

(No Model.)

C. W. HUNT.
HOISTING APPARATUS.

No. 442,286.

Patented Dec. 9, 1890.

Fig. 1.

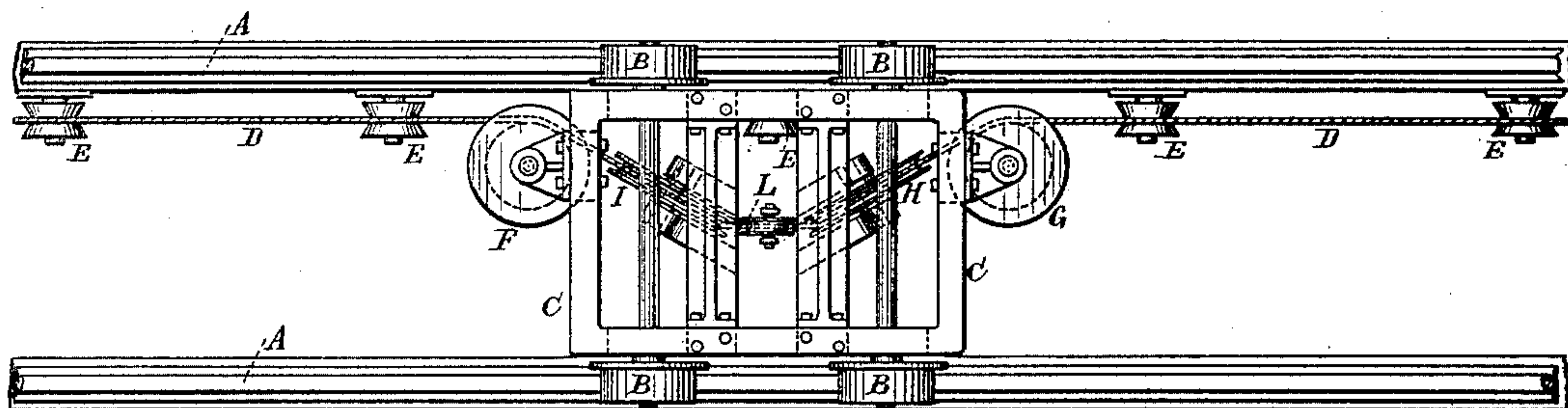


Fig. 2.

