

GEORGE B. DURKEE.

Improvement in Planing-Machines.

No. 126,381.

Patented May 7, 1872.

Fig 1

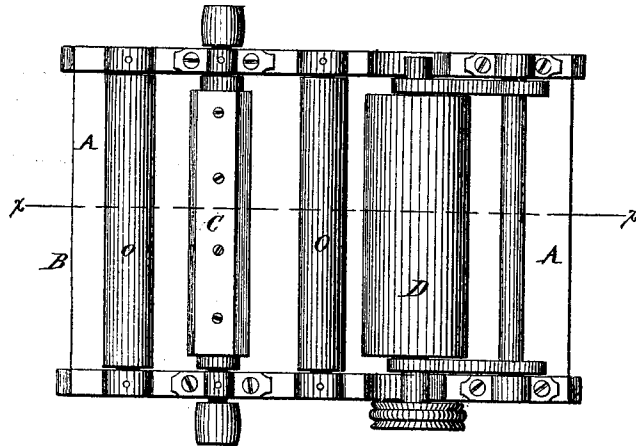
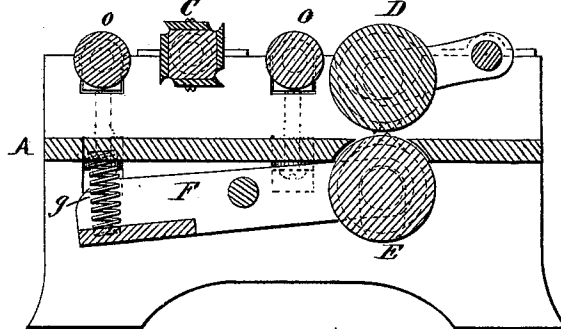


Fig 2



Witnesses.

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IMPROVEMENT IN PLANING-MACHINES.

Specification forming part of Letters Patent No. 126,381, dated May 7, 1872.

SPECIFICATION.

I, GEORGE B. DURKEE, of the city of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Planing-Machines, of which the following is a full description, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a top plan view, and Fig. 2 a longitudinal vertical section of so much of a planing-machine as is necessary to illustrate my invention.

My invention consists in combining with the stationary bed of a wood-planing machine a pair of yielding or self-adjusting feed-rollers, arranged to bear upon the opposite surfaces of the material being planed, as hereinafter more fully explained.

In the drawing, A represents the bed of the machine, and C the cylinder, having the knives attached in the usual manner. Pressure-rollers *c* are located on opposite sides of the cylinder C, by which the board is held firmly down upon the bed A at the point where it is being planed or dressed by the cylinder C, all these being features in common use. In machines of this kind it has heretofore been customary to use one or more yielding feed-rollers, located so as to bear upon the upper surface of the material being planed; but with this arrangement of the feed-roller it often happens that the board sticks fast upon the bed of the machine and ceases to be fed forward, especially so when the board is uneven or irregular upon its surface. To obviate this difficulty I use yielding feed-rollers both above and below the board, as shown in Fig. 2. The upper feed-roller D is so located as to yield sufficiently to adapt itself to any inequalities or irregularities of the board, as usual. Directly under this roller I locate a similar yielding roller, E, the periph-

ery of which projects through an opening in the bed A so as to press against and take hold upon the under surface of the board at a point opposite to that at which the upper roller D bears upon it. The lower roller is mounted in the end of a frame, F, pivoted under the bed of the machine, a spring, *g*, at the opposite end of the frame F serving to press the roller up against the board and allowing it to yield, as may be necessary.

It will thus be seen that the board is fed forward by these two yielding rollers D and E, which gripe it between them; and that as these rollers are each of them free to yield or move to or from each other, they will each of them adjust themselves readily to any irregularities there may be on either surface of the board and to any inequalities in its thickness, and thereby will at all times operate to feed the board forward with an even and regular movement.

I am aware that yielding rollers have been used on the upper side alone, and also on the lower side alone in planing-machines; also, that yielding feed-rollers are shown both above and below in the withdrawn application of W. C. Bronson for feeding logs to the saw in a saw-mill, and therefore I do not claim either of these; but

Having thus described my improvements in planing-machines, what I claim is—

The combination, with the stationary bed A, of the yielding feed-rollers D and E, arranged to operate upon the opposite surfaces of the material being planed, substantially as and for the purpose set forth.

GEORGE B. DURKEE.

Witnesses:

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