O. N. SHORE.

HAND VISE.

APPLICATION FILED DEC. 20, 1919.

1,334,971. Patented Mar. 30, 1920.

FIG_1_

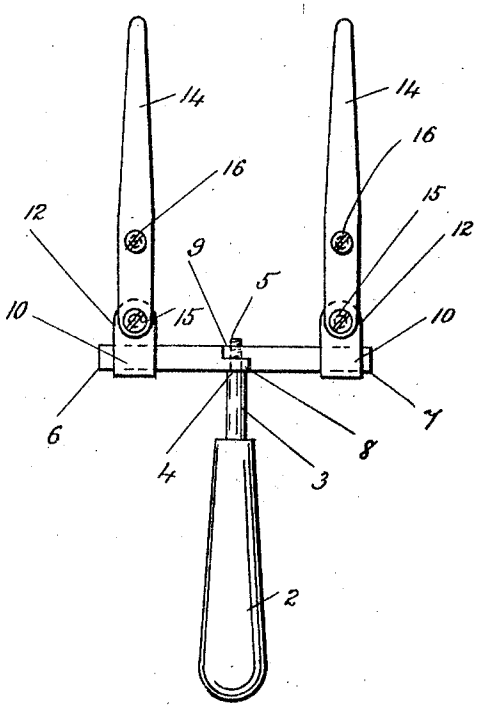


FIG_2_

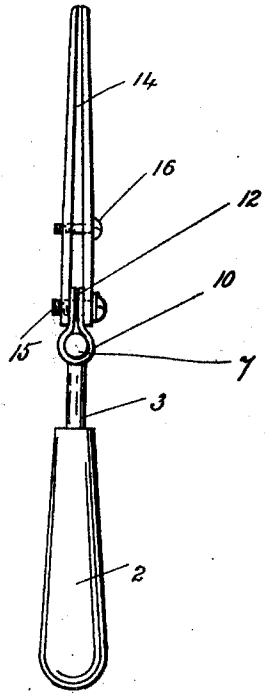


FIG_3_

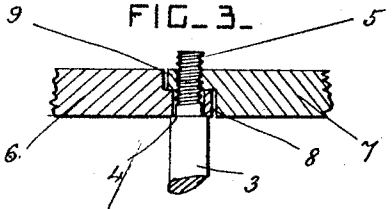
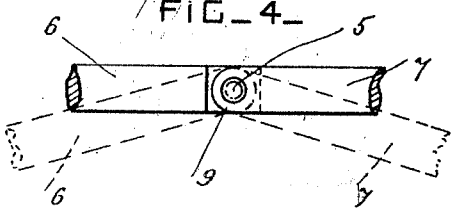


FIG_4_



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UNITED STATES PATENT OFFICE.

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HAND-VISE.

1,334,971. Specification of Letters Patent. Patented Mar. 30, 1920.

Application filed December 20, 1919. Serial No. 346,264.

To all whom it may concern:

Be it known that I, OSCAR N. SHORE, a citizen of the United States, residing at University Place, in the county of Lancaster and State of Nebraska, have invented certain new and useful Improvements in Hand-Vises, of which the following is a specification.

This invention relates to hand vises for the use of jewelers and others; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed whereby the vise is specially adapted to hold portions of the frames of spectacles and eyeglasses while they are being soldered together.

In the drawings, Figure 1 is a front view of a hand vise constructed according to this invention. Fig. 2 is an end view of the same. Fig. 3 is a detail vertical section through the pivot joint of the two arms, drawn to an enlarged size. Fig. 4 is a plan view of the same.

The vise is provided with a handle 2 of any convenient form, and a pivot spindle 3 is secured in this handle, and is provided with a shoulder 4 and a screwthreaded end portion 5.

Two arms 6 and 7 are provided and are normally arranged axially in line with each other. One arm 6 has a lug 8 at its lower part which is pivoted loosely on the screwthreaded portion 5, and which bears against the shoulder 4. The other arm 7 has a lug 9 which overlaps the lug 8 and which has a screwthreaded hole which engages with the screwthreaded portion 5. These two arms are always retained at the same level, but they can be moved pivotally out of alinement, as shown in Fig. 4, and can be clamped in any desired position by screwing the screwthreaded portion 5 tightly into the upper lug so as to clamp the two lugs together with the lower lug bearing hard against the shoulder.

The two arms are cylindrical or have cylindrical end portions. Clips 10 are mounted on the end portions of the two arms 6 and 7 and have projecting lugs 12. Pairs of tweezers 14 are provided, and are connected pivotally at one end with the lugs 12. The members of the tweezers straddle the two lugs, and the pivot screws 15 which connect the parts are screwed into one of the tweezer members. Each pair of tweezers has a screw 16 at its middle part for tightening its grip on the portion of the spectacle frame or other object which is placed in its jaws. The clips 10 are formed of spring metal and they can be slid longitudinally and circumferentially on the arms, and the tweezers can be moved to the right or to the left pivotally to suit the objects to be held or soldered together.

The screws 15 are screwed up so as to clamp the clips and the tweezers to the arms after the positions of the clips and the tweezers have been adjusted. The tweezers are preferably made of spring steel, or other resilient material.

This device is specially adapted for use in making spectacle frames which are formed of separate parts and united by soldering them together, but it may be used for holding other articles if desired.

What I claim is:

In a hand vise, a supporting spindle, two adjustable arms having their adjacent end portions pivotally connected to the spindle and normally arranged in line with each other, spring connecting members adjustable longitudinally and circumferentially on the said arms and provided with projecting lugs, pairs of tweezers having end portions which straddle the lugs of the connecting members, each pair of tweezers being provided with a clamping screw at its middle part, and a single pivot screw connecting each pair of tweezers pivotally to the lugs of the connecting member to which it pertains, said pivot screw operating to clamp the tweezers to the lugs and to clamp the connecting member to its arm.

In testimony whereof I have affixed my signature.

OSCAR N. SHORE.