

(No Model.)

A. J. FREDRIKSON.

COMBINED POCKET LIGHTER AND MATCH SAFE.

No. 479,756.

Patented July 26, 1892.

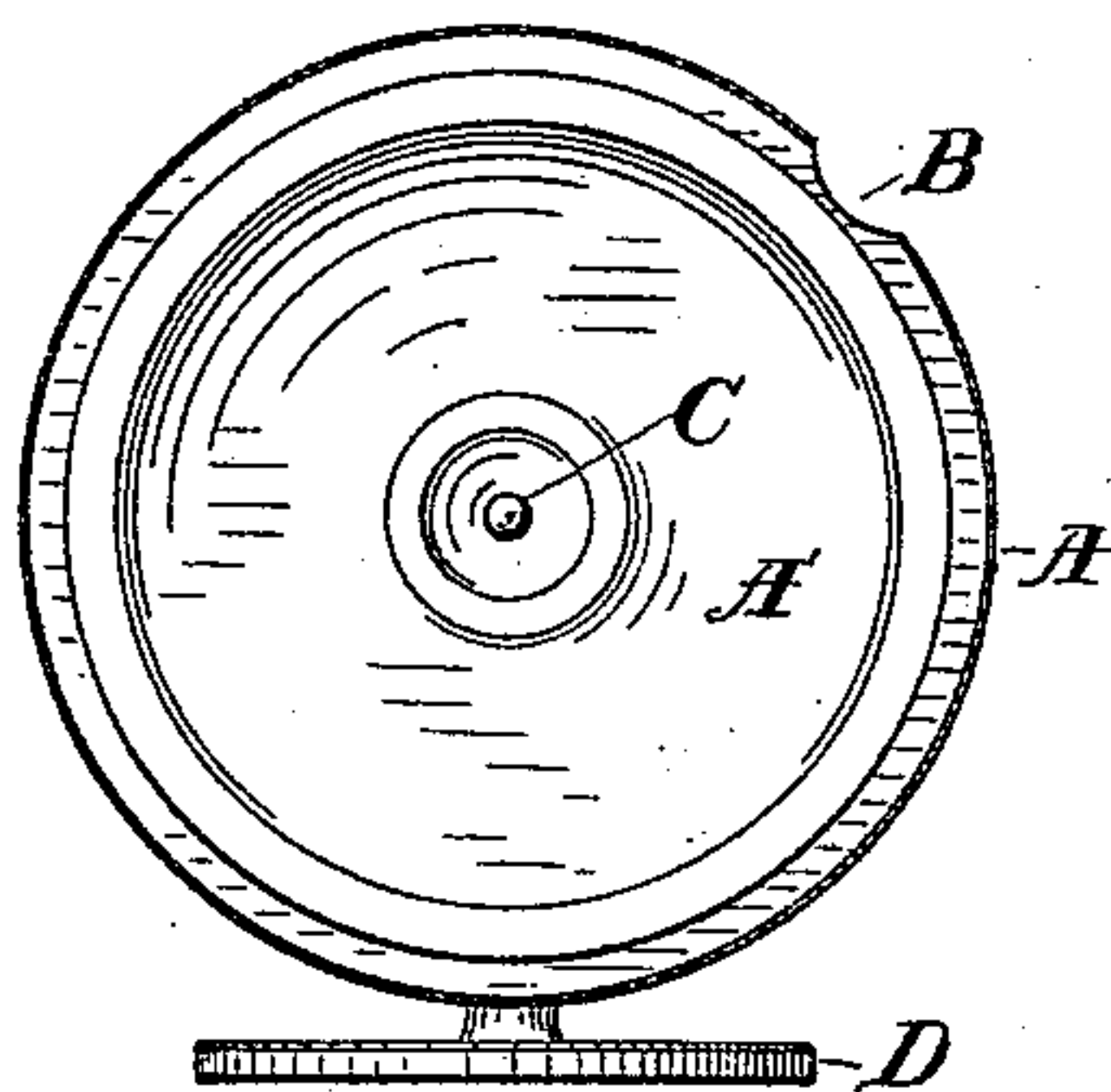


Fig. 1.

