

(No Model.)

W. F. CRAPSON.
SAW SET.

No. 467,159.

Patented Jan. 19, 1892.

FIG. 1.

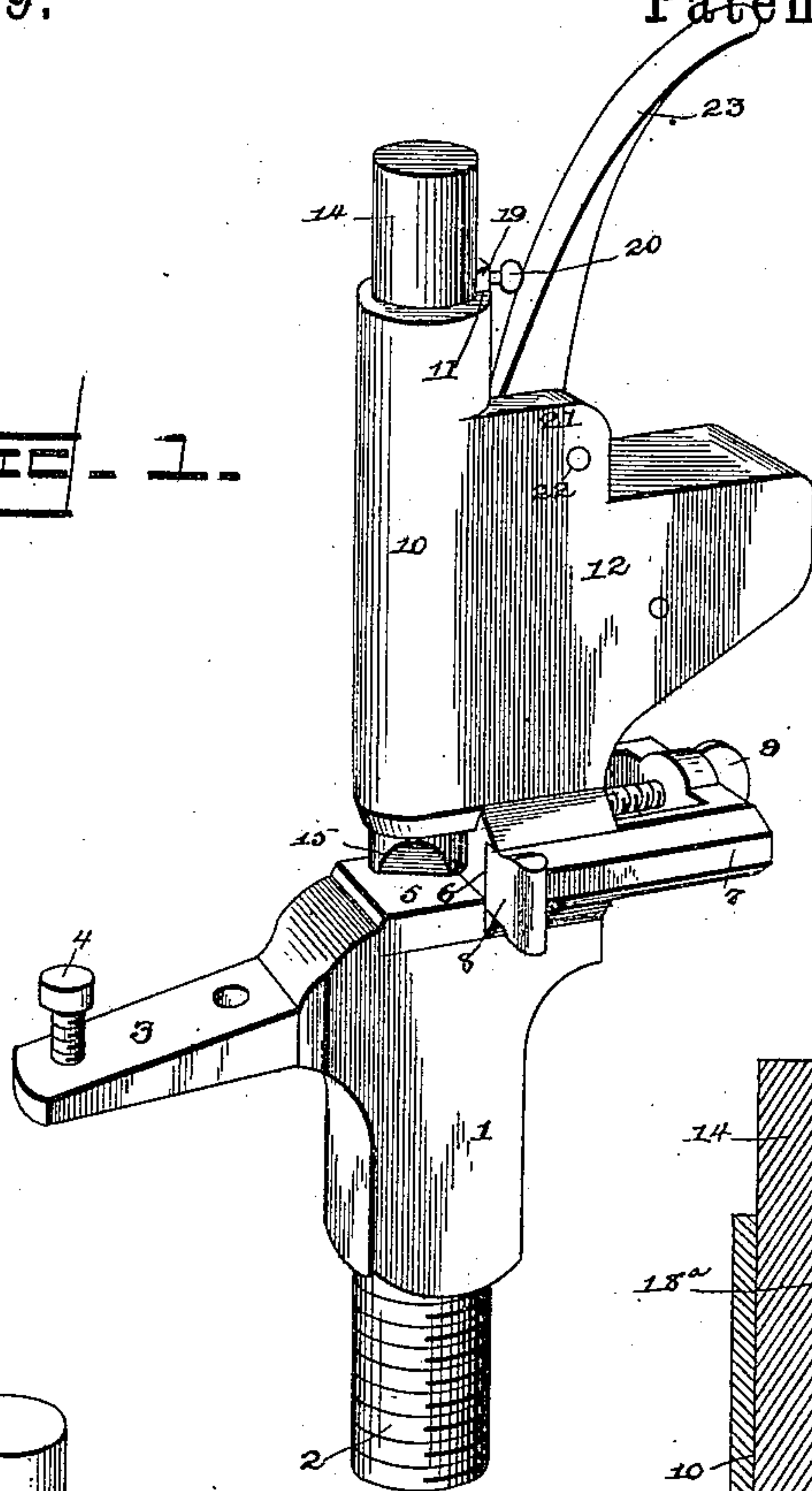


FIG. 3.

