

D. Westley.
Wood Polishing Mach.

N^o 97,254.

Patented
Nov. 23. 1869.

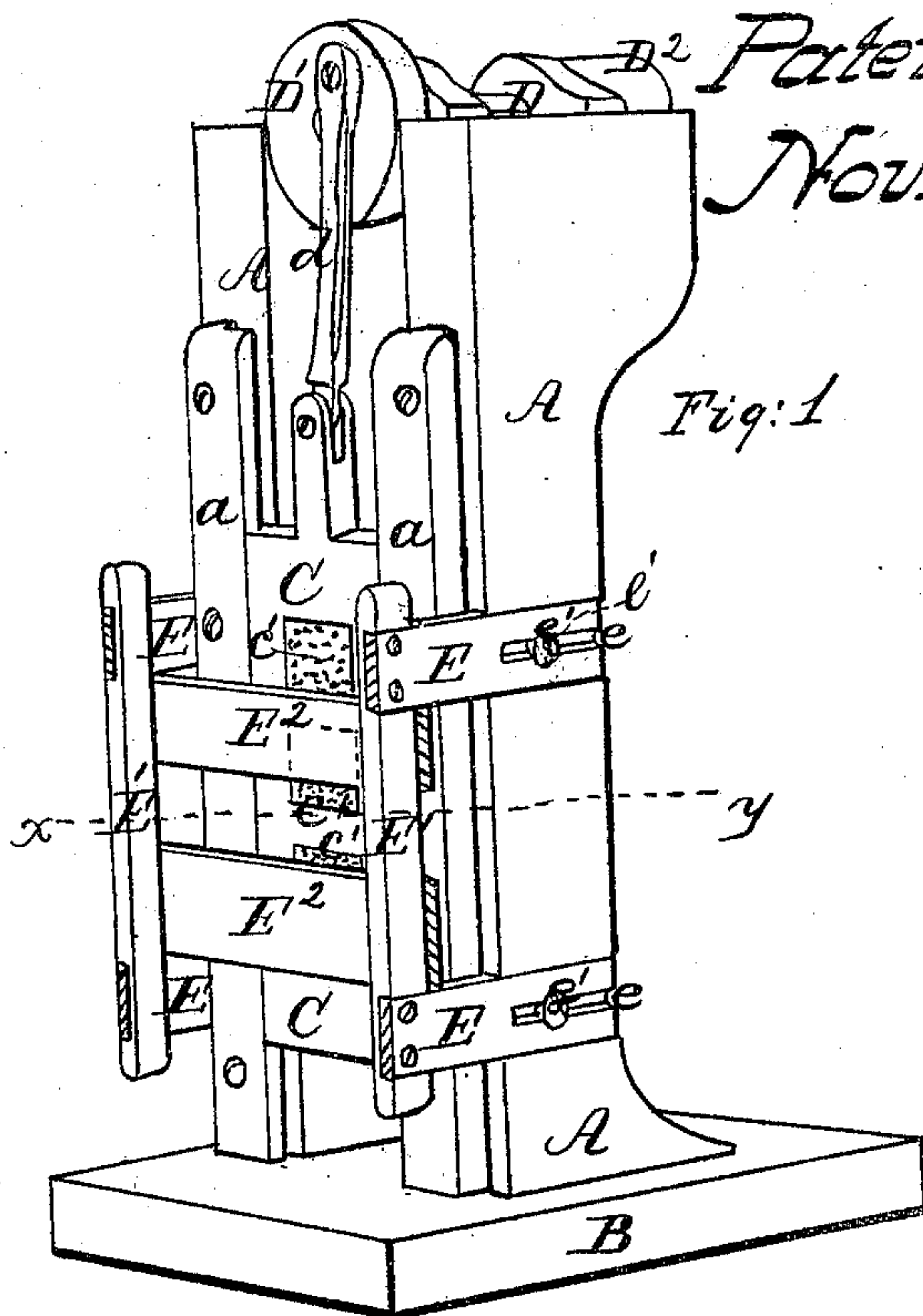
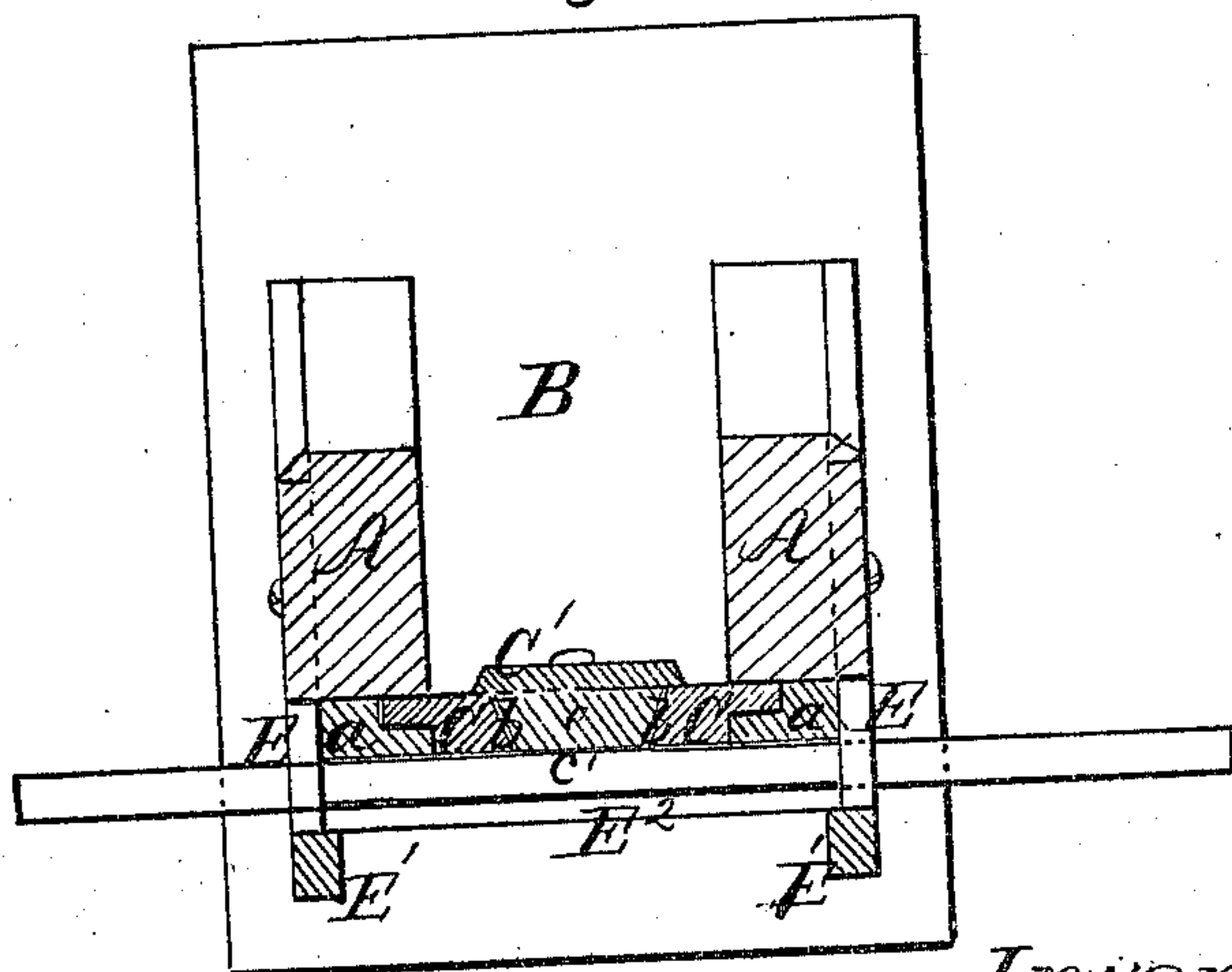


Fig. 2.



