

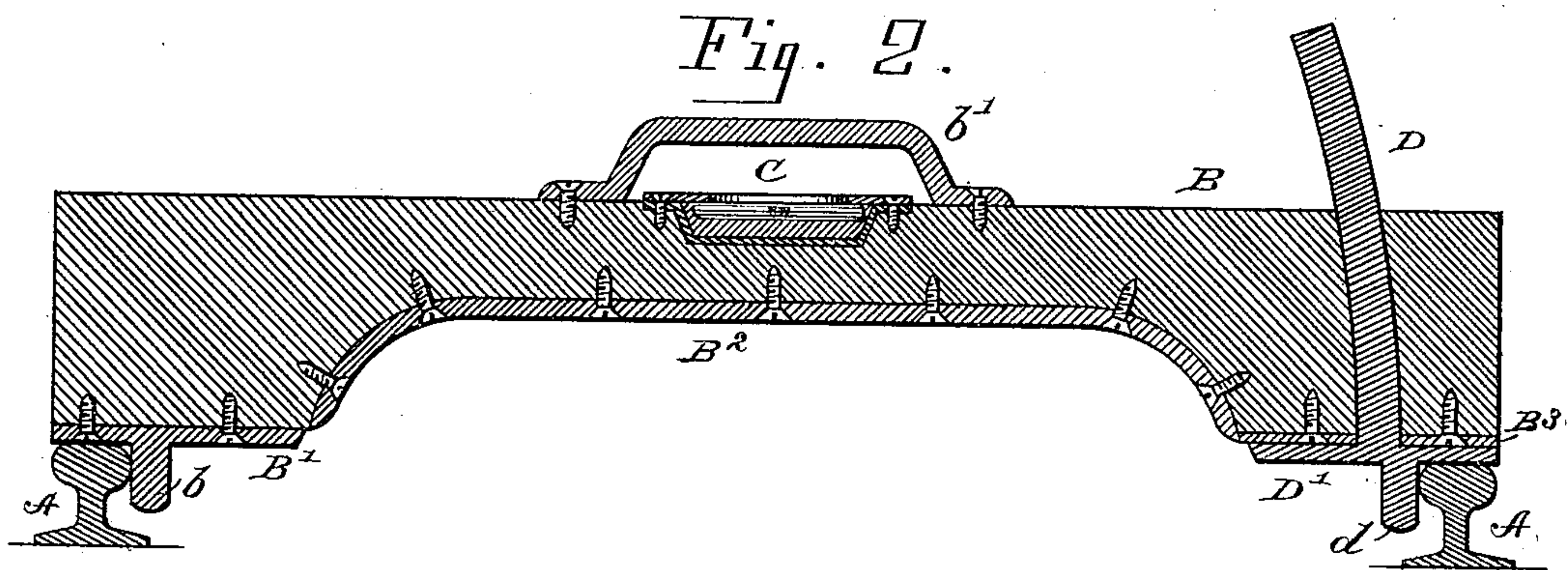
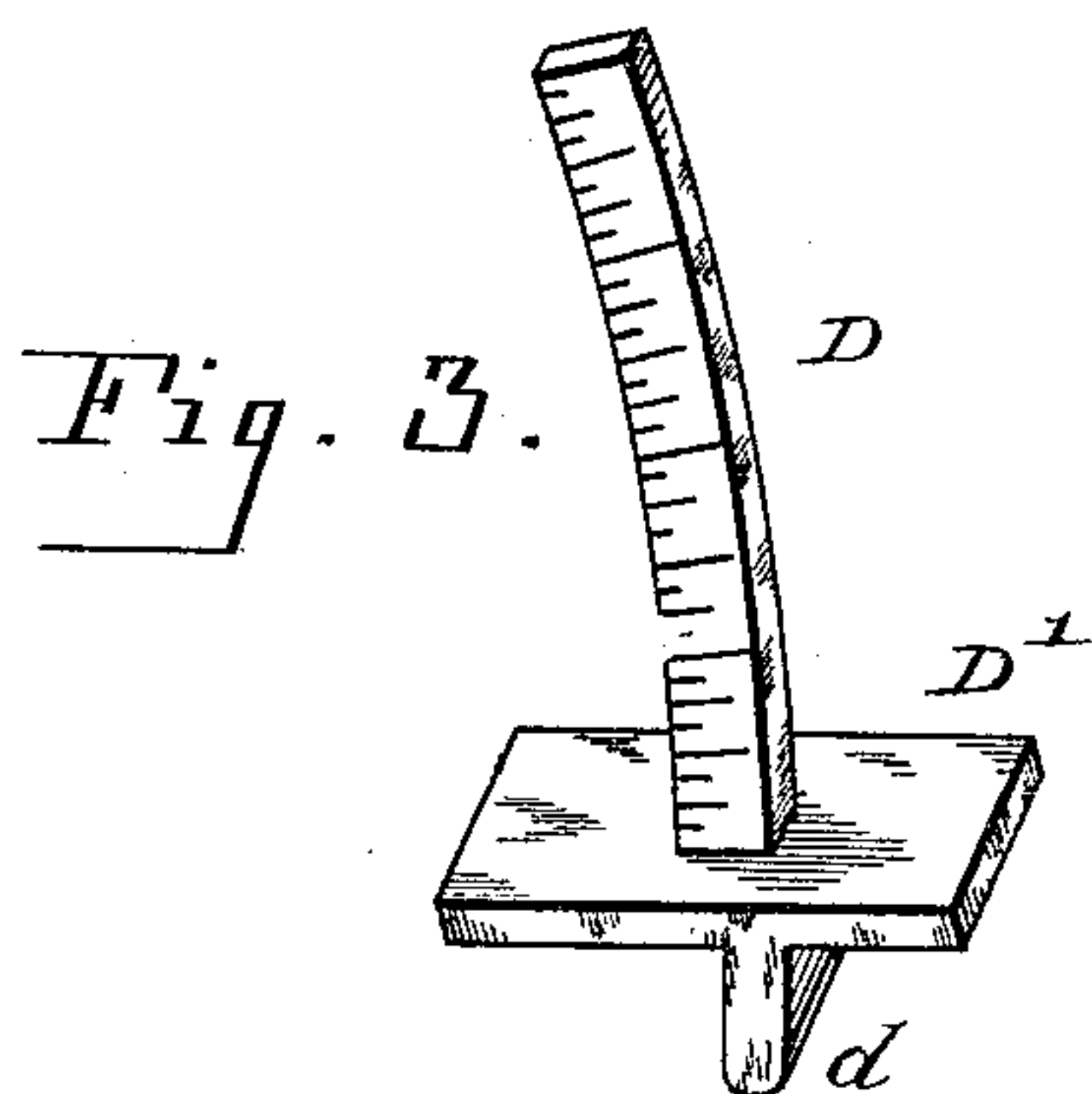
