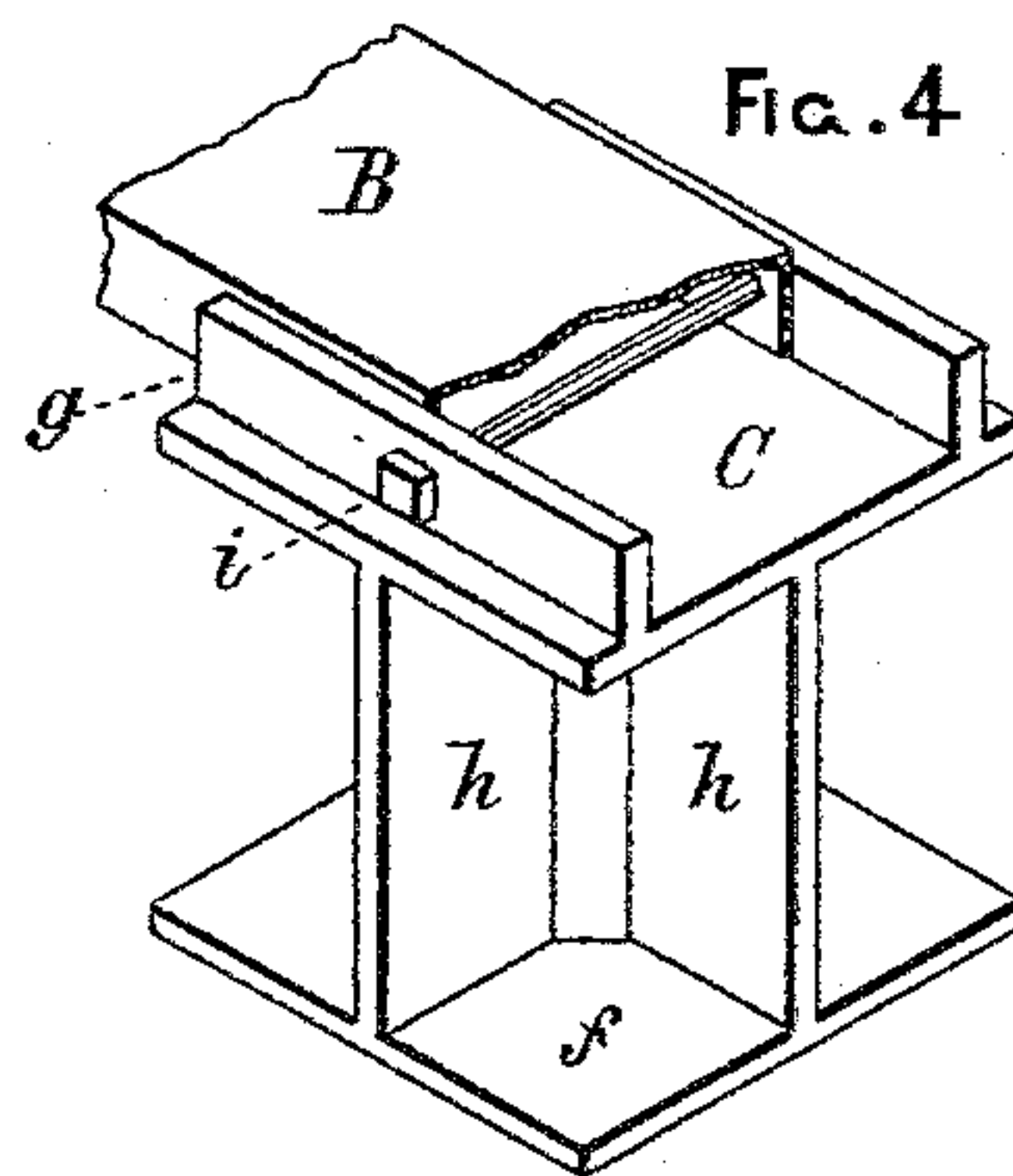
