(No Model.) 2 Sheets—Sheet 1.

J. C. MARTIN.

AUTOMATIC CASH BOX SYSTEM.

No. 255,525. Patented Mar. 28, 1882.

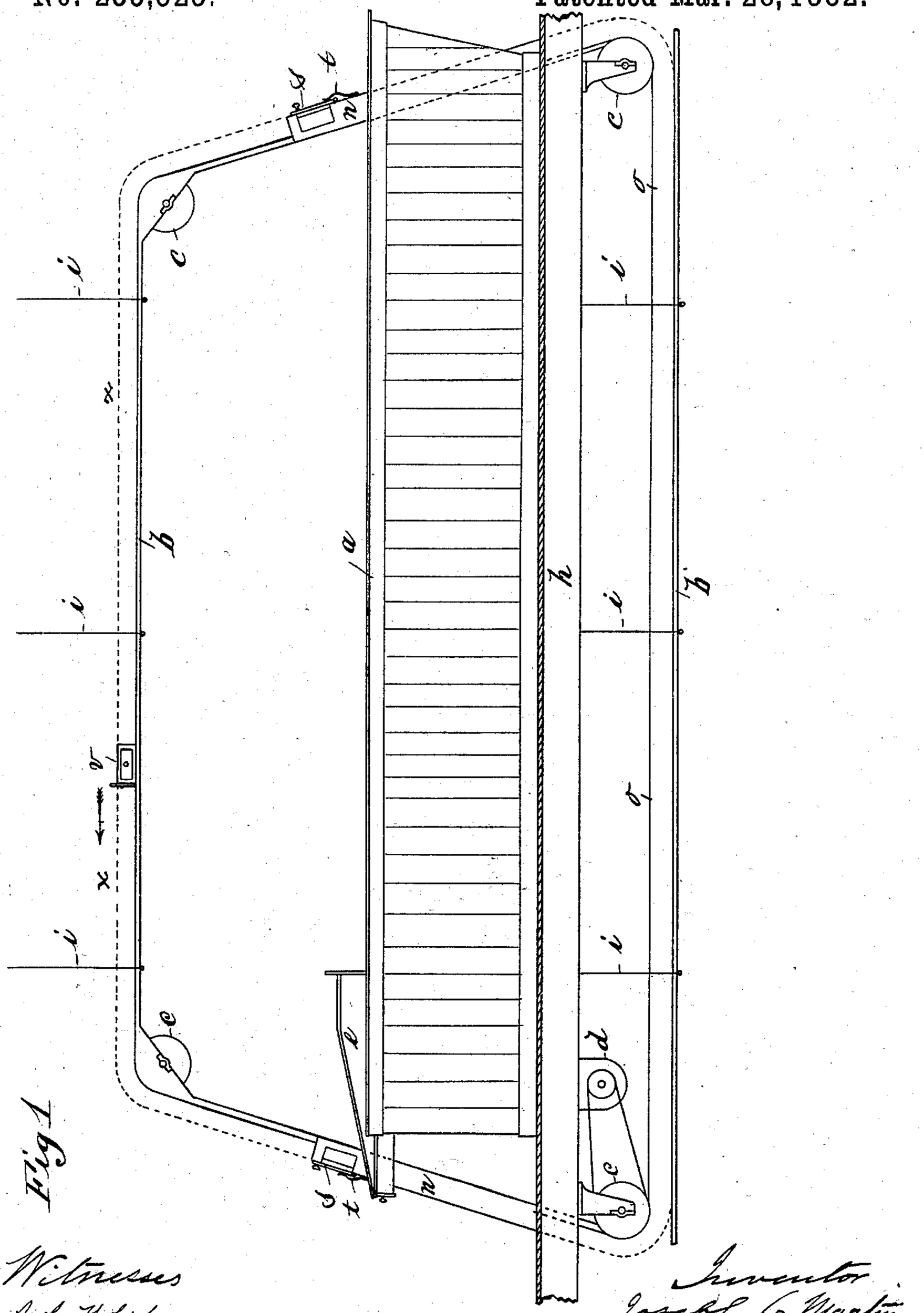


Fig 1

Witnesses
A. L. White.
J. D. Garfield

Inventor
Joseph C. Martin
by Henry A. Chapin Atty

(No Model.) 2 Sheets—Sheet 2.

