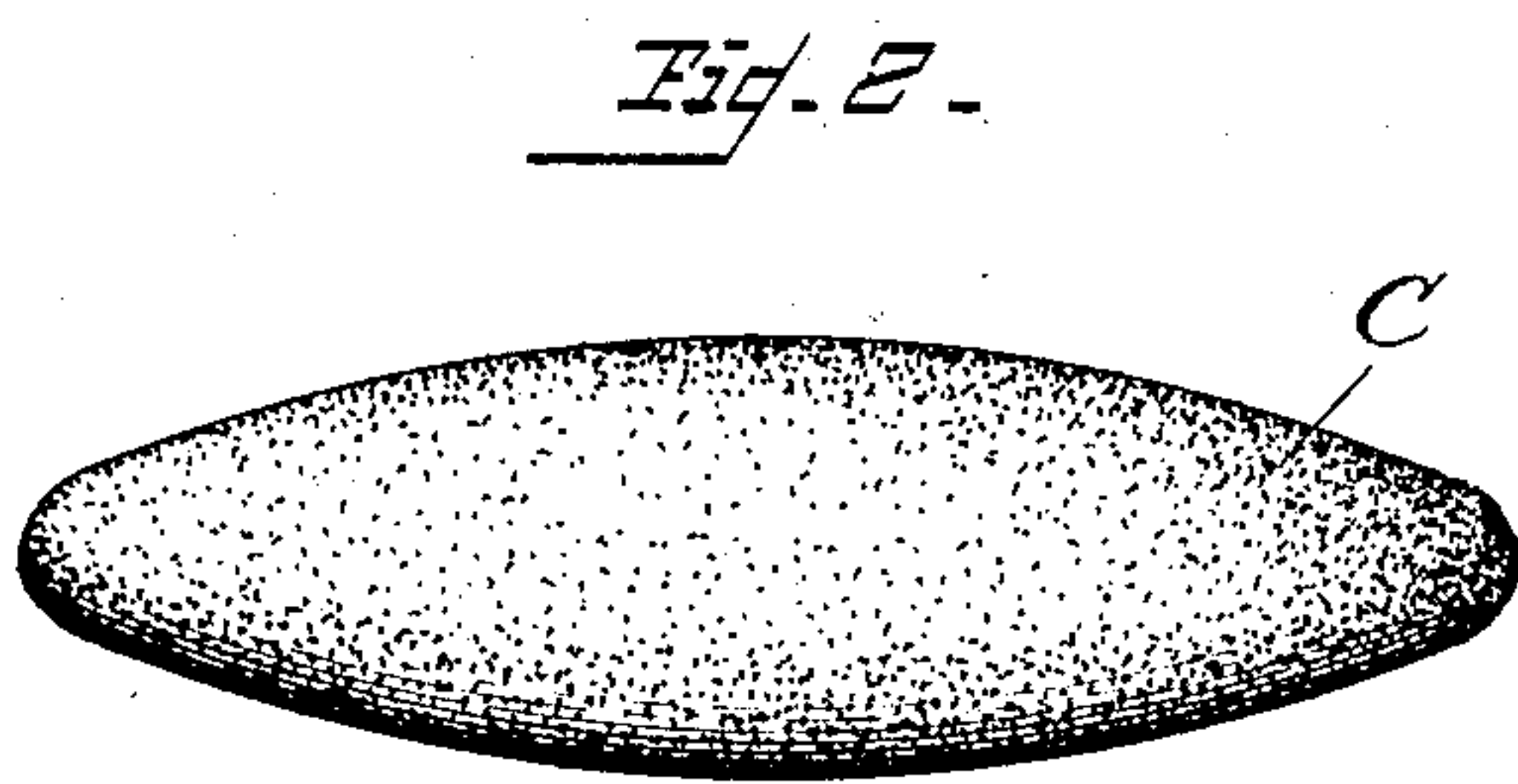
