

(No Model.)

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OPERA GLASS HOLDER.

No. 478,350.

Patented July 5, 1892.

Fig: 1.

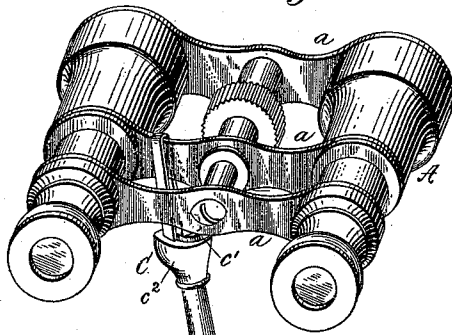


Fig: 2.

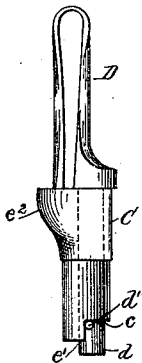


Fig: 3.

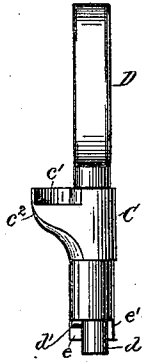


Fig: 5.

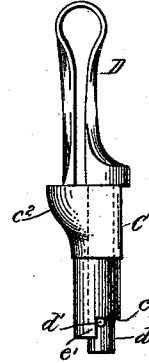


Fig: 4.

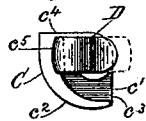
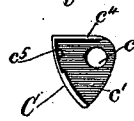


Fig: 6.



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UNITED STATES PATENT OFFICE.

ANDREW B. NICHOLSON, OF NEW YORK, N. Y.; ETHEL F. NICHOLSON ADMINISTRATRIX OF SAID ANDREW B. NICHOLSON, DECEASED.

OPERA-GLASS HOLDER.

SPECIFICATION forming part of Letters Patent No. 478,350, dated July 5, 1892.

Application filed February 21, 1891. Renewed May 27, 1892. Serial No. 434,684. (No model.)

To all whom it may concern:

Be it known that I, ANDREW B. NICHOLSON, a citizen of the United States, and a resident of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Opera-Glass Holders, of which the following is a specification.

My invention, while relating to opera and marine glass holders or supporters generally, has reference more particularly to that form of such devices which is employed in connection with opera-glasses to hold them to the eyes without necessitating the raising of the hand and arm to an inconvenient height and when in use is applied to one or the other of the transverse bars thereof. In holders of this class as heretofore constructed the transverse bar of the glass has either been clutched and held by a cylinder having a bifurcated notch or slot in its upper end and a co-operating hook formed on the upper extremity of a piston which is fitted to slide in said cylinder and be normally held with its hook drawn toward the bifurcated notch or slot by a spring suitably applied in connection therewith or else clamped between the tines of the longitudinally-forked upper extremity thereof. These constructions, while efficient in operation and serving to hold the opera-glass when the parts are new and in good condition, soon become impaired and rendered unreliable when subjected to frequent and constant use, principally because of the fact that the spring which draws the hook toward the bifurcated notch or slot in the one case and the tines which clamp the bar in the other after a short time lose their resiliency, and in consequence thereof the parts fail to hold the glass, allowing it to detach itself therefrom when in use, and thereby rendering it extremely liable to become broken.

The object of my invention is to obviate this defect and provide a means for engaging with the bar of the opera-glass, which, while simple in construction and not liable to get out of order, shall when applied thereto be securely locked in place and positively hold the bar therein without liability of its accidental detachment therefrom.

To this end the invention consists, first, in the peculiarities of construction of the de-

vices themselves, by means of which the holder is engaged with a transverse bar of the opera-glass; second, in the combination of such devices with the handle of the holder; third, in various other constructions and combinations of parts, all as will hereinafter more fully appear.

Referring to the accompanying drawings, which form a part of this specification, Figure 1 is a view of an opera-glass with a holder constructed in accordance with my invention applied thereto; Figs. 2 and 3, front and side views, respectively, of the devices by means of which the transverse bars of the opera-glass is engaged by the holder; Fig. 4, a plan or top view thereof. Fig. 5 is a side view of the opera-glass engaging devices of a slightly-modified construction, and Fig. 6 a plan or top view of a socket of a modified construction with the shackle or bow removed.

In all figures like letters of reference are employed to designate corresponding parts.

A indicates an opera-glass of any ordinary or well-known construction, having the usual transverse bars *a*, and B indicates the handle of my improved holder. As here shown, this handle consists of two tubular sections, which are telescopically united, whereby to permit of its being lengthened when the holder is in use and of being subsequently shortened when it is desired to stow or pack the holder in the opera-glass case or otherwise; but any other form or construction of handle may be employed in lieu thereof without in any way affecting my invention. Secured to the upper end of the handle B is a socket C, which is provided with a cylindrical orifice *c*, extending longitudinally of the same, and with a groove *c'*, formed in its upper end. In the construction of this socket any ornamental or appropriate design may be adopted, it only being essential that the upper end thereof shall be of such form and the groove and orifice so located therein that the arc of the groove if prolonged or continued will at some point pass to a considerable distance outside of the same and at another pass wholly within it. I prefer, however, to make this socket of substantially cylindrical form, and to provide it near its upper end with an enlargement or projection *c²* for reception of the

groove c' , whereby to dispose it at such distance from the orifice c that if its arc were continued it would pass some distance outside of that portion of the upper end of the socket which is unprovided with the enlargement or projection c^3 . As thus constructed the groove c' , which is widened somewhat at its outer end, enters the enlargement or projection at the point c^3 , and, passing around the orifice c , is terminated by an abutment c^4 , near which it is provided in its outer face with a shallow recess c^5 . In my preferred form of construction this groove in passing around the orifice c gradually approaches the same in spiral form—as shown, for instance, in Figs. 1, 4, and 6. This particular form of groove, however, or the presence of the abutment c^4 is not essential to my invention, as it is obvious that the former may be modified and even made concentric to the orifice c or the latter wholly omitted without in any way affecting the same.

