(No Model.)

F. SAHLFELD.

FIRE LIGHTER AND RECEPTACLE.

No. 474,190. Patented May 3, 1892.

Fig. I.

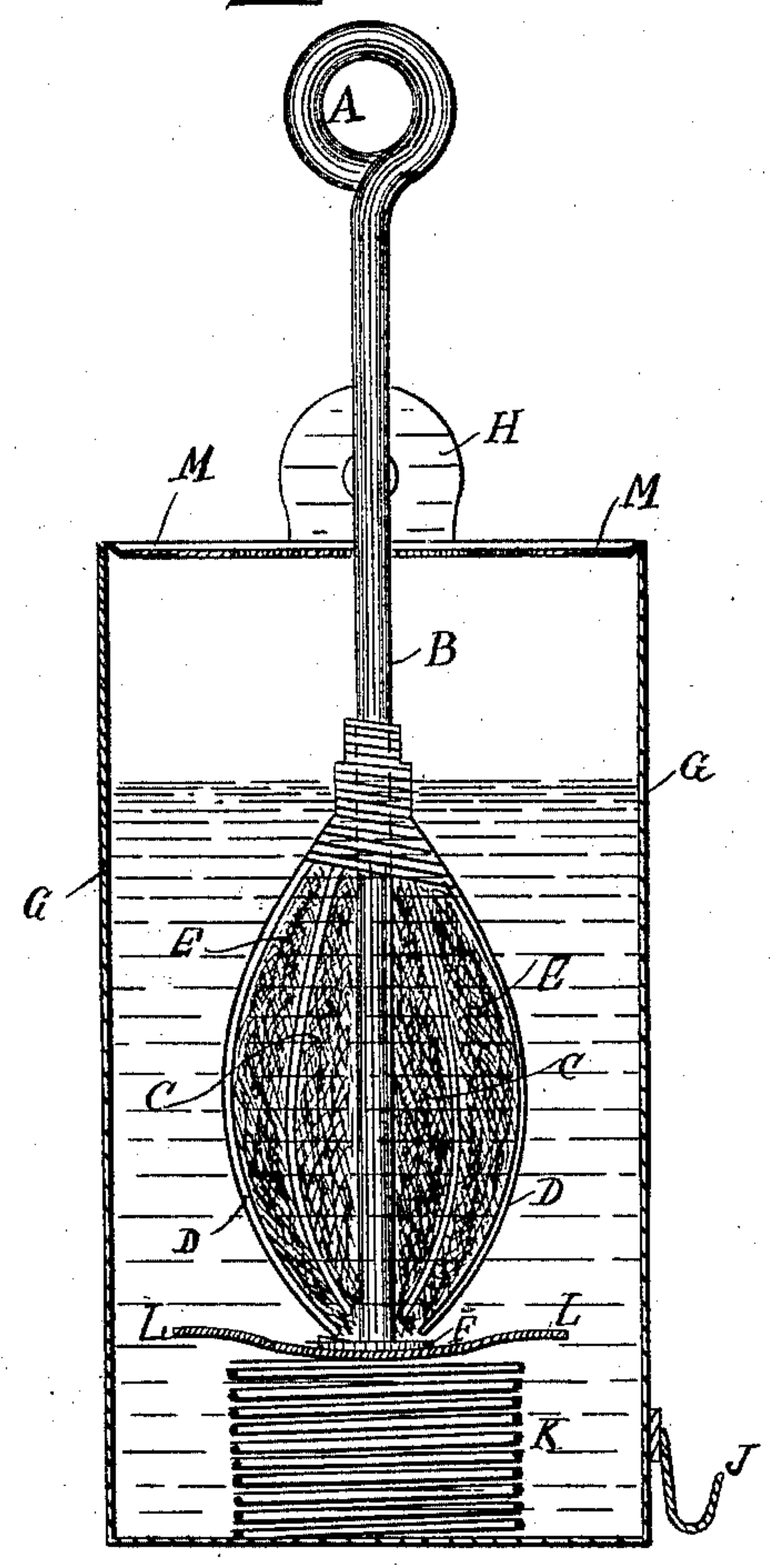
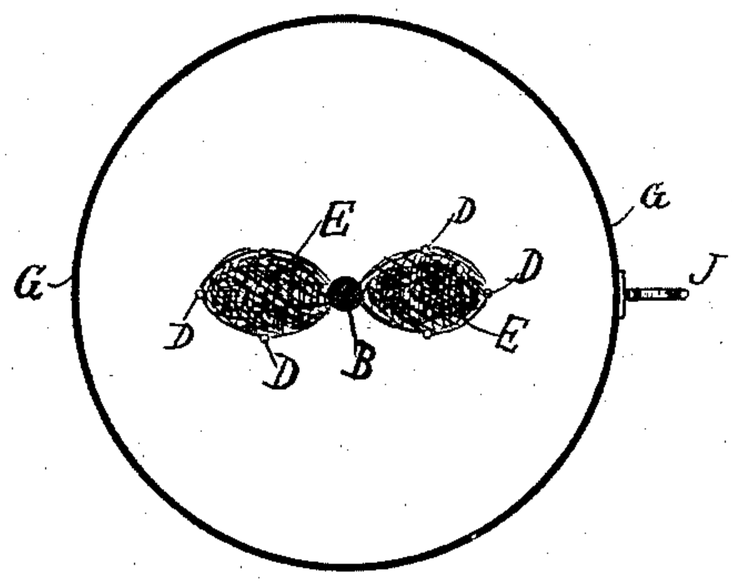


