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THE ROYAL GUNPOWDER FACTORY (n.d.)
UNSIGNED (A PARAPHRASE BY
A. BAYNES) c 1954

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E.R.D.E. (A.Baynes)

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As sent to C. J. Miller - for sep. talks to new entrants

THE ROYAL GUNPOWDER FACTORY

Gunpowder was first used by English soldiers in war at the Battle of Crecy, and it is reputed that the gunpowder was made by the monks of Waltham Abbey for King Edward II.

The earliest known record however relating to Waltham Abbey Powder-mills bears the date 2nd March, 1560. Queen Elizabeth was on the throne, and on her behalf, one, John Tamworth acting as executor for Lady Joan Denny, was negotiating the purchase of saltpetre, sulphur and staves for barrels. The Lady Joan Denny was the widow of Sir Anthony Denny, who had been chamberlain to Henry VIII and Edward VI. John Tamworth was probably managing the powdermills for the Denny family.

It is possible that the gunpowder brought to the Houses of Parliament by Guy Fawkes and his associates in 1605 was made at Waltham Holy Cross. No record exists as to where the conspirators obtained their material but it seems likely that all the powder needed would have been purchased from mills in this country, as smuggling of such a commodity would be extremely risky. Considering the state of the roads and the means of transport in the seventeenth century considerable risk would be entailed in moving explosives over any great distance. Secrecy would also make it very desirable that it should not travel over the public highway at all if it could be avoided. No source could have been handier than the Mills at Waltham Abbey. They were in private ownership, and what could have been easier than to convey the required quantities of powder down the Lea to its junction with the Thames, and thence up the Thames itself to the house in Lambeth, which had been rented by Percy as a store, and from which it was conveyed across the river to a second house, also taken by Percy, next to the Parliament House itself.

Mr. John Walton, a relative of Mr. Izaak Walton of angling fame, was the owner in 1735, the factory being considered the largest in Great Britain at that time.

Power for the Mills, from about 1739, was supplied by horses and was used to some extent considerably later than 1770; indeed, records dated 1791 showed that double horse mills were still in use. Water power had been introduced however, about 1770, when an Essex historian writes of "curious gunpowder mills worked by water, having an output of 100 barrels each of one cwt. per week for Government Service".

The Board of Ordnance acquired the Mills from a later John Walton in 1787, but contracted with him and several of his best men to run them. Forty-six hands were then employed. A pillar sundial, bearing John Walton's name, still stands in front of the old Main Offices inside the factory. In 1795 the surrounding lands were acquired by the Board of Ordnance, under whose direct management the factory then came, and the first records appear of gunpowder being sent by barge from Waltham to Purfleet for proof.

It is interesting to note that in 1804, after an explosion which killed nine men and four horses, a Committee of the Royal Society visited the works to report on the possibility of danger arising from electrical excitation caused by rolling barrels on the leather covered floors, or by the use of silk screens.

The early part of the nineteenth century saw the acquisition of water power rights, and the installation of hydraulic presses in place of the old screw presses. Horse power was finally done away with in 1814, and steam power had, to a great extent, supplanted water power by 1870. In 1872, in addition to gunpowder, the manufacture of gun cotton was started. The demand grew until it became necessary to provide more facilities, and 100 acres of land known as Quinton Hill was purchased and a new factory erected there which came into production in 1890. The manufacture of smokeless powder (cordite) was commenced in 1891, and for its production a nitroglycerine hill was erected also on Quinton Hill Site.

At the beginning of the present century, R.G.P.F. covered 411½ acres, and in addition to cordite, produced gunpowder, fine grain powder for fuzes and priming cartridges, picric acid, nitroglycerine, gun cotton, nitric acid. All the sulphur and saltpetre required for gunpowder and fuze powders was refined in the Factory.

During two world wars, the factory supplied the nucleus of trained staffs for starting up the new ordnance explosives factories, besides producing to its full capacity explosives, propellants and intermediates of very high quality. Experimental pilot plant for the manufacture of R.D.X. was erected here and continued to produce throughout World War II.