

No. 860,106.

PATENTED JULY 16, 1907.

R. W. PARKER.
VISE.

APPLICATION FILED NOV. 15, 1906.

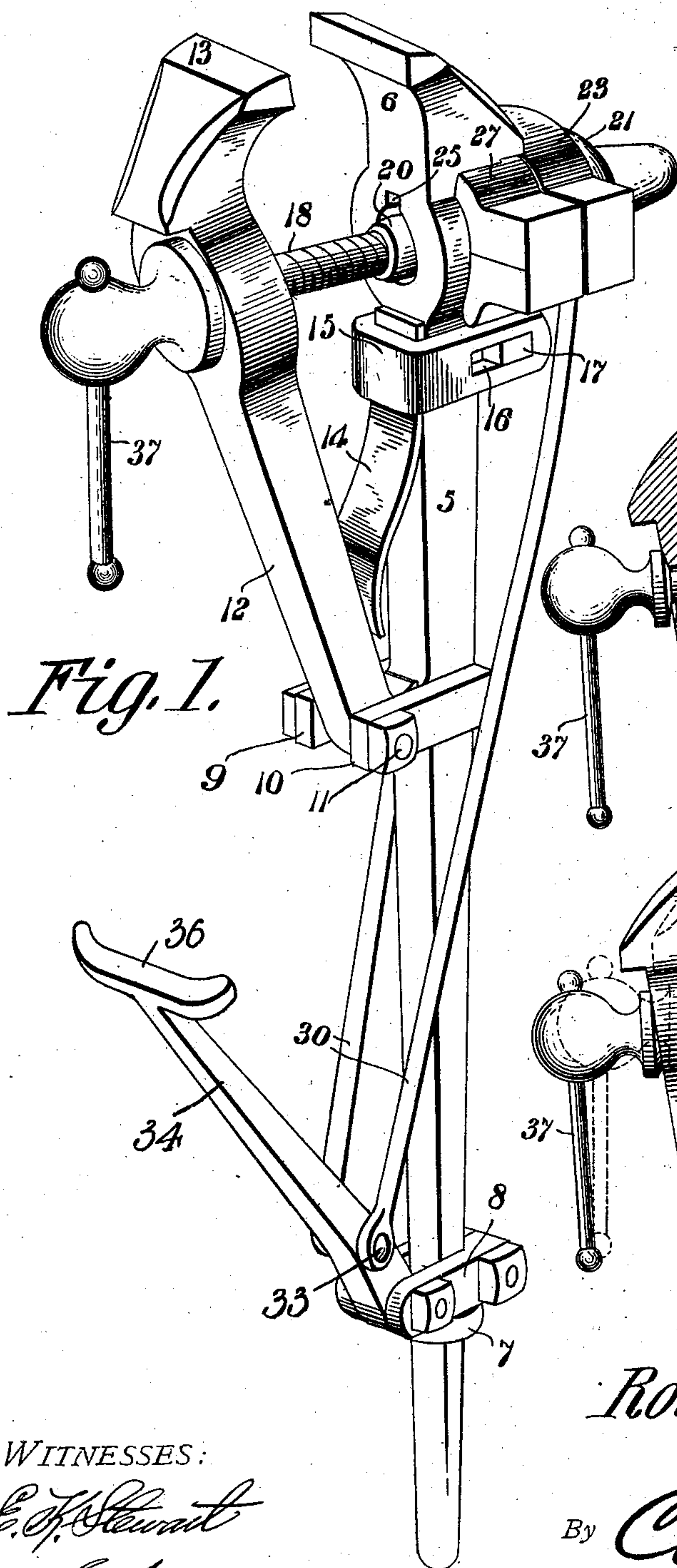


Fig. 1.

