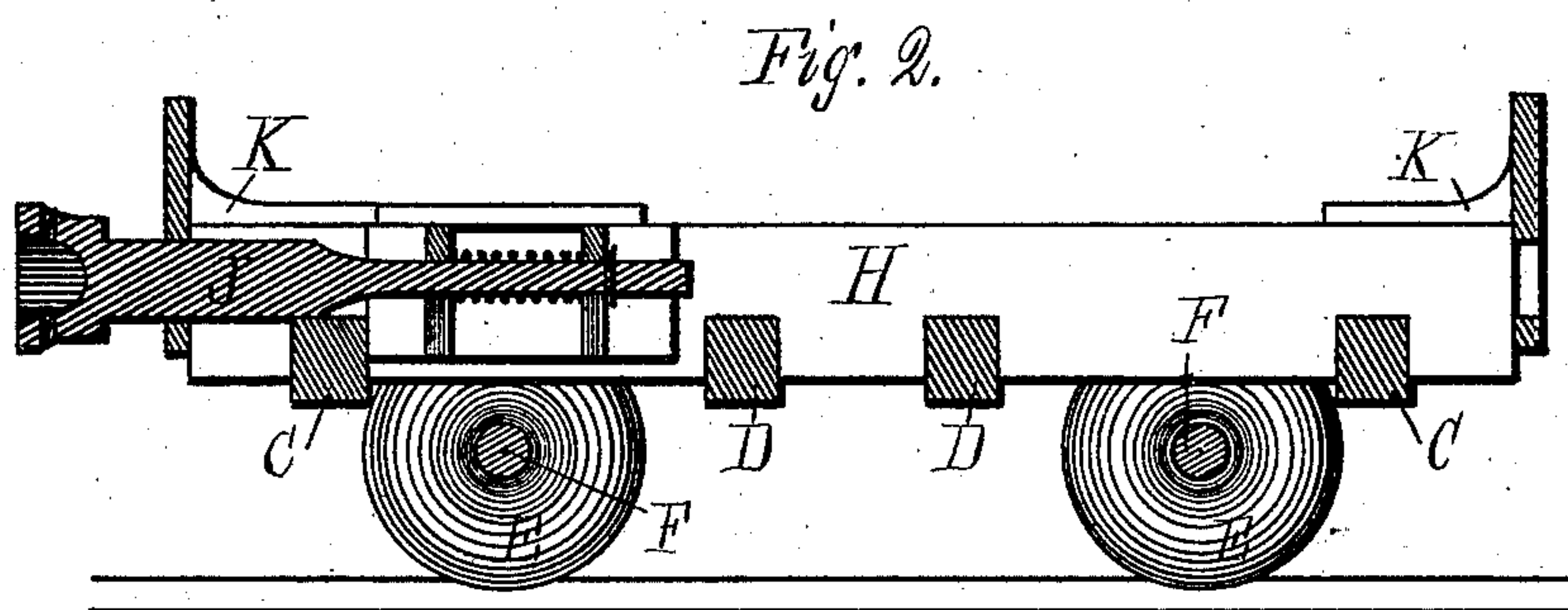
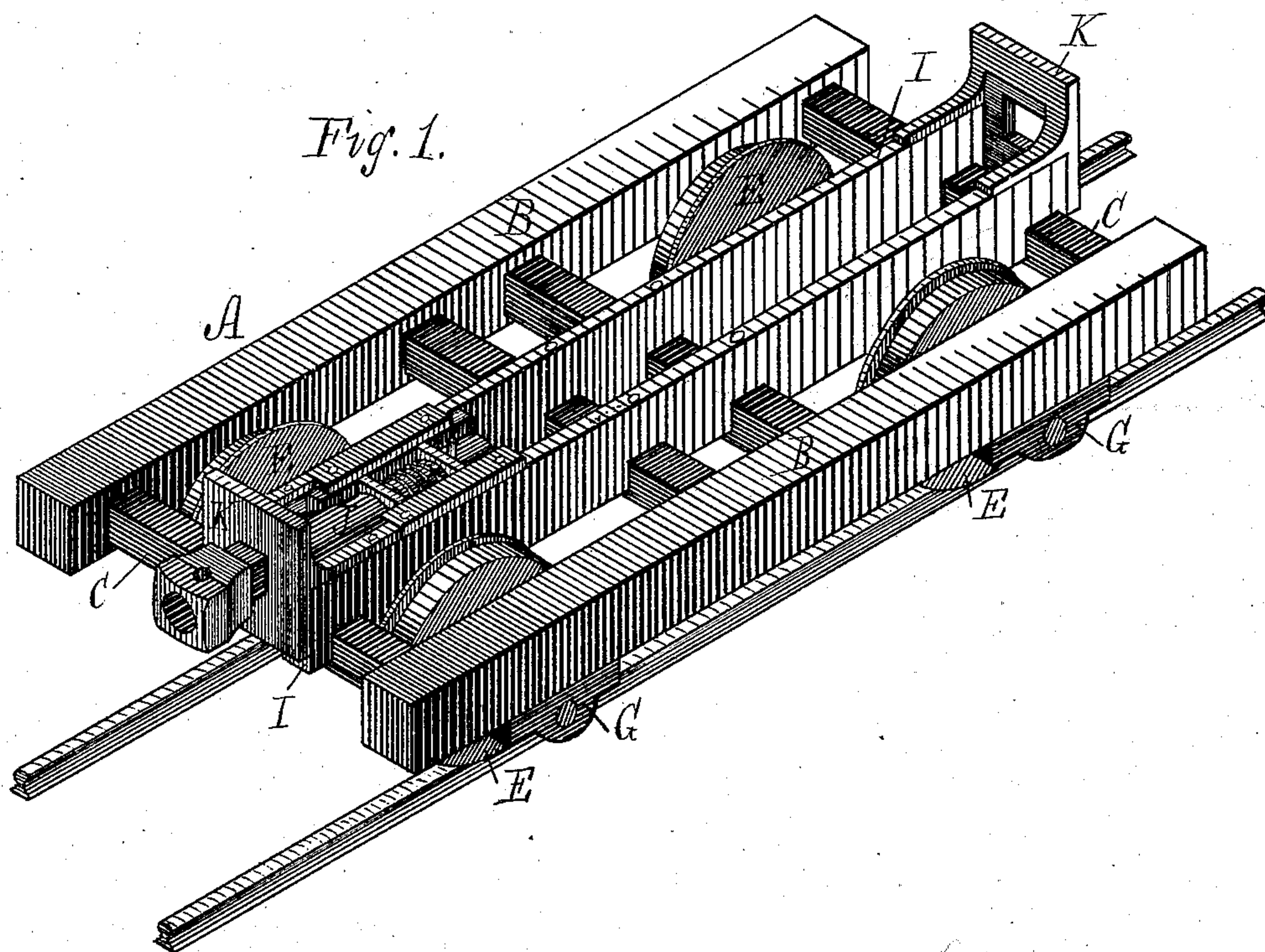


