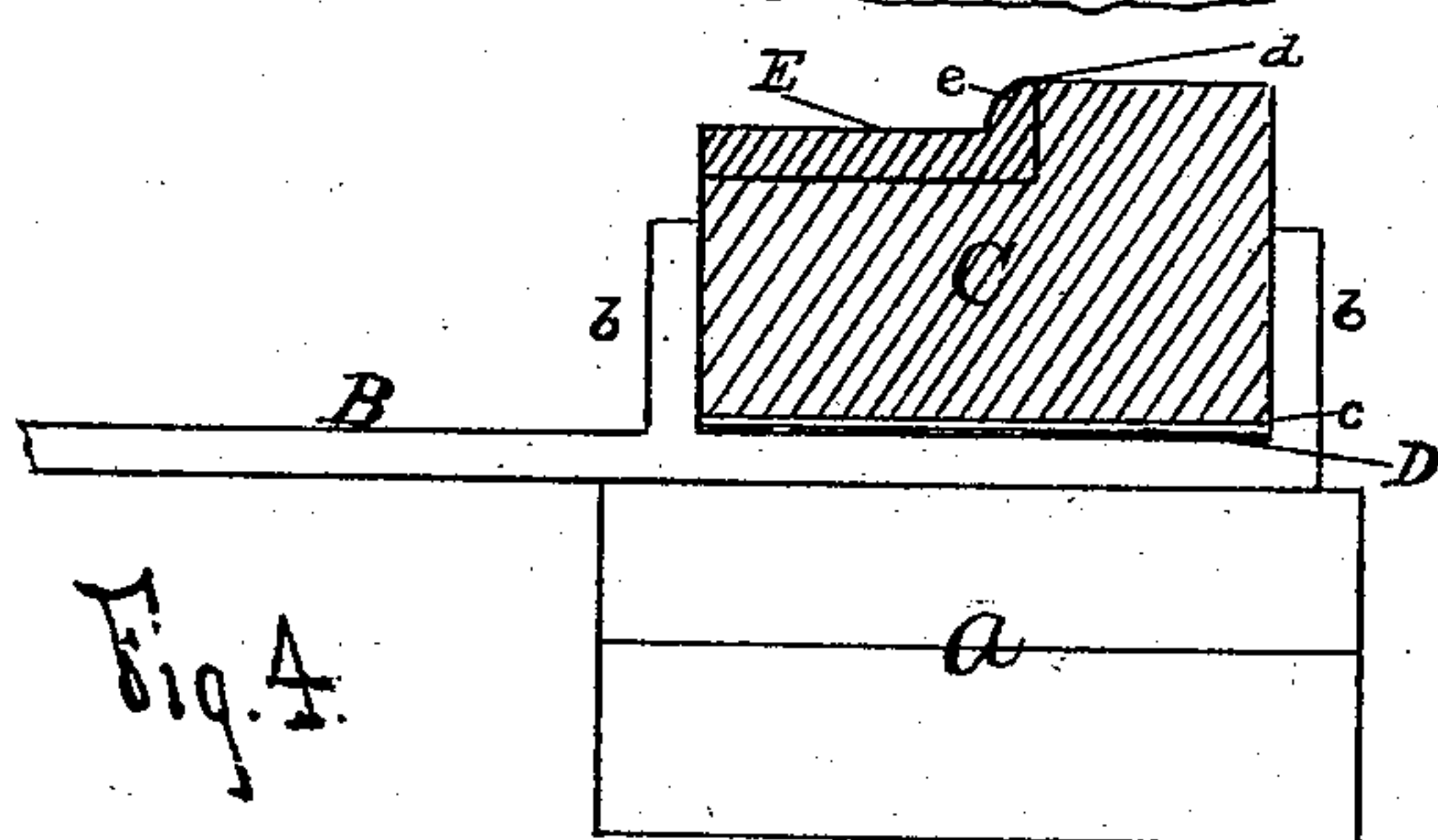
