

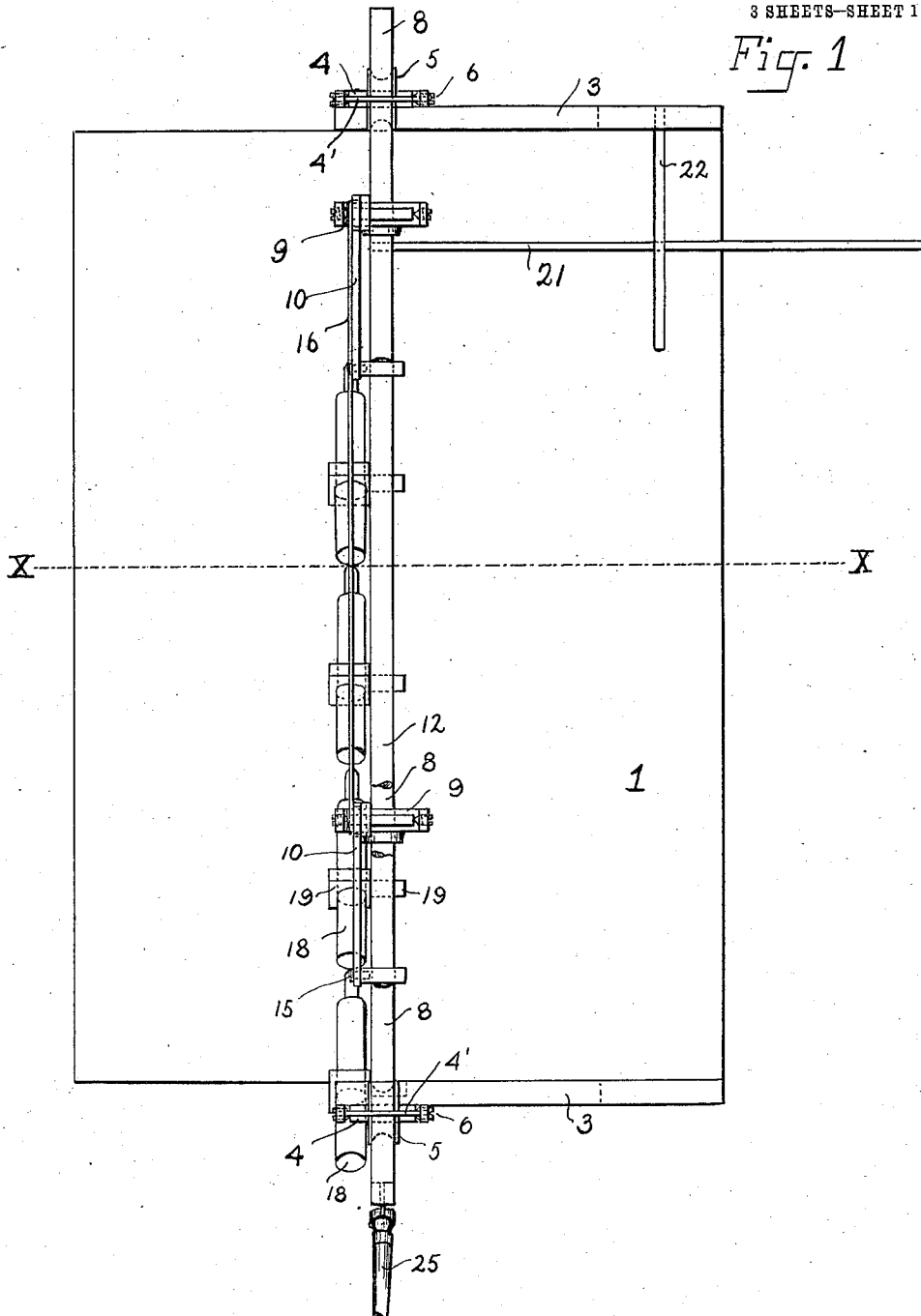
F. A. JOHNSON.
MACHINE FOR WRITING A PLURALITY OF SIGNATURES.
APPLICATION FILED JULY 6, 1912.

1,066,117.

Patented July 1, 1913.

