

No. 747,452.

PATENTED DEC. 22, 1903.

G. H. LOTSPIKE.
FIRE KINDLER.

APPLICATION FILED MAY 12, 1902.

NO MODEL.

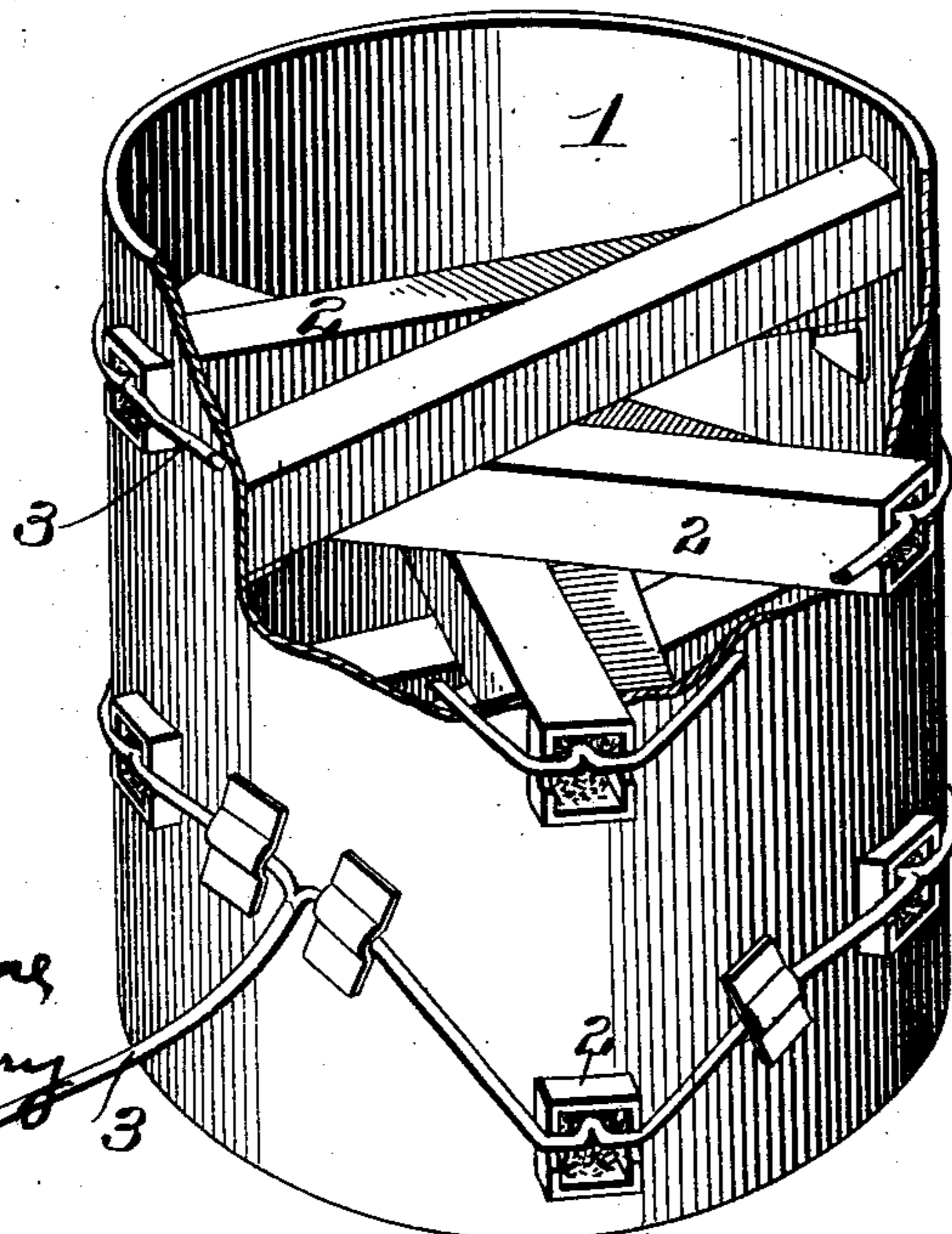
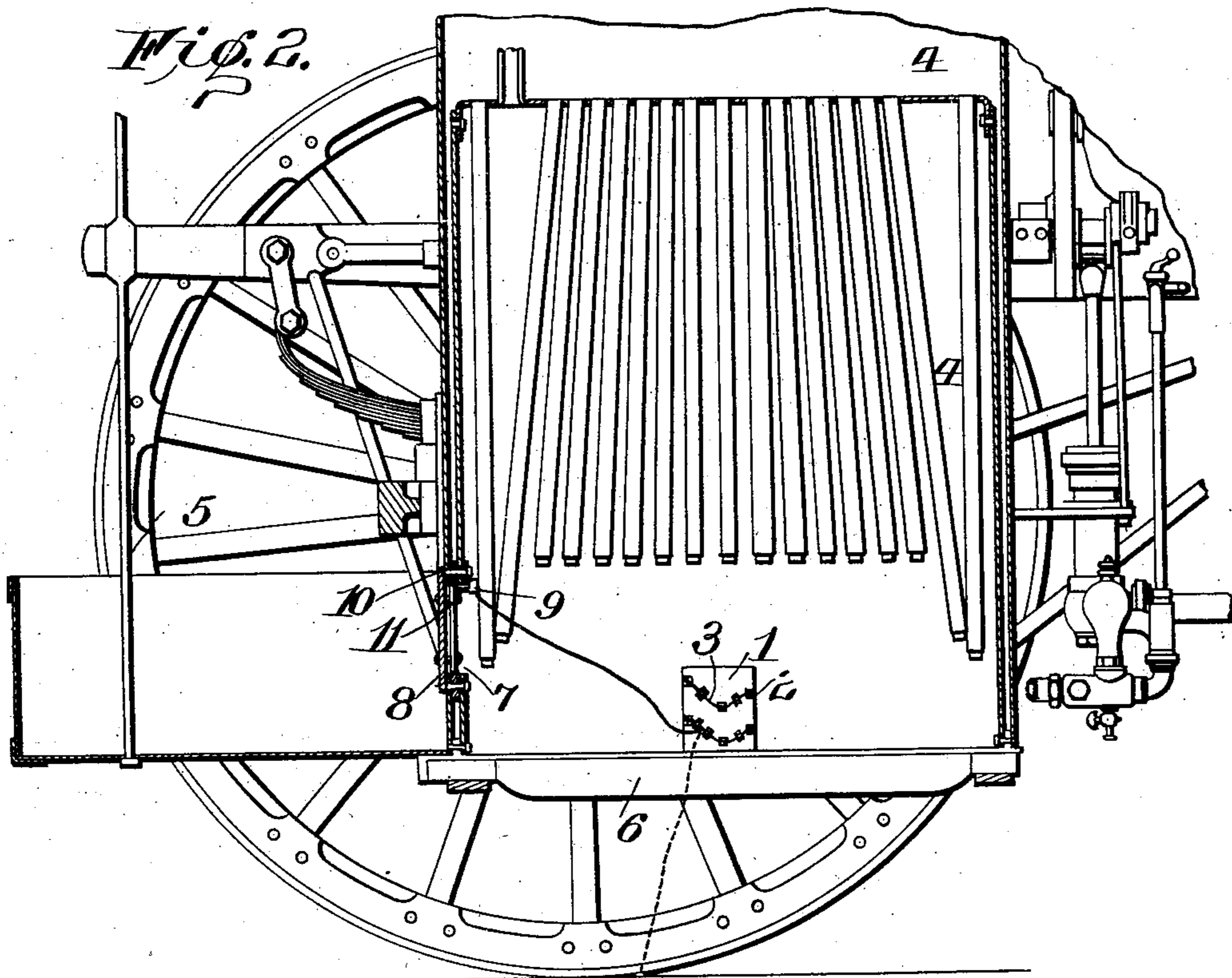


