

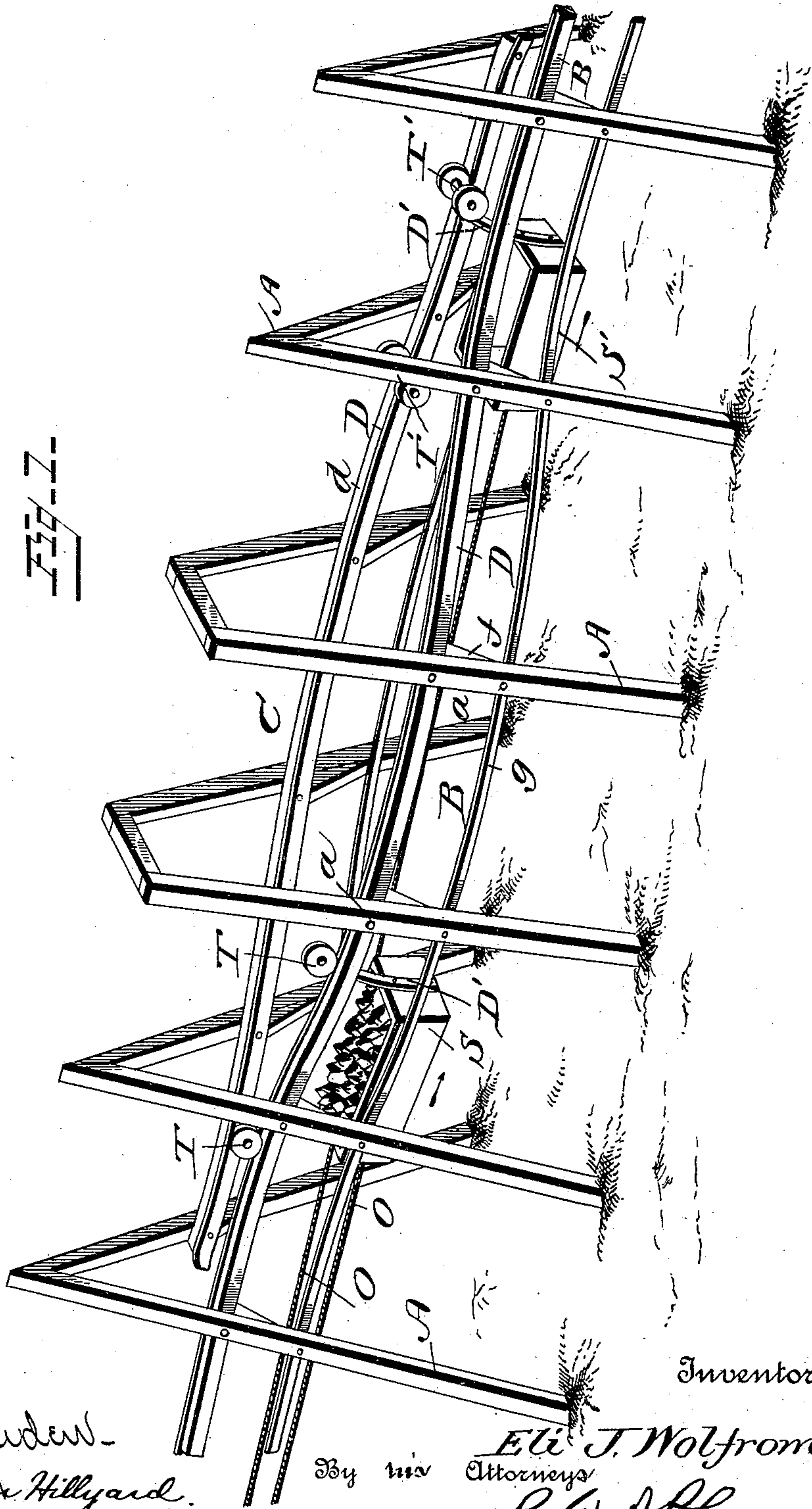
(No Model.)

2 Sheets—Sheet 1.

E. J. WOLFROM.  
TRAMWAY.

No. 475,102.

