TELESCOPIC SIGHT LENS COVER

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Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

Fig. 8

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TELESCOPIC SIGHT LENS COVER

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This invention relates to new and useful improvements in lens covers and more particularly and specifically to covers for telescopic gun sight lenses and the like of which the following is a specification.

The primary object of this invention is the provision of an arrangement carried at each end of a telescopic sight casing which enables the lens at each end thereof to be covered when desired and a quick releasing means common to both of said covers adapting them to be instantly and positively opened when desired.

Another object of this invention is the provision of a lens covering arrangement of the character described which may be easily incorporated on a telescopic sight for easy and positive operation in such a manner and of such a construction so as not to interfere with the mounting of the sight on a gun in a conventional manner.

Another and still further object of this invention is the provision of a device of the character described which is of such a construction and operation that it gives full and complete protection to the lens of the sight preventing the contact of any foreign matter therewith at any time when the covers are in a closed position.

Still another object and advantage of this invention is the provision of a lens covering arrangement of the character described which is of an extremely simple, durable and inexpensive design and which may readily be manufactured as an integral part of a telescopic sight or the like, or which may be readily manufactured as an individual unit adapted for easy application to a sight.

Still further improvements and advantages of this invention will readily appear to those skilled in the art when the following description is read in the light of the accompanying drawings in which:

Fig. 1 is a side elevation of a sight with cover assembly thereon.
Fig. 2 is a bottom plan view of Fig. 1.
Fig. 3 is a top plan view of the release rod.
Fig. 4 is a partial vertical side section of the release rod and mechanism.
Fig. 5 illustrates a modified form of the lens cover assembly.
Fig. 6 is an end view of the lens cover.
Fig. 7 is an end view of a modified cover.
Fig. 8 is an exploded structure for a flared lens.

Referring now to the accompanying drawings which illustrate the preferred embodiment of this invention, together with modified structures therefor, and in which like numerals indicate similar parts throughout the drawings A designates the elongated tubular casing comprising the body of a telescopic sight which is provided within each end thereof with sight lenses 1 and 2.

Each end of the casing A is provided with a sleeve 3 thereabout which extends slightly beyond the end of the casing. These sleeves are secured by means of a sweat or shrink fit to rigidly position them in place about said casing.

Each of said sleeves is provided with a cover plate 4 which carries a circular bevel edged rubber stopper 5 centrally on the inwardly disposed face thereof adapted to be resiliently inserted within the rim of the sleeve 3 on that end to secure and tightly enclose the lens therewith. Each of the cover plates 4 are provided at one point on their circumference with a pair of spaced radially extending ears 6 which are adapted to be pivoted on a spring hinge 7 formed at the top of said sleeve at an adjacent position to the cover plate and in a longitudinal center along the top thereof adapting said cover plate to be normally resiliently retained in a hinged open position swung back to an adjacent position on the top of said casing.

Each of said cover plates carry an extended circular catch button 8, diametrically opposite said hinge, which protrudes downwardly from said cover below the edge of said sleeve in a longitudinal center-line along the bottom of said casing.

A pair of elongated plates 9 and 10 are secured one beneath each end of the sleeves 1 and 2 respectively in alignment with said catch buttons 8 by a plurality of rivets 11 or the like secured through the inner ends thereof upwardly into said sleeve.

The plate 8, at the rearward end of said casing, is provided with an arrowhead shaped aperture 12 in the center thereof which points outward the end thereof to terminate in a restricted slot 13 provided intermediate its length with an enlarged circular notch 14 therein.

The second plate 18 of the pair of plates is provided with a figure 8 aperture 18 therein with a restricted slot 19 joining the two halves of the figure 8 aperture and a restricted slot 20 opening out from the outer half through the outer end thereof in a notched construction identical to that described at the first end.

Thus when said cover plate, at the rearward end of said casing, is swung to a closed position the circular catch button 8 thereon will be forced inward said restricted slot, which will separate
resiliently to admit said button, until it comes to 6 resilently to admit said button, until it comes to rest in the circular notch therein when said resilient jaws will close said slot retaining said button within said notch and locking said cover in a closed position.

