

Ice Elevator.

Patented Aug 11, 1868.



Fig. 1

WITNESSES
W. C. Ashkettle &
J. A. Fraser

W. T. B. Read
per Munnell
attorneys

... being so doing
is not in point

United States Patent Office.

WILLIAM T. B. READ, OF CHICAGO, ILLINOIS.

Letters Patent No. 81,004, dated August 11, 1868.

IMPROVEMENT IN ICE-ELEVATOR.

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, WILLIAM T. B. READ, of Chicago, in the county of Cook, and State of Illinois, have invented a new and improved Ice-Elevator; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those 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 a new and improved method of constructing machines for elevating ice in the process of filling ice-houses, and handling blocks of ice in other situations where it is necessary to elevate the same; and the invention consists in attaching hooks to an endless chain, and rotating the same over pulleys, which are supported by a suitably-constructed frame, and in the combination and arrangement of parts, as will be hereinafter described.

The drawing (Figure 1) represents a side elevation of the machine, showing the manner in which it is constructed, as well as that of its operation.

Figure 2 is an end-view of the same.

Similar letters of reference indicate corresponding parts.

A is an open platform-frame, which supports the whole apparatus, and which is formed of wood.

B represent blocks, secured to the side-timbers of the frame, to which the stands C are secured, which stands form bearings for the endless-chain-pulley shafts.

D represents the shafts.

E represents the pulleys.

There may be two or more of these pulleys connected with the frame in the same manner, if necessary.

The pulleys have guards, F, on their sides, between which the chain runs.

G is the chain, which is formed of alternate single and double links, *h* and *i*.

The thickness of the rims of the pulleys corresponds with that of the single links, so that the guards F, upon the outside, admit the single links between them, as seen in the drawing. The guards acting against the ends of the double link propel the chain, or prevent its slipping on the pulleys.

J represents the ice-hooks.

There may be any desired number of these hooks attached to the chain by a pivot-joint, as seen in the drawing at *k*, or by a rigid connection. There are spurs on these hooks, which penetrate the block of ice, to prevent the hook from slipping.

The bottom of the frame A is formed of slats, (placed longitudinally within the frame,) the ends of which slats are seen at *m*, fig. 2.

For elevating the blocks of ice, the end of the frame marked A' is raised to the point where it is desired to elevate the ice. The blocks are supplied at the other end of the frame, so that the hooks haul them up the frame or inclined plane as the chain is revolved.

In elevating ice directly from the water to the storehouse, the lower end of the frame is submerged, so that the block may be floated within reach of the hooks, and thus hauled up the inclined plane and delivered in the storehouse or on to an elevated platform, as may be desired.

The chain is revolved around the pulleys by hand-power applied to the crank, L, or in any other convenient manner.

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

The combination and arrangement, substantially as shown and described, of the endless chain G, the pulleys E, (with their guards F,) hooks J, and frame A, substantially as and for the purposes set forth.

WM. T. B. READ.

Witnesses:

GEO. S. CARMICHAEL,

GEO. A. SHUFELDT, Jr.