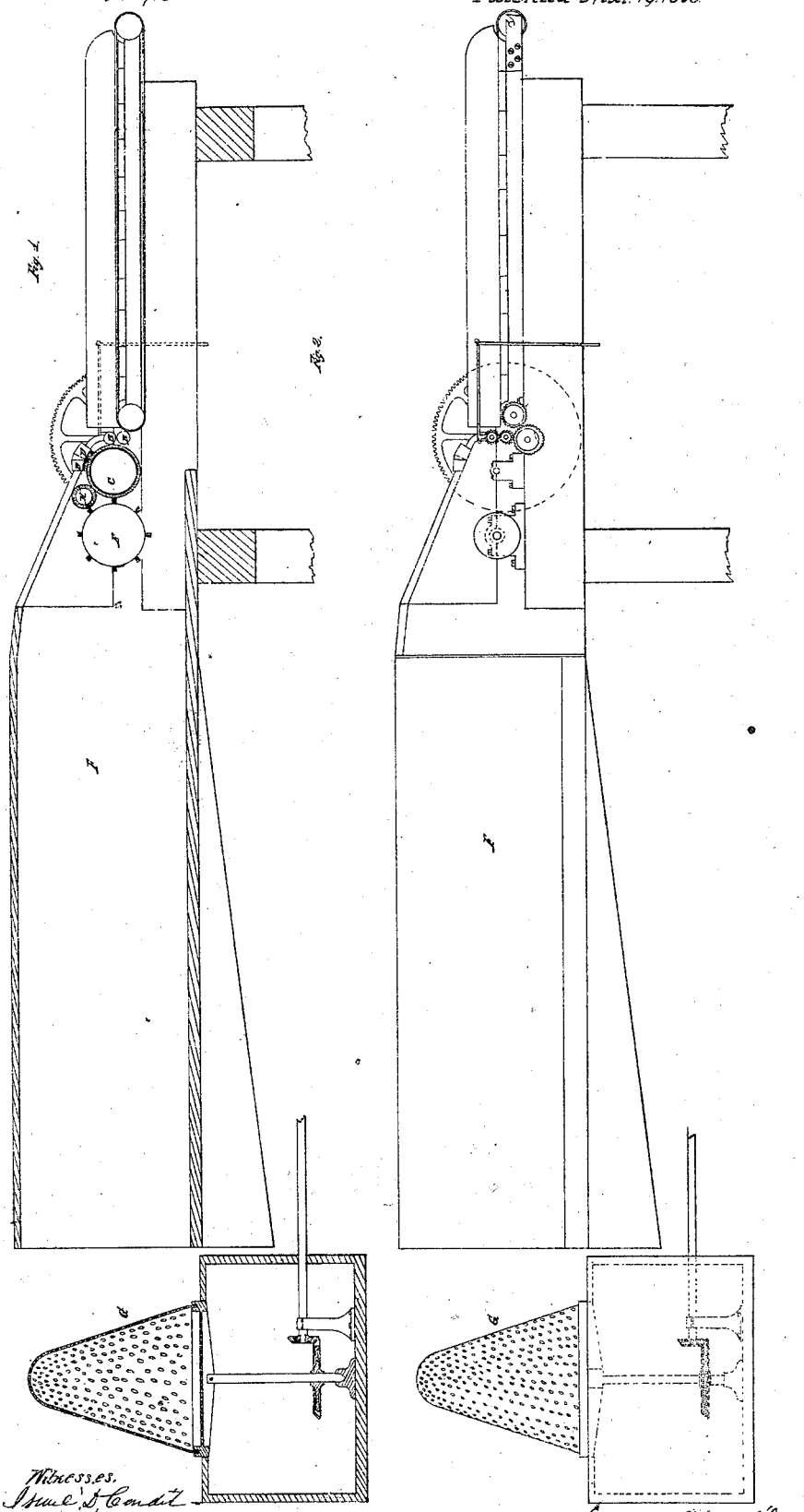
Sheet 1 2 Sheets.

E. F. Conant & A. Taylor.

Forming Hats.

No 7152. Patented Mar. 19, 1850.



Witnesses.
Isaac D. Conant
Wilmington Campbell

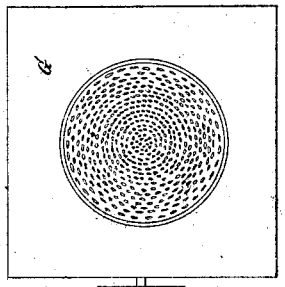
Inventor. Edward F. Conant
Alfred Taylor

Sheet 2. 2 Sheets

E. F. Condit & A. Taylor.

Forming Bats.

No. 7182. Patented Mar. 19. 1850.



