own business. His appetite for travel outside America and possibly a desire to move to London may have been born at this time. Before then, however, he had recognised that he needed to gain a professional qualification in pharmacy, a realisation possibly brought about by the APhA’s publicity at the exhibition, but more likely because his employers supported such a move.¹⁷ They described attendance at the College of Pharmacy as being ‘almost essential’, underlining the importance attached to salesmen knowing more about pharmaceuticals in order to work more effectively.

Before 1820 little was done in America to raise standards and instruct pharmacists: adulterated drugs with inferior remedies were common, a result largely of the poor training of druggists and apothecaries. That year the first *US Pharmacopeia*, laying down standards for the manufacture

of drugs, was printed, and the University of Pennsylvania then passed a resolution to offer honorary degrees to a select number of pharmacists as a step towards improving the prestige of the profession. Spurred into action by criticisms of the trade, a group of Philadelphia pharmacists seized the initiative and recommended the establishment of a College of Apothecaries to put their business 'on a respectable footing'. This would ensure that quality products appeared in the drug market created by suitably trained qualified pharmacists. The college was established there, changing its name from 'Apothecaries' to 'Pharmacy' within the year, and the Philadelphia College of Pharmacy (PCP) became the first college of pharmacy in the country.

Some thirty years later, in 1851, the national organization, the APhA, came into existence – its creation again being mainly the work of Philadelphia pharmacists. Many Quakers were associated with pharmacy, and these included William Procter jr (1817–74), editor of the *American Journal of Pharmacology* and PCP professor from 1846 to 1874, Daniel B. Smith, a founder of the PCP, its president from 1829 to 1854, and president of the APhA in 1852, and the Wyeth brothers. Further developments at this time resulted from the immigration of German pharmacists, refugees from the failed 1848 revolutionary risings in Europe, notably John Maisch (1831–93), who arrived penniless in Baltimore.

Before the Civil War, not one of the few existing pharmacy schools had laboratories for basic chemical instruction, and science played a small role in pharmaceutical education in America. After the war some key individuals acted radically to allay public concern and continue the reforms started in the 1850s, Maisch being one. He and his colleagues drafted a proposed law 'to regulate the practice of pharmacy and the sale of poisons and to prevent the adulteration of drugs and medicines'. Although it was not formally adopted by the APhA, their action encouraged improved standards within the profession and ensured that any new state legislation was based on this proposed model law. Philadelphia was one of the first places to support the bill, which was passed in 1872, stating that no one in the city could engage in the business of compounding and dispensing medicines on the prescriptions of physicians or sell at retail any drugs, chemicals, poisons or medicines without a written certificate declaring him to be duly competent and qualified to do so. Druggists could not employ assistants in the compounding of medicines unless they were graduates in pharmacy, or unless they had served a minimum apprenticeship of two years in a store where medicines were compounded and dispensed, or had taken at least one full course of lectures on chemistry, *materia*

medica and pharmacy. The editor of the *American Journal of Pharmacy* described it as the best pharmaceutical law yet passed in the US, and by the late 1870s nine states had adopted laws which licensed pharmacists.

In 1868 the college moved to larger premises, on 145 Tenth Street. Apart from its lecture rooms, seating 300 people, it had a library of 3,000 volumes, a museum containing *materia medica* and chemical and pharmaceutical specimens, an extensive herbarium of pressed plants, and a new laboratory 'fitted for practical instruction in analytical chemistry and pharmacy'. Instruction was given on certain evenings only, and the laboratory was open daily from 1870, the fee for each course of lectures being \$12. Diplomas were awarded to those of 'good moral character' who had attended two lecture courses delivered in the college (or one course in the college and one in some other reputable college of pharmacy) and who had also 'served an apprenticeship of at least four years with a person or persons qualified to conduct the drug or apothecary business.' After passing a written examination, the candidate also had to present a satisfactory original dissertation or thesis on some subject of *materia medica*, pharmacy, chemistry or one of the branches of science immediately connected with them, written with neatness and accuracy. In spite of the strictness of the process, the 1871 examination committee felt it their duty to report on the 'growing laxity on the part of employers' who failed to supervise or instruct their apprentices adequately, giving them manual rather than educative duties.¹⁸

Following Philadelphia's new regulations, in 1872 the college received over 500 applications: many more attended lectures than graduated.¹⁹ Lectures were delivered in the evenings, and most students worked at the same time as studying, so attendance meant that staff were absent from their routine employment duties and there was a financial cost to both student and the firm.

One early graduate who sat exams in 1874 was a young man from Wisconsin called Henry Solomon Wellcome who worked for McKesson & Robbins in New York.²⁰ Wellcome had applied to work for Wyeths in 1872, and at the time Wyeths wrote to him that they had 'almost made up our minds to take no more clerks who come to attend lectures as this winter we had six or seven and while we think it almost an essential for a Druggist it interferes very much with the surviving of our business.' They told Wellcome to answer their offer of employment at once as they had many applications.²¹ In the event Wellcome did not accept their offer and took up a post in Chicago instead. Although there is no evidence of how Burroughs and Wellcome met, it is likely that their paths crossed in Philadelphia during a pharmaceutical meeting or

through the college. What is certain is that the two men formed a strong friendship which was to have lasting consequences both for them and for the pharmaceutical industry.

