

(No Model.)

J. M. JONES.  
Ice Delivering Machine.

No. 243,273.

Patented June 21, 1881.

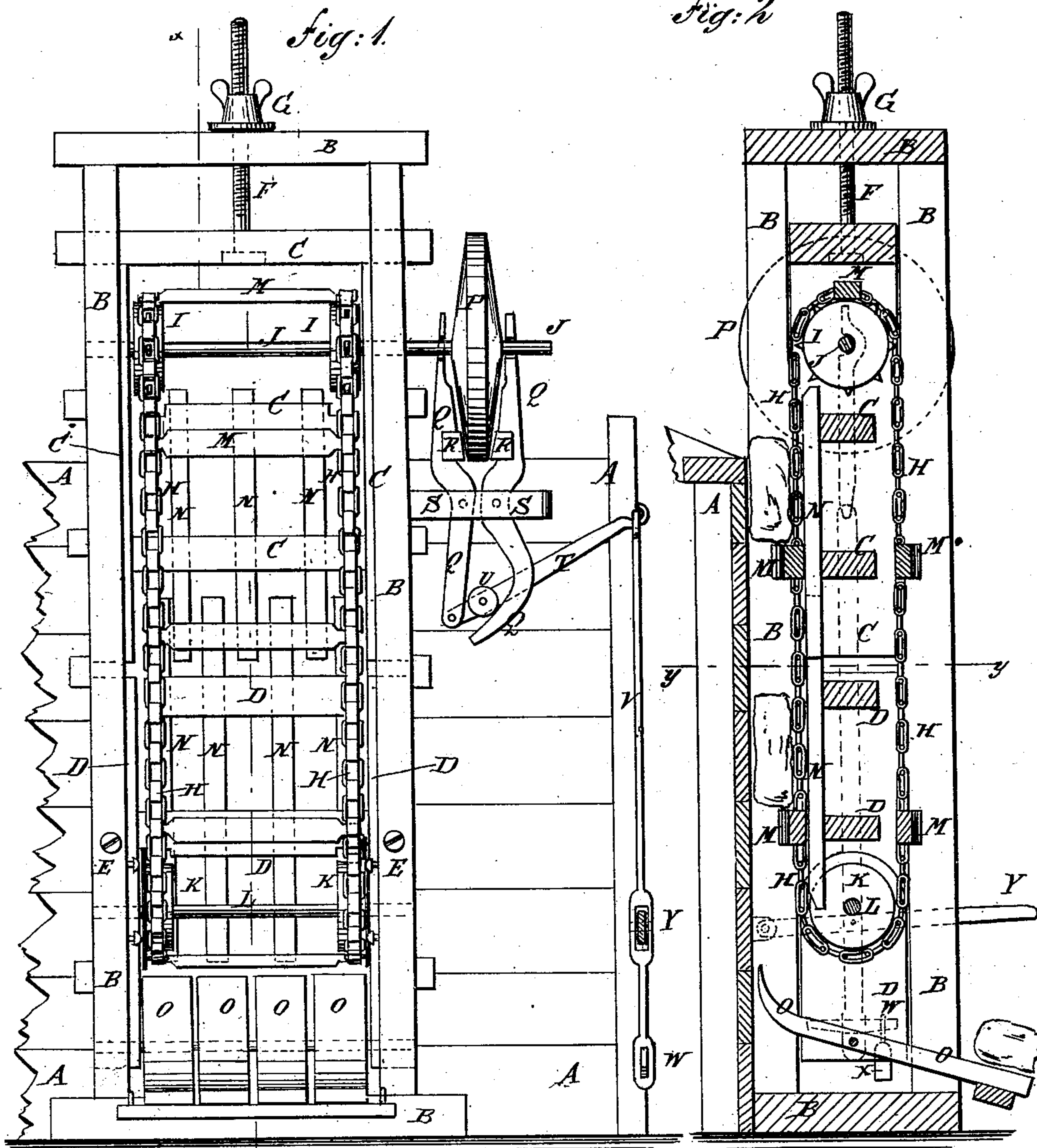
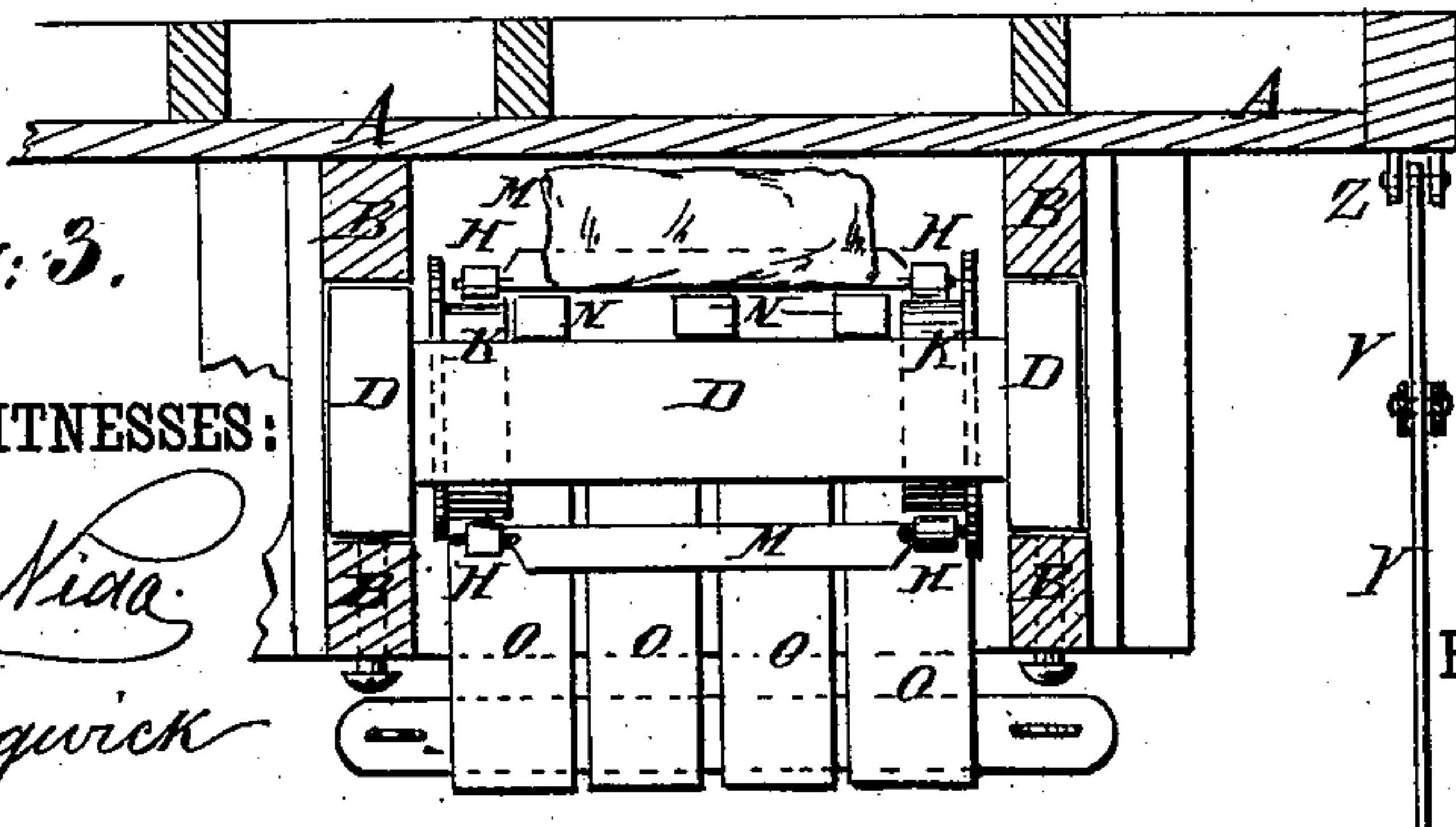


