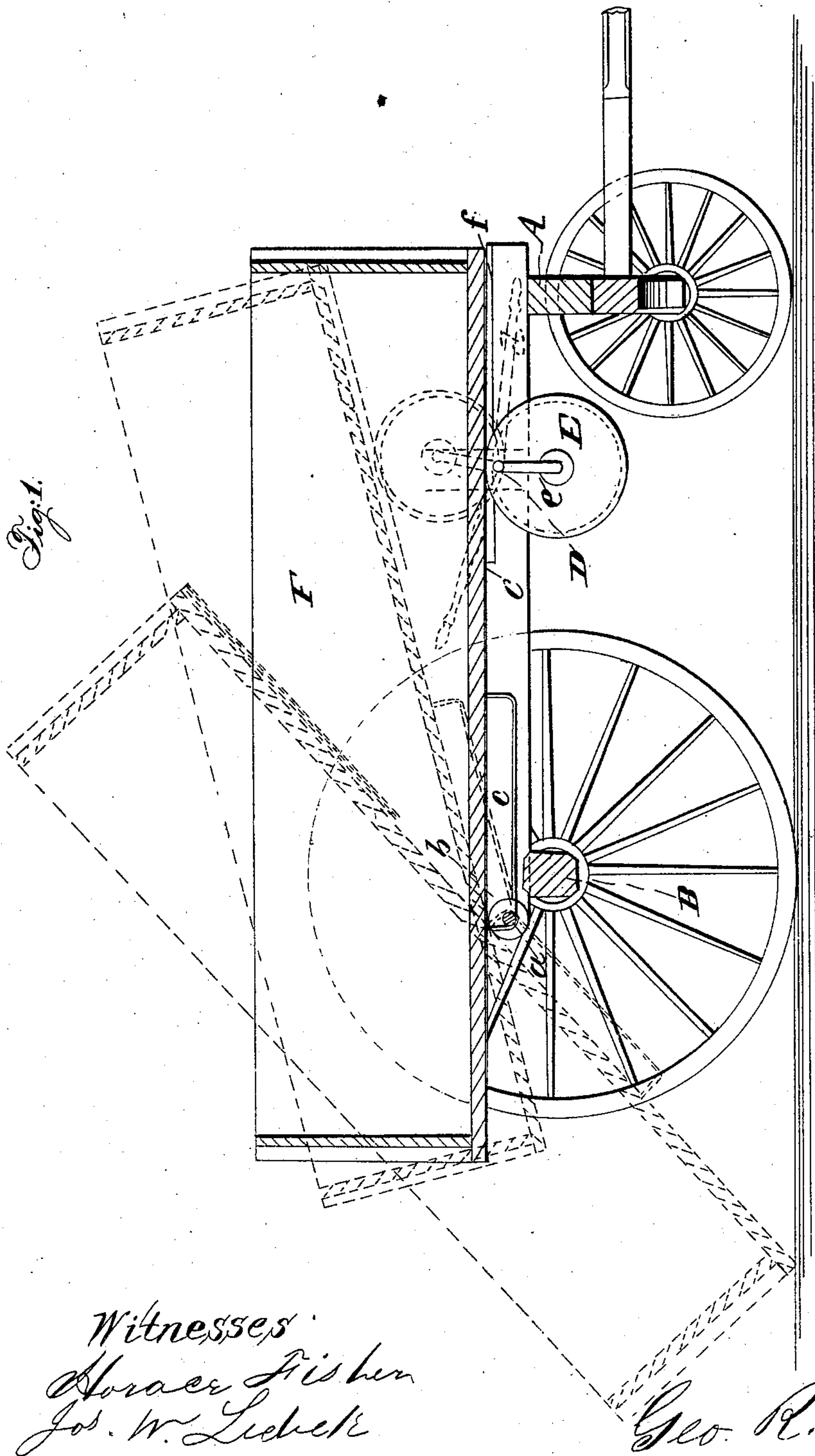


G. R. CRAMER.

Dumping-Wagon.

No. 62,478.

Patented Feb. 26, 1867.