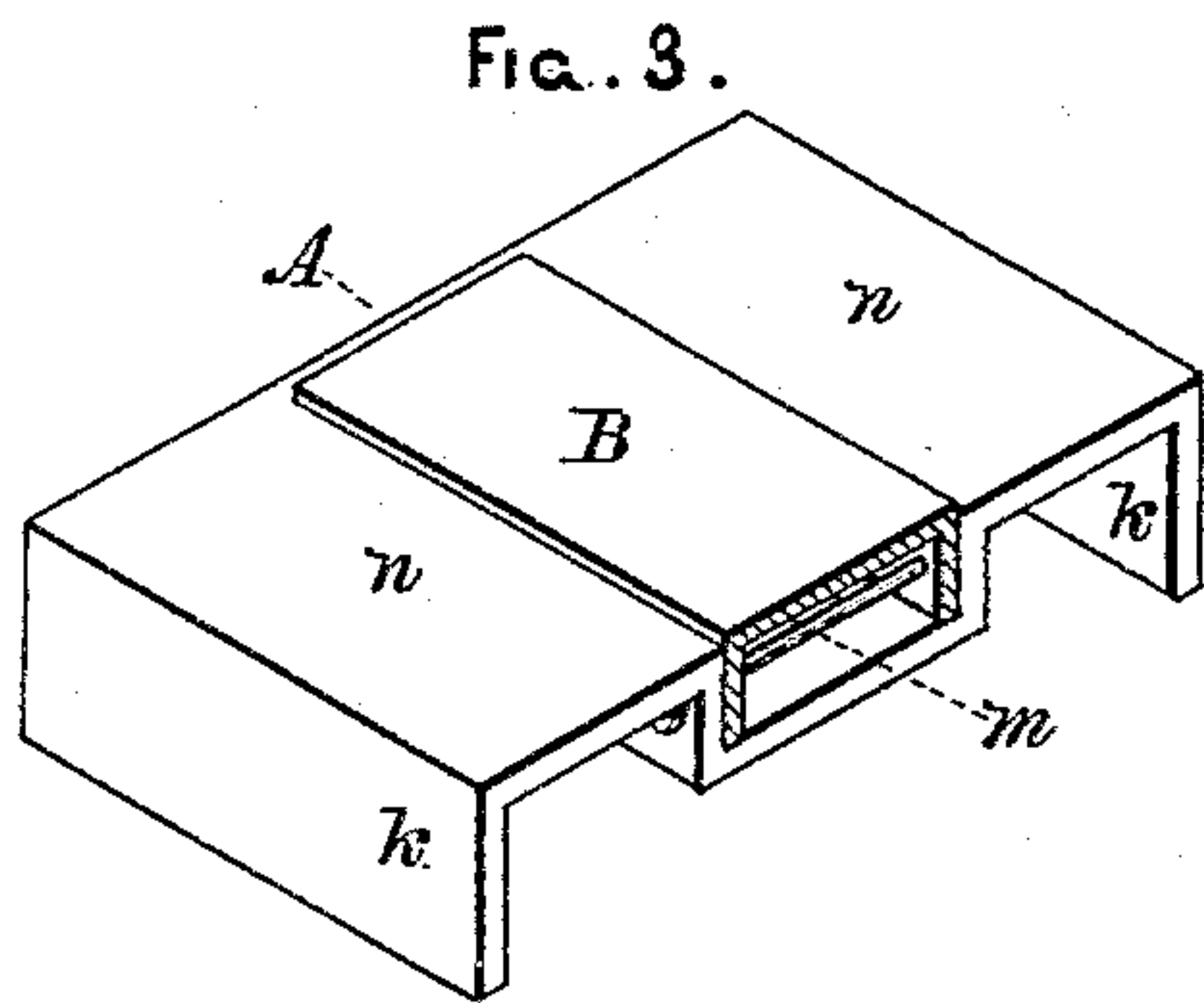
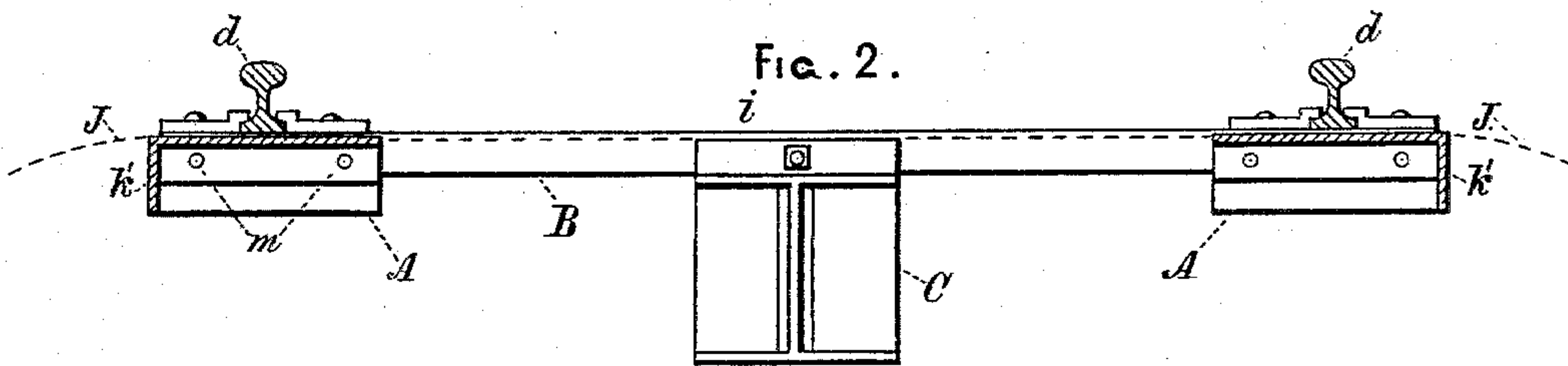
