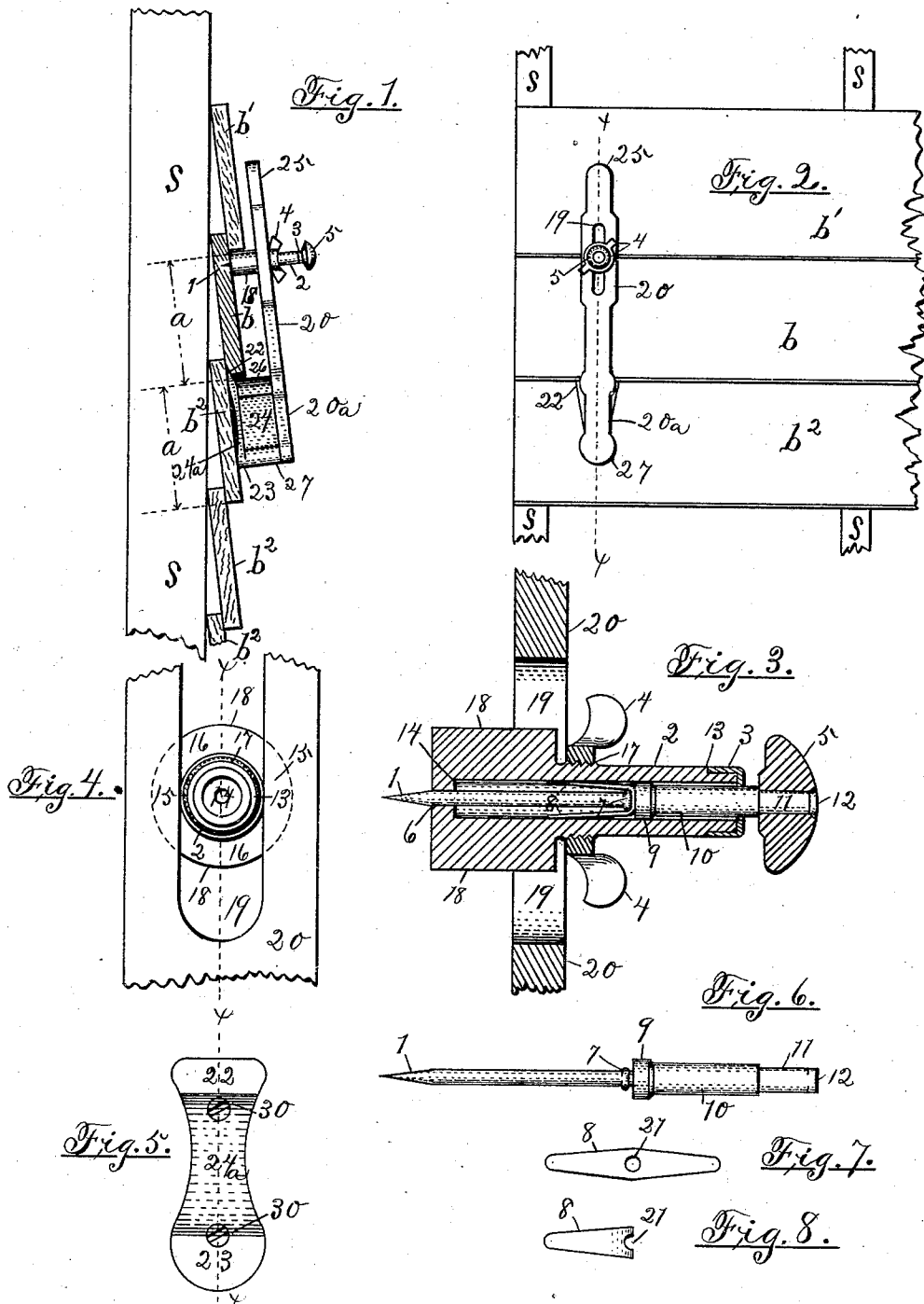


(No Model.)

E. HOTCHKISS.
WEATHER BOARDING GAGE.

No. 378,548.

Patented Feb. 28, 1888.



Witnesses:
William Reinhart.
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UNITED STATES PATENT OFFICE.

ELISHA HOTCHKISS, OF CINCINNATI, OHIO.

WEATHER-BOARDING GAGE.

SPECIFICATION forming part of Letters Patent No. 378,548, dated February 28, 1888.

Application filed March 16, 1887. Serial No. 231,120. (No model.)

To all whom it may concern:

Be it known that I, ELISHA HOTCHKISS, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Weather-Boarding Gages; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to a tool for use in weather-boarding.

The object of the invention is to produce a tool which will gage the position of a board and hold it while it is being nailed in place.

Figure 1 is a side view of the gage when in use, and an end view of weather-boarding. Fig. 2 is a front view of the gage and of the weather-boarding. Fig. 3 is a sectional view of the central parts, shown in section on the line *x x*, Figs. 2 and 4. Fig. 4 is a front view of the central slotted bar, 20, and an end view of the post 18 shown in place within the slot 19. Fig. 5 is a bottom view of the foot or base. Fig. 6 is a view of the awl. Figs. 7 and 8 show a spring.

The same letters or numbers indicate the same parts in the different figures.

In nailing on weather-boarding carpenters have to measure and mark the position for each board, and then temporarily secure the board in place by nails driven part way into the last board nailed in place previous to nailing on the board. This method is tedious, and there is liability of making mistakes. Besides, the nails driven temporarily into the boards leave holes which do not close up when the nails are withdrawn. With my improved gage, when properly set, such use of nails is dispensed with, and there is no liability to error in placing a board.

The tool consists, essentially, of the base or foot 24, the toe 22, slotted bar 20, the post 18, and an awl, 1.

