

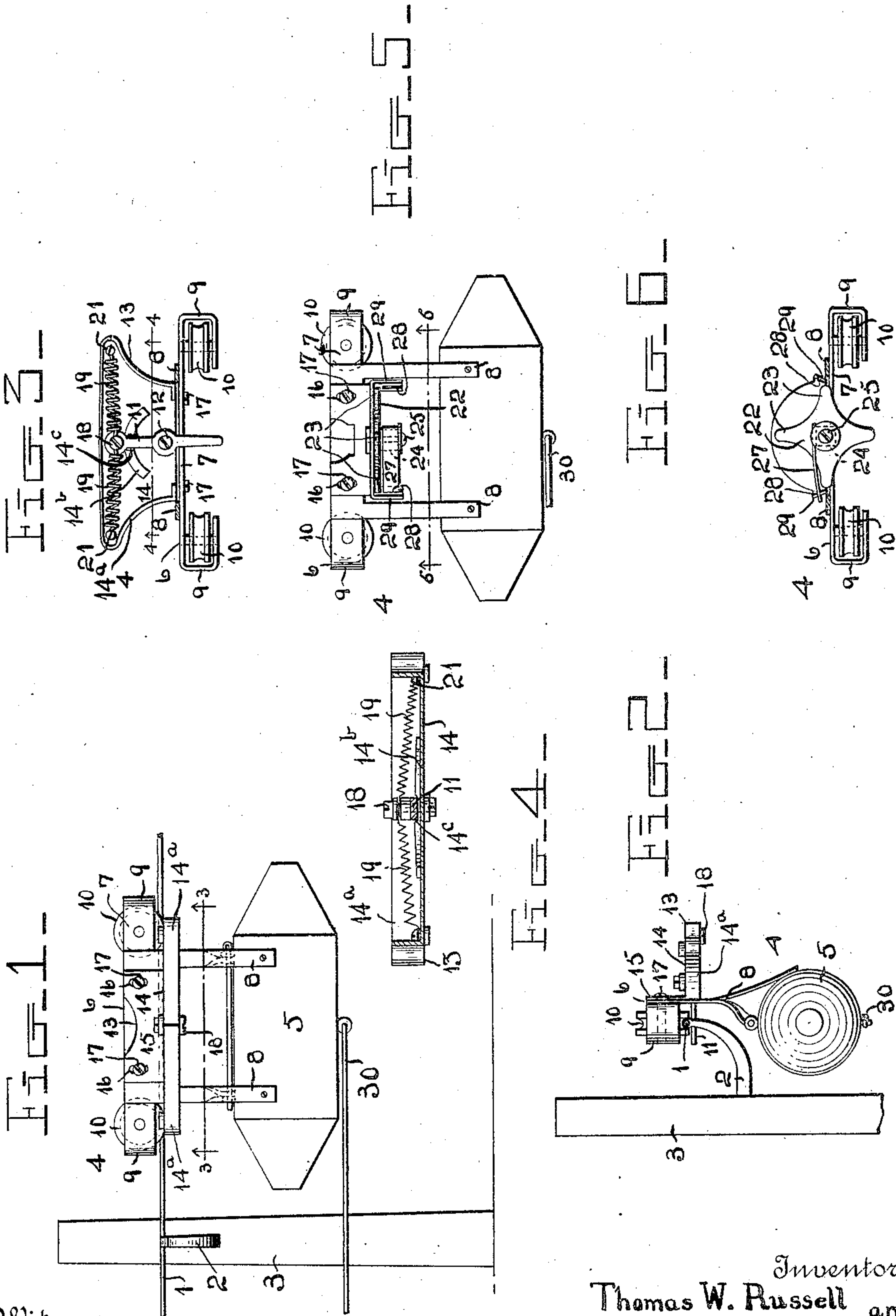
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T. W. RUSSELL & R. SAYLER.

MAIL CARRIER.

APPLICATION FILED JULY 26, 1906.



