No. 638,386. Patented Dec. 5, 1899.

C. S. FARROW.

NAIL.

(Application filed May 31, 1899.)

(No Model.)

Fig. 1.

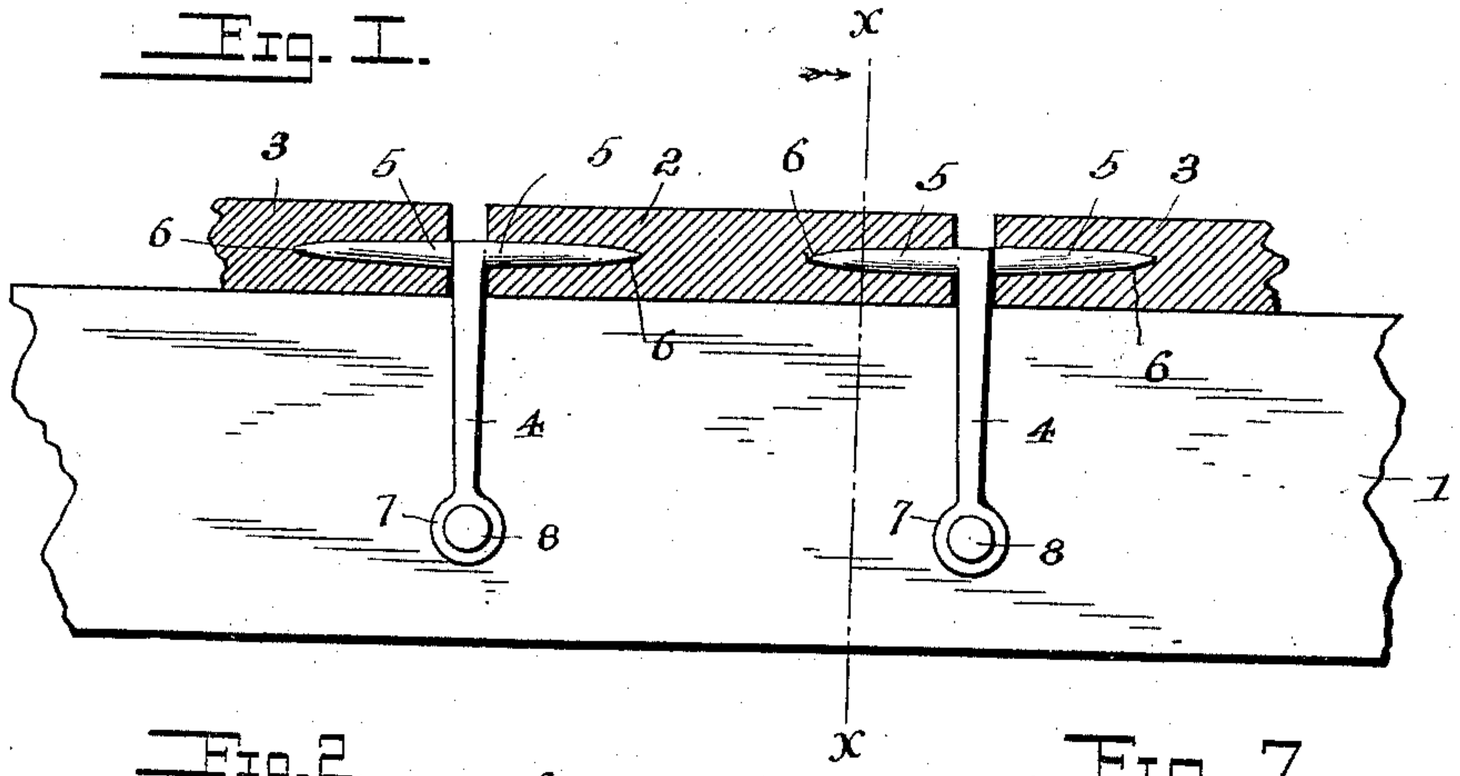


Fig. 2.

