APPARATUS FOR SETTING A FENCE POST IN CONCRETE

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3 Claims. (Cl. 50—103)

This invention relates to an apparatus for positioning a post in the earth.

The old process involved driving a hole in the earth, putting a post in the hole, bracing the post in position and pouring the concrete around the post.

An object of this invention is to eliminate the labor and materials needed to brace the post.

Another object of this invention is to eliminate waste by providing only the exact, predetermined amount of cement and aggregate needed for each type of soil and for each size and function of post.

A further object of this invention is to eliminate the mixing and handling of wet concrete.

These and other objects and advantages will appear as the description progresses.

The above objects are achieved by the use of a unit comprising a dry mixture of cement and aggregate in a box or other container. The unit is placed in a hole in the earth, a post is inserted in the cement and aggregate, earth is packed around the outside of the box, and water is then poured over the cement and aggregate. The size of the box and the amount of cement and aggregate may be varied to fit the type of soil and the size and function of the post.

In the drawing wherein a preferred form of the invention is shown for the purpose of illustration,

FIGURE 1 is a cut-away perspective view of the unit.

FIGURE 2 is a top plan view.

FIGURE 3 is a cross-sectional view along the lines 3—3 of FIGURE 1 showing the insertion of the post.

FIGURE 4 is a cross-sectional view similar to FIGURE 3 after removal of the sleeve and insert, and after water has been poured into the box.

In the preferred embodiment of my invention, the box 1 is preferably made of a decomposable substance, such as pasteboard, and is lined with a moisture proofing material (not shown). A sleeve or guide means 2 is supported in the box 1 by the inserts 3 and 4 having openings 5 and 6. The sleeve 2 has one end positioned in the opening 5 and extends through the opening 6. The space between the inserts 3 and 4 is filled with a mixture of cement and aggregate or other cementitious material 7. A spacer 8 is placed between the insert 4 and the flaps 9 or other means for closing the open end of the container to hold the insert against the mixture when the flaps are closed during storage and shipment.

In the preferred form of my invention, I first dig a hole 10 in the earth or other packed material large enough to receive the box 1. I then place the box and contents in the hole, open the flaps 9 and remove the spacer 8. Next, I insert the post or other element 11 into the opening 6 through the sleeve 2, as best shown in FIGURE 3. I then backfill earth around the box with light tampering while holding the post approximately vertical. I then remove the sleeve 2 by sliding it upward on the post, thereby permitting the mixture of cement and aggregate 7 to engage the post. To facilitate this operation, the inside of the sleeve may be lubricated. The earth is then packed around the outside of the box while the post is more accurately plumbed by any convenient means, such as a hand level, not shown. Finally, I pour water on the cement and aggregate 7 and allow it to permeate the mixture by gravitational force to "set" the concrete. The size of the box and the amount of cement and aggregate may be selected so that the desired ratio of water to cement and aggregate is obtained when the top portion of the container is completely filled or filled to a predetermined mark. The post remains in vertical position during the concrete setting process without the necessity of bracing. The box will disintegrate in the earth and need not be removed.

It is to be understood that I do not wish to limit myself to the exact details herein set forth, but desire to include all such changes and modifications as would occur to the skilled artisan and fall within the scope of the appended claims.

I claim:

1. A unit for positioning a post in concrete comprising a box having a bottom, sides and an open end, a first insert in said box adjacent to said bottom, said first insert having an opening therein, an open-ended post-receiving tubular sleeve removably positioned in said box and having one end positioned in said opening in said first insert, a dry mixture comprising cement and aggregate in said box surrounding said sleeve, a second insert having an opening therein in said box remote from said bottom and adjacent said mixture with said sleeve extending through said opening in said second insert, means for closing the open end of said box, and a spacer between said means and said second insert to hold said second insert against said mixture, and to define a water-receiving space within the box and above said mixture.

2. In a device of the class described for setting a post in the earth, the combination of: a container having side walls, a bottom wall, and a removable top wall, an open-ended hollow guide sleeve removably positioned within the container and extending between said bottom wall and said top wall, the interior of the sleeve being adapted to guide a post axially therein into contact with the bottom wall of the container, upon moving the top wall to an inoperative position, a partition removably mounted within the container between the bottom wall and the top wall and having an opening through which the sleeve projects, the partition dividing the interior of the container into a lower cavity and an upper cavity, a dry cementitious material in the lower cavity, surrounding a portion of the sleeve, whereby after insertion of the post the sleeve and partition may be removed from the container and water poured into the upper cavity to "set" the cementitious material around the post.

3. In a device of the class described for setting a post in the earth, the combination of: a container having walls including a bottom wall and a removable top wall, an open-ended hollow guide sleeve removably positioned within the container and extending between said bottom wall and said top wall, the interior of the sleeve being adapted to guide a post axially therein, a partition mounted within the container between the bottom wall and the top wall and having an opening through which said guide sleeve projects, the partition dividing the interior of the container into a lower cavity and an upper cavity, dry
cementitious material in the lower cavity surrounding the portion of said guide sleeve therein, and a spacer within said upper cavity interposed between said partition and said top wall.

References Cited by the Examiner

<table>
<thead>
<tr>
<th>Patent Number</th>
<th>Date</th>
<th>Inventor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>384,295</td>
<td>6/88</td>
<td>Stockwell</td>
</tr>
<tr>
<td>1,368,756</td>
<td>2/21</td>
<td>Ross</td>
</tr>
<tr>
<td>1,793,830</td>
<td>2/31</td>
<td>Richardson et al.</td>
</tr>
<tr>
<td>2,526,174</td>
<td>10/50</td>
<td>Ukropina</td>
</tr>
<tr>
<td>2,902,743</td>
<td>9/59</td>
<td>King</td>
</tr>
<tr>
<td>3,016,594</td>
<td>1/62</td>
<td>Jacomaro</td>
</tr>
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