

(No Model.)

D. MENDELSON.
EAR WIRE FORMING DEVICE.

No. 485,964.

Patented Nov. 8, 1892.

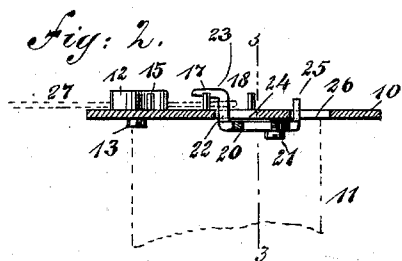
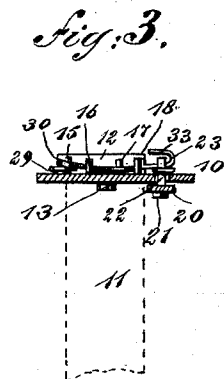
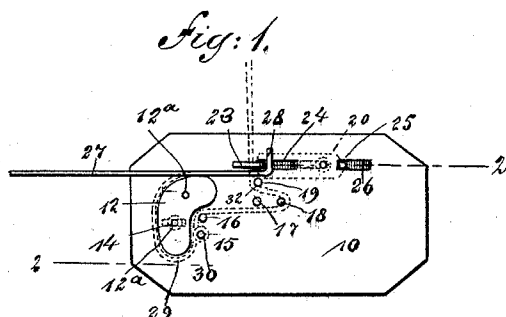


Fig: 4.

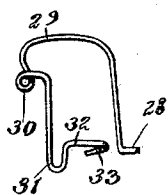


Fig: 5.

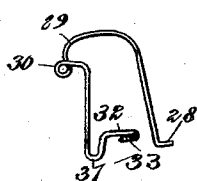


Fig: 6.

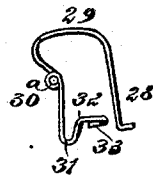


Fig: 7.

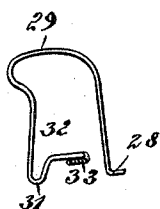
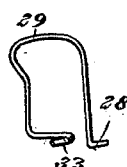


Fig: 8.



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DAVID MENDELSON, OF NEW YORK, N. Y.

EAR-WIRE-FORMING DEVICE.

SPECIFICATION forming part of Letters Patent No. 485,964, dated November 8, 1892.

Application filed June 20, 1892. Serial No. 437,402. (No model.)

To all whom it may concern:

Be it known that I, DAVID MENDELSON, of New York city, in the county and State of New York, have invented a new and Improved Ear-Wire-Forming Device, of which the following is a full, clear, and exact description.

My invention relates to an improved device for forming ear-wires, such as are made in the shape of loops of various kinds and worn in the ears as ornaments. It is the common practice to shape these wires by hand by means of pliers; but this process is slow and it is difficult to leave the wires perfectly smooth when forming them in this way.

The object of my invention is to produce a cheap and simple device which may be either held in the hand or secured in a vise and by means of which these forms of ear wires or loops may be quickly and accurately made.

To this end my invention consists in certain features of construction and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the device embodying my invention, showing in full lines the manner of starting a wire to form a loop and in dotted lines the formed loop. Fig. 2 is a longitudinal section on line 2 2 in Fig. 1. Fig. 3 is a cross-section on the line 3 3 in Fig. 2, and Figs. 4 to 8 are detail views of several forms of wires or loops which may be made with the device.

The base or body of the device consists of a flat plate 10, which is preferably provided on the under side with a stop or handle 11, as shown by dotted lines, and this enables the device to be held in the hand while a wire is formed, or to be conveniently clamped by a vise. On the top of the plate 10 and near one end is a detachable curved cam 12, having rounded ends, this cam being of a shape to form the body of the wire or loop which is attached to the ear, and the cam is provided with two fastening-holes 12^a, adapted to receive a screw 13, which secures the cam to the plate 10, and by having two holes the plate may be turned end for end, when desired, so

