

(No Model.)

A. H. ROGERS.
DUMP SLED.

No. 544,265.

Patented Aug. 6, 1895.

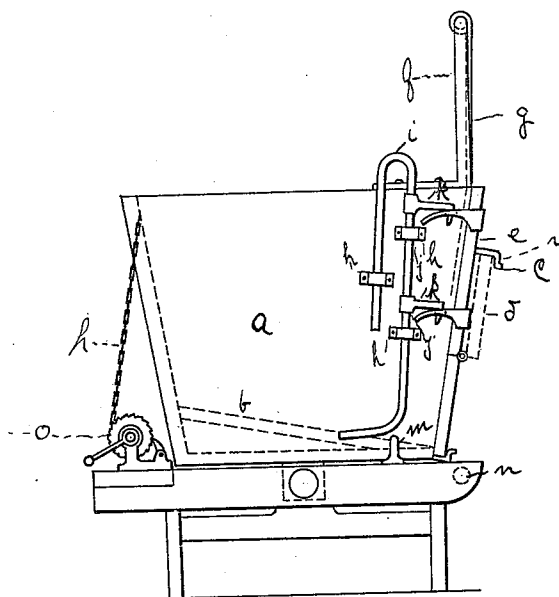


Fig. 1.

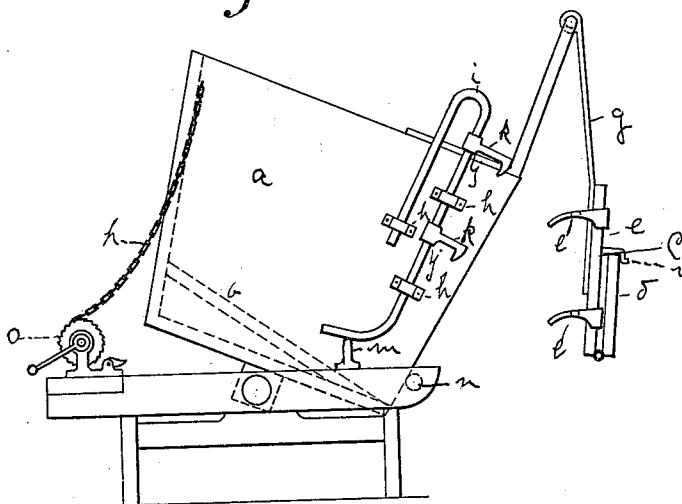


Fig. 2.

Witnesses:

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UNITED STATES PATENT OFFICE.

AMORY H. ROGERS, OF PORTLAND, MAINE.

DUMP-SLED.

SPECIFICATION forming part of Letters Patent No. 544,265, dated August 6, 1893.

Application filed November 7, 1894. Serial No. 528,133. (No model.)

To all whom it may concern:

Be it known that I, AMORY H. ROGERS, a citizen of the United States of America, residing at Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Dump-Sleds; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in dump-sleds, and especially to those adapted to remove snow from city streets.

It consists of a body with an inclined bottom pivotally attached to the bob-sleds, a door hung on supports raised above the top of the body, a suitable chain and windlass-gear for raising and lowering the body, means for automatically opening the side of the body, and in certain other details of construction which will be hereinafter more fully described.

In the drawings herewith accompanying and making a part of this application, Figure 1 is a front elevation of my improved dump-sled, the body being in position to receive the load. Fig. 2 is a front elevation of the same, showing the body tipped in the act of discharging the load.