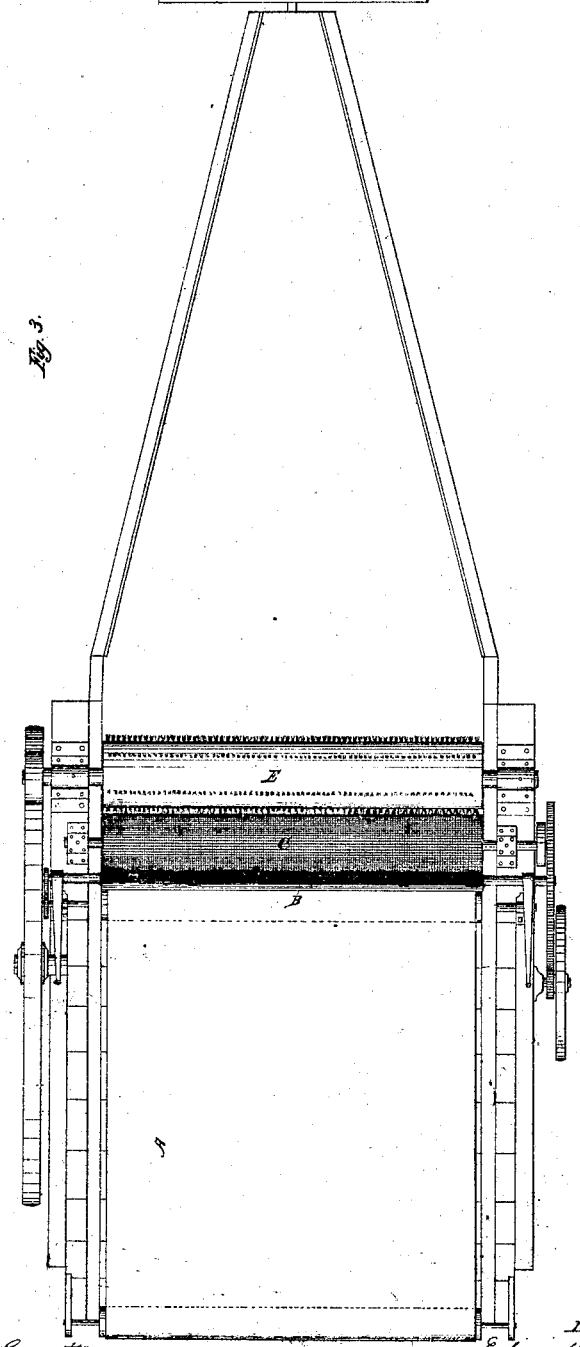


Fig. 3.

Witnesses.
Daniel D. Condit
Wilkinson Campbell

Inventor.
Edward F. Condit
Alfred Taylor

UNITED STATES PATENT OFFICE.

EDWARD F. CONDIT AND ALFRED TAYLOR, OF SPRINGFIELD, NEW JERSEY, ASSIGNORS TO WOODBRIDGE EAGLESFIELD, OF SPRINGFIELD, NEW JERSEY.

MACHINE FOR MAKING HAT-BODIES.

Specification of Letters Patent No. 7,182, dated March 19, 1850.

To all whom it may concern:

Be it known that we, EDWARD F. CONDIT and ALFRED TAYLOR, of Springfield, in the State of New Jersey, have invented an Improvement in Machines for Making Hat-Bodies of Fur, of which improvement the following is a description.

In the machines for making hat bodies of fur, which are now in use, the fur after having been cleaned and separated from the hair found in it, is placed on a feed apron, or between feed aprons, and is conveyed on them to feed rollers, through which it passes. It is then received by a rotary brush, and thrown into a trunk or chamber, through which it floats, and with a current of air passes on to a conical former and is made to settle upon the former by means of the partial exhaustion of air beneath the former. The conical former as it revolves slowly, receives the fur as required, and a hat body is thus formed which is then hardened by the application of cloths dipped in hot water, and by immersion in hot water.

This improvement, for which a patent is now solicited consists in combining with the feed rollers and brush a cylindrical rotary card, and one or more narrow, flat stationary cards, placed above and so near to the cylindrical card as to be just in contact with it. This cylindrical card is between the feed rollers and brush, and parallel to them, its axis is in the same plane with the line at which the feed rollers meet or a little above it. A second cylindrical card is placed between the brush and the flat cards and above the first cylindrical card, in such a position in relation to them, as to work against the face of the first cylindrical card, and to be operated upon by the brush. The fur as it is fed through the rollers is received by the first cylindrical card, which revolves very rapidly, and the fur is thereby worked against the stationary card and its fibers separated. The second cylindrical card which revolves slowly assists in the working and more thorough and complete separation of the fibers of the fur. The fur is then taken from the cylindrical cards by the brush, which also revolves with great rapidity and is thrown into the trunk and carried forward and deposited upon the cone or former.

This improvement is exhibited in the drawings hereto annexed, in connection with such other parts of the machine with which it is used as are necessary to represent the application of the improvement.

Figure 1 represents a vertical section of the machine. Fig. 2 a side view of it. Fig. 3 a horizontal section of the same machine.

A, in Fig. 3 represents the feed apron. B, in Figs. 1 and 3 the feed rollers. C, in Figs. 1 and 3 the first cylindrical card. D in Fig. 1 the narrow flat cards placed thereon. E, in Figs. 1 and 3 the trunk. F, in Figs. 1, 2, and 3 the trunk or chamber. G the conical former. H, in Fig. 1 the second cylindrical card.

Instead of using the flat stationary cards, small cylindrical cards may be substituted, revolving very slowly, which will answer the same purpose as the flat stationary cards, and the second cylindrical card may be dispensed with, but better work is done when all are used together as above described.

By means of this improvement both of the cylindrical cards are kept clear by the action of the brush, the fur is better prepared for being floated and carried through the trunk, and for deposit on the former or cone; the fibers are more thoroughly separated; the hat body is of a more even and uniform texture; the fur is fed with more rapidity, and more and better work can be done.

What we claim as our improvement and desire to secure by Letters Patent is—

The combination of the rotating brush for throwing the fibers, with the cards which take the fibers from the feed rollers and separate and prepare them, and with the trunk which guides and the exhausted former on which the fibers are deposited, substantially as herein described.

EDWARD F. CONDIT.
ALFRED TAYLOR.

Witnesses:
ISRAEL D. CONDIT,
WELLINGTON CAMPBELL.