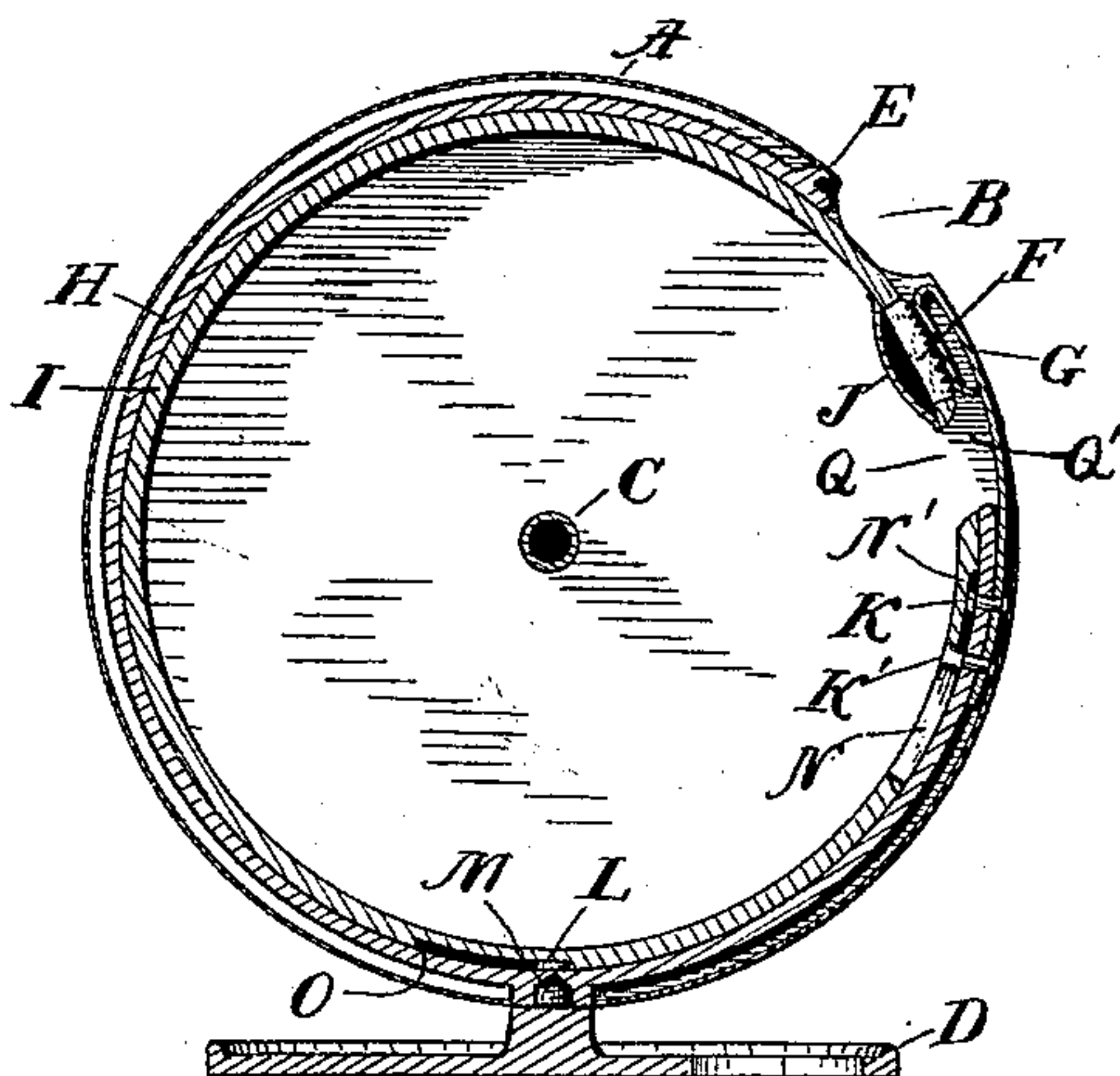


Fig. 3.

