H. G. SCHENCK.

CONCRETE MOLD.

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1,117,449.

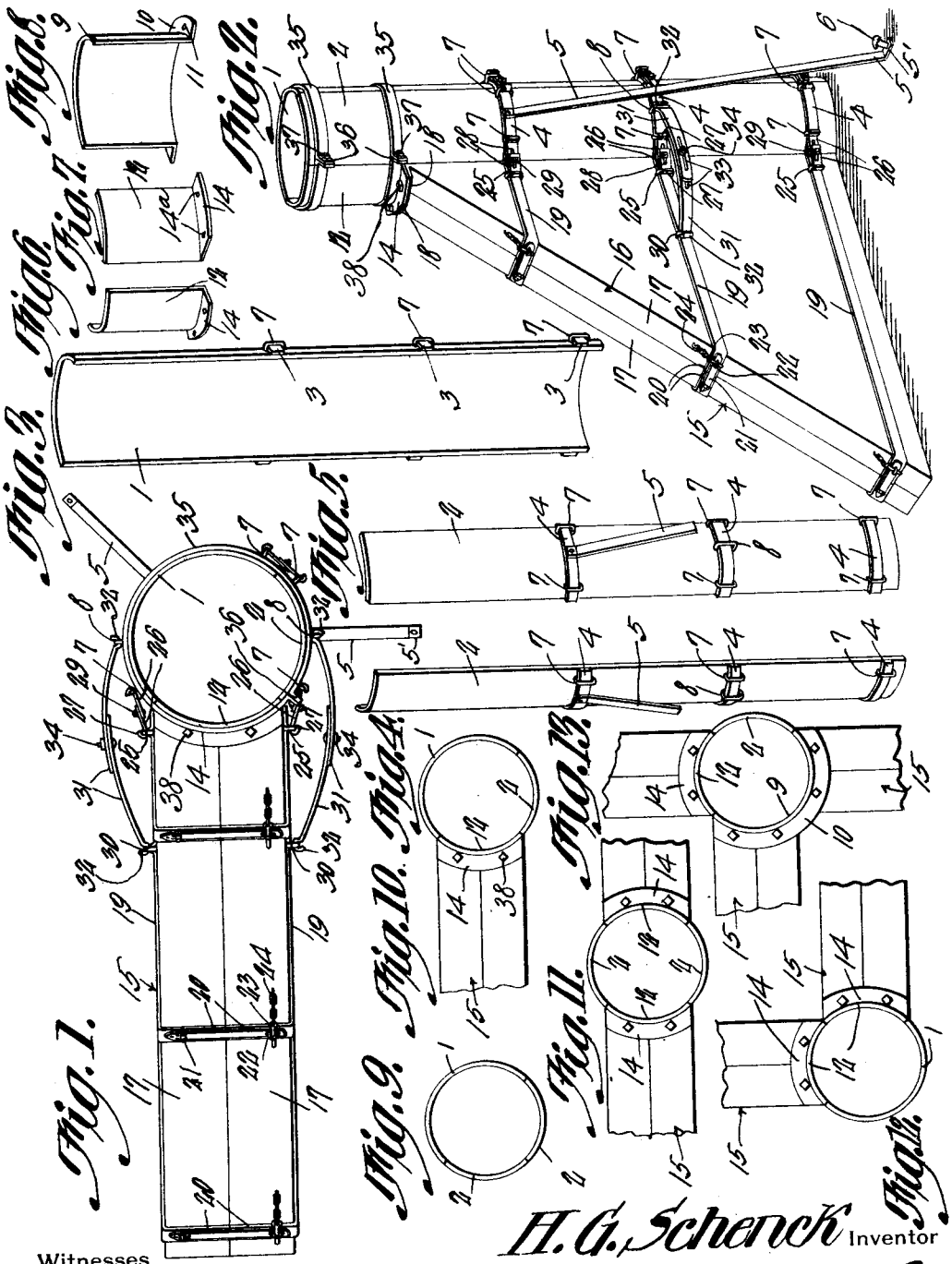


Fig. 1.

Witnesses

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CONCRETE-MOLD.

1,117,449. Specification of Letters Patent. Patented Nov. 17, 1914.

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To all whom it may concern:

Be it known that I, HARRY G. SCHENCK, a citizen of the United States, residing at Delphi, in the county of Carroll and State of Indiana, have invented a new and useful Concrete-Mold, of which the following is a specification.

One object of the present invention is to provide novel means for assembling a series of post forming elements with a series of elements adapted to form wing walls, whereby the number of wing walls may be increased or diminished at will.

