

975,765.

Fig. 1.

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JACK-BLOCK FOR TRACK-LEVELINGS.

975,765.

Specification of Letters Patent.

Patented Nov. 15, 1910.

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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 Jack-Blocks for Track-Levelings, of which the following is a specification.

My invention relates to a leveling or surfacing apparatus particularly adapted for use in connection with leveling railroad tracks and has for its object to provide a simple and efficient mounting for the jack block used in connection with sighting and hand blocks, as described in my prior Patent No. 949,429, granted me on the 9th day of August, 1909.

The object of the invention to be hereafter described is to provide a mounting for the jack block which will permit the jack block to swing freely, so that it will retain a vertical position without regard to the inclination of the surface of the rail, and further to provide means whereby the jack block may be held in engagement on the rail, yet may be easily removed from engagement therewith, and to provide jaws adapted to be adjusted, so as to engage rails of varying widths. This jack block is to be used in conjunction with a sighting board, such as described in my above referred to application, and a hand block.

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

Figure 1 is a perspective view of one form of my device applied to a rail; Fig. 2 is a transverse section thereof; Fig. 3 is a perspective view of another form of my invention as applied on a rail; Fig. 4 is a perspective view of one of the pivoted clamps detached from the frame; and Fig. 5 is a perspective view of one of the sliding jaws removed from the clamp.

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

The jack block which is designated 2, is weighted at its lower end and is pivotally supported within a frame 3. This frame 3

is substantially of a U-shaped form, and the block 2 is poised or pivoted in the space formed between the upright members 3^a of the frame, by a pivot bolt or screw 2^a. The lower portion of the frame is solid and is adapted to rest upon the surface of a railroad rail A. By reason of the pivotal support given to the block 2 and the weight placed in the lower end thereof, this block will maintain a vertical position under all circumstances without regard to the inclination of the rail A, to which it is fitted. The jack block is intended to be secured to the rail A at any point thereon, and for this purpose the frame 3 is provided with opposed clamps 4 of similar formation, each pivoted to the lower end of the frame 3, so that the depending portions of the clamps will be forced toward the sides of the rail tread. In detail each of the clamps consists of a substantially U-shaped bar 5 having the form shown in Fig. 4, the ends of the U-shaped bar being inwardly turned or angled, as at 6, and being there pivoted by the screws or bolts 7 to the base of the frame 3. These clamps will thus extend over the top of the rail A and down along the side thereof, as shown clearly in Fig. 1. The bars 5 are provided with U-shaped jaws 8 which are supported on the inner face of each bar 5 and are adjustably connected to the bar 5 by a downwardly extending bolt 9 which passes through a slot in the bar 5, the jaws 8 being thus adjustably connected to the clamping bars 5, so that they may be adjusted inward or outward to enable the clamps to be fitted to rails of different gage.

An arm 10 is extended vertically from the extremity of one of the arms 5 of each clamp, and its upper portion is enlarged and apertured to receive a pin 11, the arms 10 of the opposed clamps being thus connected by the pin 11. Upon the pin 11 and between the eyes formed on the upper ends of the arms 10, is mounted an expansion spring 12 normally tending to force the upper ends of the arms 10 apart and the depending portions of the clamp members inward, so as to grip the opposite sides of the rail and hold the jack block securely in place.

While in Figs. 1 and 2, I show a form of my invention in which the opposed clamps on the sighting block frame are both pivoted to the frame, in Fig. 3 I show a modification

which I regard as preferable, in which one of the jaws is fixed to the sighting block frame, while the other jaw is pivoted thereto. In this figure, A, designates the track 5 rail, 2 the sighting block, 3 the frame in which the sighting block is pivoted, and 13 a clamping jaw constructed precisely similar to the clamping jaw 4 previously described, and having the upwardly extending arm 14 10 formed with an eye 15 at its upper end. A stud 16 projects out from the base of the frame 3 and receives the end of a pin 18 corresponding to the pin 11. Surrounding this pin is the coil spring 17 which engages 15 with the arm 14 to force the clamp 13 inward. Opposed to the clamp member 13 is the fixed member 19 which has the same shape as the clamp member 13 except that it is not provided with any upwardly projecting arm 14. This clamp member 19 is 20 rigidly secured or formed with the base of the frame 3 and hence does not move. Both these clamping members may be provided with the inwardly adjustable jaws 20, if desired, these jaws being constructed in precisely the same manner as the jaws 8 previously described.

The modification just above described is preferable over the construction first described for the reason that it will reduce the 30 cost of manufacture and also reduce the weight. Furthermore, the device formed as last described is less liable to be broken in handling.

35 The operation of a device of this character being well known, there is no necessity of stating it here and it is sufficient to say that a target board is supported in guides adjusted to a proper height. A sighting block 40 is then placed upon the rail and the jack block is then disposed upon the rail contiguous to a track joint. The operator then sights along the upper edge of the sighting block toward the upper edge of the target 45 board. The end of the rail upon which the jack block is located should then be elevated by means of a jack or any appliance, until the upper edge of the jack block is in line with the sight of the operator.

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

1. A sighting piece for track leveling having a supporting frame adapted to rest upon a rail, and a sighting block pivoted within 55 the frame for a lateral swinging movement, the sighting block below the pivot being weighted.

2. A sighting piece for track leveling com-

prising a supporting frame adapted to rest upon a rail, a sighting block pivotally supported in the frame for a lateral swinging 60 movement, and a rail-engaging clamp pivotally mounted on the supporting frame.

3. A sighting piece for track leveling having a depending clamp, a spring for forcing 65 said clamp inward against the side of a rail, and a movable jaw mounted in the clamp and inwardly adjustable.

4. A sighting piece for track leveling comprising a frame having a base adapted to rest upon the tread of a rail and provided 70 with upwardly extending ends, a sighting block pivoted between said ends for a lateral swinging movement, said block being weighted below the pivot thereof, rail clamps 75 depending below the base of the frame, one of said clamps being inwardly movable against the face of the rail, and a spring for forcing said clamp inward.

5. A sighting piece for track leveling comprising a supporting frame having a base 80 adapted to rest upon the tread of a rail, said base being provided with upwardly projecting end portions, a sighting block pivoted between said end portions and 85 weighted below its point of pivotal support, opposed U-shaped rail clamping members pivoted on opposite sides of the base and depending below the base, and a spring for forcing one of said clamps into engagement 90 with the side of the rail.

6. A sighting piece for track leveling comprising a supporting frame having a base adapted to rest upon the tread of a rail, said 95 base being formed with upwardly projecting end portions, a sighting block pivotally supported between said end portions for a lateral swinging movement, opposed clamping members each consisting of an angular 100 U-shaped iron pivoted at its ends to opposite faces of the base and depending below said base, one of said irons being fixed with relation to said frame, the other of said irons being pivoted thereto, an arm extending upward from the movable clamping member, 105 a lug on the frame opposite to said arm, and a spring bearing at one end against the lug and at the other against the arm, forcing the arm outward and the clamp into engagement with the side of a rail. 110

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

HARLEY M. HARRIS. [L. S.]

Witnesses:

WALTER HINKLE,
H. K. MOHLER.