

The
True History
of
The Invention
of the
Lucifer Match

BY

JOHN WALKER,

OF STOCKTON-ON-TEES;

With an account of the Ancient Modes of
procuring Light and Fire.

EDITED BY MICHAEL HEAVISIDES.

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THE
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OF THE
LUCIFER MATCH,

By JOHN WALKER,

OF STOCKTON-ON-TEES, IN 1827;

WITH AN ACCOUNT OF THE ANCIENT MODES
OF PROCURING LIGHT OR FIRE.

EDITED BY MICHAEL HEAVISIDES,

Author of "Rambles in Cleveland," etc.

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1909.



"I am he who sought the source of fire
Enclosing it hid in narthex staff,
And it hath shown itself a friend of man,
And teacher of all arts."

From ÆSCHYLUS' tragedy of *Prometheus Bound*.

The True History of The Invention of the Lucifer Match ;

With an account of the Ancient Modes of
procuring Light and Fire.

" Here's your fine tar-barrel matches,
Sixteen bunches a penny—sixteen a penny."

" Come, buy my good matches, come buy of me,
They are the best matches you ever did see :
An old woman in Rosemary lane
Who dipped them, and dyed them, and I do the same.
Come buy my good matches, come buy them of me,
They are the best matches you ever did see."

OCCASIONALLY, during recent years, controversies have taken place in the London and Provincial Newspapers as to who really was the inventor of the friction lucifer match, and the object of this article is to prove beyond the least shadow of a doubt that John Walker, of Stockton-on-Tees, was the inventor of the match, and that he publicly sold them in April, 1827.

At the outset it will be well to distinguish between the friction and the phosphorus match, for the latter was not invented till the year 1834. After-

wards it was superseded by matches of a pleasanter character.

The word match, according to the "*London Encyclopædia*," is derived from a Greek noun, signifying, dried fungus, and is also further defined as a splinter or cord used to set fire to a candle or gun. The corresponding Italian word is *micchia*, the French being *meche*, from which we have our English word, match.

The word lucifer is made up of the two Latin words, "*lux*," signifying light, and "*ferre*," to carry; and the light carrier, phosphorus, has exactly the same meaning, being, however, derived from Greek. Therefore, in English, lucifer match means a light bearing splinter (of wood).

In ancient mythology it is fabulously reported that Prometheus was accused of sacrilege, for he made men of clay and stole fire from heaven by which to animate them. For this he was chained by Zeus to Mount Caucasus, where an eagle preyed on his liver, daily. Promethean fire has been described as the vital principle; the fire which Prometheus stole from heaven quickened into life his clay images. Touching on this point, SHAKESPEARE refers to it in *Othello*:—

"I know not where is that Promethean heat
That can thy light relume."

ÆSCHYLUS, the most sublime of the Greek poets and the author of the tragedy of *Prometheus Bound* (a portion of which is quoted on the second page), flourished 500 years before the birth of Christ. In the tragedy mentioned, Prometheus is an immortal God, a friend of the human race, who does not shrink from opposing the evil designs of Zeus against mankind, and even sacrificing himself for their salvation. The possession of fire to early man was a matter of importance, and the legend of its being originally stolen from heaven by a primeval hero is very widely spread over the world. The Greek name of Prometheus means "foresight."

To the Romans, Vesta was the goddess of the hearth and fire, and to preserve her name, a virgin was consecrated to Vesta, and to the service of watching the sacred fire, which was to be perpetually kept burning upon her altar. Hence in modern days we have the wax vesta, a small wax lucifer match.

The form of producing fire by the friction of two pieces of wood against each other until sparks were emitted and flame was given to dry leaves or decayed vegetable matter, was practised by the Romans, even down to a late period, when the flint and steel were well known.

PLINY, a great scholar, who lived in the first century, and was killed in an eruption of Vesuvius,

A. D. 79, says: "This experience was first discovered in the camps by the shepherds, when a fire was wanted and a fitting stone was at hand: for they rubbed together wood upon wood, by which attrition sparks were engendered, and then collecting any dry matter of leaves or fungi, they easily took fire."

VIRGIL, who also lived in the first century, notices "the hidden fire in the veins of flints" as being one of the benefits bestowed on man at the commencement of the reign of Jupiter; and pyrites (flint) are described by PLINY as being well known and esteemed for producing sparks. "Certain of them," he says, "have much fire in them, whence we call them *living*, and they are very heavy. They are sought for because they are most valuable in camps; for when they are struck hard with an iron spike, or another stone, they will emit sparks, which being taken by sulphur or dry fungus or leaves, will cause them to catch fire even with the rapidity of speech."

