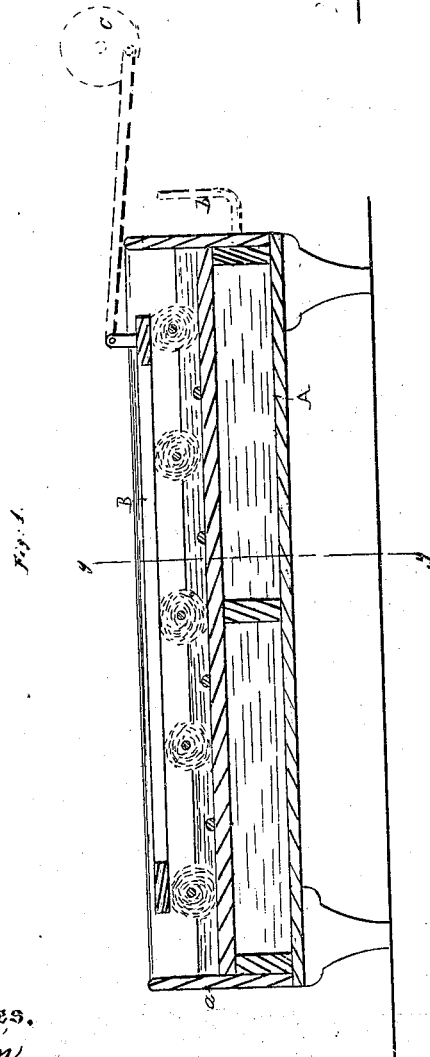
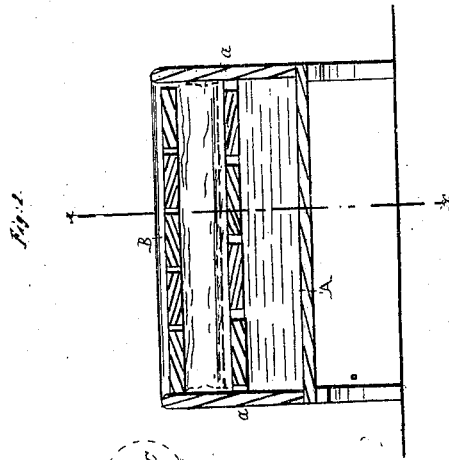


C. Faure.
Felting Machine.

No. 52489.

Patented Feb. 6. 1866.



Witnesses.
Wm. Brown
Geo. Tuck

Inventor:
C. Faure
Jas. Munroe
Attorney

UNITED STATES PATENT OFFICE.

CYPRIEN FAURE, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND C.
FRANCIS BATES, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR FELTING HAT-BODIES.

Specification forming part of Letters Patent No. 52,489, dated February 6, 1866.

To all whom it may concern:

Be it known that I, CYPRIEN FAURE, of the city, county, and State of New York, have invented a new and Improved Machine for Felting Hats; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a longitudinal vertical section of this invention, taken in the plane indicated by the line *x x*, Fig. 2. Fig. 2 is a transverse vertical section of the same, the plane of the section being indicated by the line *y y*, Fig. 1.

Similar letters of reference indicate like parts.

The object of this invention is to produce a machine which performs the operation of felting hats in imitation to the ordinary hand process. For this purpose I construct a machine consisting of a box, A, of wood or any other suitable material. It is provided with a longitudinally-slotted table, A', and with a rim or flange, *a*, extending all round the box above the table to form a water-tight tank, and it is intended to be furnished beneath the table with one or more pipes, *b*, through which hot water or steam can be introduced at pleasure, and the felt can be kept hot if desired.

In the tank thus formed on the table is placed a longitudinally-slotted plank, B, of wood or any other suitable material. This plank is somewhat shorter than the table, and a reciprocating motion is imparted to it by an eccentric, C, or any other suitable means, being connected in such a manner that it can be easily raised by a cord running over pulleys, or any other suitable means, and it may be made to exert a greater or less pressure by weights, springs, or other well-known contrivances.

The operation of this machine is as follows: First, I dip the fur or wool hat bodies in hot water, and by a few minutes' manipulation I give them sufficient firmness so that they can be conveniently handled. Then I roll two or more of the hat-bodies on a roller provided with an apron of cotton or other cloth, which serves to retain the hat-bodies on the roller, such apron being indicated in red in the drawings, and place upon the table A as many of the rolls thus formed as the same can conveniently hold. Then I drop the plank B upon them, and by imparting to said plank a reciprocating motion a reciprocating motion is imparted to the rolls of hat-bodies, which, together with the pressure of the plank and the action of the hot water and steam, causes the bodies to felt. When the operation has been continued a proper length of time it becomes necessary, as in hand-felting, to change the folds of the hats to prevent the conical-shaped body from felting into a shapeless mass. The plank being raised for this purpose the change of folds is made. It (the plank) is then replaced and the operation of felting continued as before described, and in a short time a large number of hats are thus felted with little hand-labor.

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

The box A, with longitudinally-slotted table A', in combination with the longitudinally-slotted plank B and with a suitable roller or rollers, the whole constructed and operating substantially as and for the purpose described.

C. FAURE.

Witnesses:

M. M. LIVINGSTON,
W. F. McNAMARA.