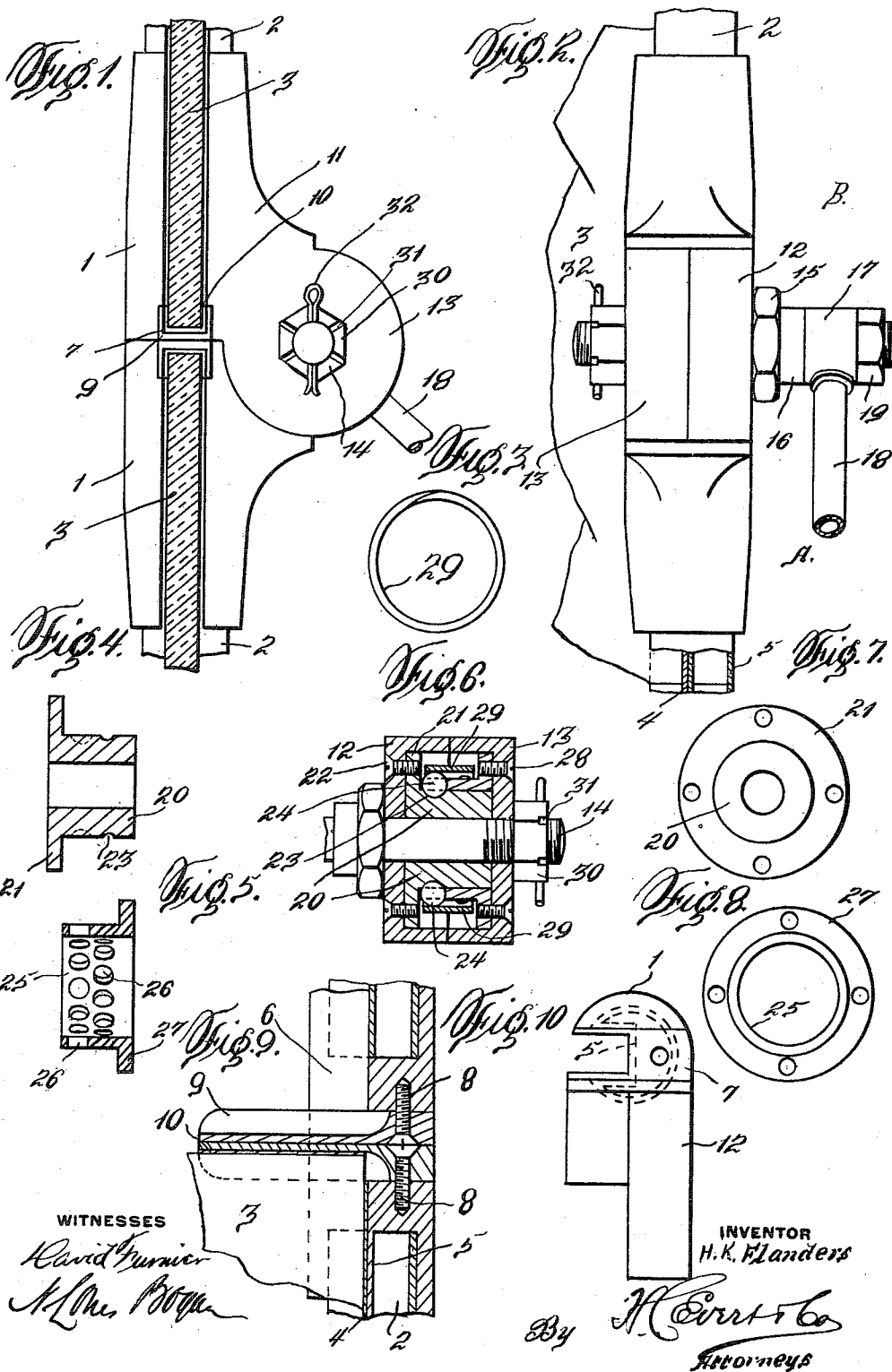


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HINGE.
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UNITED STATES PATENT OFFICE.

HARRY K. FLANDERS, OF TITUSVILLE, PENNSYLVANIA.

HINGE.

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Specification of Letters Patent.

Patented June 6, 1911.

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To all whom it may concern:

Be it known that I, HARRY K. FLANDERS, a citizen of the United States of America, residing at Titusville, in the county of Crawford and State of Pennsylvania, have invented certain new and useful Improvements in Hinges, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to hinges primarily designed for wind shields of automobiles or other vehicles, the hinge being constructed whereby the upper part of the wind shield can be easily and quickly adjusted to a desired position and firmly held during the operation of an automobile.

