

(No Model.)

2 Sheets—Sheet 1:

I. BEST.  
COMBING MACHINE.

No. 287,498.

Patented Oct. 30, 1883.

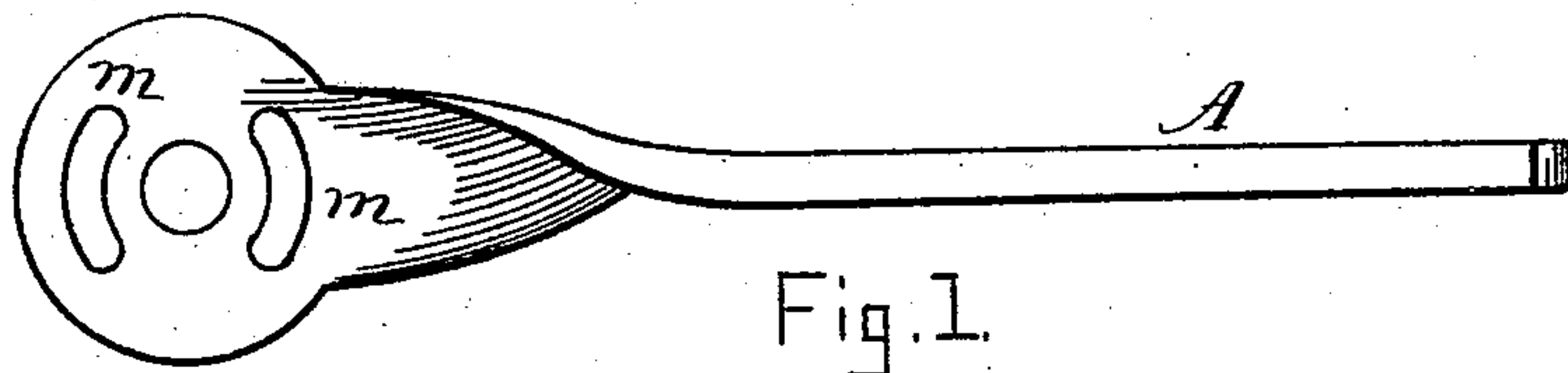


Fig. 1.

