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TRIPPING DEVICE FOR ELEVATED CARRIERS.

APPLICATION FILED DEC. 13, 1909.

967,846. Patented Aug. 16, 1910.

Fig. 2.

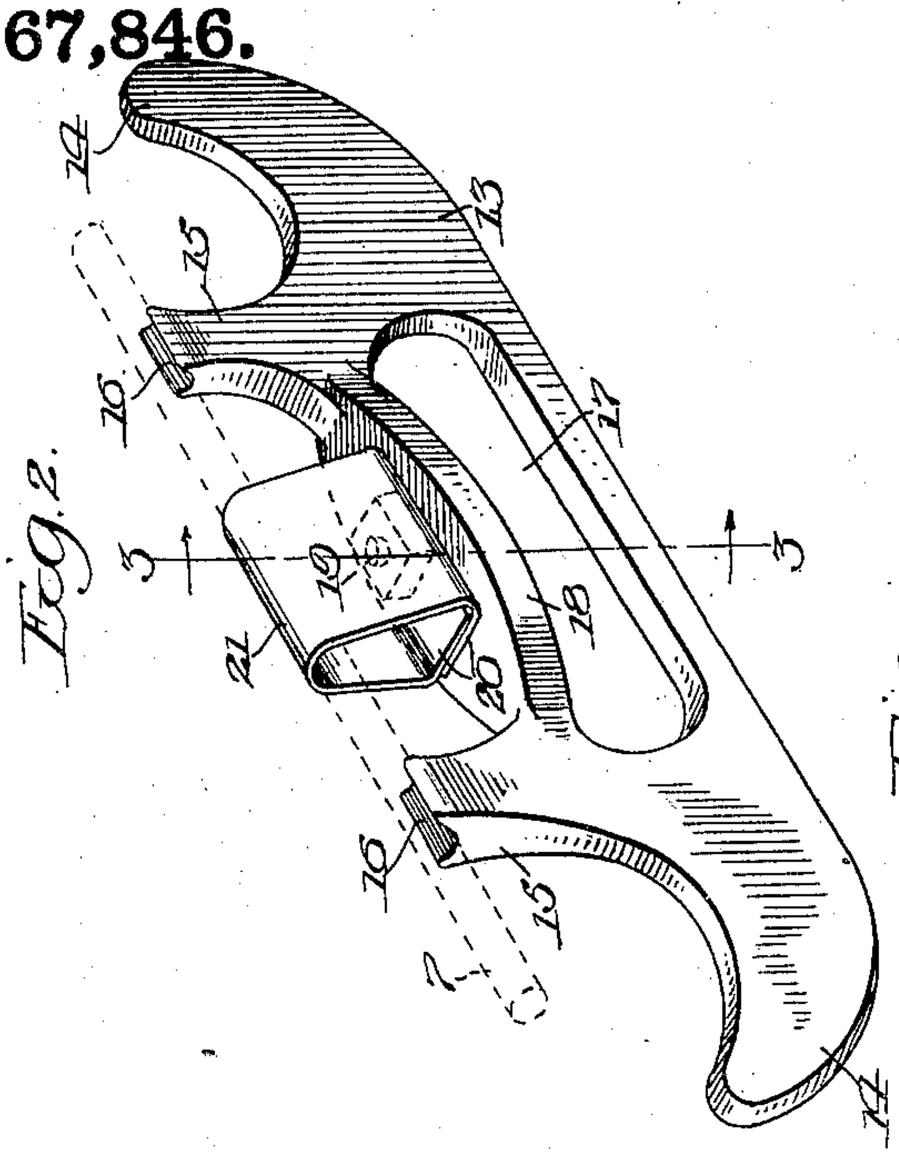


Fig. 3.

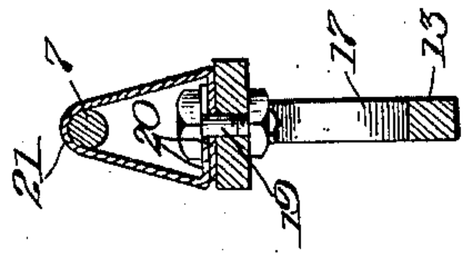


Fig. 1.