Witnesses
L. B. James
J. L. Britton

Inventors
Thomas W. Russell and
Reuben Sayler
by *H. B. Wilson*
Attorneys

UNITED STATES PATENT OFFICE.

THOMAS W. RUSSELL AND REUBEN SAYLER, OF UNION BRIDGE,
MARYLAND.

MAIL-CARRIER.

No. 844,960.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, THOMAS W. RUSSELL and REUBEN SAYLER, citizens of the United States, residing at Union Bridge, in the county of Carroll and State of Maryland, have invented certain new and useful Improvements in Mail-Carriers; and we do 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.

Our invention relates to improvements in elevated carriers for use in transporting mail-matter and for similar purposes.

The object of the invention is to provide a carrier adapted to travel upon an elevated track, with means whereby it will be retained upon the same, so that it cannot jump off at places where the track is curved or irregular in shape.

With the above and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a side elevation of our improved elevated carrier, showing it mounted upon a track. Fig. 2 is an end elevation of the same. Fig. 3 is a detail horizontal sectional view taken on the plane indicated by the line 3 3 of Fig. 1 and looking upwardly in the direction of the arrow. Fig. 4 is a detail sectional view taken on the plane indicated by the line 4 4 of Fig. 3. Fig. 5 is a side elevation of a slightly-modified form of the carrier, and Fig. 6 is a detail horizontal sectional view taken on the plane indicated by the line 6 6 of Fig. 5.

Referring to the drawings by numeral, 1 denotes an elevated track supported by brackets 2 from uprights 3 and upon which is adapted to travel our improved carrier 4. This carrier comprises a container or receptacle 5 of any suitable form and construction. This receptacle is suspended from the track by a carriage 6, which comprises a horizontal longitudinally-extending bar or plate 7 and depending hangers 8, to which the receptacle 5 is connected. The bar 7 has its ends 9 bent into U form to receive grooved wheels 10, which are journaled in said ends 9 and are adapted to run upon the track 1.

In order to prevent the wheels 10 from

jumping the track as the carrier travels over the same, we provide a detent 11, which projects transversely beneath the track and centrally between the two wheels. As shown in Figs. 1 to 3, inclusive, this detent 11 is in the form of a lever which is pivoted, by means of a screw or the like 12, upon the under side of a bracket 13, which latter is vertically adjustable upon the carrier frame or carriage 6. As shown, the bracket 13 is in the form of an angle metal plate which has a detent-lever pivoted centrally upon the bottom of its horizontal portion 14, and its vertical portion 15 formed with vertically-extending slots 16 to receive bolts or the like 17, which also pass through openings formed in the bar 7 and are adapted to clamp the bracket 13 in an adjusted position. By making the bracket adjustable in this manner the elevation of the detent-lever 11 may be regulated so that it will be disposed below the track 1 and just out of contact with the same. The pivot 12 for the detent-lever is located intermediate its ends, and upon one of the ends of said lever is a screw or stud 18, to which are connected the outer ends of two coil-springs 19. These springs extend in opposite directions and have their opposite ends attached to screws or studs 21, provided in the outer ends of the horizontal portion 14 of the bracket-plate 13.

Surrounding the horizontal portion 14 of the bracket-plate is a guard-flange 14^a, which serves to protect the springs 19 and the detent-lever. The latter is resiliently retained in a position at right angles to the track by said spring, which permits it to yield as it strikes the track-supporting bracket-arm 2 in order to pass the same. In order to prevent any liability of the detent-lever being turned by contacting with the track as the carrier moves rapidly over the same, I provide upon the bottom face of the horizontal portion 14 of the bracket 13 a segmental-shaped guard or cam 14^b. This guard is arranged concentric with the pivot 12 and has at its center a notch or seat 14^c to receive the detent-lever when the latter is at right angles to the track. It will be noted upon reference to Fig. 4 that the springs 19 tend to hold the detent-lever in said seat 14^c, and thus counteract the danger of the lever being swung when it contacts with the track 1 as the carrier is propelled along the track. The notch

or seat 14^c is, however, not deep enough to prevent the lever from swinging when it strikes one of the track-supporting arms 2. The guard 14^b preferably diminishes in thickness from the notch or seat at its center to its two ends. It will be seen that the detent-lever will effectively retain the grooved wheels 10 upon the track 1, no matter how curved or irregular and uneven the track may be and no matter how much the carrier may swing.

