

***Black Power***  
***The History of the first Establishment***  
***of Gunpowder Works in England.***

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Before quitting the subject of the establishment of powder works, I have deemed that it will be of considerable interest to give such information as I have been able to obtain on this subject through the kindness of Mr. Hart, of the Public Record Office, which will in a considerable degree afford information as to whence we derived our supplies both of gunpowder and cannon.

The exact period when this important article of warfare, gunpowder, was first made use of by our ancestors cannot now be determined; but from the testimony of various records, as shown by the Rev. Joseph Hunter, in a paper printed in the "*Archæologia*," vol. 23, it is evident that it was used at the battle of Cressy, for in an account rendered by John Cook, the clerk of the king's great wardrobe, of the monies received and expended by him from the 22nd Dec., 19 Edward III. (1349), it is stated that 912 pounds of saltpetre, and 886 pounds of quick sulphur, were supplied to the king for his guns.

On the 25th November, 1346, the king issued a writ, commanding that all the saltpetre and sulphur that was anywhere to be sold should be bought. The total amount obtained was 750 pounds of saltpetre and 310 pounds of quick sulphur.

In the time of Henry VI. an enterprising merchant of London, John Judde, who was skilled in devising warlike instruments, made at his own expense sixty guns, called serpentines, and also "stuff for *gunnepowdre of saltpietre and suphur*, to the weight of xx tonne," which he offered to deliver to the treasurer for the king's use under certain conditions, in consideration of which good service the king by letters patent, dated 21st Dec., in the thirty-fifth year of his reign, constituted him Master-General of the Ordnance for life.

It was not, however, till the latter part of the reign of Elizabeth that public attention was drawn to the necessity of establishing at home the manufacture of gunpowder, which before had been chiefly supplied by importing from abroad. It had been up to that time an open trade; but the Government being compelled, by the menacing attitude which Spain assumed, to provide more efficient means of defence, commenced the granting of patents for the manufacture of gunpowder, which constituted it a monopoly in the hands of those whom the Government thought proper to trust with the privilege.

The first establishment of gunpowder mills of any importance appears to have been at Long Ditton, near Kingston, in Surrey, by George Evelyn, grandfather of the celebrated Sir John Evelyn. He had mills also at Leigh Place, near Godstone, in the same county. The Evelyn family is said to have brought the art over from

Flanders. The mills at Faversham, in Kent, were in operation as far back as the time of Elizabeth ; but those of the Evelyns, at Godstone, were at this time of the greatest importance.

It appears, also, that on the 28th January, 1589, the thirty-first of queen Elizabeth, was granted to George Evelyn, Esq., Richard Hills, and John Evelyn, gentlemen, licence and authority for the term of eleven years to dig, open, and work for saltpetre within the realms of England and Ireland, and all other dominions where the same should be found, as well as within the queen's own lands and grounds and those of her subjects, except in the city of London and two miles distant from the walls of the same, and the counties of York, Northumberland, Westmoreland, Cumberland, and the Bishopric of Durham, and all the saltpetre so found was to be made into powder for the queen's service.

And on the 26th April, 31 Elizabeth, George Constable, Esq., had similar licence to dig for saltpetre within the counties of York, Nottingham, Lancaster, Northumberland, Westmoreland, Cumberland, and the Bishopric of Durham, for the term of eleven years.

8th of January, 32 Elizabeth (1590), Thomas Robinson and Robert Robinson had a similar licence to dig for saltpetre within the cities of London and Westminster, and within two miles of the city of London, or from the old palace of Westminster, for the term of ten years.

By letters patent, dated 7th September, 41 Elizabeth, after reciting that John Evelyn, John Wrenham, gentlemen, Richard Hardinge, Esq., and Simeon Furner, gentleman, had undertaken to deliver yearly into the store of the Tower of London a greater quantity of good, perfect, and serviceable corn gunpowder, meet and serviceable for cannon and caliver shot, at a lower rate than was before paid, whereby the queen would not be driven to seek the said proportion of gunpowder out of any foreign countries, and that they had devised means of making saltpetre, whereby the excessive waste and spoil of woods and other inconveniences to the queen's subjects will be avoided, licence was granted them for the term of ten years to make and work for all and all manner of saltpetre and gunpowder within the realms of England and Ireland, and all other the queen's dominions, and to have the sole making of all manner of saltpetre and gunpowder within the realms of England and Ireland, except in the county of York, the city of York, the counties of Nottingham, Lancaster, Northumberland, Westmoreland, Cumberland, and the Bishopric of Durham ; and they had from the last day of April similar licences for those excepted places for the same term of ten years.

