

(No Model.)

J. M. PICKERING.
BRUSH MAKING MACHINE.

No. 334,086.

Patented Jan. 12, 1886.

Fig. 2.

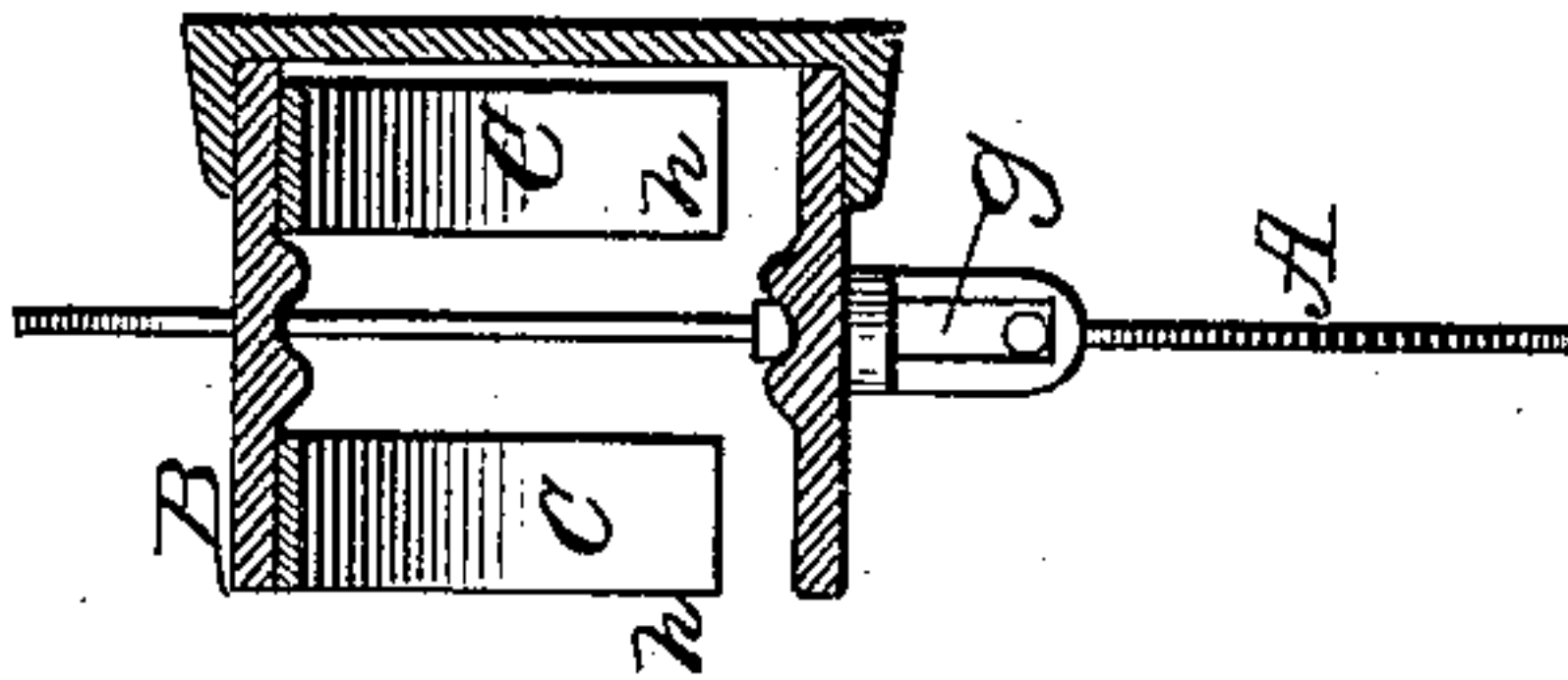
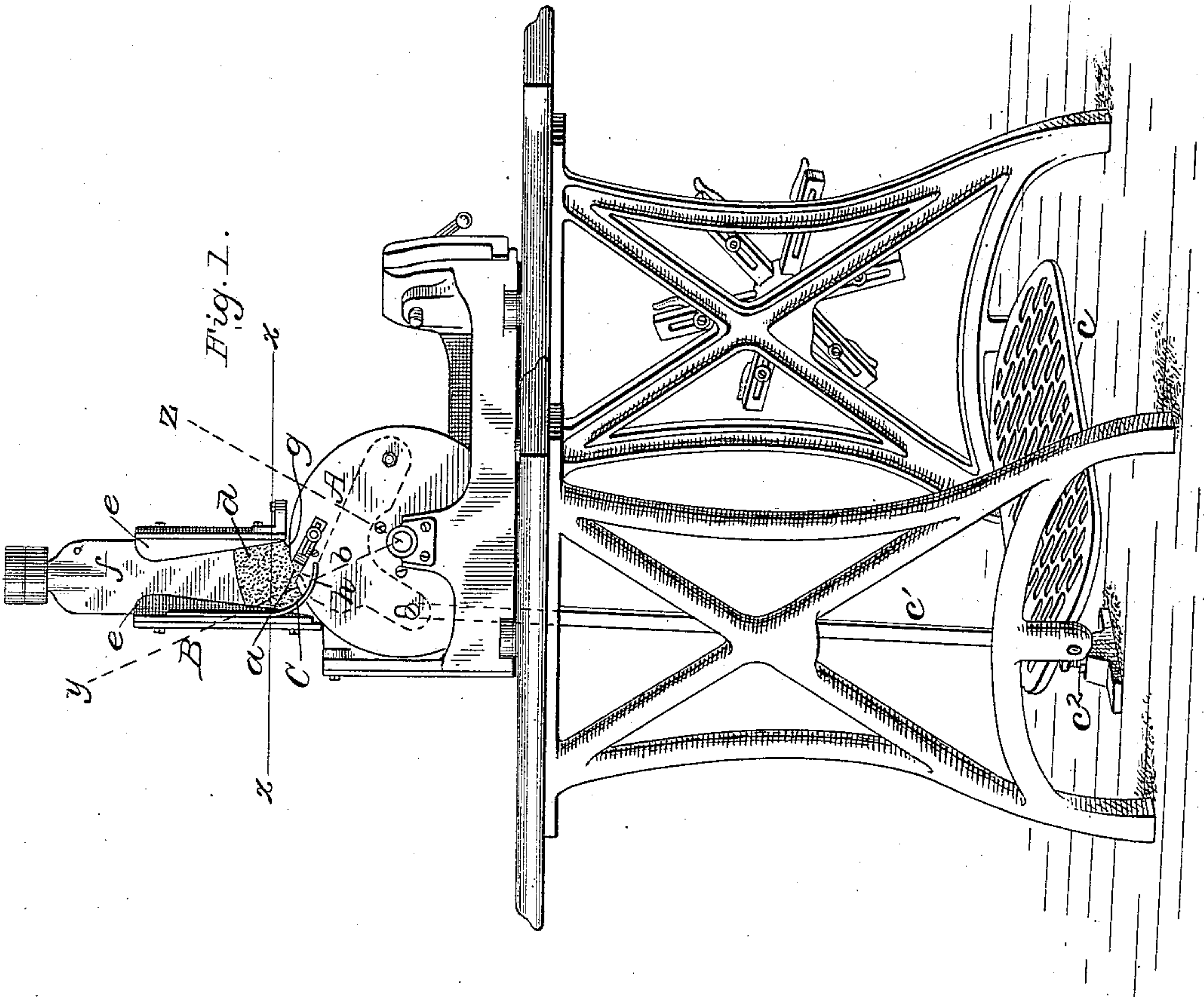