A further object of the invention is to provide novel means for connecting the constituent elements of the device, to hold the same in operative relation with respect to each other, and to permit removal and adjustment of the several elements when desired.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawings, Figure 1 shows the invention in top plan, set up to form one wing wall; Fig. 2 is a perspective of the structure delineated in Fig. 1; Fig. 3 is a perspective of the primary post forming member; Fig. 4 is a perspective of one of the secondary post forming members; Fig. 5 is perspective of the other, secondary post forming member; Figs. 6 and 7 are perspectives of the extensions which coöperate with the secondary post forming members; Fig. 8 is a perspective of the primary extension which cooperates with the primary post forming member shown in Fig. 3; Fig. 9 is a top plan showing the primary and secondary post forming members set up to fashion a structure having no wing walls; Fig. 10 is a top plan showing portions of the structure positioned to form a post having one wing wall; Fig. 11 is a top plan showing the structure set up to form a post having alined, oppositely disposed wing walls; Fig. 12 is a plan showing the structure arranged in such a manner as to form a post having a pair of rectangularly disposed wing walls; and Fig. 13 is a top plan showing the structure set up to form a post having apposed, alined wing walls and a third wing wall at right angles to the alined walls.

Figs. 9, 10, 11, 12 and 13 are in part diagrammatic, sundry elements being omitted, to render more manifest, the relations between the parts depicted.

In Figs. 3, 4 and 5 there are shown a series of members which coöperate, as shown in Fig. 9, to form a post which is devoid of wing walls. One of these post forming members, hereinafter referred to as the primary post forming member, is denoted by the numeral 1, and is fashioned transversely into a semi-circle. Coöperating with the post forming member 1 are a pair of secondary post forming members denoted by the numeral 2, each of the members 2 being formed transversely into a quadrant, so that the members 1 and 2 may coöperate to form a complete circle. The members 1 and 2, together with the remaining parts of the structure, are preferably fashioned from metal.

Bands 3 extend transversely of the primary member 1, and other bands 4 extend transversely of the secondary members 2. Connected with the uppermost bands 3 and 4 are props 5, which may be formed at their lower extremities with angularly disposed feet 5′, adapted to receive earth engaging pins 6 or the like, to maintain the members 1 and 2 in place. The bands 3 and 4 are equipped adjacent their ends with eyes 7. One of the bands 3 and 4, preferably an intermediate band in this instance, is equipped, between its ends with an eye 8.

The invention further includes a primary extension 9, of semi-circular form, being provided at its lower end with a lateral flange 10 having a plurality of openings 11. Secondary extensions 12, are shown, each being in the form of a quadrant, each extension 12 being provided at its end with a lateral flange 14 having openings 14ª.

To facilitate the forming of the wing walls upon the post, wings 15 are provided, the same being in the form of a right triangle, and projecting from the slant edges 16 of the wings 15 are abutting closure members 17, provided at their upper ends with outstanding flanges 18 which coöperate with the flanges 14 and 10, as will be described hereinafter. Extending along the wings 15 are reinforcing straps 19, the ends 20 of which are angularly disposed and extend

across the closure members 17. To one end 20 is pivoted a latch 21, having an opening to receive a staple 22 carried by the adjacent end 20, there being a pin 23 secured by means of a chain 24 to the member 17, the pin being adapted to be received in the staple 22. Connected to each of the straps 19, adjacent its free end is an eye 25.

Longitudinally extensible locking devices are provided, the same consisting of overlapping bars 26, provided at their remote ends with hooks 27, the bars 26 having longitudinal slots 28, adapted to receive nut and bolts 29 or like locking mechanism. One of the bars 19 is provided with an intermediate eye 30 and there is provided for cooperation with the eye 30 a longitudinally extensible locking device, comprising overlapping bars 31, having hooks 32 at their remote ends, the bars 31 being equipped with longitudinal slots 33, receiving bolt and nut structures 34 or like clamping devices.

Suppose that it is desired to fashion a post devoid of wing walls, as shown in Fig. 9. Under such circumstances, the primary member 1 and the secondary members 2 are set up to form a complete circle, the members 1 and 2 being surrounded at their upper ends by bands 35, as shown in Fig. 2, the bands 35 having outwardly extending feet 36, connected by bolts 37 or the like. The eyes 7 of the bands 4 and 3 are connected by the locking devices comprising the bars 26 and attendant parts. When the props 5 are engaged with the ground, the tubular post forming mold will be held upright, whereupon the same may be filled with concrete. It is within the scope of the invention to form the post with a plurality of wing walls and these walls may be positioned in a variety of ways. Some of the different arrangements of wing walls are shown in Figs. 10, 11, 12 and 13, and other arrangements will suggest themselves readily to a person using the structure.