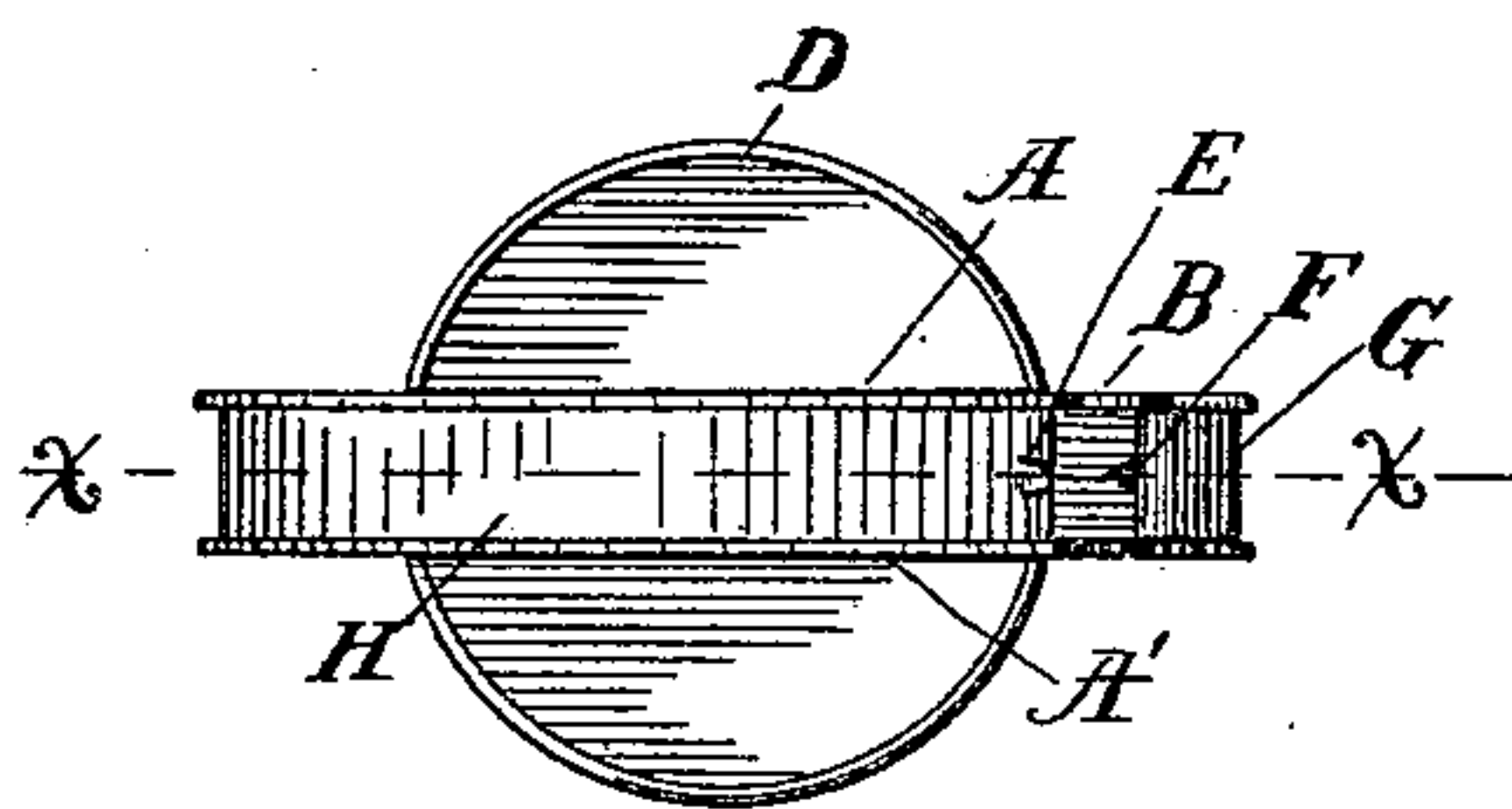


Fig. 2.

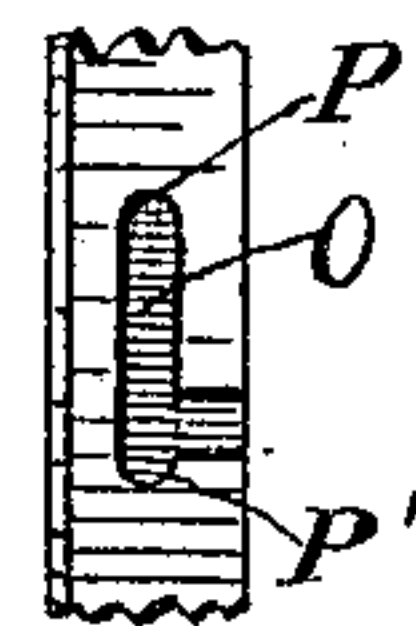


Fig. 7.

