

UNITED STATES PATENT OFFICE.

ROBERT G. FRAME, OF PITTSBURGH, PENNSYLVANIA.

PLIERS.

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To all whom it may concern:

Be it known that I, ROBERT G. FRAME, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented new and useful Improvements in Pliers, of which the following is a specification.

This invention relates to pliers, and contemplates a tool primarily designed to facilitate the association of the component parts of metal molding, so that the latter can be very easily and more economically installed, although the tool is susceptible of general use.

More specifically stated, the tool embodies a fixed jaw and a movable jaw, the latter being mounted for sliding movement in a plane parallel with the handle of the tool, in contradistinction to the pivotal movement of the present day pliers, so that the cap of the molding can be forced upon the base thereof without bending or otherwise marring the molding, which is a matter of importance when molding is being arranged on elaborate ceilings, show windows, and the like.

The nature and advantages of the invention will be better understood when the following detailed description is read in connection with the accompanying drawing, the invention residing in the construction, combination, and arrangement of parts as claimed.

In the drawing forming part of this application, like numerals of reference indicate similar parts in the several views, and wherein:

Figure 1 is a side elevation of the pliers showing the manner of using the pliers with metal molding,

Fig. 2 is an edge elevation,

Figure 3 is a sectional view taken on the line 3—3 of Fig. 2, and

Fig. 4 is a sectional view taken on the line 4—4 of Fig. 1.

Referring to the drawing in detail, 10 indicates the handle of the tool at one end of which is formed a stationary jaw 11. Projecting from this handle at an appropriate point in its length are spaced parallel plates 12, the latter being provided with alined slots 13 for a purpose to be hereinafter described. The movable jaw is indicated at 14, and includes a shank 15 arranged to slide between the plates 12 and in parallelism with the handle 10. Projecting from

the opposite sides of the shank 15 are spaced pins 16 which slide in the slots 13 whereby the movable jaw is guided in its movements. Also positioned between the plates 12 is a spring 17, one end of which is connected with the shank of the movable jaw, and the other end connected with one of the plates 12, the spring normally holding the movable jaw spaced from the fixed jaw. The movable jaw is moved into gripping relation with the fixed jaw through the instrumentality of a lever 19 fulcrumed between the plates 12 as at 20 and which lever is formed with a cam portion 21 which constantly engages the lower end of the shank 15 of the movable jaw. With the movable jaw in its normal position, the lever is spaced from the handle 10 and when the lever is drawn in close proximity to the handle, the movable jaw is forced into gripping relation with the fixed jaw. While as above stated, the general application of the tool is contemplated by the claim, it is primarily intended for use with metal moldings, whereby the component parts of this molding can be more easily and economically associated. The use of the tool is clearly illustrated in Fig. 1, wherein the cap 22 of this molding is spaced from the base 23 thereof and arranged between the jaws of the pliers just prior to the operation of the pliers for the purpose of forcing the cap downwardly upon the base. The construction of the pliers is such that this work can be accomplished without bending or otherwise injuring the molding which frequently occurs when pliers of ordinary construction are employed, the construction also permitting the use of the pliers in close places adjacent the ceiling where other tools cannot be conveniently manipulated.

While it is believed that from the foregoing description, the nature and advantages of the invention will be readily apparent, I desire to have it understood that I do not limit myself to what is herein shown and described and that such changes may be resorted to when desired as fall within the scope of what is claimed.

Having thus described the invention, I claim:

A pair of pliers comprising a handle, a fixed jaw at one end thereof, spaced parallel plates projecting from one side of said handle and having alined longitudinal slots, a movable jaw, a shank projecting therefrom

and arranged to slide between said plates, said shank being reduced to form shoulders for limiting the movement of the jaw in one direction by contacting the adjacent ends of the said plates, a cross-pin carried by said shank and slidably received by said slots, a spring arranged between said plates and terminally connected therewith and with said shank to normally hold the jaw retracted, and a cam-shaped lever pivoted between said plates and engaging the adjacent end of said shank for moving the second-mentioned jaw toward the fixed jaw and against the tension of said spring. 10

In testimony whereof I affix my signature.

ROBERT G. FRAME.