J. C. MARTIN.

AUTOMATIC CASH BOX SYSTEM.

No. 255,525. Patented Mar. 28, 1882.

Fig 2

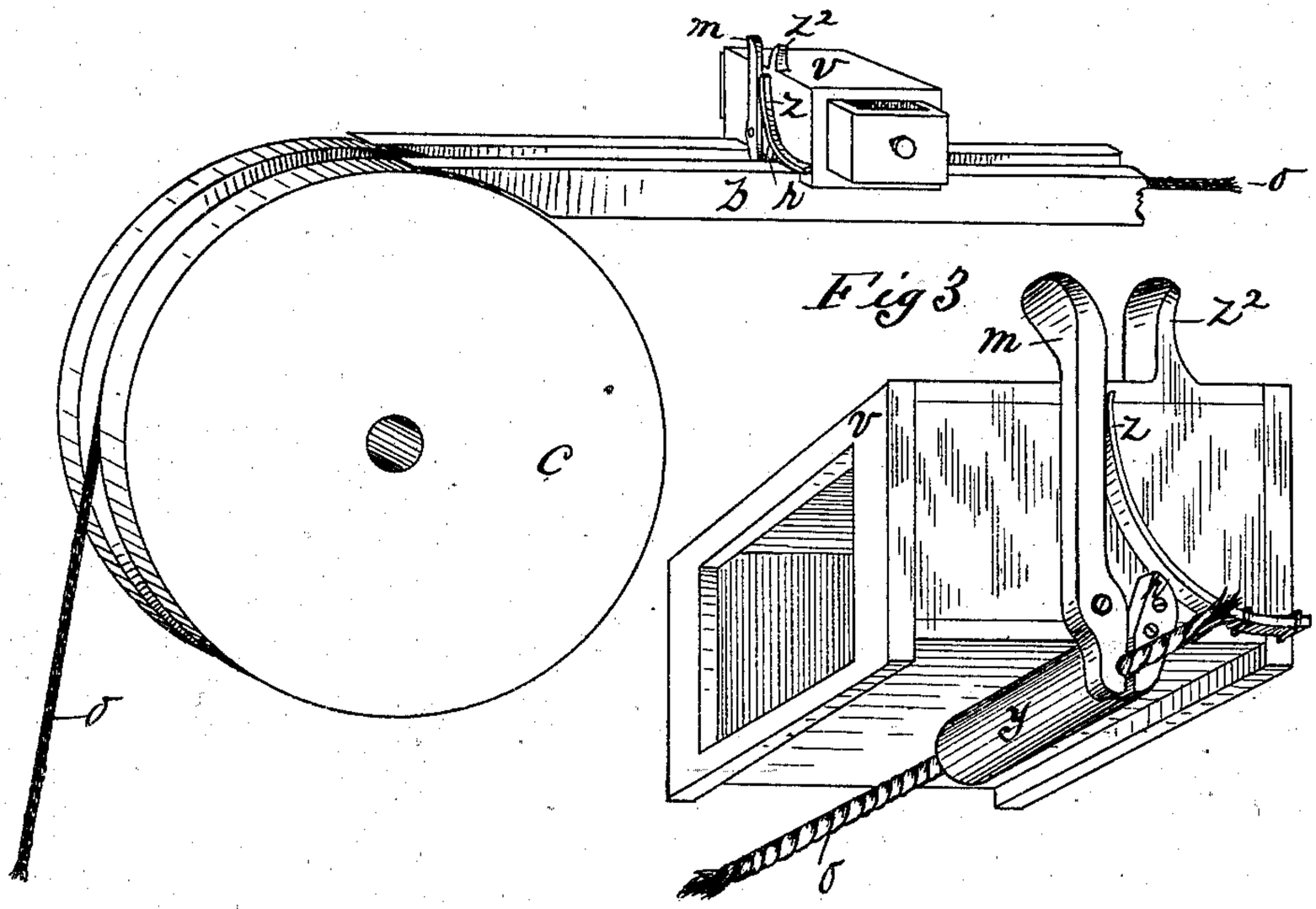


Fig 3

Fig 4

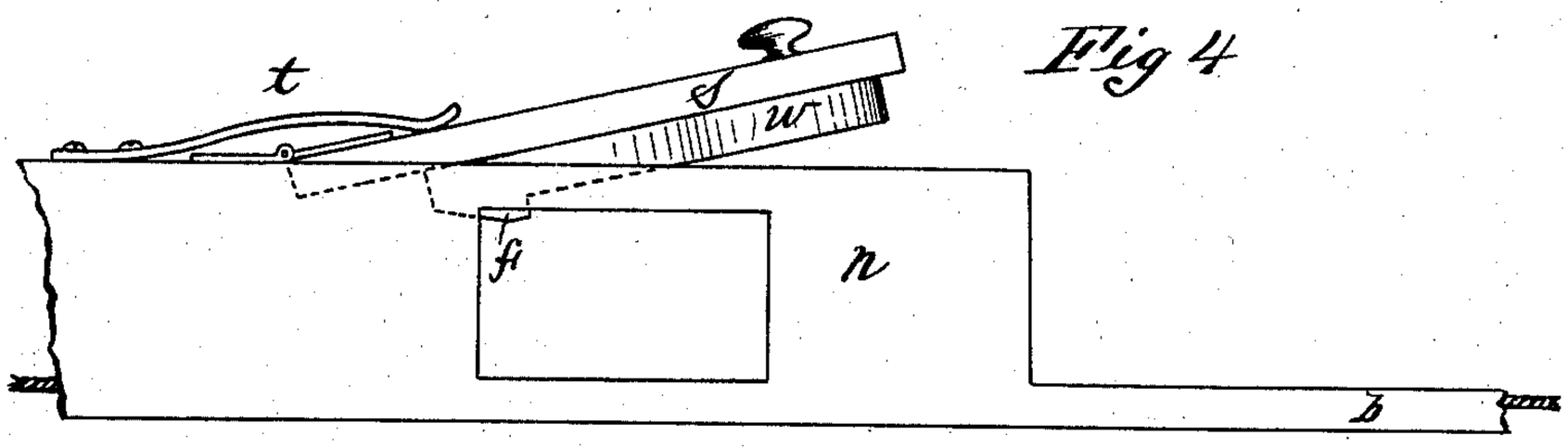


Fig 5

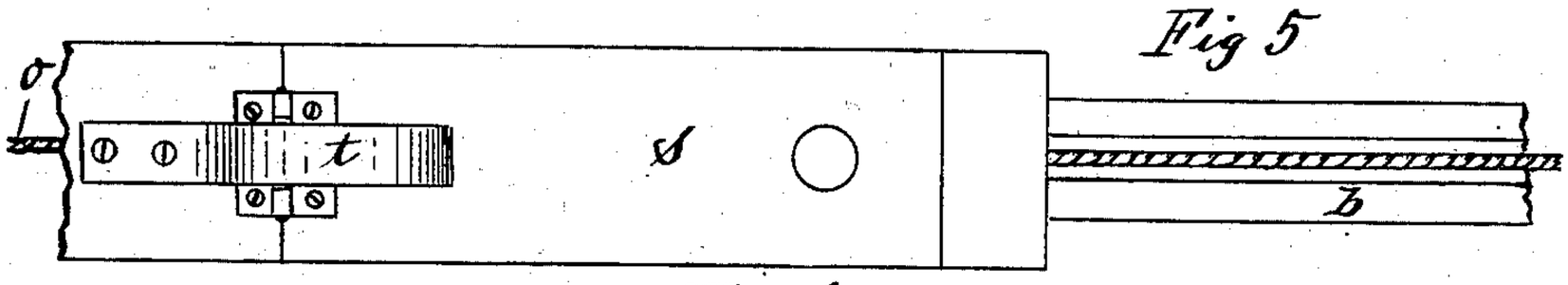
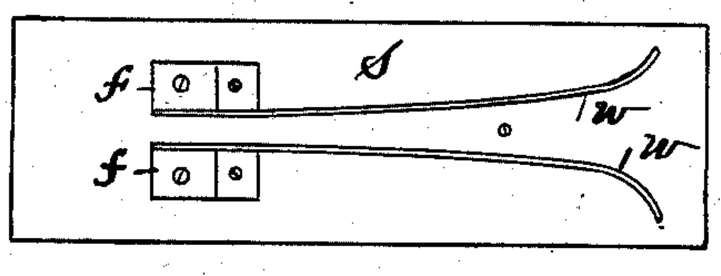


Fig 6



Witnesses
A. L. White
J. D. Garfield

Inventor
Joseph C. Martin
by Henry A. Chapin Atty

UNITED STATES PATENT OFFICE.

JOSEPH C. MARTIN, OF BURLINGTON, VERMONT, ASSIGNOR OF ONE-HALF TO LUTHER A. MARTIN, OF FLORENCE, MASSACHUSETTS.

AUTOMATIC CASH-BOX SYSTEM.

SPECIFICATION forming part of Letters Patent No. 255,525, dated March 28, 1882.

Application filed December 14, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH C. MARTIN, a citizen of the United States, residing at Burlington, in the county of Chittenden and State of Vermont, have invented new and useful Improvements in Automatic Cash-Box Systems, of which the following is a specification.

This invention relates to the details of the construction of automatically-moving cash-boxes and devices for moving such boxes from one place to another, the object being to obviate the employment of persons for carrying cash between the salesman and the