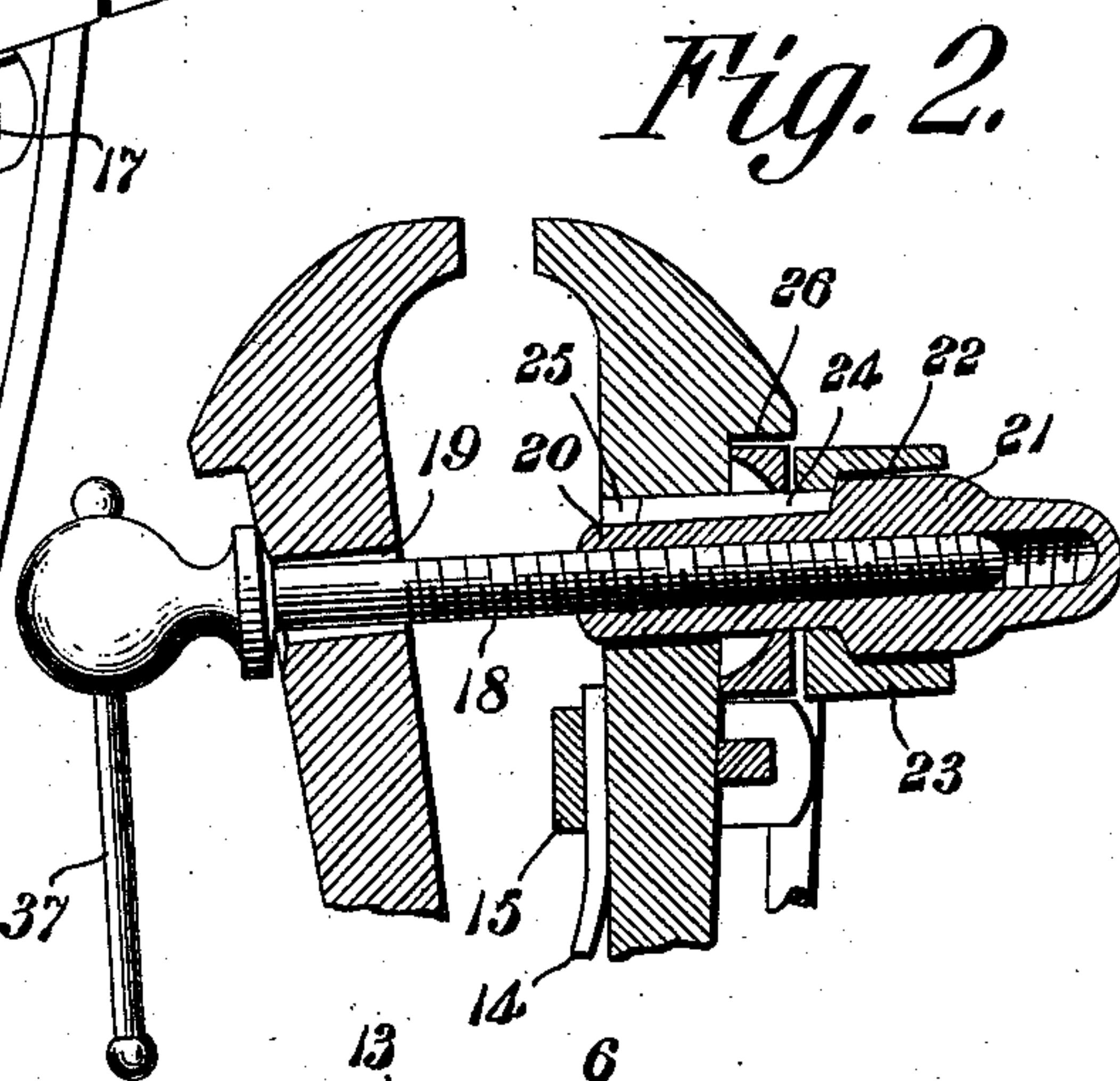


Fig. 2.

