

949,429.

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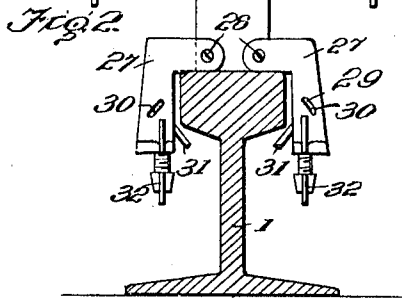
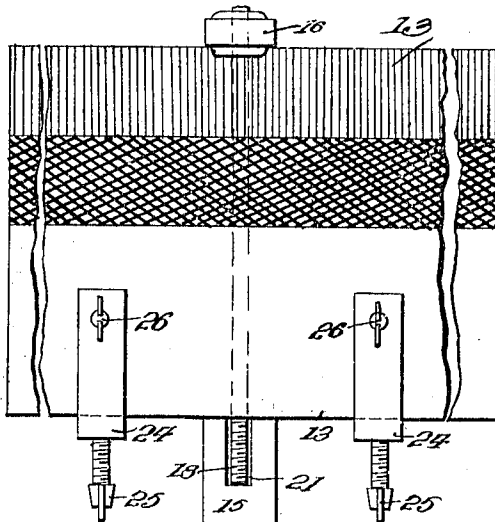
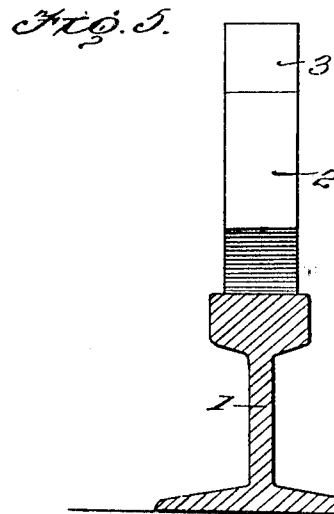
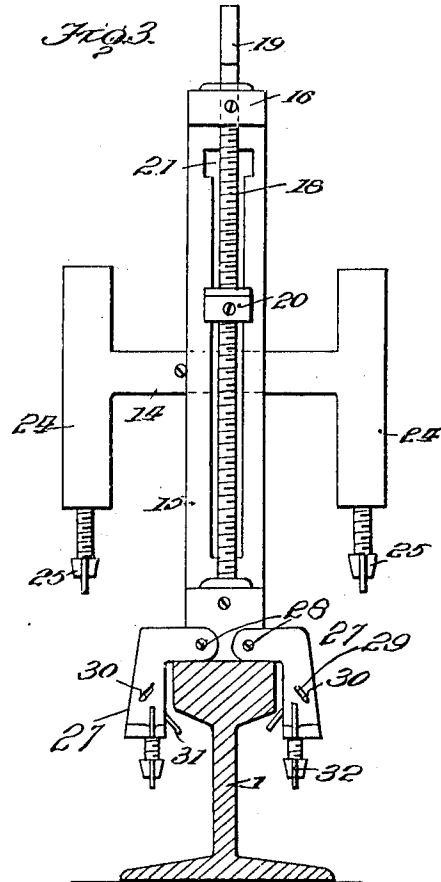
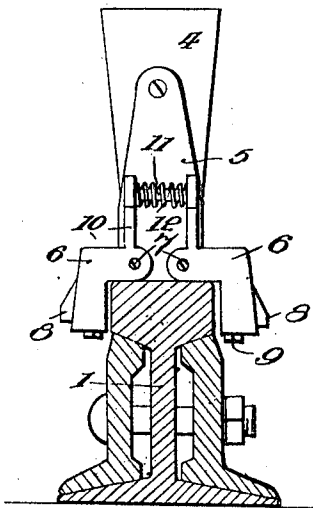


Fig. 4.



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Witnesses

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UNITED STATES PATENT OFFICE.

HARLEY M. HARRIS, OF GOODWINE, ILLINOIS, ASSIGNOR, BY MESNE ASSIGNMENTS,
OF ONE-HALF TO HARVEY A. HARRIS, OF GOODWINE, ILLINOIS.

RAILROAD-TRACK-SURFACING DEVICE.

949,429.

Specification of Letters Patent.

Patented Feb. 15, 1910.

Application filed January 14, 1909. Serial No. 472,365.

To all whom it may concern:

Be it known that I, HARLEY M. HARRIS, citizen of the United States, residing at Goodwine, in the county of Iroquois and State of Illinois, have invented certain new and useful Improvements in Railroad-Track-Surfacing Devices, of which the following is a specification.

The present invention provides simple, effective and novel means to facilitate the work of leveling or surfacing railroad tracks which may be easily placed in position and relied upon for accurate results, the several parts being provided with clamp devices and adjusting means.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a side view of a length of railroad track having the parts comprising the invention in operative position; Fig. 2 is an elevation of the jack provided with the sight board, as viewed from the left in Fig. 1; Fig. 3 is a view of the sight board jack, as seen from the right in Fig. 1, the sight board being omitted; Fig. 4 is a front view of the jack block and jack; Fig. 5 is a front view of the end block; and, Fig. 6 is a detail view of a modification.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The several devices are adapted to be fitted to a rail 1 of the railroad track to be surfaced. The hand block 2 is simply placed upon the rail and is weighted at its lower end or base to be retained in place against a slight jar or draft of air. The upper end of the hand block is beveled from opposite sides, as indicated at 3, so as not to obstruct the vision when sighting thereover.

