

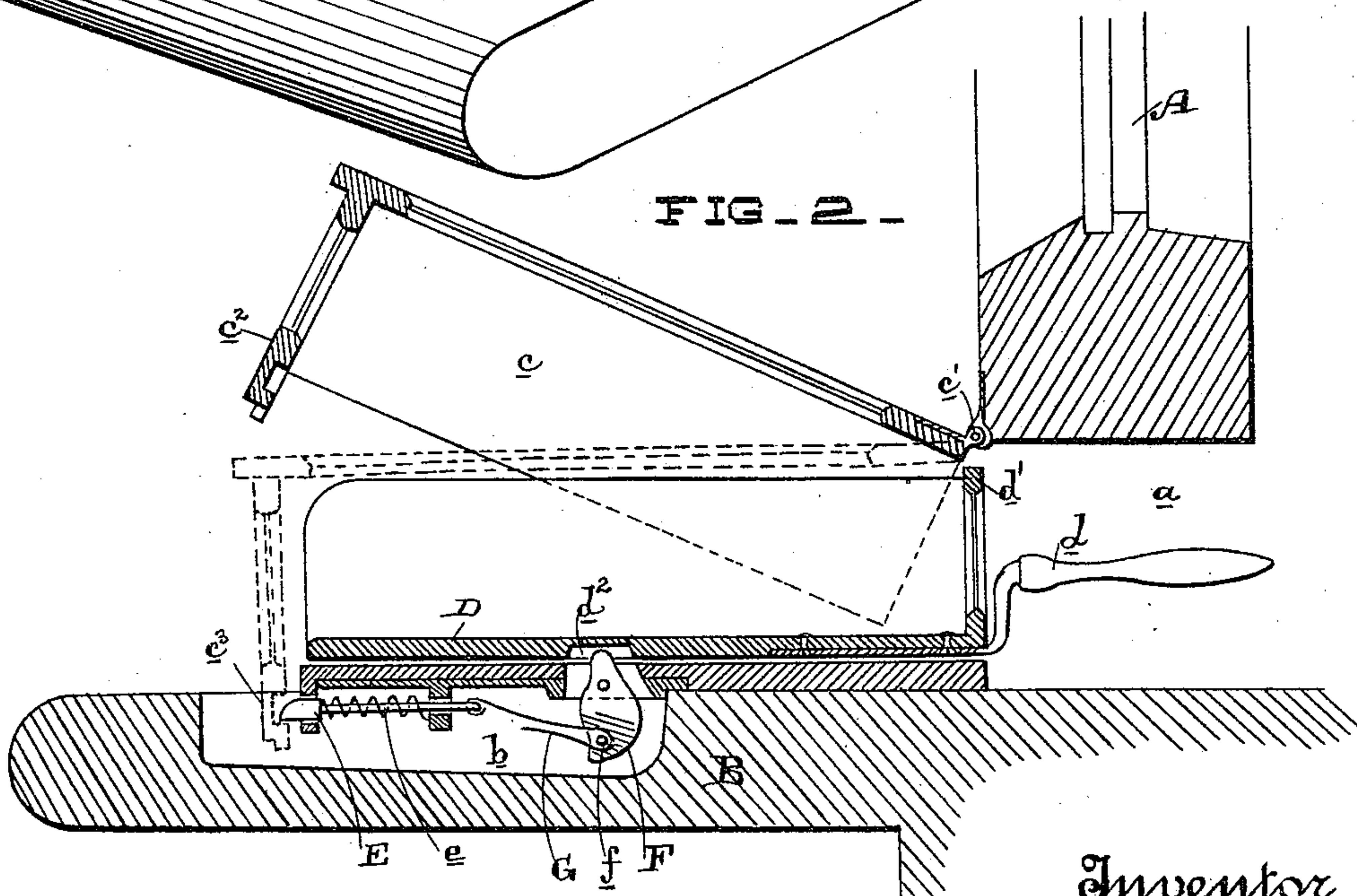
