THE E. C. POWDER WORKS AT BEAN

The E. C. Powder company was first registered in 1883 to acquire the patents for the manufacture of a new gunpowder for military & sporting purposes from the Explosives Company. The prospectus of the company and the advantages of the E C Powder are shown at the end of this article. A lease dated 10 December 1884 between the E. C. Powder Co Ltd and Mr John James Allchin granted the company a 99-year lease on land which now forms part of Beacon Park. The lease was to run from 29 September 1884 at £4 10s per annum. John Allchin, born in 1835 lived in Wilmington and was a bricklayer in his younger days but by 1881 he was living at the Brent Dartford where he was a Builder & Gravel Merchant employing 14 men. Was the land he sold in Bean where he extracted the gravel?

Trade directories list the presence of the E. C. Powderworks in Stone from 1890 with a George John Henry as the Manager but we know William Dalrymple Borland was there by 1891 as he appears in the census living in Beacon Lodge which was probably built at the same time as the factory. William had developed Smokeless powder in Stowmarket under W F Reid before joining the E. C. Powder Company where he later became Managing Director & Chairman.

The factory was on the southern slope of Bean Hill within the woods and consisted of approximately 25 buildings well-spaced apart and linked by a series of roads. Bean Lodge was further up the slope and would have been just opposite School Lane. (see plan). The company also built the E C cottages to house some of its workers.

Although the factory had no serious accidents several have been reported, one was reported in the Bexleyheath & Erith Observer on 19 October 1889 as follows: -

"Last week an explosion occurred at the E.C. Powder Works Southfleet, said to be caused through a piece of grit falling from the shoes of one of the workmen. Some damage was done to the building and Charles Farrence, aged 19, living at High Cross Southfleet was injured. He was conveyed to the Gravesend Hospital where it was found that he was suffering from burns to his back, face, head and hands."

A further explosion took place on 3rd March 1903 and the official report follows: -

"Captain JH Thomson, His Majesty's Chief Inspector of Explosives, has submitted his report to the Home Office of the explosion which occurred at the EC Powder Works, at Bean, near Stone, on the 3rd of last month. He stated that during the period of nearly nineteen years which has elapsed since the factory was started there have been four previous accidents by which only one person was injured and that only slightly. The building in which the accident occurred is licensed for the drying of explosives by artificial heat. The accident occurred at about 2.30 pm, at which time the two injured men were at work in the building. According to their statements, Austin was engaged in raking down the powder into the trough, whilst Milliams was sweeping the floor. The ignition took place on the frame where Austin was working. Immediately on seeing the flame, Austin called out to the other man and made his escape from the building. Being within three or four feet from the door, he succeeded in escaping with less severe injury than Milliams, who was further away. The latter made for the other door of the building, and effected his escape with great difficulty, being very severely burnt. There were between three or four hundred pounds of dry powder in the building, and this was partly on the frames and partly in the tin bottles. The whole of this burnt away without explosion. The building, which was of corrugated iron, lined with wood, was completely gutted, but the fire was rapidly subdued, though it was, of course, of great intensity. In the porch there were several boxes of wet powder which escaped altogether, though the boxes were a good deal charred.

In arriving at the cause of the accident, I am met with the difficulty that the only man who can give direct evidence has made two contradictory statements. Immediately after the occurrence, he stated to Mr J Alchin, Clerk in the factory, that at the moment of the ignition he was using a zinc dustpan to remove some powder dust and that probably he struck the dustpan against the wire framing. When I interrogated him at the hospital, he stated that at the moment he had just raked down the powder with the wooden rake and was engaged in filling the bottle, when he saw sparks spreading over the cloth where he had been using the rake. He further stated, definitely, that he was not using the dustpan. I regret to say that I cannot attribute the discrepancy to his mental condition produced by shock, as his mind appeared to be perfectly clear when making both statements. At first sight, therefore, it would seem that his evidence is quite unreliable, and that he was engaged in doing some illegal act which he was anxious to conceal. On the other hand, he is described as being a thoroughly reliable man, which 18 years' experience in the factory; and I regard it as highly improbable that he was guilty of any gross act of carelessness. It seems very probable that his first statement was correct, and that after considering the matter and realising that he should not have used the dustpan for this purpose, he resolved to alter his account of the accident. This view obtains some support from the fact that the bunting was about to be changed and it is therefore very probable that he was taking more pains to clear it of powder dust than usual. Continuing, the Inspector reported that there can be little doubt that the accident was due to the metal frame being struck by the zinc dustpan.

Undoubtedly, Austin, in using the dustpan in the way he stated, was committing a thoughtless act, but he cannot be said to have been infringing the special rules or in any other way breaking the law. While, therefore, I do not attach very serious blame to him on this account, I must nevertheless condemn, in the strongest terms, the mendacity which induced him to make a false statement as to the cause of the accident. Whether he was induced to do so by fear of blame, or with a view to influencing the question of compensation, his action is equally reprehensible. To avoid a reoccurrence of such an accident in the future, it was recommended that the dustpan be substituted by a wooden box and that the rake should have an edge of some softer material than mahogany, such as cloth or leather.

