Oct. 1, 1929. H. H. TOOGOOD 1,729,807

TIE FOR CONSTRUCTING CONCRETE FORMS

Filed March 28, 1928

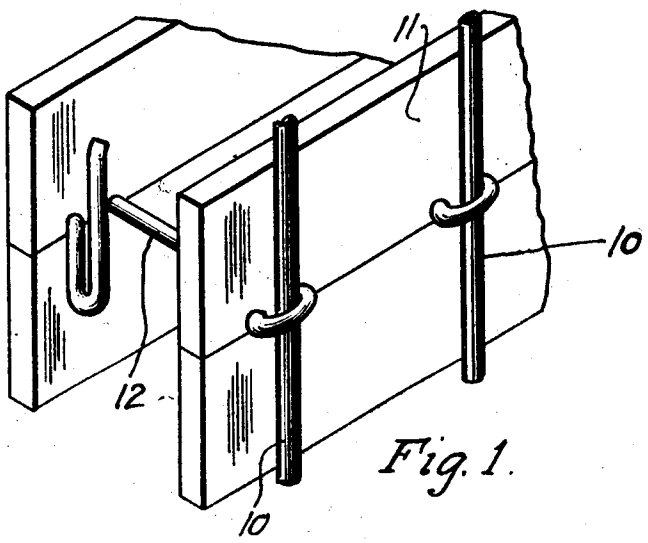


Fig. 1.

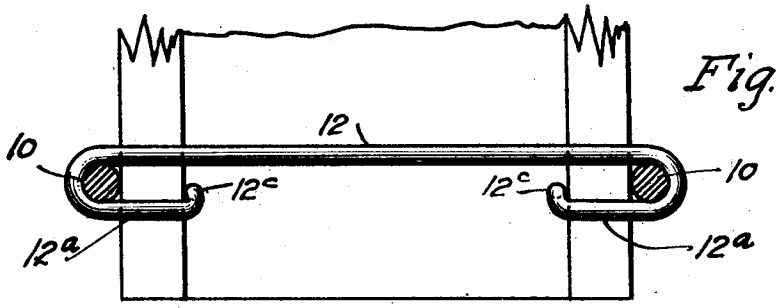


Fig. 2.

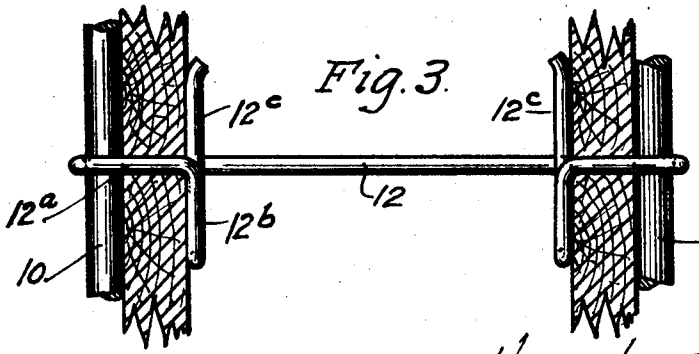


Fig. 3.

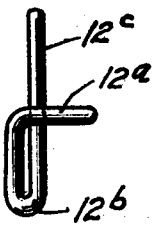


Fig. 4.

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UNITED STATES PATENT OFFICE

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TIE FOR CONSTRUCTING CONCRETE FORMS

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This invention relates to new and useful improvements in apparatus for constructing concrete forms and more particularly to the construction of ties for such forms and the means for connecting the form sections by the ties.

An important object of the invention is to provide a device of this character which may be very readily employed in the forms and will serve as a means for connecting the form boards to the usual uprights employed in such constructions without the necessity of employing nails or other securing elements for this purpose.

A further object of the invention is to provide a construction of this character, which insures the adjacent faces of the form boards being always disposed at a proper distance from one another and by means of which the warped form boards may be drawn into a proper position.

These and other objects I attain by the construction shown in the accompanying drawing, wherein for the purpose of illustration is shown a preferred embodiment of my invention and wherein:—

Figure 1 is a fragmentary perspective view of a concrete form embodying my invention;

Figure 2 is a plan view thereof;

Figure 3 is a vertical sectional view therethrough.

Figure 4 is an end elevation of my tie.

Referring now more particularly to the drawing, the numeral 10 generally designates vertically extending guide rods, which are generally employed in concrete forms as a guide for the outer faces of the boards or metallic form elements 11 employed in the construction of the actual form. In accordance with my invention, I provide a premade tie for use in such forms, comprising a body 12, having its ends looped 12^a, and a guide means 12^b and 12^c, of pre-determined length based upon the size of the vertical supports and thickness of the form elements 11. These loops and body are preferably formed of a single piece of wire, the ends of which are bent back and upwards 12^b and 12^c, to form a guide for the elements 11.

In employing the ties, the loops are slipped over the guide rods 10 and directly over the form elements 11 then in place. When the ties are placed properly the upper portion of the form elements 11 are set in position and the operation continued to the full height of the concrete form.

It will be obvious that my premade ties may be made of a single strand of wire of any desired size and are readily applied to the form elements. Nails, wires, wedges, or other means of holding the ties in proper position are entirely unnecessary with my invention and accordingly, considerable time is saved in the construction or wrecking of the forms.

Since the particular formation of the tie herein illustrated is obviously capable of a certain range of change and modification without materially departing from the spirit of the invention, I do not limit myself to such specific structure except as hereinafter claimed.

I claim:

1. A tie element for use with concrete forms comprising vertically extending supporting elements and form elements vertically stacked edge to edge against said supporting elements at opposite sides of the form, said tie comprising a single bar of metal having its ends in the form of T-heads, said bars adjacent the ends being reverted in spaced relation to the body of the bar to thereby provide an open loop, said loops being perpendicularly disposed to said T-heads.

2 A tie element for use with concrete forms comprising vertically extending supporting elements and form elements vertically stacked edge to edge against said supporting elements

at opposite sides of the form, said tie comprising a single bar of metal having at its ends angular portions the terminals of which are reverted upon the angular portions and are of greater length than the unreverted portion thereof, so that they project to the opposite side of the bar from said angular portion and combine therewith to produce a T-head, said bar adjacent its ends being reverted, the reverted portions being in spaced relation to the body of the bar to produce open loops, said loops being perpendicularly related to said T-heads.

HENRY HERBERT TOOGOOD.