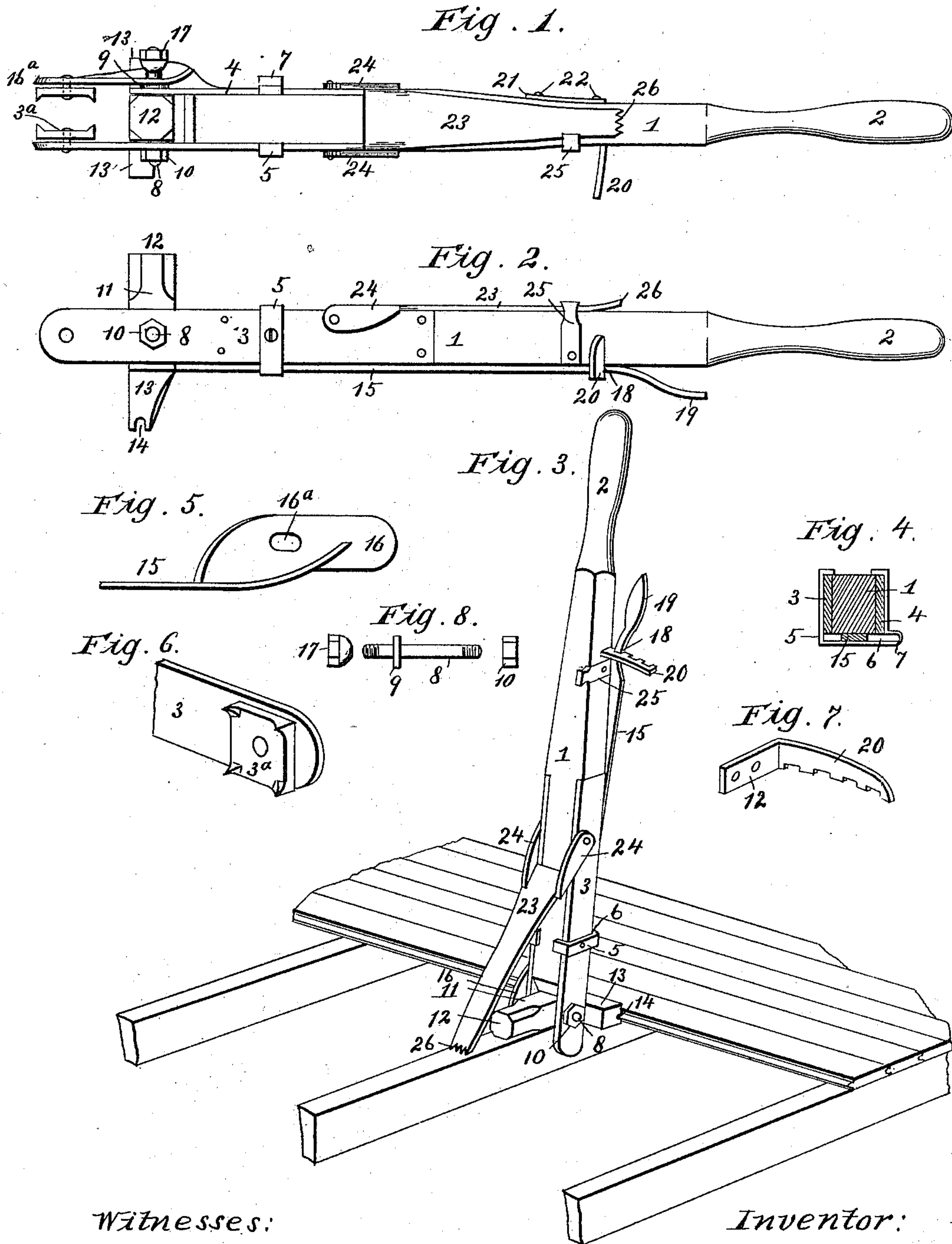


(No Model.)

J. A. ELDER.
FLOORING AND CEILING TOOL.

No. 571,432.

Patented Nov. 17, 1896.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES A. ELDER, OF GALENA, KANSAS, ASSIGNOR OF ONE-HALF TO ROBERT HARDWICK, OF SAME PLACE.

FLOORING AND CEILING TOOL.

SPECIFICATION forming part of Letters Patent No. 571,432, dated November 17, 1896.

Application filed September 28, 1895. Serial No. 563,948. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. ELDER, of Galena, Cherokee county, Kansas, have invented certain new and useful Improvements in Flooring and Ceiling Tools, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to improvements in flooring and ceiling tools; and the object of my invention is to produce a flooring and ceiling tool which may be adjusted to engage joists of different widths and which is simple, strong, durable, and inexpensive of construction and very efficient in operation.

To the above purposes my invention consists in certain peculiar and novel features of construction and arrangement, as will be hereinafter fully described and claimed.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is a rear elevation of a flooring and ceiling tool embodying my invention. Fig. 2 is a side elevation of the flooring and ceiling tool illustrated in Fig. 1. Fig. 3 is a perspective view of the flooring and ceiling tool embodying my invention and showing it in operative position as applied to the floor. Fig. 4 is a cross-sectional view taken just above the guide-bracket. Figs. 5, 6, 7, and 8 are detail views showing the construction more clearly of certain parts of the flooring and ceiling tool.

