

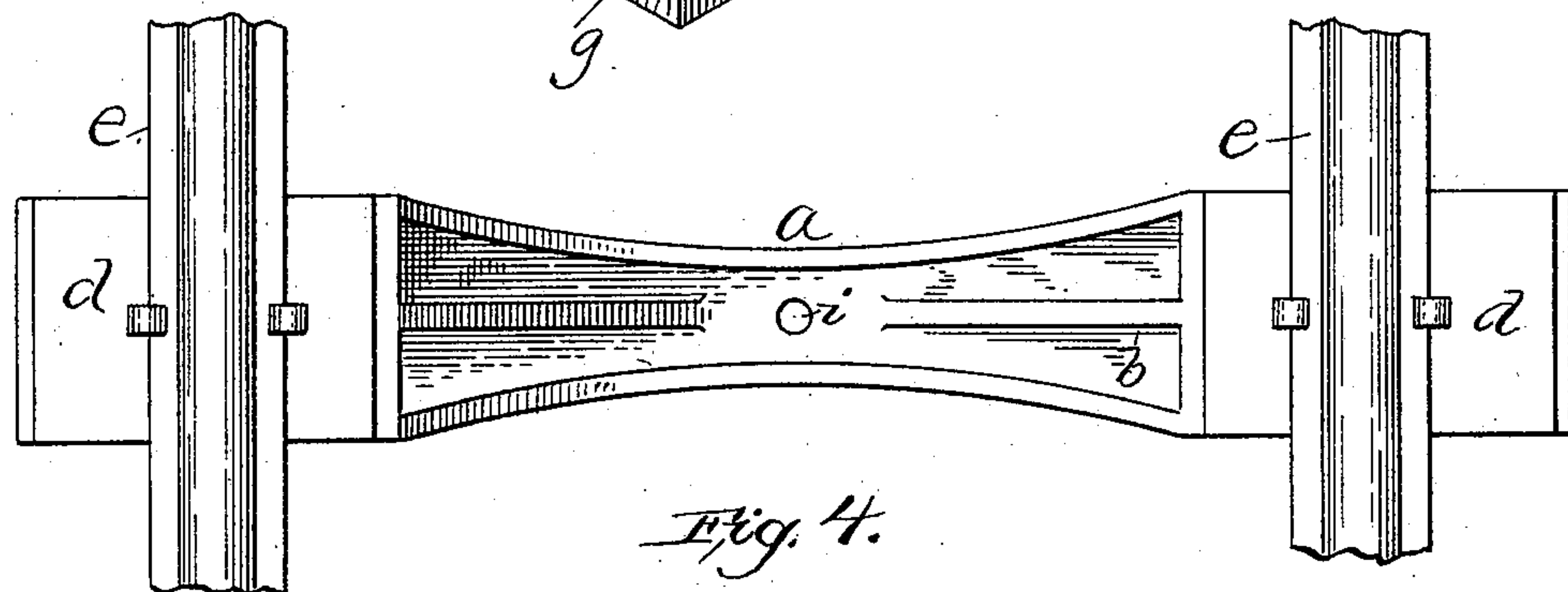
