

C. BUCKLEY.

MACHINE FOR FORMING SPECTACLE FRAMES.

No. 65,998.

Patented June 25, 1867.

Fig 1.

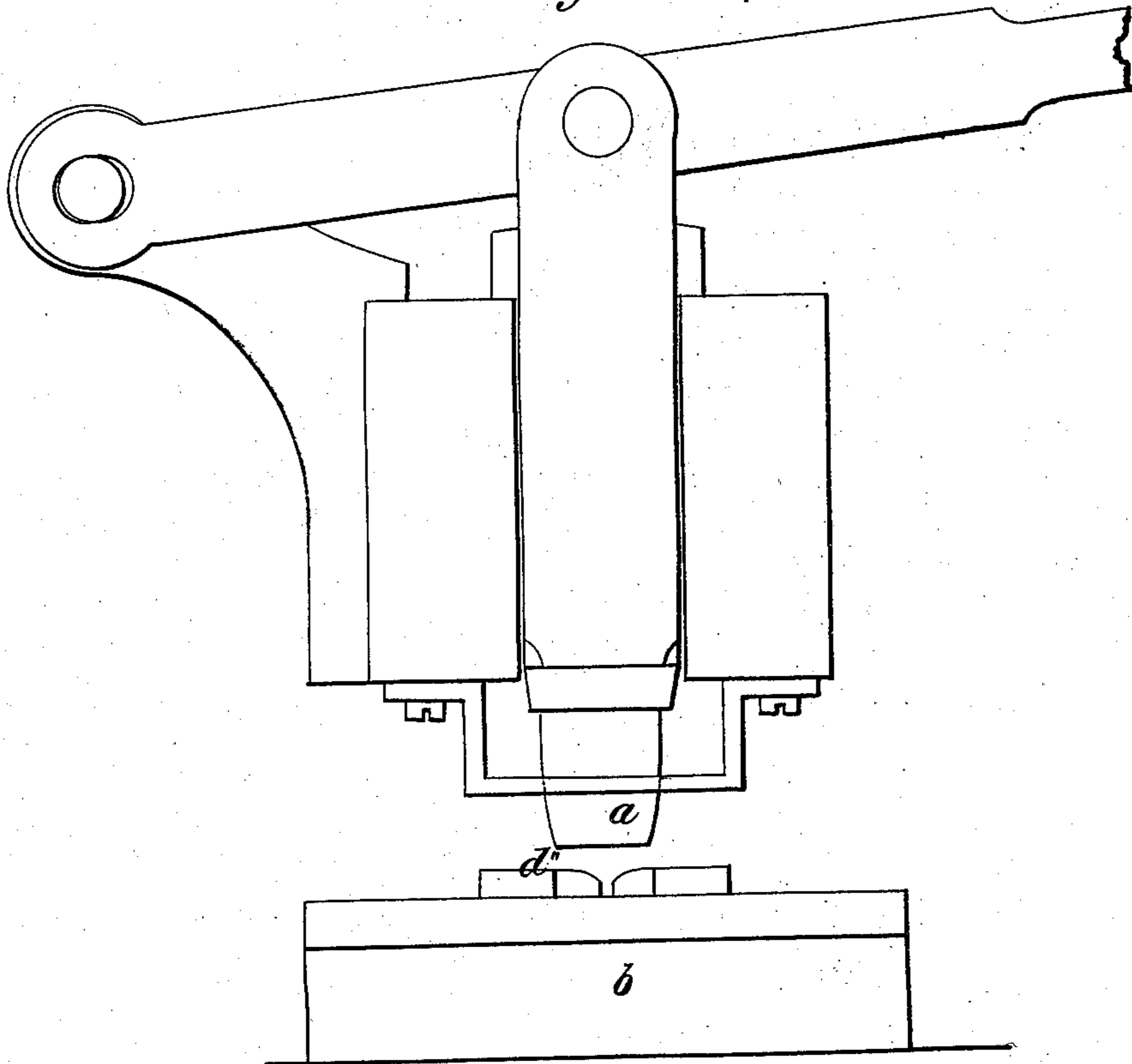
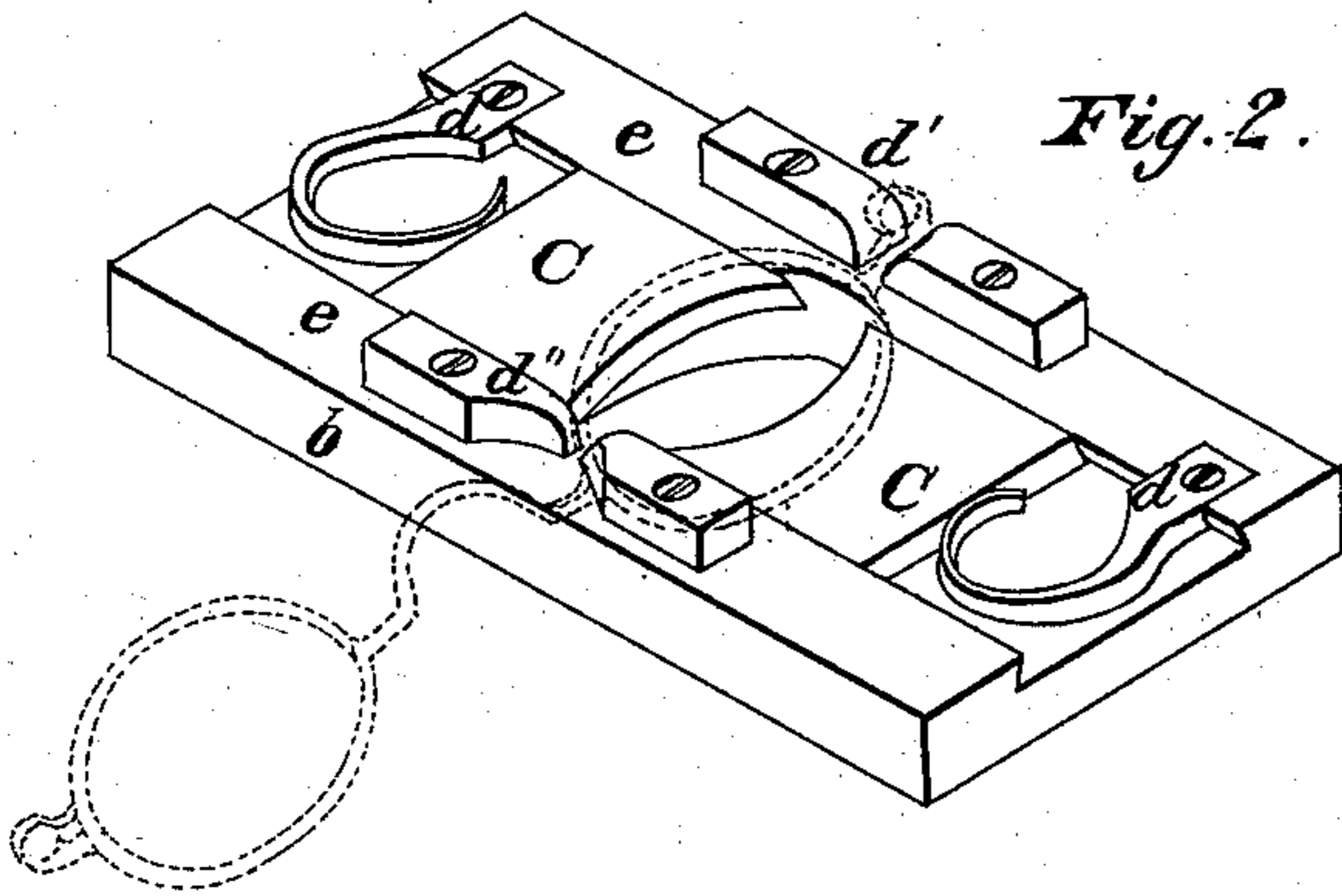


