

(No Model.)

G. W. ROLPH.

NOSE CASTING FOR CAR UNLOADERS.

No. 258,606.

Patented May 30, 1882.

Fig. 1.

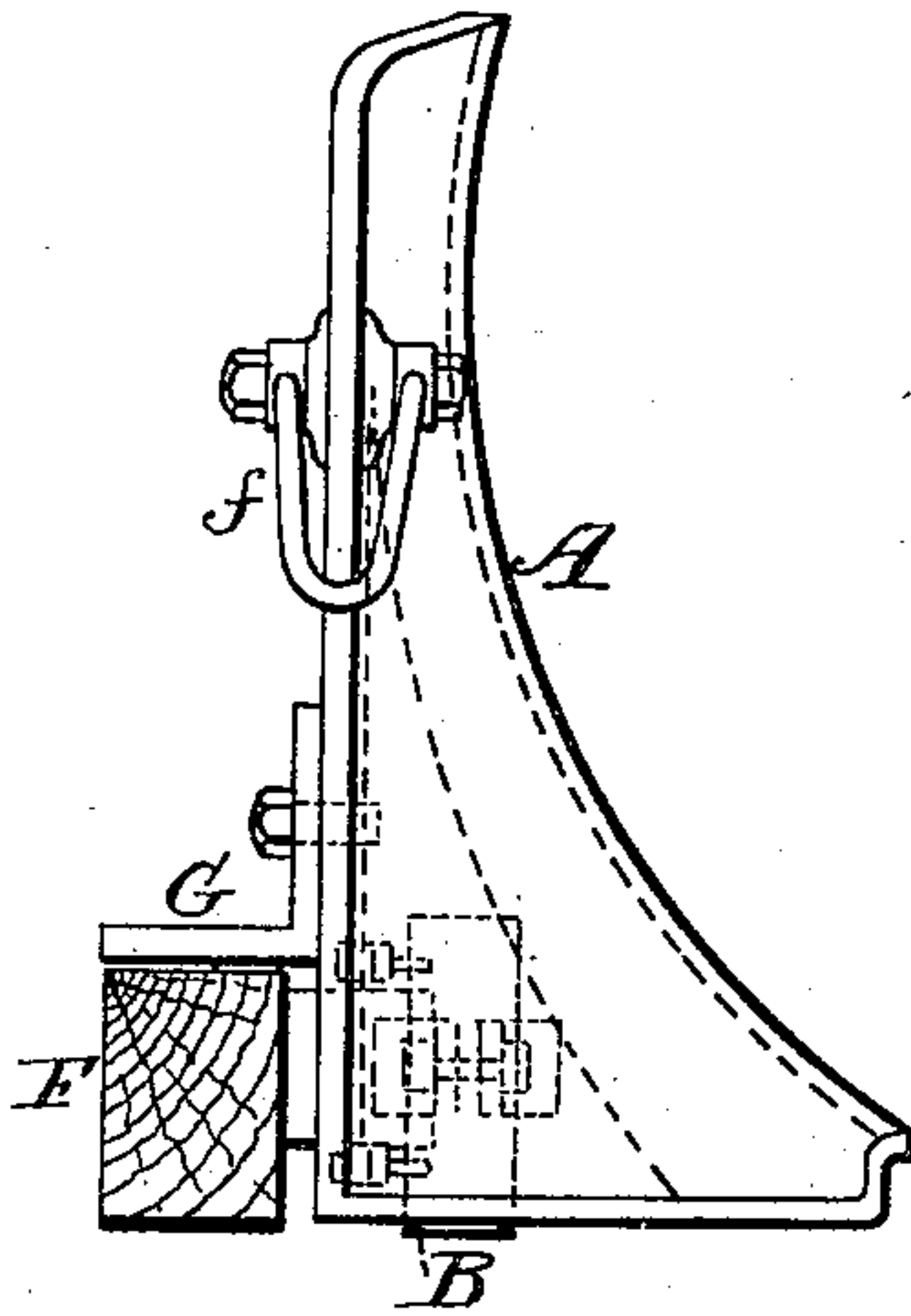


Fig. 2.

