

A. D. WHIPPLE & F. CHRISTIANSEN.
GUIDE FOR CONCRETE FORMS.
APPLICATION FILED JUNE 2, 1911.

1,053,461.

Patented Feb. 18, 1913.

FIG. 1.

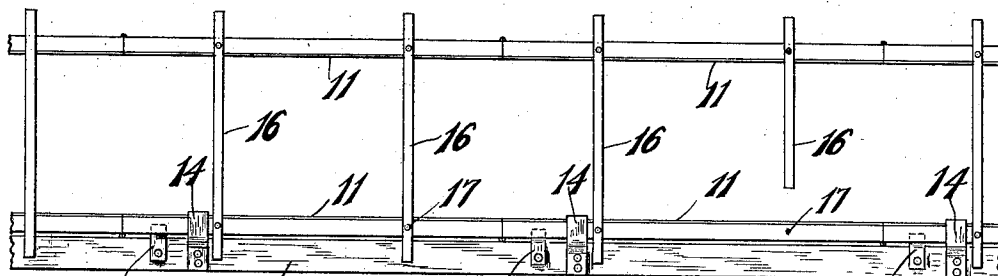


FIG. 2.

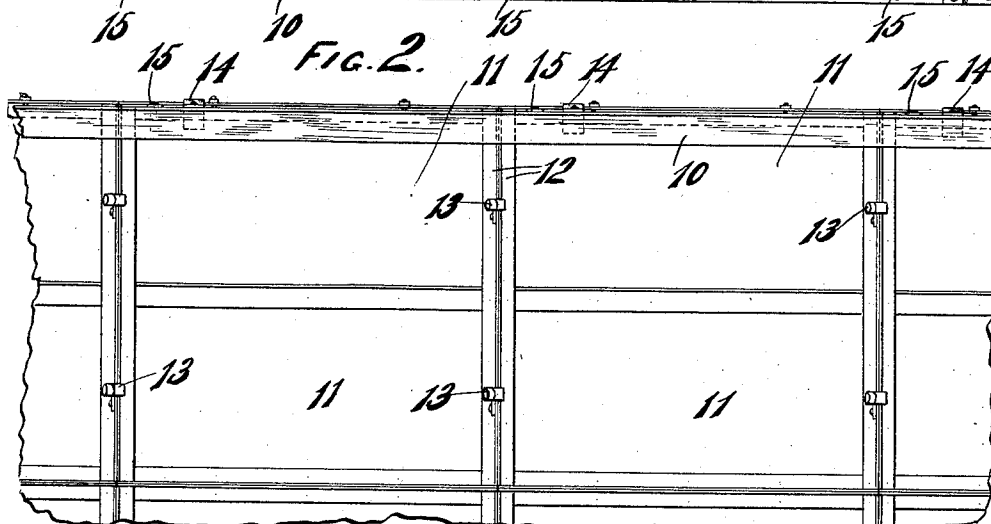


FIG. 3.

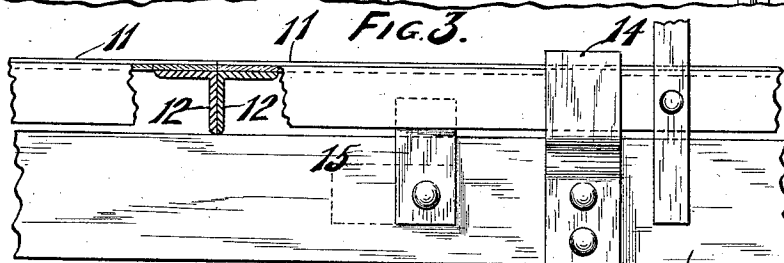
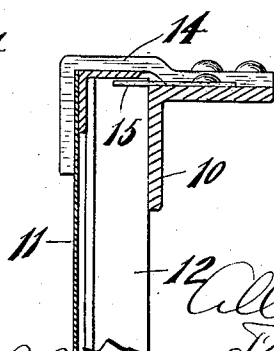


FIG. 4.



WITNESSES.

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GUIDE FOR CONCRETE-FORMS.

1,053,461.

Specification of Letters Patent.

Patented Feb. 18, 1913.

Application filed June 2, 1911. Serial No. 630,883.

