

J. L. SOUTAR.
 SPLIT SWITCH QUADRANT ADJUSTMENT.
 APPLICATION FILED APR. 13, 1909.

939,561.

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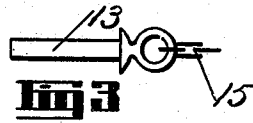
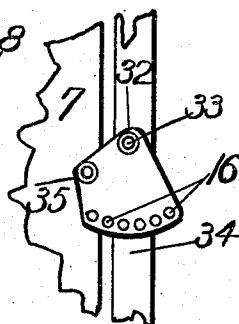
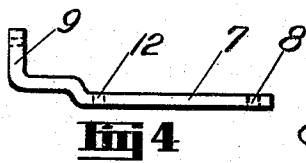
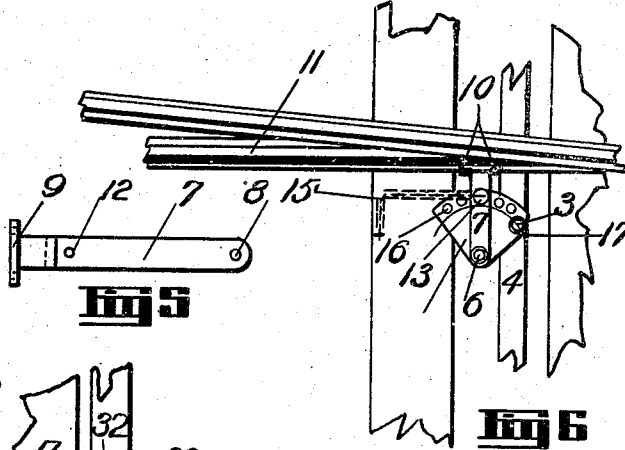
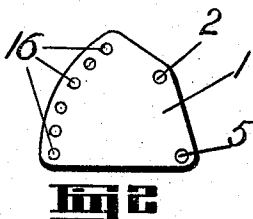
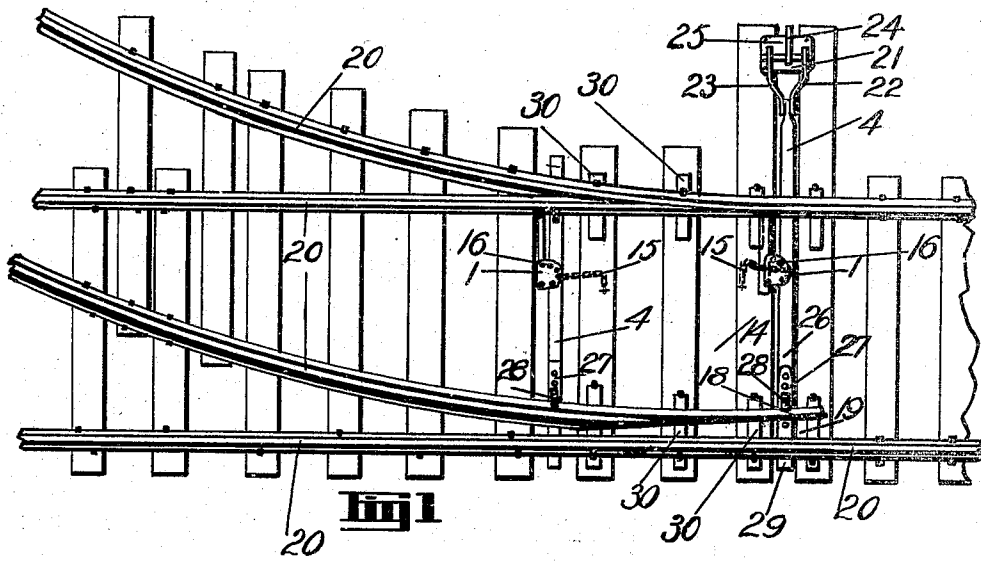


Fig 7

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SPLIT-SWITCH QUADRANT ADJUSTMENT.

939,561.

Specification of Letters Patent.

Patented Nov. 9, 1909.

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To all whom it may concern:

Be it known that I, JAMES L. SOUTAR, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented a new and useful Split-Switch Quadrant Adjustment, of which the following is a clear and concise specification.

My invention relates to a quadrant for adjusting split switches whereby a means is afforded for accurately adjusting the distance between the points of the switch so that the throw of a switch stand will bring each of the points to snugly rest against the rail when set.

I am aware that there are numerous devices for adjusting the points of switches but such devices either are clogged by being exposed to the weather and elements or are not sufficiently accurate to bring the switch points in the desired position.

The objects of my invention are to provide a quadrant for adjusting switch points.

I accomplish these as well as minor objects by the construction now preferred by me and illustrated in the accompanying drawings in which—

Figure 1 is a plan view of the track showing the application of my device; Fig. 2 is a detail of the quadrant of my device; Fig. 3 is a detail view of the lock pin and securing chain of the quadrant; Fig. 4 is an elevation of the quadrant supporting plate; Fig. 5 is a plan view of Fig. 4; Fig. 6 is a fragmentary detail of a quadrant and parts adjacent assembled; Fig. 7 is a modification in which the quadrant is supported by the connection to the connecting rod.