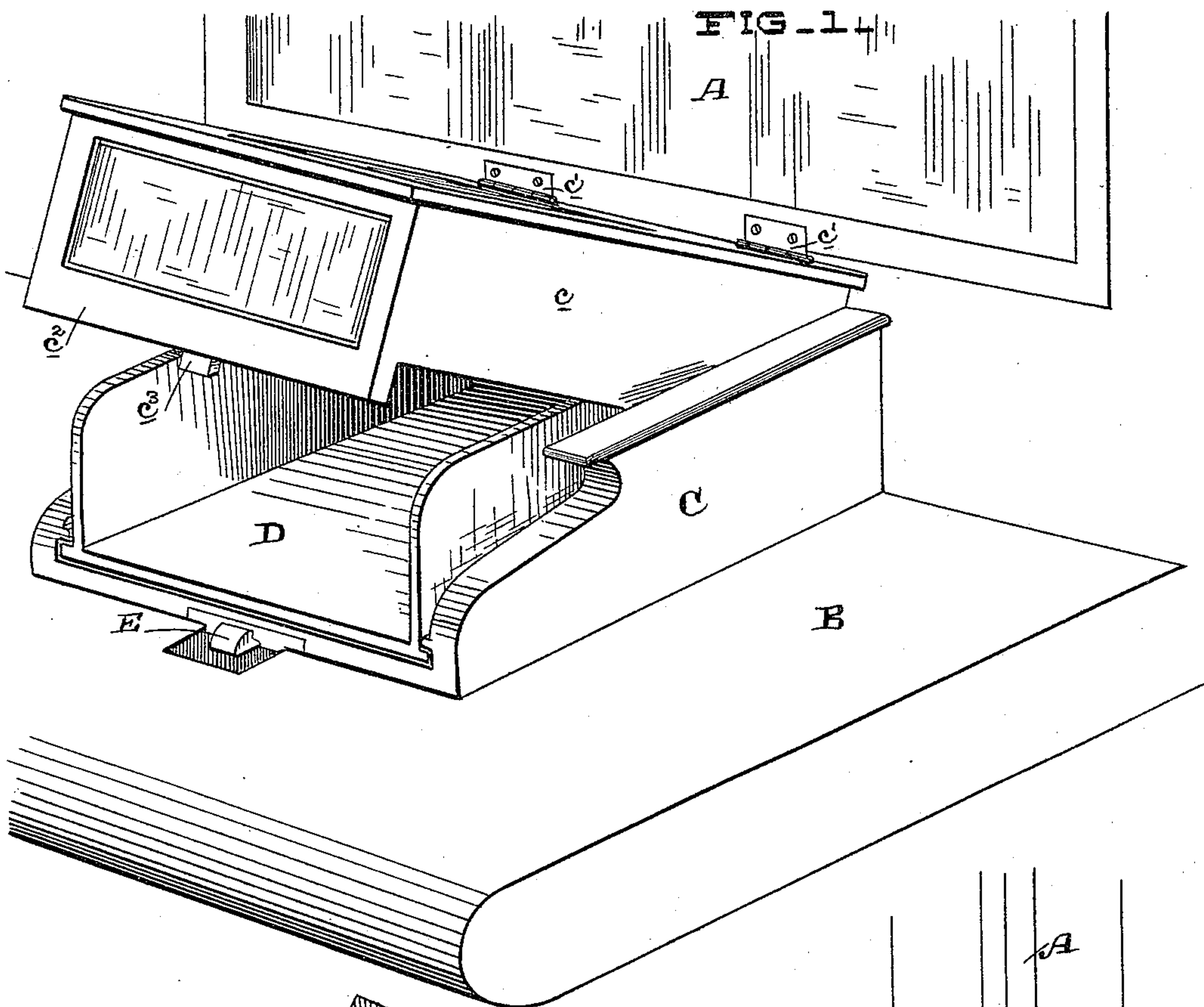
(No Model.)

