

J. H. Miller.

Bench Plane.

No. 81,929.

Patented, Sep 8. 1868.

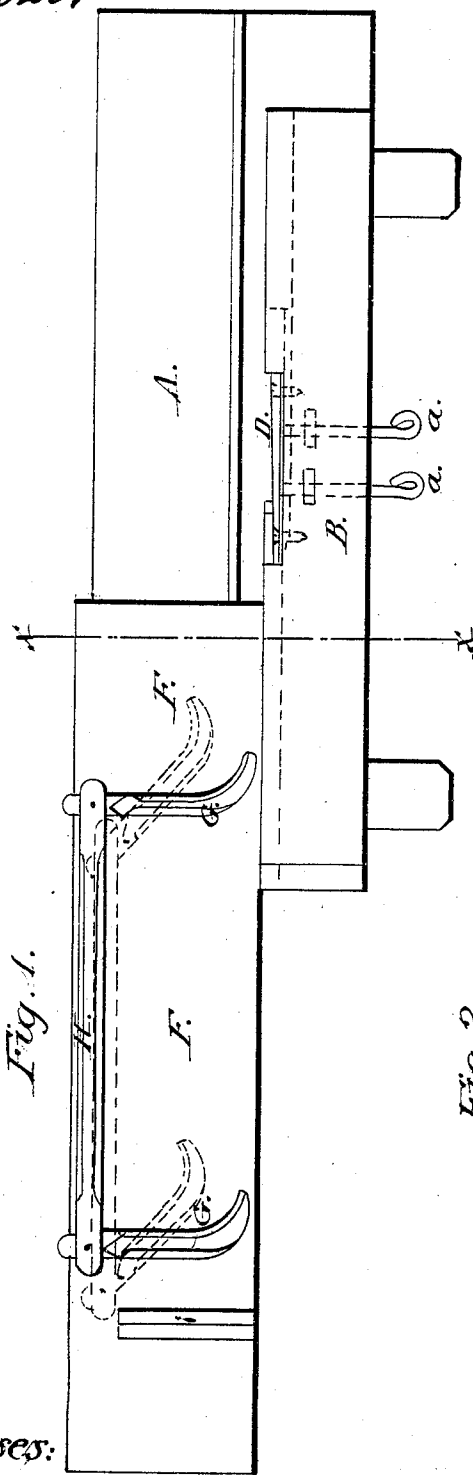


Fig. 1.

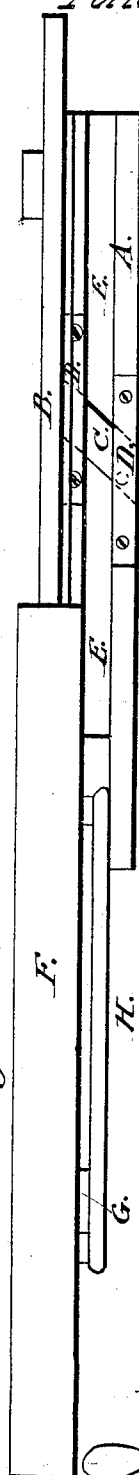


Fig. 2.

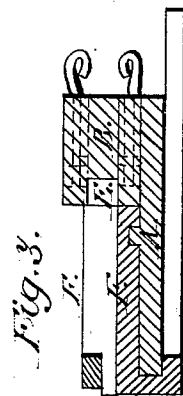


Fig. 3.

Witnesses:

*Louis Broethay
W. Weaver*

Inventor:

*John H. Miller
by J. D. Schenck
attys*

UNITED STATES PATENT OFFICE.

JOHN H. MILLER, OF OSKALOOSA, IOWA.

IMPROVEMENT IN PLANES FOR CUTTING BLIND-SLATS.

Specification forming part of Letters Patent No. **81,929**, dated September 8, 1868.

To all whom it may concern:

Be it known that I, JOHN H. MILLER, of Oskaloosa, in the county of Mahaska and the State of Iowa, have invented a new and useful Improvement in Machines for Splitting Slats for Window-Shades; and I do hereby declare the following to be a clear, exact, and full description thereof, sufficient to enable others skilled in the art to which this invention appertains to fully understand and use the same, reference being had to the accompanying drawings, making part of this specification, and in which—

Figure 1 is a top view of the device, illustrating my invention. Fig. 2 is a side view thereof. Fig. 3 is a transverse vertical section in the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

This invention is a device for splitting slats for window-shades; and consists in an arrangement of an adjustable knife, having its cutting-edge extended in a line diagonal to that of the timber brought against it, of a support having a groove to allow the split slat to pass out, and of arms pivoted to the carriage to support and hold the uncut timber. These arms hold the timber against the knife, and tighten themselves as the carriage advances, but readily release said timber when a slat is split or cut, or when occasion requires it. The arms are adapted to hold the block or piece of timber equally well when it is first cut as when the last slat is being split, as will be hereinafter more fully described.

In the drawings, A represents bed-plate, which is of ordinary form and construction. From one side thereof rises a support, B, to which is secured the knife C. The knife C consists of a flatstrip of suitable cutting-material applied to the support or rest B diagonally, in the vertical line of the support, so that a diagonal cutting-edge is presented to the timber. It is readily adjusted by suitable set-screws, *a*, placed at proper points of the upper and lower ends of the knife. A groove, E, extends the whole length of the inner face of the support or rest B, so as to leave a space between the knife and said support. The knife is held in place by two plates, D, one at

the top and the other at the bottom of the said knife. Each plate is beveled from one end to the other, and has its narrow end on the side of the cutting-edge of the knife.

Now, it will be perceived that when the timber is brought up to the knife and advanced, it is cut or split into slats, which pass out along the groove E.

F represents the carriage, which is constructed as usual, to slide on the bed, and should have suitable guides, to insure a uniformity in its motion. On this bed I pivot, at suitable points, two arms, G, which should be slightly curved, and have their inner ends free. Their outer ends are pivoted to a rod, H, which connects them together. The piece of timber will lie on the carriage in contact with the free ends of the arm G, and is then brought against the knife C.

It will be perceived that the timber is firmly held. The pressure of the arms against it increases in the forward motion of the carriage, and is readily relieved by merely throwing back the arms.

When the slat is cut, it passes out through the passage D, while the uncut timber remains on the carriage, to be returned, ready for another forward movement. It is at once brought in line with the knife by merely operating the rod H in the proper direction, and is as firmly held as in the previous case. The operation is continued until the last slat is split.

The arms G perform their functions equally well without regard to the thickness of the timber, and therefore are simple, practical, and useful.

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

The pivoted arms G and connecting-rod H upon the carriage F, when constructed and operating substantially as and for the purpose specified.

To the above I have signed my name the 29th day of February, 1868.

JOHN H. MILLER.

Witnesses:

JACOB HENRY,
CHAS. D. SMITH.