

R. H. SQUIRES.
FLOORING CLAMP.
APPLICATION FILED FEB. 4, 1910.

Patented Apr. 18, 1911.

990,074.

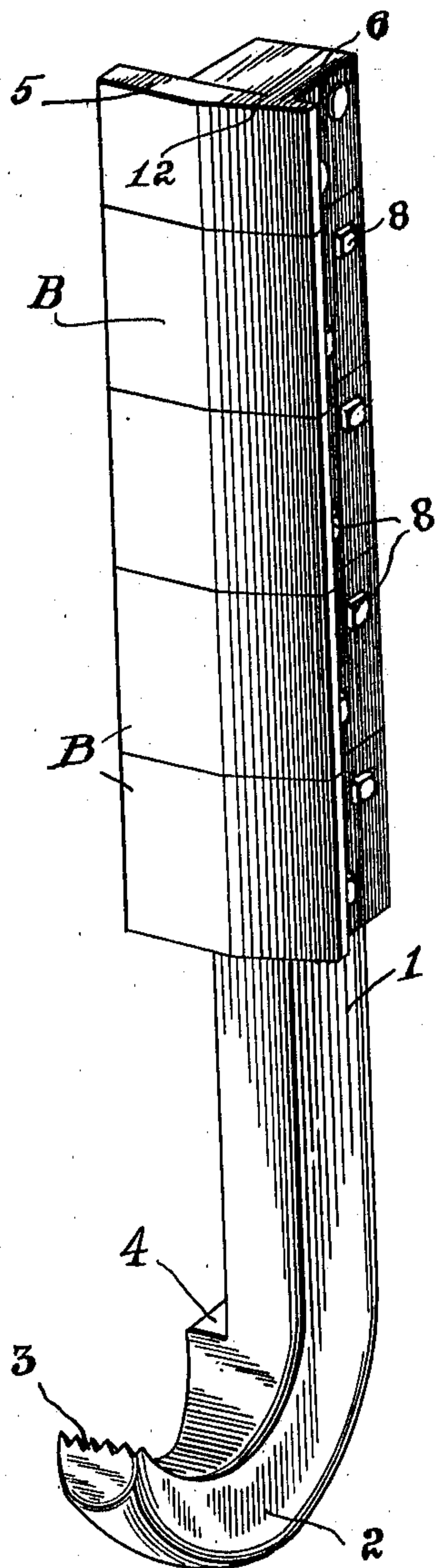


Fig. 1.

