Oct. 7, 1924. 1,510,580

G. J. BRYEN

CONVEYER HOOK

Filed Nov. 12, 1923 2 Sheets-Sheet 1

Fig. 1.

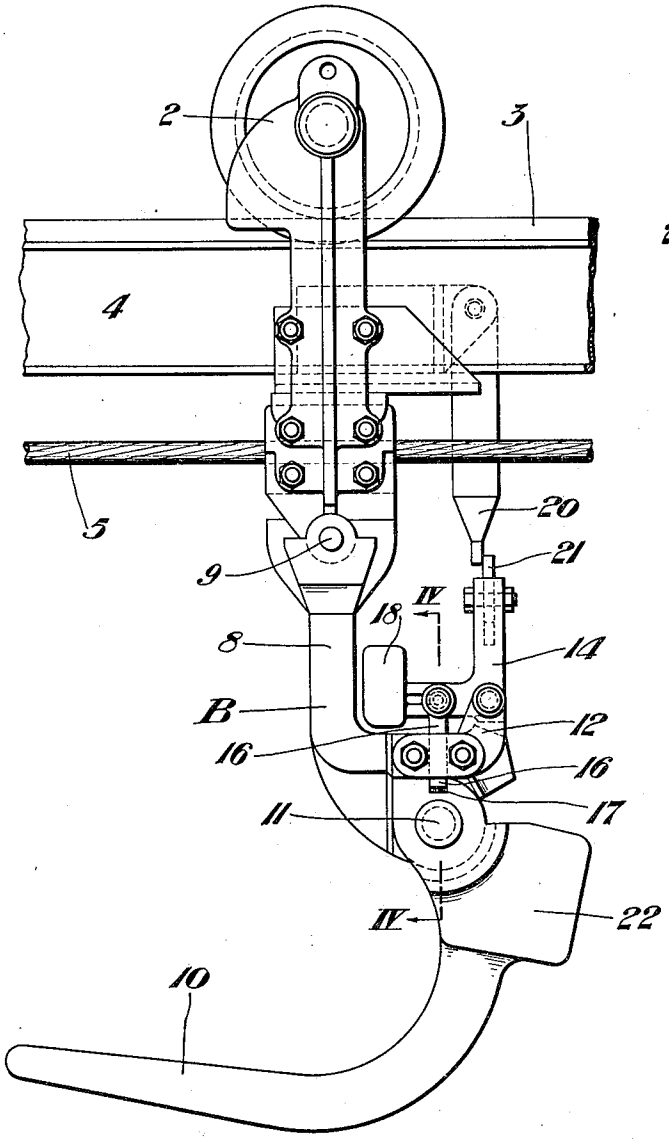
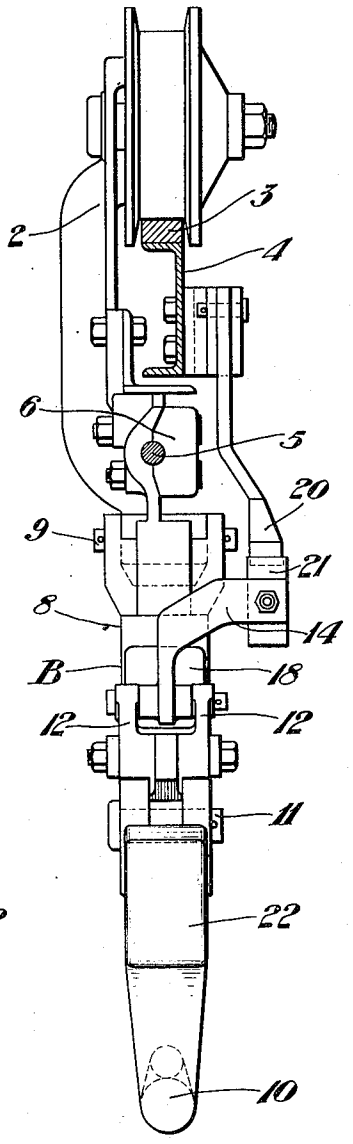


Fig. 2.



Witnesses:
Edwin Frueb

Inventor:
GEORGE J. BRYEN,
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Filed Nov. 12, 1923 2 Sheets-Sheet 2

Fig. 3.