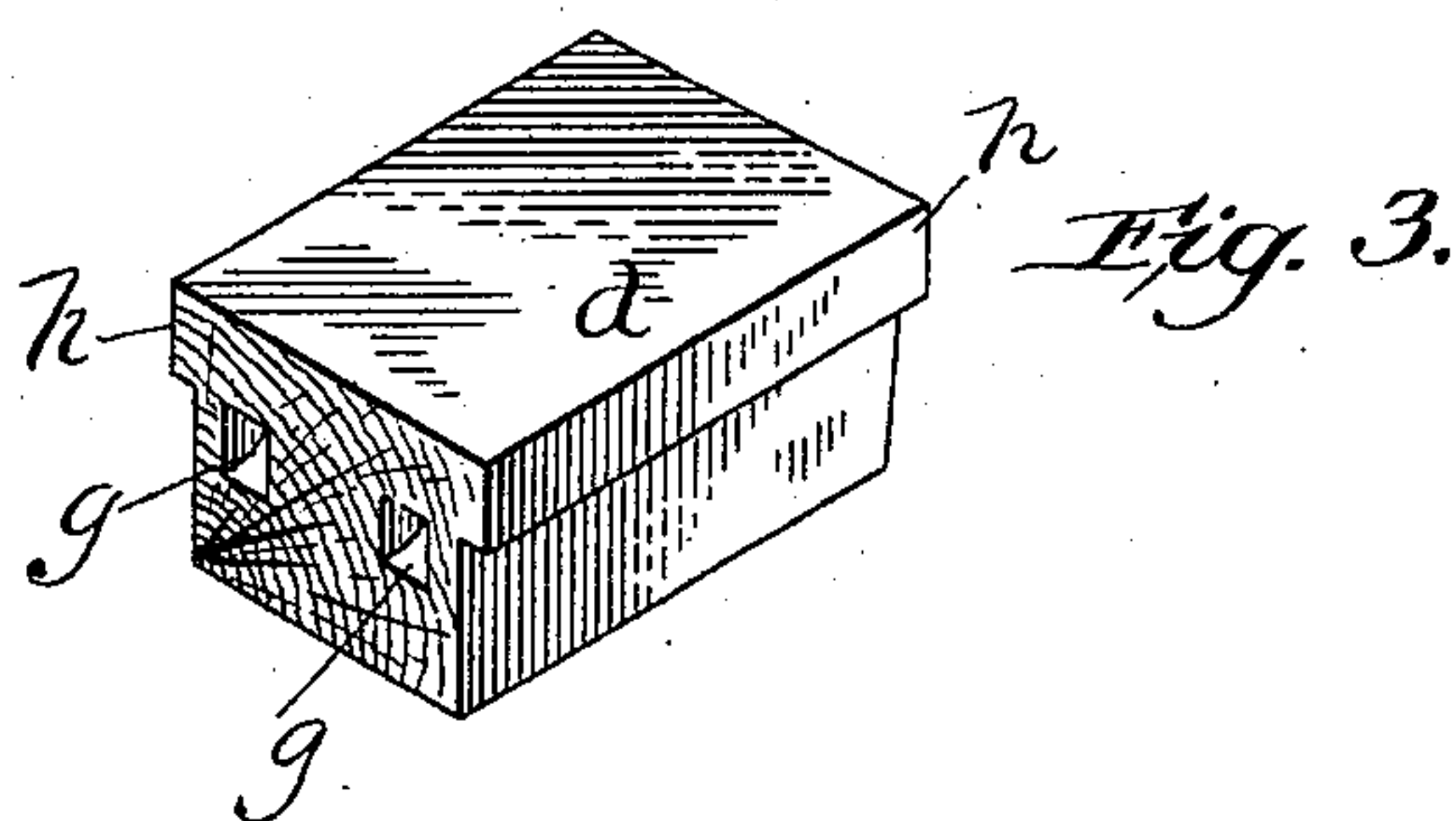
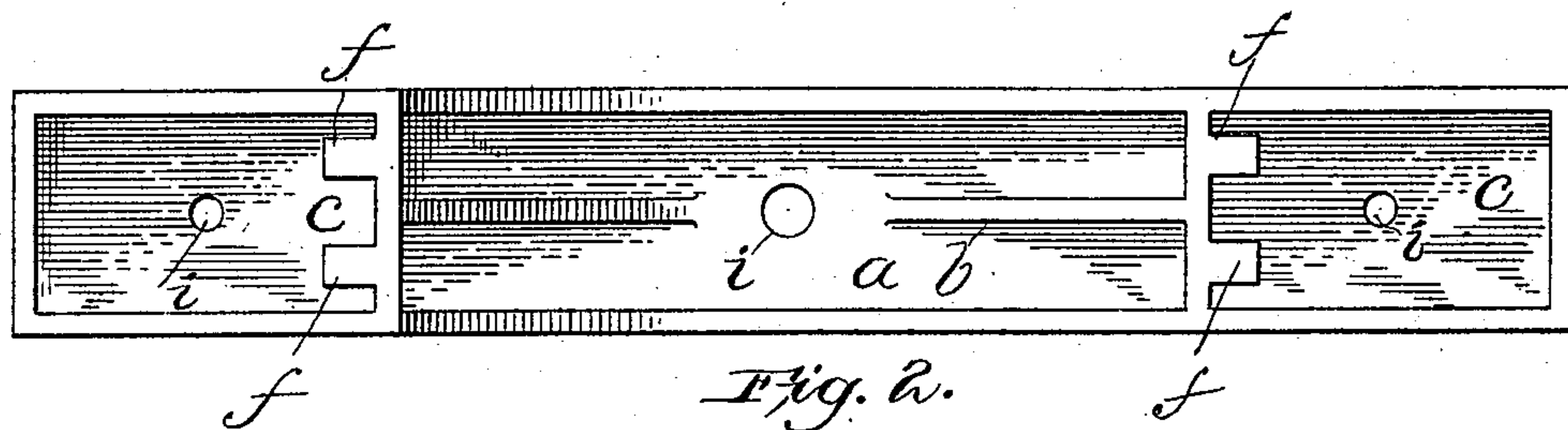