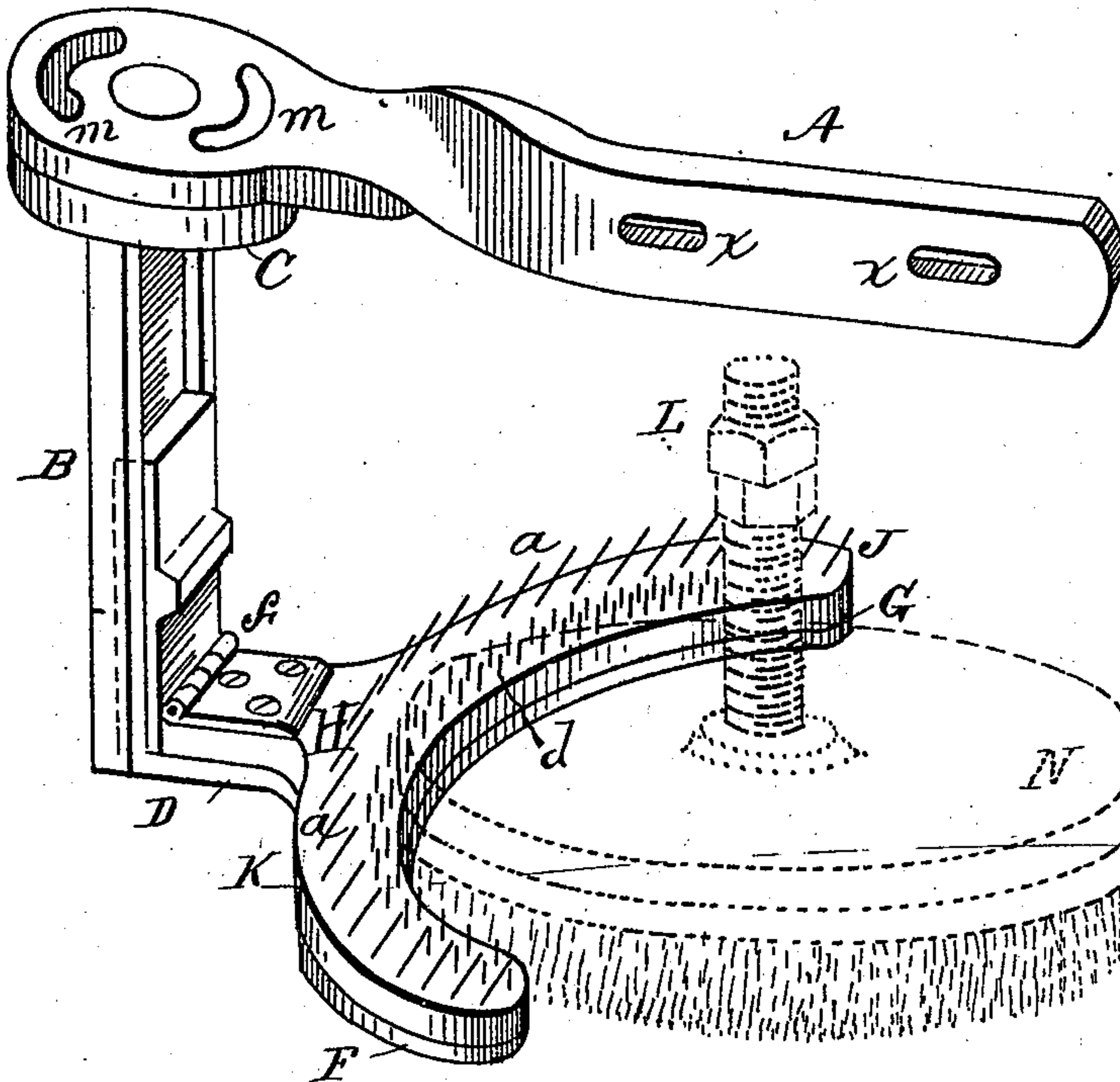


Fig. 2.

