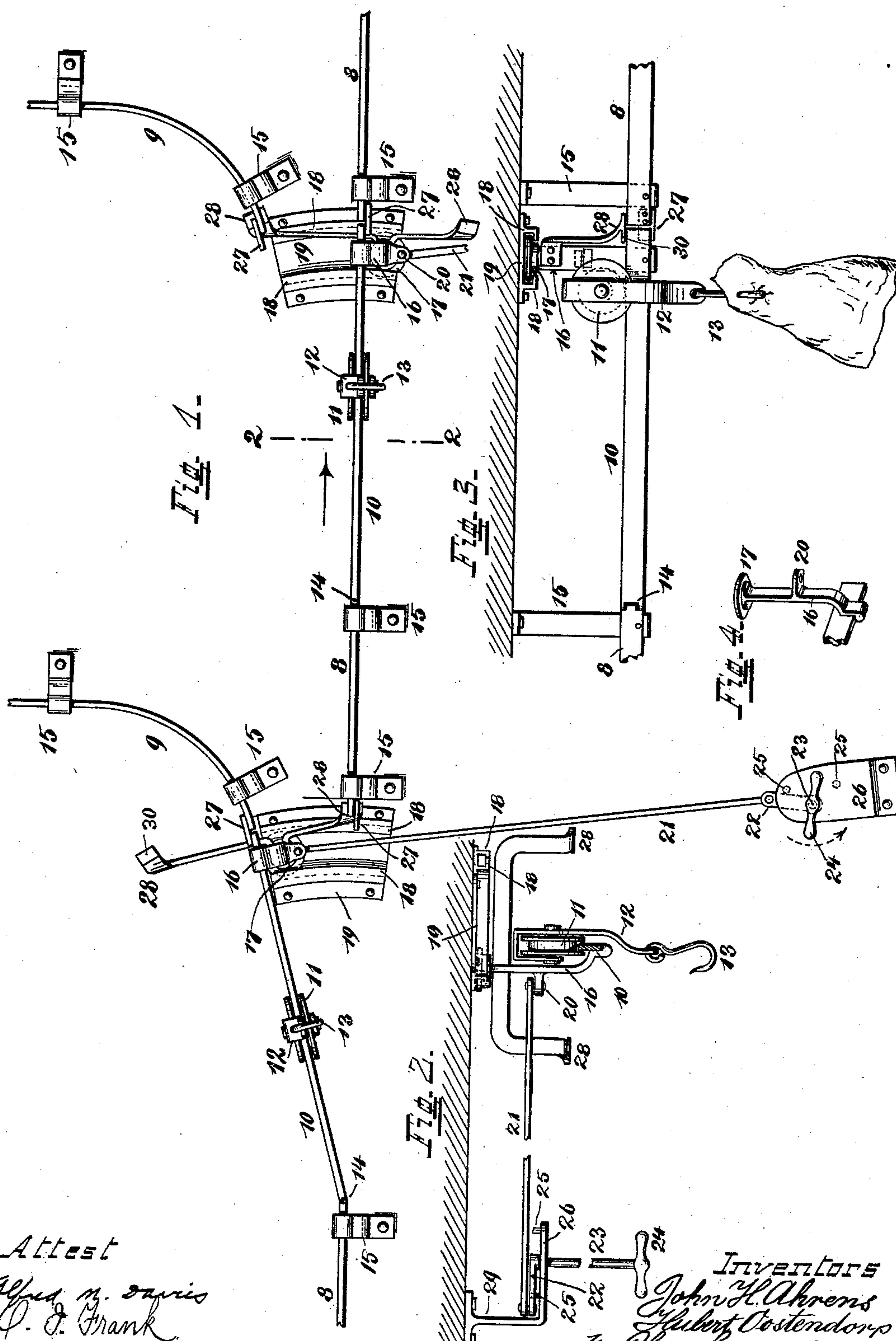


(No Model.)

J. H. AHRENS & H. OOSTENDORP.
SWITCH FOR OVERHEAD TRACKS.

No. 477,240.

Patented June 21, 1892.



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SWITCH FOR OVERHEAD TRACKS.

SPECIFICATION forming part of Letters Patent No. 477,240, dated June 21, 1892.

Application filed February 12, 1892. Serial No. 421,262. (No model.)

To all whom it may concern:

Be it known that we, JOHN H. AHRENS and HUBERT OOSTENDORP, citizens of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Switches for Overhead Carrier-Tracks; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in switches for overhead carrier-tracks, such as are used in slaughter-houses, ware-rooms, and factories for the purpose of moving quickly and conveniently sides of beef or other objects from one place to another. The objects so moved are generally supported on hooks depending from rollers or trolleys which move upon the tracks.

The improvements comprised in this invention relate to the novel manner by which the swinging end of the switch is supported, the manner of aligning this end with the balance of the track, the manner of moving the switch from one position to another and locking it in such position, and, finally, in the provision of stops which close the track end left open by the switch when the latter has been moved to the other end.

