No. 780,054. PATENTED JAN. 17, 1905.

E. L. McDANIEL.

CARPENTER'S TOOL.

APPLICATION FILED JULY 2, 1904.

FIG. 1.

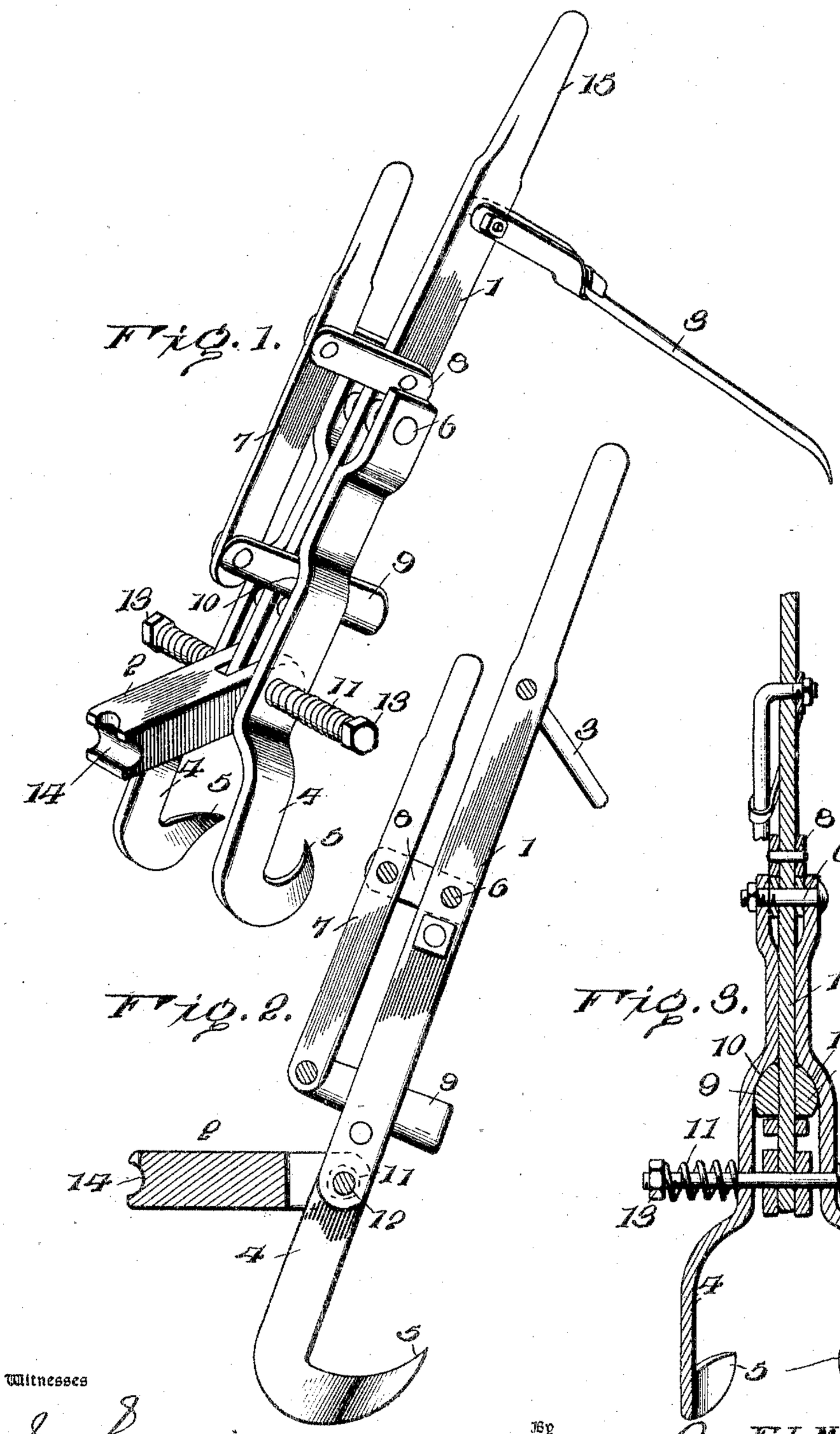

FIG. 2.

FIG. 3.

Witnesses

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No. 780,054. Patented January 17, 1905.

UNITED STATES PATENT OFFICE.

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CARPENTER'S TOOL.

SPECIFICATION forming part of Letters Patent No. 780,054, dated January 17, 1905.

Application filed July 2, 1904. Serial No. 215,137.

To all whom it may concern:

Be it known that I, EDWIN L. McDANIEL, a citizen of the United States, residing at Lenora, in the county of Norton and State of Kansas, have invented certain new and useful Improvements in Carpenters' Tools, of which the following is a specification.

This invention provides a handy tool, especially adapted for use by carpenters for laying flooring or securing siding in the construction of houses.

