M. A. BRUET & L. J. DUFFER.

ICE CUTTING APPARATUS.

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1,136,769. **Patented Apr. 20, 1915.**

Fig. 1.

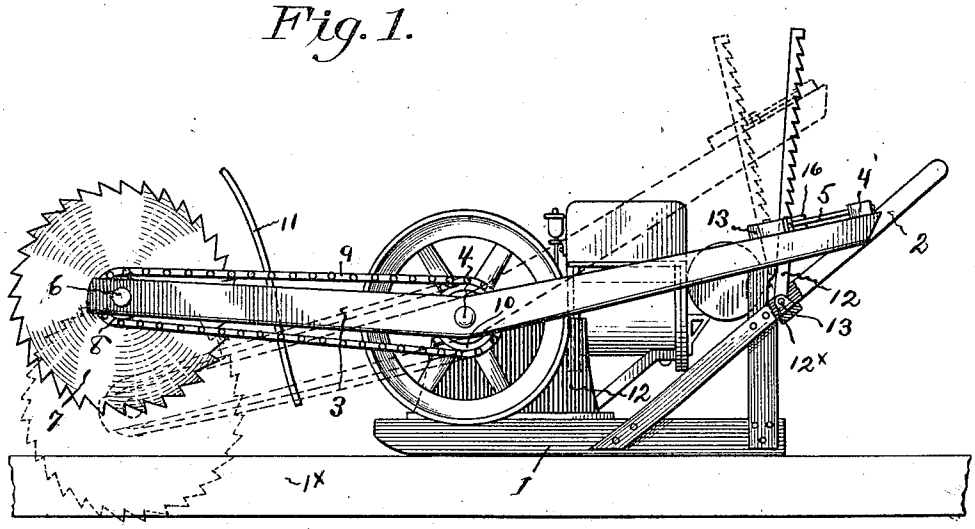


Fig. 2.

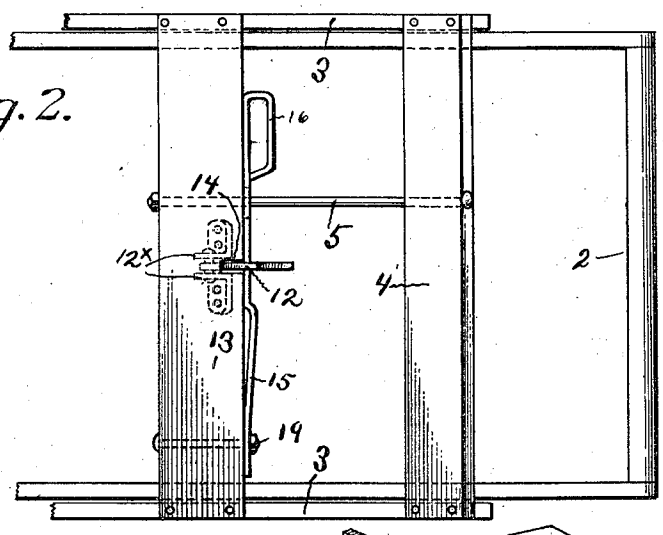
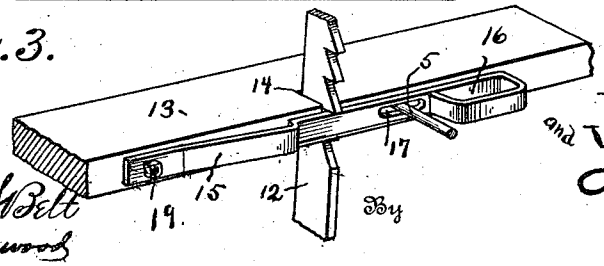


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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ICE-CUTTING APPARATUS.

1,136,769. Specification of Letters Patent. Patented Apr. 20, 1915.

Application filed March 11, 1915. Serial No. 13,653.

To all whom it may concern:

Be it known that we, MAURICE A. BRUET and LOUIS J. DUFFER, citizens of the United States, residing at Croghan, in the county of Lewis and State of New York, have invented certain new and useful Improvements in Ice-Cutting Apparatus, of which the following is a specification.

This invention relates to new and useful improvements in ice cutting apparatus and consists essentially in the provision of a sled carrying an adjustable saw driven by any suitable power mechanism and in the provision of means for holding the saw in different adjusted positions.

