

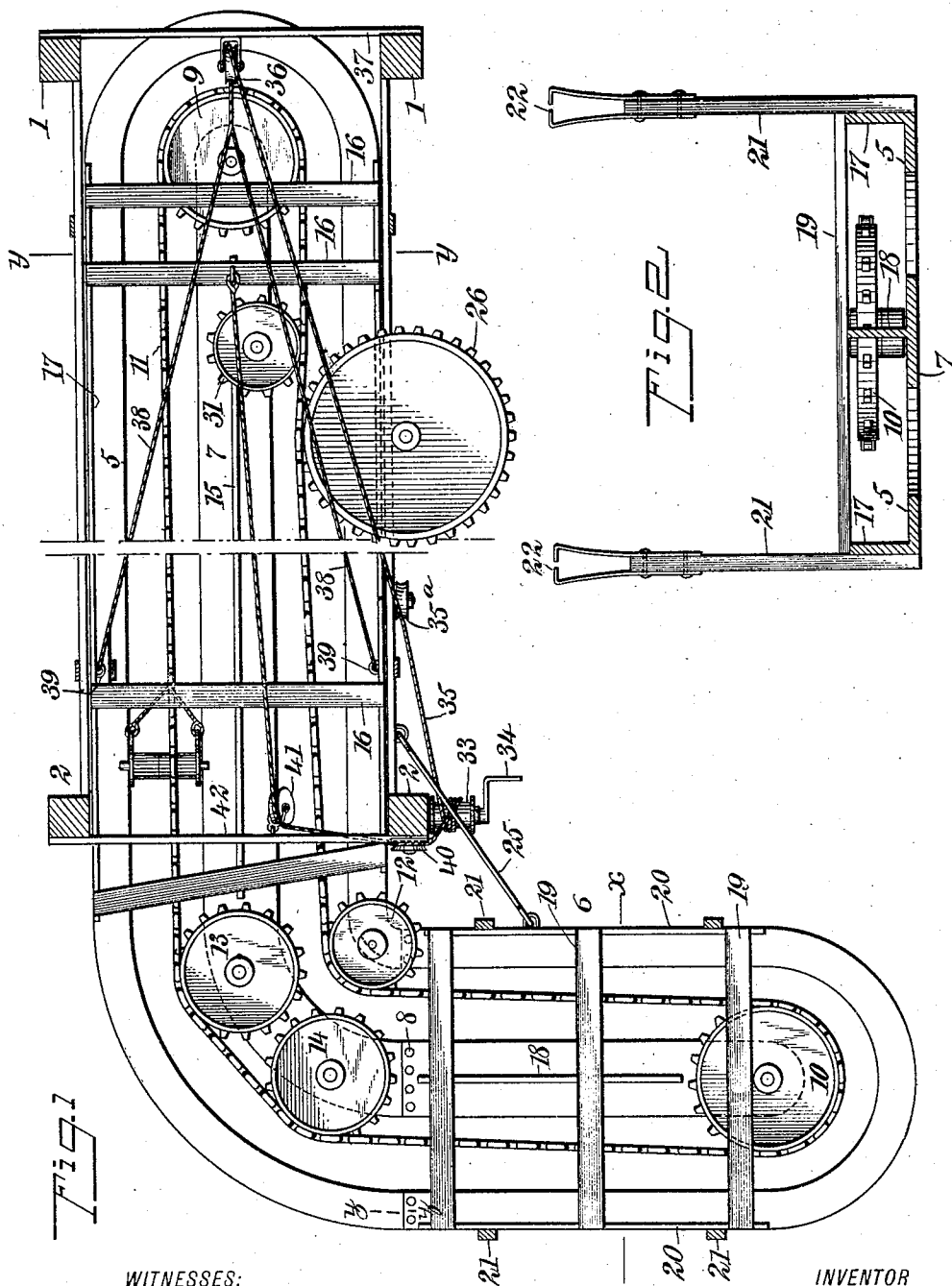
No. 774,520.

