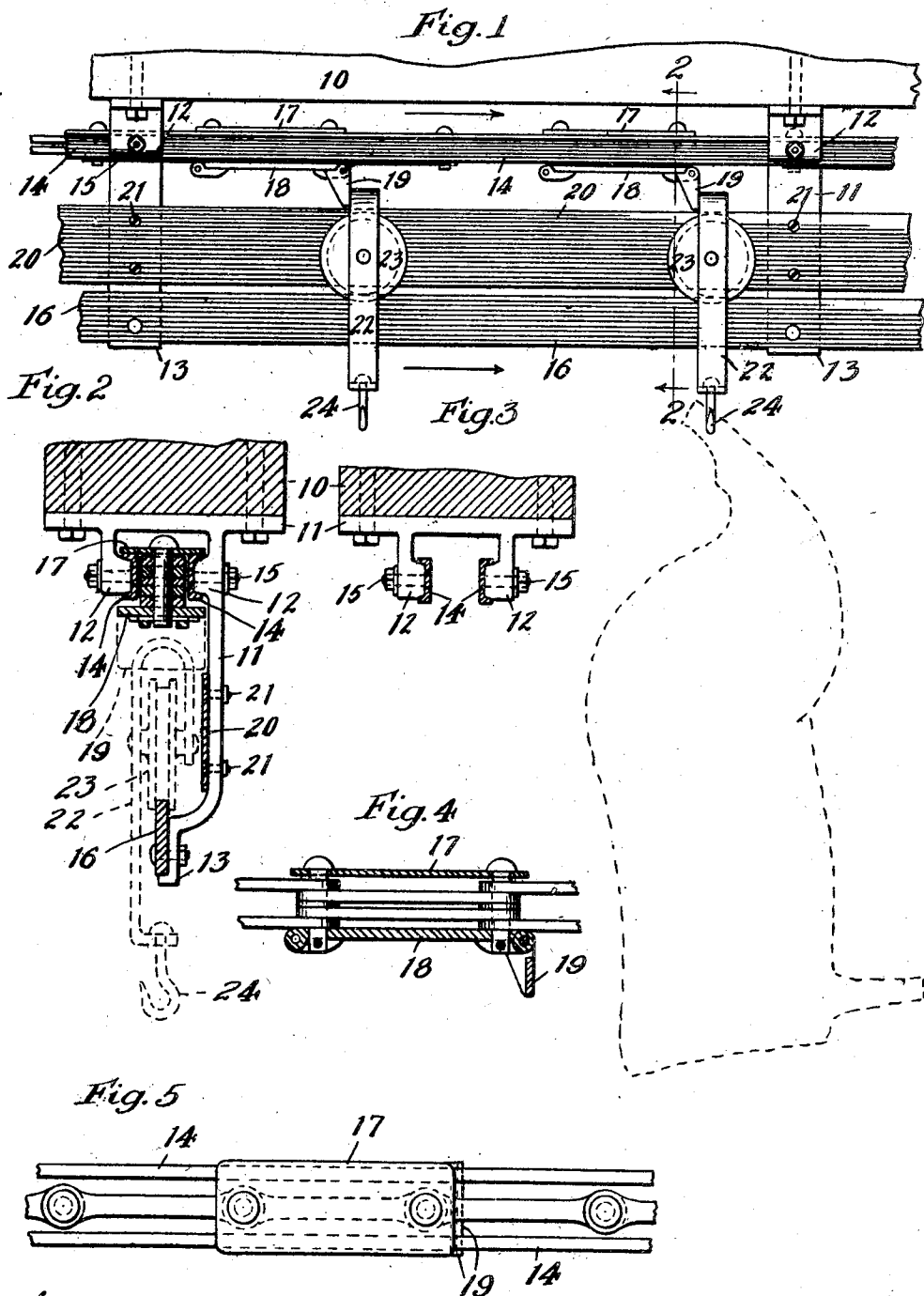


No. 852,784.

PATENTED MAY 7, 1907.

A. HANNAFORD.
OVERHEAD CARRIER.
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Witnesses:

Wm. Guigan
By Wm. Guigan

Inventor:

Alfred Hannaford

By Munday, Woots, Adcock & Co. Atty.

Attorneys

UNITED STATES PATENT OFFICE.

ALFRED HANNAFORD, OF CHICAGO, ILLINOIS.

OVERHEAD CARRIER.

No. 852,784.

Specification of Letters Patent.

Patented May 7, 1907.

Application filed February 18, 1907. Serial No. 357,827.

To all whom it may concern:

Be it known that I, ALFRED HANNAFORD, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Overhead Carriers, of which the following is a specification.

This invention relates to an improved construction of overhead carriers for packing houses.

The object of the invention is to produce a cheaper, and more compact construction of trackways, and one which will not require so much power to be expended in driving the carriage. I accomplish this object by dispensing with the usual two-part hangers customarily employed in such constructions, and combining the chain carrier or track and the load carrier or track in one structure, and placing the load carrier track directly beneath the chain for driving the load, whereby the pull is directly in line with the load.

The invention further consists in the novel construction of parts and devices and in the novel combinations of parts and devices herein shown and described.

