

No. 747,837.

PATENTED DEC. 22, 1903.

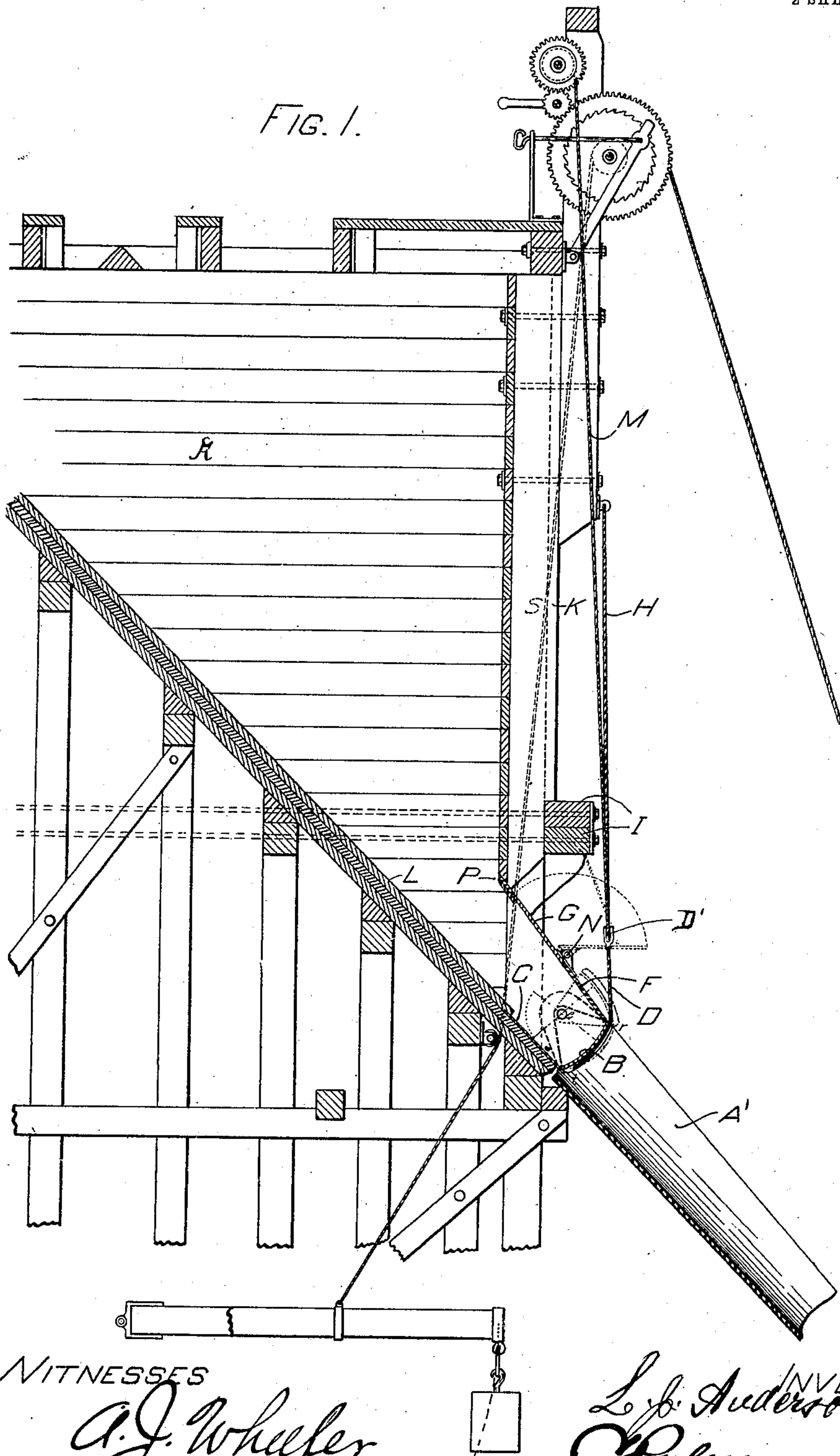
L. J. ANDERSON & C. PALMER.  
STORAGE POCKET.

APPLICATION FILED FEB. 12, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

FIG. 1.



