May 12, 1953 A. C. DULLECK 2,637,889

CONCRETE FORM AND STAKE THEREFOR

Filed Dec. 17, 1951

Fig. 1

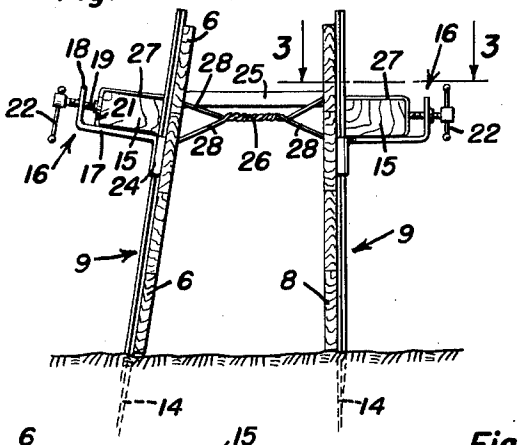


Fig. 2

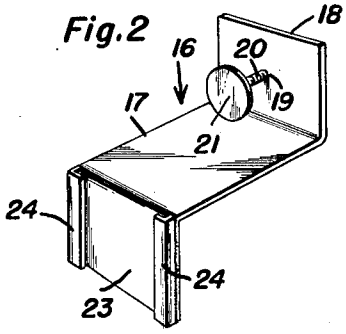


Fig. 3

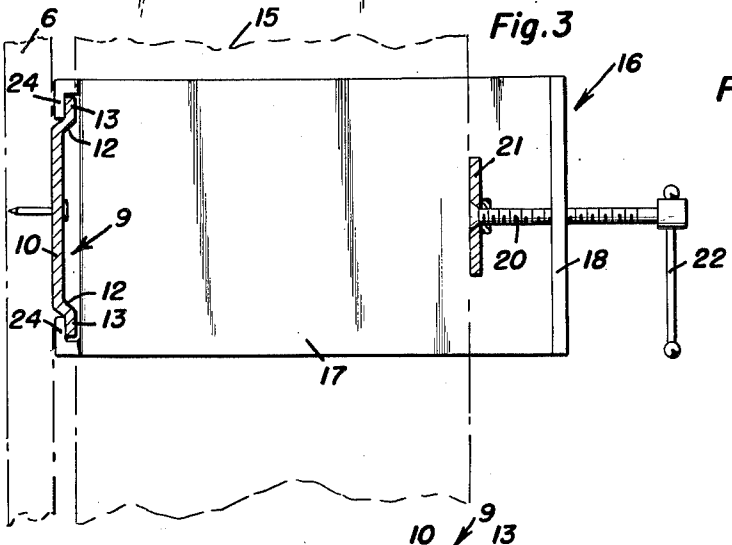


Fig. 4

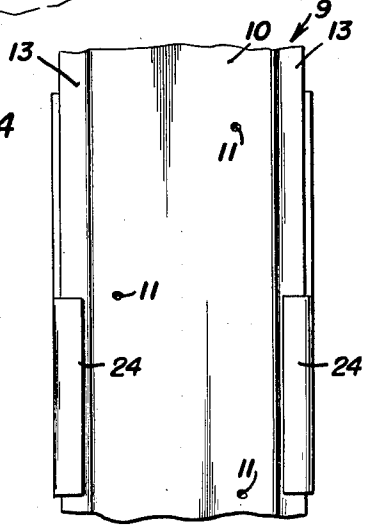
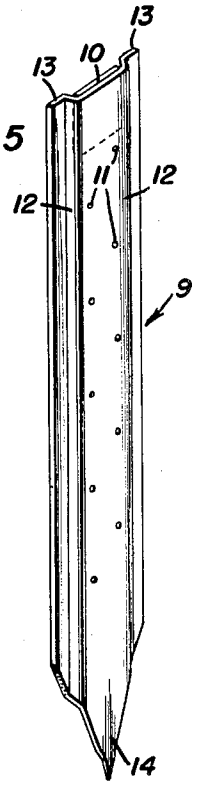


Fig. 5



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CONCRETE FORM AND STAKE THEREFOR

Albert Carl Dulleck, Los Altos, Calif.

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2 Claims. (Cl. 25—118)

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The present invention relates to certain new and useful improvements in concrete forms used during the course of building a foundation, a retaining wall or the like and has more particular reference to an improved stake and means thereon for supporting the usual horizontal timbers or walers which are employed in erecting and constructing the form.

It is a matter of common knowledge, of course, that an ordinary concrete pouring and setting form is characterized by spaced vertical walls which are made up of longitudinally extending wooden planks, vertical stakes which join the planks together and walers or horizontal timbers (often called two-by-fours) which are nailed or otherwise connected with the vertical stakes. The prior art shows, however, that certain inventors have seen fit to substitute metal stakes for wooden ones and, in addition, various brackets and the like have been offered for conveniently erecting and clamping horizontal timbers in required positions.