Fig. 1.



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JOSEPH M. PICKERING, OF PHILADELPHIA, PENNSYLVANIA.

BRUSH-MAKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 334,086, dated January 12, 1886.

Application filed December 26, 1884. Serial No. 151,186. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH M. PICKERING, of the city and county of Philadelphia, and State of Pennsylvania, have invented a certain new and useful Improvement in Brush-Making Machines; and I do hereby declare that the following specification, taken in connection with the drawings furnished and forming a part thereof, is a clear, true, and complete description of my invention.

My said improvement relates to that class of machines by which tufts of bristles or other filaments are separated from a mass and conveniently presented for removal by hand preparatory to their insertion into brush-blocks; and said improvement is particularly applicable to machines which embody a reciprocating semi-rotating notched disk and a hopper above said disk for the reception of the bristles, as shown and described in my United States Letters Patent No. 178,556, dated June 13, A. D. 1876.

In my machines as heretofore constructed the notched disk in each case supports the entire mass of bristles within the hopper, as well as the weight by which the bristles are forced downward toward the disk, and while said prior machines possess great practical value there is a tendency with them to cut or injure the bristles and other filamentous matters which are used in the manufacture of brushes.

The object of my present improvement is to prevent said cutting tendency, and to that end I have provided the lower end of my hopper with a pair of bristle-supporting plates, one on each side of the disk, and have so bent or curved said plates that they partially support the bristles and cause them to be more favorably acted upon by the notched disk than when the latter is alone relied upon for supporting the bristles.

To more particularly describe my invention, I will refer to the accompanying drawings, in which—

Figure 1 is a perspective view of one of my machines. Fig. 2 is an enlarged horizontal section of a portion of the same on line *x*.

It is to be understood that the disk A is provided with an adjustable tangential tuft-notch, *a*, a cut-off, *b*, (shown in dotted lines,) and a

treadle, *c*, and its rod *c'*, substantially as shown and described in my said prior Letters Patent, and that by vibrating the treadle said disk will be moved backwardly, so that its tuft-notch *a*, while wide open, will pass beneath the mass of bristles *d* and then be moved forwardly until said notch is wholly free from said mass, the cut-off *b* closing said notch prior to and during said forward movement, all as described in my said prior Letters Patent. Beneath the treadle is the usual adjustable stop-screw, *c''*, by which the rocking movement of the treadle is limited. The hopper B has vertical grooves *e* for the reception of the weighted blade or flat plunger *f*, and at the lower front side of the hopper there is a spring, *g*, which extends a little beneath the mass of bristles and bears at its free end upon the edge of the disk A, as in my prior machines.

The supporting-plates C constitute the novel feature, and it will be seen that they are secured to the inner rear surface of the hopper, as seen in Fig. 1, and that at their lower ends, as at *h*, they are bent or curved forwardly, and afford between them a slot partially occupied by the upper edge of the disk, as shown in Figs. 1 and 2. The mass of bristles *d* are compressed between the front and rear surfaces of the hopper, and also between the lower edge of the plunger *f* and portions of the supporting-plates and a portion of the edge of the disk. The extent of the rocking or reciprocating movement of the disk is indicated by the radial dotted lines *y* and *z*, the former indicating the extreme limit of the rearward movement, as also shown by the position of the notch in Fig. 1, and the latter the limit of the forward movement. The tuft-notch never passes below or beyond the plane occupied by the supporting-plates, and the bristles gathered therein during the backward movement of the disk are well consolidated without liability of being cut or even unduly bent. After the cut-off has closed the tuft-notch the disk begins its forward movement, and it will be seen that as the mass of bristles gradually descends in the hopper the lower portion of the mass is compacted from the rear toward the front, because of the curvature of the plates, so as to present the

bristles in the best possible condition for properly filling the notch during the next backward movement of the disk.

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

The combination, with the notched disk and the hopper located above the disk, of the forwardly bent or curved bristle-supporting

plates at the bottom of the hopper and on each side of the disk, substantially as described, 10 whereby the cutting tendency of the disk is obviated, as set forth.

JOSEPH M. PICKERING.

Witnesses:

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