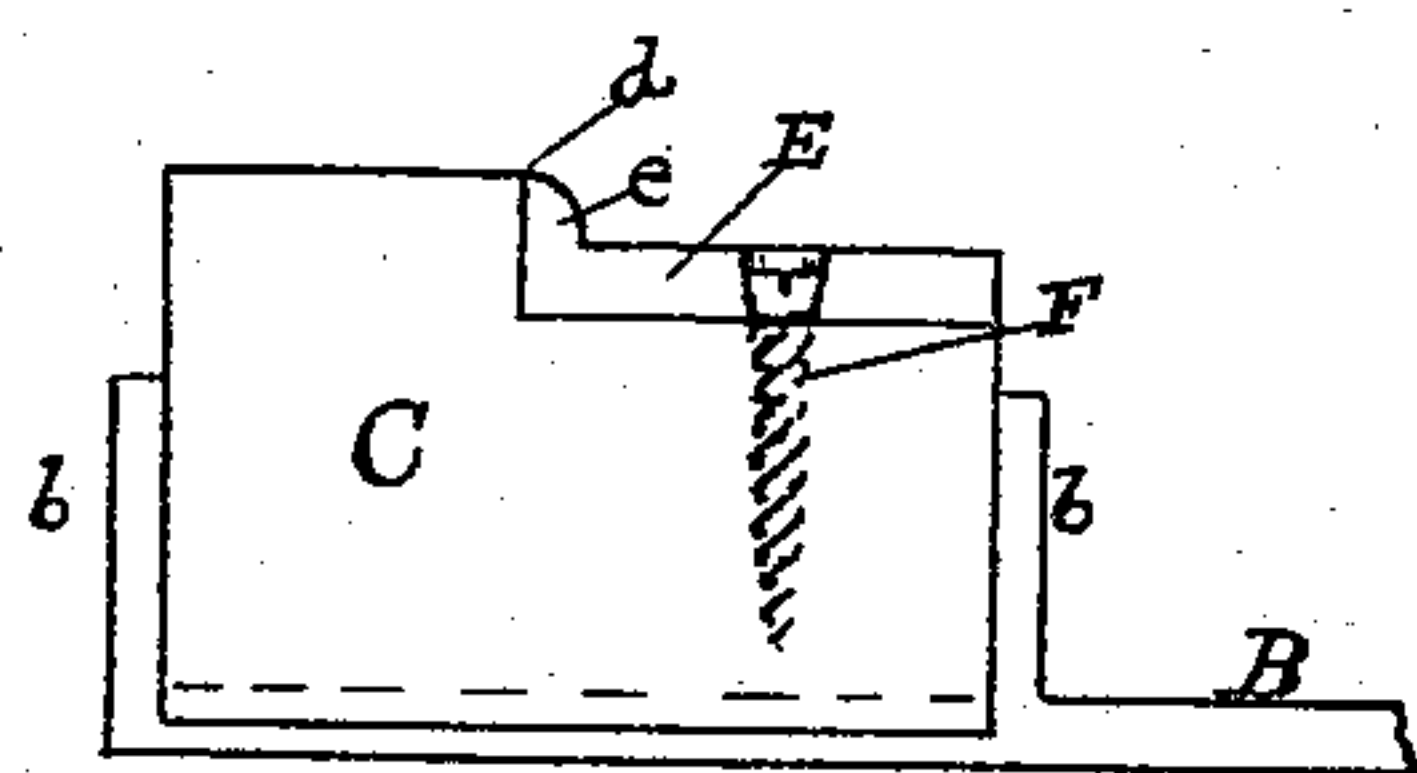
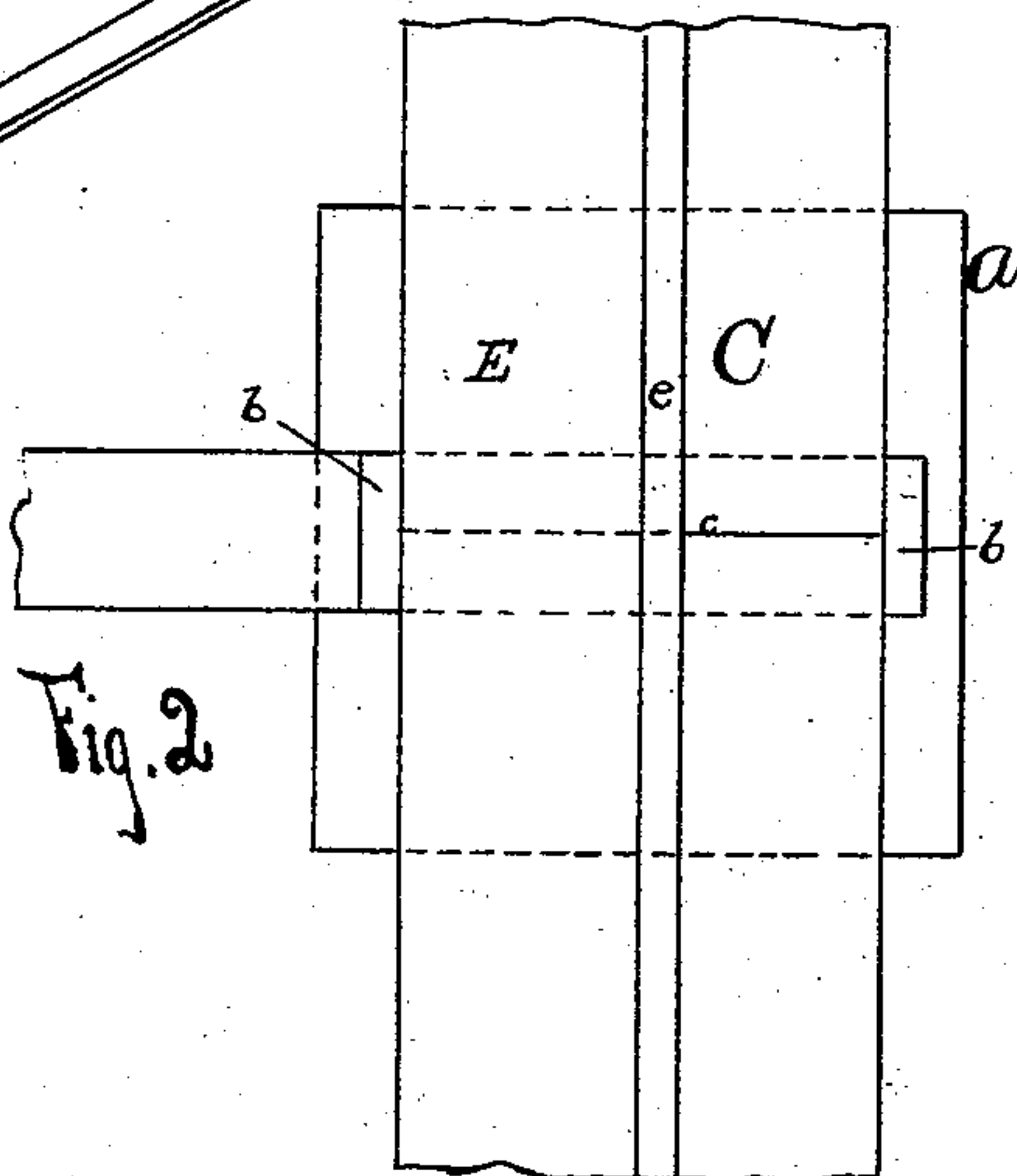
