(No Model.)

ANTHONY ISKE & ALBERT ISKE.

CASH CAR.

No. 428,102. Patented May 20, 1890.

Fig. 1.

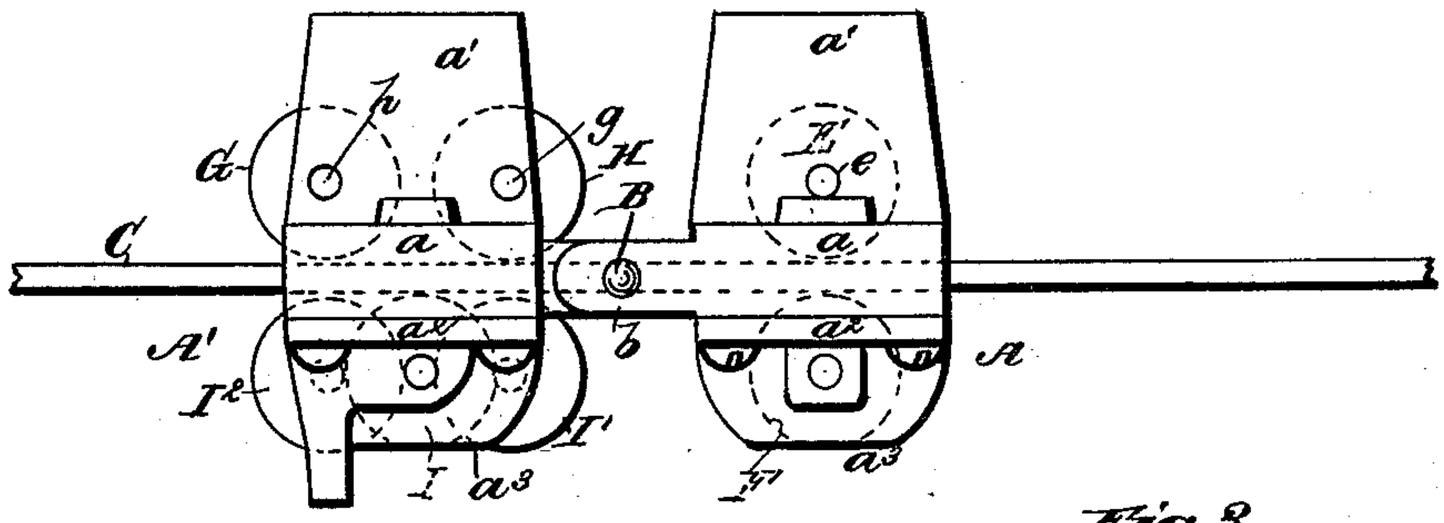


Fig. 2.