Fig. II.



Attest
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UNITED STATES PATENT OFFICE.

FRITZ SAHLFELD, OF HANOVER, GERMANY.

FIRE-LIGHTER AND RECEPTACLE.

SPECIFICATION forming part of Letters Patent No. 474,190, dated May 3, 1892.

Application filed September 8, 1891. Serial No. 405,096. (No model.)

To all whom it may concern:

Be it known that I, FRITZ SAHLFELD, chemist, of Hanover, in the Kingdom of Prussia and German Empire, have invented new and useful Improvements in Fire-Lighters and Receptacles Used in Conjunction Therewith, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in fire-lighters and receptacles used in conjunction therewith.

The fire-lighters hitherto used for lighting fuel in the fire-grates have been defective in many respects, inasmuch as in a short time they have been destroyed by the fire, and their use in ranges and stoves with grills has been highly inconvenient.

On the accompanying drawings, Figure I is a vertical section of my improved fire-lighter and receptacle, and Fig. II a longitudinal section.

This improved fire-lighter consists of a strong iron wire B, furnished with an eyelet A and connected at its lower extremity to a cage C, formed of annealed wires D and containing asbestus cord or ribbon or asbestus fiber E. As this asbestus fiber, if exposed to the fire in its normal state, would commence to crack and dwindle away, I impregnate the fibers with a concentrated solution of boric acid under a pressure of one and a half atmospheres, which hardens the fiber and changes the nature of the same entirely, but leaves it sufficiently absorbent to absorb the quantity of petroleum required.

G is my improved receptacle about half-filled with the petroleum or other inflammable spirit used, which is composed of sheet metal and provided with a metal eyelet H, by which it is suspended from the chimney-wall or other convenient part of the fireplace. This receptacle is fitted with a spiral spring K, which presses against the under side of the rim or flange M of the lid L. This spring always tends to force the lid upward and keep the mouth of the receptacle closed, so that none of the petroleum therein contained may evaporate. This receptacle G is also provided with a hook I, on which to hang the fire-lighter when not in use by means of the eyelet A. As soon as it is required to use the fire-lighter the same is removed from the hook I and introduced into the receptacle G by depressing the lid L and spiral spring K. A disk or flange F is fastened to the end of the rod B for guiding the lid L up and down when it is depressed. As soon as the asbestus fiber or ribbon is sufficiently saturated with the petroleum the fire-lighter is taken out of the receptacle G and ignited. It is then inserted among the fuel and produces a strong flame, which very quickly causes the fuel to become incandescent. In this way I produce a fire-lighter which will last a number of years and afford a means of storing the petroleum and preventing its evaporation.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. In combination, in a fire-lighter, the casing having the interior cover, the spring for forcing the same upward into place, and the lighter device adapted for insertion within the opening in the top of the casing and to press upon the cover and force the same down, substantially as described.

2. In combination, in a fire-lighter, the casing having the interior spring-cover closing upwardly against the top of the casing and the lighter device having the button at the end thereof, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

FRITZ SAHLFELD.

Witnesses:
VUNSSER,
HERM. HIGDON.