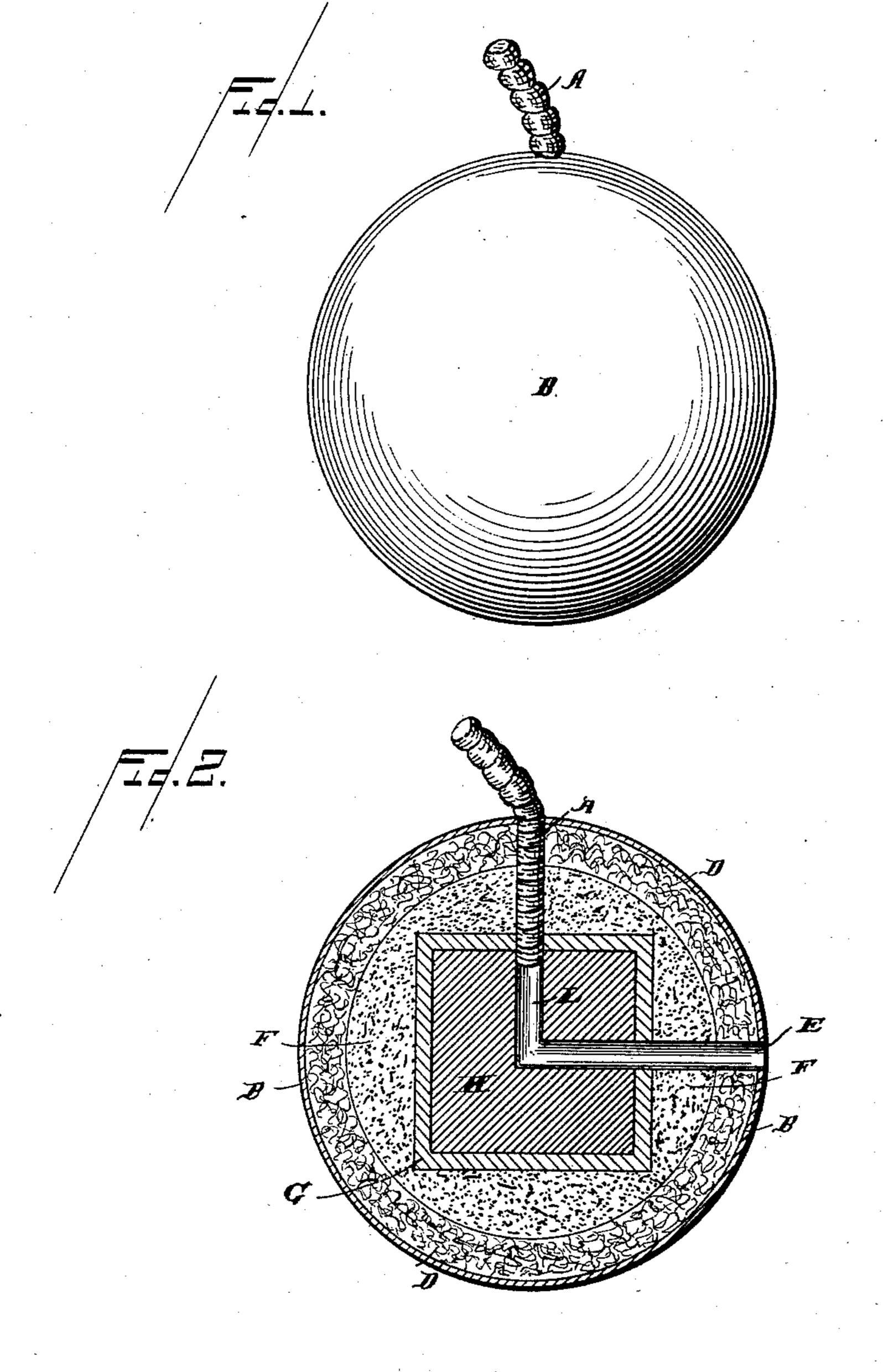
(No Model.)

