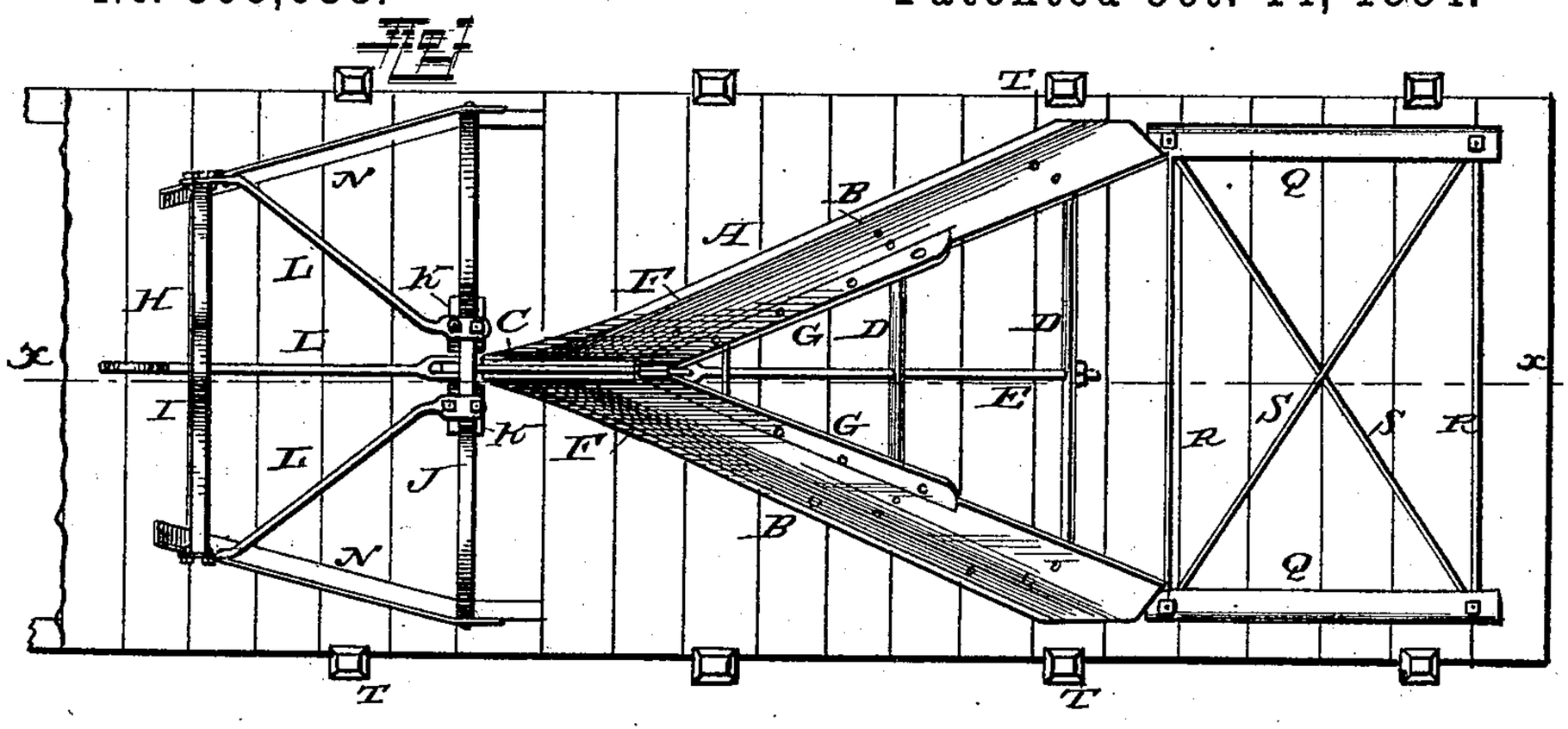
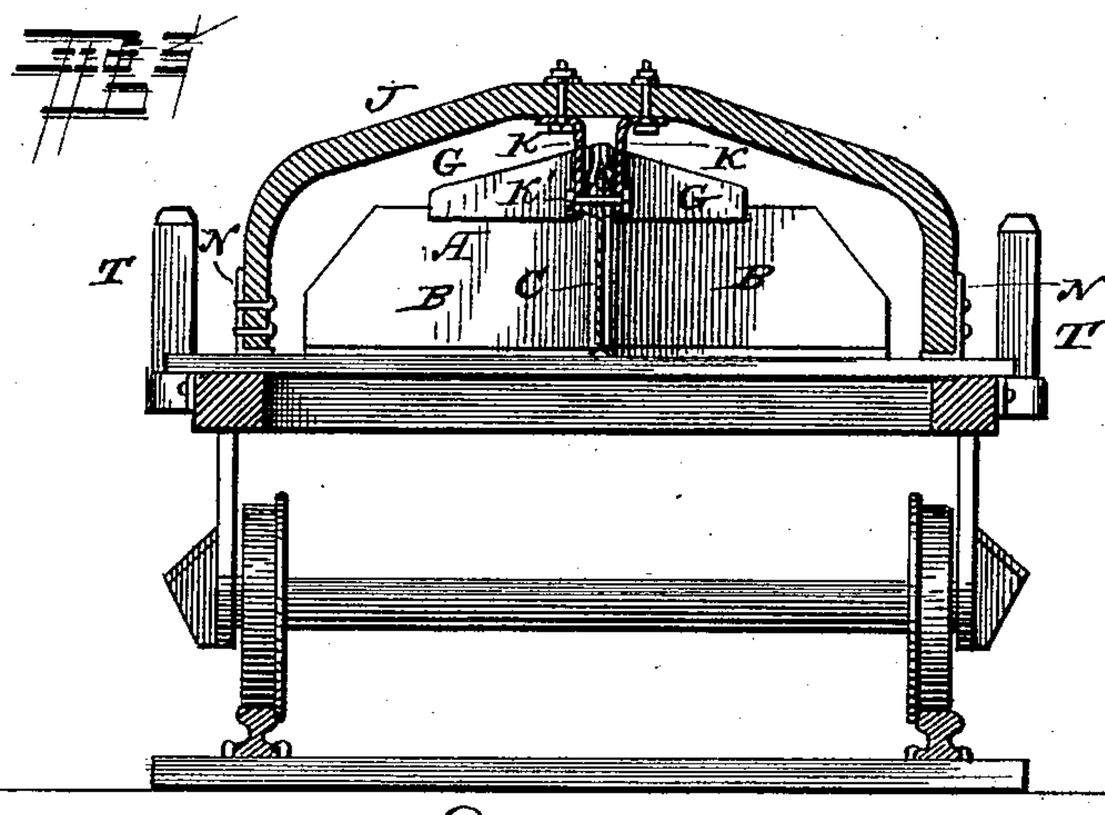
(No Model.)

