

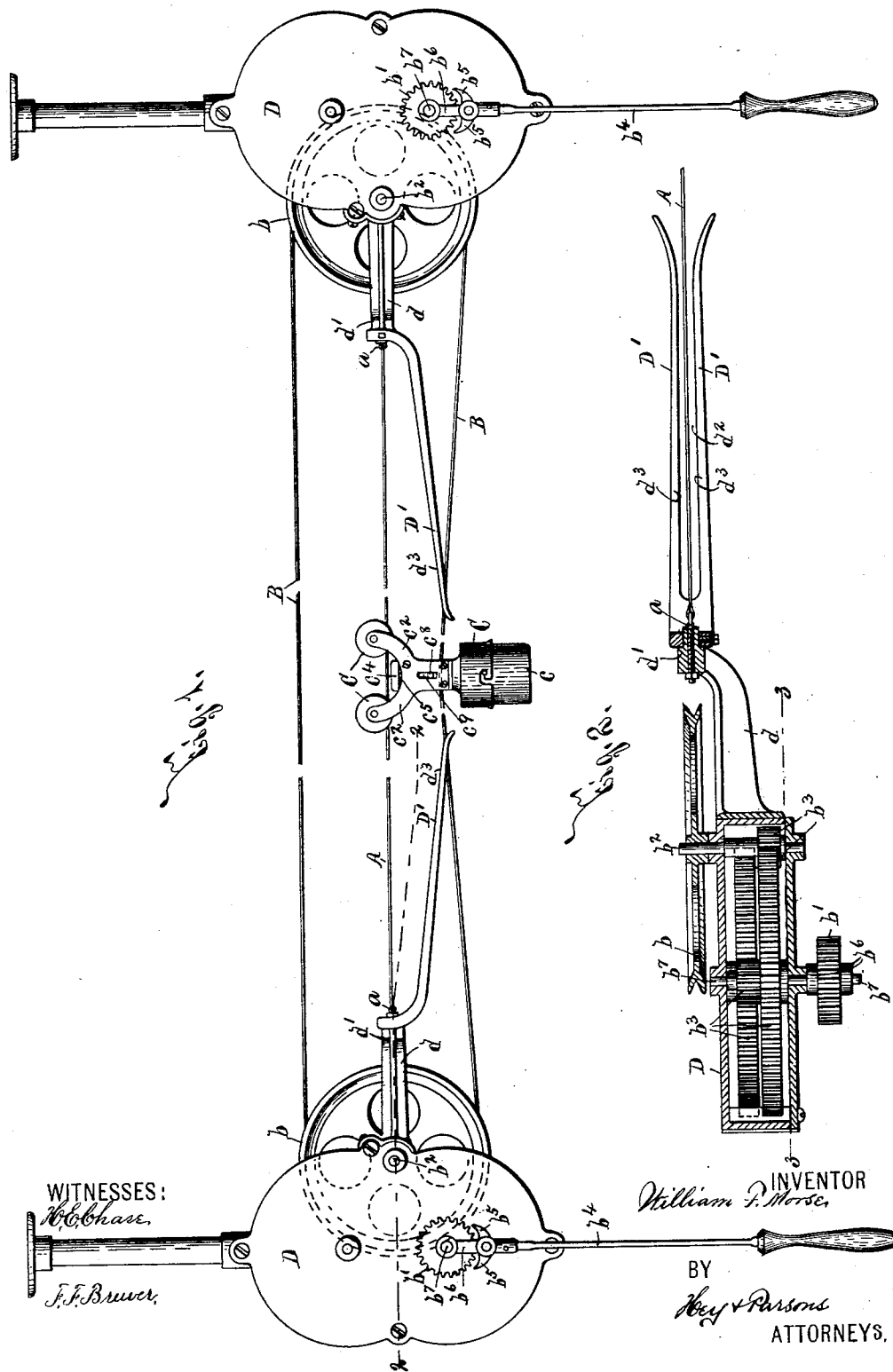
(No Model.)

