S. N. BROWN & H. W. MEYER.

Feed-Rollers for Planing-Machines.

No. 158,671. Patented Jan. 12, 1875.

Fig. 1.

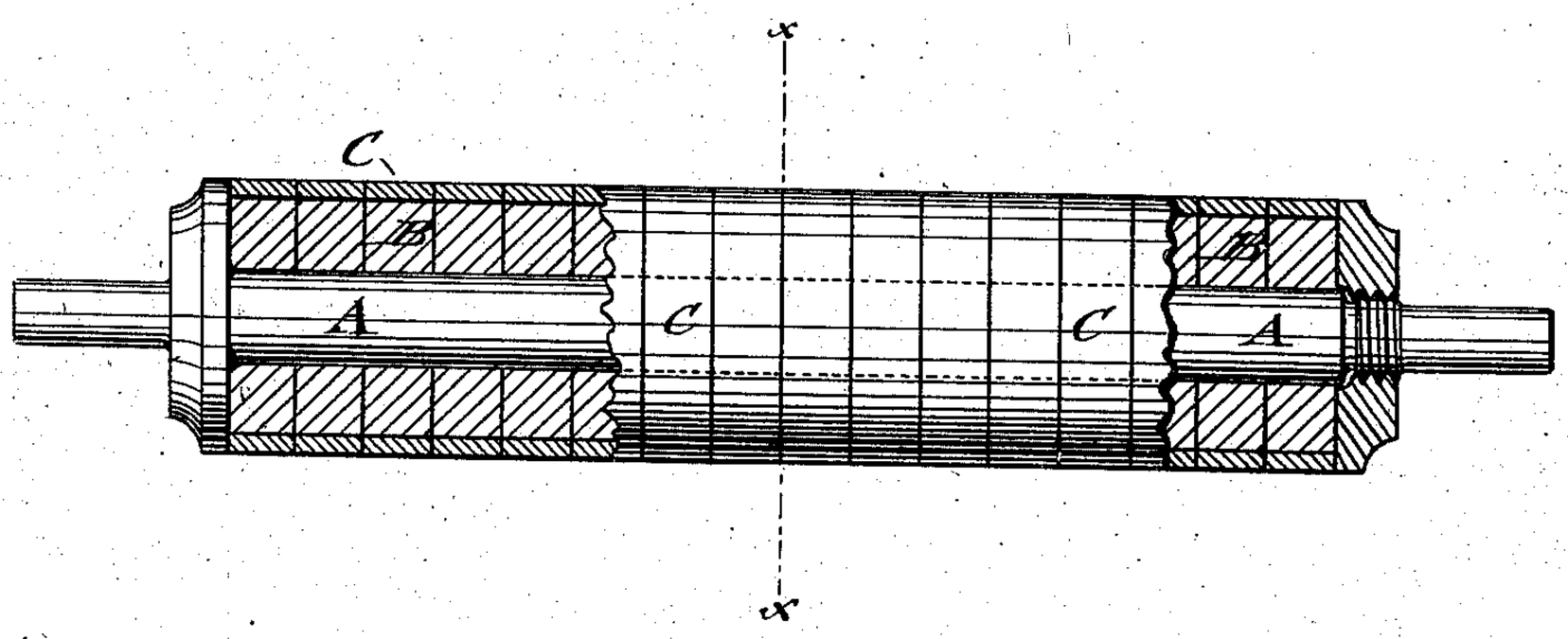
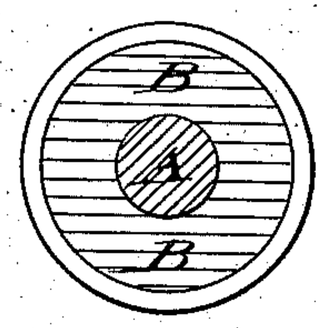


Fig. 2.



WITNESSES:

A Bennecendorf.

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UNITED STATES PATENT OFFICE.

SAMUEL N. BROWN AND HENRY W. MEYER, OF DAYTON, OHIO.

IMPROVEMENT IN FEED-ROLLERS FOR PLANING-MACHINES.

Specification forming part of Letters Patent No. **158,671**, dated January 12, 1875; application filed November 30, 1874.

To all whom it may concern:

Be it known that we, SAMUEL N. BROWN and HENRY W. MEYER, of Dayton, in the county of Montgomery and State of Ohio, have invented an Improvement in Feed-Rollers for Planing-Machines, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a sectional side elevation of our improved roller for planing-machines; and Fig. 2, a vertical transverse section of the same on the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of our invention is to so improve the feed or pressure rollers of planing-machines that the stuff may be fed to the knives with greater rapidity and ease, and be guided to the planing-knives, whether being of uniform thickness or not, so as to avoid lead work and the danger of spoiling it altogether.

Our invention consists of a feed or pressure roller for planing-machines, made of an interior cushioning-sleeve of elastic material placed firmly upon the shaft, and covered by a series of outer metallic rings.

In the drawing, A represents the shaft of a feed or pressure roller; B, the sectional or sleeve-shaped packing or cushion of rubber or other elastic material, fitted to the round, square, or other shaft A in such a manner that its turning or slipping on the shaft is prevented. The elastic packing or material B may also be made in one piece, the metallic rings C being placed over the same sidewise of each other, and made either smooth or toothed, as required for either pressure or feed roller, being secured to the stem, or loose.

The adjustment of the rubber-packed rings allows the holding and feeding of a number of pieces of stuff of uneven thickness without interfering with the regular working of the planing-machine.

The friction upon the shaft produced by the rubber confined within the rings is so powerful that the operation of feeding the stuff is greatly facilitated and accelerated, while the metallic covering-rings make these rollers more durable by protecting the inner packing, which is hardly exposed to wear thereby. The rollers combine, therefore, power, durability, and efficacy with that degree of elasticity required for feeding the stuff without injury to the planing-knives.

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

The combination of the shaft A, elastic packing-disks B, and outer metallic covering-rings C, substantially as herein shown and described, for the purpose specified.

SAMUEL N. BROWN.
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Witnesses:
THOS. BROWN,
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