3 SHEETS—SHEET 1.

Fig. 1



Witnesses,
Leth Johnson
T. C. Mackinnon

Inventor,
F. Amos Johnson

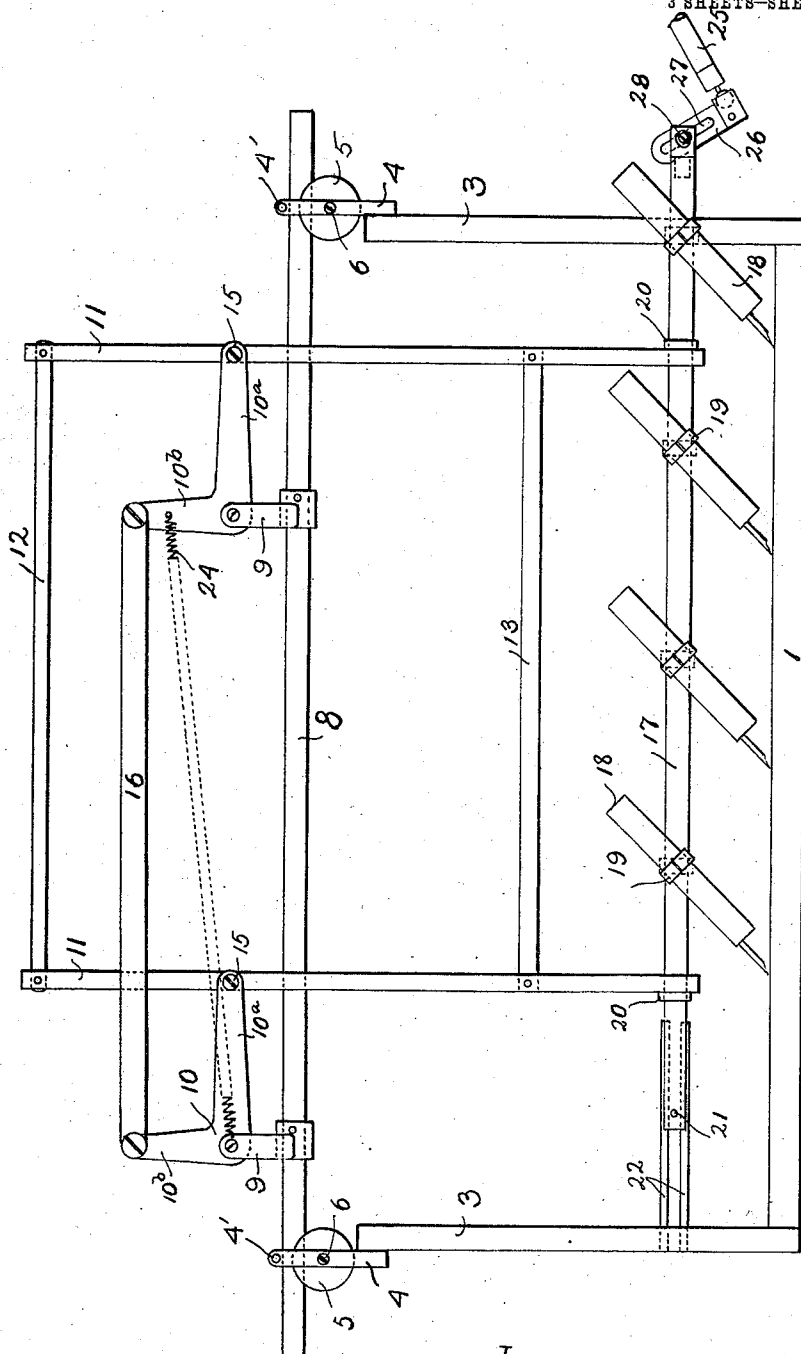
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3 SHEETS—SHEET 2.

