

No. 659,847.

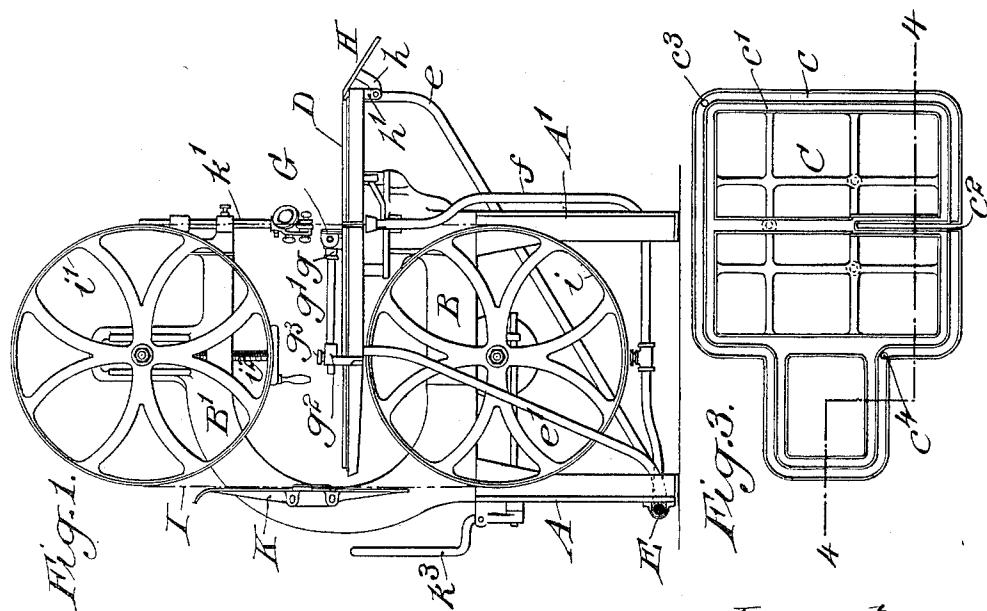
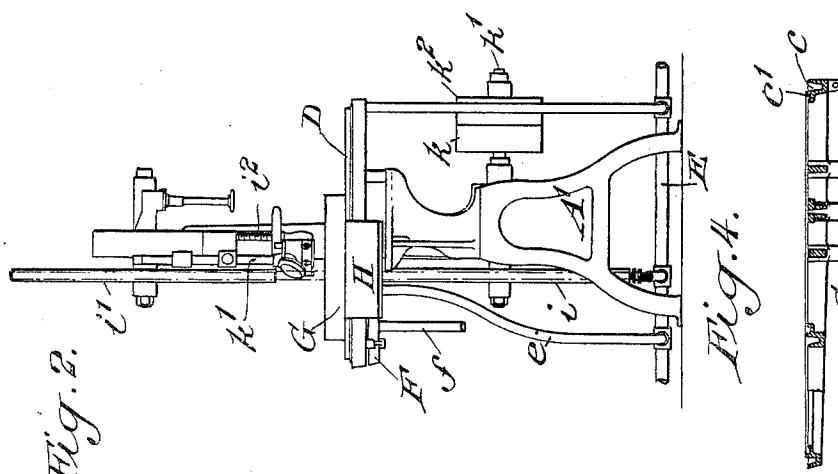
Patented Oct. 16, 1900.

M. H. DETTE.

ICE CUTTING MACHINE.

(Application filed May 4, 1900.)

(No Model.)



Witnesses:
Edward Kieser.
George Bangs.

Inventor:
Max H. Dette
By Brown & DeWol
his Attorney

UNITED STATES PATENT OFFICE.

MAX H. DETTE, OF NEW YORK, N. Y., ASSIGNOR TO THE FIRM OF P. PRYIBIL,
OF SAME PLACE.

ICE-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 659,847, dated October 16, 1900.

Application filed May 4, 1900. Serial No. 15,477. (No model.)

To all whom it may concern:

Be it known that I, MAX H. DETTE, a citizen of the United States, and a resident of New York, borough of Manhattan, State of New York, have invented a new and useful Ice-Cutting Machine, of which the following is a specification.

My invention relates to an ice-cutting machine, with the object in view of providing an expeditious and economical machine for subdividing ice into parts of varying sizes and shapes.

The means at present in common use for subdividing a cake of ice are subject to the objection of excessive waste and oftentimes to uncleanliness. My present invention is intended to obviate these objections and to provide means for handling the ice in a cleanly manner and reducing the waste to a minimum.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 represents the machine in side elevation. Fig. 2 represents the machine in front elevation. Fig. 3 is a top plan view of the table-bed, and Fig. 4 is a vertical section through the table-bed on the line 4-4 of Fig. 3.