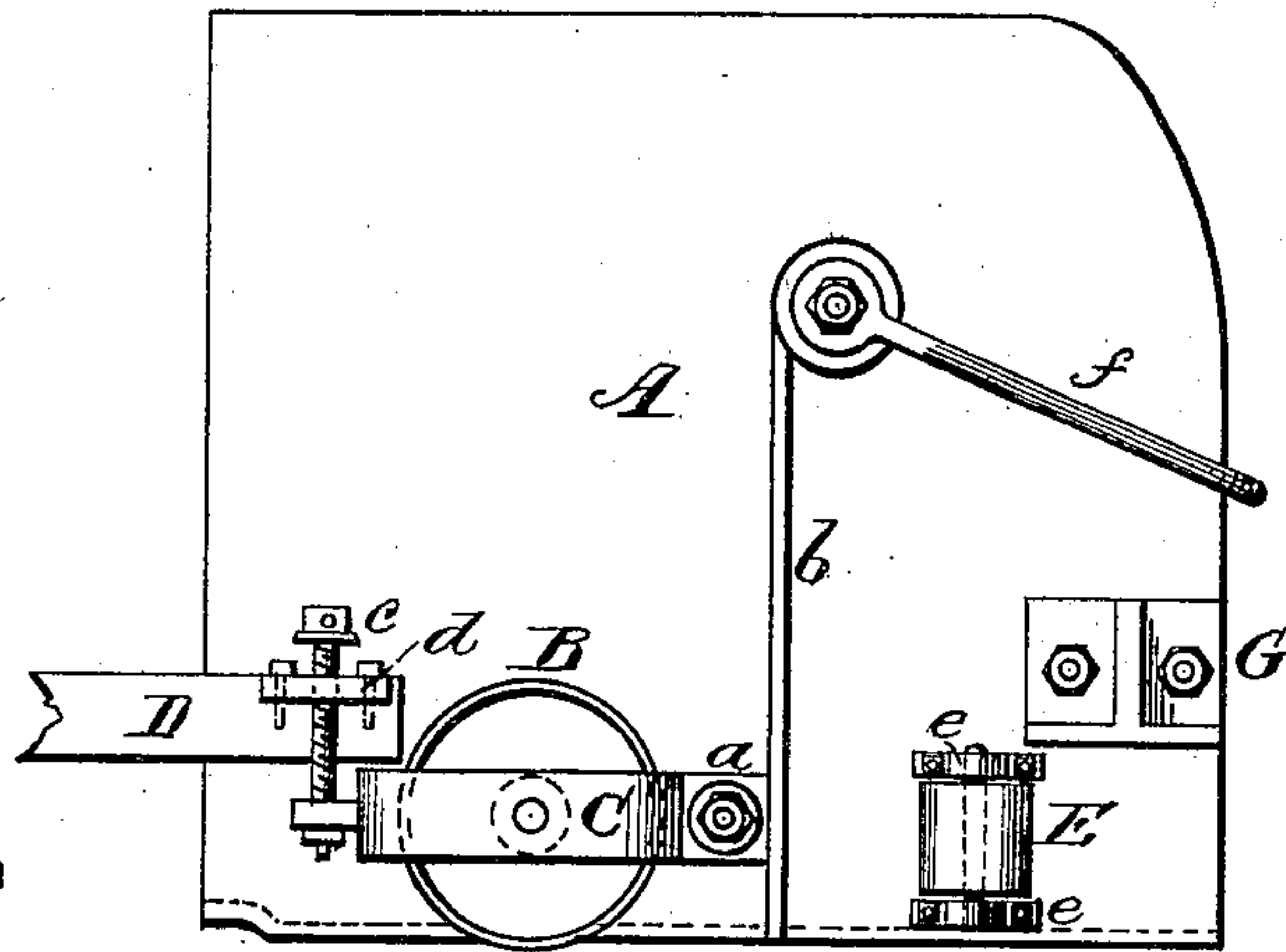
