(No Model.)

H. CRARY.

PHOTOGRAPH BURNISHING MACHINE.

No. 417,153. Patented Dec. 10, 1889.

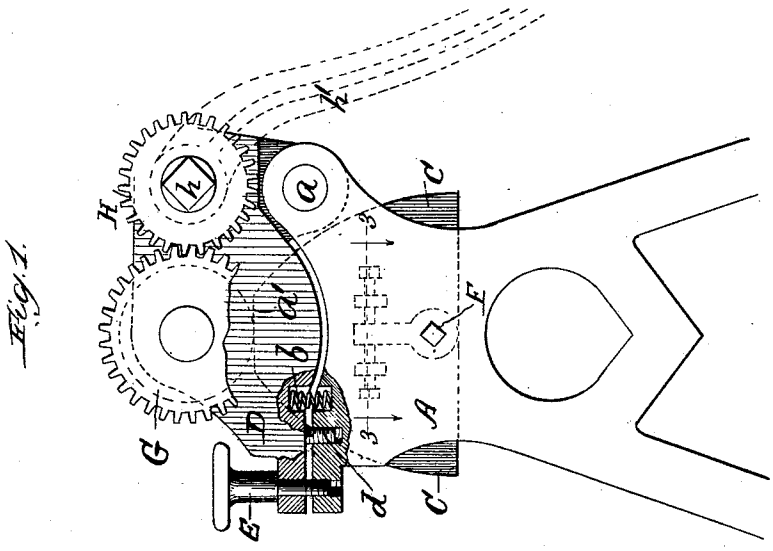

Fig. 1.

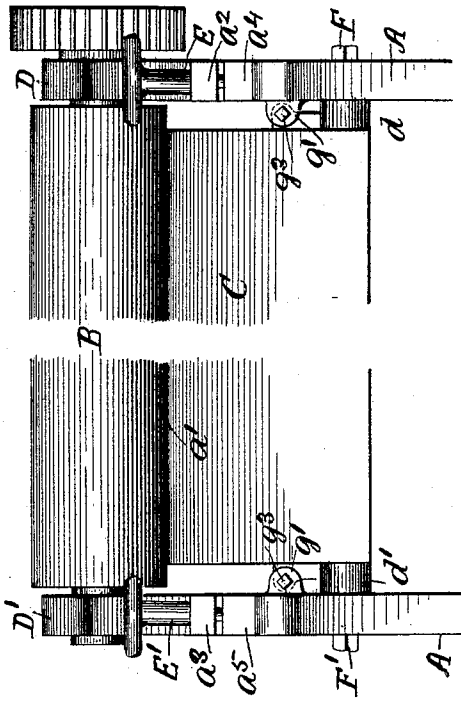

Fig. 2.

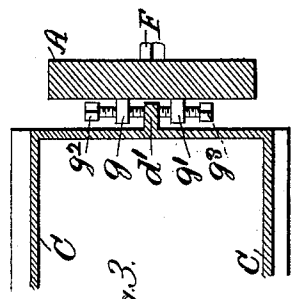

Fig. 3.

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PHOTOGRAPH-BURNISHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 417,153, dated December 10, 1889.

Application filed June 25, 1889. Serial No. 315,501. (No model.)

To all whom it may concern:

Be it known that I, HAMILTON CRARY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Photograph-Burnishing Machine, of which the following is a full, clear, and exact description, that will enable others to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to improvements in that class of machines employed in burnishing photographs, and has for its object the providing of a device of this character wherein the burnishing-surface may be changed with reference to the compressing-roller, and means for adjusting the roller with reference to the burnishing-surface and in accordance with the thickness of the card or object to be passed between the same, as will be hereinafter set forth.

Figure 1 is an end elevation, with parts broken away, of a machine embodying my improved features; Fig. 2, a side elevation; and Fig. 3, a horizontal section in plane 3, Fig. 1, looking in the direction indicated by the arrows.

Referring to the drawings, A represents the supporting-frame; B, the compressing-roller, and C the burnishing-case. The respective ends of the compressing-roller B are provided with suitable bearings in the end plates D D′, which are pivoted at the rear side, as at a, to the respective framing ends A. This arrangement permits of the compressing-roller and end plates being turned over backward out of the way when it is desired to have convenient access to the burnishing-surface a' of the case C.

