Feb. 6, 1923. 1,444,124.

J. S. JAFFE ET AL.

SPECTACLE FRAME ASSEMBLER.

FILED JUNE 4, 1921.

Fig 1

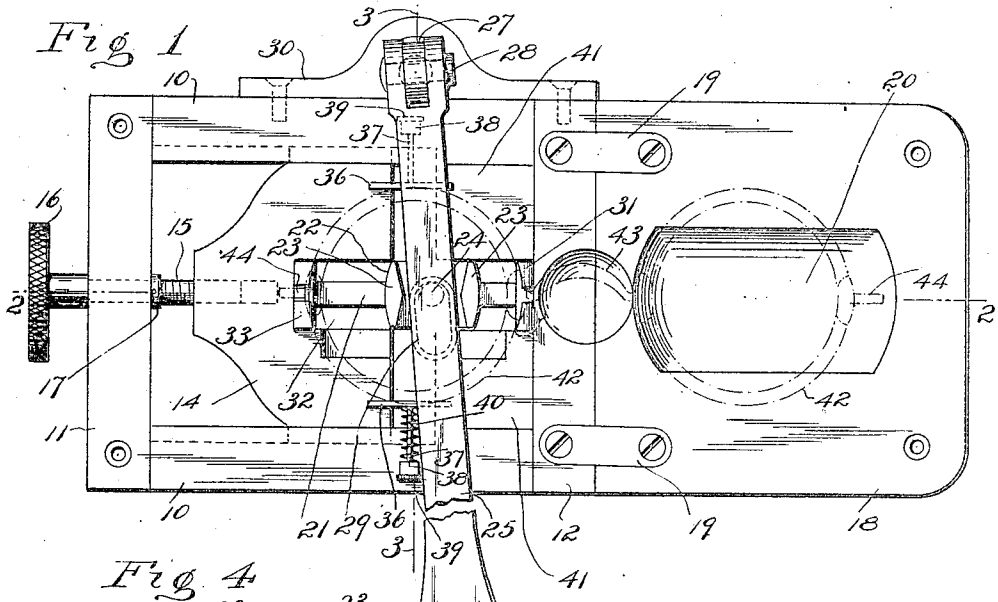


Fig 4

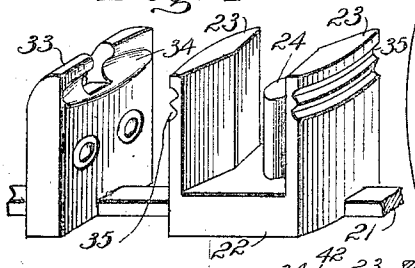


Fig 2

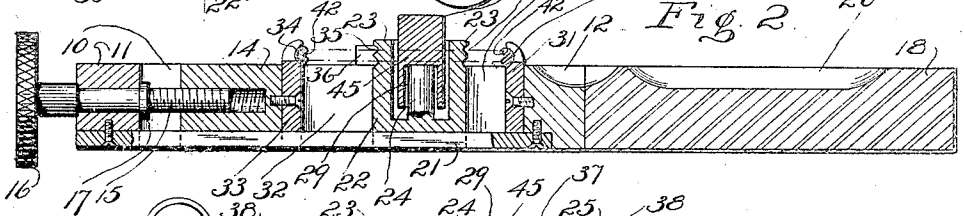


Fig 3

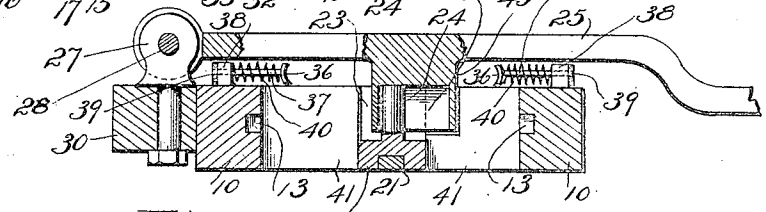


Fig 5

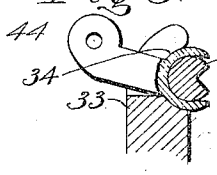
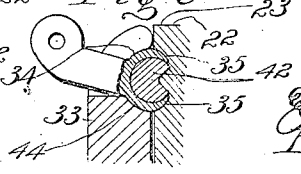


Fig 6



Inventors
Joseph S. Jaffe
Maurice J. Jaffe
By Synge & Hall
Atty's

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UNITED STATES PATENT OFFICE.