The principal object of the instant invention is to provide ways and means whereby said timbers or walers may be vertically adjusted in order that they may be moved closer together or farther apart in relation to the stakes on which they are bracketed and thus supported.

More explicitly, the invention has to do with a simple practical and economical metal stake which may be used over and over and which is provided with nailing holes and which has offset vertical flanges forming tracks, said tracks serving to accommodate hook-shaped members on approximately Z-shaped brackets, said brackets having clamping screws to permit the horizontal timbers to be readily and effectively clamped in position.

Other objects, features and advantages will become more readily apparent from the following description and the accompanying sheet of illustrative drawings.

In the accompanying sheet of drawings wherein like numerals are employed to designate like parts throughout the same:

Figure 1 is an elevational and sectional view showing a completed and ready-to-use pouring form for putting up a foundation wall or the like;

Figure 2 is a perspective view of one of the timber seating and adjusting brackets;

Figure 3 is an enlarged horizontal section taken on the line 3—3 of Figure 1, looking in the direction of the arrows;

Figure 4 is a fragmentary elevational view; and,

Figure 5 is a perspective view of the stake per se.

Referring now to the drawings by reference numerals and with respect first to Figure 1 it

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will be evident that the confining walls used in erecting the concrete pouring form are made up primarily of horizontal planks or boards wherein those to the left are denoted by the numerals 6 and those to the right by the numerals 8, that each plank-wall is the same in construction and a description of one will suffice for both. To this end, the planks are partly held in place by specially constructed metal permanently usable stakes 9. Each stake is stamped out of sheet metal and the central channel-shaped portion embodies a web 10 with a multiplicity of selectively usable nail holes 11 and with lengthwise side walls 12—12 joined with edge flanges 13. These flanges provide laterally offset tracks and the lower end portion of the stake is pointed as is 14 to provide a ground penetrating point.

The timber or waler shown for example at the right in Figure 1 is the usual wooden two-by-four and it is denoted by the numeral 15 and it is here shown as adjustably seated on an adjustable supporting bracket 16. This bracket is substantially Z-shaped and the horizontal limb thereof is denoted as 17 and one vertical limb as 18 the latter being provided with a screw threaded hole 19 to accommodate the screw threaded shank 20 on the clamping screw. The head of the screw is denoted as 21 and the handle vertical limb as 22. The limb 17 is provided with a depending portion which may be conveniently called an apron 23 and the apron is provided with vertical hook-shaped members 24 which embrace and slidingly engage the track forming flanges 13—13. It will be observed that the stake is permanent, pointed and easy to drive into the ground and may be easily nailed to the wooden planks. It serves as a satisfactory support for the adjustable bracket and the bracket in turn is a satisfactory holder and clamp for the associated timber. It follows that with this apt and suitable construction the walers may be used singly or in pairs or in other numbers and properly adjusted in height in relation to each other as well as in relation to the over-all vertical height of the plank-wall.

The numeral 25 in Figure 1 denotes an insertable and removable spacer stick and 26 denotes a twisted wire which is anchored in the concrete and which has a portion looped around the adjacent purline in the manner shown at 27. The diverging ends 28—28 are threaded through the nail holes and the wire loops are clipped off in a well known manner after the form is dismantled. The wire members and spacers are of course old structural features in a form of the type under consideration.

A careful consideration of the foregoing description in conjunction with the invention as illustrated in the drawings will enable the reader

to obtain a clear understanding and impression of the alleged features of merit and novelty sufficient to clarify the construtcion of the invention as hereinafter claimed.

Minor changes in shape, size, materials and rearrangement of parts may be resorted to in actual practice so long as no departure is made from the invention as claimed.

Having described the invention, what is claimed as new is:

1. In a concrete form construction, a rigid sheet metal stake having a ground penetrating point at its lower end, having a channel-shaped portion embodying a flat web provided with a multiplicity of selectively usable nailing holes and provided with offset marginal flanges providing track members, and a one-piece rigid metal timber seating and supporting bracket having hook-shaped members slidably engageable with said track members.

2. For use in association with wooden planks employed in making a concrete pouring form, a rigid sheet metal stake susceptible of being driven and thus anchored in the ground and having

a lengthwise channel-shaped portion including a flat web portion having a multiplicity of selectively usable nail holes and longitudinal walls provided with outstanding offset flanges, said flanges constituting assembling and guiding tracks; and a timber bracket, said bracket being generally Z-shaped and including a horizontal long limb and short vertical limb, said short limb being provided with clamping means, said long limb being provided at one end with a depending vertical apron and said apron having slidable contact with said web portion and being provided with vertical hook-shaped members slidably embracing the track flanges.

ALBERT CARL DULLECK.

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