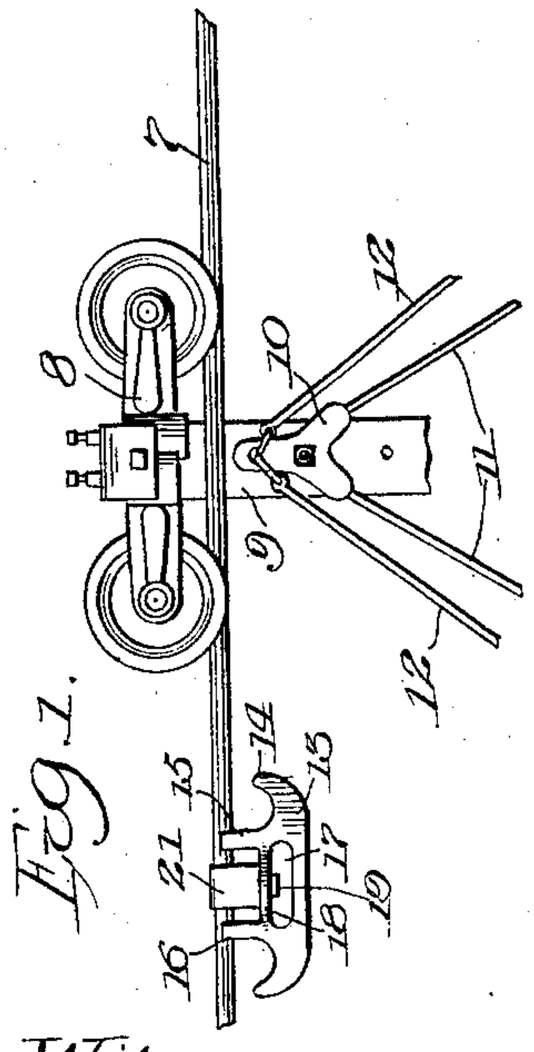
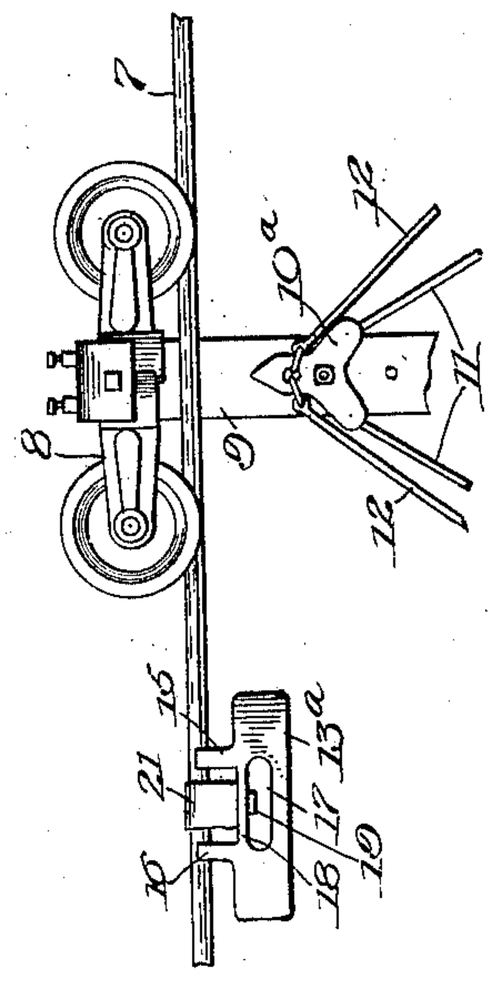


Fig. 4.



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UNITED STATES PATENT OFFICE.

ASHLEY C. SMITH, OF CHICAGO, ILLINOIS; FRANK S. SMITH, CORA SMITH, AND BELLE KNOWLES, EXECUTORS OF SAID ASHLEY C. SMITH, DECEASED, ASSIGNORS TO SMITH MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

TRIPPING DEVICE FOR ELEVATED CARRIERS.

