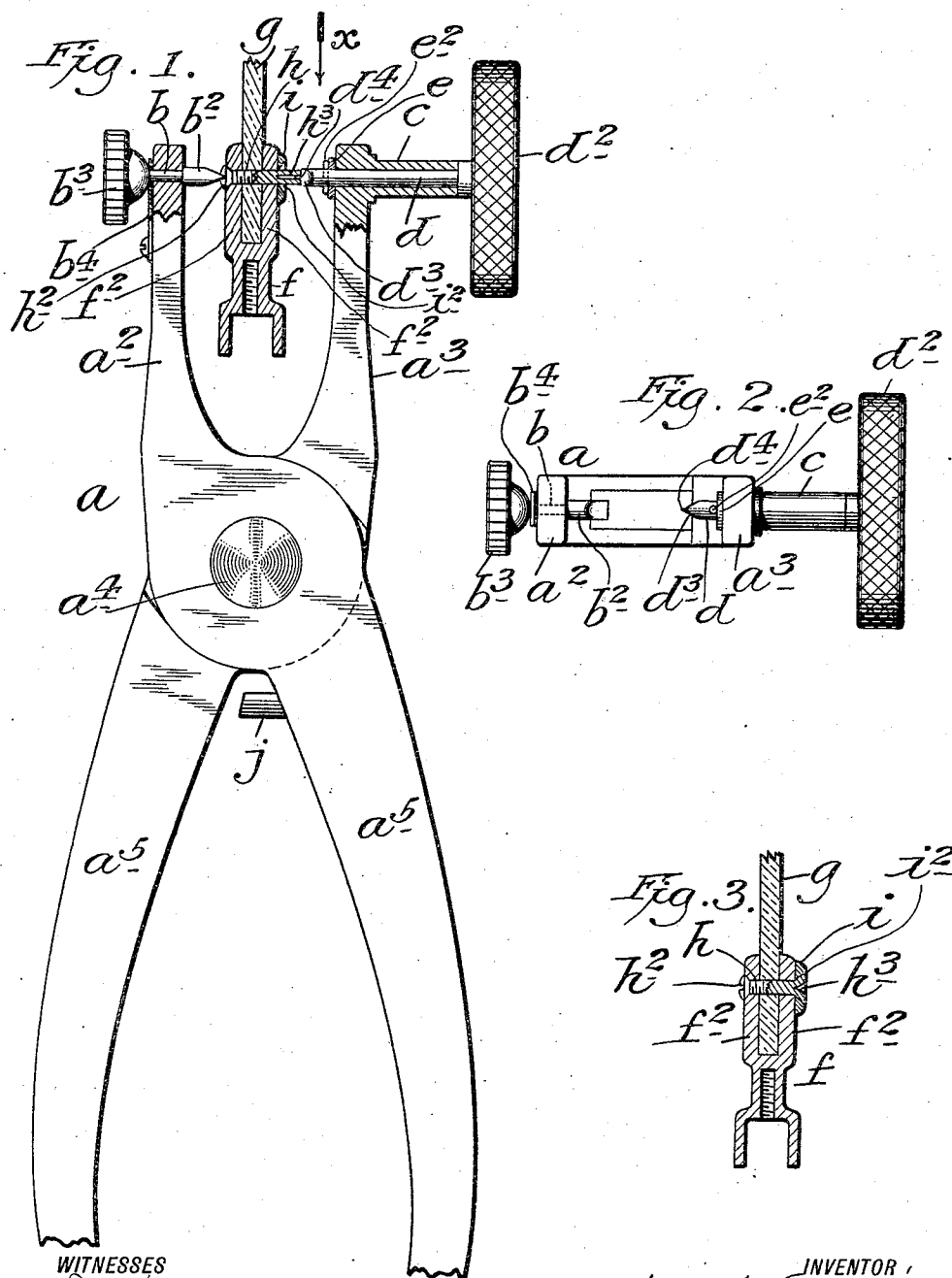


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TOOL.

APPLICATION FILED MAY 25, 1908. RENEWED MAR. 3, 1909.

938,083.

Patented Oct. 26, 1909.



WITNESSES
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TOOL.

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To all whom it may concern:

Be it known that I, JACOB SPAAR, a citizen of the United States, and residing at Katonah, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Tools, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to tools for use in securing the lenses of eye-glasses or spectacles to the nose-bridge member of the said eye-glasses or spectacles, and for securing temple pieces to said lenses when spectacles are employed, and the object thereof is to provide an improved tool of this class which is used in connection with fastening devices as shown and described in a companion application executed and filed by me of equal date herewith, and in which the tool which forms the subject matter of this application is also shown and described.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which;—

Figure 1 is a side view of my improved tool with part of the construction in section, and showing also an eye-glass or spectacle lens together with one of the clips or studs used in connecting the lens with the nose-bridge member of a pair of eye-glasses or spectacles, and showing the method of operating the tool in securing the clip or stud to the lens or the lens to said clip or stud, Fig. 2 an end view of the tool looking in the direction of the arrow *x* of Fig. 1, and;—
Fig. 3 a view of the lens and clip or stud shown in Fig. 1 after the operation of securing the lens to said clip or stud is completed.

