No. 684,428. Patented Oct. 15, 1901.

C. HOFF & G. H. KLOTTER.

FIRE KINDLER.

(Application filed Mar. 19, 1900.)

(Specimens.)

Fig. 1

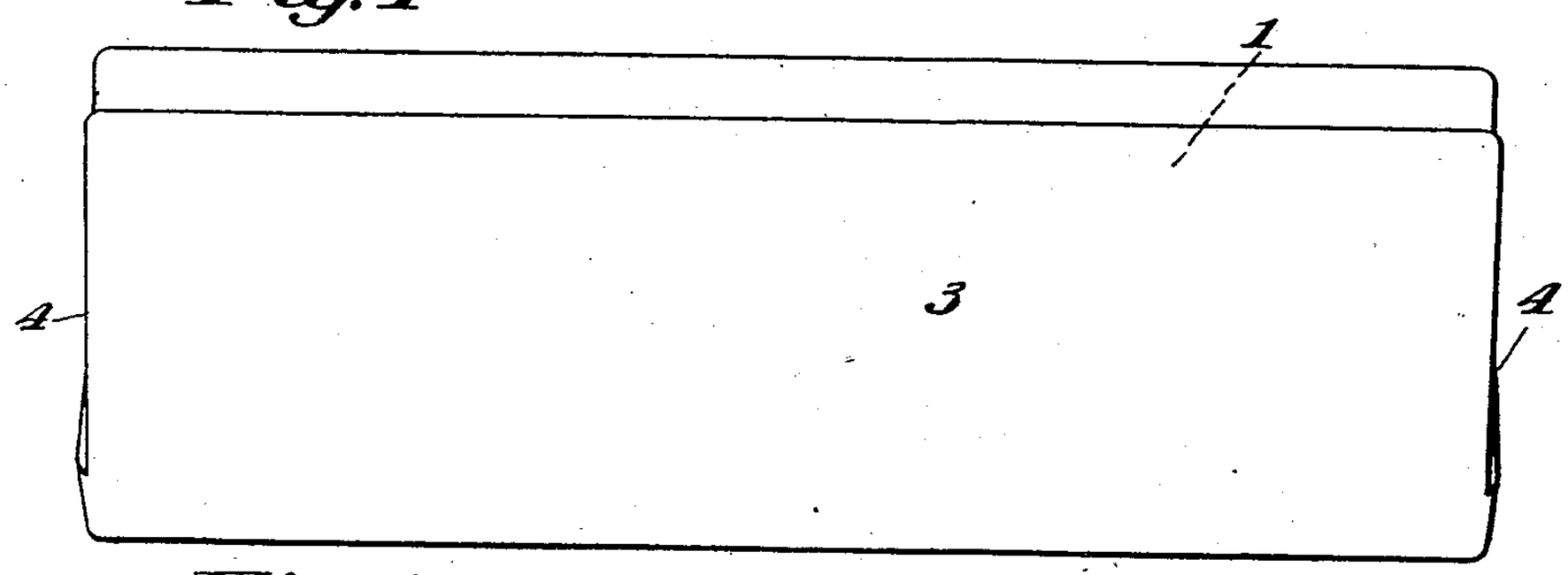


Fig. 2