Burroughs enrolled at the college in October 1876 and attended until February the following year.²² The college obtained references from his previous employers, Healy and Coann, and John Wyeth vouched that he had 'been with them almost continuously since October 1869 and had exhibited a laudable interest in this business and has conducted himself in every way satisfactorily.'²³ His fellow students came mainly from Pennsylvania and New York, but there were also two from Germany and one from Sweden; 86 students were successful in his year, so the classes must have been packed.

* * *

The faculty teachers had excellent credentials. Joseph P. Remington, who became one of the foremost figures in the field, had recently been promoted to Professor of Theory and Practice of Pharmacy; he also practised pharmacy and owned an apothecary shop. His theory and practice course covered the weights and measures systems of the US, Britain and France; specific gravity; apparatus and manipulations used in shop and laboratory; all the preparations of drugs in the pharmacopoeia in their groups; classifications; preparations of animal substances; and the practical pharmacy of making pills, suppositories, ointments, etc. His impressive courtly presence, fluent and easy manner and geniality in address and conversation made him respected and liked. In his address to the APhA in 1875 he demonstrated Wyeth's compressed medicine, giving significant support to the firm by his recommendation. Burroughs and Wellcome kept in contact with him after they left the college and arranged sales of his textbook *The Science and Practice of Pharmacy* through their firm.

The Professor of Chemistry was Dr Robert Bridges, whose course presented 'a systematic view of the science, its improvements and condition to the present time'. Reportedly unselfish, loyal and painstaking, with kindly ways, he earned respect and, 'without being ready in debate or at all eloquent in speech, ... was an admirable and efficient teacher.' One suspects that he was in fact rather a boring lecturer.²⁴

John Maisch, 'the father of adequate pharmaceutical legislation' and at that time the college's Professor of Materia Medica and Botany, lectured on the best time and mode of collecting and preserving vegetable and animal substances used in medicine and the products obtained from plants in various ways. He gave students the means to recognise

individual drugs and covered their botanical and commercial history. This relatively new course comprised one afternoon a week devoted to lectures and excursions in the countryside surrounding Philadelphia, giving the students ‘a healthy recreation’ as well as ‘the best means of becoming practically acquainted with living plants’.

The examinations were not easy. A written exam required the identification of specimens and drugs and the answers to such questions as:

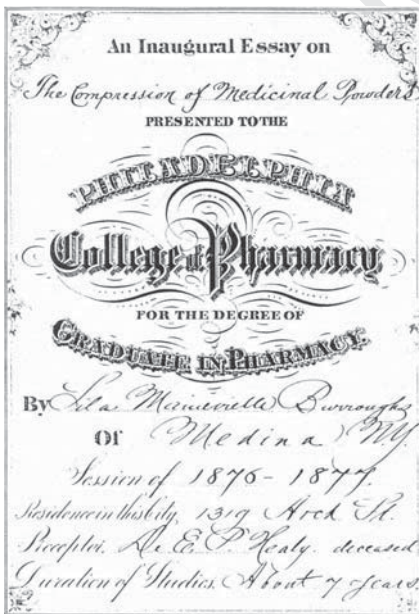
Chemistry Give a process for the preparation of Iodide of potassium and state the rationale for it.

Materia medica Give a description of sweet and bitter almonds. From what plants and from what countries are they obtained? What are their medicinal products and how obtained?

Pharmacy Give a formula for preparing a castor oil mixture.²⁵

Burroughs chose a highly topical subject for his thesis: ‘The Compression of Medicinal Powders’. Handwritten, his essay covered seventeen pages.²⁶ He wrote that their history was of recent origin in America but had been employed in Europe for many years, and he criticised the use

of the expression ‘compressed pill’: ‘I consider the title of compressed pills, usually applied to them in this country, is ill chosen, as it may imply their preparation from a pillular mass, in which an excipient has been employed whereas if properly prepared they are merely dry powders, compressed without addition whatsoever, except in cases where an increase of bulk is demanded.’ Starting with William Brockedon’s work in 1843, Burroughs related how compressed powders had obtained some popularity among physicians in England and elsewhere.²⁷ However, the style in which they were ‘put up’,



6: Burroughs’s thesis, 1877.

or marketed, inhibited their employment by the profession, as the label claimed a patent for them. Burroughs made an important point here. Aware that Brockedon's discovery was undermined by the English medical profession's reluctance to purchase patented pills, he was later careful to reassure his clients on this issue in England.

