

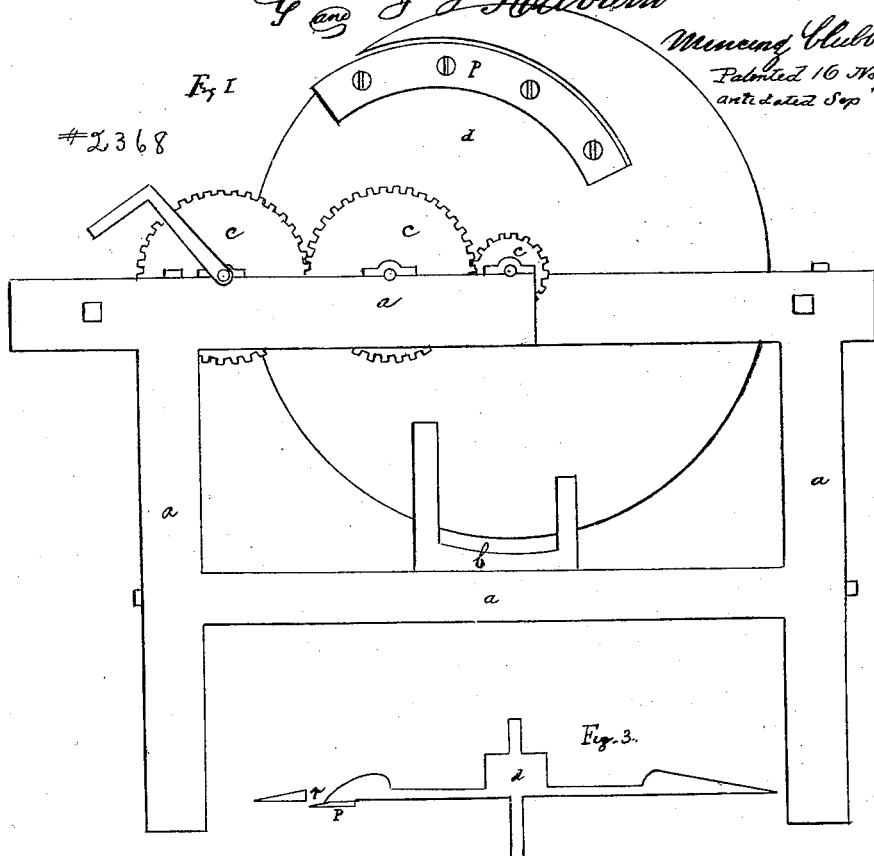
*G. & J. J. Holburn*

*Mining Shovel*

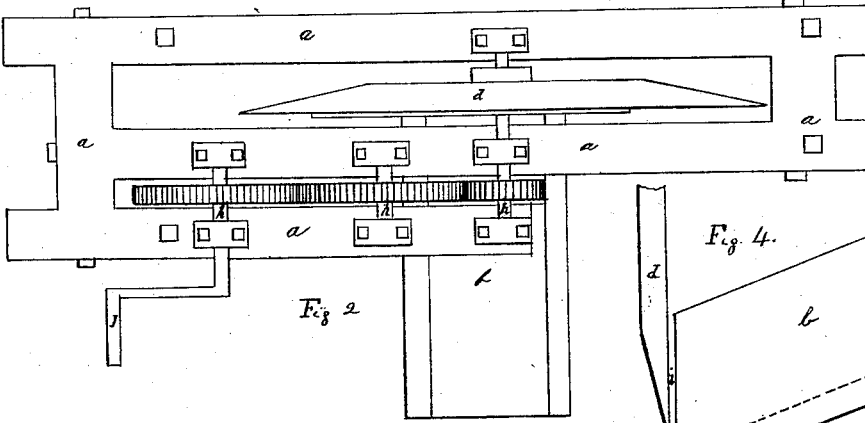
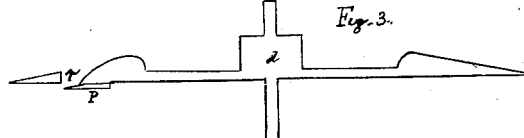
*Patented 16 Nov. 1841*

