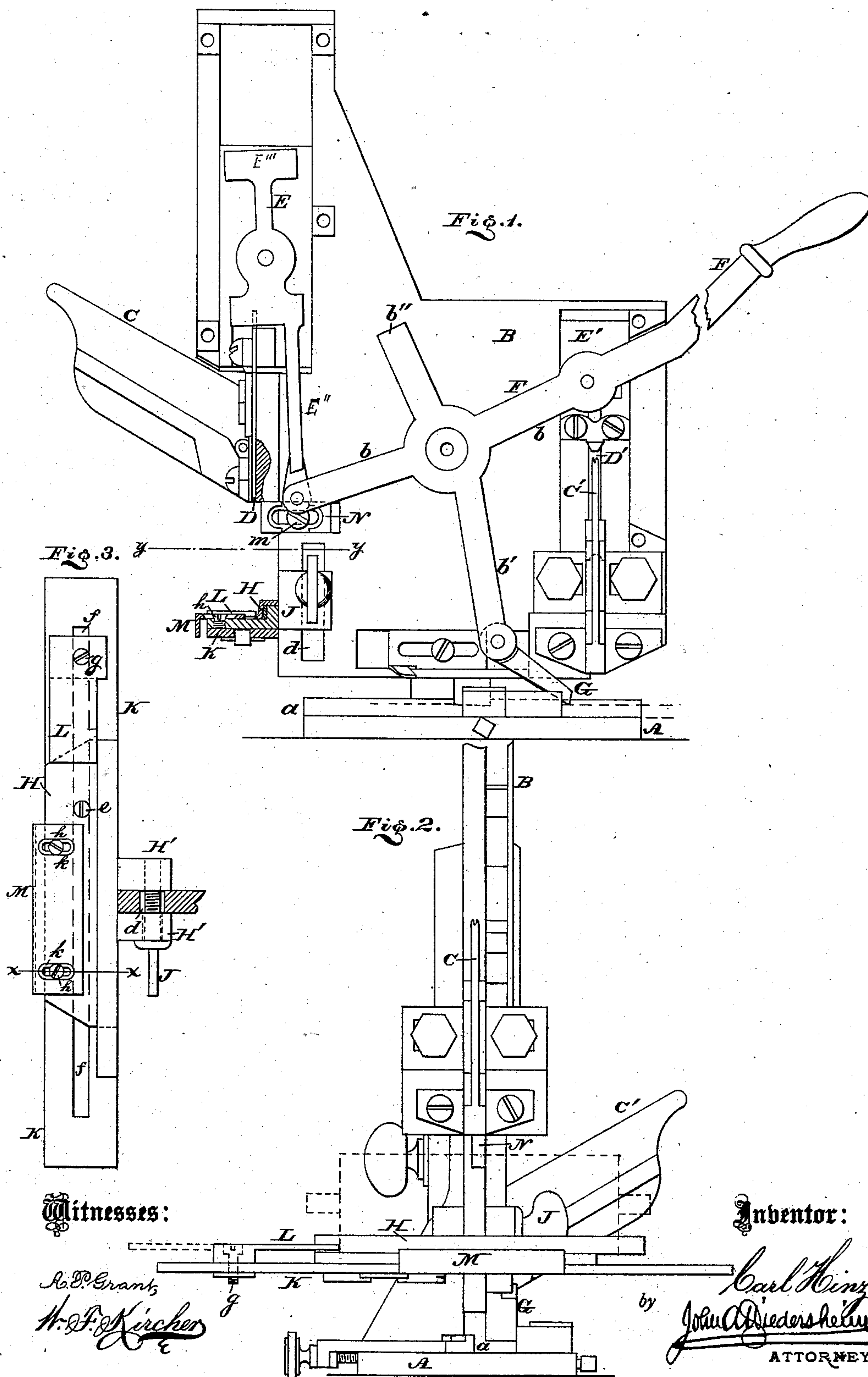


(No Model.)

C. HINZ.
Blind Wiring Machine.

No. 239,782.

Patented April 5, 1881.



Witnesses:

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CARL HINZ, OF PHILADELPHIA, PENNSYLVANIA.

BLIND-WIRING MACHINE.

SPECIFICATION forming part of Letters Patent No. 239,782, dated April 5, 1881.

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To all whom it may concern:

Be it known that I, CARL HINZ, a citizen of the United States, formerly residing at San Francisco, in the State of California, and at present in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Blind-Wiring Machines, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation, partly sectional, in line *xx*, Fig. 3, of the blind-wiring machine embodying my invention, the face-plate being removed. Fig. 2 is an end view or view at a right angle to Fig. 1. Fig. 3 is a top or plan view of a portion below the sectional line *yy*, Fig. 1.

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

My invention consists of a blind-wiring machine in which both the slats and a rod may be wired, two staple-drivers being employed and arranged at a right angle to each other and operated by a single lever.

It also consists of means for steadying the aforesaid lever.

It also consists of adjustable parts for sustaining and guiding slats of different dimensions.

It also consists of means for steadying the staple-driver and causing the staples to be driven true and uniform.

Referring to the drawings, A represents the bed of the machine which supports the working parts thereof, and provides a way, *a*, for the rod of the blind to be wired.