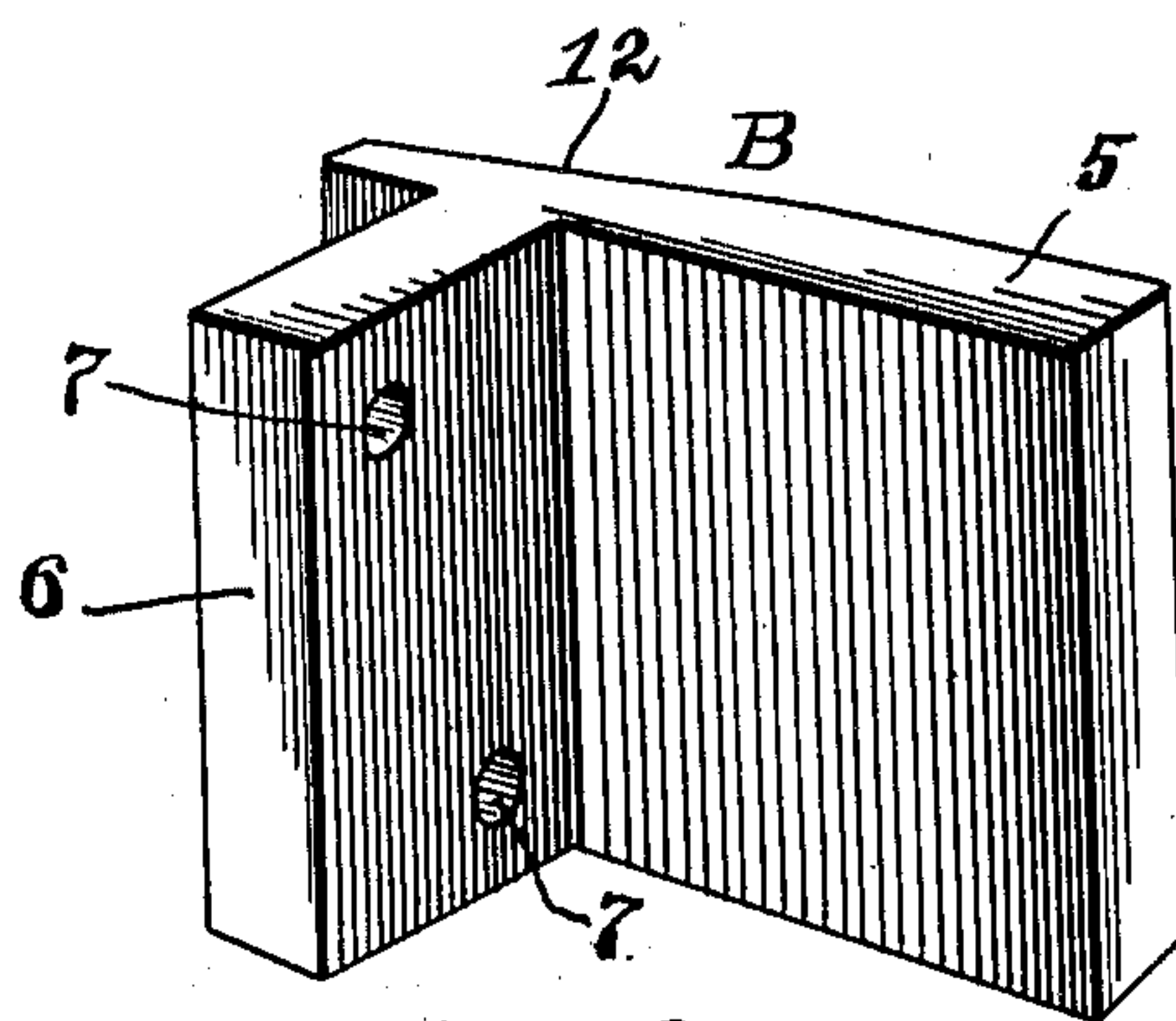


Fig. 2.

