

N. C. NEWERF.
 BUCKET FOR CONCRETE BUILDING MATERIALS.
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934,092.

Patented Sept. 14, 1909.

Fig. 1.

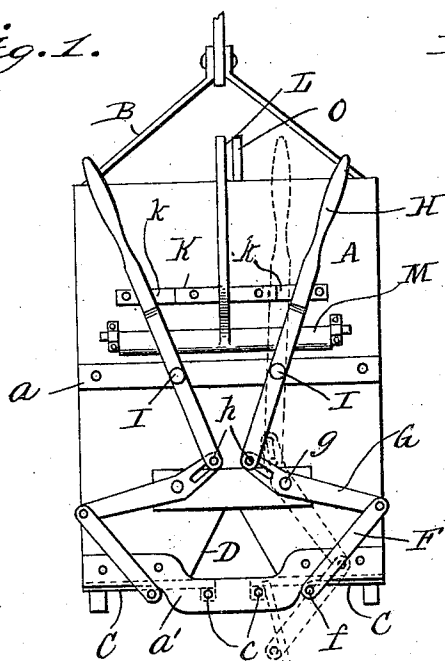


Fig. 2.

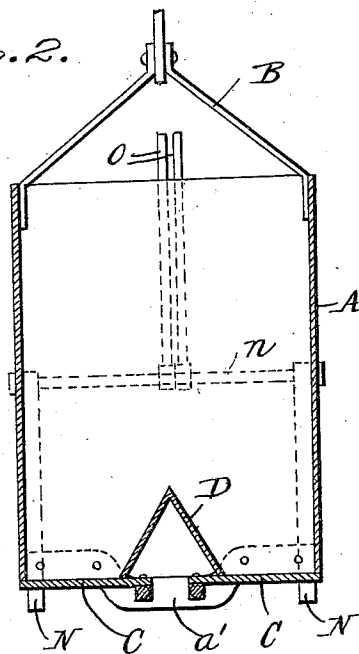


Fig. 3.

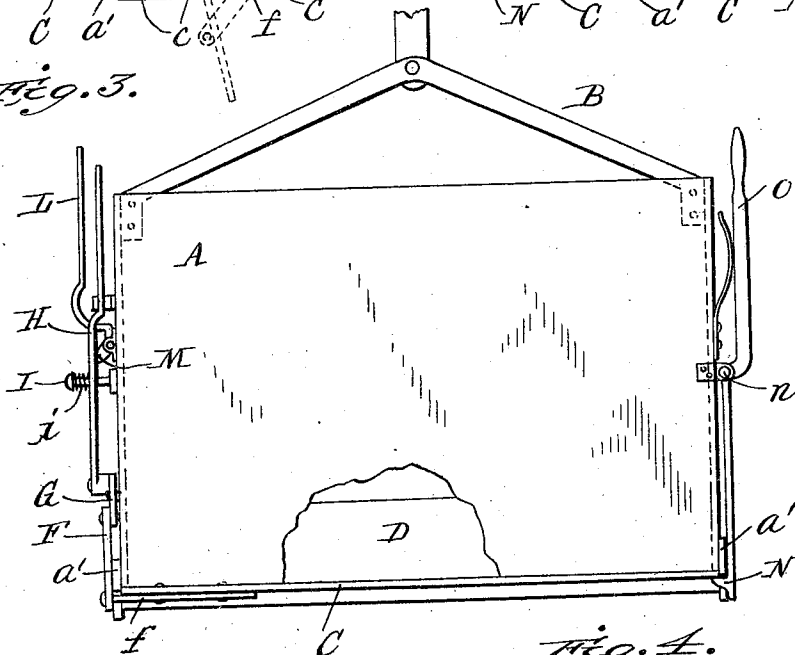
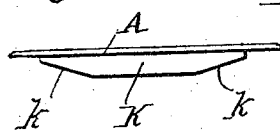


Fig. 4.



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BUCKET FOR CONCRETE BUILDING MATERIAL.

934,092.

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To all whom it may concern:

Be it known that I, NICHOLAS C. NEWERF, of Buffalo, in the county of Erie, State of New York, have invented a certain new and useful Improvement in Buckets for Concrete Building Material; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon.

The bucket of the present invention is one designed particularly for use in concrete building construction, the object being to provide a bucket which may be conveniently loaded at the ground level from a mixing machine, hoisted to the level of the top of the wall, transported to the point of discharge and the material discharged from the bucket into the molds between which the wall is being formed.

In the usual wall construction a central mold is employed, which, when removed and the wall completed leaves a central hollow space within the wall, and it is a further object of the present invention to provide a bucket from which the concrete building material may be dumped by a bottom discharge into both sides of the wall mold simultaneously, so as to insure uniform accretions to both faces of the wall, or, on the other hand, should occasion demand, the contents may be discharged from either side of the bucket at will.

Referring to the accompanying drawings—Figure 1 is an end elevation of a bucket embodying the present improvements. Fig. 2 is a central section parallel with the plane of one of the ends. Fig. 3 is a side elevation, and Fig. 4 a top plan of the retainer for the operating handles.

