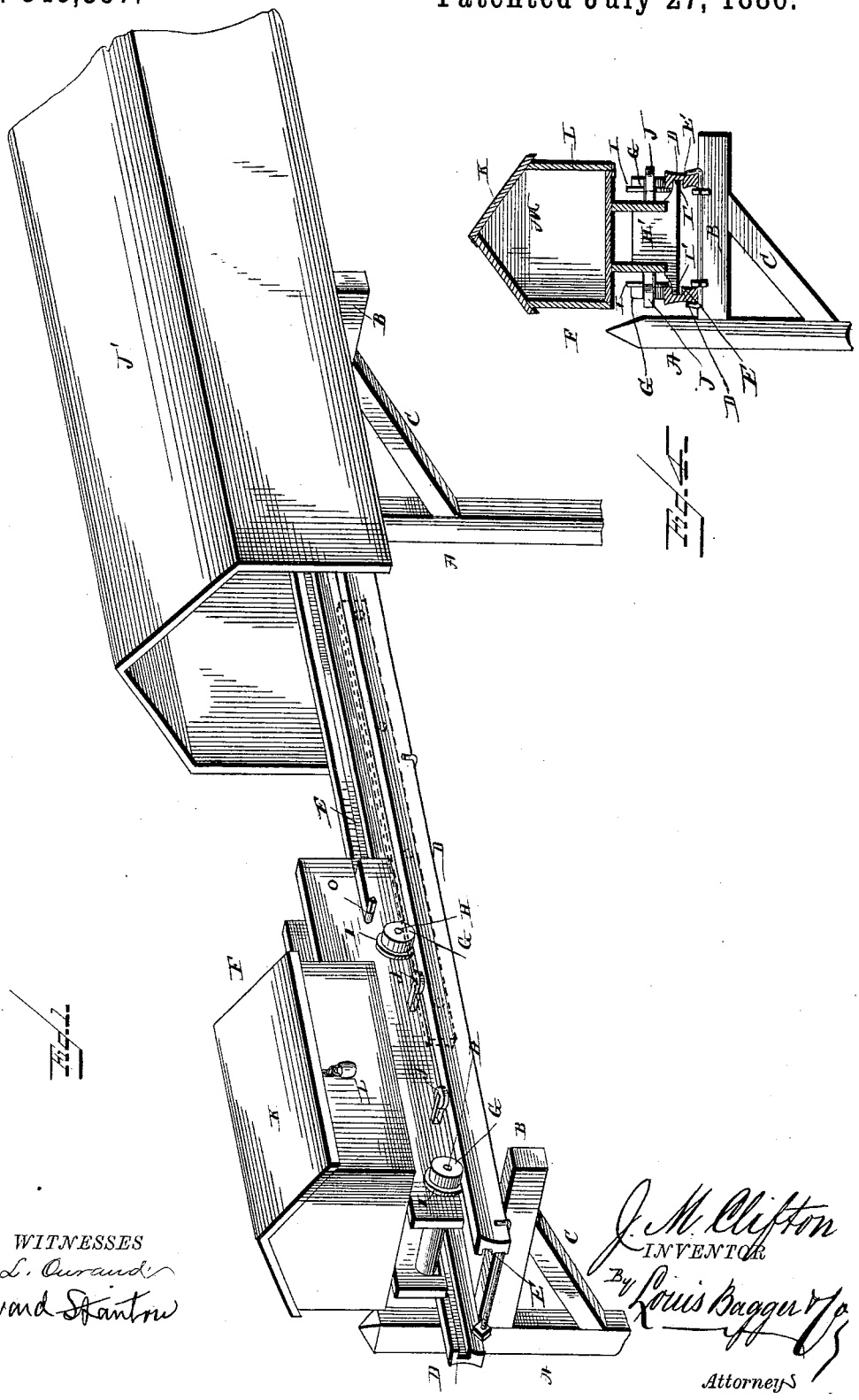
(No Model.) 2 Sheets—Sheet 1.

J. M. CLIFTON.

MAIL CARRIER.