The construction by which these improvements are accomplished is described in the following specification, pointed out in the claims concluding it, and illustrated in the accompanying drawings, in which—

Figure 1 shows part of a system of such carrier-tracks secured to the ceiling of a suitable building and as they appear when looking at them from below. Fig. 2 is a section and side elevation taken on line 2 2 of Fig. 1. Fig. 3 is a side view of the switch and adjacent parts taken at right angles to the preceding figure. Fig. 4 is a perspective view of the switch-supporting bracket.

8 is a portion of a main track, which, for the purpose of illustrating a given case, may be supposed to be running lengthwise through the building.

9 are side tracks running crosswise through the building and may be connected with the main track by switches 10.

11 are rollers traveling on these tracks having frames 12 depending from them. The lower ends of said frames are bent inwardly, so as to bring the point of gravity of the load as much as possible below the center of the track.

13 are hooks connected to the frames 12, and on which the objects to be moved may be supported. Thus, for instance, if an object is to be moved onto a certain side track all the switches on the main track between such object and the side track are closed, excepting the particular switch by which connection between the main track and the designated side track is established, and the object supported on the roller travels through on the main track until it is guided on the desired side track by the switch. In the same manner may objects be moved from any of the side tracks back onto the main track. The stationary end of the switch is connected to the main track by a suitable hinge 14.

All the tracks are supported on hangers or brackets 15, which depend from the ceiling and are secured thereto. The depending arms of all these brackets pass down below the track and on one side of it only, so as to clear the rollers and their brackets during their passage.

The swinging end of the switch is supported on a sliding bracket 16, the lower portion of which corresponds with the balance of the brackets. Its upper end terminates in a circular flanged base 17, which is supported and guided on and between two rails 18, secured to a base-plate 19, which is fastened to the ceiling. From one side of hanger 16 extends a lug 20, to which a rod 21 connects, which, with its other end, is secured to a crank-arm 22. This crank-arm is secured to a vertical rod 23, which terminates in a handle 24, and is of a length to bring this handle down to within convenient reach.

25 are two stops secured to a plate 26, which forms the bearing for rod 23, and is supported by a bracket 29. The length of crank-arm 22 is so proportioned that when said crank rests against either one of the stops the switch

end is in its proper position and in alignment with either one of the track ends. Crank 22 passes in either one of its extreme positions slightly beyond the center, so as not to form a straight line with rod 21, thereby preventing the switch from becoming unlocked. The ends of the tracks are provided with stop-plates 27, against which the switch rests, and by which means a perfect alignment is attained. The round base 17, being of a diameter which corresponds with the distance between rails 18, is a great advantage, inasmuch as it moves freely and lightly, does not bind, and furnishes all the support required. To prevent any of the rollers 11 from running off of the track ends which have been opened by the switch or to prevent any of them from being pushed off accidentally by the attendants who might not notice the open switch, automatic stops 28 are provided, which are secured to hanger 16 and move with the same. These stops are so located in their lateral distance from the switch that in either position of this latter one of the stops stands over the open and disconnected track end. To prevent these stops from becoming bent should a roller moving with great velocity strike them, heels 30 are provided and located directly above the track. Should a heavily-loaded roller mount one of these stops, the heel thereof will be pressed down and bind against the track, and thereby aid the stop in resisting the sudden impact.

The advantages resulting from these improvements manifest themselves in a great reduction in the manufacturing cost and also in the easy and convenient manner by which the structure may be put in position. The hangers 16 may all be cast from one pattern and may be all alike, the round base making the fitting and adjustment very easy.

Brackets 20 are not exclusively confined to

walls or posts for support, but may be also attached to the ceiling and close to the track. This avoids in many cases excessive lengths of rods 21 and enables the operator to set the switches without changing his position and while walking under the track when moving the object supported thereon.

No special complicated construction is required to hold the switch in its adjusted positions. The arrangement and disposition of crank 22, moving slightly beyond the center and resting against stops 25, accomplish this purpose.

Having described our invention, we claim as new—

1. The combination, with a main overhead track and branch track, of a switch-track pivoted to the main track and provided with yoke-shaped guards or stops extending from each side, whereby when the switch-track is in connection with either the main or branch track a roller or trolley is prevented from running off the open track, all as substantially shown and described.

2. The combination, with a main overhead track and branch track, of a switch-track pivoted to the main track and provided with yoke-shaped guards or stops extending from each side to prevent any of the rollers or trolleys from running off of the open track-section and heels 30, secured to the under side of said stops and capable of binding against the track for the purpose of increasing the resistance of the stops, all as substantially shown and described.

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

JOHN H. AHRENS.

HUBERT OOSTENDORP.

Witnesses:

ALFRED M. DAVIES,
CHAS. SPENGEL.