In the drawings, 1 designates the lever proper, having the handle 2 formed at its upper end. The lever 1 is recessed or cut away at its opposite sides and plates 3 4 are secured in said recesses, and the lower end of said plates project a suitable distance beyond the lower end of the body portion of the device, the plate 3 projecting beyond the end of the plate 4 and provided at its inner side and near its lower end with a spider-clamp 3^a, and a guide-bracket 5, approximately U-shaped, has its side arms secured to the plates 3 and 4 and its cross-bar extending transversely of the front side of the body portion of the device and a suitable distance therefrom to form the guide-slot 6. The slot may be extended

laterally to a greater length by forming a U-shaped bend 7 at the end of the slot, if desired. A bolt 8, extending transversely through the projecting ends of the plates 3 and 4, is provided with a shoulder 9, and the end of the bolt projecting through the opening in the plate 3 is engaged by a clamping-nut 10, which causes the shoulder 9 to bear firmly against the outer side of the plate. Pivotaly mounted upon the bolt 8 between the projecting ends of the plates 3 and 4 is the head-block 11, which is provided at its rear end with a hammer-head 12 and at its front end is extended laterally to each side, as at 13, and is provided with a longitudinally-extending groove 14 therein.

A spring-plate clamping-lever 15 engages the slot 6 and is retained upon the lever 1 by the bracket 5, forming said slot, and its lower end is provided with a perpendicular extension arm 16, having a spider-clamp 16^a on its inner side and near its lower end, and an elongated opening 16^b therein engages that end of the bolt 8 which projects outwardly from the shoulder 9, and a retaining adjusting-nut 17 engages the outer end of said bolt. The upper end of the spring-plate lever 15 is reduced in width at 18 and has a handle 19 formed at its upper end. The reduced portion 18 of the handle is preferably bent inwardly, as shown, and is adapted to engage a segmental rack-bar 20, which projects outwardly from and approximately concentric to the movable or pivotal point of the lever 15 in the slot 6, and is provided at its inner end with an arm 21, which extends at a right angle to the portion 20, and is secured to the lever 1 by screws 22 or in any other suitable manner. As it is often necessary to hold the flooring or ceiling boards in position when being applied I provide an anchoring-bar 23, which is provided with the oppositely-disposed ears 24 24, which are pivoted to opposite sides of the lever 1 at a suitable distance from its lower end. This anchoring-arm when not in use is folded back upon the lever and is retained in that position by a spring-catch 25, which is secured to the side of the lever 1 by pivots or in any other suitable manner. The free end of the anchoring-arm 23 is toothed at 26, and is adapted to pene-

trate the upper side of a joist at certain times, as hereinafter explained in the operation of the device.

The operation is as follows: The device is arranged above the joist and adjacent to the flooring being laid, and the projecting ends of the plate 3 and the spring-plate lever 15 are secured on opposite sides of the said joist by the penetration thereof of the spider-clamps, carried at the lower ends of plate 3 and the lever 15, the said lever being held securely in position by the engagement of the reduced portion 18 with the rack-bar 20. The lever 1 is now drawn outwardly and the tongue of the floor-board inserted into the groove 14 of the pivotal head-block. The lever 1 is now moved pivotally forward, and the head-block forces the floor-board into position in the line of flooring. The head 12 may then be struck with a hammer to more securely drive the board in position.

If it is desired to hold the tool in a certain position, the pivotal anchor-arm 23 may be disengaged from the catch 25 and swung to a position where the toothed lower end 26 of said arm engages the upper side of the joist and affords an effectual brace or anchor for the device.

When the device is applied to joists of unusual width, the lower end of the clamping-lever 15, by the adjustment of the reduced portion 18 thereof to a different position of the rack-bar 20, is caused to assume a position nearer to or farther from the adjacent end of the stationary plate 3. The said lever 15, pivoting in the slot 6, and the elongated opening 16^b, engaging the bolt 9, allows of said pivotal movement. It is to be understood that this tool is designed to be used in securing ceiling-boards as well as flooring-boards.

From the above description it will be seen that I have produced a flooring and ceiling tool which is simple, strong, durable, and inexpensive of construction and very efficient in operation.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A flooring and ceiling tool, comprising a body portion having a pair of side plates projecting below the lower end thereof, one of said plates projecting beyond the end of the other and having a spider-clamp secured to its in-

ner side, a head-block pivotally mounted between the projecting ends of said plates, and a lever pivotally carried upon the front side of the body portion, and having its lower end also provided on its inner side with a spider-clamp to engage the side of the joist, substantially as described.

2. A flooring and ceiling tool, comprising a body portion having a handle at its upper end, a pair of plates projecting from opposite sides and beyond the lower end of the body portion, one of said plates projecting beyond the lower end of the other, a spider-clamp secured to the inner end of the longer plate, a bolt passing transversely through said plates, a head-block pivotally mounted upon the bolt and between said plates, having a groove in its forward end and a head at its rear end, and a lever pivotally carried at the front side of the body portion, and having its lower end provided with a spider-clamp, and also with an opening engaging the projecting end of the transversely-arranged bolt, substantially as described.

3. A flooring and ceiling tool, comprising a body portion having side plates projecting beyond the lower end of the said body portion, one of said plates projecting beyond the lower end of the other and provided with a spider-clamp on its inner side, a bolt passing transversely through said side plates and beyond the lower end of the body portion, and provided with a shoulder bearing against the shorter arm, a head-block pivotally mounted upon the bolt between said plates, a bracket extending transversely of the body portion so as to form a slot between the same and the body portion, a lever mounted in said slot, and having a perpendicular extension at its lower end having an opening engaging the bolt, a spider-clamp at its inner side, having at its upper end a handle, and nuts engaging the projecting ends of the transversely-arranged bolt, and a rack-bar carried by the body portion and engaged by the lever, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES A. ELDER.

Witnesses:

D. B. STANEY,
C. L. RAINS.