To all whom it may concern:

Be it known that we, ALLEN D. WHIPPLE and FRITS CHRISTIANSEN, citizens of the United States, and residents of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Guides for Concrete-Forms, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

This invention has for its object to provide a guide for sheet metal forms used in concrete building construction to produce the molds in which the concrete is placed for forming walls and the like, the purpose thereof being to secure a proper alinement of the forms and avoid the zig-zag arrangement which is liable to be taken by the forms when their clamping means alone are relied upon for holding them in position.

With the above and other objects in view the invention consists in the guide for concrete forms as herein claimed, and all equivalents.

Referring to the accompanying drawings in which like characters of reference indicate the same parts in the different views: Figure 1 is a plan view of a guide for concrete forms constructed in accordance with this invention as applied in use for holding the sheet metal plates or concrete forms in proper alinement; Fig. 2 is a side elevation thereof; Fig. 3 is a detail plan view thereof; and, Fig. 4 is a transverse sectional view thereof.

In these drawings 10 indicates the guide member which is of angle-iron construction, as best seen in Fig. 4 and which becomes a straight-edge when applied to the upper edges of a set of sheet metal plates or concrete forms 11 which are detachably connected together to form the mold for the wall. These sheet metal forms 11 are provided with frames 12 of angle-iron construction and the flanges of each form or mold section are provided with suitable clamping means 13 for clamping together the abutting flanges of the adjacent frames 12, as shown in Fig. 3, and is as long as convenient for handling, so that each of the guides thus engages the abutting flanges of a number of the sheet metal forms. The horizontal face of the guide is provided at intervals with hook members 14 which are slightly arched to reach over the upper

edges of the concrete forms and engage their inner faces as shown in Fig. 4. It is by means of this hook of the guide member 10 with the concrete forms that the guide member is held in place and the distance between the depending portion of the hook members 14 and the upright portion of the guide member 10 is just sufficient to receive the concrete forms between them without material play so that the forms are firmly held by the hook members in their engagement with the straight-edge and are therefore maintained in accurate alinement.

As a convenience for locking the guide in place, it may be provided at intervals with turn buttons 15 in the form of flat sheet metal strips pivotally mounted on the top face of the guide member and adapted to project beyond the upright face of the guide member when turned to one position and engage beneath the top flange of the frame of the forms. When the guide is thus locked in position, there is no danger of its being accidentally disturbed and the true alinement of the forms is assured. The guide need only be applied to the forms on one side of the mold, the forms on the other side of the mold being tied in parallel relation thereto by means of tie rods 16 which have pins 17 projecting from them to enter openings in the flanges of the forms. When it is desired to remove the guide for building up another tier of forms, the turn buttons 15 are swung out from beneath the flanges of the forms and the guide may then be lifted and laid to one side until replaced upon the new tier of forms.

By means of this invention the accurate alinement of the concrete forms, which is necessary to produce a straight wall, may be quickly and easily made and the forms, when clamped thereto, will remain in their proper alinement.

What we claim as new and desire to secure by Letters Patent is:

1. A guide for concrete forms, comprising a straight-edge for engaging the forms on one side thereof, and straight edge suspending hooks extending from the straight-edge for passing over the upper edges of the forms and engaging their opposite sides for holding them in such engagement with the straight edge.

2. A guide for concrete forms, comprising an angle-iron guide member, and guide member suspending means connected there-

with for engaging the upper edges of concrete forms and holding them in engagement with the guide member.

3. A guide for flanged concrete forms, 5 comprising a straight-edge adapted to engage concrete forms on one side thereof, straight edge suspending hooks on the straight-edge to pass over the upper edges of the concrete forms and engage the other 10 side thereof for holding said concrete forms in such engagement with the straight-edge, and turn buttons on the straight-edge for engaging beneath the flanges of the concrete forms to lock the guide in place.

15 4. A guide for flanged concrete forms, comprising a guide member of angle-iron construction, arched guide member suspending means connected therewith for engaging the upper edges of concrete forms and hold- 20 ing them in engagement with the guide member, and turn buttons on the guide mem-

ber adapted to engage beneath the flanges of the concrete forms.

5. A guide for concrete forms, comprising a straight-edge adapted to engage the concrete forms on one side thereof, straight edge 25 suspending hooks on the straight-edge extending over the concrete forms and engaging the other side thereof for holding them in engagement with the straight-edge, and 30 means connecting concrete forms thus engaged with the concrete forms on the opposite side of the mold for holding them in proper relation.

In testimony whereof, we affix our signatures, in presence of two witnesses. 35

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FRITS CHRISTIANSEN.

Witnesses:

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C. H. KEENEY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."