

UNITED STATES PATENT OFFICE.

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OPTICIAN'S ANGLING PLIERS.

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To all whom it may concern:

Be it known that I, PHILIP N. HANSEN, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Optician's Angling Pliers, of which the following is a specification.

An object of this invention is to provide for opticians, pliers for the purpose of angling the crests of the bridges of spectacles by making a bend in the shank to afford greater comfort to the wearer of the glasses. An object is to enable the optician to more easily alter the angle of the crests so as to conform the bridge to the contour of the nose.

An object is to make it a simple and easy matter to adjust the crests of the bridge to the same angle as the bridge of the nose; for example 20, 30 or 45 degrees from the vertical, as the case may be. The average nose will take a 45 degree angle.

The principle of the invention is that the pivoted jaws of the pliers are provided with lips spaced different distances from the axis of the jaws so that when the pliers are closed the lip that is nearer the axis is interposed between the other lip and said axis with a gap between it, and the axis on one side and the other lip on the other side, and the jaw having the other lip also has an anvil or forming face opposed to the intermediate lip. Such anvil may be variously formed.

In some instances it may be flat, and in others it may be recessed directly opposite the intermediate lip.

An object of the invention is to provide an instrument by which the optician may put a kink or crimp into the shank of a bridge with great ease and accuracy.

An advantage is that by this newly invented pliers the workmen can make the required bends with but one instrument held in one hand while holding the bridge by the fingers of the other hand.

Other objects, advantages and features of invention may appear from the accompanying drawing, the subjoined detail description and the appended claims.

I have applied the invention in two forms which for conveniences of separate reference I term respectively, the parrot nose and the flat anvil types.

The accompanying drawing illustrates the invention in two of the forms in which I have embodied the invention.

Figure 1 is a perspective view of the parrot nose or short bend form of the newly invented pliers in position for making a short bend in the shank of a spectacle bridge.

Fig. 2 is a side view of the short-bend pliers showing the shape and relationship of the two jaws.

Fig. 3 is a fragmental perspective view of the pliers open to receive a bridge showing the recessed, grooved or notched place in the anvil or contact surface of the longer jaw.

Fig. 4 is a fragmental side view of a form of the invention in which the anvil face is flat and straight.

Fig. 5 is a fragmental perspective view of a flat anvil form of the invention showing the pliers applied to one of the stronger shanks, for re-forming the same.

Fig. 6 is an enlarged fragmental perspective view of pliers of the type shown in Figs. 4 and 5 on an enlarged scale.

Fig. 7 is a fragmental view on enlarged scale showing the ends of the jaws slightly open.

Fig. 8 is a view analogous to Fig. 7 showing the jaws closed.