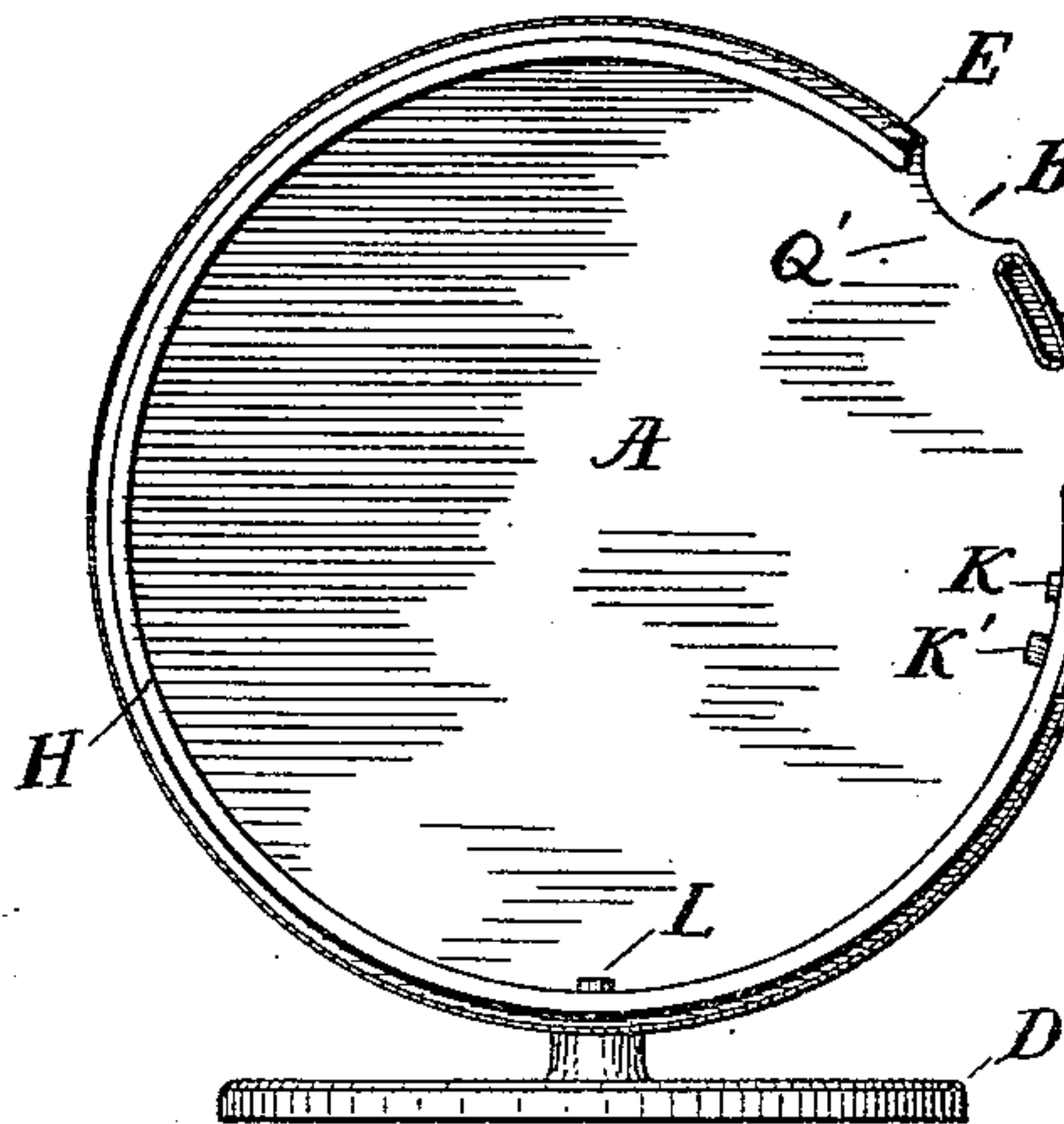


Fig. 4.

