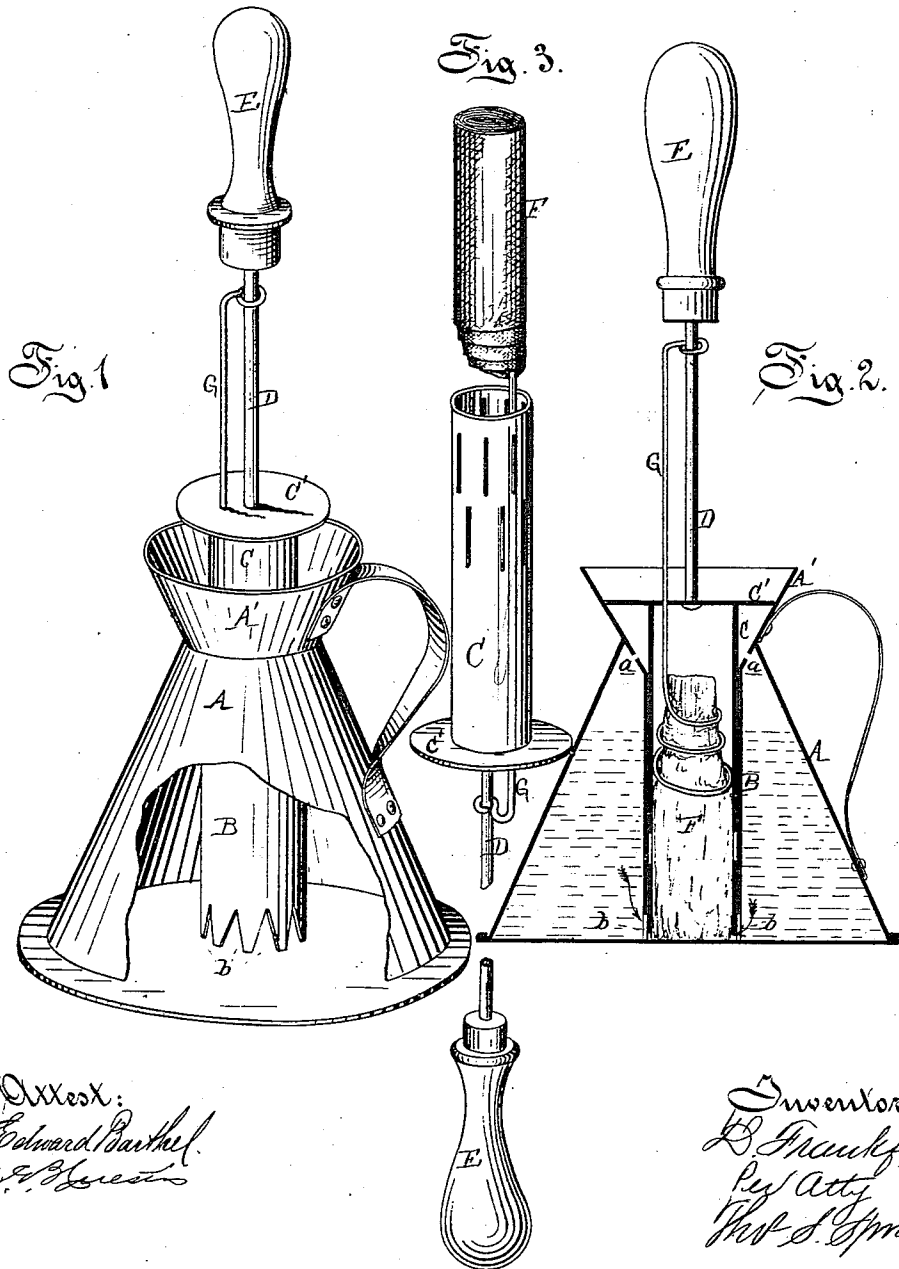


D. FRANKFODER.  
Fire-Kindler.

No. 167,520.

Patented Sept. 7, 1875.



# UNITED STATES PATENT OFFICE

DAVID FRANKFODER, OF WAKARUSA, INDIANA, ASSIGNOR TO HIMSELF  
AND JOSEPH A. CULP, OF SAME PLACE.

## IMPROVEMENT IN FIRE-KINDLERS.

Specification forming part of Letters Patent No. **167,520**, dated September 7, 1875; application filed  
April 17, 1875.

*To all whom it may concern:*

Be it known that I, DAVID FRANKFODER, of Wakarusa, in the county of Elkhart and State of Indiana, have invented an Improvement in Fire-Kindlers, of which the following is a specification:

The nature of my invention relates to an improvement in fire-kindling torches, and in a vessel for containing the torch and a supply of any light hydrocarbon for saturating the wick of the torch.

The objects of the invention are, first, to provide a torch so arranged as to give a flame of any required volume; and, secondly, to so construct the torch-receptacle as that the lighted torch can be inserted without danger of igniting the inflammable liquid, and to prevent accumulation of gas in the upper part of said vessel.

Figure 1 is a perspective view with a portion of the wall of the vessel broken away, and showing the torch partially withdrawn. Fig. 2 is a vertical section of the torch and receptacle. Fig. 3 is a detached perspective view of the torch.

In the drawing, A represents a conical can or vessel, having a flaring top or mouth, A', from the bottom of which a cylindrical socket, B, extends to the bottom of the can. A row of openings, *b*, is made in the lower end of said socket, through which naphtha or any light hydrocarbon is introduced into the can. The liquid will, of course, stand at the same level in the socket as it does in the can. A row of small apertures, *a*, is made in the mouth A' between the neck of the can and the top of the socket, through which any gaseous vapor rising from the liquid may escape. C is a cylindrical torch, of such diameter as

to fit easily into the socket B. It has a head, C', upon one end of larger diameter, which rests in the mouth A' above the apertures *a*, and thus prevents the evaporation of the liquid when inserted in the can-socket. It is mounted on a rod, D, having a wooden handle, E, at the other end. F is a roll of cotton flannel, or other fabric, suitable to serve as a wick. Its inner end is secured in a coil at the end of a wire, G, which runs through the head C' of the torch, its other end having a turn taken around the rod D.

By means of the wire G the wick may be protruded from the torch-case C far enough to give a flame of any required size for kindling a fire by laying it under the grate of a stove. It may also be used as a torch for lighting up a dark place.

What I claim as my invention is—

1. The combination of the torch-tube C C', rod D, handle E, wire G, and wick-roll F, the said torch being adapted to enter the tube B of a can, A, in the manner and for the purpose set forth.

2. The can A, having the flaring top A', perforations *a*, and socket B, provided with the openings *b* at the lower end, in combination with a torch, C, substantially as and for the purpose specified.

3. The combination of the can A, having the flaring top A', openings *a*, and socket B, provided with the openings *b*, with the torch C, provided with the head C', and wick-roll F substantially as described and shown.

DAVID FRANKFODER.

Witnesses:

WIMAN FISHER,  
GEOG. W. P. ARLMER.