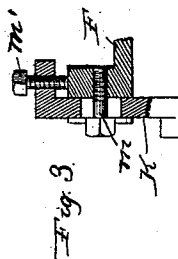
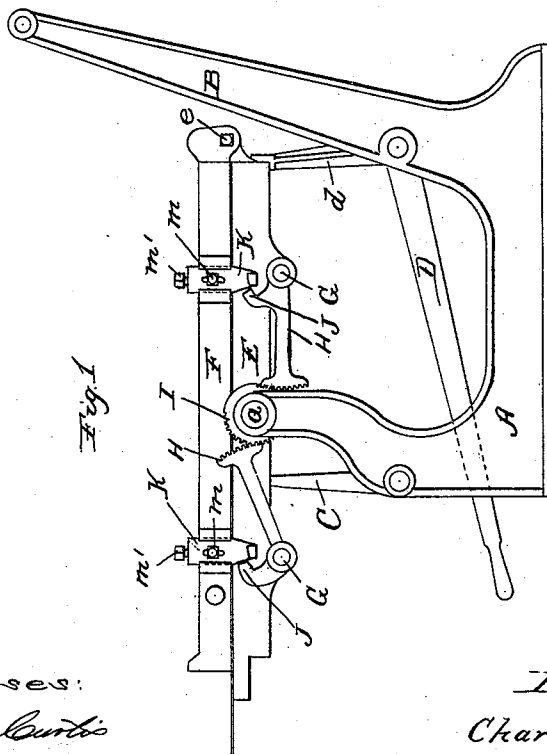
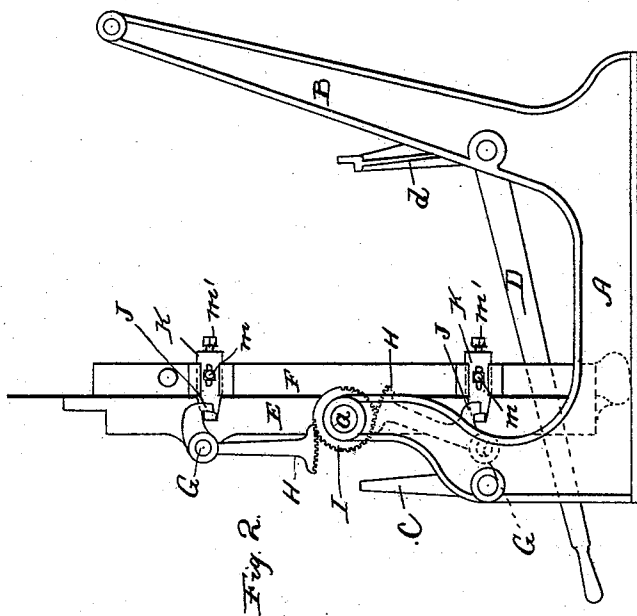


(No Model.)

C. S. PARTRIDGE.
STEREOTYPE BOX.

No. 466,366.

Patented Jan. 5, 1892.



Witnesses:

Low C. Curtis

A. W. Munday,

Inventor:

Charles S. Partridge.

By Munday, Everts & Adcock,
his Attorneys.

UNITED STATES PATENT OFFICE.

CHARLES S. PARTRIDGE, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE A. N. KELLOGG NEWSPAPER COMPANY, OF SAME PLACE.

STEREOTYPE-BOX.

SPECIFICATION forming part of Letters Patent No. 466,366, dated January 5, 1892.

Application filed September 7, 1891. Serial No. 404,945. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. PARTRIDGE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Stereotype-Boxes, of which the following is a specification.

This invention relates to devices for automatically locking the cover of a swinging stereotype-box when the box is turned into the vertical position ready for pouring and for automatically unlocking the same when the box is turned into the horizontal position. The nature of the devices which I employ for this purpose is fully shown in the accompanying drawings, and they consist of segments pivoted to the box, catches or projections upon the box-cover, adapted to be engaged by hooks carried by the segments when the box is moved into the vertical position; and a stationary segment-rack with which the swinging segments intermesh and by which they are actuated in locking and unlocking the box.

In the drawings, I show, at Figures 1 and 2, side elevations of a casting-box provided with my improved locking devices, Fig. 1 showing the box in the horizontal and Fig. 2 in the vertical position. Fig. 3 is a detail section of one of the locking projections upon the cover.

In the drawings, A represents the supporting-frame; *a*, the trunnions upon which the box swings; B, the support for the cover when open; C, the stationary rest supporting the box at one end when in the horizontal position, and D *d* the pivoted elbow tripping-lever for releasing the box when it is to be tipped up for pouring and for supporting its end when lowered.

E is the box, and F its cover, hinged together at *e* in the usual manner.

Upon one or both ends of the pivots G, which may extend across the box and are supported from its under side, are segments H, adapted to swing with or upon the pivots. These segments mesh with and are actuated by a segment-rack I, stationarily located and supported from the frame A or trunnions *a*, as shown. The segments H are each provided with hooks J, which, when the box is tipped, are moved into locking position, with the laterally-extended ends of the catches K se-

cured in the cover of the box and extended so as to lap over the side of the box and into position where they can be caught by the hooks J. Duplicates of the rack, the segments, the hooks, and the catches are provided upon the farther side of the box, or, in lieu of duplicating the segments and rack, there may be provided upon the farther side only the hooks and catches; but in such case the pivots should extend across the box and the segments shown, and likewise the hooks at the farther side must be made fast thereto, so that the power derived from one set of segments and the rack can be used to operate the hooks at both sides of the box. The catches K are adjustably secured in dovetails in the side frame of the box-cover and may be adjusted by the screws *m'*, bearing upon the cover and held in the adjusted position by the set-screws *m*.

The operation of the devices is as follows: Supposing the cover F to have been lowered preparatory to the making of a cast, the lever D is raised, thus removing from under the box the support *d*, which maintains it in its horizontal position. The box now tips from the position shown at Fig. 1 to that shown at Fig. 2, and in this operation the segments H are moved to the position shown at Fig. 2. This movement brings the hooks J into a locking engagement with the catches K, as plainly appears from Fig. 2. After the metal has been poured into the box and has cooled, it is returned to the horizontal position, and in this return movement the segments H are so actuated as to dissolve the locking engagement between the hooks and catches. The box is now free to be opened for the removing of the cast. The operation of locking and unlocking is entirely automatic and saves all necessity for the use of hand-operated clamps. Should the locking-surfaces of the hooks and catches become worn, the wear may be taken up at any time by adjusting the catches through the medium of the screws *m'*. These surfaces are inclined, so as to insure a clamping action by them when in engagement.

I claim—

1. The combination, with the tipping stereotype-box, of the segment-rack, the swinging

segments meshing with said rack and pivoted upon the box, the hooks joined to said segments, and the catches upon the box-cover interlocking with the hooks, substantially as set forth. 10

5 set forth.

2. The combination, with the tipping stereo-type-box, of the segment-rack, the swinging segments meshing with said rack and piv-

oted upon the box, the hooks joined to said segments, and the adjustable catches upon the box-cover interlocking with the hooks, substantially as set forth.

CHARLES S. PARTRIDGE.

Witnesses:

H. M. MUNDAY,
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