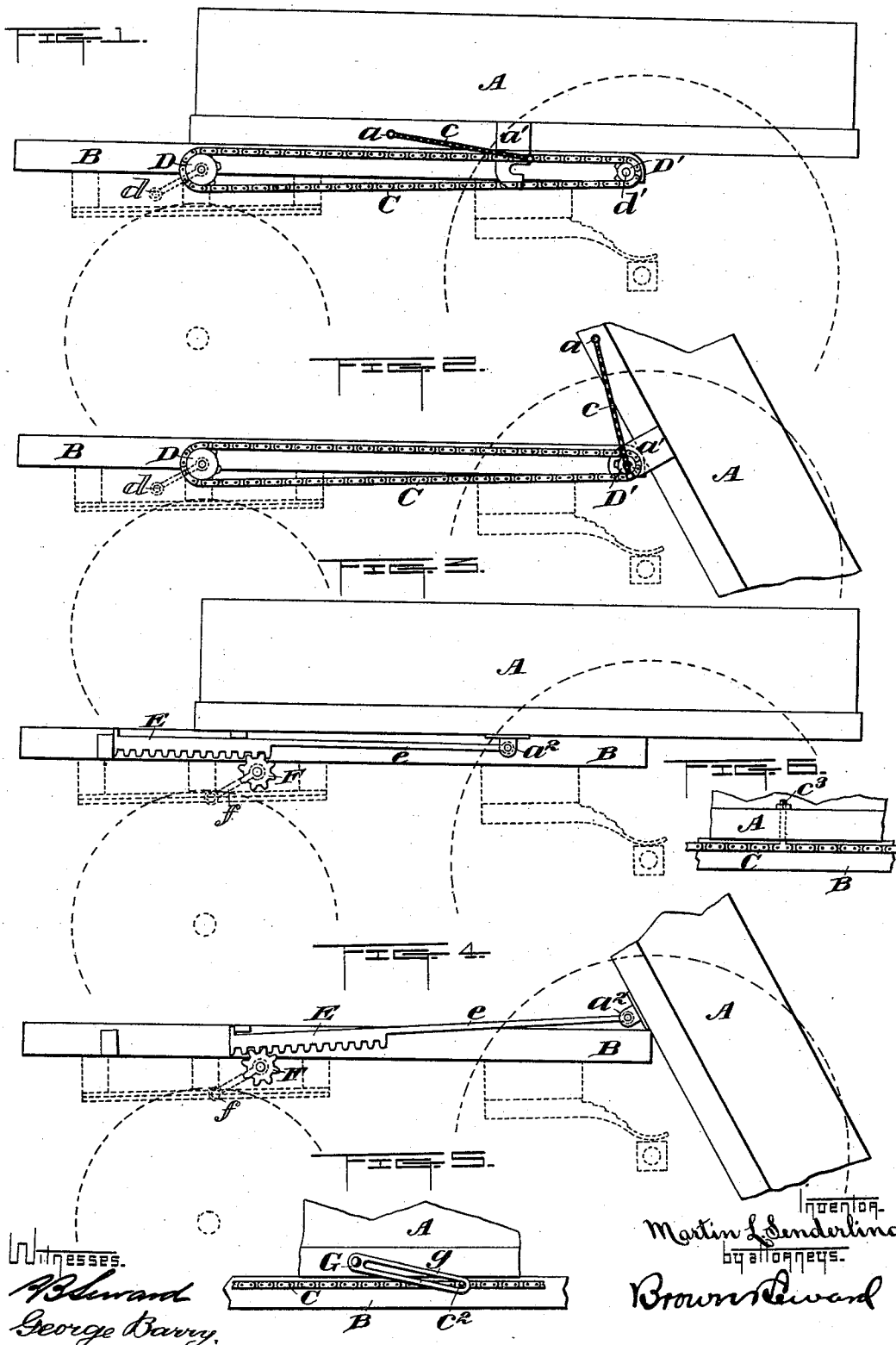


(No Model.)

M. L. SENDERLING.
SLIDING BODY DUMP WAGON.

No. 565,237.

Patented Aug. 4, 1896.



UNITED STATES PATENT OFFICE.

MARTIN L. SENDERLING, OF JERSEY CITY, NEW JERSEY.

SLIDING-BODY DUMP-WAGON.

SPECIFICATION forming part of Letters Patent No. 565,237, dated August 4, 1896.

Application filed June 19, 1894. Serial No. 515,029. (No model.)

To all whom it may concern:

Be it known that I, MARTIN L. SENDERLING, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Sliding-Body Dump-Wagons, of which the following is a specification.

