

Lannay & Parks.

Brush Machine.

N^o 84,561.

Patented Dec. 1, 1868.

Fig. 1.

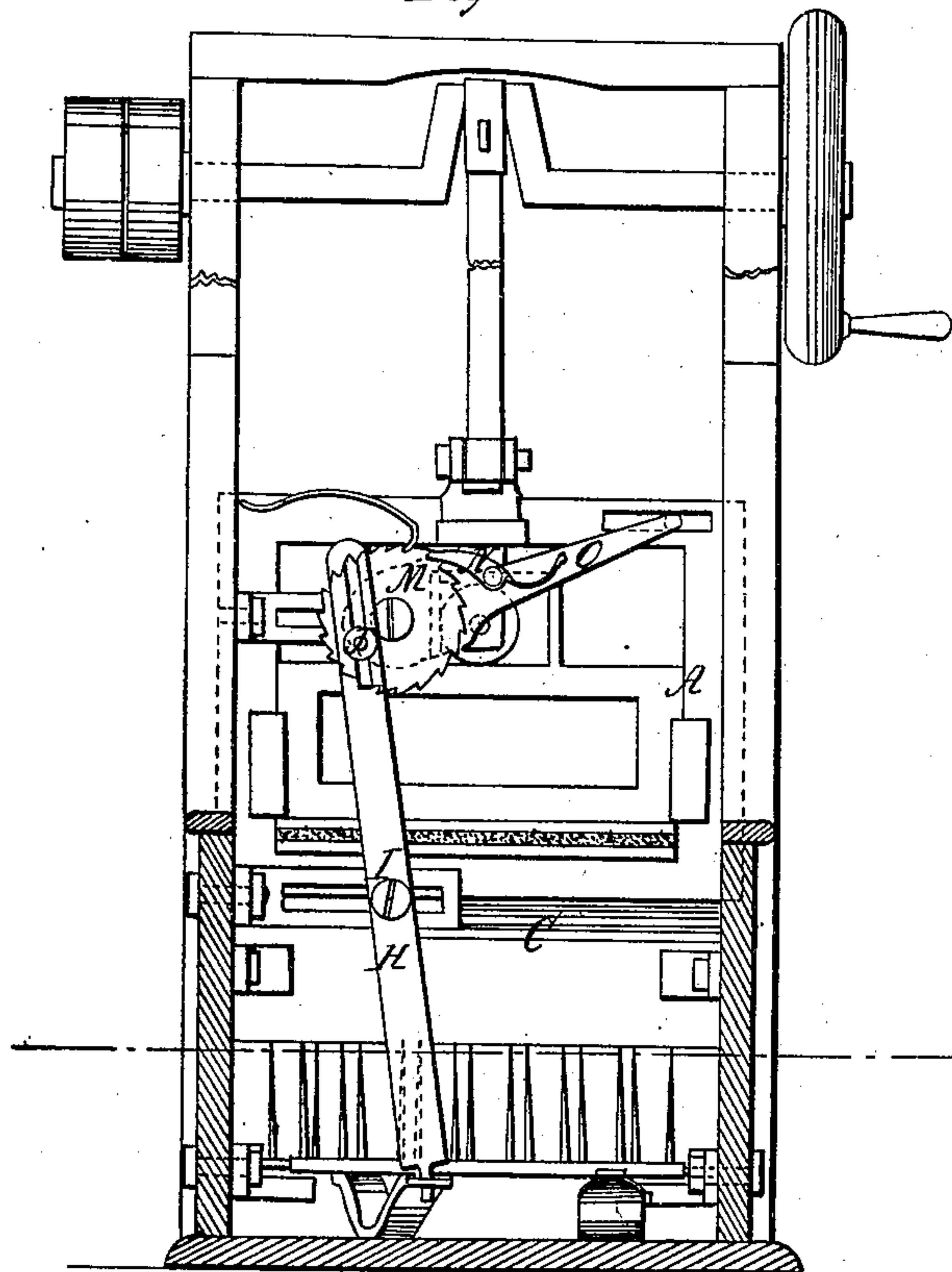
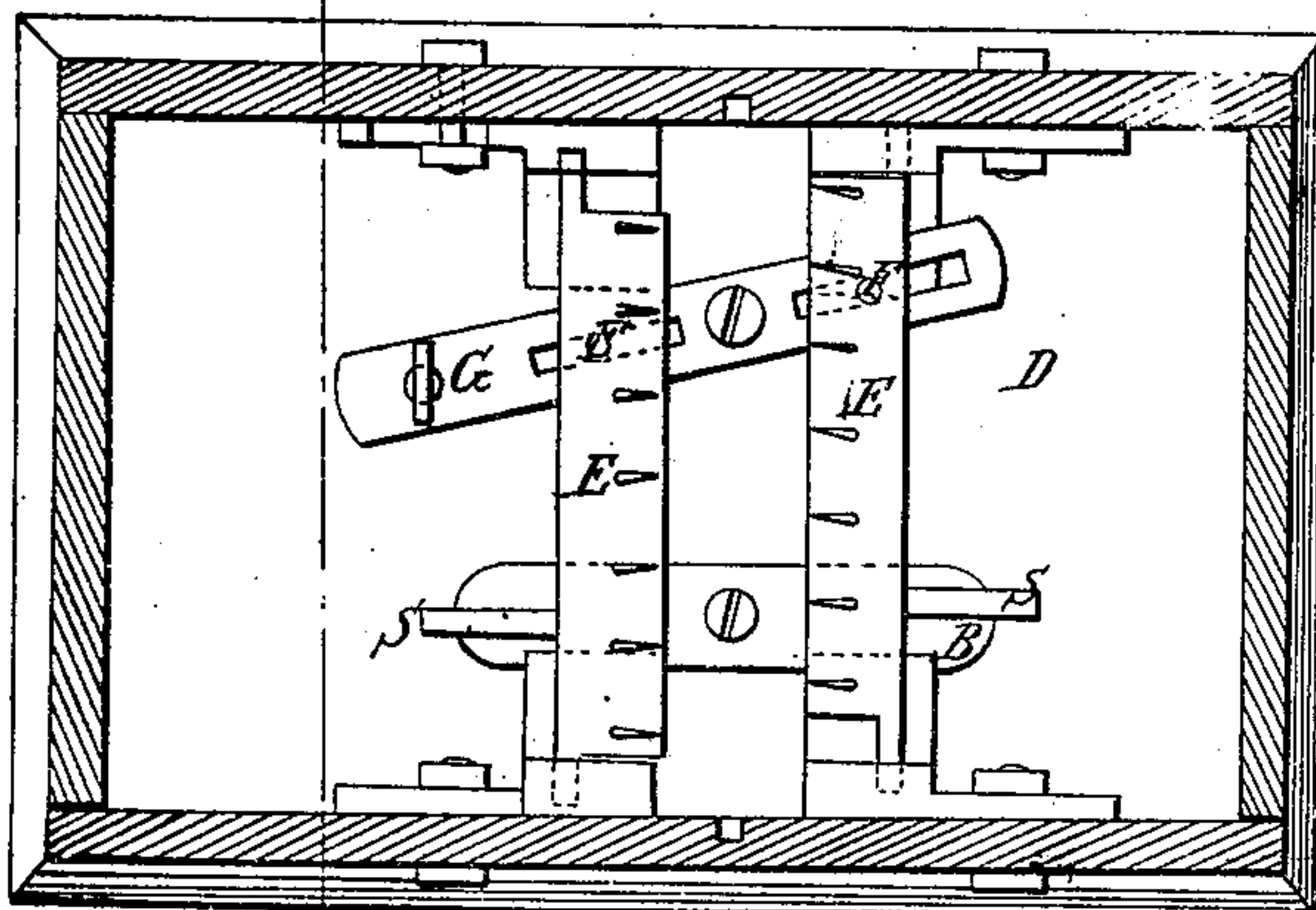


