

P. B. McKelvey,

Soap Cutter.

No. 82,971.

Patented Oct. 13. 1868.

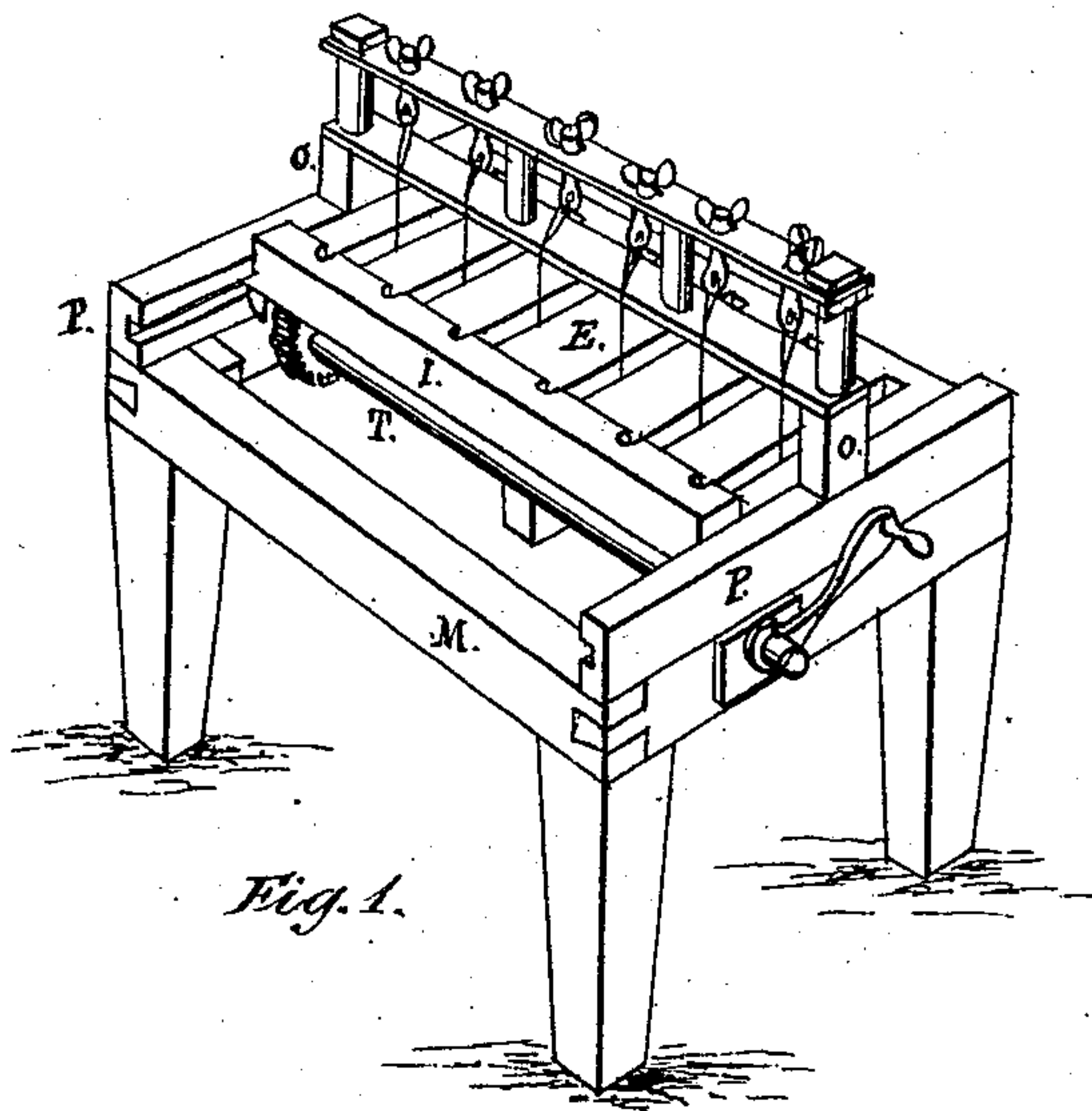


Fig. 1.

