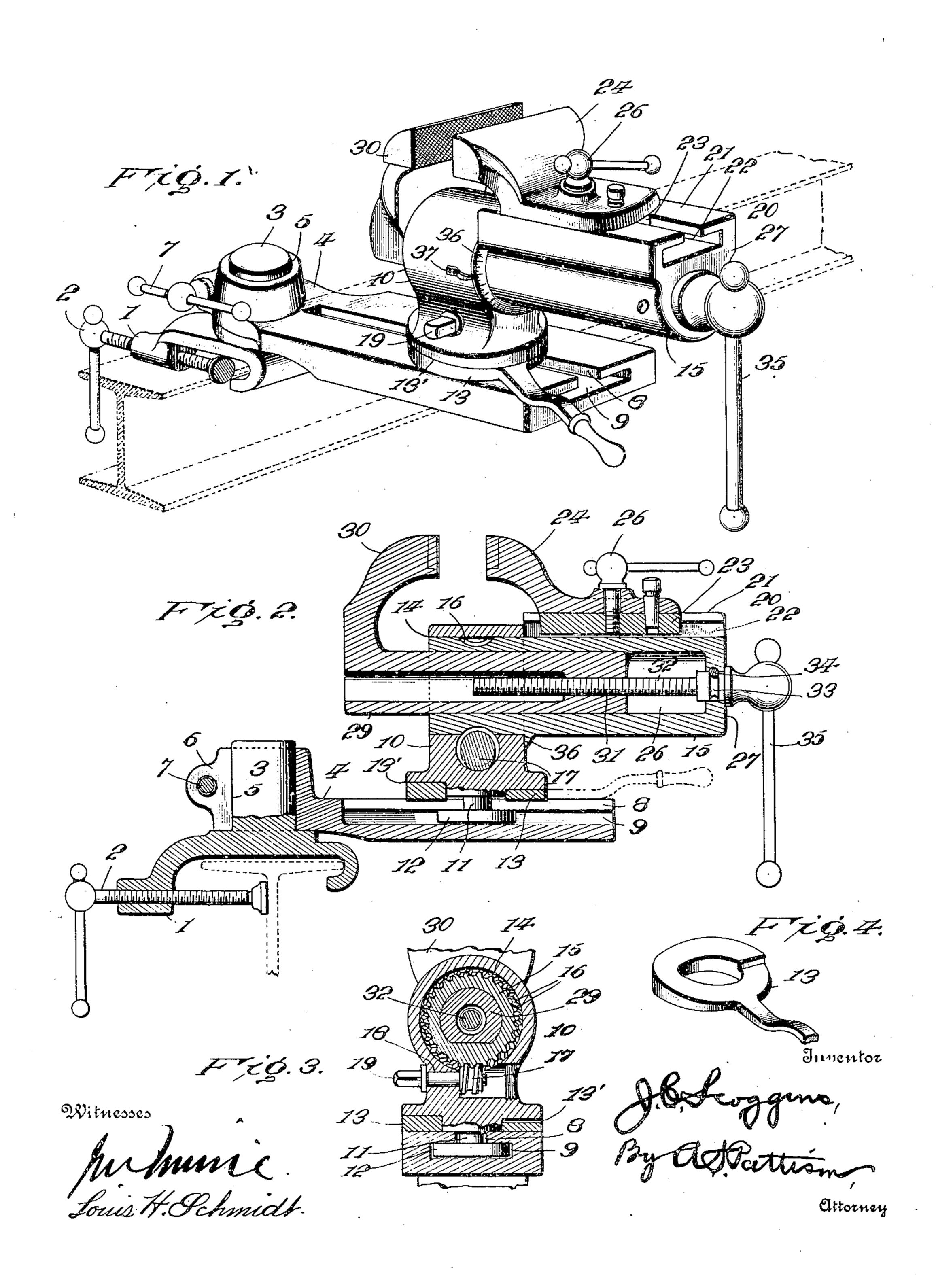
J. C. SCOGGINS.

VISE.

APPLICATION FILED SEPT. 27, 1905.



UNITED STATES PATENT OFFICE.

JESSE C. SCOGGINS, OF ALVA, OKLAHOMA TERRITORY.

VISE.

No. 832,087.

Specification of Letters Patent.

Patented Oct. 2, 1906.

Application filed September 27, 1905. Serial No. 280,316.

To all whom it may concern:

Be it known that I, Jesse C. Scoggins, a citizen of the United States, residing at Alva, in the county of Woods and Territory of 5 Oklahoma, have invented certain new and useful Improvements in Vises, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in 10 vises, and pertains more particularly to those

used in metal-working.

