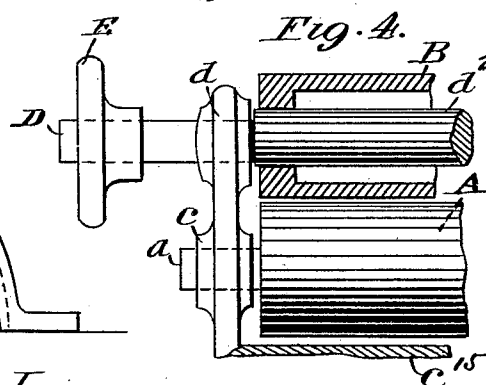
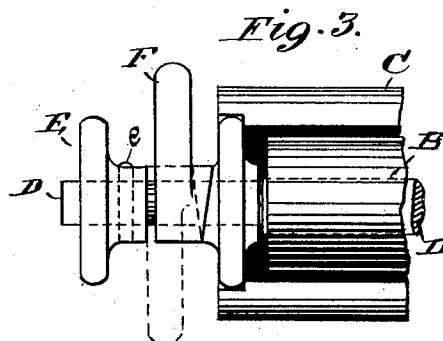
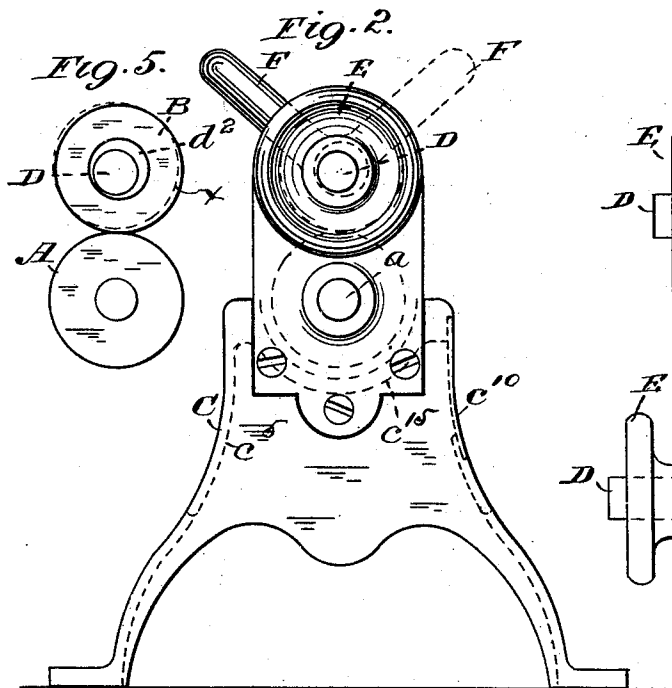
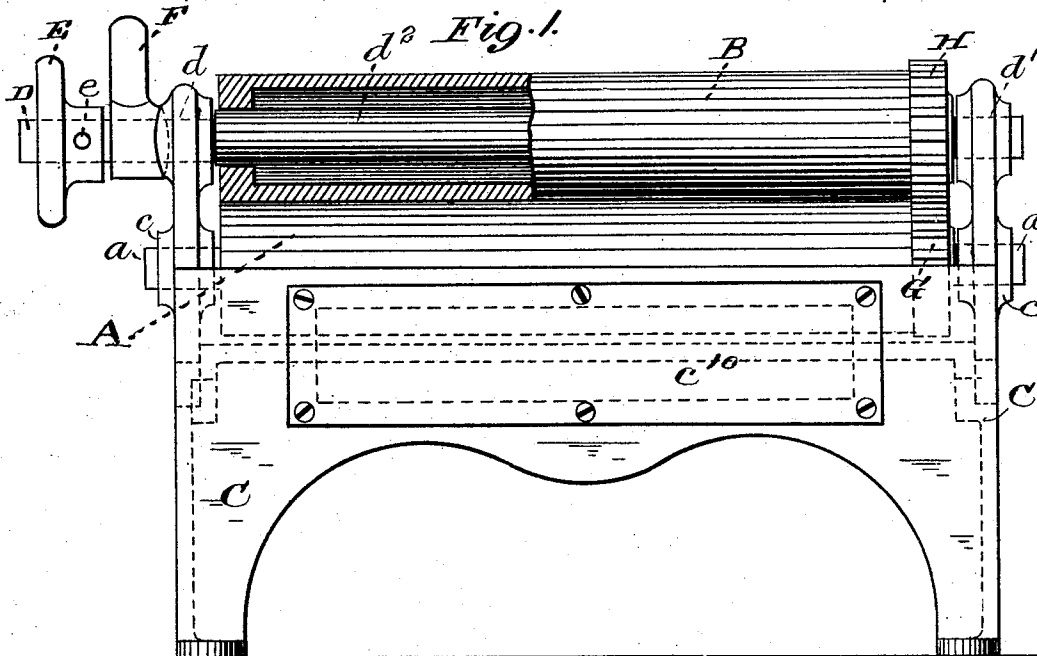


(No Model.)