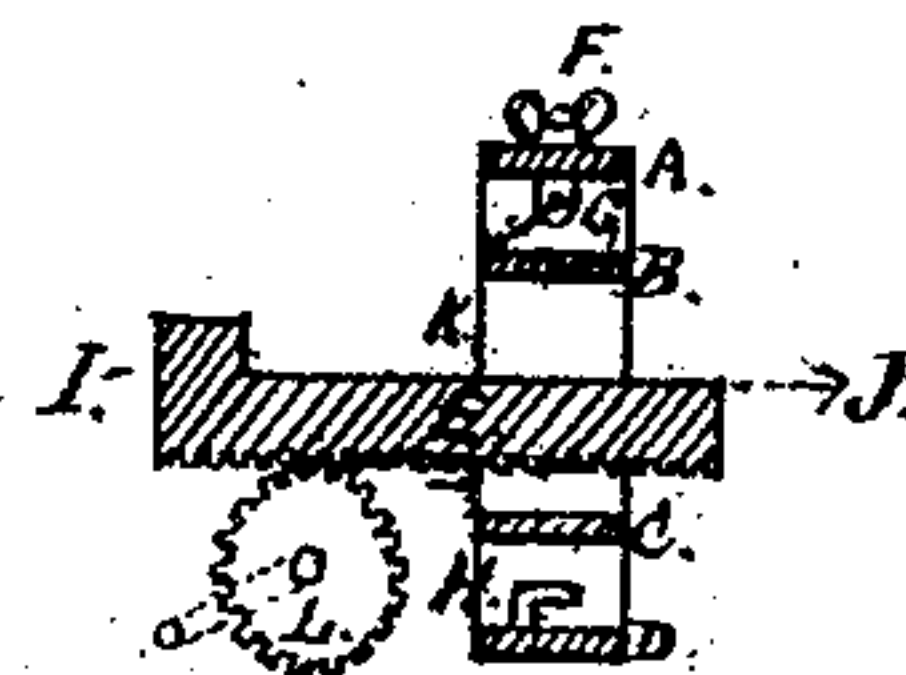


Fig. 3.

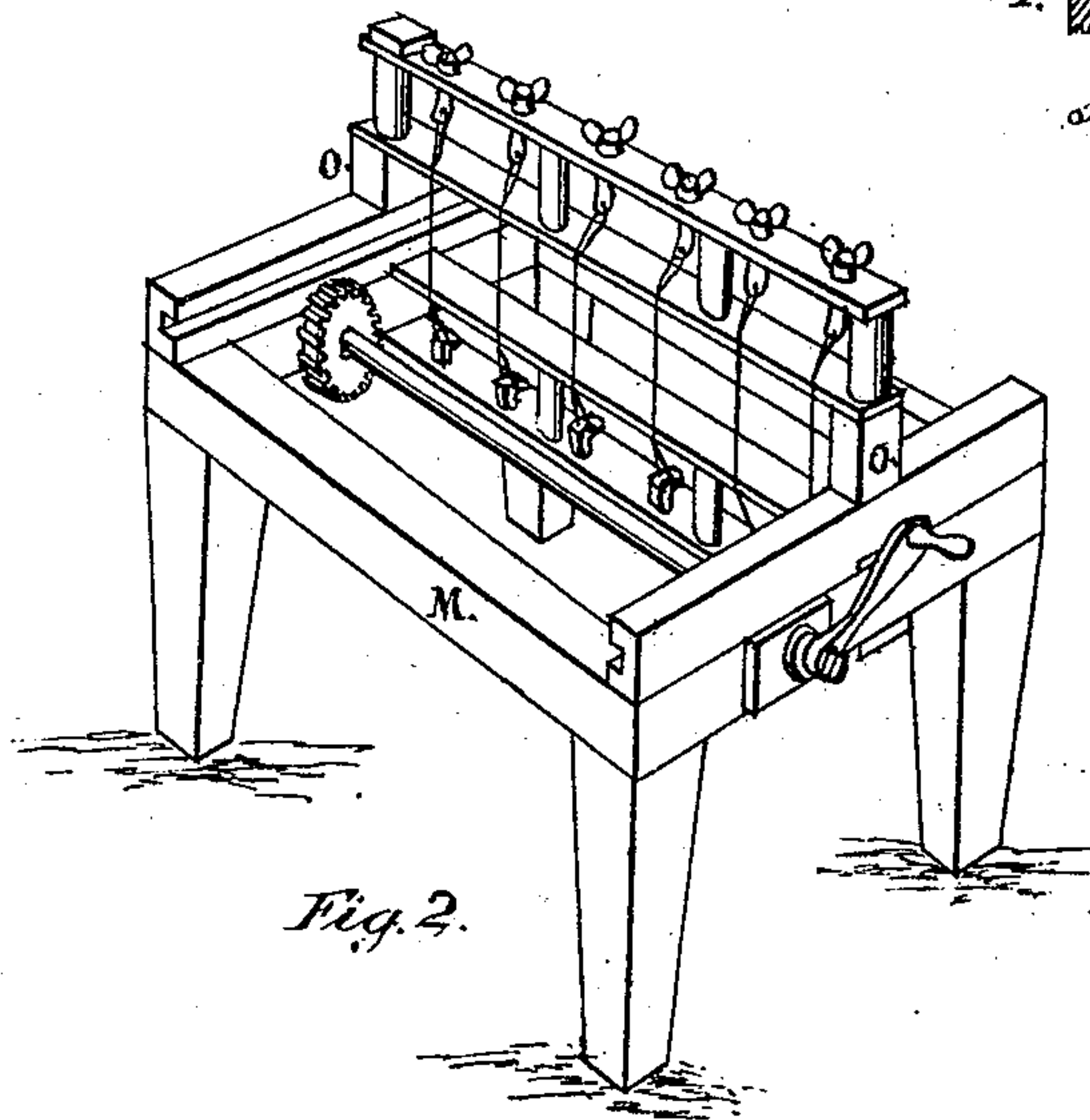


Fig. 2.

