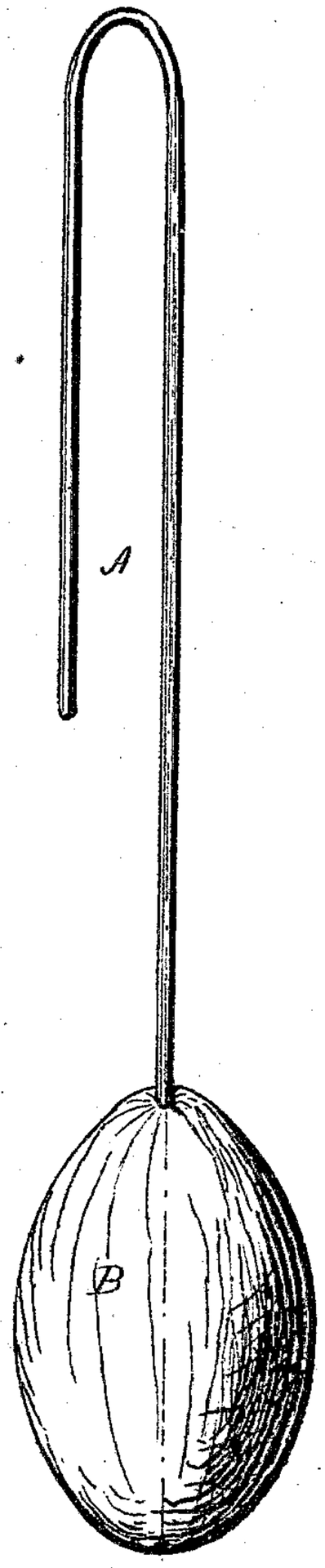
WILLIAM H. McCRARY.

Improvement in Fire Kindlers.

No. 115,757. Patented June 6, 1871.



WITNESSES:-

A. G. Rawlings

Bertram H. Ellsworth

INVENTOR:-

Wm. H. McCrary

By

Hill Ellsworth
His Attys.

115,757

UNITED STATES PATENT OFFICE.

WILLIAM H. McCRARY, OF KINGSTON, GEORGIA.

IMPROVEMENT IN FIRE-KINDLERS.

Specification forming part of Letters Patent No. 115,757, dated June 6, 1871.

Be it known that I, WILLIAM H. McCRARY, of Kingston, in the county of Cass and State of Georgia, have invented a new and useful Process of Making Balls for Fire-Kindlers; and I declare the following to be a full and true description thereof, reference being had to the accompanying drawing forming a part of this specification, and which represents a fire-kindler of the class to the manufacture of which my invention particularly relates.

In making fire-kindlers of this class heretofore, much difficulty has been experienced in baking the porous balls from the fact that their thickness and solidity prevent the water from drying out rapidly, and if they are not thoroughly dry when put into the oven or furnace the formation of steam within them immediately bursts them open. Great numbers of them are destroyed in this way, and the materials of which they are composed are forever lost. The only way to obviate the difficulty, as such balls have been heretofore made, is to spend several days' time in slowly and carefully drying them in the open air before subjecting them to the action of great heat, or to dry them slowly by a furnace or other artificial heat, which requires a day or two, and costs no inconsiderable amount for fuel and attendance.

To obviate this difficulty I have invented a new process of manufacturing said balls, consisting, in its essential feature, of the employment of spirits of turpentine as a drier, in connection with the materials of which the balls are composed. The whole process is as follows: I take of plaster of Paris, say, three and one-half pounds; of Venetian red, two and three-fourths pounds; of pipe-clay, six pounds; of English resin, six ounces; and of spirits of turpentine, one-half pint, with about three pints of common water. I pulverize the first four ingredients thoroughly, and mix them, with the water and spirits of turpentine, into a mass of the consistency of dough or putty, which I separate into balls of any size required, the material above specified being sufficient to make one hundred balls of ordinary size. The stems are applied in the usual way, and the instrument is then submitted for ten or twelve hours to a red heat in order to burn out the resin and bake the ball to the proper hardness.

The spirits of turpentine, either through its own natural quality or by its combination with the Venetian red or other ingredients, has the effect to dry up the water or otherwise get it out of the way almost immediately, so that the mass can without delay be submitted to the action of fire without danger of breaking or bursting. It also operates, as a matter of course, to increase the intensity of combustion during the burning-out process, and to insure the speedy and complete eradication of the resin, leaving the ball more porous than if it had not been employed. A ball thus produced is a fine absorbent, and will last without injury for years.

I do not claim to be the first inventor of a porous ball and a stem for a fire-kindler, which has been patented; but

What I do claim as my invention is—

The process of manufacturing balls for fire-kindlers, herein described.

W. H. McCRARY.

Witnesses:

NATHAN K. ELLSWORTH,

A. C. RAWLINGS.