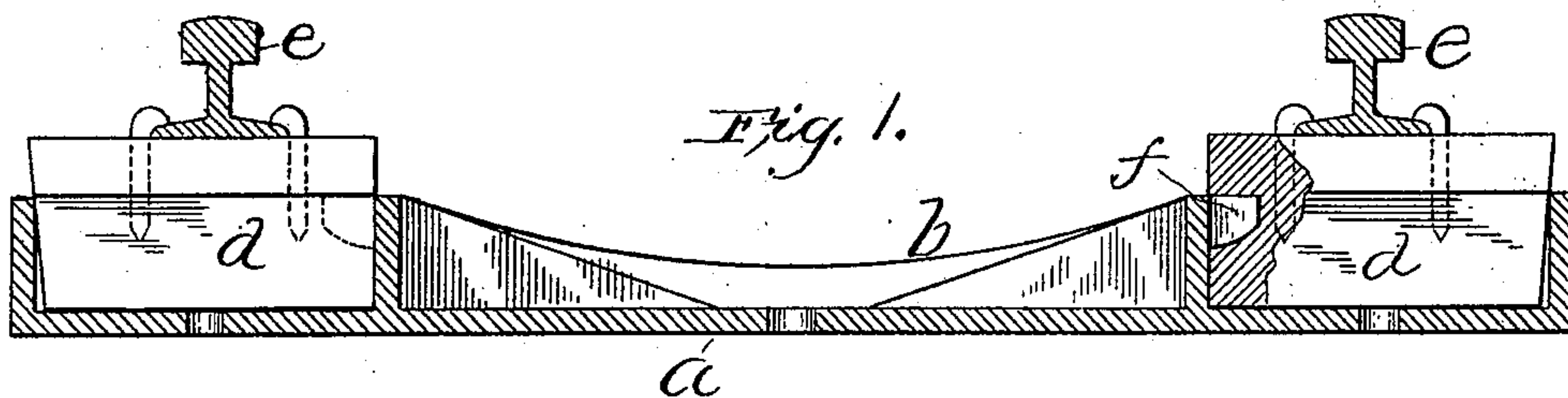
No. 615,923.

