Anited States Patent Office.

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

Letters Patent No. 104,145, dated June 14,1870.

IMPROVEMENT IN FIRE-KINDLING.

The Schedule referred to in these Letters Patent and making part of the same

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 Fire-Kindlers, of which the following is a description.

This invention relates to the compounding of certain ingredients with ordinary potters' clay, whereby said clay is rendered porous and not liable to crack on being repeatedly heated, when made into a ball and used as a fire-kindler, as hereinafter more fully set forth and described.

The ordinary way of kindling fire is by the use of shavings or other light combustible material for igniting the splints of wood employed for starting the fire.

As a substitute for the shavings, paper, or other light material, which is not at all times conveniently had, is the purpose of the above-named composition, which is molded into a ball, attached to a handle and saturated with ordinary distillate of petroleum. The ball is then ignited, which will continue to burn until the oil is burned wherewith it was charged, and thereby ignite the splints of wood piled upon it for starting the fire. This being done, the ball is removed and placed in a can or vessel containing a certain quantity of coal-oil, and becomes again charged therewith for a subsequent use.

Balls when made of ordinary clay will, on being frequently charged with oil and heated, crack and fall to pieces, and therefore become worthless for the purpose above specified.

To avoid this cracking tendency and provide a body that will not crack on being repeatedly saturated with oil, and as frequently heated, we take any of the clays

or argillous earths and compound therewith the following ingredients, viz:

Half pound sulphur; quarter pound alum; quarter

pound borax; one pint sawdust.

These ingredients we thoroughly mix with about five pounds of clay; the composition is then molded into balls of any required size and shape, each of which is then attached to the end of an iron rod for a handle, and is then burned in an ordinary potter's kiln. This being done, the article is ready for use in the manner and for the purpose above said.

It is found by experience that this composition will stand the heat of repeated burnings without cracking, and that, in consequence of the sawdust, which will soon burn out, leaves the ball sufficiently porous to become charged with oil, on being kept therein for a few minutes, and in which it is constantly kept when not in use.

We do not confine ourselves to the above-specified proportions, but vary them more or less, as their quality may render it advisable.

Claim.

What we claim as our improvement, and desire to

secure by Letters Patent, is-

The herein-described compound, consisting of the specified ingredients or their equivalents, substantially as and for the purpose specified.

JOSEPH L. HANNUM. SAMUEL H. STEBBINS.

Witnesses:

H. BECKMAN, JULIUS SCHELDT.