2 Sheets--Sheet 1.

J. COUMBE.

Photograph-Burnisher.

No. 168,457. Patented Oct. 5, 1875.

Fig. 2.

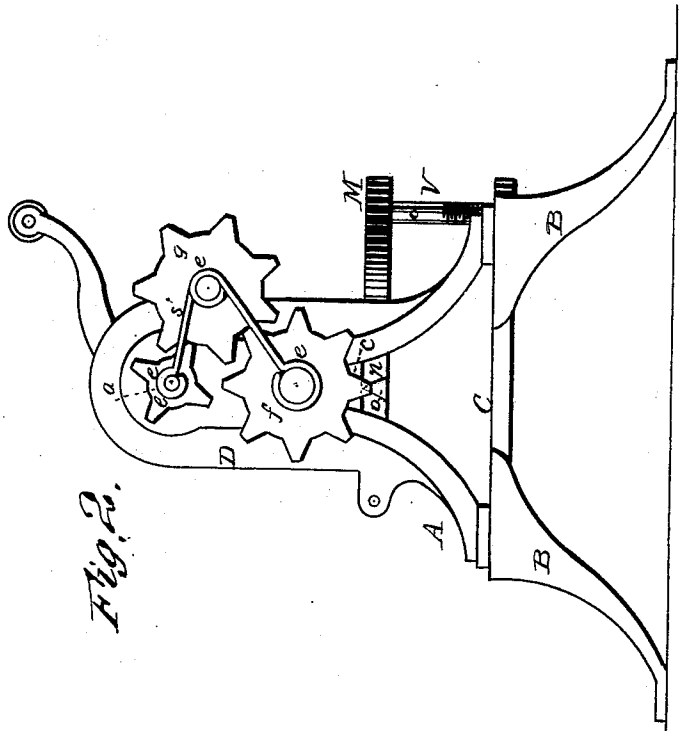
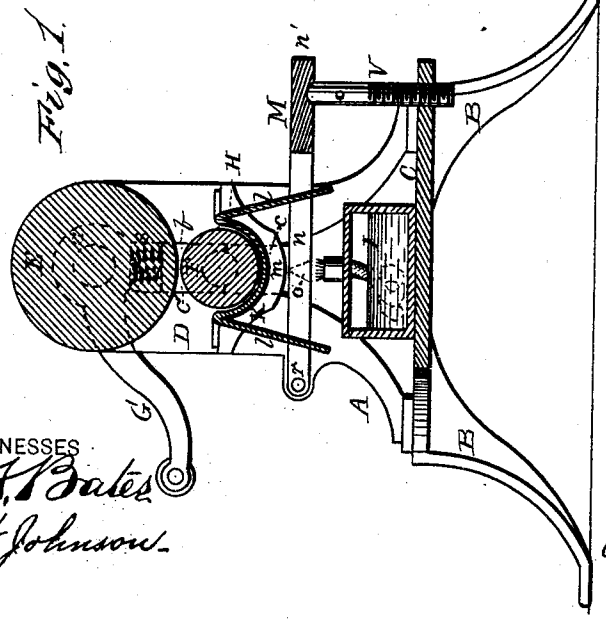


Fig. 1.



WITNESSES

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2 Sheets--Sheet 2.

J. COUMBE.

Photograph-Burnisher.

No. 168,457. Patented Oct. 5, 1875.

Fig. 3.

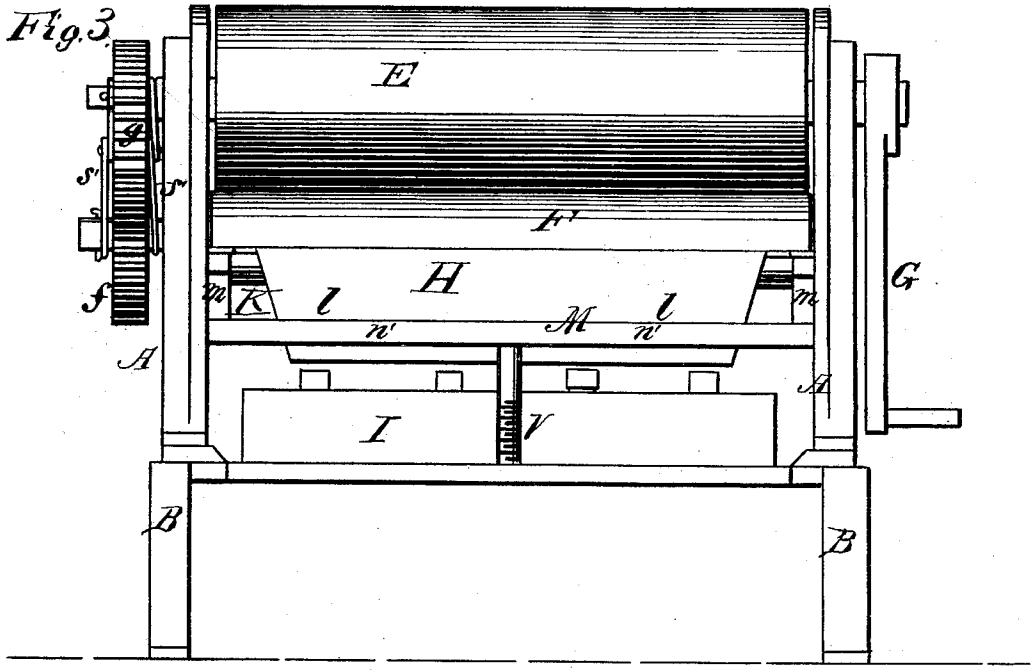
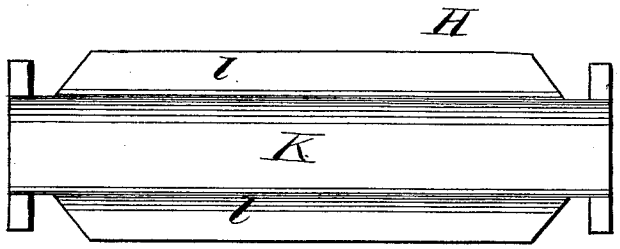


