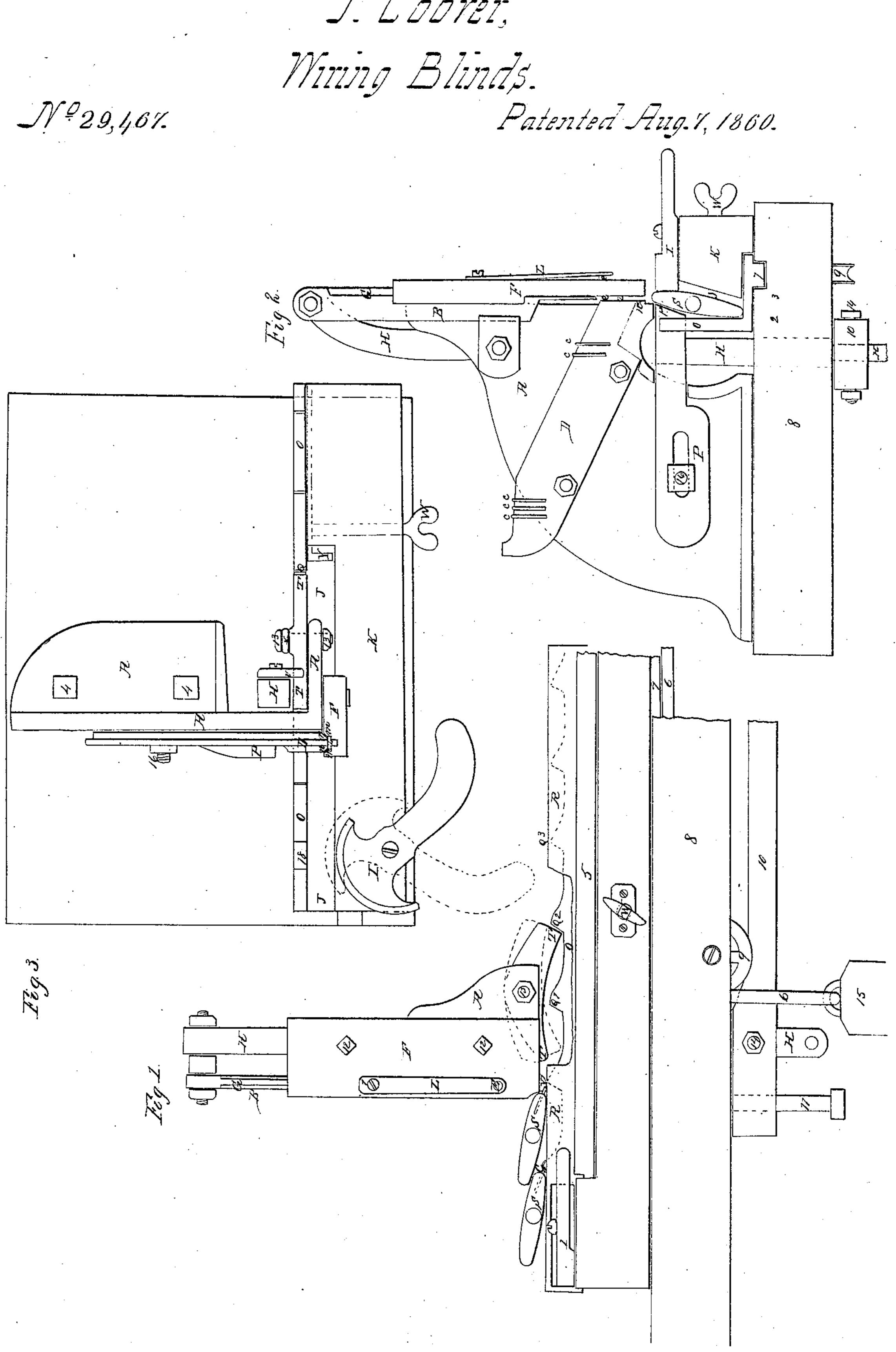
J. Langer,



## UNITED STATES PATENT OFFICE.

JACOB COOVER, OF CHAMBERSBURG, PENNSYLVANIA.