2 Sheets—Sheet 1.

B. F. CARMAN.
RECEIVER'S CASH BOX AND TRAY.

No. 451,317.

Patented Apr. 28, 1891.



Witnesses,
J. H. House
H. F. Decheck

Inventor,
Benjamin F. Carman
By Dewey & Co. atty

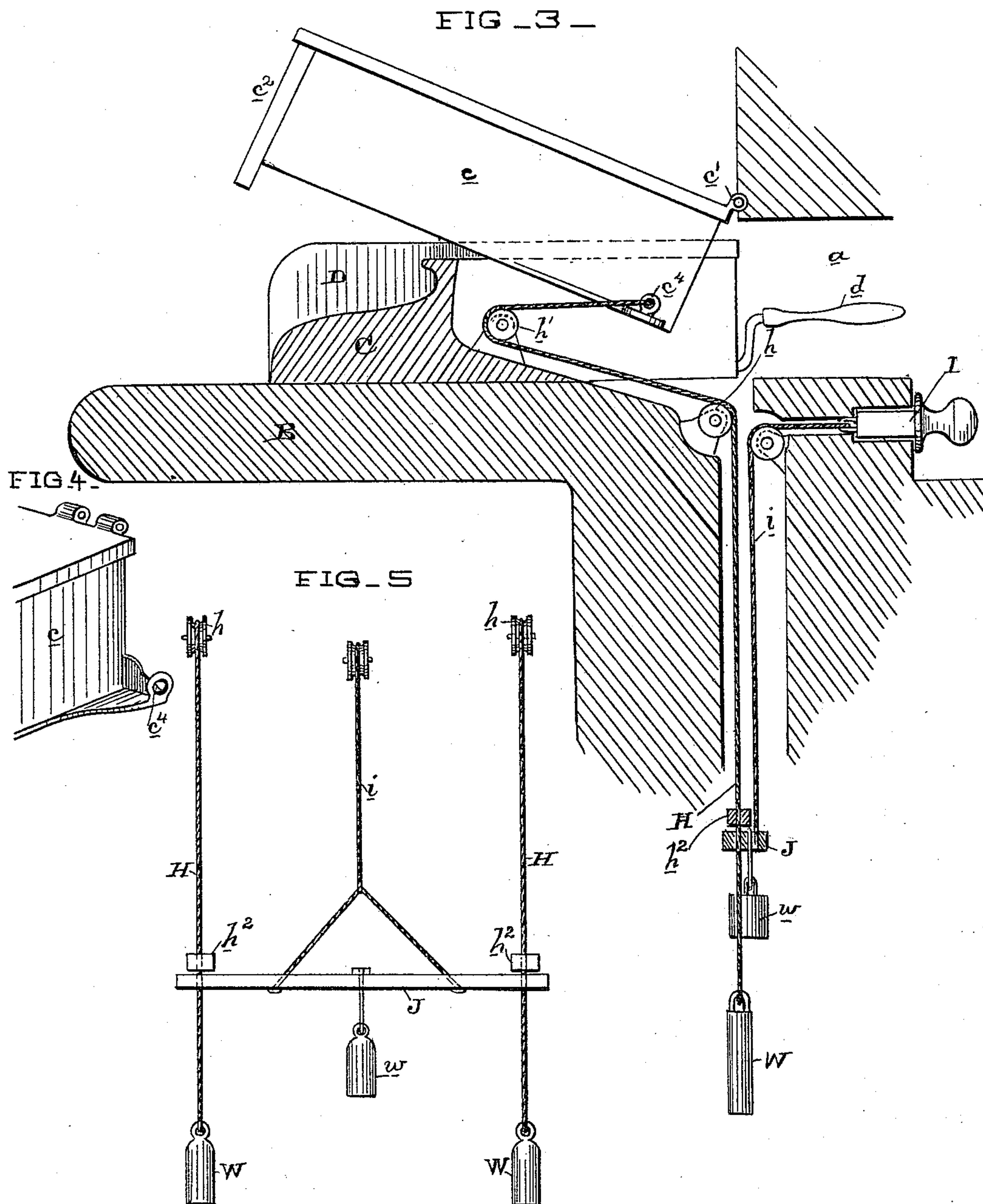
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UNITED STATES PATENT OFFICE.

BENJAMIN F. CARMAN, OF SAN FRANCISCO, CALIFORNIA.

RECEIVER'S CASH BOX AND TRAY.

SPECIFICATION forming part of Letters Patent No. 451,317, dated April 28, 1891.

Application filed December 15, 1890. Serial No. 374,805. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. CARMAN, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Receivers' Cash Boxes and Trays; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to the general class of money receiving and handling devices.

My invention is especially intended for the use of those receivers to whom sums of money are passed at intervals—as, for example, the receivers of car-fare money, to whose offices the conductors successively repair for the purpose of turning over the money collected.

My invention consists in the novel box and tray and their connected and operating parts hereinafter fully described, and specifically pointed out in the claims.

The object of my invention is to provide an easy and perfectly safe receptacle for the transfer of the money from the person paying to the person receiving it, and at the same time to avoid all drafts usually occasioned by the opening of the passage through which the money is passed.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view showing the open box and the inserted tray on the outside of the receiver's window. Fig. 2 is a vertical longitudinal central section of the same. Fig. 3 is a section showing the lifting mechanism of the lid of the box. Fig. 4 is a detail of one corner of the lid. Fig. 5 is an elevation of the lifting-weights and connections.

