

(No Model.)

J. T. ELLIOTT.
Fire Kindler.

No. 235,756.

Patented Dec. 21, 1880.

Fig. 1.

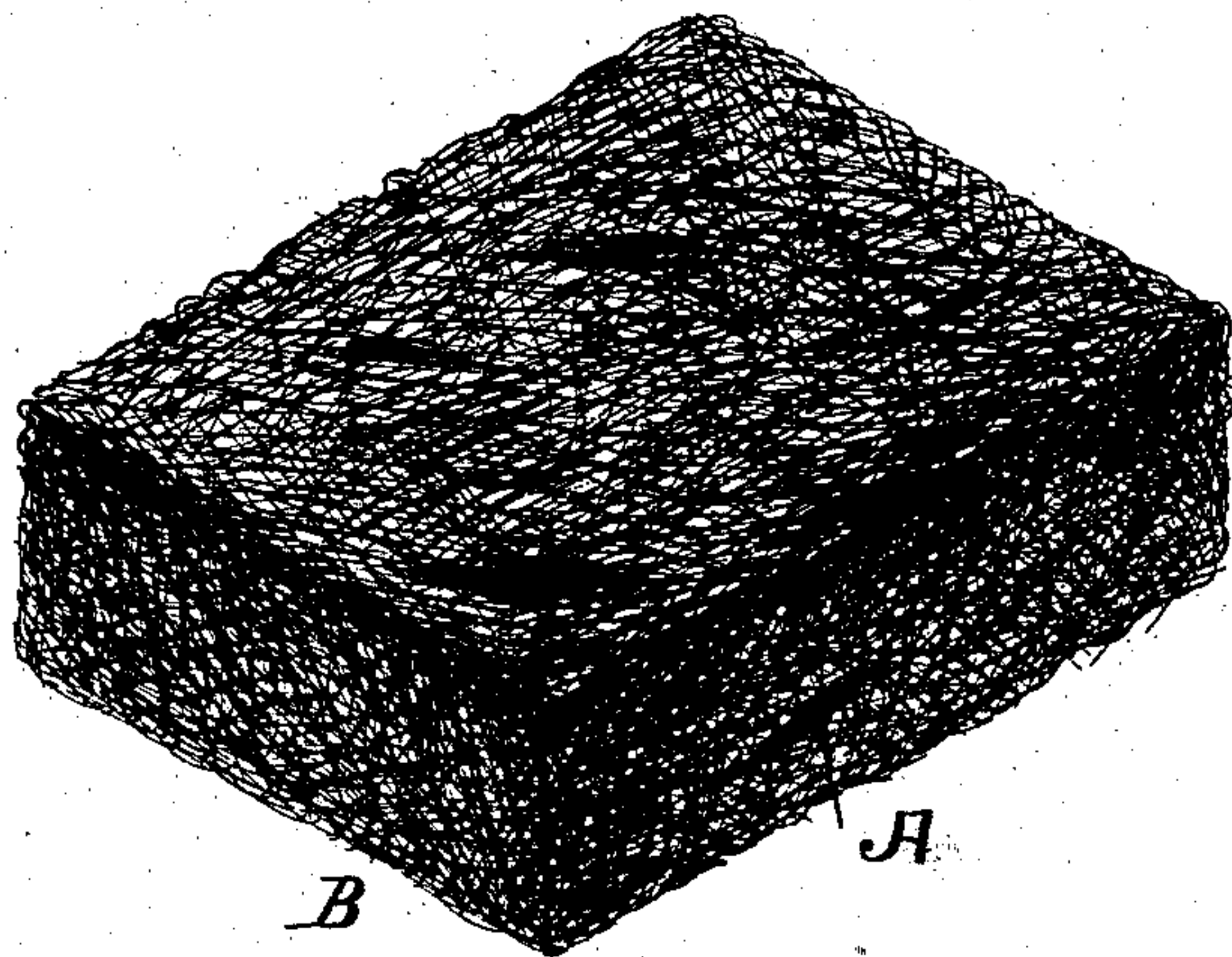
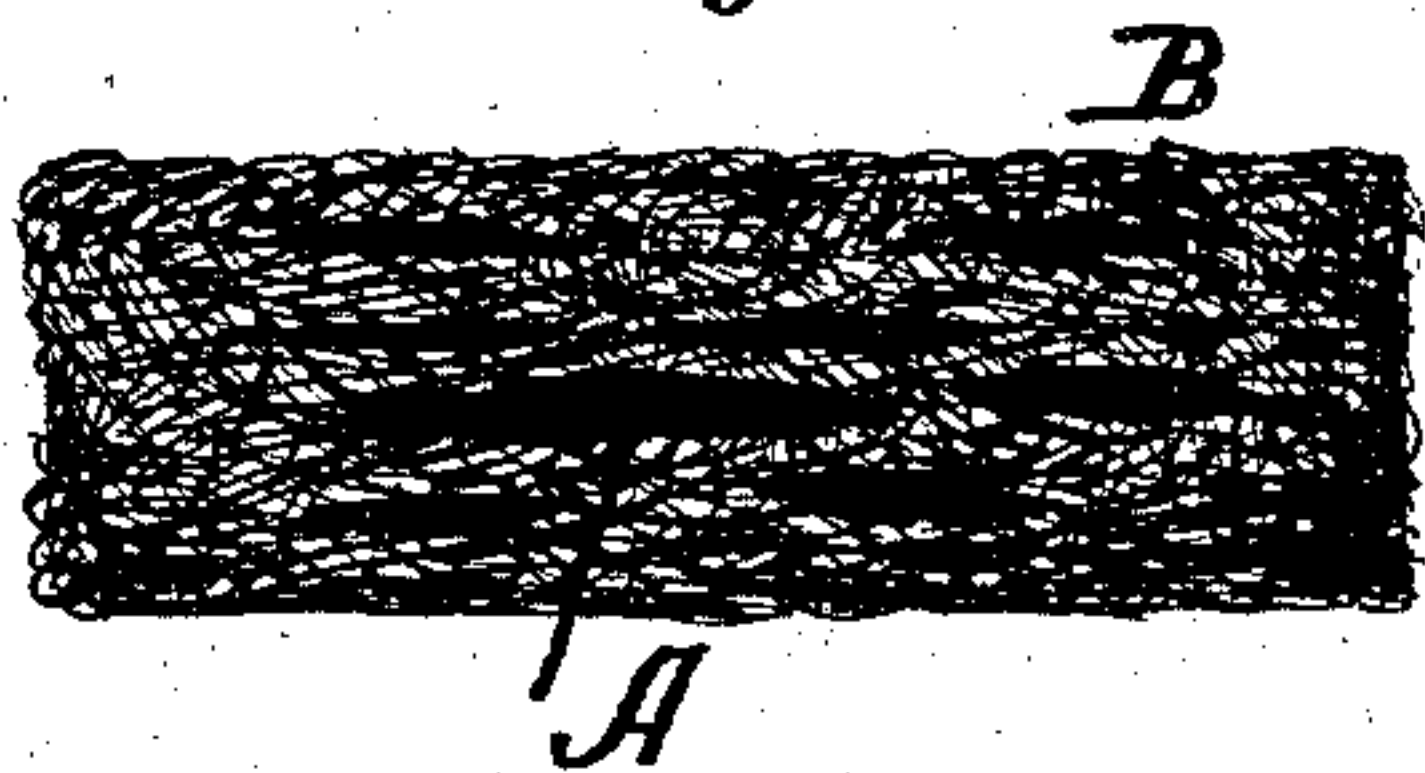