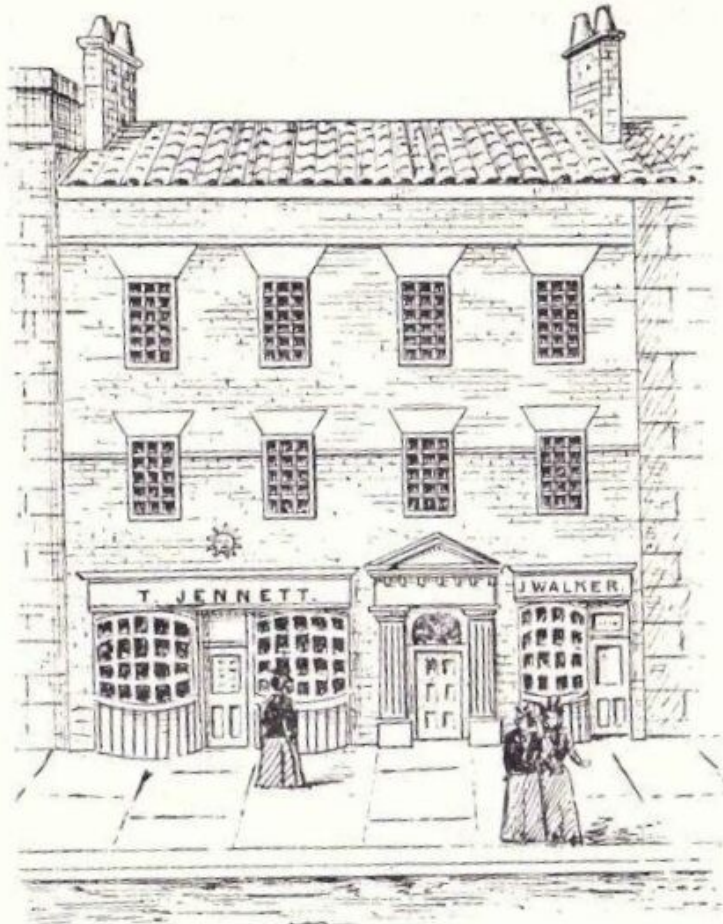
For many centuries the action of striking a stone against a piece of iron, continued. In 1429, Philip the Good, Duke of Burgundy, established the order of the Golden Fleece, in the collar of which the flint and steel of the time formed the principal device. The latter was therein represented as a short and stout fusil, sharpened to a pointed edge on one side

and on the other having two small carved handles, with a vacant space between them for the hand, and a modification of this shape, for the steel continued to exist to the close of the history of the old-fashioned tinder-box.

It was not until the latter part of the seventeenth century that the discovery of phosphorus gave a quicker and more certain means of procuring light or fire. It required great labour and time even to produce it in small quantities. Its principal value was the supplying of a light in the night or in dark places, when exhibited in glass vessels.

An elaborate account, dealing with the method of gaining light by attrition, appeared in the *Newcastle Weekly Chronicle* some years ago, from the pen of the late JAMES CLEPHAN, a native of Stockton-on-Tees, formerly editor of the *Gateshead Observer*, and afterwards on the *Newcastle Chronicle* staff:—

'Captain Cook, discovering the eastern coast of Australia in 1770, saw the smoke that rose up from the homes of its inhabitants, and witnessed with admiration how they gained possession of fire and diffused it in increasing volume':—"They produce it with great facility, and spread it in a wonderful manner. They take two pieces of soft dry wood; one is a stick about eight or nine inches long, the other piece is flat. The stick they shape into an obtuse point at one end; and pressing it upon the



The first printing office established in
Stockton.

At one time occupied by J. Walker,
the inventor of the lucifer match

TWO CELEBRATED SHOPS IN STOCKTON HIGH STREET.

other, turn it nimbly by holding it between both their hands as we do a chocolate mill, often shifting their hands up, and then moving them down upon

it, to increase the pressure as much as possible. By this method they get fire in less than two minutes, and from the smallest spark they increase it with great speed and dexterity. We have often seen one of them run along the shore, to all appearance with nothing in his hand, who, stooping down for a moment, at the distance of every fifty or one hundred yards, left fire behind him, as we could see first by the smoke and then by the flame, among the drift-wood and other litter which was scattered along the place. We had the curiosity to examine one of these planters of fire when he set off, and we saw him wrap up a small spark in dry grass, which, when he had run a little way, having been fanned by the air that his motion produced, began to blaze. He then laid it down in a place convenient for his purpose, enclosing a spark of it in another quantity of grass, and so continued his course."