The invention consists of a simple and efficient apparatus of this nature, having various details of construction, combinations and arrangements of parts which will be hereinafter fully described, shown in the accompanying drawings and then specifically defined in the appended claims.

Our invention is illustrated in the accompanying drawings, in which:

Figure 1 is a side elevation of the invention. Fig. 2 is an enlarged top plan view of a part of the invention, and Fig. 3 is a detail perspective view showing the means for holding the saw in different adjusted positions.

Reference now being had to the details of the drawings by numerals, 1 designates a sled, shown as mounted upon the surface of ice 1^x and having handles 2 secured to the opposite sides thereof, and 3 designates beams pivotally mounted upon the shaft 4, and the forward ends of said beams have journaled therein a shaft 6 to which a saw 7 is fixed and also a sprocket wheel 8 about which a sprocket chain 9 passes and also about a sprocket wheel 10 which is fixed to the driving wheel mounted upon the shaft 4 in the base 12 of the engine. 11 designates a fender positioned at any location adjacent to the saw and behind the latter. Said beams 3 are connected together by means of two cross-pieces 4′ and 13 and which, by coming in contact with the upper edges of the handles 2, will serve to limit the throw of said beams in one direction and which will hold the saw at its highest limit and in the position shown in solid lines in Fig. 1. A cross-piece 13^x is secured to the handles and to which bracket members 12^x, shown in dotted lines in Fig. 2 of the drawings, are fastened, and 12′ designates a ratchet bar pivotally mounted upon said bracket members 12^x. Upon reference to Fig. 3 of the drawings, it will be noted that the cross-piece 13 has a slot 14 in one edge thereof adapted to receive the ratchet bar 12′. A resilient bar 15 is fixed at one end to the bolt 19 upon the edge of the crosspiece 13 and has a handle 16 at one end and is slotted at 17 for the reception of the bolt 5 which passes through the two cross-pieces 4′ and 13 and serves as a means to guide the bar 15. Said bar 15 is adapted to engage one or another of the teeth of the ratchet bar 12′ for the purpose of holding the saw in different positions. When the bar 15 is in normal position, it will be noted that it will hold the ratchet bar 12 in the slot 14 securely and any downward movement of the ratchet bar will be prevented by reason of the bolt 15 which passes through the slot 17.

By the provision of an ice cutting apparatus embodying the features of our invention, it will be noted that a simple and efficient mechanism is afforded whereby, when the saw is not in operation, it may be held above the surface upon which the sled rests and, when in operation, it may be held by means of the ratchet and resilient bar shown with the locking pin serving to hold the parts securely in their adjusted position.

What we claim to be new is:—

1. An ice cutting apparatus comprising a sled with handles thereon, pivotal beams mounted thereon, a rotatable saw carried by the beams, an engine and connections between the same and saw for driving the latter, cross-pieces connecting said beams, a resilient slotted bar fixed at one end to one of said cross-pieces, a ratchet bar pivoted to the handle of the slot and engaged by said bar, a bolt connecting said cross-pieces and passing through the slot of said bar and tending to hold the latter from swinging vertically.

2. An ice cutting apparatus comprising a sled with handles thereon, pivotal beams mounted thereon, a rotatable saw carried by the beams, an engine and connections between the same and saw for driving the latter, cross-pieces connecting said beams, one of said cross-pieces having a slot in the edge thereof, a ratchet bar pivoted to the handles positioned in said slot, a resilient bar fastened at one end to the edge of the slotted cross-piece and engaging the teeth of the ratchet bar, and means for preventing the free end of the bar from swinging.

3. An ice cutting apparatus comprising a sled with handles thereon, pivotal beams mounted thereon, a rotatable saw carried by the beams, an engine and connections between the same and saw for driving the latter, cross-pieces connecting said beams, one of said cross-pieces having a slot in the edge thereof, a ratchet bar pivoted to the handles positioned in said slot, a slotted bar fastened at one end to the slotted cross-piece and provided with a handle at its free end, a bolt passing through said cross-pieces and the slots of said bar.

In testimony whereof we affix our signatures in presence of two witnesses.

MAURICE A. BRUET.
LOUIS J. DUFFER.

Witnesses:
MICHAEL NORTZ,
FREDLIN NORTZ.