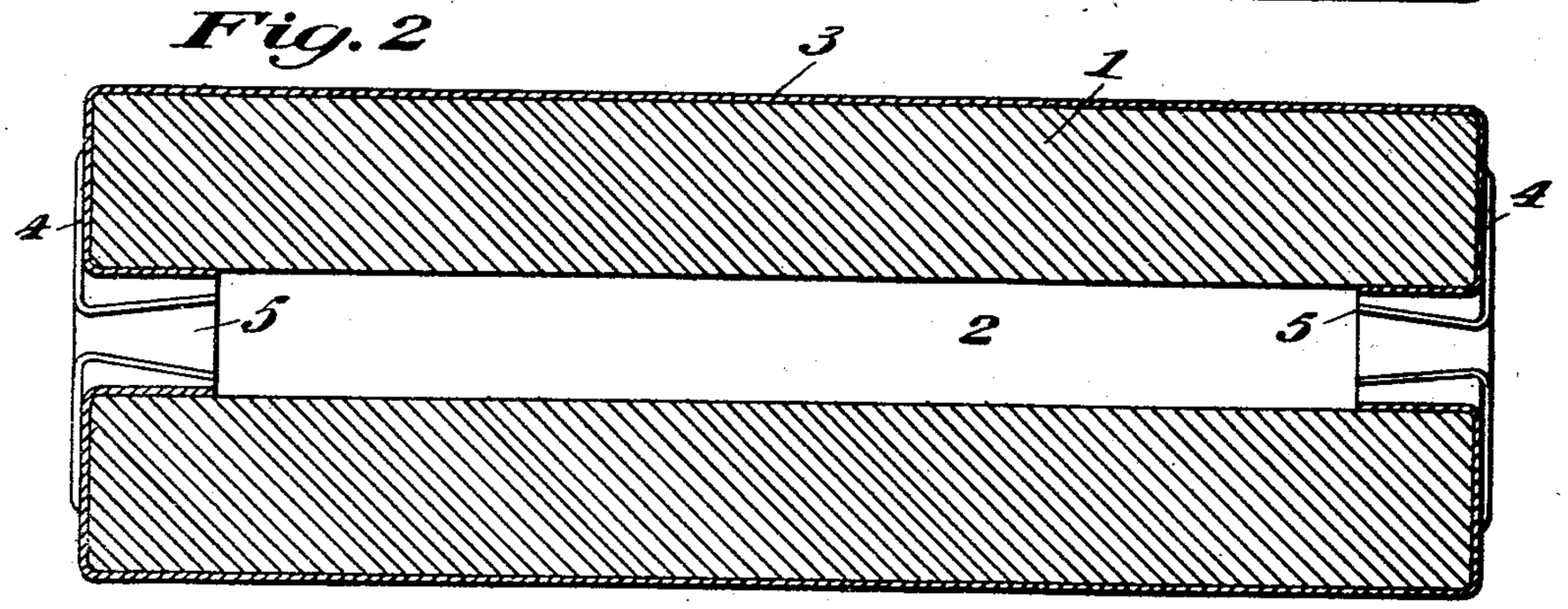


Fig. 3

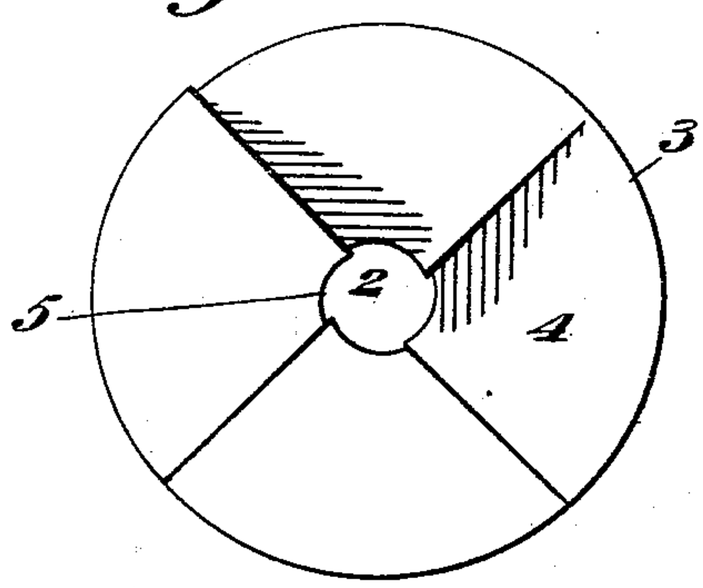
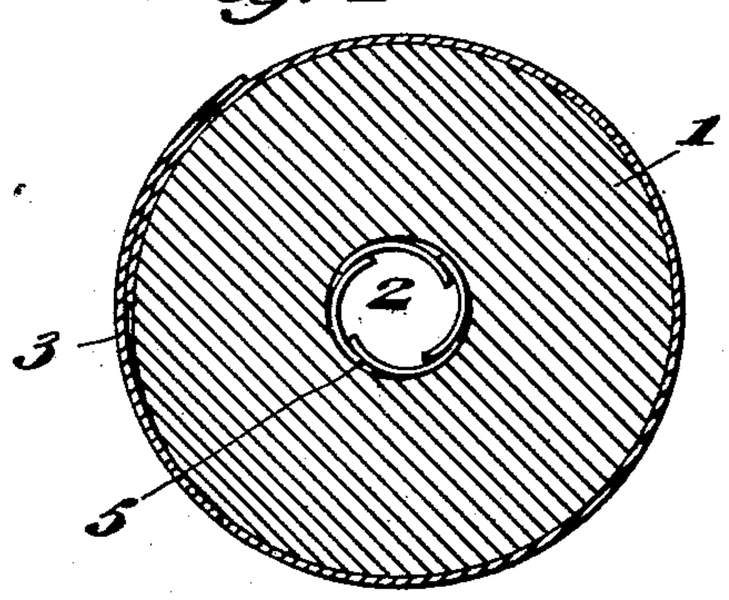


Fig. 4



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UNITED STATES PATENT OFFICE.

