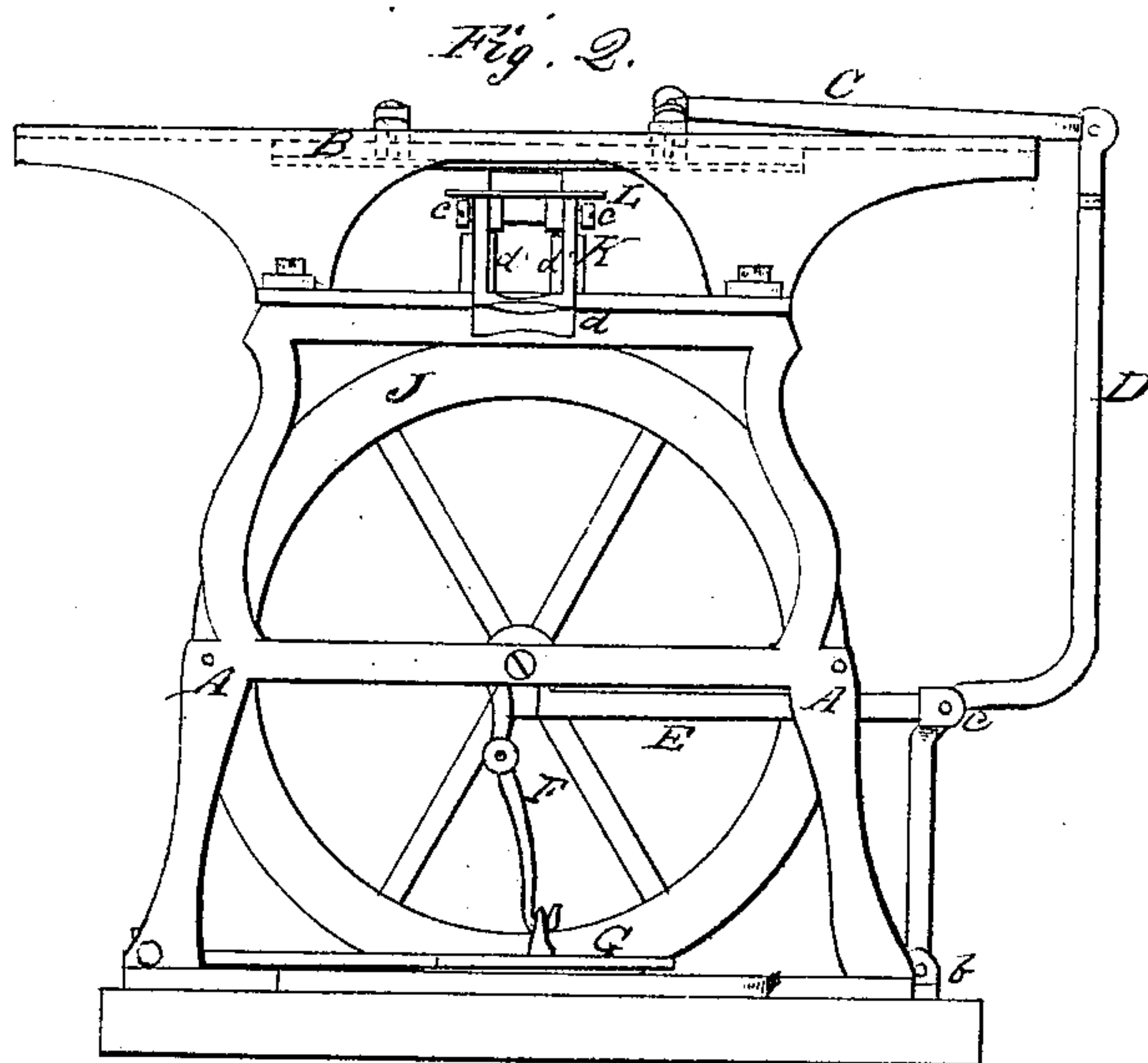