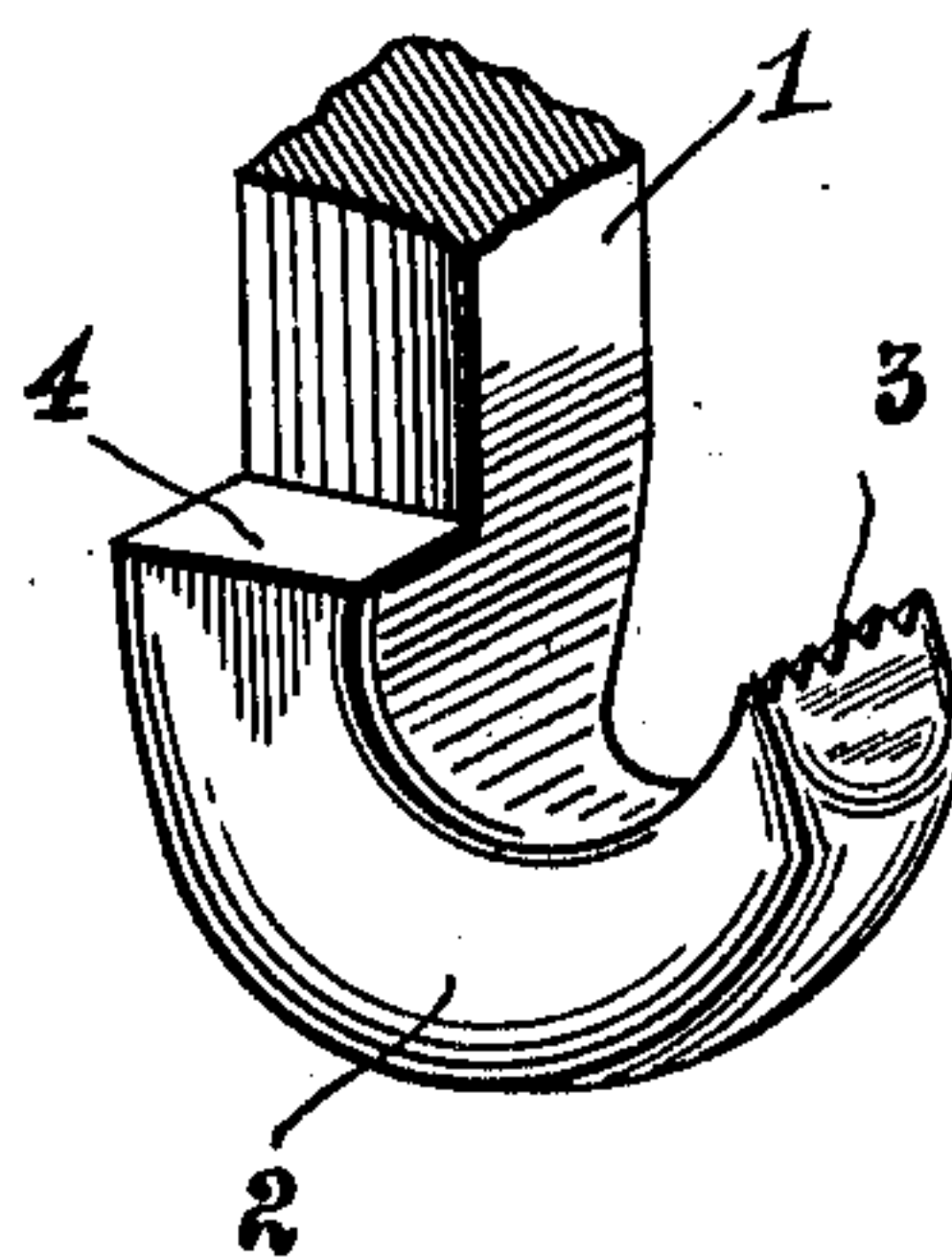


Fig. 3.

