

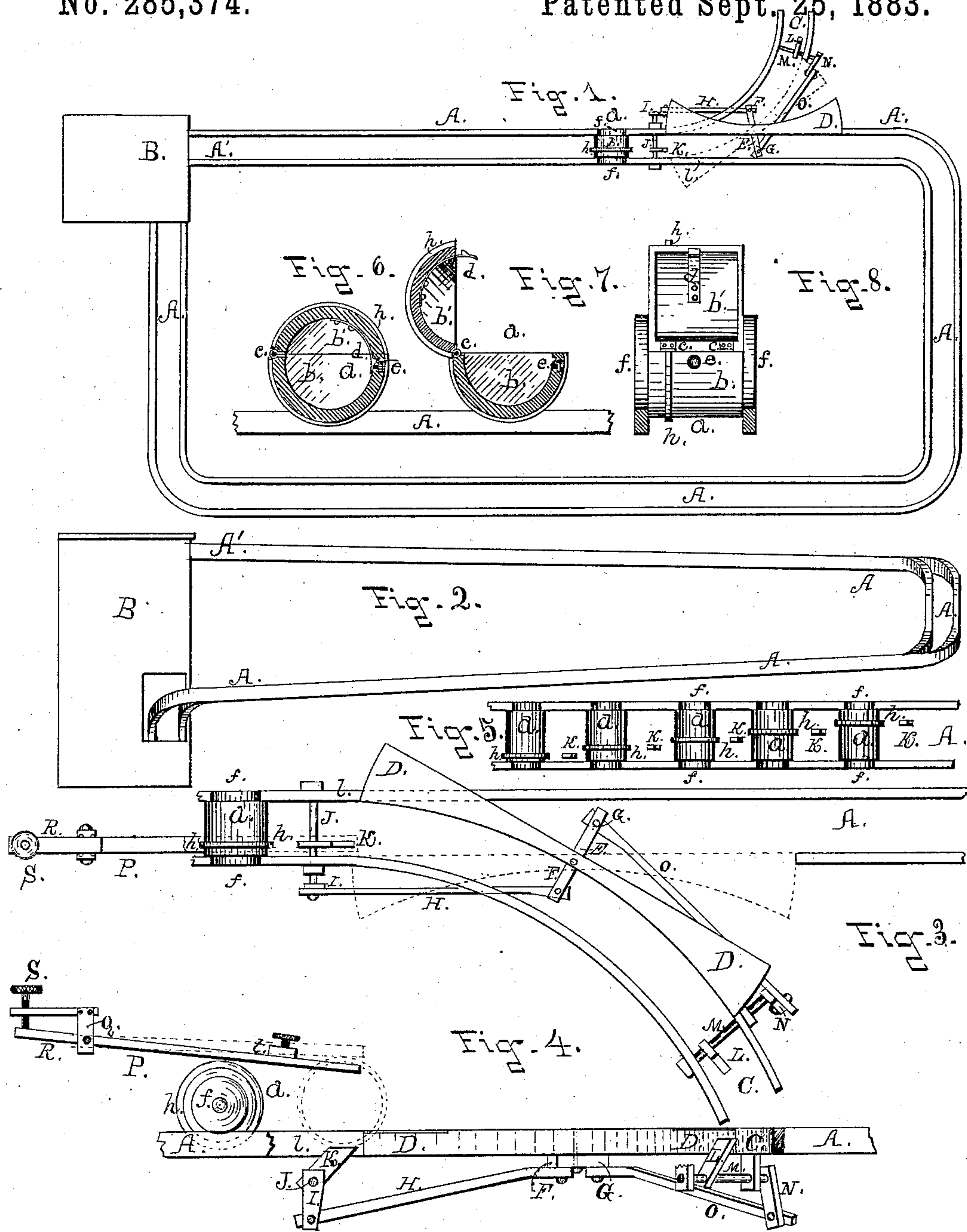
(No Model.)

H. A. BAKER.

CASH AND PARCEL CARRYING RAILWAY.

No. 285,374.

Patented Sept. 25, 1883.



ATTEST:

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CASH AND PARCEL CARRYING RAILWAY.

SPECIFICATION forming part of Letters Patent No. 285,374, dated September 25, 1883.

Application filed August 15, 1883. (No model.)

To all whom it may concern:

Be it known that I, HUDSON A. BAKER, a citizen of the United States, and residing in Bay City, in the county of Bay and State of Michigan, have invented a new and useful Improvement in Store-Service Systems and Cash and Parcel Carriers, of which the following is a specification.

My invention relates to store-service systems in which cash or parcels are carried from one place to another by an inclined railway; and it consists, chiefly, in a continuous inclined railway beginning at some station in the store and leading in any desired direction and distance, and terminating at the station from which it started, and provided with switches and mechanism for operating the same, and carriers adapted to travel on the rails, and also to operate the switches, as I hereinafter more fully describe and claim, and illustrate in the accompanying drawings, in which—

Figure 1 is a plan or top view of my improved railway. Fig. 2 is a side view of the same. Fig. 3 is a top view or plan of my improved switch. Fig. 4 is a side view of the same. Fig. 5 shows the manner in which different carriers operate different switches. Fig. 6 is a section of a carrier closed. Fig. 7 is a section of a carrier open. Fig. 8 is a side view of a carrier open.