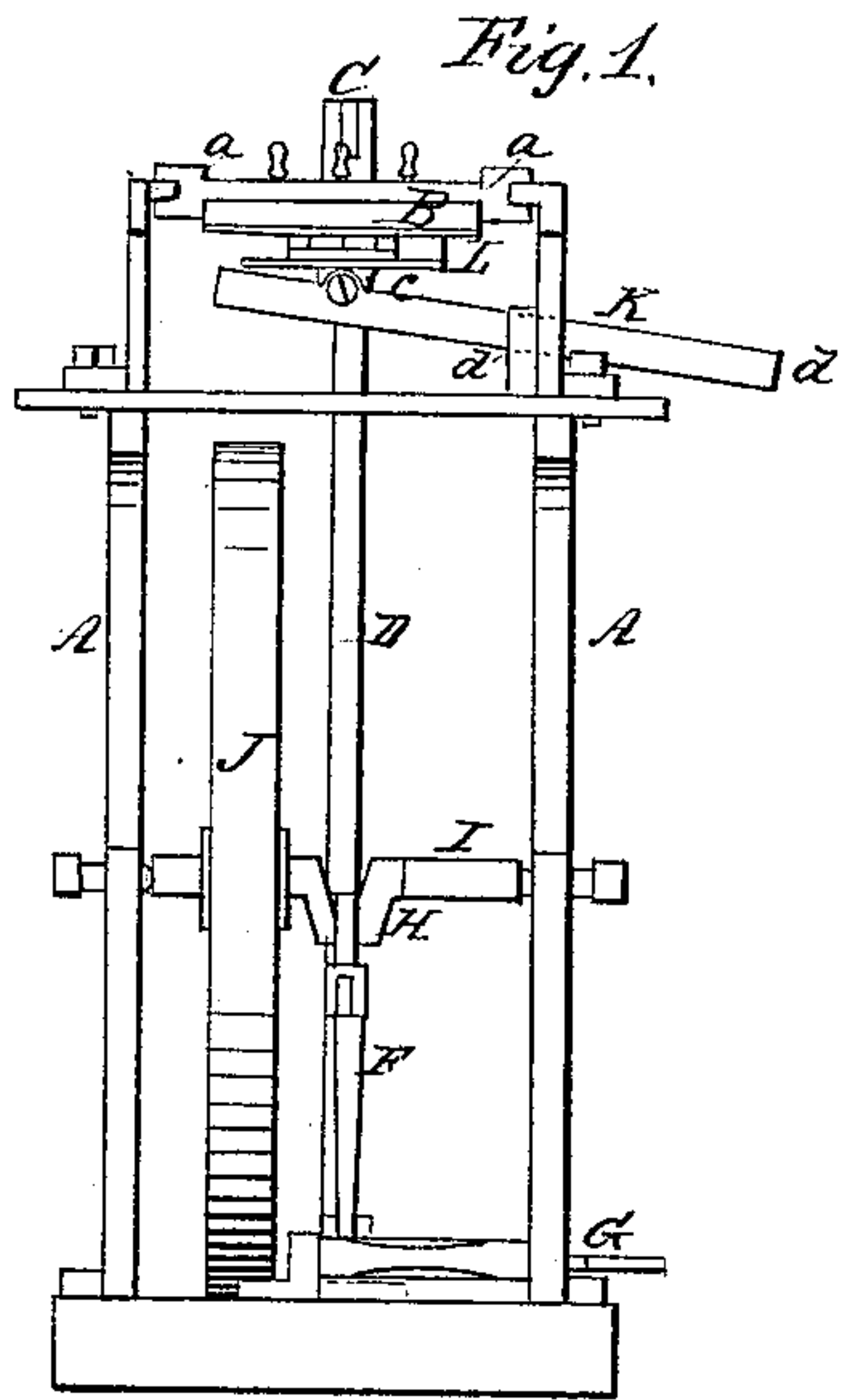


