J. P. BECK.

SAND-PAPERING MACHINE.

No. 191,640. Patented June 5, 1877.

Fig. 1.

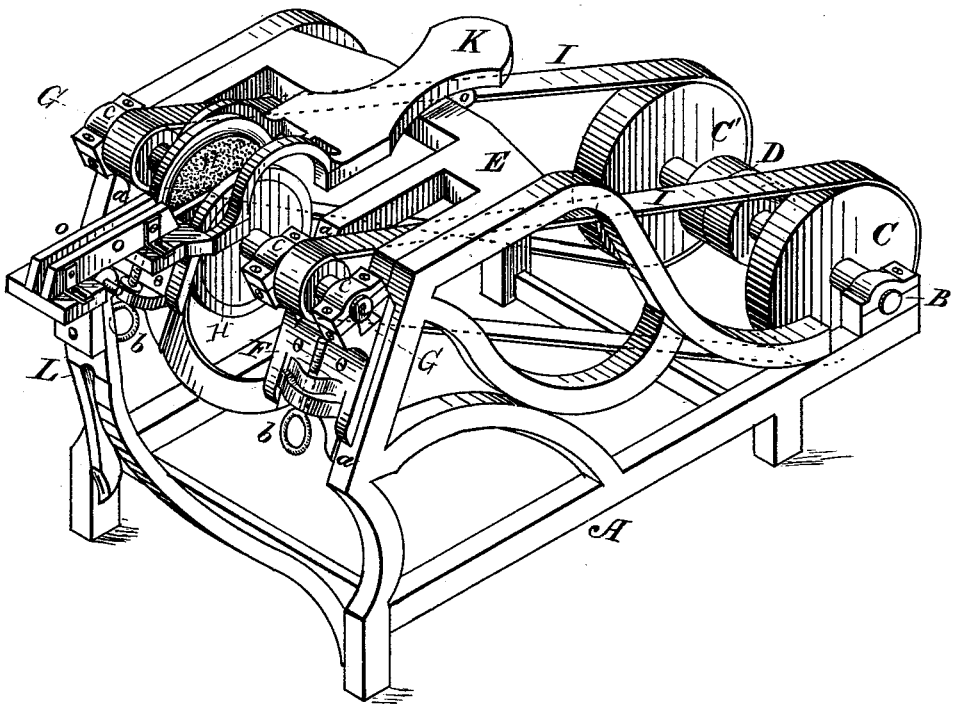


Fig. 2.

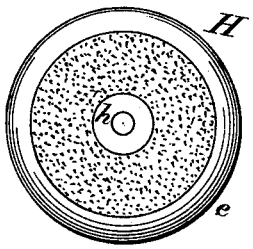
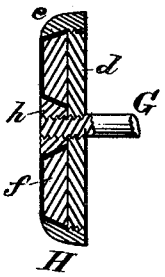


Fig. 3.



Attest:

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UNITED STATES PATENT OFFICE.

JACOB P. BECK, OF LOCK HAVEN, PENNSYLVANIA, ASSIGNOR OF A PART OF HIS RIGHT TO GRAVENSTINE KINTZING AND CARRIE V. RICHARDS, OF SAME PLACE.

IMPROVEMENT IN SANDPAPERING-MACHINES.

Specification forming part of Letters Patent No. **191,640**, dated June 5, 1877; application filed April 24, 1877.

To all whom it may concern:

Be it known that I, JACOB P. BECK, of Lock Haven, in the county of Clinton and State of Pennsylvania, have invented a new and useful Improvement in Sandpapering-Machines; and I do hereby declare the following to be such a full, clear, and exact description thereof as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

Similar letters of reference indicate corresponding parts in the different figures.

The object of this invention is to produce a machine capable of sandpapering the panels and frames of doors and other similar pieces of wood-work in a neat and expeditious manner; and the invention consists in the method of constructing and arranging the revolving sand-paper heads with relation to the other parts of the machine, as will be hereinafter fully set forth.

Figure 1 is a perspective view of the machine complete, and Figs. 2 and 3 are front and sectional views of the sand-paper heads.

A represents the frame of the machine, the sides of which are usually of cast-iron, united to each other by suitable metal or wooden girts. Crossing the rear end of the frame A, and supported upon it in suitable journal-boxes, is the driving-shaft B, carrying the two driving-pulleys C and C′. Motion is imparted to this shaft by a belt upon the pulley D from any suitable prime mover.

Connecting the front ends of the frame is a bracket, E, provided with inclined guiding-surfaces *a a*, upon which rest and reciprocate the sliding frames F. These frames are adjusted by means of the adjusting-screws *b*, which pass through lugs upon the bracket E. The sliding frames F are provided with journal-boxes *c*, in which rotate the shafts G. These shafts G carry upon one end the sand-paper heads H, and are put in motion by belts I from the driving-pulleys upon the driving-shaft B. These sand-paper heads H are formed of a circular metallic plate, *d*, secured upon the shaft G, and provided with a screw-threaded periphery, which receives the collar *e*.

An annular disk of wood, *f*, serves as a support for the sand-paper, which is cut into circular pieces a little larger than the disks placed over them, and the edges bent down, so that the paper and disk may be inclosed by the collar *e*, which is then screwed upon the plate *d*, thus stretching and firmly securing the paper upon the wooden disks *f*, as well as to the plate *d* and its driving-shaft.

As a further security to the sand-paper and its supporting-disk, the threaded end of the shaft G is allowed to project into a conical opening in the middle of the disk, where it receives the conical nut *h*, which catches the paper between its periphery and the sides of the conical opening in the disk, thus forming an additional stretcher and securer of the paper and disk.

The work-carrying table K rests upon the bracket E at one end, the opposite end being carried by the bifurcated support L, which is attached to the frame A of the machine. This table K is provided with two horizontally-adjustable guides, *o*, between which the material is placed before passing between the sand-paper heads.

The operation of the machine is as follows: The shaft B is put in motion, and communicates its rotation to the sand-paper heads through the belts I. The heads H are then adjusted to the desired height above the table by the screws *b*, the inclined planes upon which the head-carrying frames rest allowing this adjustment without material change in the tension of the driving-belts. The guides *o* are then adjusted to the thickness of the material to be sandpapered, and the stuff passed through by hand between the heads.

Having thus described my invention, I claim as new and desire to secure by Letters Patent the following:

1. The shaft G, plate *d*, screw-threaded on its periphery, and disk *f*, in combination with

the conical nut *h*, to secure the central part of the sand-paper disk, substantially as and for the purpose set forth.

2. The shaft G, plate *d*, and collar *e*, in combination with the disk *f* and nut *h*, all constructed and operating in the manner and for the purpose described.

3. The table K, provided with the adjustable guides *o*, in combination with the sand-paper heads H, mounted upon the independently-adjustable frames F, as and for the purpose specified.

JACOB P. BECK.

Witnesses:
CHAS. BINGHAM,
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