## WIRING BLIND-RODS.

Specification of Letters Patent No. 29,467, dated August 7, 1860.

To all whom it may concern:

Be it known that I, JACOB COOVER, of Chambersburg, in the county of Franklin and State of Pennsylvania, have invented 5 a new and useful Machine for Wiring Pivot-Blinds; and I do hereby declare that the following is a full and exact description of the construction and operation of the same, reference being had to the annexed draw-10 ings, making a part of this specification, in which—

Figure 1, is a front view of the machine; representing it as wiring the slats, S, to the rod R; Fig. 2 an end view showing the 15 machine as wiring the slats S. Fig. 3, is a top view, with the slats S, rod R, adjustable piece 5, driving bar, B, and the top part

of the connecting rod H, removed.

In Fig. 1, B, is the driving bar, H, a section of the connecting rod, one end of which is connected to the driving bar, B, and the other end to a treadle; G the rib on the driving bar, for the purpose of strengthening the lower part of said bar; F, the plate that contains the conducting groove Z, and which is secured to the form A, by the bolts 12; L, the spring for holding the staple, which is secured to the plate F, by the screw 1; T, the reciprocating bar, for stopping the car-30 riage K, allowing it to move forward but a certain distance at a time, the bar being pivoted to the form A, by the bolt 13; O, the plate with stops Q, upon its top edge, and which is secured to the carriage K; 35 S, the slats; R, the rod to which the slats are connected; part of said rod being removed to show the reciprocating bar T, and stops Q; 5 an adjustable piece with a groove in the top, to suit the size and form of the 40 rod R, into which the rod is placed to raise it a proper height, and keep it straight under the driving bar; I, the eccentric; K, the carriage; 8, the table upon which the machine is placed; 7, the rib on the bottom 45 of the carriage K, which works in a groove in the table 8, serving to guide said carriage; 15, a section of the weight, that gives motion to the carriage K, through the cord 6, which passes over the pulley 9, and is se-50 cured to the rear end of the carriage; 10, the spring for raising the driving bar B, one end of said spring being secured to the connecting rod H, by the bolt 14, and the other end not shown in the drawings, to the 55 table 8; 11, the set screw for regulating the

descent of the driving bar B.

In Fig. 2, A, is the form which is secured to the table 8, by means of bolts 4, shown in Fig. 3; F, the plate which contains the conducting groove Z, and is here represented 60 with a part of the near side, removed to show the lower part of the driving bar B, inclined conducting bar D, and the projecting part E, of spring L; P, the adjustable bar, against which the slat is clamped; this 65 bar is set so that the staple is driven in the middle or side of the slat's edge, as may be desired; V, the stop against which the projecting part of the staple in the slat, is placed, when it is to be connected to the 70 rod R; I, the eccentric; K, the carriage; O, the plate with stops Q; J, the groove in the end of the carriage; S, the slat.

In Fig. 3, 8, is the table; A, the form; P, the adjustable bar; H, the connecting 75 rod, to which is secured the projecting piece U; T, the reciprocating bar; X, an india rubber friction washer, which by its pressure, against the reciprocating bar T, will hold it in either of the two positions, in 80 which it may be placed; O, the plate with stops Q, and notch 18; D, the inclined conducting bar; F, the plate with conducting groove Z, and beveled sides, m, m; K, the carriage; I, the eccentric; J, the groove, 85 into which the slat is placed when it is to be wired; Y, the gage, which is a small bar, sliding loosely, in a groove in the back of the carriage, and against the plate O, one end extending into the groove J; being tight- 90 ened when set by the thumb screw W.