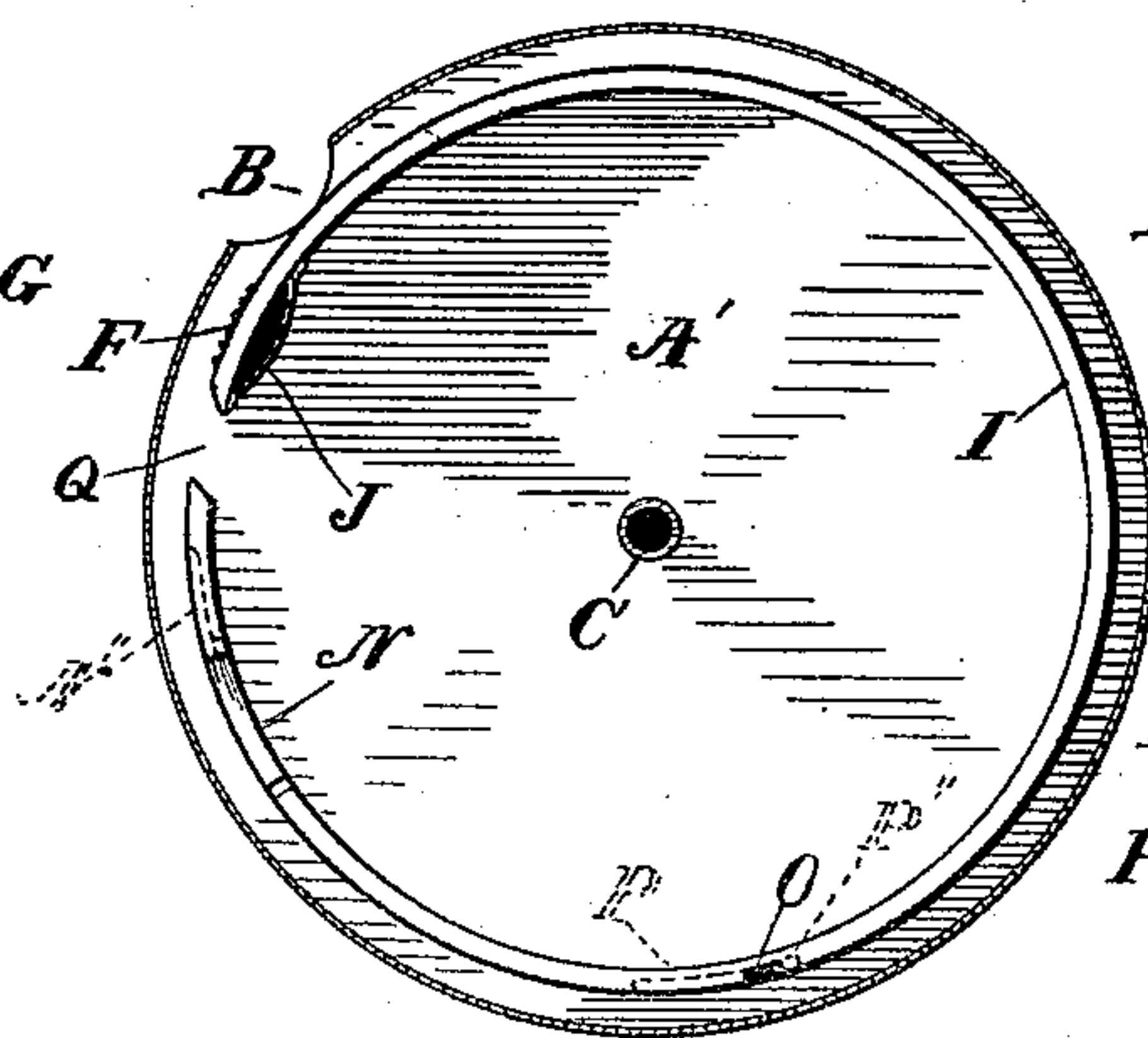


Fig. 5.

