

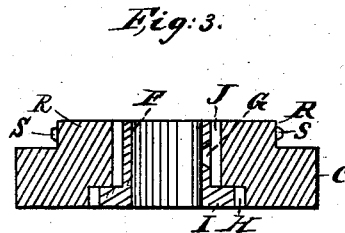
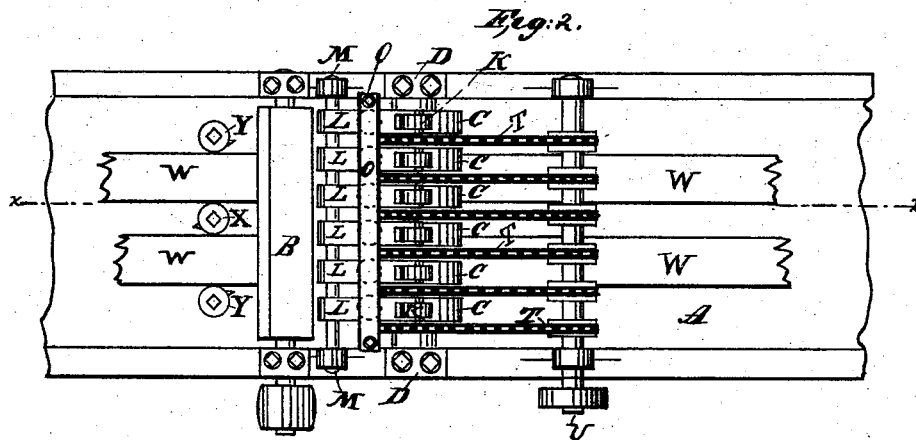
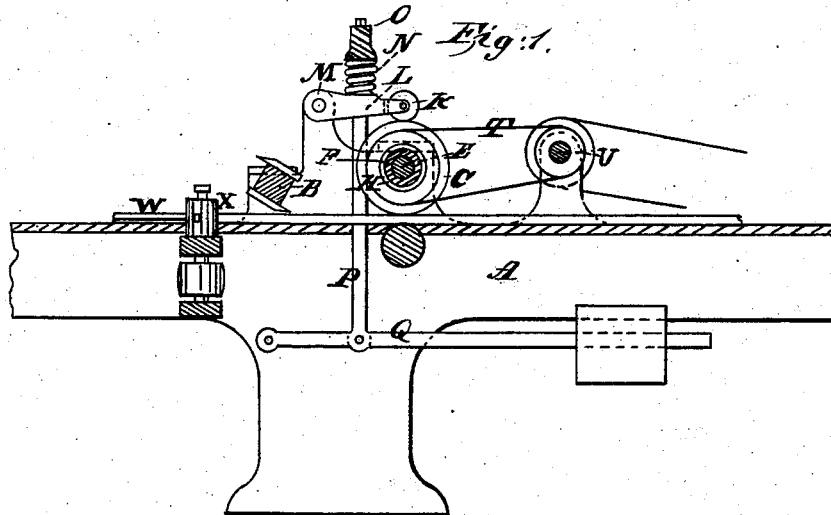
(No Model.)

E. H. HERNDON.

FEED ROLLER FOR WOOD PLANERS.

No. 260,569.

Patented July 4, 1882.



WITNESSES:
B. A. Gore
C. Sedgwick

INVENTOR.
E. H. Herndon
Munn &
Attorneys

UNITED STATES PATENT OFFICE.

EMMETT H. HERNDON, OF SANFORD, FLORIDA.

FEED-ROLLER FOR WOOD-PLANERS.

SPECIFICATION forming part of Letters Patent No. 260,569, dated July 4, 1882.

Application filed March 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, EMMETT H. HERNDON, of Sanford, in the county of Orange and State of Florida, have invented a new and Improved Feed-Roller for Wood-Planers, of which the following is a full, clear, and exact description.

My invention relates to improvements in feed-rollers for planing-machines; and it consists of a feed-roller consisting of a series of rollers mounted loosely upon the same shaft, and each having an independent movement.

It also consists in the particular construction and combination of parts, as hereinafter more fully set forth.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal sectional elevation of a planer with my improved sectional feed-roller applied to it, the section being taken on the line *xx* of Fig. 2. Fig. 2 is a plan view of the machine as represented in Fig. 1, and Fig. 3 is a detail of the sectional feed-roller device.

A represents the planer-bed, B the rotary planer, and C the several sections of my improved sectional feed-roller, one of said sections being shown in horizontal section and on a larger scale in Fig. 3 than in the other figures.

In the bearings D of the ordinary solid feed-roller, I place a shaft, E, Fig. 1, of uniform size throughout its length, on which I place as many sectional rollers C as may be preferred—say six, more or less—the said sections being mounted thereon by a thimble, F, to each one, the said thimbles being fitted closely to the shaft and secured by a flush head-screw at G, and having a collar-head, I, at one end, for which the sections C are recessed at H around their center holes, J, which hole is much larger than the thimble F, so that the sections shall have vertical motion thereon independently of the shaft E, in order that the different sections may rise and fall according to the different thicknesses of boards under them, and in this case I provide independent pressure-rollers K for each section, the said independent pressure-rollers being mounted in

the forked bearers L, pivoted on rod M, and projecting forward over sections C, so that the said pressure-rollers K rest upon them.

To each bearer L there is a spring, N, under the cross-bar O, by which bar and the rods P the weighted levers Q, by which the pressure is applied, are connected.

To rotate the sections C each one has a pitch-chain pulley, R, with studs S for the chain-belt T upon one side, and the chain-belts for all the sections are geared with the driving-shaft U. These pulleys R form a hub on one side of each section C, to bear against the side of the next section, and the collar-head I of the thimble forms a bearing to the other side of the section to keep it in place on the shaft. By the use of these thimbles F the shaft E is wholly protected from wear. If the thimbles wear out, they can be readily replaced, and as often as they are renewed the new ones can be made a little larger in case the sections C wear larger in the holes J.

As an example of the advantage of these sectional feed-rollers, it is here shown in Fig. 2 that they enable two boards, W, to be planed and matched at the same time, three match-heads, X and Y Y, being used, the one X being the groover and being placed between the boards for grooving both at the same time, that being easier than making the tongue, and the tongue-heads being therefore placed outside to tongue one board each; but the sectional feed-roller is also advantageous for planing several narrow boards at the same time when not to be tongued and grooved. Plain leather belts may be used for driving the feed-roller; but the pitch-chain belts are preferred, because they work positively.

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

1. In a planing-machine, a feed-roller consisting of a series of rollers mounted loosely upon the same shaft, and each having an independent movement, substantially as and for the purpose set forth.

2. In a planing-machine, the combination, with the series of feed-rollers C, of an independent pressure-roller K, bearing thereon, for each section of the feed-roller, substantially as and for the purpose set forth.

3. In a planing-machine, the combination,

with the series of feed-rollers C, of the pivoted beams L, the pressure-rollers K, the cross-bar O, and the spring N, interposed between the said cross-bar and bearer, substantially as
5 and for the purpose set forth.

4. In a planing-machine, the combination, with the feed-rollers C, of the pressure-rollers K, the cross-bar O, the spring N, the rods P, and the weighted levers Q, substantially as
10 and for the purpose set forth.

5. In a planing-machine, the combination,

with the shaft E and the thimble F, provided with the head I, and secured to the shaft, of the roller C, provided with the central orifice, J, of longer diameter than that of the thimble, 15 and having end head-recess, H, substantially as and for the purpose set forth.

EMMETT H. HERNDON.

Witnesses:

F. P. FORSTER,

F. P. GORMAN.