My invention relates to an improvement in sliding-body dump-wagons, in which provision is made for sliding the body rearwardly into dumping position and forwardly again into its position to receive the load without requiring any manipulation of the body other than the sliding attachment.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 is a view of a wagon-body and its support in side elevation, showing the body-sliding mechanism in the position which it assumes when the body is to receive its load. Fig. 2 is a similar view showing the parts in the position which they assume when the body is in dumping position. Fig. 3 is a similar view showing a modified form of operating mechanism in position which it assumes when the body is in the position to receive the load. Fig. 4 is a similar view showing said modified operating mechanism in the position which it assumes when the body is in the position to dump. Fig. 5 is a partial view in detail in side elevation, showing still other means for connecting the body with the sliding operating mechanism; and Fig. 6 is a partial view in side elevation of a third modified form.

The body of the wagon is denoted by A, and the side rails, upon which it is supported to move rearwardly and forwardly into and back from a dumping position, are denoted by B.

In the form represented in Figs. 1 and 2 the operating mechanism for sliding the body rearwardly and forwardly consists of an endless chain C of the sprocket type, mounted on a driving sprocket-wheel D, here shown as located toward the front of the wagon and provided with an operating-crank *d* and a second sprocket-wheel D', located at or near the rear end of the side rail. It is to be understood that a sprocket-chain and its connections, similar to that shown in side ele-

vation on one side of the wagon, is also located upon the opposite side of the wagon in order to move the body truly rearwardly and forwardly on its supports, although it is obvious that a single sprocket-chain of the character shown and described might be located centrally under the body, if so desired.

The sprocket-chain C is connected with the body by a branch chain or other suitable flexible connection *c*, extending from one of the links of the chain C to a point *a* at the side of the bottom rail of the body. The body is provided with a depending hook or stop *a'*, which, when the body has been moved rearwardly a distance sufficient to cause it to dump, engages a laterally-projecting pin or bearing *d'*, which may be an extension of the spindle on which the sprocket-wheel D' is mounted.

In operation, when it is required to dump the load, the driving sprocket-wheel D is rotated by means of the crank *d* in a direction to move the upper part of the chain C to the rear. This, through the branch connection *c*, will move the body of the wagon rearwardly until it begins to tilt, when the depending hook *a'* will engage the laterally-projecting pin *d'* and hold the body in position during its tilting movement. When it is desired to return the body to its normal position, the chain C is driven in the opposite direction, which movement will first slacken the branch connection *c* and after its connection with the chain has passed along to a point sufficiently toward the front to produce a strain upon the body it will at first rock the body toward a horizontal position and finally slide it forward on the supporting-rails B to its desired position. It will be observed that there will be some lost motion both after the body has been moved to its rearward or dumping position and also after it has been returned to its forward position, before the branch chain *c* will begin to produce a sliding effect upon the body.

In the forms shown in Figs. 3 and 4 a rack-bar E, held in guides of any well-known or approved form, is connected by an extension *e*, which may be formed integral therewith, or fixed thereto, with a connecting-piece *a*² at the bottom rail of the wagon-body and the pinion F, having a crank *f* fixed thereto, is

located in position to engage the teeth of the rack-bar. In this instance the body may be slid to the rear and forwardly again without any lost motion.

5 Referring to Fig. 5, a chain C, similar to that shown and described in Figs. 1 and 2; is connected with the wagon-body by a link G, which is pivoted at one end to the wagon-body, while its elongated loop *g* loosely en-
10 gages a stud *c*² on the chain.

In the form shown in Fig. 6 a chain similar to the chain C has fixed to one of its links a bolt *c*³, which may be secured directly to the bottom or rail of the wagon-body, and as the
15 body is carried rearwardly to the point of dumping the bolt *c*³ will tilt with the body as the chain passes over the sprocket-wheel D'.

In all of the forms presented the body is positively moved to the rear and returned to
20 its normal position by the same operating mechanism without requiring any additional

mechanism for partially or completely returning the body to its horizontal position after the load has been dumped.

What I claim is—

25 The combination with the body and its support, the body being mounted to move rearwardly and forwardly along its support, of an endless chain mounted on the support, means for operating the chain and a connec-
30 tion between the body and chain, said connection being attached to the body forward of the point where the body fulcrums in tilting and free to collapse or shorten as the end-
35 less chain is reversed for positively returning the body to a horizontal position and moving it forward, substantially as set forth.

MARTIN L. SENDERLING.

Witnesses:

FREDK. HAYNES,
R. B. SEWARD.