

Nov. 6, 1934.

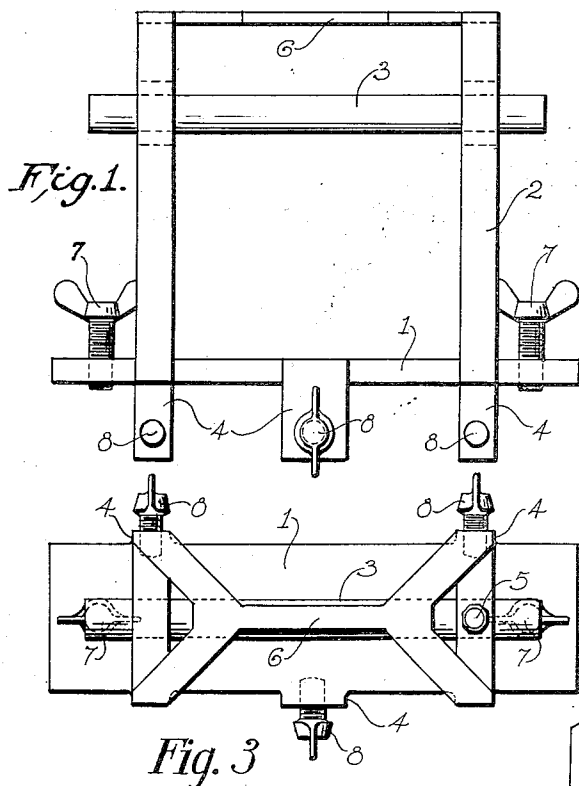
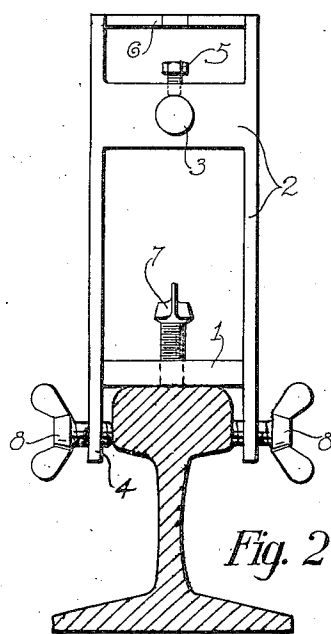
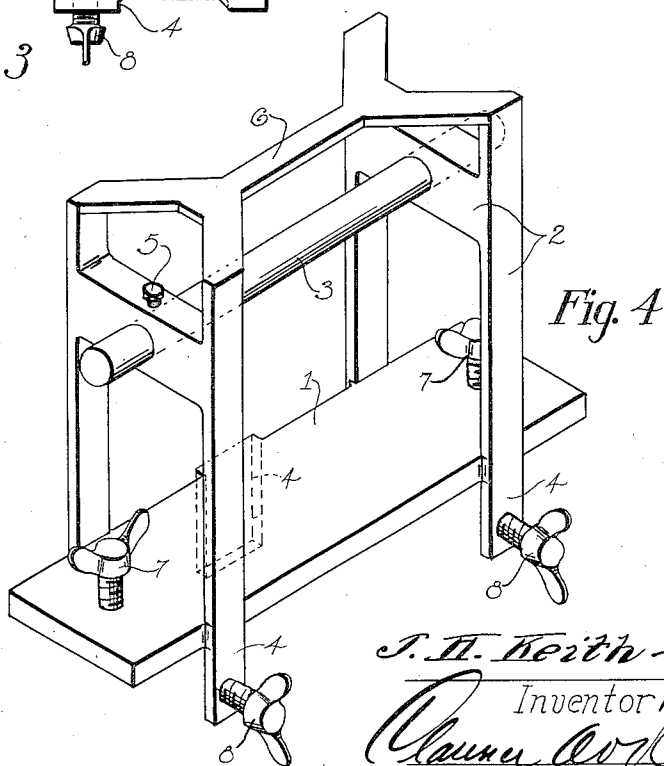
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1,979,886