cashier in mercantile establishments, and to place at the immediate disposition of those persons effective and rapidly-operating means for conveying money, papers, &c., from one to the other.

In the drawings forming part of this specification, Figure 1 is a side elevation, partly in section, illustrating a counter in a store or like place, showing the floor in section thereunder, and my cash-box and its moving devices constructed according to my invention. Fig. 2 is a detail view, showing the cash-box, a portion of its track, moving-cord, and one pulley. Fig. 3 is a view of the cash-box and a portion of said cord. Fig. 4 is a section of the track and stop devices. Fig. 5 is a plan view of the last-named parts, and Fig. 6 is a plan view of the under side of the cover of the trough.

In the drawings, *a* is the counter. *b* is the cash-box track. *c* are pulleys. *d* indicates a motor; *e*, the cashier's desk; *h*, the floor of the room; *i*, track suspension-rods; *n*, stop-troughs; *o*, an endless cord; *s*, the spring-cover to the trough. *t* is the cover-spring. *v* is the cash-box. *w w* are curved cord-clamp guides. *f f* are stops on the cover *s*. *m* is a cord-clamp lever. *r* is a cord-clamp arm on the cash-box. *z* is a cord-clamp spring. *y* is a cord-tube under box *v*. z^2 is a thumb-piece on box *v*. *x* indicates in dotted line the course of the cash-box in moving over its track.

The improvements in means for transporting the cash-box *v*, herein described, consist in a grooved track, *b*, made of wood or other suitable material, suspended by rods *i* horizontally over the counter *a*, running in an inclined direction at each end thereof down through or by the said counter and the cashier's desk *e*, through the floor *h*, where said track is suspended below the endless cord which carries the box. At the corners of said track, or at points therein where its direction changes, are hung the centrally-grooved pulleys *c*, and around the latter, and running the whole length of said track, is placed an endless cord, *o*. On the inclined end portions of said track, and on that portion thereof running above the counter *a*, said cord follows the groove in said track; but under the floor *h* the line of the cord is from pulley to pulley, and the track is suspended below to accommodate the reversed position of the cash-box as it passes under said floor.