From Australia let us now follow Captain Cook to Ounalaska's shore, where we find the natives producing fire both by

"collision and attrition; the former, by striking two stones one against another on one of which a good deal of brimstone is first rubbed. The latter method is with two pieces of wood, one of which is a stick of about eighteen inches in length, and the other a flat piece. The pointed end of the stick they press upon the other, whirling it round nimbly as a drill, thus producing fire in a few minutes. This method is common in many parts of the world. It is practised by the Kamtshadales, by these people (the natives of Ounalaska), by the Greenlanders, by the

Brazilians, the Othaheitans, by the New Hollanders, and probably by many other nations."

BUFFON has stated :—

"That man by his own ingenuity produced the element of fire, which did not exist upon the surface of the earth."

Among the devices employed in the past for the purpose of procuring a light was that of using what were called sun glasses, by which the sun's rays were concentrated on some inflammable substance.

It is related that when No. 1 "Locomotion" was first placed on the rails at Aycliffe Level, for a trial trip, her boiler filled with water, and wood and coal made ready for lighting, it was discovered that no one had a light. John Walker had not yet invented his friction lights. George Stephenson was just on the point of despatching a man to Aycliffe for a lighted lantern, when a navvy stepped forward and presenting a burning glass, said he often lit his pipe by its aid, and perhaps it might fire the engine. The glass was tried and proved successful, and Robert Metcalf it was, who with a common sun glass and a piece of tarred oakum actually lit the fire of "Locomotion." The truth of this incident has been thoroughly corroborated, and thus beyond all doubt the first locomotive that ever moved over a public railway the fire was kindled on its first trial trip by the aid of the sun itself.

Coming down to later times, Mr. FRANCIS HUNTER, a well-known and respected Stocktonian, who is wonderfully well for his 87 years at the time of writing, and gifted with a remarkable memory, has furnished the following interesting information touching on the old "flint and steel and tinder" days :—

"About the year 1829, I first remember my grandmother making her tinder and matches. The tinder was made from a piece of old linen rag, which, after being partially bunt, was placed in a little square wooden box. The matches, which were made into thin pieces, from dry wood, were different in appearance from those in use at the present day. Each end of wood was dipped into the brimstone whilst in a hot state; a pan with a handle being specially kept for the purpose; a piece of flint and steel were also required, and to produce sparks, sharp blows were struck on the steel with the flint, and sparks flying off on to the tinder, it soon ignited. A match was then placed against the spark of fire, and light was the result. I made the matches and tinder many a time for my grandmother, who lived in Nag's Head Yard, Dovecot Street, Stockton-on-Tees, nearly eighty years ago.

John Walker's Lucifer Matches were sold at 1/- per box, the boxes being made by one ELLIS, a bookbinder, in the employ of Mr. THOMAS JENNETT."

The late HENRY HEAVISIDES was well acquainted with Mr. WALKER, and in his "*Annals of Stockton-*

on-Tees," speaks of him and his invention, as follows :

"MR. WALKER occupied for many years the small shop, 59, High Street, Stockton-on-Tees, where he carried on the business of an apothecary, for which he was well qualified, having served his apprenticeship as a surgeon under Dr. Alcock. He was not, however, like Shakspeare's apothecary, a person meagre in his looks, showing by "famine in his cheeks" that "sharp hunger had worn him to the bones;" but a merry facetious little fellow, one who loved to hear and crack a joke, and whose sunny smile to customers only slightly indisposed was enough to send them away cured without taking a dose of his physic."

The following communication from the late ALDERMAN JACKSON, of Stockton-on-Tees, appeared in the *Northern Echo*, when the subject of the invention was in question. He says:—

"SIR,—I have not the slightest doubt that the invention of lucifer matches is due to our late fellow-townsmen, Mr. John Walker, chemist and druggist, who had for his place of business the shop No. 59, High Street, Stockton. I knew Mr. Walker personally and intimately, and have had many a friendly chat with him both on this subject and others. In the year 1860 I sent a communication to the "Illustrated London News," in consequence of an article in that journal with the heading, "The Origin or Invention of Lucifer Matches." After alluding to the tinder-box and phosphorus match boxes, it is stated: 'Suddenly and successfully, but

where we have not been able to learn, the lucifer matches invaded the province of the old tar matches.' Before replying to the article in the *Illustrated London News*, I communicated with an old friend, the editor of a local newspaper, who confirmed my conviction that the world at large is indebted to Mr. John Walker for this useful invention. I may say that Mr. Walker was frequently and urgently pressed by his numerous friends to take out a patent, but he always declined, saying it was not worth the while doing so, considering the simple and trifling nature of the article. Mr. Walker died in Stockton-on-Tees on the 1st of May, 1859. The facts as stated in the local paper to which I refer were published in 1852, and were as follows:—

'Mr. Walker was preparing some lighting mixture for his own use, when a match, after being dipped in the preparation, took fire by accidental friction upon the hearth. This was the first friction match, and the hint was not lost. He commenced making friction matches, selling with each box a piece of doubled sand paper to set them in flames by pressure of the thumb and a sharp pull.'