CHARLES HOFF AND GEORGE H. KLOTTER, OF CINCINNATI, OHIO.

FIRE-KINDLER.

SPECIFICATION forming part of Letters Patent No. 684,428, dated October 15, 1901.

Application filed March 19, 1900. Serial No. 9,243. (Specimens.)

To all whom it may concern:

Be it known that we, CHARLES HOFF and GEORGE H. KLOTTER, citizens of the United States of America, and residents of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Fire-Kindlers, of which the following is a specification.

This invention relates to certain improvements in fire-kindlers, and has for its object to provide a kindler made from wood-chips bound together by rosin or the like into a compact and convenient form for use.

The invention consists in certain novel features of the improved fire-kindler whereby certain important advantages are attained and the device is made simpler, cheaper, and otherwise better adapted and more convenient for use, all as will be hereinafter fully set forth.

The novel features of the invention will be carefully defined in the claims.

In the accompanying drawings, which serve to illustrate our invention, Figure 1 is a side elevation showing the improved fire-kindler, and Fig. 2 is a sectional view taken lengthwise through the same. Fig. 3 is an end elevation of the completed kindler, and Fig. 4 is a cross-section taken through the device.

In the views, 1 indicates the body of the improved kindler, formed of a mass of wood-chips loosely compacted by pressure into a cylindrical form and bound together by admixture with melted rosin, which on cooling solidifies and binds or holds the chips together in a porous mass.

The body 1 is formed with a central axial flue or passage 2, serving to promote combustion of the kindler by permitting access of the air to the interior of the porous mass, and in order to hold the kindler in shape and prevent as much as possible crumbling thereof I provide a wrapper 3 for the same, the said wrapper being made, by preference, from waxed or paraffined paper wrapped around the cylindrical body 1 and having its extended edges folded over the ends of said body, as shown at 4, and pressed or tucked into the ends of the axial flue 2, as seen at 5 in the drawings, in such a way as to hold the wrapper 3 in place on the body.

The kindler is made of wood-chips bound together by rosin. The kindler-body 1 is given a porous nature, and the surfaces of the body, as well as the walls of the flue or passage 2, are given a certain degree of roughness, owing to the size, shape, and projection of the said chips, which do not pack tightly together, but have intervening interstices, and thereby the flame is given a more ready hold upon the combustible and inflammable substances of which the kindler is formed, and the gases generated in the interior of the kindler by the heat are permitted to escape freely through the interstices to aid in the combustion. The interstices and flue or passage 2 permit the cylindrical body 1 of the kindler also to spread and crack open more freely under the heat, so as to give a greater flame than would be otherwise possible, and said interstices and passage also permit the kindler to be readily broken apart in case this is desirable before lighting the fire. The employment of rosin or similar material solid at ordinary temperatures insures a proper degree of solidity to prevent the kindler from crumbling or breaking down under ordinary pressures.

The wrapper 3 enables the kindler to be conveniently handled or carried without soiling the hands or clothes and is also useful, since being of an inflammable nature it may be lighted by the match and employed for starting the body of the kindler into blaze, but by reason of the openings at the ends of the flue 2 it is not even essential to remove the wrapper before using the kindler, since a match applied in said flue will serve to ignite the body of the kindler, and the flue and interstices will admit sufficient air to permit combustion until the flame is communicated to the outer walls of the body and to the wrapper 3.

The improved kindler constructed according to our invention is extremely inexpensive and is very convenient and desirable for use on account of the ease with which the fire may be kindled and also on account of its cleanliness. It will also be obvious from the above description that the improved kindler is capable of some modification without material departure from the principles and spirit of the invention, and for this reason we do not wish to be understood as limiting our-

selves to the precise form of the device herein shown.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A fire-kindler consisting of a porous body formed of wood-chips loosely compacted and bound together and rendered self-sustaining by a substance plastic under heat but solid at ordinary temperatures, said body having rough surfaces and having a central flue and having between the particles of fragmentary material interstices adapted for communication with said central flue and with said rough surfaces to permit the escape of gases generated in the interior of the porous body and to insure the ignition of the kindler, substantially as set forth.

2. As an improved article of manufacture a fire-kindler in cylindrical form with a longitudinal bore therethrough from end to end, the said kindler being composed of loosely-compacted wood-chips and a saturating material, the whole being crumbable and containing interstices between the chips providing communication between said bore and the outer periphery of the kindler, whereby the kindler readily ignites and is broken up and smoldering prevented, substantially as described.

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