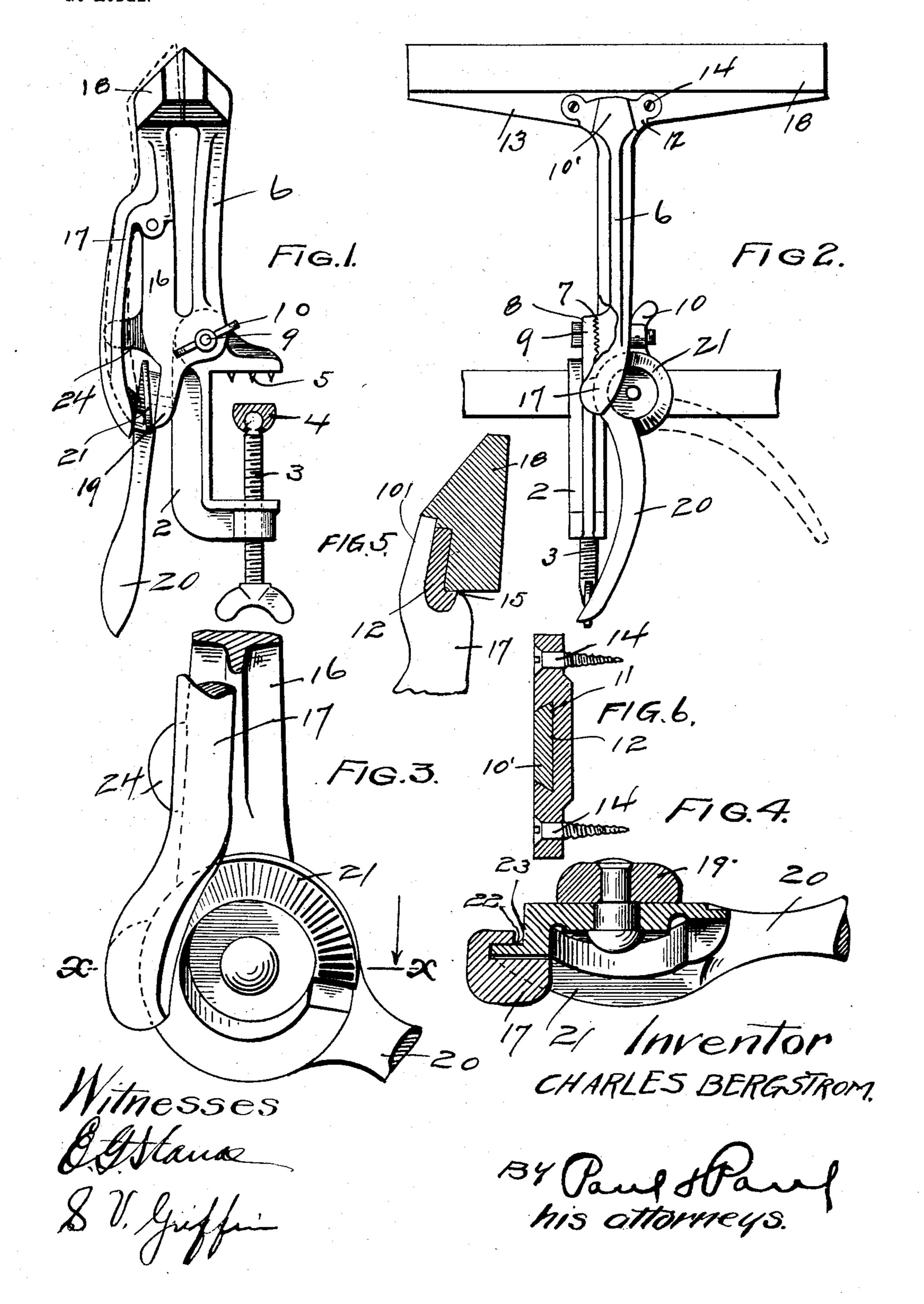
C. BERGSTROM. SAW CLAMP.

APPLICATION FILED MAY 16, 1903.

NO MODEL.



United States Patent Office.

CHARLES BERGSTROM, OF LINDSTROM, MINNESOTA.

SAW-CLAMP.

SPECIFICATION forming part of Letters Patent No. 762,677, dated June 14, 1904.

Application filed May 16, 1903. Serial No. 157,401. (No model.)

