

A. A. OLIVER.
FLOOR CLAMP.
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964,305.

Patented July 12, 1910.

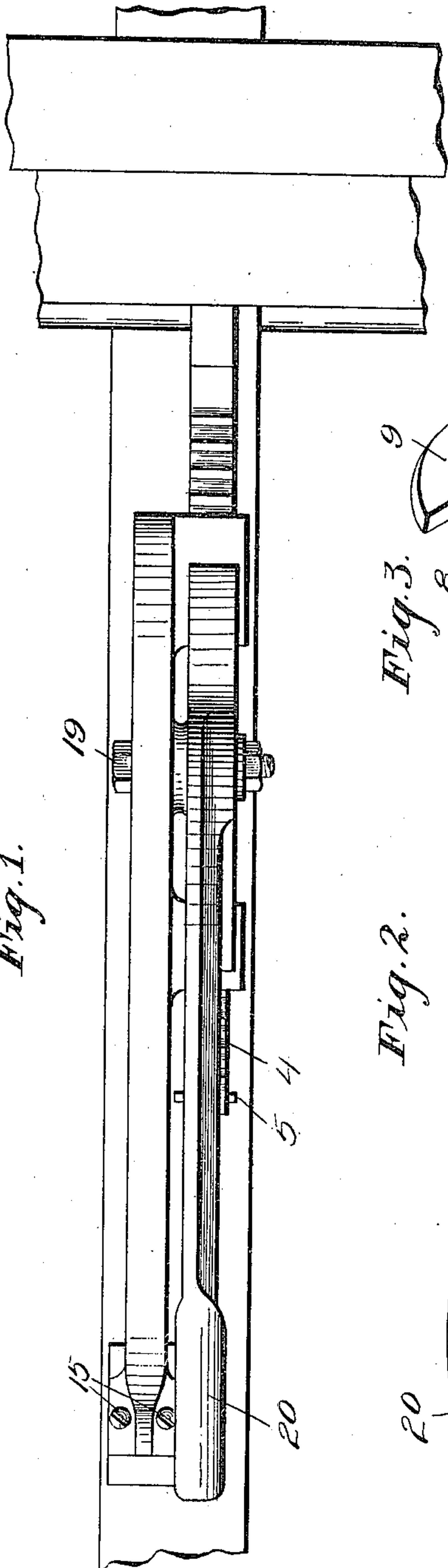


Fig. 1.