Like letters of reference in the several figures indicate the same parts.

The bucket itself is preferably of rectangular form in horizontal section inasmuch as this form lends itself most readily to the manipulations in building construction. It is preferably made with metal sides and ends A, suitably strengthened by a strip *a* and has at the top a bail or support B of approved construction, such as will adapt the bucket for being handled by suitable elevating and carrying mechanism forming no part of the present invention. While the bucket is open at the top for filling, it is designed to be dumped or emptied by a bot-

tom discharge and in order to accomplish the objects hereinbefore set forth, the bottom is preferably composed of two sections C hinged at their proximate edges or on the sides toward the center of the bucket, by pintles *c* journaled in the end strengthening strips *a'*, which are centrally depressed for the purpose, as best shown in Figs. 1 and 2. The hinged sections may swing down as indicated by the dotted lines in Fig. 1 and in order to protect their proximate edges when swung into open position, as well as to provide a sharp edge for severing the discharged material into two streams spaced sufficiently far apart, a central inverted V-shaped deflector D is located within the base of the bucket immediately over the proximate edges of the bottom sections. The bottom sections themselves when open, constitute in effect, continuations of the deflector, and they may, if so desired, strike and rest against the edges of the center mold used in the wall formation, although if the bucket in use, is designed for a wall of particular width and having a particular hollow or void within it, the material will gravitate into proper position in relation to the mold.

In order to operate the hinged bottom sections they are preferably provided at one end with projections *f* to which one end of links F are connected, said links F in turn being jointed to the outer ends of angle levers G pivoted at *g* to the sides of the bucket and coöperating through slot and pin connections *h* with the lower ends of operating handles H, also pivoted to the ends of the bucket on pins I. The handles H in addition to being pivoted on the pins I are movable longitudinally of the pins, springs *i* being provided to normally hold said handles toward the end of the bucket, and in position to engage inclines *k* on the frictional retaining devices K, shown in detail in Fig. 4 and in front elevation in Fig. 1. The handles H, through the levers G, may be utilized to either open or close the hinged bottom sections and when said sections are in closed position the springs *i* will force the handles into engagement with the retainer and prevent the accidental opening of the bottom sections. Should it be desired, as is usually the case, to release both of the bottom sections simultaneously, this may be accomplished by pressing inwardly on the handle L which, at its lower end, is connected with or constitutes part of an elongated cam or

eccentric bar M, pivoted to the end wall of the bucket and lying behind both of the operating handles H. Inward pressure on the handle L forces both of the operating handles H outwardly and out of engagement with the inclines K, the result being that the weight of the hinged bottom sections or load thereon instantly forces said sections to swing to their open position.

During the elevation and transportation of the bucket it is preferable that additional means should be provided for retaining the hinged sections closed and this is conveniently accomplished by means of spring catches N located at the opposite end of the bucket and hinged thereto on a rod or rods n. Obviously both of the catches N may be operated by a single handle for simultaneously releasing the hinged bottom sections, but, in the preferred construction, each is provided with its own releasing handle O, said handles being located in proximity so that they may be operated simultaneously with one hand, but should occasion require, either may be operated independently of the other for permitting one or the other of the bottom sections to open.

In using the bucket a workman first positions the same immediately above that portion of the wall to which the concrete is to be added and then, with his hands on the handles at opposite ends of the bucket, releases either or both of the bottom sections as may be desired.

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

1. A bottom discharge bucket for hoisting and transporting plastic concrete to walls in course of construction, embodying a substantially rectangular body, two separate bottom sections hinged at their proximate edges at the bottom of the body with their axes parallel with the sides of the body whereby parallel discharge openings are formed when the sections are swung open and an inverted V-shaped deflector located above the proximate edges and axes of the bottom sections,

said deflector having its sides inclined sufficiently to prevent the plastic material from adhering thereto and being of sufficient width to project beyond the proximate edges of the bottom sections both when the latter are open and closed.

2. A bottom discharge bucket for hoisting and transporting concrete to walls in course of construction embodying separate bottom sections hinged at their proximate edges, a central transverse deflector over the hinged edges of the bottom sections, and separate levers for closing and releasing said sections and means whereby said levers may be simultaneously or independently released.

3. A bottom discharge bucket for hoisting and transporting concrete to walls in course of construction embodying hinged bottom sections and separate levers for closing and releasing said sections whereby either may be opened or closed independently of the other.

4. A bottom discharge bucket for hoisting and transporting concrete to walls in course of construction, embodying hinged bottom sections, separate levers for closing and releasing said sections whereby either may be opened or closed independently of the other and a releasing arm coöperating with both said levers for simultaneously releasing the bottom sections.

5. A bottom discharge bucket for hoisting and transporting concrete to walls in course of construction, embodying bottom sections, hinged at their proximate edges to swing downwardly, operating levers pivoted to the end of the bucket, links connecting the levers and bottom sections, means for holding the levers with the sections closed and means whereby said levers may be simultaneously or independently released.

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