

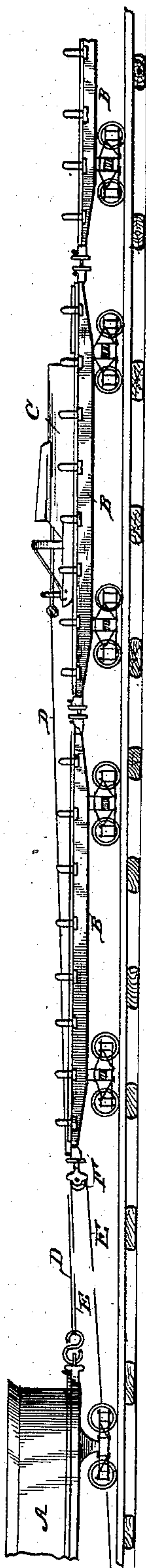
(No Model.)

E. HUBER & H. M. BARNHART.

DEVICE FOR UNLOADING GRAVEL CARS.

No. 316,782.

Patented Apr. 28, 1885.



WITNESSES:

Fred. L. Dietrich
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UNITED STATES PATENT OFFICE.

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

DEVICE FOR UNLOADING GRAVEL-CARS.

SPECIFICATION forming part of Letters Patent No. 316,782, dated April 28, 1885.

Application filed March 11, 1885. (No model.)

To all whom it may concern:

Be it known that we, EDWARD HUBER and HENRY M. BARNHART, residents of Marion, in the county of Marion and State of Ohio, have
5 invented certain new and useful Improvements in Devices for Unloading Gravel-Cars; 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
10 which it appertains to make and use the same, reference being had to the accompanying drawing, which forms a part of this specification, and which represents so much of a train of gravel or ballast cars as is necessary to illustrate our invention.

This invention relates to an improved device for unloading gravel and the like from railway-cars under subdivision of application, Serial No. 153,746, by means of a plow
20 or scraper constructed, for instance, such as that patented to ourselves on the 14th day of October, 1884, No. 306,688, and by means of which only half a car-load shall be discharged for each car-length, which quantity is amply
25 sufficient for ballasting old roads. Such partial unloading has heretofore been found impracticable by means of plows or scrapers of the class referred to, owing to the method of operation, which has consisted in connecting
30 the scraper while placed on the rear car of the train with the locomotive or tender, whereby it has been dragged over the entire line of cars while the train has remained stationary, thus discharging a full car-load to each car-length,
35 necessitating the employment of manual labor when it has been desired to discharge a lesser quantity. These objections are overcome by our present device and arrangement, which will in the following specification be fully described, and particularly pointed out in the
40 claim.

In the drawing, A designates the locomotive-tender or the rear end of the same, and B B represent several of the cars of the train,
45 which are the ordinary flat gravel or ballast cars.

C designates the plow or scraper, which, as stated, may be of any suitable construction, and which at the commencement of the operation is located upon the rear end of the
50 rear car of the train. This scraper is coupled

or connected with the tender by means of a wire rope or cable, D, extending over the entire line of cars.

E represents another wire rope or cable of the same length as the cable D. The front end
55 of the cable E is made securely fast to the track in front of the locomotive and tender, and its rear end passes under the locomotive and tender trucks over a snatch-block, F, attached to the coupling of the front car, B, and
60 to the coupling at the rear end of tender, where it is made fast. The dimensions of the cables will of course be regulated according to the strain to which they will be subjected.

The operation of this invention will be readily understood from the foregoing description, taken in connection with the drawing hereto annexed. When the locomotive moves forward, the train drawn by the cable E will follow
70 at one-half the speed, owing to said cable being doubled over the block F. At the same time, however, the scraper C, being connected directly with the locomotive by means of the cable D, will be moved forward over the cars
75 at precisely one-half the speed as the latter, thus discharging one car-load while the car moves forward twice its own length. When the forward point of attachment of the cable E has been reached, the scraper will have reached
80 the front end of the front car of the train, and the work will be completed.

We would have it understood that we reserve to ourselves the right to all modifications which may be resorted to without departing from the spirit of the invention.

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

The combination of the tender A, cars B B, scraper C, cables D and E, and the snatch-block F, all combined, arranged, and adapted to operate substantially as and for the purpose
90 herein shown and specified.

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

EDWARD HUBER.

HENRY M. BARNHART.

Witnesses:

J. E. DAVIDS,

J. H. ALSTON.