

P. F. Whitney.

Loading Ice.

N^o 87,452.

Patented Mar. 2, 1869.

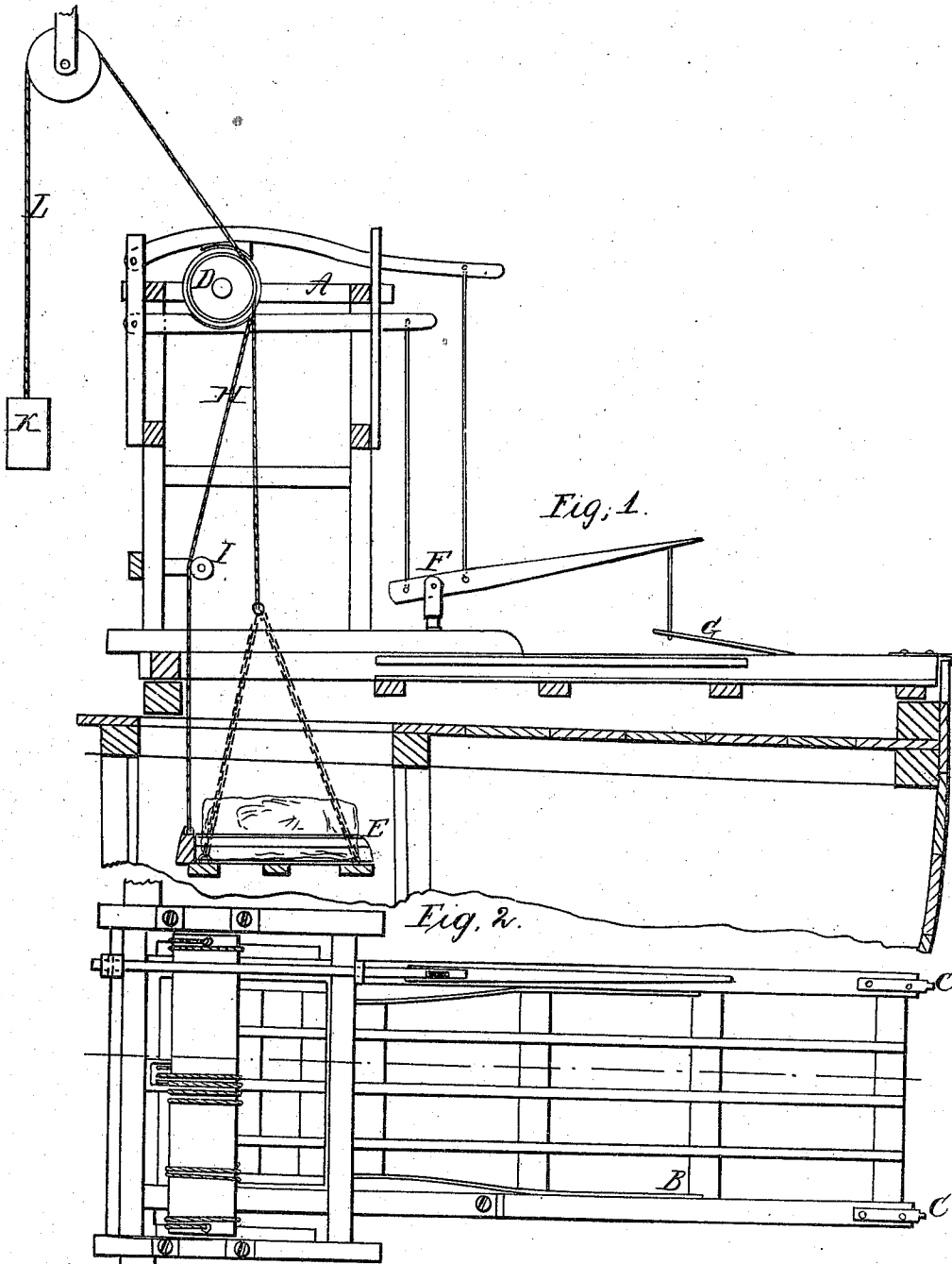


Fig. 1.

Fig. 2.

*Witnesses,
Alex. F. Roberts
Frank H. Kley*

*Inventor,
P. F. Whitney
per M. W. A.
attorneys*

United States Patent Office.

PETER F. WHITNEY, OF SAUGERTIES, NEW YORK.

Letters Patent No. 87,452, dated March 2, 1869.

APPARATUS FOR LOADING ICE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, PETER F. WHITNEY, of Saugerties, in the county of Ulster, and State of New York, have invented a new and improved Apparatus for Loading Ice; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in mechanism for receiving ice as it is chuted from the storehouses, and delivering it into the holds of vessels, the object of which is to reduce the labor, and preserve the ice from breaking.

It consists of a framing, to be placed over the hatchway of a vessel, having a rotating drum, from which is suspended a carriage, which, when in the elevated position, forms the termination of a chute, extending to the bulwarks, or thereabouts, of the vessel, to receive the ice.

The said carriage is lowered into the hold by the weight of the ice, under the restraining action of a friction-brake, and is raised again by a weight.

Figure 1 represents a sectional elevation of my apparatus, and a portion of a vessel.

Figure 2 represents a plan view of the same.

Similar letters of reference indicate corresponding parts.

A represents a framing, to be suspended over the hatchway of a vessel, having a chute, B, extending laterally from the bottom, provided with hooks C, for securing it to the bulwarks or other holding-device.

D represents a shaft, in suitable bearings at the top of the frame, from which is suspended the carriage E, forming, when in the elevated position, the inner termination of the chute B, and receives the pieces of ice from the said chute B. As soon as the carriage has received a piece of ice, it will be carried down by the weight of the ice.

F represents a double-lever friction-brake, having a foot-treadle, G, whereby the operator regulates the speed of the descending carriage.

H represents a cord working over the shaft D, and connected to the rear side of the carriage, and deflected over the pulley I, for the purpose of preventing the carriage from swinging; and

K represents a weight connected by a cord, L, to the shaft D, and working over an elevated pulley, I, and is for the purpose of drawing up the carriage as soon as the ice is discharged from it.

The present method of loading ice is to deliver it through a circular spiral, or zigzag chute, which is very objectionable in the respect that the pieces of ice frequently arrive at the bottom under great velocity, and break in striking against other pieces, or on the floor; and at other times the chute becomes clogged, and a considerable accumulation of pieces, following one another, results, producing great damage by breaking, also endangering the chutes by their accumulated weight. The chutes must, therefore, be strong, and difficult to handle, as well as expensive.

My improved apparatus may be made so light, as to be easily handled by two men, and will deliver the ice quite as rapidly, with less labor, and without damage to the ice.

Having thus described my invention,

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

The combination, with the frame A, roller D, carriage E, and chute B, of the friction-brake F, weight K, cords H and L, and the pulleys I I, arranged substantially as and for the purpose described.

The above specification of my invention signed by me, this 18th day of August, 1868.

P. F. WHITNEY.

Witnesses:

FRANK BLOCKLEY,
ALEX. F. ROBERTS.