W. ROTHE.

OVERHEAD SWITCH AND AUTOMATIC TROLLEY STOP.

APPLICATION FILED APR. 16, 1913.

1,068,277. Patented July 22, 1913.

Fig. 1

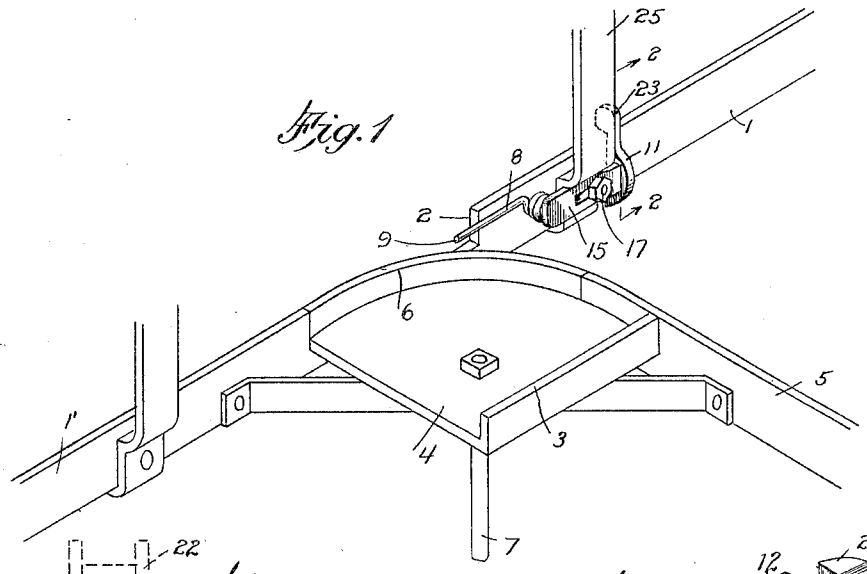


Fig. 2

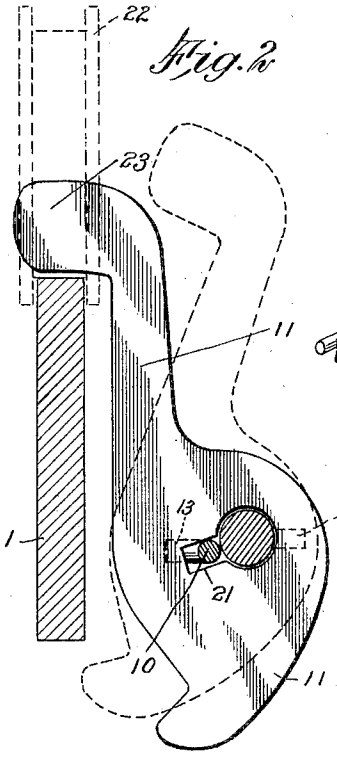


Fig. 3

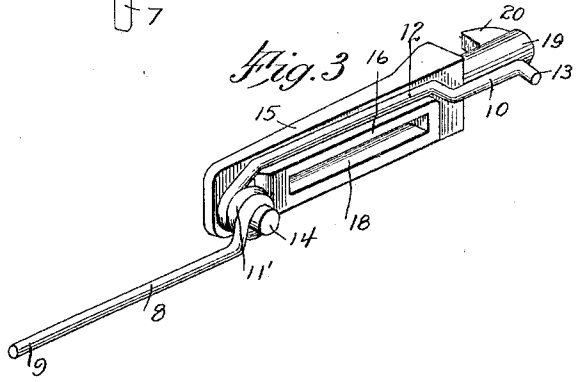
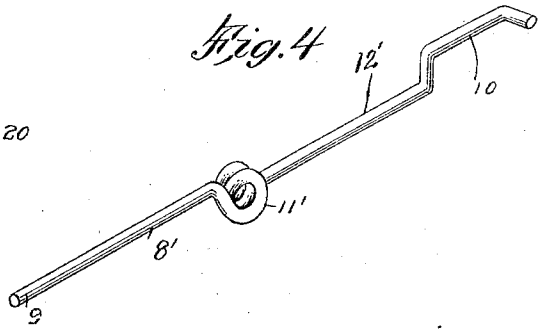


Fig. 4



WITNESSES

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OVERHEAD SWITCH AND AUTOMATIC TROLLEY-STOP.

1,068,277. Specification of Letters Patent. Patented July 22, 1913.

Application filed April 16, 1913. Serial No. 761,486.

To all whom it may concern:

Be it known that I, WILLIAM ROTHE, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Overhead Switch and Automatic Trolley-Stop, of which the following is a full, clear, and exact description.

This invention relates to improvements in stops for overhead railways or switches of the type used in slaughter houses, and similar places where the article being carried is suspended from a suitable carriage, and has for an object to provide an improved structure which will automatically be set when the switch is open, and which will automatically move out of the way when the switch is closed.

A further object of the invention is to provide a pivotally mounted stop associated with a clamping member, and a pivotally mounted lever structure actuated by the switch so that when the switch is in one position, and when the switch is in an opposite position the stop will be automatically moved to act as an obstruction or stop.

In carrying out the objects of the invention, a switch of substantially any desired kind may be used, and overhead rails may be used of any desired or preferred structure. The switches commonly in use, as for instance a vertically movable and pivotally arranged switch, is a desirable structure to be used in connection with the stop embodying the invention. The switch when turned for closing the main line is designed to engage the pivotally mounted lever structure, which will actuate a stop overlapping or overhanging the main line or main track. The actuation of the pivotally mounted lever will cause the stop to move to one side so that when the switch is correctly positioned on the main line or track, the track will be clear. The stop is formed heavier at one end than at the other so as to automatically move to a position over the main line or track when the switch has been opened.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of a switch, part of a track, and a stop embodying the invention associated with the track and switch; Fig. 2 is an enlarged sectional view approximately on the line 2—2 of Fig. 1; Fig. 3 is a detail perspective view of the pivotally mounted lever and clamping member for holding the same in place; and Fig. 4 is a detail perspective view of a lever designed to be used when the device is arranged in a reverse position to that shown in Fig. 1.