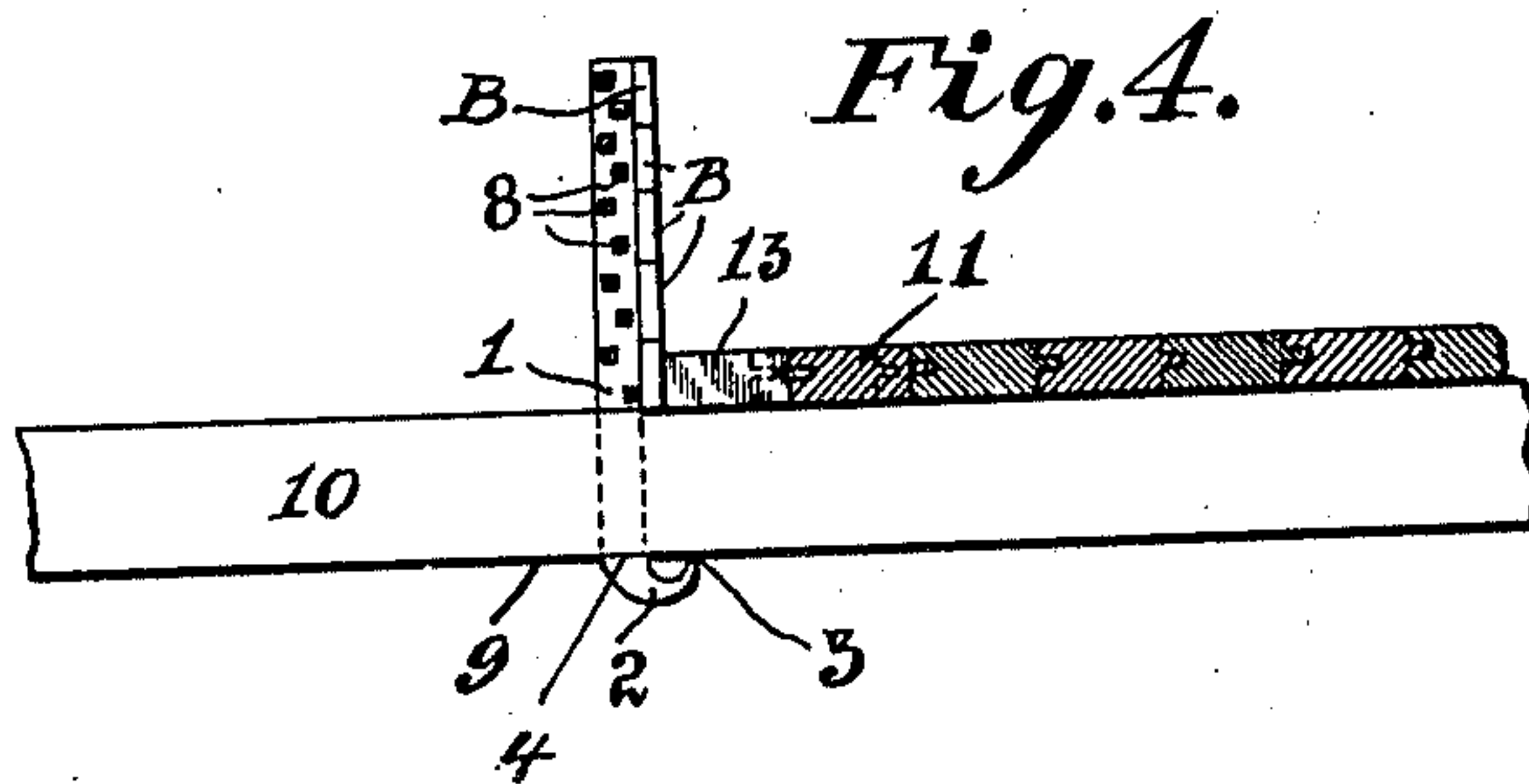


Fig. 4.

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FLOORING-CLAMP.

990,074.

Specification of Letters Patent.

Patented Apr. 18, 1911.

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To all whom it may concern:

Be it known that I, ROBERT H. SQUIRES, a citizen of the United States, residing at East Quogue, in the county of Suffolk, Long Island, and State of New York, have invented new and useful Improvements in Flooring-Clamps, of which the following is a specification.

This invention relates to a device adapted for use more especially by carpenters in the laying of floor boards, and the primary object of the invention is the provision of a device which is applied to the floor beams to form an abutment for the wedge used to draw up a warped board against the last board of the floor laid so that a tight joint can be made between adjacent flooring boards.

Another object of the invention is the provision of a flooring clamp which is readily adjustable for floor beams or joists of different sizes and the device takes the form of a hook formed on the lower end of the shank or standard to cooperate with removable plates so as to clamp the device to the joist or beam, the lowermost plate serving as an abutment for the wedging or drawing block which will be driven between the lowermost plate and flooring board to be nailed.

With these objects in view, and others which will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity, in the claims appended hereto.

In the accompanying drawing which illustrates one embodiment of the invention:—
Figure 1 is a perspective view of the flooring clamp. Fig. 2 is a perspective view of one of the combined abutment plates or blocks and clamping jaw. Fig. 3 is a perspective view of the hook portion of the device. Fig. 4 is a detail view showing the operation of the device.

Similar reference characters are employed to designate corresponding parts throughout the several views.

Referring to the drawing, 1 designates the shank or standard of the device and is preferably in the form of a metal bar of rectangular or non-circular cross section and the foot of the shank or standard is formed into a laterally extending hook 2 that has a serrated bill 3 turned upwardly so as to en-

gage under the joist or floor beam. The bill of the hook is offset from the shank so as to be opposite a shoulder 4 disposed at a juncture between the hook and shank, the shoulder being in the same horizontal plane with the serrated edge of the hook.

