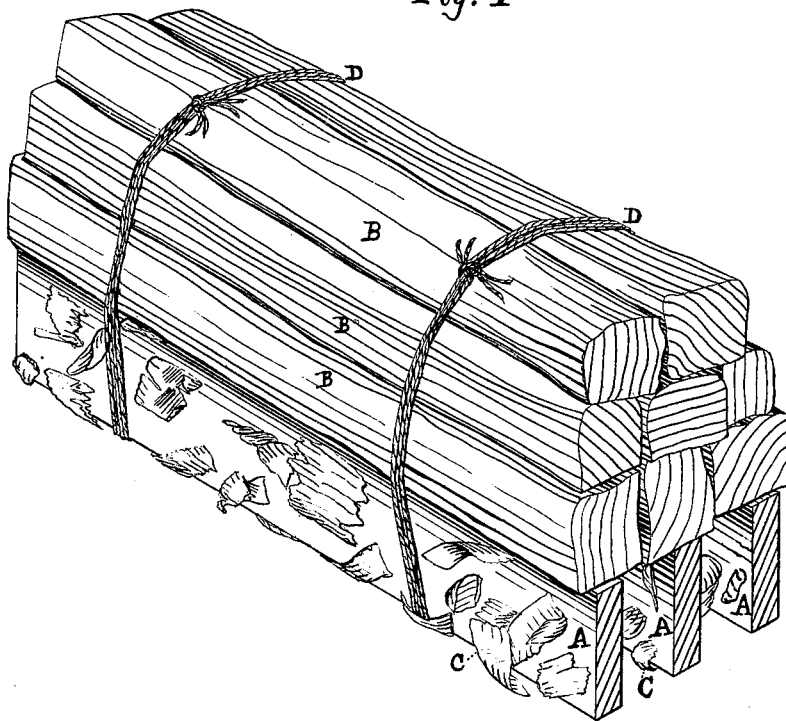


J. J. K. BOOTE & G. L. HECHLER.
Fire-Kindler.

No. 200,972.

Patented March 5, 1878.

Fig. 1



Witnesses,

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UNITED STATES PATENT OFFICE.

JOHN J. K. BOOTE AND GEORGE L. HECHLER, OF CLEVELAND, OHIO,
ASSIGNORS OF ONE-HALF THEIR RIGHT TO DEVANE F. SHERBONDY
AND VAN DORN LILLIE, OF NEW YORK, N. Y.

IMPROVEMENT IN FIRE-KINDLERS.

Specification forming part of Letters Patent No. **200,972**, dated March 5, 1878; application filed
December 12, 1877.

To all whom it may concern:

Be it known that we, JOHN J. K. BOOTE and GEORGE L. HECHLER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and Improved Fire-Kindler; and we do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Our invention relates to certain improvements in fire-kindlers, to adapt them to be used in lighting hard-coal fires, being an especial improvement over our former patent, which is inadequate to ignite coal of this description.

Our kindler consists of a quadrangular bundle of wood, bound together with cord or twine at either end, and we propose making them of seven or eight pieces of pine or spruce, though we do not limit ourselves to the number of pieces used, or confine ourselves to the quadrangular form. By using this form, as shown, it will readily fit into the common grate or receptacle for coal in ordinary cook-stoves.

Underneath the bundle of pieces of wood described we place three parallel strips of lath, so fastened as to be equidistant from one another. These strips are dipped in a composition composed of one part of paraffine to seven parts of resin, which we cover with cylinder-chips, coarse shavings of wood, or sawdust, this composition forming a combination with the shavings which is readily lighted, and burns with much heat.

In using the kindlers we have formerly manufactured, we have found that, while this substance, together with the strips of lath, is sufficient to light the ordinary soft or bituminous coal, it burns too quickly, and does not form a bed of coals sufficient to light the harder varieties.

By placing, as we do, a bundle of wood above the lath and composition, they will ig-

nite, and the flame assist in burning the thick smoke which rises, and would otherwise pass away without adding to the flame for igniting the coal, so that none of the substance is wasted in smoke. The spaces between the strips of lath in the lower portion of the kindler are such as to admit the free escape of smoke to the bundle of wood above.

This form we have found to answer all requirements of a kindler for lighting hard-coal fires, and as such we consider it an improvement over others of the same class, which burn out too quickly to ignite this kind of coal.

In the drawing, the figure is a perspective view of our improved fire-kindler.

A are pieces of ordinary lath, of pine or other light and inflammable wood. B are pieces of spruce or pine wood, arranged in a compact pile, as shown. C indicates shavings, cylinder-chips, or sawdust, and a coating of paraffine and resin. D are cords or twine, for the purpose of binding the bundle together until it is ignited, when they are burned and allow the kindler to fall apart.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a fire-kindler, the combination, with the fagot B, of the strips A, placed on edge beneath said fagot, and coated with a combustible composition, substantially as described.

2. The fire-kindler described, consisting of the fagot B, composed of pieces of wood laid promiscuously, and the thin strips A placed on edge beneath said fagot equal distances apart, and coated with a combustible composition and with shavings, the whole being bound together, in substantially the form shown, by the cords D.

J. J. K. BOOTE.
G. L. HECHLER.

Witnesses:

W. E. MORROW,
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