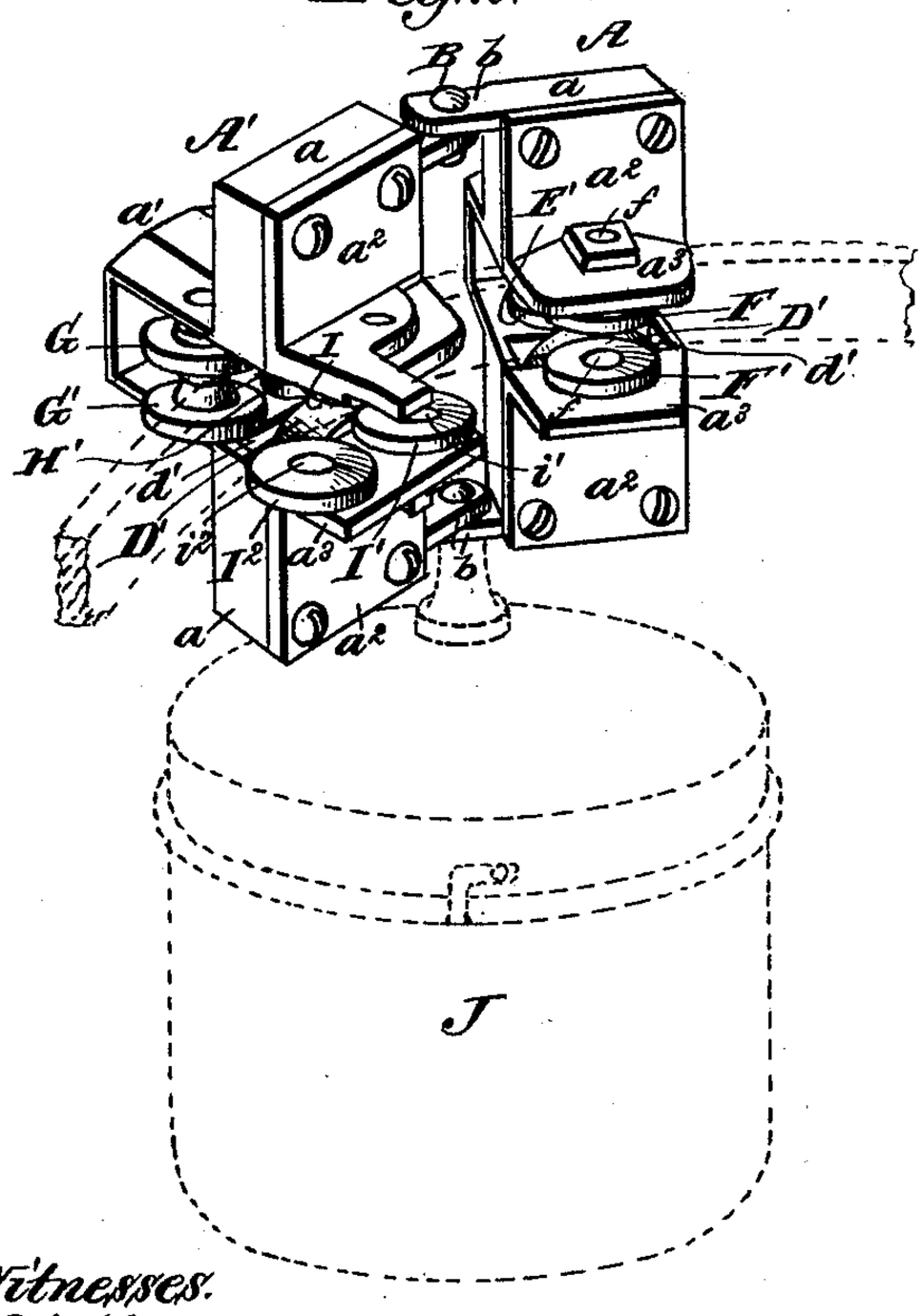


Fig. 3.