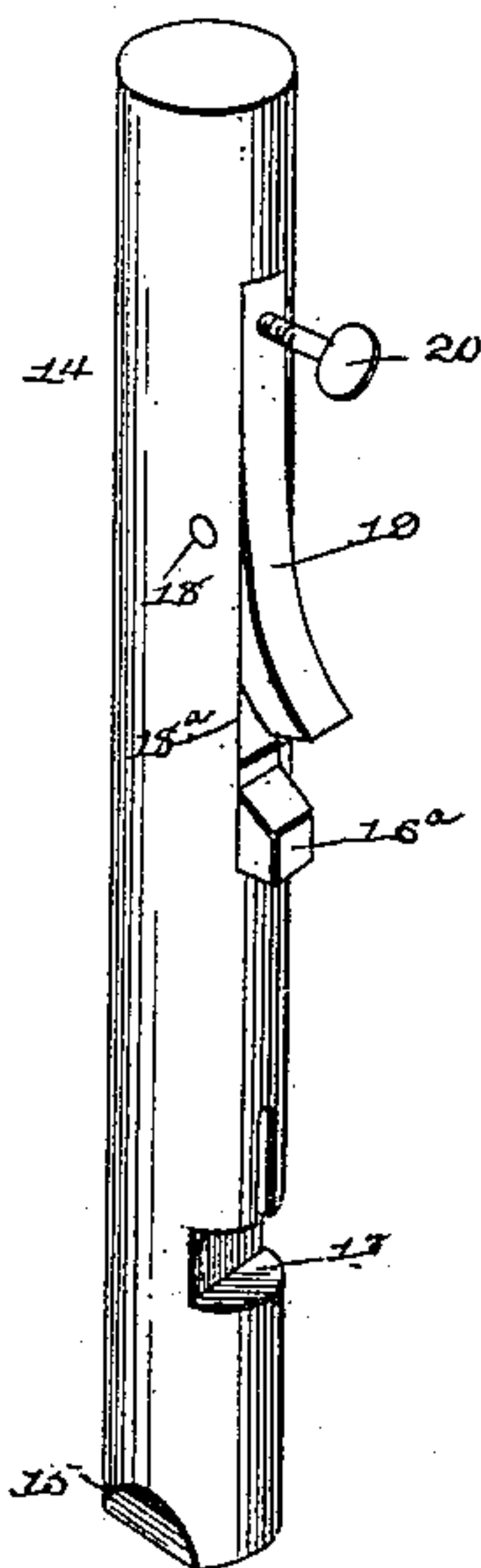
