J. M. FAEHRMANN.

TOURIST'S GLASS.

APPLICATION FILED FEB. 5, 1913.

1,104,643. Patented July 21, 1914.

Fig. 1.

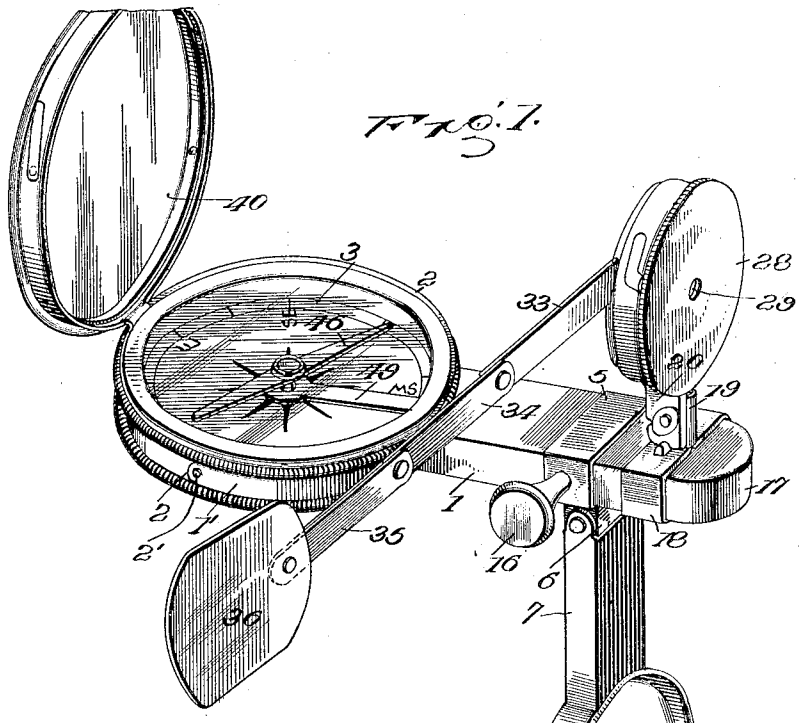

Fig. 2.

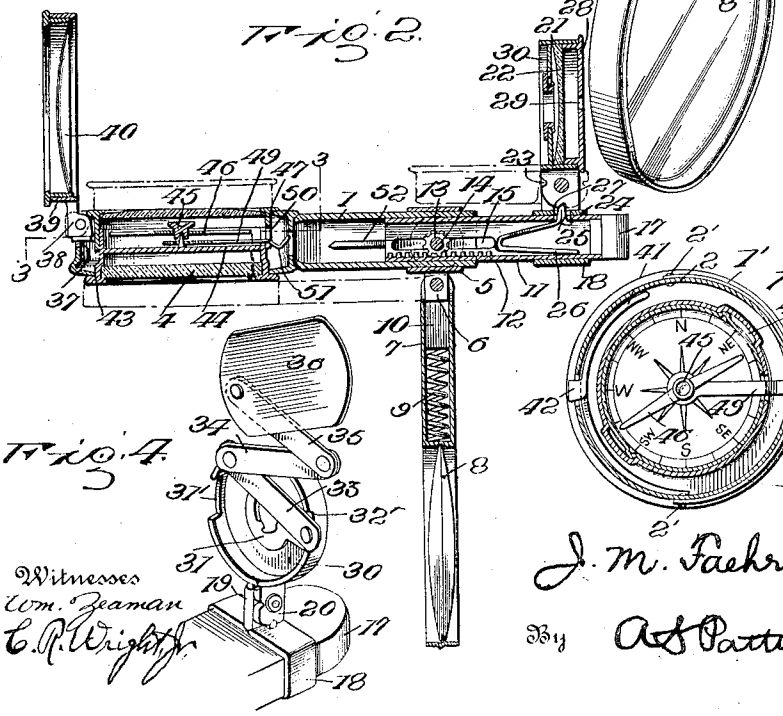

Fig. 3.

