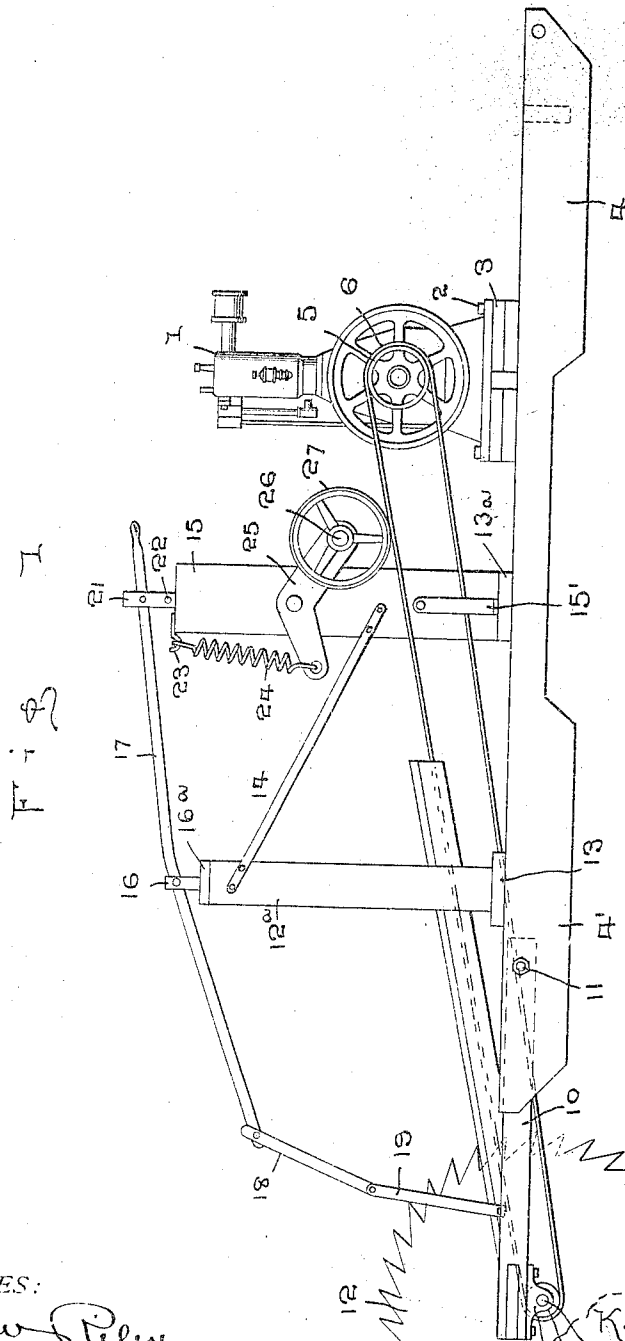


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K. H. LADEGARD.
ICE CUTTING MACHINE.
APPLICATION FILED JULY 13, 1909.

Patented Mar. 29, 1910.
2 SHEETS—SHEET 1.



WITNESSES:

Thomas Riley
J. R. French

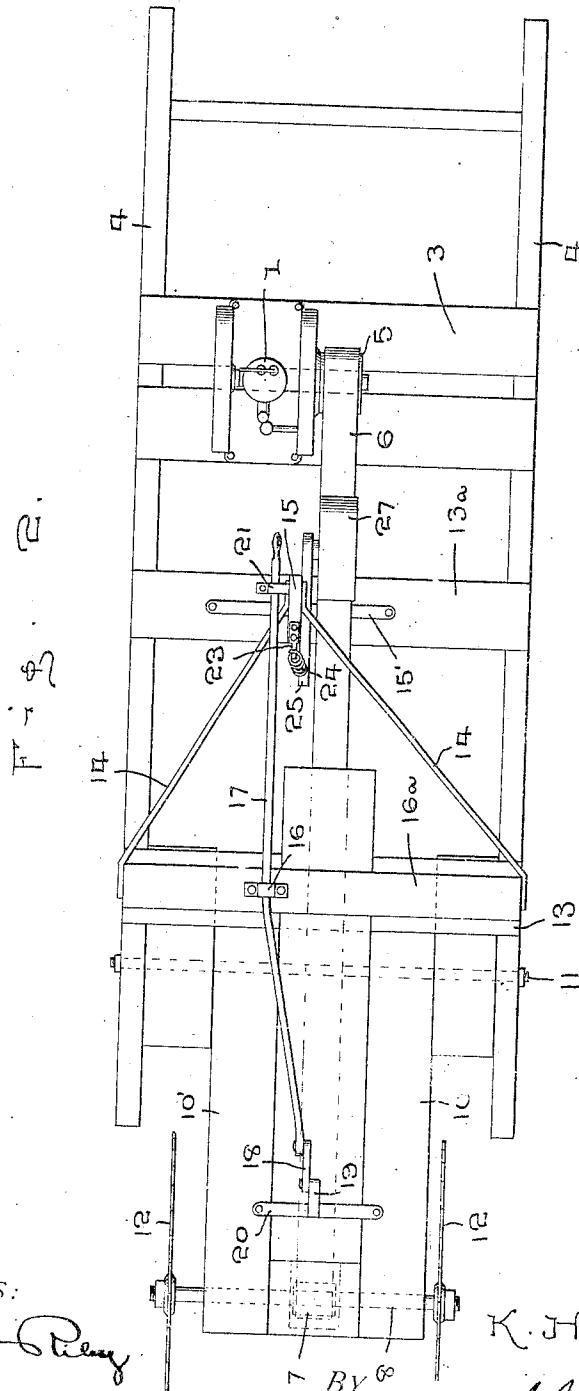
INVENTOR
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UNITED STATES PATENT OFFICE.