I think after perusing the above, you will have no doubt that Mr. Walker is really the inventor of this useful and now indispensable article. I have always endeavoured, in various parts of the Continent, as well as in England, to establish these facts, that justice may be done to the departed.

I am, Sir, very respectfully,

RICHARD JACKSON.

Stockton-on-Tees, May 6th, 1871."

The following appeared in the *Illustrated London News*, October, 1860:—"The brimstone matches, the tinder box, and the flint and steel, as well as the song, are now in the past, and so completely have the lucifers superseded them that the



QUAYSIDE, STOCKTON-ON-TEES.

John Walker's residence, where he carried out many of his experiments; is marked with a cross.

fire-producing apparatus, which was so common in every dwelling throughout the land, is almost as rare as the schoolboy's hornbook, the street oil lamps, the London hackney coaches and sedan chairs, which

have vanished from view. It is remarkable how gradually yet surely those modes which have been made useless by improvement, vanish. When searching for flint, steel and tinder boxes, we have inquired in many parts of the metropolis, and in many districts of England and Scotland, for a remaining example of an apparatus which was once so well known, and which has so often tried the patience of the dames of the preceding generation. Some of whom enquiries were made thought they had one, others knew somebody who had one. When further enquiry, however, came to be made, they were either not to be found or were in some way imperfect."

In June, 1872, ROBERT W. FOSS, M.D., a Stocktonian, read a paper before the Newcastle Society of Antiquaries, the subject of the paper being *An Account of the Invention of Friction Lucifer Matches*, which afterwards appeared in pamphlet form, and we have pleasure in giving the following extracts from it:—

"John Walker, the subject of this memoir, was the third son of John Walker, a grocer, draper, and spirit merchant, who occupied and was the owner of the shop No. 104, High Street, Stockton (opposite the Town Hall), and was born on the 24th May, 1781. He was educated in the town, and when he had attained the usual age, was apprenticed to Mr. Watson Alcock, surgeon. After completing his

apprenticeship, he went to London for a few years, then came back to Mr. Alcock; subsequently he spent several years in Durham and York in the employ of wholesale druggists; finally settling down in Stockton, as a druggist, in June, 1819. He would be then thirty-eight years of age. In physique, he was a little thin man, never weighing more than nine stones. He was never married. He commenced business in the druggist's shop, next door to Messrs. Jennett & Co., and not as is generally said, on the opposite side of the street. It is said that Mr. Walker's relations were desirous that he should become a surgeon, but as he had an invincible horror of surgical operations, he would not follow out their wishes. When an apprentice with Mr. Alcock, he first began to show his scientific proclivities. He became an expert botanist, and was well acquainted with all the common plants of the neighbourhood, as well as the most likely places to find them. He was also very fond of mineralogy, a science which was just then springing up, and which later was much studied in the town, so that he was frequently consulted about rare or difficult specimens.

He was also constantly making chemical experiments, and he used to go to the shop of John Clennett, a local bookbinder, to beg the gold leaf which was brushed from the lettering of the books, for the purpose of making fulminating gold. On one occasion, when in his house upon the Quayside, near to Cleveland Row, some chemical mixture he had compounded fell upon the hearthstone and then ignited, and then Walker exhibited some of his

compound to the wondering gaze of the bookbinder, and the mixture was handed about as a novelty.

The exact chemical constitution of the matches Mr. Walker always kept secret, and from a careful search which has been made in his books, it has not been possible to find it. Showing how near he was the discovery of the phosphorus match, there are a great number of experiments on light-producing substances, which he had noted in a book, now in the possession of his niece, Mrs. Hutchinson Wilkinson, who kindly revised this portion of Mr. Foss's paper. Phosphorus matches were not invented till 1834. Phosphorus was added in the place of the sulphuret of antimony. Sulphur is not now used in the preparation of the best matches. The first friction matches were made of cardboard, or a substance similar to what the present fusee pipe lighters are made, but the inventor soon substituted splinters of wood for this. The sand paper sold with them in shape resembled a cocked hat, into which the match was inserted and drawn out quickly.

With reference to the patenting of the invention, Walker, like the inventor of phosphorus matches, thought at the time that they were not worth it, and it was well known that he cared more to pursue his scientific studies, whether botanising or experimenting in chemistry, than speculating in order to make money."

