

Mills Archive Information Summary 2

The Wrights Waltham Abbey Gunpowder Generations

In several instances families served at the Mills through successive generations. One of the most noted was the Wright family whose connection stemmed back through Faversham then onwards to Waltham Abbey and two of whom were of particular significance in gunpowder, in very different locales.

When the Government purchased the Waltham Abbey Mills from John Walton in 1787 several staff appointments were made. The most senior was **James Wright** who was in a senior position at the Royal Gunpowder Mills at Faversham and was made Storekeeper at Waltham Abbey at a salary of £150 p.a. The title of Storekeeper belies the scope and responsibilities of the position – a more contemporary title would be General Manager. Wright reported to then Major William Congreve, Deputy Comptroller of the Royal Laboratory at Woolwich, who had been instrumental in the Government purchase of Waltham Abbey. Congreve had instituted a series of studies at Faversham designed to improve and produce a more uniform powder quality. Prominent among these was a concentration on charcoal quality. Arising from this Congreve had introduced a new method of manufacturing charcoal involving burning wood in closed iron cylinders, developed by Dr.R.Watson, Professor of Chemistry at Cambridge. Congreve continued the exercise on charcoal at Waltham Abbey and one of Wright's many responsibilities was to conduct experiments at Congreve's direction and report on the result. Part of the plant involved what were termed 'gasometers' and the drawing shows one of these from Wright's notebooks. The idea of scientific experiment was still a novel one and Wright had to be careful to assure the Board that no frivolous equipment expenditure was being incurred. Thus we have the note in his drawing 'The whole is constructed with pipes that were in store and considered unserviceable for other purposes'. Wright proved himself a very able experimenter. 'Having regard to the fog in which chemistry was enveloped early in the 19C – Dalton's "New System of Chemical Philosophy" was first published in 1808, it is remarkable to find Storekeeper Wright expressing his results on charcoal 'distillation' with complete lucidity' (From booklet on Chief Scientists Conference held at Waltham Abbey in 1966).

To add to his burdens, when war broke out with Revolutionary France in 1794 an artillery unit was formed at the Mills, the Waltham Volunteers, was formed with Wright as O/C. Not surprisingly Wright became exhausted with his multiple labours and official correspondence notes that his accounts were 'shamefully behind and renders this office to censure'. In his defence Wright wrote 'I am employed every day (Sundays included) from 9 o'clock in the morning until 6 or 7 at night (one hour and a half excepted for dinner – time) in the duty of my office, and it ever was my wish to discharge business with care and faithfulness'. However in the next year 1805 Wright was replaced as Storekeeper.

William Congreve had staked his career on making a success of the Waltham Abbey Mills. He succeeded and Waltham Abbey became the leading producer in the world of propellant powder. In the vital first two decades in which the Mills stood or fell James Wright played a vital role in establishing the foundations for the future.

In the meantime some time before 1801 members of the family had a stroke of luck when two sons – Joseph and James Jnr., were left a sum of money, sufficient to enable them to set up as merchants in the lucrative West Indies trade and to purchase a sugar plantation on the island of St. Kitts. Unfortunately the French ruined the plantation and the brothers had to return to seek employment in England. Bearing in mind their father's position it is not surprising that both found positions in the Government gunpowder activity – **Joseph** as Clerk of Works at the Royal Mills at Faversham and then when Faversham was sold by the Government in 1823 a similar position at the Tower of London and **James** Jnr. starting as a Clerk at Waltham Abbey, progressing up to Clerk of the Cheque and in 1822 Deputy Storekeeper.

James Jnr. married and had nine children. Of these two were to serve in the gunpowder service, Henry and Frederick, the latter to pursue a very chequered course.

