(No Model.)

H. FEYH & J. L. MURPHY.

PLANING MACHINE.

No. 303,425. Patented Aug. 12, 1884.

Fig. 1.

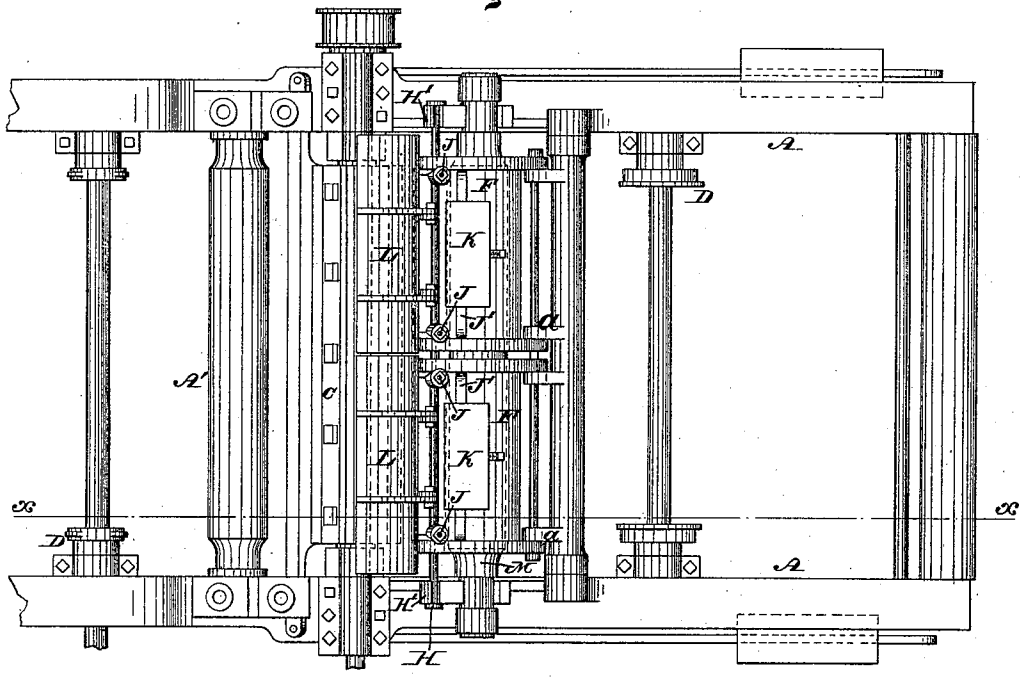


Fig. 2.

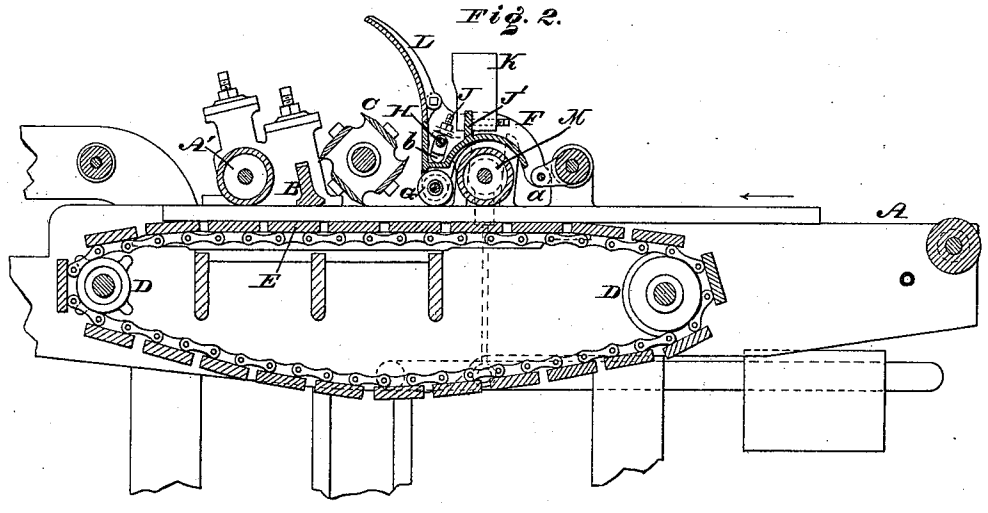


Fig. 3.

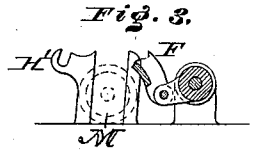
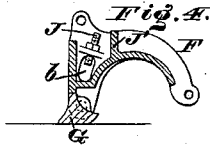


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY FEYH AND JOHN L. MURPHY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNORS TO L. POWER & CO., OF SAME PLACE.

PLANING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 303,425, dated August 12, 1884.

Application filed March 13, 1884. (No model.)