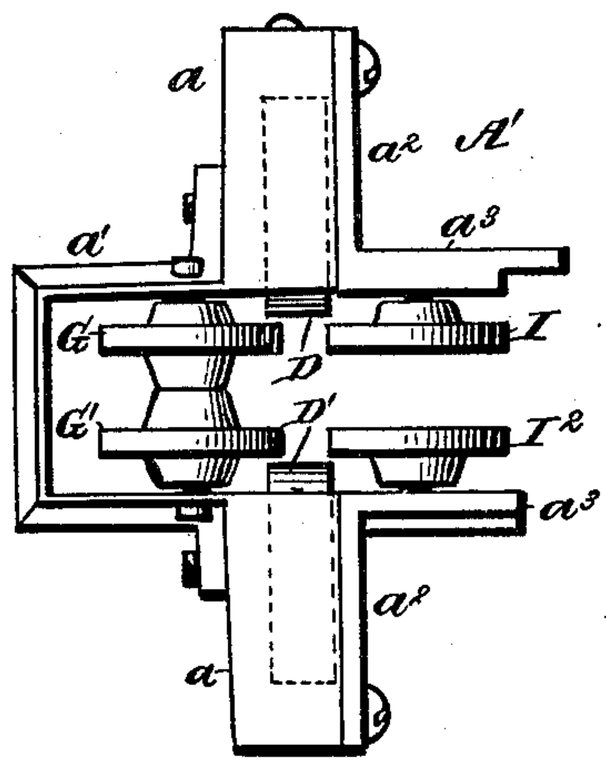
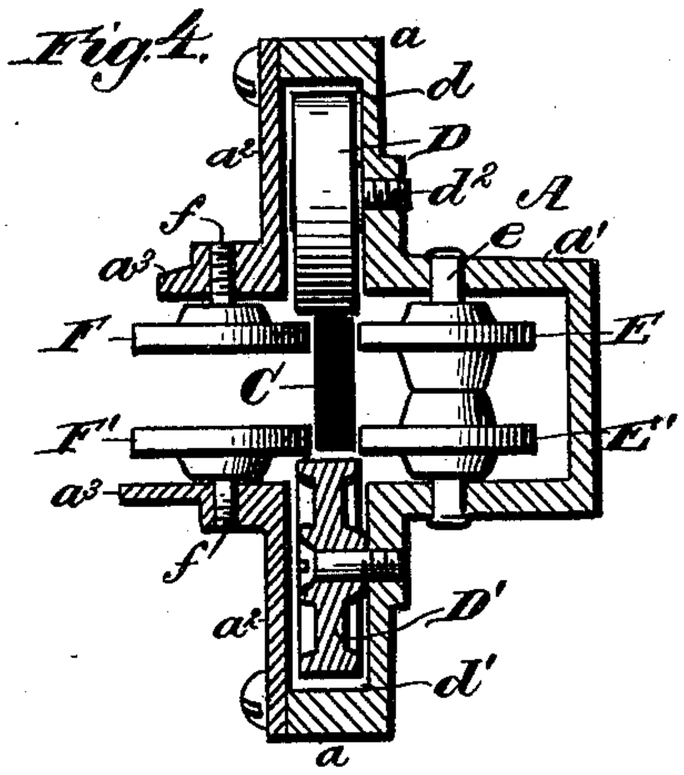


Fig. 4.



Witnesses.
Robt Ewett
William A. Mozzy.

Inventor.
Anthony Iske
and Albert Iske
by Wm H Babcock
Attorney.

UNITED STATES PATENT OFFICE.

ANTHONY ISKE AND ALBERT ISKE, OF LANCASTER, PENNSYLVANIA,
ASSIGNORS TO ISRAEL L. LANDIS, OF SAME PLACE.

CASH-CAR.

SPECIFICATION forming part of Letters Patent No. 428,102, dated May 20, 1890.

Application filed January 18, 1890. Serial No. 337,284. (No model.)

To all whom it may concern:

Be it known that we, ANTHONY ISKE and ALBERT ISKE, citizens of the United States, residing at Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Cash-Cars; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of this invention is to enable cash-cars—that is to say, traveling cash-boxes—to pass along a rail speedily and with facility, turning curves without obstruction, the rail being slightly inclined and no propulsion being required beside gravity. To this end we make use of the construction and combination of devices hereinafter particularly set forth and claimed.

In the accompanying drawings, Figure 1 represents a plan view of a supporting-frame for a cash-car embodying our invention, the two hinged sections being shown in their straight position. Fig. 2 represents a perspective view of the car, showing the hinged sections in their bent position when rounding a curve. Fig. 3 represents an end elevation of one of the hinged frame-sections, and Fig. 4 represents a vertical section of the other frame-section.

A and A′ designate, respectively, the two metal frame-sections of our cash-car. These are hinged together at the top and bottom by pintles B, passing vertically through overlapping lugs *b* of said frame-sections, thus making together a sectional frame which will bend on its center when necessary, as in turning a curve. Each section consists of an outer plate *a*, having an offset *a′*, and of two detachable inner plates a^2, one at the top of the frame, the other at the bottom, having horizontal flanges a^3, which correspond to the horizontal parts of the offset *a′*. The vertical wall of said offset is wanting between these flanges to allow this supporting attachment to be slipped upon the rail C. Otherwise, with one exception, the inner plate would be identical in construction with the outer plate, instead of there being two partial inner plates, as shown. The terms "outer" and "inner" are used with respect to the track, which has the form of a belt.