PATENTED NOV. 8, 1904.

F. B. HEWITT.
FREIGHT HANDLING APPARATUS.
APPLICATION FILED JAN. 23, 1904.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

J. A. Brophy
C. R. Ferguson

INVENTOR

Franklin B. Hewitt

BY

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ATTORNEYS

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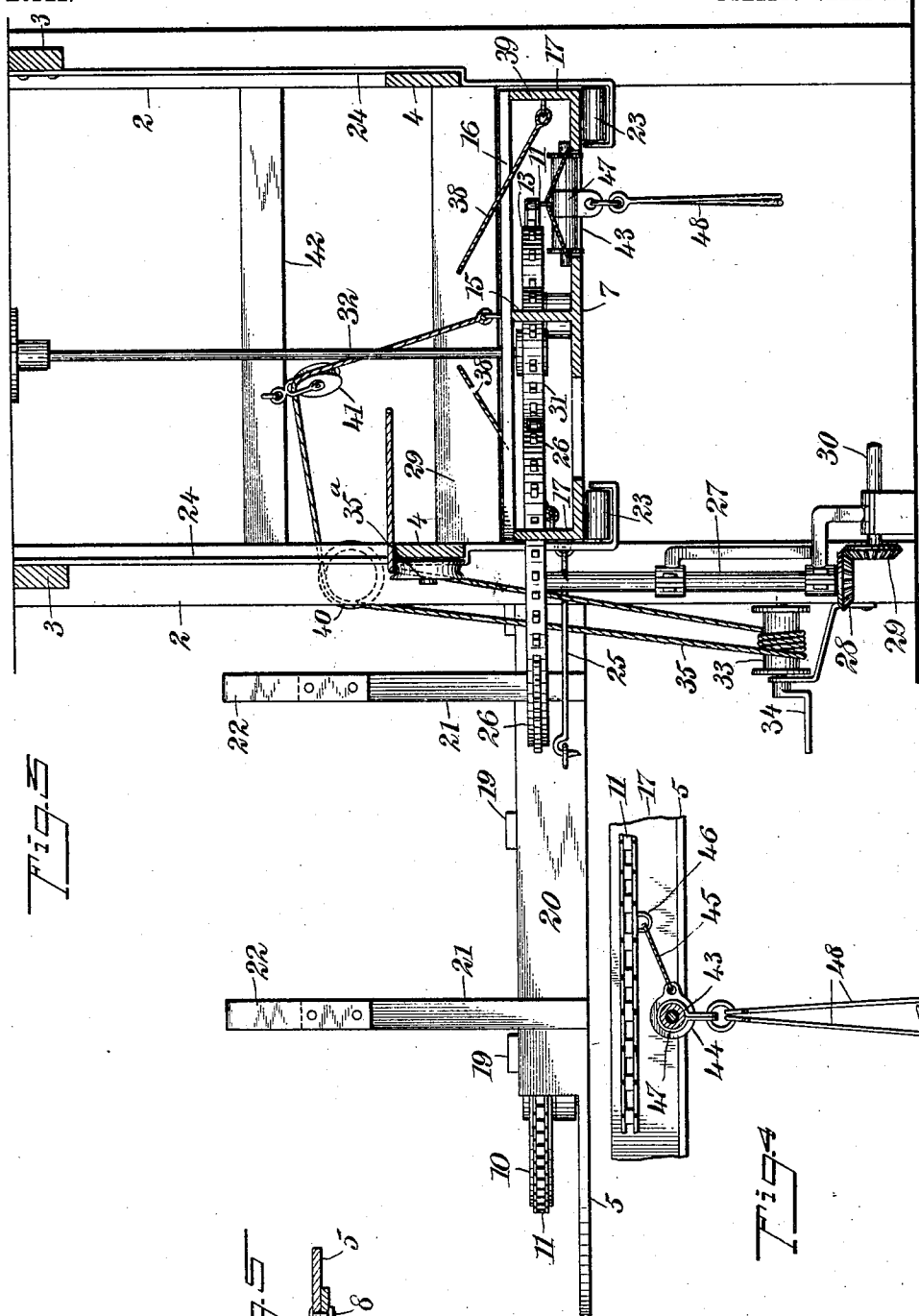
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UNITED STATES PATENT OFFICE.