In the accompanying drawing, which forms a part of this specification, Figure 1 is a side elevation of a single section of the improved carrier apparatus. Fig. 2 is a vertical section on line 2—2 of Fig. 1. Fig. 3 is a similar section showing the return carrier for carrying the empty chain back. Fig. 4 is a sectional side elevation of the chain, and Fig. 5 is a plan view of the chain and its track.

In the accompanying drawing 10 represents an ordinary overhead beam, either one of the beams of the ceiling work, of the packing house, or especially erected beam put up for the purpose of carrying the track rail. Secured to this beam or these beams at short intervals by means of bolts are the vertical hangers 11, each provided with the chainway track support 12, and the carrier track support 13. It will be noted that the construction of this hanger is such that the chainway track support is in close juxtaposition to the overhead beam, and consequently the chainway track, presently to be described, is in like manner close to the beam, and the strain of the chain upon the bolts that support the hangers from the beam is not multiplied by any leverage unnecessarily. Two parallel track bars 14, 14, are bolted by bolts 15 to the hangers 11, for the chain to run upon.

To the carrier track supports 13 is bolted the single bar carrier track 16, upon which the load is carried. It will be noted that the construction is such that this carrier track bar 16 comes directly under the center of the chain so that the pull of the latter upon the load suspended on this track bar is a straight direct pull in line with the load, and the side draft, and loss of power due thereto usual in packing house carrier systems, is entirely done away with. This is a matter of very considerable consequence as the loads consisting of carcasses or parts of carcasses, are often very heavy, and not only is the power required of some importance but the wear and tear and racking strains due to side drafts are still more important, affecting the life or duration of the mechanism. Secured to the chain at suitable intervals—say two links apart—are the riding shoes, each consisting of an upper plate 17 and a lower plate 18. The upper plate rests and slides upon the parallel tracks 14, and the lower plate guards against upward displacement.

From the lower plate depends a dog or engagement finger 19 to engage the upper part of the rolling meat-hook hanger; presently to be described. This finger may be rigidly connected to the shoe 18 but I prefer that it shall be pivoted thereto to act ratchet-fashion. The advantage of having the finger pivoted to act ratchet-fashion is that where from accident or other cause the driving chain stops if the finger is ratchet-like in its action the rolling hook hangers can be run on by hand without said finger offering any obstruction.

To strengthen and stiffen the structure I apply to the hangers 11, above and parallel with the track 16, a strengthening member 20, consisting of a flat bar or plate bolted with bolts 21, 21, to the hangers 11. This produces a very rigid and strong construction, and relatively a cheap one. The rolling hook hanger is shown at 22, and carries in a loop at the upper end the grooved wheel 23 which rides upon the track 16, and carries at its lower end immediately below, and in line with the wheel, the swiveled meat hook 24. The looped upper end of this hanger serves as a point of contact for the driving finger 19, in direct line with the wheel and the meat hook.

At Fig. 3 is shown the hanger for the return ply of the chain. It is constructed in all

respects like the hanger 11 except that the load carrying track and the dependent portion of that hanger for supporting the load carrying track is omitted, and is of course unnecessary unless it be desired to carry the rolling meat hook hangers back, a thing generally done otherwise is practice.

It will be understood that the pivots of the carrying chain are all vertical pivots, and therefore adapted to pass around horizontal sprocket wheels. And as the load track and rolling meat hook hanger are at all times immediately beneath the chain and engaged by a depending finger, as contradistinguished from the usual laterally extending engagement means, it is possible with my apparatus to conduct the carrier system in any direction, turning either to the right or to the left as the circumstances and convenience of the situation might demand in the packing house. This has not been possible with the ordinary overhead carrier systems wherein the carrying chain and the load carrying track are placed side by side, and the engagement means consists of a laterally extending finger.

I claim:

1. The overhead carrier for packing houses, comprising in combination the hangers supporting in their upper part a chain way track, and in their lower portion beneath said chainway track a load carrier track together with said chain carrier track and said load carrier track, substantially as specified.
2. The overhead carrier for packing houses, comprising in combination the hangers supporting in their upper part a chain way track, and in their lower portion beneath said chainway track a load carrier track together with said chain carrier track and said load carrier track, the carrying chain and the rolling meat hook hanger, and means for engaging

ing the chain with said hanger, substantially as specified.

3. The overhead carrier for packing houses, comprising in combination the hangers supporting in their upper part a chain way track, and in their lower portion beneath said chainway track a load carrier track together with said chain carrier track and said load carrier track, the carrying chain and the rolling meat hook hanger, and means for engaging the chain with said hanger, said means consisting of a ratchet acting finger, substantially as specified.

4. The one piece hanger adapted at its upper end to receive and support the chain way track, and at its lower end to receive and support the load carrying track in a line immediately beneath said chain way track, substantially as specified.

5. The combination of the hangers carrying in their upper part the chain way track and in their lower part the load carrying track, both the chain way track and the load carrying track being secured to the hangers, and a bracing bar stretching from hanger to hanger and secured to said hangers at a point between the load carrying track and the chain way track, substantially as specified.

6. The combination with a carrier chain having vertical pivots and a load carrying track placed beneath said carrying chain, a rolling hook hanger inserted on said carrying track, and an engaging means depending downward from the carrier chain toward the load carrying track for engaging and moving the rolling hook hanger.

ALFRED HANNAFORD.

Witnesses:

H. M. MUNDAY,
WILLIAM A. GEIGER.