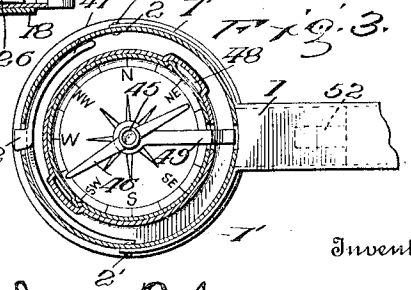

Fig. 4.

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TOURIST'S GLASS.

1,104,643. Specification of Letters Patent. Patented July 21, 1914.

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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 an improvement upon my Patent No. 911,483, dated February 2nd, 1909, in respect to certain details of structure, all of which will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of an instrument embodying my invention, the several parts being shown in operative position. Fig. 2 is a longitudinal sectional view of Fig. 1. Fig. 3 is a horizontal sectional view taken on the line 3—3 of Fig. 2. Fig. 4 is a perspective view showing the eye-closing means partly folded.

This invention is especially intended for use to tourists, hunters, ranchmen, botanists, mineralogists and analogous purposes.

Referring now to the drawings, 1 represents the main-body portion of my device, which, as shown, is of an elongated form and made of sheet metal. One end of said body portion is provided with arms 1′, formed integral therewith and which partially encircles the circular metal case 2, and which are secured thereto by means of screws 2′. Arranged within the case 2 is a compass 3 and a looking glass 4, the detailed construction and arrangement of which will be hereinafter more fully described. The said body portion 1, as shown, is of a hollow form and encircling the outer free end thereof is a band 5 having outwardly projecting lugs 6, to which is pivotally connected an arm 7 carrying at its outer end the magnifying-glass 8. The arm 7, as shown, is of a hollow form and provided with a spring 9 pressing against a plunger 10, which engages the ears 6 of the band 5, whereby the magnifying-glass is held in the position shown in full lines in Fig. 2, and also held in the position shown in dotted lines in said figure. The swinging of the arm 7 on the ears 6 causes the plunger to recede within the arm and thus the arm is held firmly in either position shown in dotted or full lines in Fig. 2.

Telescoping with the body-portion 1, is a hollow member 11, having within its interior a rack 12 meshing with a gear 13, mounted on the shaft 14, said shaft extending through a slot 15 of the member 11, and out through the body-portion 1 and the band 5. The shaft on each side of the band has rigidly attached thereto a knob or handle 16, by means of which the shaft 14 is rotated, whereby the telescoping member may be drawn inwardly or outwardly for the purpose hereinafter more fully described.

The telescoping member 11, as heretofore described, is of a hollow form and has its outer end closed by a plug 17 to prevent dust or dirt from entering the same. Surrounding the telescoping member 11 is a band 18, which has its free ends turned laterally and held together by means of a clip 19. Pivoted upon the said clip 19 is an ear 20 carried by the band 21, in which is mounted the lens 22 forming a part of the telescope. The ear 20 is provided with two notches 23 and 24 into which extends the looped end of the spring 25. The spring 26 carrying the looped end is held within a hollow telescoping member 11 and extends through the opening 27, as clearly shown in Fig. 2 of the drawings. When the lens is in its outward position the looped end 25 of the spring is within the notch 24 of the ear 20, thus holding it in a rigid position. The bevel of the notch 24 is such that by a slight pressure upon the lens, the spring is compressed and travels around the rounded face of the ear 20 and enters the notch 23, whereby the lens is held in the folded position shown in dotted lines in Fig. 2.

The band 21 has fitting therein a cup-shaped member 28 having a center-opening 29, all of which is well understood. The band 21 is provided with a diaphragm 30, to which is secured a plate 31 having an outwardly extending arm 32. The edge of the band 21 on the opposite side is cut away, as indicated at 31′ and 32′ to allow the arm 32 and the links to pass in beyond the inner face of the band. Pivoted to the said arm 32 is a link 33, and pivoted to the outer end of the said link 33 is a second link 34, and pivoted to the link 34 is a third link 35. The outer end of the link 35 has pivotally connected thereto a plate 36, which forms an eye-closing member. When the device is to be used as a telescope, the plate 36 by means of the links 33, 34 and 35 is swung outwardly, as shown in Fig. 1, of the drawings

and assumes a position opposite the eye, thus obviating the necessity of closing the eye in looking through the telescope. By the arrangement of the links, it will be seen that the plate 36 may be readily swung inwardly over the lens 22 in the band 21 and does not take up any room to prevent the lens from being folded in the position shown in dotted lines in Fig. 2.

