

UNITED STATES PATENT OFFICE.

JOHN W. THEW, OF MARION, OHIO.

STORE-SERVICE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 518,431, dated April 17, 1894.

Application filed December 11, 1893. Serial No. 493,382. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. THEW, of Marion, in the county of Marion and State of Ohio, have invented certain new and useful Improvements in Store-Service Apparatus; and I 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 pertains to make and use the same.

My invention relates to improvements in dispatch or store-service apparatus, and it appertains especially to parcel or cash-carrying apparatus wherein two lines, located the one above the other, are employed, the upper or track-line being stretched taut, and the carrier being propelled from station to station by the spreading of the lower line.

The object of my invention is to construct apparatus of the variety indicated, that is simpler and cheaper in construction, and more durable than the apparatus heretofore devised, and, with this object in view, the invention consists in certain features of construction and in combinations of parts hereinafter described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a station of the apparatus, partly in section to more clearly show the construction. Fig. 2 is an enlarged elevation in section on line 2—2, Fig. 1, and Fig. 3 is a section on line 3—3, Fig. 2.

I would here remark that the construction of the apparatus, at each of the stations between which the cash or parcel carrier travels being alike or substantially alike, it is not considered necessary to show more than one station. At each of the stations between which the cash or parcel-carrier travels is provided a hanger or support secured to the ceiling or other support overhead, said hanger being suitably constructed of two tubular pieces A and A' suitably secured together, the lower section being open at its lower end, as shown at A². Rigid with said hanger, in the present instance, with the lower section of the hanger, is an arm or bracket α , that, at its outer end, terminates in a vertical plate, α' , that is preferably circular, as shown.

B represents one of the cash or parcel-carriers of the apparatus, said carrier having wheels B' mounted upon the upper or track-wire C in the usual manner, and having also

a wheel B² that engages the under side of the lower line D, by spreading which, as will hereinafter more fully appear, the carrier is propelled from station to station. The upper or track-wire or line C is secured, at its ends, to any suitable stationary object, being stretched between the stations in any suitable manner, the end of the track-wire shown being secured to arm or bracket α of the supporting-hanger. The lower or propelling line D, of course, extends from station to station. A suitable yielding stop is provided for arresting the carrier as it arrives at a station, and holding it at the station until released, or again propelled away from the station, as hereinafter described. The stop, comprises, among other pieces, a plate E preferably circular and parallel with and a suitable distance from the outer side of plate α' , and suitably supported from said plate α' , being shown mounted loosely upon bolts or screws G suitably secured to plate α' , the screw-threaded shanks of the bolts or screws engaging correspondingly-threaded holes α^2 in said plate α' , and the stop comprises, moreover, springs g suitably confined between plates α' and E, said springs being preferably of the coiled variety shown and mounted upon bolts G. The stop, furthermore, comprises preferably segmental pieces H of elastic material, such as rubber, and suitably secured to the outer face of plate E. Said segmental pieces are arranged concentrically about the center of plate E and cut away at their inner edges, as at H', so as to form a hole or opening h that is adapted to be entered by a tapering projection b on the cash or parcel-carrier, said tapering projection being reduced in size at the larger end of the tapering portion to form a gradual shoulder b' that is adapted to engage the back side of the aforesaid elastic segments and lock the carrier in position at the station, the material of which the segments are composed being of course compressed upon the entrance of the shouldered projection b of the carrier until the shoulder of said projection arrives at the back side of the elastic segments, whereupon the compressed portions of the elastic segments are free to expand and engage the aforesaid shoulder on the tapering projection of the carrier and thereby, as already indicated, lock the carrier in position at

shouldered projection adapted to enter said hole and lock the carrier to the stop, the size of said hole being such relative to the tapering projection on the carrier that the material of the elastic section of the carrier shall be compressed as the aforesaid hole is entered by the tapering projection, and shall be free to expand upon the engagement of the back side of said elastic section by the shoulder of the projection on the carrier, the aforesaid plate of the stop being perforated to accommodate the operation of the locking-projection on the carrier, substantially as set forth.

4. A store-service-apparatus comprising a track, a cash or parcel-carrier mounted upon said track, suitable means for propelling the carrier from station to station, a stop for retaining the carrier upon its arrival at a station, said stop comprising a plate *a'* and another plate *E* supported from and a suitable distance forward of plate *a'*, one or more springs confined between said plates, elastic material suitably secured to the front face of plate *F*, with a hole or perforation *h* formed centrally thereof, and the carrier being provided with tapering projections *b* adapted to enter, respectively, hole *h* in the stop of the respective station and lock the carrier at the station by the engagement of the shoulder of the projection with the back side of the elastic material of the stop, and plate *E* of the stop being perforated to accommodate the operation of the respective locking projection of the carrier, substantially as set forth.

5. In store-service-apparatus, the combination with a track, carrier mounted upon said track and suitable means for propelling the carrier, of a stop for arresting the carrier upon its arrival at the station, said stop comprising a plate *E* and elastic segments suit-

ably secured to and arranged upon said plate in such a manner as to form a hole *h* centrally between the segments, said segments being adjustable radially, and tapering and shouldered locking projection on the carrier for entering said hole and locking the carrier to the stop, plate *E* being perforated to accommodate the operation of the locking-projection on the carrier, substantially as set forth.