The vertical hand-adjusting screws E E′ are inserted down through the flanges a^2 a^3 of the end plates and have a threaded engagement with the corresponding flanges a^4 a^5, projecting horizontally from the front side of the framing ends A. The hand-clamping screws have a threaded engagement only with the supporting-frame and serve the purpose of lowering the compressing-roller with reference to the burnishing-surface forming the upper side of case C.

Each end of the machine is provided with a spiral spring b, one-half of which is recessed in the framing ends and the other half resting in the under side of the end plates D D′, as shown in Fig. 1. The object of these springs is to automatically raise the compressing-roller and enlarge the space between the same and the burnishing-surface underneath, in accordance with the slackening up or turning back on the clamping-screws E E′.

A vertical adjustable gage-screw d is recessed in the upper edge of each end of the frame, (see Fig. 1,) the end plates resting on the upper projecting ends of said screws.

The object of the screws d is to prevent the compressing-roller from being set nearer the burnishing-surface than a fixed point when the clamping-screws are tightened and in accordance with the thickness of the card to be passed through.

The respective ends of the burnishing-case C are provided with lugs d' d^2, and are secured in position between the framing ends by the pivot-bolts F F′, passing through the lower part of the lugs d' d^2, as shown in Fig. 2 and indicated by dotted lines in Fig. 1. The framing ends have the lugs g g', formed on the inner sides and located on each side of and in a horizontal plane with the upper ends of lugs d' d^2, as shown in Fig. 3.

The horizontal adjusting-screws g^2 g^3 are inserted through the lugs g g' and bear against the respective sides of the upper part of the lugs d' d^2. Now, by turning back on the screws g^2 on one side and tightening up on the companion-screws g^3 the case C may be tilted on its pivot-bolts F F′, the purpose of which arrangement is to change the relation of the burnishing-surface with reference to the compressing-roller.

It will be observed that the top of the case C is quite wide, and but a small part of the burnishing-surface is covered by the roller. Therefore, should that part of the surface in line with the rollers become marred or defaced a new burnishing-surface may be brought into position until the entire surface has been gone over, thus greatly lengthening the service of the machine.

A gear-wheel G is mounted on one end of the roller B. A pinion H is mounted on the

stud-shaft h, journaled in the end plate D and lying parallel to and in a horizontal plane with reference to the compressing-roller. A handle h' (represented in dotted lines) is mounted on the square end of the stud-shaft. The object of this arrangement is to enable the operator to rotate the roller, so that the photographs may be inserted and passed through from the front side without having to turn the handle backward, thus making the machine right-handed instead of left-handed, as would be the case were the operating-handle mounted directly on the compressing-roller. The stud-shaft and pinion mounted on the same, being in a horizontal plane and located back of the compressing-roller, keep the gear-wheel and pinion in engagement as the roller is adjusted.

The case C may be conveniently heated from the under side by any suitable means.

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

1. The combination of the frame, the adjustable end plates mounted thereon, the spiral spring or springs recessed in said frame and plates, and the clamping hand-screws, whereby said springs are adapted to force the end plates in an upward direction when the clamping-screws are relaxed, substantially as and for the purpose set forth.

2. In a photograph-burnishing machine, the combination of the supporting-frame, the end plates pivoted at one side to said frame, the compressing-roller journaled in said end plates, and the gage screw or screws adjustably inserted in the top of the framing ends and projecting upwardly therefrom in the line of the end plates, substantially as and for the purpose set forth.

3. In a photograph-burnishing machine, the combination of the frame, the end plates pivoted thereto and adapted to be swung over backward therefrom, the compressing-roller journaled in said end plates, the burnishing-case supported between the framing ends and below said roller, the adjustable gage screw or screws d, and the hand clamping-screws, substantially as and for the purpose set forth.

4. In a photograph-burnishing machine, the combination of the framing ends, the burnishing-case arranged between said frame and provided on its respective ends with the lugs d' d^2, the pivot-bolts adjustably securing said case to the frame, the lugs g g', and the adjusting-screws bearing against the upper end of the lugs d' d^2, whereby said case may be tilted to present a new surface with reference to the compressing-roller, substantially as set forth.

5. In a photograph-burnishing machine, the combination, with the movable end plates, of the compressing-roller, the gear-wheel mounted on one end of said roller, the stud-shaft, and the pinion mounted thereon and engaging with said gear-wheel, substantially as and for the purpose set forth.

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