as to change the shape of the wire loop. The fastening-screw 13 is held in a longitudinal slot 14 of the plate 10, and consequently the cam may be adjusted longitudinally on the plate, so as to make an ear-wire of the desired length. In front of the cam 12 and placed side by side are upwardly-projecting pins 15 and 16, which are firmly fixed to the plate 10, and near the center of the plate are pins 17, 18, and 19, placed in a nearly-triangular position, as shown in Fig. 1, the pins 17 and 18 aligning longitudinally of the plate and the pins 17 and 19 aligning transversely. Near one edge of the plate and on the under side is a longitudinally-movable slide 20, which is held to the plate by a screw 21, extending through the center slot in the slide, and at one end of the slide is an upwardly-extending arm 22, which has a bent end 23, extending rearwardly toward the cam, the bent end being nearly parallel with the plane of the plate 10. The arm 22 is held to slide in a slot 24 in the plate. At the opposite end of the slide 20 is a stud 25, which extends upward through a slot 26 in the plate, and by means of this stud the slide may be conveniently moved. The wire 27 of which the ear-wires are formed comes in long lengths and is cut off after each ear-wire is made, as described below. To form a loop or wire such as is shown in Fig. 4, the end of the wire 27 is bent at right angles, as shown at 28, the slide 20 is pushed back toward the cam 12 until the arm 22 reaches the rear end of the slot 24, the bent end 28 is passed in front of the arm 22, so as to engage the same, and the wire 27 is then pulled back around the back convex side of the cam 12 and around one end of the cam, thus forming the top bend 29 of the ear-wire. The wire is then passed once around the pin 15, forming the eye 30, to which a pendant may be hung, is then passed forward behind the pin 16, is then carried longitudinally forward on the plate by the pin 17 and half around the pin 18, thus forming the loop 31, which is adapted to support a pendant, and is then carried sideways behind the pin 19, forming the bend 32, and is carried beneath the bent end 23 of the arm 22, doubled upward over the arm, forming the keeper 33, and is then cut off. The bent end 28 is then

pushed from in front of the arm 22 and the operator presses with his thumb or finger upon the stud 25 and pushes the slide 20 forward, so as to pull the bent end 23 of the arm 22 out of the keeper 33. All this may be accomplished in less time than it takes to describe it. The formed wire is then raised from the cam and pins and, if necessary, the eye 30 is closed a little by a light tap with a hammer. It will be seen that a wire thus formed is one of the well-known wires of commerce, and the keeper 33 is adapted to catch and hold the free end of the wire, thus forming a locking-clasp. If another form of the wire is to be made, the cam 12 is turned end for end and the above operation proceeded with, the result being a somewhat-narrow wire. (Shown in Fig. 5.) If the eye is to be produced in a different place, the wire after being passed around the cam 12 may be carried around the pin 16 instead of around the pin 15, thus producing the eye 30^a, as shown in Fig. 6. If a plain wire is to be formed without any eye, the wire 27 after being passed around the cam 12, as described, is extended straight across between the pins 15 and 16 and curved side of the cam, is then carried forward around the pin 18, as described, and formed into a terminal keeper, as set forth above, this form of wire being shown in Fig. 7.

In Fig. 8 is shown one of the plainest forms of the wires made, which does not have the pendant-loop 31. In this case the wire is passed around the cam 12, as in the above cases, between the cam and the pins 15 and 16, and is bent at right angles around either the pin 17 or 19 instead of being carried forward around the pin 18.

The forms of wires shown are the usual kind, such as the trade calls for; but it will be understood that if the demands of the trade should change the shape of the cams 12 and the relative position of the forming-pins

may be also changed, so that the desired form of wire may be made.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A device of the character described, comprising a plate or bed, an arm held to slide on the bed, the arm having its upper end bent to engage a wire to be shaped, a forming-cam secured to the bed adjacent to the wire-holding arm, and forming-pins projecting from the bed near and to one side of the forming-cam and also adjacent to the bent arm, substantially as described.

2. A device of the character described, comprising a base-plate having a longitudinal slot therein, a bent arm held to slide in the slot, the arm having its upper end bent into a plane substantially parallel with the plate and adapted to engage a wire to be formed, a longitudinally-adjustable forming-cam held to the plate near the bent arm, forming-pins secured to the plate and extending upward near one edge of the cam, and a second group of pins secured to the plate and held near one side of the sliding arm, substantially as described.

3. A device of the character described, comprising a slotted base-plate, a slide held to the under side of the base-plate and having an upwardly-extending bent arm and an upwardly-extending stud held to move in the slots of the base-plate, a cam secured to the base-plate near one end, forming-pins secured to the base-plate near one edge of the cam, and a second set of pins secured to the base-plate at one side of the bent arm, substantially as described.

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Witnesses:

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