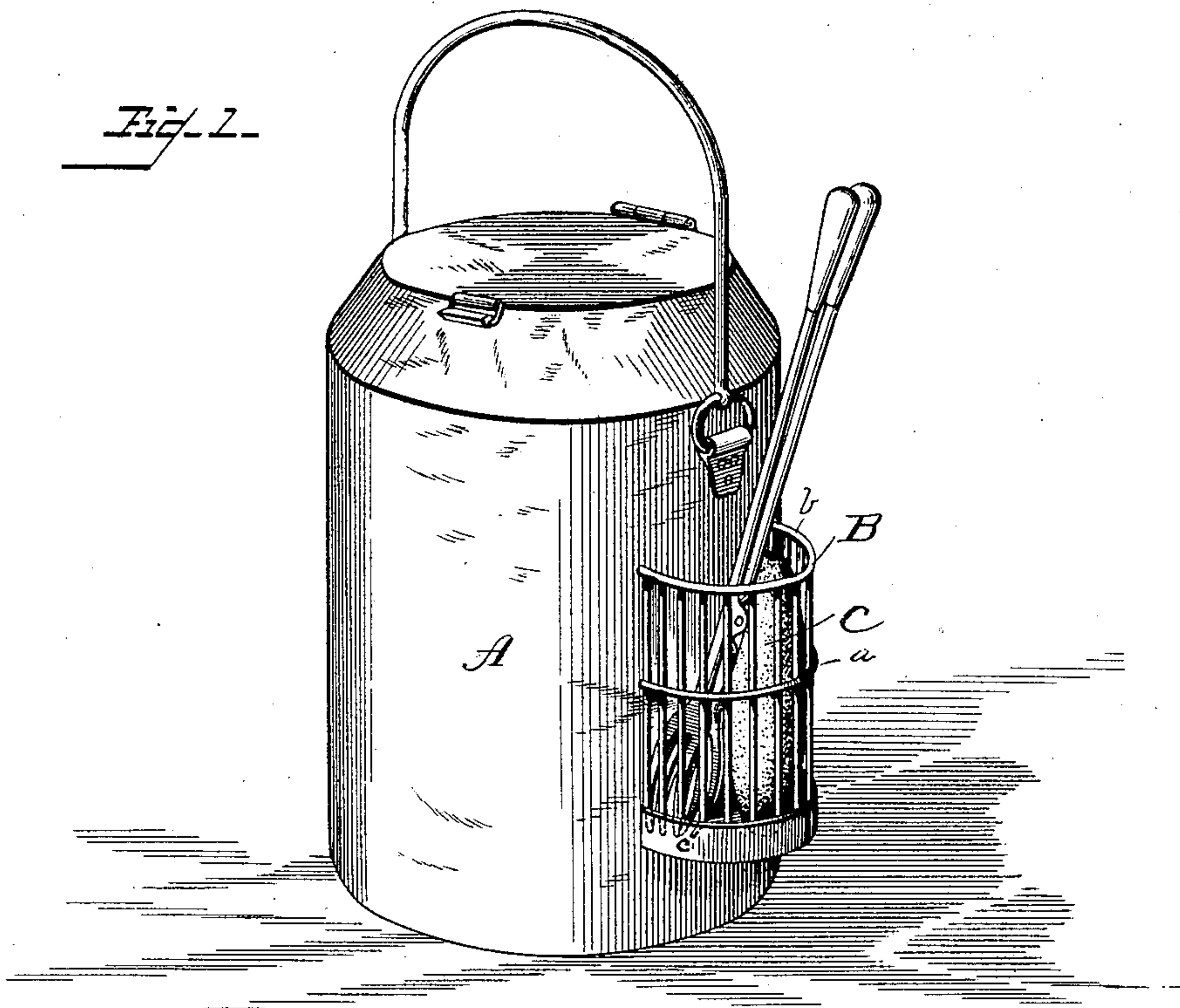