FRANKLIN BRENT HEWITT, OF FORT MYERS, FLORIDA.

FREIGHT-HANDLING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 774,520, dated November 8, 1904.

Application filed January 23, 1904. Serial No. 190,386. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN BRENT HEWITT, a citizen of the United States, and a resident of Fort Myers, in the county of Lee and State of Florida, have invented a new and Improved Freight-Handling Apparatus, of which the following is a full, clear, and exact description.

This invention relates to improvements in apparatus for loading and unloading railway-cars, vessels, and the like, the object being to provide a device of this character by means of which freight may be rapidly and safely handled.

Other objects of the invention will appear in the general description.

I will describe a freight-handling apparatus embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of a freight-handling apparatus embodying my invention. Fig. 2 is a section on the line *xx* of Fig. 1. Fig. 3 is a section on the line *yy* of Fig. 1. Fig. 4 is a detail showing a carrying-sling employed, and Fig. 5 is a section on the line *zz* of Fig. 1.

The frame of the apparatus comprises outer end posts 1 and inner end posts 2, designed to be placed upon the ground, a dock, or platform and connected by longitudinal top rails 3 and longitudinal intermediate rails 4.

Mounted to slide in the frame is a continuous outer track 5, the said track being curved at the end of the supporting-frame, as clearly indicated in Fig. 1, and at one end the track turned at right angles, as indicated at 6, this portion 6 being designed to pass into the doorway of a car or over the hatch of a vessel or the like.

Arranged between the continuous outer track members 5 is a central track 7, which serves as a double track, as will be hereinafter described. The track portions comprised in the section 6 of the apparatus are removably connected, by means of bolts 8, to the tracks of the other section, so that when

the device is not in use the parts may be dismembered for convenience in packing. In Fig. 5 I have shown the track-sections as overlapping at the joints.

Mounted on the outer end of the central track 7 is a sprocket-wheel 9, and mounted on the inner end thereof—that is, on the end in the section 6 on the frame—is a sprocket-wheel 10. Engaging with these sprocket-wheels is a carrying-chain 11, which passes around an outer idler sprocket-wheel 12, at the short curve of the outer track, and it also passes around two idler sprocket-wheels 13 14, supported on the long curve of the central rail. The central rail is supported in the main section by means of a bar 15, connected to said rail and also attached to cross-bars 16, attached to the side boards 17 on the outer track members.

The section of the inner track in the extension 6 is supported by a bar 18, attached to cross-bars 19, secured to the side boards 20 on the outer sides of the extension outer track. Extended upward from the side boards 20 are posts 21, having metal clips 22 at the upper end, which are here shown in the form of jaws designed to be engaged with rafters in a car-ceiling or the like, so as to support the section 6.

The portions of the tracks within the main frame are supported on rollers 23, having bearings in hangers 24, depending from the upper rails 3. The extension 6 is held rigidly from lateral movement with relation to the main body of the track system by means of a brace, here shown as a hook 25, having swinging connection with the member 6 and a hook engagement with the staple on a board 17.

As a means for imparting motion to the endless carrier 11 I employ a sprocket-wheel 26, which engages with the chain and has its shaft 27 supported in suitable bearings, and on the shaft is a bevel-gear 28, engaging with a bevel-gear 29 on a driving-shaft 30, which, as here shown, is at the lower portion of the machine; but the shafting may be reversed without departing from the spirit of my invention. The chain is held in connection with the driving sprocket-wheel 26 by means of an idler sprocket-wheel 31, which is attached to a

hanging rod 32 therefor, supported above the central track, so that the carrying-rollers to be hereinafter described may pass under the same.