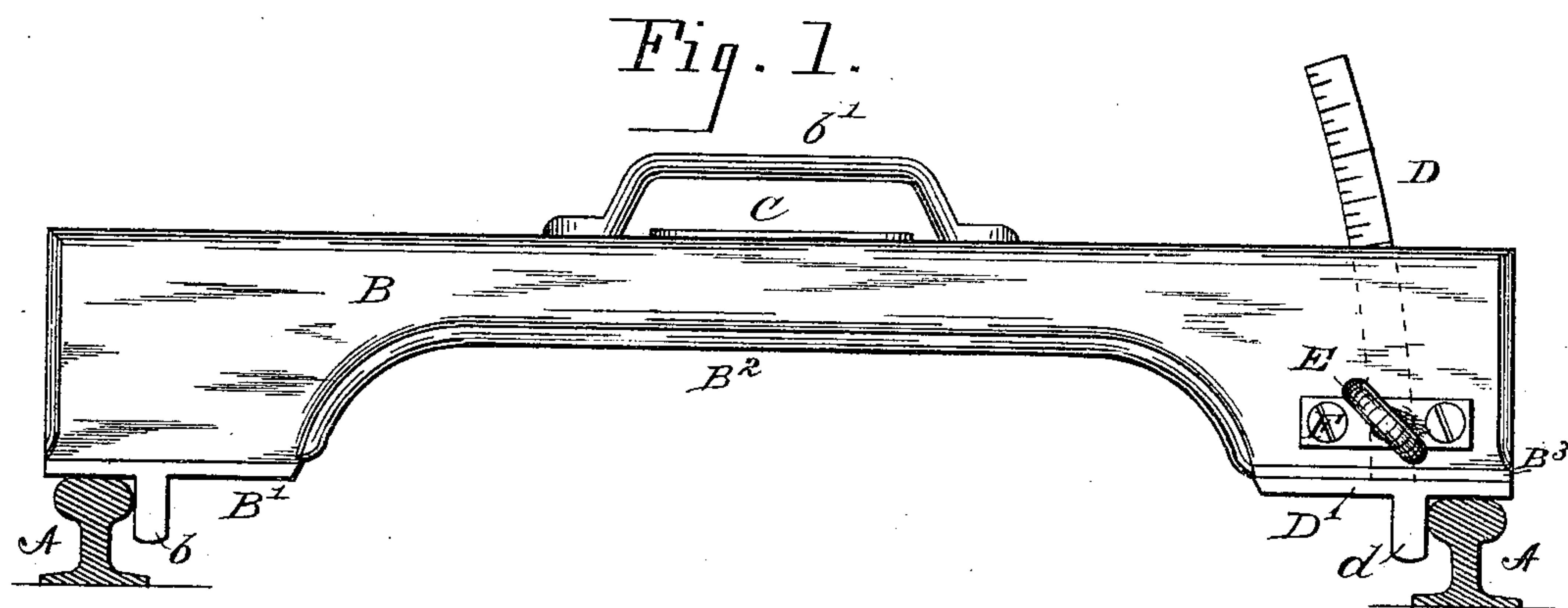
(No Model.)