2 Sheets—Sheet 1.

W. F. MORSE.
CARRIER.

No. 587,849.

Patented Aug. 10, 1897.



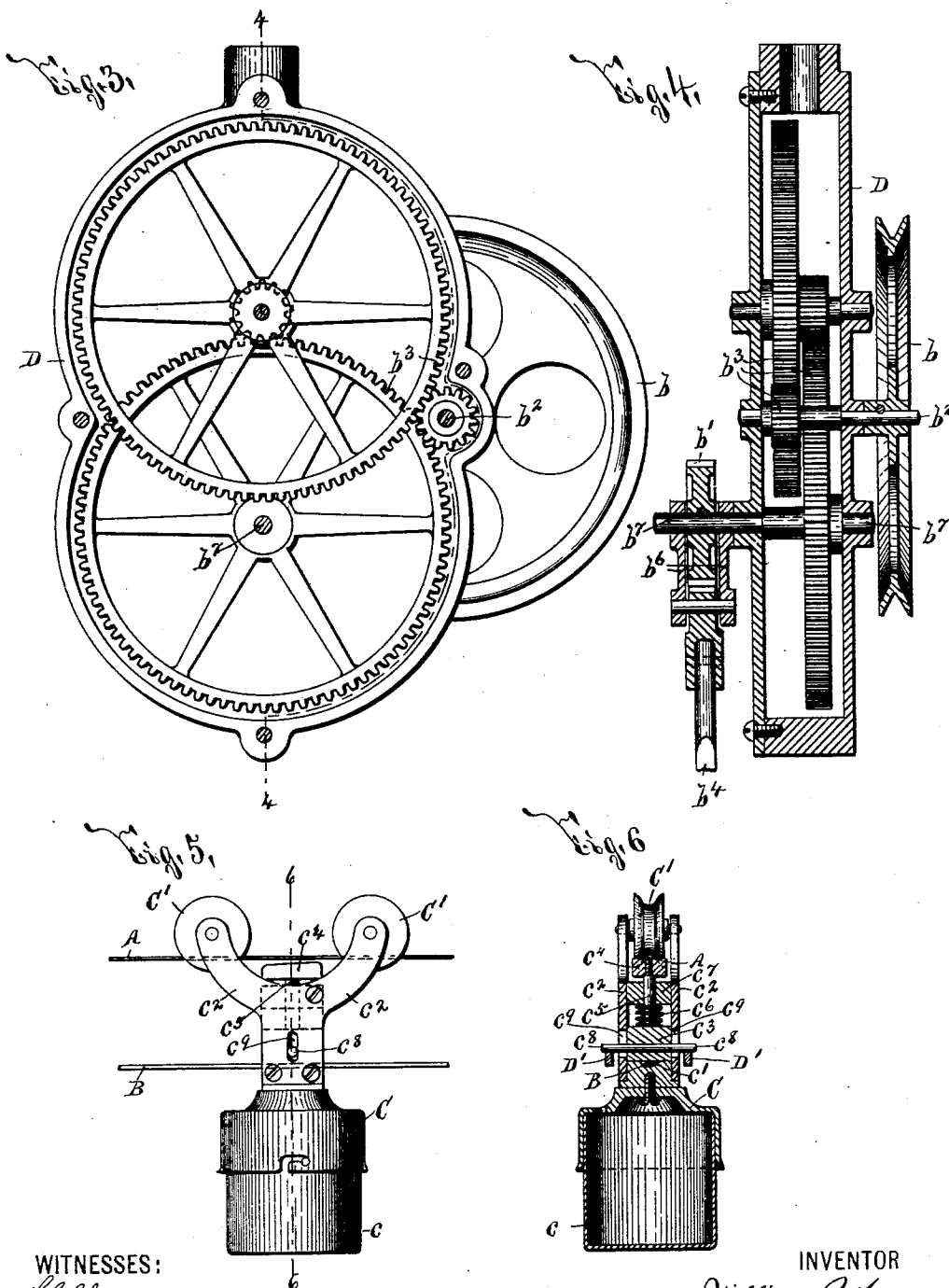
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WITNESSES:

H. Chase
J. F. Brewer

INVENTOR

William F. Morse

BY

Wey & Parsons

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM F. MORSE, OF ROCHESTER, NEW YORK, ASSIGNOR TO THOMAS J. THURBER, OF SAME PLACE.