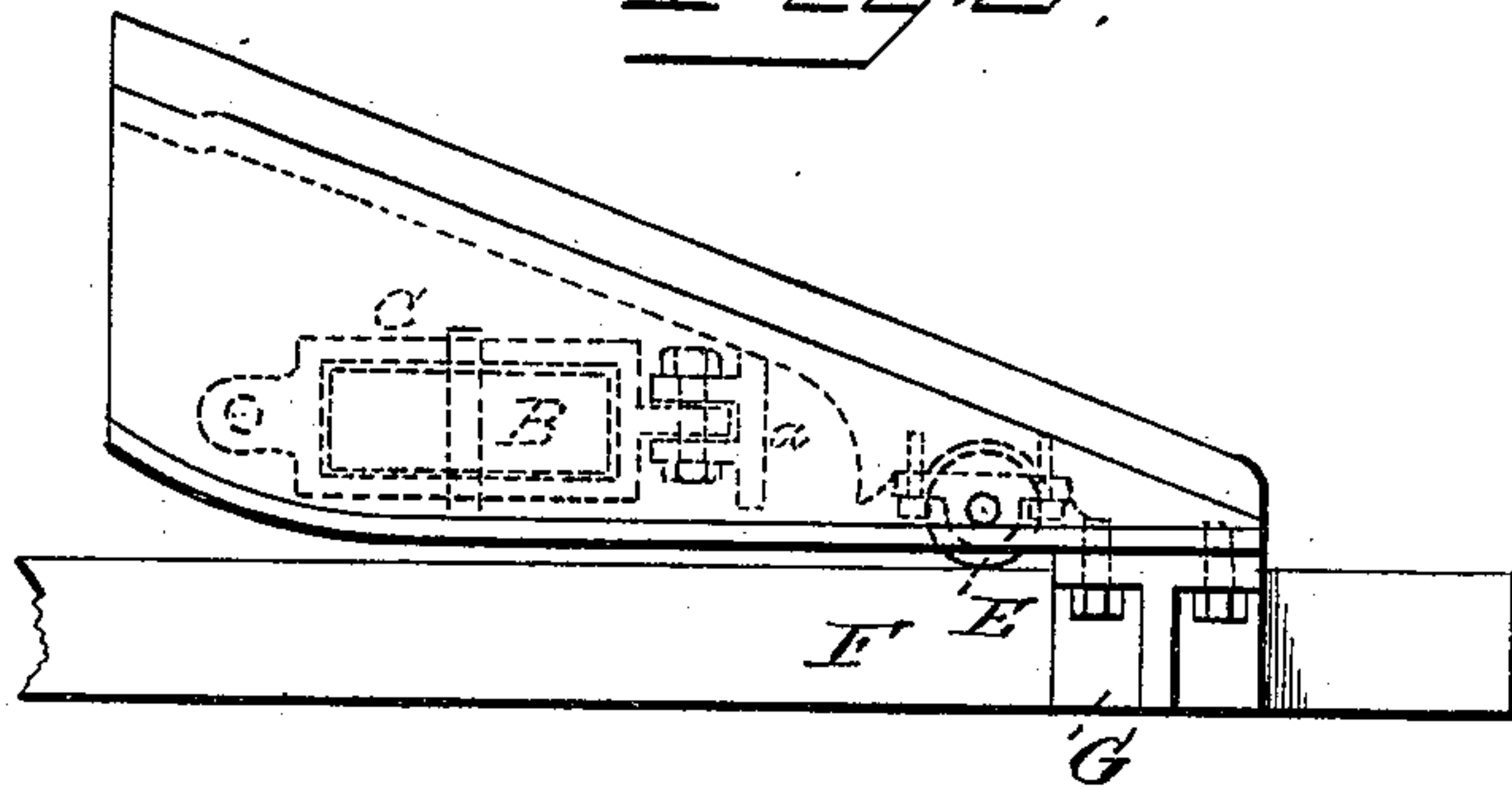


