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W. P. WINKLEY, OF DES MOINES, IOWA.

Letters Patent No. 82,506, dated September 29. 1868.

IMPROVED COMPOSITION FOR FIRE-KINCLING.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, W. P. WINKLEY, of Des Moines, in the county of Polk, and State of Iowa, have invented certain new and useful Improvements in Composition for Kindling Fires; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

My invention relates to the composition of materials for kindling fires, and consists in the production of a cheap and useful material, in pieces or blocks, compact, portable, and convenient for quickly lighting dry or green wood, or coal, or other similar substances.

In the composition or manufacture of my new kindling, I employ rosin, pitch, bituminous coal, and charcoal. The bituminous coal or charcoal, I first thoroughly pulverize, and then mix these ingredients together in about the following proportions, by measure: rosin, two parts; pitch and bituminous coal, each one part, and charcoal, four parts. These are about the proportions. Whenever the quality of the materials varies from the common standard, the quantity should be accordingly increased or diminished, so as to keep the proportion good.

These materials may be compounded in any convenient way. I first melt the pitch and rosin together, and then, after thoroughly incorporating the bituminous coal and charcoal, pulverized for the purpose, I run or cast the whole into sheets, with cuts or grooves running at right angles across their surfaces. This marking of the sheets may be done by moulds, or in any other convenient way, and is for the purpose of allowing the sheets to be broken up easily into blocks of suitable size for handling and use.

I have found from experiment that each of the materials used answers an important purpose in the composition. Without the rosin, the blocks would become soft and run together at too low a temperature, and would burn out too rapidly. The pitch binds the whole together, and prevents any cracking or crumbling in handling. The charcoal keeps up a bright, live fire after the flame of the pitch and rosin ceases, and the bituminous coal, while it burns freely, holds the particles of the charcoal together till consumed.

My blocks will burn from fifteen to twenty minutes, and kindle a green hard-wood fire. They are free from all offensive or unhealthy odors, do not soil the fingers in handling, and will not ignite by the use of ordinary friction, or explode while burning. They will keep, any length of time, in any climate. They are not injured by water, but will ignite readily after being submerged in water, provided the water adhering to them is first dried or wiped off from their outer surface. They can be manufactured and sold at a very low or cheap rate, and packed so as to take up but little room. An ordinary box, of a cubie foot in the clear, will hold about (3,000) three thousand of my blocks, each of which, with proper management, will never fail to kindle any ordinary fire.

Having thus described my invention, what I claim, is-

The composition of rosin, pitch, charcoal, and bituminous coal, in the proportions and manner substantially as herein described, as a new article of "kindling."

W. P. WINKLEY.

Witnesses:

V. E. Rowley,

C. P. HCLMES.