

No. 640,128.

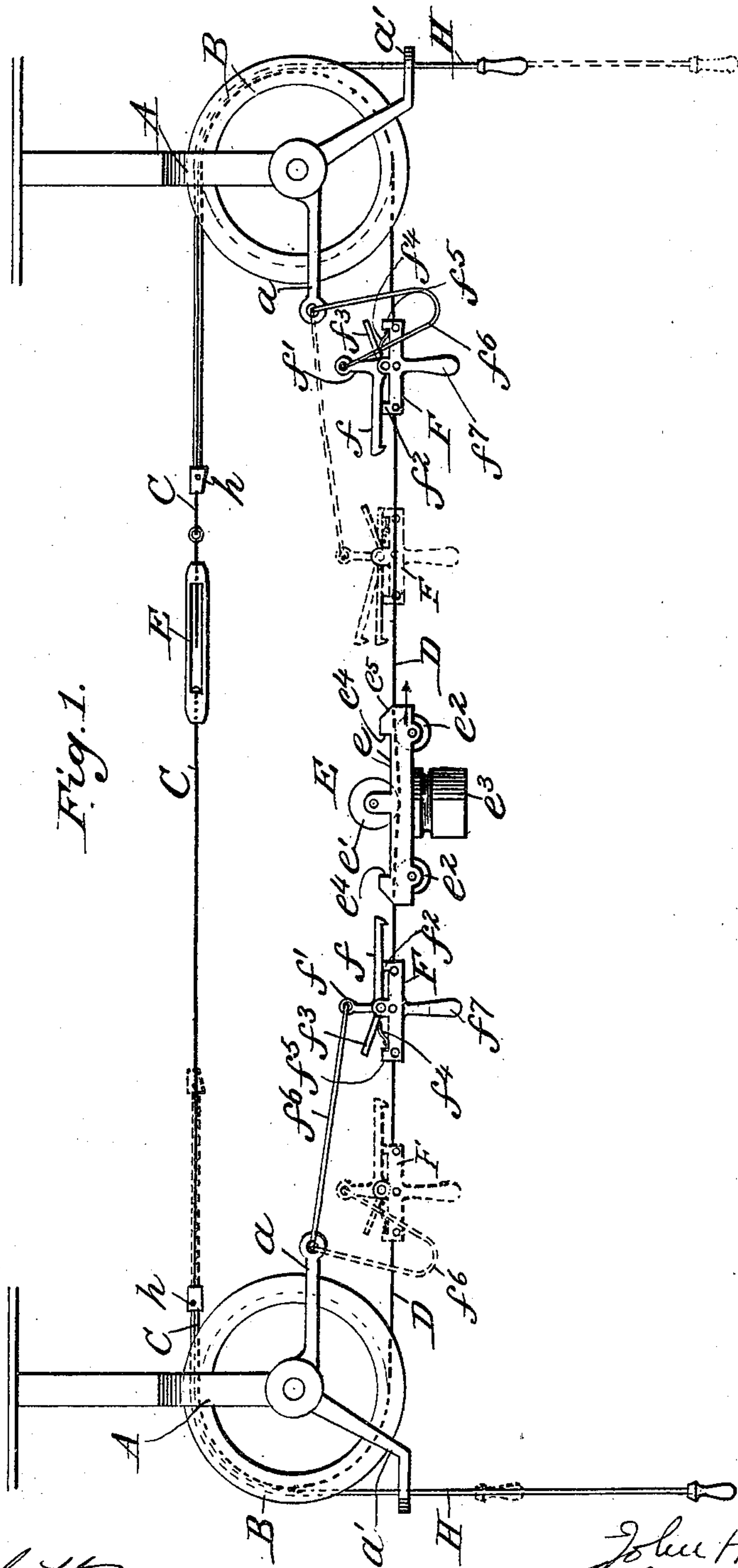
Patented Dec. 26, 1899.

J. H. GOODFELLOW.
STORE SERVICE APPARATUS.

(Application filed Nov. 23, 1896.)

(No Model.)

2 Sheets—Sheet 1.



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UNITED STATES PATENT OFFICE.

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STORE-SERVICE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 640,128, dated December 26, 1899.

Application filed November 23, 1896. Serial No. 613,152. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. GOODFELLOW, a resident of the city of Lowell, in the county of Middlesex and State of Massachusetts, have
5 invented certain new and useful Improvements in Store-Service Apparatus, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to improvements in
10 store-service apparatus; and it consists in the novel construction, combination, and arrangement of parts, such as will be hereinafter fully described, pointed out in the appended claims, and illustrated in the accompanying draw-
15 ings.

In the drawings, Figure 1 is a side elevation of a store-service apparatus embodying the invention. Fig. 2 is a side elevation showing an end of a modification of the invention. Fig.
20 3 is a similar view of another modification.

Like reference characters designate corresponding parts in the several views.

