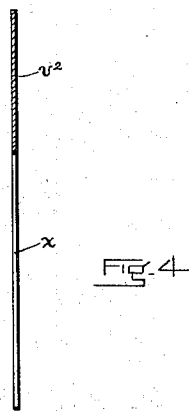
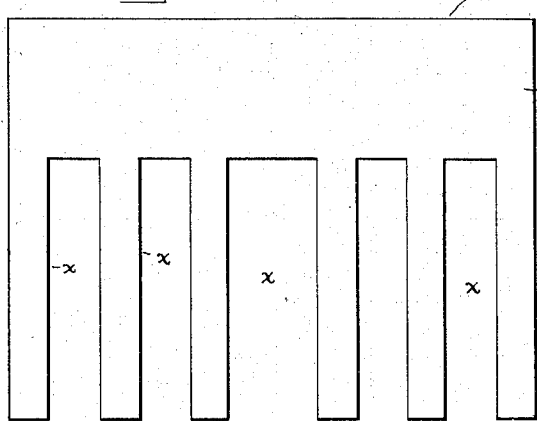
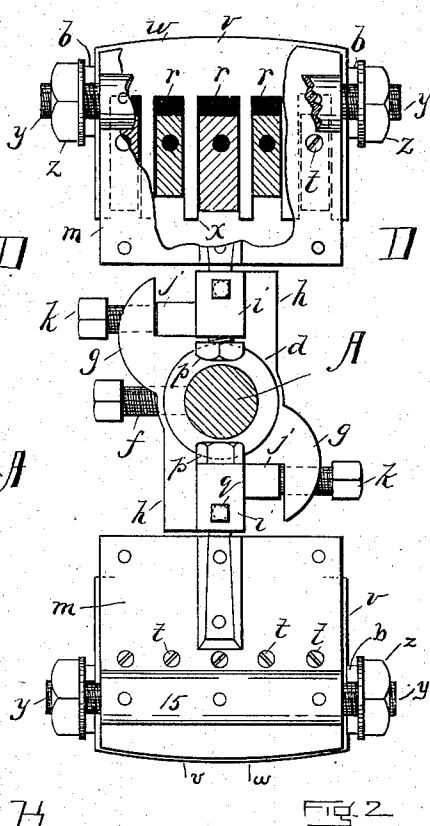
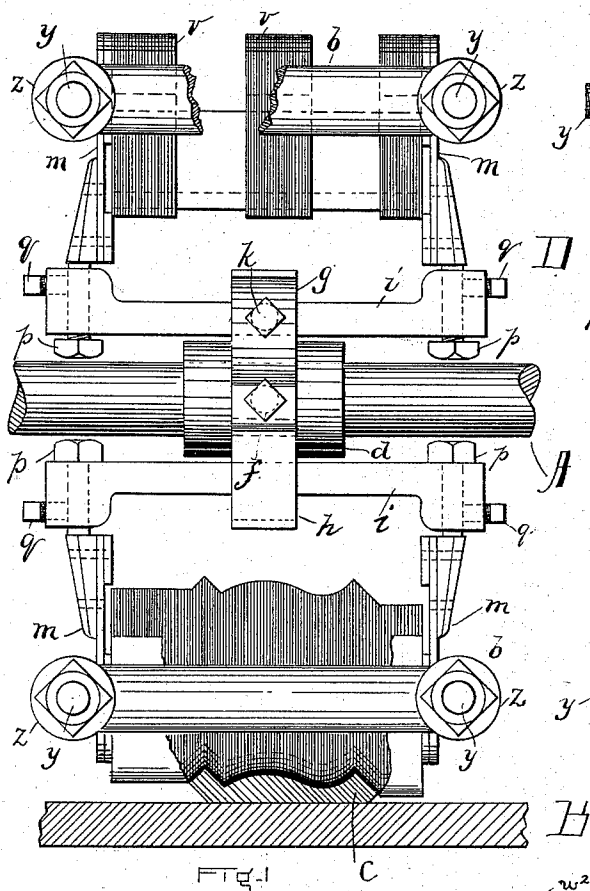


(No Model.)

J. B. LOCKE.
SANDPAPERING MACHINE.

No. 567,905.

Patented Sept. 15, 1896.



WITNESSES
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UNITED STATES PATENT OFFICE.

JAMES B. LOCKE, OF BOSTON, MASSACHUSETTS.