A is the window in the receiver's office. Below this window and extending through the wall of this office is an opening *a*, which opens out onto a shelf B on the outside of the office. Upon this shelf and communicating with opening *a* is fixed the stationary frame C of the box, the hinged lid of which is *c*. This lid is hinged to the wall at *c'*, and it has a closed front *c''*, which, when the lid is shut down, completely closes the front of the box. The top and front of the lid are glazed to admit light into the box and provide means for observing its interior.

D is the frame, consisting of a scoop-like

frame adapted to fit into the box, being passed therein through the opening *a*, and provided with a handle *d*, by which it is manipulated. The front of this tray is open, but its back *d'* is closed, and is preferably glazed, so that when in position its contents can be seen from within and the light unobstructed.

The front center of the lid is provided with a catch *c''*. With this catch is adapted to engage a sliding latch-bolt E, mounted in suitable bearings in a recess *b* in the shelf B, and adapted to be projected and held to engagement by means of a spring *e*. Now upon closing down the lid *c* of the box its catch *c''* will automatically engage the latch-bolt E, the spring *e* of which will hold it to its engagement, and thus effectually lock the lid in a closed position.

Within the recess *b* is pivoted a tumbler F, the lower end of which is slotted, and is provided with a cross-pin *f*, which fits freely within the slotted rear end of a connecting-link G, the forward end of which is connected with the rear end of the latch-bolt E. The link G may be made, as herein shown, of a piece of bent wire, in the rear end of which the pin *f* fits freely.

The upper end of the tumbler F lies in the path of the bottom of tray D, so that when said tray is inserted into the box it will come in contact with said tumbler and will thereby swing it, and thus, through the link G, the latch-bolt E will be retracted and the lid released, and said lid will thereupon rise by means to be presently described. When the tray reaches its seat in the box, the upper end of the tumbler drops into a recess *d''* made in the bottom of the tray, whereby the tumbler returns by gravity to its position of rest, and allows the bolt E to be projected, ready to engage the latch of the lid when the latter is again pushed down. The lid is raised and held open by the mechanism shown in Figs. 3 and 5.

II are cords having weights W upon their lower ends. These cords pass upwardly over suitable guide-pulleys *h* and around and back over other guide-pulleys *h'*, located in suitable recesses in the sides of the box C, and are connected at their ends to small ears *c''* on the lower back corners of the lid *c*. The tendency of these weights, therefore, is to pull

and hold the lid open in the elevated position shown in Figs. 1, 2, and 3.

Now to limit the opening of the lid so that it will not be pulled back too far, and also to provide a means for closing the lid from the inside, I have the following means, (shown in Fig. 3:) I is a pull-knob having a cord i , the lower end of which is connected with a cross-bar J, from which a weight w is suspended, said cross-bar having its ends lying directly under stop-blocks h^2 on the cords H. This cross-bar J prevents the opening of the lid by reason of the stop-blocks h^2 coming in contact with it and thereby effecting the suspension of the weights W and relieving the ears c^4 of the lid from the strain. By pulling on the knob I the cross-bar J, operating under the blocks h^2 , will raise the weights W, and the lid c will descend to a closed position by its own weight.

The whole device will be more fully understood from the following description of its operation: Its normal position is shown best in Fig. 1, wherein it will be seen that the box is opened by the elevation of the lid c , and the tray D is in position in the box. In this position the opening a through the wall into the receiver's office is closed by the rear end d' of the tray, so that no draft can take place through said opening. When a conductor comes to turn in his collection, he places it in the tray D and immediately puts his hand upon the top of the lid c and presses it down to a closed position, and said lid is locked by its catch c^3 engaging the latch-bolt E. Now no one can interfere with the contents of the tray, and it is not therefore highly important that the tray should be instantly withdrawn. When the receiver is ready he withdraws the tray, and this withdrawal does not affect the latch-bolt E, because the tumbler F, swung by the tray, simply slides its pin f in the slotted or bent end of the link G without interference, thus enabling the tray to be withdrawn without affecting the lock of the lid, which still remains in a closed position. As soon as the tray is withdrawn, the tumbler by its own weight returns to position, and the aperture a in the wall of the office is still closed by reason of the front closed end of the lid, and no draft can take place. When the receiver has removed the money from the tray, he shoves the tray back through the opening a into the box, and the tray, operating on the tumbler F, withdraws the latch-bolt E, whereby the cover or lid c is released, and the weights W pull it to an open position, and the apparatus is then ready for the next conductor.