*Ante-dated Sep. 20 ..*

*Fig. 1*  
#2368

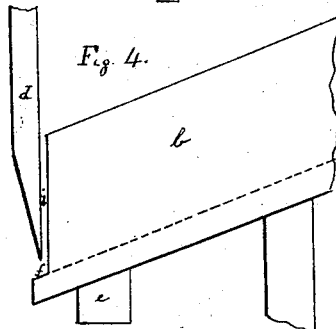


*Fig. 3.*



*Fig. 2*

*Fig. 4.*



# UNITED STATES PATENT OFFICE.

GEORGE KILBURN AND J. J. KILBURN, OF FALL RIVER, MASSACHUSETTS.

## MACHINE FOR MINCING BLUBBER.

Specification forming part of Letters Patent No. 2,368, dated November 16, 1841; antedated September 20, 1841.

*To all whom it may concern:*

Be it known that we, GEORGE KILBURN and JOHN J. KILBURN, both of Fall River, in the county of Bristol and State of Massachusetts, have invented a new and useful machine for mincing blubber on board ships or vessels employed in the whale fishery, and for other purposes, and called the "Fly-Mincer;" and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, Figs. 1, 2, 3, 4.

Figure 1 is a side elevation; Fig. 2, plan of the top of the frame; Fig. 3, plan showing section of fly-wheel and knife; Fig. 4, plan showing the lower edge and side of the fly-wheel and the position of the hopper in connection with it.

A A A A, Figs. 1, 2, represent a wooden frame, shaped as seen in drawings, or otherwise properly framed, on which is hung or connected fly-wheel *d*, of, say, three feet in diameter, or any other desirable size, as in Figs. 1, 2. To this wheel knife *p*, Fig. 1, is attached, hereinafter more particularly described.

C C C, Fig. 1, are cog-wheels sufficiently large to carry crank *J* from hopper *b*, geared so as to give sufficient power and speed to the machine; *h h h*, Fig. 2, arbors for cog and fly wheels; *p*, Fig. 1, curved knife of sufficient length to give a drawing stroke, and of such a curve that when it is attached to the wheel and the wheel turned around the edge will progress downward with equal progression from heel to point, as represented in Fig. 1, and set off from the wheel so as to cut the slices of any desirable thickness, the edge being placed even with the outer edge of the slot, as seen at *p*, Fig. 3. The fly-wheel is beveled on the back side to an edge at the periphery, that it may pass through between the mass of blubber and the slice as it is cut off. There is a slot through the wheel under-

neath the knife and of the same curve, one inch wide on the side next to the knife, and square through the wheel next the periphery, and beveled back toward the center, as seen at *r*, Fig. 3. The hopper is made one foot wide, the upper side of the bottom concave, of the same circle of the fly-wheel and longer than the sides, that it may project under the wheel, and placed at an angle from the side of the wheel of, say, twenty or thirty degrees, and secured to the frame, as represented at *e*, Fig. 4, leaving a space between the sides of the hopper and the wheel for the knife to pass as it cuts the blubber, as seen at *i*, Fig. 4, and the bottom of the hopper placed below the point of the knife, that it may not cut the blubber entirely through, but leave the slices hanging together, that they may be easily handled, as seen at *f*, Fig. 4.

Having hereinabove explained our invention, we shall claim in the same as follows:

We do not claim the knife on the wheel or the opening in the face of the wheel, nor the beveled edge of the wheel, as these have long since been known and used separately, as also the hopper; but

What we do claim as our invention, and desire to secure by Letters Patent, is—

Making the back face of the wheel beveled toward the periphery, and the beveled opening through which the blubber passes after it has been cut, in combination with the curved knife, and these thus combined in combination with the arrangement of the hopper, so that the part cut shall not be entirely severed from the mass in the hopper, all substantially as herein specified.

Fall River, August 26, 1841.

GEORGE KILBURN.  
J. J. KILBURN.

Witnesses:

WM. T. WOOD,  
P. W. LELAND.