L. A. BUCHANAN.
BURNISHER.

No. 467,600.

Patented Jan. 26, 1892.



WITNESSES
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UNITED STATES PATENT OFFICE.

LOUIS A. BUCHANAN, OF ST. LOUIS, ASSIGNOR TO HENRY A. HYATT, OF KIRKWOOD, MISSOURI.

BURNISHER.

SPECIFICATION forming part of Letters Patent No. 467,600, dated January 26, 1892.

Application filed February 20, 1891. Serial No. 382,242. (No model.)

To all whom it may concern:

Be it known that I, LOUIS A. BUCHANAN, of St. Louis, Missouri, have made a new and useful Improvement in Burnishers, of which the following is a full, clear, and exact description.

The present improvement relates more especially to photograph-burnishers; and it consists, partly, in the means for adjusting the rollers with reference to each other, partly to the means for readily operating and securing the adjustable roller, and partly to minor details of construction, substantially as is hereinafter described and claimed, aided by the annexed drawings, making part of this specification, in which—

Figure 1 is a side elevation of the improved burnisher, a portion of the shell of the upper roller being broken away to exhibit the interior construction; Fig. 2, an end elevation of the same; Fig. 3, a top view of an end portion of the burnisher; Fig. 4, a vertical longitudinal section of the parts of Fig. 3, the upper roller and the housing being in section; and Fig. 5, an end elevation of the rollers.

The same letters of reference denote the same parts.

A and B represent, respectively, the burnishing-roller and the feed-roller of the construction, and C represents the housing. The lower roller A is constructed in the usual manner, and its shaft *a* is held in the bearings *c* *c'* in the housing. The upper roller B is loose upon its shaft, which in turn is adapted to rotate in bearings in the housing.

The upper roller and its support constitute a leading feature of the construction and are made as follows: D represents a shaft journaled at *d* *d'* in the housings and provided between its bearings with an eccentric *d''*, upon which the roller B is immediately journaled. The shaft D is thus in effect a crank-shaft, which when rotated in its bearing causes the roller B to be moved farther from or brought nearer to the other roller A. The eccentricity of the shaft is shown more distinctly in Fig. 5, and the adjustment of the roller B with reference to the roller A is indicated by the broken line *x* in that figure. As the roller B requires to be lifted only far enough to admit the photograph to be bur-

nished, the eccentric is constructed accordingly. The shaft D can be adapted to be rotated by any suitable means; but to enable the shaft to be readily manipulated and also to be readily fastened at any point of its adjustment, the shaft is provided with a hand-wheel E, which is secured to the shaft, as by means of a pin *e*, and between the wheel and the housing a cam-lever F is journaled upon the shaft to be rotated thereon, as indicated by its two positions shown, respectively, in the full and broken lines, Fig. 2. When the cam-lever is turned in one direction, it becomes loose in a longitudinal direction upon the shaft D; but when it is turned in the opposite direction it becomes wedged between the hand-wheel and the housing, which parts are suitably relatively constructed, substantially as shown, to coact with the cam-lever, and the shaft D is thereby locked frictionally and prevented from rotating in its bearings. Owing to the proximity to each other of the hand-wheel and cam-lever, the operator is enabled with a single hand to both adjust and lock and unlock the shaft, leaving his other hand free to be otherwise occupied. In this manner the adjustable roller can be easily unlocked and suitably spaced apart from the fixed roller to admit the photograph between the rollers, and then secured to produce the desired pressure upon the photograph as it is worked forward and backward in the ordinary manner between the rollers. A single manipulation, it may be said, suffices to accomplish the result. I desire, however, not to be restricted to any special means for locking said adjustable roller. A very even pressure is also obtained upon the work, as the described eccentricity extends suitably upon the shaft D to support the roller B evenly throughout its length with relation to the roller A. The rollers A B are suitably intergeared by means of the wheel G H to enable them to coact in the ordinary manner. The housing C is suitably constructed, as indicated by the broken lines *c''*, Fig. 2, to enable the burnisher to be heated in the ordinary manner, and a minor feature of the construction is the removable plate *c''*, which when taken out of its place in the housing enables access to the up-

per portion of the interior of the housing—
namely, that part c^{15} which is immediately be-
neath the rollers—whenever it is desired to
remove and accumulation of soot thereupon.

5 I claim—

A burnisher combining in its construction
a burnishing-roller, a feed-roller, and a lock-
ing device, one of said rollers, for the purpose
of adjusting it with reference to the other of
10 said rollers, being journaled upon an eccentric

shaft, the other of said rollers being journaled
centrally, and said locking device being
adapted to secure said adjustable roller, sub-
stantially as described.

Witness my hand this 11th day of Febru- 15
ary, 1891.

LOUIS A. BUCHANAN.

Witnesses:

C. D. MOODY,
A. BONVILLE.