Patented May 17, 1892.



Witnesses  
Albert S. Seiden.  
Van Buren Hillyard.

Inventor

By his

Attorneys

Eli J. Wolfrom,  
Robt. A. Lacey.

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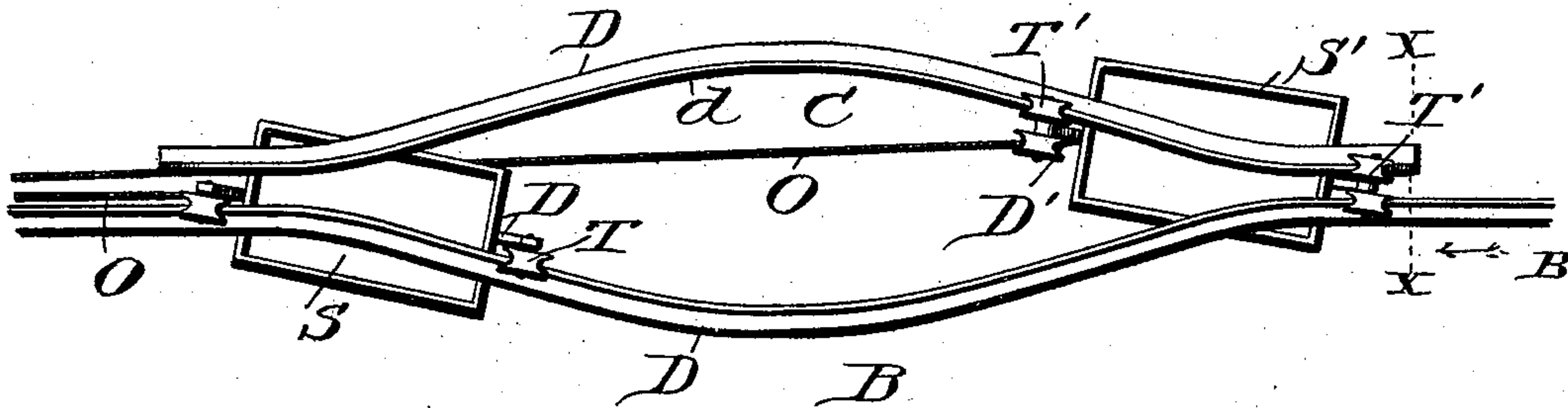


Fig. 2.