Patented Dec. 13, 1898.

A. W. TAFT.  
RAILWAY TIE.

(Application filed Mar. 25, 1898.)

(No Model.)



Witnesses:  
Arthur G. Randall  
Annie J. Dailey.

Inventor:  
A. W. Taft.  
By Crossley and Goddard  
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# UNITED STATES PATENT OFFICE.

ALISON W. TAFT, OF WOODSTOCK, VERMONT.

## RAILWAY-TIE.

SPECIFICATION forming part of Letters Patent No. 615,923, dated December 13, 1898.

Application filed March 25, 1898. Serial No. 675,072. (No model.)

*To all whom it may concern:*

Be it known that I, ALISON W. TAFT, of Woodstock, in the county of Windsor and State of Vermont, have invented certain new and useful Improvements in Railway-Ties, of which the following is a description sufficiently full, clear, and exact to enable those skilled in the art to which it appertains or with which it is most nearly connected to make and use the same.

This invention relates to metallic ties or sleepers adapted to be laid in the ballast and to have the rails secured thereto to form the track of a railway.

It is the object of my invention to give to a cast-iron tie or a tie of steel or other metal such structural characteristics as will render the same serviceable in the highest degree as a tie to hold and maintain the rails in proper and firm position and at the same time to make the said tie durable in and economical of use.

To these ends the invention consists of a metallic railway tie or sleeper provided at its ends with recesses having dowels projecting inward horizontally from the inner wall thereof for the reception of blocks upon which the rail rests and to which it may be spiked or fastened.

The invention also consists of the combination of the foregoing with rail-fastening blocks of peculiar and advantageous form or construction, all as is hereinafter fully set forth.

Reference is to be had to the annexed drawings, and to the letters marked thereon, forming a part of this specification, the same letters designating the same parts or features, as the case may be, wherever they occur.

Figure 1 is a vertical longitudinal sectional view of my improved railway tie or sleeper, one block being shown in elevation and the other as partially in section. Fig. 2 is a plan view of the improved tie complete, the blocks, however, being removed from their recesses in the ends of the tie. Fig. 3 is a perspective view of one of the blocks to which the rail is fastened and upon which the rail rests. Fig. 4 is a plan view of the invention complete, showing the central portion of a tie slightly modified in form from that shown in the other

figures and showing portions of railway-rails secured in place upon the blocks.

In the drawings, *a* designates the body of my improved tie, which at its central part consists of a flat slab, along the edges of which, and it may be between the edges, there are ribs or webs *b* for the purpose of giving stiffness and strength to said central part. However, the central part may be given other shape or design so long as it subserves its obvious purpose.

The ends of the tie are provided with recesses *c* to receive blocks of wood *d* or blocks composed of other material suitable for receiving fastening-spikes, which may be driven therein, and suited also as rests for the railway-rails *e*, which may be placed thereon.

The inner wall of each recess *c* is provided with dowels or projecting pins *f*, which extend inward, so as to enter holes or recesses *g*, formed in the inner end of the block *d*. The said blocks *d* will be made of such form as to fit within the recesses *c* of the tie and extend a considerable distance thereabove. The upper portions of the blocks *d* may also be made so as to project beyond the outer edges of the tie, though this is not essential. It is desired, however, that the blocks should have flanges or projecting parts *h* thereon which may extend outward over the edges of the tie in order that the edges of the projections *h* may be flush with the outer edges of the tie therebelow. The outer end of each block *d* may be slightly beveled inward, as is clearly represented in Fig. 1, so that the weight of the rails or a train running on the rails may by its weight drive or press the blocks downwardly and, in consequence of their beveled ends, wedge them over against the laterally-projecting dowels, which serve to assist in holding the block firmly in place, so that it cannot from any cause be withdrawn, but so that it will form to all intents and purposes a substantial part of the tie or sleeper.

Holes *i* may be bored in the bottom of the recesses *c* and in the bottom of the central portion in order that any water that may chance to collect therein may run out through said holes.

It is designed to treat the metallic part of the tie with a coating of paint that will pro-



tect it against rust, and it is also designed that the blocks *d* may be treated in such a way as to prevent their decay or disintegration.

5 In use the tie will be bedded in the ballast of the road as ordinary ties are, and after the blocks *d* are placed in their recesses in the ends of the tie the rails will be spiked thereon as on ordinary wooden ties.

10 Having thus explained the nature of the invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, 15 it is declared that what is claimed is—

1. A metallic railway-tie provided at its ends with recesses, from one end wall of which dowels project horizontally inward, combined with wooden blocks to fit in said

recesses and be engaged by the said dowels, 20 the latter operating to hold the blocks against rising from place in their respective recesses.

2. A metallic railway-tie provided at its ends with recesses, from one end wall of which dowels project inward, combined with 25 wooden blocks to fit in said recesses and be engaged by the said dowels, the said blocks being beveled at the ends opposite the dowels so as to adapt them to become wedged in the said recesses. 30

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 25th day of February, A. D. 1898.

ALISON W. TAFT.

Witnesses:

WARREN C. FRENCH,  
FREDK. C. SOUTHGATE.