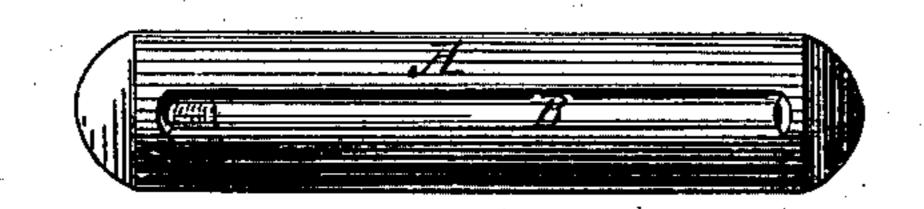
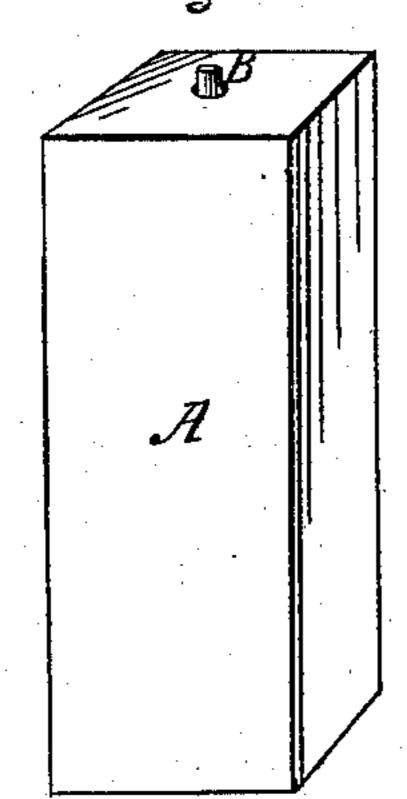
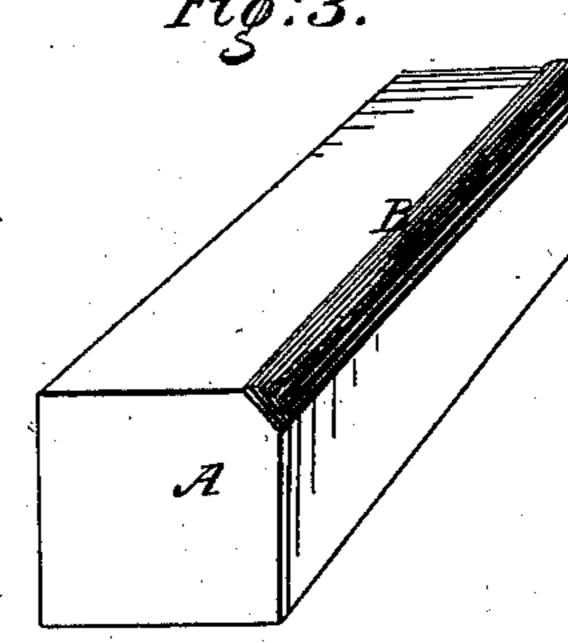
## B. SWIFT. Fire-Lighter.

No. 225,244.

Patented Mar. 9, 1880.







Senjamen Suft

## United States Patent Office.

BENJAMIN SWIFT, OF BROOKLYN, NEW YORK.

## FIRE-LIGHTER.

SPECIFICATION forming part of Letters Patent No. 225,244, dated March 9, 1880.

Application filed June 25, 1879.

To all whom it may concern:

Be it known that I, BENJAMIN SWIFT, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new 5 and useful Improvement in Fire-Lighters; and I do hereby declare that the following, taken in connection with the accompanying drawings, is a full, clear, and accurate description of the same.

The object of my invention is to form a new and useful fire-lighter which shall be an improvement upon and form a convenient substitute for the means now used for lighting and starting fires.

I form my improvement as follows: I make a mixture of charcoal saturated with liquid resin, and press or form it by any suitable means into a form, A, as shown in Figure 1, of round and oblong shape. In each side of this 20 form A is cut a slot, in which matches tipped with phosphorus or other proper material which will ignite by friction are placed. These forms A are wrapped in paper or other proper wrapping material, and sold in packages of a dozen 25 or more, as desired.

I do not intend to confine myself to the particular form A shown in Fig. 1, but modifications of the same can be used.

Two modifications are shown in Figs. 2 and 30 3. In Fig. 2 the form A is made nearly square, and the matches inserted so as to fit securely

in a hole cut in the form A, with the end of the match tipped with phosphorus or other proper material protruding. In Fig. 3 a portion of the top and one side of the form A is 35 provided with phosphorus or other proper ma-

terial secured to the form A.

I am aware that charcoal has been used in compounds for kindling fires. I am also aware that resin has been used for the same purpose; 40 but they have been used with other ingredients, such as sawdust, coal-tar, coal-dust, &c. I am also aware that fire-kindlers of wood blocks have been combined with a match, as shown in the patent of S. S. Brown, August 45 15, 1876, No. 181,033, and such I do not broadly claim; but,

Having thus described my invention, what I claim, and desire to secure by Letters Patent,

The improvement in fire-lighters A, composed of a mixture of charcoal and resin, and provided with one or more matches or other proper material, B, substantially as shown and described.

In testimony whereof I have hereunto set my hand this 20th day of June, 1879.

BENJAMIN SWIFT.

In presence of— CHARLES G. COE, R. F. VAN BOSKERCK.