

(No Model.)

J. N. RICHARDSON.
MIRROR.

No. 410,924.

Patented Sept. 10, 1889.

Fig-1.

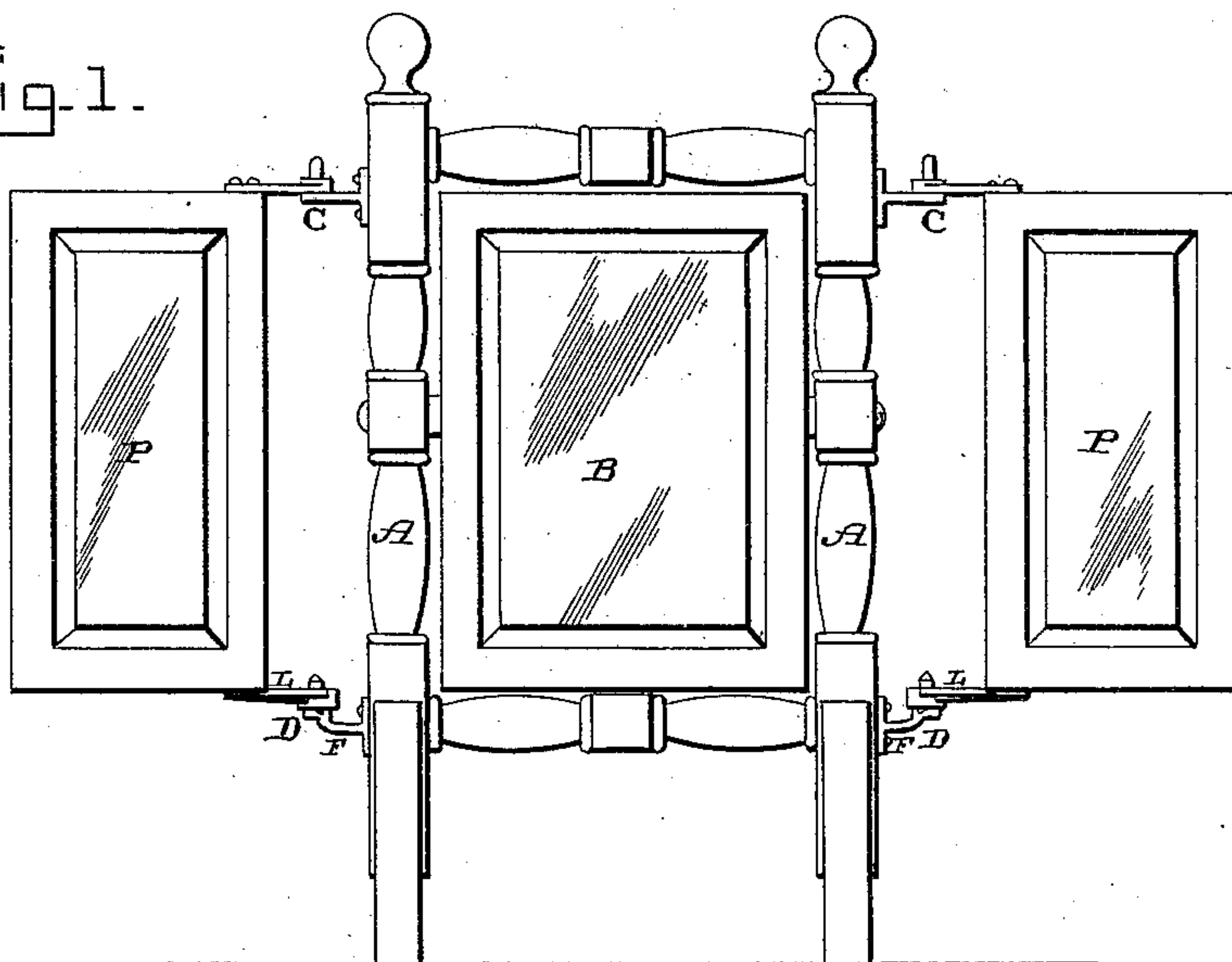


Fig-2.