C. BARRETT.  
Draw-Bar for Freight-Cars.

No. 224,985.

Patented Mar. 2, 1880.



Witnesses.

Wm. T. Andrews Jr.  
Geo L. Hall

Inventor.

Charles Barrett



# UNITED STATES PATENT OFFICE.

CHARLES BARRETT, OF SOMERVILLE, MASSACHUSETTS.

## DRAW-BAR FOR FREIGHT-CARS.

SPECIFICATION forming part of Letters Patent No. 224,985, dated March 2, 1880.

Application filed November 28, 1879.

*To all whom it may concern:*

Be it known that I, CHARLES BARRETT, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain  
5 Improvements in Railway Freight-Cars, of which the following is a specification.

This invention relates to the trucks of railway freight-cars, and more especially to the method of attaching the draw-bar thereto in  
10 lieu of to the body of the car, as heretofore practiced.

It has been the general custom heretofore in the construction of railway freight-cars to attach the draw-bar to the car-body—that is,  
15 beneath the body of the car and in guides attached to the latter. For this reason shocks or thrusts upon the draw-bar must be met and resisted by the car-body, which is illy adapted to sustain them.

In my present invention I dispose the draw-bars in guides in the upper part of the truck, and make these guides of long timbers, extending the entire length of the truck, with  
20 solid bunters at each end to receive the ends of the car-body, the longitudinal timbers constituting a perch to withstand severe thrusts and blows in cases of collisions or other accidents, and protect the car-body from their effects.

The drawings accompanying this specification represent, in Figure 1, a perspective view, and in Fig. 2 a vertical longitudinal section,  
30 of a railway freight-car truck embodying my improvements.

In such drawings, A represents the truck of a railway freight-car as composed of longitudinal side beams or sills, B B, and transverse end beams or sills, C C, with intermediate cross-ties D D, the wheels of the truck, which are  
40 four in number, being shown at E E, and the two axles at F F, the latter being situated at opposite ends of the truck and near the extremities, to obtain as long a wheel-base as possible, and the boxes or hangers which support the axle-journals being shown at G G as secured to the side sills of the truck.

The above truck extends the entire length of the car-body, and the requisite end play of the axles to enable the truck to adapt itself to  
50 curves in the track is obtained by the journals of such axles being elongated between the boxes.

The central longitudinal perch before al-

luded to is shown at H in the drawings as composed of two timbers, I I, extending the entire length of the truck, and being jointed or  
55 united to the end timbers or sills and cross-ties of such truck in as secure a manner as possible, in order that thrusts or strains upon the ends of the perch shall be distributed generally throughout the truck and result in little injury to the latter.

The draw-bars are shown at J J as disposed within each end of the perch and playing through bunters K, applied one to each extreme end of said perch, and against which  
60 the car-body abuts.

The perch constitutes a solid and firm resistance to any blows or concussions to which it may be subject in collisions or otherwise, and its construction is such that it permits of  
70 safety-chains being employed to connect the draw-bars to its sides, so that in the event of breakage of coupling-pins or keys the draw-bar cannot be detached.

As the draw-bars are connected with the truck in lieu of the car-body and operate with the longitudinal perch, the draft upon the draw-bars is more equally distributed and advantageously applied than when applied to  
75 the car-body, as in the latter case the draft is exerted to separate the car body and truck.

I am aware that car-trucks have been provided (as in the patent of Griffith and Patterson, granted July 27, 1879) with spring-pressed  
80 draft-rods extending from end to end of the car, and having sliding connection with couplings which are attached to draft-hooks and guided by frames like my perch, the bumpers being placed in a supplementary projecting  
85 frame, and having no relation to the action of the draft-bar. I do not claim such construction.

What I do claim is—

In combination with a truck-frame, a double  
95 perch, I, extending from end to end thereof and rigidly connected thereto, the bunters K, attached to the ends of said perch, and the draft-bar J, provided with a spring between two interior cross-pieces of said perch, said  
100 draft-bar working through an aperture in said bunter, substantially as shown.

CHARLES BARRETT.

Witnesses:

H. E. LODGE,  
W. R. NUTTING.