RAILWAY LEVELING DEVICE

Filed Nov. 8, 1933

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

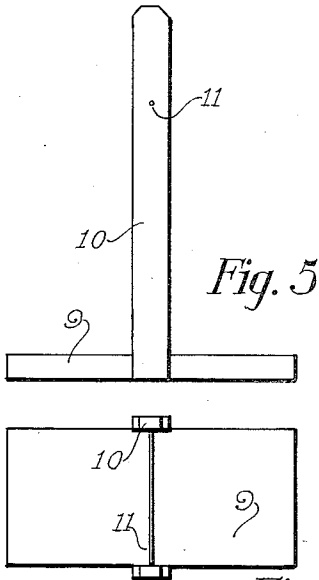


Fig. 5

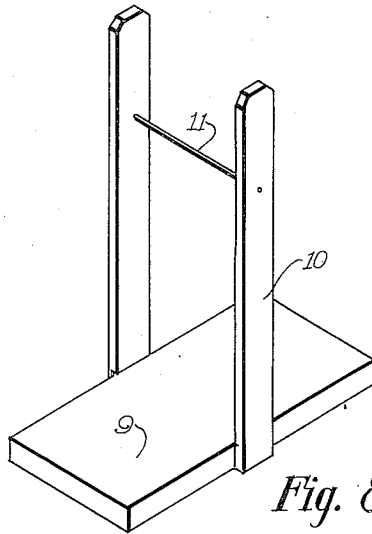


Fig. 8

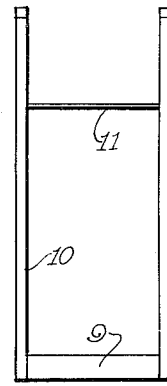


Fig. 6

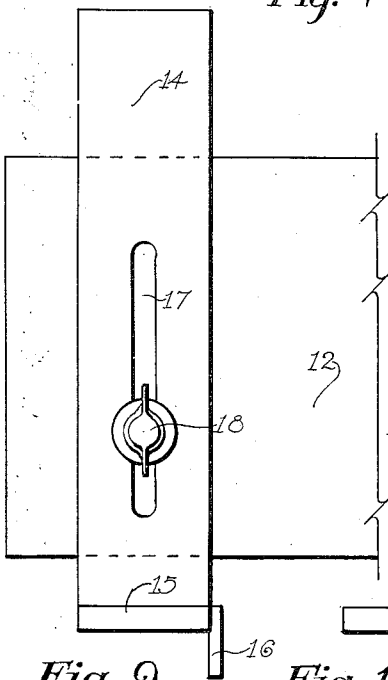


Fig. 9

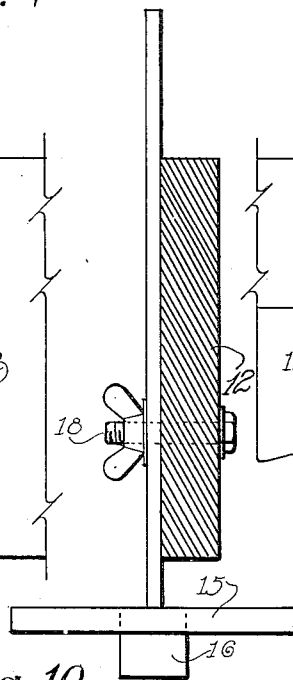


Fig. 10

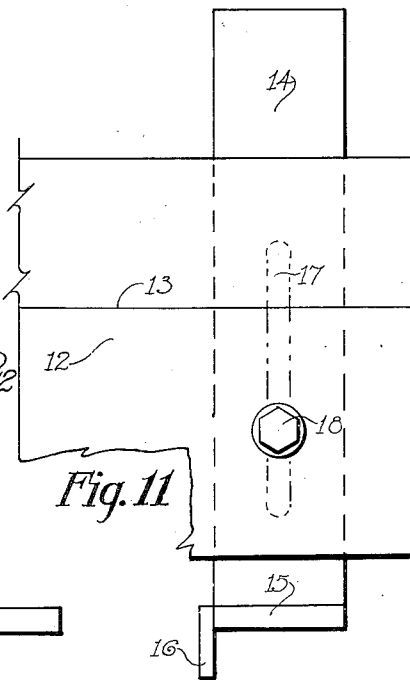


Fig. 11

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UNITED STATES PATENT OFFICE

1,979,886

RAILWAY LEVELING DEVICE

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Application November 8, 1933, Serial No. 697,194

1 Claim. (Cl. 33—60)

This invention appertains to new and useful improvements in apparatus for aligning railroad trackage, and more particularly to a geometrical device which can be used especially for vertical alignment and in removing dips or humps in trackage.

An important object of the invention is to provide an apparatus wherein the different units can be easily handled.

These and various other important objects and advantages of the invention will become apparent to the reader of the following specification.

In the drawings:—

Figure 1 represents a side elevational view of the optical unit of the assembly.

Figure 2 represents an end elevational view of the optical unit clamped to a rail.

Figure 3 represents a top plan view of the unit shown in Figures 1 and 2.

Figure 4 represents a perspective view of the optical unit.

Figure 5 represents a side elevational view of the aligning unit.

Figure 6 represents an end elevational view of the unit shown in Figure 5.

Figure 7 represents a top plan view of the aligning unit.

Figure 8 represents a perspective view of the aligning unit.

Figure 9 represents a front elevational view of the target board support, with the target board supported thereon.

Figure 10 represents a vertical sectional view taken through the board.

Figure 11 represents a back view showing in elevation the target board and the support therefor.

Referring to the drawings wherein like numerals designate like parts, it can be seen in Figures 1 to 4 inclusive, that the optical unit consists of a base plate 1 having upstanding H-shaped frames 2 extending upwardly from the end portions thereof. The crossed portions of the frames 2 have openings therein through which the telescope 3 is disposed. The base plate 1 has depending lugs 4 at the end portion of the same and a depending intermediately located lug 4 at one side of the plate. A set screw 5 secures the telescope 3 in place to one of the cross members of one of the frames 2, while the upper ends of the frames 2 are connected by the member 6.

