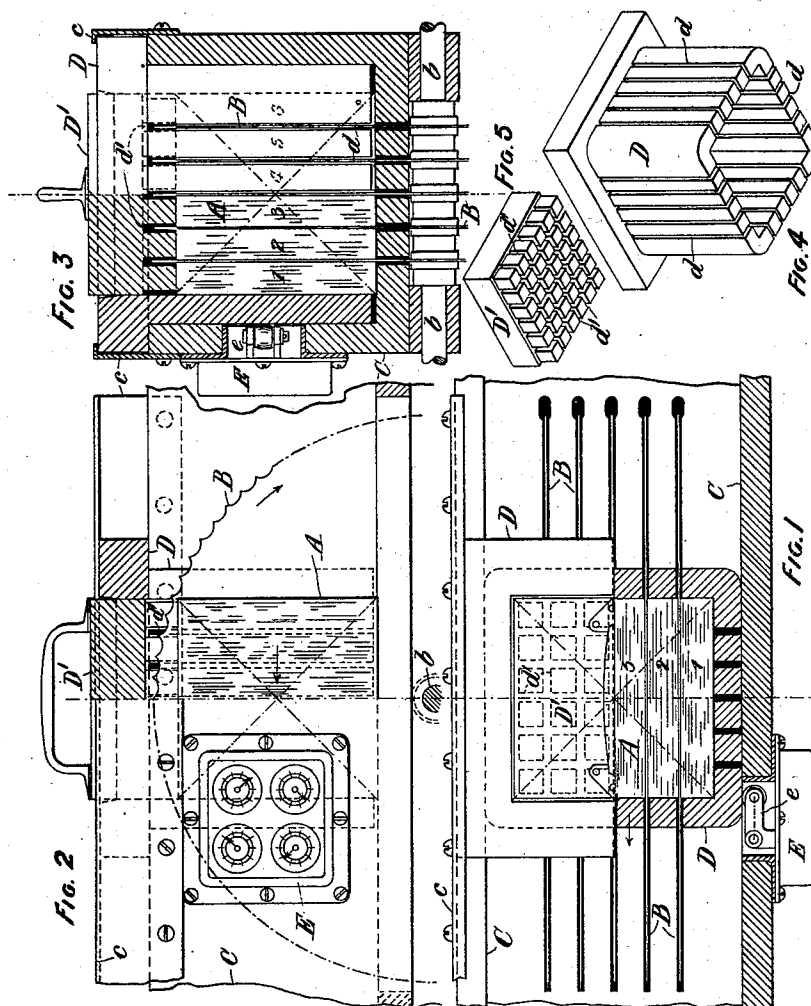


(No Model.)

H. VANDER WEYDE.
APPARATUS FOR CUTTING BLOCK ICE INTO CUBES.

No. 566,038.

Patented Aug. 18, 1896.



Witnesses:
James Conway
Oliver Emberton

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H. Vander Weyde
By [Signature] Attorney

UNITED STATES PATENT OFFICE.

HENRY VANDER WEYDE, OF LONDON, ENGLAND.

APPARATUS FOR CUTTING BLOCK-ICE INTO CUBES.

SPECIFICATION forming part of Letters Patent No. 566,038, dated August 18, 1896.

Application filed November 12, 1895. Serial No. 568,679. (No model.)

To all whom it may concern:

Be it known that I, HENRY VANDER WEYDE, artist and electric-light photographer, of 182 Regent Street, London, W., England, have
5 invented a new and useful Apparatus for Cutting Block-Ice into Cubes, of which the following is a full, clear, and exact description.

This invention relates to improved apparatus for use in cutting up blocks of ice into small cubes of a size suitable for use at table; and it consists in the combination, with a gang of circular saws, of a guide-trough and sliding cage-like holder for holding and guiding the block in the operation of presenting it to the saws three successive times for the purpose of being sawed in three sets of planes, each set intersecting the others at right angles as required for dividing the block into
20 cubes.

