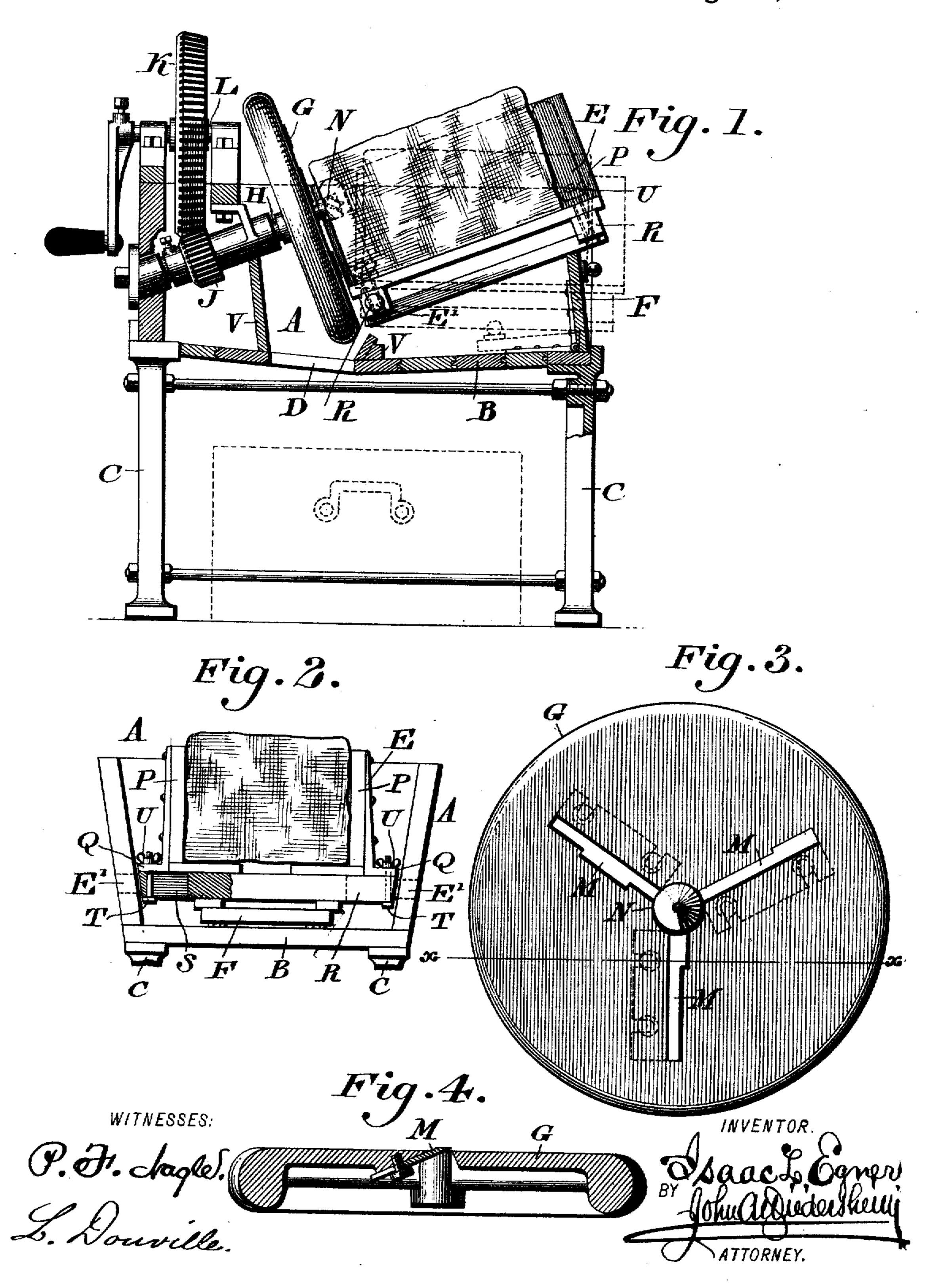
(No Model.)

I. L. EGNER.
ICE SHAVER.

No. 525,195.

Patented Aug. 28, 1894.



## United States Patent Office.

ISAAC L. EGNER, OF PHILADELPHIA, PENNSYLVANIA.