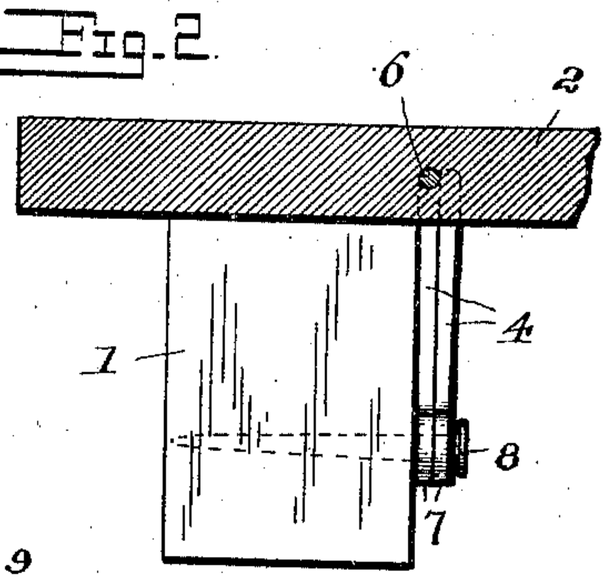


Fig. 7.

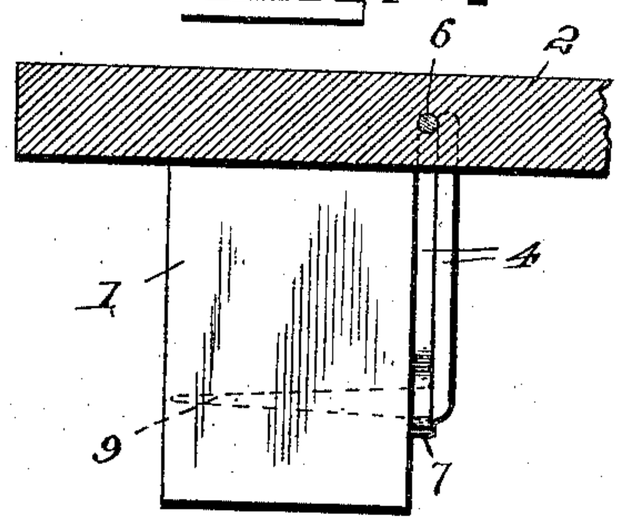


Fig. 6.

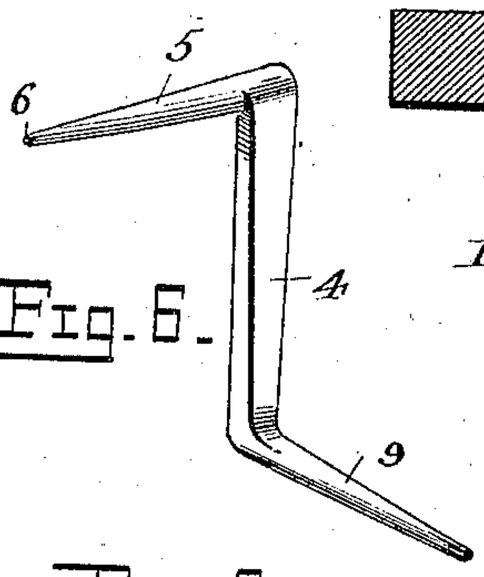


Fig. 3.

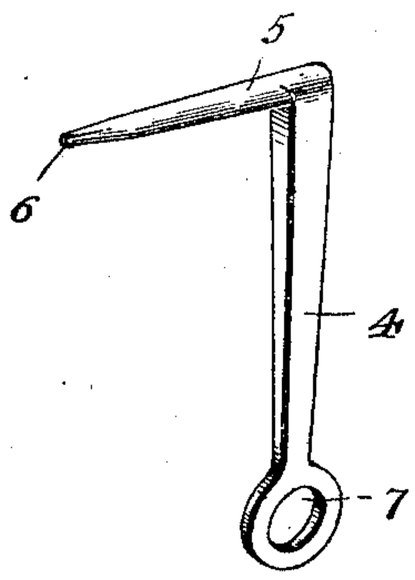


Fig. 4.