The historical background section of his thesis demonstrated careful observation of developments in this field. Burroughs cited a German journal of pharmacy which alluded to the display of compressed pills at the Centennial Exposition and their use in Germany for some time. Quoting from a recent article in the *American Journal of Pharmacy*, he described the method employed by Professor Rosenthal of Berlin to create compressed tablets and noted that Wyeths had manufactured increasing varieties of compressed pills since 1873, mentioning Remington's recent work on compressing powders. The price of these pills was initially too high for the druggist trade to accommodate them, and Burroughs explained: 'Like most new products the price decreased considerably with increasing demand and improved facilities for rapid and economical production.' An additional objection – that they were liable to disintegrate on exposure to the atmosphere or by rough handling – 'seems now to be greatly obviated by careful regulation of pressure', although it was essential that they be carefully packed and handled. Burroughs's experiments were detailed, and his results led him to conclude that compressed powders dissolved quickly, acted more efficiently (since there was no excipient), were smaller, had a glossier surface, were easier to swallow, and were comparatively free from taste. They thus constituted 'a benefit to the Patient, a valuable aid to the Druggist, and to the Physician an advantage over former expedients in the administration of medicines, as well as a protection against Homeopathic practice.'

Burroughs's clear conclusion was that the future of the pharmaceutical world lay in manufacturing compressed pills. The thesis was well written and forceful, its fluency giving the impression that it was composed easily, almost casually; indeed, in parts it almost reads as a promotional report. Burroughs had done his homework well, cited practical experiments and included good examples. The fact that he failed to complete the year date for one work was an indication of a hastiness and inattention to detail, a failing in him later criticised by Wellcome.

Burroughs was regarded as an outstanding and popular student. To celebrate the passing of his exam in 1877 he commissioned a special photograph of himself, which he presented to Professor Remington. He was now 31, his face fuller, and his hair beginning to thin – a man in



7: Burroughs on graduation, 1877. He gave this photo to Professor Joseph Remington at the Philadelphia College of Pharmacy.

his prime. The following year he was elected to the APhA, and by May he had negotiated a fundamental change in his career – to act as Wyeths’ agent in England.

Many years later, one of the Wyeth brothers was to say of Burroughs: ‘he was the smartest boy I ever saw ... he came into our employ at \$20 per week, and when he left nine years later [in 1878] was getting \$3,000 per year.’²⁸ The sum of \$2,500 a year in 1878 is noted as being rather generous for a travelling salesman, so with \$3,000 Burroughs had an excellent salary. By comparison, Wellcome’s trial salary of \$832 per annum in 1876 when he joined McKesson & Robbins in New York

had risen to \$2,500 by the time he left them in 1880, but then he was seven years younger and had less experience than Burroughs. Wyeths subsequently remarked to Burroughs: ‘While you were in our employ we gave you more liberal compensation than was given to any other one of our travellers. You were active, energetic, and your efforts constantly received our commendation, for [the] above reasons.’ In the same letter, referring to Burroughs’s subsequent employment as their agent in the UK, they told him that he was still receiving more than others – double the equivalent, for example, of a Mr Thomas Brown, who received only \$800. From all this it is evident that Burroughs was a sharp negotiator but was also valued by Wyeths.²⁹ They found him difficult to manage, with “patent medicine impulses” and a predilection for advertising’, and later complained that he gave them ‘more bother than all our travellers combined – too hasty arrangements with our customers, often in a manner prejudicial to our interests, making statements and promises we could not fulfil.’ That said, his easy manner and ability to

make friends and maintain contacts stood him in good stead, and, as Wyeths admitted to him: 'the truth is that when you are right and when you know your preparation is as good and better than anyone else's, it is pretty hard to put you down.'³⁰

How did the move to be Wyeths' agent in Britain come about? Was it because the firm was so impressed with him that they decided to send him to London as their representative, as Wyeth states in his obituary?³¹ Burroughs's version of events is rather different. Many years later he wrote to a friend that he had been disillusioned with Wyeths and that he had left the firm twice because he suspected things were 'not quite straight'. He added:

You know also the reason why I went to England that it was because I requested it as a gradual severance of my relations with J W & Bro. I had observed the way JW disparaged every employee who left them & without any cause for speaking ill of the employee. I was determined to leave and requested the departure for England as the beginning of a final separation of myself from the house because it was my intention to sell out my half int[erest] in the London business after 6 mo[nth]s and then to return to the States. But I got interested in other business affairs in England & had to stay. I tried to sell out the int[erest] in JW&Bros business but John wouldn't buy it at any price. Perhaps the whole course of events has been most providential for me. I believe it is so.³²

This is most probably the way events turned out: Burroughs saw an opportunity to move and managed to negotiate a deal with Wyeths. The prospect of a new challenge and going to England to explore the market there was one he would have relished. London, at the heart of the British Empire, was key to opening up new world markets and the ideal place to create a business. Working merely as an agent was clearly not his sole aim, though: he would make his own way, and his ambition, self-confidence, ability and unbounded energy augured well.