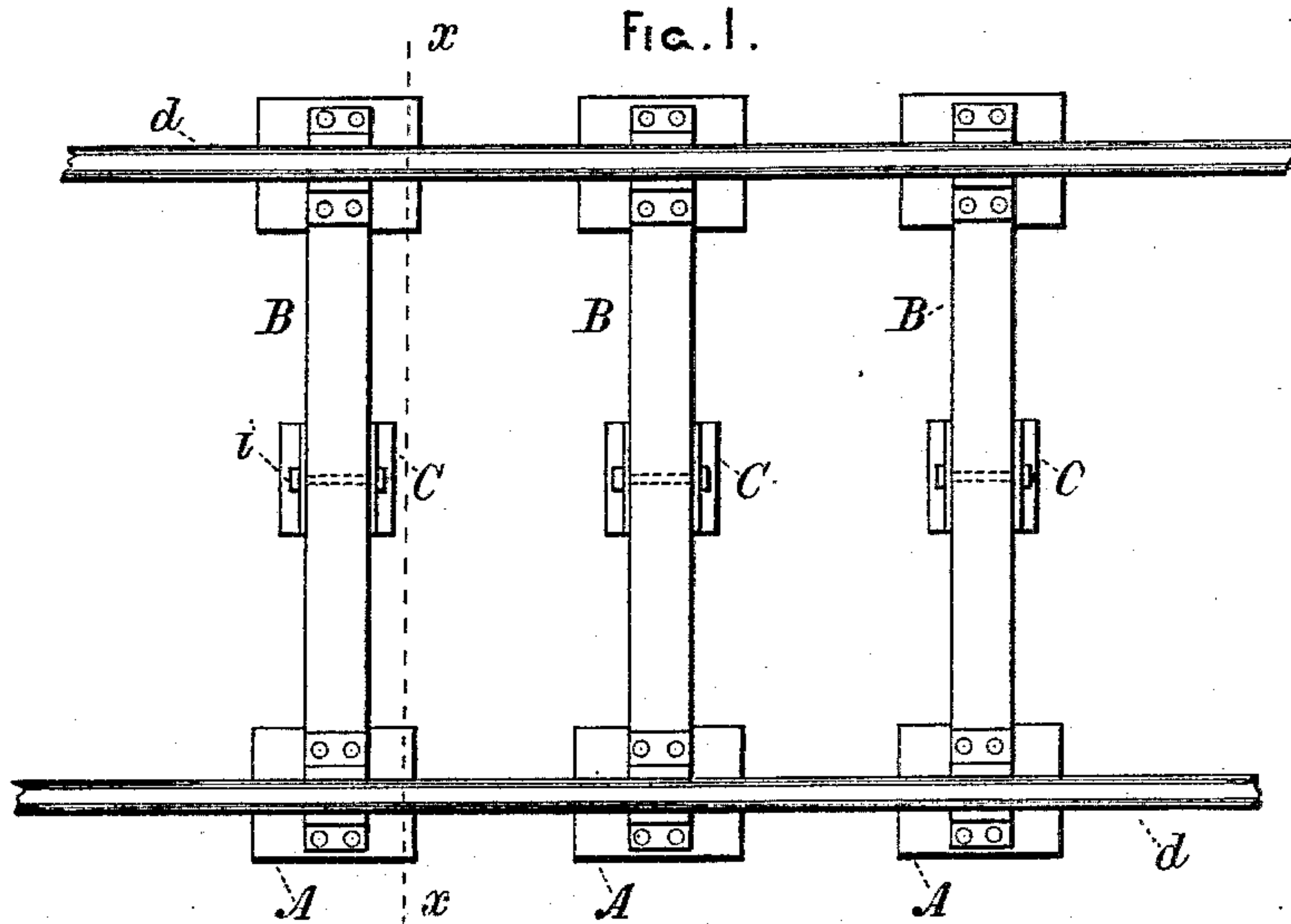