CARRIER.

SPECIFICATION forming part of Letters Patent No. 587,849, dated August 10, 1897.

Application filed May 26, 1896. Serial No. 593,125. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. MORSE, of Rochester, in the county of Monroe, in the State of New York, have invented new and useful Improvements in Carriers, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to improvements in carriers particularly applicable for conveying change and other articles in stores and similar places, and has for its object the production of a device which is simple in construction, effective and durable in use, and is readily manipulated; and to this end it consists, essentially, in the general construction and arrangement of the component parts of the carrier, all as hereinafter more particularly described, and pointed out in the claims.

In describing this invention reference is had to the accompanying drawings, forming a part of this specification, in which like letters indicate corresponding parts in all the views.

Figure 1 is an elevation of my improved carrier, portions of the support or track and the traveling cable or belt being broken away; Fig. 2 is a horizontal section taken on line 2 2, Fig. 1. Fig. 3 and 4 are vertical sections taken, respectively, on lines 3 3 and 4 4, Figs. 2 and 3. Fig. 5 is an enlarged elevation of the detached carriage and adjacent parts of the support or track and the lower portion of the cable or belt; and Fig. 6 is a vertical section taken on line 6 6, Fig. 5.

A is a support or track, B a traveling cable or belt, and C a carriage movable along the support or track, all of which parts may be of any desirable form, size, and construction. The support or track A and the cable or belt B are preferably formed of wire or other suitable material and are usually supported in proximity to each other by opposite frames D D, which also support the means for driving said cable or belt and are provided with attaching-arms *d d*. The opposite ends of the support or track A are secured to rods or screws *a a*, adjustable longitudinally in laterally-extending ends formed upon arms *d' d'*, projecting from the adjacent faces of the frames D D. The rods or screws *a a* permit

the desired tightening of the support or track A, but it is obvious that either or both of said rods or screws may be dispensed with if desired.

The cable or belt B is preferably passed around driving-wheels *b b*, arranged outside of the frames D D at corresponding sides thereof, and is supported above and below the support or track A. Suitable main driving-wheels *b' b'* are arranged at the outside of the frames D D at the opposite sides thereof and are connected to the spindles *b² b²* of the wheels *b b* by suitable gearing *b³ b³*, arranged within said frames.

The wheels *b' b'* may be actuated by any desirable means, but are preferably reversely rotated by actuating-levers *b⁴ b⁴*, having their upper ends provided with oppositely-arranged dogs *b⁵ b⁵*, fixed thereto. The upper ends of said levers are also pivoted to the lower ends of links *b⁶ b⁶*, extending beneath the wheels *b' b'* and having their upper ends journaled on the shafts or spindles *b⁷ b⁷* of said wheels *b' b'*. The levers *b⁴ b⁴* and the dogs *b⁵ b⁵* form a particularly simple and practical means of actuating the cable or belt B; but it is obvious that each lever may be provided with but one dog, if desired.

The carriage C preferably depends from the support or track A and is driven by the lower portion of the cable or belt B. The lower end of the carriage is formed with a detachable receptacle *c* for the coin or other articles to be conveyed, and its upper end is provided with a face *c'*, which is preferably fixed and engages the lower portion of the cable or belt B. Suitable arms *c² c²* extend upwardly from the face *c'* on opposite sides of the lower portion of the cable or belt B and are provided with oppositely-extending branches, in which are journaled antifric- tion wheels or rollers *C'*, arranged one in advance of the other and engaged with the top face of the support or track A. A suitable clamping-piece *c³* and a brake-piece *c⁴* are interposed between the arms *c² c²* and are usually secured, respectively, to the lower and upper ends of a reciprocating rod *c⁵*, and, as best seen at Figs. 1 and 5, the brake-piece *c⁴* is arranged beneath the portion of the support or track A interposed between the antifric-

tion wheels or rollers C' and is formed of less length than the distance between said wheels or rollers.

