

Feb. 17, 1942.

J. M. HIGHTOWER
FORM FOR CONCRETE FOOTING

2,273,109

Filed Feb. 27, 1939

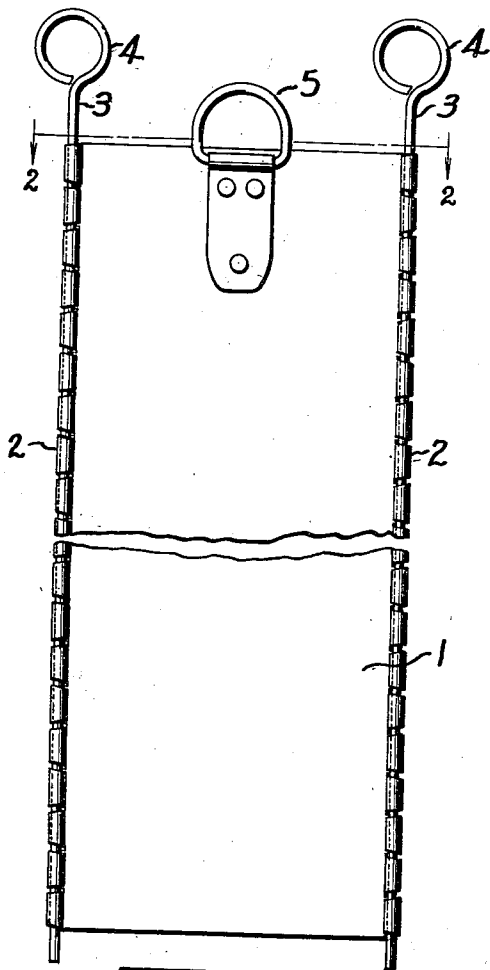


Fig. 1.

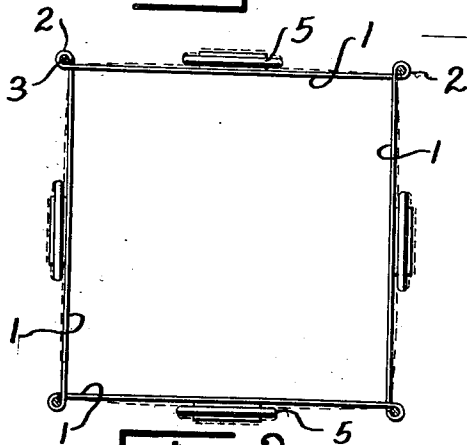


Fig. 2.

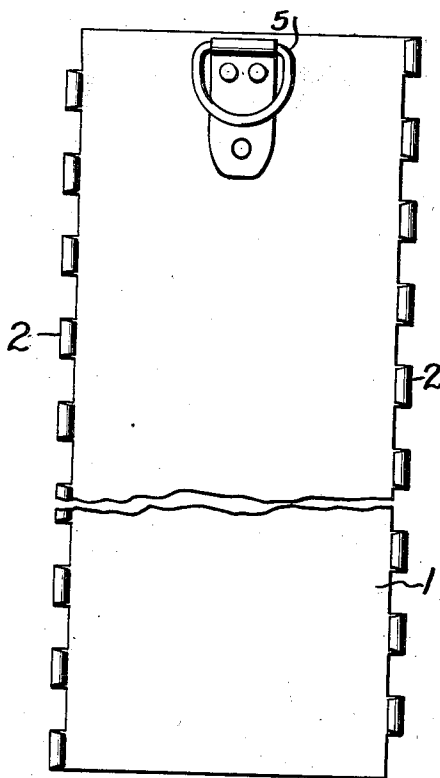


Fig. 3.

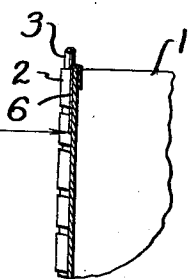


Fig. 4.

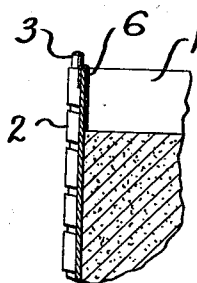


Fig. 5.

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2,273,109

FORM FOR CONCRETE FOOTING

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Application February 27, 1939, Serial No. 258,720

1 Claim. (Cl. 25—121)

This invention relates to a form.