Henry entered a Clerk of Works apprenticeship at the Tower under the tutelage of his Uncle Joseph at the Tower. He was a 'superior apprentice', what might now be termed management trainee. After his apprenticeship his first appointment was as Works Foreman in the Eastern Military District. Then at

the very young age of 22 in 1835 Henry was appointed to the post of Clerk of Works at Waltham Abbey. After this he had a peripatetic career supervising works in Government establishments. After Waltham Abbey he moved first to the Dover Military District. At this point he must have irritated someone of influence. He became a suspect as not being politically correct and became the victim of an injustice. Without warning he and his family were posted to Quebec, the Victorian equivalent to a political dissident in Tsarist Russia being exiled to Siberia. The full circumstances have never become known. However we have a letter from Henry in which he describes how ‘because I was suspected – very erroneously – to influence the Whig Government’s candidate, Lord Melgand, I was not allowed a day’s leave, so had to hurry off in the middle of the night’ and interestingly describes a dreadful voyage in a vessel ‘overladen with gunpowder and rockets’. Henry distinguished himself in Quebec by organising the actions which saved the Quebec magazine holding 6000 barrels of gunpowder from blowing up in a fire. This included disuading a General who had ordered the magazine to be blown up! He plaintively records that he was refused any commendation, saying ‘I presume I had always been a voter in the Conservative interest; the Liberals being then in power’. He was posted back to England supervising Government works largely in connection with coastal defence – Eastern District, then Isle of Wight, Eastbourne and Brighton and Sheerness.

We come finally to **Frederick**, younger brother of Henry. He was apprenticed at Waltham Abbey on the production side. His ambition was checked for a time when after his apprenticeship he applied for the post of Assistant Master Worker, i.e. Foreman but was sent instead to Faversham for further training, then being appointed to that position. It is at this point that some mystery enters into Frederick’s career, for having gained the appointment and hopefully later to succeed the existing incumbent as Master Worker he left Waltham Abbey for America. The reasons have never been discovered. Either by choice or being unable to find employment in the American powder industry initially he found a job teaching in a school in Tennessee. However the clouds of war were gathering and when the American Civil War broke out Frederick found himself in demand as the chief powder maker in the Southern States powder mill at Manchester Tennessee. The South had found itself in a precarious position regarding powder supplies and a brilliant Confederate soldier engineer Col. G.W.Rains was commissioned to design and erect a powder manufacturing complex based on best European practice – what became the Augusta Mills. Rains was an admirer of Waltham Abbey powder and he discovered that Waltham Abbey could materially assist him in two most fortuitous ways. Firstly he discovered a technical treatise written by a senior Waltham Abbey officer and secondly he became aware of Frederick Wright. He lost little time in bringing him to Augusta where Frederick was to play a key advisory role. After the War Rains gave full credit to the value of the treatise and to Frederick’s role, although referring enigmatically to a ‘sad defect’. The general consensus seems to be that this was probably an over fondness for Tennessee whisky – not the best qualification in a powder maker!

Notwithstanding this Frederick was appointed official Agent for advising on and obtaining the all important saltpetre in the South. This took him to a mine in a caves complex in Sand Mountain, Alabama. It was customary for mine officials to also do their bit in the guard unit and when Northern forces made a raid on the mines Frederick was taken as a prisoner of war. One wonders whether by this time he was looking back longingly on his days at Waltham Abbey. If so this can only have intensified as he entered the North’s military prison system, notorious for harsh treatment, abominable living conditions, starvation and disease. Frederick survived, passing through the system in Louisville, Kentucky, Point Lookout, Maryland and Camp Chase, Ohio, finally arriving at Macon, Georgia where he was released in 1865. After the War he returned to powder manufacture, working for the Sycamore Manufacturing Company (ironically this company had purchased the machinery of the Augusta Mills). Frederick died sometime after 1870, around 100 years after his ancestor had arrived at the Waltham Abbey Mills.

The design of buildings and machinery for the Augusta Mills by Col. Rains virtually from a standing start was a remarkable achievement, ranking amongst great achievements of American technology in the mid 19C. Frederick’s importance in this achievement was recorded by Rains – ‘But one man – Wright – could be found in the Southern States who had seen gunpowder made by an incorporating mill, the only kind that can make it of the first quality; he had been a workman at the Waltham Abbey Gunpowder Works in England..... I was much indebted to his knowledge and experience’.

Les Tucker