F. E. CORWIN.

FIRE LIGHTER.

No. 362,147.

Patented May 3, 1887.



Witnesses Geo. Thorpe. Extension

Frank Enventor By his Attorneys MAnnotes

United States Patent Office.

FRANK E. CORWIN, OF EAST SAGINAW, MICHIGAN.

FIRE-LIGHTER.

SPECIFICATION forming part of Letters Patent No. 362,147, dated May 3, 1887.

Application filed September 8, 1886. Serial No. 213,024. (No model.)

To all whom it may concern:

Be it known that I, Frank E. Corwin, a citizen of the United States, residing at East Saginaw, in the county of Saginaw and State 5 of Michigan, have invented a new and useful Improvement in Fire-Lighters, of which the

following is a specification.

My invention relates to fire-kindlers of that class used for starting fires in stoves, furnaces, 10 &c., and has for its object the provision of an article which shall be perfectly safe, in that it cannot explode, and which shall be cheap and simple in manufacture; and to these ends the invention consists in the combination, ar-15 rangement, and nature of the several elements, substantially as hereinafter fully described, and specifically pointed out in the claims.

The invention is illustrated in the accompa-20 nying drawings, which form a part of this

specification, and in which—

Figure 1 is an elevation of my improved fire-kindler. Fig. 2 is a central section thereof.

In the embodiment of my invention I em-25 ploy in combination a square block of wood, H, preferably of what is called "fat" pine or other resinous wood which will burn quickly; and, if desirable, this block may be saturated with kerosene or other combustible material 30 or oil. It is then wound with cotton waste, yarn, or similar material, G, to any desired thickness. The whole is then coated with a preparation composed of pitch and sawdust, F, after passing through which it assumes a spheri-35 calshape or configuration. The ball or sphere is then wound with another cover of cotton waste, D, saturated with kerosene, after which it is completely covered with heavy paper, B, preferably made for the purpose.

I attach special importance to the fact that, owing to the nature of the elements used in my invention and the method employed of combining them, the danger of explosion is en-

tirely obviated.

After the final covering of paper has been applied, a channel, groove, or perforation, E, is bored from the periphery direct to the center, after which a second perforation, L, is bored from a different point on the periphery !

and at right angles to the perforation E, to the 50 center, where it joins the first, and in one of these channels, preferably L, is disposed a wick or fuse, A, made preferably of cotton waste saturated with kerosene or other combustible material or oil. After the wick or fuse has 55 been fired and completely consumed, the channels or passages serve as draft openings or exits for the products of combustion, thereby facilitating the complete and quick combustion of the kindler, and making it highly improba- 60 ble of the kindler becoming smothered, and thereby extinguished, as is often the case with other fire-kindlers.

I do not wish to confine myself to the precise method of combining the elements as here- 65 inbefore set forth.

What I claim as new, and desire to secure by

Letters Patent, is—

1. In a fire-kindler, the combination, with a core or center of wood covered, respectively, 70 with cotton waste, a compound consisting of pitch and sawdust over the cotton waste, and a final covering of paper, of a channel extending through said kindler and provided at one end with a fuse or wick, substantially as and 75

for the purpose set forth.

2. In a combustible fire-kindler, the combination of the following elements, to wit: core or center H, cotton-waste covering G, a second covering consisting of a compound of pitch 80 and sawdust, F, a third covering of waste, D, and a final or fourth covering of paper, B, with a channel or groove, E, extending entirely through the sphere and provided with a wick, A, substantially as and for the purpose set 85 forth.

3. A fire-kindler made from combustible material, having the openings E L formed through the same at right angles to each other and meeting at the center, and a wick placed 90 in one of said openings, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

presence of two witnesses.

FRANK E. CORWIN.

Witnesses:

HENRY G. ROTHWELL, JOHN A. COMBS.