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H. A. CARMICHAEL.
CORNER LOCK FOR CEMENT MOLDS.

APPLICATION FILED JULY 29, 1907.

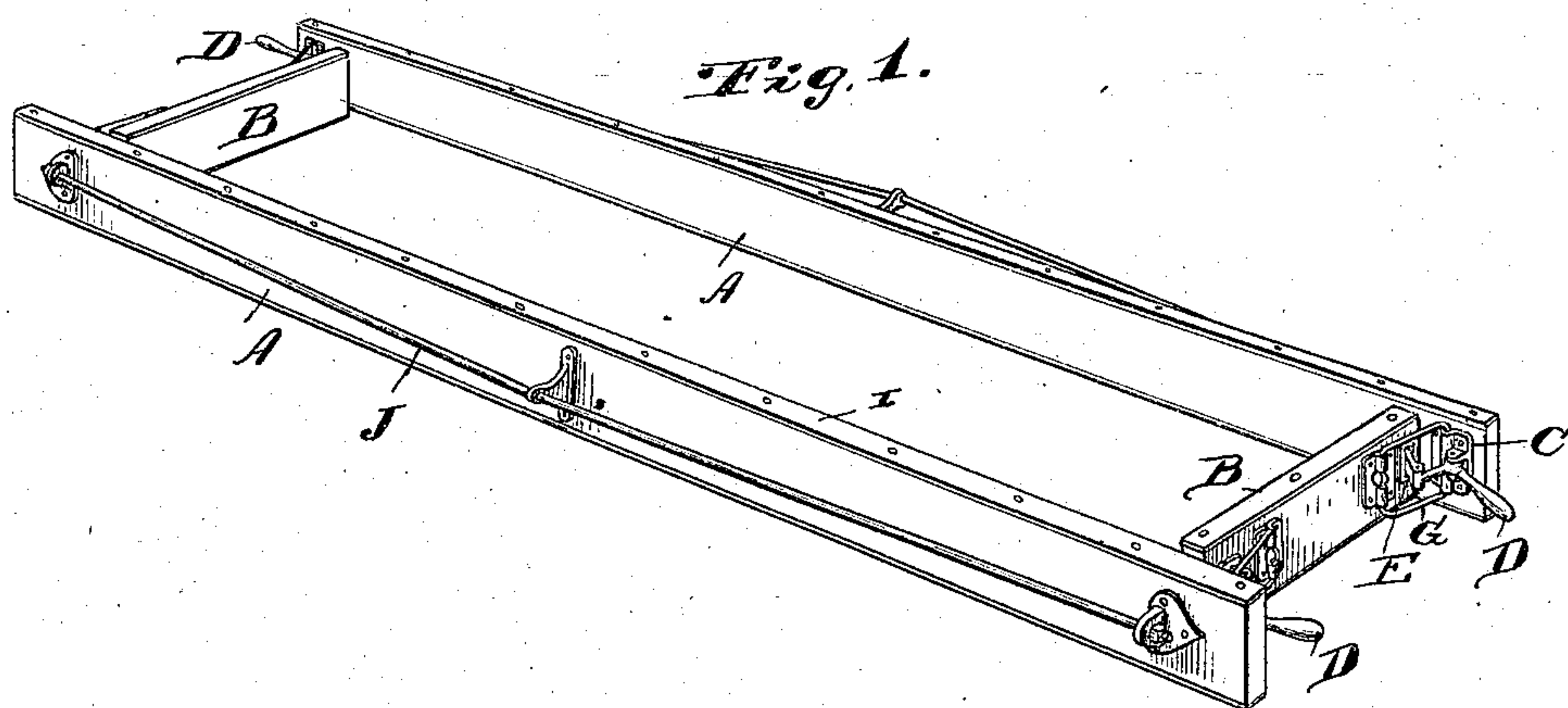
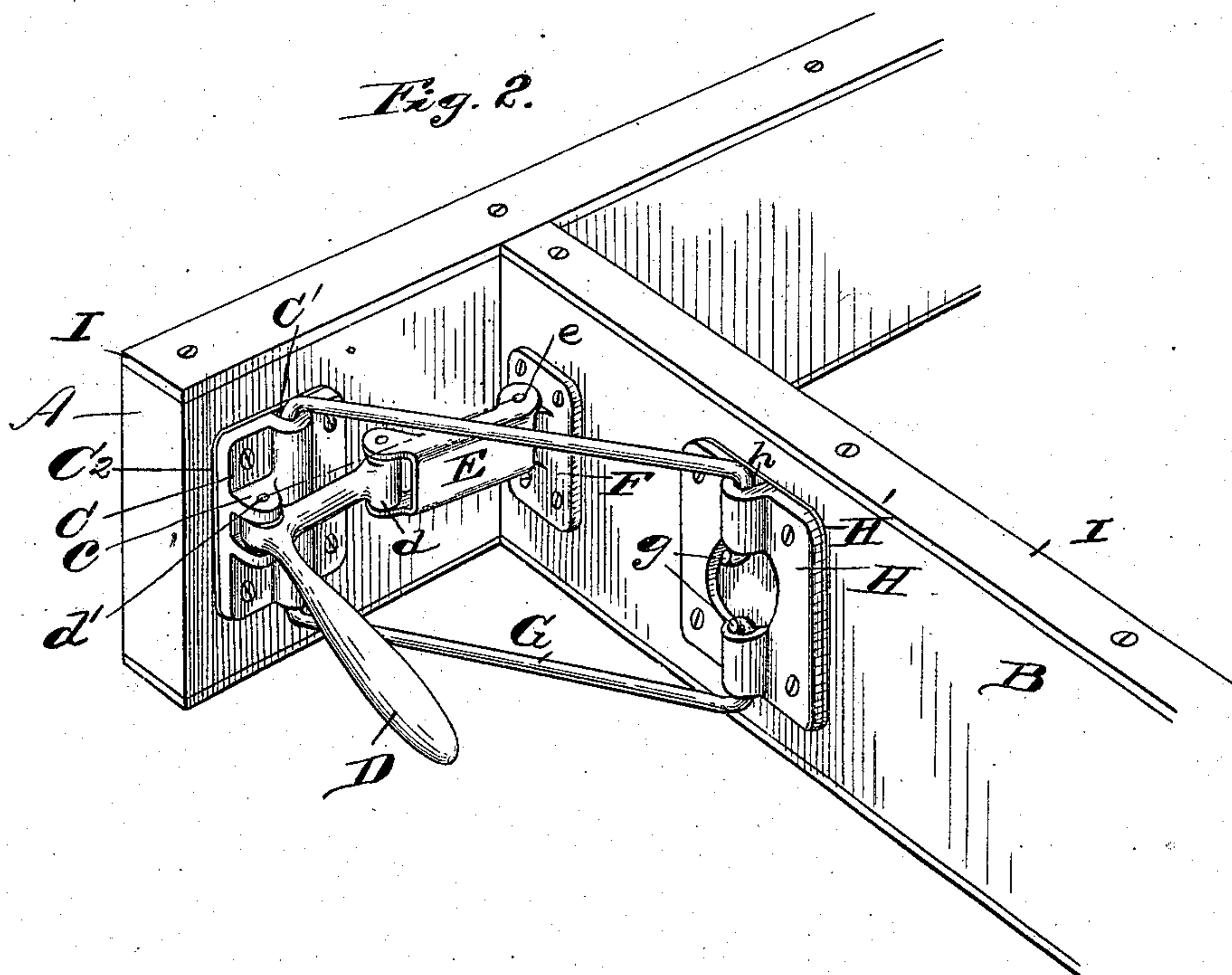