The object of my invention is to provide a device of this character which is provided with numerous adjustments, whereby the 15 clamping-jaws may be adjusted to or from the base to which the vise is attached or at any angle thereto, said jaws adapted to be oscillated independent of the other adjustments, thus producing a vise of this charac 20 ter in which the jaws may be adjusted in any desired position.

Another object of my invention is to provide a vise of this character in which the jaws are provided with means whereby the angle 25 at which the jaws are to be oscillated may be

readily determined.

A further object of my invention is to provide a more simple, cheap, and effective vise of this character having the numerous ad-

30 justments.

In the accompanying drawings, Figure 1 is a perspective view of my improved vise. Fig. 2 is a longitudinal vertical sectional view showing the jaws adjusted in their outward 35 position. Fig. 3 is a transverse vertical sectional view showing the jaws oscillated to one side and also showing the means for oscillating and holding said jaws in said position. Fig. 4 is a perspective view of the cam for

40 locking the standard to the arm.

Referring now to the drawings, 1 represents a clamp which, as shown, is provided with a set-screw 2, by means of which the same may be readily attached to the anvil-45 bench or other place, as desired. The said clamp 1, as clearly shown, is provided on its upper face with an upwardly-extending lug 3, upon which is mounted the main vise-supporting member 4. The said member 4 is 50 provided adjacent its end with an opening 5, through which the lug 3 passes, and is provided with a split outer end 6, which is provided with a thumb-screw 7, by means of which said member is allowed to oscillate 55 upon the lug 3, but may be securely locked thereon in its adjusted position.

The main body portion of the vise-supporting bracket is provided with a longitudinallyextending groove 8 in its upper face, and said groove is of a channel-like form, having a 60 broader lower end 9 for the purpose hereinafter more fully described. Fitting within and slidably mounted upon said vise-supporting bracket 4 is the main or body portion or standard 10 of the vise proper, which is pro- 65 vided at its lower end with a downwardlyextending pin 11, which passes into the groove 8 and is provided at its lower end with the enlarged portion or head 12, which slides in the groove 9 and allows the standard 10 to 70 be moved longitudinally in the slot and also allows the same to be turned therein, but preventing the upward movement thereon. The said pin is of a length slightly greater than the depth of the slot, thus leaving a space 75 above said slot. Loosely mounted upon said pin between the upper face of the member 4 and the standard 10 is a cam 13, which is adapted to act upon the lower cam-surface 13' of the standard 10, and thus said 80 standard is firmly locked upon the visesupporting member 4 in its adjusted position. The said standard 10 at its upper end is provided with an enlarged transverse opening 14, in which is loosely mounted an 85 elongated sleeve 15, which is adapted to oscillate in said standard, and is provided on its outer face within the standard with the threaded portion 16, which is adapted to be engaged by a transverse key 17, passing 90 transversely through an opening 18 in the standard, and said key is rotatably supported, but held against longitudinal movement. The outer end of said key 17 is provided with a squared end 19 for receiving a wrench 95 whereby the key is rotated, and the sleeve 15 is caused to oscillate according to the direction the key is rotated. As clearly shown, one end of said sleeve 15 is flush with one edge of the standard 10, while the opposite 100 end extends a considerable distance beyond the same. The said extended end 20 has its upper face formed with an elongated flat portion 21, which is provided with a longitudinally-extending dovetail recess 22, in which 105 is slidably mounted the block 23, and carried by the upper face of said flat portion 21 is the stationary jaw 24 of the vise. The said jaw is provided with a horizontally-extended portion 25, through which a thumb-screw 26 110 passes and enters the block 23, and thus the stationary jaw 24 may be moved longitudinally upon the upper smooth face of the

sleeve, as will be readily seen.

The sleeve 15, as before described, is of an elongated form and is provided with the 5 large opening 26, extending nearly entirely therethrough, but leaving a solid portion 27 at its outer end, which is provided with a reduced opening 28, the purpose of which will be hereinafter more fully described. Fitting 10 loosely within the large opening 26 of the sleeve is the elongated stem portion 29 of the movable jaw 30, said stem portion being of an angular form to correspond with the angular opening 26. Thus the movable jaw is 15 adapted to be moved longitudinal in respect to the sleeve 15, but held against rotation. The stem portion 29 of the movable clamping-jaw 30 is provided with a longitudinallyextending screw-threaded opening 31, which 20 is adapted to receive the operating-screw 32, which is rotatably mounted in the solid block portion 27 of the sleeve 15, and said screw is provided with a circumferential groove 33, in which extends a pin 34, carried by the sleeve 25 15, and thus the screw is allowed to rotate, but is held against longitudinal movement. The outer end of the screw 32 is provided with a handle or crank 35, by means of which it is operated, and thus the jaws are moved 30 to or from each other.