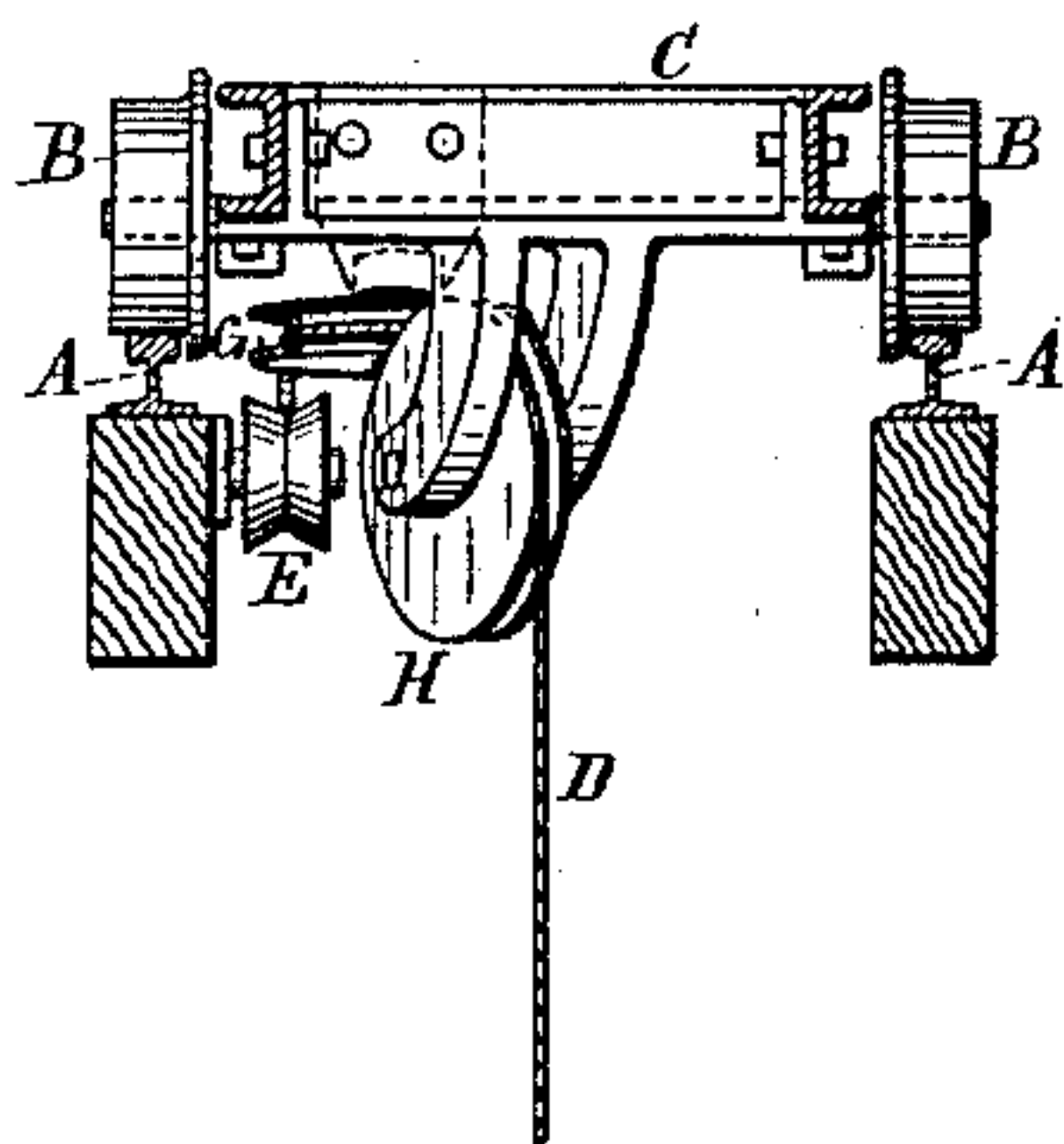
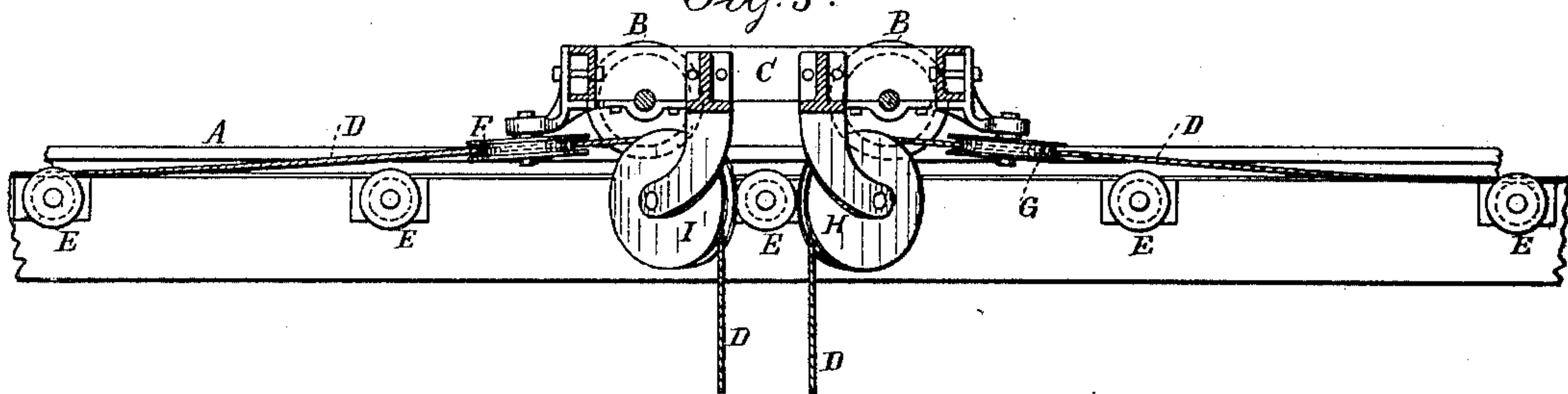


Fig. 3.



Witnesses:

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Inventor:

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UNITED STATES PATENT OFFICE.