Fig. 1.

Witnesses.

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FIRE-KINDLER.

SPECIFICATION forming part of Letters Patent No. 747,452, dated December 22, 1903.

Application filed May 12, 1902. Serial No. 107,020. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. LOTSPIKE, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Fire-Kindlers; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

My present invention has for its object to provide a device for kindling fires adapted to be used in the fire-pot of a stove or the fire-box of a steam-boiler or similar place and which may be positioned when the kindling material is laid and adapted to readily ignite the latter at such a time as may be desired.

To these and other ends the invention consists in certain improvements in construction and combinations of parts, all as will be more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings, Figure 1 is a perspective view of a fire-kindler constructed in accordance with my invention, a portion thereof being broken away to show the interior arrangement of the parts. Fig. 2 is a diagrammatic view illustrating the operation of the device in connection with a steam fire-engine.

Similar reference-numerals in the two figures indicate similar parts.

A fire-kindler constructed in accordance with my invention consists of a suitable casing provided with a number of tubes or flues which are adapted to contain an inflammable material which when ignited will be blown outwardly, setting the fire to and igniting the kindling material in which it is placed, and in the present instance I have illustrated the casing 1 as cylindrical in form, which may be easily constructed of pasteboard or of light wood, such as is used for purposes of veneering, and may be readily bent into the desired shape. Extending transversely of the casing is a series of tubes or flues 2, formed separate therefrom and passed through suitable apertures formed therein, so that one end thereof is open at the exterior of the casing and the other is closed by abutting against

the inner surface thereof at the opposite side, where said end is secured by any suitable means. In the drawings I have shown these tubes arranged in pairs and at a slight angle to the horizontal plane and having their upper ends opening at opposite sides of the casing, so that when the material therein is ignited the flames emitted therefrom will be forced in opposite directions. In order that the kindling material may be thoroughly ignited at all points, I provide a number of these tubes extending diametrically of the casing and at an angle to each other, so that the flames emitted therefrom are projected radially, and the device being located in the center of the kindling material will cause the latter to be thoroughly ignited.

To adapt the kindling device to be readily operated, when desired, after the combustible material has been laid and to start the fire, I provide a fuse 3, which is wrapped around the cylinder 1 and secured by small pasting-strips in such a manner as to communicate with the open ends of the several tubes or flues 2 or the inflammable material therein, and the ends of the fuse are of sufficient length to extend to the exterior of the fire-box, where they may be conveniently ignited by the application of a match, torch, or other device.

In illustrating the operation of my invention I have shown it employed in connection with the fire-box of a steam fire-engine, as shown in Fig. 2, in which the usual upright or vertical boiler (indicated by 4) is supported between the wheels 5, and beneath the boiler are the usual grate-bars 6, access to which is had through the aperture or opening 7, normally closed by the door 8. In laying the kindling material preparatory to produce a quick and intense fire, such as is required in an apparatus of this class, the kindling device is located at the center of the grate, the shavings, excelsior, and other light kindling material is placed around it, and the end or ends of the fuse drawn outwardly to a convenient position in which they are readily accessible. However, when the device is employed upon a fire-engine it is desirable to provide means whereby the fuse may be quickly ignited, and to accom-

plish this purpose I provide thereon a friction-operated igniting or detonating cap, (indicated by 9.) This cap may be operated by any suitable means, and as a preferable manner I have shown it mounted upon a suitable support 10, located at the side of the fire-box aperture 7, where it is operated by means of a projection or lug 11 on the door 8, which engages the cap when the door is closed, or the fuse may be extended downwardly between the grate-bars and the cap positioned upon the floor forward of one of the wheels 5, as illustrated in dotted lines in Fig. 2, so that when the engine is drawn forwardly the wheel engaging the cap will explode it and ignite the fuse.

The inflammable material which I employ in the tubes 2 may be of any suitable substance which is readily ignited; but I preferably employ a firework composition consisting of some form of gunpowder combined with other agents, which cause it to burn more or less slowly and prevent its explosion. As this material burns with an intense heat and being inclosed in the tubes it causes the flame to be projected outwardly therefrom to a considerable distance, thoroughly igniting the kindling material.

The fuse 3 may be the usual quick-match used in pyrotechnics, and it will be understood that the latter may be arranged in any desired manner to communicate with the material contained in the tubes, the outer or open ends of which may be covered or filled to temporarily secure their contents in place when the device is not in operation.

A fire-kindler constructed in accordance with my invention is simple and is easily constructed and by making the parts of light wood, pasteboard, or other combustible substance it is consumed by the fire and the interior of the fire-box is not obstructed, so as to interfere with the application of additional fuel. By making the casing hollow a draft-flue is formed in the fire-box and the air being allowed a comparatively free passage upwardly increases the draft, which as-

sists in the combustion of the material therein when the fire is first started.

I claim as my invention—

1. A fire-kindler embodying a casing having a plurality of tubes each provided with the open end and containing an inflammable material adapted to be projected therefrom when ignited and a fuse extending around the casing and connecting said tubes.

2. A fire-kindler embodying a casing and a plurality of tubes arranged therein each having an end opening at the exterior of the casing, said tubes containing inflammable material which is projected therefrom when ignited, and a fuse connecting with the material at the ends of said tubes.

3. A fire-kindler consisting of a casing having a plurality of tubes therein each having the end opening exteriorly of the casing and extending in different directions, said tubes containing an inflammable material, a fuse communicating with the material in the tubes and a friction-igniting cap attached to the fuse.

4. In a fire-kindler, the combination with a hollow casing adapted to be embedded in the kindling material, a plurality of tubes in the casing having their ends opening exteriorly of the casing and extending in different directions, and inflammable material provided in the tubes and adapted to be projected therefrom when ignited, a fuse communicating with the interior of the tubes, and a friction-operated cap for igniting the fuse adapted to be located exterior of the kindling material.

5. In a fire-kindler, the combination with a hollow casing of combustible material, and a plurality of tubes therein having their ends opening exteriorly of the casing and extending in different directions and containing inflammable material, of means for igniting the said material in the tubes.

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Witnesses:

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