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MAGNIFYING LENS AND MEANS FOR SUPPORTING IT

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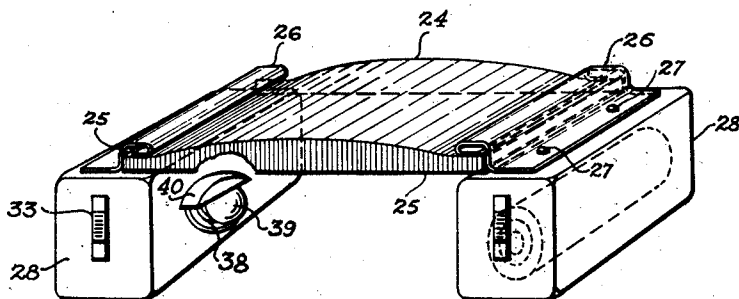


Fig. 1

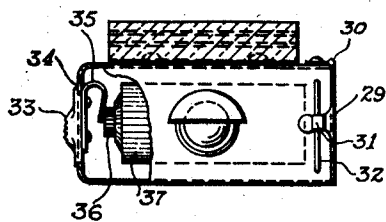


Fig. 2

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MAGNIFYING LENS AND MEANS FOR
SUPPORTING IT

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3 Claims. (Cl. 88—39)

This invention relates to magnifiers, and in particular, to supported magnifiers, preferably made of synthetic materials.

One object of this invention is to provide a magnifier, preferably of synthetic non-breakable material, and having supports secured in depressions in the lens.

Another object is to provide a cylindrical magnifier having supports with the ends thereof secured in drilled portions running parallel with the cylindrical axis of the lens.

Another object is to provide a magnifying lens having supports with illuminating means associated therewith, such as an incandescent bulb connected to a source of electricity.

Another object is to provide a cylindrical magnifier of synthetic non-breakable material, wherein the supports are secured in sockets in the ends of the lens, with means optionally provided for releasably holding the supports in one position.

In the drawing:

Figure 1 is a perspective view of a modified form of magnifier having illuminating devices in one or more of the supports thereof.

Figure 2 is a central vertical section through the magnifying lens shown in Figure 1, with one of the supports partly broken away to disclose the interior.

In the form shown in Figures 1 and 2 the magnifying lens 24 is provided with flattened portions 25 at its opposite edges. These flattened portions serve for the engagement of clips 26 secured, as by the rivets 27, the hollow supports 28. The hollow supports 28 are provided with cover plates 29 hinged, as at 30, to the support and with a latch member 31 cooperating with a projection 32 to maintain the cover plates 29 in a closed position. At the opposite end of the support 28 is a sliding switch member 33, mounted in an aperture 34 and having a spring clip 35 adapted to engage and disengage the pole 36 of a dry cell battery 37 mounted within the interior of the support 28. The support 28 is provided with a socket 38 adapted to receive an incandescent bulb 39, optionally provided with a shade or hood 40. The socket 38 may be formed integral with the metal walls of the support 28 and the bottom of the bulb 39 connected to the metal casing of the battery 37. This device enables the user to read the print or view the magnified object even in the darkness. If desired, the supports 28 may be detached from the lens after use so that the entire apparatus may be packed in small space.

The lens 24 itself is preferably made of a non-breakable substance, particularly a synthetic plastic material, such as a synthetic resin. One such material which has been found satisfactory for this purpose is a synthetic resin of the acrolein type, derived from coal tar, and sold in the British market under the trade name of "Resin M". This resin is water-white and thermoplastic, readily softening at about 248 degrees F. It is exceedingly tough, does not chip, does not break when dropped, has a high tensile strength and can be machined, turned, cut, molded or extruded. When molded, the material comes from the mold with a brilliant polish, requiring little or no additional polishing. This resin has a high resistance to water, is not affected by dilute acids, and is resistant to alkalies and alcohols. Other synthetic plastics which may be used are the urea-formaldehyde condensation products known by the trade names of "Pollopas", "Plastopal" and "Shellan".

It will be understood that I desire to comprehend within my invention such modifications as come within the scope of the claims and the invention.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. A magnifier comprising a magnifying lens having a pair of block-like supports secured to both edges thereof, an illuminating device associated with at least one of said supports, and a battery for providing electrical energy for said illuminating device arranged within at least one of said supports.

2. A magnifier comprising a cylindrical magnifying lens having a pair of block-like supports secured to a pair of opposite side edges, and an illuminating device associated with at least one of said supports and a source of electrical energy in at least one of said block-like supports and having an electrical connection to said illuminating device.

3. A magnifier comprising a cylindrical magnifying lens with a pair of hollow block-like supports secured to a pair of opposite side edges, an illuminating device mounted on the inner wall of each support, and a source of electrical energy within each of said supports.

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