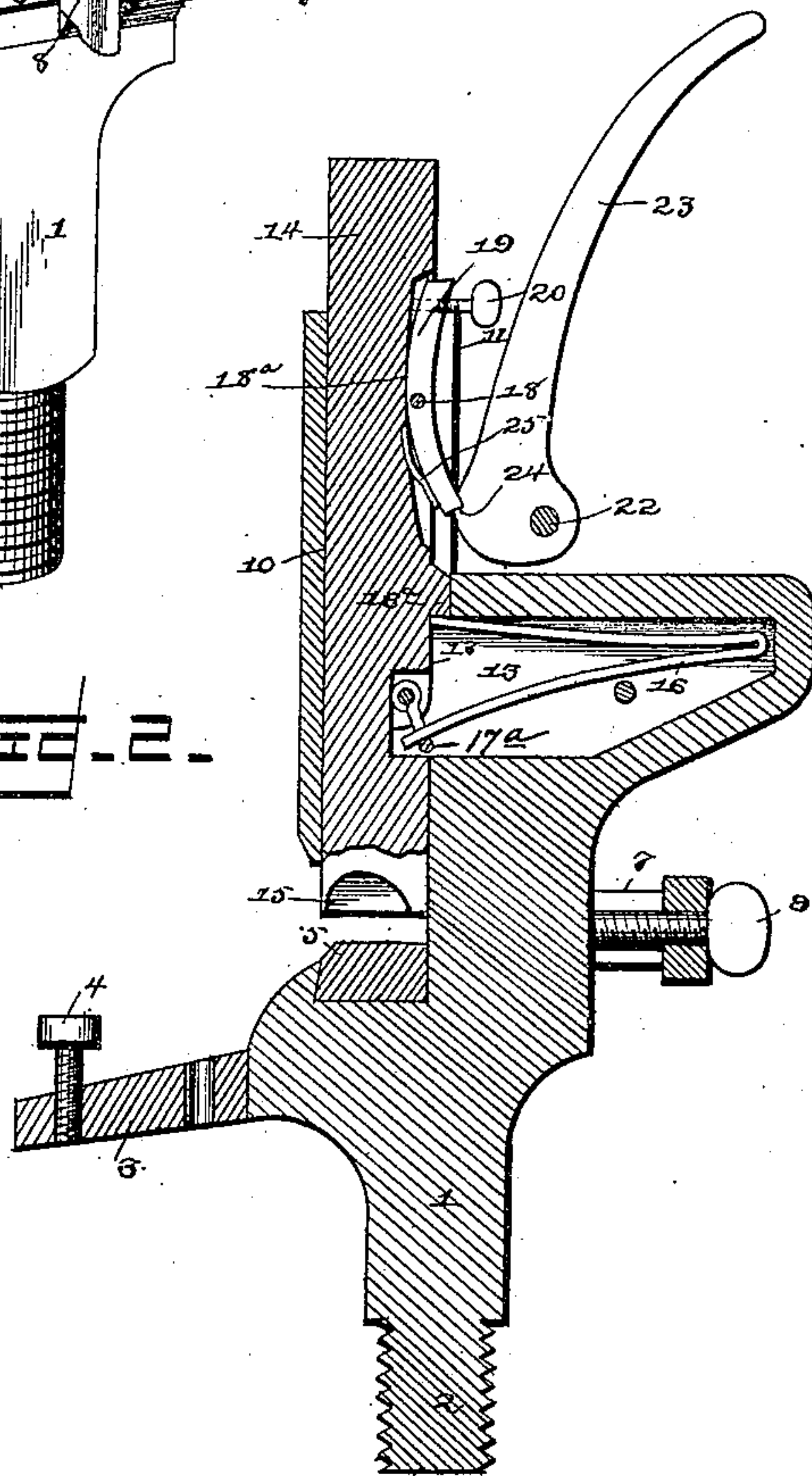


