W. F. PARKS.

MACHINE FOR CLEANING AND SEPARATING BRISTLES.

No. 182,849. Patented Oct. 3, 1876.

Fig. 1.

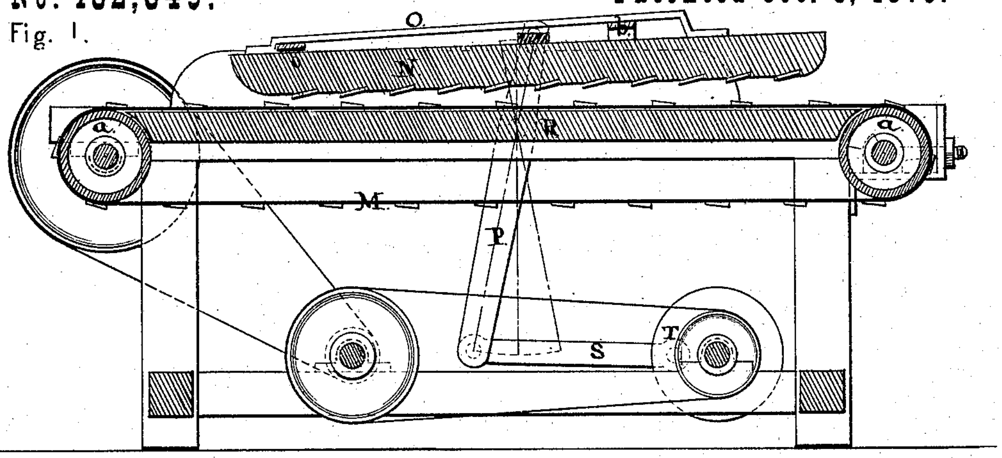


Fig. 2.

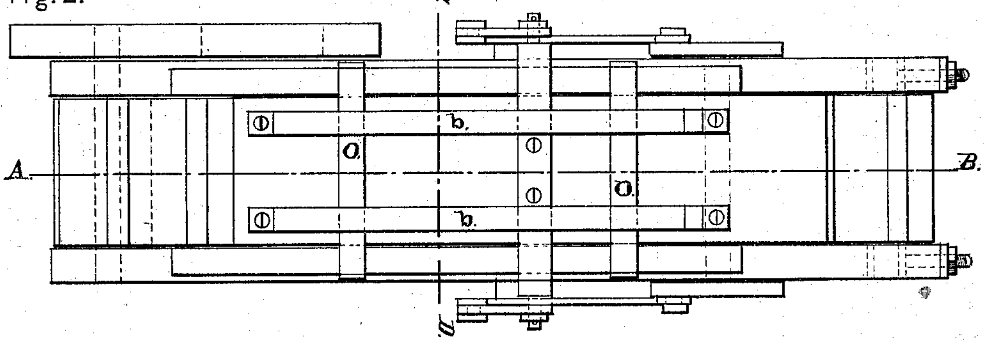
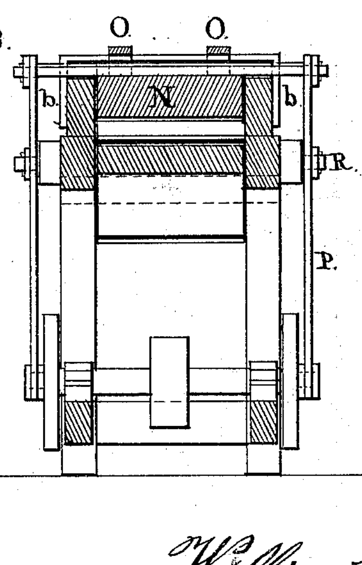


Fig. 3.



Witnesses *Inventor*

UNITED STATES PATENT OFFICE.

WILLIAM F. PARKS, OF BALTIMORE COUNTY, MARYLAND, ASSIGNOR TO WILLIAM WILKINS, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR CLEANING AND SEPARATING BRISTLES.

Specification forming part of Letters Patent No. **182,849**, dated October 3, 1876; application filed June 29, 1876.

To all whom it may concern:

Be it known that I, WM. F. PARKS, of the county of Baltimore, and State of Maryland, have invented a new and useful Improvement in the Process of Cleaning and Separating Bristles used in the manufacture of brushes, which process is fully set forth in the following specification:

After bristles are washed, and, as far as practicable, cleaned as they come from the animal, they are in masses larger or smaller, as the case may be, and always having a greater or smaller number of bristles connected or adhering together.

Now, my invention consists of a contrivance by which I rub these masses until each bristle is separated from every other bristle at the same time that they are cleaned from any impurity or other matter adhering to their surfaces, respectively.

For this purpose I press them between two surfaces, the lower one of which is a moving band or belt, on which the bristles in bundles, as aforesaid, are laid, and which carries them underneath an inclined slide, which, separated from the belt at the end where the bristles are inserted far enough to admit their entrance, approaches so near to it at the other end as only to permit the separate bristles to pass between it and the revolving belt aforesaid. To this slide a reciprocating motion is given, so that while they are carried forward on the belt or band they are rubbed by the slide and cleaned and separated, passing out at the narrowest opening in the desired condition.

Figure 1 represents a longitudinal section of the machine, through the line A B. Fig. 2 represents a plan of the machine. Fig. 3 represents a cross-section of the machine through the line C D of the plan, Fig. 2.

In the drawing herewith above mentioned, like parts are designated by the same letters in the three figures.

M represents an endless band, carried round upon the rollers, whose journals are shown at *a a*, by any suitable moving power, and by pulleys or cog-gearing. N represents a slide, to which the guides O are attached, moving to and fro upon the braces *b b*, which are attached to the frame carrying the endless band in such wise that the slide, while it is at a distance from the band at one end, approaches close to it at the other, as shown in the drawing. P is the lever, pivoted at R, by means of which, and the connecting-rod S pivoted on the pulley T, a reciprocating movement is given to the slide M.

I have found that one-sixteenth of an inch is a suitable opening for the narrower of the two openings, while the opening at the wider would be about five-eighths of an inch.

I give to the slide a reciprocating motion of about three inches on the band. On both the slide and revolving band I place ridges, which insure that rubbing of the bristles against each other in their progress through the machine which is essential to the operation I have in view.

I do not limit myself to any particular mechanical arrangement to produce the movement of the band and slide in the way described, as many modes may be resorted to, all equally efficient.

What I claim as new in the above is—

The combination of an endless band provided with transverse ridges, with a slide at an angle thereto, similarly provided with ridges, the movement of the band being continuous, while that of the slide is reciprocating, substantially as described.

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Witnesses:
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