Set screws 8 are disposed through threaded openings in the depending lugs 4 to bear against the railway track A.

Threaded downwardly through the opposite ends of the plate 1 are the set screws 7. These set screws 7 can be adjusted to swing the frame and plate so as to set the telescope at the proper inclination, while the set screws 8 in the depending lugs 4 can be adjusted to secure the proper lateral adjustment of the telescope.

Figures 5 to 7, inclusive, represent the aligning unit which is used between the telescope unit shown in Figures 1 to 4, inclusive, and the target unit which is shown in Figures 9 to 11, inclusive.

This aligning unit 5 simply consists of the base plate 9 having the pair of upstanding spaced leg portions 10 between which is stretched the wire 11.

The target unit consists of a pair of track engaging supports (only one of which is shown in Figure 9), each consisting of the base plate 15 for rest upon the tread portion of the track. This base plate 15 is provided with a depending flange 16 at one side for engaging the side of the track, while numeral 14 represents an upstanding member slotted, as at 17, to receive the bolt 18 which extends through the target board at 12. The front side of the target board is painted red to the elevation line 13 and from there up white. Obviously, the board 12 can be properly adjusted by means of the slotted member 14 and the bolt 18.

While the foregoing specification sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size and materials may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

Having described the invention, what is claimed as new is:—

In a track aligning apparatus, an optical device, said optical device comprising a base plate, an upstanding frame on the base plate, a telescope mounted on the frame, depending lugs on the edge portion of the frame, each provided with a horizontally feedable set screw for engagement with a rail head, and a vertically adjustable set screw feedable through each end of the base plate to permit vertical adjustment of the end portions of the base plate.

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