WITNESSES

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INVENTORS

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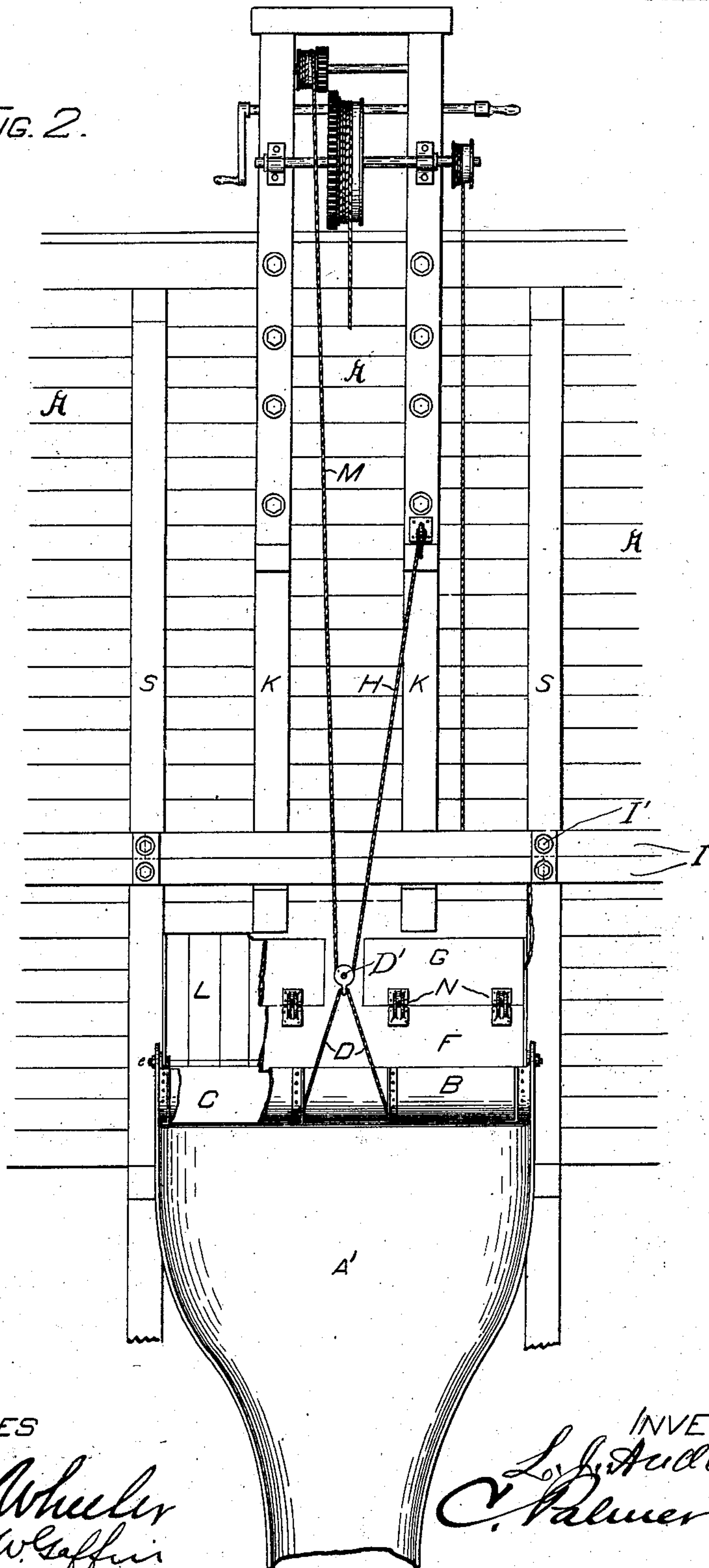
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NO MODEL.

2 SHEETS—SHEET 2.

FIG. 2.



WITNESSES

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# UNITED STATES PATENT OFFICE.

LOUIS J. ANDERSON AND CORNELIUS PALMER, OF ESCANABA, MICHIGAN.

## STORAGE-POCKET.

SPECIFICATION forming part of Letters Patent No. 747,837, dated December 22, 1903.

Application filed February 12, 1903. Serial No. 143,069. (No model.)

*To all whom it may concern:*

Be it known that we, LOUIS J. ANDERSON and CORNELIUS PALMER, citizens of the United States, residing at Escanaba, in the county of Delta and State of Michigan, have invented certain new and useful Improvements in Storage-Pockets; and we do 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.

This invention relates to improvements in the construction of the storage-pockets of docks or storehouses in which ore, coal, or other products are stored for loading cars and vessels for transportation and also relates to improvements in the outlets of such pockets through which the product discharges onto the conducting-chute.

The objects of the invention are, first, to provide a construction to secure a large outlet through which a greater quantity of the stored material may discharge with less liability of clogging; second, to provide a support on which a workman may stand and work while the material is discharging to keep the outlet clear, and thus further diminish liability of clogging, and, third, to provide an improved door which is self-locking in its closed position and adapted to be freely opened.

