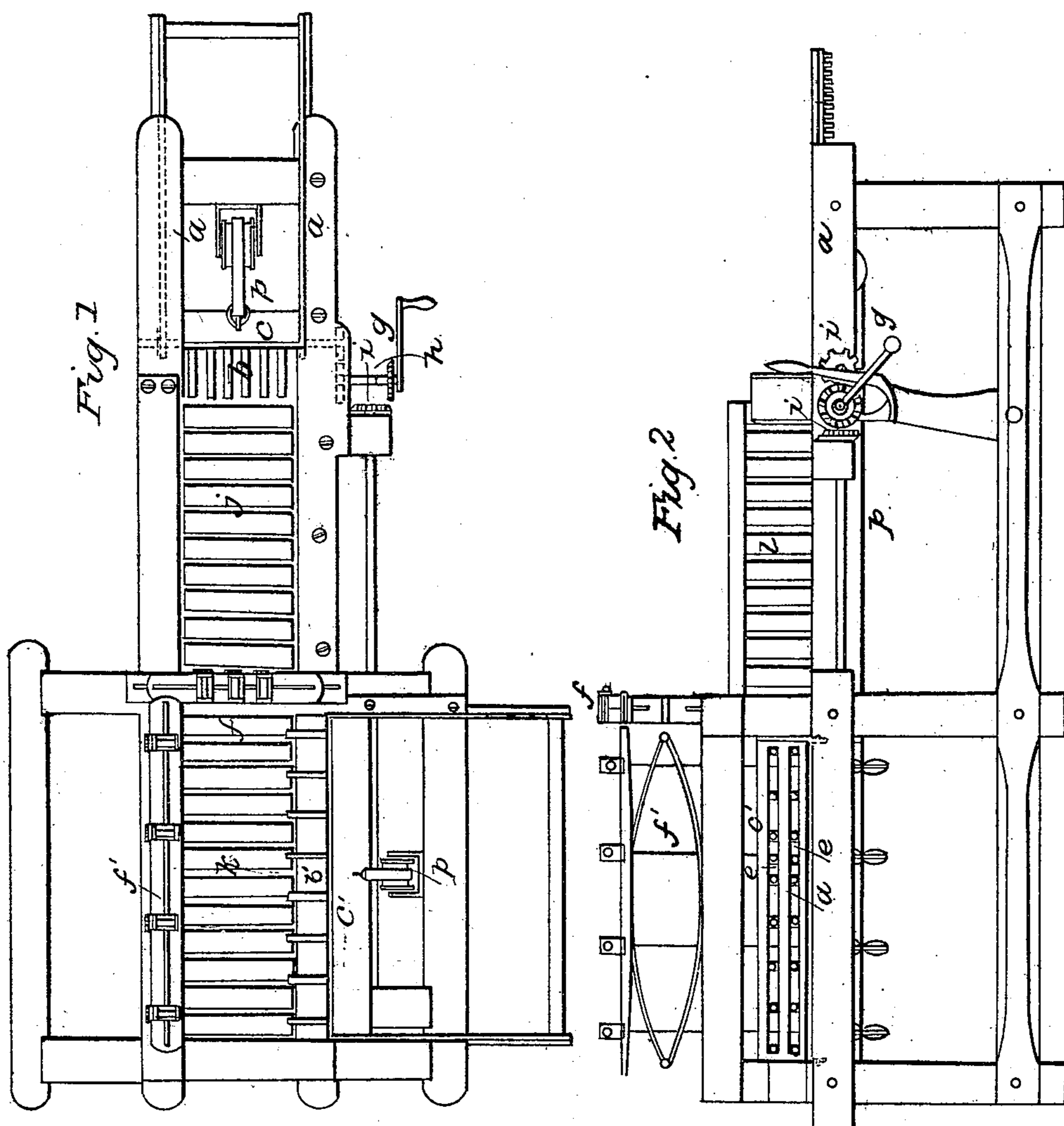


A. VANHAAGEN.

Cutting Soap.

No. 13,367.

Patented July 31, 1855.



UNITED STATES PATENT OFFICE.

ANTON VAN HAAGEN, OF CINCINNATI, OHIO.

SOAP-CUTTING MACHINE.

Specification of Letters Patent No. 13,367, dated July 31, 1855.

To all whom it may concern:

Be it known that I, ANTON VAN HAAGEN, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Machine for Cutting Soap; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the annexed drawings, making part of this specification.

10 The object of my invention is to convert one or more slabs of soap into cakes ready for packing at one operation and without handling during the process.

15 In the accompanying drawing Figure 1 is a plan. Fig. 2 is a side elevation.

The sills (*a*) form guide ways for the device (*b c*) which consists of a range of battens or brackets (*b*) capable of being attached by screws at any desired distance apart to the head (*c*), a pair of slats in the head (*c*) permitting to the screws a longitudinal traverse in the head when slackened for that purpose. This I call the barring driver. (*b c d e*) is a similar device which I call the caking driver, and by reference to the drawing of this a clear understanding of both drivers is obtained. In the caking driver, (*b'*) are the battens, (*c'*) the head, (*d*) the screws, (*e*) the slots. The intervals between the battens in either driver are to prevent the entry of the respective range of wires *f* or *f'* on emerging from the soap. These ranges consist of wires stretched vertically and arranged in a pair of vertical planes at right angles to each other. The bearing surface presented by the collective edges of the battens is adapted to correspond with the end or side surface respectively of the tier of slabs which is to be operated upon.

45 By means of the winch (*g*) and reversible shaft (*h*), in connection with the gearing (*i*) or (*i'*), either driver may be advanced, and as soon as the driving power is detached the india rubber thongs (*p p'*) draw back the drivers to their first position.

(*j*) is a range of rollers in a horizontal position but with their axes parallel with the frame, and on the other side of the wires (*f*) is another range of rollers (*k*) in a line with the range (*j*) but having their axes parallel with the frame. (*l*) is a vertical range of rollers flanking the range (*j*). These rollers have several axes: They facilitate by their revolution the advance of the soap, carry off and discharge immediately any crumbs that would otherwise mar its surface and prevent any severe friction against the surface of the soap.

The operation is as follows: A slab of soap, or a tier of two, three or more, according to circumstances and the capacity of the machine, being laid on the rollers (*j*) in front of the driver (*b c*) and with one edge bearing close against the rollers (*l*), the winch is moved into gear, and the slabs being advanced by the driver are run between the wires (*f*) and thence onto the rollers (*k*) immediately in front of the driver (*b c*); which driver being in its turn advanced pushes the bars through the wires whence they emerge in the form of cakes and may be received by a platform or by the boxes in which they are transported.

I claim as new and of my invention—

The ranges *f*, *f'*, of vertical wires, at right angles to each other, in combination with the drivers *b*, *b'*, moving at right angles to each other, and the ranges of rollers *k*, *l*, *b j*, for the purpose of cutting blocks of soap directly into slabs and bars, at one operation, and without handling thereof, when once on the machine.

In testimony whereof, I hereunto set my hand before two subscribing witnesses.

A. VAN HAAGEN.

Witnesses:

GEO. H. KNIGHT,
THOS. W. SCOTT.