Fig. 4.



WITNESSES
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UNITED STATES PATENT OFFICE.

JOHN COUMBE, OF RHINEBECK, NEW YORK.

IMPROVEMENT IN PHOTOGRAPH-BURNISHERS.

Specification forming part of Letters Patent No. **168,457**, dated October 5, 1875; application filed August 14, 1875.

To all whom it may concern:

Be it known that I, JOHN COUMBE, of Rhinebeck, in the county of Dutchess and State of New York, have invented a new and valuable Improvement in Photograph-Burnishers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a transverse vertical section of my photograph-burnisher, and Fig. 2 is an end view of the same. Fig. 3 is a front view thereof, and Fig. 4 is a plan view of the heating-apron.

This invention has relation to photograph-burnishers; and it consists, mainly, in the construction and novel arrangement of the large upper iron roller, having a roughened surface, the smaller polished steel roller below, having an upward motion in suitable ways, the metallic heating-jacket and its roller-bearings, arranged under the lower roller and over the lamp, and the screw-adjusting frame, all as hereinafter fully shown and described.

In the accompanying drawings, the letter A designates the frame of the machine, having the supporting-legs B, lamp-shelf C, and roll-standards D, provided with bearings *a* for the journals of the large roll, and with slots *b* for the journals of the small roll. E represents the large roll, the cylindrical surface of which is roughened by longitudinal creases or grooves, in order to give it a purchase on the card-back of the photograph, which is designed to be introduced between said large roll and the smaller roll. This smaller roll F is made of polished steel, in cylindrical form. Its journals revolve in the blocks *c*, which slide up and down in the slots *b* of the frame, and are supported on the scale-beam joints *o* on the lever *n*, by means of which the height of the roller is adjusted. Blocks *c'* in rail-grooves bear on the journals of the lower roller. Springs *s* may be placed between said blocks *c'* and the upper ends of the slots. These rolls are geared to move in the same direction—that is, their adjacent surfaces will move in opposite directions when the large roll is turned by means of its crank G. The mode of gearing which I prefer is illustrated in the drawings. The small roll is provided with a large gear, *f*, and the large roll with a small gear, *e*, said gears engaging with a third gear, *g*, which is supported and connected to the journals of said rolls by angular springs *s'*, having loops *e* at the ends and in the bends for the gear-journals. The upward movement of the lower roll will not affect the engagement of the gears. H represents the metallic heating apron or guard. This consists of a concave semi-cylindrical central portion, K, in close proximity to the under surface of the lower roll F, and the heat directing and conducting flanges *l* depending therefrom in a downward and outward direction on each side of said central portion. This guard may be readily bent up out of sheet metal. At its ends bearings *m* are attached, to rest upon the branches or arms *n* of the press-lever M. This lever extends transversely of the frame, being pivoted at the points *r*, and the ends of its arms *n* are joined by a broad bar, *n'*, under which is located a pressing-screw, V, whereby said lever may be raised or lowered, according to requirement. I designates the lamp, which is placed under the guard or apron.

This is a compressing and polishing burnisher. The lamp having been lighted, and the proper degree of pressure between the rollers having been secured, by moving the screw V, to raise the arms of the lever, the apron, and the lower roll, the card is introduced between the rolls face downward.

What I claim, and desire to secure by Letters Patent, is—

1. In combination with the lower roll of a photograph-burnisher, the adjustable flanged heat-apron and the adjusting-lever, substantially as specified.

2. A photograph-burnisher having the upper large roughened roll E, the lower adjustable and smaller polished steel roll F, having, respectively, large and small gears engaged to rotate in the same direction, the flanged heat-apron H, the compressing-lever M, and its screw V, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN COUMBE.

Witnesses:
B. N. BAKER,
A. W. EDGERLY.