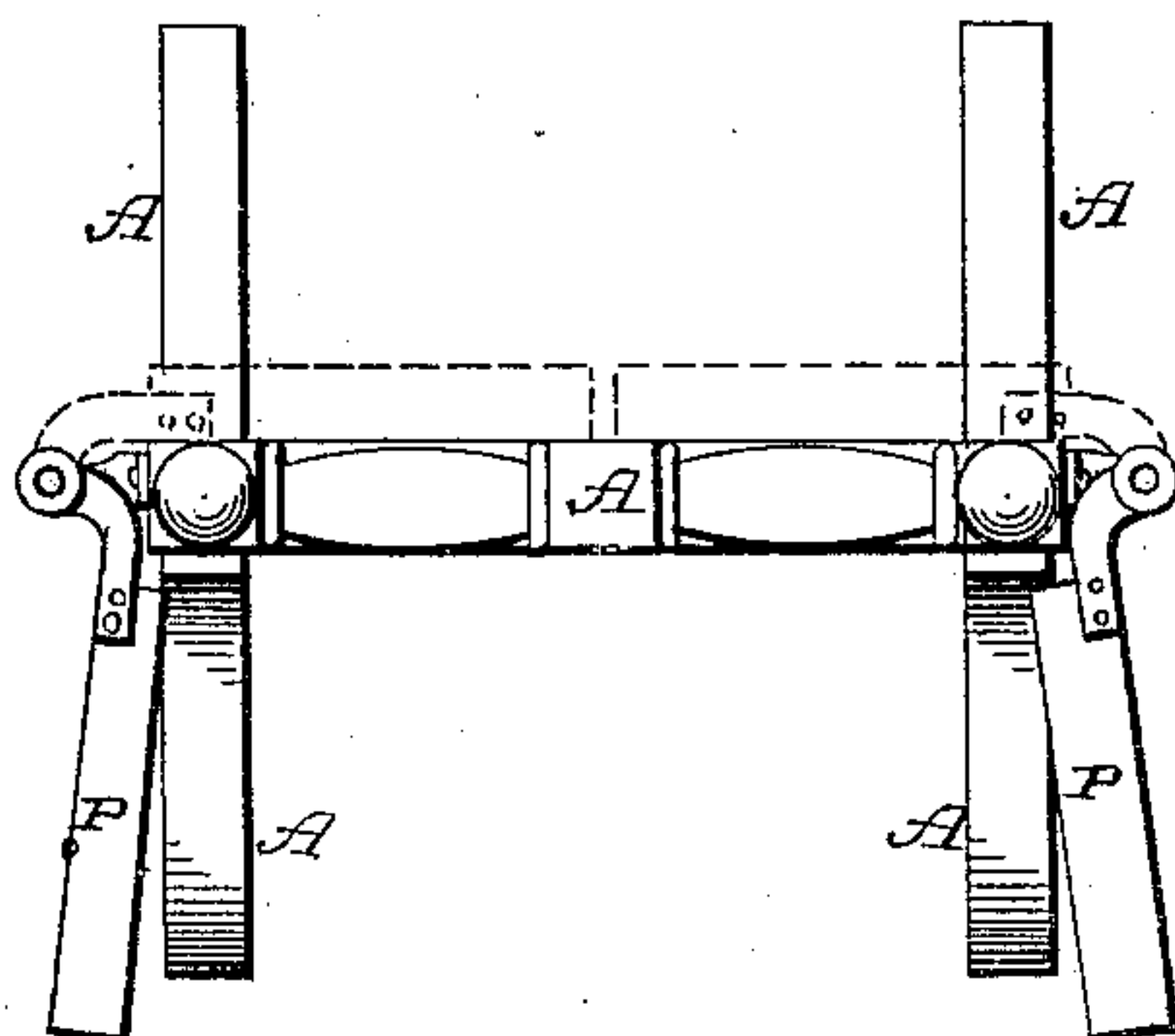


Fig-3.