A water or other suitable motor, *d*, may be connected by suitable means to one of pulleys *c*, and thus impart a constant movement of said cord around said pulleys and through the groove in track *b*. Upon that portion of the track from just above the counter *a* to the floor are placed sides and a cover to form a short trough-like structure, *n*, and at the upper open end of said trough is hinged a spring-actuated cover, *s*, held down by a spring, *t*, and having set edgewise upon its under side two curved-ended cord-clamp guides, *w w*, which project downward into said trough, as shown in Fig. 4.

The cash-box *v* is made with top, bottom, and ends only, and has a drawer adapted to slide transversely through it, as shown in Fig. 2, for holding money or other objects to be transported between one part of the store and the cashier's desk, and vice versa. Said drawer is made to be flush with the sides of said cash-box, and the latter has sides slightly projecting downward, which inclose the track and insure security and steadiness of motion to said box. Under one end of said cash-box is fixed a short cord-tube, *y*, and on the end of the box is pivoted a cord-clamp lever, *m*, its lower end terminating at the end of said tube *y*, and a short fixed arm, *r*, is secured to the said box, opposite to the lower end of said lever, and also standing at the end of said tube. A spring, *z*, secured to the end of the cash-box, swings the lever *m*, so that its lower end impinges against the cord *o*, which runs between it and said arm *r*. A thumb-piece, z^2, is fixed upon

the top of box *v* to afford conveniences for manipulating the lever *m*. Stop-blocks *f* are placed on the under side of the hinged cover *s*.

The operation of my improvements is as follows: It being understood that proper motion is given to the endless cord *o*, and that the cash-box is resting upon that part of the track under the trough at the end of the counter *a* opposite to that where the desk *e* is located, a clerk desiring to send cash to said desk places it in the cash-box drawer and lifts up the cover *s*, whereby the guide *w*, which was in contact with the upper end of lever *m*, keeping its lower end away from cord *o*, is lifted away from said lever, freeing the latter and letting its lower end swing against cord *o*, the latter is clamped between said lever and arm *r*, and the stop *f* is at the same time lifted from before the end of the cash-box, so that the box immediately starts off on the track *b*, drawn by said cord. When the box reaches the end of the trough *n*, above the desk *e*, (running in the direction shown in Fig. 1,) it runs under cover *s*, and the upper end of the lever *m*, encountering the curved side of one of guides *w*, is swung over toward the thumb-piece b^2, the latter bearing against the opposite guide *w*, and the lower end of said lever is swung away from arm *r*, thus unclamping the box from cord *o*, and at once bringing said box to a full stop against stop *f*, opposite to the opening in trough *n*, as seen in Fig. 4. After the cashier has made the proper change the box is started on its way back by again lifting the spring-cover *s*, when the parts operate as above described, and cord *o* transports it, as before. When said box passes under the floor *h* it turns bottom side up, and its top side slides against the track *b*, which is properly grooved to let the projecting ends of lever *m* and the thumb-piece b^2 pass along therein.

What I claim as my invention is—

1. In an automatic cash-box system, the track *b*, the endless cord *o*, the cash-box *v*, and appliances, substantially as described, for attaching said box to said endless cord and for automatically detaching said box therefrom, and a suitable motor to give a motion to said cord, all combined and operating substantially as set forth.

2. In combination, the grooved track *b*, the endless cord *o*, the hinged cover *s*, having the curved guards *w*, and the stops *f* thereon, the cash-box *v*, having the arm *r*, and the spring-actuated clamping-lever thereon, and a suitable motor, substantially as set forth.

JOSEPH C. MARTIN.

Witnesses:

H. A. CHAPIN,

J. D. GARFIELD.