W. D. WRIGHT & J. T. FINN.

SWITCH.

APPLICATION FILED SEPT. 4, 1912.

1,072,409.

Patented Sept. 2, 1913.

2 SHEETS—SHEET 1.

Fig. 1.

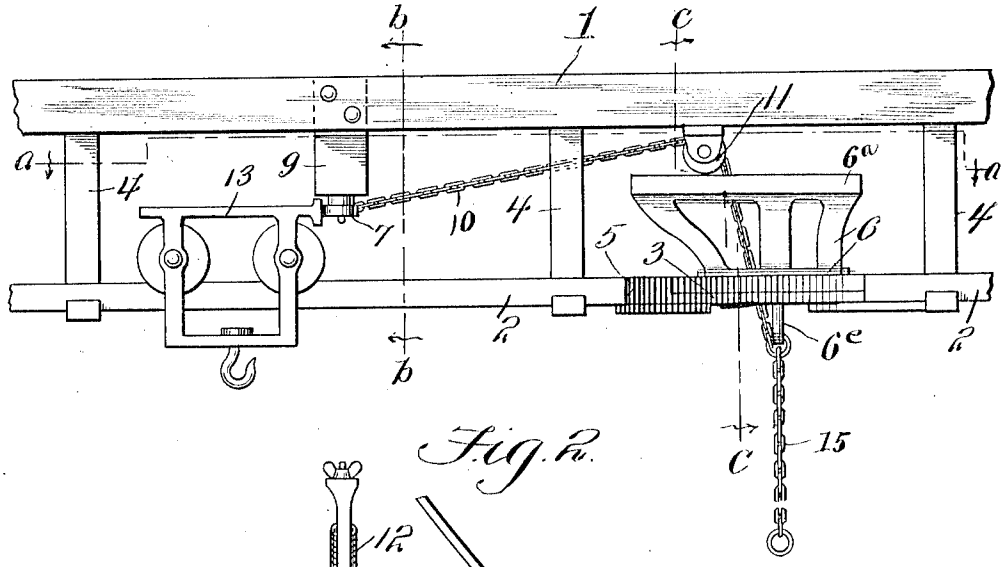
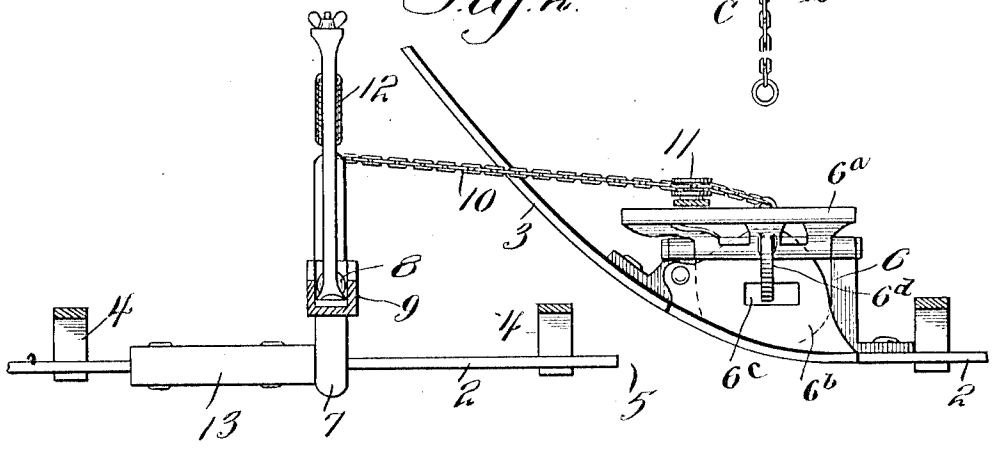


Fig. 2.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 3.

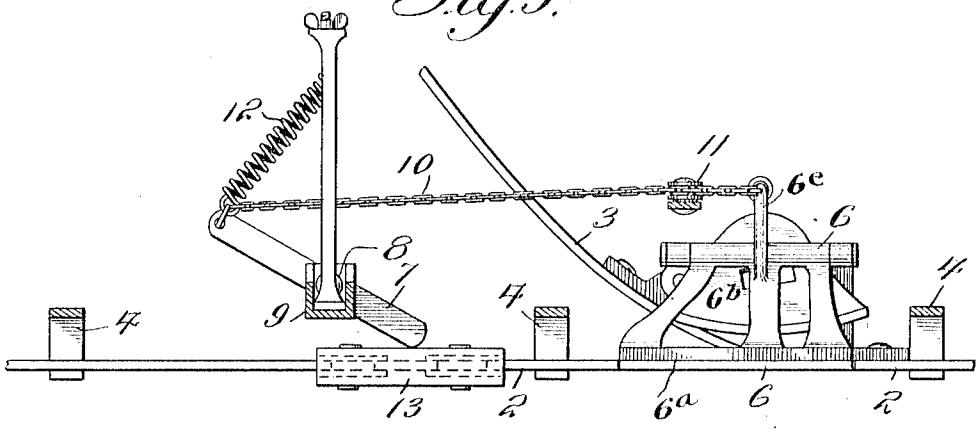


Fig. 4.

