J. Gallipo,

Soap Cutting.

No. 100,135. Patented Feb. 22. 1870.

Fig: 1.

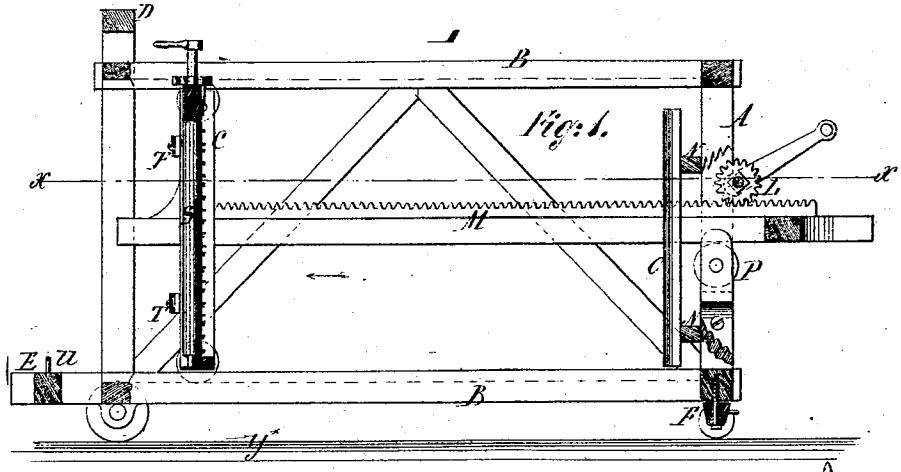


Fig: 2

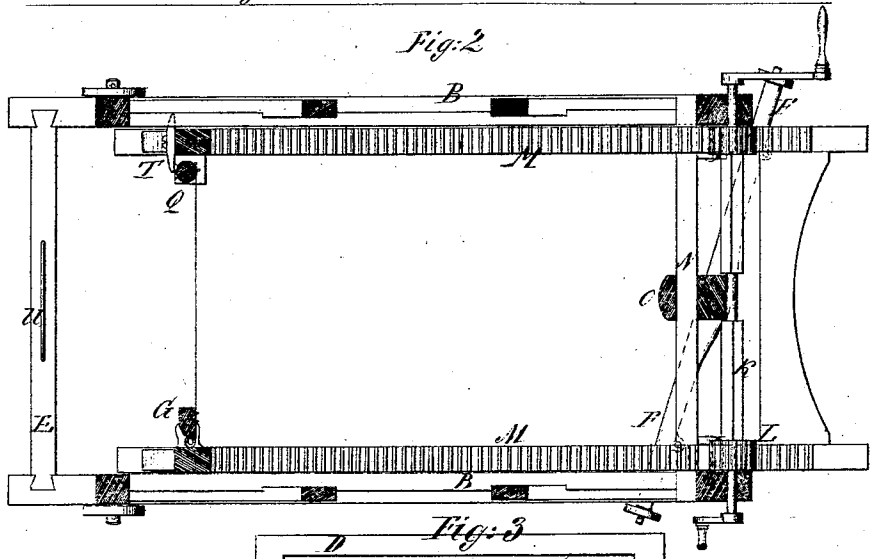
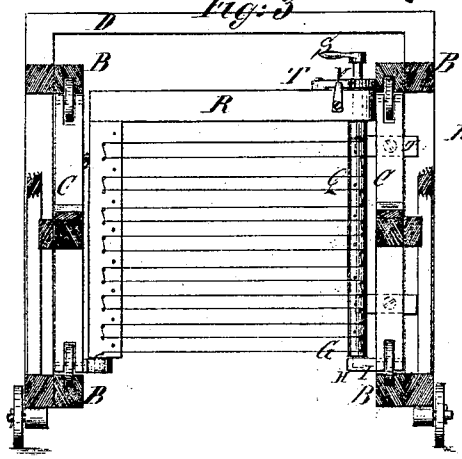


Fig: 3



Witnesses.

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United States Patent Office.

JOSEPH GALLIPO, OF COHOES, NEW YORK.

Letters Patent No. 100,135, *dated February* 22, 1870.

IMPROVED MACHINE FOR CUTTING SOAP INTO SLABS.

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, JOSEPH GALLIPO, of Cohoes, in the county of Albany, and State of New York, have invented a new and useful Improvement in Machinery for Cutting Soap; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 is a vertical longitudinal section of a machine which contains my invention.

Figure 2 is a horizontal section in the plane of the line *x x*, fig. 1.

Figure 3 is a vertical cross-section, taken in the plane of the line *y y*, fig. 1, looking in the direction of the arrow.

Similar letters indicate corresponding parts.

This invention relates to machinery for slabbing soap, or cutting soap into slabs or layers. The machine or apparatus is supported upon wheels, so that it can be moved with facility to the place where the mass of soap to be cut is located.