*T. Duryea,*  
*Polishing Daguerreotype Plates,*  
*No 9,018, Patented June 15, 1852.*



# UNITED STATES PATENT OFFICE.

TOWNSEND DURYEA, OF WILLIAMSBURG, NEW YORK.

## MACHINE FOR POLISHING DAGUERREOTYPE-PLATES.

Specification forming part of Letters Patent No. 9,018, dated June 15, 1852.

*To all whom it may concern:*

Be it known that I, TOWNSEND DURYEA, of Williamsburg, in the county of Kings and State of New York, have invented a new and Improved Machine for Polishing Daguerreotype-Plates; 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, in which—

Figure 1 is a front elevation of the machine. Fig. 2 is a side elevation of the machine.

Similar letters of reference indicate corresponding parts in each of the two figures.

The nature of my invention consists in polishing daguerreotype-plates by means of a horizontal reciprocating bed, said bed having a strip of buff, chamois, or other suitable material attached to its under side. The plate to be polished is placed and secured in any proper manner to the end of a lever or frame having its fulcrum or bearing attached to the frame of the machine. The plate is so arranged on the end of the lever as to be in contact with the buff or chamois on the under side of the reciprocating bed when the opposite or outer end of the lever or frame is depressed. The plate is thus brought in contact with the polishing material, and the combination of the horizontal reciprocating bed with the lever or frame for holding or pressing the plate to or against it constitutes the invention.

To enable others skilled in the art to make and use my invention, I will proceed to describe fully its construction and operation.

A represents the frame of the machine, which may be constructed of metal or other suitable material. On the upper part of the frame is placed the reciprocating board or bed B, said bed having grooves *a a* in its sides in which a part of the frame fits, (see Fig. 1,) the portion of the frame that fits in the grooves being bent at right angles with the vertical portion. C is a connecting-rod attached by pivots to the bed B and to the lever D. (See Fig. 2.) The lever D has its fulcrum at *b*. Attached to the lever at the point *c* is a connecting-rod E, the opposite end of which is secured to a jointed pitman F, said pitman being secured to a treadle G—that is, the lower end of it, the upper end being attached to a crank H on the shaft I, the shaft having

its bearings in the frame of the machine. J is a fly-wheel upon the shaft I to assist the crank to pass its center.

The manner in which the reciprocating motion is given the bed B will be readily seen. As the treadle G is operated by the foot, a reciprocating motion is given the connecting-rod E, and this motion is communicated to the bed B by means of the lever D and connecting-rod C.

K is the frame or lever, on one end of which the plate to be polished is secured. The plate is arranged on the end of the frame in the following way:

L is a small platform attached to the end of the frame by a joint or joints *c*. The plate is secured on this platform in any proper way. Now when the outer end *d* of the frame is depressed the whole surface of the plate will be in contact with the buff or chamois on the under side of the bed B, as the platform L will be in a horizontal position owing to the joint attachment. The frame may consist of one or more levers. Two levers are represented in the drawings. I do not confine myself to any particular number. The fulcrums of the levers are at *d'*.

The operation will be readily seen. The plate being properly secured on the platform L, motion is given the bed B by operating the treadle G with the foot. The outer end *d* of the frame K is then depressed, which forces the plate against the buff or chamois on the under side of the bed B, the friction produced by the motion causing the plate to be polished.

The above machine is simple, not liable to get out of repair, and works in an effectual manner, the plate is polished more perfectly than can be done on the ordinary machines in use, and the expense of constructing one of my machines is not great.

I do not claim the platform L nor frame K; neither do I claim the reciprocating bed B separately; but

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

The horizontal reciprocating bed B, operated in the manner described, or in any other equivalent way, in combination with the frame K, for the purpose as herein specified.

TOWNSEND DURYEA.

Witnesses:

JAMES M. AYMEN,  
JAMES H. CILLS.