JOSEPH S. JAFFE AND MAURICE J. JAFFE, OF NEW HAVEN, CONNECTICUT.

SPECTACLE-FRAME ASSEMBLER.

Application filed June 4, 1921. Serial No. 474,881.

To all whom it may concern:

Be it known that we, JOSEPH S. JAFFE and MAURICE J. JAFFE, citizens of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Spectacle-Frame Assemblers, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention relates to new and improved spectacle frame assemblers.

It is the object of this invention, among other things, to provide a simple, readily operated device whereby the metal nose-bridge and metal end-piece may be secured to the tortoise shell eye rim of a spectacle frame in proper alignment with each other and in substantially the same plane in relation to the edge of the rim, and to accomplish this result with mechanism that will insure positiveness and perfection of results with the minimum amount of labor and expenditure of time both in locating the parts relatively to each other and securing them against movement as so held.

The improvements in the details and arrangement of parts will be apparent from an inspection of the accompanying drawings in connection with the description hereinafter contained and wherein a preferred embodiment of the invention is disclosed for the purpose of imparting a full understanding thereof.

In the drawings, Figure 1 is a plan view of our improved spectacle frame assembler;

Figure 2 is a sectional view thereof taken generally upon line 2—2 of Figure 1;

Figure 3 is a sectional fragmentary view taken generally upon line 3—3 of Figure 1;

Figure 4 is a perspective view of the inside die and one of the outside dies in one of their relative positions;

Figure 5 is an enlarged cross-sectional view of a portion of the eye rim with an end-piece before being clamped thereon, and a portion of one of the outside dies, all of these parts being in their proper relative positions ready for the action of the inside die; and

Figure 6 is a view similar to Figure 5 except that a portion of the inside die is shown in its relative position after the ends of the end-pieces have been closed onto the eye rim.

Having more particular reference to the drawings and in connection with which like reference characters refer to corresponding parts in the several figures, the numeral 10 designates the side bars of the body member which are joined by the end bars 11 and 12 and provided upon their inner faces with the recess 13 which supports and guides a carrier plate 14 that receives movement through the manual operation of a screw 15 threaded therein and journaled in the end bar 11 having a thumb screw 16 upon the outer end thereof, a collar 17 fixed thereon preventing relative endwise movement.

Blocks 41 are located in the carriers formed by the side bars 10 and end bar 12, with an open space therebetween. These may be integral with either the side or end bar, or separate, as desired.

A lateral extension of the body member is provided by the block 18, which may be made of wood, if desired, and secured to the frame by tie plates 19 or other similar means, a recess 20 being formed in the upper surface thereof to accommodate the curve of the lens.

Fixed to the underside of the end bars 11 and 12 is a guide bar 21 upon which is slidably mounted the inner die 22 having oppositely disposed upwardly extending cheeks 23 with an open space therebetween and into which projects a post 24. Movement of the inner die 22 along the guide bar 21 is accomplished through a lever 25 having a handle 26 at one end and pivotally connected at the other end to the swivel block 27 by a pintle 28, a recess 29 being formed in the lug 45 upon the underside of the handle and into which projects the post 24.

The swivel block 27 is rotatably supported in a bracket 30 attached to one of the side bars 10. Obviously within our invention this bracket may be made integral with the side bar or not, as desired.

Fixed to the inner face of the end bar 12 and between the blocks 41—41 is the outside die 31, and within the recess 32 in the carrier plate 14 is fixed another outside die, designated by the reference numeral 33. The inner faces of each of the outside dies 31 and 33 are provided with a recess 34 which corresponds generally with the shape of the exterior of a portion of the end-piece or nose-bridge, and each of the cheeks 23 of the inside die is also provided with grooves

or recesses 35 that correspond generally in shape with the end-piece and nose-bridge as closed upon the eye rim.

