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E. A. BROWN & A. WILLIAMS.

RAILWAY TRACK GAGE.

APPLICATION FILED MAY 11, 1905.

FIG. 1

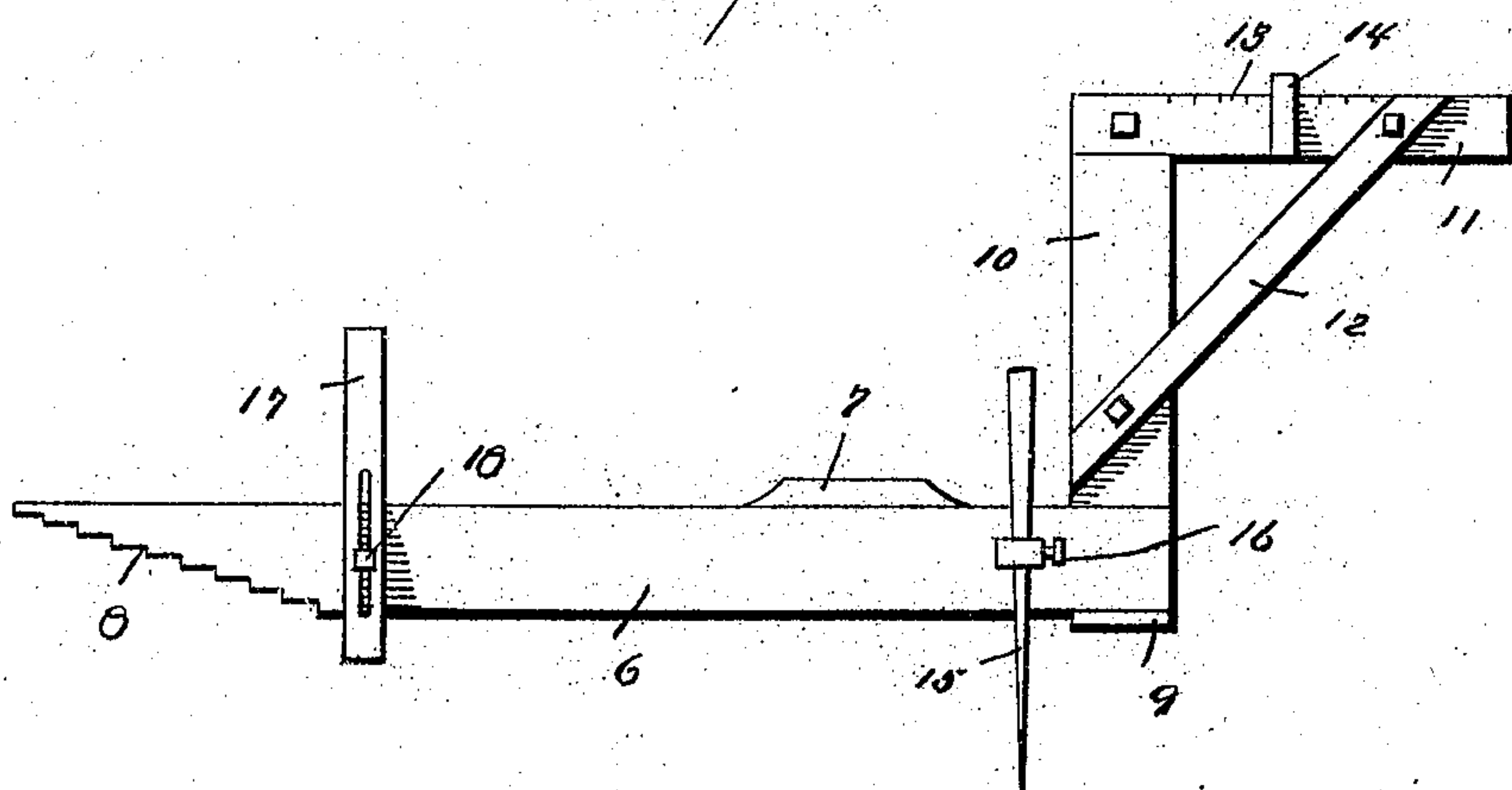
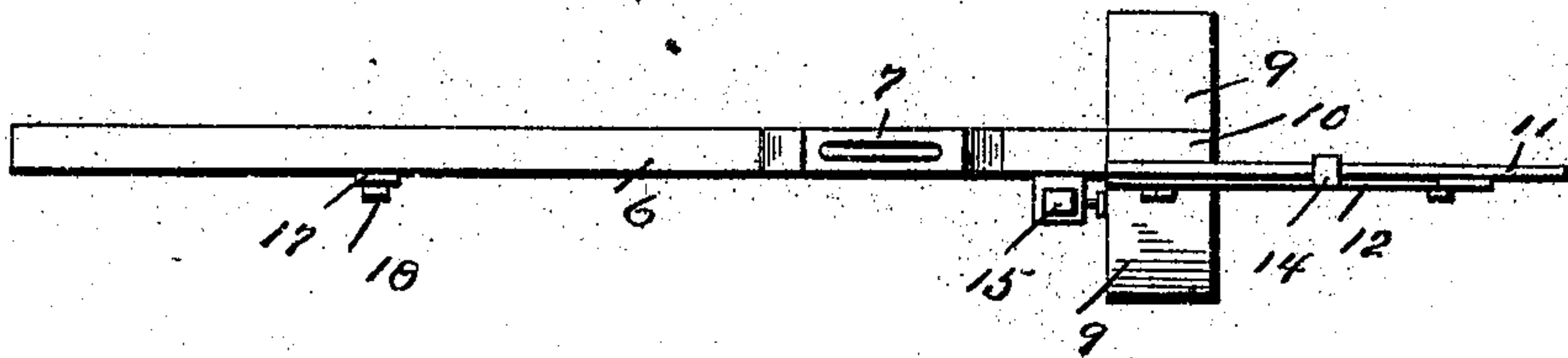


