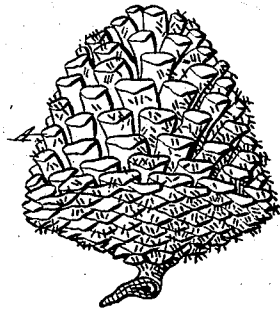


C. F. CUSHING
FIRE-KINDLER.

No. 170,158.

Patented Nov. 23, 1875.



Witnesses:
Genl. Shaw,
H. E. Metcalf.

Inventor:
Cyrus F. Cushing,
Per C. A. Shaw,
Atty.

UNITED STATES PATENT OFFICE.

CYRUS F. CUSHING, OF SOUTH BRAINTREE, MASSACHUSETTS.

IMPROVEMENT IN FIRE-KINDLERS.

Specification forming part of Letters Patent No. **170,158**, dated November 23, 1875; application filed October 23, 1875.

To all whom it may concern:

Be it known that I, CYRUS F. CUSHING, of South Braintree, in the county of Norfolk, State of Massachusetts, have invented a certain new and useful Improvement in Fire-Kindlers, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is an isometrical perspective view.

My invention relates more especially to that class of fire-kindlers which are designed for domestic purposes; and consists in the conical fruit of trees of the genus *Pinus*, commonly known as "pine cones," prepared as hereinafter more fully set forth and claimed, by which a new and more desirable article of its character is produced than is now in ordinary use.

The nature and operation of my invention will be readily obvious to all conversant with such matters from the following description.

In the drawing, A represents one of my improved fire-kindlers in readiness for use. To prepare it I take an ordinary pine cone, preferably the product of the yellow pine, (*Pinus resinosa*,) or pitch-pine, (*Pinus rigida*,) and, when thoroughly dried, coat it in a solution prepared as follows: Take fifteen pounds of ordinary yellow resin, three quarts of common

kerosene, and half a pound of finely-powdered leather. Dissolve the resin in the kerosene, and then add the leather, stirring briskly until all of the ingredients are thoroughly incorporated. The cones are then dipped in the compound, and dried in any convenient manner, and, to prevent them from sticking together, may be rolled in dry sawdust, if desired, before packing.

The object of the powdered leather is to give body to the compound, and prevent the resin from cracking and "cleaving" from the cone during transportation and handling.

In place of the kerosene any of the hydrocarbon oils or naphtha may be used for dissolving the resin, and the proportions of the ingredients may also be varied to produce a solution of any desired consistency without departing from the spirit of my invention, which having thus described,

What I claim is—

As a new article of manufacture, the improved fire-kindler described, consisting of the pine cone A, prepared by immersion in a solution or compound of kerosene, resin, and leather, substantially as and for the purpose set forth and specified.

CYRUS F. CUSHING. [L. S.]

Witnesses:

C. A. SHAW,
H. E. METCALF.