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN T. ELLIOTT, OF GRAND RAPIDS, MICHIGAN.

FIRE-KINDLER.

SPECIFICATION forming part of Letters Patent No. 235,756, dated December 21, 1880.

Application filed August 24, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. ELLIOTT, of Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Fire-Kindlers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to certain improvements in fire-kindlers; and it has for its object to produce an inexpensive article in convenient shape, which will burn readily for a proper length of time and with sufficient intensity to ignite the fuel to be kindled, whether wood or coal.

To this end my invention consists of a kindler composed of porous absorbent material, such as sawdust or the like, surrounding a solid inflammable material, such as rosin or its equivalent, which will melt under the influence of heat and be supplied by capillary attraction to the outside of the mass in just sufficient quantities to keep up a flame of the proper intensity and for a proper length of time to ignite the fuel without undue waste of the inflammable material in order to economize the same to the greatest possible extent.

In the drawings, Figure 1 represents a perspective view of my improved kindler, and Fig. 2 a sectional view of the same.

In carrying out my invention the rosin A is melted and poured in a liquid state into the center of a mass, B, of fibrous sawdust, and, while hot, the whole is placed in a mold and pressed until cool, so as to retain its shape after removal.

The absorbent substance which I use is what is known as "shingle-sawdust." This is a waste product of the manufacture of shingles, and is either burned at the mills or thrown away. It is consequently extremely cheap, and, as it is cut lengthwise of the grain of the wood, is admirably adapted to the intended purpose, as it forms a fibrous inclosing substance for the inflammable material, which will conveniently

keep its form, and which is of such absorbent and capillaceous nature as to operate similarly to the wick of a lamp and supply the inflammable matter from the center to the outside of the mass to supply the flame.

It is evident that the kindler can be formed into any desirable shape, such as cubical, polygonal, or spherical blocks or lumps, without departing from the spirit or sacrificing the advantages of my invention.

It will be perceived that when the kindler is ignited the gradual melting of the inflammable substance will feed the flame as it is slowly converted into gas through the medium of the heat, thus keeping up the combustion for a length of time sufficient to insure the ignition of the fuel, and that the dust or shreds will feed the melting inflammable material to the surface by reason of the capillary attraction due to the fibrous material.

I am aware of the Patent No. 208,882, in which sawdust or shavings, tallow, petroleum, or paraffine oils are used and glued blocks are formed; also, that pulverized coke, anthracite coal, turpentine, coal-oil, resin, pitch, shavings, chips, &c., have been before employed in this art, and such is not sought to be broadly covered in this application.

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

A fire-kindler composed of a solid inflammable material which will melt under the action of heat and be rendered fluid, the said material being inclosed in and wholly surrounded by a fibrous absorbent or capillary material, and the whole molded, under pressure, into suitably-shaped blocks, substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand this 17th day of August, 1880.

JOHN T. ELLIOTT.

Witnesses:

J. J. MCCARTHY,
JOSEPH RUSSELL.