To all whom it may concern:

Be it known that I, Charles Bergstrom, of Lindstrom, in the county of Chisago, State of Minnesota, have invented certain new and useful Improvements in Saw-Clamps, of which the following is a specification.

My invention relates to clamps for holding saws during the operation of sharpening them; and the object of the invention is to provide a clamp wherein the saw can be secured and held without vibration during the operation of filing.

A further object is to provide improved means for operating the movable jaw to clamp the saw.

Other objects of the invention will appear from the following detailed description.

The invention consists generally in various constructions and combinations, all as hereinafter described, and particularly pointed out in the claim.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of a saw-clamp embodying my invention. Fig. 2 is a front elevation of the same. Fig. 3 is a detail of the means for operating the movable jaw. Fig. 4 is a section on the line x x of Fig. 3, and Figs. 5 and 6 are details showing the means for attaching the wooden clamping-jaws to their supports.

In the drawings, 2 represents a supportingclamp having a screw 3, provided with a loosely-mounted bearing-head 4, adapted to engage the under side of a bench, shelf, or other support, and said supporting-clamp is also preferably provided with points 5, that dig into the surface of the bench and aid in holding the clamp securely thereon.

one side with a toothed face 7, that is adapted to engage a similar face provided on a lug 8 at the upper end of the clamp 2. A bolt 9, provided with a thumb-nut 10, secures the said toothed surfaces together and permits the adjustment of the arm 6 at different angles with respect to its supporting-clamp. The upper end of the arm 6 terminates in a flat blade 10', that is adapted to enter a dovetailed slot 11 in a plate 12, that is secured to a wooden clamping-jaw 13 by screws 14 or other suit-

able means. A socket 15 is provided in the end of said arm to receive the lower edge of the plate 12 and form a firm support for the stationary jaw 13.

An arm 16 extends upward from the lower 55 end of the arm 6 and preferably integral therewith, and near the upper end of said arm 16 a lever 17 is pivoted. The upper end of said lever 17 corresponds in shape to the upper end of the arm 6 and supports the wooden mov- 60 able jaw 18, between which and the stationary jaw 13 the saw is clamped. A lug 19 is provided at the lower ends of the arms 6 and 16, and pivoted thereon is a cam-lever 20, having a rib 21, that is adapted to enter a slot 22 in 65 the lower end of the lever 17. The lever 20 operates in a direction substantially at right angles to the direction of movement of the lever 17, and the rib 21 has an eccentricallyarranged face or surface 23, that engages the 70 lower end of the lever 17 as the said lever 20 is operated and causes the oscillation of said lever 17 to move the movable jaw toward the stationary jaw or to separate them. The said lever 20 operates toward the side or laterally 75 with respect to the movement of the movable jaw, and hence it is not necessary for the workman to step back when he can conveniently operate the movable jaw to clamp or loosen the saw. In fact, the operator bending over 80 the clamp can without changing his position adjust the saw-blade in the jaws by merely swinging the arm 20 sufficiently to release the outward pressure of the lower end of the arm 17. The rib 21, moving in the slot 22, will 85 hold the lever 17 securely and positively prevent accidental loosening of the saw-blade. The lug 24 is preferably provided on the arm 16 to act as a guide for the lever 17. The wooden jaws will prevent vibration of the saw 90 while it is being filed and when worn or broken can be readily replaced without affecting the other parts of the clamp. The rib having the cam-face surface fitting within the slot 22 will as the lever 20 is operated move 95 the lever 17 back and forth to clamp or release a saw, according to the direction in which the lever 20 is moved. The operation, therefore, of the lever 17 is positive in both directions, the device not being dependent upon 100

springs or other uncertain agents for operating it in one direction.

I claim as my invention—

The saw-clamp comprising the arm carrying the stationary jaw and the lever carrying the movable jaw, the upper end of said arm and lever each formed with a wedge-shaped plate and a socket, a plate fitting in the socket of the arm and another plate fitting in the socket of of the lever, each of said plates being formed

with a dovetailed slot to receive the wedgeshaped plate of the arm and lever, respectively, and both plates provided with a wooden jaw, substantially as described.

In witness whereof I have hereunto set my 15

hand this 7th day of May, 1903.

CHARLES BERGSTROM.

In presence of—P. M. QVIST,
CHARLES ANDREWS.