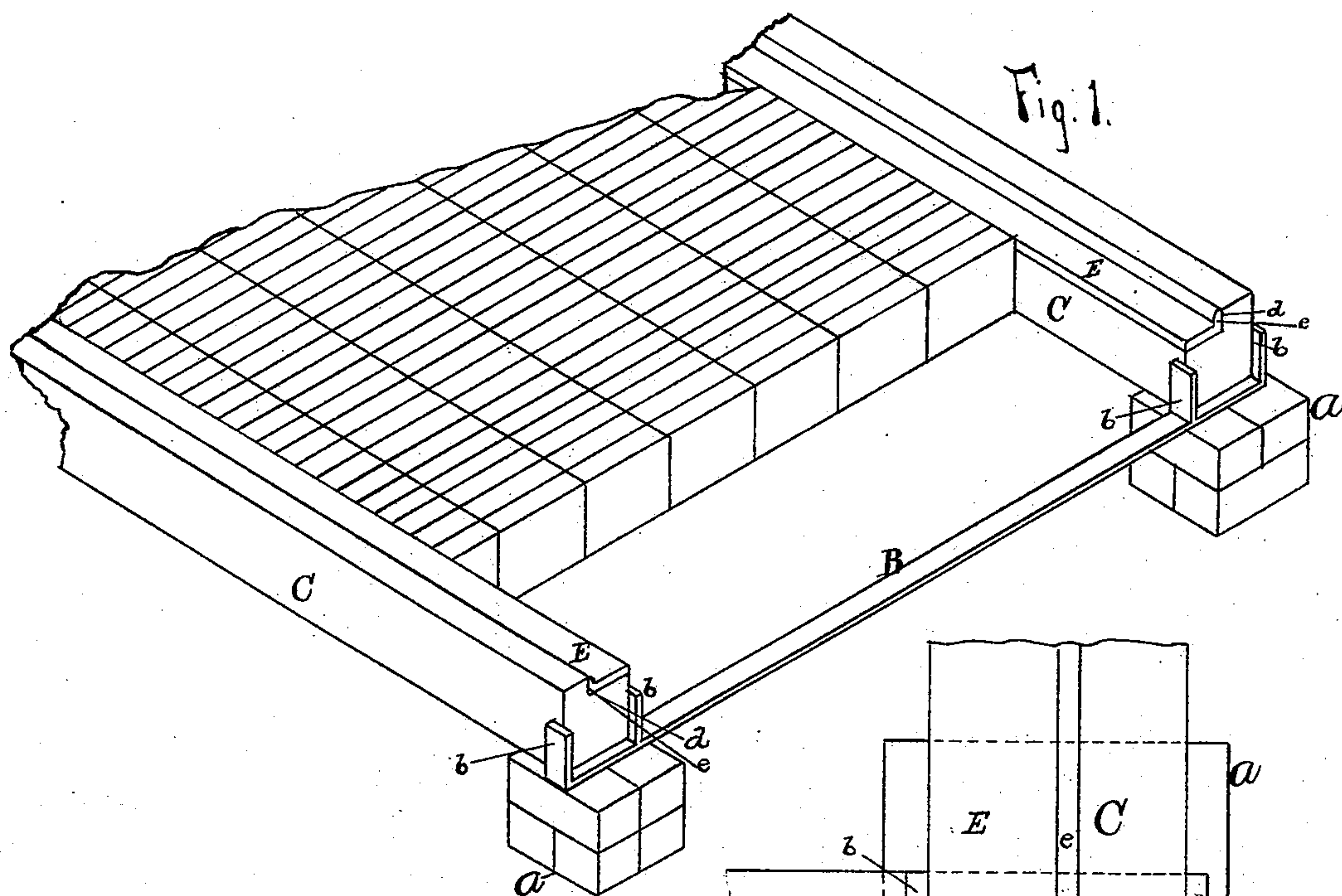