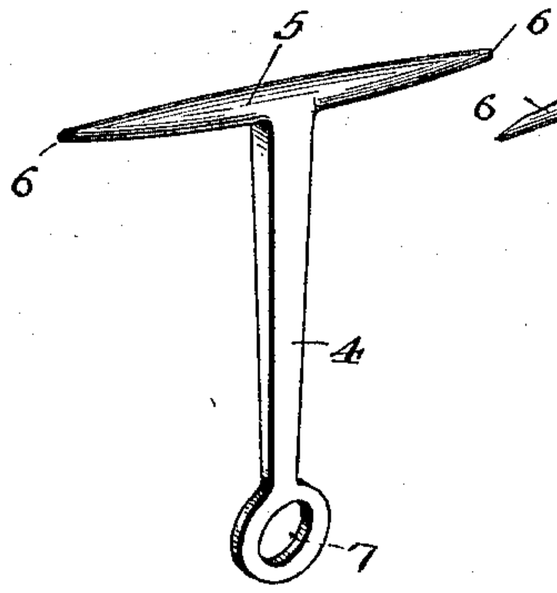
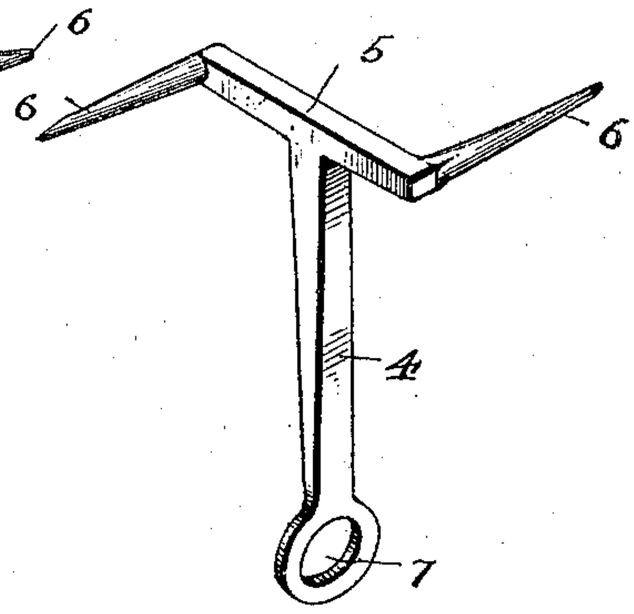


Fig. 5.



Witnesses
F. E. Alden.
P. E. Lepard.

C. S. Farrow. Inventor.

By his Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

CHARLES STEPHEN FARROW, OF EUGENE, OREGON.

NAIL.

SPECIFICATION forming part of Letters Patent No. 638,386, dated December 5, 1899.

Application filed May 31, 1899. Serial No. 718,835. (No model.)

To all whom it may concern:

Be it known that I, CHARLES STEPHEN FARROW, a citizen of the United States, residing at Eugene, in the county of Lane and State of Oregon, have invented a new and useful Nail, of which the following is a specification.

This invention relates to nails, and is especially designed for use in constructing board walks, bridges, &c.

It is a well-known fact that the nails employed in securing the flooring to the stringers of a board walk and similar structures become loosened under the action of the weather and project up above the flooring-boards, causing damage and inconvenience to pedestrians and vehicles passing over the same.

In view of this difficulty the present invention has for its object to provide a nail or fastening device which is not exposed through the upper face of the flooring and is prevented from becoming loosened and working up out of the same.

A further object is to prevent the flooring-boards from becoming warped.

To these ends the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims.

In the drawings, Figure 1 is a fragmentary sectional view taken longitudinally through a stringer and showing the fastener employed to secure adjacent flooring-boards to the stringer. Fig. 2 is a transverse sectional view thereof, taken on the line *x x*, Fig. 1. Fig. 3 is a detail perspective view of the fastener. Figs. 4, 5, and 6 are detail perspective views of modified forms of the invention. Fig. 7 is a view similar to Fig. 2, showing the application of the modified form illustrated in Fig. 6.

Corresponding parts are designated by like reference characters in all the figures of the drawings.

Referring to the accompanying drawings, 1 designates a portion of the stringer having the adjacent flooring-boards 2 and 3 secured thereto by means of the present invention.

The simplest form of the device is shown in Fig. 3 and comprises a straight shank 4, having at one end a transverse head 5, the extremity of which is sharpened to provide a board-penetrating prong 6, and an eye 7 is formed at the opposite end of the shank, the opening of the eye being disposed transversely of the prong.