(No Model.)

J. F. HAGER.
FIRE KINDLING APPARATUS.

No. 366,393.

Patented July 12, 1887.



Witnesses

Wm. S. S. S. S.
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UNITED STATES PATENT OFFICE.

JAMES F. HAGER, OF CHARLESTON, WEST VIRGINIA.

FIRE-KINDLING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 366,393, dated July 12, 1887.

Application filed November 1, 1886. Serial No. 217,678. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. HAGER, a citizen of the United States, residing at Charleston, in the county of Kanawha and State of West Virginia, have invented certain new and useful Improvements in Fire-Kindling Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings and letters of reference marked thereon, which form a part of this specification.

Like letters refer to similar parts throughout the several views.

In the drawings, Figure 1 is a side elevation of my fire-kindling apparatus. Fig. 2 is a similar view of the torch or kindler detached.

The object of my invention is to provide a more cheap and serviceable fire-kindler than heretofore used; and to this end the invention consists in the novel construction of the kindler and the peculiar combination and construction and arrangement of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the claim.

Referring by letter to the drawings, A represents an oil-can made of any suitable material and of any desired form, having a hinged or otherwise removable cap or cover, by the removal of which access is had to the interior of the can. Secured to the side of the can is a basket or receptacle, B, which is provided with a metallic bottom, c. The outer edges of this are turned upward and form a basin in the lower portion of the basket, which serves to retain the liquid dripping from the kindlers placed therein. The upward-turned edges of the bottom plate, above described, also serve as a means for permitting the lower ends of the wires to be secured in place. The upper ends of the wires are secured to the rail b.

a is an intermediate strengthening-rail for bracing the wires between the bottom c and the top rail, b.

The torch or kindler C is made preferably of porous fire or other clay, which is prepared

in the following manner: A quantity of clay is reduced to such a consistence as to render it soft and pliable. It is then mixed with powdered resin, and after molding into the desired form it is subjected to a sufficient degree of heat to burn out the resin from the composition, and at the same time harden the clay, which is thus left porous. This porous torch will, when immersed in oil, absorb and retain within the pores a large quantity of the oil.

I thus provide at a minimum of expense a most serviceable kindler, which will last for a long time after once being charged. When not required for use, the kindlers are placed within the pocket or basket B at the side of the can, which also serves to hold the tongs used in handling the torch when in use, whereby the whole apparatus is compact, at all times in readiness for immediate use, and may be readily moved from place to place.

I am aware that it has been proposed to form a fire-kindler solely of fire-clay mixed with sawdust, and the sawdust then thoroughly burned out, leaving the clay porous; but the use of sawdust renders it necessary that the mass should be burned for a period of from six to seven days, in order to thoroughly burn out all of the combustible material. This long burning consumes a great amount of time, necessitating more or less attention to properly bake it, and adding materially to the cost of production. I have found from experience powdered resin far preferable to sawdust, sand, or other material which has heretofore been used for this purpose, for the reason that the resin more readily unites with the clay, and as it fuses at a lower temperature and is quickly licked up by the flames a block thus prepared can be relieved of its combustible properties in a much shorter time, and consequently at a much less expense. I have also found that the melting of the resin aids in the hardening of the clay. I do not seek to cover a kindler composed of fire-clay, formed by mixing therewith sawdust or sand, and made porous by subjecting the same to heat, but restrict myself to the block above described, attaching importance to the use of the resin; neither do I make any claim to the construction shown and described in the Patent No. 86,838.

Having thus described my invention and set forth its merits, what I claim to be new, and desire to secure by Letters Patent, is—

As an improved article of manufacture, the
5 can A, provided upon one side with semicircular receptacle B, consisting of a metallic bottom, *c*, having upturned edge to form a drip-cup, a top rail, *b*, vertical wires secured at their ends to said rail and the upturned

edge of the bottom *c*, and an intermediate 10 strengthening-rail, *a*, all substantially as herein shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES F. HAGER.

Witnesses:

D. C. SYDNOR,

D. T. ROLLINS.