No. 650,395. Patented May 29, 1900.

C. H. JENKINS.

WATCHMAKER'S HAND VISE.

(Application filed Feb. 14, 1900.)

(No Model.)

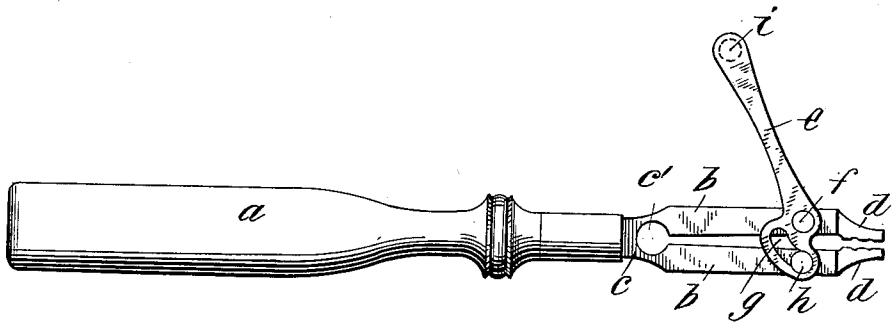


Fig. 1.

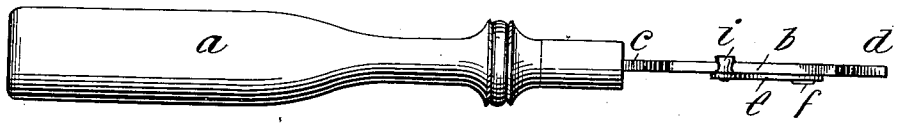


Fig. 2.

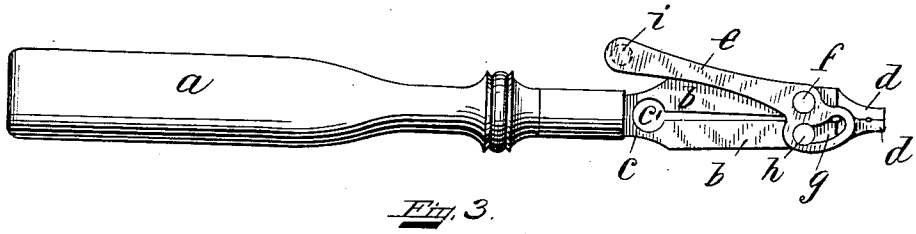


Fig. 3.

Witnesses:
Halle E. Willis
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Inventor:
Charles H. Jenkins,
by W. L. Frothingham,
his Attorney.

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UNITED STATES PATENT OFFICE.

CHARLES H. JENKINS, OF LEBANON, NEW HAMPSHIRE, ASSIGNOR OF ONE-HALF TO FRANK B. KENDRICK AND WILLIAM F. DAVIS, OF SAME PLACE.

WATCHMAKER'S HAND-VISE.

SPECIFICATION forming part of Letters Patent No. 650,395, dated May 29, 1900.

Application filed February 14, 1900. Serial No. 5,131. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. JENKINS, a citizen of the United States, residing at Lebanon, in the county of Grafton and State of New Hampshire, have invented a certain new and useful Improvement in Watchmakers' Hand-Vises, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to hand-vises especially adapted for the use of watchmakers, and has for its object to provide a simple and efficient means for holding the small and delicately-made parts of a watch or other like device while the same are being operated upon or in the act of being inserted into place. It is especially suited for holding all the metallic parts of a watch and all those parts—such as screws, pallets, pinions, &c.—which would not be likely to be crushed or broken by the force of the grasping action of the jaws of the vise. For this reason it could not be used as a jewel-holder, as the force of the jaws when closed would crush the jewel or other similar article.

The invention consists in the novel features of construction hereinafter set forth and described, and more particularly pointed out in the claims hereto appended.

Referring to the drawings, Figure 1 is a side elevation showing the jaws open. Fig. 2 is a plan view, and Fig. 3 is a side elevation showing the jaws closed.

Like letters of reference refer to like parts throughout the several views.

a denotes the handle, and *b b* metallic bars made, preferably, from one piece of thin flat metal and provided at their inner ends with a shank *c*, which is suitably secured to the handle *a*, and terminating at their outer ends in the jaws *d d*.

c' is a hole bored or cut through the bars, near the shank, the function of which is to give greater resiliency or spring to the bars, which are a slight distance apart, this distance gradually increasing from the said hole to the jaws proper.

e is a cam-lever pivoted to one side of the upper bar at *f* and provided with a cam-slot *g*, in which the knob or pin *h*, attached to one side of the lower bar, is free to travel as the said lever is moved down or up in parallelism with said bars, as hereinafter set forth. The lever *e* is provided with a knob or projection *i*, which is countersunk in the same, for greater convenience in manipulating the tool.

The mode of operation is as follows: When it is desired to hold any object such as has been above referred to, the article is placed within the jaws *d d* and the cam-lever pulled down. This action, owing to the cam-operated mechanism above described and the spring-bars, brings the jaws together and causes the article to be firmly grasped and held. To release the article, the operation is reversed.

What I claim, and desire to secure by Letters Patent, is—

1. In a hand-vise, the spring-bars *b*, *b*, provided with the jaws *d*, *d*, constructed of thin flat material, combined with the cam-lever *e* pivoted to the side of one of said bars and provided with a cam-slot, and the knob or pin *h* arranged on the side of the other of said bars and engaging said cam-slot, whereby the said cam-lever moves in parallelism with said bars to open and close the jaws, substantially as described.

2. In a hand-vise, the spring-bars *b*, *b*, provided with the jaws *d*, *d*, at one end and terminating in the shank *c* at the other end, all constructed of a thin flat piece of material, combined with the cam-lever *e* pivoted to the side of one of said bars and provided with a cam-slot, the knob or pin *h* arranged on the side of the other of said bars and engaging said cam-slot, whereby the said cam-lever moves in parallelism with said bars to open and close the jaws, and the handle *a* into which the said shank is inserted, substantially as described.

3. In a hand-vise, the spring-bars *b*, *b*, provided with the jaws *d*, *d*, constructed of thin flat material, combined with the cam-lever *e* pivoted to the side of one of said bars and

provided with a cam-slot, and the knob or pin *h* arranged on the side of the other of said bars and engaging said cam-slot, whereby the said cam-lever moves in parallelism with said bars to open and close the jaws, and the knob *i* on said cam-lever, substantially as and for the purpose described.

In witness whereof I have hereunto affixed my signature, this 5th day of February, 1900, in the presence of two witnesses.

CHARLES H. JENKINS.

Witnesses:
HALLE E. WILLIS,
J. L. SPRING.