At each side of the inner die 22 is an alinement plate 36 secured on the rod 37 that passes through a fixed lug 38 and having a stop 39 upon its outer end. A coil spring 40 around the rod 37 between the alinement plate 36 and lug 38 exerts its tension so as to move the alinement plate 36 toward its outermost position.

In operation, the lever 25 is first moved upwardly upon its pivot mounting. An eye rim, designated by the reference numeral 42, is then laid upon the plates 41 and 14, the lever 25 returned to its former down position, a nose-bridge 43 placed in contact with the outer edge of said rim within the recess 34 in the outside die 31, and an end-piece 44 placed opposite thereto and in substantially the same relative position to the rim and the outside die 33.

As now positioned, both the end-piece and nose-bridge are directly opposite each other and in the same horizontal plane. The inside die is now moved through manipulation of the handle 26 so that the grooves 35 in one of the cheeks 23 are brought up against the projecting inner ends of either the nose-bridge or the end-piece and by such action these are folded inwardly and are thus clamped and permanently fixed to the frame. Movement of the inner die in the opposite direction performs the same operation upon either the end-piece or nose-bridge, which ever it may happen to be, thus permanently securing these parts to the eye rim and in fixed relation to each other in the same horizontal plane and at the proper angle in relation to the rim.

The above described operations are repeated in assembling the nose-bridge to the other rim at which time the block 18 forms a support for the first mentioned rim. If perchance a lens is already in one of the rims and this is curved, the recess 20 provides means for accommodating such curvature without disturbing the alignment of the other parts.

Opposite sides of the rim are in contact with the alinement plates 36, which thereby hold said rim in a true central position relatively to the inner die. The springs 40 being of equal tension apply like pressure and also accommodate rims of various sizes within its capacity.

Within the scope of the appended claims changes and alterations may be made in our invention, aside from those herein shown and suggested, and we therefore do not limit ourselves to the exact construction herein shown and described.

What we claim as new and desire to secure by Letters Patent, is:

1. A device of the character described wherein means are provided for supporting at one and the same time an eye rim of a spectacle frame, an end-piece, and a nose-bridge all in fixed relation to each other; means for securing said nose-bridge and end-piece to said rim while so held.

2. A device of the character described; means for supporting at one and the same time an eye rim of a spectacle frame, an end-piece and a nose-bridge all in fixed relation to each other; means for permanently securing said end-piece and nose-bridge to said rim while so held, said means operating within said rim.

3. A device of the character described, having means for supporting at one and the same time an eye rim of a spectacle frame, an end-piece and a nose-bridge all in fixed relation to each other; means for holding said rim against lateral movement; and means for securing said nose-bridge and end-piece to said rim while so held.

4. In a device for securing either an end-piece or nose-bridge or both to an eye rim of a spectacle frame, the combination with means for holding said rim in a fixed position in relation to the member or members to be secured thereto; and pressure means for acting upon said end-piece or nose-bridge or both while so held, said means being movable toward and away from the holding means and the latter resisting the action of said pressure means.

5. In a device for securing either an end-piece or nose-bridge or both to an eye rim of a spectacle frame, the combination with means engaging said rim between the points of attachment of said end-piece and nose-bridge for holding said rim in a fixed position in relation to said end-piece or nose-bridge; means for varying the relative position of said holding means to accommodate rims of varying shapes and sizes; and means actuated from within the rim for applying pressure to either said end-piece or nose-bridge or both to fold the same upon said rim.

6. In a device of the character described, the combination with companion outside dies for holding an end-piece or nose-bridge in relation to an eye rim of a spectacle frame; means for varying the position of said outside dies; and an inside die movable toward and away from said outside dies and engaging the end-piece or nose-bridge or both for closing the same onto said rim and thereby attaching it thereto in a fixed relation.

7. In a device of the character described, the combination with companion outside dies located upon opposite sides of a common center; means for varying the relative positions of said dies; an inside die; and means for moving said inside die toward and away from said companion outside dies.

8. In a device of the character described, the combination with companion outside dies; means for varying the relative positions of said dies toward and away from each other; an inside die; means for moving said inside die toward and away from said companion outside dies; and yielding means for centering an eye rim of a spectacle frame in relation to all of said dies.

