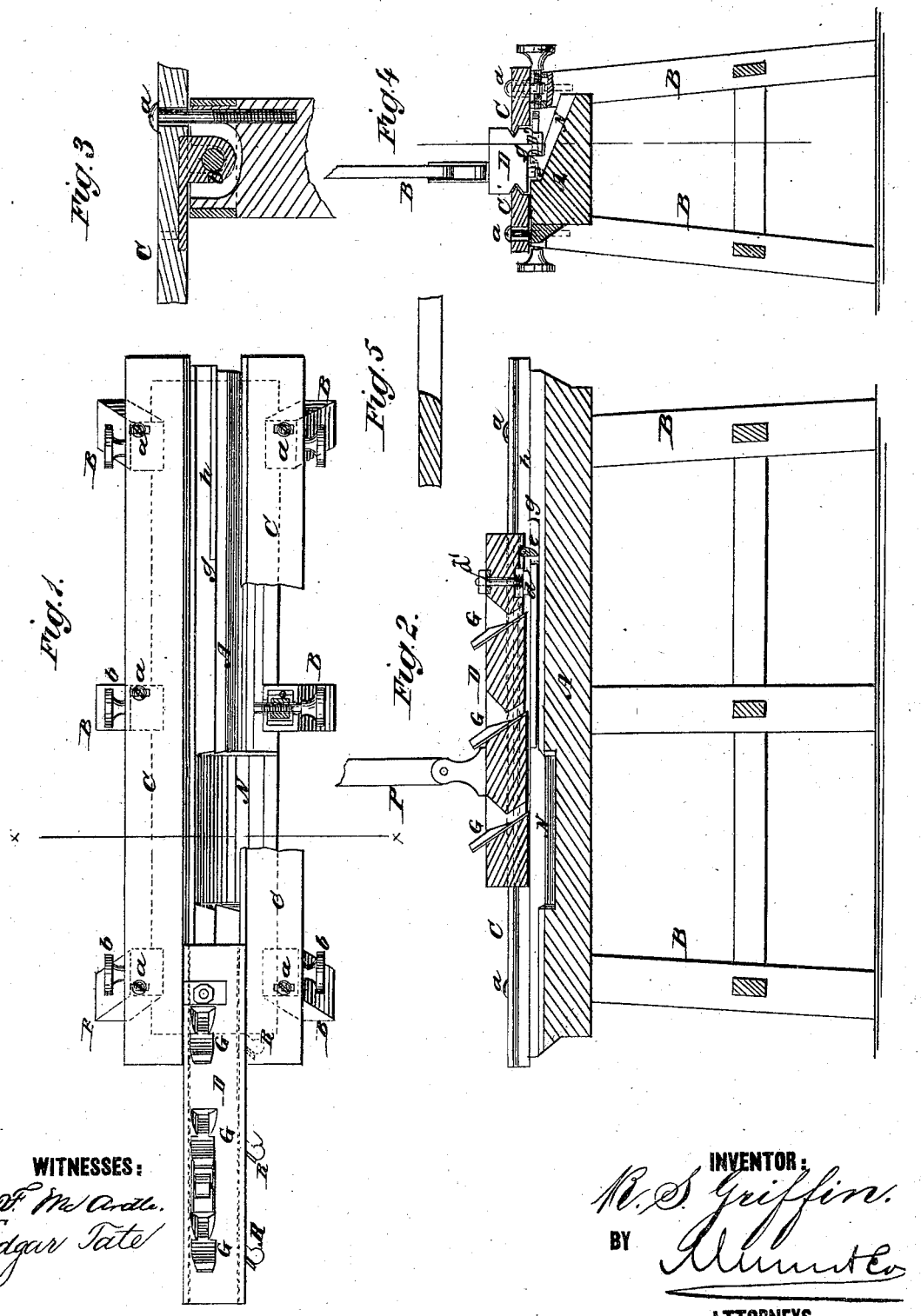
R. S. GRIFFIN.
Blind-Slat Planer.

