

B. FOX & W. W. WILSON.
 COMBINED SCREED AND NAILING STRIP.
 APPLICATION FILED FEB. 13, 1909.

985,891.

Patented Mar. 7, 1911.

Fig. 1.

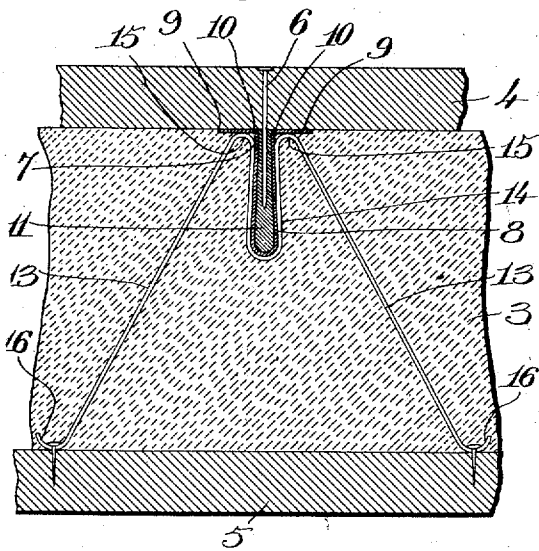


Fig. 2.

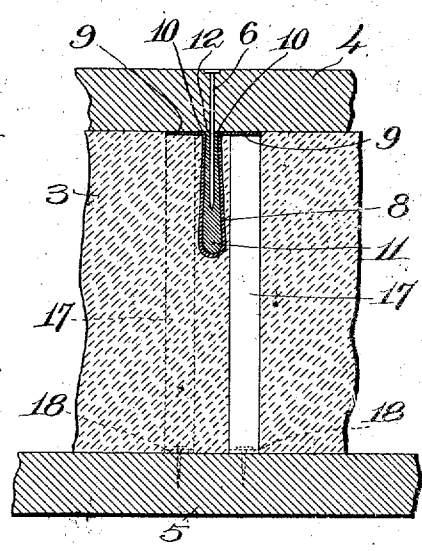


Fig. 3.

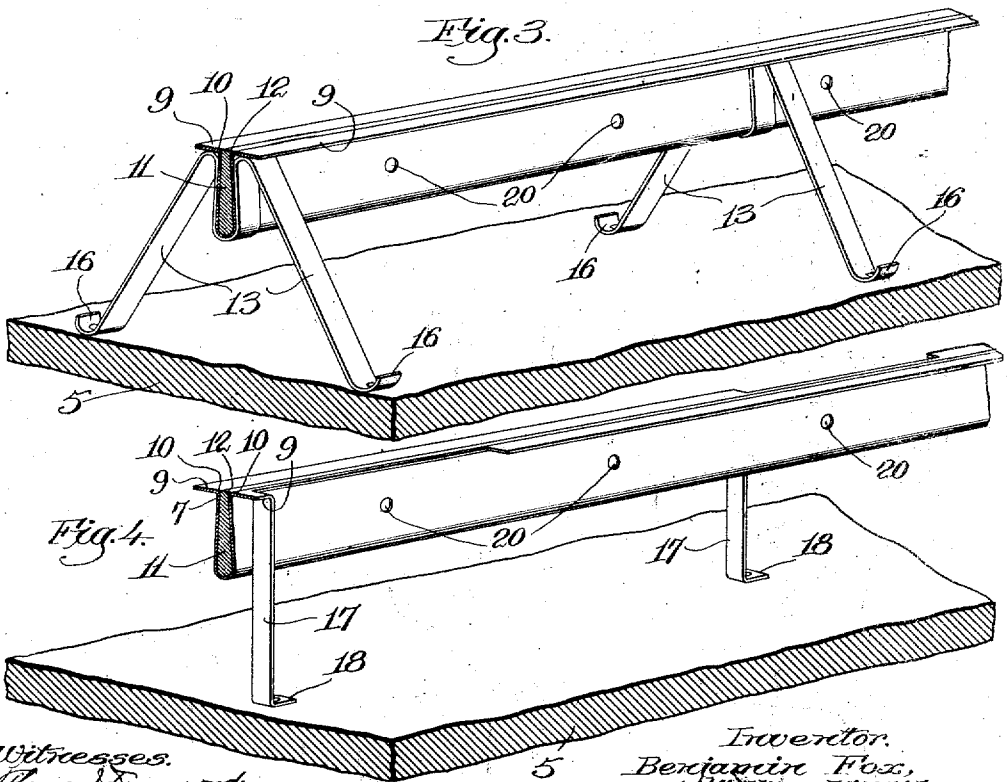
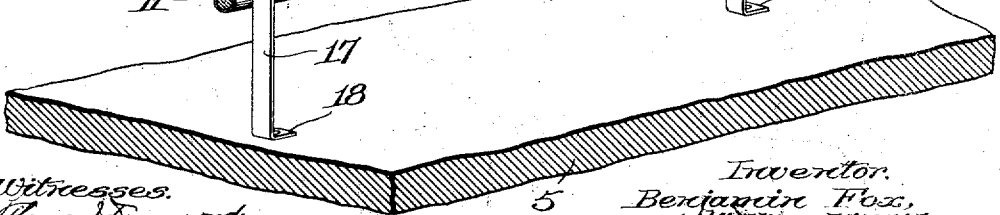