The supporting-frame conveniently consists of two pairs of supporting-legs, (denoted by A A'), one pair at the front and another at the rear, the said supporting-legs being surmounted by a bed-piece B, forming a support for the table-bed and having an upwardly and forwardly extended arm B' for supporting the upper saw-pulley and its guides. The table-bed is denoted as a whole by C. It is preferably of skeleton formation and is provided at its margin with a trough c for collecting water from the melting ice and with a marginal ledge c' in proximity to and inwardly from the trough c for receiving the outer edge of a marble slab D, which forms the table on which the ice is intended to rest during the cutting operation.

In speaking of the table D as marble I wish it to be understood that this is at the present time the preferred substance; but other materials of a non-oxidizable nature may be employed—as, for example, glass and aluminium.

The table-bed C is provided at one side

with a slot c², opening through to the edge of the table for the purpose of admitting the saw, and the table D is provided with a corresponding slot. The trough c is provided at intervals—as, for example, at c³ c⁴—with openings in its bottom, which communicate with pipes e e', leading to a common waste-pipe E at the bottom of the frame. I also locate a trough F under the slot c² after the saw has been placed in position in order to catch the drip water which may escape from the table through said pipe, and a pipe f connects with the trough F and with the common waste-pipe E. On the table D there rests a gage G, hinged to a headpiece g, adapted to rest on the surface of the table, the said head g being attached to a stem g', which has a longitudinally-sliding movement in a supporting-bracket g², a set-screw g³ being provided for holding the stem g' in its various adjustments. The hinging of the gage G to the head g permits the gage to rest flatly against the cake of ice, whether it be perpendicular to the table or oblique thereto, while the head g is permitted to rest on the table and determine the thickness of the piece to be cut.

At the front of the table there is an apron H, attached to swinging arms h, pivoted to hangers h', depending from the front of the table-bed to permit the apron H to be swung up into position to slide cakes of ice onto or off the table or down underneath the table-bed out of the way when not needed.

The saw employed for cutting the ice is a band-saw, its position being indicated by the line I. It is mounted on pulleys i i', the lower pulley i being journaled in the supporting-frame and the upper pulley i' being journaled in the overhanging arm B' of the supporting-frame. Suitable guides K K', located, respectively, at the back and front, serve to hold the saw in position, as is usual in connection with band-saw machines. Suitable tension is imparted to the saw by the adjustment of the pulley i' in its bearings by means of the adjusting-screw i², as is usual. The saw is operated by means of a drive-pulley k, fixed on the shaft k' of the pulley i by means of a belt (not shown) leading to a

suitable source of power. (Not shown.) A loose pulley k^2 and a belt-shifting mechanism k^3 , of any well-known or approved form, are employed for stopping and starting the machine at pleasure.

In operation, the gage G having been set at the proper distance from the saw to determine the thickness of the piece of ice to be severed from the cake, the cake of ice is slid onto the table D against the gage G, and while holding it against the gage G it is slid toward the saw and a piece or slice cut off. This operation may be repeated until the cake has been sliced into parts as thick as desired, and then these parts may be in turn subdivided to form pieces of the desired shape and size. The saw itself is very thin, so that there is very little waste by the saw-cut and no chips or small bits of waste ice are formed, such as are commonly formed when a piece of ice is chopped in two or broken up by a sharp instrument or hammer.

The table on which the cake of ice rests may be kept clean, the waste water from the cake of ice being conducted away by the trough at the margin of the table, so that the machine may be used in rooms where it is desirable to keep the floor from being soaked with water.

What I claim is—

1. An ice-cutting machine comprising a band-saw, a table of some suitable non-oxidizable material for supporting the cake of ice in proximity to the saw, the said table being provided with a trough at its margin for conveying away the waste water and a gage for determining the position of the cake of ice relatively to the saw, substantially as set forth. 30

2. An ice-cutting machine comprising a band-saw, a table of some suitable non-oxidizable material for supporting the cake of ice in proximity to the saw, the said table being provided with a marginal trough, a common waste-pipe, branch pipes leading 35 from the common waste-pipe to the said trough, and a gage for determining the position of the cake of ice relatively to the saw, substantially as set forth. 40

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 9th day of April, 1900. 45

MAX H. DETTE.

Witnesses:

FREDK. HAYNES,
GEORGE BARRY, Jr.