A spring c^6 , preferably encircling the rod c^5 , is interposed between the clamping-piece c^3 and a cross-bar c^7 , fixed to the arms c^2 c^2 , and operates to normally depress said clamping-piece and thereby force the cable or belt B against the face c' for securing the carriage to said cable or belt. The clamping-piece c^3 is usually provided with oppositely-arranged shoulders c^8 c^8 , which project laterally through lengthwise slots c^9 c^9 in the arms c^2 c^2 and are engaged by arms D' D', fixed to the arms d' d' previously described and inclining upwardly from their adjacent ends. The arms D' D' are provided with lengthwise slots d^2 d^2 , through which the upper end of the carriage is longitudinally movable, and separated faces d^3 d^3 , arranged on opposite sides of said slots and inclining upwardly from the free ends of the arms D' D'. As the carriage B is moving along one of the arms D' the shoulders c^8 c^8 projecting from the clamping-piece c^3 engage the faces d^3 d^3 and said clamping-piece is elevated against the action of the spring c^6 , thereby releasing the carriage from the cable or belt B and forcing the brake-piece c^4 against the support or track A.

The operation of my improved carrier will now be readily understood upon reference to the foregoing description and the accompanying drawings, and as the exact detail construction and arrangement of the component parts of said carrier may be more or less varied without departing from the spirit of my invention I do not herein specifically limit myself to such exact detail construction and arrangement.

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

1. In a carrier, the combination of a support or track, a carriage depending from the support or track and movable along the same, an endless traveling cable or belt arranged above and below the support or track, and movable in opposite directions independently of the carriage, and means provided upon the carriage for detachably engaging the lower part of the cable or belt, substantially as described.

2. In a carrier, the combination of a carriage, a traveling cable or belt for the carriage, a wheel for driving the cable or belt, a second wheel connected to the former wheel for revolving the same, and an actuating-lever arranged to be engaged with and disengaged from the second wheel for operating said second wheel, substantially as specified.

3. In a carrier, the combination of a support or track, a carriage depending from the support or track and movable along the same, an endless traveling cable or belt arranged above and below the support or track, and movable in opposite directions independently of the carriage, means provided upon the car-

riage for detachably engaging the cable or belt, wheels for driving the cable or belt, additional wheels connected to the former wheels for revolving the same, and actuating-levers arranged to be engaged with and disengaged from the additional wheels for moving the same, substantially as and for the purpose set forth.

4. In a carrier, the combination of a carriage, a traveling cable or belt for the carriage, a wheel for driving the cable or belt, a second wheel connected to the former wheel for revolving the same, a link movable on an axis substantially coincident with that of the second wheel, and a lever pivoted to the link and provided with means for engaging the second wheel, substantially as and for the purpose specified.

5. In a carrier, the combination of a carriage, a traveling cable or belt for the carriage, a wheel for driving the cable or belt, a second wheel connected to the former wheel for revolving the same, a link movable on an axis substantially coincident with that of the second wheel, a lever pivoted to the link, and oppositely-arranged dogs fixed to the lever for reversely moving the second wheel, substantially as described.

6. In a carrier, the combination of a carriage, a traveling cable or belt for the carriage, a wheel for driving the cable or belt, a second wheel connected to the former wheel for revolving the same, a link having its upper end mounted on the axle or spindle of the second wheel and its lower end extending beneath said second wheel, a lever pivoted to the lower end of the link and provided with means for engaging the second wheel, substantially as specified.

7. In a carrier, the combination of a carriage, a traveling cable or belt for the carriage, a wheel for driving the cable or belt, a second wheel connected to the former wheel for revolving the same, a link having its upper end mounted on the shaft or spindle of the second wheel and its lower end extending beneath said second wheel, a lever pivoted to the lower end of the link, and oppositely-arranged dogs fixed to the lever for engaging the second wheel, substantially as specified.