The invention comprises, essentially, a lever device provided with engaging means for positioning the same with other work-engaging means and an engaging brace for supporting the lever device in such a position as to firmly hold the boards in place preparatory to nailing the same permanently.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view illustrating the adaptation of the device when used for flooring purposes. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a sectional view looking from the front of the tool.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

In its general organization, and specifically describing the same, my tool device consists, primarily, of an operating-lever 1, provided at its lower end with engaging means, before premised upon, for positioning the device, a work-engaging member or dog 2, and a supporting-brace 3, designed to hold the device in proper position when in use. The engaging means carried by the lever for attaching the same to a joist or similar part in order to gain the necessary purchase in forcing the engaging dog 2 against the boards is of peculiar construction, said engaging means being composed of complemental clamp or engaging members 4, attached to the lower end of the lever 1 and provided at their lower extremities with rearwardly and inwardly curved jaws 5. The clamp members 4 are secured upon opposite sides of the lever 1, being suitably attached at their upper ends by means of a bolt or similar fastenings 6. The members 4 are designed for lateral spreading and closing movement in disengaging and engaging the same in the actual operation of the device. For the purpose of actuating the members 4 a secondary lever 7 is utilized, and this lever is mounted pivotally at a point between its ends to a standard 8, projected laterally from the upper portion of the lever 1. The lower end of the lever 7 has attached thereto spaced sliding wedges 9, which are pivoted to the lever 7 and which pass between the main lever 1 and the clamp members 4 upon opposite sides thereof. In order to form a space in which the wedges 9 may readily operate, the clamp members 4 are outwardly curved between their ends, as shown at 10, and the movement of the wedges under the actuation of the secondary lever 7 will serve to spread the members 4 in a manner clearly apparent. The closing movement of the members 4 toward each other is effected by means of springs 11, which are mounted upon a transverse bar 12, passing through the lower end of the lever 1. The bar 12 projects outwardly from the members 4 and is provided upon its ends with stops 13 of any suitable form, between which stops 13 and the members 4 are interposed the springs 11. The normal tendency of the springs 11 is such as to hold the clamp members 4 at the limit of their closing movement.

The work-engaging dog 2 is carried by the lower end of the lever, one end of the dog being bifurcated to receive the lever 1, and apertures are provided in the bifurcated portion, so as to receive the bar 12, upon which the dog 2 is mounted. The outermost end of the dog 2 is provided with a transverse recess or groove 14, which receives the tongue of the common type of flooring-boards, so that the board is not bruised or damaged in any man-

ner whatever when power is applied to the device in the actual operation thereof. The brace 3 is pointed at its lower end and is pivoted at its upper end to the upper portion of the lever 1 adjacent the handle 15 of the said lever.

In operating my invention in laying flooring, for instance, the main lever 1 is grasped and the lever 7 is operated to impart slidable movement to the wedges 9, and this forces the jaws 5 of the members 4 apart. These jaws are then engaged with an adjacent joist or similar part, the lever 7 being actuated so as to permit closing and engaging movement of the jaws 5 under the influence of the springs 11. The lever 1 is thus firmly attached to the jaws 5 of the members 4, constituting a fulcrum for said lever. The lever 1 having been positioned as above described, the dog 2 is engaged with the edge of a board, and the lever 1 is then forced hard in the direction of the board, after which the brace 3 is engaged with the joist to hold the board in position until nailed.

It will be understood that several of the tools may be provided, if necessary, and the same may be readily operated by a single person in actual use.

The device is exceedingly simple and affords a very practical and useful means for accomplishing the purposes which have been hereinbefore set forth.

Having thus described the invention, what is claimed as new is—

1. In a tool of the class described, the combination of a main lever, clamp members carried by the lever for positioning the same, a pivoted work-engaging member projected from one side of the lever, a supporting-brace extended from the opposite sides of the lever, wedges operating between the clamp members and the main lever, and a secondary lever connected with the wedges for operation thereof.

2. In a tool of the class described, the combination of a main lever, clamp members disposed upon opposite sides of said lever for attachment thereof, wedges operating between the clamp members of the lever to operate said members, a secondary lever pivoted to the main lever and connected with the wedges above mentioned, springs bearing against the clamp members, a work-engaging dog carried by the main lever upon one side thereof, and a supporting-brace projected from the opposite side of the main lever.

3. In a tool of the class described, the combination of a main lever, a work-engaging dog pivoted to the lower end of said lever upon one side thereof, a brace extended from the opposite side of said lever, clamp members secured at their upper ends to the lever upon opposite sides thereof and extended below the lower extremity of the lever at their lower ends, a transverse bar passing through the lower end of the lever and the clamp members, springs mounted upon the ends of said bar and bearing against the outer side of the clamp members, wedges operating between the clamp members and the main lever, and a secondary lever pivoted to the main lever and connected with the wedges for actuation thereof.

4. In a tool of the class described, the combination of a lever, laterally-movable clamp members at the lower end of the lever, a work-engaging member pivoted to the lever, spring means for actuating the clamp members aforesaid, wedge means for separating said members, and a supporting-brace carried by the upper portion of said lever.

5. In a tool of the class described, the combination of a main lever, clamp members at the lower end of said lever and movable toward and from each other, a secondary lever for actuation of the clamp members, a work-engaging dog projecting from one side of the main lever, and a supporting-brace projecting from the opposite side of the lever.

6. In a tool of the class described, the combination of a main lever, laterally-movable clamp members carried by the lower end of said lever, springs bearing against the outer sides of the clamp members and normally holding said members closed, means for effecting separating movement of the clamp members, and a work-engaging dog carried by the main lever aforesaid.

7. In a tool of the class described, the combination of a main lever, laterally-movable clamp members at the lower end of said lever, engaging jaws carried by said clamp members, springs coöperating with said clamp members, a secondary lever mounted upon the main lever, wedges operable by the secondary lever and coöperating with the clamp members, a work-engaging dog projected from one side of the main lever, and a supporting-brace projected from the opposite side of said main lever.

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

EDWIN L. McDANIEL. [L. S.]

Witnesses:

E. S. GOODMAN,

W. E. BECKWITH.