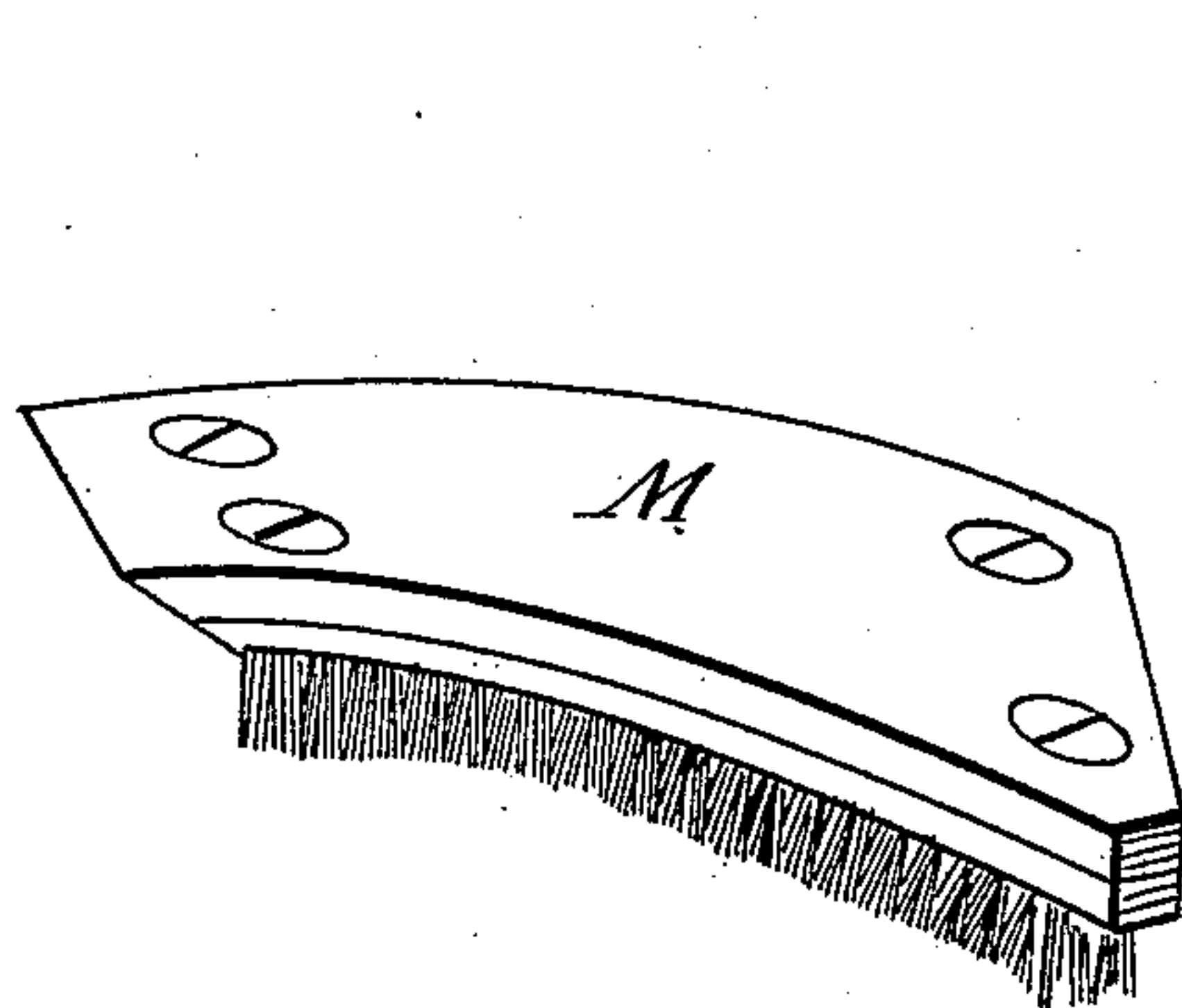


Fig. 3.

