No. 877,313. PATENTED JAN. 21, 1908.

J. M. FAEHRMANN.

TOURIST'S GLASS.

APPLICATION FILED SEPT. 6, 1907.

Fig. 1.

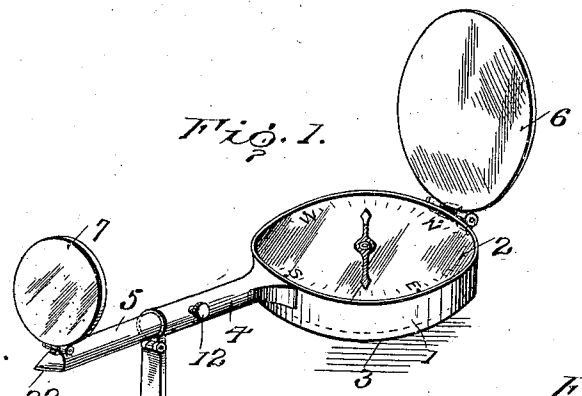


Fig. 2.

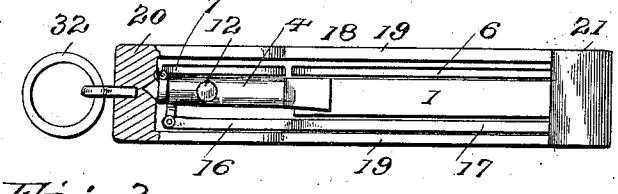


Fig. 3.

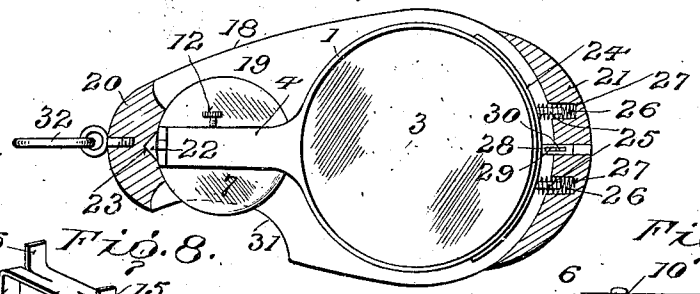


Fig. 8.

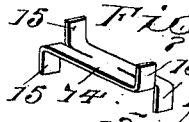


Fig. 4.

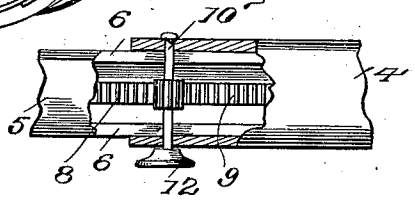


Fig. 6.

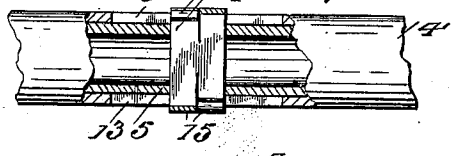


Fig. 5.

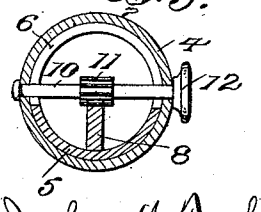
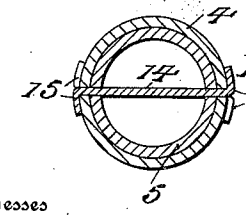


Fig. 7.



Witnesses

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TOURIST'S GLASS.

No. 877,313. Specification of Letters Patent. Patented Jan. 21, 1908.

Application filed September 6, 1907. Serial No. 391,735.

To all whom it may concern:.

Be it known that I, JOHN M. FAEHRMANN, a citizen of the United States, residing at Houston, in the county of Harris and State of Texas, have invented certain new and useful Improvements in Tourists' Glasses, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to improvements in tourists' glasses, and is particularly intended for the use of tourists, hunters, ranchmen, botanists, mineralogists, and analogous purposes, the object of which is to combine with a compass a plurality of instruments particularly adapted for the aforesaid persons and purposes.

In the accompanying drawings, Figure 1, is a perspective view of my improved instrument showing the several parts unfolded or open. Fig. 2, is an edge view of my invention showing the several parts folded and placed in a carrying case. Fig. 3, is a side elevation of my invention showing it in a carrying case. Fig. 4, is a sectional view showing means for adjusting one of the lenses of the distance glass. Fig. 5, is a cross-sectional view of Fig. 4. Fig. 6, is a sectional view showing a modified form of device for permitting the adjustment of the lens of the distance glass. Fig. 7, is a cross-sectional view of Fig. 6. Fig. 8 is a detached perspective view of the split member or stem for limiting the movement of the member which carries one of the lenses of the distance glass.

In carrying out my invention I provide a main or body portion 1, preferably of circular form, and in one side of this body portion I form or provide a compass 2 and on the opposite side the body portion is provided with a mirror 3 indicated in dotted lines, Fig. 1. Projecting laterally from the edge of the main or body portion 1 is a hollow arm or tube 4, and telescoping within this tube 4 is an adjustable tube 5. Hinged to the edge of the body portion 1 directly opposite the tube 4 is a lens 6, and this hinge is so constructed that the lens may fold down over the compass, as shown in Fig. 2, but cannot go beyond the vertical position shown in Fig. 1. Hinged to the outer end of the telescoping or adjustable tube 5 is a second lens 7, and this lens is adapted to be folded inward over the tube 4, as shown in Fig. 2, but cannot swing outward beyond a vertical position. When the lenses 6 and 7 are in the vertical position shown in Fig. 1 they form a distance glass.