A represents a line of railway beginning at the desk or table B and in an elevated position, and leading outward in any direction, and having made any desired circuit ends at the station from which it started. This railway A is placed on a continuous incline from the starting-point A', so that a carrier adapted to travel on the rails will be propelled by its own weight along the line around the room and to the terminus or lower end of the rails at the table near the starting-point.

a is a carrier adapted to travel on the track A, and is composed of a cylindrical body, b, divided longitudinally near the center, the upper portion, b', forming a lid, and is attached to the lower portion, b, by the hinges c, and when closed is held to the lower portion, b, by the spring-catch d, which is fastened in the proper position to the lid b', and when the lid is closed the catch d is released by pushing inward on the button e, which extends through

the part b and acts on the spring-catch d. At each end, and properly secured to the lower portion, b, of the body, are the wheels f, which revolve independent of the body. The diameter of the wheels being somewhat smaller than that of the body b, and the length of the body b being the same as the distance between the rails, it serves to keep the carrier on the rails. Around the body b is a raised part, h, which acts on the lever of the switch, (shown in Figs. 3 and 4,) A representing the main line of railway, and C the side track, which intersects the main line.

D is a switch-rail, one side of which is curved to conform to the curve of the switch, while the opposite side is straight or so shaped as to conform to the main line. This switch-rail D is pivoted near the center and at a suitable point, so that it will properly intersect with either the curved switch or the main line, as may be desired.

Beneath and at right angles with the switch-rail D, and firmly secured to the same, is the cross-piece E, forming the arms F and G. To the outer end of the arm F is pivoted the connecting-rod H, the opposite end of the rod H being pivoted to the lower end of the downward-projecting lever I, the upper end of this lever I being secured firmly to the outer end of the actuating-shaft J, which is located across and beneath the rails just forward of the switch.

At a suitable point between the rails on the shaft J is firmly attached the lever K, which extends upward and forward to a proper distance, so that when a traveling carrier passes along the projection h acts on the lever K and presses it downward and forward, and thereby moving the lever I backward, together with the connecting-rod H and arm F, and thereby causing the switch-rail D to move over and intersect with the rail l of the main line A and turn the carrier on the switch. After the carrier has passed over the switch-rail D it comes in contact with the lever L, which is placed in a suitable position and firmly fastened to the oscillating shaft M, placed across beneath the rails, and at the outer end of the shaft M is secured the lever N, which, projecting downward, is pivoted to the end of the connecting-rod O, the other end of the connecting-

rod O being pivoted to the arm G of the cross-piece E, so that when the carrier passes over the lever L the lever L is actuated forward and downward, and, by means of the connecting parts, serves to move the switch-rail D back to its former position in line with the main track, so that another carrier (not designed to operate the switch-rail) will pass by on the main line. By locating these raised portions *h* on different parts of the surface of the carrier *a* different switches may be operated by the different carriers, and each carrier will pass by any switch it is not designed to open, as illustrated in Fig. 5, and a carrier which has operated a switch may be placed on the main track at any point beyond the switch, and it will then travel to the terminus of the main line. Directly over the lever K is placed a brake, P, which extends back for some distance, and is pivoted to a suitable stationary piece, Q, near the end, leaving the arm R projecting in front of the piece Q and over the arm R, and in a suitable stationary piece is located the set-screw S, which adjusts the brake P to bear properly on the passing carrier as it operates the switch, and also, if desired, can be used for retarding the motion of a swiftly-traveling carrier. The power of the brake P is adjusted by the weight *t*, located near the lower end of the brake, and, by moving the weight *t* nearer the lower end of the brake, causes the brake to bear with greater force on the traveling carrier.

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

1. In a cash-carrier, one or more continuous

inclined railways starting from the cashier's desk, making a circuit around past stations occupied by salesmen, and terminating at the station from which it started, the point of ending being lower than the point of starting, substantially as described and shown. 40

2. In a cash-carrier, in combination with a two-railed track, a number of cars or carriers of cylindrical form, provided on their outer circumference with a raised portion or ring so situated between the two ends that it will register with the lever that actuates the switch at the particular station at which such carrier is designed to stop, substantially as described and set forth. 50

3. In an automatic switch for a cash-railway, the movable switch-rail D, pivoted at a point near the center and having one side curved to conform to the curve of the side track, and having the opposite side straight to conform to the line of the main track, and adapted to intersect with either track, substantially as described and set forth. 55 60

4. As a means of operating an automatic switch in a cash-railway, a cylindrical carrier, *a*, provided with a portion of its surface raised and adapted to engage with and actuate the lever K, which is located below the track, substantially as described and shown. 65

5. The brake P, provided with a set-screw, S, and weight T, in combination with the carrier *a* and the track A, substantially as shown and described.

HUDSON A. BAKER.

Witnesses:

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