KNUD H. LADEGARD, OF LITCHFIELD, NEBRASKA.

ICE-CUTTING MACHINE.

953,625.

Specification of Letters Patent. Patented Mar. 29, 1910.

Application filed July 13, 1909. Serial No. 507,290.

To all whom it may concern:

Be it known that I, KNUD H. LADEGARD, a citizen of the United States, residing at Litchfield, in the county of Sherman and State of Nebraska, have invented certain new and useful Improvements in Ice-Cutting Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to new and useful improvements in ice cutting machines and my object is to provide a device that may be readily transported from place to place, in pursuit of the objects for which it is constructed and a further object is to provide a device that may be regulated according to the depth of the cut desired.

A still further object is to provide a device that will be simple and economical in construction and effective in operation.

Referring to the drawings which form part of this application. Figure 1 is a side elevation of my machine, the saw nearest the observer and bar 10 having been removed. Fig. 2 is a top plan view of the machine.

Corresponding parts throughout the several views are designated by similar reference characters.

In carrying out my invention, 1 indicates an engine of any preferred type, but for convenience is here shown as a gas engine, mounted upon cross bars 3 and secured thereon by means of bolts 2, said cross bars 3 being mounted on the forward runners 4 which permit of the device being moved upon ice. The fly wheel of the engine 1 has mounted thereon a pulley 5 and power from the engine is supplied to the machine through the medium of a belt 6 mounted on said pulley 5 at one end and passed around a second pulley 7 mounted on the shaft 8, said shaft being mounted in the bearings 9, which are secured to the rear ends of a pair of parallel bars 10 and 10' pivotally mounted between the rear runners 4'. Said parallel bars are pivoted between said rear runners 4' by means of cross bar 11 and one or more circular saws are adapted to be mounted on said shaft 8, whereby it will be seen that when power is applied to the pulley 7, from the engine 1, said saws 12 will be operated.

The standard 12^a is secured to a cross bar 13 mounted between the rear runners 4', and secured to the upper portion of said

standard 12^a are the laterally extending braces 14 secured at the ends, opposite those secured to said standard, to a second standard 15 secured at its base to an additional cross bar 13^a by means of the braces 15'. On the top of the standard 12^a is mounted the horizontal beam 16^a to which is secured about centrally the vertically extending and substantially V-shaped keeper 16, through which is passed and pivotally secured there-to a lifting bar 17. To one end of said lifting bar 17 is pivotally secured a cooperating bar 18, said cooperating bar being in turn pivoted to the extension 19 of a substantially inverted T-shaped cross bar 20, the head of which is secured to the parallel bars 10 and 10' and countersunk therein. Secured to said standard 15 and extending upwardly therefrom and thence downwardly along one of its sides, is the keeper 21, through which the free end of said lifting bar 17 extends, said keeper 21 having the registering openings 22 therein, whereby when said lifting bar is pushed downwardly, the pivoted parallel bars 10 and 10' will be raised upwardly carrying the saws therewith, and a pin inserted in said registering openings 22 above the lifting bar 17 would be adapted to hold the saws in the raised position, if so desired. Secured to the upper portion of said standard 15, is a hook, from which is suspended a yielding spring 24, the opposite end of which engages one end of an approximately L-shaped member 25, said L-shaped member being pivoted about centrally to the standard 15, and mounted in the opposite end thereof is a shaft 26 carrying the belt tightener 27, the purpose of which is obvious.

It will be seen that applicant has provided a machine that may be readily transported on the ice from place to place, and that can be easily regulated according to the depth of the cut desired, and it will still further be seen that a machine has been provided that although simple and novel in construction, is effective in operation.

What I claim is:

In an ice cutting machine, the combination with a pair of forward and rear runners, an engine mounted on cross bars between said forward runners, a pair of vertical standards mounted between said runners, a pair of parallel bars pivotally mounted between said rear runners, a shaft mounted between said bars and carrying one

or more circular saws, means for coöperation between said engine and said saws, and a lever fulcrumed on a keeper carried above the rear vertical standard with additional leverage secured to one end of said lever and to said parallel bars, the forward vertical standard having a metallic keeper secured and extending parallel to one of its sides through which the opposite end of said lever extends and registering openings in said keeper, whereby when said saws are

raised or lowered through means of said lever, said lever can be held in any desired position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

KNUD H. LADEGARD.

Witnesses:

GEO. SLOTE,
B. H. ACHENBACH.