May 8, 1928. 1,668,858

M. MADSEN

DEVICE FOR USE IN LEVELING CONCRETE

Filed May 4, 1926

Fig. 1

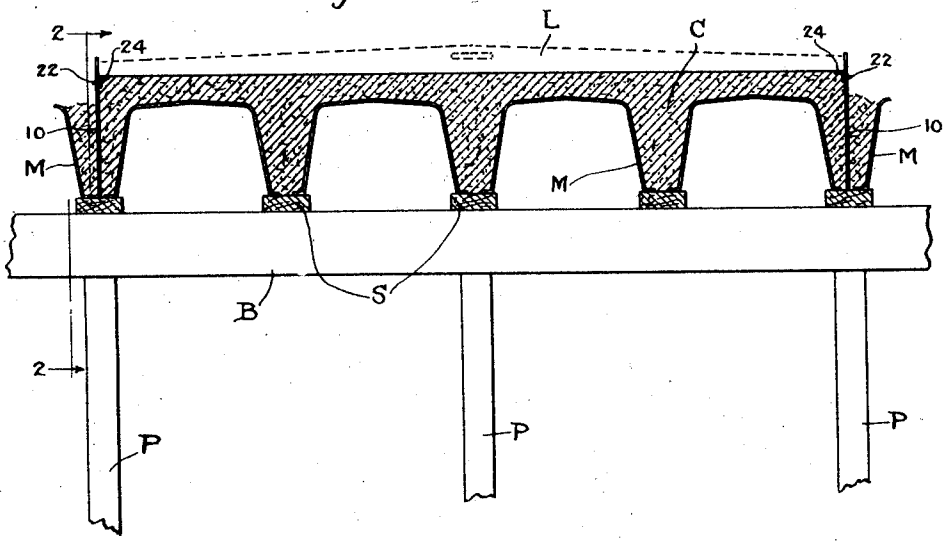


Fig. 2

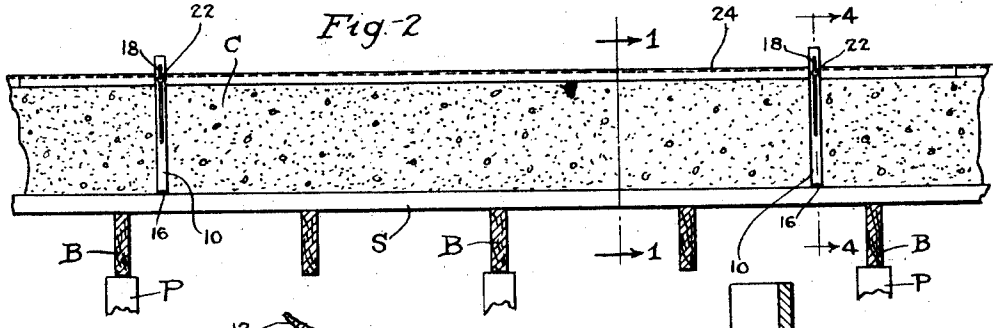


Fig. 3

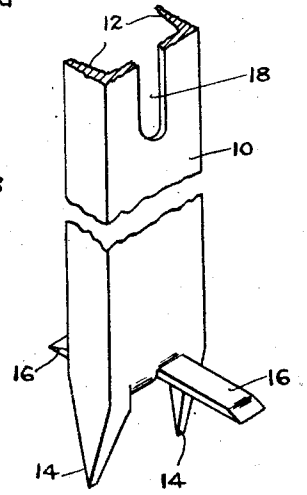
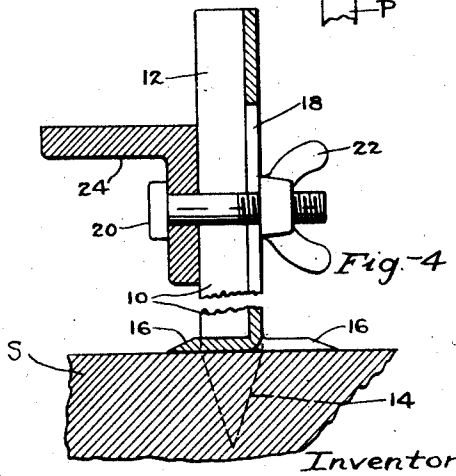


Fig. 4



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UNITED STATES PATENT OFFICE.

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DEVICE FOR USE IN LEVELING CONCRETE.

Application filed May 4, 1926. Serial No. 106,623.

My invention relates to devices for use in leveling concrete and while intended particularly for use in leveling concrete floors after the concrete has been laid in slab form, it will be understood that the device may be used in other places for leveling concrete after the same has been deposited for producing the desired construction work. An object of the invention is to provide a device of this character which may be readily removed after the leveling operation has been performed in order that the device may be used repeatedly. Another object is to produce a device which may be readily adjusted to the desired height for the leveling operation.

The full objects and advantages of my invention will appear in connection with the detailed description thereof, and the novel features of my inventive idea will be particularly pointed out in the claim.

In the accompanying drawings which illustrate the application of my invention,—

Fig. 1 is a fragmentary view in section on the line 1—1 of Fig. 2 showing a concrete floor in the process of construction with the use of my device. Fig. 2 is a view taken at right angles to Fig. 1 on the line 2—2 of Fig. 1. Fig. 3 is a perspective view on an enlarged scale showing the lower portion of the device. Fig. 4 is a view of the device on an enlarged scale taken on the line 4—4 of Fig. 2 and with the middle portion broken out.

Referring to the construction shown in the drawings, Figs. 1 and 2 illustrate a concrete floor C which while being laid is supported by a temporary staging consisting of vertical posts P upon which rest horizontal beams B across which stringers S are laid at right angles. In the form of the construction shown, inverted metal strips M of inverted U-shape are supported upon the stringers S and concrete is placed between and over these metal strips. A plurality of my devices one of which is designated in general by the numeral 10 are used in connection with the leveling of the concrete. The device as will be understood from Figs. 3 and 4, consists of a channel bar of desired length having side flanges 12. The lower ends of these flanges are sharpened to form points 14 and the web portion between the points may if desired be bent out at right angles to form stops 16, one-half of the web being bent in one direction and the other half being bent in the opposite direction. The stops 16 also assist in maintaining the device 10 in vertical position. The channel bar toward the upper end and in the web portion thereof is provided with a longitudinal slot 18 through which passes a bolt 20 provided with a wing nut 22. In the use of the device, the points 14 are driven into a stringer to a distance determined by the stops 16. It will be understood that a plurality of the devices are placed at spaced intervals along the two stringers which are at opposite sides of the slab which is being laid. The devices serve to support guide bars or screed strips 24 by means of the bolts 20 which pass therethrough. The provision of the longitudinal slots 18 permits the strips 24 to be placed at the desired height in which they may be maintained by tightening the wing nuts 22. With the strips 24 thus properly positioned, as shown in Fig. 1, the ends of a straight edge or leveling device L are placed thereon and the leveling device is drawn over the concrete to level the same. When the concrete has been thus leveled, the device may be removed for subsequent use, the space which it occupied in the concrete being readily smoothed over with a trowel.

I claim:

A device for use in leveling concrete comprising a channel bar whose side flanges are sharpened at their lower ends and whose web portion contains a longitudinal slot, two stops formed by turning portions of the web between said flanges outwardly in different directions, and a bolt passing through said slot and adapted to be secured in different positions along said slot for supporting a guide bar.

In testimony whereof I hereunto affix my signature.

MADS MADSEN.