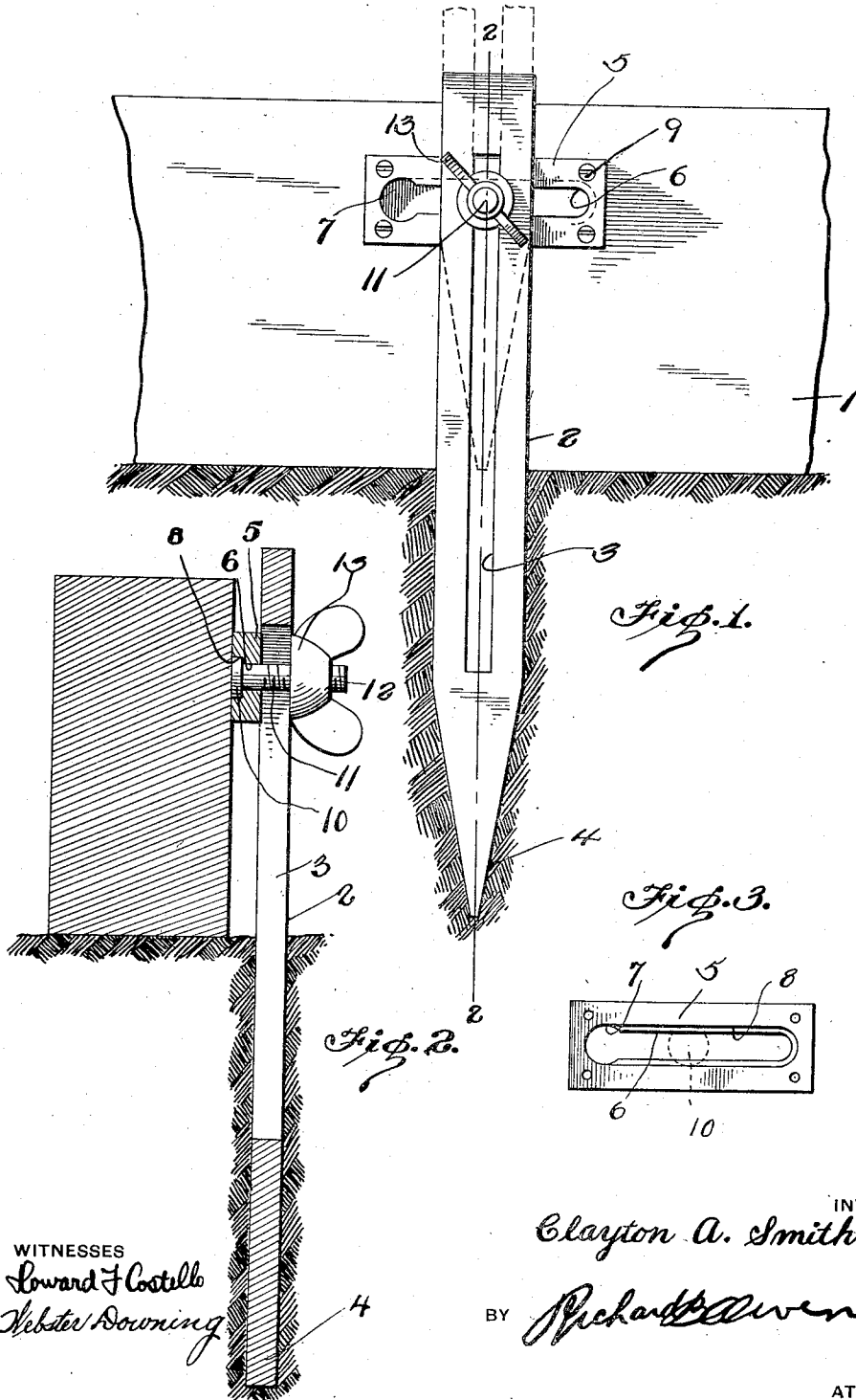


C. A. SMITH.
 COMBINED CONCRETE FORM STAKE.
 APPLICATION FILED JULY 13, 1916.

1,274,618.

Patented Aug. 6, 1918.



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COMBINED CONCRETE-FORM STAKE.

1,274,618.

Specification of Letters Patent.

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Application filed July 13, 1916. Serial No. 109,111.

To all whom it may concern:

Be it known that I, CLAYTON A. SMITH, a citizen of the United States, residing at Decatur, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Combined Concrete-Form Stakes, of which the following is a specification.

My invention has particular reference to a combined concrete form and stake.

As the primary object, this invention contemplates the provision of novel connecting means between the form and the stake which will permit the stake to be driven into the ground to brace the form while attached to the form, and which will further permit the form to be moved after the concrete has become dry to effect a disengagement of the connecting means leaving the stake in the ground, which can be finally removed in the usual manner. Heretofore, it has been necessary to drive the stakes into the ground and permanently connect them to the form such as with nails which naturally is a very expensive proposition as there is a great loss in so far as both the forms and the stakes are concerned.