B represents an upright casing, which is adjustably supported on the bed A, and has secured to or formed with it two staple holders or hangers, C C', which project at a right angle to each other and serve to feed the staples—the holder C to the slats and the holder C' to the rod—there being fitted and guided at the base or inner ends of the holders the staple-drivers D D'. The driver D is connected to a slide, E, and the driver D' to a slide, E', both slides being guided within the casing B. Both slides are connected to a lever, F, which is pivoted to the casing B and has several arms, *b b' b''*, which play between the walls of the casing, the arm *b'* having pivoted to it

the tooth G for feeding the blind-rod. The wing *b* of the lever F is connected to the slide E of the driver D by means of an arm, E'', which is pivoted to said wing *b* and slide E. The arm may be broadened at the part below its pivotal connection with the slide as a steadying surface, and is extended above said connection to form a steadying part, E''', it being noticed that as the slide moves in the recess in one wall of the casing B the pivoted arm E'' is steadied by the other wall of the casing, both above and below its pivotal connection with the slide, and thus the staple-driver, connected at one end to said slide, is nicely guided and caused to drive the staples true and uniform. The slide E of the staple-driver D' is also fitted in a recess in one wall of the casing B, and the other wall thereof serves to guide the lever F, and thus causes said driver D' to accomplish its work true and uniform.

H represents a bed or table for the slats to be wired, located beneath the staple-holder C, and secured to the casing B by two blocks, H', which, cast with or connected to the bed, embrace opposite sides of the casing, and are held in position and vertically adjustable by means of a bolt, J, which, passed through an opening in one block H' and a vertical slot, *d*, in the casing, screws into the other block H', the bed H abutting against the casing B, whereby, when the bolt J is tightened, the bed, prevented from shifting, remains firm and immovable in position.

The holders C C' are properly supplied with staples. The blind-rod is placed on the way *a*, and a slat on the bed H. The lever F is then operated, and as the driver D descends it forces a staple into the slat, which latter is removed and placed over the rod, so that on the next operation of the lever F, the driver D' forces a staple through the staple of the slat into the rod. Another slat is then rested on the bed H and the lever F operated, and said slat is stapled and the rod advanced by the tooth G the distance of one slat, said slat being then removed and placed over the rod, that on the next operation of the lever F the driver D' forces a staple through the slat into the rod, and thus the second slat is connected to the rod, the operations being continued until the work is completed, it being noticed that by

the employment of one lever two staple-drivers are operated, and the stapling of the slats and rod is accomplished in one machine. The upper wing or arm, *b''*, of the lever *F*, playing
 5 between the walls of the casing *B* and in contact therewith, serves to steady said lever and prevent irregular motions thereof.

To the bed *H* is connected, by means of a screw, *e*, a horizontally-sliding plate, *K*, which
 10 is formed with a longitudinally-extending slot, *f*, through which the screw *e* is passed.

To the plate *K* is connected a sliding block or stop, *L*, against which one end of the slat abuts during the stapling operation. The
 15 screw *g*, which connects the block to the plate *K*, passes through the slot *f*, whereby the block may be moved to and from the bed *H*, and provision is thereby made for supporting slats of different lengths, the plate *K* being first
 20 moved the desired length, and the block *L* set at the required place, after which the screws *e g* are tightened, whereby the parts retain their adjusted positions. The block *L* may be rotated on the screw *g*, which passes through
 25 one end of the block, so that the end in Fig. 2, having the slat abut against it, may become the left-hand end, as shown by the dotted lines, and thus slats of greater length may be supported on the bed *H* and rested against
 30 the block as a stop or abutment.

Attached to the bed *H* is a slotted plate *M*, which is adapted to be moved transversely or to and from said bed, at a right angle thereto, and, by means of screws *h* passing through the
 35 slots *k* of said plate *M* and entering the bed, the plate may be adjusted and secured in position.

Attached to one of the walls of the casing *B*, and located above the bed *H*, is a plate, *N*, which has a horizontal slot through which
 40 passes the securing and adjusting screw *m*, said plate *N* having a horizontally-adjustable motion transverse or at a right angle to the bed *H*, it being noticed that the plate *N* is let
 45 into one of the walls of the casing *B* flush therewith, so as to approach the center of the staple-driver and be clear of movable parts.

By means of the plate *M* the bed is adapted to sustain slats of different thicknesses guided
 50 by said plate, and the slats are set true relatively to the driver *D*, so that the staples are inserted at the proper places.

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

1. The lever *F*, carrying two staple-drivers, *D D'*, in combination with the staple-holders *C C'*, the driver *D* and holder *C* being at a right angle to the driver *D'* and holder *C'*, substantially as and for the purpose set forth. 55 60

2. The lever having two wings, *b b'*, connected to the staple-drivers, a wing, *b'*, connected to the feeding-tooth *G*, and a guiding-wing, *b''*, playing between the walls of the casing, the several wings being in one piece
 65 with the lever, substantially as and for the purpose set forth.

3. The combination, with staple-driver mechanism, of the bed *H*, the slotted plate *K*, and the abutment *L*, the latter being rotatable
 70 and longitudinally adjustable by means of the screw *g*, which is fitted to said slotted plate *K*, substantially as and for the purpose set forth.

4. The bed *H*, with two connected blocks, *H' H''*, in combination with the casing *B*, having a vertical slot, *d*, and the screw-bolts *J*, said blocks embracing opposite sides of the casing, and the bed *H* abutting against the casing,
 80 substantially as and for the purpose set forth.

5. The combination, with the staple-driver and the bed, of the casing *B*, provided with a slotted plate, *N*, and the bolt *m*, said plate being let into the wall of the casing, substantially as and for the purpose set forth. 85

6. The bed *H*, in combination with the longitudinally-adjustable plate *K*, the stop-block *L*, longitudinally adjustable on said plate *K*, the plate transversely adjustable on the bed *H*, and the plate *N*, horizontally adjustable on
 90 the casing *B*, substantially as and for the purpose set forth.

7. The combination, with the staple-driver, connected slide, and operating-lever, of an arm pivoted to the said slide and lever, and formed
 95 with an extension, *E'''*, above the pivotal connection with the slide, substantially as and for the purpose set forth.

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Witnesses;

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