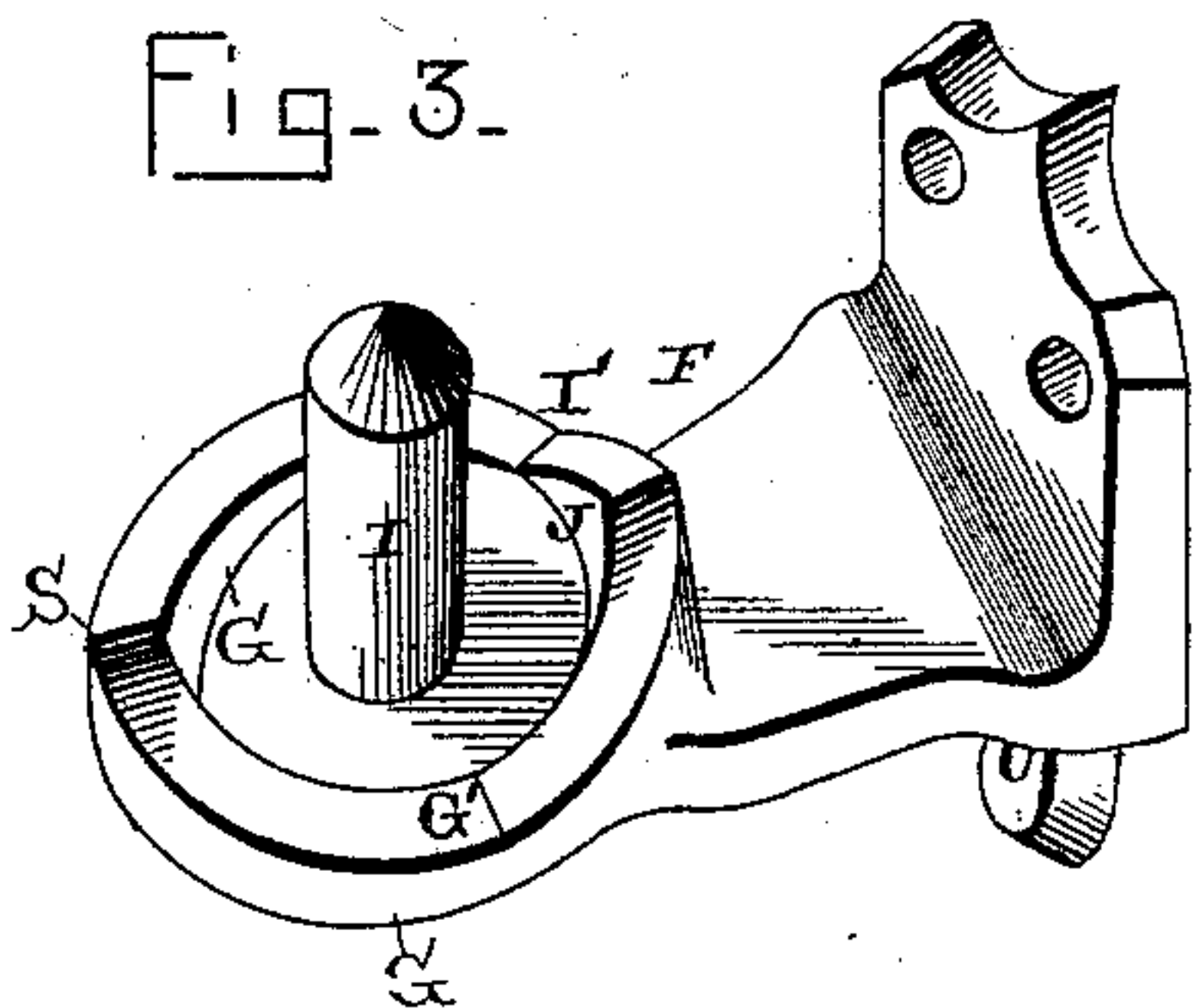