In the construction shown in Fig. 1 the brackets A, located at the ends of the appa-
25 ratus, are secured to suitable supports. In the lower end of each bracket is journaled the pulley B. The periphery of the latter is grooved. A wire consisting of the members C and D is looped over the pulleys B. The
30 lower member D forms the way. To secure a proper tension of the way, a turnbuckle E is interposed in the upper member C of the wire. A carrier E travels on the way. It consists of the frame e , in which are journaled
35 the upper roller e' and the lower rollers e^2 . The upper roller rides on the way and supports the carrier. The lower rollers bear on the under side of the way and serve to steady the carrier. To the under side of the carrier
40 is attached the usual receptacle e^3 . A mechanism is located at each end of the way for engaging with the carrier. On the lower member D the block F is secured adjacent to the pulley B. A bell-crank latch consisting of
45 the arms f and f' is pivoted on the block and is adapted to engage with the catch e^4 of the carrier. The downward movement of the engaging arm f of the latch is limited by the stop f^2 , projecting from the block. An arm f^3
50 extends from the rear of the latch and is pressed upward by the spring f^4 , which nor-

mally holds the latch in an engaging position. The downward movement of the arm is limited by the stop f^5 . An operating-cord f^6 connects the upper end of the arm f' of the latch
55 with the arm a , attached to the bracket A. To hold the block F in an upright position, a counterpoise f^7 is attached to its under side. A pull-cord H passes over the pulley B and is attached to the upper member C by the clip h
60 a short distance from the pulley. The lower end of the pull-cord passes through an opening in the outer end of the arm a' , secured to the bracket A.

The operation of the device is as follows:
65 It is assumed that the several parts of the apparatus are in the positions shown in full lines in Fig. 1 and that the carrier is approaching the right-hand end of the way. On approaching the pulley the forward end of the
70 carrier, which is beveled, as at e^5 , for the purpose, passes under the arm f of the bell-crank latch. The latter engages with the catch e^4 on the carrier and holds it. When it is de-
75 sired to propel the carrier in the opposite direction, the cord H on the right-hand side is pulled downward. This moves the way toward the left-hand side. In its movement the way carries the carrier and the latch mechanism with it. The movement of the way is lim-
80 ited by the cord f^6 . The latter on becoming taut operates the bell-crank latch to release the carrier. The momentum imparted to the carrier will cause it to travel to the opposite
85 end of the way.

In the modifications shown in Figs. 2 and 3 the constructions are the same as that shown in Fig. 1, with a few exceptions, which will be noted. In the modifications the axle of the pulley B is journaled in the box b , adjust-
90 ably mounted in the bracket A. By means of the adjustable box the tension of the way can be regulated. Also the two members of the wire are in close proximity and are held so by the pulley K, carried by the arm a ,
95 around which the upper member of the wire passes. Both members of the wire form the way. On the upper member of the wire in these instances are mounted the carrier and the latch mechanism instead of on the lower
100 member, as in the first instance. A pull-cord H' is attached to the lower member of the

wire and is compounded by passing over the pulleys h' .

In the modification shown in Fig. 3 an auxiliary way W is provided to adapt the apparatus to heavy loads. It is also provided with a second compound pull-cord H^2 , attached to the upper member of the wire. By means of the pull-cords H' and H^2 the carrier can be propelled from either end of the way.

While the hereinbefore described embodiments of the invention are the preferred ones, yet they can be departed from to a considerable extent without departing from the spirit of the invention.

Having thus described the invention, what I claim, and desire to secure by Letters Patent, is—

1. In a store-service apparatus, the combination of two pulleys, a wire looped around said pulleys to form a way, a carrier adapted to travel on said way, and means for moving said wire on said pulleys.

2. In a store-service apparatus, the combination of two pulleys, a wire looped around said pulleys to form a way, a carrier adapted to travel on said way, a device for regulating the tension of said wire, and means for moving said wire on said pulleys.

3. In a store-service apparatus, the combination of two pulleys, a wire looped around said pulleys to form a way, a carrier adapted to travel on said way, means for moving said wire on said pulleys, and means for limiting the movement of said wire.

4. In a store-service apparatus, the combination of two pulleys, a wire looped around said pulleys to form a way, a carrier adapted to travel on said way, a latch mechanism carried on said wire and adapted to engage with said carrier, and means for moving said wire on said pulleys.

5. In a store-service apparatus, the combination of two pulleys, a wire looped around said pulleys to form a way, a carrier adapted to travel on said way, a latch mechanism carried on said wire and adapted to engage with said carrier, a trip mechanism for said latch

mechanism, and means for moving said wire on said pulleys.

6. In a store-service apparatus, the combination of two pulleys, a wire consisting of two members looped over said pulleys and one of said members forming a way, a carrier adapted to travel on said way, and means for moving said wire on said pulleys.

7. In a store-service apparatus, the combination of two pulleys, a wire consisting of two members looped over said pulleys and one of said members forming a way, a carrier adapted to travel on said way, a device for regulating the tension of said wire, and means for moving said wire on said pulleys.

8. In a store-service apparatus, the combination of two pulleys, a wire consisting of two members looped over said pulleys and one of said members forming a way, a carrier adapted to travel on said way, means for moving said wire on said pulleys, and means for limiting the movement of said wire.

9. In a store-service apparatus, the combination of two pulleys, a wire consisting of two members looped over said pulleys and one of said members forming a way, a carrier adapted to travel on said way, a latch mechanism mounted on said way and adapted to engage with said carrier, and means for moving said wire on said pulleys.

10. In a store-service apparatus, the combination of two pulleys, a wire consisting of two members looped over said pulleys and one of said members forming a way, a carrier adapted to travel on said way, a latch mechanism fixed on said way and adapted to engage with said carrier, a trip mechanism for said latch mechanism, and means for moving said wire.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 21st day of October, A. D. 1896.

JOHN H. GOODFELLOW.

Witnesses:

S. B. DOANE,
A. L. MESSER.