6. In store-service-apparatus, the combination with a track, carrier mounted upon said track, and suitable means for propelling the carrier, of a stop for arresting the carrier upon its arrival at the station, said stop comprising a stationary-plate *a'*, another plate *E* supported from plate *a'* by means of bolts or screws, coiled-springs confined upon said bolts or screws between the plates, elastic segments *H* mounted upon said bolts against the front side of plate *E* and arranged upon said plate in such a manner as to form a hole *h* centrally between the segments, the bolt-holes in the aforesaid segments being elongated radially to accommodate a radial adjustment of the segments, a plate *I* for retaining the segments in the desired adjustment, and a tapering and shouldered locking projection on the carrier for entering said hole and locking the carrier to the stop, plates *E* and *I* being perforated to accommodate the operation of the locking projection of the carrier, substantially as set forth.

In testimony whereof I sign this specification in the presence of two witnesses, this 1st day of November, 1893.

JOHN W. THEW.

Witnesses:

FRED E. GUTHERY,
H. G. REISER.



(No Model.)

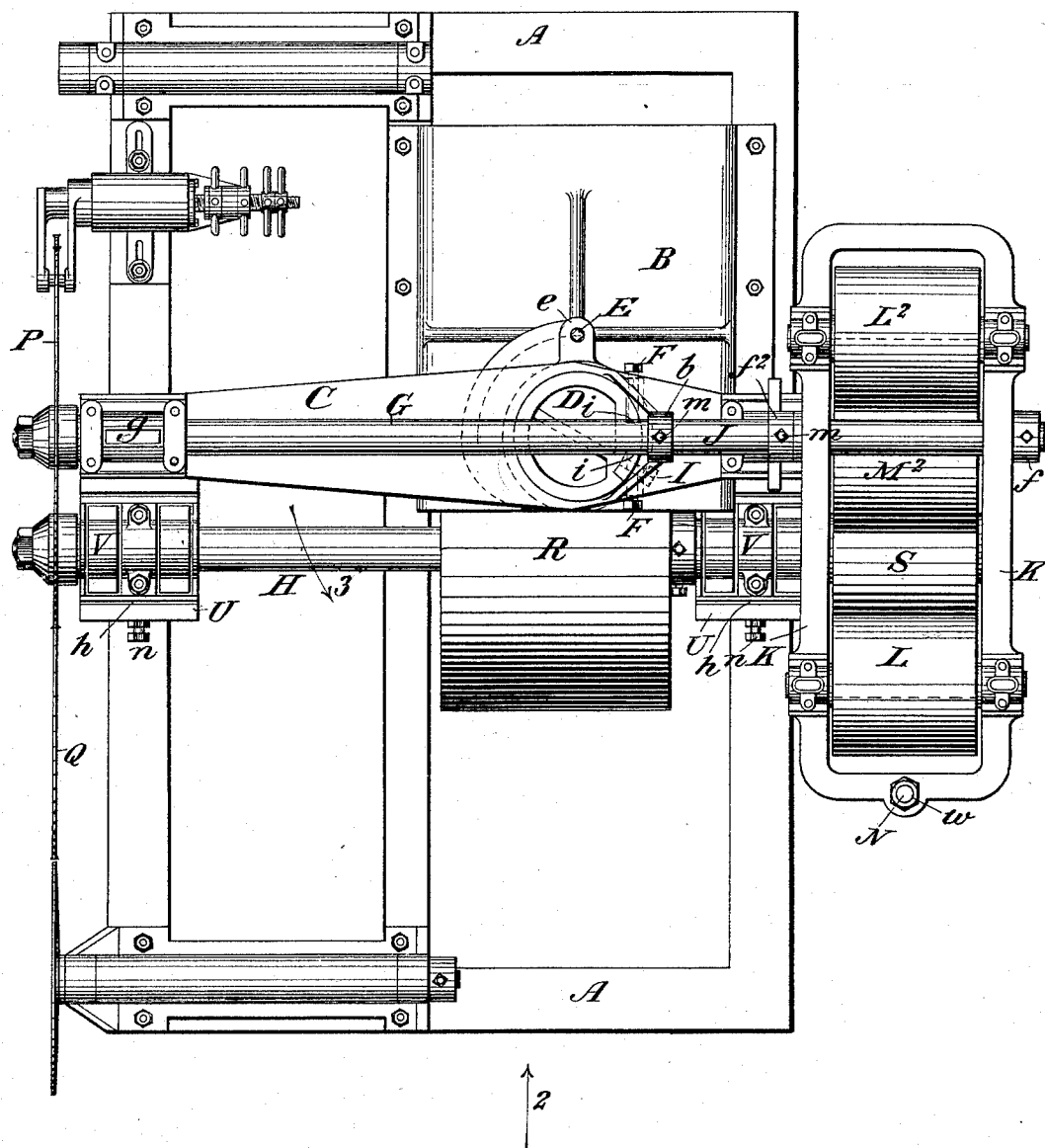
2 Sheets—Sheet 1.

E. E. THOMAS.
CIRCULAR SAWING MACHINE.

No. 518,432.

Patented Apr. 17, 1894.

Fig.1,



Witnesses:-

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