Fig. 2.



*Witnesses,
And Morgan
P. C. Dietrich*

*Inventor,
L. F. Lannay &
W. E. Parks.*

*per
Wm. H. H. H.
Attorneys.*

UNITED STATES PATENT OFFICE.

LOUIS F. LANNAY, OF INDIANAPOLIS, INDIANA, AND WILLIAM F. PARKS,
OF BALTIMORE, MARYLAND.

COMBINED BRISTLE WASHING AND COMBING MACHINE.

Specification forming part of Letters Patent No. **84,561**, dated December 1, 1868.

To all whom it may concern:

Be it known that we, LOUIS F. LANNAY, of Indianapolis, in the county of Marion and State of Indiana, and WILLIAM F. PARKS, of Baltimore, in the county of Baltimore and State of Maryland, have invented a new and Improved Machine for Washing and Combing Bristles, Hair, &c.; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in machines for washing hair, bristles, &c., such as was patented to Louis F. Lannay, May 19, 1868; and consists in the combination therewith of a combing apparatus, whereby the two operations of washing and combing may be accomplished at once, which have heretofore and until now been done separately, and necessarily at greater expense than when done simultaneously and by the same machine.

In the accompanying drawings, Figure 1 represents a sectional elevation of the said machine with our improvements attached thereto, and Fig. 2 represents a horizontal section of the same, taken on the line *y y* of Fig. 1.

Similar letters of reference indicate corresponding parts.

The said machine, as heretofore patented to Lannay, consists of a vertical reciprocating clamping-frame, A, arranged to clamp the bristles, hair, &c., B, and move them back and forth between wash-boards C, and into the washing-liquor of a vat for washing them.

Our present invention consists in combining therewith combs E, and mechanism to cause them to have a to-and-fro movement in the direction of their length, in order that they may act on the hair or bristles uniformly. The said combs also have an oscillatory movement. The stocks of the said combs are made capable of an endwise movement in their bearings, and are provided with pins F, (shown in dotted lines in Fig. 2,) which project downward into slots in the lever G, pivoted centrally between the combs, and connected to the lower end of the vibrating lever H, made

to oscillate on the stud-pin I by connection of its upper slotted end to the stud-pin L of a wheel, M, which receives an intermitting rotary movement by a pawl, N, taking into ratchet-teeth on its periphery, and actuated by a lever, O, deriving motion from the reciprocating slide A, as is clearly shown in Fig. 1. The said combs are also arranged to have an oscillatory movement on their bearings, imparted to them by the action of the hair or bristles in their upward movement, for the purpose of facilitating the withdrawal of them from the combs.

In order that the teeth of the combs shall take into the bristles close to the clamping-frame A, which embraces them centrally, and from which they project equally each way, the combs are so set that the teeth are inclined toward each other at their tops, leaving only space sufficient for the thickness of the frame, whereby, as the bristles are carried down, the teeth will draw any wool, fur, or other matter to the outer ends, and deliver it to the water, or where it will be scraped off by the wash-boards. If the teeth of the combs were maintained rigidly in this inclined position, the effect would be to some extent injurious to the bristles in their upward movement, and produce a jarring effect upon the machinery, besides returning some of the refuse matter from the ends of the bristles toward the center, for which reasons they are arranged to be oscillated by the frictional action of the bristles against the springs on which the arms S of the combs bear, by which they are instantly thrown back to their inclined position when disengaged from the bristles.

By the longitudinal movement of the combs the teeth are brought to act on all the bristles alike, which are thereby very thoroughly combed of all refuse matter, which is found only in the ends, as short wool and roots at the root end or split portions of the bristles or hair at the other end.

We do not desire to confine ourselves to this precise method of communicating the longitudinal movement to the combs, which may obviously be accomplished by various other arrangements.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination, with the washing apparatus A C, of the combs E, substantially as and for the purpose described.

2. The combination of the same, when the combs are arranged to have the longitudinal and oscillatory movements, or either separately, substantially as and for the purpose described.

3. The combination, with the reciprocating frame A, of the pawl-lever O, pawl N, wheel

M, levers H G, and the combs, all substantially as and for the purpose described.

4. The combination, with the combs E, of the arms S and springs R, substantially as and for the purpose described.

The above specification of our invention signed by us this 10th day of October, 1868.

LOUIS F. LANNAY.
WM. F. PARKS.

Witnesses:

SAMUEL BANKS,
JOHN M. JONES.