N. A. CHANDLER & J. C. BOESCH.

MACHINE FOR CUTTING SOAP.

No. 193,223. Patented July 17, 1877.

Fig. 1.

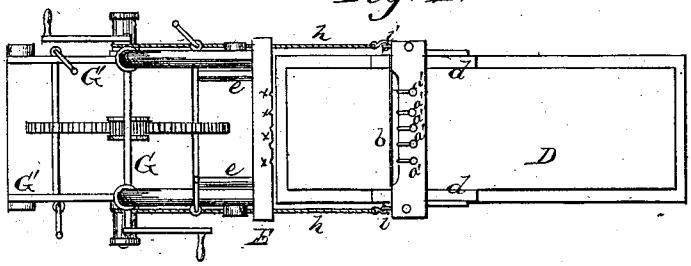


Fig. 2.

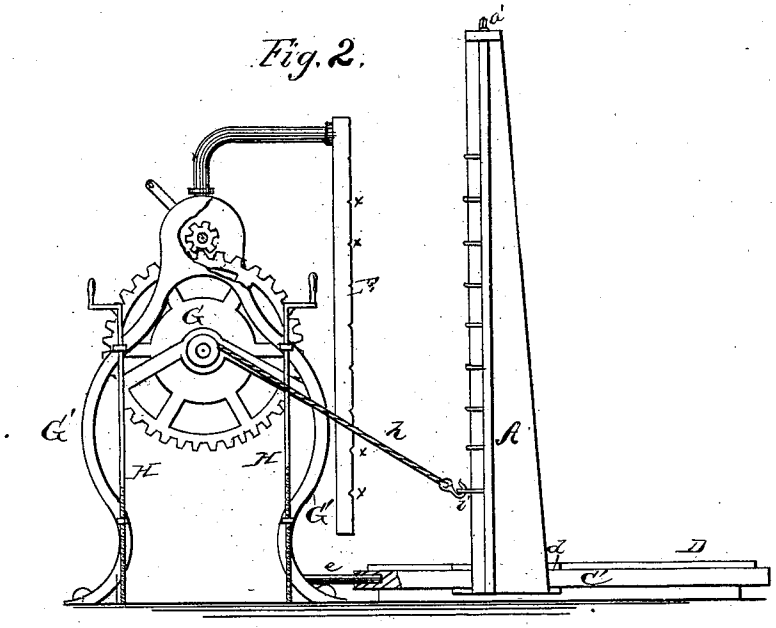


Fig. 3.

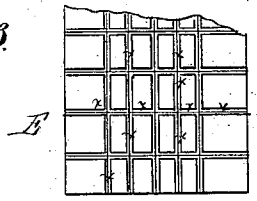
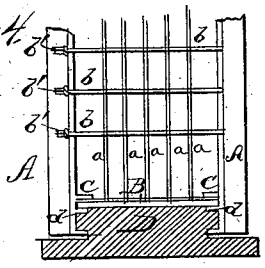


Fig. 4.



Witnesses.

N. McArthur.

C. L. Ewell.

Inventors.

N. A. Chandler & J. C. Boesch.

per

T. H. Alexander & Elliott

Attorneys.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

NELSON A. CHANDLER AND JOHN C. BOESCH, OF CHARLESTON, S. C.

IMPROVEMENT IN MACHINES FOR CUTTING SOAP.

Specification forming part of Letters Patent No. **193,223**, dated July 17, 1877; application filed May 26, 1877.

To all whom it may concern:

Be it known that we, N. A. CHANDLER and J. C. BOESCH, of Charleston, in the county of Charleston and State of South Carolina, have invented certain new and useful Improvements in Machines for Cutting Soap; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of our invention consists in the construction and arrangement of a machine for cutting a frame of soap in bars by one cut by means of a series of horizontal and vertical wires, arranged in a movable frame, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view, Fig. 2 is a side elevation, and Figs. 3 and 4 are details, of our invention.

A represents a vertical frame, of any suitable dimensions, provided with a series of vertical wires, *a a*, and a series of horizontal wires, *b b*. The vertical wires *a a* are attached at the bottom to a steel cutting-blade, B, bolted to lugs C C, cast upon the inner sides of the frame A, near the bottom, while the upper ends of said vertical wires *a* are adjusted at the top of the frame by set-bolts *a' a'*. The horizontal wires *b b* are fastened to one side of the frame, and adjusted at the other side by set-bolts *b' b'*. At the bottom of the frame A are flanges *d d*, which form guides to conduct it on the bottom board D of the soap-frame. G represents a common gear-windlass, arranged in a frame, G', to the front of which is bolted a vertical face-board, E, to hold the soap in place. This board is provided with a series of vertical and horizontal grooves, *x x*, for the wires *a* and *b* to enter. The windlass-frame G' has adjusting-screws H H on the sides to raise and lower the same, so as to let two pins, *e e*, projecting from the same, pass into sockets or holes in the bottom C' of the soap-frame. The windlass is attached to the soap-cutting frame A by chains or ropes *h h*, running from drums on the windlass to the sides of the frame A, where they are hooked to eyebolts *i i*.

After the frames are removed and the soap is ready for cutting, place the soap-cutting frame A on the end of the bottom board C, and move it up to the soap. The windlass is then placed at the opposite end, and, after regulating the height, and the steady-pins *e* having entered the bottom board C, the chains or ropes *h* are hooked to the cutting-frame A. Then, by turning the cranks of the windlass, the cutter is drawn up until the wires have all passed entirely through the soap, thus cutting the entire frame of soap into bars at one operation.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In a horizontally-working soap-cutting machine, the combination of the frame A, having vertical and horizontal wires *a b* and cutter B, and movable upon the bottom board D, the adjustable frame G', with windlass G and pins *e*, the chains or ropes *h*, and grooved stationary face-board E, all substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

NELSON A. CHANDLER.
JOHN CASPER BOESCH.

Witnesses:
W. M. MOLEN,
R. C. MCCLURE.