

J. P. Hart,

Railroad Frog,

Patented Mar. 12, 1867.

No. 62,745

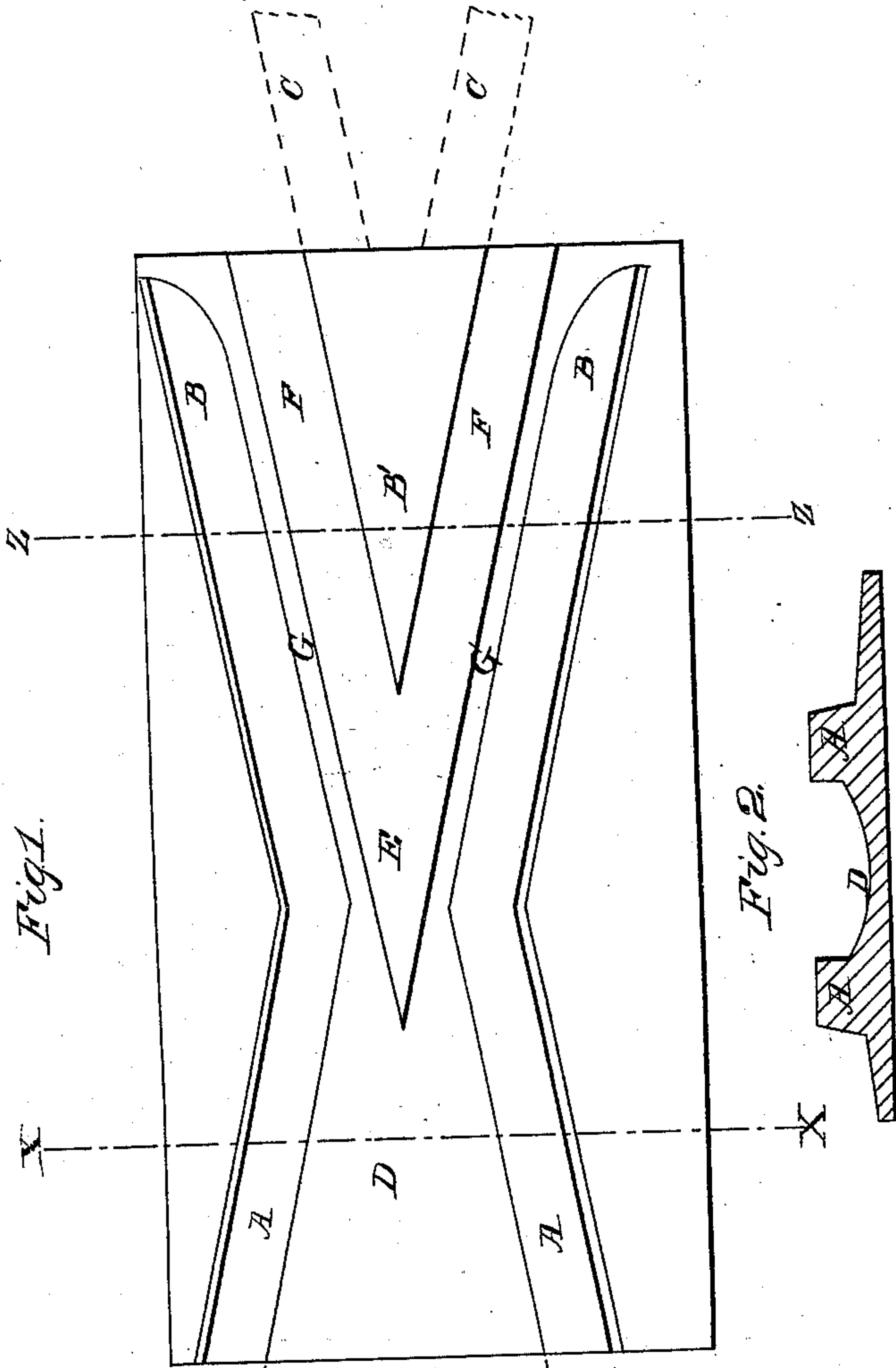


Fig. 1.

Fig. 2.