If for any reason the receiver wishes to close the lid c , he can do so from within by pulling on the knob I, as heretofore explained. Thus the objects of the apparatus are effected—namely, the provision of safe means for receiving the money and preventing its being tampered with, and also the prevention of drafts into the office, which latter is a matter of great consideration in car-receivers' offices.

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

1. The combination of the box communicating with the receiver's office, the swinging lid of the box, an automatic lock for holding said lid closed when pushed down, a tray adapted to be inserted and removed from said box, and a means for opening said lid when released from the lock, substantially as herein described.

2. The combination of the box communicating with the receiver's office, the swinging lid of said box, the tray adapted to be inserted into and removed from said box, a lock for said lid for holding it closed when pushed down, and a means controlled by the insertion of the tray for releasing the lock, substantially as herein described.

3. The combination of the box communicating with the receiver's office, the swinging lid of said box, an automatic locking device for holding the lid closed when pushed down, a means for raising the lid when relieved of the lock, the tray adapted to be inserted into and removed from the box, and means controlled by the insertion of the tray for releasing the lock of the lid, substantially as herein described.

4. The combination of the box communicating through an opening with the receiver's office, the hinged lid of said box, having a closed forward end, and the insertible and removable tray having a closed rear end, whereby the opening into the receiver's office is closed by the lid when said lid is closed and by the tray when said lid is opened, substantially as herein described.

5. The combination of the box communicating with the receiver's office, the swinging lid of said box, having the catch, the spring-controlled latch-bolt adapted to engage said catch and hold the lid closed when pushed down, the insertible and removable tray, and means controlled by the insertion of the tray for effecting the retraction of the bolt to release the lid, substantially as herein described.

6. The combination of the box communicating with the receiver's office, the swinging lid of said box, having the catch, the spring-controlled latch-bolt engaging said catch, the insertible and removable tray having the recess d^2 , the gravity-tumbler operated by said tray, and the slotted link or bent wire connecting said tumbler with the latch-bolt, substantially as herein described.

7. The combination of the box communicating with the receiver's office, the hinged lid of said box, a locking device for holding the lid closed when pushed down, and the weighted cords connected with the rear end of the lid for raising it when released of the lock, substantially as herein described.

8. The combination of the box communicating with the receiver's office, the swinging lid of said box, having the catch, the spring-controlled latch-bolt, the insertible and re-

movable tray, the gravity-tumbler operated by said tray, the slotted link or bent wire connecting the gravity-tumbler with the latch-bolt, whereby the lid is relieved by the insertion of the tray, and the weighted cords connected with the cover for lifting it, substantially as herein described.

9. The combination of the box communicating with the receiver's office, the swinging lid of said box, the weighted cords for lifting said lid, the cross-bar J, and the stop-block h^2 on the cords, adapted to come in contact with the cross-bar for limiting the upward movement of the lid, substantially as herein described.

10. The combination of the box communicating with the receiver's office, the swinging lid of said box, the weighted cords connected with said lid for raising it, the weighted cross-bar, the stop-blocks on the ropes or cords, the pull-knob within the receiver's office, and the cord connecting said knob with the cross-bar, substantially as herein described.

11. The combination of the box C, communicating with the receiver's office, the swinging lid of said box, having the closed front with catch, the spring-controlled latch-bolt adapted to engage said catch, the insertible and removable tray having the closed inner end, the gravity-tumbler operated by the in-

sertion of the tray, and the link connecting said tumbler with the latch-bolt for effecting its retraction, the weighted cords connected with the lid for raising it, the stop-bar, and the stop-blocks on the cords for limiting the opening of the lid, substantially as herein described.

12. The combination of the box communicating with the receiver's office, the swinging lid of said box, having the closed front with catch, the spring-controlled latch-bolt adapted to engage said catch, the insertible and removable tray having the closed inner end, the gravity-tumbler operated by the insertion of the tray, and the link connecting said tumbler with the latch-bolt for effecting its retraction, the weighted cords connected with the cover or lid for raising it, the weighted stop-bar, and the stop-blocks on the cords for limiting the opening of the lid, the pull-knob I within the receiver's office, and the cord i , connecting said pull-knob with the cross-bar, substantially as herein described.

In witness whereof I have hereunto set my hand.

BENJAMIN F. CARMAN.

Witnesses:

S. H. NOURSE,
H. F. ASCHECK.