The following are the principal operations

of the machine:

For wiring the slats, the machine is arranged as shown in Fig. 2. The carriage 95 K, is brought back, so as to pass the adjustable bar P, through the notch 18, in the plate O, shown in Fig. 3, when set right, it is fastened by the bolt 16. The slat S, is then placed in the groove J, with the end resting 100 against the bar Y, which is brought out into the groove J, such a distance as will bring the middle of the slat's length or such part as is to receive the staple, under the driving bar B. The eccentric I, is then turned as 105 represented by the dotted lines in Fig. 3, thereby clamping the slat S, firmly between the eccentric, and adjustable bar P, which prevents the slat from splitting, when it receives the staple. The groove J, adjustable 110 bar P, and eccentric I, are so constructed as to place the slat S, at an angle with the

driving bar B, as shown by the dotted lines 2, and 3, by which means the staple is driven, so as to lean to one side of the slat, as shown in Fig. 1, so that when said slat is connected 5 to the rod R, it will lie down flat and yet allow the staple in the rod R, to be driven down close, thereby avoiding long projecting staples, and allowing no play between the slats and the rod. The staples C, are 10 placed astride of the inclined conducting bar, D, and upon which they slide down by their own gravity, the lower one dropping into the conducting groove Z, where it is held by the projecting part E, of spring L, 15 until the driving bar, B, descends upon it, the pressure forcing back the spring L, and the staple is carried down and pressed into the wood. The conducting groove Z, being so small as to allow but one staple to pass 20 under the driving bar, B, at a time. When a staple is straddled, so as to be much wider at the open end than at the closed one, the closed end of the staple will then only pass into the conducting groove by its own 25 gravity; the legs, resting against the beveled sides, m, m, but as the driving bar B, descends with the staple, the legs, or ends of the staple strike the sloping bottom, n, n, which in addition to the beveled sides, m, 30 will compress and force it into the conducting groove Z. Thus the conducting groove, may be constructed so small or narrow that it will allow the staple no play, and always conduct it straight into the wood. To wire the slats to the rod, the machine is arranged as shown in Fig. 1. The bar P, being drawn back out of the plate O, and the adjustable piece 5, placed upon the carriage K, and the rod R, placed in a groove on 40 top of piece 5. When it is fastened by the eccentric I, a slat S, is then placed across the rod R, and against the lower edge of the plate F, with the projecting part of its staple resting against the stop V, which serves to bring 45 it directly under the driving bar B, so that the descending staple which is to be driven into the rod R, shall pass with one leg through the staple of the slat, and connect it to the rod. The projecting piece U, which 50 is secured to the connecting rod H, shown in Fig. 3, at the same time pressing down the one end of the reciprocating bar T, so as to raise the other end from the stop Q<sup>2</sup>, where

it is held by the friction of the washer X.

The weight 15, then moves the carriage K, 55 forward and the stop Q¹ throws back the bar T, so as to catch upon the next stop Q³ thus the connected slat is removed a proper distance; when a second slat may be presented to the machine in the same manner as the 60 first.

It will be observed that the lower part of the plate F, is beveled or made thin at x. The object of this is to permit the edge of the slat S, to approach so near to the con- 65 ducting groove that the staple will, without being unduly elongated, project underneath the conducting groove and thus receive one leg of the descending wire; and so that the conducting groove may be extended 70 close down to the rod R, thus preventing the wire from being bent or crookedly driven. This formation also enables me to use the machine for wiring the slats and rods together in as perfect a manner as can 75 be done by hand by the most experienced workman.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the eccentric I, and 80 adjustable bar P, with the driving bar B, and slat groove J, as herein shown and described so that the slat S, may be so set and held that the wires will enter at an angle to the axis of the slat, all as set forth.

2. The employment of the eccentric I, or its equivalent to compress that portion of the slat which is immediately below the driving bar, so that the slat will not split when the wires are driven into it, substantially as 90 herein shown and described.

3. The beveling of the lower part of the plate F, as shown at x, so as to permit the near approach of the slats S, to the conducting groove, as and for the purpose set forth. 95

4. The combination of the stop V, with the conducting groove z, as and for the purpose herein shown and described.

5. The arrangement as herein shown and described of the spring L, conducting bar 100 D, conducting groove Z, and driving bar B, as and for the purpose herein shown and described.

JACOB COOVER.

Witnesses:

J. Allison Eyster, John J. Rebman.