An object of the invention is to provide a form particularly designed for molding concretious material such as foundation pillars and the like and which may be readily released and withdrawn when the concrete is set.

Another object of the invention is to provide a form of the character described with upright side walls formed of flexible material, arranged to enclose the concretious material and give the desired shape to the pillar and whose adjacent margins are releasably secured together.

It is another object of the invention to provide, in combination with the form, a reversible gauge whereby the level for the plastic material poured into the form may be readily indicated.

With the above and other objects in view the invention has particular relation to certain novel features of construction, arrangement of parts and use, an example of which is given in this specification and illustrated in the accompanying drawing, wherein:

Figure 1 shows a side view of the form.

Figure 2 shows a horizontal, sectional view taken on the line 2—2 of Figure 1.

Figure 3 shows an elevational view of one of the side walls.

Figure 4 shows a fragmentary, vertical, sectional view showing the form empty, and

Figure 5 shows a fragmentary, vertical, sectional view showing the form filled to the desired level with the concretious material to be molded.

Referring now more particularly to the drawing wherein like numerals of reference designate the same parts in each of the figures, the numerals 1 designate the side walls of the form. As illustrated, the form is rectangular in horizontal cross-section although it may be of any other selected contour. The side walls are formed of flexible material, sheet-like in form, preferably steel. The side walls may be of any selected height depending on the depth of the foundation to be erected. The margins of each wall plate are formed with vertically aligned, sleeve-like bearings 2. The bearings of adjacent margins of the wall plates are staggered so that they will interfit, as illustrated in Figure 1, to provide a substantially continuous vertical bearing at each corner to receive the interlocking rods, or tie rods 3. These rods are formed with suitable eyes, or other grips, as 4, at their upper ends. The lower ends of the rods preferably, though not necessarily, extend beneath the lower ends of the plates. The upper ends of the plates are provided with suitable grips as 5.

In use the excavation for the pillar may be made to the required depth and a footing of concretious material formed at the bottom of the excavation and the assembled form may be supported on said footing with the lower ends of the rods 3 penetrating into the material of the footing to maintain the form in upright position. The excavation around the form may then be filled with earth and the concretious material, of which the pillar is to be formed, then poured into the form, in plastic state to the desired level. The pressure of the plastic material against the side walls will cause them to curve outwardly from top to bottom, or assume an arcuate shape, in horizontal cross-section, as indicated in dotted lines in Figure 2. When the concrete has set the rods 3 may be withdrawn and the side margins of the wall plates 1 will spring outwardly, due to the flexibility of said plates and thus release themselves from the pillars and leave a clearance so that the wall plates may be pulled upwardly and thus recovered for reuse.

Prior to the insertion of the lower ends of the rods 3 into the footing said lower ends are covered with a suitable lubricant so that they may be readily pulled from the footing even after the material of the footing has set and the inner sides of the wall plates are covered with a suitable lubricating substance to prevent them from adhering to the material of the pillar when said material sets.

For the purpose of easily determining the level to which the concrete is to be poured into the form a gauge strip as 6 is provided. This strip has a hook on its upper end engageable over the upper margin of a wall plate. The level of the desired plane to which the pillars are to rise may be marked on the outer side of the form and a gauge strip of the required length may be hung from the upper end of a side wall, as indicated in Figure 4, with its lower end reaching to the desired level. Of course, a gauge strip of the exact desired length should be selected. The gauge strip may then be reversed, as shown in Figure 5, and the form should then be filled until the level of the concrete reaches the lower end of the gauge strip as indicated in Figure 5.

The drawing and description disclose what is now considered to be a preferred form of the invention by way of illustration only, while the broad principle of the invention will be defined by the appended claim.

What I claim is:

A form for a concrete footing which is polygonal in horizontal cross section and which is adapted to be set in an earth excavation, said form comprising similar flat sheet metal wall sections of greater vertical than transverse dimensions, said sections being thin and flexible, the side margins of each section being detachably connected to the adjacent side margins of the adjoining sections, each of said sections being of sufficient width to be bowed outwardly

from end to end by the force exerted outwardly by the hydrostatic pressure of fluid concrete in the form, means connecting said adjacent margins, said connecting means being completely removable to completely release said margins to permit them to simultaneously move outwardly, said sections having sufficient strength to cause said margins to move outwardly when the connecting means is removed.

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