Witnesses
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DANIEL WESTLEY, OF CORRY, PENNSYLVANIA, ASSIGNOR TO HIMSELF
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Letters Patent No. 97,254, dated November 23, 1869.

IMPROVEMENT IN MACHINE FOR POLISHING WOOD.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, DANIEL WESTLEY, of Corry, Erie county, Pennsylvania, have invented certain new and useful Improvements in the Construction of Machines for Polishing Doors, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, making part of this specification, in which—

Figure 1 is a perspective view of the machine, and

Figure 2 is a transverse sectional view, through the line *x y*, fig. 1.

Similar letters of reference indicate corresponding parts in both figures.

In the drawing—

A A are posts or jambs, which are to be secured, at the bottom, to either a movable platform, B, or a permanent floor, as may be expedient. They are also connected with each other at their upper ends by cross-pieces, not shown in the drawing.

To these jambs are bolted, or otherwise fastened, rebated guide-pieces *a*, forming channels or ways, or, if preferred, the ways may be provided by grooving the inner faces of the jambs.

C is a carrying-frame or gate, reciprocating in the ways just named.

In this frame are placed one or more blocks *c*, covered upon their outer face with sand-paper, *c'*, or other substance suitable for polishing-purposes.

These blocks have their edges bevelled, and fit closely into perforations having similarly bevelled sides, in frame C, as shown at *b b*, fig. 2.

They are held in place by a cap, C', upon the rear side of the gate, as is also shown in fig. 2.

When sand-paper is used, it can be conveniently secured to block *c*, by pressing the paper around the edges of said block before it is placed in frame C, and then pressing both block and paper firmly in place, by means of the cap C', the inclined edges of the block and corresponding inclined edges of the perforations in frame C, affording the means of securing the sand-paper in proper position, and also of adjusting the distance which the block projects through the gate.

D is a shaft, mounted in suitable bearings, at the upper end of jambs A.

D¹ is a crank-wheel, keyed rigidly to shaft D; and *d* is a pitman, connecting wheel D¹ with gate C.

D² is a belt-pulley, keyed to shaft D in such position that motion may be imparted to it from some convenient point.

A supporting-frame, on which to slide the doors or other articles to be operated upon, is formed of slotted arms E, sliding in gains in posts A, the uprights E¹, and transverse bars E².

This frame not only serves to support the door at a proper height, with reference to the gate C, but also keeps said door in contact with the polishing-blocks *c*, the slots *e*, and bolts *e'*, providing for such adjustment as may be rendered necessary by the variation in the thickness of the doors.

If it is found to be desirable, the outer face of the block *c* may be padded or otherwise rendered slightly elastic, for the purpose of fitting with more accuracy any inequalities in the surface of the doors, or the transverse bars E² may be so constructed as to present a yielding surface, and thus accomplish the same purpose.

From the foregoing description, it will be readily seen that if I give the gate or carrying-frame C a rapid reciprocating motion, by means of the crank D¹ and pitman *d*, operated by any suitable power, a door or other article passed through the supporting-frame, and subjected to the operation of the sand or other polishing-substance, upon the outer face of block *c*, will be effectually and rapidly polished and finished.

Among the advantages possessed by my machine are its cheapness and durability.

From the fact that the reciprocation of the gate is vertical, the tendency to rack and shake the machine apart is largely reduced, while at the same time the doors can be handled more easily than they could if the polishing-surfaces had a horizontal reciprocation, although, if in some cases and under some circumstances, a horizontal reciprocation be preferred, it may be employed.

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

1. The reciprocating gate C, constructed and arranged to operate substantially as shown and described, and for the purpose set forth.

2. The supporting-frame E E¹ E², constructed substantially as shown, in combination with the carrying-frame or gate C.

DANIEL WESTLEY.

Witnesses:

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