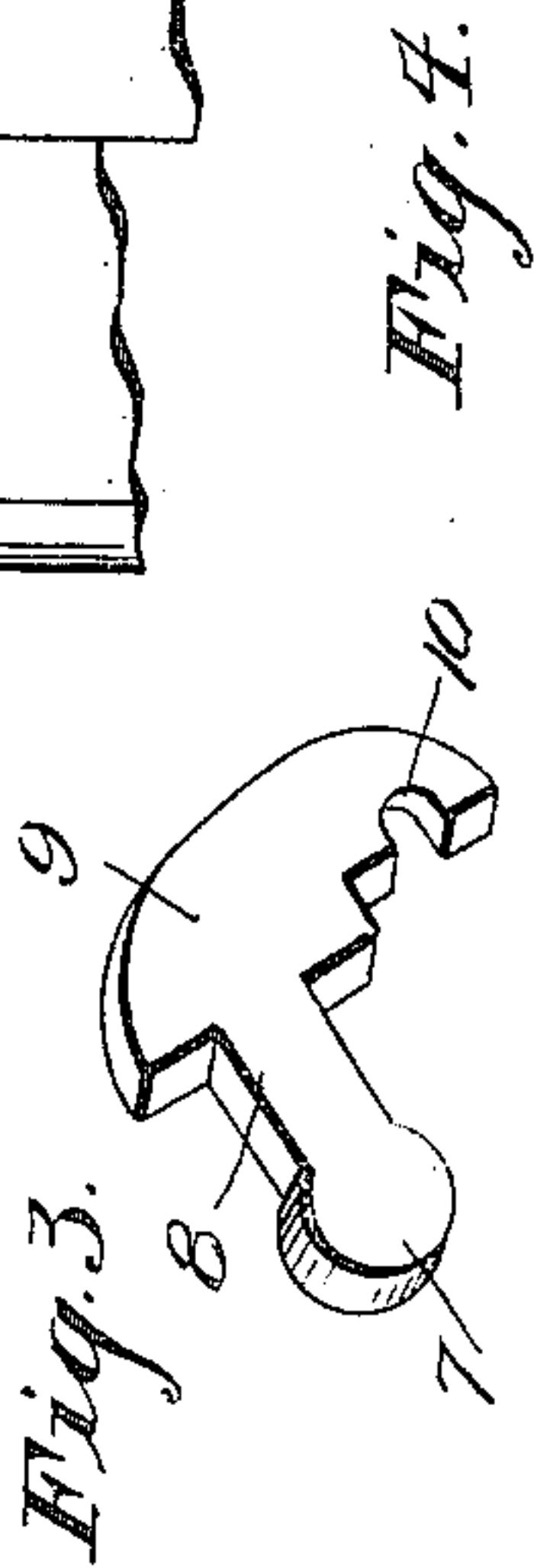


Fig. 3.

Fig. 2.

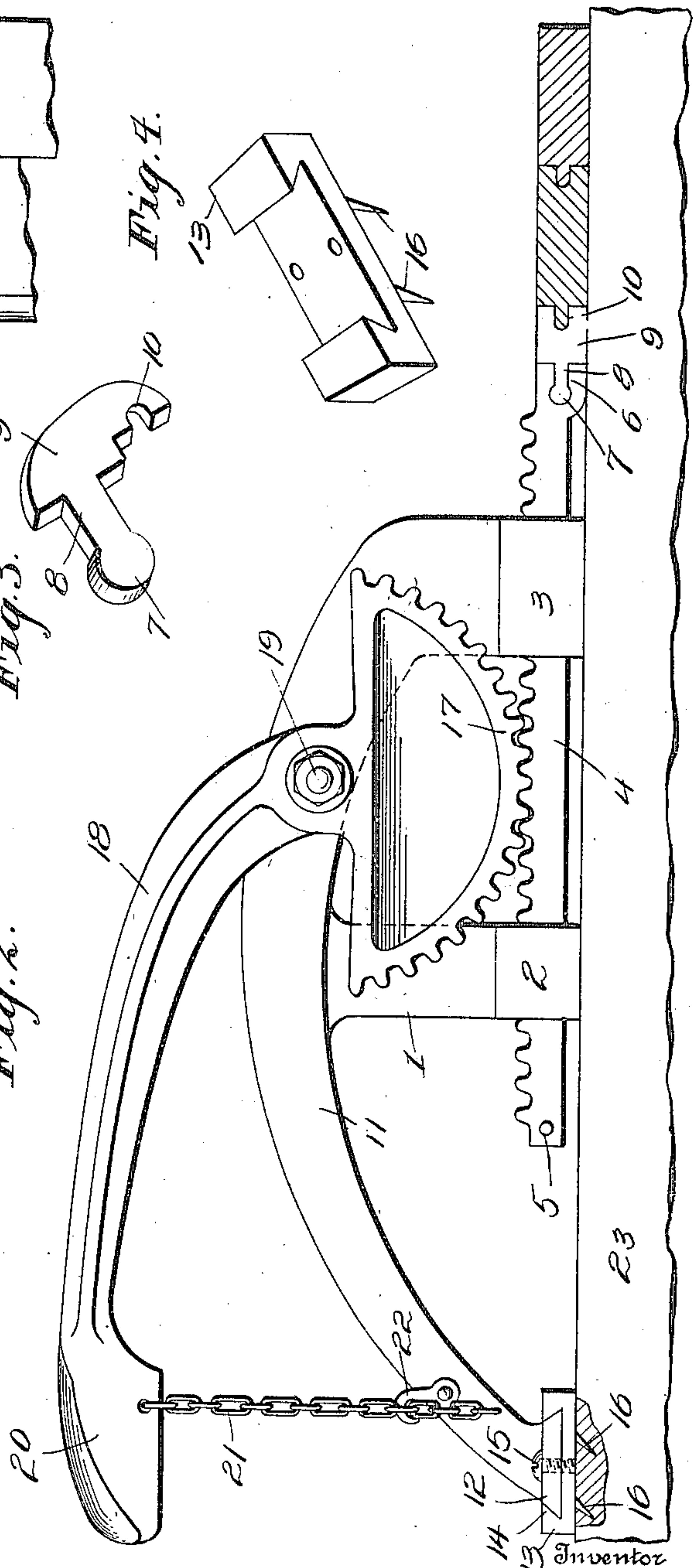


Fig. 4.