In the month of August, 1880, an answer of the *Newcastle Daily Chronicle* to an enquiry from one of

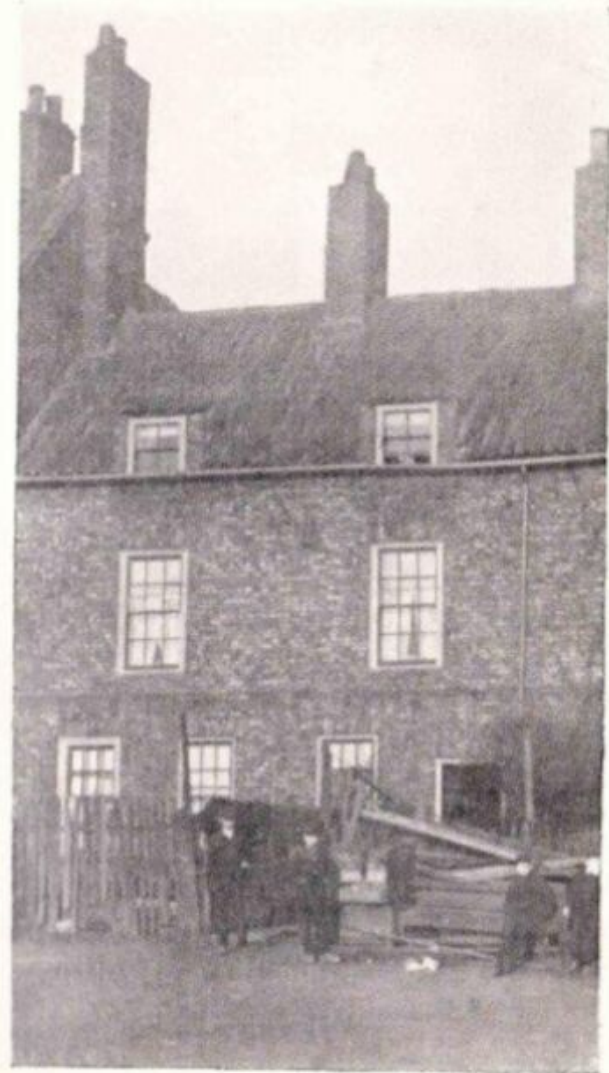
some of these "Friction Lights," which his father purchased of John Walker as a wondrous curiosity, a year or two before Mr. Wright's decease, which took place in the same month and year as Sir Isaac Holden's invention."



JOHN WALKER'S MORTARS AND PESTLES.
The centre Pestle weighs 18 lbs. and the Mortar 6 stones.

M. HEAVISIDES, in his Almanack for 1902, says:—

"Being on the look for "old bits," I, one morning, selected some old buildings, lying to the west of the Ship Launch Inn, and decided to photograph them. Here I met one of those amphibia, common to the district. In the course of our conversation he said, "I can show you the house where the first match was made." Rather inclined to doubt him, I replied, "I don't know about that," but never



A LATER VIEW OF JOHN WALKER'S RESIDENCE.

being averse to the gaining of knowledge, I accompanied him a few yards to his house, and was shewn a small room, where, he said, John Walker carried on his match experiments. A river-side garden fronted the old house, and fine large plants of dahlias were in full bloom on that bright September morning. I should add that Mr. Samuel most graciously presented me with a small crimson dahlia and a bit of green to wear as a button-hole in remembrance of my visit. Desiring corroborative evidence as to its being John Walker's residence, I mentioned my visit to Mr. Joseph Parrott, and he very kindly sent me the following contribution":—

"Longfellow says:

"All houses wherein men have lived and died
Are haunted houses. Through the open doors
The harmless phantoms on their errands glide
With feet that make no sound upon the floors."

"One house in Stockton, fast descending into decrepitude, is worthy of note. Facing the river—ere the products of the iron age obscured the sky, the Cleveland Hills and Roseberry Topping could be seen—is the house where was discovered one of the most beneficent facilities mankind have ever enjoyed. Here is the veritable residence of John Walker, chymist and druggist, and from whence he issued the forerunner of the enlightenment of the age, the lucifer match."

A few years ago, a brass tablet, denoting to the passer-by the site of Mr. Walker's shop, was placed on the side of the shop of Mr. Appleby, bookseller,

59, High Street, by the Trustees, and at the request of the late James Pentland Jewson, professor of music, Stockton-on-Tees.

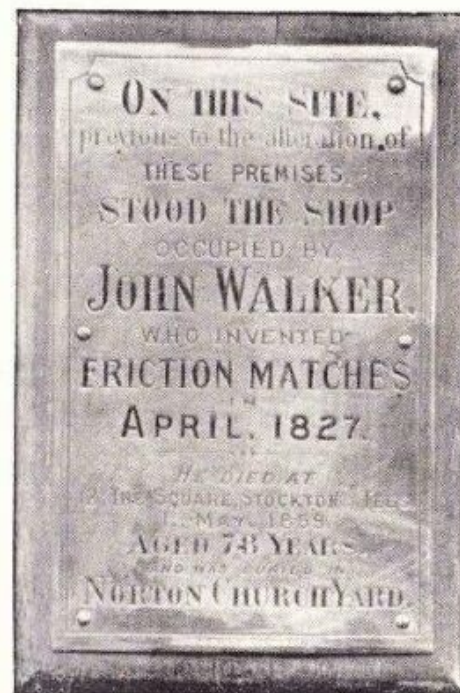


PHOTO OF THE BRASS TABLET.

