W. W. Armington,

Ice Crusher,

No. 50,198. Patented Sep. 26, 1865.

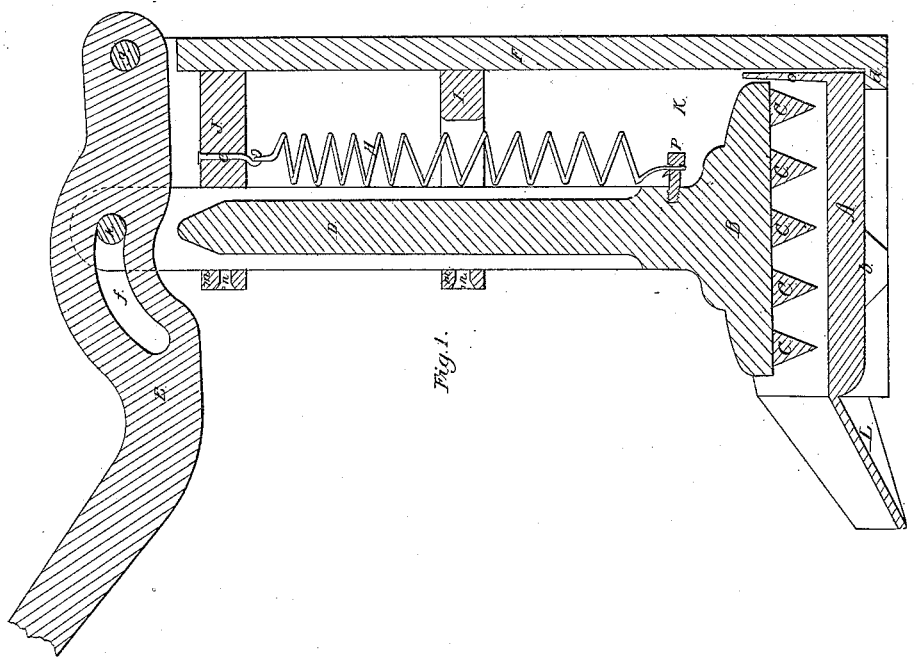

Fig. 1.

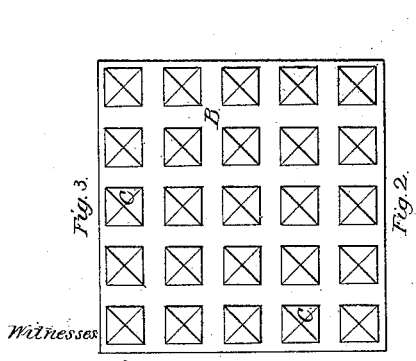

Fig. 3.

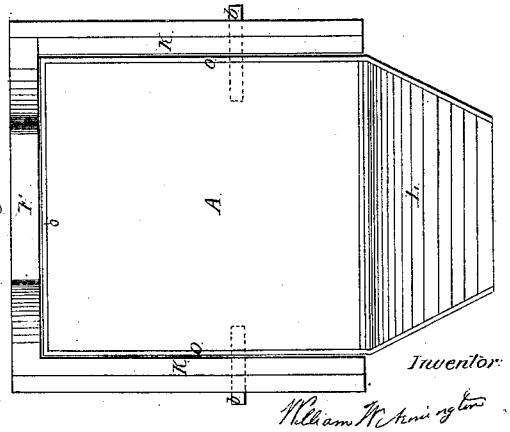

Fig. 2.

Witnesses

John E. Crane

John F. Adam

Inventor:

William W. Armington

UNITED STATES PATENT OFFICE.

WILLIAM W. ARMINGTON, OF LOWELL, MASSACHUSETTS, ASSIGNOR TO GEO. E. MITCHELL, OF SAME PLACE.

ICE-CRUSHER.

Specification forming part of Letters Patent No. **50,198**, dated September 26, 1865.

To all whom it may concern:

Be it known that I, WILLIAM W. ARMINGTON, of Lowell, in the county of Middlesex, and State of Massachusetts, have invented a new and useful Improvement in Machines for Crushing Ice, for any purpose where small fragments are desired; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification, of which—

Figure 1 is a longitudinal vertical section of my improvement, the plane of the section passing through the center. Fig. 2 is a detached plan or top view of the ice-box; also the sides and the lower part of the back. Fig. 3 is a bottom view of the crusher-head.

Similar letters of reference indicate corresponding parts in the three figures.

The nature of my invention consists in the employment of a disk or crusher-head having sharp prongs or teeth projecting from the under side of it, when the said teeth are made to act upon the substance of the ice against a plain surface upon which the ice rests, so as to allow each fragment to move as soon as it is separated from the piece of ice being crushed, and the plain-surfaced bottom is made to rock or tip on pins or other supports, so as to tip forward and allow the fragments to be easily removed. A shaft or shank is secured to the top side of the crusher-head to guide it up or down in grooves or guideways made to receive the said shaft or shank.

In the drawings A is the plain-surfaced bottom, supported at the back by a ledge, *d*, and at the sides by pins *b b* passing through the sides *k k* of the machine, which sides are firmly united with the back F.

Arms I and J extend forward from the back F, and suitable guideways are formed in the said arms in which the shaft or shank D moves up or down. Caps *m m*, secured to the ends of the arms I and J by screws *n n*, hold the shaft in its place.

The crusher-head B is cast onto the shaft D or otherwise firmly secured thereto, and several sharp prongs or teeth C project downward from the bottom surface of the same. Sides *o o o* rise from the extremities of the bottom A, forming a box for the reception of the ice which is to be crushed; also preventing leakage between the extremities of the bottom A and the sides K K of the machine. The spout or nose L provides for the easy removal of the crushed fragments or of water in case a portion of the ice should melt.

The lever E is hinged at the top of the back F by the pin *g*. Downward motion is given to the shaft D and crusher-head B by the lever E acting upon the pin *h* in the circular slot *f*. The spring H is secured at the top by the hook *e*, attached to the arm J, and at the bottom by the screw P in the shaft D, and serves to produce the upward motion of the crusher-head B.

The object of my invention will be readily seen. When small fragments of ice are desired for use, a piece of ice of sufficient size is placed upon the plain-surfaced bottom A in the ice-box.

Downward motion is given to the lever E by the hand of the operator or otherwise, forcing several of the teeth C into the piece of ice, crushing and splitting it into small fragments, said fragments sliding off from each other on the plain-surfaced bottom A. The spring H raises the crusher-head, when the ice-box is rocked or tipped forward, and the fragments removed through the spout L.

I do not confine myself to the precise form or length of the teeth or prongs on the crusher-head B, as that will of necessity be governed by the fineness of fragments and the amount of ice to be crushed.

What I claim is—

The combination of the crusher B, the pivoted box A, the shaft D, lever E, and spring H, operating substantially as and for the purpose specified.

WILLIAM W. ARMINGTON.

Witnesses:

JOHN F. ANLIN,

JOHN E. CRANE.