No. 346,357. Patented July 27, 1886.



WITNESSES
F. L. Ourand
Edward Stanton

J. M. Clifton
INVENTOR
By Louis Bagger & Co
Attorneys

(No Model.) 2 Sheets—Sheet 2.

J. M. CLIFTON.

MAIL CARRIER.

No. 346,357. Patented July 27, 1886.

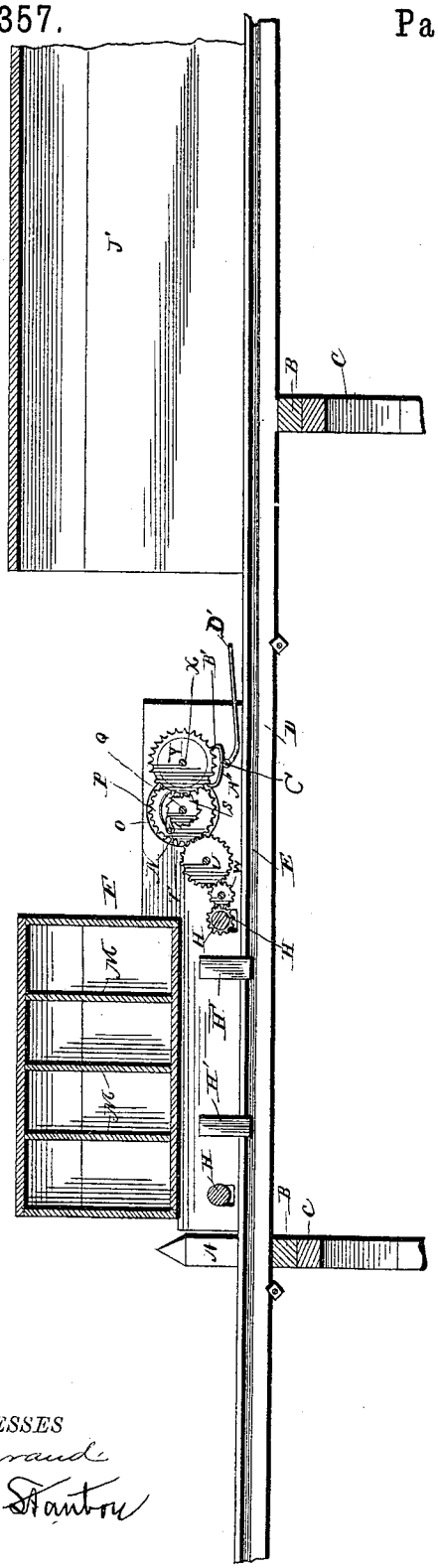


Fig. 2.

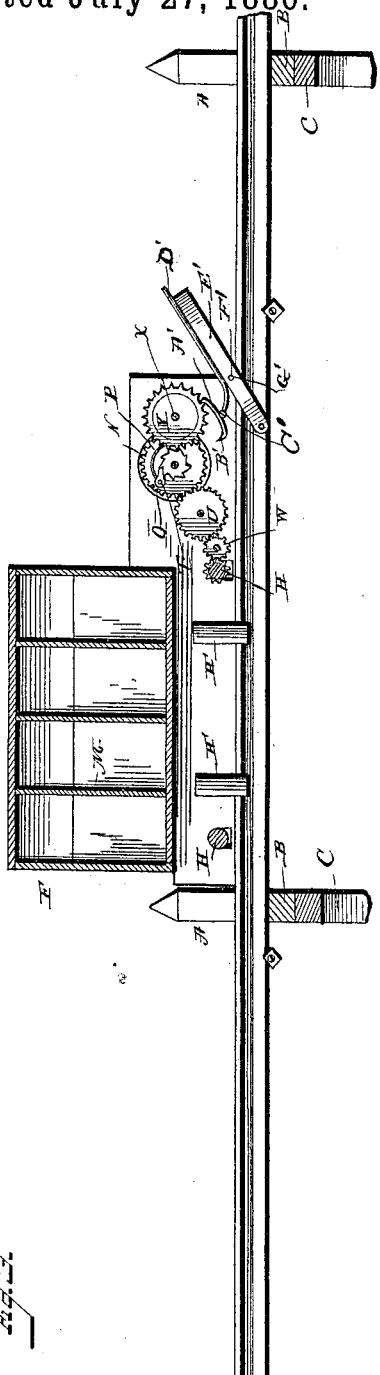


Fig. 1.

