

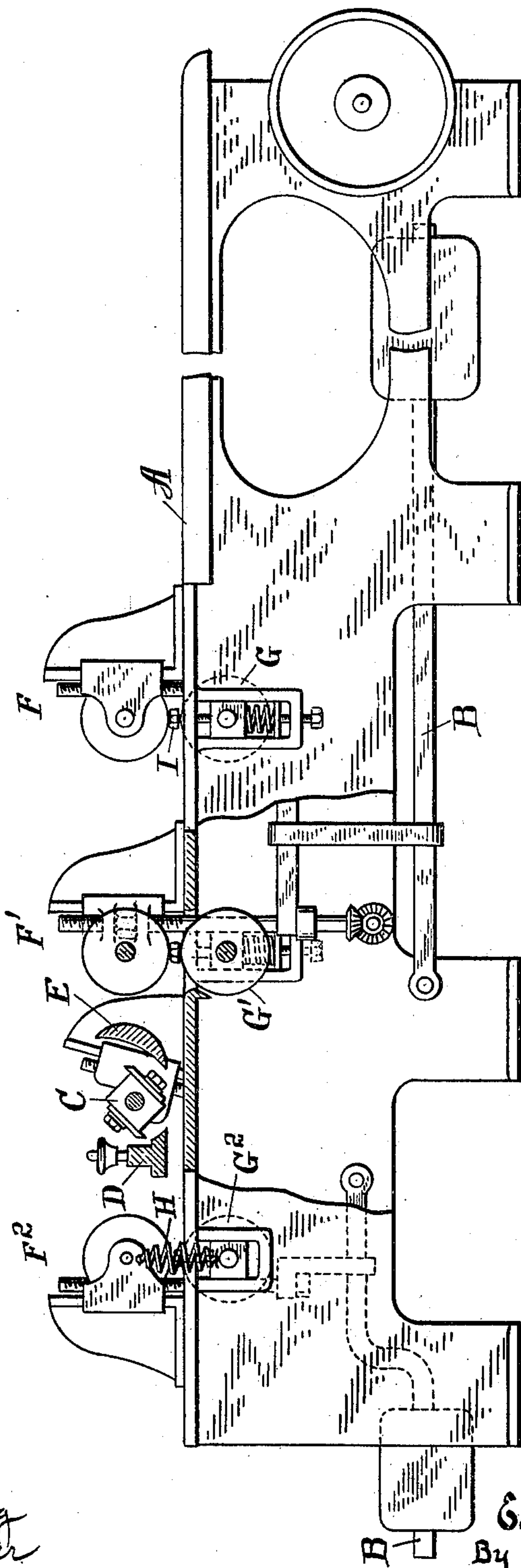
No. 693,559.

Patented Feb. 18, 1902.

E. C. MERSHON.
PLANE BED.

(Application filed Aug. 20, 1901.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

EDWARD C. MERSHON, OF EAST SAGINAW, MICHIGAN.

PLANER-BED.

SPECIFICATION forming part of Letters Patent No. 693,559, dated February 18, 1902.

Application filed August 20, 1901. Serial No. 72,706. (No model.)

To all whom it may concern:

Be it known that I, EDWARD C. MERSHON, a citizen of the United States, and a resident of East Saginaw, in the State of Michigan, have invented a certain new and useful Improvement in Planer-Beds, of which the following is a specification.

This invention relates to an improvement in woodworking machinery and the like, and particularly to an improvement in the feeding mechanism of a planing-machine.

The objects of the invention are to produce a more regular and reliable feed and to secure a more perfect finish for the material operated upon.

With these objects in view the invention consists in the construction, combination, and arrangement of parts, substantially as hereinafter set forth and claimed.

In the accompanying drawing, which forms a part of this specification, a partially-sectioned side elevation of a planer is shown wherein my invention is embodied.

The machine-table may be of any pattern or design and provided with any suitable cutter-head and upper pressure or feed rolls, the form shown being simply adopted to show the application of my invention.

In the drawing, A indicates the bed of the machine; C, the cutter-head; D, the pressure-bar; E, the chip-breaker; F F' F², the upper pressure or feed rolls, and G G' G² the friction-relieving or supplemental feeding-rolls. The rolls F, F', and F² are mounted in the usual manner and pressed toward the bed by the weighted levers B to hold the lumber down and to give thereupon sufficient pressure to feed it along. The rolls G G' G² are resiliently mounted below the bed and pressed upwardly through openings in the bed, extending transversely thereof. Said rolls may be given upward resilient pressure in various ways. This may be done, as seen at F F', by placing compression-springs under their journal-boxes or, as seen at F², by connecting the

journal-box of the lower roll to the block in which the upper roll is journaled, as by the extension-spring H. The lower rolls—rolls G G' G²—are allowed to project above the level of the bed from one sixty-fourth to one-eighth of an inch and may be pressed down to the level of the bed or even below it. Their upward movement may be limited by a stop-screw, as seen at I.

The main function of the rolls G G' G² is to lessen the friction between the lumber and the bed, thereby allowing a free and regular feed, and at the same time to be readily depressed to the level of the bed, or even below it, by a projecting knot or "stub-shot" passing between the rolls, and thereby provide a ready passage of what would otherwise produce irregularity of the feed.

The exact superposition of the rolls F F' F² over rolls G G' G² is not necessary, it being sufficient if said upper and lower rolls are so located as to keep the lumber straight and effect the proper feeding thereof.

Other modes aside from those shown may be employed for resiliently mounting the lower rolls without departing from my invention.

I claim as my invention—

In a woodworking or like machine, the combination with the bed thereof provided with transverse openings, of rolls mounted in said openings, rolls mounted above said lower rolls and preponderating the latter in pressure against the lumber, and springs joining said upper and lower rolls to insure constant and regular engagement of the lumber by both upper and lower rolls, and to decrease the friction between the lumber and the bed of the machine substantially as set forth.

Signed at Saginaw, in the county of Saginaw and State of Michigan, this 3d day of August, A. D. 1901.

EDWARD C. MERSHON.

Witnesses:

D. J. LAGATREE,
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