

# UNITED STATES PATENT OFFICE.

MARK A. DEES, OF MOSS POINT, MISSISSIPPI, ASSIGNOR TO THOMAS MOORE DEES AND TO ANNIE STARKEY DEES FOR HERSELF AND AS TRUSTEE.

## FIRE-KINDLER.

SPECIFICATION forming part of Letters Patent No. 540,609, dated June 4, 1895.

Application filed August 24, 1894. Serial No. 521,220. (No specimens.)

*To all whom it may concern:*

Be it known that I, MARK A. DEES, of Moss Point, in the county of Jackson and State of Mississippi, have invented certain new and  
5 useful Improvements in Fire-Kindlers, of which the following is a specification.

In carrying out my invention, I first take the following ingredients, viz: sawdust, planing mill shavings or other light particles of  
10 wood, coal, kerosene, or similar highly inflammable oil, and pine rosin, tar, or crude turpentine, and to make, say, one barrel of the composition, and prepare and mix them in proportions as follows: one barrel of saw-  
15 dust or shavings; five gallons of oil; fifty pounds of rosin, tar or crude petroleum. I first pour or sprinkle the oil on or over the sawdust or shavings, so as to thoroughly saturate the same, the oil being readily absorbed;  
20 but if the sawdust or shavings were left in this condition, the oil would soon evaporate. I therefore, now melt or sufficiently heat the rosin, tar or crude petroleum, and pour it over the sawdust or shavings, thoroughly stirring  
25 and mixing the mass. The rosin, tar or crude petroleum will at once adhere to and close up the pores of the wood, and seal the oil within the interstices thereof; and, as the rosin, tar or crude petroleum is also highly inflammable, an efficient kindling composition is made.  
30 It has been found that the above treatment does not cause the grains of sawdust, or particles of shavings, to unite or form in lumps, but each grain or particle remains separate.  
35 I then put up the composition in bulk in barrels, or in small convenient packages of say, one, two, five or ten pounds' weight, or in any other convenient form for market.

To kindle a fire, I place a flat piece of coal or wood, or a sheet of paper, on the grate to  
40 prevent the kindling from falling through the bars, and then put a small quantity of the pulverulent composition equal to the capacity of about a small tablespoon, upon the flat body or sheet of paper. The composition is  
45 then to be ignited, and so small a quantity as that mentioned is found to burn for from twenty to forty minutes. The fuel, wood or coal, is then to be placed upon the flame, and a brisk fire is readily produced. 50

I am aware that a fire kindling has heretofore been made, composed of sawdust or other small particles of wood united by rosin, tar and other substances or materials into a solid mass; and also that small sticks of wood have  
55 been coated with resinous, or other inflammable substances; but I am not aware that, heretofore, sawdust, or minute particles of wood, have been so treated with the inflammable materials herein set forth, in the proportions specified, in such a manner as to prevent the adhesion of the sawdust or small particles of wood, as described. 60

I therefore claim—

A pulverulent fire kindling composition, 65 consisting of separate atoms of saw dust, or minute particles of wood, saturated with coal, kerosene, or other inflammable oil, and coated with rosin, tar or crude petroleum, in or about the proportions specified. 70

In testimony whereof I hereto set my hand and seal.

MARK A. DEES. [L. S.]

Witnesses:

TOM M. DEES,  
ANNIE S. DEES.