April 14, 1931. W. M. KETCHAM 1,801,163

FIRE KINDLER

Filed Jan. 18, 1929

Fig. 1.

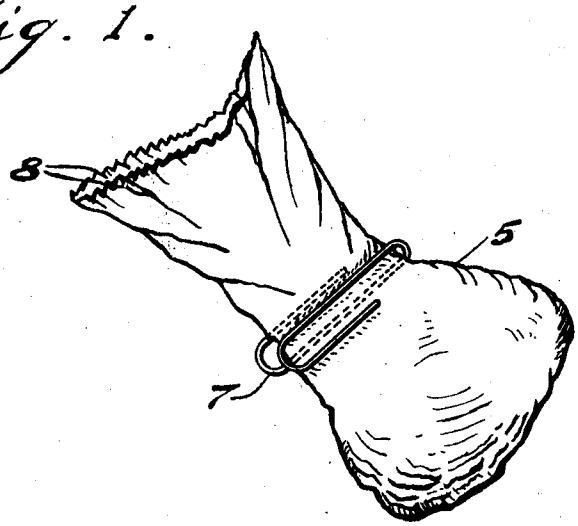
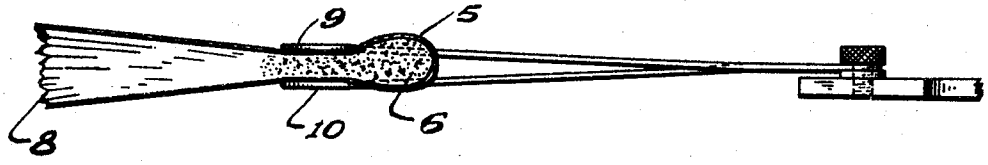


Fig. 2.



INVENTOR

WILLIAM. M. KETCHAM

BY James L. Norris

ATTORNEY

Patented Apr. 14, 1931 1,801,163

UNITED STATES PATENT OFFICE

WILLIAM M. KETCHAM, OF DURHAM, NORTH CAROLINA

FIRE KINDLER

Application filed January 18, 1929. Serial No. 333,457.

The present invention relates to improvements in a fire kindler, one object of the invention being the provision of an inflammable envelope and contents adapted to be ignited in any desired manner to kindle the fire within a stove, one particular type of apparatus for accomplishing this being shown in my co-pending application filed of even date herewith, Serial No. 333,456.

Another object of this invention is the provision of a firekindler in which a compound explosive charge is contained within an inflammable envelope, said envelope being so formed and disposed around the same as to provide a flame projecting portion to be ignited by the explosive charge when the same is detonated to produce a flame and thus insure the proper kindling of the fire.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangements of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings:—

Figure 1 is a perspective view of the complete kindler per se.

Figure 2 is a cross-section through the kindler showing the same supported between two "jump" spark terminals of an electrical igniting device.

Referring to the drawings, the numeral 5 designates an envelope which is formed from a rectangular sheet of inflammable material, preferably of semi-tissue paper, and is formed into a loose receptacle to contain the explosive or igniting charge 6 which is composed of approximately 25% of a rapid-burning explosive or gun-powder and 75% of an explosive or gun-powder which under the same conditions, burns slower than that first mentioned and is adapted to be ignited thereby.

In ordinary packing, and before using the present device, a clip 7 engages the portion of the envelope between the flame-directing terminals or edges 8 and the portion containing the charge, and when the device is placed in use, the bulk or charge portion is placed between the terminals 9 and 10 of the "jump" spark device and the clip is removed.

It will thus be seen that by providing a device of this type, the terminals, when energized, will produce a spark that will ignite primarily the rapid-burning powder, which, in turn, will ignite the slow-burning powder, and finally, the envelope, thus insuring the introduction of the flame to the envelope and the portion of said flame to and through the edges of the same to the material in the grate to be ignited.

The inflammable material may be paper, cellulose, cloth, of cotton or other material, and may be saturated with wax, oil, or other similar material.

I claim:—

1. A fire kindler including an envelope of an inflammable material and a flame-producing filler in said envelope, said filler being composed of a slow-burning gun-powder and a rapid-burning gun-powder, and said envelope being of such thickness that the filler contained therein may be ignited when the envelope is engaged by the terminals of an electric jump-spark device.

2. A fire kindler including an envelope of an inflammable material and a flame-producing filler in said envelope, said filler being composed of approximately 75 per cent. of a slow-burning gun-powder and approximately 25 per cent. of a rapid-burning gun-powder, and said envelope being of such thickness that the filler contained therein may be ignited when the envelope is engaged by the terminals of an electric jump-spark device.

In testimony whereof I have hereunto set my hand.

WILLIAM M. KETCHAM.