

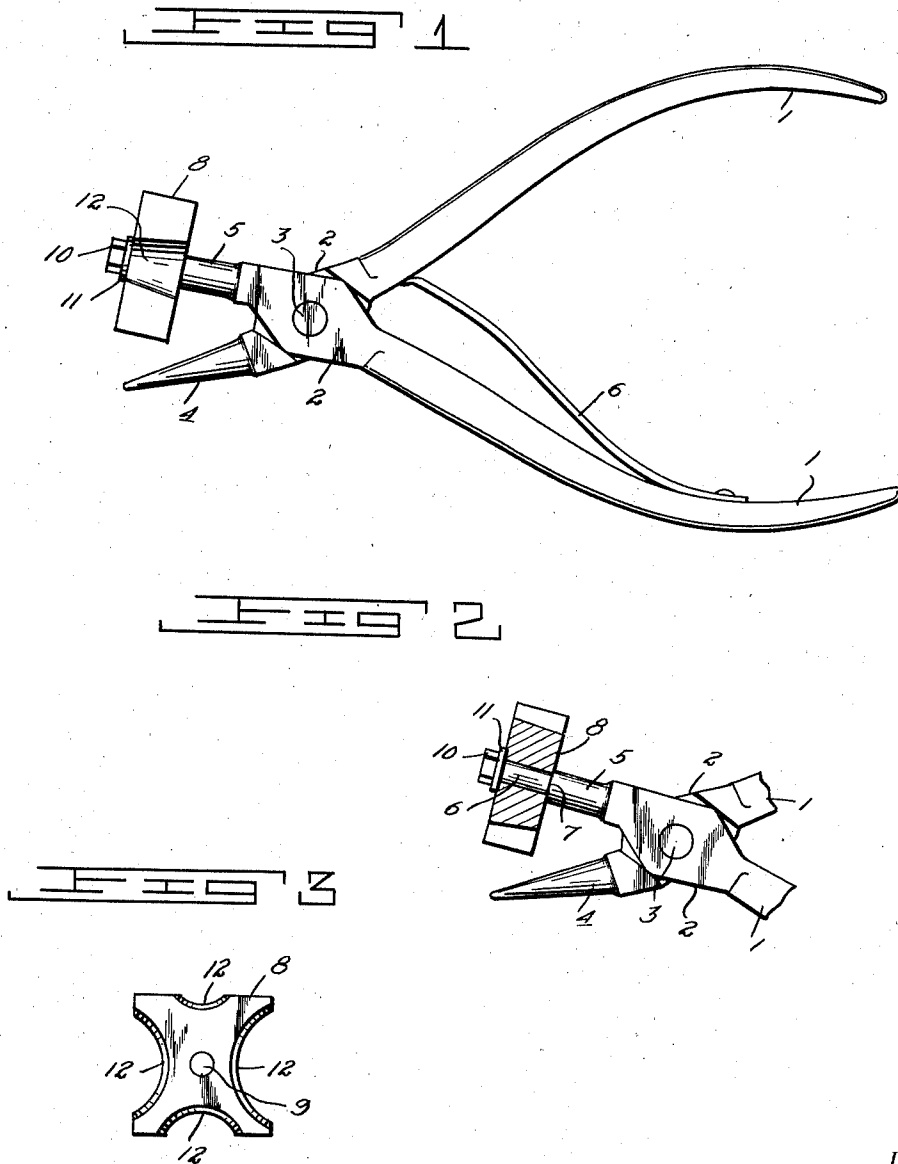
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BOW PLIERS

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BOW PLIERS

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1 Claim. (Cl. 81—15)

My invention relates to improvements in jewelers' pliers, and more particularly to so-called bow pliers for use in shaping and closing the split bow rings of watches.

The principal object of the invention is to provide simply constructed pliers of the type indicated particularly adapted for easily and quickly contracting and shaping various sizes of watch bows from the smallest close fitting to the largest, and especially of wrist watches both old and late models.

To the accomplishment of the above, and subordinate objects presently appearing, a preferred embodiment of my invention has been illustrated in the accompanying drawing, set forth in detail in the succeeding description, and defined in the claim appended hereto.

In said drawing:

Figure 1 is a view in side elevation of a pair of pliers embodying my improvements,

Figure 2 is a fragmentary view partly in side elevation and partly in vertical section, and

Figure 3 is a view in rear elevation of the head.

Reference being had to the drawing by numerals, in the preferred embodiment thereof, my improved pliers comprise the usual pair of hand grip levers 1 including a pair of laterally opposed, flat ends 2 pivotally connected by the usual transverse pivot pin 3.

Extending forwardly from the ends 3 of the hand grip levers 1, in the plane of said levers, is a pair of stud-like jaw members 4, 5 both transversely rounded and adapted for movement toward and from each other under corresponding movement of said hand levers 1. The usual leaf spring 6 interposed between the hand levers 1 tensions said levers against movement toward each other. One of the jaw members 4 is tapered to a point. The other jaw member 5 is straight with a reduced outer bearing end 6 forming a shoulder 7.

A flat, metal, polygonal clamping head 8 with a central transverse bore 9 is rotatably mounted, by means of said bore, on the end 6 of the jaw member 5 and detachably retained thereon against the shoulder 7 by a nut and washer 10, 11. The head 8 has formed in each side edge thereof an arcuate notch, or recess, 12 adapted to be centered in the edge and also relative to the jaw member 4. The notches 12 are formed in arcs of different radii, relatively, and are tapered

transversely outwardly of the head 8 from the rear face of the latter.

In the use of the described pliers, the tapered jaw member 4 is inserted in the watch bow, not shown, and the head 8 rotated on the jaw member 5 to present a notch 12 of appropriate curvature for clamping against the outside of the bow under movement of the hand levers 1 toward each other. Hence the jaw member 4 and selected notch 12 cooperate to contract and shape the bow. As will be clear, by virtue of the tapered form of the jaw member 4, it may be used in bows of a wide range of sizes and shape, and by virtue of the transversely tapered arcuate notches 12, each may be used to shape different sizes of bows by adjusting the selected notch laterally of the bows. Obviously, when the notches are adjusted transversely of the bows, the tapered jaw member 4 is, or may be, similarly adjusted for the use of different diameters, or circumferential portions thereof, with a selected notch 12.

The foregoing will, it is believed, suffice to impart a clear understanding of my invention without further explanation.

Manifestly, the invention, as described, is susceptible of modification without departing from the inventive concept, and right is herein reserved to such modifications as fall within the scope of the subjoined claim.

What is claimed as new is:

In a watch bow pliers, a pair of hand levers pivoted together in crossed relation for movement toward and from each other and terminating in a pair of forwardly extending opposed stud-like jaw members movable toward and from each other under corresponding movement of said levers into and from clamping relation, and a flat metal polygonal clamping head mounted on one jaw member for rotation crosswise of the other member to oppose the edges thereof selectively to said other member, said edges being concave in arcs of different circles, respectively, to provide sockets of different form for clamping coaction with said other member, the other member being tapered for fitting in watch bows of different sizes, and said sockets being tapered transversely in correspondence with the taper of said other member to variably curve a watch bow clamped in the same in different locations transversely thereof.

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