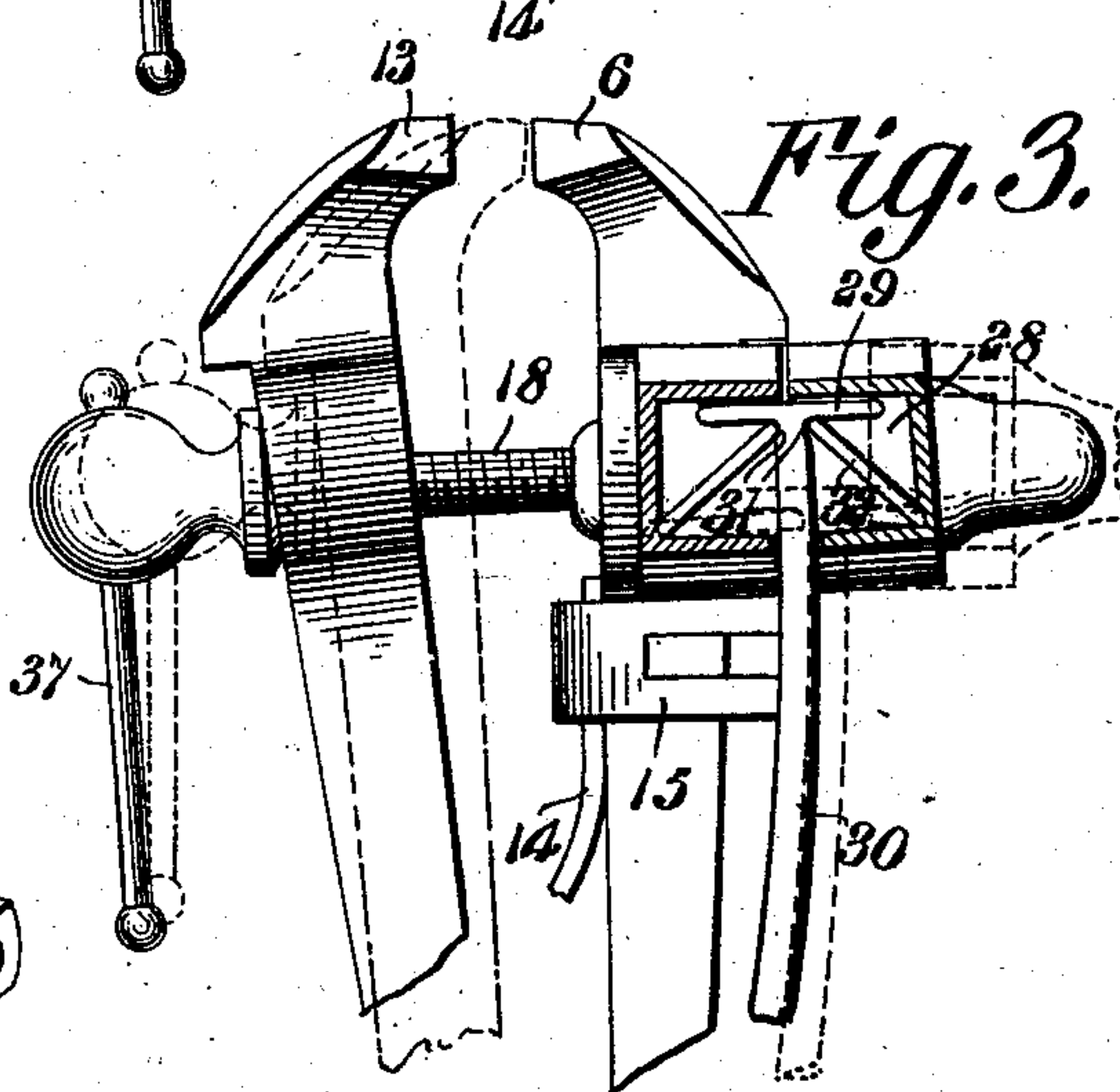


Fig. 3.

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ROBERT W. PARKER, OF LOS ANGELES, CALIFORNIA.

VICE.

No. 860,106.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ROBERT W. PARKER, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have
5 invented a new and useful Vise, of which the following is a specification.

This invention relates to vises and has for its object to provide a vise having a foot-operated lever associated therewith whereby the clamping jaws may be
10 operated independently of the usual adjusting screw.

A further object of the invention is to provide a vise including relatively stationary and movable jaws one of which is operatively connected with the foot-lever so that by depressing said lever the opposite jaw may
15 be clamped in engagement with the object to be operated upon.