In conclusion, Captain Thomson stated that he received every possible assistance from Mr Borland, Managing Director, in carrying out the inquiry"

A further accident was reported in the Kent Messenger & Gravesend Telegraph on 23 January 1915 "BEAN EXPLOSION – Alarm was caused early on Tuesday by an explosion at the E.C. Powder Works, Bean. In the grey light, those in the neighbourhood who were just commencing work, saw a cloud of smoke rise from one of the magazines, followed by a report. The alarms were sounded, and for a time tension prevailed. Great relief was felt when it was found no one was injured. It is difficult to obtain from those concerned any information on the matter, but it is understood the magazine mentioned is used for drying powder."

The company was acquired by ICI in 1918 and by 1923 the production of the E.C. Powder was transferred to ICI's plant at Ardeer on the west coast of Scotland. The buildings were gradually demolished during the following two years as evidenced by the following two auctions. The first advertised in the Kent Messenger on 30 August 1924 as follows: -

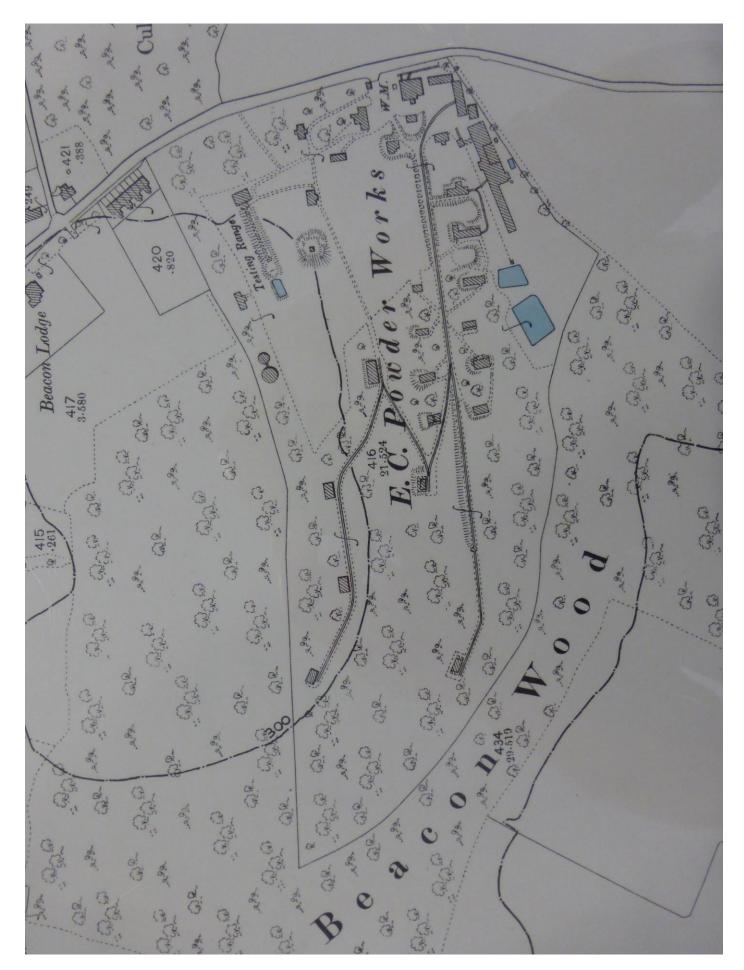
"E.C. POWDER WORKS – MESSRS PHILIP CHAMPION & SONS have received instruction to SELL by AUCTION upon the premises as above on MONDAY 8TH SEPTEMBER 1924, at 11.30 a.m., an extensive assortment of BUILDERS MATERIAL comprising quartering, boarding, deals, fire bricks, guttering, tanks, belting, 400 feet of iron piping, and a large quantity of miscellaneous effects.

The second auction was announced in the Kent Messenger on 27 June 1925

"E.C. POWDER WORKS – MESSRS PHILIP CHAMPION & SONS have received instruction to SELL by AUCTION upon the premises as above on FRIDAY 3RD JULY, at 11 a.m., precisely a large quantity of BUILDERS MATERIALS comprising blue building, paving and stock bricks, Steel and wooden roofs, trusses, Hardcore, iron and wooden doors, fibro-asbestos sheeting, quartering, boarding and miscellaneous effects.

Following the closure of the factory Mr Borland acted as a technical expert for ICI on sporting powders and ammunition and continued to live in Beacon Lodge until his death on 20 May 1934.

PLAN OF THE E. C. POWDER WORKS AT BEAN



THE "E.C." POWDER COMPANY (LIMITED.)

This company has been formed to acquire to themselves from the Explosives Company the patent for a new powder for military and sporting purposes, and carry on it's manufacture in a district where there is less restriction as to quantity than exists at the parent company's works. The chief advantages of the "E.C." powder are thus stated in the prospectus : - about one-half the weight of charge of black powder, a minimum of noise, smoke and recoil; a minimum of fouling, and no corrosion or damage to gun-barrels or locks; a minimum of heating of the barrel; a very great advantage in rapid firing, as with the "Gatling," "Nordenfeldt," " Hotchkiss," or other machine guns; the velocity and penetration of the projectile are greater than with any other powder, which is unaffected by atmospheric changes and safety of manufacture, and is ready for immediate use when made. The price to be paid for the patents is $f_{20,000}$ in cash, and $f_{20,000}$ in fully paid-up shares of the company. The capital is $f_{70,000}$, in f_{5} shares, which are now offered for subscription.

VIEW OF THE POWDER WORKS