In the application of the device the prong 6 is driven into one edge of the board 2, with the shank 4 lying flush against the adjacent side of the stringer 1, and then a suitable nail 8 is driven through the eye 7 into the stringer. Thus the head of the device does not project above the board, but engages the same at the edge thereof, and the nail extending transversely of the shank effectively prevents upward movement of the latter. The fastening for the next adjacent board 3 is adapted to receive the nail 8 through the eye 7 thereof prior to the securing of said nail, and then the board 3 is driven up against the prong of the fastener, and the contiguous sides of the adjacent boards are effectively secured to the stringer. By this arrangement only one nail 8 is required for each pair of fastening devices.

The modification shown in Fig. 4 has the head 5 extending at opposite sides of the shank, and both ends are sharpened to provide two prongs extending in opposite directions from the same end of the shank, whereby a single fastening may be employed to secure the contiguous sides of adjacent boards.

Another modification is shown in Fig. 5, having the transverse head 5 extending at opposite sides of the shank and provided with the prongs 6; but in this form the prongs extend at right angles to the head and in opposite directions therefrom. This latter form is also adapted to fasten two adjacent boards, as will be understood.

The modification shown in Fig. 6 comprises the shank 4, the head 5, and the prong 6; but instead of the eye 7 it is provided with a prong 9 at the opposite lower end of the shank and extending at right angles to the upper prong. As illustrated in Fig. 7, this latter form is designed to be used in combination with the simplest form, (shown in Fig. 3,) the prong 9 being driven through the eye of the first form into the stringer 1 in the manner of the nail 8, thereby dispensing with said separate

nail, and the prong 6 engaging the board 3, as hereinbefore described.

In the form of nail shown in Fig. 3 one end of the head 5, opposite the prong 6, forms a driving-shoulder, which is adapted to be struck by a hammer or the like when forcing the board-penetrating prong into the edge of the board, while in the form shown in Fig. 5 the opposite sides of the head 5, at opposite ends thereof in longitudinal alinement with the respective prongs, form similar driving-shoulders. The other form shown in Fig. 4 is adapted to be struck at a point immediately below the prongs and upon either longitudinal edge of the shank thereof, so that each form has a driving-shoulder located adjacent to the wood-penetrating prong.

It will be noted that each of the three forms comprises a shank having at one end a transverse head provided with a prong and an eye provided at the opposite end of the shank. Furthermore, the eye 7 in each form has its opening disposed transversely of the prong, so that the nail 8 may be received through the eye transversely of the prong to provide a positive and substantial anchorage for the device.

By reason of the fastening device engaging the boards at the extreme edges thereof the latter are at all times held flat against the stringer, and the boards are thereby prevented from warping, as will be understood.

Changes in the form, proportion, size, and the minor details of construction within the scope of the appended claims may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What I claim is—

1. A device for fastening boards to stringers or the like, comprising a shank to be placed alongside of the stringer and between adjacent boards, said shank having a board-penetrating prong at one end, extending at substantially right angles thereto, and to be driven into the edge of a board, and an eye located at the opposite end of the shank, and disposed at substantially right angles to the prong, in combination with separate means to be driven transversely through the eye and into the stringer, and disposed at substantially right angles to the prong, substantially as shown and described.

2. A device for fastening boards to stringers or the like, comprising a shank to be placed alongside of the stringer and between adjacent boards, said shank having a board-penetrating prong at one end, extending at substantially right angles thereto, and to be driven into the edge of a board, a driving-shoulder located adjacent to one end of the prong and alined longitudinally thereof, and an eye located at the opposite end of the shank and at substantially right angles to the prong, in combination with separate means to be driven transversely through the eye and into the stringer, and disposed at substantially right angles to the prong, substantially as shown and described.

3. A fastening device of the class described, comprising a pair of shanks, each shank having a transverse prong at one end thereof, the prongs extending outwardly in opposite directions, and means connecting the opposite ends of the shanks, extending at substantially right angles to the prongs, and supporting the device in place, substantially as shown and described.

4. A fastening device of the class described, comprising a laterally-pronged shank, having an eye located at one end thereof and at substantially right angles to the prong, in combination with separate means adapted to be driven transversely through the eye, and comprising a shank having prongs at opposite ends thereof and extending at substantially right angles to each other, one of the prongs being adapted to be driven transversely through the eye of the former shank, and the opposite prong being located adjacent to, and extending in opposite directions from the prong of the former shank, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CHARLES STEPHEN FARROW.

Witnesses:
E. M. LEE,
L. H. JOHNSON.