The rear wall of the circular metal case 2, is cut away as indicated at 37, and pivoted therein is an ear 38, carried by the band 39, carrying the lens 40. Surrounding the inner circumference of the case 2, is a spring 41, which has a laterally turned end 42, which engages the flat lower edge of the ear 38 and holds the lens in the position shown in full lines Fig. 2. This spring also holds the lens in the position shown in dotted lines, Fig. 2, by engaging the other edge of the ear 38.

Passing within the metal case 2 from the lower side is a circular frame 43, carrying the looking-glass 4, and also a compass-dial 44 and the pivot 45 for the needle 46 of the compass. Extending within the metal case 2, from the upper face, is a housing 47, which has a bayonet slot connection 48 with the circular frame 43, whereby the circular frame 43 and the housing 47 are locked in the metal case 2, yet they may be readily moved.

Surrounding the pivot of the compass is an arm 49, which extends out through an opening 50 in the housing 47 and is provided with a downwardly and upwardly bent portion 51. The telescoping member 11 is provided with an inwardly extending arm 52 having its inner end beveled and adapted to engage the portion 51 of the arm 59 and forces the same upwardly so that the needle 46 of the compass is locked against vibration when the instrument is not in use.

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, a compass case carried by one end of the body-portion, a lens pivoted to the outer edge of the compass case, a telescoping member within the body-portion, a lens pivoted to the outer end of the telescoping member, means for moving the telescoping member in and out of the body-portion, and means carried by the telescoping member for locking the needle of the compass against movement.

2. An instrument of the character described, comprising a body-portion, a compass case carried by one end of the body-portion, a lens pivoted to the outer edge of the compass case, a telescoping member within the body portion, a lens pivoted to the outer end of the telescoping member and adapted to coöperate with the first-mentioned lens, means for moving the telescoping member inwardly or outwardly, and a member carried by the telescoping member and extending within the compass case for locking the needle against movement.

3. An instrument of the character described, comprising a body-portion, a compass case carried by one end of the body-portion, a lens pivoted to the outer ends of the compass case, a telescoping member extending from within the opposite end of the body-portion, a lens pivoted to the outer end of the telescoping member and coöperating with the first-mentioned lens, means for moving the telescoping member inwardly or outwardly, a compass within the compass case, an arm surrounding the pivot of the needle of the compass, and means carried by the telescoping member for moving the arm upwardly and locking the needle against movement when the telescoping member is in its inward position.

4. The combination with a telescope, of toggle levers pivotally connected to the telescope, and a plate pivotally connected to the outer end of the toggle levers and adapted to fold inwardly and outwardly for the purpose described.

5. The combination with a telescope, formed of two spaced lenses, a plate carried by the inner lens, toggle levers connected to said plate, and a large plate carried by the outer end of the toggle levers and adapted to serve to close the eye not being used in telescoping.

6. An instrument of the character described, comprising a body-portion, a compass case carried by one end of the body-portion, a lens pivoted to the outer edge of the compass case, a looking-glass case extending within the compass case from one side, a housing extending within the compass case from the opposite side and having a bayonet slot connection with the looking-glass case, a telescoping member within the body-portion, a lens pivoted to the outer end of the telescoping member adapted to coöperate with the first-mentioned lens, means for moving the telescoping member within the body-portion, and an arm carried by the telescoping member and adapted to extend into the compass case and hold the needle against movement when the telescoping member is in its inward position.

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

JOHN M. FAEHRMANN.

Witnesses:
E. C. SMITH,
C. K. REESE.