

L. S. STARRETT.  
 VISE JAW ATTACHMENT.  
 APPLICATION FILED MAY 31, 1910.

1,006,509.

Patented Oct. 24, 1911.

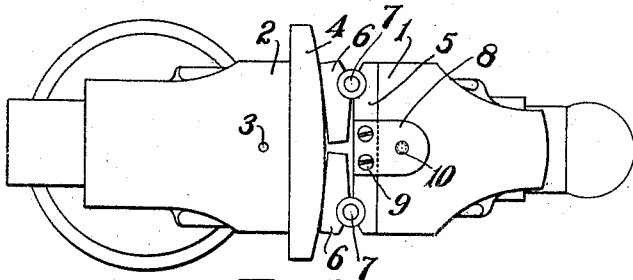


FIG. 1

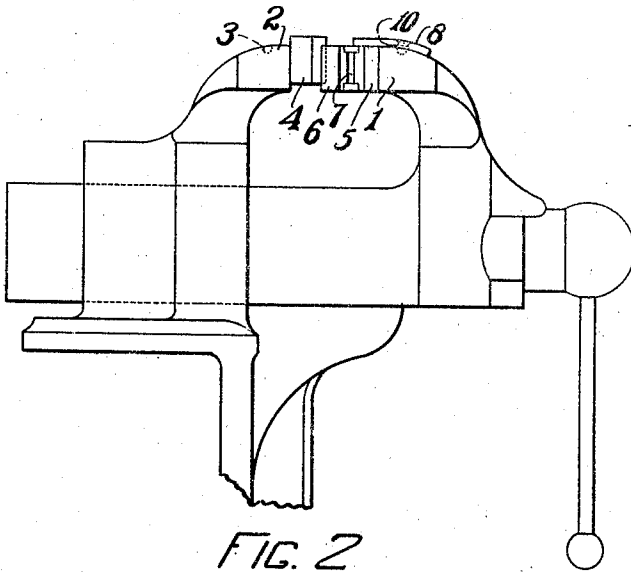


FIG. 2

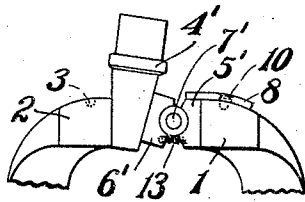


FIG. 3

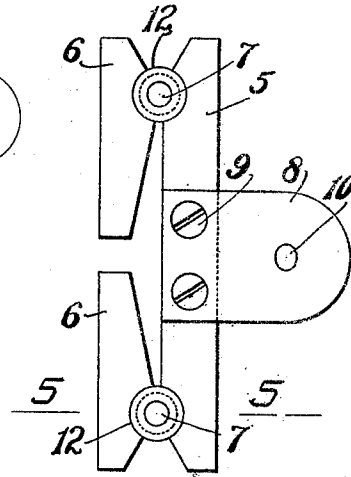


FIG. 4

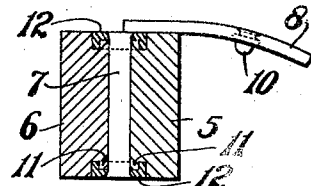


FIG. 5

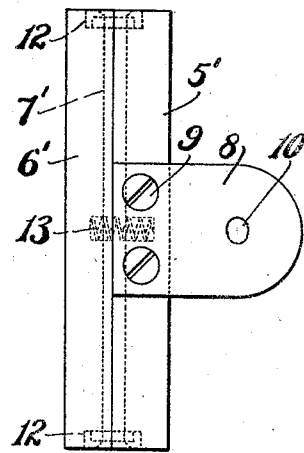


FIG. 6

WITNESSES  
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# UNITED STATES PATENT OFFICE.

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## WISE-JAW ATTACHMENT.

1,006,509.

Specification of Letters Patent.

Patented Oct. 24, 1911.

Application filed May 31, 1910. Serial No. 564,054.

*To all whom it may concern:*

Be it known that I, LAROCY S. STARRETT, a citizen of the United States, residing at Athol, county of Worcester, Commonwealth of Massachusetts, have invented certain new and useful Improvements in Vise-Jaw Attachments, of which the following is a specification.

This invention relates to vise jaws, and particularly to an auxiliary vise jaw or jaw attachment adapted to automatically conform to and hold firmly tapering pieces of work of irregular shapes which have to be gripped in a vise.

The difficulty of holding work of irregular shape, and particularly small pieces of work having such irregularities, is well known and it is the object of the present invention to provide means for firmly holding work of this nature without danger of mutilation and in a manner permitting the greatest accessibility and freedom in operation. This I accomplish by providing a supplemental jaw capable of adjustment relative to the opposite jaw, so as to allow for any taper, slant or other irregularity of surface upon which it may be necessary to clamp.