John Walker sold his friction lights in 1827, about eighteen months after the memorable opening of the first public railway between Stockton and Darlington. At that time the means of communication between London and the North was slow and

tedious, yet, notwithstanding this great drawback, only five years elapsed before we find that Messrs. Richard Bell & Co., in 1832, established the first match manufactory in the world at South Street, then called Garratt's Lane, Wandsworth; also at 16, Basing Lane, London; and to-day at Bromley-by-Bow. This firm holds the leading position as match and vesta manufacturers. Their advertisement should prove interesting, especially to those who can go back to the days of the sulphurous match with its pungent smell.

The lucifer match appears to have been introduced in different countries about the year 1834. In Germany it was first manufactured on a large scale in the Grand Duchy of Hesse, especially in Darmstadt, and gradually extended through Germany; but its progress was at first very slow, on account of the lucifer match being prohibited until the year 1840, on account of the alleged risk of fire consequent upon its employment.

ROBERT LOWE, afterwards Viscount Sherbrooke, when Chancellor of the Exchequer (1868-73) proposed in one of his budgets to tax matches, but met such strong opposition from employees in the match industry and the public that he was obliged to withdraw his proposal, and since that time no succeeding Chancellor has been bold enough to

make a second attempt.

At the present time it is estimated that matches to the value of £1,500,000 are made annually in Great Britain. In Sweden and Norway where the match trade has rapidly developed, there are about sixty factories, one town alone employing 6,000 matchmakers. Germany and Austria have together as many as 450 factories. In the United States the manufacture is mainly controlled by one combination of capitalists. In Spain and France the making of matches is a Government monopoly and is a considerable source of revenue. In France, a box of matches, containing some twenty-four, costs one penny.

It may be interesting to the general reader to give a brief description of the manufacture of matches, which embraces:—(1) cutting the wood splints; (2) immersing the splints into melted paraffin; (3) preparing the igniting composition and dipping the splints into it. Then there is also the making of the boxes, which, in the case of safety matches, have the phosphorus composition glued upon their sides. Pine or aspen is the wood used for the splints.

Regarding the machinery, one of the simplest splint-cutting machines is a special lathe, for which the tree trunks to be operated upon are sawn across in pieces fourteen inches long, after which the bark is

removed. One of these pieces is the length of seven matches, and is fixed on the chuck of the lathe and cut in a continuous slice or shaving equal to a match in thickness. The principal cutting tool is fixed on to a slide-rest, and as the shaving comes away it is divided into seven equal widths by cutters placed above the chief slicing tool. After the two-inch wide shavings are cut into six feet lengths, they are divided into single splints by a guillotine cutter, similar to that used for cutting paper. Under favourable conditions this machine will cut a million splints in an hour!

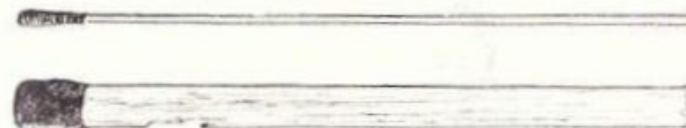
Nearly every manufacturer has his own special mixture for the dipping of matches. One peculiar quality of Messrs. R. Bell & Co.'s matches is that the ash will not drop, and in the prevalent indiscriminate use of matches in well-furnished rooms, by careless servants and others, this should not be lost sight of by the purchaser.

It is needless to say that matches are made in enormous quantities, some large firms turning out as many as one hundred millions daily!

In a recent examination of Mr. Walker's sale book, which dates from August 9th, 1825, to Sept. 23rd, 1829, now in the possession of Mrs. William Hardcastle, who kindly lent it to the Editor, it was found that between April 7th and December 24th,

1827, thirteen 1/- boxes; six 6d.; and one 3d. were sold; while from August 24th to September 23rd—one month—fifty-four 1/- boxes were sold, showing clearly that the fame of the matches was spreading. The last entry in the book, September 23rd, 1829, is for twenty-four boxes of Friction Lights to Colonel Maddison, Norton, near Stockton-on-Tees. The first entry, that of Mr. John Hixon, is written in Latin. In all subsequent entries the term, "Friction Lights" is used.