Instead of employing the detent-lever 11 we may substitute therefor the detent-wheel 22. (Shown in Figs. 4 and 5 of the drawings.) This wheel is formed with a plurality of detent-arms 23 and has a polygonally-shaped hub portion 24, which is pivoted by a screw or the like 25 upon the bottom of an angle-bracket 26, which corresponds to the bracket 13, but is slightly different in shape. The polygonally-shaped hub portion 24 has as many faces, which latter may be slightly concave, if desired, as the wheel 22 has arms 23, and said faces are adapted to be alternately engaged by the free end of a flat spring 27, which is secured in a notch or kerf 28, formed in a depending lug 29 upon the angle-bracket 26. Two of the lugs 29 are preferably provided, and, if desired, two of the springs 27 may be employed. The operation of this form of detent will be readily understood. As the carrier passes the track-supporting brackets or hangers 2 the arms 23 will successively engage them, and the wheel 22 will be given a partial rotation as each one is passed, the spring 27 holding the wheel so that one of the arms projects beneath and at right angles to the track at all times.

While the invention may be employed upon carriers of any description which travel upon elevated tracks, it is especially adapted for use upon tracks which extend from a house or dwelling to the road along which a mail-man passes, so that the carrier 4 is adapted for transporting mail-matter between such points. The carrier may be propelled in any suitable manner; but, as shown, two cords or cables 30 are attached to an eye upon the body or receptacle 5 and pass in opposite directions over suitable guides to a suitable mechanism (not shown) for operating them to move the carrier along the track in either direction.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as defined by the appended claims.

Having thus described our invention, what

we claim as new, and desire to secure by Letters Patent, is—

1. A carrier of the character described comprising a supporting-frame, grooved wheels mounted in said frame, a swinging detent arranged upon said frame, and a swinging, spring-controlled detent projecting between said wheels for retaining the latter upon their track.

2. A carrier of the character described comprising a supporting-frame, grooved wheels mounted in said frame, a swinging detent arranged upon said frame, a swinging, spring-controlled detent projecting between said wheels for retaining the latter upon their track, and means for adjustably mounting said detent upon said frame.

3. A carrier of the character described comprising a supporting-frame, a grooved wheel journaled therein, a transversely-extending detent-lever, and springs connected to said lever to hold it in its transverse position.

4. A carrier of the character described comprising a supporting-frame, a grooved wheel journaled therein, a vertically-adjustable support upon said frame, a detent-lever pivoted upon said support, and springs connected to said lever for holding it transversely of said wheel.

5. A carrier of the character described comprising a supporting-frame, curved wheels journaled therein, a vertically-adjustable bracket upon said frame, a detent-lever pivoted upon said bracket, and springs connected to said lever and to said bracket, substantially as described.

6. The combination with a track having bracket-arms for supporting same, of a carrier, a grooved wheel upon said carrier, to travel upon said track, and a resilient detent upon said carrier adapted to project beneath said track to retain said wheel thereon, and to swing past said bracket-arms.

7. A carrier of the character described having a grooved supporting-wheel, a swinging detent for retaining said wheel upon its track, and a guard for holding said detent in a plane at right angles to the track for said wheel.

8. A carrier of the character described having a grooved supporting-wheel, a swinging detent for retaining said wheel upon its track, a segmental, cam-shaped guard having a seat to receive said detent, and springs for holding said detent in said seat.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

THOMAS W. RUSSELL.
REUBEN SAYLER.

Witnesses:

L. E. STAUFFER,
LESLIE REPP.