An elongated flat blank 15 of a metallic material is slidably mounted beneath the sight casing, in direct alignment beneath said plates 9 and 10, by means of a pair of elongated slots 16 and 17 which are provided therein at equally spaced distances one from each end of said blank, and which engage a headed set screw 48 or the like secured in a depending position from each of the secured ends of said plates 9 and 10.

Each end of said blank 15 is provided with a raised triangular button 21 on the upper surface thereof with the apex 22 thereof both disposed toward the rearward end of said sight.

When the blank strip 15 is secured slidably beneath the sights in the manner heretofore described the triangular button 21 at the rearward end of the strip is adapted to be received in the arrowhead aperture 12 while the second button 21 at the forward end of the strip is inserted upwardly into the outer half of the figure 8 aperture 18.

The center of the blank strip 15 is provided with a reinforced section 23 which carries a central circular catch button 8 for the purpose described. The remaining modification directed to Fig. 8 carries the circular catch button for the purpose described.

The remaining modification directed to Fig. 8 illustrates an enlarged flared sleeve construction 69 adapted to be fitted to a flared lens 61 type sight, and the strip band 16 is bent as at 52 to allow it to remain in a flush working condition relative to the sleeve bottom for proper operation of the cover release in the manner described.

Thus it may be seen that a new and improved cover and cover release mechanism for telescopic sights has been provided.

Having thus described the construction and function of this invention and with full belief that modifications in size, materials, and general characteristics would not constitute a departure from the spirit of this invention what I desire to claim in Letters Patent is:

1. In a telescope sight of the type involving an elongated tube containing lenses at its opposite ends and hinged covers spring pressed to normally occupy open positions and adapted to be manually moved into closing relation to the ends of said tube; the improvement of combined retaining and releasing mechanism for said covers, said mechanism comprising projections on said covers, spring closed gripping elements on said tube between which said projections forcibly engage as the covers are moved from open to closed positions whereby the covers are retained in their closed positions, a rod mounted along said tube for endwise movement and normally occupying a starting position, said rod having openers at the opposite ends arranged upon movement of said rod in one direction away from its starting position to engage and separate said spring closed gripping elements and thereby release said projections and permit said covers to resume their open positions, said spring closed gripping elements comprising a pair of spring arms secured at one end to said tube and tensioned toward each other, the free ends of said spring arms having closely spaced edges formed with facing notches to retainably embrace said projections while said arms are closed toward each other, the outward ends of said edges being flared to provide entrance therebetween of said projections as said covers are moved into their closed positions the inner edges of said arms between said outward ends and the secured other ends being in the shape of wedges complementary to said openers on said rod.

2. In a telescope sight of the type involving an elongated tube containing lenses at its opposite ends and hinged covers spring pressed to normally occupy open positions and adapted to be manually moved into closing relation to the ends of said tube; the improvement of combined retaining and releasing mechanism for said covers, said mechanism comprising projections on said covers, spring closed gripping elements on said tube between which said projections forcibly engage as the covers are moved from open to closed positions whereby the covers are retained in their closed positions, a rod mounted along said tube for endwise movement and normally occupying a starting position, said rod having openers at the opposite ends arranged upon movement of said rod in one direction away from its starting position to engage and separate said spring closed gripping elements and thereby release said projections and permit said covers to resume their open positions, said spring closed gripping elements comprising a pair of spring arms secured at one end to said tube and tensioned toward each other, the free ends of said spring arms having closely spaced edges formed with facing notches to retainably embrace said projections while said arms are closed toward each other, the outward ends of said edges being flared to provide entrance therebetween of said projections as said covers are moved into their closed positions the inner edges of said arms between said outward ends and the secured other ends being in the shape of wedges complementary to said openers on said rod.
at one end to said tube and tensioned toward each other, the free ends of said spring arms having closely spaced edges formed with facing notches to retainably embrace said projections while said arms are closed toward each other, the outward ends of said edges being flared to provide entrance therebetween of said projections as said covers are moved into their closed positions, said cam portions on said gripping elements comprising wedge surfaces on the inner edges of said spring arms, and said openers comprising wedges on said bar positioned between the related spring arms and arranged to operatively engage between the related wedge surfaces as said bar is moved in said one direction from its starting position to spread the said edges on the free ends of said arms away from each other so as to release the projections from said notches, release of manual pressure upon said bar then permitting said wedge surfaces to act upon said wedges in a manner to move said bar toward its starting position.

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