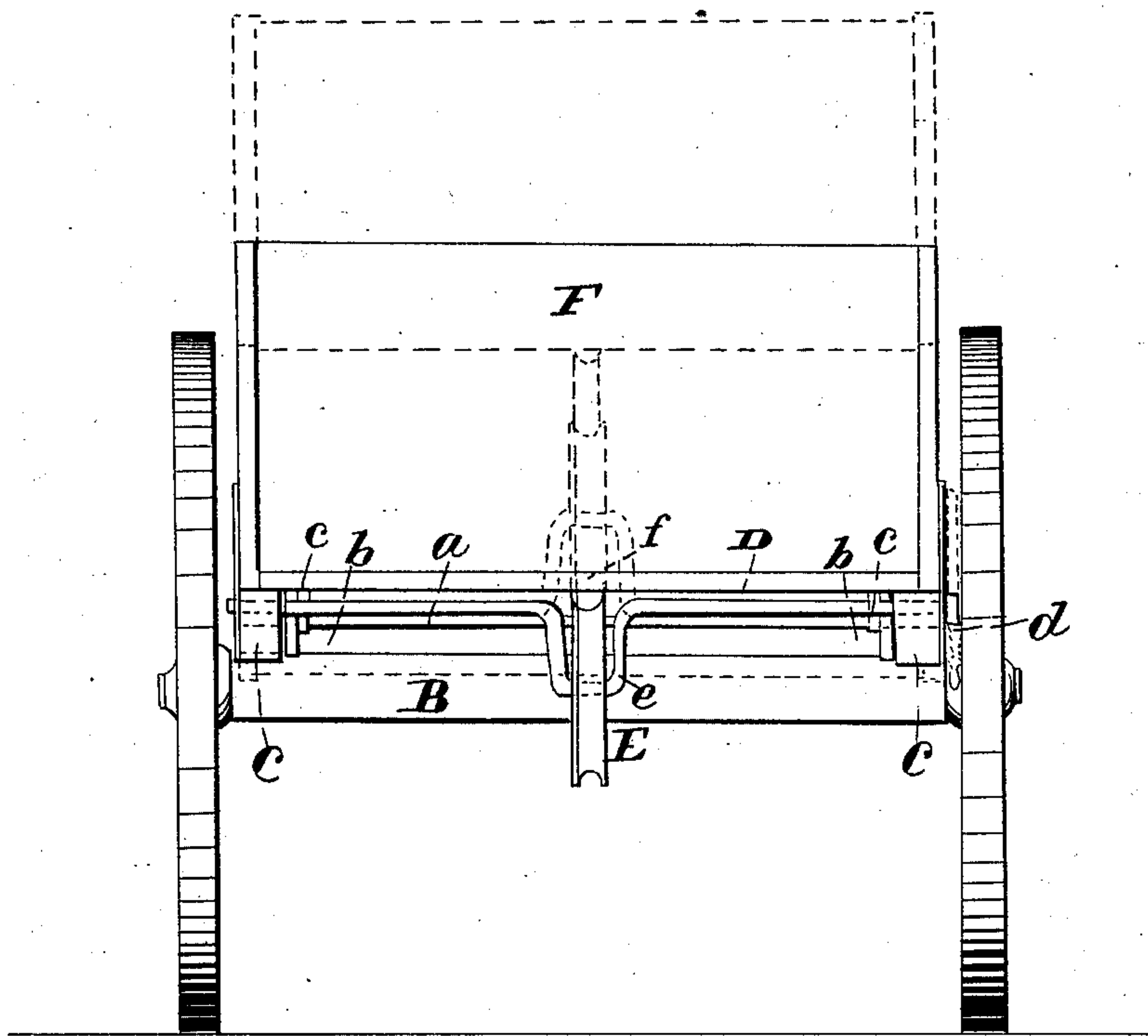


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Fig. 2.



Witnesses.
Horace Fisher
Jos. W. Lusk

Inventor,
G. R. Cramer

UNITED STATES PATENT OFFICE.

GEORGE R. CRAMER, OF CINCINNATI, OHIO.

IMPROVEMENT IN DUMPING-WAGONS.

Specification forming part of Letters Patent No. 62,478, dated February 26, 1867.

To all whom it may concern:

Be it known that I, GEORGE R. CRAMER, of Cincinnati, Hamilton county, and State of Ohio, have invented a new and useful Improvement in Dump-Wagons, of which the following is a full and clear description thereof, reference being had to the accompanying drawing, making part of this specification.

My improvement relates to a device for elevating the front end of the wagon-body to such a height that its weight, overcoming the friction of the rollers upon which it rests, causes it to recede backward until the center of gravity of the load in the wagon-body shall have passed beyond the rear ends of the side rails of the frame of the wagon, when the tail end of the wagon-body descends to the ground.

Figure 1 represents a longitudinal section of my improved wagon, showing the device for dumping in operation. Fig. 2 is an elevation of the front end of the wagon, the forward carriage being removed.

A is the bolster upon the front axle. B is the rear axle. To the bolster A and axle B are secured the side rails C, the rear ends of which project a little beyond the rear axle B. A rod, *a*, extends between and is secured to the side rails C. The rod *a* carries two friction-rollers, *b*, one near each of the side rails C. The rollers are in contact with the bottom of the wagon-body. Guard-straps *c* pass over the rod *a*, and are firmly secured at either end to the under side of the wagon-body. To the rear of the front carriage is located the crank-shaft, D journaled in one of the side rails C, and, passing through the opposite rail, terminates in the lever *d*. The crank-shaft D is crank-shaped at *e*, and carries a loose guttered roller E. The roller is located at an equal distance from each side rail C. A ridge, *f*, corresponding in contour to the depression in the roller E, is made fast to the under side of the wagon-body. It extends from the front of the wagon-body to a point in the rear of the

crank-shaft D. The wagon-body F rests upon the frame of the wagon of which the side rails C make part. The diameter of the guttered roller E, in connection with the location of the crank-shaft bearings, is such that no weight of the wagon-body shall rest upon it. The crank-shaft D is located at such a distance to the rear of the front end of the wagon that the guttered roller E shall be to the rear of the front end of the wagon-body F when the wagon-body is rotating about the friction-rollers *b*.

The operation of dumping a load is performed in the following manner: The lever *d* is rotated in the arc of a circle till it attains the position indicated in the accompanying drawings. The guttered roller E is caused to press upon the ridge *f* on the under side of the wagon-body, which it elevates. As soon as a sufficient inclination of the wagon-body F is attained, where the weight of the load is sufficient to overcome the friction of the rollers, the wagon-body F is rolled backward until the center of gravity of the load in the wagon-body F has passed to the rear of the friction-rollers *b*, when the tail end of the wagon-body F falls to the ground, as indicated by the outline in Fig. 1.

It is obvious from the above description and operation of the wagon that guttered roller E is employed to the same extent in rolling backward the wagon-body as on the friction-rollers *b*.

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

The combination of the crank-shaft D, roller E, lever *d*, and body F, or their equivalents, when the same are arranged and operate substantially as above described.

GEO. R. CRAMER.

Witnesses:

HORACE FISHER,
JOS. W. LIDICK.