No. 851,906. PATENTED APR. 30, 1907.

E. STRASSBURGER.

CONSTRUCTION OF PLIERS.

APPLICATION FILED AUG. 13, 1906.

Fig. 1.

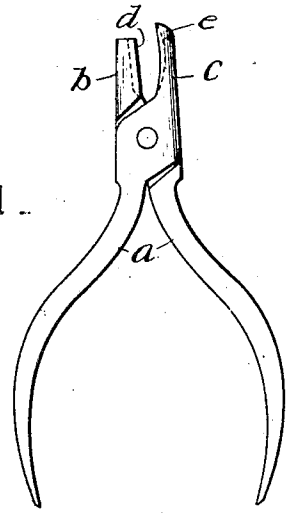
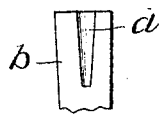


Fig. 3.



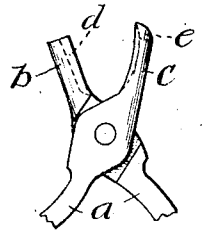


Fig. 2.

Fig. 4.

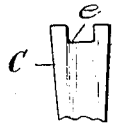


Fig. 5.

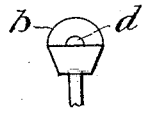


Fig. 6.

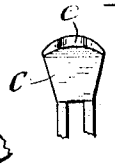


Fig. 7.

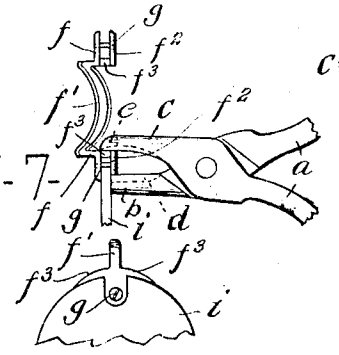


Fig. 8.

Witnesses
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ERNST STRASSBURGER, OF CHICAGO, ILLINOIS.

CONSTRUCTION OF PLIERS.

No. 851,906. Specification of Letters Patent. Patented April 30, 1907.

Application filed August 13, 1906. Serial No. 330,414.

To all whom it may concern:

Be it known that I, ERNST STRASSBURGER, a citizen of Germany, residing in Chicago, Cook county, Illinois, have invented certain new and useful Improvements in the Construction of Pliers, whereof the following is a full and correct specification, reference being had to the hereto accompanying drawing, forming a part hereof and in which—

Figure 1 shows my said new device in side view; Fig. 2 shows the same opened and the legs broken away, short. Fig. 3 shows the inside view of the construction of one jaw, and Fig. 4 shows the inside construction of the opposite jaw of my said device. Fig. 5 shows the end or top view of Fig. 3, extended farther down toward the pivot. Fig. 6 shows the end view of Fig. 4, also extended farther down toward the pivot. Figs. 3 and 4 show only the working part of each jaw, the other parts being broken away. Fig. 7 shows the jaw end of said instrument applied to the work for which it is specially designed. Fig. 8 shows a fragment of a rimless eye-glass and its attachment, in side view.

It is a well known fact that metal attachments to rimless lenses of spectacles become loose, easily, and that it is more or less laborious to re-fit said parts so that they shall hold properly and so that all looseness shall be overcome. The said work is now done with ordinary pliers, which are not well fitted for such work and, therefore, are the cause of frequent breakage of such lenses.

The object of my invention is to overcome said difficulty. To attain said desirable end I make a pair of pliers of special construction and well adapted directly to overcome said difficulty.

I provide an ordinary pliers *a* with two specially constructed jaw-members *b* and *c* whereof the special construction of said parts is, more particularly, at their extreme ends, as will be made clear in showing their actual use. The jaw *b* is semi-cylindrical, externally, and flat, internally, and provided with a central notch or groove *d*, and the jaw *c* is a comparatively thin member, concaved internally and convexed externally, as shown in Figs. 4 and 5, in which the former shows the interior construction, and the latter shows the same in end view, as seen in looking toward its outer end, a greater length of jaw being shown in the latter than in the former Fig., and said part is provided with a rectangularly shaped notch *e* cut through from side to side, as shown. The jaw *c* is somewhat longer than its opposite member *b*, as clearly shown in Figs. 1 and 7, and in the latter Fig. the reason for such added length is clearly apparent, the glass is relieved from all strain and, consequently, from all danger of breaking.

The nose-piece *f'* of rimless eye-glasses is provided with a clamp *f* at each end and from said clamp extend arms *f*³ which lay on the edge of the lenses *i* to prevent the motion of the clamp or clamps *f* around the screw *g* which causes said looseness. With my said new pliers said looseness is quickly and entirely overcome by applying them as shown in Fig. 7. Preferably, the screw *g* is loosened before the instrument is applied, then the jaws of said instrument are shut against the jaw-blade *f*² and compressed firmly enough to shorten or upset said blade *f*² sufficiently, after which said screw is again driven home.

The essential features of my said structure are the shorter jaw with an internal notch *d* to hold the work from slipping or injury, and the longer jaw with an end notch adapted to leave untouched the central rib or ridge of the nose-piece.

What I claim is:

Pliers whereof one jaw-member is provided with a notch forming a longitudinal channel in the face toward the opposite jaw and said opposite jaw provided with an end notch cut through the member so as to leave two short prongs.

ERNST STRASSBURGER.

Witnesses:

WM. ZIMMERMAN,

WM. SCHUMACHER.