As illustrative of my invention I shall describe in the following specification an embodiment which I find well adapted to practical use and to manufacture. In the drawings which form a part of the specification, I have shown this embodiment and throughout specification and drawings like reference numerals are employed to indicate corresponding parts.

In the drawings Figure 1 is a plan view of vise equipped with one form of my invention, Fig. 2 is a side view of the same, Fig. 3 is a side view showing an adaptation to the different form of work, Fig. 4 is a plan view of the attachment shown in Fig. 1, removed from the vise, Fig. 5 is a sectional view on the line 5-5, Fig. 4, and Fig. 6 is a plan view of the attachment shown in Fig. 3.

My attachment may be mounted on either of the jaws indicated as 1 or 2 of a vise and, when so mounted, will hold a piece of work, as 4, between itself and the opposite jaw.

My attachment consists of a supporting block or plate 5 having its rear surface adapted to rest along the face of the jaw 55 and having mounted on its outer face aux-

iliary jaw pieces 6. These jaw pieces 6 are vertically grooved between their ends and oppositely beveled on each side of the grooving to give a rocking clearance. The front face of the support 5 is also vertically grooved near each end and between these grooves, on the support 5 and the jaws 6, as shown in Fig. 5, are pintles 7.

12 are opposite heads set on the ends of the pintle and having flanged edges which engage the grooves 11 which are concentrically arranged about the pintle grooves on both the jaws 6 and the block 5. This arrangement gives a very strong joint as the thrust of the jaw 6 is taken up laterally through the pintle 7 and borne by the grooved face of the block 5. The block 5 may be provided with only one of the jaws 6 or may have two, as shown.

8 is a top plate fastened to the block 5 by screws 9 and having a nib 10 which enters the recess 3 on the upper side of the jaw so that the block 5 will be centrally hung thereon. The top plate 8 is narrow as compared with the length of the vise jaw, thus leaving a broad space on each side along which the work may be filled up flush with the top of the vise.

The construction shown in Figs. 1, 2, 4 and 5 show the arrangement for accommodating work with lateral irregularities.

In Figs. 3 and 6 I have shown a form of construction adapted to accommodate irregularities vertically. In this form the supporting block or plate 5<sup>1</sup> is transversely grooved, as is also the jaw 6 and between these grooves the pintle 7<sup>1</sup> is held. The rear face of the jaw 6<sup>1</sup> and the front face of the block 5<sup>1</sup> are preferably both oppositely beveled on each side of the pintle groove to allow the jaw to rock in either direction out of the perpendicular. The coil spring 13, which has one end resting in a socket in the block 5<sup>1</sup> and the other in a corresponding recess in the jaw 7<sup>1</sup>, tends normally to tip the jaw 6<sup>1</sup> up. As shown in Fig. 1, when such a piece of work as 4 is put into the vise the auxiliary jaw pieces 6 tip inward to engage it symmetrically and firmly. With a piece of work such as 4<sup>1</sup> the jaw 6<sup>1</sup> tips up to take care of any vertical taper or incline.

Various modifications in the structure and operation of my device may obviously be made without departing from the spirit of my invention.

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

1. An auxiliary attachment for a vise jaw comprising a supporting block having a rear jaw engaging face and a forward centrally grooved means for attaching said block to a jaw, an auxiliary jaw having a forward work engaging face and a centrally grooved rear face, said block and said jaw each having a kerf cut in each end, a pintle assembled between said grooves and a head on each end of said pintle and having flanges engaging said kerfs.

2. An attachment of the class described comprising a support, an auxiliary work engaging jaw adjustably mounted on said support to hold its work engaging face at an angle thereto, a socket in adjacent faces of said support and said jaw, and a coiled spring having one end seated in each of said sockets for yieldingly holding said jaw relative to said support.

3. An attachment of the class described

comprising a support, a pair of auxiliary work engaging jaws pivotally mounted on said support one adjacent to each end of said support each of said jaws being pivotally connected near its own outer end and being beveled on its rear face from its point of pivot toward its ends said supporting plate also being beveled from the point of pivot rearwardly, substantially as shown and described.

4. A vise jaw attachment comprising a supporting block, a central overhanging plate on said support and of a less width than the length of said plate and adapted to engage the top of a vise jaw and an auxiliary work engaging jaw adjustably mounted on said supporting block.

In testimony whereof, I affix my signature in presence of two witnesses.

LAROE S. STARRETT.

Witnesses:

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MARSHALL B. WATERMAN.