The sleeve 15 adjacent the standard 10 is provided with a circumferential flange 36, having a graduated scale thereon, and the standard is provided with a hand 37, extend-35 ing over the said flange and indicating at what angle the jaws are set or may be set.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is—

1. A vise, comprising a clamp, an arm pivotally carried by the clamp, means for locking the arm in its adjusted position on the clamp, a standard longitudinally movably mounted on said arm and adapted to rotate, 45 a cam for locking said standard in its adjusted position on the arm against rotation and longitudinal movement, an oscillating sleeve horizontally arranged within the standard and carrying a jaw means for locking said 50 sleeve in its adjusted position, a sleeve longitudinally movable in the first-mentioned sleeve and held against rotation, and carrying a jaw, and means for longitudinally adjusting said sleeve within the first sleeve.

2. A vise, comprising a clamp, an arm pivotally carried by the clamp, a standard longitudinally movably mounted on said arm and adapted to rotate, a cam for locking said standard in its adjusted position on the arm 60 against rotation and longitudinal movement, and movable jaws adapted to be oscillated horizontally in said standard.

3. A vise, comprising a clamp, an arm pivotally supported by the clamp and having a 65 longitudinally-extending channel-slot therein, a standard mounted upon said arm and having its lower face cam-shaped, a downwardly-extending pin carried by the standard and entering the channel-slot and allowing the standard to rotate and move longitu- 70 dinally therein, and a cam carried by the pin between the lower cam-face of the standard and the upper face of the arm whereby the standard is locked in its adjusted position on the arm.

4. A vise comprising a standard adjustably supported and having a horizontallyarranged opening therethrough, a sleeve extending through said opening and having a worm-gear arranged thereon within the 80 standard, a worm extending transversely through the standard at right angles to the sleeve and engaging the worm-gear thereon, a movable jaw mounted upon the upper face of the sleeve, and a second jaw having a 85 stem portion mounted with said sleeve and

longitudinally adjustable therein.

5. A vise, comprising a standard, adjustably supported and having a horizontallyarranged opening therethrough, a sleeve ex- 90 tending through said opening and having a worm-gear arranged thereon within the standard, a worm extending transversely through the standard at right angles to the sleeve and engaging the worm-gear thereon, 95 the upper face of said sleeve having a longitudinally-extending T-shaped slot, a jaw mounted within said slot, a set-screw carried by the jaw for holding the same in its adjusted position, and a second jaw having a stem 100 portion mounted with said sleeve, and a worm connection between said sleeve and jaw for longitudinally adjusting the same.

6. A vise, comprising a clamp, an arm pivotally supported by the clamp and having 105 longitudinally-extending channel-slots therein, a standard mounted upon said arm and having its lower face cam-shaped, a downwardly-extending pin carried by the standard and entering the channel-slot and allow- 110 ing the standard to rotate and move longitudinally therein, a cam carried by the pin between the lower face of the standard and the upper face of the arm, said standard having a horizontally-arranged opening therethrough, 115 a sleeve extending through said opening, and a worm-gear arranged thereon within the standard, a worm extending transversely through the standard at right angles to the sleeve and engaging the worm-gear on the 1 sleeve, a movable jaw mounted in said sleeve, and a worm carried by the sleeve and adapted to move the jaw longitudinally in respect to the sleeve.

7. A vise comprising a clamp, an arm piv- 125 otally supported by the clamp and having a longitudinally-extending channel-slot therein, a standard mounted upon said arm and having its lower face cam-shaped, a downwardly-extending pin carried by the stand- 130

ard and entering the channel-slot and allowing the standard to rotate and move longitudinally therein, a cam carried by the pin between the lower face of the standard and the 5 upper face of the arm, means whereby said cam can be oscillated on the pin, the upper end of said standard having a horizontallyarranged opening therethrough, and a wormgear arranged thereon within the standard, a 10 worm rotatably supported within the standard at right angles to the sleeve and engaging the worm-gear on the sleeve, a movable jaw

mounted in said sleeve, a worm carried by the sleeve and adapted to move the jaw longitudinally in respect to the sleeve, and a sec- 15 ond jaw carried by the outside of the sleeve and longitudinally adjustable thereon.
In testimony whereof I affix my signature

in presence of two witnesses.

JESSE C. SCOGGINS.

Witnesses:

B. F. BARNETT, J. A. DEVIN.