(No Model.)

W. W. BAIRD.  
TRAMWAY.

No. 495,146.

Patented Apr. 11, 1893.



Witnesses *John W. Baird*  
*John W. Baird*

Inventor W. W. Baird  
Per *John W. Baird*  
Attorney

# UNITED STATES PATENT OFFICE.

WILLIAM W. BAIRD, OF BLOOMINGTON, ILLINOIS.

## TRAMWAY.

SPECIFICATION forming part of Letters Patent No. 495,146, dated April 11, 1893.

Application filed September 15, 1892. Serial No. 445,929. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM W. BAIRD, of the city of Bloomington, in the county of McLean and State of Illinois, have invented certain new and useful Improvements in Tramways; and I do hereby 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.

My invention relates to certain new and useful improvements in tramways more especially intended to facilitate the passage thereover of heavy wagons and other vehicles which would be impracticable to transport over ordinary roads, and to this end my invention consists in the novel construction and arrangement of parts hereinafter fully described, and afterward definitely pointed out in the claim, due reference being had to the accompanying drawings forming a part of this specification, wherein:—

Figure 1 represents a perspective view of a portion of my improved tramway; Fig. 2 a top plan view of one of the piers and a portion of the tie, stringer and rail; Fig. 3 an end view of the stringer, rail and one end of the tie, and Fig. 4 a similar view in section.

Referring to the drawings, the letters A, A, indicate piers constructed of bricks, masonry or other suitable material, located upon each side of the tramway, and at suitable distances apart, preferably at about the distance of six feet. Anchored upon said piers in any suitable manner, are the metallic ties B, each consisting of a flat metallic bar, provided at each end with two vertically projecting flanges *b, b*, which are adapted to embrace the sides of stringers C, C, which extend from one pier to another. Between the flanges *b, b*, the tie B, is provided with a central longitudinal raised rib D, and the ends of the stringers C, are pro-

vided with corresponding grooves *c*, so that when the ends of the stringers C are laid between the flanges *b, b*, of the ties B, the rib D will rest within the groove *c*, and prevent any longitudinal movement of the stringer upon the ties. Upon the upper and inner face of each stringer C, is cut a rabbet *d*, within which is fitted an L-shaped rail E. The flange *e* of the rail is designed to rest flush with the top of the stringer C, and said rail is fastened thereto by means of bolts or screws F passing through suitable countersunk perforations in the rail and into the stringer.

In laying the tramway, the roadbed is first graded and the piers constructed and the stringers and rails then secured in place as described, after which the space between the rails and stringers is suitably paved—preferably with bricks. The roadbed upon each side of the tramway is afterward graded off so that vehicles may pass over and across the tramway without difficulty.

What I claim is—

In a tramway, the combination with piers set at suitable distances apart, of metallic ties supported thereon, and provided at each end with vertically disposed flanges arising therefrom, a vertically projecting rib formed integral with said tie and extending longitudinally between said flanges, stringers resting upon said ties between said flanges and provided upon their under sides with transverse grooves adapted to rest over said ribs, and rails secured to the upper sides of said stringers, substantially as shown and described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM W. BAIRD.

Witnesses:

R. P. McNULTA,  
SAM WELTY.