Fig. 3.



WITNESSES

Francis L. Ourand
L. L. Miller

INVENTOR

George W. Rolph
per Cha. H. Fowler
Attorney

UNITED STATES PATENT OFFICE.

GEORGE W. ROLPH, OF TOLEDO, OHIO, ASSIGNOR TO THE AMERICAN RAIL
ROAD BALLAST UNLOADER COMPANY, OF SAME PLACE.

NOSE-CASTING FOR CAR-UNLOADERS.

SPECIFICATION forming part of Letters Patent No. 258,606, dated May 30, 1882.

Application filed March 30, 1882. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. ROLPH, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Nose-Castings for Car-Unloaders; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a front elevation of my invention; Fig. 2, a side elevation thereof, and Fig. 3 a top plan view.

The present invention has relation to certain new and useful improvements in devices for unloading dirt or gravel from railroad-cars, and refers more particularly and is designed as an improvement upon that class for which patents were granted to George P. Merrill, November 30, 1880, No. 234,883, June 28, 1881, Nos. 243,388 and 243,389.

The invention or improvement has reference especially to the nose-castings of the unloaders above referred to, which will be hereinafter described, and subsequently pointed out in the claims.

In the accompanying drawings, A represents the nose-casting proper, which forms the forward extension of the car-unloader, and B an anti-friction roller. This roller has its bearings in the sides of a suitable frame, C, the forward end thereof being pivoted or otherwise suitably connected between lugs *a*, projecting from an upright bracket, *b*, while the rear or opposite end of the frame is swiveled to the lower end of a screw-rod, *c*. This screw-rod *c* passes up through an opening in the rail or timber D, and the threads thereon engage with those in a screw-threaded opening in a metal plate, *d*, secured to the rail or timber. The periphery of the roller B bears upon the surface of the car-platform, and by turning the screw-rod *c* the rear end of the frame C will be raised or lowered, as the case may be, carrying with it the roller, thus elevating or lowering the nose-casting A.

The anti-friction roller E bears against the

inner side of the timber or guide-rail F, the journals of which have their bearing in suitable boxes, *e*, fastened by suitable means to the inside of the nose-casting about midway between the front end of the casting and the bracket *b*. Unlike the roller B, which revolves vertically upon its axis, the roller E revolves horizontally, its periphery bearing against the inside of the guide-rail F to prevent the nose-casting from being pushed over against the guide-rail by the pressure of the ballast. A bracket, G, is bolted or otherwise secured to the inner side of the front end of the nose-casting at the required height to be over and above the guide-rail F, for the purpose of guiding the nose-casting from one car to another. A clevis, *f*, is connected to the nose-casting A, for attaching thereto the wire cable to make connection with the hauling-power.

It should be noticed that both the rollers B and E are located inside the nose-casting A, the former bearing upon the car-platform, while the latter bears against the inner side of the guide-rail. These rollers are designed to bear all the weight and pressure of the nose-casting, and prevent its dragging upon the car-platform or scraping against the inner side of the guide-rail. In the patents heretofore referred to no such rollers are located within the nose-casting, but are placed upon the unloader at the rear of the nose-casting, and consequently are of no service to the nose-casting whatever, for when the rollers have passed from one car, and before reaching the next car ahead, the nose-casting drops down upon said car and is dragged upon the platform thereof until the roller in the rear of the nose-casting shall have passed the opening between the cars, while the pressure of the ballast forces the nose-casting over and against the guide-rail, considering which two facts it is impossible for the power of one locomotive to haul the unloader from one car to another. These difficulties, as will be seen, are entirely overcome by locating the rollers within the nose-casting instead of placing them on the unloader at the rear of the nose-casting, this being the essential and important feature of my invention.

Having now fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

5 1. A nose-casting for car-unloaders, having upon its inner side a bracket of suitable construction, to which is pivoted or otherwise adjustably connected an anti-friction roller adapted to bear upon the car-platform, substantially as and for the purpose set forth.

10 2. In a car-unloader, the nose-casting at the extreme forward end thereof, having pivoted to its inner side a suitable frame, carrying an anti-friction roller, in combination with means, substantially as shown, for raising and lowering said frame, for the purpose set forth.

15 3. In a car-unloader, the combination, with the nose-casting thereof, of an anti-friction roll-

er connected to the forward end of said nose-casting and adapted to bear against the guide-rail of the car-platform, substantially as and for the purpose specified.

20 4. A nose-casting provided with a bracket on the inner side of its forward end to rest over and above the guide rail of the car-platform, substantially as and for the purpose described.

25 In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEO. W. ROLPH.

Witnesses:

E. O. BROWN,

E. A. POPE.