(No Model.)

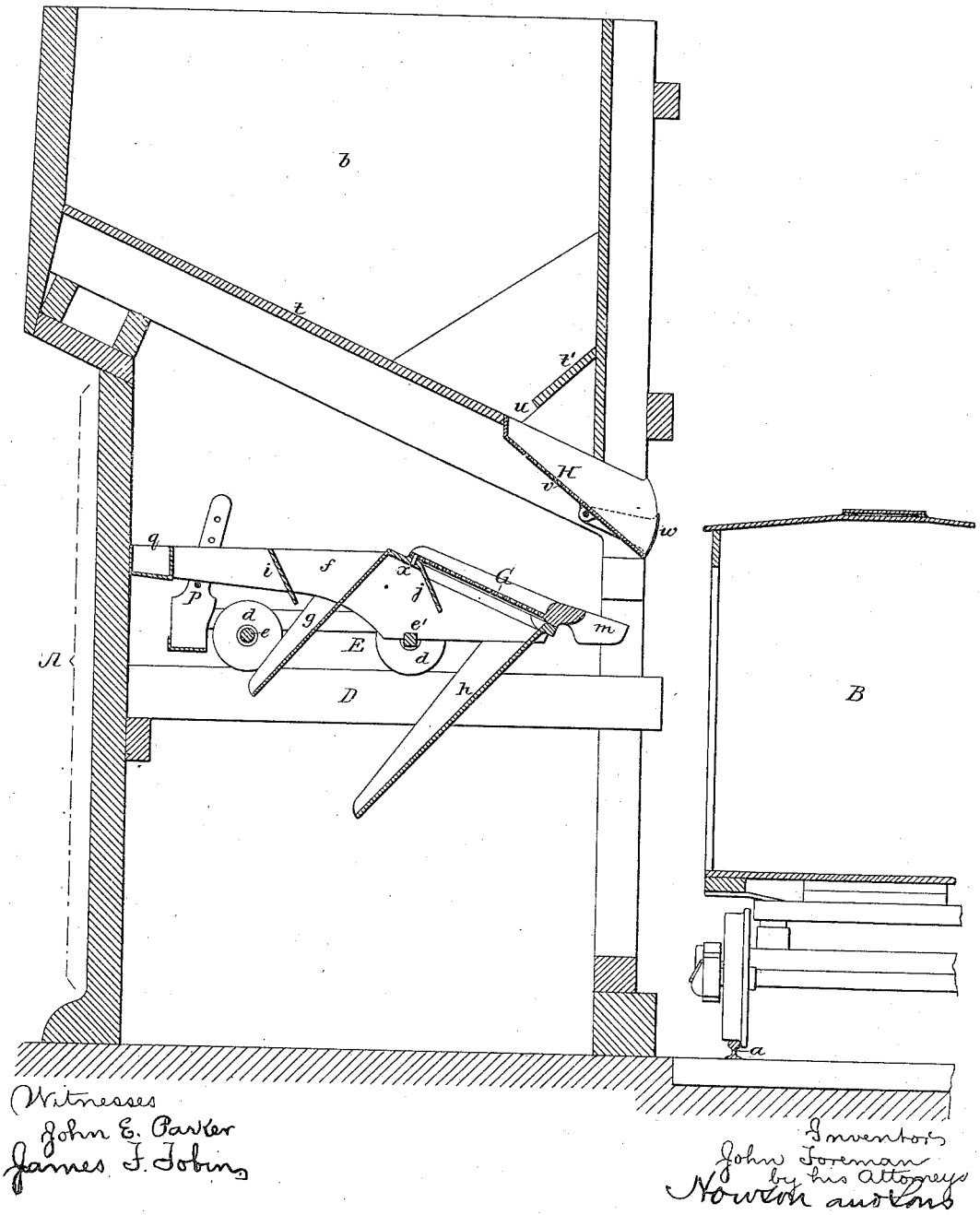
2 Sheets—Sheet 1.

J. FOREMAN.

STRUCTURE FOR LOADING CARS.

No. 302,720. Patented July 29, 1884.

FIG. 1.



Witnesses
John E. Parker
James F. Johns

Inventor
John Foreman
by his Attorneys
Howson and Sons

(No Model.)