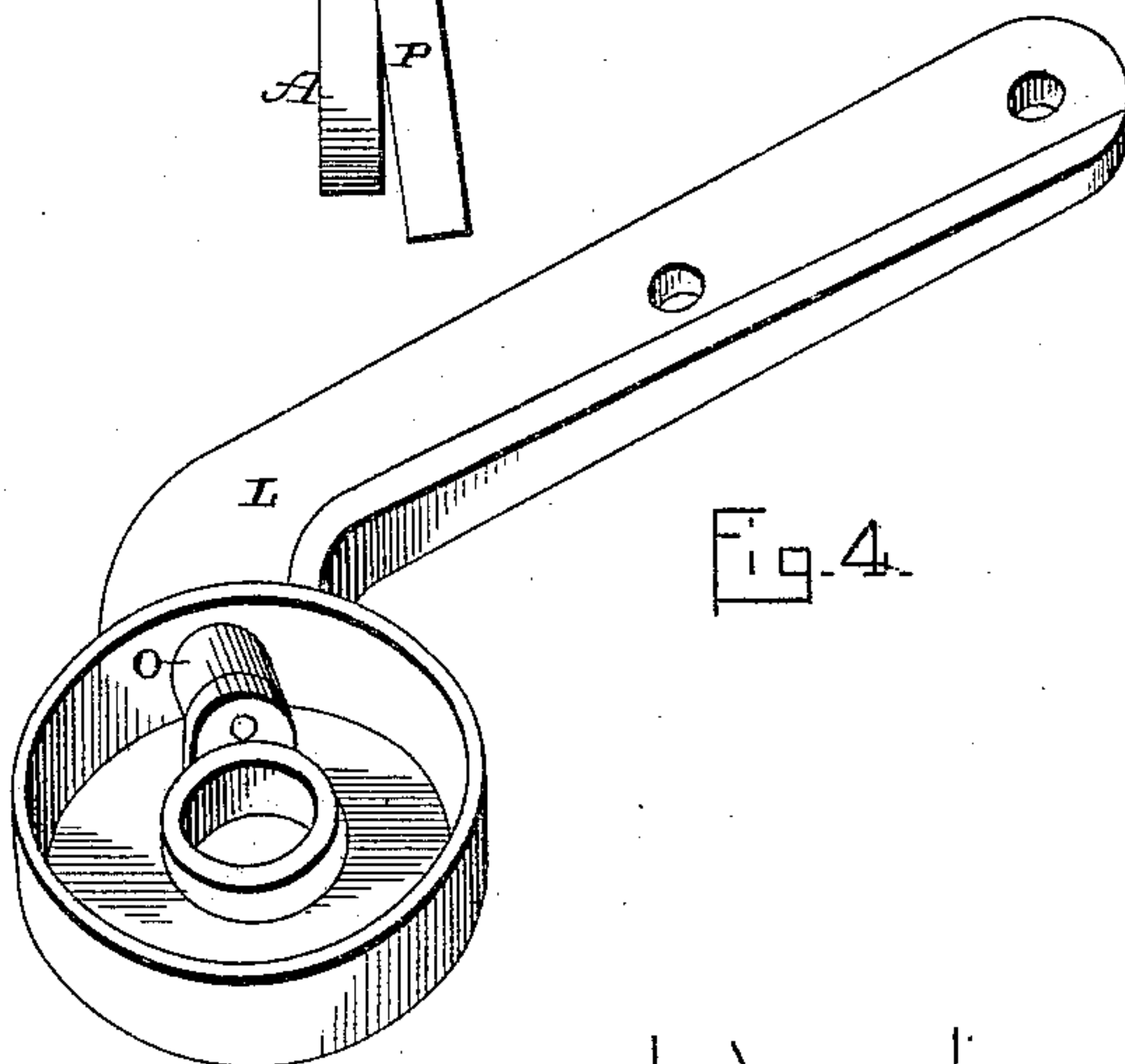