The exception above alluded to is the recessing of the outer plate at *d* and *d′* to receive two vertical rollers D D′, the former facing downward against the upper edge of the rail C, the latter facing upward against its lower edge. Their construction and arrangement are the same in each frame-section, and therefore the same reference-letters are employed. They are journaled on studs d^2, attached to back plates *a*, and turn in the direction of motion of the cash-car. The roller D of each frame-section is in effect a track-wheel, the roller D′ being a guard-wheel under the track.

The frame-section A is provided also with two rollers E E′, arranged one above the other, much like the flanges of an ordinary thread-spool, on short rod *e*, extending vertically through offset *a′* from top to bottom. On the opposite side of this frame-section similar rollers F F′ are mounted on studs *f*, extending, respectively, upward and downward from flanges a^3. The interval between these rollers F and F′ is for the purpose of allowing them to pass the rail when the cash-car is to be placed thereon. The axes of these rollers E E′ F F′ are all in the same transverse vertical plane, so that there is practically on each side but one roller with two flanges. The other frame-section A′ has two pairs of rollers G G′ H H′, turning on rods *g h* of offset *a′*, arranged side by side. Either one of these corresponds to the rollers E E′ aforesaid. At the inner or open side of this section is a roller I, corresponding to the upper roller F in the open side of section A, and turning likewise on a downwardly-extending stud *i*; but instead of a single lower roller corresponding to F′ we employ two rollers I′ and I^2, mounted on studs *i′* and i^2, and arranged on each side of a point directly below the axial line of the upper roller I. All of the rollers within the offsets *a′* bear against the rear face of the rail C. All of the other horizontal rollers bear against the front of said rail. This last is a flat plate, as shown, and set at an incline to allow the gravity of the cash-car and the box J (indicated by dotted lines) to propel themselves along said rail. For the

return of the cash-car the inclination of the rail must be reversed. This may be done by devices which form the subject-matter of another application for patent.

The arrangement of rollers above described gives at one end of my hinged frame a pressure at one point only on each side, whereas there is a pressure at two points on each side of the rail at the other end of said frame. This is not strictly necessary, but we prefer it, inasmuch as the difference in the binding of the two ends of the frame compensates for the different frictional resistance of the rail in the different parts of its curve and facilitates the passage of the cash-car around the same. The rollers of course lessen the friction as compared with any non-rotary surfaces; but the greater the number of points of contact the greater the friction and binding in the part of the frame where these occur when a curve is being rounded by the cash-car. Of course these devices may be used for any traveling box, receptacle, or vehicle, whether in store-service or otherwise. Instead of three rollers at the inner side of frame-section A′, four might be employed. Three will suffice, and will allow the supporting-frame to be slipped easily on the rail.

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

1. A cash-car provided with track-wheels, guard-wheels running under the rail, and with anti-friction rollers bearing against the sides of the rail, the frame of said car consisting of two sections hinged together, for the purpose set forth.

2. A supporting-frame for a traveling receptacle, consisting of two sections hinged together and provided with sets of rollers bearing against top, bottom, and both sides of the rail, substantially as set forth.

3. A flexible supporting-frame for a cash-car or equivalent vehicle, having sets of rollers at each end arranged to bear against a rail, the rollers of one end of said frame bearing against the sides of the rail at one point only and those at the other end of the rail bearing against it at two points, substantially as set forth.

4. The frame-section A, having on each side two horizontal rollers arranged one above the other, in combination with the frame-section A, hinged thereto, having on one side two pairs of rollers thus arranged and on the other side at least three rollers, two of these being in the same horizontal plane, substantially as set forth.

5. A frame consisting of sections A A′, each formed of an outer plate *a*, having an offset *a′* and recesses *d d′*, and detachable inner plates provided with flanges which leave an opening between them, the said frame-sections being hinged together and provided with sets of anti-friction rollers, for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

ANTHONY ISKE.
ALBERT ISKE.

Witnesses:
P. DONNELLY,
CHRISTIAN HERR.