These parties were bound, it appears, to deliver during the term 100 lasts of powder [ A "last" of gunpowder equals; 2 400 lbs i.e., 24 barrels /djh/ ] ; good, serviceable corn powder, eight lasts ; and eight hundred pounds weight every month, half of which was to be *cannon corn gunpowder*, and half to be caliver [rifle /djh/] corn powder, at the price of sevenpence per pound ; and they had permission to sell to the public.

Thus we have established on undisputed testimony that gunpowder of different sized grains, or corned—an art probably obtained from Flanders was generally used at this time ; and that before this date the greater quantity of gunpowder used in Great Britain had been imported from abroad.

It may be a wrong supposition, but with all this digging for saltpetre, to the great distress and worrying of the inhabitants of houses in the town and country, gardens, Orchards, &c., which led to much discontent, probably our great Shakespeare took the expression—Act 1, Henry IV. :—

"And that it was great pity, so it was,  
That villanous saltpetre should be *digg'd*  
Out of the bowels of this harmless earth."

Since the general practice in countries where it abounds is to obtain it by lixiviation of the upper soils.

It appears by letters patent, dated 24th January, 18 James I. (1621), that in consequence of the abuses and inconveniences which the inhabitants of this kingdom complained of as sustained from the servants of the above patentees, that the patent was revoked on the 17th December, and after reciting that there was in the kingdom a great quantity of the *mine of saltpetre*, it stated that the King had once determined again to furnish the store of gunpowder by importation, but still as there were inconveniences in this mode of obtaining the necessary supplies of gunpowder, the King thought it expedient to continue the manufacture in the kingdom, and to establish certain vigilance and care to press all abuses complained of by his loving subjects.

The King then granted to George, Marquis of Buckingham, High Admiral of England; Lord George Carew, Master of the Ordnance ; and Sir Lionel Cranfield, Knight, Master of the Court of Wards and Liveries, licence to make and work, for saltpetre and gunpowder.

On the 16th of January, 20 James, a proclamation was issued which, after stating the great inconvenience of the sale of weak and defective gunpowder, ordered that no persons should make gunpowder in England and Wales, or any saltpetre, but by warrant of His Majesty's Commission, and that no saltpetre could be sold or bought but to and from the King's powder maker and all gunpowder was to be proved and allowed by the sworn proof-master, and marked by him, for which he was to have a fee of sixpence the barrel. The marks of the proof-master were three crowns for the best, two crowns if new and strong, but O W and one crown for old powder now worked, but good and strong, and fit for ordnance for one year's service at least.

By an indenture, dated 26th April, 2 Charles I. (1626), Made between the King on the one part and Sir John Brooke, Knight, and Thomas Russell, Esq., after reciting that there was never yet made, since the first making of saltpetre in the kingdom, being about the beginning of the reign of Queen Elizabeth, a third part of the saltpetre required for the service of the kingdom, but the King, as well as his

subjects, were forced to procure the same from Barbary, France, Poland, Hamburgh, and other places in Germany; and that Brooke and Russell had discovered a new mode of making saltpetre, whereby the King should have whatever quantity was required ; the King' granted them a licence to exercise this invention for twenty-one years, and they were to be paid £3 3s. 4d. for every hundred-weight of saltpetre delivered into the store in the Tower.

The East India Company by this time had begun importing great quantities of saltpetre, and had erected gunpowder mills in the county of Surrey, but being in an inconvenient situation they were pulled down by the King's direction. The East India Company then petitioned for leave to erect mills in the counties of Surrey, Kent, and Sussex, or any or either of them, and accordingly by letters patent, dated 17th August, 2 Charles 1. (1626), they were empowered to do so, and also to convert into powder all such saltpetre as should be imported by them from foreign parts, and to employ the same powder for their own use, or to the use of any of the King's subjects.

28th April, 5 Charles I. (1629), the King granted Richard Lord Weston, High Treasurer of England, and others, commissions to work for saltpetre ; and on the 18th April, 10 Charles I. (1634), a similar commission was granted to Richard Earl of Portland and others.

No doubt the manufacture of gunpowder at this time was a very profitable investment of money, and we find by a commission dated 8th March, 12 Charles I. (1637), directed to the Bishop of London, and others, a contract was made with Samuel Cordwell and John Collins for the solo working and making into gunpowder all saltpetre made in England or imported.

