This invention relates to new and useful improvements in eye piece and lens covers for gun scopes and binoculars, and more specifically to an improved eye piece and lens cover which need not be removed from the gun scope or binocular when it is desired to use the same.

In order to prevent damage to either lens or covering plates and to prevent the entrance of dust and other foreign matter, it is customary to provide gun scopes and binoculars at both the lens ends thereof and at the eye pieces with covers. However, these covers have the disadvantage that in that when it is desired to utilize the gun scope or binoculars, it is necessary to remove the covers. This is a decided disadvantage, particularly with respect to gun scopes inasmuch as a hunter must first reach over and remove the cover and then find some place to put the cover otherwise it will be lost.

It is therefore the primary object of this invention to provide a cover for binoculars and gun scopes which is of such a nature whereby it may remain on the gun scope or binoculars at all times and at the same time is so constructed whereby it may be immediately operated so as to permit full viewing through either the gun scope or binocular.

Another object of this invention is to provide a cover for gun scopes and binoculars, the cover including a tubular body portion engageable over either the gun scope or binocular and an end wall, the end wall being hingedly mounted whereby it may be readily removed to an out of the way position.

A further object of this invention is to provide an improved cover for gun scopes and binoculars, the cover including a resilient tubular body portion which may be readily slipped over either a binocular or gun scope end and which will be retained in place by the body member, the body member having hingedly secured thereto an end wall normally closing the opposite end of the body member, the end wall being spring urged outwardly to a position out of alignment with the body member and there being a catch for normally retaining the end wall in a body member closing position.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a fragmentary perspective view of a gun having mounted thereon a scope, opposite ends of the scope being provided with covers which are the subject of this invention;

Figure 2 is an enlarged fragmentary sectional view taken through the cover of Figure 1 along the section line 2—2 and shows the specific construction of the cover and the relationship thereof with respect to the gun scope, the cover having the end wall thereof in a closed position;

Figure 3 is an enlarged fragmentary sectional view similar to Figure 2 and shows the end wall swung to an out-of-the-way position; and

Figure 4 is a perspective view of the metallic components of the cover with the end wall in an out-of-the-way position.

Referring now to the drawings in detail, it will be seen that there is illustrated in Figure 1 a conventional type of gun 10 which has mounted thereon a conventional type of gun scope 12. Mounted on and normally closing opposite ends of the gun scope 12 are covers 14 conforming to the present invention.

As is best shown in Figures 2 and 3, the cover 14 includes a tubular body member 16 and an end wall 18. The tubular body member 16 is preferably formed of two layers 20 and 22 of resilient material, such as rubber or flexible plastics. The right hand ends of the layers 20 and 22 are suitably bonded together whereas the left hand ends thereof, as viewed in Figures 2 and 3, are separated and have positioned therein a reinforcing ring 24. The reinforcing ring 24 is completely encased between the layers 20 and 22. Further, the layers 20 and 22 may be suitably bonded to the reinforcing ring 24.

The end wall 18 includes a reinforcing plate 26 which is circular in outline, as is best shown in Figure 4. The reinforcing plate has bonded to opposite sides thereof layers 28 and 30 of a cushioning material. The layers 28 and 30 are preferably formed of the same material as the layers 20 and 22 and thus will be formed either of rubber or a flexible and resilient plastic.

Secured to the reinforcing plate 26 is one leaf 32 of a hinge member which is referred to in general by the reference numeral 34. It is preferred that rivets 36 be used for the purpose of securing the hinge leaf 32 to the reinforcing plate 26, although other fasteners may be utilized.

The hinge member 34 also includes a second hinge leaf 38 which is preferably secured to the reinforcing ring 24 by means of rivets 40 although other fasteners may also be used in making this connection. It is to be noted that a major portion of both the hinge leaf 32 and the hinge leaf 38 are encased within the layers 25 and 30 and 20 and 22, respectively.

The hinge member 34 also includes a hinge pin 42 which extends through the hinge leaves 32 and 38 and pivotally connects the two together. It is to be noted that intermediate portions of the hinge leaves 32 and 38 are cut away and there is mounted on the central portion of the hinge pin 42 a spring member 44. The spring member 44 is so constructed whereby it normally urges the hinge member 34 to the position illustrated in Figures 3 and 4. Thus the end wall 18 is normally urged to an out-of-the-way position so that it does not hinder the sighting through the gun scope 12.

Disposed diametrically opposite to the hinge member 34 is a catch member which is referred to in general by the reference numeral 46. The catch member 46 includes a spring clip 48 which is secured to the reinforcing ring 24 by means of a rivet 50. The spring clip 48 extends forwardly from the reinforcing ring 24 and terminates in a catch element 52 which is secured to the spring clip 48 by means of an integral rivet 54. The catch element 52 is engageable with the lower part of the reinforcing plate 26, as is best shown in Figure 2, to retain the end wall 18 in alignment with the body member 16 so that it will close the body member 16 when it is desired.

Inasmuch as the mating surfaces of the body member 16 and the end wall 18 are resilient, it will be seen that when the end wall 18 is in the closed position of Figure 2, a seal will be formed between the end wall 18 and the body member 16. Thus the cover 14 will have the same effective sealing qualities as conventional one-piece covers now in use. Furthermore, since it is merely necessary to depress the spring clip 48 of the catch member 46 to release the end wall 18 and since the end wall 18 is
mounted by means of a spring hinge incorporating the spring 44, movement of the cover 14 to an inoperative position can become almost an automatic one. This is very desirable in the case of gun scopes inasmuch as it is desired in most instances to protect the gun scope except when in use. However, when a target is found it is desired that the gun scope may readily be made available for use.

While the invention has been illustrated and described with respect to a gun scope, it is to be understood that the invention is not intended to be so limited. The same type of cover may be used in conjunction with binoculars. Also, there are many optical instruments, including cameras, which may readily make use of the cover which is the subject of this invention.

What is claimed as new is as follows:

1. A lens and eye piece cover for gun scopes and binoculars comprising a resilient tubular body member for telescoping engagement over scopes and binoculars, an end wall for closing one end of said body member, a hinge member hingedly connecting said end wall to said body member, spring means urging said end wall to a position out of alignment with said body member, and a releasable catch on said body member for retaining said end wall in a body member closing position, said body member including a continuous reinforcing ring adjacent said end wall, said hinge member and said catch being secured to said reinforcing ring, said reinforcing ring being entirely encased in the material of said body member.

2. A lens and eye piece cover for gun scopes and binoculars comprising a resilient tubular body member for telescoping engagement over scopes and binoculars, an end wall for closing one end of said body member, a hinge member hingedly connecting said end wall to said body member, spring means urging said end wall to a position out of alignment with said body member, and a releasable catch on said body member for retaining said end wall in a body member closing position, said body member including a continuous reinforcing ring adjacent said end wall, said hinge member and said catch being secured to said reinforcing ring, said reinforcing ring being completely encased in the material of said body member, said end wall including a reinforcing plate completely covered by a cushion material, said hinge member being secured to said reinforcing plate.

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