(No Model.)

A. A. SHOBE.
RAILROAD TIE SUPPORT.

No. 323,455.

Patented Aug. 4, 1885.



WITNESSES.

O. Hamilton.

G. R. Smith

INVENTOR.

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By F. S. Davenport, Atty.

UNITED STATES PATENT OFFICE.

ABRAHAM A. SHOBE, OF JERSEYVILLE, ILLINOIS.

RAILROAD-TIE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 323,455, dated August 1, 1885.

Application filed February 6, 1885. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM A. SHOBE, of Jerseyville, in the county of Jersey and State of Illinois, have invented a new and Improved Railroad-Tie Support; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an improvement in railroad-tie supports; and it consists in combining with an inverted trough-tie, preferably of steel, or, if desirable, any other form of tie of other material, a central support of metal provided with a broad base adapted to reach sufficiently far below the surface of the middle of the road-bed to be beyond the reach of frost, and to secure a more solid and permanent foundation than the soil or ballast at or near the surface can afford.

The above-named improvements I accomplish by combining with the tie supports of peculiar construction, fully explained in the following specification and illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a section of the road-bed, exhibiting in combination with ordinary steel trough-ties my central and outer end supports. Fig. 2 is an enlarged transverse sectional view of the same, taken in the line *x x*, Fig. 1. Fig. 3 is a still further enlarged perspective view of one of the outer end supports, in combination with a section of the tie. Fig. 4 is an enlarged perspective view of one of the central supports exhibited in combination with a section of one of the ties.

In the drawings, B represents a tie combined with and designed to be mainly sustained by an iron support, C, exhibited in perspective in Fig. 4, which represents the top thereof provided with side flanges, *g*, and connected with a broad flat horizontal base, *f*, by vertical intersecting webs *h*. It will be observed that the flanges *g* are of such distance apart as to just admit the tie B between them, the latter being secured in position by a bolt, *i*. The webs *h* are designed not only to support the superstructure, but to afford a large area against which the earth may be densely packed, so as to give the requisite lateral stability to the central and main sustaining-column, while the broad base *f*, being so much below the surface of the road-bed, has the ad-

vantage of resting upon a much more solid foundation than could be obtained at or near the surface of the ground.

Referring to Figs. 2 and 3, it will be seen that each end of the tie is inserted and secured by bolts M, as shown, in an iron box-shaped support provided for its reception, and furnished with end flanges, K K, and a back flange, K', the top surface, N, Fig. 3, being a little below the top of the tie, upon which rests the rail *d*, secured to the tie by plates and bolts, as shown, or by any other means adapted to the form of rail employed. The peculiar form given to these outer end supports is for the purpose of preventing as far as possible the washing away by heavy rains or floods of the earth, which is by the usual process of tamping rendered sufficiently solid and compact to form a secure bed for the support A and its superstructure. The road-bed being always more or less inclined downward from the center toward the sides, as shown in broken line J, Fig. 2, the effect of rain or flood is, as is well known, to wash away the road-bed, especially at the sides, and consequently from the ends of the ties, which of course immediately sink, and with them the rails, to the serious detriment of the road. Now, since the bed of earth upon which the support A rests is confined within the three walls or flanges K K K', it is obvious that the washing away above referred to, though not wholly prevented, is by the means I have devised and herein explained to an important extent checked, and consequently the cost of maintaining the road reduced.

I am aware that metallic ties and sleepers for railroads are not new. I do not therefore claim such; but

What I do claim as my invention, and desire to secure by Letters Patent of the United States, is—

The combination, with a railroad-tie, of the central support, C, constructed substantially as herein described, and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 13th day of January, 1885.

ABRAHAM A. SHOBE.

Witnesses:

WALTER S. DANIELS,
W. J. CAMPBELL.