Witnesses;

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United States Patent Office.

PETER B. MCKELVEY, OF ALBANY, NEW YORK.

Letters Patent No. 82,971, dated October 13, 1868.

IMPROVED MACHINE FOR CUTTING SOAP.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, PETER B. MCKELVEY, of the city and county of Albany, and State of New York, have invented a new and useful Machine for Cutting Soap into Bars; and that the following is a full, true, and exact description of my said invention, reference being had to the accompanying drawings, which are made a part of this specification, and in which—

Figure 1 is a view of my machine ready for use;

Figure 2 is a view of the said machine with the carriage removed, showing the frame upon which the wires are stretched; and

Figure 3 represents a section of the said frame with a section of the carriage, showing the relative positions of the same.

The nature of my invention consists in the employment of a number of stationary wires, which are strained vertically upon a frame, and against which the slab of soap is pressed by means of a movable slide or carriage moving at right angles to the said wires, substantially as hereinafter described and set forth.

Having thus described the nature of my said invention, and to enable others skilled in the art to which it relates to make and use the same, I will proceed to describe the construction and operation thereof, which is as follows:

M, figs. 1 and 2, is a wooden frame, supported on legs at a convenient height from the ground. To the bottom of this frame a plate, D, of iron or other suitable metal, is firmly fixed, with hooks H at intervals to hold the wires. Above this, and about the middle of the frame M, is a similar plate, C, with notches or grooves in the edge, through which the wires pass.

A convenient distance above the frame, upon the blocks O O, is the similar plate B, with notches also in the edge, through which the wires are carried. A few inches above this plate, and connected with it by metal pillars, or otherwise, is the metal plate A, with apertures for the passage of the screws G G, which are tightened and loosened, at the pleasure of the operator, by the nuts F F. To the hooks H H, I attach small wires, of the size commonly used in cutting soap, and pass them through the notches in the plates C and B, and fasten them to the lower end of the screws G G. The said plates B and C are constructed with several notches or grooves in the edge for each wire, so that the size of the bar of soap can be varied, as hereinafter set forth.

I, fig. 1, is a carriage or slide, moving to and fro in the grooves P P of the frame M. This carriage is operated by a rack and pinion, as shown in the drawings, worked by the crank, L. There is a rack and pinion at each end of the carriage, connected by the

cylinder T. This carriage is simply a frame, of a suitable size to fit the frame M, and upon which are laid bars E, with spaces between them for the wires hereinafter mentioned. I make these bars movable, and use them of different sizes, according to the size of the bars of soap which I desire to cut. The carriage is also provided with a back or ledge, I, which rises above the said bars to a height about equal to the thickness of a slab of soap, and has semicircular notches in its inside edge, corresponding to the wires and the spaces between the bars. I make this back removable, and use several sizes, with notches, according to the size of the bars.

The operation of my machine is as follows:

Having placed the several wires above mentioned in the notches of the plates B and C, according to the size of the bars of soap that I desire to cut, I strain each wire tight by means of the nut F and screw G. I then lay the slab of soap to be cut on the carriage, in front of the said wires, and move the carriage in the direction of the wires, by means of the rack and pinion, worked by the winch or crank, L. The slab is prevented from sliding backward by the ledge or back I, and, being pressed against and through the said wires, is divided into bars which are perfectly true and smooth.

To make the bars of soap larger or smaller, I loosen the wires by means of the said nuts and screws, and place them farther apart or nearer together in other notches in the said plates B and C. I then tighten them by means of the said nuts and screws, and change the bars E and the back of the carriage I to correspond to the altered position of the wires. By this means I am enabled to make the bars of soap wider or narrower, as I please.

Having thus described the construction and operation of my said invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The carriage I, constructed and operated substantially as hereinbefore specified and set forth.

2. The said carriage, when combined with stationary wires, in the manner and for the purposes above described and set forth.

3. The combination of the stationary wires with the notched plates B and C, the screws G, and nuts F, substantially in the manner, and for the purposes hereinafter specified and set forth.

In witness whereof, I have hereunto set my hand, this 21st day of February, 1867.

PETER B. MCKELVEY.

Witnesses:

CHARLES D. KELLUM,
C. E. PATTERSON.