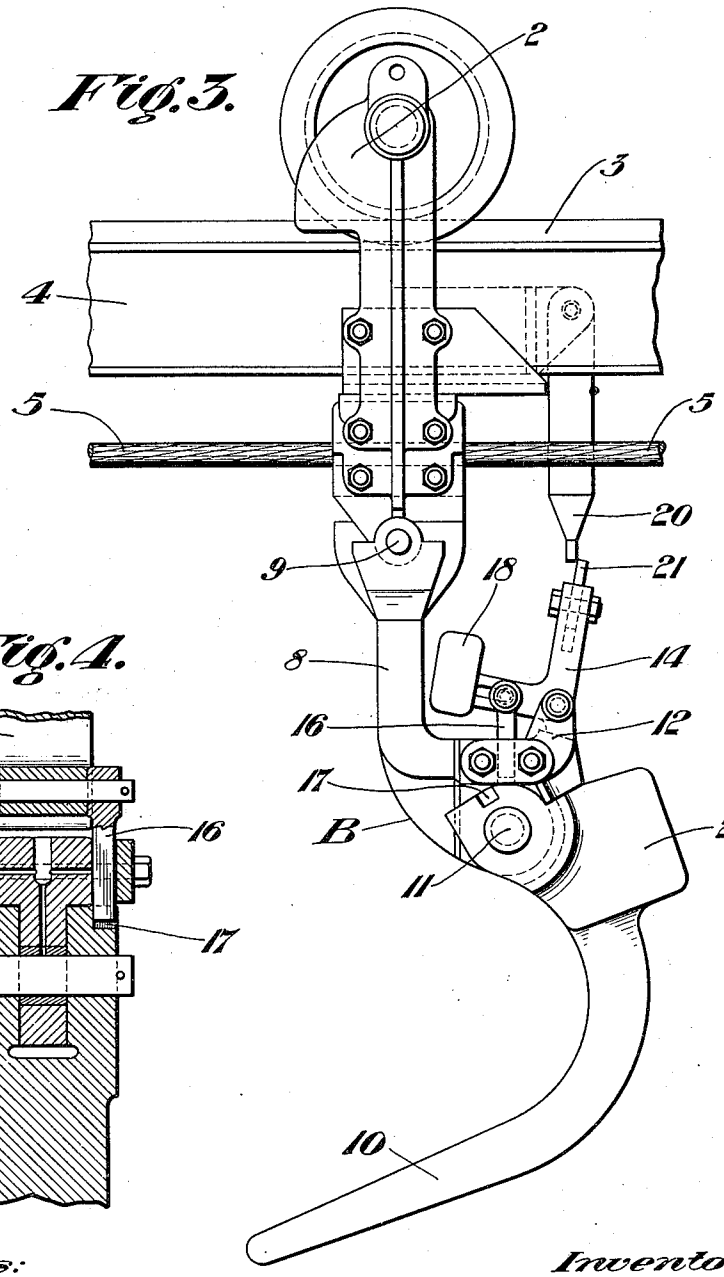


Fig. 4.

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Patented Oct. 7, 1924. 1,510,580

UNITED STATES PATENT OFFICE.

GEORGE J. BRYEN, OF DUQUESNE, PENNSYLVANIA.

CONVEYER HOOK.

Application filed November 12, 1923. Serial No. 674,250.

To all whom it may concern:

Be it known that I, GEORGE J. BRYEN, a citizen of the United States, and resident of Duquesne, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Conveyer Hooks, of which the following is a specification.

This invention relates to article carrying apparatus, and, while not limited thereto, relates more particularly to apparatus primarily designed for carrying bundles of rods, bars, wire and the like.

One object of the present invention is to provide a novel form of apparatus which will automatically discharge the article being carried, return to and be locked in article carrying position without manual aid.

Another object is to provide a novel form of article carrying apparatus having the novel design, construction and combination of parts described and illustrated in the accompanying drawings.

In the drawings, Figure 1 is a side elevation of the apparatus in article carrying position.

Figure 2 is a rear elevation thereof.

Figure 3 is a view similar to Figure 1, with the article carrying hook tripped and in discharging position.

Figure 4 is a sectional elevation on the line IV—IV of Figure 1.

Referring more particularly to the drawings, the numeral 2 designates a conveyer trolley mounted to run on a rail 3 carried by a supporting channel beam 4.

The trolley 2 is secured to an endless driving cable 5 by a cable clamp 6, so as to cause it to travel with the cable along the track.

