

VARIOUS WAYS FOR GETTING A LIGHT

They All Depend Upon the Agency of Friction.

BUT THE PROCESS HAS CHANGED

Some Facts Noted Apropos of the Recent Death of Sir Isaac Holden, the Reported Inventor of the Lucifer Match.—A Chapter on Match-making.

From the Boston Herald.

The announcement that Sir Isaac Holden, M. P., who died recently in London, was the inventor of the lucifer match may be correct, but there is strong evidence to the contrary.

Phosphorus, discovered by Brandt in 1669, was first applied commercially as a means of obtaining fire by Godfrey Haukwitz, of London, who in 1820, prepared the direction of Robert Boyle, prepared and sold considerable quantities.

There is good authority for the belief that the friction match was the product of the ingenuity of John Frederick Komerc, who, early in the century, was imprisoned in the penitentiary at Hohensberg, in Germany.

Another somewhat similar apparatus was prepared by putting a piece of phosphorus in a small vial and stirring it about with a hot wire passed through the cork.

M. Chanou's discovery, mentioned above, was utilized in England some twenty years after it was made, in what was called an "instantaneous light box."

Primitive processes. The primitive method of kindling a fire was, no doubt, the use of friction.

In Central and South America, early travelers report the natives producing fire by striking a piece of hard wood against a piece of soft wood, notched to receive the point, and twist it rapidly back and forth between the palms of the hands.

As to the end of the first quarter of the present century the flint and steel were the only instruments of fire.

Blacksmiths occasionally ignored flint and steel in lighting their forges, by striking soft iron wire against blows with a hammer, making it red hot in a few seconds, and thrusting it into a little heap of powdered limestone and sawdust, which it immediately kindled.

POPEN'S ILLUMINATION. Early in the century an ingenious Frenchman utilized the well-known fact that the rapid compression of air creates intense heat, in a light-striking apparatus made like a poscon closed at the end. Placing amadou in the closed end and forcing the piston down with great force, sufficient heat was generated to kindle the tinder, and light could be procured from it with a limestone match. This apparatus was uncertain and easily got out of order, and never came into common use.

apply the "portlands" to their cigars and begin to puff immediately the tip is ignited, they generally inhale a sulphurous whiff that noyokes them. Whereat the Bostonian laughs contentedly.

TRADE CONDITIONS.

Until the introduction of amorphous phosphorus (which was made by Prof. Anton von Schroder in Vienna in 1843) the trade of match-making was very unhealthy. The emanation of phosphoric acid, when common phosphorus was used, gave rise to necrosis, a disease which destroys the bones, and fatal effects.

ACID UTILIZED. M. Chanou's discovery, mentioned above, was utilized in England some twenty years after it was made, in what was called an "instantaneous light box."

MACHINERY. Most of the processes of match manufacture are now effected by machinery, and many ingenious inventions have been introduced for making the wooden splints.

THE SPLITTERS. The splints are usually made of a soft kind of white pine, though some aspen is used in Sweden. The square splints are cut by means of knives, and the round ones are shaped by passing through perforations in steel plates, a process invented in 1812 by a Mr. Partridge.

There are several kinds of machines for producing the splints. By one process a log of fifteen inches length, stripped of its bark and soaked or steamed, is put into a machine, which unrolls it, as it were, in a continuous strip as wide as the log is long and of the thickness of the splint.

DIPPING. The splints are dried in revolving drums and sifted to free them from fragments and splinters and arrange them in parallel order, and then are put into a "filling" machine of American invention which sticks them into the dipping frames.

STATISTICAL. Statisticians whose opinions carry weight estimate that the average daily consumption of matches in a civilized State is 225,000,000 to 230,000,000. This country has been a large importer of these articles, especially from Eng-

land, Sweden and Germany, while producing great quantities at home. The manufacture in the United States is mainly controlled by one combination of capitalists, the Diamond Match company, but a rival has lately arisen.

HELPED HIM GET HIS PAY. President Lincoln's Kindness to a Tired and Lost Soldier.

One day in November, of the year referred to, President Lincoln had been at the office of the Secretary of War, and was traveling the long halls at the War and Navy building, sedate, unassuming and unattended, when he met a worn soldier, in a tattered uniform of blue, evidently at a loss among the many doors along the corridor.

CONFLICTING LEGAL STYLES. A good anecdote is told of the two celebrated barristers, Balfour and Erskine.

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NEGLECT IS SUICIDE.

Plain Words From Mrs. Pinkham, Corroborated by Mrs. Charles Dunmore, That Ought to Bring Suffering Women to Their Senses.

If you were drowning and friendly hands shoved a plank to you, and you refused it, you would be committing suicide!

It is suicidal to go day after day with that dull, constant pain in the region of the womb and that bloating heat and tenderness of the abdomen, which make the weight of your clothes an almost intolerable burden to you.

Commence the use of Lydia E. Pinkham's Vegetable Compound. Thousands of women in this condition have been cured by it.

Ms. CHARLES DUNMORE, 102 Fremont St., Winter Hill, Somerville, Mass., says: "I was in pain day and night; my doctor did not seem to help me. I could not seem to find any relief until I took Lydia E. Pinkham's Vegetable Compound."

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