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UNITED STATES PATENT OFFICE.

ARTHUR A. OLIVER, OF CALERA, ALABAMA.

FLOOR-CLAMP.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ARTHUR A. OLIVER, a citizen of the United States, residing at Calera, in the county of Shelby and State of Alabama, have invented new and useful Improvements in Floor-Clamps, of which the following is a specification.

This invention relates to floor clamps, the object in view being to provide a device of the class referred to adapted for the purpose of laying a single or double floor and adapted to operate with a pushing as well as a pulling strain for the purpose of pulling or drawing the floor boards into place preparatory to nailing the same to the joists or other supports.

With the above and other objects in view, the invention consists in the novel construction, combination and arrangement of parts as herein fully described, illustrated and claimed.

In the accompanying drawing:—Figure 1 is a plan view of the floor clamp of this invention. Fig. 2 is a side elevation of the same, showing a section of the joist and floor boards. Fig. 3 is a detail perspective view of the pulling jaw. Fig. 4 is a similar view of the reversible shoe.

The device comprises essentially a frame 1 comprising at the bottom thereof a pair of guides 2 and 3, through which a rack bar 4 is adapted to slide, said rack bar being provided adjacent one end with a stop pin 5 to limit the movement thereof in one direction and being provided at the opposite end with a key hole slot or groove 6 adapted to receive the head 7 and shank 8 of a jaw 9, the latter being provided with a notch 10 to receive and fit the tongue of a tongue-and-groove floor board as illustrated in Fig. 2.

The jaw illustrated in Fig. 2 is of the pushing jaw type, as it acts to push the floor boards together preparatory to nailing the same in the manner indicated in Fig. 2. The interchangeable jaw shown in Fig. 3 is designed to be substituted for the jaw shown in Fig. 2 when the floor is nearly complete and the operator is approaching the wall opposite that at which he began laying the floor in which case instead of supporting the device on a joist as shown in Fig. 2, the device will be supported directly on the previously laid floor boards in a manner under-

stood by those familiar with the art to which the invention appertains. 55

The device also comprises an arched frame arm 11 the extremity of which is provided with a dove-tailed foot 12 upon which is detachably mounted a reversible shoe 13, the latter being provided with a dove-tailed recess 14 corresponding in shape to the foot 12 and adapted to receive the same as shown in Fig. 2, the foot and shoe being connected together by one or more fasteners 15 such as screws. The shoe is provided on its lower side with inclined spikes or barbs 16, two of such barbs being shown and being inclined in the same direction. To act with a pushing force the shoe is arranged as shown in Fig. 2 with the spikes 16 inclining away from the pushing jaw 9. When the pulling jaw is substituted for the pushing jaw the shoe 13 is reversed or turned end for end in which position the spikes 16 will incline in a direction to that opposite shown in Fig. 2, thereby enabling the device to obtain the necessary hold on the floor boards to provide for drawing a loose board into place preparatory to entering the same. 60 65 70 75

Coöperating with the rack bar 4 is a gear segment 17 provided with an operating lever 18 the same being fulcrumed at 19 on the frame. The operating lever 18 is provided with a suitable handle 20 and also has connected thereto a retaining chain 21 any link of which is adapted to be connected with a hook 22 on the arm 11. 80 85

In operation, the shoe is driven into engagement with a joist indicated at 23 and after placing the jaw 9 in engagement with the floor board to be operated upon, the lever 18 is swung until the loose board is firmly jammed to place whereupon the chain 21 is placed in engagement with the hook 22 thereby locking the operating lever and retaining the loose floor board in position to be nailed. As the operator nears the completion of the floor, he substitutes the pulling jaw for the pushing jaw and reverses the shoe 13, then rests the device upon the previously nailed floor boards, jamming the spikes or members 16 into the same at the proper joint. He then operates the lever 15 to draw the loose floor board into place and subsequently nails the same securely. 90 95 100 105

I claim:—

A floor clamp comprising a frame, a movable jaw, lever operated gear and rack bar elements for advancing the jaw, and a shoe
5 provided with inclined spikes and having a dove-tailed connection with the frame whereby said shoe is rendered reversible.

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

ARTHUR A. OLIVER.

Witnesses:

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