Oct. 18, 1927. 1,645,524

E. B. FISKE

ICE HOUSE PLOW

Filed April 16, 1925

Fig. 1

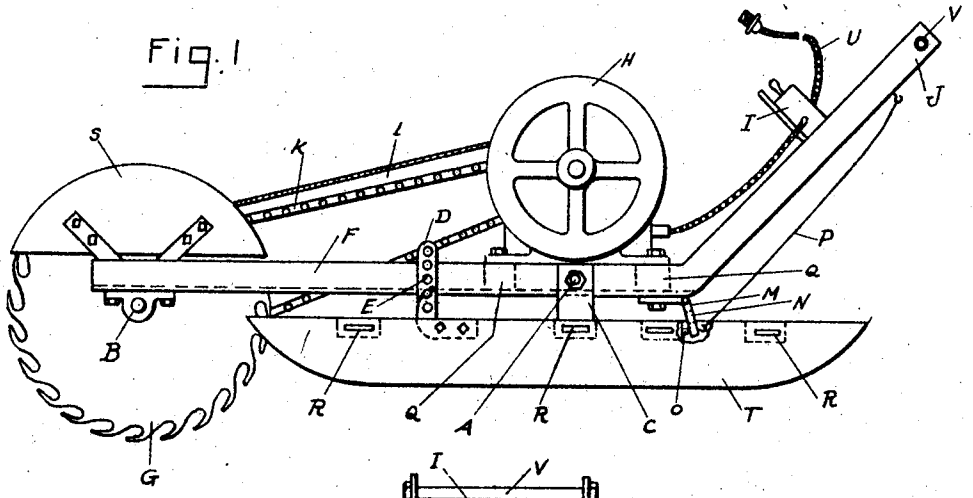


Fig. 2

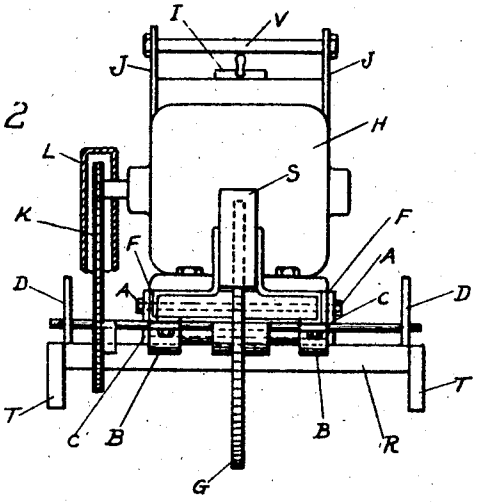
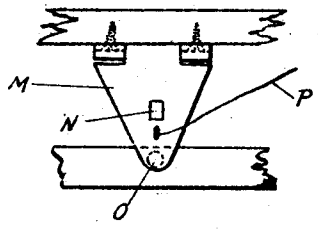


Fig. 3.



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UNITED STATES PATENT OFFICE.

EUGENE B. FISKE, OF SAUGUS, MASSACHUSETTS.

ICE-HOUSE PLOW.

Application filed April 16, 1925. Serial No. 23,648.

My invention relates to power ice cutters and more particularly to the type designed for use within ice houses, in preparing previously stored ice for sale or loading on delivery trucks.

The objects of my invention are to provide a light weight, simple and inexpensive construction, yet efficient means for the economical handling and cutting of ice during the process of delivery from the storage house; to eliminate ice house hand plowing and hand chiseling; to provide a machine of so-called "one man control" designed and arranged to center the control at the operating position; to provide a novel hoist fall adaptable to hold aloft the cutting saw while out of operation; and to provide the various other advantages and results made evident in the following specification.

My device is particularly adaptable for operation by an electric motor but it is evident that any suitable driving force may be used. For house plow purposes light weight is extremely desirable and my construction is designed to meet this requirement.

Referring to the accompanying drawings, which form a part of this specification, Figure 1 shows a side view of my device. Figure 2 shows a front view thereof. Figure 3 shows the detail of my hoist fall. Referring again to Figures 1 and 2, T shows the sled runners on which my device rests, R shows the cross pieces of the sled.

C shows the standards in which the ends of the rod A are secured. The standards are mounted on the cross piece which connects the runners intermediate their respective ends and, as shown, are spaced inwardly from the runners. F shows the rocking beams consisting of angle irons having vertical flanges pivotally mounted on the rod A, on the end of which beams F is carried a circular saw G, the saw shaft turning in the journal blocks B. Q shows the cross pieces which join the rocking beams and which are supported on the inwardly disposed horizontal flanges of the beams and on opposite sides of rod A to form a platform to which the motor H is bolted. D shows depth gage uprights mounted on the runners T and between the pivot or rod A and the saw G at the forward end of the frame. E shows openings in the uprights through appropriate pairs of which a rod is placed to regulate the drop of the rocking beams F. I shows the switch box, U shows the electric cord, K shows the chain transmitting power from the motor H to the saw. L shows the chain guard, S shows the saw guard, J shows the operating handles formed rearwardly of the motor by the upwardly inclined portions of the beam, which inclined portions are joined at their respective outer ends by the brace V. Referring again to Figure 3, M shows the hoist fall, N shows the slot in the fall, O shows the pin on which the fall locks, P shows the trip string which releases the hoist fall from its locking position.

Similar letters of reference refer to similar parts throughout the various views.

To operate, the depth gage is set at a point to regulate the desired cut of the saw. The operator then takes his place at the handles J, slides the plow to the cutting position, switches on the current, pulls the trip string P, releasing the hoist fall, whereupon the rotating saw drops to the cutting position, and the plow is pushed about by the handles until such time as the desired cut is obtained. Instant control over the cutting is had by pressing down the handles J thus elevating the saw away from the cutting surface. The hoist fall locks the saw in its raised position until the string P is again tripped. For quick work the power is seldom shut off, the operation being controlled entirely from the handles. The simplicity of my device renders it particularly free from technical repair requirements, and its use fills a long felt want in indoor handling and cutting of ice.

I do not desire to confine myself to the specific details of construction herein set forth and described, but claim such modifications and equivalents as may be construed within the scope of the appended claim.

Having thus described my invention I claim as new and desire to secure by Letters Patent of the United States of America—

An ice house plow including a pair of spaced runners, a cross beam connecting the runners intermediate their respective ends, standards mounted on the cross beam and centered between said runners, a pair of spaced parallel angle beams extending longitudinally between the standards with their forward ends in advance of the runners and their rear ends disposed upwardly at an inclination to the horizontal, each of

said angle beams presenting a vertical side flange disposed against the inner face of an adjacent standard and a horizontal bottom flange extending inwardly at right angle to the standard, a transverse pivot rod having its ends supported in said standards, said rod extending through the said side flanges of the angle beams at points substantially intermediate the ends of the said beams, a pair of cross pieces joining the angle beams on respectively opposite sides of the pivot rod and supported on the said bottom flanges of the angle beams, said cross pieces being equidistant from the pivot rod, a motor supported on the cross pieces and centered over the pivot rod, a handle brace connecting the upwardly disposed rear ends of the angle beams, a saw centered between the forward ends of the angle beams, and a driving connection from the said motor to the said saw.

In testimony whereof I affix my signature.

EUGENE B. FISKE.