

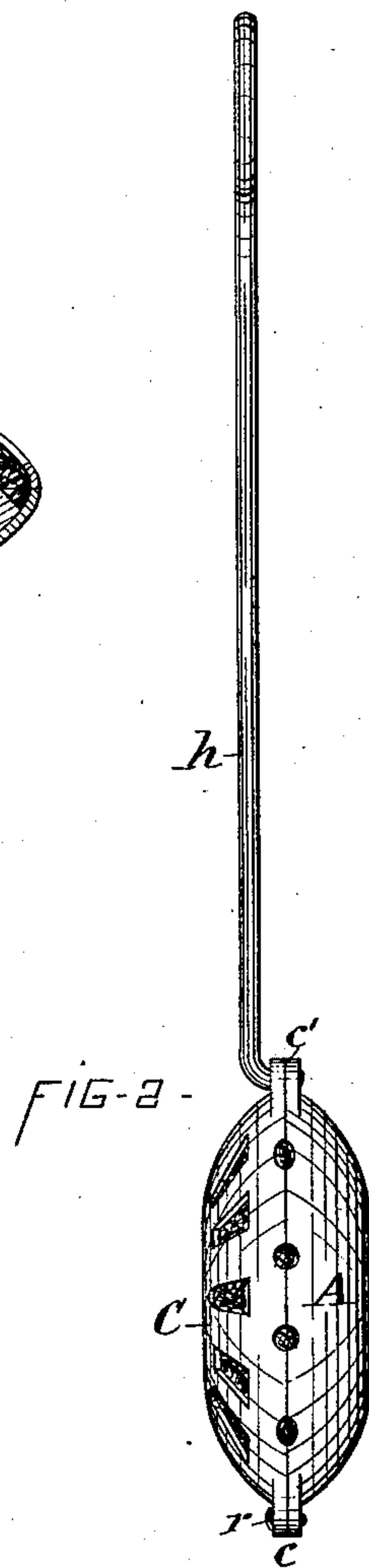
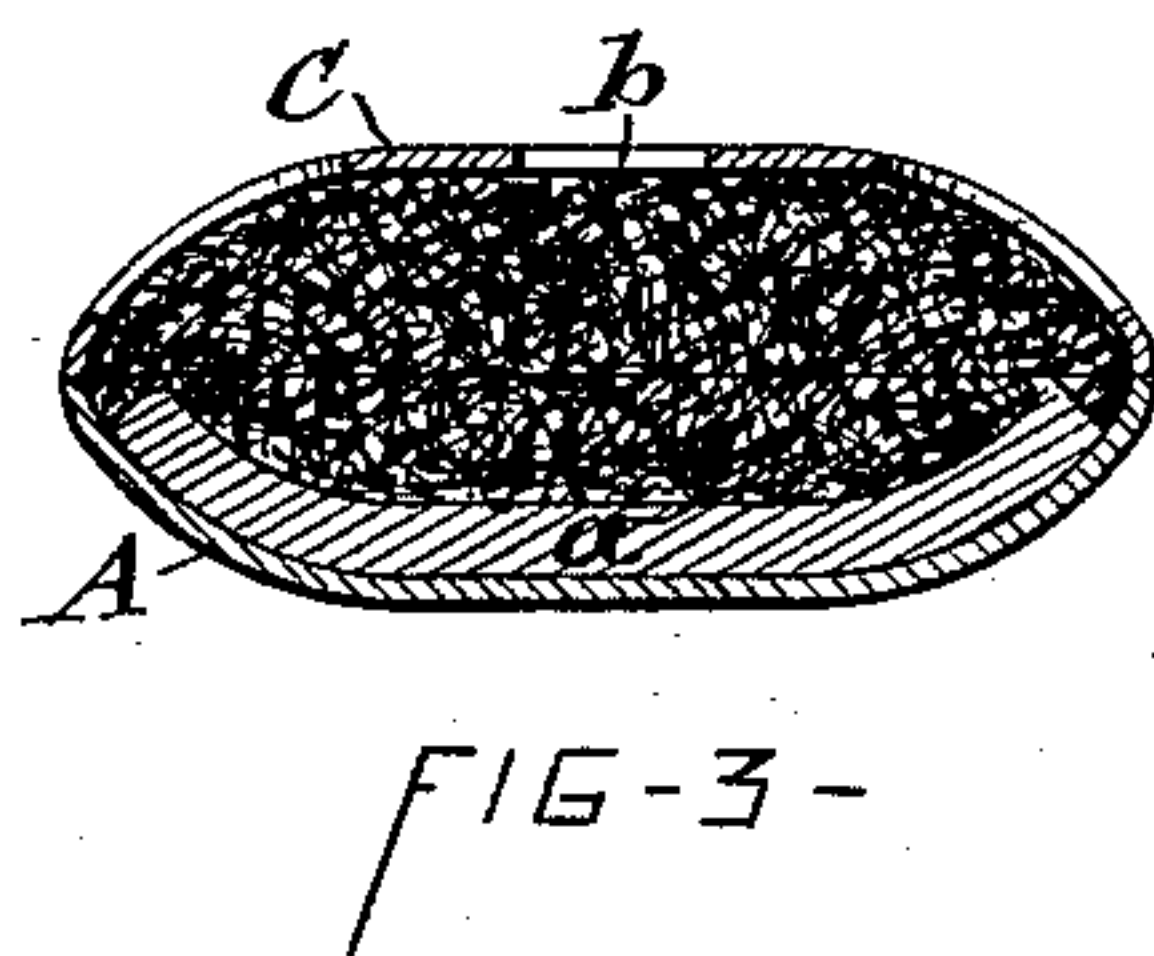