A commission dated 26th April, Charles I. (1637), after reciting that grievances had arisen from the indiscriminate sale of gunpowder— Mountjoy, Earl of Newport, and others were ordered and authorised to make choice of and license persons who were desirous of buying and receiving gunpowder from any of the Royal magazines, and selling the same by retail.

7th June (1637), another commission was granted to the Bishop of London and others, giving the licence to dig for saltpetre, and to make gunpowder.

17th March, 16 Charles II (1663), was issued a proclamation prohibiting the exportation of saltpetre for three months.

June 5th, 18 Charles II. (1666), a commission was granted to John Lord Berkeley, Baron of Stratton, and Sir John Dunscombe, Knight, Thomas Chichely, Esq., commissioners for the execution of the office of Ordnance, William Legg, Lieutenant of the Ordnance, John Evelyn, of Deptford, E. Strong, Esq., Edward Sherborne, Esq., Clerk of the Ordnance, and Jonas Moore, Esq., to dig and work for saltpetre, and make the same into gunpowder for the King's service.

22nd July (1689), was issued another proclamation prohibiting the exportation of saltpetre.

Letters patent, dated 29th October, 1692, were granted to Our trusty and well-beloved subjects—Richard Earl of Belmont, in our kingdom of Ireland ; Peregrine Bertie and Phillip Bertie, Esqs., sons of our trusty and right well-beloved cousin and councillor, Robert Earl of Lindsey, Sir John Huband, Bart., Sir Nicolas Pelham, and Sir John Bucknall, Knights ; William Gulston, William Tindal, Thomas Cox, Rupert Brown, Richard Dayrell, William Barnesby, John Hoskyns, Esqrs. ; John Seger Widenfelt, Charles Cox, Thomas Malyn, John Sherman, Patrick Gordon, Samuel Antrim, Jonathan Smith, gentlemen; Thomas Dawson, and James West, merchants; and all such others as shall hereafter be admitted and made free of the Company by the name of the Governor and Company, for making and refining of saltpetre within the kingdoms of England and Ireland, and to have continuance for ever."

They were to sell and deliver into the office of the Ordnance two hundred tons of the best white saltpetre, duly refined, within one year from the date of the patent, and every year afterwards such quantities, not exceeding one thousand tons in any one year, "is should be required by the Ordnance, at the price of £70 the ton, in case it bore that price in the market; or if not, then at the market price.

*The were also to pay, yearly, during the continuance of their grant, to the Treasurer of the Navy, 1000l. towards the relief and maintenance Of maimed, aged, and decayed seamen, until a hospital should be built for them ; after the erection of which, the money would go towards the support of the hospital."*

There is no record, Mr. Hart states, that lie has met with, of this remarkable charter of incorporation, in any works on the subject of gunpowder, nor is it known when the company was dissolved, or the charter surrendered.

There can be little doubt, however, that, as by the East India Company's Charter, the Company was bound to import a certain quantity of saltpetre annually, for the use of the Ordnance, probably quite sufficient for the Government purposes, that the supply from the Governor and Company was quite unnecessary, and that the discovery of William Tindal and Thomas Cox, Esqs., of a " new way of making saltpetre in great quantities," on which the company was formed, was of no commercial value, and thus the supply of Indian saltpetre led to the discontinuance of their project. [According to the charter of 1693, A. D., the East India Company was bound to furnish the Government with 500 tons of saltpetre annually, at from £38 to £45 per ton.]

I have thus, through the kindness of Mr. W. Hart, of the Public Record Office, been able to place before the readers of this volume sonic interesting facts which will establish the certainty that although the manufacture of gunpowder commenced in England in the time of Edward III. (1345), it was not until the reign of queen Elizabeth, when the improved art was imported from Flanders by the Evelyns, that it was fairly established also that until the reign of Charles II. the quantity required

for the King's service, and of saltpetre also, was not sufficient, and that large supplies were imported from various foreign countries. It will also account for the supply to the East Indian armies after the East India Company had established their manufactories in England, in aid of the quantity furnished to the Bengal Government by the native manufacturers, until the time of Mr. John Farquhar, in 1794.—EDITOR.

[Col. Samuel Parlby, Retired Bengal Artillery — Editor]

Col. William Anderson, C.B., Late Agent At Ishopore.  
Sketch Of The Mode Of Manufacturing Gunpowder At The Ishopore Mills In Bengal. With A Record Of The Experiments Carried On To Ascertain The Value Of Charge, Windage, Vent And Weight, Etc; In Mortars And Muskets; Also Reports Of The Various Proofs Of Powder.

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1862.