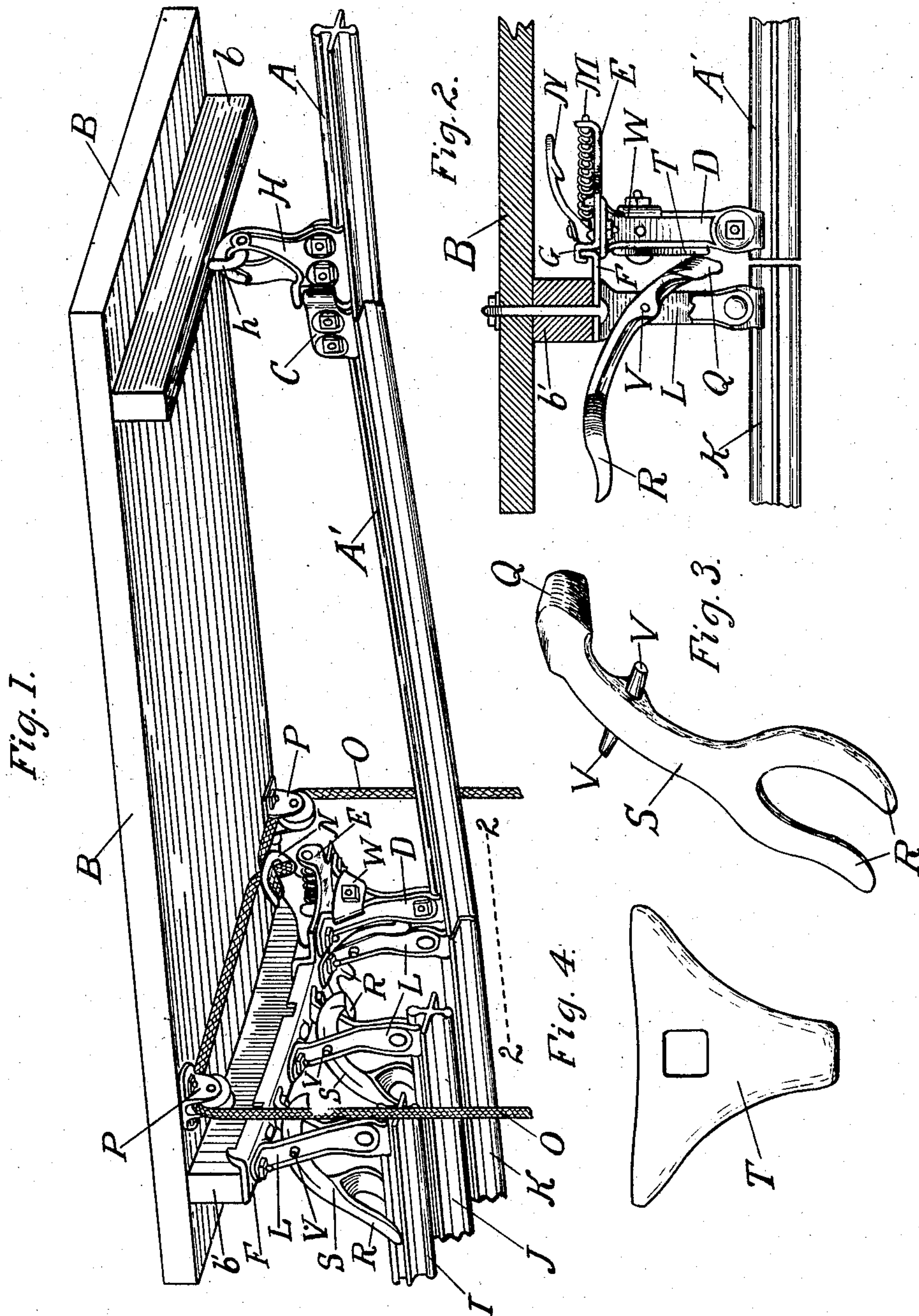


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R. B. & W. LOUDEN.
OVERHEAD SWITCH.

APPLICATION FILED MAR. 13, 1908.



WITNESSES:

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OVERHEAD SWITCH.

No. 891,493.

Specification of Letters Patent.

Patented June 23, 1908.

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To all whom it may concern:

Be it known that we, ROBERT B. LOUDEN and WILLIAM LOUDEN, citizens of the United States, residing at Fairfield, in the county of Jefferson and State of Iowa, have invented a new and useful Improvement in Overhead Switches, of which the following is a specification.