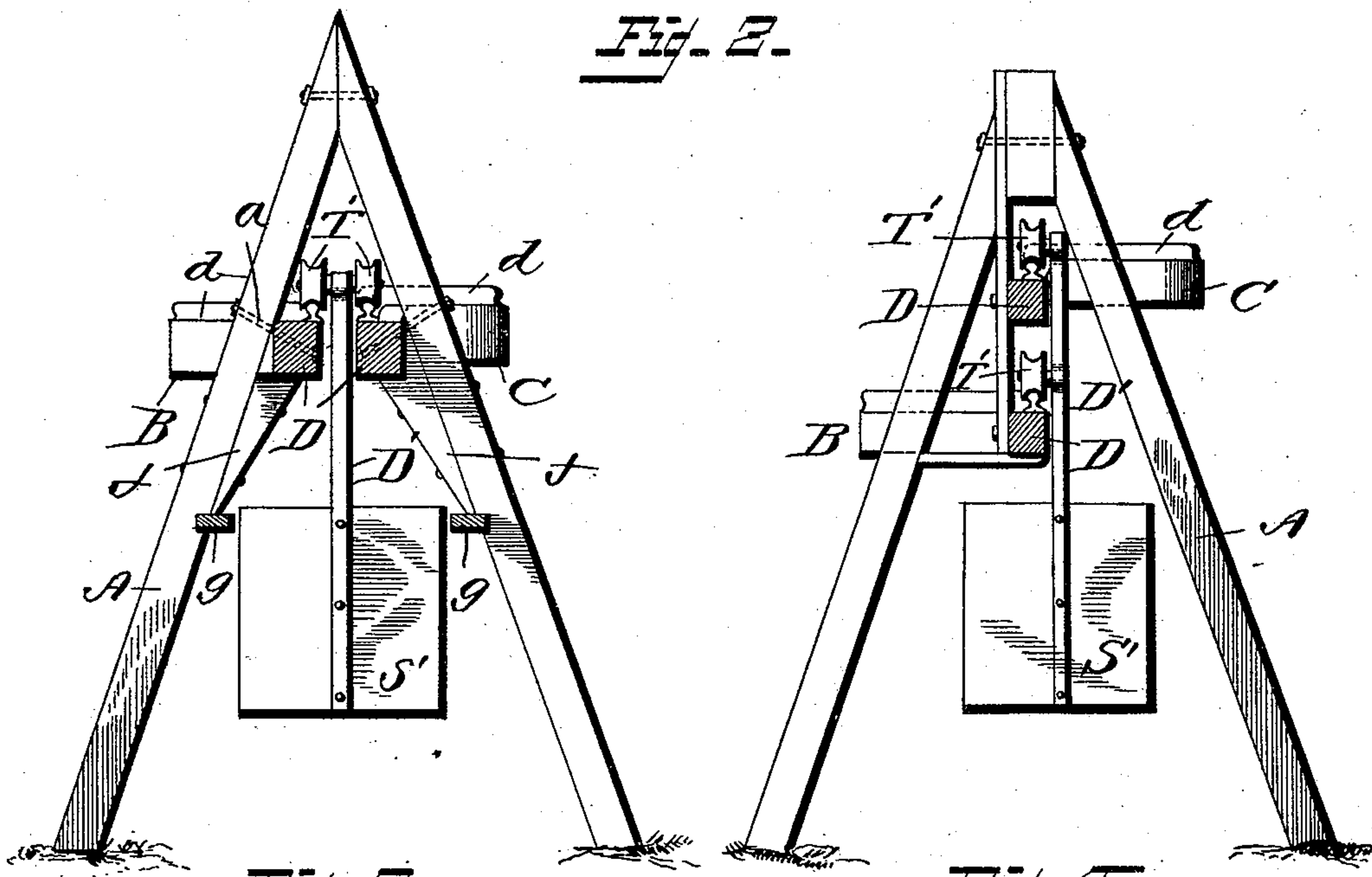


Fig. 3.

Fig. 4.

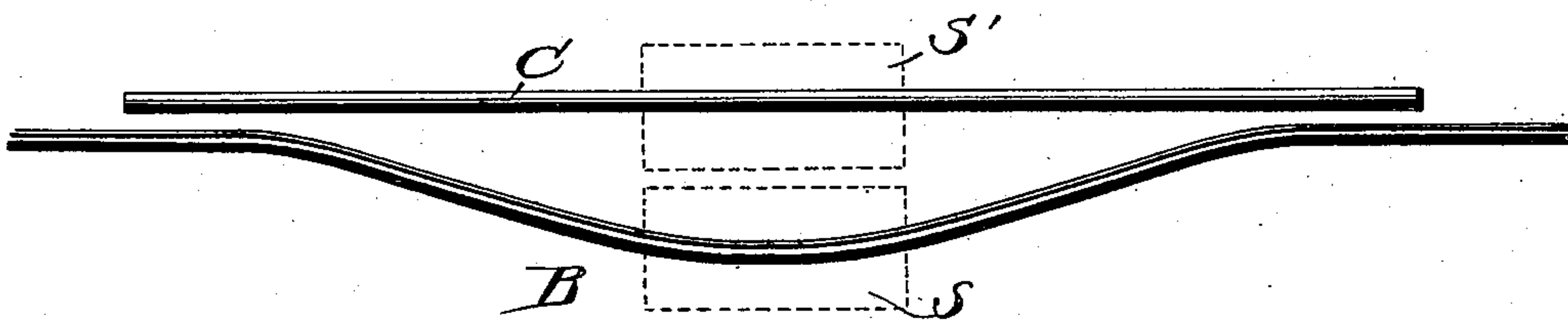


Fig. 5.

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# UNITED STATES PATENT OFFICE.

ELI J. WOLFROM, OF MAYSVILLE, COLORADO.