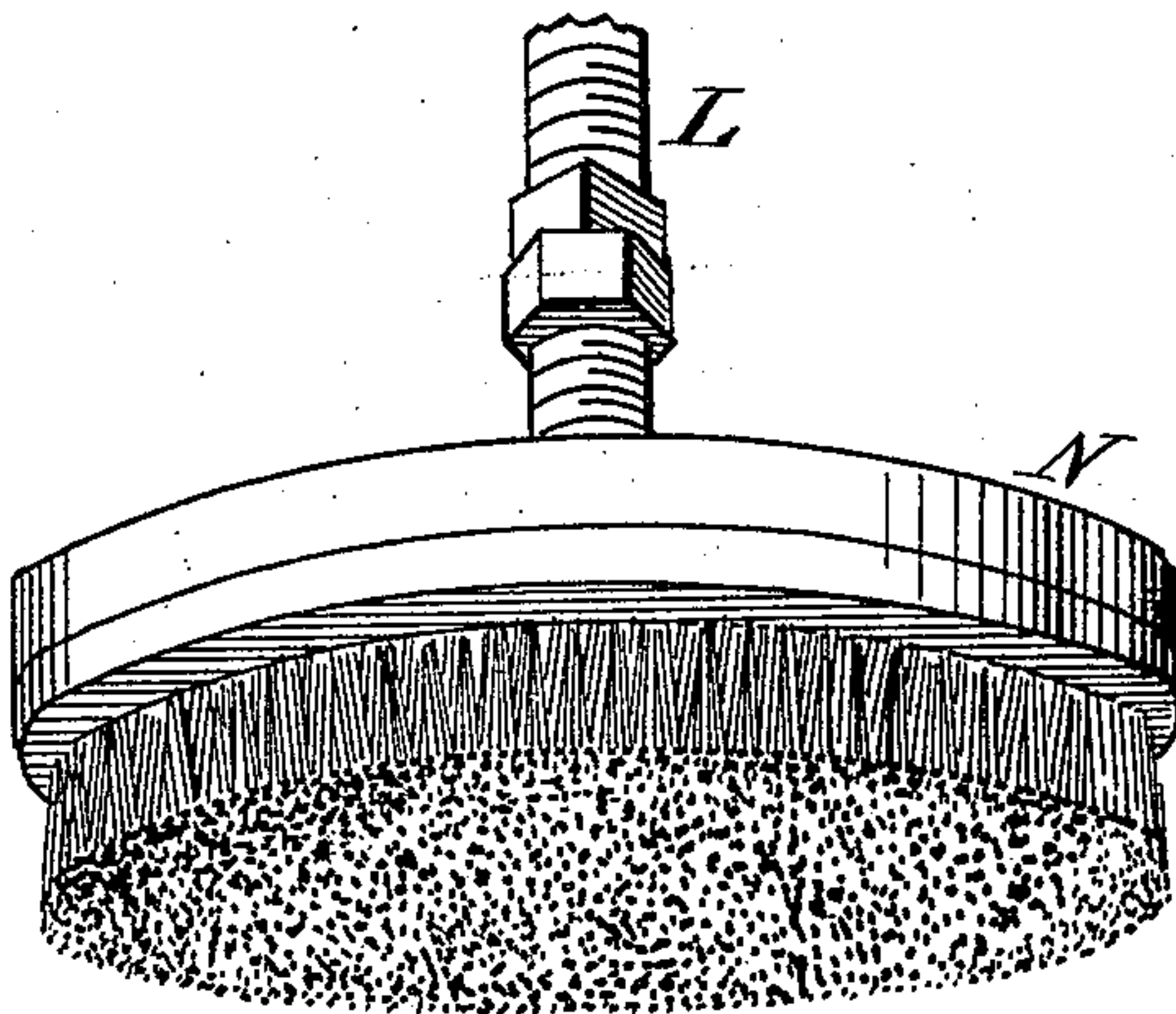


Fig. 4.

Witnesses:  
H. E. Penick  
L. J. White.

Inventor:  
Irae Best,  
Per C. C. Shaw,  
Att'y

(No Model.)

2 Sheets—Sheet 2.

I. BEST.  
COMBING MACHINE.

No. 287,498.

Patented Oct. 30, 1883.