Our invention relates to switches for overhead tracks, such as are used for hay carriers, litter carriers, etc., and it consists of improvements in details, as hereinafter set forth and as definitely pointed out in the claims.

In the accompanying drawings forming a part of this specification, Figure 1 is a perspective of an overhead track and switches embodying our invention. Fig. 2 is a vertical section drawn longitudinally along the main track and the branch track with which it is connected and the attachments for supporting the same, said section being approximately along and above the line 2—2 in Fig. 1. Figs. 3 and 4 are enlarged detail views which will be explained hereafter.

Referring to the drawings, A represents a section of the main track which is connected to an overhead supporting block or plank B by means of a hanger H, a cleat *b* being preferably secured to the plank and a hook *h* being passed through the cleat and plank to support the hanger.

A' is a hinged section of track and is connected to the main track by a clamp C which is hinged to the hanger H. The other end of the section A' is supported by a special hanger D which has its upper end made forked and secured to a plate E. The opposite end of the plank B is also fitted with a cleat *b'* and to this cleat is secured a plate F having an upturned flange on its outer edge. The plate E on its edge adjoining the plate F has a lipped portion G fitted with a groove to catch over and slide upon the upturned edge of the plate F.

I, J and K represent branch track sections with which the hinged section A' is designed to connect when moved into proper position for each. The ends of these branch sections adjacent to the hinged section A' are supported by hangers L which are made substantially like the hanger D and their upper forked ends are secured to the plate F by bolts passing through it and preferably also through the cleat *b'* and plank B. The hangers L are spaced so as to afford sufficient

space between the tracks I, J and K, to allow the passage of the necessary carrier frames between them. The upturned edge of the plate F is fitted with notches spaced so as to be directly in line with each of the branch tracks, I, J and K.

The plate E is fitted with a spring pressed bolt, the inner end of which is adapted to enter either of the notches in the upturned edge of the plate F, and thus to hold the hinged section A' in line with either of the branch track, I, J and K, as desired. A cord or small rope O is passed over small pulleys P which are secured to opposite edges of the plank adjacent to the plate F. The central portion of the cord O is secured to a lever or trigger N, which is arranged to operate the bolt, substantially in the manner shown and described in Patent No. 744,372 to William Loudon, Nov. 17, 1903. As shown in the drawings, the bolt is inserted in the notch in line with the branch track K.

To bring the hinged section A' in line with either of the other branch tracks, pull on the left hand end of the cord O which first withdraws the bolt N from engagement with the right hand notch and then draws the plate E along on the plate F until the bolt M is opposite the central notch in line with the branch track J. The force of the spring will now cause it to enter this notch and thus the section A' will be held in alinement with this branch of the track. If desired to bring it in alinement with the branch track I, continue to pull on the left hand end of the cord when the bolt will be withdrawn from the central notch and the plate E will be slid further along the plate F until the bolt is opposite the left hand notch at which point the section A' will be held in alinement with the branch track I.

To reverse the operation pull on the right hand end of the cord O. The pulleys P being firmly secured to the edges of the plank B at the most advantageous points for operation, which may be changed if necessary to suit requirements, the device will be easily and speedily operated so as to bring the hinged section A' in alinement with either of the branch tracks desired. In order to prevent a carrier on either of the branch tracks from running off when they are not in alinement with the hinged section A', we use stops S, which are pivoted between the upper forked ends of the hangers L. This stop, an enlarged perspective of which is shown in

Fig. 3, has a rounded head Q on one end and forked prongs R on the other. It is preferably fitted with pivot pins V which are adapted to enter holes in the upper ends of the hangers L, so adjusted that when free the forked end of the stop will drop down and straddle the branch track to which it belongs, and thus, to effectually prevent the passage of the carrier wheels off the open end of the track.

When the hinged section A' is brought in alinement with either of the branch tracks the hanger D will come in contact with the head of the stop for that track and will press down its head and raises its forked end so as to permit the carrier wheels to pass under it. In this way the stop on the branch track which is in alinement with the hinged section A' will be lifted out of the way, while the others will be left in position to arrest the movement of the carrier, as is shown in Fig. 1. To assist in pressing down the head of the stop easily, we use a triangular shaped plate T, an enlarged side view of which is shown in Fig. 4. The plate is secured to the inner edge of the hanger D by a bolt passed between its forked upper ends and through a washer W. The lower edges of the plate T are rounded or beveled so as to contact with the rounded head of the stop at an easy angle, which together with the inclines of these edges will cause them to easily slide over and press down the rounded head of the stop, and thus raise its forked end above the carrier wheels.