With these and other objects in view the invention consists in certain novel features of construction, combination, and arrangement of parts, which will be hereinafter more fully described, and particularly defined in the appended claims.

In the accompanying drawings, Figure 1 is a vertical central section of an elevated storage-pocket embodying our invention, and Fig. 2 is a front section of a portion of a dock or storehouse containing the same.

Referring to the drawings, the letter A represents the storage-pocket of an elevated dock or storehouse, which may contain ore, coal, or other products to be discharged into a vessel, car, or other vehicle for shipment.

A' represents the swinging chute, which conducts the discharging material to the vehicle; L, the bottom wall of the pocket; F, the outlet to the pocket, having a bottom lining C; B, the swinging gate or door closing

the outlet and preventing the discharge of the material and adapted to be swung open to allow the material to pass from the pocket to the chute. In accordance with our invention the door B is in the form of a curved plate having right-angularly bent ends mounted to swing upon a pivot *e*. This pivot is eccentrically placed with reference to the curve of the door B, and the radius *et* at the bottom is longer than the radius *er* at the top, so that in raising the door it is readily released from the friction of the contents behind it and may be easily operated. It will be noted also that the bottom part of the curved door-plate is adjusted at such an angle with reference to the lining-plate C and the pivot *e* that the door will be self-locking when the contents are received and remain against its inner face, and a slight movement upward by pull on the line D, by which the door is elevated, will change the angle and swing the door open. The line D terminates in a pulley-block D', through which the lines H M lead to a drum or drums on the hoist. The pulley can be dispensed with, if desired, and a single line run directly to the drum.

The top of the outlet F is provided with a cover-plate G closing an opening therein, which cover-plate is hinged at its outer edge, as shown at N, so that when the chute A' is lowered the said cover-plate may be swung outward to the dotted-line position shown in Fig. 1 to serve as a platform on which the workman may stand to loosen the contents of the pocket when any liability of the same choking the outlet ensues.

Fig. 2 shows a side elevation of a dock containing a series of storage-pockets A, in which the face-posts S are the outer members of the bents on which the partition-linings V between the several pockets are fastened. In iron-ore docks these partitions are about eleven feet apart. The pockets in all iron-ore docks as now built are strengthened by upright posts K extending from top to bottom, and between these posts an opening or outlet is left for the discharge of the contents of the pocket, the opening being from three to four feet in width. This contraction of the opening is a great obstruction to the flow of the contents, and to avoid this as far as possible and expedite the discharge we



cut off the lower ends of the posts K at the top of the opening and fasten the same to and confine them by a longitudinal beam I, which extends along the front of the pocket and is held by one or more bolts I', which extend through the partition-timbers and preferably to the opposite side of the dock. The beam I may be a single member or, if of timber, two members, breaking joints, as shown in Fig. 2. It will be seen that this construction affords a free opening the full width of the pocket and greatly facilitates the discharge of its contents. The only other element that effects the discharge is the height of the opening, and this may be varied by removing or adding one or more planks at the top of the opening P.

From the foregoing description, taken in connection with the accompanying drawings, the construction, mode of operation, and advantages of our invention will be readily apparent, it is thought, without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A storage-pocket having a discharge-outlet closed by a curved door pivotally mounted, the lower edge of the door being a greater distance from the pivot than its upper edge, whereby the door is adapted to readily release

itself from the material and freely swing upward, substantially as described.

2. A storage-pocket having an outlet provided with an opening closed by a cover, said cover being adapted to be swung open and serve as a platform on which a workman may stand to keep the outlet clear, substantially as described.

3. A storage-pocket having an outlet provided with an opening closed by an outwardly-swinging cover-plate and a swinging gate closing the lower end of the outlet and eccentrically mounted on its pivot so as to self-lock when closed and swing freely when forced open, substantially as described.

4. A storage-pocket having an opening extending across its entire front, a wide chute adapted to said outlet, upright front wall-posts cut off at the top of the opening and held laterally by a longitudinal beam forming the top of the frame of the opening, a cover closing an opening in the top of the pocket outlet and adapted to be swung outward to form a platform, and a door closing the lower portion of the outlet and eccentrically mounted to swing, substantially as described.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

LOUIS J. ANDERSON.  
CORNELIUS PALMER.

Witnesses:

GEO. D. HULBERT,  
E. J. ANTHONY.