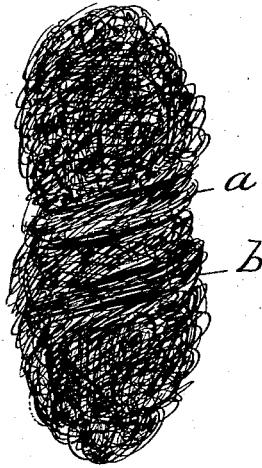


H. N. WOODMAN.
Fire-Kindler.

No. 203,809.

Patented May 14, 1878.



Witnesses
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UNITED STATES PATENT OFFICE.

HENRY N. WOODMAN, OF SPRINGFIELD, MASSACHUSETTS.

IMPROVEMENT IN FIRE-KINDLERS.

Specification forming part of Letters Patent No. **203,809**, dated May 14, 1878; application filed August 2, 1877.

To all whom it may concern:

Be it known that I, HENRY N. WOODMAN, of Springfield, county of Hampden, and State of Massachusetts, have invented a new and useful combination and arrangement of materials or substances which together constitute a new Fire-Kindler, which invention is fully set forth in the annexed specification and in the accompanying drawing.

The object of my invention is to provide a cheap and safe fire-kindler which will be an advantageous substitute for shavings, paper, and like materials for kindling wood and soft coal.

Many descriptions of manufactured fire-kindlers which have heretofore been made lack sufficient absorbent qualities to properly take up the resinous substances which constitute their principal value as kindlers. Owing to this fact, it is a frequent cause of complaint that such kindlers, when ignited, fail to burn entirely, and only the surface covering of inflammable material, or a small portion of it, is consumed, without igniting the body of the kindler, and consequently they often fail to accomplish the object for which they are employed.

In my invention I entirely obviate the objections above set forth, and, instead of providing a material to be simply covered with resinous substances, the nature and disposition of it provides cells and interstices, in which the inflammable material finds an easy lodgment, and becomes so intermingled with the body of the kindler that once it is set on fire it is sure to be completely consumed, and to ignite the fuel with which it may be placed in contact.

The drawing shows the general form of my kindler, the body of which is formed from

bunched or wrapped "excelsior" or other slitted or similarly prepared wood-fiber.

A small quantity of this material is taken in the hands of the workman and molded into about the form shown in the drawing, and the long projecting ends of the fiber are wound around the bundle, as shown at *a* and *b*, and tucked under the surrounding band, or otherwise fastened temporarily in the bundle. After a quantity of these bundles have thus been made they are put together into a vessel of melted resinous compound, and after remaining therein for a few moments they become thoroughly saturated therewith, and they are then removed from the vessel, allowed to get cool, and are then packed for use.

The wrapping ends of the fiber become thus so cemented together that the bundle is compact, and will bear any necessary handling and retain its shape.

It is obvious that a similar fire-kindler to mine might be made from certain kinds of coarse grasses or soft corn-husks made into bunches and dipped in a resinous compound, as hereinbefore set forth; but such material would lack the absorbent qualities of wood, and would not be so good for the purpose as is the substance I use.

What I claim as new is—

As a new article of manufacture, the hereinbefore-described fire-kindler, consisting of "excelsior" bundled into convenient size and form, wound and retained in shape by its own fibers, and saturated with an inflammable resinous substance, substantially as set forth.

HENRY NELSON WOODMAN.

Witnesses:

H. A. CHAPIN,
WM. H. CHAPIN.