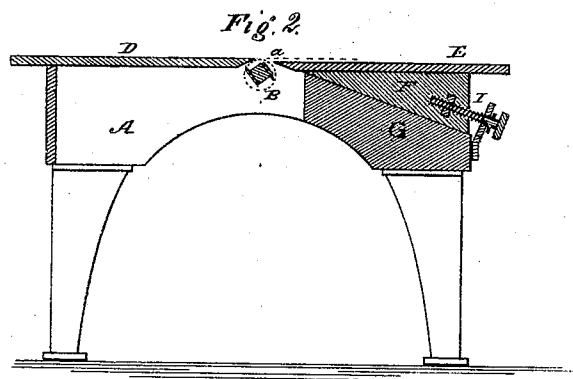
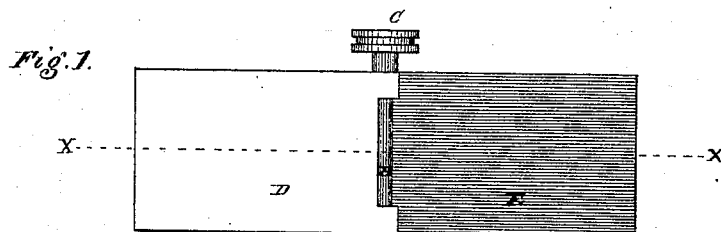


J. P. GROSVENOR.

Hand-Planers.

No. 152,364.

Patented June 23, 1874.



Witnesses

Wm. Kent
Edw. J. Thornton

Inventor:

Jonathan P. Grosvenor

UNITED STATES PATENT OFFICE.

JONATHAN P. GROSVENOR, OF LOWELL, MASSACHUSETTS.

IMPROVEMENT IN HAND-PLANERS.

Specification forming part of Letters Patent No. **152,364**, dated June 23, 1874; application filed March 13, 1871.

To all whom it may concern:

Be it known that I, JONATHAN P. GROSVENOR, of the city of Lowell, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Hand-Planers; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings forming a part of this specification, and to the letters of reference marked thereon.

My invention relates to certain improvements in buzz or hand-planing machines, in which the lumber is fed to the cutter by hand; and its object is to construct the table in such a manner that, while one section of the same which receives the board after leaving the cutters is rigidly secured to the frame of the machine, the other section may be adjusted both vertically and horizontally by a single movement, so as both to determine the thickness of the shaving to be taken off, and also to regulate the width of the throat, or distance of the inner end of the adjustable portion of the table from the cutters, the latter being thereby kept the same width whether the table is raised or lowered.

The nature of my invention consists in making that portion of the table upon which the rough board is laid in such a manner that it may be adjusted both horizontally and vertically simultaneously and by one movement, while the other portion which receives the smooth surface of the board after leaving the cutters is rigidly secured to the frame of the machine, with its upper surface on a straight line with the top of the cutter. This double adjustment of the portion of the table upon which the rough board is laid is effected by securing the said portion of the table to a wedge-shaped block, which works on an incline secured to the frame of the machine, and which is adjusted by means of an adjusting-screw, so that when it is pushed forward toward the cutters the table is raised at the same time, and the said incline is at such an angle with the plane of the table that the inner end of the adjustable portion of the table is always kept at the same distance from the

surface of the cutters, so that whether the table is raised or lowered the width of the throat is not materially altered.

To enable others skilled in the art to make and use my invention, I will proceed more particularly to describe its construction and operation.

Figure 1 represents a plan view of the table of a planer with my improvement. Fig. 2 is a vertical longitudinal section of the same, taken through the line *xx*.

Letters of like name and kind indicate like parts in each of the figures.

A represents the frame of the machine, which may be made of suitable material, and of such form and dimensions as may be adapted for receiving and holding my improvements. B is the cutter-head, which may be of any of the common or well-known forms. C is the pulley, to which the power is applied for driving the cutter. D represents that portion of the table which receives the smooth surface of the board after leaving the cutters, and which is rigidly secured to the frame A in such a position that its upper surface is on a line with the top of the cutters. E represents the adjustable portion of the table in front of the cutters, on which the rough board is laid, which is secured to the adjustable wedge-shaped block F, the latter of which works upon an incline, G, secured to the frame of the machine, and is fitted thereto in any suitable manner. The block F is adjusted by means of an adjusting-screw, I, which may be located in any position that may be adapted to enable the same properly to perform its function. The incline above mentioned forms such an angle with the plane of the portion E of the table that the inner end *a* of the latter will maintain nearly an equal distance from the line of motion of the edges of the cutters, whether the block F is moved upward on the incline so as to reduce the thickness of the shaving, or downward so as to increase the thickness of the same. It will therefore be seen that the same distance, or nearly the same distance, is maintained between the end *a* of the portion E of the table and the cutters, whether a thin or a

thick shaving is being taken off, thus insuring safety to the operator and regularity and precision in the operation of the machine.

Having thus described my invention I may state that I do not claim adjusting both sections of the table by means of inclines; nor do I claim adjusting one section thereof vertically and horizontally by two distinct and separate movements or means of adjustment; neither do I claim adjusting a table behind the cutters on an incline.

I hereby fully disclaim the patent of Cramer and Riley, November 27, 1866, and of Fred. Douglas, July 26, 1870, all for improve-

ments in planing-machines, which have been given as references in this case; but

What I claim as new, and desire to secure by Letters Patent of the United States, is—

The adjustable feed-table E, adjustable vertically and longitudinally by a single movement, arranged in front of and combined with the revolving cutter B, which turns in fixed boxes, as and for the purpose set forth.

JONATHAN P. GROSVENOR.

Witnesses:

WM. VENTZ,
JOHN S. THORNTON.