The rear axle is so arranged that it can turn on a center bolt or pivot and take a position at right angles with the rear axle, whereby I am able to anchor the machine at any spot after it has been rolled along, so as to enclose the mass of soap.

The machine consists of a rectangular frame, open at one end, and of such a width and length that it can inclose the mass of soap to be cut, the cutter being swung open when the machine is pushed over the mass, and closed again when the mass is within the apparatus.

The cutter is composed of a series of wires arranged parallel with each other upon a swinging frame, which is hinged at the end of and across a traveling rack-frame, which is arranged to move within the main frame of the machine. The cutting wires are tightened up to take up any slack which may occur in them by turning one of the posts of the swinging frame.

The letter A designates the main frame of the machine, whose upper and lower string-pieces B B are grooved, as shown in figs. 1 and 3, to receive the rollers of the traveling rack-frame C, and form guides therefor.

The front part of the machine is stiffened transversely by means of the raised beam D and the removable cross-piece E, whose ends are dovetailed and let loosely into dovetailed recesses provided in the lower string-pieces B.

When the machine is to be pushed over a mass of soap the cross-piece E, which is provided with a handle, U, is taken away, and after the soap is inclosed it is replaced.

The whole machine is supported upon wheels, the hind wheels being placed on the ends of an axle, F, which is pivoted at its center to the bottom of the machine, so that when it is desired to keep it stationary the axle can be turned at an angle or be turned lengthwise of the machine for the purpose of preventing any advance.

The letter G designates the cutter-frame. It is hinged at the forward end of the traveling rack-frame C and is of such a size as to close the forward end of the latter, when swung to a transverse position.

The free end of the cutter-frame is stepped in a recess, H, made for its foot in a projecting piece, I, which is provided on the inside of the rack-frame, and the forward side of the recess H is open, as shown in fig. 2, to allow the foot of the cutter-frame to be moved in and out at pleasure when one swings it open or shut.

When a mass of soap is inclosed within the machine the cutter-frame is swung across to its transverse position, and is then locked by means of buttons J, or other suitable devices. The machine is then ready for operation.

The cutters are now pressed against the mass of soap by giving motion to the traveling frame C, which is done by revolving the shaft K, which turns in bearings provided in the main frame, and whose pinions L L engage the racks M M formed on the traveling frame C, the movement of the said frame being toward the rear so as to press the cutters against the mass of soap which abuts against the inner end of the main frame A, which is strengthened at that part by the horizontal pieces N N and the central vertical bar O, whose surface projects from the pieces N N, and is rounded so that the cutting wires or cutters will not receive injury as they emerge from the mass of soap.

After the mass has been cut the cutter frame is swung open, the cross-piece E is removed, and the machine is rolled off and away from it, ready to repeat the operation on a fresh mass.

The racks of the traveling rack-frame C are supported at the rear end of the main frame upon anti-friction rollers P P, whose position is directly beneath the driving pinions L L.

The free end of the cutter frame is composed of a cylinder, Q, on which, or on pins on which are attached the strands of wire which compose the parallel cutters.

The cylinder Q turns in and is supported, through the means of a collar, V, by the end of the framing R of the cutter-frame, and on its periphery are pins S, around which are passed the strands of wire which compose the cutters.

When the cutters are slack they are strained and straightened out by turning the cylinder through the

handle S on its upper end, and the cylinder is prevented from slipping or turning back after the strands have been tightened by means of a spring detent, T, placed on the top of the framing R, which engages ratchet-teeth cut on the periphery of the collar V of the cylinder.

This machine or apparatus facilitates the operation of slabbing or cutting masses of soap into parallel layers, and in order to use the same machine for cutting slabs of different thicknesses, I hinge the cutter-frame to the rack-frame in such a manner as to be capable of being lifted off its hinges, when another cutter-frame, whose cutters are nearer or further apart, as the case may require, is hung in its place.

I am aware that it is not new to cut soap into slabs by means of wires which are drawn through the block, such being shown in Letters Patent of Palmer & Bush, dated August 18, 1868. In this case the framework of the whole device must be lifted over the block before the wires can be operated.

The same is also shown in the patent of H. and A. Phelps, dated September 3, 1867, in which the wires are secured to a gate, which is clamped to the carriage which draws the wires, but said gate must be removed from the carriage before the operation of cutting is commenced.

I therefore disclaim the above patents.

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

1. The combination of a soap-cutting or slabbing machine with rollers on which it is supported and moves, the rear rollers being mounted on a swinging axle, substantially as described.

2. The swinging cutter-frame G and the movable cross-piece E, in combination with the main frame A and the traveling rack-frame C, substantially as described.

3. The revolving cylinder Q of the cutter-frame in combination with the strands which compose the cutters, and with the detent and ratchet which lock the cylinder after being strained or wound up, substantially as described.

This specification signed by me this 31st day of August, 1869.

his
JOSEPH × GALLIPO.
mark.

Witnesses:
WM. MANNING,
HARVEY CLUTE.