2 Sheets—Sheet 1.

J. L. BARNETT.
TRACK GAGE AND LEVEL.

No. 353,655.

Patented Dec. 7, 1886.



WITNESSES

John C. Miller
Percy White.

INVENTOR

Jean Louis Barnett
By Richard P. Evans
Attorney

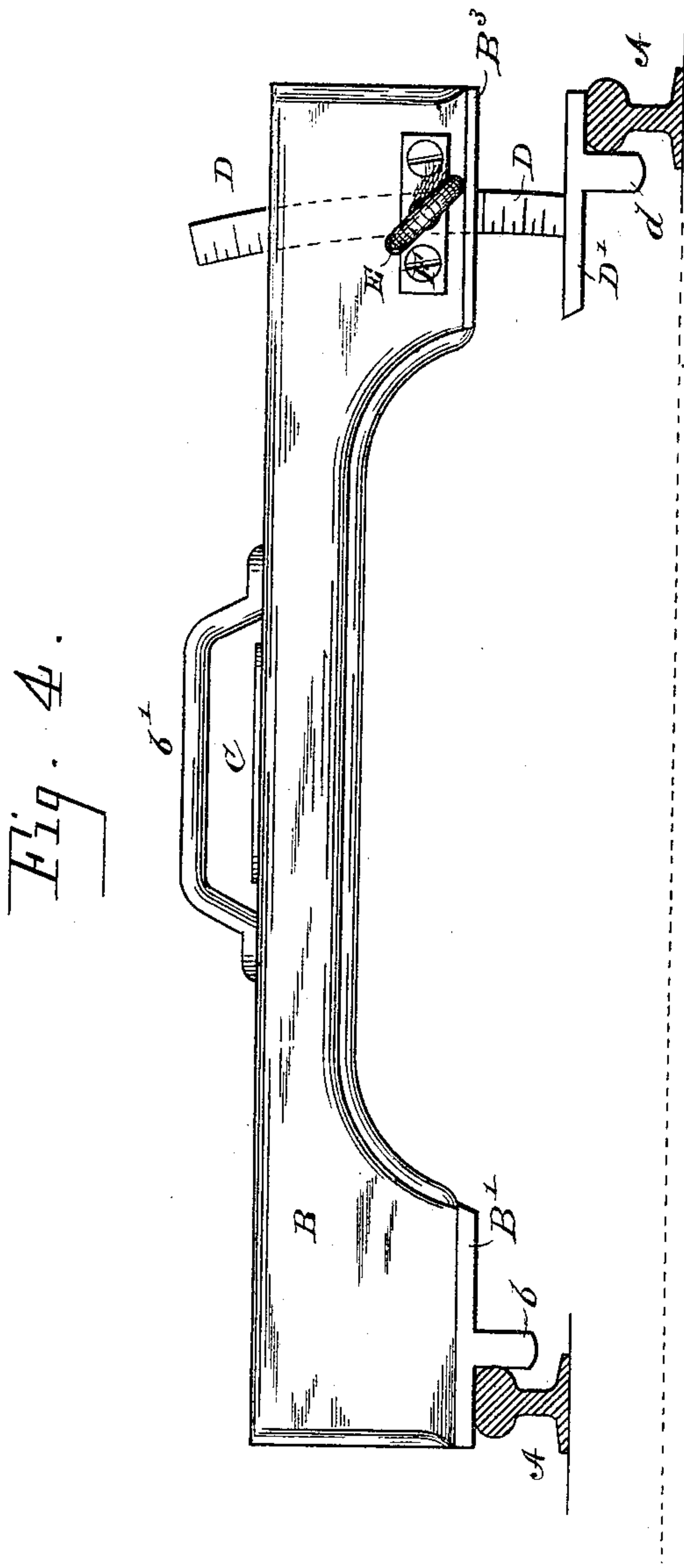
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UNITED STATES PATENT OFFICE.