After a careful consideration of what has been advanced to prove that John Walker was the inventor of the friction match, there can be but one opinion on the matter. It is singular that no one has yet made a prior claim as to date. Authorities on the subject state that the first friction match was invented in 1832, whereas Mr. Walker's sale book shews that the 30th box was sold to Mr. John Hixon, on Saturday, April 7th, 1827, and appears on page 18, having



Front and side section of one of John Walker's Matches.
The exact size.

been photographed direct from Mr. Walker's sale book, and the probability is that the first box was sold some time during 1826.

While Walker's invention was fatal to the tinder box process, yet it was not perfection, for even fifty years ago is still remembered the strong sulphurous smell of the matches in vogue at that time, but as the years rolled by, various light-producing inventions appeared, with the result that at the present time, 100 matches may be purchased for less than a farthing, while eighty years ago the same number cost one shilling.

Stockton is proud of John Walker, and it is to be hoped that, at no distant date, a national memorial will be erected in his native town to keep in remembrance one who gave such a boon to humanity in the shape of the first friction match.

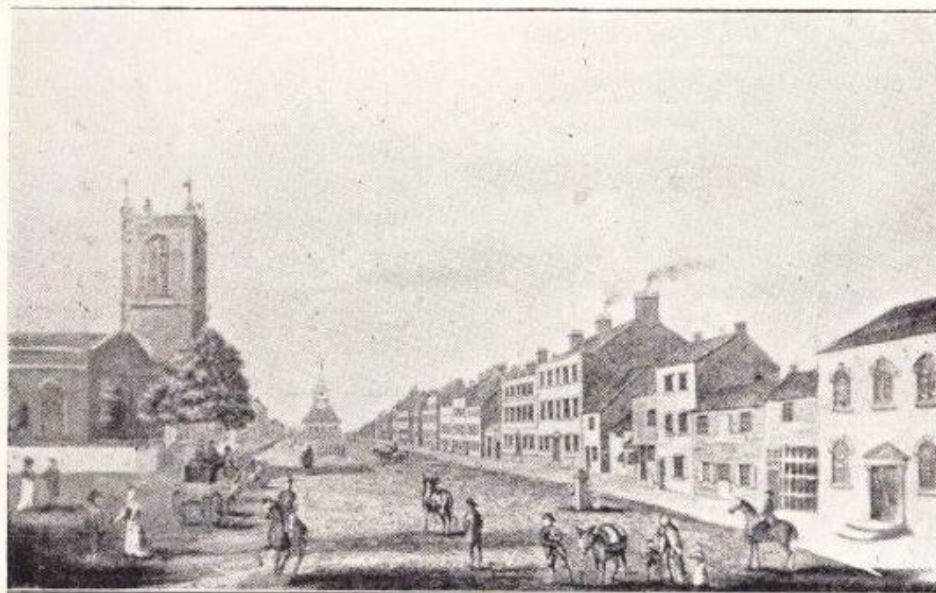


STOCKTON COAT OF ARMS.

STOCKTON-ON-TEES.

As this booklet may be sent from residents of Stockton to friends abroad, it may be interesting to add a concise account of the birthplace of John Walker.

The ancient town of Stockton-on-Tees is splendidly situated on commanding ground above the river Tees, in the county of Durham, England, about twelve miles from



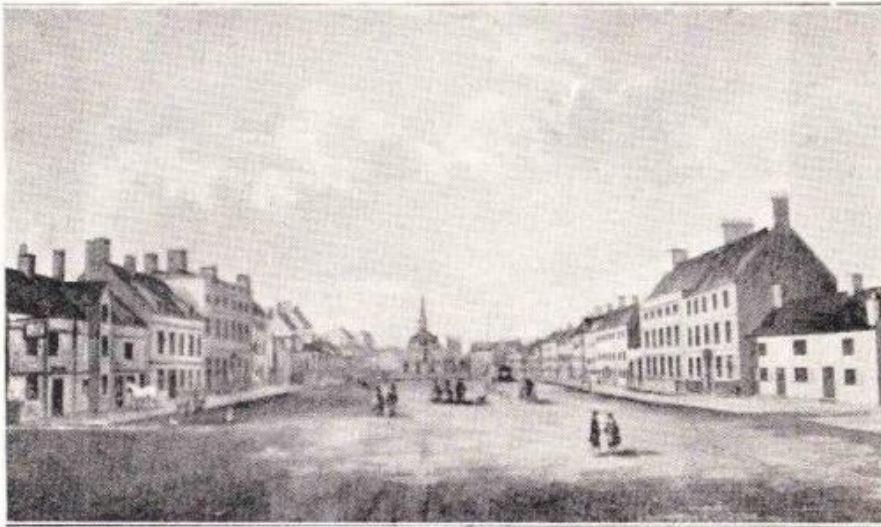
High Street from the North End, 1785.

the mouth of the river. Its foundation is lost in the mists of antiquity, but there is little doubt that it was in existence in the time of William the Conqueror. In 1214, King John visited Rd. de Marisco, Bishop of Durham, at Stockton Castle and their granted a charter to the Burgesses of Newcastle.