FIG. 2.



Witnesses:

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W. S. Duval.

By his Attorneys,

Inventor
Willie F. Crapson.
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UNITED STATES PATENT OFFICE.

WILLIE F. CRAPSON, OF CHANUTE, KANSAS.

SAW-SET.

SPECIFICATION forming part of Letters Patent No. 467,159, dated January 19, 1892.

Application filed June 9, 1891. Serial No. 395,719. (No model.)

To all whom it may concern:

Be it known that I, WILLIE F. CRAPSON, a citizen of the United States, residing at Chanutte, in the county of Neosho and State of Kansas, have invented a new and useful Saw-Set, of which the following is a specification.

This invention relates to improvements in saw-sets, and has special reference to the means for actuating the plunger; and the objects in view are to provide means for easily operating said plunger without the necessity of striking the same with a hammer or exerting any amount of force thereon, to provide means for rendering the blows uniform, and for graduating said blows.

Other objects and advantages of the invention will appear in the following description and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a saw-set constructed in accordance with my invention. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a detail of the plunger.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates the metal base, which terminates at its lower end in the threaded shank 2, by which it is secured to the bench. From the base there projects forwardly an inclined shelf or saw-support 3, provided with a pair of adjusting bolts or screws 4, by which the saw may be adjusted to a proper elevation, so that its teeth will rest upon the anvil 5, located in front of the support 3 and slightly above the same. In rear of the anvil the base is provided with a pair of opposite guides or ways 6, in which an adjusting-frame 7, of U shape, is mounted, the terminals of the frame terminating in bearing ends 8, against which the teeth of the saw may be adjusted, so as to set said teeth at a uniform depth. The frame is adjusted through the medium of an adjusting-screw 9, passed through the rear end of the frame and terminating against the rear side of the base. From the rear side of the base and extending above and in line with the anvil is a hollow standard 10, the rear side of which is slotted, as at 11, and in rear of

the anvil there is formed upon the base a housing 12, having a securing-plate 13, said housing at its front end communicating with the bore of the standard.

14 designates a plunger mounted in the hollow standard for the purpose of reciprocation, said plunger terminating at its lower end above the anvil in a saw-set 15. A V-shaped spring 16 is mounted in the housing and has one terminal resting against the lug 16^a of the plunger and the other loosely secured in a loop 17^a, located in a notch 17, formed in the plunger. Above the housing the plunger is provided with a shallow-recess, in which is pivoted, as at 18, a pawl 19. The upper end of the pawl has passed therethrough a set-screw 20, by which the lower end of said pawl may be set with relation to the plunger. To a lug 21, located at one side of the slot 11 of the standard 10 and upon the housing, is pivoted, as at 22, a hand-lever 23, said lever terminating at its inner end in an eccentric head having a notch or shoulder 24 above the pivot. A spring 25, interposed between the lower end of the pawl 19 and the bottom of the recess 18^a of the plunger, serves to normally extend the lower end of the pawl into the path of the eccentric notched head of the lever.

In practice the saw to be set is laid upon the adjusting-screws 4 and the frame 7 adjusted so as to bring the teeth of the saw at a proper point upon the anvil and in the path of the plunger. This having been accomplished, it is simply necessary to raise the lever 23 until its shoulder 24 passes down past and engages under the lower end of the pawl 19. Now by depressing the outer end of the lever the plunger is elevated against the tendency of the spring 16, which elevation is continued until the shoulder 24 is withdrawn from under the end of the pawl, when the plunger, being released, is suddenly thrown down by the spring 16, so that the setting end of the plunger serves to punch the teeth of the saw and set the same. The normal divergence of the spring 16 is such as to re-elevate the plunger above the saw after each downward movement of the plunger. In this

manner the process of setting the teeth may be carried on as rapidly as a person can move the saw and raise and lower the lever.

Having described my invention, what I claim is—

1. In a saw-set, the combination, with the base having the anvil, of the vertical hollow standard arranged thereover, a reciprocating plunger mounted therein, a spring for actuating the plunger in a downward direction, a laterally-disposed yielding projection on said plunger, and an eccentrically-pivoted lever at one side of the plunger and adapted to engage said projection when the outer end of the lever is raised, substantially as specified.

2. In a saw-set, the combination, with the base having the anvil, of the vertical hollow slotted standard located thereover, the housing 12, located at one side of the standard and continued to form the wall 21, the plunger mounted for reciprocation in the standard and having the recess 17 near its

lower end, the loose link located therein, and the shallow recess 18 near its upper end, the V-shaped spring having its upper end bearing against the upper end of the plunger and its lower end engaging loosely the said link, a pawl 19, pivoted in the latter recess, a spring interposed between the lower end of the pawl and the recess, a set-screw passed through the upper end of the pawl and bearing on the bottom of the recess, the lever 23, pivoted, as at 22, to the wall 21 and terminating at its inner end in an eccentric head having a shoulder 24 for engaging the lower end of the pawl, substantially as specified.

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

WILLIE F. CRAPSON.

Witnesses:

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ALVANIS C. WILLIAMSON.