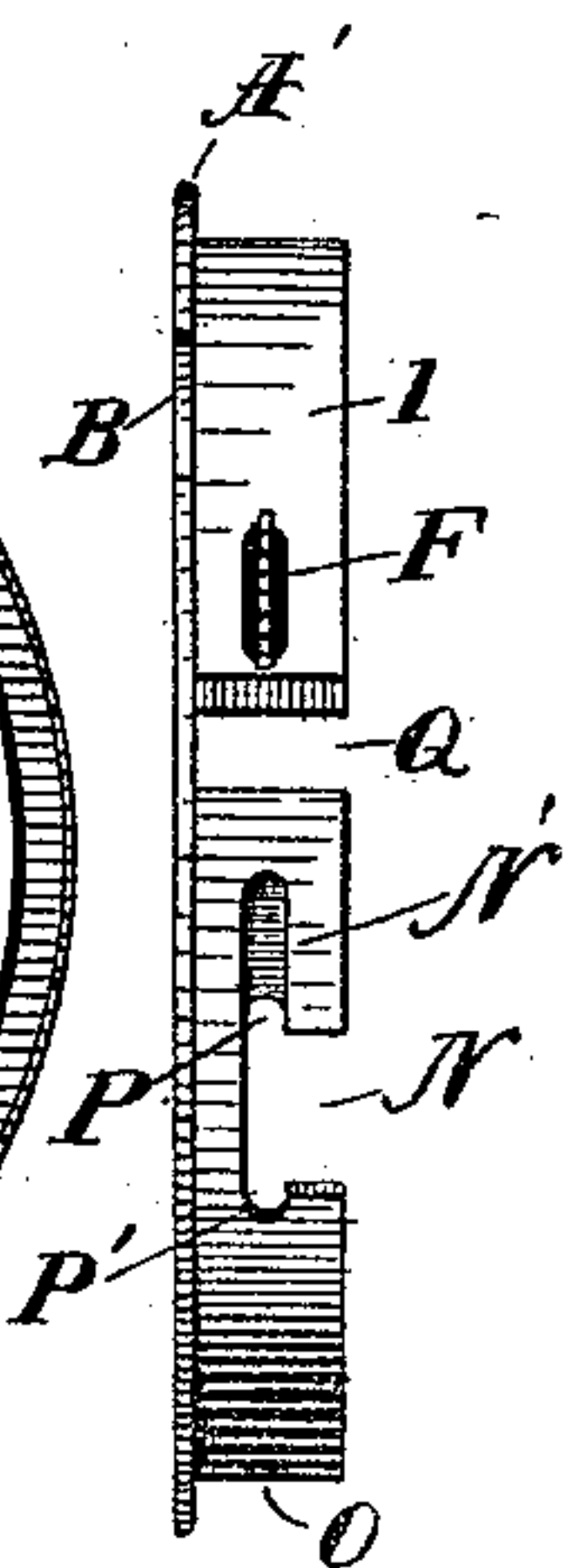


Fig. 6.

WITNESSES:

George W. Shook
Myron H. Hensley

INVENTOR

Andrew J. Fredrikson.

BY

Lawrence V. Moulton
ATTORNEY.

UNITED STATES PATENT OFFICE.

ANDREW J. FREDRIKSON, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR OF
ONE-HALF TO JOHN TOURNELL, OF SAME PLACE.

COMBINED POCKET-LIGHTER AND MATCH-SAFE.

SPECIFICATION forming part of Letters Patent No. 479,756, dated July 26, 1892.

Application filed February 26, 1891. Serial No. 382,912. (No model.)

To all whom it may concern:

Be it known that I, ANDREW J. FREDRIKSON, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Combined Pocket-Lighters and Match-Safes; and I do hereby 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 appertains to make and use the same.

My invention relates to improvements in pocket-lighters and match-safes adapted to contain the continuous coil-paper match described in my United States Patent No. 443,986, bearing date December 30, 1890; and its objects are to furnish a case for the same adapted to be either carried in the pocket or attached to the wall or elsewhere as a match-safe; also, having certain other novel and useful features, hereinafter more fully described, and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of a device embodying my invention; Fig. 2, a plan view of the same; Fig. 3, an enlarged vertical section of the same on the line $x x$ of Fig. 2; Figs. 4 and 5, enlarged elevations of the adjacent sides of the respective parts of the case detached; Fig. 6, an edge view of the part shown in Fig. 5, and Fig. 7 a detail of the lower side of the same.

Like letters refer to like parts in all the figures.

The case consists of a short cylinder H, slightly longer than the width of the strip of paper forming the match, having attached a fixed head A at one end, a detachable base D at its lower side, and a detachable head A', having attached a cylindrical flange I, adapted to fit inside of the cylinder H. In the side of the flange I is a slit Q to permit the passage of the match, and a portion of the cylinder H is cut away at Q' for like purpose and to accommodate the spring G, which has a loop at its free end, which loop forms a rounded angle at its inner end to engage the end of the tongue on the match-strip and reverse the same when turned in the wrong di-

rection. The spring G covers the opening Q and presses upon I, near said opening, at which point is inserted the igniter F, consisting of a strip of thin metal having a serrated edge in contact with the loop of the spring G, and openings in I at each side of said igniter, beneath which openings is located a chamber J.