SANDPAPERING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 567,905, dated September 15, 1896.

Application filed January 8, 1894. Serial No. 496,141. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. LOCKE, of Boston, in the county of Suffolk, State of Massachusetts, have invented certain new and useful Improvements in Sandpapering-Machines, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation showing the rotary wheel of my improved sandpapering-machine, the shaft being represented as broken off; Fig. 2, an end elevation of the same; Fig. 3, a side elevation of one of the leaves detached from the clamp, and Fig. 4 a transverse section of the same.

Like letters and figures of reference indicate corresponding parts in the different views of the drawings.

My invention relates especially to a machine for sandpapering or rubbing down wooden molding.

My invention is designed particularly to facilitate this work by applying the sandpaper to a rotary grinding-wheel which is provided with a body or bed that can be made to conform to the grooves and angles of the molding.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the shaft, which is mounted in suitable bearings and driven from any suitable source of power.

B is a table or bed on which the molding C is guided during the process of sandpapering or rubbing down.

The polishing-wheel D comprises a collar *d*, held by a set-screw *f* on the shaft. From said collar two hook-shaped lugs *g* project, and alternating with said lugs and in parallelism therewith there are two arms *h*. Between each lug and its companion arm a frame-bar *i*, running parallel with the shaft, is held. These bars are jammed against the arms *h* by blocks *j* and screw-bolts *k*. A clamping-plate *m* is supported on a screw *p*

at each end of the bar *i*, whereby said plates may be adjusted vertically. These screws are held against rotation by set-screws *q*. Connecting each set of plates *m* there are a series of wooden blocks *r*, screws *t* being turned into said blocks through the plates *m*. The space between each set of plates *m* is filled by a series of leaves *v*. These leaves are run transversely of the wooden blocks *r*, and their upper edges are curved, as shown at *w* in Fig. 2. Said leaves are preferably made of lamina fiber or compressed paper-stock and are about one thirty-second of an inch in thickness. The lower edges of the leaves are slotted at *x* to pass between the blocks *r*. Across the ends of the leaves clamping-bars *b* are held by nuts *z*, turned onto screw-bolts *y* in lugs 15 on the plates *m*. These bars are designed to hold the sandpaper, as hereinafter described.

In the use of my improvement when a certain form of molding is to be sandpapered or rubbed down its face is pressed into the curved surface *w* of the lamina body *v*, displacing the sheets until said surface conforms to the shape of the molding, as shown in the lower portion of Fig. 1. A sheet of sandpaper, or sandcloth, preferably, is moistened slightly and laid onto the surface thus formed, both members of the wheel being prepared in the same manner. The nuts *z* are then loosened and the ends of the sandpaper passed under the bars *b*, by which it can be clamped tightly against the ends of the sheets *v* by turning up said nuts. A grinding-surface is thus formed on each member of the wheel conforming to the shape of the molding. The wheel being set in motion the molding C is placed on the bed thereon and passed under the wheel. The force of the contact of the sandpaper with the molding can be readily adjusted by means of the bolts *p*, moving the clamp radially from the shaft. A rotary grinding or polishing movement is thus effected, accomplishing the work desired in far less time than by the usual hand processes.

Figs. 3 and 4 represent a modified form of leaf *v*² for the body of the grinder, the upper edge *w*² being straight. This form is designed for use in a machine where the grinder may be reciprocated in a direct or straight line,

the method of adjusting and conforming the body of the grinder to the shape of the molding being the same.

By constructing the bed of thin leaves *v*, held with sufficient tension by the clamp, I am afforded a surface which can be readily made to conform to and retain the shape of the molding, carrying the grinding-surface into every portion thereof.

10 Having thus explained my invention, what I claim is—

1. In a sandpapering-machine, a shaft, in combination with a clamp on said shaft; and a series of leaves radially adjustable independently in said clamp substantially as and for the purpose set forth.

2. In a sandpapering-machine, the shaft, in combination with the clamp radially adjustable thereon and the series of leaves, *v*, held by said clamp and adjustable therein 20 substantially as described.

3. The shaft, in combination with the clamp; a series of leaves, *v*, held in said clamp and movable radially of the shaft; and mechanism for securing a removable grinding-surface 25 on the outer edges of said leaves substantially as described.

JAMES B. LOCKE.

Witnesses:

KATHARINE DUFFEE,
O. M. SHAW.