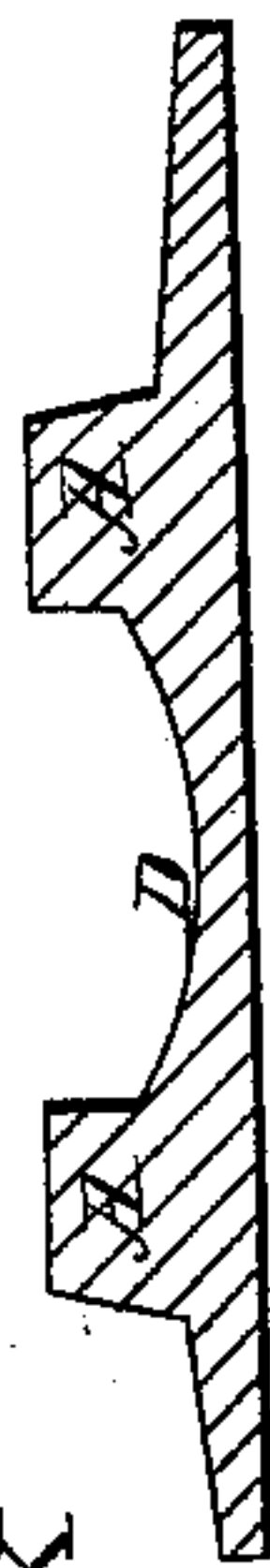
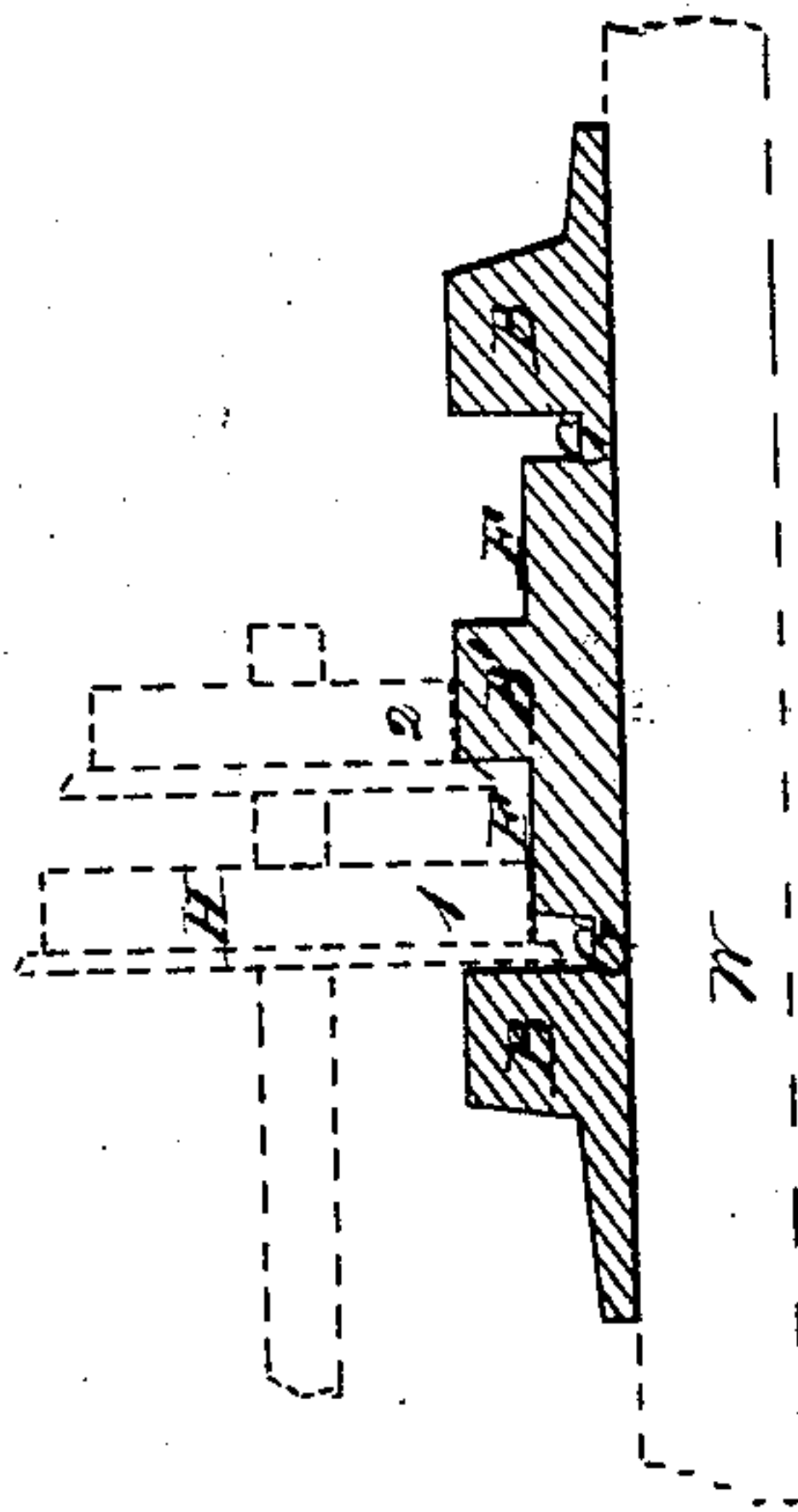