Fig. 2



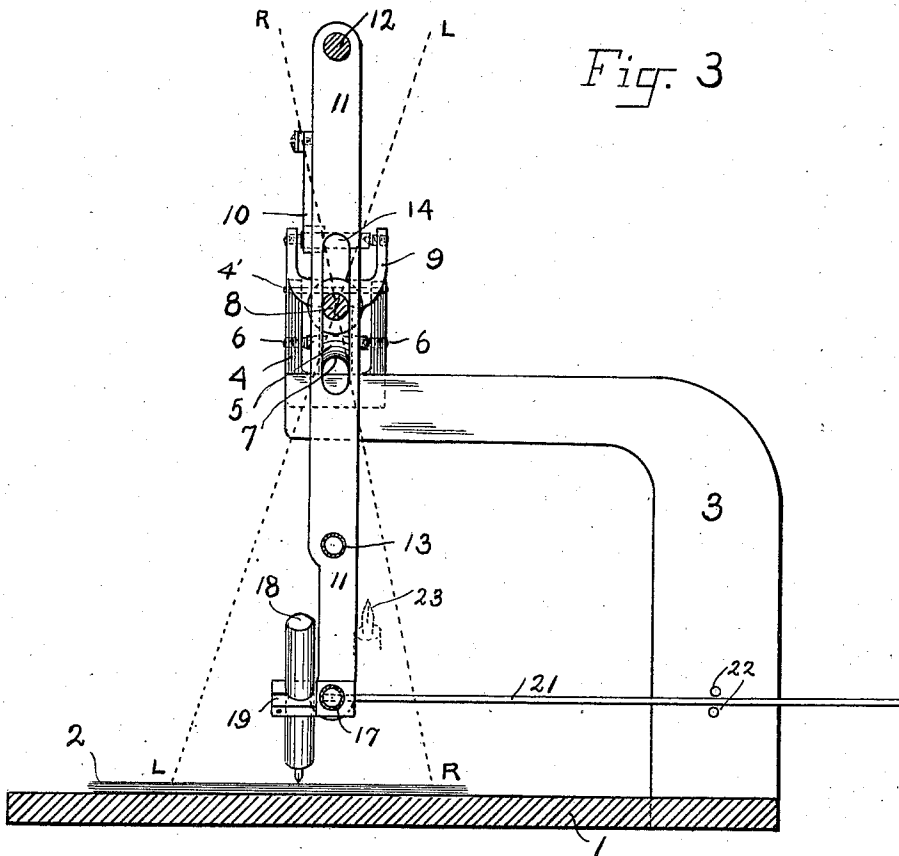
Witnesses,
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Fig. 3



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UNITED STATES PATENT OFFICE.

FRANK AMOS JOHNSON, OF DUNELLEN, NEW JERSEY, ASSIGNOR TO THE SIGNATURE COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

MACHINE FOR WRITING A PLURALITY OF SIGNATURES.

1,066,117.

Specification of Letters Patent.

Patented July 1, 1913.

Application filed July 6, 1912. Serial No. 708,033.

To all whom it may concern:

Be it known that I, FRANK AMOS JOHNSON, a citizen of the United States, and a resident of Dunellen, in the county of Middlesex and State of New Jersey, have invented certain new and useful Improvements in Machines for Writing a Plurality of Signatures, of which the following is a specification.

My invention relates to machines for simultaneously writing a plurality of signatures and is designed especially for use in signing checks or similar instruments, where there are a large number of signatures to be affixed.

My invention belongs to that class of machines referred to in which the pens are mounted on a common pen-bar which has a universal movement in a horizontal plane and where the pen pressure is given and maintained by the hand of the writer.

My present improvement relates to the means for mounting the pen-bar so as to obtain a free and easy movement and one that can be easily swung aside to remove the documents from the pile that is being signed.

In the following description reference is made to the accompanying drawings in which:

Figure 1 is a plan, Fig. 2 is a left elevation and Fig. 3 is a front sectional elevation on the line X—X of Fig. 1.

In carrying out my invention, I provide a suitable document supporting bed or base plate 1, on which the checks or other instruments 2 which are to be signed are placed. At the right hand side of this bed there are front and rear brackets 3, which extend upward and to the left over the writing surface of the bed and above the documents to be signed. Each of these brackets has a yoke 4 which carries a roll 5, which turns on centers 6. The rolls have grooves 7 which are adapted to receive and support a horizontal fulcrum bar or rod 8. A pin 4' in the upper end of each of the yokes 4 just clears the rod 8 and prevents its being accidentally dislodged from its position. The fulcrum rod 8 has two brackets 9 in which are pivoted two bell-crank levers 10, their horizontal portions being marked 10^a and their vertical portions 10^b.