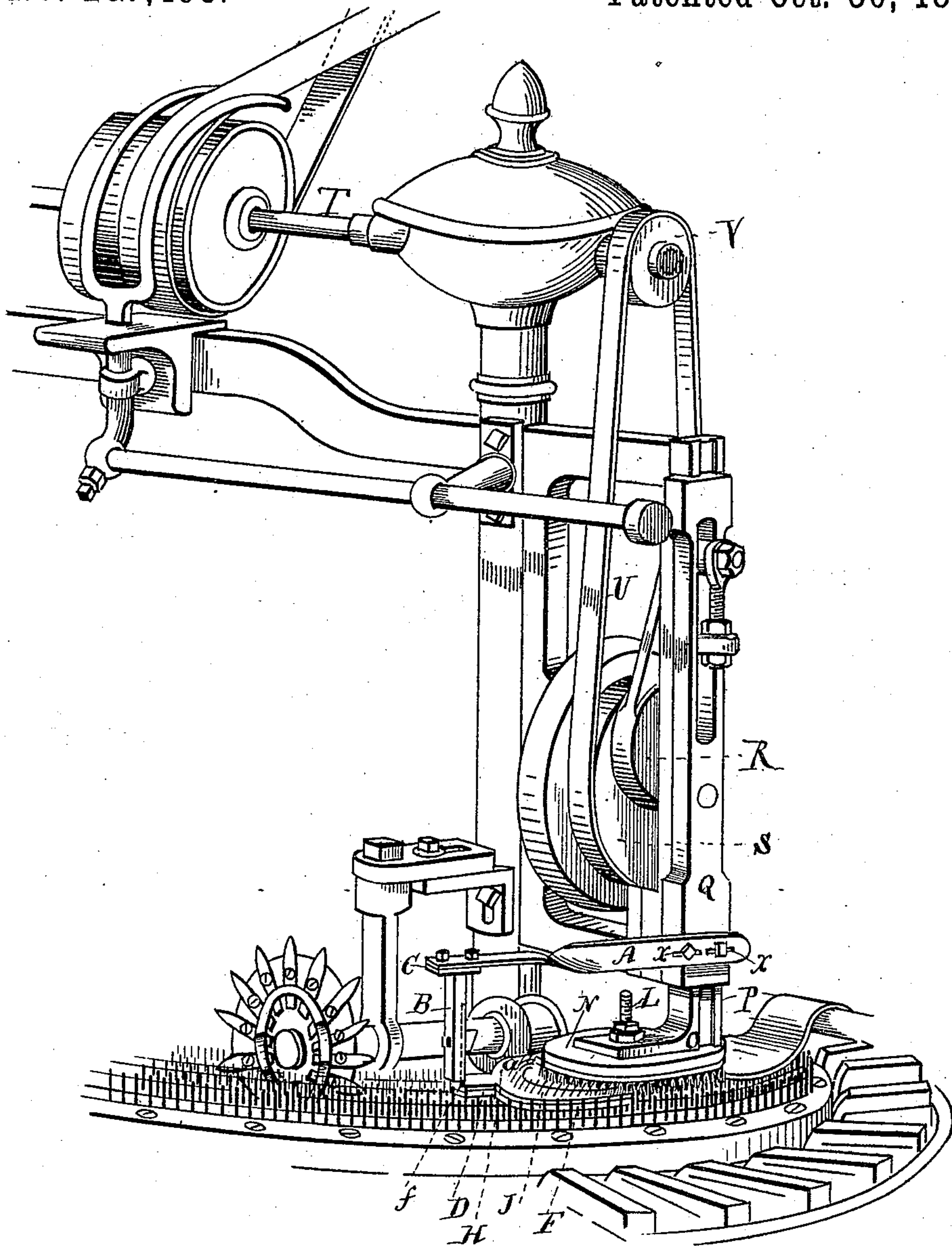


Fig. 5.

Witnesses:  
H. E. Remick.  
L. J. White.

Inventor:  
Isaac Best,  
per C. C. Shaw.  
att.



# UNITED STATES PATENT OFFICE.

ISAAC BEST, OF LAWRENCE, MASSACHUSETTS.

## COMBING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 287,498, dated October 30, 1883.

Application filed February 23, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, ISAAC BEST, of Lawrence, in the county of Essex, State of Massachusetts, have invented a certain new and useful Improvement in Combing-Machines, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan view of the arm for attaching the comb to the machine; Fig. 2, an isometrical perspective view of the bracket, comb, and attaching arm, the brush being shown in dotted lines; Fig. 3, a view of the ordinary brush; and Fig. 4, an under view in perspective of my improved brush, detached from the holder. Figure 5 is a perspective view of my improvement applied to a Noble comb-machine.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates to that class of combing-machines in which dabbing-brushes are employed in the manufacture of worsted goods; and it consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, by which a more effective device of this character is produced than is now in ordinary use. The dabbing-brush usually employed in machines of this character, more especially in what is known as "the Noble's machine," has a back nearly rectangular in form, with slightly curved sides, being somewhat irregular in shape, as shown in Fig. 3, and is so arranged and operated as to wear away the teeth of the brush unevenly, the wear being greater at some points than at others. Another difficulty also exists, arising from the lack of any suitable means for preventing the burrs or small pellets of wool which are picked up by the brush from escaping into the work, and thereby making it imperfect.