5 It may be here stated that the end sprocket-wheels 9 10 and also the other idler sprocket-wheels are sufficiently above the tracks to permit the passing of the carrying-rollers underneath the same.

10 As a means for moving the tracks inward and outward with relation to the main frame, and therefore adjusting the extension 6 to the proper position to pass into a car-doorway or the like, I employ a winding-drum 33, having
15 a crank 34, and from this winding-drum one end of a cable 35 extends over a pulley 35^a and thence around a pulley 36, mounted on a cross-bar 37, attached to the outer posts 1, the said end of the cable terminating in branches
20 38, which connect with eyes 39 on the opposite side boards 17. The other end of the cable passes over a pulley 40 on the posts 2, then over a pulley 41, having swinging connection with a cross-bar 42, attached to the posts 2,
25 and the end of this portion of the cable is attached to one of the outer cross-bars 16. The cable has several turns around the drum, and obviously by rotating the drum the tracks may be moved inward and outward, riding on
30 the rollers 23.

The load-carrying devices consist of rollers 43, having extended shafts for engaging on the tracks, and from collars 44 on the ends of the rollers cables or other flexible connections 45 extend to eyes 46 on the under side
35 of the carrying-chain. Engaged around the center of the rollers is a collar 47, from which grappling-hooks 48 depend.

In practice there will be a considerable
40 number of these carrying devices spaced sufficiently apart, and in the operation the carriers at one side will be moved in one direction, while the carriers at the other side are moved in the opposite direction so that, if desired, freight may be both loaded into a car
45 and at the same time freight discharged therefrom, or the carriers may leave the car empty, to be provided with freight or other material arranged alongside of the main frame.

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

1. A freight-handling apparatus comprising a continuous outer track, a central track, sprocket-wheels supported on the ends of said
55 central track, a sprocket-chain engaging with the wheels, idler-sprockets for the chain, and means for imparting motion to the chain.

2. A freight-handling apparatus comprising a continuous outer track having a lateral
60 extension, a central track having a lateral extension, sprocket-wheels supported on the

ends of said central track, a sprocket-chain engaging with the wheels, idler-sprockets for the chain, and means for imparting motion to the chain.

3. A freight-handling apparatus comprising a main frame, a continuous outer track having a portion arranged in said frame and a portion extended laterally from an end
65 thereof, a central track coacting with the two sections of the outer track, sprocket-wheels at the ends of the central track, a sprocket-chain engaging therewith, idlers at the bend of the tracks, a driving-sprocket engaging with the chain, and carrying devices having
70 connection with the chain and movable on said tracks.

4. A freight-handling apparatus comprising a frame, a continuous outer track having a portion arranged in the frame and a portion
75 extended laterally from one end of the frame, a central track, supporting-rollers arranged in the frame on which the tracks are movable, means for causing inward and outward movements of the tracks relatively to the
80 frame, and a continuous carrier operating between the rails.

5. A freight-handling apparatus comprising a main frame, a continuous outer track having a portion in said frame and a portion
85 extended laterally from one end thereof, a central track, posts extended outward from the lateral extension, and devices on said posts for engaging with fixed devices.

6. A freight-handling apparatus comprising a main frame, an outer continuous track having a portion arranged in the frame and a portion extended laterally from one end thereof,
90 a track arranged between the members of the outer track, a carrier-chain movable with relation to the tracks, sprocket-wheels for supporting said chain, a driving-sprocket engaging with the chain, and an idler engaging with the chain adjacent to said driving-sprocket.

7. A freight-handling device, comprising a main frame, an outer continuous track and a central track, the said tracks being movable
95 lengthwise of the frame, means for causing said movement, an endless chain movable with relation to said tracks and lengthwise thereof, rollers mounted to move on the tracks, connections between the said rollers and chain, and devices carried by said rollers for engaging with freight or the like.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANKLIN BRENT HEWITT.

Witnesses:

G. F. IRELAND,
ROBERT LILLY.