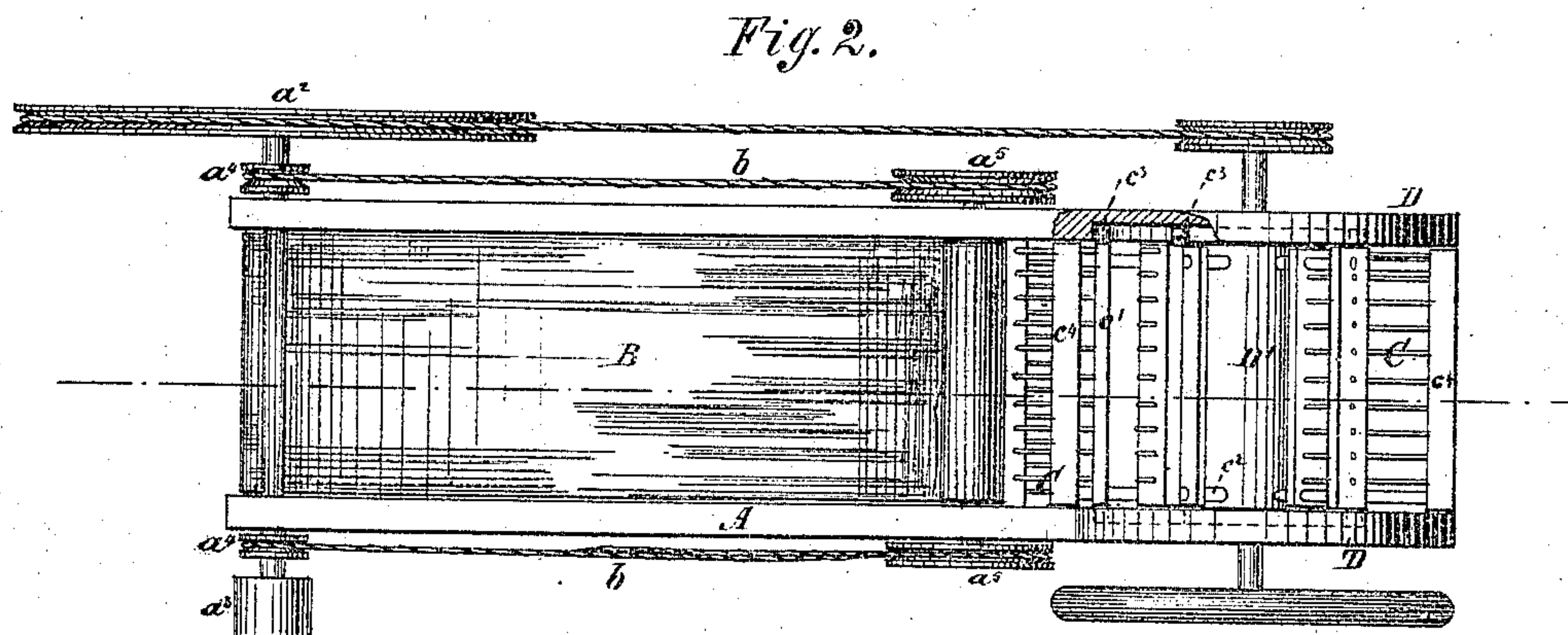
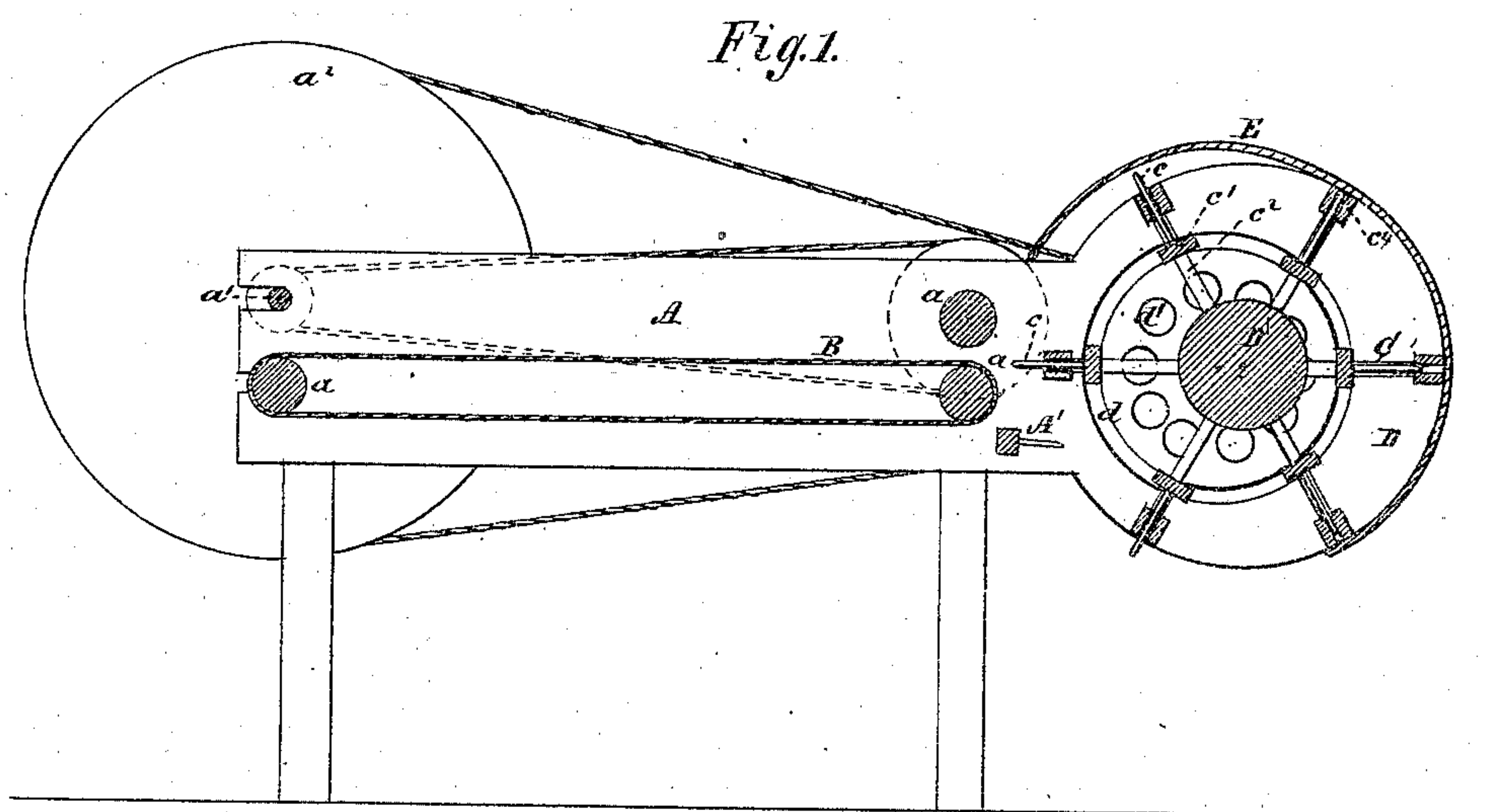