2 Sheets—Sheet 2.

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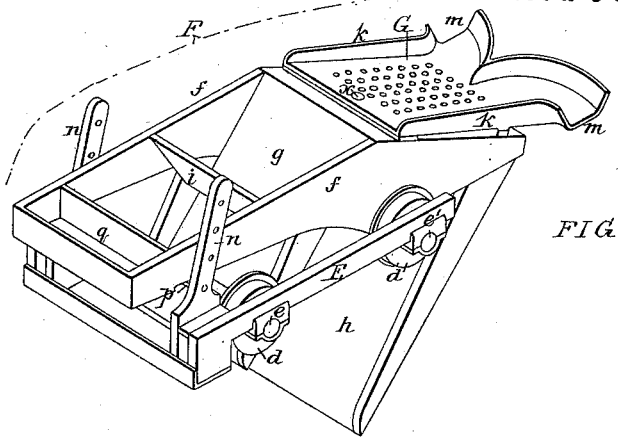

FIG. 3.

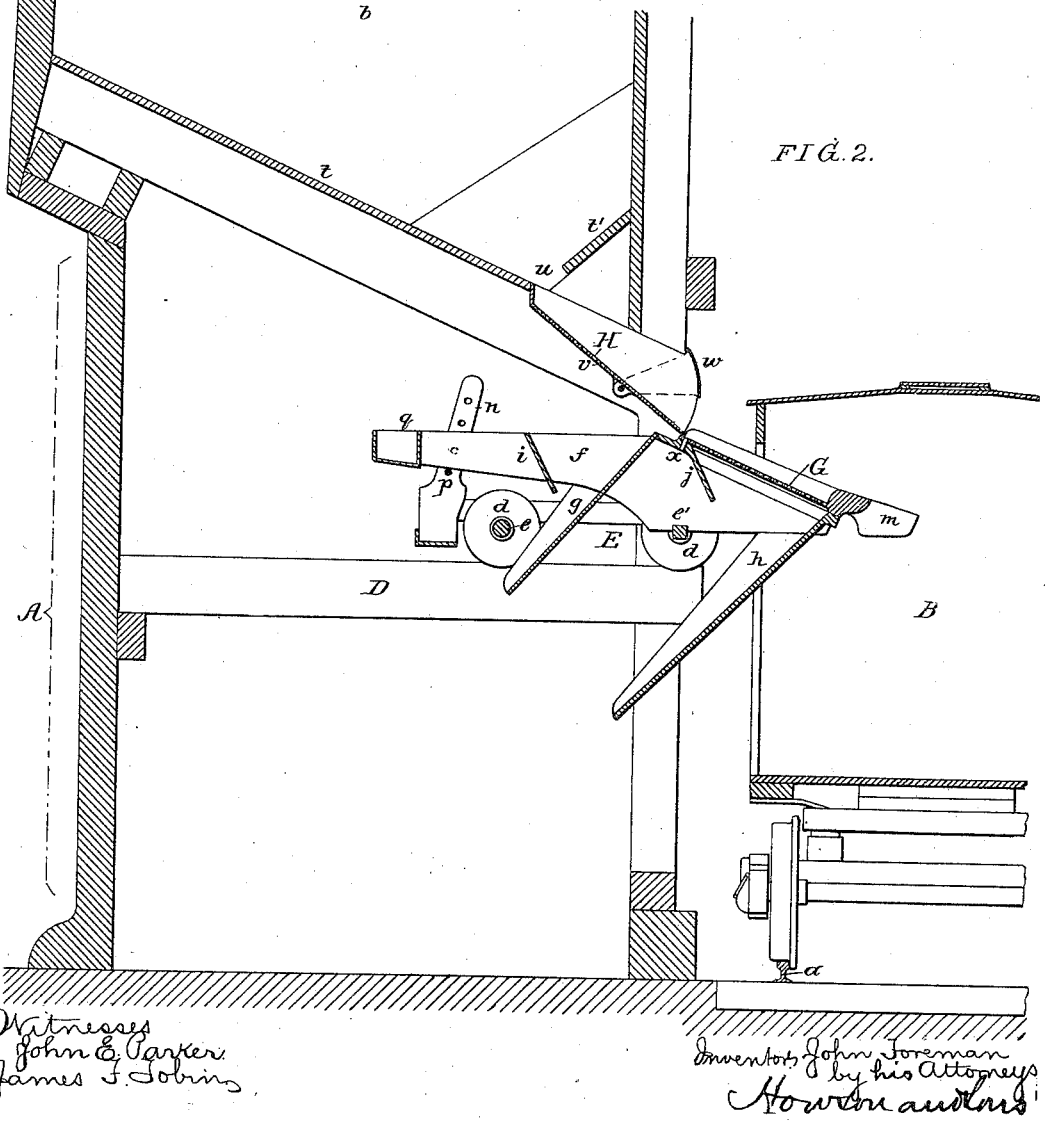

FIG. 2.

