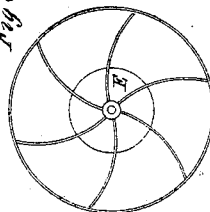
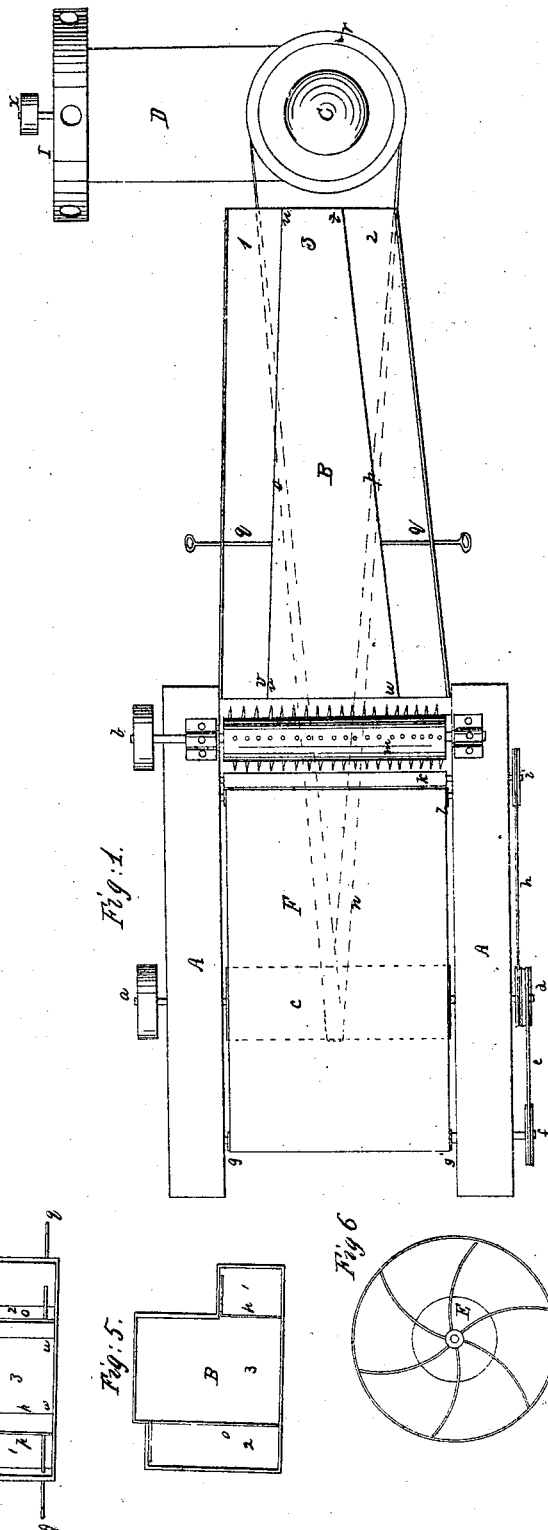


Patented Jul. 20, 1846.



UNITED STATES PATENT OFFICE.

RUSSEL WILDMAN, OF HARTFORD, CONNECTICUT.

MACHINERY FOR FORMING HAT-BODIES.

Specification of Letters Patent No. 4,643, dated July 20, 1846.

To all whom it may concern:

Be it known that I, RUSSEL WILDMAN, of Hartford, county of Hartford, and State of Connecticut, have invented a new and useful Improvement in Forming Hats or Hat-Bodies of Fur, Wool, &c.; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing, making a part of this description, in which—

Figure 1 is a plan of the machine; Fig. 2 a longitudinal elevation; Fig. 3 is an end view of the tubes near the cone; Fig. 4 a view of the tubes at the picker; Fig. 5 a transverse section of the conductor.

My arrangement consists in feeding the stock of fur, wool, &c., after it is properly prepared upon a common feed apron in sufficient quantities to form a hat body of the desired heft and then feeding it through rollers which hold it firm, yielding it in small proportions to the rotary picker cylinder. The stock is thrown by the picker through the case divided longitudinally by two adjustable partitions, onto a metallic perforated cone, placed near and in front of the tubes, beneath the picker is an aperture for the admission of a current of air to aid in carrying the stock through the tubes. The cone rests upon a revolving stand and thereby has a revolving motion while the body is forming thereon. Through the center of the revolving stand is an opening connecting the inner surface of the cone with a trunk that is connected to fan blower, by which the air within the cone is partially rarefied, causing a rush of air from all directions to and through the apertures of the cone, carrying the stock onto and holding it thereon. In order to lay the stock in the desired proportion upon the cone, the tubes through which the stock is conducted vary in height. The tube designed to form the brim, spreads the stock from the base of the cone as high as the band of the hat. The 2nd from the base of the cone to the square of the hat a 3rd from the base to the tip of the cone. An extra square is formed to the body by enlarging the 2nd tube a little at top.

The same letters indicate like parts in all the figures.

In the accompanying drawings A A is a frame properly adapted to the operative parts of the machine. The stock of fur, wool, &c., is spread upon a common feed apron E passed through feed rollers K which hold and yield it to the rotary picker *m* which has a rapid motion. The stock is thrown by the picker *m* through a trunk onto a perforated cone C placed near the delivery aperture of the tube. The trunk is divided longitudinally by two metallic partitions, *o*, *p*, thereby forming three distinct tubes 1, 2, 3. The vertical partitions, *o*, *p*, have each a flange turned into and fitted to the top of the tubes 1, 2, to preserve their distinctness when the partitions are moved into tube 3 to lay an increase of stock upon the brim or square of the body. The partitions are stationary at *t*, *u*, but movable at *v*, *w*, attached to the partitions *o*, *p*, are rods *q* *q* which pass through the sides of the case, by which the partitions are moved. The top of the trunk B near the picker is on a line with the center of the picker cylinder in order to prevent the reaction that takes place when the chamber incloses the cylinder. The upper half of the picker cylinder is inclosed in a bonnet which rests on the chamber and feed roll. In front and near to the delivery apertures of the tubes is a cone C placed upon a revolving stand *r* which is revolved by a band *n* that passes around the cylinder *c*. Through the revolving stand is an aperture *s* connecting the inner surface of the cone with the trunk D which leads to and is connected with a fan blower I. A section of the blower is seen Fig. 6.

What I claim to be new and my invention in the above described machine and desire to secure by Letters Patent of the United States is—

The tube (which conducts the stock to the cone) divided longitudinally by adjustable partitions for the purpose and in the manner substantially as herein described.

RUSSEL WILDMAN.

Witnesses:

BENNING MANN,
CYRUS N. MANN.