In the practice of my invention, I provide a tool *a* of the same general form as a pair of pliers, said tool being composed of parallel jaws *a*² and *a*³ pivotally connected at *a*⁴ and provided with extended shanks *a*⁵ forming handles the compression of which will force the jaws *a*² and *a*³ together.

Passing through one of the jaws of the tool, the jaw *a*² as shown in the drawing, is a rotary pin *b* provided at its inner end with a head *b*² the inner end portion of which is wedge-shaped in form, and the outer end of the pin *b* is provided with a large milled

head *b*³ between which and the jaw *a*² is placed a friction spring or similar device *b*⁴. The other jaw *a*³ of the tool is provided with an outwardly directed elongated boss *c*, and passing inwardly through said boss and said jaw is a pin or shaft *d* provided at its outer end with a large milled head *d*² which forms a handle, and the inner end of the pin *d* is preferably made wedge-shaped in form as shown at *d*³, and provided centrally with a projecting beveled point *d*⁴, and mounted on the inner end portion of the pin *d* adjacent to the jaw *a*³ is a washer *e* which is held in place by a key pin *e*² passed through the pin or shaft *d*. I have also shown at *f* a clip or stud employed in connection with the nose-bridge member of a pair of spectacles or eye-glasses for connecting a lens *g* therewith, and said clip or stud is provided with parallel jaws *f*², and in the operation of connecting the lens with the clip or stud I provide a screw *h* provided at one end with the usual head *h*², and the other end of which is provided with a longitudinal socket or bore *h*³, and I also preferably provide a washer *i* through which the end of the screw *h* passes, and said washer is provided with an aperture, the walls of which are beveled outwardly as shown at *i*². The length of the screw *h* is greater than the combined thickness of the jaws *f*² of the clip or stud *f*, the lens *g* and the washer *i* and the end portion of said screw in which the socket or recess *h*³ is formed is not threaded.

In the operation of securing the lens *g* in the clip or stud *f*, the screw *h* is passed through the jaws *f*² of said clip or stud and through the lens and through the washer *i*, and the tool *a* is manipulated so as to place the head *b*² of the pin *b* on the head *h*² of the screw *h*, and the point *d*⁴ of the pin or shaft *d* in the socket or recess *h*³ of the screw *h*. The handle members *a*⁵ of the tool are then firmly compressed by one hand thus forcing the jaws *a*² and *a*³ together, and at the same time the pin or shaft *d* is turned by the other hand, and the end of the screw *h* in which the socket or recess *h*³ is formed is expanded as shown in Fig. 3 and the lens *g* is securely locked and held in the clip or stud *f* and will not work loose under any circumstances.

The clip or stud *f*, the screw *h* and the washer *i* form no part of the invention described and claimed herein, but constitute

the subject matter of a companion application hereinbefore referred to.

The object of the spring b^4 is to hold the pin b against rotation when it is not desired that said pin should rotate, and the head b^3 of the pin b constitutes a handle by which said pin may be rotated when necessary, and the object of making this pin rotary is to provide means whereby the wedge-shaped inner end or head b^2 thereof may be caused to engage the head of the screw h in any position in which said screw may be.

One of the shank or handle members a^5 of the tool is provided adjacent to the pivotal connection of said shank or handle members with an inwardly directed stud j which is adapted to strike on the other shank or handle member, and thus limit the extent to which the jaws a^2 and a^3 can be brought together, the object of this construction being to prevent the forcing of the inner ends of the pins b and pin or shaft d together and thus injuring said ends.

Having fully described my invention,

what I claim as new and desire to secure by Letters Patent, is;—

1. A tool of the class described provided with parallel jaws, a rotary pin mounted in one of said jaws, and a rotary shaft mounted in the other jaw, said pin and said shaft being provided at their outer ends with heads forming handles.

2. A tool of the class described provided with parallel jaws, a rotary pin mounted in one of said jaws, and a rotary shaft mounted in the other, said pin and said shaft being provided at their outer ends with heads forming handles, and a friction spring placed between the head of the pin and the jaw through which said pin passes.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this 22nd day of May, 1908.

JACOB SPAAR.

Witnesses:

M. E. DOODY,

C. E. MULREANY.