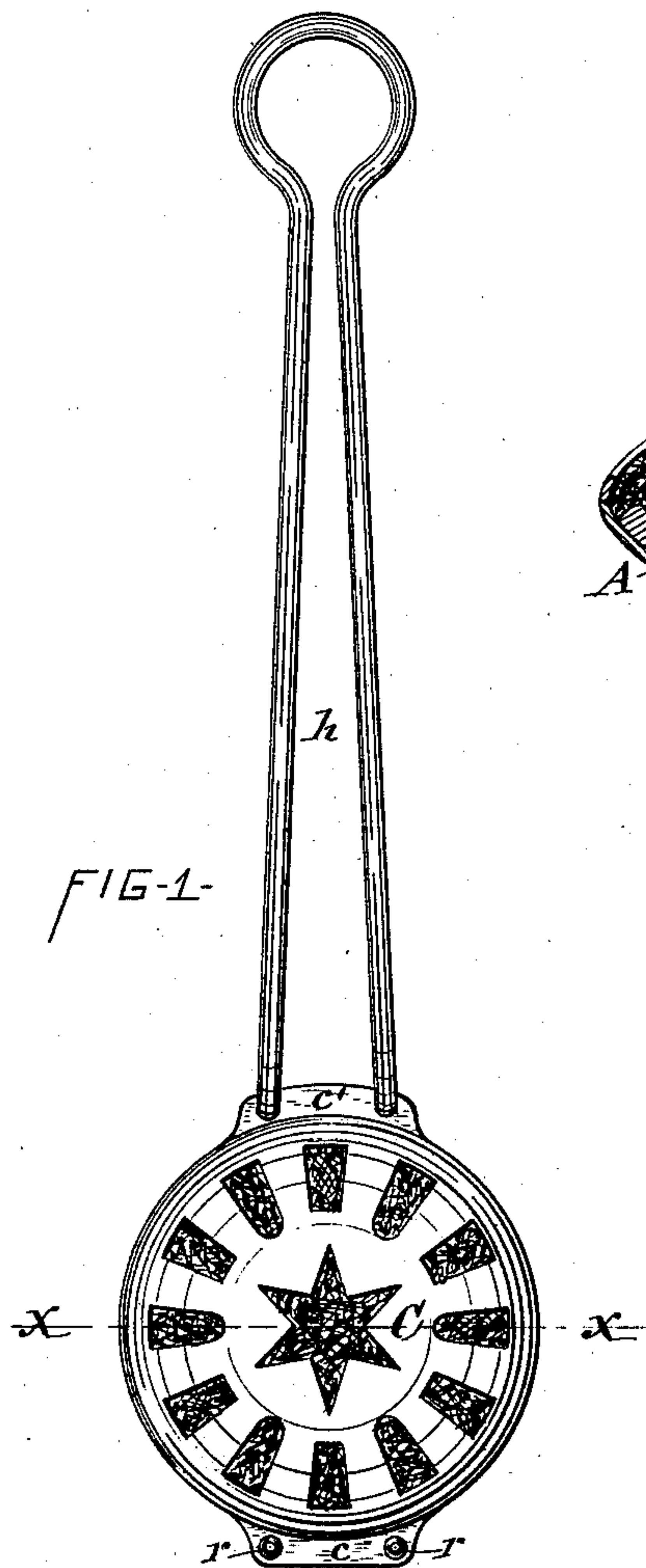
(No Model.)