Referring to the accompanying drawings by numerals, 1 indicates a main line provided with a notched out portion 2, into which the rail 3 of switch 4 is adapted to be moved when the rail 1 is designed to be clear or continuous. When it is desired to connect the auxiliary side rail 5 to rail 1, the switch is arranged as shown in Fig. 1, whereby the article from rail 5 may pass over the curved rail section 6 to part 1′ of track 1, or the carriage may be moved in an opposite direction, as desired. When it is desired to make line 1 continuous, bar 7 is raised and turned, and as bar 7 is rigidly connected with switch 4, the switch is raised and turned until rail 3 of switch 4 is above the notched out portion 2. The rail 3 is then lowered into position in its downward movement will engage lever 8 and move the end 9 downwardly. The movement of end 9 downwardly causes the end 10 to move upwardly. An upward movement of end 10 will cause the stop 11 to move to the dotted position shown in Fig. 2, whereupon the track 1 is clear. Lever 8 may be made from a bar having a twisted portion 11′, ends 9 and 10, connecting member 12, and turned over point 13, or the lever may be made from a casting or stamping, as occasion may demand.

As shown in Fig. 3, lever 8 is pivotally mounted upon a stub shaft 14 rigidly connected with, or formed integral with a clamping member 15. The clamping member 15 is provided with a projecting boss 16 so that when the clamping member is clamped in place by bolt 17, ample space will be provided between member 15 and hanger 25, allowing a free pivotal movement of lever 8. In order to accommodate clamping member 15 to various hangers, the same is formed with a slot 18 which will allow the hanger clamping bolt to be used in clamping the clamping member 15 correctly in place. One end of the clamping member 15 is provided with a shaft 19 having a key 20 radiating from one side there-

of. The key 20 is adapted to be passed through a keyway 21 in the stop 11 and then turned to the position shown in Fig. 2, which will cause the boss 16 to become flush with a hanger when the device is arranged in position. The keyway 21 is designed to be used by bar 10 of lever 8, as shown in Fig. 2 for actuating the stop 11, the point 13 being used to assist in holding the stop 11 in place. In connection with stop 11 it will be observed that the lower part thereof is made comparatively heavy so as to overbalance in order that the stop will normally take the position shown in full lines in Fig. 2. In this way whenever the switch is designedly or accidentally moved to the position shown in Fig. 1, the stop will automatically actuate in order to prevent any accident. In order that the wheels 22 of the carriages used on track 1 may not be unnecessarily injured or have the flanges thereof bent, the stop 11 is provided with an enlarged head 23, which is adapted to engage the curves of the wheels, as shown in Fig. 2.

In Fig. 4 will be seen a lever 8′ similar to lever 8 shown in Fig. 3, but formed with an oppositely extending coil 11′ and an oppositely extending inclined portion 12′ so as to act as a left-handed lever, while the structure shown in Fig. 3 acts as a right-handed lever. This slight change is merely so that stop 11 may be used on either side of the hanger 25, whether the hanger is used on the main track or on the side track. In case the main track should be slightly curved the lever arm 8 may be curved or bent to properly fit the track.

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

1. In a stop for overhead tracks, the combination with a switch, of a pivotally mounted lever actuated by said switch, a support for said lever formed with a stub shaft projecting through the lever, said support being formed with a journal member extending therefrom, and a stop pivotally mounted on said journal member formed with a weighted end and with an aperture through which one end of said lever projects, said weighted end normally holding said lever in a predetermined position and said lever being adapted to move said stop in another position when actuated by said switch.

2. In an automatic stop for overhead rails, a support formed with a slot therein for receiving a clamping bolt, said support being formed with a boss, a stub shaft extending from the bottom thereof near one end of said boss, and a journal member extending from the end opposite said stub shaft, said journal member being provided with a projecting lug, a lever formed with a journal receiving opening, said lever being mounted on said stub shaft and fitting around said boss with one end projecting adjacent said bearing member, a stop formed with an aperture and a slot radiating therefrom, said stop fitting over said bearing member, and locked in place by the lock projecting therefrom, said lever projecting through said radiating slot whereby when said lever is actuated said stop may be moved from one position to another.

3. In an automatic stop for overhead rails, a support, a journal member extending from one end of said support, a pivotally mounted lever, a stop formed with an aperture, and a slot radiating therefrom, said stop fitting over said journal member said stop being locked in place by a projection extending from said journal member, said lever projecting through said radiating slot whereby when said lever is actuated said stop may be moved from one position to the other.

4. In a stop for overhead tracks, a pivotally mounted lever, a support formed with a journal member extending therefrom, and a stop pivotally mounted on said journal member, said stop being formed with a weighted end and with an aperture through which one end of said lever projects, said weighted end normally holding said lever in a predetermined position, and said lever being adapted to move said stop to another position when operated.

5. In a stop for overhead tracks, the combination with a switch, of a pivotally mounted lever actuated by said switch in one direction, a support arranged adjacent the track on which the switch is mounted, said support being formed with a journal member extending therefrom, and a stop pivotally mounted on said journal member, said stop being formed with a weighted end and with an aperture through which one end of said lever projects, said weighted end normally holding said lever in a predetermined position, and said lever being adapted to move said stop to another position when actuated by said switch.

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

WILLIAM ROTHE.

Witnesses:
A. L. KITCHIN,
PHILIP D. ROLLHAUS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."