Fig-4.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOSEPH N. RICHARDSON, OF JERSEY CITY, NEW JERSEY.

MIRROR.

SPECIFICATION forming part of Letters Patent No. 410,924, dated September 10, 1889.

Application filed April 26, 1889. Serial No. 308,645. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH N. RICHARDSON, of Jersey City, in the county of Hudson and State of New Jersey, have invented certain
5 new and useful Improvements in Mirrors; 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 pertains to make and use
10 it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in folding mirrors; and it consists in the combination of a supporting-frame, a pivoted mirror placed therein, projecting hinges secured to opposite edges of the supporting-frame, and two small side mirrors which automatically swing into position both when opened
20 and closed, as will be more fully described hereinafter.

The object of my invention is to provide a large mirror with two small swinging ones which extend at any suitable angle thereto
25 when open, so as to expose every part of a person's body, and which close up against the back of the central mirror, out of the way when not needed.

Figure 1 is a front elevation of a mirror which embodies my invention. Fig. 2 is a plan view of the same, showing the side mirrors open in solid lines and closed in dotted lines. Figs. 3 and 4 are enlarged perspectives of the parts of one of the lower hinges.

35 A represents a suitable supporting-frame in which the large mirror B is pivoted in the usual manner. Secured to opposite edges of the frame A are the projecting hinges C D. The upper hinges C are of ordinary construction; but the lower ones D are especially constructed for the purpose of causing the side mirrors P to swing into position when open, and to automatically close against the back of the large mirror after having been
40 moved outward to a certain distance and exposing the mirrors P, so that by this construction the side mirrors, when folded back of the central mirror, form an additional one, which can be used by persons at the rear of
50 the central mirror while at the same time the central mirror is in use. Where the side mir-

rors fold to the front, as has been the case heretofore, the front mirror is covered by them and cannot be used, as it can be by my construction, and at the same time the
55 side mirrors form an additional one at the back, as shown in dotted lines in Fig. 2. The lower portion F of the lower hinge D is provided with the circular flange G and the central pintle I. The flanges G of the hinges
60 D are provided with the two side depressions G', which gradually rise in either direction, thus forming the projections S at the outer sides of the hinges and the projections J at their inner sides, both of which are in a line
65 with the large central glass. By this construction gradual inclines are formed between the two projections for the purpose hereinafter stated. The upper part L of the lower hinge consists of two concentric flanges,
70 between which a roller O is journaled, and this roller O rolls upon the flange G, formed upon the lower part of the hinge.

As shown, the hinges D and C are secured to the edges of the frame A, and the hinges
75 L, that are secured to the side mirrors, have their pivoted ends turned outward when the glasses are in the position shown in solid lines, Fig. 2, so that when their position is that shown in dotted lines their pivoted ends
80 are turned inward, which construction allows the side mirrors to fold against the back of the mirror close, out of the way and out of sight, leaving the front central mirror free to be
85 used as desired.

As shown in Fig. 4, the roller O is journaled in the part L of the lower hinge opposite the junction of the arm or bracket therewith, so that the roller will rest in the depressions G' when the side mirrors are closed and in the
90 depressions I when open, the projection J in each case acting as a stop, by which means the mirrors are automatically held in either position; hence by combining the curved arm, the roller, and the hinge D in the manner
95 shown they are especially adapted for the purpose and operation hereinafter specified.

When one of the mirrors is moved so that the roller O rests upon the flange G in front of the projection or rise S, it automatically
100 rolls down the incline, striking the stop J and resting in the depression I', which, by means

of the shape of the arm or bracket of the hinge L, holds the side mirror at the proper angle in relation to the central one, thus causing it to automatically assume this position.

5 So if the mirrors are to be closed it is only necessary to move them back so that the roller O rests upon the incline back of the rise or projection S, when from their weight the rollers descend the incline, striking the
10 opposite side of the stop J, and automatically closing against the back of the central mirror, as shown in dotted lines in Fig. 2; hence it will be seen that the form of hinges here shown causes the side mirrors to automati-
15 cally assume the desired positions without the necessity of the operator having to adjust them.

Having thus described my invention, I claim—

20 1. The combination, in a mirror composed of a central mirror and two side mirrors which fold back of it, whereby two mirrors are formed, one front and one back of the supporting central frame, the mirror supported
25 therein, and the two side mirrors, of projecting hinges secured to the edges of the supporting-frame, and projecting arms secured to the side mirrors, having their inner ends pivoted to said hinges and curved outward when they
30 are opened, whereby when they are closed the curve is reversed, thus allowing the side mirrors to close back of the central mirror, substantially as shown and described.

35 2. The combination, with the supporting-frame, the large mirror supported therein, and the side mirrors, of projecting hinges secured to the frame and the side mirrors, one of said hinges provided with two inclines in

a line with and extending toward the supporting-frame, and the other with a roller, 40 whereby the side mirrors will automatically move either forward or backward from a vertical line with the central mirror, thus opening or closing, substantially as specified.

3. The combination, with the supporting- 45 frame, the large mirror supported therein, and the side mirrors, of hinges secured to the said frame, having a rise or projection on its outer side in a line with the length of the central mirror, and inclines extending therefrom to- 50 ward the supporting-frame, arms secured to the side mirrors, having their inner pivoted ends curved outward when they are open, and a roller journaled therein, whereby the side mirrors automatically close and open and fold 55 at the back of the central mirror, for the purpose described.

4. The combination, with the supporting- frame, the large mirror supported therein, the side mirrors, and hinges secured to the said 60 frame, having projections on their outer and inner sides in a line with the length of the central mirror and with inclines connecting them, of arms secured to the side mirrors, and a roller journaled thereon in such relation to 65 the projections and inclines as to cause the side mirrors to automatically open, close, and assume the proper angle to the central mirror when open, for the purpose shown and de- 70 scribed.

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

JOSEPH N. RICHARDSON.

Witnesses:

JOHN N. MEEKER,
JOHN CHIOCCHI.