FIG. 2



WITNESSES:

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UNITED STATES PATENT OFFICE

EDWARD A. BROWN AND ALLEN WILLIAMS, OF CARBONDALE, ILLINOIS.

RAILWAY-TRACK GAGE.

No. 814,826.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed May 11, 1905. Serial No. 260,004.

To all whom it may concern:

Be it known that we, EDWARD A. BROWN and ALLEN WILLIAMS, citizens of the United States, residing at Carbondale, in the county of Jackson and State of Illinois, have invented new and useful Improvements in Railway-Track Gages, of which the following is a specification.

This invention is a gage instrument for railroad-tracks, and is designed to form a gage for spacing, alining, and surfacing of tracks and showing the degree of curvature of a curved track.

The device will also be found useful for setting grade-stakes and for various other purposes in connection with track laying or repairing.

An embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation thereof. Fig. 2 is a top view.

Referring specifically to the drawings, 6 indicates a beam having a spirit-level 7 on the top and at one end a series of steps or risers 8, which are serviceable in leveling up the beam in working on curves where one track is higher than the other. At the other end the beam has a laterally-extending cleat 9 to rest upon the rail and prevent the instrument from falling over. At the same end the beam has a standard 10, at the top of which is an arm 11, supported by a brace 12. The arm 11 is graduated, as at 13, to form a scale, and has an index 14, slidable thereon, to indicate the scale.

15 indicates a rod adjustable up and down across the beam through a proper guide thereon and fixed at adjustment by a set-screw at 16.

17 is a vertically-sliding foot at the other end of the beam, designed to rest upon one of the rails and support that end of the beam when the same is raised above the track.

In use three of the gages above described will be employed, the sight being taken from one to the other. Thus a straight track may be alined by setting three of the instruments along the track and taking the sight across the uprights 10 at either edge thereof, the three implements being placed any desired or convenient distance apart. For working on curves to determine or indicate the degree of curvature the three implements are

placed along the curve thirty-one feet apart and the sight taken from the standard 10 of the first device to the standard 10 of the third across the arm 13, and the index being moved to the line will indicate on the scale the degree of curvature. It is obvious that only one of the devices need have an arm 11. The other two can have simply the plain upright.

For elevating or surfacing a track the pin or rod 15 of the first implement is driven in a tie and the beam 6 raised by rule until at the height wanted. The set-screw 16 is then tightened, and the foot 17 is let down until it rests on the rail. This supports the beam at the proper height above the track. The third beam is then raised to the same height. The track under the intermediate beam, or the second beam, is then raised until the beams are in line at the same height or on a level with respect to each other. Then by moving the instruments along the track to new positions in a manner common to this class of devices the whole track can be surfaced or staked and brought to the proper height. It will be understood that the uprights 10 on all the beams are of the same height and that the beams have the same dimensions generally. The arm 11 can be reversed for left-hand work by taking out the bolts by which it is attached to the uprights and turning it around to the left side. The vertically-sliding foot 17 is fixed at the desired height by a set-screw 18 and when not in use is drawn up beside the lower edge of the beam. In connection with the spirit-level the beam affords means for leveling up a track and by the use of the steps for indicating the inclination of the track on curves. The upright 10 is perpendicular to the beam, and so forms a square.

The device is capable of several other uses which will suggest themselves to those familiar with the operation of such implements.

What we claim as new, and desire to secure by Letters Patent, is—

1. A track-gage comprising a beam provided with a level, and having steps at one end, and an upright perpendicular thereto at the other end, said upright having at its foot a laterally-extending piece adapted to lie upon and along the rail, and an arm extending perpendicularly from the top of the upright and having a scale and index thereon.

2. A track-gage comprising a beam having
a level, a pointed rod at one end thereof
adapted to be driven into the ground or tie
and having an adjustable connection with
5 the beam to support the same in raised posi-
tion thereon, and a vertically-adjustable foot
at the other end of the beam, adapted to rest
on a rail.

In testimony whereof we have signed our
names to this specification in the presence of 10
two subscribing witnesses.

EDWARD A. BROWN.
ALLEN WILLIAMS.

Witnesses:

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J. A. CARTER.