Fig. 3.



Witnesses:

*Geo L. Chapin
A. Hayward*

Inventor:

John P. Hart

United States Patent Office.

JOHN P. HART, OF CHICAGO, ILLINOIS.

Letters Patent No. 62,745, dated March 12, 1867.

IMPROVED RAILWAY FROG.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN P. HART, of Chicago, in the county of Cook, and State of Illinois, have invented a new and useful improvement in Frog for Railroad Tracks; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and letters of reference marked thereon, making a part of this specification, in which—

Figure I is a plan view of my frog.

Figure II is a vertical section taken through the red line *x x*.

Figure III is a vertical section taken through the red line *z z*.

The nature of my invention consists in making a series of grooves in the frog, below the flange track, in order to allow the larger wheels of the trucks to pass through the frog, when wheels of different sizes are used on the same axle for the purpose of running on roads of different gauges. It is evident that when the smaller wheels are running upon the track the larger wheels would come in contact with the frogs, as now constructed; but by cutting enough of the frog away to clear the larger wheel on the axle, it will pass through the frog when the smaller wheel is running on the rail in the usual manner. The want of a frog suitably constructed to allow compound wheels to run over the road rendered James Wright's patent of 1829 inoperative, and all other inventions of similar character. I claim that by the use of my frog different-sized wheels on car axles can be made practical so as to run on roads of different gauges, thereby saving much labor and expense in the transfer of freight.

To enable others skilled in the art to make and use my invention, I will describe its construction and how it may be used.

D represents the bed of the common frog, resting upon the ties shown by the red lines *w*, Fig. III. A shows the frog-rails, connected with the guides B in the usual manner. B' is the V, resting upon the flange-track F E. The red lines *c* show the position of the T-rails when connected with the frog, all of which is a common construction of frog for railroads. G shows the grooves or channels which I make between the flange-track F and the guides B, for the larger wheel of the truck to pass through the frog when the smaller wheel is passing over the frog in the usual manner. The frog represented in the drawing is calculated only for a single angle of road, but my improvement can be used in frogs for roads that cross each other at any angle, and all other places where frogs are used, by simply making the grooves G, or cutting away that portion of the frog which would come in contact with the larger wheel. It is not necessary that the frog be constructed precisely as that shown in the drawing, the main object being to allow the larger wheel to pass through and yet leave the frog as strong as possible. I use the same material in the construction of the frog that is now employed for such purposes.

Operation.

After the frog has been constructed as set forth, and adjusted in the track as shown at Fig. I, the wheels of the truck will occupy the position on the frog shown by the red lines H, Fig. III, 1 being the larger wheel and 2 the smaller wheel.

Having thus fully described my device, what I claim as new, and desire to secure by Letters Patent of the United States, is—

The grooves G for allowing compound wheels to pass through the frog, substantially as set forth.

JOHN P. HART.

Witnesses:

GEO. L. CHAPIN,

A. HAYWARD.