JEAN LOUIS BARNETT, OF STEWARTSVILLE, MISSOURI.

TRACK GAGE AND LEVEL.

SPECIFICATION forming part of Letters Patent No. 353,655, dated December 7, 1886.

Application filed April 7, 1886. Serial No. 198,134. (No model.)

To all whom it may concern:

Be it known that I, JEAN LOUIS BARNETT, a citizen of the United States, residing at Stewartsville, in the county of DeKalb and State of Missouri, have invented certain new and useful Improvements in Railroad-Track Gages and Levels; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The object of this improvement is a railroad-track gage and level that is adapted to exactly preserve the gage of curves while being used for grading the inclinations of the same. These results are attained by the mechanism illustrated in the drawings herewith filed as part hereof, in which the same letters of reference denote the same parts in the different views.

Figure 1 is a side elevation of a track gage and level embodying the features of my improvement. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a perspective representation of one of the parts detached. Fig. 4 is a side elevation illustrating the application of my improvement to grading the inclinations of the curves, and to simultaneously preserving the gage of the track along the same.

A A represent the track-rails.

B is the body of the gage and level, which is formed of wood, in order that the instrument may be light and easily handled and easily adjustable from one place to another, and also be less liable to change its length and the distance between its parts by reason of expansion or contraction from heat or cold than would be the case if the body B was made of metal.

B' is a metal bearing-plate secured to the gage-body by screws, as shown in Fig. 2, and provided with an integral rectangular projection, *b*, for a purpose hereinafter set forth.

B² and B³ are plates secured to the gage-body in the same manner as the plate B'. The plates B' B² B³ stiffen the body B and prevent it from being warped by the heat of the sun or other causes.

C is a spirit-level set into the gage-body at its vertical center, as shown. The gage-body is provided with a curved recess for the reception of a correspondingly-curved plate, D, provided at its lower end with a bearing-plate, D', having a rectangular extension, *d*, for a purpose hereinafter set forth.

E is a thumb-screw secured to the body B by means of a correspondingly-threaded plate, F, and arranged to engage with the curved plate D.

The gage-body is provided with a handle or bail, *b'*, for conveniently transporting the instrument from place to place. The projections *b d* of the plates B' D' act as the track-gage. By removing the plates B' D' and substituting others, with the projections *b d* nearer to or farther from each other, the other parts of the mechanism may be adapted to tracks of different gages. The curve of the plate D must agree with the curve of a circle described from the center of the opposite rail. In laying curves the plate D' is lowered from the body B, according to the necessary elevation of the outer rail, which will be indicated by the graduation-marks on the plate D, and the adjustment of the parts secured by means of the set-screw E without changing the distance between the gage projections *b d*, and the exact gage of the track thus preserved, while obtaining the necessary inclination between its rails. The spirit-level C will show the proper adjustment of the mechanism for securing suitable relative positions for the opposite rails.

I am aware of the invention of a track-gage provided with an adjustable graduated straight bar for use in obtaining suitable inclinations between the opposite rails in the curves of a railroad-track; and I am also aware of the invention of a track-gage composed of a sill-piece having two fixed shoulders or extensions for gaging the distance between the rails of the track, a graduated arc fixed to the sill-piece at one end, and a hinged bar connected to the top of the sill-piece at the end opposite the graduated arc and provided with a slot for clearing the arc and allowing an adjustment of the hinged bar over the arc, for the purpose of acting in connection therewith as the gage for the elevation of the outer rails of the track-curve. I do not claim such construction; but

What I claim, and desire to secure by Letters Patent, is—

5 The combination of the spirit-level fixed to the gage-body, the gage-body made of wood to avoid the contraction and expansion from heat or cold peculiar to metal, and provided with metal plates at its upper and lower edges to prevent warping of the body, the bearing-plate
10 fixed to the gage-body at one end and provided with an extension for engaging the rail at one side of the track, the bearing-plate provided with an extension for gaging the distance between the rails forming the track, and a

curved upward extension arranged to be adjusted within the gage-body, and the set-screw
15 fixed to the gage-body and adapted to secure gage-body and the bearing-plate provided with the curved extension in different relative positions to each other, substantially as specified, for the purpose set forth. 20

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

JEAN LOUIS BARNETT.

Witnesses:

A. J. CUELETSON,
C. L. FOWLER.