Fig. 2.



WITNESSES;

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CHAUNCEY BUCKLEY, OF MERIDEN, CONNECTICUT, ASSIGNOR TO CHARLES PARKER, OF SAME PLACE

Letters Patent No. 65,998, dated June 25, 1867.

IMPROVEMENT IN MACHINES FOR FORMING SPECTACLE-FRAMES.

The Schedule referred to in these Letters Patent and making part of the same.

TO WHOM IT MAY CONCERN:

Be it known that I, CHAUNCEY BUCKLEY, of Meriden, New Haven county, Connecticut, have invented certain new and useful Improvements in Forming Spectacle-Frames; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being made to the annexed drawing, making a part of this specification, in which—

Figure I is a front view or elevation.

Figure II is a perspective view of the bed or holder of the machine.

And similar letters indicate similar parts throughout the figures.

My invention is an improved machine for shaping and stretching the eyes of spectacle-frames to receive the lenses. In soldering the eye to the nose-piece and end-piece, it is almost impossible, even in fine gold work, to get it truly shaped to receive the lens, whereby results the expenditure of much labor and time in properly fitting in the glasses. In my machine for accurately shaping the eye to receive the lens, superiority of workmanship is secured and an economy of manufacture also.

The machine consists of a holding-plate or bed, having an adjustable clamping apparatus to seize and retain the front or frame in place upon the bed, whilst a suitably-shaped plunger is brought down by a lever, and caused to pass through the eye and into an opening through the bed, and thus force the eye to take the form of the plunger, which will be of the size and shape required for the intended lens. For fine work, such as gold spectacles, which are made by skilled workmen, this arrangement fully meets the required effect; but for cheap work, which must necessarily be made with the greatest rapidity, the fixed bed does not afford a sufficient bearing for the irregular form of the eye. A pair of movable supporting-plates is, therefore, provided to slide upon the bed, one from each side, so as to partially cover the opening through the bed in the direction of its width, and which will be spread by the tapered end of the plunger as it comes down. It is of course understood that the lenses are all accurately ground beforehand to given sizes for the various kind of spectacles, viz, round, elliptical, &c.

At *a*, in Fig. I, is seen the plunger affixed to the guide-bar, which latter is operated by the lever, as shown. The plunger, shown in the figure, is oval and tapering from the lower end upward. Upon the bed *b* are the adjustable clamps for holding the spectacle-frame. Fig. II is a perspective view, in which are shown, at *C C*, two movable supporting-plates, made to approach each other by the springs *d*, being held in place by guide-pieces *e*, the inner ends of which plates are concave, either of an elliptical shape or round, according to the shape of the eye to be operated upon, as shown. The eye rests upon these plates while being acted upon by the plunger. Upon the two guides *e* are holding-pieces *d' d''*, into which to drop the end-piece on the one side, and part of the nose-piece on the other, as shown in dotted lines, Fig. II. Beneath the plates *c* there is a hole in the bed-plate, to allow the plunger to pass down.

The operation is as follows: A spectacle-frame or front is to be placed, as shown in the dotted lines, Fig. II, resting upon *c*, and firmly held in position by the pieces *d' d''*. The plunger is now brought down and caused to go through the eye; the taper of the plunger will cause it to press the eye into the given shape and size, as soon as it has been forced down far enough. The frame is, in the meanwhile, held perfectly level by the plates *c*, although those will be pressed apart by the entering plunger. The plunger may now be withdrawn, and the reverse end of the spectacle introduced to be treated in the same manner. It will thus be seen that even if the nose-piece or the end-piece has been soldered on inaccurately, as will constantly occur, they will be brought into proper line by the action of the machine, since, as both of those are held in their clamps, the plunger will stretch the eye on one side more than on the other, and thereby insure a regularity of form. To insure perfect accuracy in the size of both eyes and of all the spectacles, the plunger is to be arrested at any given point by stops or gauge-marks placed upon its guide-plate. Different eyes are shaped by substituting other plates for those at *c*, and changing the plunger, when on cheap work; but different machines must be made for each size or form of spectacles if the sliding-plates are not employed.

I claim the eye-former or stretcher, consisting of a plunger to enter the eye, and a bed for the eye to rest upon, having an opening through it of the form of the eye desired for the plunger to pass into, in combination with the holding-pieces *d' d''*, as set forth.

I also claim the combination of the adjustable supporting-plates *c*, the bed, and the plunger, substantially as described.

Witnesses:

G. W. PARKER,
J. W. MILES.

CHAUNCEY BUCKLEY.