967,846. Specification of Letters Patent. Patented Aug. 16, 1910.

Application filed December 13, 1909. Serial No. 532,730.

To all whom it may concern:

Be it known that I, ASHLEY C. SMITH, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Tripping Devices for Elevated Carriers, of which the following is a specification.

This invention has relation to improvements in a tripping device to be used in connection with an elevated carrying apparatus similar to that shown in an application for patent, Serial No. 455,684, filed by me on the 1st day of October, 1908, for carrying apparatus, in which application I have shown, but not claimed, one form of the present invention, that is, an apparatus of that type in which a wheeled carrier equipped with and supporting a car or receptacle for the material to be transferred from one place to another, travels on an elevated track or cable and said receptacle is caused to automatically dump its load at a pre-determined point on the track or cable, and it consists in certain peculiarities of the construction, novel arrangement and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The principal object of the invention is to provide a tripping device for elevated carriers which shall be simple and inexpensive in construction, strong, durable and efficient in operation, and so made that when applied to the cable or track, its connecting parts thereto will offer practically no obstruction to the wheels of the carrier as they pass along the track or cable.

A further object of the invention is to provide a tripping device which will positively actuate the trigger which controls the operation of dumping the car or receptacle when the carrier is moved in either direction.

Still another object of the invention is to provide a tripping device which can be readily secured to the track or cable at any desired point thereon or quickly removed therefrom.

In order to enable others skilled in the art to which my invention pertains, to make and use the same, I will now proceed to describe it, referring to the accompanying drawings, in which:

Figure 1, is a view in side elevation of a portion of an elevated track or cable showing a tripping device embodying one form of the invention mounted thereon and illustrating a wheeled carrier on the track or cable and a portion of the hanger and releasing or dumping mechanism for the car or receptacle. Fig. 2, is an enlarged perspective view of the tripping device shown in Fig. 1. Fig. 3, is a cross-sectional view taken on line 3—3 of Fig. 2, looking in the direction indicated by the arrows. And Fig. 4, is a similar view of like parts to that shown in Fig. 1, but illustrating a modification in the construction of the tripping device.

Like numerals of reference, refer to corresponding parts throughout the different views of the drawing.

The reference numeral 7, designates a portion of an elevated track or cable which may be supported in any well known manner, and on which a wheeled carrier 8, of the ordinary or any preferred construction is adapted to travel. This carrier is provided with a depending bracket 9, which supports a car or receptacle (not shown) for the material to be transferred from one point to another, and said car is usually supported on the lower portion of the bracket 9, by means of a bail mounted thereon so that it may be tilted to either side of the bail, yet may be held in its upright position by means of suitable locking or engaging devices carried by the bail and connected to a trigger 10, pivoted on the bracket 9, by means of cables or connections 11, and 12, which mechanism is clearly shown and fully set forth in my aforesaid application No. 455,684, for patent, but which forms no part of the present invention, and for this reason it is deemed unnecessary to show the same or to further describe its construction and operation, other than to say that when the upper portion of the trigger 10, strikes the tripping device it will be turned on its pivot, thus causing the lock or engaging mechanism for the car to be unlocked or disengaged and permitting the car to automatically turn on its pivoted support and discharge its load.

Mounted at a suitable point or points on the cable or track 7, is a trip or tripping device for the trigger 10, which consists of a sleigh-like runner-bar 13, that is to say, it

has each of its ends turned upwardly as at 14, and is provided on its upper portion with upright and spaced apart extensions 15, each of which is provided with a groove 16, to receive the cable or track. The bar 13, is provided at about its middle with an opening 17, and above said opening with a flat horizontal portion 18, which unites the extensions 15, near their lower portions. The portion 18, of the trip has extended through a suitable opening at about the middle thereof, a bolt 19, which is also extended through the overlapping bottom portions 20, of a clip 21, which is made of quite thin metal, and is looped over the cable or track 7, as is clearly shown in Figs. 2, and 3, of the drawing.

