March 14, 1933. O. HAUSER 1,900,930

PORTABLE MAGNIFIER

Filed Aug. 20, 1931

Fig. 1

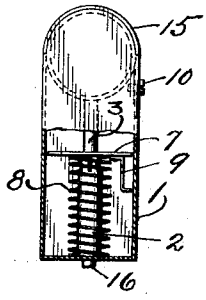


Fig. 2

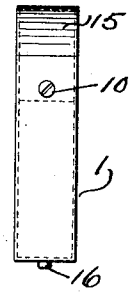


Fig. 3

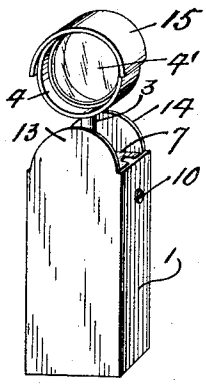
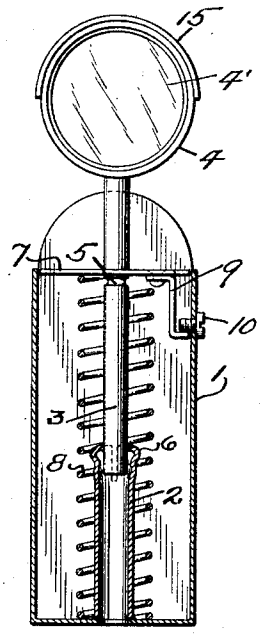


Fig. 4



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UNITED STATES PATENT OFFICE

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PORTABLE MAGNIFIER

Application filed August 20, 1931. Serial No. 558,201.

My invention relates to improvements in portable or pocket magnifiers, and one of the objects thereof is the provision of a device of this character wherein the lens of the magnifier, when the device is not in use, may be completely enclosed in a casing which is practically dustproof and which effectually prevents the lens from becoming scratched or otherwise injured, my device being of such construction that when the device is to be used the lens may be quickly extended.

Other objects of my invention will be manifest from the following description and the accompanying drawing, in which:

Fig. 1 is a front elevation of my device partly in section;

Fig. 2 is a side elevation of the same;

Fig. 3 is a view in perspective with the device ready for use; and

Fig. 4 is a part sectional view similar to Fig. 1 but with the lens extended.

Referring to the drawing in detail, 1 designates a rectangular casing or enclosure having a sleeve or tube 2 within the same and suitably secured to the bottom thereof. This tube terminates short of the outer end of the casing and is adapted to telescope a lens mount supporting shaft or rod 3 which carries at its upper extremity a lens mount or ring 4 and lens 4'. The supporting shaft or rod 3 is provided intermediate its ends with an annular groove 5 which is adapted to be received by fingers 6 formed on the upper end of the tube 2 by beading this end of the tube and splitting the same longtiudinally. The shaft 3 extends through and has secured thereto a plate 7.

Within the casing or enclosure 1 and surrounding the tube 2 and rod 3 is a helical spring 8 one end of the spring bearing against the bottom of the container or casing and the other end bearing against the plate 7.

The plate 7 also carries a bracket 9 adapted to engage a set screw or stop 10 provided in the wall of the casing 1. The side plates of the casing are extended upwardly and shaped to provide semi-circular wings or flanges 13 and 14, while the lens mount 4 is provided with a curved cover plate 15 as shown in Fig. 3.

With the parts in the position of Fig. 4 the device is ready for use. When the device is not in use pressure is applied to the cover 15 to push the lens mount, plate 7 and rod 3 downwardly until the fingers 6 enter the groove 5 to latch the shaft and hence the lens and its mount in inward or closed position. With the parts in this position the lower or inner end of the shaft 3 will project slightly below the bottom of the casing 1, as shown in Fig. 1.

It will be seen that the lens is now completely enclosed and the device may be carried in the pocket or tool box without danger of scratching or otherwise injuring the lens.

When it is desired to use the device again it is merely necessary to press on the projecting portion 16 of the shaft or rod 3, forcing the groove 5 out of engagement with the spring fingers 6, whereupon the spring 8 will force the shaft and the parts carried thereby outwardly until the bracket 9 engages the stop screw 10.

It will be appreciated of course that if desired the stop bracket 9 may be dispensed with and the plate 7 employed as the stop, in which event the small cut-out in the plate shown in Fig. 3 will be omitted and the screw 10 inserted above the plate.

What I claim is:—

In combination a casing or container, a sleeve within the container secured to the bottom thereof, a shaft or rod movable axially of the container, a plate carried by said rod and maintaining the same in line with said sleeve, a groove in the shaft cooperable with spring fingers provided by said sleeve when the shaft is in its innermost position, a spring placed under compression by the inward movement of said shaft and held compressed

by the engagement of said fingers with the groove in said shaft, stop mechanism limiting outward movement of the shaft under the action of said spring, a lens mount carried at the outer end of said shaft, a lens carried by said mount, and a cover for the container carried by said lens mount, the permitted inward movement of said shaft being sufficient to move the lens into the container and said cover to closed position.

This specification signed this 14th day of August, 1931.

OSCAR HAUSER.