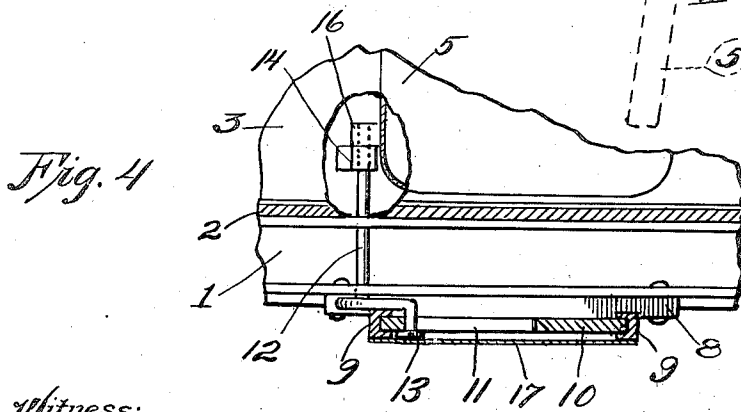
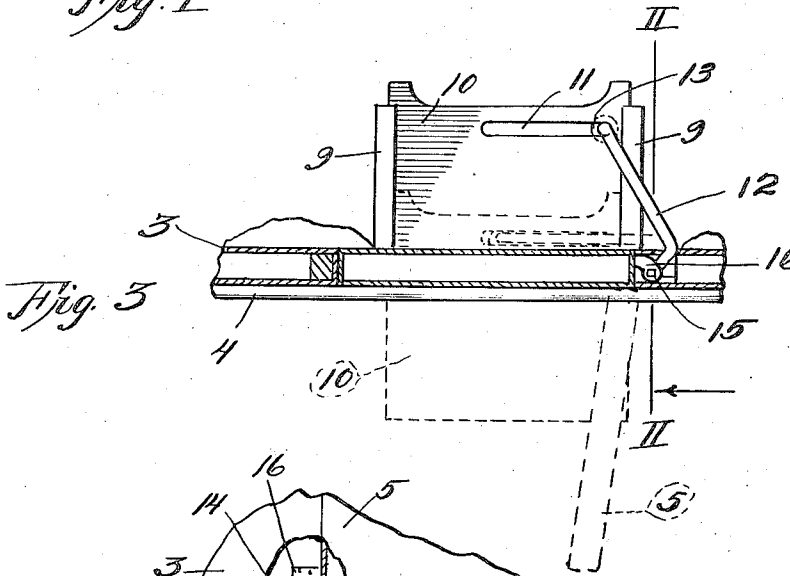
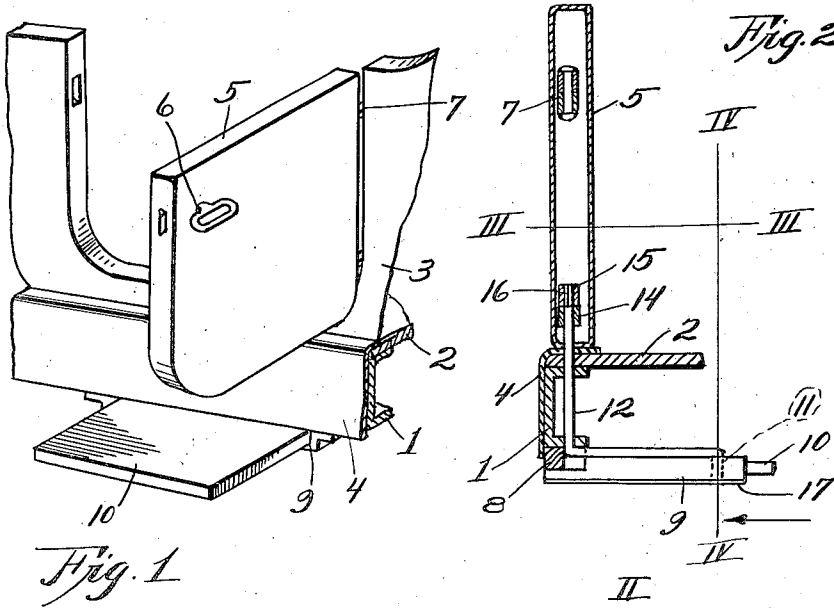
The parrot nose angling pliers shown in Figs. 1, 2 and 3 are connected by the usual pivot 1 and are constructed with the distinctive longer and shorter jaws 2, 3 terminating respectively in the non-articulating inwardly bent broad points, terminals or lips 4, 5; the lip 4 being further and the lip 5 being nearer than the other with respect to the pivot. The nearer lip 5 of the shorter jaw is intermediate the farther lip 4 of the longer jaw and the pivot 1 when the jaws are in closed position as indicated in Fig. 2. The longer jaw 2 is provided with a transverse groove or recess 6 opposite to the lip 5 of the shorter jaw and is adapted to accommodate said lip 5 which meshes therewith, and to form a gap between the lip 4 and the anvil 7 provided on the inner face of jaw 2 to receive the shank 8 of a bridge that is to be re-formed. The lips 4 and 5 have transverse grooves which serve to hold the bridge in place and prevent the bridge from slipping out of the jaws while being re-formed.

In practice with this form of instrument the bridge of a pair of glasses will be grasped in one hand by the operator, and the pliers grasped in the other hand will be applied to grip the shank or other part to

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 AUTO STEP.
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