C represents a post about which the match-coil may be wound; but this is not necessary.

The base D is attached to the case by means of a screw-stud M, which engages a suitably-threaded opening in H.

The respective parts of the case are detachably secured to each other by the studs K, K', and L. The latter enters an L-shaped channel O in the outer surface of I, and the studs K K' engage a somewhat similar channel N' in the same, having its lateral part N wider and cut entirely through I, and the stud K' is also longer than K and extends through the same. This, however, is not necessary. The studs K K' may be of equal length and the channel N of equal depth throughout. The circumferential parts of these channels N, N', and O all terminate in concave seats P and P', with which the studs K, K', and L engage as the flange I is rotated in either direction within the cylinder H. The studs K and K' also serve as rivets to secure the spring G.

E is a stop or hook to engage the openings in the match and stop the same, and the milled rims of the heads A and A' are cut away at B to facilitate grasping the end of the match-strip, which at this point lies close to the outer surface of the case and between said flanges.

The operation of my device is as follows: By grasping the head A by its milled edge in the left hand and A' in like manner in the right hand and turning the latter to the left nearly as far as it will go the case may be opened. The match-strip is inserted in A', with its outer end projecting through the opening Q, which end is passed between the loop of the spring G and the lighter F as the case is closed. By turning A' to the right the lugs K, K', and L enter the channels N O and engage the seats P, and thus secure the case and stop the lighter F beneath the loop of the spring G.

If now the match-strip be drawn out quickly in contact with the hook E, the end will be lighted and a section of the same broken off in the fingers. Any particles of combustible material that may be removed and any residue therefrom will pass through the openings at each side of the lighter into the chamber J, from whence they may be finally removed, thus preventing any clogging of the lighter by the same. If it is desired to remove several sections before lighting at all, grasp the case as if to open the same and turn A' to the left as far as possible, when the studs K K' L will engage the seats P' and the lighter F will then be beneath the hook E, where it cannot operate, and the opening Q opposite the space between the spring G and hook E, having a free opening for the strip to run out without friction. When enough has been drawn out, the case can again be restored to lighting position and the match lighted, or an opening in the strip may be engaged with E, the box turned back, and the strip torn off at E without lighting. If desirable, the stand D may be secured to the wall or any suitable place where the case may be detached. Said case is then of suitable form to carry in the pocket. When any tongue upon the match chances to be folded back upon the strip, it will engage either the rounded side of the opening Q or the inner angle of the loop on the spring G and be turned into proper position as the match is drawn out.

What I claim is—

1. The combination of a short cylinder having one head attached, an opposite head having an annular flange provided with L-shaped channels in its outer surface, and lugs projecting from the inner surface of said cylinder and engaging said channels, substantially as described.

2. The combination of a cylinder having one head attached, an opposite head having

an annular flange, L-shaped channels in said flange, lugs on said cylinder engaging said channels, openings in the side of said cylinder and flange, and a spring and lighter adjacent to said openings, substantially as described.

3. The combination of a case having an opening in the side thereof, a lighter near said opening, openings each side of said lighter, a chamber beneath the same, and a spring adapted to press against said lighter, substantially as described.

4. The combination of a case having an opening in the side thereof, a lighter near said opening, openings at each side of and a chamber beneath the same, a spring pressing upon the same, and a stop-hook near the same, substantially as described.

5. The combination of a cylindrical case having an opening in its side, a spring opposite said opening, and lugs on its inner surface, an annular flange adapted to rotate within said case having an opening in its side, a lighter attached near said opening, and circumferential channels with the ends of which said lugs engage, substantially as described.

6. The combination of a cylindrical case having an opening in its side and one head attached, a spring opposite said opening, a stop-hook at one side of the same, and lugs on its inner surface, an opposite head having an annular flange having an opening, and a lighter attached near said opening, adapted to engage said spring, L-shaped channels in the surface of said flange, having concave seats and engaging said lugs, substantially as described.

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

ANDREW J. FREDRIKSON.

Witnesses:

LUTHER V. MOULTON,
LOIS MOULTON.