Fig. 3.

WITNESSES:

*Cros. Nida*  
*C. Spadwick*



INVENTOR:

*J. M. Jones*  
BY *Munn Ho*  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

JEREMIAH M. JONES, OF LUCAS, OHIO.

## ICE-DELIVERING MACHINE.

SPECIFICATION forming part of Letters Patent No. 243,273, dated June 21, 1881.

Application filed May 12, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, JEREMIAH M. JONES, of Lucas, in the county of Richland and State of Ohio, have invented certain useful Improvements in Ice-Delivering Machines, of which the following is a specification.

Figure 1 is a front elevation of my improvement. Fig. 2 is a sectional side elevation of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a sectional plan view of the same, taken through the line *y y*, Fig. 2.

Similar letters of reference indicate corresponding parts.

The object of this invention is to facilitate the delivery of ice from ice-houses to wagons, cars, boats, and other receptacles.

The invention consists in constructing an ice-delivering machine with an endless carrier to receive blocks of ice from an ice-house and lower them to a chute, down which they slide to a receiver, sashes that carry the carrier and slide in ways in the main frame, the sashes being adjusted and held in place by a jack-screw and set-screws connected with the main frame, a tapered friction-wheel, friction-clamps, and a clamp-lever for controlling the descent of the ice, and a bar and suspended weights for balancing the descending blocks of ice, whereby the ice will be delivered by its own weight, and the rapidity of descent of the ice-blocks can be easily controlled, as will be hereinafter fully described.