Fig. 4.



Witnesses.
 Thomas Drummond.
 Joseph M. Ward.

Inventor.
 Benjamin Fox,
 William W. Wilson,
 by Henry H. Hays, atty.

UNITED STATES PATENT OFFICE

BENJAMIN FOX AND WILLIAM W. WILSON, OF BOSTON, MASSACHUSETTS, ASSIGNORS
TO BENJAMIN FOX INCORPORATED, OF BOSTON, MASSACHUSETTS, A CORPORATION
OF MASSACHUSETTS

COMBINED SCREED AND NAILING-STRIP.

985,891.

Specification of Letters Patent.

Patented Mar. 7, 1911.

Application filed February 13, 1909. Serial No. 477,659.

To all whom it may concern:

Be it known that we, BENJAMIN FOX, a subject of the King of Great Britain, and WILLIAM W. WILSON, a citizen of the United States, residing at Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Combined Screeds and Nailing-Strips, of which the following description, in connection with the accompanying drawing, is a specification, like letters on the drawing representing like parts.

In concrete building construction it is customary to place in the concrete floor or wall a nailing strip of some character to which the flooring, furring, etc., may be nailed, and in laying concrete floors it is the usual practice to employ some kind of a gage or screed to gage the thickness of the concrete and to indicate where the surface should be.

It is the object of our invention to provide a combined nailing strip and screed which serves not only as a gage for the surface of the concrete, but which also acts as a nailing strip to which the flooring, etc., may be nailed.

Our improved combination screed and nailing strip is simple and inexpensive to manufacture and may be made in continuous sections of any desired length, and has other advantages which will be more fully hereinafter specified.

We will first describe one embodiment of our invention and then point out the novel features thereof in the appended claims.

Referring now to the drawings, Figure 1 is a cross sectional view through a concrete floor showing one form of our improved nailing strip in cross section; Fig. 2 is a similar view showing another embodiment of the invention; Fig. 3 is a perspective view of the device shown in Fig. 1; Fig. 4 is a perspective view of the device shown in Fig. 2.

Referring to the drawings the concrete body or material forming a concrete floor

is designated by 3 and the flooring to be laid on top of the concrete is designated by 4. In laying a concrete floor it is customary to first erect a form of proper shape on which the concrete 3 is poured, and after the concrete has dried, the flooring 4 is laid.

Our improved device, which is designed not only for the purpose of affording a proper anchorage for the nails 6 which hold the flooring in place, but which constitutes a screed for gaging the surface of the concrete, is formed of a strip of sheet metal bent longitudinally to form the U-shaped portion or fold 8 and the laterally-extending flanges 9. The corners 10 where the flanges 9 merge into the U-shaped portion 8 are separated thereby to form an open throat between the sides of the U-shaped portion, and in the preferred form of our invention, the distance between the sides of the U-shaped portion 8 near the apex thereof is greater than the width of the open throat between the corners 10. We prefer to place in the U-shaped portion 8 a strip 11 of wood or other material into which nails may be driven and which is of a shape to fit the U-shaped portion 8 of the device, said strip of wood or other material preferably being narrower at its upper edge 12 than at the other edge. This strip 11 will preferably completely fill the U-shaped portion or fold in the sheet metal 7.

As stated above, our improved device is a combined screed and nailing strip and that it may act as a screed it is necessary to properly support it so that the flanges 9 will come at the proposed level of the concrete body. For supporting the device in a proper shape, we have provided supports or holders which are designed not only to support the device as a whole but which also support the flanges 9, the latter being the parts which constitute the screed portions of the device. In Figs. 1 and 3 we have shown for this purpose a plurality of holders each comprising two legs 13 adapted to rest on

and be secured to the form 5 and the U-shaped portion 14 shaped to receive the U-shaped portion of the metal, said holders being so constructed that the portions 15 thereof engage the under side of the flanges 9 and thus firmly support the flanges.