Fitted to the orifice c so as to be free to rotate therein is the journal d of the bow or shackle D, which, with the socket C, constitutes the devices by means of which the holder is secured to the transverse bar of the glass. This bow or shackle is preferably constructed of an inverted-U form with the journal d depending from one of its legs in substantial prolongation thereof, and when arranged with this journal in the orifice c and with the bow or shackle in its locked position the lower free end of the outer leg extends down into the groove c' and rests in the recess c^5 , in which location it is positively held by its engagement therewith. In the construction of this bow or shackle the legs thereof will be made of the proper length to receive between them and accommodate any one of the transverse bars of an opera or other desired glass and of the proper form to insure the outer free end of the bow or shackle springing out into the recess c^5 when brought into relation therewith and of yielding to permit of its being removed therefrom when the bow or shackle is to be rotated in the orifice c to release the glass or to place it in the proper position to receive another.

The inverted-U form of bow or shackle illustrated in Figs. 1 to 4 will in most cases be found sufficient. When, however, greater yielding capacity is required, I sometimes find it convenient to enlarge the portion of the bow or shackle joining the upper end of the legs, so as to give it a circular form, as shown in Fig. 5; but this is a refinement and not considered essential to my invention.

To limit the rotary motion of the bow or shackle and afford a stop to its further movement when opened to receive a glass or closed to hold one, various means may be employed. I prefer, however, to make use of a pin d' , which projects from the journal d , and, entering a recess formed in the lower end of the socket C, not only prevents the withdrawal of the bow or shackle from the socket when

arranged in the latter, but by engaging with one or the other of the vertical walls e e' also limits its rotary motion therein.

The holder being constructed substantially as above set forth, its operation is as follows: The bow or shackle will first be turned into the position shown by dotted lines in Fig. 4, the pin d' in the journal d engaging with the wall e' , preventing its further rotation in that direction. The outer leg of the bow or shackle, being then free from the groove c' , will be passed over the transverse bar of the opera-glass and then rotated back into the position shown in full lines in said figure, the result of which rotation will be to carry the lower free end of the outer leg of the bow or shackle around in the groove c' until it reaches the recess c^5 , when its further rotation will be arrested either by the said free end striking the abutment c^4 or by the pin d' engaging with the wall e , and the glass will be thereby clamped and positively locked in that position. The removal of the glass from the holder will be accomplished, when desired, by pressing the lower free end of the outer leg out of engagement with the recess c^5 and rotating the bow or shackle in the direction first above mentioned and detaching the glass therefrom. It will thus be seen that I produce a holder for opera and other glasses which not only obviates the objections incident to those heretofore in use, but which also attains other and further advantages not necessary to enumerate herein.

In the foregoing I have described the best means contemplated by me for carrying my invention into use; but I wish it distinctly understood that I do not limit myself strictly thereto, since it is obvious that the same may be modified in various ways without departing from the spirit thereof—as, for instance, instead of making the bow or shackle in one piece, as above described, I may make it of two pieces and joint it at its upper end by a knuckle or other other suitable joint. Again, instead of securing my improved holding devices to the body B, I may, if I so desire, adapt them to be applied to the upper end of a cane or to the handle of an umbrella. Furthermore, instead of retaining the inner walls of the groove c' , I may remove the same entirely, as shown, for instance, in Fig. 6, leaving only the outer walls thereof, and still be within the scope of my invention, the shoulder on the lower end of the leg of the bow or shackle upon which the journal d is formed resting in such case in the bottom of said groove.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination, with a socket provided with a portion that is adapted to engage with and be thereby secured to a handle, cane, or other equivalent support, of a bow or shackle jointed to said socket, whereby to turn upon an axis longitudinally thereof, and means for

locking such bow or shackle in one of its extremes of movement, substantially as described.

2. The combination, with a socket provided with a cylindrical orifice extending longitudinally of the same and a handle, of a bow or shackle arranged to turn in said socket and means for locking it in one of its extremes of movement, substantially as described.

3. The combination, with a socket provided with a cylindrical orifice and a handle, of a bow or shackle journaled in said orifice and a stop whereby to limit its movements, substantially as described.

4. The combination, with a handle and a socket provided with a cylindrical orifice arranged longitudinally therein and with a groove formed in its upper end, of a bow or shackle journaled in said orifice with its outer free end extending down in such groove, substantially as described.

5. The combination, with a handle and a socket provided with a cylindrical orifice ar-

ranged longitudinally therein and with a groove formed in its upper end and provided with a recess in its side, of a bow or shackle journaled in said orifice with its outer free end extending down into such groove and engaging with the recess when the bow or shackle is in one of its extremes of movement, substantially as described.

6. The combination, with a handle B and a socket secured to its upper end and provided with a cylindrical orifice arranged longitudinally therein and with a groove formed in its upper end, of a bow or shackle journaled in said orifice with its outer free end extending down into such groove, substantially as described.

In testimony whereof I have hereunto set my hand this 23d day of January, 1891.

ANDREW B. NICHOLSON.

Witnesses:

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ROBT. W. WATERBURY.