In said drawings *a* represents the body, which may be of any convenient size or shape; *b*, the bottom, which is inclined toward the movable side of the body to assist in freeing the sled of its load when necessary.

c represents the swinging side of the body, which side is divided into two longitudinal sections *d* and *e*. Rigidly attached to the top of one side of the body is a framework *f*. Pivotaly attached to said framework are hangers *g*. Said hangers are firmly attached to the upper section of the swinging side *c* of the body. By attaching the swinging side to this framework said side swings clear of the load when dumped and allows the sled to be drawn away immediately without the delay of shoveling out a portion of the load which stays behind in dump-sleds, as previously constructed. By means of clamps *h* there is attached to the front end and rear end of the body a goose-neck iron *i* bent back upon itself at its lower extremity. At points *j* on said goose-neck are attached catches *k*, which when the body is in its normal position fit into the eyes *l*, at-

tached to the movable side *c*. Rigidly attached to the bunk of both the forward and after sled is a lug *m*, against which the offset in the goose-neck bears when the cart is tipped, pushing the goose-neck iron upward, thereby releasing the catch and enabling the side of the body to swing outwardly. Until the body of the sled has tipped nearly the full distance the goose-neck iron is not raised, so whenever the catch is released the side is pushed outward with the additional force of the sliding load. On the inner side of the sled-bunk is a stop *n*, which prevents the body when tipped from going over too far. Firmly attached to the bunk of the sled at a point opposite the swinging side is attached a windlass-gear *o*. Running from the barrel of the windlass to the upper side of the body is a chain *p*. This chain and windlass are used to bring the body back to its normal position after it has been tipped and also to hold the body in an upright position.

The operation of my improved sled is simple. After the body has been filled with any material, as snow, it will be seen that the greatest weight is at the point nearest to the movable side. When the workman wishes to dump the load, he first unhooks the lower section of the movable side *c*, folds it back and fastens it to the upper section of said side by means of hook *r*. He then releases the pawl of the windlass, and as the greatest weight of the load is at the side opposite that to which the windlass-chain is attached the body naturally tips in the direction of the greatest weight. The weight of the snow and the tipping of the body throw the sides of the body so far out that the load is emptied without the necessary trouble and expense of shoveling. When the body is righted, the movable side assumes its normal position, and is held there by means of the catches before described.

Although I have described my invention as applied to a dump-sled, it will be readily seen that it is equally applicable to dump-cars and other dumping vehicles, and I do not mean to limit its use to a dump-sled.

The advantages of my improved dump-sled are that owing to the fact that it is hung quite near to the ground it can be easily loaded, and the raised standards allowing the

swinging side to swing clear of the body and prevent any part of the load from being kept back, saving thereby time and expense in handling large loads, and being especially adapted for the removal of snow from city streets.

Having thus described my invention and its use, I claim—

1. In a dump sled, a running gear, a body pivotally mounted on said running gear, standards projecting above the top of the body and a swinging door having two longitudinal sections hinged together and supported by hangers pivotally attached to said standards, substantially as and for the purposes set forth.

2. In a dump sled, a running gear a body wider at the top than at the bottom, and pivotally mounted on said running gear and adapted to be turned on said pivot standards projecting above the top of the body, a swinging side supported by hangers pivotally attached to said standards, the bottom of said body inclining toward said swinging side, and means for securing said swinging side to the body, substantially as and for the purposes set forth.

3. In a dump sled, a body, having an inclined bottom, standards projecting above the top of

the body, a swinging side supported by hangers pivotally attached to said standards, means for securing said swinging side to the body, means for automatically releasing said swinging side and means for holding said body in an upright position, substantially as and for the purposes set forth.

4. In a dump sled, a body having an inclined bottom, standards projecting above said body, a swinging side supported by said standards and having two longitudinal sections hinged together, gooseneck irons having offsets at their lower extremities movably attached to the front and rear ends of the body, said gooseneck irons having catches firmly attached thereto and adapted to engage eyes on the swinging side for holding said side firmly in position, lugs rigidly attached to the bunk of the forward and after sleds to trip said gooseneck irons and means for holding said body in an upright position, substantially as and for the purposes set forth.

In testimony whereof I affix my signature, in presence of two witnesses, this 3d day of November, 1894.

AMORY H. ROGERS.

Witnesses:

ELGIN C. VERRILL,
NATHAN CLIFFORD.