The adjustment of the tube 5 within the tube 4 may be accomplished in various ways, two of which are here illustrated. In Figs. 4 and 5 one form is shown and it consists in providing the adjustment tube 5 with a centrally arranged web 8 which has its upper edge provided with gear teeth 9, and journaled in the stationary tube 4 is a pinion-shaft 10 carrying at an intermediate point a pinion 11 adapted to mesh with the teeth 9, and on one end of the shaft 10 is a thumb-handle or screw 12, by which the shaft is rotated and the tube 5 moved in and out for focusing the distance glass in a manner well understood. To permit the movement of the adjustable tube 5 past the pinion shaft 10 it is cut out at its upper portion, as shown at 6.

A modified form for permitting the adjustment of the tube 5 is shown in Figs. 6 to 8, and consists in providing one of the tubes with longitudinal slots 13, and the other tube with a transverse member 14. This transverse member is formed from a stem of sheet metal longitudinally split from opposite ends, and the bifurcated portions 15 turned in opposite directions, as shown, and engaging the outer wall of the outer tube with tension so that the tubes are prevented from having any lost motion in a lateral direction.

Hinged to the tube 4 and extending in a direction opposite the lens 7 is a member 16 which carries at its outer end a lens 17. This member, when in the position shown in Fig. 1, forms a handle for the instrument, and especially when being used as a distance glass. It is also adapted to be folded inward against the mirror 3, as shown in Fig. 2, and when so folded the mirror 3 becomes a magnifying mirror, and is particularly useful for a person to critically examine the eye, or other portion of the body which can only be examined with the use of a mirror. This will be particularly useful to the character of persons hereinbefore mentioned, who are oftentimes alone, and therefore need to critically examine an injured eye or other portion of the body visible to him only by means of a mirror. The lens 17 is also adapted to be used as an ordinary magnifying glass, and the mirror 3 as an ordinary mirror.

An instrument of the kind herein shown and described combines in a single device a

plurality of instruments which are the necessary equipment of persons of the character herein referred to, and will therefore be found exceedingly useful to them. It will also be understood that the instrument may be used by other persons, in that it combines the several devices in a single instrument. When the distance glass is being used, the compass will indicate to the user the direction he is looking through the glass.

For the purpose of protection to the instrument when not in use I provide a case 18 which consists of the side member 19 and the end members 20 and 21. The instrument is adapted to be placed in this case, as shown in Fig. 2, and it is held in this case by means of the following construction. The outer end of the tube 5 is provided with a pointed projection 22 adapted to engage a recess 23 formed in the head 20, and the opposite edge of the body 1 is adapted to engage a spring actuated plunger or member 24, as clearly shown in Fig. 3. The spring actuated plunger 24 is provided with outwardly-projecting pins 25 around which pass spiral springs 26, and these springs have their outer ends resting in recesses 27 formed in the head 21. Also projecting from the plunger 24 is a stem 28 which is provided with a slot 29 through which a pin 30 passes, by means of which the follower is held in its proper position. For the purpose of enabling the instrument to be readily removed from the case, the sides of the case are cut out as shown at 31, whereby the projection 22 can be forced from the recess 23, and thus release the instrument and permit it to be readily removed. The head 20 is provided with a ring 32 by means of which the case may be attached to a suitable chain.

The instrument in its folded position is adapted to be carried in the pocket, and the case containing the instrument is also constructed to be carried in the pocket of the user.

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

1. An instrument of the character described, comprising a body portion having a compass in one side thereof, a lens attached directly to one edge of the body portion and adapted to be folded inward over the compass or extended at right angles thereto, an arm rigidly secured to the body portion and extending from the opposite side thereof and a lens-carrying member longitudinally adjustable upon the arm, a lens carried by said member and adapted to be folded inward and to be extended at right angles to said member.

2. An instrument of the character described comprising a body portion having a compass in one side thereof, a lens attached to one edge of the body portion and adapted to be folded over the compass or extended at right angles thereto, an arm extending from the opposite edge of the body portion and carrying an inwardly-folding coöperating lens, and a folding handle connected with the said arm at a point opposite the last mentioned lens.

3. An instrument of the character described, comprising a body portion having in one side a compass, an inwardly-folding lens attached to one edge of the body portion, an arm extending from the opposite edge of the body portion, an inwardly-folding coöperating lens carried by the said arm, a folding handle projecting from the opposite end of the arm and carrying a lens a distance from its hinge substantially equal to the length of the said arm, whereby the lens will fold against the opposite side of the body portion when the handle is folded.

4. An instrument of the character described, comprising a body portion having in one side a compass and in its opposite side a mirror, an inwardly-folding lens hinged to the edge of the body portion, an arm projecting from the opposite edge of the body portion and carrying an inwardly-folding coöperating lens, an inwardly-folding handle carried by the arm and located opposite the last-mentioned lens, the handle being of a length substantially equal to the length of the arm, the handle having projecting therefrom a lens, whereby when the handle is folded the lens will cover the mirror to form a magnifying mirror.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN M. FAEHRMANN.

Witnesses:

JOHN L. FLETCHER,

C. R. WRIGHT, Jr.