The entire device is exceedingly simple in construction and effective in operation. The entire apparatus being secured to the plank B which is portable, it can be readily secured in any desired position without the special adjustment of any of the parts being necessary. In place of the plank B a suitably constructed frame for the attachment of the various tracks may be used if desired.

What we claim is:—

1. In overhead switches, the combination of a main section of track, two or more sections of branch tracks, a switch section hinged to the main section and adapted to aline with either of the branch sections, a portable frame and a separate hanger to connect each of the various track sections to the frame.

2. In overhead switches, the combination of a main section of track, two or more sections of branch tracks, a switch section hinged to the main section and adapted to aline with either of the branch sections, a portable frame, separate hangers for connecting the main and branch sections of track to the frame and means for movably connecting the switch section to said main and branch sections.

3. In overhead switches a portable plank,

cleats secured to the plank, a main track section secured to one of the cleats by means of a hanger, two or more branch sections secured by hangers to the other cleat and a switch section hinged at one end to the main section and slidably connected at the other end to said cleat so as to aline with either of the branch tracks.

4. In overhead switches, a portable plank, cleats secured to the plank, a main track section secured to one of the cleats by means of a hanger, two or more branch sections secured by hangers to the other cleat, a switch section hinged at one end to the main section and slidably connected at the other end to said cleat and means to draw it into alinement with either of the branch tracks.

5. In overhead switches, a portable plank, cleats secured to the plank, a main track section secured to one of the cleats by means of a hanger, two or more branch sections secured by hangers to the other cleats, a switch section hinged at one end to the main section and slidably connected at the other end to said cleat, pulleys secured to opposite edges of the plank and a cord passed over said pulleys and connected to the mountings of said switch section so as to draw it into or out of alinement with the branch tracks.

6. In a device of the character described, a main track, two or more branch tracks, a switch track connected to the main track and adapted to aline with either of the branch tracks, separate hangers to support the open ends of each of the branch tracks, and stops pivoted in each of said hangers above its track in alinement therewith and so as to drop down thereon and prevent a carrier from running off the end thereof.

7. In a device of the character described, a main track, two or more branch tracks, a switch track adapted to aline with either of the branch tracks and a pivoted stop having a forked end applied to each of the branch tracks to prevent a carrier from running off the open ends thereof.

8. In a device of the character described, a main track, two or more branch tracks, a switch track adapted to aline with either of the branch tracks, and a pivoted stop having a rounded head at one end and being forked at the other, and being applied to each of the branch tracks to prevent a carrier from running off the open ends thereof.

9. In a device of the character described, a main track, two or more branch tracks supported by bifurcated hangers, a switch track adapted to aline with either of the branch tracks, and a stop device pivoted in the bifurcated ends of each of the branch track hangers so as to stand in alinement therewith and to drop down and prevent a carrier from running off the open ends thereof.

10. In a device of the character described,

a main track, two or more branch tracks supported by bifurcated hangers, a switch track adapted to aline with either of the branch tracks and a stop device having forked ends adapted to straddle said tracks and being pivoted in the bifurcated ends of each of the said hangers so as to prevent a carrier from running off the open ends thereof.

11. In a device of the character described, a main track, two or more branch tracks supported by hangers, a switch track supported by a hanger and adapted to aline with the branch tracks and a stop device secured to each of the branch track hangers so as to prevent a carrier from running off the open ends thereof, and to be raised out of the way of the carrier by the movement of the switch track hanger.

12. In a device of the character described, a main track, two or more branch tracks supported by hangers, a switch track supported by a hanger and adapted to aline with the branch tracks and a stop device pivoted to each of the branch track hangers so as to prevent a carrier from running off the open ends thereof and to be raised out of the way of the carrier by the movement of the switch track hanger.

13. In a device of the character described,

a main track, two or more branch tracks supported by hangers, a switch track supported by a hanger and adapted to aline with the branch tracks and a stop device pivoted to each of the branch track hangers so as to prevent a carrier from running off the open ends thereof and an angular shaped plate being secured to the inner edge of switch track hanger to contact with the head of the stop and to raise it away from its track section.

14. In a device of the character described, a main track, two or more branch tracks supported by hangers, a stop device pivoted to each of said hangers, a switch track supported by a bifurcated hanger and adapted to aline with the branch tracks, and an angular shaped plate secured to the inner edge of said bifurcated hanger so as to contact with the stop device and to raise it away from its track, said plate being applied to the hanger by a bolt passed through between its bifurcated ends and through a washer on its other side.

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Witnesses:

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