When it is desired to form a post having but one wing wall, the structure is set up as shown in Figs. 1 and 2. Under such circumstances, one of the secondary members 2 is removed, whereupon there will exist a longitudinal opening in the mold, extending from the top of the mold to the bottom thereof. The upper portion of this opening is closed by means of one of the secondary extensions 12, the same being placed beneath the bands 35. The wings 15 are mounted in place in the opening, the flanges 18 and 14 being in overlapped relation. Thereupon, the securing elements 38 are inserted into the openings 14^a and in the corresponding openings to the flange 18, the upper end of the wing forming structure is thus secured to the secondary extension 12 and the secondary extension 12 is held in place by the bands 35. The latches 21 are swung onto the staples 22 and the pins 23 are mounted into place thereby preventing a separation of the wings 15, and holding the closures 17 in place, to define the outer edge of the wing. The longitudinally extensible locking devices comprising bars 26 and attendant parts are engaged with the eyes 25 of the wings 15 and with eyes 7. The longitudinally extensible locking devices comprising the bars 31 and attendant parts are engaged with the eyes 8 of the post forming structure and with the eyes 30 of the wings, as shown in Fig. 2.

In practical operation, before the extension 12 is mounted in place, the wing mold and the post mold are tramped full of concrete, whereupon the extension 12 may be mounted in place, the post being finished to the top. It is obvious that the post may be fashioned in any desired length by adding tubular extensions to the structure shown in Fig. 2. These extensions are common in the art and their use is understood. A specific delineation of them is therefore unnecessary.

Referring to the diagrammatic figures numbers 11, 12 and 13, and noting Fig. 11 in the first instance, it will be seen that the secondary members 2 may be placed opposite to each other, the primary member 1 being dispensed with, the extensions 12 being applied to complete circular contour of the mold at the top, whereupon a pair of opposed wing wall forming structures may be connected with the flanges 14 of the members 12.

As shown in Fig. 12, the wing wall molds are rectangularly disposed, the secondary members 2 being disposed with and the extensions 12 being employed, the primary member 1 remaining in place. Three wing wall molds may be set up, as shown in Fig. 13, two of the wing wall molds being in alinement the third wing wall mold being at right angles to the other two. Under such circumstances, when one of the secondary members 2 is employed, the primary extension 9 and one secondary extension 12 being used to complete the contour of the structure at the top.

The post forming members and the wing wall molds may be set up in other ways which will suggest themselves readily to the user of the structure.

The locking devices comprising bars 26 may be used for joining the longitudinal edges of the members 1 and 2, the locking devices being engaged with the eyes 7.

Having thus described the invention what is claimed is:—

1. In a device of the class described, a mold comprising a series of segmental members, certain of which are spaced to define a longitudinal opening extended to a point adjacent the bottom of the mold; wing walls coöperating with the edges of the

opening and extended to a point adjacent the bottom of the mold, the wing walls being provided along their upper edges with angularly disposed flanges constituting joining members between the wing walls; an extension serving as a closure for the upper portion of the opening, above the flanges; means for connecting the closure with the flanges; separable retaining bands extended transversely of the segmental members; retaining strips upon the wing walls and provided with extensions overlapping the flanges; means for connecting the extensions of the respective retaining strips; and braces connecting the strips with the bands.

2. In a device of the class described, a mold comprising a series of segmental members, certain of which are spaced to define a longitudinal opening extended to a point adjacent the bottom of the mold; wing walls coöperating with the edges of the opening and extended to a point adjacent the bottom of the mold, the wing walls being provided along their upper edges with angularly disposed flanges constituting joining members existing between the wing walls; an extension serving as a closure for the upper portion of the opening, above the flanges; separable retaining bands extended transversely of the segmental members; and longitudinally extensible braces connecting the bands with the wing walls, to permit a lateral movement of the wing walls.

3. In a device of the class described, a mold having an opening in one side extended to a point adjacent the bottom of the mold; wing walls coöperating with the edges of the opening and extended to a point adjacent the bottom of the mold, the wing walls being provided along their upper edges with angularly disposed flanges constituting joining members between the wing walls; means for connecting the flanges; and means for connecting the wing walls to the mold.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

HARRY G. SCHENCK.

Witnesses:
FRANK WINCERD,
OSCAR LEATHERMAN.

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