To all whom it may concern:

Be it known that we, HENRY FEYH and JOHN L. MURPHY, both citizens of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Planing-Machines, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a top or plan view of a portion of a planing-machine embodying our invention. Fig. 2 is a vertical section thereof in line *x x*, Fig. 1. Fig. 3 is a partial side elevation and partial vertical section of a detached part. Fig. 4 is a vertical section of a modification of a portion thereof.

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

Our invention consists of a planing-machine having a swinging pressure intermediate of the feeding in or receiving end of the machine and the top cutter-head thereof, whereby many advantages are derived, as will be hereinafter stated.

It also consists of certain details of construction, as will be hereinafter fully set forth.

Referring to the drawings, A represents the frame of the machine, having the pressure-roll A′ and pressure-bar B mounted thereon, as usual, at the paying-out end of the machine.

C represents the cutter-head; D, the carriers of the endless feed-bed E, which parts are well known in machines of the class.

Above the table of the machine is mounted a transversely-extending frame, F, which has its center, as at *a*, and carries a pressure-roll, G. In the sides of the frame F are vertical slots *b*, through which is freely passed a suspension-bar, H, the ends whereof are loosely fitted in guides H′, rising from the frame A.

Fitted to the frame F are set-screws J, which bear against the bar H for adjusting the roll G. On the back of the frame is a bar, J′, which extends transversely and horizontally, and supports a sliding weight, K.

Pivoted to the frame F, on the end next to the cutter-head C, is the shaving-dasher L, which is of curved or inclined form, and somewhat overhangs said head.

M represents a weighted receiving or starting in pressure-roll located beneath the frame F, which is recessed on its under side to receive and cover said roll M.

In Fig. 4 is shown a pressure bar, G, which is detachably connected with the lower end of the frame F and employed in lieu of the roll G when the nature of the work to be accomplished requires the same. The frame F is formed of sections adapted to oscillate independently of each other, each section having slots *b*, a section of the roll or bar, G, and a weight, K, the bar H passing through the slots *b* of the sections without interfering with the independent motions of the sections.

It will be seen that we produce a triple pressure for the board to be planed resting upon the endless feed-bed E, and are enabled to equalize the pressure on boards when of different thicknesses near to or in front of the cutter-head, said triple pressure being occasioned by the receiving or starting-in roll M, and the two sections of the pressure roll or bar G, which are mounted on the sections of the frame F, and oscillate side by side independent of each other and intermediate of the receiving end of the frame and the cutter-head, as has been stated. The triple pressure is used conjointly with the pressure bar or roll, or both, at the paying-out side of the cutter-head.

It will also be seen that the cutter-head is not obstructed, as would be the case if the pressure were constructed to oscillate from the paying out end of the machine, the latter occasioning the crossing of the cutter-head by arms supporting the swinging pressure. Furthermore, said cutter-head is easy of access for purposes of sharpening or changing the knives, as the frame F, with rolls or sections of rolls G, may be entirely swung back on the centers or axis *a*, and thus removed from the cutter-head.

When two boards are passed into the machine side by side, and reach the rollers or bars G, should there be any irregularity therein, either section of the frame F yields relatively to said irregularity, thus pressing each board firmly to the feed-table while passing under the cutter-head to be planed, prevent-

ing the clipping or cutting under of the ends of the thin boards. The slots permit the sections of the frame to rise without interference of the suspension-bar H to the extent limited by the screws J.

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

1. In a planing-machine, triple-pressure devices consisting of the feeding or starting-in roll, and two rolls or bars arranged end to end on oscillating frames, which latter are mounted independent of each other on the frame of the machine, located side by side, and having their axes parallel with the rolls, substantially as and for the purpose set forth.

2. In a planing-machine, the starting-in roll and the cutter-head, in combination with a two-part pressure device, intermediate of said roll and head, consisting of two rolls and oscillating frames carrying the same, said frames being independent of each other, located side by side, and having their axes parallel with said roll, substantially as and for the purpose set forth.

3. In a planing-machine, triple-pressure devices consisting of the feeding or starting-in roll and two rolls or bars, said roll being mounted on the frame of the machine, and said rolls or bars being mounted on oscillating frames, which latter are also mounted on the frame of the machine, the two frames being located side by side, each having its own axis, which is parallel with the rolls, and provided with vertical slots through which is passed a suspension-bar which is loosely fitted to guides on the frame of the machine, and common to the two oscillating frames, substantially as and for the purposes set forth.

4. In a planing-machine, an oscillating frame provided with vertical slots, set-screws, and a suspension-bar, said frame being mounted on the frame of the machine, said bar passing through the slots of the oscillating frame, and said screws being fitted to the oscillating frame and bearing against the suspension-bar, substantially as and for the purpose set forth.

5. In a planing-machine, a pressure roller or bar in front of the cutter-head, an oscillating frame mounted on the frame of the machine carrying said roller or bar, and the receiving-in roll supported on the frame of the machine, and located beneath the oscillating frame as a cover, substantially as and for the purpose set forth.

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