The foot 24 and the slotted bar 20 are preferably made integral and of malleable cast-iron, and the sole 24^a is made of iron or steel, and secured to the bottom of the foot 24 by

means of screws 30, and has a wedge shaped projection or toe extending upward.

In Fig. 5 the bottom of the sole 24^a is shown made concave between the toe 22 and the heel 23. The post 18 is cut away at the sides, so as to form a shoulder, 15, Fig. 4, which bears against the back side of the bar 20, while the flattened portion in front of this shoulder is fitted to slide within the slot 19. The post 18 has a prolongation, 2, which extends in front of the bar 20, and has a screw-thread, 17, cut on its exterior, near the front side of the bar 20, and a wing-nut, 4, which, when screwed onto this thread and tight against the bar 20, clamps the post 18 in any desired position within the slot 19. The post 18 and its prolongation 2 have a hole, 14, extending from the front end to near the rear end, and a smaller hole, 6, continued through the wall at the back end. An awl, 1, carried by a shaft, 10, is placed within these holes, the awl proper projecting through and sliding within the small hole and the shaft 10 resting within the large one 14. The shaft 10 has a collar, 9, about the diameter of the hole 14, which serves to guide the shaft and awl. Adjacent the collar 9 is a small shoulder, 7. Springs 8, cut out with the shape shown in Fig. 7, have a hole, 21, which is slipped over the awl 1, and, pressed over the shoulder 7, is secured, by means of this shoulder and the collar 9, in place on the awl. The extremities of the springs 8 are then bent down upon the awl, as shown in Fig. 8, until they enter the hole 14 in the prolongation 2, when they are pushed into the hole. The springs 8 bear against the walls of the hole 14, and by their friction retain the awl in any desired position. The springs 8 may be soldered or otherwise secured to the awl 1. The front end of the prolongation 2 is turned down or reduced, leaving a shoulder, 13, and a cap, 3, may be secured thereon in any suitable manner, as by friction or a screw-thread.

When the awl is in place, it rests and is guided within the small hole 6 in the end of the post 18, and the shaft 10 projects through and slides within a corresponding hole in the cap 3. The collar 9 will strike against the cap 3 and prevent the awl from coming out forward, while a shoulder on a knob, 5, which is fastened onto the end 11 of the shaft 10, will strike against the exterior of the cap 3 and

prevent the shaft 10 being driven too far inward, and thus injuring the springs 8. The relative construction of the board-supporting post and the awl provides for adjusting the awl and post at the same time, and provides for the location of the awl in the most effective working position.

In Figs. 1 and 2, s s are studs, and b , b' , and b'' are weather-boards. The boards b'' and b are supposed to be already nailed in place. The last or upper one, b' , is in section on the line x x of Fig. 2.

The gage is shown with its sole 24^a pressed against the board b'' , and its toe 22 is shown inserted under the lower edge of the board b and between the boards b and b'' , and the post 18 is shown pressing against the board b and the nut 4 screwed down tight, whereby the post is secured in place. When in this position, the knob 5 is forced inward, and the awl 1 is thus driven out of the small hole 6 and into the board b , as shown clearly in Fig. 1. The awl prevents the gage from becoming displaced.

a indicates the spacing or "gage," and when the upper side of the post 18 is the distance a from the upper side of the shoulder 26, as shown in Fig. 1, and the toe 22 is forced under the board b until the shoulder 26 strikes the lower edge of the board b , then the post 18 will be in such position that if the lower edge of the board b' be supported by the post the board b' will then be in position to be nailed.

Of course it would require two such tools to support the board b' unless one end only be supported by the tool while the carpenter holds the other in position and then nails it fast.

The slot 19, the post 18, and the nut serve as a means for varying the gage.

When the tool is used, the awl, having a slender, sharp, tapering point, simply presses the wood apart without breaking the fiber, so that when the awl is withdrawn and the wood becomes moist the hole closes up and the boards are not disfigured, as when nails are driven into them for gaging the boards.

I claim—

1. In a weather-boarding gage, the combination of a recessed board-supporting post, an awl working within the recess of the post, and the binding-clamp 8, fastened to the awl

and engaging the walls of the recess of the post, the said post being suitably adjustably connected to the main parts of the gage, substantially as set forth.

2. In a weather-boarding gage, the combination of a board-supporting post having a central longitudinal recess, 6 14, and an awl working within the recess of the post, and having the enlarged bearing part 9 working in the recess 14, the reduced bearing part 1 working in the hole 6, and the reduced bearing part 10 working in the hole in the cap 3, the said post being suitably adjustably connected to the main parts of the gage, substantially as set forth.

3. In a weather-boarding gage, the combination of the body having an upwardly-extending slotted part, a board-supporting post having an integral longitudinal prolongation projecting in line with the post proper, and projecting concentrically with the axis of the post and through the slot in the said slotted extension and adapted to fit and be adjusted lengthwise in the said slot, and a nut on the post prolongation, the said post having bearing parts, which with the nut are adapted to clamp the post to the body-extension, substantially as set forth.

4. In a weather-boarding gage, the combination of the body having an upwardly-extending slotted part, a board-supporting post having a prolongation adapted to fit and be adjusted in the slot in the said slotted extension, a nut on the post prolongation, and an awl working in the recess in the post, the said post having bearing parts, which with the nut are adapted to clamp the post to the body-extension, and the awl being supported and guided by its bearings in the post, whereby it is adapted to pierce the board at or near the end of the post, and whereby both the post and awl may be adjusted together relatively to the slotted body-extension, substantially as set forth.

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

ELISHA HOTCHKISS.

Witnesses:

E. P. ROBBINS,

WILLIAM REINHART.