A represents an ice-house. B is the frame of the ice-deliverer, which is placed against and secured to the ice-house A. In grooves or ways in the frame B slide the sashes C D. The lower sash, D, upon being adjusted, is secured in place by set-screws E passing in through the side bars of the frame B and resting against the side bars of the sash D.

To the top bar of the upper sash, C, is attached a screw, F, which passes up through the top bar of the frame B, and has a hand-nut, G, screwed upon its upper end, so that the upper sash, C, can be raised and lowered to regulate the tension of the endless chains H when the lower sash, D, is in place, and both sashes can be raised and lowered together, to adjust them in the desired position when the lower sash is free and the endless chains H are in place. The endless chains H pass around chain-wheels I, attached to a shaft, J,

that works in bearings in the upper part of the upper sash, C. The endless chains H also pass around chain-pulleys K, attached to a shaft, L, which revolves in bearings in the lower part of the lower sash, D.

To the endless chains H are attached the ends of cross-bars M, by which the blocks of ice are supported while being delivered or lowered. The blocks of ice are kept in place upon the cross-bars M while being lowered upon the rear side, by the ice-house A, and upon the forward side by the guide-bars N, attached to the sashes C D.

To the lower ends of the side bars of the lower sash, D, is pivoted a chute, O, the inner end of which rests against the ice-house A, and is curved upward, so as to guide the blocks of ice beneath the shaft L and chain-pulleys K, and discharge the said blocks into the wagon, car, boat, or other receiver. As the blocks of ice pass to the outer part of the chute O the said chute tilts a little, so that the said blocks will pass off more readily. With this construction the blocks of ice descend, and are delivered by their own weight as they are pushed from the ice-house into the machine.

To one end of the shaft J is attached a friction-wheel, P, which tapers or becomes thinner toward its rim. Q are the jaws or arms of a clamp, which pass up upon the opposite sides of the friction-wheel P, and have openings in their upper parts to receive the shaft J, so that the said shaft will serve as a guide to the said jaws. In recesses in the inner sides of the jaws Q are secured friction-blocks R, which bear against the opposite sides of the friction-wheel P. The clamp-jaws Q are pivoted to a bracket, S, attached to the upper sash, C.

To the lower end of the inner arm of the clamp Q is pivoted the end of a lever, T, which passes through a slot in the outer arm of the said clamp Q.

To the opposite sides of the lever T, between the arms of the clamp Q, are pivoted small wheels or rollers U, which rest upon the inner side of the outer arm of the clamp, the said arm being curved, as shown in Fig. 1, to give the rollers U a better hold upon it.

To the outer end of the lever T is attached the upper end of the bar V, to the lower part of which is attached a cross-bar, W, to serve



as a convenient support for weights X. A number of weights X are provided, so that more or fewer can be suspended, according as larger or smaller blocks of ice are to be delivered, the purpose being to suspend so much weight from the bar V that the attendant will need to exert but little power in controlling the descent of the blocks of ice. The lower part of the bar V is slotted to receive a lever, Y, the other end of which is pivoted to a support, Z, attached to the ice-house. With this construction the attendant by operating the lever Y can cause the ice-blocks to descend slowly or rapidly, or can stop them at any point of their descent, if desired. With this construction the action of the friction or brake clamps Q upon the tapered wheel P has a tendency to force the shaft J upward, so as to balance the downward pressure of the ice upon the said shaft, and thus diminish friction.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. An ice-delivering machine constructed substantially as herein shown and described, consisting of a carrier, a guide-chute, a friction-wheel, and a friction-clamp, whereby the

ice will be lowered by its own weight, and its rapidity of descent controlled, as set forth.

2. In an ice-delivering machine, the combination, with the frame B and the carrier I K H M, of the sashes C D, the set-screws E, and the jack-screw F G, substantially as herein shown and described, whereby the carrier can be adjusted and the tautness of the carrier-chains regulated, as set forth.

3. In an ice-delivering machine, the combination, with the drive-shaft J of the carrier, of the tapered friction-wheel P, the friction-clamps Q, and the clamp-lever T, substantially as herein shown and described, whereby the rapidity of descent of the ice can be controlled, as set forth.

4. In an ice-delivering machine, the combination, with the clamp-lever T, of the suspended bars V W and weights X, substantially as herein shown and described, whereby the gravity of the ice-blocks can be balanced, as set forth.

JEREMIAH MARTIN JONES.

Witnesses:

J. L. SWIGART,  
DAVID B. JONES.