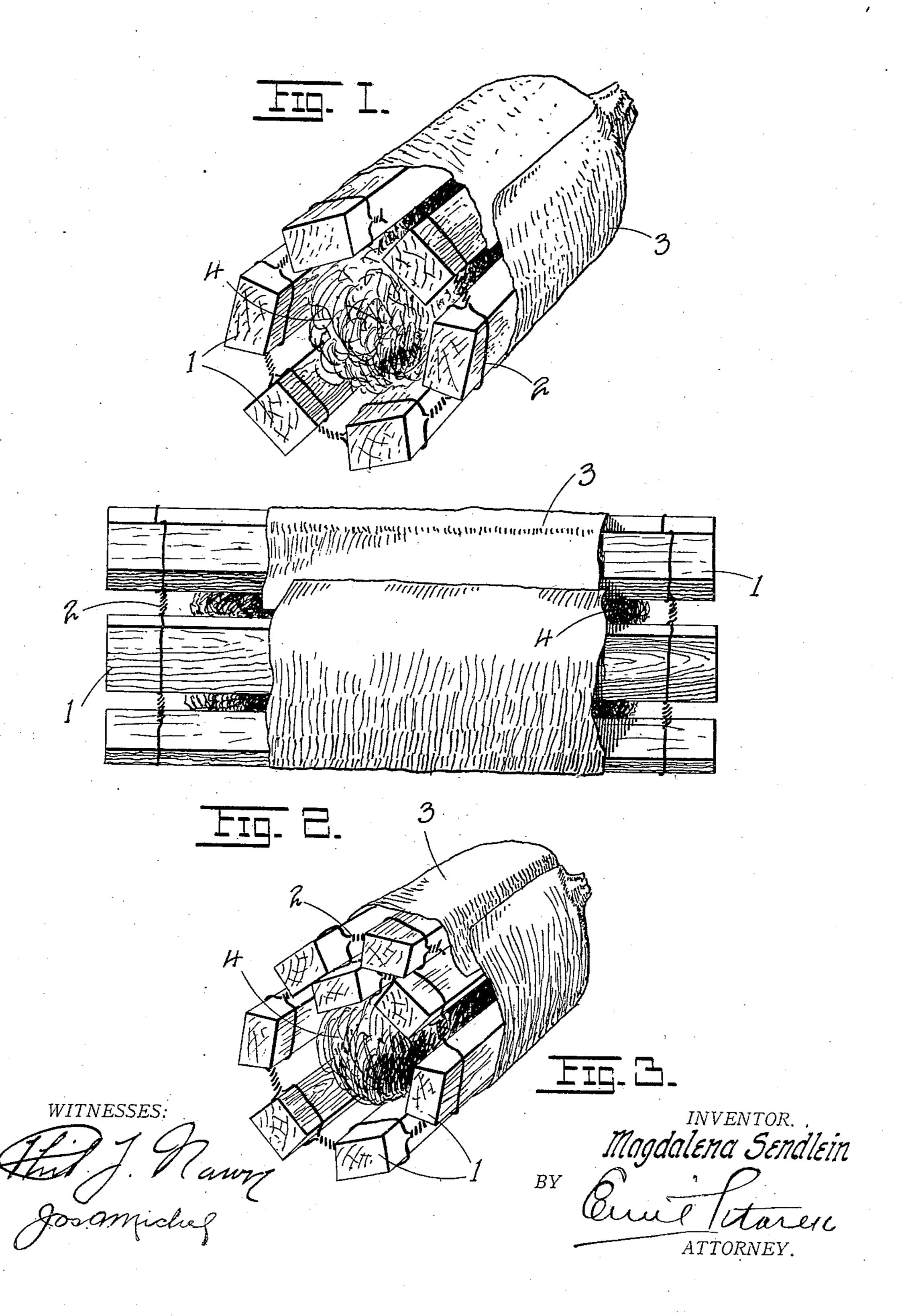
## M. SENDLEIN. FIRE KINDLER. APPLICATION FILED JAN. 31, 1908.