A further object is to provide a foot-operated lever one end of which is seated in a sectional casing carried by the stationary jaw and adjusting screw, respectively,
20 there being links or pins interposed between the lever and the adjacent walls of the casing sections thereby to separate said sections and thus effect the movement of the pivoted jaw when the lever is depressed.

A still further object of the invention is to generally
25 improve this class of devices so as to increase their utility, durability and efficiency as well as to reduce the cost of manufacture.

With these and other objects in view the invention consists in the construction and novel combination and
30 arrangement of parts hereinafter fully described, and illustrated in the accompanying drawings, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

35 Figure 1 is a perspective view of the vise constructed in accordance with my invention. Fig. 2 is a transverse sectional view. Fig. 3 is a side elevation partly in section showing the position of the headed end of the foot-operated lever.

40 Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

The improved vise comprises a stock or shank 5 one end of which constitutes a stationary or fixed jaw 6 while the opposite end thereof is provided with an annular shoulder 7 adapted to support a clip or bracket 8.
45

Secured to and preferably formed integral with the intermediate portion of the stock 5 are laterally extending arms 9 and 10 between which is pivotally mounted on a pin or bolt 11, the shank 12 of the movable jaw 13. The movable jaw 13 is normally and yieldably supported in open or inoperative position
50 by means of a flat spring 14 one end of which bears

against the shank 12 while the opposite end is secured to the stock 5 by a U shaped clip or yoke 15. The opposite arms of the yoke 15 are provided with aligned
55 slots 16 for the reception of a wedge or key 17 which bears against the adjacent surface of the stock 5 and serves to clamp the spring 14 in engagement with said stock.

The stationary and movable jaws are connected by
60 an adjusting screw 18 one end of which passes through an opening 19 in the movable jaw 13 while the opposite end thereof is seated in a sleeve or collar 20 carried by and movable within the stationary jaw 6. The sleeve 20 is provided with an enlarged head 21 which
65 is seated in a recess 22 formed in a casing or housing 23, said sleeve being provided with a longitudinal spline or key 24 which engages a corresponding key-seat 25 formed in the stationary jaw 6 and thus serves to lock the sleeve 21 against rotary movement.
70

Seated in a recess 26 formed in the outer face of the stationary jaw 6 and rigidly secured to the latter in any suitable manner is a casing 27. The casings 23 and 27 are provided with lateral extensions having recesses
75 or chambers 28 formed therein in which are seated and housed the laterally extending heads 29 of rods or links 30. The heads 29 are formed with oppositely disposed notches or grooves 31 for the reception of the adjacent ends of suitable pins or links 32 preferably
80 formed of spring metal and having their opposite ends bearing against the adjacent walls of the chambers 28 so that by exerting a downward pressure on the rods 30 the links 32 will be forced laterally and thus separate the casings. The rods 30 are pivotally connected at
85 33 to a foot-operated lever 34 preferably mounted between the arms of the clip 8 and provided with a terminal foot-piece 36 for manipulation by the operator.

It will thus be seen that by rotating the handle 37 of the screw 18 the clamping jaws may be adjusted laterally into and out of engagement with the object to
90 be operated upon. It will also be observed that by depressing the foot-lever 34 the heads 29 of the rods 30 will be forced downwardly thus exerting a lateral pressure on the pins 32 and separating the sections 23 and 27. The jaw 6 being relatively stationary, the section
95 27 carrying the adjacent end of the screw 18 will be forced laterally and draw or force the movable jaw 13 into engagement with the object to be operated upon thus permitting the jaws to be operated independently of the adjusting screw.
100

As soon as the foot-lever 34 is released the spring 14 will automatically return the movable jaw to open or inoperative position.

From the foregoing description it is thought that

the construction and operation of the device will be readily understood by those skilled in the art and further description thereof is deemed unnecessary.

Having thus described the invention what is claimed is:

1. A vise including relatively stationary and movable clamping jaws, an adjusting screw extending through and connecting said jaws for moving the latter to operative and inoperative position, and means interposed between the screw and the adjacent jaw for operating the jaws independently of said screw.