No. 197,774. Patented Dec. 4, 1877.



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UNITED STATES PATENT OFFICE.

ROBERT S. GRIFFIN, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN BLIND-SLAT PLANERS.

Specification forming part of Letters Patent No. **197,774**, dated December 4, 1877; application filed September 29, 1877.

To all whom it may concern:

Be it known that I, ROBERT S. GRIFFIN, of Worcester, in the county of Worcester and State of Massachusetts, have invented a new and Improved Blind-Slat Planer, of which the following is a specification:

This invention has relation to machinery which is designed for planing blind-slats; and the nature of my invention consists in combining with a suitable bed and laterally-adjustable guides, suitably mounted, a rectilinear reciprocating plane, the cutters of which are so arranged that they will dress one side and one edge of a slat, as will be understood from the following description.

The invention also consists in novel means for keeping a slat down firmly on the bed, and discharging the dressed slat from the machine to be finished in another machine, as will be hereinafter specified.

In the annexed drawings, Figure 1 is a top view of the machine, showing a portion of one of the adjustable guides broken away. Fig. 2 is a section taken vertically through the machine. Fig. 3 shows, in section and detail, one of the devices for adjusting the guides. Fig. 4 is a vertical transverse section through the machine, taken in the plane indicated by dotted line *x x*, Fig. 1; and Fig. 5 is a detail view of the plane and slat.

Similar letters of reference indicate corresponding parts.

The letter A designates the bed of the machine, which is mounted upon substantial legs B, having metal caps on their upper ends, for giving solidity to two parallel guides, C C, between which the plane D is moved. The guides C C are held down upon the upper ends of the legs B by means of screws *a*, by loosening which and turning the thumb-nuts *b* the guides can be adjusted for different widths of planes, or be set up to compensate for wear. The plane is constructed with cutters G G G, for dressing one side of each slat, and with cutters R, for dressing one edge of each slat, the other edge and side being dressed in another machine similar to the one I am now describing.

The plane D is provided with a longitudinal bottom rib or projection, D′, the inner surface or side of which is made concave, and provided with rounded cutters or plane-irons, which form a rounded surface on the edge of the slat, as is shown in Fig. 5. Near the front end of the plane D, and extending slightly below the sole thereof, is a smooth shoe, *d*, for the purpose of keeping a slat down firmly on the bed in front of the first cutter. The shoe or presser-foot *d* is applied to the lower end of a spring-encircled stem or bolt, *d′*, passing through the plane-stock, so as to exert a yielding pressure upon the slat to be planed. In front of this shoe, and in close relation thereto, is a pivoted retractor, *e*, the object of which is to draw a slat back, after it is planed, far enough to fall upon an inclined chute, N, which discharges it from the machine into a suitable receptacle.

When a blank slat is adjusted on the bed of the machine, it is held in its proper place against a shoulder, *g*, which is the rear terminus of a rib, *h*.

The plane-irons which perform the edging are concave, and are set obliquely, for the purpose of making a drawing cut, and thus leaving smooth beads on the edges of the slats. Near the heel of the plane a pitman, P, is pivoted, which is carried by a suitably-arranged crank, driven by a convenient motor, for moving the plane back and forth; but I do not confine myself to this device, as other means may be employed for operating the plane.

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

1. In a machine for planing blind-slats, the combination of a plane, D, having the bottom rib D′, surface-dressing cutters G, and edge-dressing cutters R, relatively arranged as herein shown, with the bed-frame A and the lateral guides C, as and for the purpose set forth.

2. In a machine for planing blind-slats, the combination of the laterally-adjustable guides C, screws *a*, and thumb screws and nuts *b* with the frame A and reciprocating plane D, as and for the purpose set forth.

3. The combination of the pivoted retractor *e* and the spring-pressed foot *d* with the plane D, bed A, having chute N, stop *g*, and guides C, as and for the purpose set forth.

ROBERT S. GRIFFIN.

Witnesses:

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