D. M. VARNEY.

Improvement in Hair-Picking Machines.

No. 130,550.

Patented Aug. 13, 1872.



Witnesses:

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# UNITED STATES PATENT OFFICE.

DAVID M. VARNEY, OF BURLINGTON, VERMONT.

## IMPROVEMENT IN HAIR-PICKING MACHINES.

Specification forming part of Letters Patent No. 130,550, dated August 13, 1872.

Specification describing certain Improvements in Machines for Picking and Cleaning Hair, Wool, Cotton, &c., invented by DAVID M. VARNEY, of Burlington, in the county of Chittenden and State of Vermont.

The invention relates to improvements in the class of hair and wool pickers wherein a series of combs are attached to a drum or wheel, by whose rotation they are caused to engage with a stationary comb, upon which the hair or other material is delivered by suitable mechanism. The invention consists in the arrangement of parts, as hereinafter described, producing a light, strong, durable, and effective machine.

Figure 1 is a longitudinal section. Fig. 2 is a top view with hood removed.

A represents the box, provided with fixed comb A' at the end, the rolls *a a a*, the detachable pulley-shaft *a*<sup>1</sup>, the pulleys *a*<sup>2</sup> *a*<sup>3</sup> *a*<sup>4</sup> *a*<sup>5</sup>, and the feed-belt B. *b b* are the feed-pulley belts, one of which is crossed so as to operate the top and bottom pulleys in opposite directions. C is a picker-comb, whose teeth *c* are rigidly attached to a holder, *c*<sup>1</sup>, that slides on the arms *c*<sup>2</sup>, and has projecting ends *c*<sup>3</sup> *c*<sup>3</sup>. *c*<sup>4</sup> is a cross-bar, having perforations which receive the movable teeth *c* there-through, and which is rigidly attached to the ends of arms *c*<sup>2</sup>. D D are disks, one on each side of the comb C, and each provided with a cam-slot, *d*. These disks D are perforated near the shaft D' so as to form holes *d'*. E is a hood which covers the comb C as a similar device does the wings of a grain-fan.

The mode of operation is as follows: The

hair, wool, cotton, or other material which is to be picked, being placed on the belt B, is fed forward to the stationary comb A' where it is caught and pulled to pieces by the revolving teeth *c*. As the combs C come in front of belt they are thrust forward by the cam-grooves *d d* to act in conjunction with stationary comb A', but as soon as the combs have performed their functions they are withdrawn by these same cam-grooves. This causes the teeth *c* to be retracted through the bar *c*<sup>4</sup>, and to be relieved of any material adhering thereto. The picked material is now carried over and dropped under the picker, while the dust is separated and driven out of it by a blast of air which enters at the holes *d'*. Thus the wool or fiber is fed, picked, and cleaned at one operation, while the picker-teeth are automatically cleaned as they rotate.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The improved hair-picker, formed by the combination of the revolving, radially-reciprocating combs, the disks D D having eccentric grooves *d d*, shaft D, fixed perforated bars *c*<sup>4</sup>, hood E, the fixed comb A and feed-belt B, all as shown and described.

To the above specification I have signed my hand this 18th day of April, 1872.

DAVID M. VARNEY.

Witnesses:

L. L. LAWRENCE,  
B. B. SMALLEY.