In Figs. 2 and 4 we have shown another form of the invention wherein the flanges 9 are slit and the slit portions are bent downwardly to present legs 17 by which the device is supported. These legs 17 are preferably bent at their lower ends to form feet 18 which rest on and are secured to the form 5. In the embodiment shown in Figs. 1 and 2 the lower ends of the legs 13 are bent to form feet 16 which are preferably curved, as shown. It will be noted that in both forms of the invention the legs or supports serve not only to sustain the U-shaped portion but they also stiffen, brace and support the flanges 9 which constitute the screed portions of the device.

In using our device it will be placed on the form 5, as shown in Figs. 3 and 4, so that the flanges 9 will come at the desired level of the top of the concrete, and after the device is in place the concrete is poured in the usual manner, the flanges 9 constituting gages or guides to lay the concrete to. In surfacing the concrete it is customary for the workman to take a straight edge and smooth the concrete off and with our invention the flanges 9 constitute the gages or guides for the straight edge so that the operator has merely to place the straight edge so that it will span two adjacent devices and draw the straight edge across the surface of the concrete. This manner of supporting the flanges of the device stiffens them so that they will not give or yield during this operation and a true surface to the floor can be secured.

When the concrete floor is finished the flanges come flush with the surface of the concrete, as shown in the drawings. Since the nail-receiving strip 11 fills entirely the U-shaped portion of the device, it will be apparent that there are no openings or cavities which are liable to become filled with concrete while it is being poured, and therefore no special care need be taken to prevent the nailing strip from becoming clogged. After the concrete has set, the U-shaped portion 7 will be firmly held in and will be prevented from expanding by the concrete.

By making the U-shaped portion of the shape shown, that is, larger at the lower end than at the mouth, two important advantages are secured. In the first place, the device will be fixedly anchored in the concrete because of the fact that the lower end

thereof is larger than the upper end, and in the second place, the nailing strip is fixedly and permanently retained in the fold of the U-shaped metal because of the fact that the concrete is unyielding and will prevent absolutely the sides of the fold from spreading sufficiently to permit the thicker lower edge of the nailing strip being drawn out through the mouth of the fold.

If desired I may make the sheet metal with perforations 20 into which the concrete will enter, thus more securely anchoring the device in place. The advantage of making the feet 16 of the shape shown in Figs. 1 and 3 is that when the form 5 is removed, a minimum surface of each foot is exposed.

Our invention is not confined to use in floors, but may also be used in concrete walls as will be obvious.

Having fully described our invention what we claim as new and desire to secure by Letters Patent is:—

1. A combined nailing strip and screed for a concrete floor or wall comprising a longitudinally extending body portion of sheet metal having a substantially U-shape in cross section with laterally extending flanges which are adapted to form screeds or gages for the surface of the concrete, a nail-receiving strip retained in the U-shaped portion and having a shape to fit the sides thereof, and supports for said device comprising legs depending from and engaging and supporting the flanges.

2. In a concrete floor, the combination with a body of concrete, of a combined screed and nailing strip embedded in the concrete and comprising a longitudinally extending body of sheet metal U shaped in cross section and provided with laterally-extending flanges which form the gage to which the top surface of the concrete is laid, a nail-receiving strip filling the U-shaped portion of the body and coming flush with said flanges, and legs for sustaining the device in position and engaging and supporting the flanges, the walls of the U-shaped portion inclined toward each other from the apex toward the mouth of said U-shaped portion whereby the device will be held fixedly in the concrete, and the nail-receiving strip will also be locked in the U-shaped portion of the metal.

3. A combined nailing strip and screed for concrete floors or walls comprising a longitudinally extending body portion of sheet metal having a substantially U-shape in cross section with laterally-extending flanges on either side of the mouth thereof, which flanges are adapted to form screeds or flanges for the surface of the concrete, the walls of the U-shaped portion inclined to-

ward each other from the apex toward the mouth of said U-shaped portion, a nail-receiving strip retained in the U-shaped portion and having a shape to fit the sides thereof, and supports for the device comprising legs which depend from and support the flanges.

In testimony whereof, we have signed our

names to this specification, in the presence of two subscribing witnesses.

BENJAMIN FOX.
WILLIAM W. WILSON.

Witnesses:

FRANCES E. GALLAGHER,
LOUIS C. SMITH.

Correction in Letters Patent No. 985,891.

It is hereby certified that in Letters Patent No. 985,891, granted March 7, 1911, upon the application of Benjamin Fox and William W. Wilson, of Boston, Massachusetts, for an improvement in "A Combined Screed and Nailing-Strip," an error appears in the printed specification requiring correction as follows: Page 2, line 123, the word "flanges" should read *gages*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 28th day of March, A. D., 1911.

[SEAL.]

E. B. MOORE,
Commissioner of Patents.

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