E. HUBER & H. M. BARNHART.

CAR UNLOADER AND BALLAST DISCHARGER.

No. 306,688. Patented Oct. 14, 1884.





WITNESSES:

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UNITED STATES PATENT OFFICE.

EDWARD HUBER AND HENRY M. BARNHART, OF MARION, OHIO.

CAR-UNLOADER AND BALLAST-DISCHARGER.

SPECIFICATION forming part of Letters Patent No. 306,688, dated October 14, 1884.

Application filed August 13, 1884. (No model.)

To all whom it may concern:

Be it known that we, EDWARD HUBER and HENRY M. BARNHART, both residents of Marion, in the county of Marion and State of Ohio, have invented certain new and useful Improvements in Car-Unloaders and Ballast-Dischargers; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a plan view of our improved device for unloading flat cars. Fig. 2 is a longitudinal vertical sectional view of the same, taken on the line *x x* in Fig. 1; and Fig. 3 is a transverse sectional view.

The same letters refer to the same parts in all the figures.

Our invention has relation to that class of devices for unloading dirt, gravel, and the like from flat railway-cars in which a plow-shaped implement traveling upon the platforms of the car or cars is drawn over the same, forcing the load to one or both sides, according to its construction and adjustment; and it consists in the improved construction and combination of parts of such a device, in which a fender is attached in front of the plow, serving to guide it by bearing against the stakes at the sides of the platform of the car, and to discharge a portion of the load, as hereinafter more fully described and claimed.

In the drawings hereto annexed, A designates a plow or scraper, having two mold-boards, B B, diverging from a central vertical plate or cutter, C, and connected by transverse braces D D, through which passes a longitudinal strengthening-rod, E. The lower edges of the mold-boards may be provided with shares or cutters F F, and their upper edges are equipped with extensions or guards G.

H is a fender-frame consisting of bows or arches I J, the rear one of which, J, is provided with downwardly-extending lugs K K, which are connected pivotally to the upper front end of the cutter G by means of a bolt, K′. Braces L L connect the arches I and J. L is a rod or tongue, which is pivoted upon the bolt K′, and supported in a bail or staple, M, extending downwardly from the center of the arch I. The latter, as will be seen, is somewhat narrower than the rear arch, J. To the lower end of the arches I J are secured the fenders N N, the lower edges of which are provided with inwardly-extending shoes or flanges O. The lower rear ends of the mold-boards are provided with lugs P, to which a pair of guides, Q Q, consisting simply of flanged metal plates, are pivotally attached. The said guides are connected by transverse and diagonal braces R and S.

Ordinary flat cars are adapted for operation with our improved discharger by simply providing the sides of such car with a series of vertical stakes, T T, between which the plow or scraper may work, thus dispensing with the use of the central guide or ridge, which is used in connection with other car-unloaders, and enabling ordinary flat "ballast-cars" to be used. The front and rear guides or fenders cause the plow or scraper to move centrally upon the car when dragged over the latter. The front fenders also serve to discharge a portion of the load of the car, thereby lessening the strain upon the plow or scraper proper, and facilitating the operation.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

1. In a device for unloading gravel-cars, the combination, with a plow or scraper, of a frame connected pivotally to the front end of the same, and having a pair of forwardly-converging guides or fenders, substantially as and for the purpose set forth.

2. In a device for unloading gravel-cars, the combination, with a plow or scraper, of a pivoted fender-frame consisting of a pair of suitably-connected arches connected at their lower ends by means of guides or fenders, the lower edges of which are provided with inturned shoes or flanges, substantially as and for the purpose set forth.

3. The combination, with the plow or scraper having a central vertical plate or cutter, of a pivoted fender-frame and a pivoted rod or tongue resting in a bail extending downwardly from the center of the front arch of the fender-frame, substantially as and for the purpose set forth.

4. The combination, with the plow or scraper, of the flanged guides connected pivotally to the rear ends of the mold-boards of the same, and suitable transverse and diagonal braces connecting the said guides, substantially as and for the purpose set forth.

5. The herein-described improved unloading device for gravel-cars, comprising a plow or scraper, a frame connected pivotally to the front end of the same, and having a pair of forwardly-converging guides or fenders, and a pair of suitably-connected parallel flanged guides connected pivotally to the lower rear ends of the mold-boards of the said plow or scraper, substantially as and for the purpose set forth.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

EDWARD HUBER.
HENRY M. BARNHART.

Witnesses:
J. E. DAVIDS,
THOMAS R. ROBERTS.