Fig. 2.



Inventor

Hugh A. Carmichael

Witnesses

Grace E. Wynkoop.
Charles H. Fisk

By

S. C. Thomas

Attorney

UNITED STATES PATENT OFFICE.

HUGH A. CARMICHAEL, OF WEST LORNE, ONTARIO, CANADA.

CORNER-LOCK FOR CEMENT-MOLDS.

No. 881,224.

Specification of Letters Patent.

Patented March 10, 1908.

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To all whom it may concern:

Be it known that I, HUGH A. CARMICHAEL a subject of Great Britain, residing at West Lorne, county of Elgin, Province of Ontario, Canada, have invented a certain new and useful Improvement in Corner - Locks for Cement-Molds, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in corner locks for cement molds and more especially those employed in the manufacture of window sills, fence posts, etc., shown in the accompanying drawings and more particularly pointed out in the following specification and claims.

In the drawings: Figure 1 is a perspective view of the mold showing the corners unlocked as they would appear when the block is to be released. Fig. 2 is a detail view in perspective showing one of the locking devices as it would appear when in position upon the mold, showing the side and end walls in locked relation.

The object of my invention is to put on the market a locking device for the corners of cement molds which while it is simple in construction,—in order to reduce the cost of manufacture and also to avoid the liability of getting out of order,—is positive and uniform in its action, the parts operating to lock together the side and end walls of the mold perfectly square.

Provision is made whereby the length of the mold proper may be increased or reduced by merely shifting the location of the locking device on the side walls of the mold which is accomplished by removing the screws engaging the locking device to the wall.

Another advantage in the use of my invention is that it is not necessary to crate it for shipment as in other forms of molds, as none of the working parts in this invention extend beyond the ends of the walls of the mold.

Another advantage is that any individual corner may be operated singly if desired.

Other advantages will hereafter appear.

While I have shown only a part of the device formed of steel stampings, it is apparent that all of the parts may be so constructed if desired.

Referring now to the letters of reference shown on the drawings:—A represents the side, and B the end walls of the mold.

C is a plate bolted or otherwise secured to the inner face of each of the projecting ends of the side walls A.

D is a bell-crank lever pivoted in the lugs *c* formed integral with the plate C. One arm of the lever D is in the form of a handle whereby it may be manually operated, the other arm has at its swinging end a hub *d*, to which is pivoted the link E in turn hinged to the plate F secured to the wall B near its end. It being understood that similar plates F are secured to both ends of each of the walls B, to which are engaged their respective connecting elements:—the locking devices for each corner being identical.

C' is a channel formed in the plate C opening toward the back to receive one end of the link G.

H is a plate fastened to the wall B having a channeled portion *h* also designed to receive one end of the link G,—the ends of the link being bent outwardly as indicated at *g* to overlap the ends of the channeled portion of the plate, in order to secure it to the latter.

H' is a wearing plate located back of the plate H to protect the wall of the mold from wear occasioned by the movement of the link G, and C² is a similar wearing plate located back of the plate C for a like purpose.

I indicates strap-iron secured to the edges of the walls forming the mold, to protect them from wear.

J is a truss engaging the side walls of the mold to stiffen the latter.

Having indicated the several parts by reference letters, the operation of the device will be easily understood. The several walls forming the mold being linked together in the manner shown, they are locked in rigid relation by manually forcing the handle of the bell-crank lever toward the end wall, this action causes the pivotal connections between the bell-crank lever and the link engaging the plate F to pass an imaginary line (see dotted line) drawn from the pivotal connection *e* of the link E with the plate F, to

the pivot d' of the bell-crank lever, thereby securing the parts in locked relation as will be readily understood. To release the parts, the bell-crank lever is thrown in the opposite direction to that just described.

Having thus described my invention, what I claim is:—

1. In a locking device for cement molds, a bell-crank lever pivoted to one of the walls of the mold, a link connecting one arm of said lever with the wall located at right angles to the first named wall, and a separate link connection between said walls.

2. In a locking device for cement molds, a plate secured to one of the walls of said mold having bearings to support a bell-crank lever, a bell-crank lever supported in said bearings, a plate secured to the wall located at right angles to the first mentioned wall, a link connection between said last named plate and with one arm of the bell-

crank lever, and a separate link connection between said walls.

3. In a locking device for cement molds, a plate secured to one of its walls having bearings for a bell-crank lever, said plate also adapted to support a link connecting it with the wall of the mold at right angles to that first mentioned, a bell-crank lever pivoted in the plate and having a linked connection with the last named wall of the mold, a plate secured to said last named wall adapted to be engaged by a separate link also engaging the first named plate, and the said link, substantially as described.

In testimony whereof, I sign this specification in the presence of two witnesses.

HUGH A. CARMICHAEL.

Witnesses:

SAMUEL E. THOMAS,
GRACE E. WYNKOOP.