CHARLES W. HUNT, OF WEST NEW BRIGHTON, NEW YORK.

HOISTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 442,286, dated December 9, 1890.

Application filed February 13, 1890. Serial No. 340,295. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. HUNT, a citizen of the United States, residing at West New Brighton, in the county of Richmond and State of New York, have invented an Improvement in Hoisting Apparatus, of which the following is a specification.

In hoisting apparatus, especially that made use of upon elevated tracks, difficulty has been experienced from the rope or chain hanging down loosely between the pulley at the end of the track and the pulley on the truck. This looseness arises principally after the weight has been disconnected from the hoisting-rope below the truck, and it often happens that the hoisting-pulley that is connected with the truck upon the elevated track draws up out of the reach of the attendant as soon as the connection to the weight is released, and it becomes necessary to slacken upon the hoisting rope or chain to a considerable extent to allow the pulley to descend and come within reach of the attendant, and in some instances personal injury arises from the hoisting-rope hanging down between the tracks or from the hoisting-pulley suddenly moving upwardly as the hoisting rope or chain descends or sags down between the tracks.

My present invention is to obviate these difficulties; and it consists in combining with the track, truck, and hoisting chain or rope a range of supporting rollers or idlers along upon the track and intermediate deflector pulleys or sheaves that divert the rope or chain from a central plane between the tracks into the vertical plane occupied by the supporting rollers or idlers, so that as the truck is moved along upon the elevated track and the weight is hung below the truck by the ropes or chains passing down between the tracks the hoisting rope or chain will be laid upon and supported by the range of rollers or idlers, thus preventing the rope or chain hanging down between the tracks, especially when it is slack, and thus avoiding the difficulty resulting from the hoisting-pulley being drawn up when liberated from the weight.

In the drawings, Figure 1 is a plan view illustrating the relative positions of the parts made use of in my hoisting apparatus. Fig. 2 is a cross-section of the track and of the truck,

and Fig. 3 is a longitudinal section of the truck and an elevation of one track and the idlers.

The elevated tracks A A are of any ordinary character and supported upon suitable columns or frame-work, and the wheels B and truck-frame C are also of the usual construction. The hoisting chain or rope D, instead of occupying a plane centrally between the tracks, is sufficiently at one side thereof to be supported by rollers or idlers E that are upon the track, and there are deflector rollers or wheels F G, around which the hoisting rope or chain passes from above the idlers E to the grooved wheels or sheaves H I upon the truck, and the hoisting rope or chain descends in a loop between these wheels H I to the pulley or block L, to which the article to be raised is connected, and these wheels H and I are preferably placed diagonally, so that the loop that hangs from such pulley H I to the pulley or block L is in a central plane between the two tracks, and it will now be apparent that the hoisting operation can be performed in the usual manner, and the rope or chain D will be above the rollers or idlers E and will rest upon such rollers or idlers upon the track whenever slackened, and the truck can be moved along upon the track to any desired point in the ordinary manner, and in cases where an inclined track is made use of and the hoisting-rope only passes over one wheel or pulley H the deflector-pulley G will direct the hoisting-rope in such a manner that it will be above the rollers and idlers E at all places along the track, except where it is diverted over the pulley H to the center of the track for acting upon the article to be raised or lowered, and in all instances the rope or chain hanging from the pulley H or the loop between the pulleys H and I will be in the center between the two tracks, or nearly so, and the rollers or idlers E will not interfere with the movement of the truck or the article suspended from the same.

I claim as my invention—

1. The combination, with the track, the truck moving upon the track, and the hoisting-rope, of the rollers or idlers E, supported by the track, the deflector-pulley G upon the truck, around which the rope passes, and the

wheel or pulley H, also on the truck, and over which said hoisting-rope passes to the article to be raised, substantially as set forth.

2. The combination, with an elevated track,
5 of a range of pulleys or idlers supported by one of such tracks, a truck running upon the track, two hoist wheels or pulleys, a rope passing over the same to the article to be raised, and deflector-pulleys at each side of

the hoist-pulleys to direct the hoist rope or chain to the range of idlers, substantially as set forth.

Signed by me this 7th day of February, 1890.

CHAS. W. HUNT.

Witnesses:

GEO. T. PINCKNEY,
WILLIAM G. MOTT.