H. D. HENDERSON.

FIRE KINDLER.

No. 347,176.

Patented Aug. 10, 1886.



WITNESSES

C. Bendixon

E. C. Cannon

INVENTOR

Harry D. Henderson

per Hull, Laessle & Hay  
his Atty



# UNITED STATES PATENT OFFICE.

HARRY D. HENDERSON, OF EARLVILLE, NEW YORK, ASSIGNOR OF TWO-THIRDS TO RANDALL T. VAN VAULKENBURG, OF MANCHESTER, MICHIGAN, AND AMI C. ACKLEY, OF EARLVILLE, NEW YORK.

## FIRE-KINDLER.

SPECIFICATION forming part of Letters Patent No. 347,176, dated August 10, 1886.

Application filed June 10, 1886. Serial No. 204,784. (No model.)

*To all whom it may concern:*

Be it known that I, HARRY D. HENDERSON, of Earlville, in the county of Madison, in the State of New York, have invented new and useful Improvements in Fire-Kindlers, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the class of fire-kindlers in which a perforated case is packed with asbestos and provided with a handle by which to hold the said case under the fuel to be kindled, the asbestos being saturated with kerosene or other suitable inflammable material, which, being ignited, ignites the aforesaid fuel.

My invention consists, first, in an improved construction of the case or shell which contains the asbestos, said shell being provided with a solid concave bottom disk, which forms a receptacle for a quantity of the inflammable oil with which the asbestos is saturated, said receptacle preventing the dripping of the oil from the case, and also serving to supply the asbestos with oil for a longer time, and consequently increasing the efficiency of the kindler.

My invention consists, secondly, in a novel construction of the handle of the kindler, which handle is composed of a wire bent at the center, and having its end portions diverging from each other and secured to the case, so as to form a broad handle, which enables the manipulator of the kindler to more easily hold the case in a horizontal position, and thus prevent the spilling of the oil from the solid concave bottom of the case; and the invention consists, thirdly, in the combination, with the case constructed as aforesaid, of a sheet of asbestos applied to the inner or concave side of the solid bottom of the case and loose asbestos fibers packed between the aforesaid sheet and perforated cover of the case, whereby the efficiency of the kindler is increased, all as herein-after more fully described, and specifically set forth in the claims.

In the annexed drawings, Figure 1 is a top plan view of my improved fire-kindler. Fig. 2 is a side view of the same; and Fig. 3 is a transverse section on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

A denotes the concave bottom disk of the shell or case, which disk is solid or imperforate and of the form of a saucer or similar receptacle.

C represents the cover of the case. This cover is concavo-convex and perforated, and is placed over the bottom disk, A, with the concave side of the former facing the concavity of the latter.

The aforesaid parts of the case are provided with corresponding horizontal outward projections, *c c'*, at their adjacent sides, which projections are perforated, and by rivets *r r* passing through one set of said projections and headed at opposite ends, and the ends of the wire handle *h* passing through the perforations of the other set of projections, *c'*, and clinched thereon, the cover C is secured to the bottom disk, A. Upon the inner or concave side of the bottom disk, A, I place a sheet, *a*, of asbestos, and between this sheet and the cover C, I pack loosely asbestos fibers, as designated by the reference-letter *b*.

In charging the case with the inflammable oil, the asbestos becomes thoroughly saturated, and in case a surplus of oil is introduced into the case it settles to the saucer-shaped bottom of the case, and is there retained in reserve to supply oil to the asbestos as it is consumed therefrom by combustion, the oil rising from the bottom of the case and from the asbestos sheet through the loose asbestos fibers by capillary action. The solid bottom of the case effectually guards against the spilling of the oil from the case, which is one of the great defects of other fire-kindlers of this class.

In order to enable the manipulator of the described fire-kindler to hold the case or shell A C more securely in a horizontal position, I form a broad handle, *h*, of a single piece of wire bent at the center and having its end portions diverging from each other, as illustrated in Fig. 1 of the drawings, the ends of said wire being inserted in the projection *c'* and clinched therein, as hereinbefore described.

I do not claim a fire-kindling torch composed of two perforated sections containing



asbestos, as such is the construction of fire-kindlers already in use. My invention consists specifically in the improved detail construction of the fire-kindler, whereby I render the same much safer and more efficient, as already hereinbefore fully set forth; hence

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

1. The improved fire-kindler consisting of the imperforate concave oil-receptacle A, the perforated concavo-convex cover C, the broad handle *h*, for supporting the said receptacle in a horizontal position, composed of a single piece of wire bent at its center and having its end portions diverging from each other, and passing through two holes in the margins of the disk and its cover and riveted thereon, and an asbestos filling between the receptacle and its cover, substantially as described and shown.

2. The combination of the imperforate concave oil-receptacle A, the perforated concavo-convex cover C, secured to said receptacle, with the concavities facing each other, a sheet, *a*, of asbestos applied to the concave side of the receptacle A, and loose asbestos fibers between the sheet *a* and cover C, substantially as described and shown.

In testimony whereof I have hereunto signed my name and affixed my seal, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 3d day of June, 1886.

HARRY D. HENDERSON. [L. S.]

Witnesses:

FREDERICK H. GIBBS,

E. C. CANNON.