2. A vise including relatively stationary and movable clamping members, a hand-operated device extending through and connecting said jaws for moving the latter to operative and inoperative position, and a foot-lever operatively connected with the hand-operated device and the adjacent jaw, respectively, for moving said jaws to operative position independently of the hand-operated device.

3. A vise including relatively stationary and movable clamping members, an adjusting screw connecting said clamping members for moving the same to operative and inoperative position, a sectional casing one section of which is carried by the adjusting screw and the opposite section by the adjacent jaw, and means interposed between the casing sections for operating the jaws independently of the adjusting screw.

4. A vise including relatively stationary and movable clamping jaws, an adjusting screw extending through and connecting said clamping jaws for moving the latter to operative and inoperative position, a foot-lever operatively connected with the adjusting screw and the adjacent jaw, respectively for moving said jaws to operative position independently of the adjusting screw, and a spring for automatically returning the jaws to inoperative position.

5. A vise including relatively stationary and movable jaws, an adjusting screw for moving the jaws to operative and inoperative position, said screw being provided with a casing a rod one end of which is interposed between the casing and the adjacent jaw, links bearing against the rod, and a foot-operated lever pivotally connected with the rod for moving the clamping jaws to operative position independently of the adjusting screw.

6. A vise including relatively stationary and movable clamping members, hand operated means connecting said jaws for moving the same to operative and inoperative position, a sectional casing, one section of which is secured to the adjusting screw and the opposite section thereof carried by the adjacent jaw, and means carried by said sections for separating the same thereby to operate the jaws independently of the hand-operated means.

7. A vise including relatively stationary and movable clamping jaws, hand-operated means connecting said jaws for moving the same to operative and inoperative position, a sectional casing, one section of which is secured to the hand-operated means, and the opposite section thereof secured to the adjacent clamping jaw, rods disposed within

the casing sections and provided with laterally extending heads, pins engaging the heads of the rods and bearing against the walls of the casing sections, and a lever operatively connected with the rods for actuating the latter thereby to operate the jaws independently of the hand-operated means.

8. A vise including relatively stationary and movable clamping jaws, a screw connecting said members for moving the same to operative and inoperative position, a sectional casing, one section of which is carried by the screw and the opposite section secured to the adjacent jaw, said casing being provided with oppositely disposed chambers, rods disposed within the chambers and provided with laterally extending heads, pins interposed between the heads and the adjacent walls of the casing sections, and a lever operatively connected with the rods for actuating the latter to move the jaws to operative position independently of the adjusting screw.

9. A vise including relatively stationary and movable clamping jaws, a screw connecting said jaws for moving the same to operative and inoperative position, a sectional casing, one section of which is carried by the adjusting screw and the opposite sections thereof secured to the adjacent jaw, a foot-operated lever pivotally mounted on one of said jaws, and means connected with the foot-operated lever and extending between the sections of the casing for moving the clamping jaws to operative position independently of the adjusting screw.

10. A vise including relatively stationary and movable clamping jaws one of which is provided with an opening, a sleeve seated in said opening and having a threaded bore, an adjusting screw engaging the threads of the bore for moving the clamping jaws to operative and inoperative position, a sectional casing one section of which is carried by the sleeve and the opposite section thereof secured to the adjacent clamping jaw, said casings being provided with oppositely disposed chambers, means for preventing rotation of the sleeve within the jaw, a foot-operated lever pivotally mounted on one of the jaws, rods pivotally connected with the foot-operated lever and having their opposite ends provided with enlarged heads arranged within the chambers of the casings, links interposed between the heads of the rods and the adjacent walls of the casing sections for moving the jaws to operative position independently of the clamping screw, a spring for normally returning the jaws to inoperative position, a clip embracing one of the jaws and bearing against the spring, and a locking key engaging the aligned slots formed in the clip and bearing against the adjacent jaw for locking the clip against accidental displacement.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ROBERT W. PARKER.

Witnesses:

J. G. KIDNEY,
M. T. BROADED.