8. In a carrier, the combination of a support or track, inclosing frames at the opposite extremities of the support or track, a traveling cable or belt arranged adjacent to the support or track, a carriage movable along the support or track and provided with means for engaging the cable or belt, wheels for driving the cable or belt arranged at the outside of the inclosing frames and supported by corresponding sides thereof, additional wheels arranged at the outside of the inclosing frames and supported by the opposite walls thereof, gearing arranged within the frames for connecting said wheels, and actuating-levers for operating the additional wheels, substantially as set forth.

9. In a carrier, the combination of a sup-

port or track, a carriage depending from the support or track and movable along the same, said carriage being provided with an engaging face, a traveling cable or belt arranged adjacent to the support or track and engaged with said face, a reciprocating clamping-piece provided with a laterally-projecting shoulder and supported by the carriage for forcing the cable or belt against the engaging face, a spring for normally actuating the clamping-piece, and an arm having an inclined top face for engaging said shoulder and moving the clamping-piece from operative position against the operation of the spring, substantially as and for the purpose set forth.

10. In a carrier, the combination of a support or track, a carriage depending from the support or track and movable along the same, said carriage being provided with an engaging face, a traveling cable or belt arranged adjacent to the support or track and engaged with said face, a movable clamping-piece supported by the carriage for forcing the cable or belt against the engaging face, said clamping-piece having oppositely-arranged shoulders, a spring for normally actuating the clamping-piece, and an arm formed with a lengthwise slot for receiving the adjacent portion of the carriage, and having separated upwardly-inclined faces for engaging said shoulders, substantially as and for the purpose described.

11. In a carrier, the combination of a support or track, a carriage movable along the support or track, a reciprocating rod provided with a laterally-projecting shoulder and a brake-piece arranged beneath the support or track for engaging the same and preventing movement of the carriage, a spring for forcing the brake-piece to its inoperative position, and an arm having an inclined face for engaging said shoulder and moving the brake-piece against the action of the spring, substantially as and for the purpose specified.

12. In a carrier, the combination of a support or track, a carriage movable along the support or track and provided with rollers engaged therewith and arranged one in advance of the other, a brake-piece arranged beneath the support or track for engaging the portion thereof interposed between the rollers and thereby preventing movement of the carriage, a spring for forcing the brake-

piece to its inoperative position, and means for moving the brake-piece against the action of the spring, substantially as and for the purpose described.

13. In a carrier, the combination of a support or track, a traveling cable or belt, a carriage having a face for engaging the cable or belt, and arms projecting upwardly above the face and formed with lengthwise slots, a reciprocating rod provided at its lower end with a clamping-piece for forcing the cable or belt against said face, said clamping-piece having oppositely-arranged shoulders projecting through the slots of the arms, a brake-piece at the upper end of the reciprocating rod for engaging the support or track, wheels arranged on opposite sides of the brake-piece, a spring for forcing the clamping-piece to operative position, and means for engaging said shoulders and moving the clamping-piece in the opposite direction and thereby engaging the brake-piece with the support or track, substantially as set forth.

14. In a carrier, the combination of separated frames provided with projecting arms, a support or track interposed between said arms, a carriage movable along the support or track, a traveling cable or belt, a reciprocating rod supported by the carriage and having its lower end provided with an engaging shoulder and with a clamping-piece for engaging the cable or belt, and having its upper end provided with a brake-piece for engaging the support or track, means for normally forcing the rod downwardly and thereby engaging the clamping-piece with the cable or belt and separating the brake-piece from the support or track, and arms secured to the frames for engaging said shoulder and moving the rod upwardly and thereby engaging the brake-piece with the support or track and separating the clamping-piece from the cable or belt, substantially as set forth.

In testimony whereof I have hereunto signed my name, in the presence of two attesting witnesses, at Rochester, in the county of Monroe, in the State of New York, this 21st day of May, 1896.

WILLIAM F. MORSE.

Witnesses:

HAMPDEN HYDE,
K. H. THEOBALD.