908,615.

Patented Jan. 5, 1909.



## UNITED STATES PATENT OFFICE.

MAGDALENA SENDLEIN, OF ST. LOUIS, MISSOURI.

## FIRE-KINDLER.

No. 908,615.

Specification of Letters Patent.

Patented Jan. 5, 1909.

Application filed January 31, 1908. Serial No. 413,664.

To all whom it may concern:

LEIN, citizen of the United States, residing at St. Louis, State of Missouri, have invent-5 ed certain new and useful Improvements in Fire-Kindlers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in fire-kindlers, and it consists in the novel construction of kindler more fully set forth in the specification and pointed out in the claims.

In the drawings, Figure 1 is a perspective of one form of my kindler; Fig. 2 is a side elevation with a portion of the wrapper removed; and Fig. 3 is a perspective of a modification.

The object of my invention is to produce a fire-kindler composed of a series of strips of wood or composition spaced a suitable distance apart to afford ample means for the circulation of air whereby rapid and com-25 plete combustion is insured.

A further object is to construct a readily inflammable and rapidly burning kindler; one producing an intense flame, and one possessing further and other advantages better 30 apparent from a detailed description of the invention is as follows:—

Referring to the drawings, 1, 1, represent a series of sticks of wood (or composition) coupled together by means of wire strands 35 2, and spaced apart, thus forming a frame of any desirable length. This frame is subsequently cut up into convenient lengths and rolled into hollow cylindrical form with the edges abutting as shown in Figs. 1 and 2, or 40 overlapping as in Fig. 3. The skeleton cylinder is wrapped in paper 3. The hollow cylinder (or prism, where not perfectly cylindrical in form) forms a flue which is filled with excelsior 4 or equivalent material pre-45 viously dipped in a suitable hydrocarbon to insure rapid combustion. In fact the frame may be likewise dipped into a suitable inflammable hydrocarbon, as well as the outer wrapper 3.

In the majority of cases the cylinder with abutting edges as shown in Figs. 1 and 2 answers every purpose; but where the kindler is intended to support an abnormal weight of fuel, the edges are overlapped as

Be it known that I, Magdalena Send- | shown in Fig. 3, this arrangement serving 55 to stiffen the cylinder and at the same time furnishing additional quantity of sticks or strips to start the fire.

It is apparent that the central flue of the cylinder, coupled with the spaces between 60 the peripherally disposed sticks or strips 1, 1, afford a perfect and unobstructed passage to the air currents, the outer wrapper almost instantly disappearing as soon as a match is applied to the same. The excel- 65 sior or other finely comminuted and porous material or filling 4, burns with great intensity, thus setting fire to the sticks or strips 1, 1, which in turn ignite the fuel placed upon the kindler.

As stated above, one of the objects of this invention is to keep the strips spaced apart. This spacing apart must be a permanent relation so as to afford ample air circulation during the combustion of the kindler. 75 This spacing is most effectively accomplished by twisting the wires about the several strips of wood, the twisted portions insuring a permanent retention of the strips from each other as shown clearly in the drawings. 80

Having described my invention what I claim is:—

1. A fire-kindler composed of a hollow cylinder or tube of sticks, wires disposed across the cylinder and having portions 85 twisted about and coupling the sticks together suitable permanent distances apart, whereby the sticks are held against collapse while burning and permanent draft openings are afforded for the air, substantially 90 as set forth.

2. A fire-kindler composed of a hollow cylinder of sticks, wires disposed across the cylinder and having portions twisted about and coupling the sticks together permanent 95 distances apart for affording permanent draft openings and holding the sticks against collapse while burning, a filling of excelsion impregnated with inflammable hydrocarbon and an outer paper wrapper, substantially 100 as set forth.

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

## MAGDALENA SENDLEIN.

Witnesses: EMIL STAREK, Jos. A. Michel.