The jack block 4 is pivotally supported in a frame 5 and its lower end is weighted, so that the block may maintain a definite position with respect to the perpendicular without regard to the inclination of the rail 1 to which it is fitted. The frame 5 is substantially of U-form, the block 4 being poised in the space formed between the upright members of the frame. The jack block is adapt-

ed to be positively secured to the rail 1 and for this purpose the frame 5 is provided with clamps 6 of similar formation, each consisting of a substantially U-shaped frame having its end members of right-angle formation, so as to extend over the top of the rail 1 and down along the side thereof, as indicated most clearly in Fig. 4. The clamps 6 are pivoted at 7 to the lower portion of the frame 5 and are provided with jaws 8 adjustably connected thereto by means of bolts or like fastenings 9. The jaws 8 are adjustable to enable the clamps to be fitted to rails of different gage. An arm 10 is projected vertically from each clamp member 6 and its upper portion is widened and apertured to receive a pin 11 upon which is mounted an expansion spring 12 normally tending to force the upper ends of the arms 10 apart and the jaws of the clamp members inward, so as to grip opposite sides of the rail and hold the sight jack lock in place. The sight board 13 is usually about three feet long, eight inches wide and one inch thick and is provided at its upper edge with a spirit level. One side of the sight board is painted in longitudinal strips, the upper portion being red, the lower portion white and the intermediate portion black. By painting the board in this manner no mistake is liable to occur when sighting to determine the proper position of the parts. The opposite side of the sight board is painted red to act as a danger signal and thereby warn the engineer of a train approaching a section of railroad track being surfaced.

The sight board is fitted to a carrier 14, which in turn is adjustably mounted upon a support or frame 15, which is clamped or otherwise secured to the rail 1. The support or frame 15 has a lateral extension 16 at its upper end and a lateral extension 17 at its lower end, both extensions projecting in the same direction. A screw 18 is mounted in the lateral extensions 16 and 17 of the frame or support and is provided at its upper end with a suitable hand piece 19 for imparting rotary movement thereto. The sight board carrier 14 is provided with a projection 20 which passes through a vertical slot 21 of the frame 15 and receives the screw 18 which makes screw thread connection therewith, so as to positively move the

carrier 14 vertically upon turning the screw 18 in one direction or the other. A pointer 22 attached to the carrier 14 coöperates with graduations 23 along a side of the support or frame 15 to determine the position of the sight board.

The carrier comprises a longitudinal bar and U-shaped frames 24 at the ends of the bar, said frames receiving the sight board, as indicated most clearly in Fig. 2. Set screws 25 and 26 are fitted to the horizontal and outer vertical members respectively of the U-frames 24 and serve to adjust and secure the sight board in an adjusted position. The carrier with the sight board attached may be raised or lowered by turning the screw 18 and always remains parallel to a given position in any adjustment, thereby greatly facilitating the work.

The clamp at the lower end of the frame or support 15 comprises similar clamp members 27 pivotally connected at 28 to the part 15, each consisting of an approximately U-shaped frame having its end members of right-angle formation. Inclined slots 29 are formed in the vertical members of the end pieces of the clamp members 27 to receive lugs 30 of jaw pieces 31 adjustably fitted to the lower portions of the parts 27. Set screws 32 threaded into the horizontal bars of the clamp members 27 are adapted to engage with the jaw pieces 31 and move the same, so as to grip the head of the rail 1 between the upper horizontal portions of the clamp members and the jaw pieces 31, as indicated most clearly in Fig. 2. By having the clamp pieces 27 pivoted to the lower portion of the support or frame 15 they are enabled to readily adapt themselves to the shape of the tread portion of the rail to which the sight board jack is secured.

In the modification, shown in Fig. 6, the vertical members of the clamp pieces are provided with pins 33 which enter and operate in inclined slots 34 formed in the side members of the jaw pieces 31. This construction is preferred since it prevents weakening of the clamp members, such as results by providing the inclined slots therein.

Having thus described the invention what is claimed as new is:

1. In track surfacing means the combination of a support, a carrier adjustable vertically of the support, a sight board fitted to the carrier and having one side colored to indicate danger and having the opposite side provided with longitudinal strips of contrasting color, and means carried by the support and operatively connected with the carrier for adjusting the latter vertically of said support.

2. In track surfacing means the combination of a support provided with a sight piece, clamp members pivotally connected to the lower portion of the support, each consisting of a frame of substantially U-form and having its end members of right-angle formation, the horizontal portions being pivoted to the said support and the vertical members having inclined slots, jaw pieces fitted to the clamp members and having lugs extended into said inclined slots, and set screws threaded into the lower bars of the clamp members and adapted to move the jaw pieces to clamp the head of the rail between the horizontal portions of the clamp members and the said jaw pieces.

3. In track surfacing means, the combination of a vertically slotted support, a screw mounted in end portions of the support, a carrier having a projection extended through the slot of the support and receiving said screw to be moved thereby, and a sight board fitted to said carrier.

4. In track surfacing devices the combination of a support, a carrier mounted upon the support and adjustable thereon and comprising a bar provided with end frames, a sight board engaging end frames, and set screws applied to vertical and horizontal members of the end frames for securing the sight board in an adjusted position.

In testimony whereof I affix my signature in presence of two witnesses.

HARLEY M. HARRIS. [L. s.]

Witnesses:

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WILBUR OURS.