A further object of the invention resides in the provision of a device of the character described that is simple in construction, efficient in operation and one that can be manufactured and placed on the market at a minimum cost.

Other objects and features as well as the nature, characteristic features and scope of my invention will be more readily understood from the following description taken in connection with the accompanying drawings and pointed out in the claims forming a part of this specification.

In the drawings:

Figure 1 is a front elevation of my invention.

Fig. 2 is a transverse section taken on the line 2—2 of Fig. 1.

Fig. 3 is a rear elevation of the plate.

Referring more particularly to the drawings in which similar reference numerals designate like and corresponding parts throughout the various views, the board or plate 1 which constitutes a part of a concrete form, is associated with the stake 2 having a longitudinal slot 3 therein, and terminating at a point 4 to facilitate entrance to the ground.

In order to removably connect the stake

to the form, a plate 5 having a longitudinal slot 6 is provided one end of which slot terminates in an opening 7. The plate 5 is positioned and secured by members 9 to the form-board so that the slot will, preferably, extend substantially horizontally. The rear face of the plate has a recess 8 about the side of the slot which is similar to the width and diameter of the opening 7 so that the head of a bolt 11 can be passed through the opening 7 and engaged in the recess 8, the sides of the slot serving to guide movement of the bolt 10 therethrough. The outer threaded extremity 12 of the bolt is adapted to pass through the slot 3 in the stake, which latter is held in close relation with the plate through the medium of a winged nut 13.

The operation of this invention is as follows:

After the board is arranged in its desired position, the plate 5 is connected to the outer face thereof and the bolt 11 is arranged in the slot 6 and extends through the slot 3 in the stake 2, and the winged nut 13 is then associated with the free end of the bolt but is not threaded to bind the stake in close relation with the form board. Now, the stake is driven downwardly into the ground as shown in Fig. 1, the nut serving to retain the stake on the bolt which guides the movement of the former. Of course, it will be appreciated that after the stake is driven in position the nut is tightened to bind the stake and form-board together, the stake serving as an anchor and naturally braces the board 1. When the concrete has become sufficiently dry the board 1 will be loosened and driven along the ground until the head 10 registers with the opening 7 whereupon the bolt can be removed from engagement with the plate without injury to the form-board, stake or the concrete which has been formed, and permitting the board and stake to be subsequently used. Likewise, the winged nut can be disengaged to permit of the disengagement of the bolt and finally the stake can be removed from the ground and subsequently used in a similar capacity.

It will be understood from the drawings that the present invention presents a unique and compact means for connecting a form-board and anchoring stake without requiring or without necessitating any openings to be made in the side of the form-board or without having any projections extending from the inner face of the form-board, and

which projections would leave impressions in the surface of the concrete which is formed by the board.

From the above description taken in connection with the accompanying drawing, it can easily be seen that I have provided a device that is simple in construction, containing but a few simple parts that can be cheaply manufactured and assembled and when assembled can be placed upon the market and sold at a minimum cost.

It will be understood that the above description and accompanying drawings comprehend only the general embodiment of my invention and that various minor changes in detail of construction, proportion and arrangement of the parts may be made within the scope of the appended claims and without sacrificing any of the advantages of my invention.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. A combined concrete form and stake including a form board, a slotted stake, a plate mounted on the board, a bolt slidably mounted in the plate and adapted to be engaged by the slot in the stake, a nut removably associated with the bolt for guiding the sliding movement of the stake into the ground, and for binding said form and stake together.

2. A combined concrete form and stake including a form-board, a slotted plate removably secured on the board, a slotted stake, a bolt removably engaged in the plate

and also in the slot in the stake, and a nut removably associated with the bolt for maintaining the stake on the bolt while it is being driven into the ground and for binding the form and stake together.

3. In a combined concrete form and stake, the combination with a form board, of a plate secured thereto having a slot terminating at one end in a recess, a bolt adapted to be slidably engaged in the plate and removably therefrom through the recess, a stake having a longitudinal slot adapted for slidable engagement with the bolt, and a removable nut for the bolt.

4. A connection for a form-board and stake, which comprises a form board, a slotted stake, a plate provided with a slot having a recess at one end, said plate being adapted to be secured to one surface of a form-board with its slot extending substantially horizontally, a removable bolt adapted to be slidably engaged in said slot, said bolt having the head thereof removable through the recess at the end of the slot to permit the plate to be detached from the bolt, said bolt being further adapted to engage with the stake by passing through the slot thereof, and means on the bolt for binding the stake to the form-board.

In testimony whereof, I affix my signature in presence of two witnesses.

CLAYTON A. SMITH.

Witnesses:

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CLEMENT C. WALTERS.

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