9. In a device of the character described, the combination with a first outside die connected with a fixed part; a second outside die; means for mounting said second outside die so that the same may be moved toward and away from the first outside die; yielding means for holding an eye rim of a spectacle frame centrally in relation to said outside dies; an inside die mounted so as to be movable toward and away from each of said outside dies; and means for imparting movement thereto, whereby the same may be actuated toward or away from either one of said outside dies and apply pressure to any object placed therebetween.

10. In a device of the character described, the combination with a first outside die connected with a fixed part; a second outside die connected with a movable part; alinement plates located substantially equally distant from each of said outside dies, whereby an eye rim of a spectacle frame is held in a central position in relation to said outside dies; means for yieldingly supporting said alinement plates; an inside die; and means for actuating said inside die, whereby the same may be moved toward and away from either of said outside dies.

11. In a device of the character described, the combination with a body member having a lateral recessed extension upon one side thereof; a carrier plate slidably mounted in said body member; a first outside die connected with said body member; a second outside die connected with said carrier plate; an inside die slidably mounted upon said body member; and means for imparting movement to said die.

12. In a device of the character described, the combination with a body member having a lateral recessed extension upon one side thereof; a carrier plate slidably mounted in said body member; a first outside die connected with said body member; a second outside die connected with said carrier plate; an inside die slidably mounted upon said body member; and means for imparting movement to said die; and alinement plates yieldingly connected with said body member and having contact with an eye rim of a spectacle frame and held equally distant from said inside die and centering the same in relation thereto.

13. In a device of the character described, means for supporting an eye rim of a spectacle frame, an end piece, and a nose bridge; means for permanently securing said end piece and nose bridge to said rim while so held; and means for aligning said eye rim in relation to said securing means.

14. In a device of the character described, means for supporting an eye rim of a spectacle frame, an end piece, and a nose bridge; means for permanently securing said end piece and nose bridge to said rim while so held comprising a die having pressure cheeks at opposite ends thereof; and means for aligning said eye rim in relation to said securing means.

15. In a device of the character described, means for supporting an eye rim of a spectacle frame, an end piece, and a nose bridge; means for permanently securing said end piece and nose bridge to said rim while so held comprising a die having pressure cheeks at opposite ends thereof; means for aligning said eye rim in relation to said securing means; and means for imparting a reciprocatory movement thereto, comprising a movably mounted member having an operative connection with said inner die.

16. In a device of the character described, means for supporting an eye rim of a spectacle frame, an end piece, and a nose bridge; means for permanently securing said end piece and nose bridge to said rim while so held comprising a die having pressure cheeks at opposite ends thereof; means for aligning said eye rim in relation to said securing means; and means for imparting a reciprocatory movement thereto, comprising a member having an operative connection with said inner die, and mounted so as to be moved about two pivots in different directions.

17. In a device of the character described, the combination with a body member having a lateral recessed extension upon one side thereof; a carrier plate slidably mounted in said body member; a first outside die connected with said body member; a second outside die connected with said carrier plate; an inside die slidably mounted upon said body member; and means having a separable connection with the die for imparting movement thereto.

18. In a device of the character described, the combination with a first outside die connected with a fixed part; a second outside die; means for mounting said second outside die so that the same may be moved toward and away from the first outside die; means for holding an eye rim of a spectacle frame centrally in relation to said outside dies; an inside die mounted so as to be movable toward and away from each of said outside dies; and means for imparting movement thereto, whereby the same may be actuated toward or away from either one of said outside dies and apply pressure to any object placed therebetween.

19. In a device of the character described,

means for supporting an eye rim of a spectacle frame; companion dies upon the outside thereof; means for varying the relative position of said dies toward and away from each other; an inside die projecting through said eye rim; means for moving said inside die toward and away from each of the outside dies, said means being separably secured to said die and projecting through the opening in said eye rim; and means for centering said eye rim in relation to said die.

In testimony whereof we have hereunto affixed our signatures.

JOSEPH S. JAFFE.
MAURICE J. JAFFE.