The overlapping bottom portions 20, of the clip 21, are secured to the portion 18, of the bar 13, by means of the bolt 19, and nuts thereon so as to firmly hold the grooved extensions 16, against the lower surface of the track or cable. By employing the clip 21, made of very thin metal, it is apparent that very little obstruction will be offered to the wheels of the carrier as they pass back and forth thereover and that as the ends of the bar 13, are curved and upwardly extended to near the cable, they will strike the upper portion of the trigger 10, when the carrier is going in either direction, thus causing the trigger to be turned on its pivot and through the medium of the cables or connections 11, to remove or disengage the locking device from the car or receptacle when the same will be permitted to turn on its bearing to either side of the bail and discharge its load.

In Fig. 4, is shown a modification in the construction of the tripping device which is identical with that shown in the other figures of the drawing, except that a bar 13^a, is employed which is rectangular at its ends instead of having rounded and upturned ends as in the other construction. When this modified construction is employed, a trigger 10^a, having the sides of its upper portion beveled as shown in Fig. 4, may be employed which will co-act with the rectangular ends of the bar 13^a, in such a way as to cause the trigger to turn on its pivot and release the locking device from the car or receptacle.

While I have shown the extensions 15, provided with grooves 16, to receive the cable or track and prefer such form of extensions, especially when the device is used in connection with a cable, yet in some instances the grooves may be omitted and the upper ends of the extensions allowed to rest against the lower surface of the track or cable, in which position they will be firmly held by the clip.

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

1. A tripping device for elevated carriers consisting of a bar having between its ends and on its upper surface a pair of spaced apart extensions to rest against the lower portion of a cable or track, a clip adapted to be looped over the cable or track and having its lower portion adjustably secured to the upper surface of the bar between said extensions thereon.

2. A tripping device for elevated carriers consisting of a bar having between its ends and on its upper surface spaced apart extensions to rest against the lower portion of a cable or track and provided between its ends with an opening, a clip adapted to be looped over the cable or track and having its lower portion adjustably secured to the bar above the opening therein.

3. A tripping device for elevated carriers consisting of a bar having between its ends and on its upper surface spaced apart extensions each provided at its free end with a groove to receive the cable or track, and a clip adapted to be looped over the cable or track and having its lower portion vertically adjustably secured to the upper surface of the bar between the extensions thereon.

4. A tripping device for elevated carriers consisting of a bar having its ends rounded and between said ends and on its upper surface spaced apart extensions to rest against the lower portion of the cable or track, and a clip adapted to be looped over the cable or track and adjustably secured at its lower portion to the upper surface of the bar between said extensions thereon.

5. A tripping device for elevated carriers consisting of a bar having its ends rounded and upturned and between said ends and on its upper surface spaced apart extensions, each of said extensions having in its free end a groove to receive the cable or track, and a clip looped over the cable or track and adjustably secured at its lower portion to the upper surface of the bar between said extensions.

6. A tripping device for elevated carriers consisting of a bar having its ends curved upwardly and on its upper surface spaced apart extensions, each of said extensions having on its free end a groove to receive the cable or track, the said bar having a horizontally disposed and apertured flattened portion between said extensions and provided with an opening below said flattened portion, a clip looped over the cable or track and having at its lower portion apertured overlapping parts to rest on the upper surface of the flattened portion of the bar, and a bolt located in the aperture of the overlapping parts of the clip and the opening of the flattened portion of the bar to secure said parts together.

7. A tripping device for elevated carriers consisting of a bar having its ends curved

upwardly and on its upper surface between said ends spaced apart extensions to rest against the lower portion of a cable or track, the said bar having a horizontally disposed and vertically apertured portion between said extensions and provided with an opening below said portion, a clip looped over the cable or track and having at its lower portion apertured overlapping parts, and a bolt located in the aperture of the overlapping parts of the clip and the aperture of the portion of the bar above the said opening therein to adjustably secure the clip and bar together.

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