(No Model.)

J. C. GROUT.

WIND GUARD FOR LIGHTING MATCHES.

No. 535,696. Patented Mar. 12, 1895.

Fig. 1.

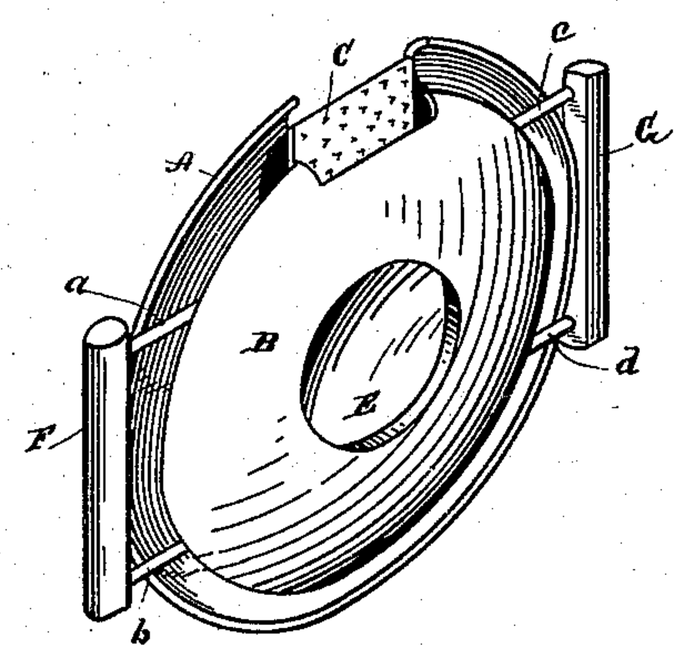


Fig. 2.

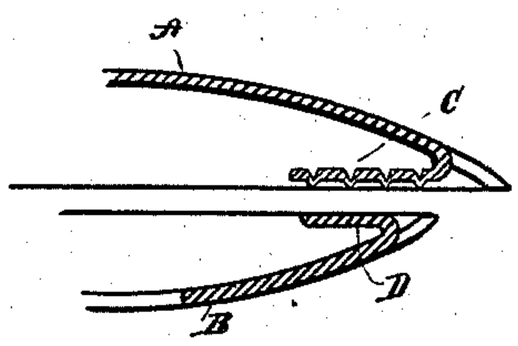


Fig. 3.

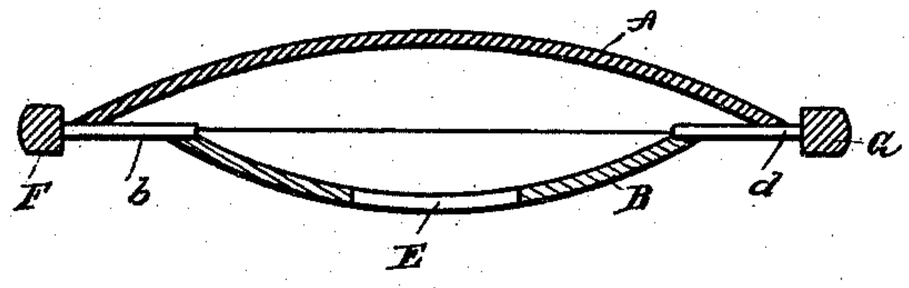


Fig. 5.

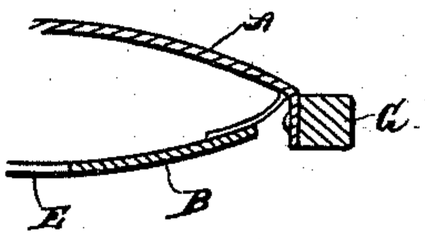


Fig. 6.

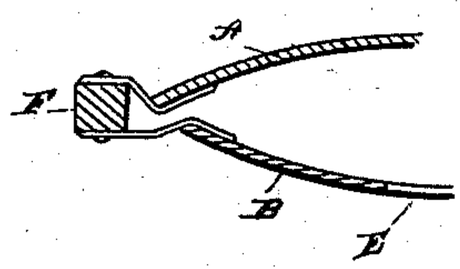
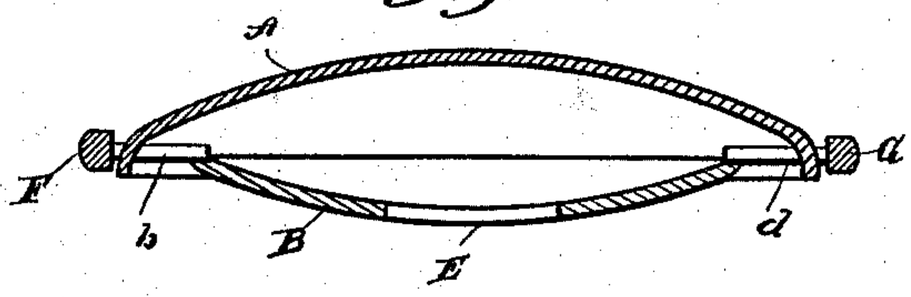


Fig. 4.



