

# UNITED STATES PATENT OFFICE

JOHN Y. MARKS, OF ROCHESTER, PENNSYLVANIA.

## IMPROVEMENT IN FIRE-KINDLERS.

Specification forming part of Letters Patent No. 135,280, dated January 28, 1873.

*To all whom it may concern:*

Be it known that I, JOHN Y. MARKS, of Rochester, in the county of Beaver and State of Pennsylvania, have invented a new and useful Improvement in Fire-Kindlers, of which the following is a specification:

This invention relates to compositions used for igniting fires; and consists in a fire-kindling compound, consisting of the ingredients hereinafter named, in about the proportions specified.

I am aware that various fire-kindlers have been invented heretofore; but I am not aware that anything of the kind has before been produced which dispenses with kindling-wood and is unobjectionable as regards odor, smoke, and the space it occupies.

In carrying out my invention I proceed in the following manner: I take of pulverized cannel coal one part, (bulk;) melted resin, three parts, (bulk;) sawdust, four parts, (bulk;) alcohol, one part, (bulk.) The resin is melted in any suitable vessel, and the powdered cannel coal, sawdust, and alcohol are added while the resin is hot, so that the ingredients may be thoroughly mixed together. When thus mixed the composition is spread out while it is in a semi-fluid state,

and cut into pieces of suitable size for use. A cube of three inches is sufficient to kindle an anthracite-coal fire without the use of paper, shavings, or kindling-wood. A much less quantity is required for bituminous coal. The alcohol used will be retained, and its combustion will consume the smoke.

The fire-kindler thus prepared emits no odor, and may be kept in any part of the house. It is put up in bundles or boxes, and takes the place of ordinary kindling-wood with less than a tenth part of the bulk, and may be afforded at not more than one-fourth part of the cost of the latter.

I do not confine myself to the precise proportions above specified, as it might be necessary or proper to vary them according to the kind of sawdust used.

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

A fire-kindler composed of the ingredients substantially herein described.

JOHN Y. MARKS.

Witnesses:

T. B. MOSHER,  
C. SEDGWICK.