## ICE-SHAVER.

SPECIFICATION forming part of Letters Patent No. 525,195, dated August 28, 1894.

Application filed February 23, 1894. Serial No. 501,120. (No model.)

To all whom it may concern:

Be it known that I, Isaac L. Egner, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Ice-Shavers, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of an ice shaver embodying an ice holder or trough which may be readily raised, and is provided with means for sustaining the same in elevated position, thus avoiding severe lifting of the ice to place it primarily in the trough.

It also consists of a novel construction of the blades of the cutter.

It also consists of means for operating the shaver or cutter relatively to the inclined position of the ice holder or trough.

Figure 1 represents a partial side elevation and partial vertical section of an ice shaver embodying my invention. Fig. 2 represents an end elevation of a portion thereof. Fig. 3 represents a face view of the cutter on an enlarged scale. Fig. 4 represents a section on line x, x, Fig. 3.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings: A designates a frame or box which is provided with an inclined bottom B, and supported on the legs C in any suitable manner, said bottom having an opening D for directing the shaved ice to a place of collection.

E designates an ice rack, holder or trough, which is connected by a horizontal axis E' with the frame A, so that said trough may be raised and lowered, as shown by the full and dotted lines Fig. 1.

Hinged to the outer end of the bottom B, is a prop or leg F, which is located beneath the outer end of the trough E, and adapted to be folded on said bottom, or raised so as to bear against the trough E from below, so as to hold the same in raised position.

Adjacent to the inner end of the trough is a rotary cutter G, which is connected with the shaft II, which carries the pinion J, with which meshes the spur wheel K, whose shaft to L and the shaft II are mounted on suitable bearings on the frame A. The cutter G con-

sists of a wheel having blades M, arranged radially or tangentially thereon, and has at its center the auger bit N, which is adapted to screw into the block of ice and assist in 55 drawing the same toward the cutter although the inclined position of the trough E will cause the block to descend by gravity to the cutter, or a weight may be placed on the outer end of the block to force down the latter if so desired, it being seen that the shaft H occupies an oblique position, so that the axis of the cutter is in a plane parallel with the block of ice.

The sides P of the trough E are laterally 65 adjustable for which purpose they are made separate from the floor of the trough, and have secured to them the feet Q. The bottom sills R of the trough are formed with transverse slots S, which receive the bolts T, 70 which pass through the feet Q, and are provided with tightening nuts U, whereby when the sides are adjusted relatively to the width or thickness of the block of ice, they may be firmly held in position.

The operation is as follows: The leg F is primarily in lowered position on the bottom B, and the trough E is primarily in lowered position on said leg. The block of ice is placed on the trough and the latter is raised, 80 it readily turning on its axis E'. The leg F is also raised so as to be placed under the trough, whereby the ice is held in proper position to be shaved. The cutter is now rotated and acts upon the ice so as to shave the 85 same, the pieces or shavings passing through the throats of the cutter and dropping therefrom through the openings D into the receptacle below. On the bottom B, aside of the opening D are guards V, which prevent the 90 ice clippings and shavings from flying, and serve to direct the same into the opening D. The edges of the blades of the cutters are staggered so as to cut the ice in different paths and avoid the action of all of the knives 95 in one place.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An ice shaver having a frame with sup- 100 porting legs, and an inclined bottom with an opening therein, a trough above said bottom,

a cutter adjacent to one end of said trough and a guard between said trough and bottom, said parts being combined substantially as described.

5 2. An ice shaver consisting of a frame having an inclined bottom with an opening therein, an ice rack having adjustable sides in said frame and provided with a horizontal axis connected with said frame, a prop for said to trough, a horizontal shaft with a spur wheel, an inclined shaft with pinion meshing with said spur wheel and carrying a cutter adjacent to the inner end of said trough, and guards aside of the opening in said bottom,

said parts being combined substantially as 15 described.

3. An ice shaver having a frame with a discharge opening in its bottom, and a guard adjacent to said opening, a rotary cutter, a rising and falling ice holder, and a leg for supporting said holder in elevated position, said cutter, holder and leg being mounted on the frame, and the parts named being combined substantially as described.

ISAAC L. EGNER.

Witnesses:

JOHN A. WIEDERSHEIM, A. P. JENNINGS.