Similar reference numerals refer to similar parts throughout the several views of the accompanying drawings as herein set forth.

My invention comprises a quadrant 1 provided with an aperture 2 engaging the pin 3 which pivotally connects said quadrant to the connecting rod 4. Said quadrant is also provided with an aperture 5 engaging the pin 6 which pivotally secures said quadrant to the quadrant supporting piece 7. The pin engaging the aperture 8 in said supporting piece 7 which is secured to the point 11 of the switch by means of the flange 9 and bolts 10. Said supporting piece 7 is provided with an aperture 12 adapted to receive the adjusting pin 13 which is secured to the tie 14 by means of the chain 15. Said pin 13 also engages the apertures 16 of said

quadrant 1, the apertures being concentrically arranged relative to the aperture 5. Said pin 3 it will be seen by referring to Fig. 5 travels on the line 17. By this travel it will be seen that as the pin 13 engages the aperture 16 nearest the aperture 2 to which is connected the connecting rod 4 said connecting rod will draw the point 18 which is secured thereto toward said point 11 thereby decreasing the distance between said points and increasing the space 19 between the point 18 and the rail 20 thus making it necessary to have a larger travel of said connecting rod 4 and the switch stand 21 connected thereto which throws said points 18 and 11. In Fig. 1, I have shown a throwing device in the form of a "jack-knife switch" comprising the straps 22 and 23 pivotally connected to the lever 24 which is pivotally connected to the plate 25. I do not wish to be limited to this form of switch throwing device as any suitable stand can be operated in connection with my device. The connecting rod is preferably connected to the point 18 by means of the strap 26 which is pivotally secured to the connecting rod supporting piece 27 by the pin 28. Said connecting rod is preferably provided with an extension 29 which passes under the point 18 and under the rail 21 serving as a guide to stiffen said connecting rod. The ties near the points 11 and 18 are provided with guide plates 30 which reduce the wear on said ties and facilitate the easy adjustment of the switch. I have provided a similar construction to the device above described at a point a few feet distant from the switch points 11 and 18 whereby an adjustment between the rails which terminate in said points may be adjusted as desired. The connecting rod 4 however, does not continue to the switch stand but extends only under the rail 20 for a guide.

In Fig. 6 of the accompanying drawings I have shown a modification of my device in which the quadrant is reversed. An aperture 32 located in a similar position to the aperture 5 is provided with the pin 33 which secures the connecting rod 34 which is similar to the connecting rod 4 and which is also attached in the same manner to the switch stand 21. By this construction the aperture 35 which is similar to the aperture 2 pivotally secures the quadrant to the quadrant supporting member 7.

I do not wish to be limited to the specific

construction as herein set forth and illustrated in the accompanying drawings but wish to depart from such details as are within the scope of the appended claims.

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

10 1. In a split switch adjustment, a quadrant, means for connecting said quadrant to each of the points of the switch and means for swinging said quadrant on one of said connecting means.

15 2. In a split switch adjustment, a quadrant, means for connecting said quadrant to each of the points of the switch, means for swinging said quadrant on one of said connecting means, and means for locking said quadrant at a predetermined position whereby the points of the switch may be locked
20 apart at a predetermined distance.

25 3. In an adjustment for point switches, a connecting rod and a switch stand operating said rod and means for connecting said connecting rod to one of the switch points, a quadrant and means for supporting said quadrant secured to the opposite switch point, means whereby said quadrant may be operated to adjust the distance between the points.

30 4. In an adjustment for point switches, a connecting rod and a switch stand operating said rod and means for connecting said connecting rod to one of the switch points, a quadrant and means for supporting said quadrant secured to the opposite switch point, means whereby said quadrant may be
35 operated to adjust the distance between the

points and a pin engaging a plurality of apertures in said quadrant whereby said quadrant may be locked at a predetermined position. 40

5. In a switch point adjusting device, a quadrant having an aperture provided therein, a quadrant supporting piece secured to one of the switch points engaging said aperture whereby said quadrant is pivotally connected to said switch point, said quadrant being provided with a plurality of holes concentrically disposed relative to said pivotal connection and a pin engaging one of said holes to lock said quadrant from swinging. 45 50

6. In a switch point adjusting device, a quadrant having an aperture provided therein, a quadrant supporting piece secured to one of the switch points engaging said aperture whereby said quadrant is pivotally connected to said switch point, said quadrant being provided with a plurality of holes concentrically disposed relative to said pivotal connection, a pin engaging one of said holes to lock said quadrant from swinging and a pivotal connection to the opposite of said switch points and operated by the swinging of said quadrant to increase or decrease the distance between the switch points. 55 60 65

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

JAMES L. SOUTAR.

Witnesses:

H. E. TALBOT,
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