An article carrying hook B is mounted on the trolley 2 and comprises a rigid shank portion 8 secured by a pin 9 to the trolley 2 and a hooked body portion 10 pivotally secured to the lower end of the shank portion 8 by a pin 11.

The shank portion 8 is provided with upstanding lugs or ears 12 adjacent its lower end, between which is pivotally secured a bell crank lever 14 having one arm extending horizontally over the upper end of the body portion 10 and its other end extending normally vertically or parallel with the upper portion of the shank for a portion of its length, and then outwardly to a point beyond the side of the hook.

A pair of locking pins or bolts 16 are pivotally secured to the horizontal arm of the lever 14 and extend through guideways in the shank and have their lower ends normally projecting into suitable recesses 17 in the upper end of the body portion 10 to lock said portion against movement relative to the shank.

A suitable counterweight 18 is formed on the extreme outer end of the horizontal arm of the bell crank lever, and serves to normally hold the pins 16 in position within the recesses 17.

A suitable tripping finger 20 is secured to the beam 4 and extends down into the path of travel of a second finger 21 on the vertical arm of the lever 14. When the fingers 20 and 21 engage, the bell crank lever 14 will be rocked rearwardly, thus raising the pins 16 out of the recesses 17 and permitting the body portion 10 to swing about the pin 11 to discharge the article carried thereby.

A suitable counterweight 22 is formed integral with and projects rearwardly from the body portion 10 of the hook B adjacent its upper end, and serves to automatically return the body portion 10 of the hook to its article carrying position immediately upon the discharge of the article being carried. As soon as the body portion 10 returns to its article carrying position, it will be automatically locked in this position, due to the counterweight 18 which is normally forcing the pins 16 downwardly. Therefore, when the recesses 17 return to their normal position the pins 16 will immediately drop into said recesses and lock the body portion 10 of the hook against movement until the bell crank lever 14 is again tripped.

While I have described and shown only one specific embodiment of my invention, it will be understood that I do not wish to be limited thereto, since various modifications may be made without departing from the scope of my invention as defined in the appended claims.

I claim:—

1. The combination with track, a trolley adapted to travel on said track, of an article carrying hook secured to said trolley, said hook comprising a rigid shank portion, a body portion pivotally secured to said shank portion, a bell crank lever pivotally mounted on said shank portion, a pair of

locking pins carried by one arm of said bell crank lever and adapted to engage suitable recesses in said body portion to lock said body portion in raised or carrying position, a trip member carried by said track at a predetermined point in the travel of said hook for automatically rocking said bell crank lever to withdraw said locking pins from said recesses, thereby releasing said body portion for downward movement to discharge the article carried thereon, an integral counterweight formed on said body portion adapted to automatically return said body portion to carrying position immediately after said article is discharged, and a counterweight on said bell crank lever for causing said locking pins to enter said recesses in said body portion, and thus lock said body portion in carrying position.

2. In an article carrying apparatus, the combination of an article carrying hook comprising a shank portion, a body portion pivotally mounted on said shank portion, a bell crank lever pivotally mounted on said shank portion, a pair of locking pins carried by one arm of said bell crank, and adapted to be engaged in suitable recesses in said body portion to lock said body portion in raised or carrying position, a trip member adapted to automatically rock said bell crank lever and withdraw said pins from said recesses, thereby releasing said body portion for downward movement to discharge the article carried thereon, a counterweight on said body portion adjacent its upper end adapted to automatically return said body portion to carrying position when the article is discharged therefrom, and a counterweight on said bell crank lever for causing said locking pins to automatically enter said recesses in said body portion when said body portion returns to carrying position.

3. In an article carrying apparatus, the combination of an article carrying hook comprising a shank portion, a body portion pivotally mounted on said shank portion, a lever pivotally mounted on said shank portion, at least one locking pin carried by said lever and adapted to be engaged in a suitable recess in said body portion to lock said body portion in raised or carrying position, a trip member adapted to automatically rock said lever and withdraw said pin from said recess, thereby releasing said body portion for downward movement to discharge the article carried thereon, a counterweight on said body portion adapted to automatically return said body portion to carrying position when the article is discharged therefrom, and a counterweight on said lever for causing said locking pin to automatically enter said recess in said body portion when said body portion returns to carrying position.

In testimony whereof I have hereunto signed my name.

GEORGE J. BRYEN.