Witnesses
John E. Parker
James F. Jobbins

Inventor, John Foreman
by his Attorneys
Howson and Sons

UNITED STATES PATENT OFFICE.

JOHN FOREMAN, OF POTTSTOWN, PENNSYLVANIA.

STRUCTURE FOR LOADING CARS.

SPECIFICATION forming part of Letters Patent No. 302,720, dated July 29, 1884.

Application filed June 16, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN FOREMAN, a citizen of the United States, and a resident of Pottstown, Montgomery county, Pennsylvania, have invented certain Improvements in Structures for Loading Cars, of which the following is a specification.

My invention consists of apparatus, fully described and claimed hereinafter, for loading cars with coal and other granular material.

In the accompanying drawings, Figure 1, Sheet 1, is a vertical section of my improved apparatus for loading cars; Fig. 2, Sheet 2, the same as Fig. 1, excepting as regards the position of the movable chute; and Fig. 3 a perspective view of the said movable chute.

Near a railway-track, *a*, is erected a structure, A, the upper portion, *b*, of which is a bin for receiving the coal, which has to be loaded into a car, B.

Forming part of the structure A are beams D, to which, or to rails on which, are adapted the flanged wheels *d* on the axles *e e'* of a truck, E, which carries the movable chute F. (Shown most clearly in the perspective view, Fig. 3.) The movable chute consists of a frame composed of the opposite side pieces, *f f*, the spouts *g* and *h*, and shields *i* and *j*, and to this frame is fitted an inclined screen, G, bounded laterally by side strips, *k k*, and having preferably two outlets, *m m*, as shown in Fig. 3. The frame of the movable chute is supported partly on the front axle, *e'*, of the truck, and partly on pins *p*, one of which is passed through each of the two posts, *n n*, secured to the truck at the rear of the same, each post having a number of holes, into any one of which the supporting-pin may be introduced as the desired inclination of the chute may suggest. A weight or weights may be placed in a box, *q*, at the rear of the frame, to keep it down on the pins *p*.

The bottom of the bin *b* consists of two inclined planes, *t t'*, between which is the outlet *u*, communicating with a fixed chute, H, the bottom of which consists of a screen, *v*; and to this chute is pivoted a segmental gate, *w*, which can be raised, as shown in Fig. 2, when coal has to escape from the bin, or lowered, as shown in Fig. 1, when the escape of coal from the bin has to be prevented.

When coal has to be loaded into the car B, the movable chute is protruded, so that it will project, to about the extent shown in Fig. 2, into a doorway or other opening in the side of the car. The coal will first pass down the chute H, the dust and small particles of coal falling through the screen *v*, which forms the bottom of this chute, and being directed to the bottom of the structure A by the spout *g*. The coal will pass onto the screen G of the movable chute, the dust being directed by the spout *h* into the bottom of the structure A, while the coal passes through the two spouts, *m m*, into the car, throughout which it may be distributed by suitable inclined troughs, which may be directed from either outlet to any part of the car.

When a car has been loaded, the movable chute can be retracted into the structure A, so as to make way for another car.

I have hitherto referred to the loading of cars with coal; but my invention may be used for loading cars with grain and other granular material. When the granular material requires no screening, non-perforated inclined planes may be substituted for the screens G and *v*.

The screen or spout G is pivoted to the chute F at the point *x*, so that it can be swung laterally in either direction, in case the car has not been stopped with its doorway exactly in line with the chute.

I claim as my invention—

1. The combination of a structure, A, and its bin *b* with a movable chute, F, having wheels adapted to a track on the said structure, substantially as set forth.

2. The combination of the truck E with the chute-frame F, supported partly by a fixed portion of the truck and partly by devices which permit the said frame to be raised and lowered, substantially as specified.

3. The combination of the chute F with a screen or spout, G, having two outlets, *m m*, substantially as specified.

4. The bin and its opening *u*, and the permanent inclined chute H, in combination with a movable chute carried by a truck, substantially as set forth.

5. The combination of the bin and chute H with the pivoted gate *w*, substantially as described.

6. The combination of the bin, the chute H,

and its screen *v*, with the movable chute and its spout *g*, substantially as specified.

7. The combination of the bin and its chute H with the movable chute, its screen G, and spout *h*, substantially as set forth.

8. The combination of the movable chute F with the screen or spout G, pivoted thereto, so as to be swung laterally thereon, as set forth.

9. The combination of the bin *b*, having an inclined and valved outlet, with a truck movable beneath the bin, and having an inclined spout or screen, G, which, when the truck is moved outward, forms a continuation of the outlet of the bin, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN FOREMAN.

Witnesses:
JOHN M. CLAYTON,
HARRY SMITH.