In 1310, Bishop Bec granted a charter for a Weekly Market and Fair to the town of Stockton. The Market

to be held every Wednesday for ever, and the Fair every year upon the feast of the translation of St. Thomas the Martyr, Archbishop of Canterbury, to continue eight whole days.

Century after century, we read again and again that Stockton Castle was a favourite residence of the Bishops of Durham. In those early days they were princes of the land, were invested with great power, both temporal and spiritual, and it has been stated that the liveried retinue



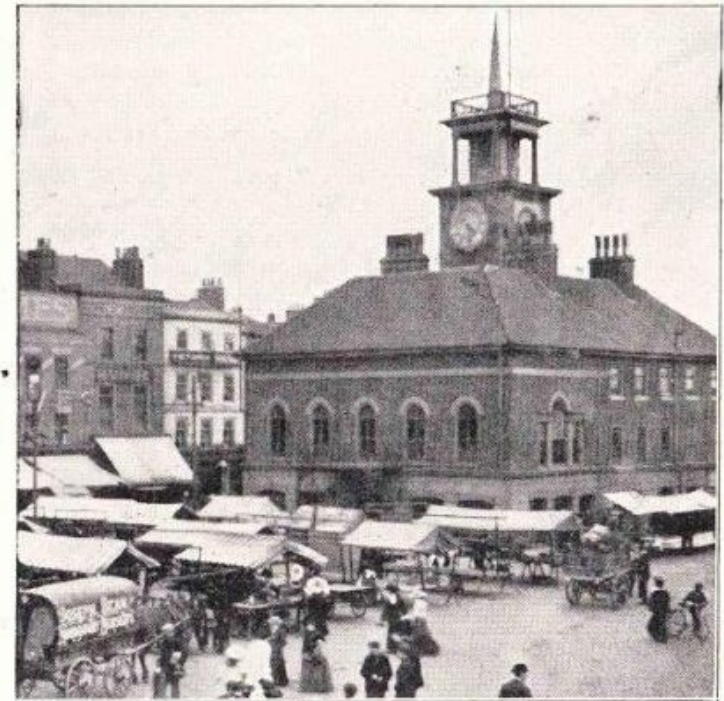
High Street from the South End, 1785.

of Bishop Bec numbered one hundred and forty persons; so that it is easy to imagine that many a stately and imposing procession was witnessed as the incoming Bishop took up his residence at the Castle.

And well might the Bishops take delight in a visit to Stockton Castle, for it stood in a commanding position, amid gardens, orchards and wooded grounds, with the fair Tees winding its course below, while far away could be

seen the beautiful Vale of Cleveland, and beyond the hills of that name.

In 1647, Feb. 26th. An order of Parliament was made, viz., "That Stockton Castle be made untenable and the garrison disgarrisoned." It was confirmed in the House of Commons in July of that year. In 1652, Stockton



Town Hall. Market Day.

Castle was totally destroyed. And then followed the disposing of the stone which formed the Castle, which to-day may be seen in the lower parts of many old buildings by the quayside.

In Cromwell's time the town appears to have been at its lowest ebb, as it contained only 136 families. From

that period to the early part of the nineteenth century its population gradually increased and in the year 1811 it was 4,000; but the greatest impetus occurred during the last fifty years and the population now exceeds 50,000.

The causes which have led to Stockton's prosperity are the making of the river cuts in 1810 and 1829, the opening of the bridge across the Tees in 1769, the fifty years splendid work of the Tees Conservancy Commissioners, the discovery of ironstone in the Cleveland Hills, about 60 years ago, and the proximity of the Durham coal fields.

Stocktonians are proud of their High Street. It is 750 yards in length, the greater portion being about 50 yards in width. The quaint Town Hall, as seen in our engraving, stands in the centre of the High Street, was built in the year 1736, and its architecture is after the Dutch. The Wednesday Market, established six centuries ago still flourishes, and is a splendid source of income to the Corporation.

A century ago Stockton was a quiet country town; to-day it is a commercial centre of activity in Shipbuilding, two firms occupying the south bank and one the north side of the river. Here are built large sailing ships and screw steamers up to 6,000 tons burden. There is also one of the largest steel and iron works in the United Kingdom, besides large marine engine building works, blast furnaces, flour mills, etc.

It should not be forgotten that Stockton was the terminus, when "Locomotion" ended its first journey on the memorable 27th of September, 1825, and even to-day there are still left a few interesting buildings in connexion with the early days of the railway system.



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