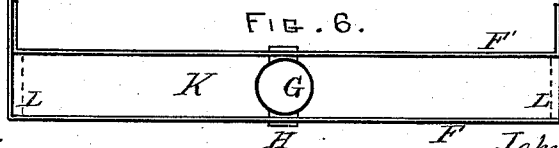
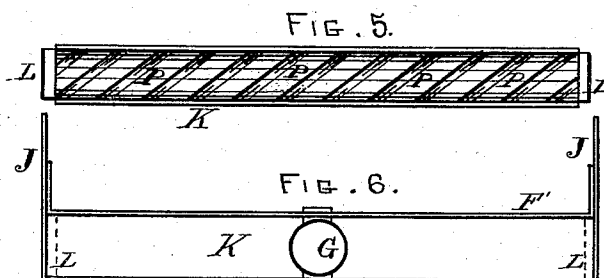
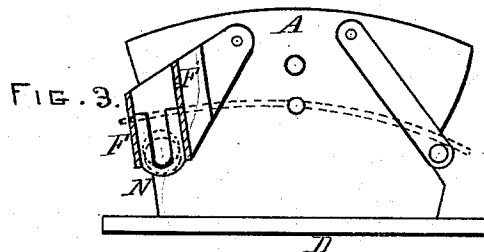
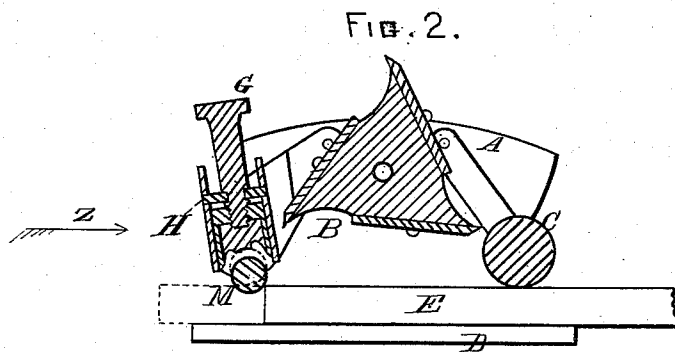
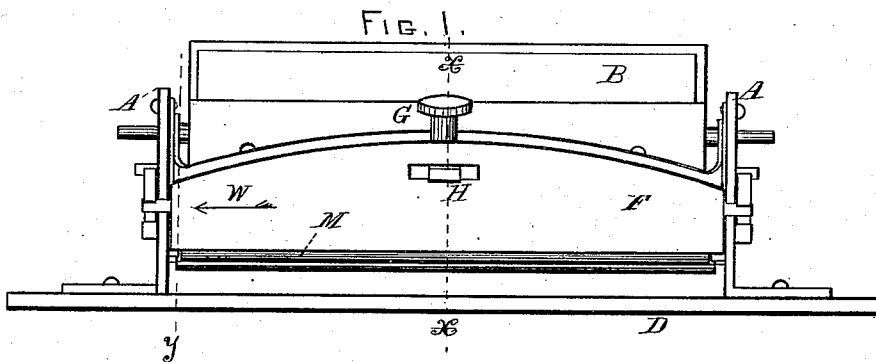


J. P. BURNHAM.

PRESSURE ROLLS FOR WOOD PLANING MACHINES.

No. 177,922.

Patented May 30, 1876.



ATTEST
John W. Munday
O. H. Adix.

INVENTOR.
John P. Burnham,
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ATTY

UNITED STATES PATENT OFFICE.

JOHN P. BURNHAM, OF CHICAGO, ILLINOIS, ASSIGNOR TO THOMAS WILCE & CO., OF SAME PLACE.

IMPROVEMENT IN PRESSURE-ROLLS FOR WOOD-PLANING MACHINES.

Specification forming part of Letters Patent No. 177,922, dated May 30, 1876; application filed January 15, 1876.

To all whom it may concern:

Be it known that I, JOHN P. BURNHAM, of Chicago, county of Cook and State of Illinois, have invented new and useful Improvements in Pressure-Rollers for Wood-Planing Machines, of which the following is a specification:

The nature of the present invention consists in a pressure-roller cap, which is provided with a semicircular bearing, in which are cut or formed a series of semi-spiral grooves, whereby the roller is freed from gum and is kept smooth.

In the drawings, Fig. 1 is an elevation of the frame and cutter-head with my devices attached, looking in the direction indicated by arrow Z, Fig. 2. Fig. 2 is a transverse central section of Fig. 1 on line *xx*; Fig. 3, a transverse section on line *yy*, Fig. 1, looking in the direction indicated by arrow W. Fig. 4 shows the roller removed from the cap and cutter-head frame. Fig. 5 is an inverted view of the roller-cap. Fig. 6 is a top view of the roller-cap and its frame.

D represents the bed, A the frame, and B the cutter-head, of an ordinary planing-machine, and C is the feed-roller thereof. F F' represent the sides, and J the ends of the metal frame which supports the roller-cap K. To the ends of said frame are affixed slotted bearings, one of which is shown at N, Fig. 3, of a thickness corresponding to the projections L on the cap K, respectively, Figs. 5 and 6. The bearings serve to hold the cap in a proper position above the roller M, and to permit the roller to have a vertical movement. The journals *o o* are guided by the slots in bearings N, but the cap performs wholly the function of keeping the roller down

to its work. When in position the projections L L of the cap K bear on the tops of the bearings N, and the cap is prevented from having a lateral movement by means of the side pieces F F'.

The means for holding the cap K on the guides consist of a thumb-screw, G, carrying a rotating button, H, which is put through slots in the side pieces F F', as shown at Figs. 1, 2, 6, the thumb-screw being turned after the button is in place.

The roller M, when not in use, falls below the face of the board, (shown at E,) but, when the board comes under it, it is brought up against the cap K, and is kept clean by the semi-spiral grooves P. The ends J J of the cap-support are pivoted to the frame A A of the cutter-head, and the roller is held to its work by means of springs bearing on pins projecting out from the ends J J of said frame.

I am aware that pressure-rollers for planing-machines have been used with continuous bearings, and that such rollers are shown in the patents granted to S. A. Woods, November 11, 1873, and W. C. Horton, March 3, 1874, for planing. I therefore disclaim what there may be shown in the said patents, and confine myself to the following specific claim.

I claim and desire to secure by Letters Patent—

The cap K, provided with semi-spiral grooves P, in combination with the pressure-roller M, as set forth.

JOHN P. BURNHAM.

Witnesses:

G. L. CHAPIN,
O. H. ADIX.