WITNESSES
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WIND-GUARD FOR LIGHTING MATCHES.

SPECIFICATION forming part of Letters Patent No. 535,696, dated March 12, 1895.

Application filed March 19, 1894. Serial No. 504,308. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. GROUT, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Wind-Guards for Lighting Matches; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to a wind guard for matches and has for its object the production of a guard such that the ordinary Lucifer match may be lighted and kept lighted; that is, prevented from being blown out during the time it is consuming.

In the drawings, Figure 1 shows the complete guard in perspective. Fig. 2 shows a cross section through the rasp on which the match is ignited. Fig. 3 shows a cross section of the guard on a line at right angles to that of Fig. 2. In Fig. 4, the front or larger guard plate is shown more deeply dished than in either of the other figures. Figs. 5 and 6 show details of ways for holding the parts together and for holding the handle to the guard.

A indicates the front guard plate, which is a concave plate.

B indicates the rear guard plate, which is also concave, the concave faces of the two plates A and B lying toward each other.

C indicates a friction surface adapted to firing a match drawn or pushed across it from without the interior of the guard.

D (Fig. 2) indicates a spring holder or pressure strip, the purpose of which is to hold the end of a match close against the roughened friction strip C. The strip C is either made integral with, or is attached to one of the guard plates, as, for instance, the front guard plate A, and the holding strip D is either made integral or attached to the other guard plate B. The guard plate A is larger in diameter than the guard plate B, and its edges extend beyond the edges of the guard plate B. The two plates A and B are spaced from each other in order to permit a free access of air to the interior compartment between the two plates. The central part of the smaller guard plate B is cut out, leaving the opening E, opposite which and within the space between the two plates the burning end of the match is held. At any convenient place with respect to the two guard plates is a handle, or two handles, F, G, secured to the device in any convenient way, and made preferably of some material not liable to heat rapidly, such as wood or vegetable fiber, or some similar substance.

I do not desire to confine the construction and attachment of the handles to the form shown in the drawings, as that does not form the principal feature of the invention, the main feature of the invention consisting in the two guard plates between which is a cavity provided with free access for air by which combustion may be carried on, and provided with an opening through one of the guard plates through which the fire of the lighted match may be utilized for lighting any object.

In use, it is only necessary to take the device in one hand, and push the match head first over the friction surface C and into the cavity between the plates. The match held firmly against the friction surface C by the strip D, and pushed inward by the hand of the operator, takes fire and burns within the cavity. As the substance of the match is consumed, it can, if desired, be pushed gradually inward until the match is entirely consumed. Inasmuch as the two plates A and B are made of metal, or preferably so, they become heated, and it is necessary to have some non-heating handle attached to them in some way, so that the device may be held in the hand without any inconvenience; but this handle may be attached in any one of several different ways.

As shown in the drawings, two short pieces of wood, F and G, are secured to the ends of wires *a* and *b*, and *c* and *d*, which wires are also utilized in this instance for holding the two guard plates at the requisite distance apart.

In Fig. 5, the handle pieces are attached directly to the rim of the larger disk.

What I claim is—

1. A wind guard for lighting matches, comprising a pair of dished plates spaced from each other, one of which is provided with a friction plate, and the other of which is provided with a holding strip opposite said fric-

tion plate; and one of which is provided with a central opening through which the fire of the match may be utilized, substantially as described.

2. A wind guard for lighting matches, comprising a pair of dished plates of unequal diameter, held together but spaced from each other, and one of which is provided with a central opening through which the fire may be used, substantially as described.

3. In a wind guard for lighted matches, the combination of two dished plates, arranged with their concave faces toward each other, with bars adapted to engage said dished plates, whereby they are held together, yet spaced from each other, handles of non-conducting material, adapted to be supported by said bars, a spring scratch plate, formed by bending inward a portion of the edge of one of said dished plates, a holding strip, formed by bending inward a portion of the edge of the opposite dished plate, said holding strip, adapted to press the match firmly against the friction plate, and a hole in the center of one of said dished plates, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

JOHN C. GROUT.

Witnesses:

CHARLES F. BURTON,

FRANCES CLOUGH.