R. C. LEWIS.

FIRE-KINDLER.

No. 180,248. Patented July 25, 1876.

Fig. 1.

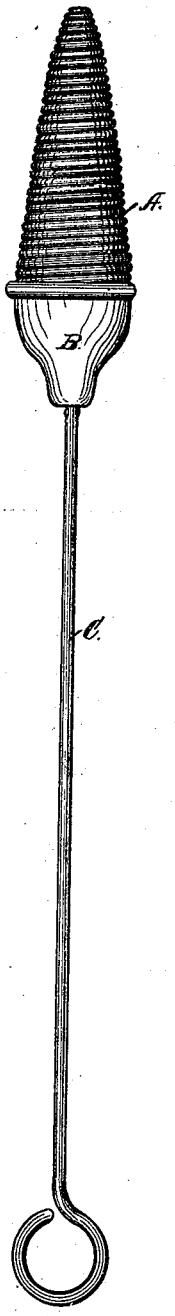
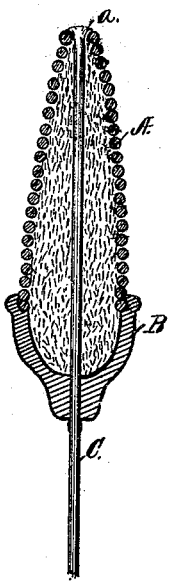


Fig. 2.



Witnesses;
Chas. M. Peck
Wm Ritchie

Inventor;
Rolin C. Lewis
By his atty's
Peck & Co.

UNITED STATES PATENT OFFICE.

ROLLIN C. LEWIS, OF DAYTON, OHIO, ASSIGNOR OF ONE-HALF HIS RIGHT TO EDWARD C. BOYER, OF SAME PLACE.

IMPROVEMENT IN FIRE-KINDLERS.

Specification forming part of Letters Patent No. **180,248**, dated July 25, 1876; application filed May 15, 1876.

To all whom it may concern:

Be it known that I, ROLLIN C. LEWIS, of Dayton, in the county of Montgomery and State of Ohio, 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.

This invention relates to that class of fire-kindlers which are composed of a rod or handle sustaining a shell or cap containing some non-combustible absorbent for retaining the lighter hydrocarbon oils.

My improvement consists in the structure of the shell and the manner of attaching the rod thereto to effect both simplicity and durability.

To enable others skilled in the art to which my invention appertains to make and use the same, I would thus proceed to describe it, referring to the accompanying drawing, in which—

Figure 1 represents my improved fire-kindler in elevation. Fig. 2 is a central section of the shell, in the line of the handle.

Most kindlers of this class at present in use are made of cast-iron, which cannot be subjected to a high degree of heat without melting; and hence they are, on this account, objectionable.

That part of my kindler which is exposed to the flames I propose to make as follows: I take a piece of wire, preferably of wrought-iron, and coil it into a conoidal shape, A, with the coils almost touching each other, as represented. I then slip a cap, B, of either cast or wrought metal, upon the rod *b*, and upon it the wire cone A, the rod being passed centrally through both. The cap and cone are then filled with asbestus or some incombustible absorbent material, and the base of the cone is inserted into the top of the cap, which is formed with a shoulder on its inner side to receive one or two coils of the cone. The parts are then held together by riveting the top of the rod C, as seen at *a*, Fig. 2, and by swelling the rod just under the cap by hammering it. This is the simplest method of uniting and holding the parts together, though a pin passed through the rod under the cap would answer just as well. Instead, too, of riveting the top of the rod a nut might be screwed upon it to hold the cone from slipping. When saturated with oil, and lighted, the flame from the generated gas will issue from between the coils in every direction.

I am aware that fire-kindlers composed of perforated cast-iron cylinders, inclosing asbestus, have been employed, and therefore I make no claim to the principle embodied; but

What I claim as new, and desire to secure by Letters Patent, is as follows:

The herein-described fire-kindler, consisting of the wire conoid A, the cap B, containing asbestus or any incombustible absorbent material, and the handle C, the parts being arranged and united substantially as and for the purpose specified.

Witness my hand this 9th day of May, A. D. 1876.

ROLLIN C. LEWIS.

Witnesses:
CHAS. M. PECK,
WM. RITCHIE.