20 The invention aims to provide a hinge that is simple in construction, durable, positive in its action, free from injury by ordinary use, and efficient for safely holding a part of the shield to be adjusted by the hinge.

25 The invention will be hereinafter specifically described and then claimed, and reference will now be had to the drawing, wherein:

30 Figure 1 is a side elevation of a hinge constructed in accordance with this invention. Fig. 2 is a front elevation of the same. Fig. 3 is a side elevation of a detachable yieldable band forming part of the hinge. Fig. 4 is a longitudinal sectional view of a locking member adapted to form part of the hinge. Fig. 5 is a similar view of a ball holder adapted to form part of the hinge. Fig. 6 is a longitudinal sectional view of the hinge. Fig. 7 is an end view of the locking member shown in Fig. 4. Fig. 8 is an end view of the ball holder shown in Fig. 5. Fig. 9 is a vertical sectional view of a portion of the hinge, and Fig. 10 is a plan of the stationary member of the hinge.

45 In the accompanying drawing the reference character A denotes a stationary member and B a movable member, these members being somewhat similar in construction. Each member comprises a tubular body 1 and adapted to fit in each body is a tubular frame 2 adapted to support the vertical edges of a plate of glass 3, the edges of the plate being held by a U-shaped gasket 4 mounted in a longitudinal casing 5, carried by the frame 2. The inner side of each member is provided with a vertical slot 6 and a transverse slot 7, said transverse slots

confronting one another when the members A and B are pivotally connected together. Secured in the slots 7 by screws 8 or other fastening means are channel shaped shelves 9 provided with gaskets 10 adapted to support the confronting edges of the plates of glass held by the members A and B and the frames 2 thereof.

65 The rear sides of the members A and B at the lower ends thereof are provided with off-set portions 11 and these off-set portions are cut away to provide hinged sockets 12 and 13, the socket 12 being carried by the stationary member A and the socket 13 by the movable member B, these sockets being adapted to confront one another and be held by a bolt 14. The outer end of the bolt 14 is provided with a nut 15 and collar 16 and said bolt is adapted to extend through the socket end 17 of an angularly disposed bracing rod 18, the socket end of said rod being retained upon the bolt by a nut 19.

80 Mounted in the socket 12 and surrounding the bolt 14 is a locking member 20 having one end thereof provided with a peripheral flange 21 connected to the socket 12 by screws 22 or other fastening means. The periphery of the member 20 has two circumferentially arranged rows of recesses 23, the recesses of one row being staggered with relation to the recesses of the other row. Movable mounted in these recesses are spherical bodies or balls 24, said bodies or balls being retained in proper relation to each other by a cylindrical ball holder 25 movably mounted upon the member 20, said ball holder having circumferentially arranged rows of openings 26, the openings of one row being staggered with relation to the openings of the other row, and said openings corresponding in number to the balls 24 and the recesses 23 of the member 20. One end of the ball holder 25 has a peripheral flange 27 secured to the socket 13 by screws 28 or other fastening means.

100 Surrounding the ball holder 25 and engaging the balls 24 thereof is a yieldable split band 29 adapted to normally retain the balls 24 within the openings 26 and in the recesses 23 of the member 20.

110 The socket 13 is movably retained in engagement with the socket 12 by a nut 30, and the outer face of the nut is provided with radially disposed grooves 31 adapted to receive a cotter pin 32 which extends through the threaded end of the bolt 14.

With the member A stationary and holding the socket 12, the member B can be easily adjusted to angles represented by the recesses 23 and the openings 26 of member 20 and the holder 25 respectively, the split yieldable band receding during the shift-
able movement of the balls 24 from one recess to another.

What I claim, is:

- 10 A hinge of the type described, comprising a stationary member and a movable member, said members having off-set portions provided with confronting sockets, a bolt adapted to extend through said sockets
15 and pivotally connect one of said sockets to the other of said sockets, a locking member in said stationary socket, said locking member having the periphery thereof provided with two rows of circumferentially

arranged recesses, with the recesses of one 20 row staggered relatively to the recesses of the other row, a ball holder fixed in said stationary socket and having openings formed therein corresponding in number and arrangement to the recesses of said locking 25 member, balls mounted in said openings and adapted to engage in the recesses of said locking member, and a yieldable split band surrounding said ball holder and adapted to normally retain said balls in said holder 30 and in the recesses of said member, substantially as described.

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

HARRY K. FLANDERS.

Witnesses:

FRANK H. FLANDERS,
C. H. HOVIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