WITNESSES

F. L. Ourand.

Edward Stanton

INVENTOR

J. M. Clifton,

By Louis Bagger & Co.

Attorneys

UNITED STATES PATENT OFFICE.

JACKSON MARION CLIFTON, OF AUNT, TENNESSEE.

MAIL-CARRIER.

SPECIFICATION forming part of Letters Patent No. 346,357, dated July 27, 1886.

Application filed February 20, 1886. Serial No. 192,717. (No model.)

To all whom it may concern:

Be it known that I, JACKSON MARION CLIFTON, a citizen of the United States, and a resident of Aunt, in the county of Hawkins and State of Tennessee, have invented certain new and useful Improvements in Mail-Carriers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view, showing a section of the elevated track for my improved mail-carrier with a car upon the track, and showing a portion of the track covered, to protect the track. Fig. 2 is a longitudinal vertical sectional view of the car standing upon the track. Fig. 3 is a similar view showing the car at a station, and Fig. 4 is a transverse sectional view of the track and car.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to devices for carrying small objects upon an elevated track, especially adapted for the purpose of carrying mail from one post-office to another; and it consists in the improved construction and combination of parts of the track and car, as hereinafter more fully described and claimed.

In the accompanying drawings, the letters A indicate upright posts, which are arranged at suitable distances along the line at which the route is to be, and these posts are provided with outwardly-projecting arms B, supported by oblique braces C, the said arms and braces forming supports for the track, which consists of the rails D D. These rails consist of flat metallic bars, secured upon the arms with their edges upward, and formed upon their inner sides with longitudinal grooves E.

The car F has four or more wheels, G, secured upon axles H, journaled in suitable bearings in the under side of the car, and these wheels are provided with flanges I upon their inner sides, similar to the flanged wheels of railway-car wheels, the said flanges bearing against the inner sides of the rails and preventing the car from jumping off the track. At sharp curves the sides of the car may be provided with wheels J, which may bear against side rails, furthermore preventing the car from jumping off the track. (Shown in dotted lines in Fig. 1.) The rear portion of the car is formed into the shape of a case having a hinged cover or door, K, and a hinged side, L, and the interior of the case is preferably subdivided into pigeon-holes by means of partitions M, one compartment or pigeon-hole serving for the reception of the mail for one post-office. These compartments may, if desired, be closed by suitable doors provided with individual doors, and suitable slits or apertures for dropping letters or other mail into them, so that only the mail for the desired post-office can be touched by one postmaster or other person in charge. The forward end of the car has a spring-barrel, N, journaled in it, which barrel has a clock-spring, O, secured within it, and which barrel is provided with a cog-wheel, P, and the shaft Q has one end shaped to receive a suitable key, by means of which the spring may be wound upon the shaft, the shaft having a suitable ratchet-wheel, S, engaged by a pawl, T, upon the side of the cog-wheel, so that the spring may be wound up without interferring with the cog-wheel, while the shaft cannot be revolved by the spring without revolving the cog-wheel with it, in the same manner as the main shaft and main cog-wheel in a watch or clock. The main cog-wheel communicates motion through a suitable train of cog-wheels and pinions, U and W, to the axle of the forward pair of wheels, revolving the said axle, and the cog-wheel meshes with a pinion, V, upon a shaft, X, which shaft is provided with a cog-wheel, Y, the cogs or teeth of which are engaged by an anchor or stop, A′, having its ends bent inward to form lips B′, engaging the spaces between the cogs, and secured at its middle upon a rocking shaft, C′, journaled in the casing of the car. This shaft is provided with forwardly-projecting arms D′, which will force the forward lip of the anchor between the cogs of the cog-wheel when they are raised, stopping the revolutions of the cog-wheel. The pinion upon the forward or drive axle may be connected to said axle by means of an ordinary ratchet, for allowing the axle and its wheels to revolve after the works driving the axle have stopped.

