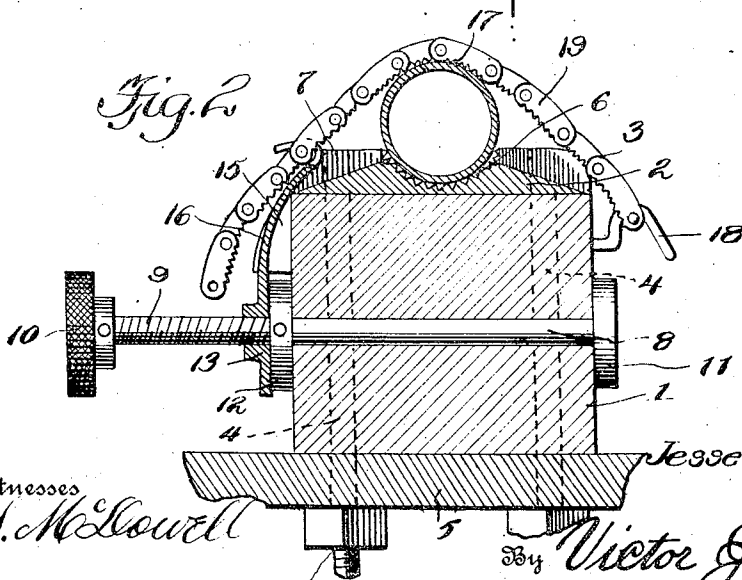


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PIPE-VISE.

1,008,277.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JESSE LEE LANTER, a citizen of the United States of America, residing at Richmond, in the county of Wayne and State of Indiana, have invented new and useful Improvements in Pipe-Vises, of which the following is a specification.

This invention relates to pipe vises, and has for an object to provide a structure of this character including a fixed rigid jaw and a flexible movable jaw, each of such jaws being provided with cooperating teeth which operate to hold the pipes fixedly secured between the jaws.

Another object of the invention is to provide in the fixed jaw means for guiding the flexible jaw and for retaining it and the fixed jaw respectively in relatively adjusted positions.

Another object of the invention is to provide a support on which the fixed jaw is detachably mounted so that when worn it may be removed and replaced by a new jaw at a minimum cost.

In the drawing, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views:—Figure 1 is a perspective view of the vise, a part of the flexible jaw being omitted. Fig. 2 is a vertical section through the vise.

The vise comprises a support 1 on which is mounted a fixed jaw 2 and a movable jaw 3. The jaw 2 is secured to the support 1 by fastening bolts 4, the said bolts being of a construction to permit them to also be engaged with the supporting bench 5 on which the device is mounted. The fixed jaw 2 is preferably constructed of steel, and as shown, it is provided in its upper surface with a transverse groove 6 which is toothed, throughout, to grip the pipe. The said fixed jaw is also provided with grooves 7 which open at their inner ends into the groove 6 and at their outer ends onto the outer edges of the fixed jaw. These grooves act as guides for the movable jaw in a manner to be hereinafter described.

The support 1 has revolvably mounted therein a shaft 8 which is provided with an outwardly extending screw portion 9 at the end of which is a manipulating knob 10. That portion of the shaft which is journaled in the support is provided at one end with a fixed head 11 which is located exteriorly of the support at one side thereof. The

shaft, at the opposite side of the support, is provided with a set collar 12 which operates with the head 11 to hold the shaft against displacement from the support.

An adjusting element embodying a main body portion 13 is fitted to the screw portion 9 of the shaft to be moved longitudinally thereon on rotation of the shaft. The main body portion 13 of the adjusting element is formed to provide shoulders 14 which ride on the under surfaces of the guide lugs 15. These guide lugs are formed integral with the support 1 and are properly spaced to form a guide-way and positioned there-between is a hook member 16 which extends up between the said lugs and is formed on the shouldered body 13 abutting against the under surfaces of the lugs 15 and forms a bearing for the screw 9. To the hook member 16 is attached one end of the flexible chain jaw 17, the opposite end of the said jaw being attached to hooks 18 at one side of the support 1. The links of the chain jaw are provided with toothed surfaces 19 which are superimposed with respect to the teeth in the groove 6 of the fixed jaw and which cooperate therewith to engage the pipe and to hold the same fixedly supported on the proper adjustment of the screw shaft.

From the construction described it will be seen that the vise can be conveniently associated with or removed from the pipe and the means described will be found most desirable in that a quick adjustment of the parts can be obtained with a view of gripping the pipe in the most efficient manner. Upon reference to Fig. 2 of the drawing, it will be observed that portions of the flexible chain jaw extend upwardly between the walls of the grooves 7 of the fixed jaw and the chain will be held thereby and in its operating position with respect to the fixed jaw and in a manner whereby the most desirable results will be obtained. The manipulating knob 10 is preferably secured to the screw end of the shaft after the parts 11 and 12 respectively have been properly adjusted to the support.

I claim:

A vise comprising a support, a fixed jaw detachably mounted thereon, a flexible jaw detachably secured by a hook member at the rear end of the support, the inner surface of the said jaw formed with serrations to grip the pipe, a movable adjusting ele-

ment secured at the forward end of the support, an operating shaft having its forward end screw threaded and adapted to receive the movable adjusting element, lugs formed integral with the support, the said lugs having proper spaced relation to form a guide-way, the said adjusting element being formed to provide an upwardly extending hook portion at one end and its opposite end being formed to provide shoulders, the said upwardly extending hook portion of the members being adapted to extend up be-

tween the said lugs and being formed on the lower shouldered portion of the member, the said lower shouldered portion of the member being adapted to abut against the under surfaces of the lugs and forming a bearing for the screw portion of the operating shaft. In testimony whereof I affix my signature in presence of two witnesses.

JESSE LEE LANTER.

Witnesses:

HARRY T. BEST,
WALLACE D. WILSON.