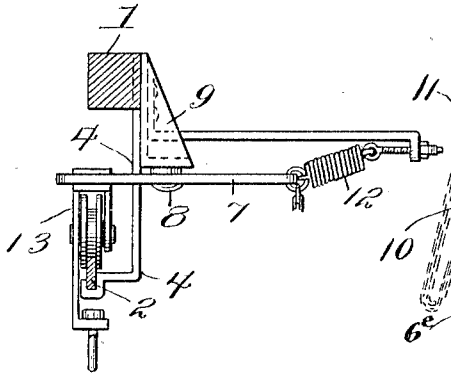
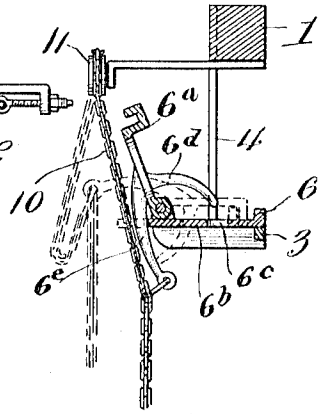


Fig. 5.



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UNITED STATES PATENT OFFICE.

WILLIAM D. WRIGHT AND JOSEPH T. FINN, OF ALBION, NEW YORK; SAID FINN ASSIGNOR OF ONE-FOURTH OF THE RIGHT TO THOMAS J. SWEET, OF ALBION, NEW YORK.

SWITCH.

1,072,409. Specification of Letters Patent. Patented Sept. 2, 1913.

Application filed September 4, 1912. Serial No. 718,589.

To all whom it may concern:

Be it known that we, WILLIAM D. WRIGHT and JOSEPH T. FINN, citizens of the United States, residing at Albion, in the county of Orleans and State of New York, have invented new and useful Improvements in Switches, of which the following is a specification.

This invention relates to improvements in switches, for conveyer apparatus such as used in factories, slaughter houses and other places and embodying overhead track rails and cars which operate thereon to carry articles from one point to another, the object of the invention being to provide car operated switch throwing mechanism connected to the switch at the point where a side track connects with a main track and adapted to be operated automatically by a car approaching an open switch on the main track so as to automatically set the switch and, hence, prevent the car from dropping through the open point in the main track, the invention consisting in the construction, combination and arrangement of devices hereinafter described and claimed.

In the accompanying drawing:—Figure 1 is a side elevation of a portion of the overhead track of a conveyer apparatus of the class indicated, provided with our improved automatically operated switch controlling mechanism. Fig. 2 is a horizontal sectional view of the same on the plane indicated by the line *a—a* of Fig. 1, showing the main track and a side track and also a switch in plan, the switch being in the position to open the main track and to close the side track. Fig. 3 is a similar view, showing the switch in position to close the main track in advance of an approaching car and in the act of being closed thereby. Fig. 4 is a vertical transverse sectional view on the plane indicated by the line *b—b* of Fig. 1. Fig. 5 is a detail transverse sectional view on the plane indicated by the line *c—c* of Fig. 1.

For the purposes of this specification, an overhead beam is indicated at 1 and a main track at 2 and side track 3 are also indicated, suspended from and below the beam by means of hangers 4. There is an opening 5 in the main track at the point of intersection by the side track. At this point is located a switch 6, which for the purposes of this specification is shown as of the form described in Letters-Patent of the United States, No. 571,607, granted to P. F. Werner, Nov. 17, 1896, and comprising essentially an element 6^a mounted for vertical angular movement to close or open the main track, and an element 6^b mounted for horizontal angular movement to close or open the side track. The element 6^b is directly actuated by the element 6^a and has an opening 6^c for engagement by a cam arm 6^d. Said element 6^a also has an operating lever 6^e on its rear side. When the element 6^b is moved outwardly by the cam arm 6^d and the element 6^a is raised, as shown in Figs. 1, 2 and 5, the main track is open and the side track is closed. When, however, the element 6^b is drawn back by the arm 6^d and the element 6^a is lowered as indicated in Fig. 3, and also in dotted lines in Fig. 5, the side track is open and the main track is closed.

In accordance with our invention, we provide a car operated lever 7 which is pivotally mounted as at 8, at a point intermediate its ends, on the under side of a block or bracket 9 which is secured to and depends from the beam 1 at a point near the intersection of the side track and spaced from the opening 5 of the main track. An operating element here shown as a chain 10 is connected to the outer end of the lever 7 and is also connected to the switch 6^a and passes over the direction pulley 11. A chain 15 is connected to and hangs from the lever 6^e to keep the element 6^a normally raised so that the main track is open and the side track is closed. A spring 12 is connected to the lever 7 and serves to normally hold said lever in position at right angles to and extending across and above the main track at a point near the opening 5, as shown in Figs. 1, 2 and 4. When a car, such as indicated at 13, operating on the main track approaches the switch and the latter is set for the side track, the car is caused to strike the inner end of the lever 7 and to turn the latter a sufficient distance to cause the element 10 to close the switch so that the element 6^a thereof forms a bridge over the opening 5 in the main track and thus prevents the car from dropping through said opening.

While we have herein shown and described a preferred form of the invention, we would have it understood that changes may be made in the form, proportion and

construction of the several parts without departing from the spirit of the invention and within the scope of the appended claims.

We claim: —

1. In combination with a main track, a side track and a switch, a car operated lever connected to the switch, pivotally mounted at a point higher than and spaced from one side of the track and yieldable means to normally hold the lever at an angle to and across and above the main track for operation by a car as the latter approaches a switch.

2. In conveying apparatus of the class described, the combination of an overhead main track and side track, a switch for alinement with either the main or side track, a car operated lever connected to the switch, pivotally mounted at a point higher than and spaced from one side of the track and a spring attached to the lever at a point eccentric to the pivot thereof and acting on the lever to normally hold the latter at an angle to and across and above the main track for operation by a car to close the switch as the car approaches the switch.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIAM D. WRIGHT.
JOSEPH T. FINN.

Witnesses:
WILLIAM G. TAYLOR,
HARRY E. COEBURN.