At each station or post-office a board or wing,

E′, is hinged at its lower end between the track, and may be supported in an inclined position by means of a pin or plug, F′, fitting in a perforation, G′, in the edge of the board, which pin may rest upon the track and thus support the board in an inclined position pointing in either direction.

As, now, the car is started from one station or post-office, and after traveling over the length of the track to the next station arrives at the inclined board, the said board will raise the forwardly-projecting arms at the end of the cars, forcing the forward lip of the anchor or stop between the cogs of the cog-wheel and thus stop the revolutions of the works, stopping the car.

Cross-bars H′ are secured under the car, and the flat reduced ends I′ of these bars project at the sides of the car and project into the grooves upon the inner sides of the rails, preventing the car from getting off the track.

At places on the track where the track is exposed to obstruction from snow, sleet, or other similar causes, I construct a casing, J′, over the track, which will protect it from all obstructions and interference, forming a polygonal tube around the track, and this tubular casing will also serve to strengthen the track, so that the posts may be placed at greater distances apart than where the track is not provided with the casing.

As it is of great importance that the rails forming the track do not spread, I connect them by clamps or rods, placed suitable distances apart, as shown in Figs. 1 and 4, thereby insuring parallelism of the track, and always keeping both rails the proper distance apart, so as to fit the flanged wheels of the car. I desire it to be understood, however, that I do not limit myself to any particular means or method for accomplishing this object.

The cogs of the forward cog-wheel, which is engaged by the anchor or stop, are preferably formed with inclined edges, and the rear lip upon the stop is bent obliquely, so that the cogs slipping over the oblique lip will vibrate the forwardly-projecting arms, causing the said arms and the lip to produce a sound, which will serve as an alarm for notifying persons of the arrival of the car, as well as for driving off birds, which may perch upon the track and thus obstruct it.

When the car and apparatus is in use, the car is filled with mail distributed into the several compartments and closed. The works are wound up, while the forward arms are held raised, either by hand or by the inclined board, against which the forward end of the car is placed. By now letting down the board or otherwise releasing the arms, the works will start the car, which will be conveyed to the next station, where the inclined board has been placed in position for stopping the car. The contents of the car are now attended to and the works again wound, whereupon the board is let down and the car allowed to pass to the next station, as before, or the car may be reversed upon the track and sent back to the starting-point, as desired.

Although I have shown the car provided with works set in motion by a spring, it is obvious that other means of propulsion may be resorted to.

The apparatus may be used as a means for conveying parcels and mail from one station to another across the country, or it may be used in stores as a cash and parcel carrier for conveying parcels and cash from the sales man or woman to the cashier and to the place where parcels are wrapped up, and for conveying the wrapped parcels and the change back to the sales man or woman, the propelling-works enabling the car to pass up inclines and to propel itself without any necessity for raising the track at the starting point or otherwise impelling the car at the start.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination, with an elevated track, a car traveling upon the track, works for revolving an axle of the car and formed with a cog-wheel at the forward end of the car, revolving with the works, a stop engaging the forward portion of the cog-wheel between the cogs and having forwardly-projecting arms secured to it for raising the stop into engagement with the cog-wheel, and means secured to the track for operating said arms, as and for the purpose shown and set forth.

2. The combination of an elevated track, a car traveling upon the track, works for revolving the forward axle of the car, provided with a cog-wheel at the forward end of the car, having cogs with inclined edges, a stop or anchor secured upon a shaft and having inwardly-bent ends engaging the cog-wheel from below at its forward and rear side and provided with forwardly-projecting arms, and a board hinged at its lower edge between the rails of the track and having a plug in a perforation in one side edge resting upon the track and supporting the board in an inclined position, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JACKSON MARION CLIFTON.

Witnesses:

COMADORE CARTER,

THOMAS ANDERSON HARREL.