

UNITED STATES PATENT OFFICE.

JOSEPH L. HANNUM AND SAMUEL H. STEBBINS, OF BEREА, OHIO.

IMPROVEMENT IN COMPOUNDS FOR KINDLING FIRES.

Specification forming part of Letters Patent No. **112,337**, dated March 7, 1871.

To all whom it may concern:

Be it known that we, JOSEPH L. HANNUM and SAMUEL H. STEBBINS, of Berea, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Composition for Fire-Kindlers, of which the following is a full and complete description.

Specification.

The nature of this invention relates to a composition for a fire-kindler; and the object thereof is to produce a composition that shall be porous, and at the same time be of such a nature as to be fire-proof, so that on being heated and cooled repeatedly it will not crack or break until worn out.

The composition referred to consists of the following ingredients: pulverized iron ore, fifteen pounds; clay, five pounds; sand, three pounds; borax, one-fourth pound; salt, one pound; asbestos, one-fourth pound; sawdust, three pints. Said ingredients are thoroughly mixed with water to the consistency that will admit of its being worked. It is then molded into rounded or egg-shaped balls, and of about the size of an egg. It is then attached to an iron rod for a handle. The ball is then baked in a kiln, as ordinary earthenware. These balls are found to be hard and almost indestructible by fire, as they can be heated repeat-

edly and show no signs of cracking or disintegration. They are also sufficiently porous to absorb freely coal-oil, in which they are immersed and kept for use. These balls or fire-kindlers are kept in a vessel of oil prepared for that especial purpose, and, when needed for use, are taken therefrom and ignited with a match. The saturated ball will readily burn, and, while burning, is placed in the fire-place on which is laid the wood or coal, which when ignited, the kindler is removed and replaced in its receptacle of oil for another occasion.

We do not confine ourselves to the exact proportions specified, but vary therefrom as the quality of the ingredients may be more or less pure.

Claim.

What we claim as our improvement, and desire to secure by Letters Patent, is—

The herein-described fire-kindler, when composed of the several ingredients specified, or their equivalents, substantially as described, and for the purpose set forth.

JOSEPH L. HANNUM.
SAMUEL H. STEBBINS.

Witnesses:

J. H. BURRIDGE,
E. HESSERIMVELLER.