The length of the shank from the shoulder 4 to the upper extremity is preferably greater than a foot so as to adapt the device for different sizes of joists and applied to the shank are a plurality of removable elements B which are of similar construction and each consists of a plate 5 that has extending from its rear side a vertical flange or lug 6, the contacting face of the plate and lug being disposed at right angles to each other so that the element can be applied to the front and one of the side faces of the shank, the lug 6 being provided with openings 7 for receiving fastenings such as bolts 8 that pass through openings in the shank. These elements are fastened to the shank one above another and are all removable except the top element which is preferably riveted or permanently secured in place, but of course can be made detachable if desired. The plate 5 is tapered or wedge shape in horizontal cross section so that the plates will form an abutment on which the drawing block or wedge will bear in drawing up a warped board. When all the elements B are on the shank the bottom of the lowermost element will be four inches from the hook 2 so that the device can be applied to a four inch beam. To adapt the device for a six, eight, ten and twelve inch beam the successive blocks will be removed as the case requires, each block being two inches in vertical dimension.

In applying the flooring clamp to a joist the bill of the hook and shoulder 4 are engaged with the bottom 9 of the joist 10, while the lowermost element B will engage the top of the joist so as to support the standard in upright position, the placing of the device being determined with reference to the flooring board 11 to be drawn, it being necessary that sufficient space be provided between the inclined face 12 of the lowermost element and board 11 to accommodate a drawing block or wedge 13 which will rest on top of the joist. In driving the block the device will form a stationary abutment and thus cause the warped board 11 to be driven home from the dotted to the full lines opposite Fig. 6 where it can be nailed to the joist.

The lateral thrust on the device during the drawing up of the board tends to increase the hold of the device on the joist, since the tendency of the standard is to rock on the front edge of the shoulder 4 and thereby cause the bill to bite deeper into the bottom of the joist and the lowermost element B to bite into the top of the joist. The lowermost element B forms a combined abutment for the wedging block 13 and an upper jaw for securing the device to the joist, the lower jaw being the hook 2. When the standard is held vertically it can be engaged or disengaged freely with or from the joist by lateral movement, but as soon as it is slightly canted by the wedge 13 being engaged with the bottom element B it will firmly hold on the joist and constitute an immovable abutment. In other words the device automatically locks itself on the joist, but can be quickly released to move it to another position.

From the foregoing description taken in connection with the accompanying drawing the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative and that such changes may be made when desired as are within the scope of the appended claims.

Having thus described the invention, what I claim as new is:—

1. A device of the class described comprising a bar like shank, spaced joist engaging means rigid on one end of the shank, and an element arranged on the shank intermediate the ends thereof and in spaced relation to and above the said means and forming a combined object engaging means and wedge abutment.

2. A device of the class described comprising a standard, a hook integrally connected with the lower end thereof and projecting forwardly and curved upwardly, a shoulder on the same end of the standard with the hook and disposed horizontally in line with the end of the hook, and an element secured to the standard, disposed at the side thereof from which the hook projects to cooperate with the hook to clamp the standard on a joist and serving as a wedge abutment.

3. A device of the class described comprising a standard, a hook integrally connected with the lower end thereof and projecting forwardly and curved upwardly, a shoulder on the bottom of the standard at the beginning of the hook and disposed horizontally in line with the end of the hook, an element located above the shoulder and hook and secured to the standard, disposed at the side thereof from which the hook projects to cooperate with the hook to clamp the standard on a joist and serving as a wedge abutment, and means for removably mounting the element on the standard.

4. A device of the class described comprising a standard, an upwardly curved hook projecting forwardly from the bottom thereof and offset laterally, a shoulder on one side of the standard and disposed in the same plane with the bill of the hook whereby the shoulder and bill form spaced joist engaging means, and an element on the standard spaced from the hook and shoulder and having a horizontal bottom face to engage the face of the joist opposite from that face engaged by the shoulder and hook, the said face of the element forming a wedge abutment.

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

ROBERT H. SQUIRES.

Witnesses:

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