Reference is to be had to the accompanying drawings, forming part of this specification, wherein—

Figure 1 is a plan, Fig. 2 a side elevation, and Fig. 3 an end elevation, each partly sectional, illustrating the apparatus for dividing a block of ice into cubes. Figs. 4 and 5 show in perspective, viewed from beneath, the cage-like holder for the block of ice while being
30 saved.

The same letters of reference denote like parts in all the figures.

The cutting of the block A first into slabs 1 2 3 4 5 6, then into prisms, and finally into
35 cubes is performed by means of a gang of circular saws B, mounted on a common shaft b, the saws rotating through slots in the bottom of a trough-like guideway C and projecting up therein a height rather greater than that of the block to be cut. The trough or guideway C is made of a width to just receive a cage-like holder D, within which the ice block A is held while being presented to the saws. This cage-like holder D is of square
40 form in plan, is open at bottom, and of a size internally to just receive the ice block A within it. It has a square top frame which projects beyond the four sides, so as to be adapted to run on the edges of the guide-trough C and beneath inwardly-projecting
50 flanges c, fixed thereon. The opposite sides

of the holder are vertically slitted, as at d, at distances apart corresponding to the saws, so as to give passage to the saws when the holder is slid along the guide-trough, the square
55 form of the holder and the fact that all four sides are slitted enabling the holder and the contained slabs into which the block is cut to be presented to the saws a second time in a direction at right angles to the first without
60 removal from the holder. The holder may, however, be slitted on two opposite sides only. The holder is provided with a weighted top D', which fits removably in the top frame of the holder, for a purpose hereinafter referred
65 to, and which rests upon the top of the ice block A. The under side of this top piece is grooved, as at d', in register with the side slits d of the holder to give passage to the saw-teeth which rise above the block A.
70

The cutting of the block A into slabs is performed by sliding the holder, with the contained block, along the trough until the saws have passed completely through the block, any tendency of the saws to tilt the block and
75 holder being resisted by the engagement of the projecting top frame of the holder beneath the guide-flanges c of the trough. A counting mechanism, such as that shown at E, may be mounted in the side of the trough C, so as
80 to be operated by the holder in its passage along the trough, striking a friction-roller carried by a lever e, in order to register the number of blocks operated on.

After the first passage of the saws through
85 the block the slabs into which it is thereby divided may be subjected to a branding operation, whereby a trade-mark or ornamental device is impressed on one face of each of the cubes into which the block is to be ultimately
90 divided. For this purpose the slabs, while still contained in the cage-like holder D, are slid along the table to branding apparatus, such as that forming the subject of another application for Letters Patent of even date
95 herewith. The slabs, whether thus branded or not, are then superposed one upon the other flatwise, the cage-like holder D is placed over them, and the whole presented to the saws, whereby the superposed slabs are di-
100 vided into prisms. By then turning the holder D and the contained prisms a quarter-round

upon the table and again presenting the mass to the saws the prisms are cut across and thereby divided into cubes.

It will be seen that the holder D serves to
 5 keep in their places the slabs and prisms produced by the first and second cutting operations, so that the presentation of the divided mass of ice in compact form to the saws and the retention of the pieces in their proper position, both during and after the sawing, is
 10 rendered possible. The purpose of making the holder D open at top and providing it with a removable weighted top D' is to admit of the introduction of a sheet-metal case
 15 within the holder D and around the cubes of ice for the purpose of temporarily inclosing them and holding them in place in the operation of packing after the holder D is removed.

I claim—

20 1. Apparatus for cutting block-ice into cubes, consisting in the combination, with a gang of circular saws mounted to work in a

trough-like guide, of a cage-like holder adapted to embrace the ice block having its sides vertically slotted from the bottom upward to
 25 correspond, and give passage, to the saws and having a solid frame at the upper part adapted to slide on and in engagement with the sides of the trough, substantially as specified.

2. In apparatus for cutting block-ice into
 30 cubes, the combination, with a gang of circular saws working in a guide-trough and with a holder for the block having vertically-slitted sides and adapted to slide on and in engagement
 35 with the sides of the trough, of a top presser-piece adapted to rest on the ice block and grooved to give passage to the saws, as described.

HENRY VANDER WEYDE.

In presence of—

G. F. WARREN,
 JOSEPH LAKE.