My improvement is designed to obviate these objections and difficulties; and to that end I make use of means which will be readily understood by all conversant with such matters from the following explanation, the ex-

treme simplicity of the invention rendering an elaborate description unnecessary.

In the drawings, A represents the arm for attaching the comb to any convenient and proper support, which may be accomplished by bolts passing through the slots *x x* and secured by nuts.

Attached to the arm A there is a vertically-arranged bar, B, having the cap or plate C, the bar being secured to the arm and rendered adjustable thereon by means of bolts provided with nuts, which pass through the slots *m m* and through said cap.

Projecting horizontally from the lower end of the bar B there is a bracket, D, provided with the curved arms F G, the inner curve formed by the arms constituting the arc of a true circle.

Hinged to the bar B, at *f*, there is a plate, H, provided with the curved arms J K, the curvature of which corresponds with that of the arms F G, on which they rest when the hinged plate H is turned down.

Projecting from the upper side of the arms J K, near their inner curved edges, are a series of vertically-arranged teeth, *d*, as shown in Fig. 2, and back of these there is a row of inclined wires, *a*, longer than the teeth *d*, and arranged in a curve corresponding with the curvature of the arms J K.

In operation, a circular or round brush, N, is arranged to work vertically within the arms, as shown in full lines, Fig. 5, and by the dotted lines in Fig. 2, the handle L of the brush being connected to an arm, O, which extends from the rod P. This rod slides vertically in ways in the standard Q, being connected with and reciprocated by an eccentric, R, on the belt-wheel S, which latter is connected with the driving-shaft T by the belt U and pulley V, the said parts being the ordinary operative mechanism used in such machines for giving the brush vertical reciprocating movements. As the brush works up and down past the edge of the curved arms the burrs and small pellets of wool, which would otherwise be liable to become incorporated with and injure the work as they pass outwardly from the brush, will be caught on the teeth *d*, the inclined wires *a a* acting as guards, to prevent the escape of the same from the teeth. When the comb formed by the teeth *d* has become



filled, the workman tending the machine turns up the plate H and arms J K and removes the burrs and pellets from the teeth, after which the plate is turned down again into the position shown in Fig. 2.

The brush N, being round, may be readily turned from time to time, to prevent any undue wear of its teeth at any particular point, thereby enabling it to perform its functions more perfectly than the ordinary brush, M, the position of which cannot be changed, and also making a large saving in the expense of brushes. The brush N may also be readily arranged to revolve slowly around its vertical axial line, if desired, by any suitable mechanism for that purpose, thereby constantly changing the position of its teeth with respect to the comb. I do not, however, desire to be understood as confining myself to the use of my improvement in connection with any special form or make of wool-combing machines, as it is well adapted for nearly any machine of this class. Neither do I confine myself to the use of the guards *a*, or to hinging the plate H, as these features may be dispensed with without materially departing from the spirit of my invention.

Having thus explained my invention, what I claim is—

1. The combination of a circular dabbing-brush with means for catching and holding the burrs or pellets of wool escaping from the brush, and mechanism for imparting a vertical reciprocatory motion to said brush, substantially as described. 30
2. The combination of a dabbing-brush, a hinged plate provided with teeth, a support for said plate, and means for imparting a vertical reciprocatory motion to said brush, substantially as described. 35
3. The combination of a dabbing-brush, a hinged plate provided with teeth *d* and guard-wires *a*, a support for said plate, and means for imparting a vertical reciprocatory motion to said brush, substantially as described. 40
4. The combination of the attaching arm A, the bracket B, provided with a hinged plate, H, having teeth *d*, the brush N, and operative mechanism, substantially as described. 45

ISAAC BEST.

Witnesses:

A. R. SANBORN,  
JAMES BRANDY.