## TRAMWAY.

SPECIFICATION forming part of Letters Patent No. 475,102, dated May 17, 1892.

Application filed November 28, 1891. Serial No. 413,421. (No model.)

*To all whom it may concern:*

Be it known that I, ELI J. WOLFROM, a citizen of the United States, residing at Maysville, in the county of Chaffee and State of Colorado, 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.

This invention relates to tramways.

The object of the invention is to provide an elevated way which will be protected from snow and which will permit the use of a single track and yet admit of the loaded cars drawing the empty cars, the two cars passing intermediate the ends of the said tramway, a switch or side track being provided at this point to permit the cars to pass.

The improvement consists of the novel features and the peculiar construction and combination of the parts, which will be hereinafter more fully described and claimed and which are shown in the annexed drawings, in which—

Figure 1 is a perspective view of a tramway embodying my invention, showing the switch and the relative disposition of the cars on the said switch and main line. Fig. 2 is a top plan view of the main and switch tracks, the supports being removed. Fig. 3 is a cross-section of the tramway in front of the car on the line  $x x$  of Fig. 2, looking to the left. Fig. 4 is a cross-section, similar to Fig. 3, of a modification, showing the pair of rollers placed one above the other. Fig. 5 is a further modification showing the main line deflected.

The tramway is composed of a series of triangular-shaped supports A, which are arranged with their apices upward and the base portions resting upon the ground, the main track B, the switch-track C, and the guide-rails  $g g$ , which are located at a lower level and are secured to the side pieces of the supports A. The tracks are composed of sills D and rails  $d$ , the latter being secured on the sills in the usual manner and the sills being secured to the side pieces of the supports by bolts  $a$  and blocks  $f$ , which are secured to the side pieces of the said supports A, substantially in the manner shown most clearly in Fig. 3. The

switch-track C for a short distance from each end extends parallel with the main track B and is deflected away from the main track intermediate of its ends. The main track is deflected in an opposite direction at a point opposite the deflected portion of the switch-track C. The two tracks are similarly deflected, thereby distributing the strain more uniformly on the cables O O, which connect the two cars S S'. The switch-track is two inches, more or less, higher than the main track, and its ends slope gradually to the level of the said main track. One of the cars, as S, is provided with single-groove wheels T at the upper ends of the hanger D'. This car always travels on the main track. The car S' is provided with a pair of groove-wheels T' at the upper ends of the hanger D'. This car leaves the main track and passes the car S on the switch C and again returns to the said main track after passing the car S'.

The operation of the invention is as follows: The two cars, being connected together by the cable O O in the usual manner, travel in opposite directions. Hence they approach the switch from opposite points. The car S travels on the main track from end to end. As the car S enters the switch the free wheel rides upon the switch-track and lifts the wheel previously traveling on the main track and compels the car to travel on the switch. The two cars S and S' pass each about midway of the ends of the switch-track. As the car S' approaches the end of the switch-track the wheels ride down on the inclined end of the said switch-track and permit the car to continue its travel on the main track. The guide-rails  $g g$  engage with the sides of the car and hold the same in a perpendicular position.

The pair of supporting-wheels T' may be placed side by side or above one another, depending upon the relative position of the main and switch tracks. Obviously if the end portions of the switch-track are in line with the main track the said switch-track will have to be placed relatively higher and the said wheels T' will be in the same vertical plane. (See Fig. 4.) In the practical operation of the invention it makes little difference whether the main or the switch track is deflected, or both. The purpose of the lateral deflection is

to permit the cars to pass by each other without interference. The manner of supporting the tracks is not essential to the spirit of the invention, the said tracks being secured to  
5 the triangular or other suitable supports in any convenient manner.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

10 The combination, with the approximately triangular-shaped supports A, of the sills D, the

bolts *a*, the blocks *f*, the rails *d*, secured to the said sills, the guard-rails *g*, and the car suspended from the said rails and held in a vertical position by means of the guard-rails  
15 *g*, substantially as set forth.

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

ELI J. WOLFROM.

Witnesses:

WM. N. JOHNSON,  
E. B. BREWINGTON.