The pen-carrying frame is rectangular in form and hangs normally in a central ver-

tical position. It is composed of front and rear ends 11 and top tie bar 12 and bottom tie bar 13. The ends 11 are provided with slots 14 through which the fulcrum rod 8 passes and these slots serve to limit the movement of the frame to and from the bed. The free ends of the horizontal portions 10^a of the bell-crank levers are pivoted to the ends of the frame by stud screws 15 and a link 16 joins the vertical portions 10^b of the bell-cranks. This construction holds the frame to longitudinal movement with the fulcrum rod 8, but allows it free transverse movement with relation to said rod, to and from the bed.

The ends of the pen frame extend downward beyond the tie bar 13 and in their lower ends is journaled a pen-bar 17, which carries the pens or writing members 18, they being secured to the pen-bar by clamps 19. A pair of collars 20, on the pen-bar keeps it from moving lengthwise in its bearings. While very fair results may be obtained by a pen-bar which is fixed in the pen frame, the angularity which results as the frame is swung to the right or left, as indicated by the dotted lines R—R and L—L in Fig. 3, is objectionable. To avoid this side angularity of the pens the pen-bar is journaled as just explained and a means is added to control the rotation of the pen-bar as the frame is swung sidewise on its fulcrum rod. A preferred means of accomplishing this result is by a long rod or arm 21 which extends to the right and is inclosed between two guides 22 which extend forward from the rear bracket 3. These guides are long enough to permit of the necessary longitudinal movement of the frame and the arm 21 is long enough so that the pens are substantially vertical regardless of the height of the pile of documents which are in position for signing.

The arm 21 is detachably secured to the pen-bar, it being frictionally held therein and it may be pulled out and the pen-bar turned half way around and the arm inserted from the other side. In this position the pens will be reversed and their points will be up, as indicated by the dotted position at 23 in Fig. 3.

The weight of the pen frame and pen-bar and pens is wholly or partially sustained by a spring 24 which connects the vertical arm 10^b of the front bell-crank lever with the

rear hanger 9. Different writers prefer different tension to the spring and springs of various strength may be used to accommodate the individual tastes.

5 The front and rear ends of the pen frame are preferably made a little longer than shown in the drawings, so that the bell-cranks and the parts of the frame which are above the fulcrum rod 8 will just about
10 equal the weight of the parts of the frame which are below the fulcrum rod; so that when the frame is swung to the right or to the left as indicated by the dotted line positions R—R and L—L of Fig. 3 there is little or no tendency to return to vertical position and the frame is balanced so that it
15 will stay in any position in which it may be placed.

The style of frame and the long overhanging brackets 3 afford a construction which permits the frame to be swung to the right beyond the position shown by line R—R, so that the top sheet of the pile may be easily removed after it has been signed.

25 The pen-bar has a pilot 25 of the usual form by means of which the pens are guided—it being connected to the bar by a link 26. This link is provided with a slot 27 and it is held firmly by a clamp screw 28 so that the pilot may be adjusted up close
30 to the pen-bar, thereby giving greater rigidity; or it may be let down to accommodate a greater height of the pile of documents.

What I claim for use in a machine of the class described is:

35 1. The combination of a document supporting bed with a frame mounted above said bed and adapted to move longitudinally and vertically and to swing transversely with relation to said bed; a pen-bar
40 having a plurality of pens secured thereto and journaled in said frame and means for controlling the rotating movement of said pen-bar with reference to said frame.

45 2. A document supporting bed; a fulcrum rod mounted above said bed; a frame mounted on said rod and adapted to move transversely thereon to and from said bed, to move longitudinally with said rod and to
50 swing transversely with said rod as a fulcrum; a pen-bar having a plurality of pens secured thereto and journaled in said frame; in combination with means for controlling the rotating movement of said pen-bar with
55 reference to said frame.

3. A document supporting bed; a pair of brackets extending upward from said bed and outward over the writing surface of said bed; a fulcrum rod mounted in said
60 brackets; a frame mounted on said fulcrum rod and adapted to move transversely thereon to and from said bed, to move longitudinally with said rod and to swing transversely with said rod as a fulcrum; a pen-bar having a plurality of pens secured there-

to and journaled in said frame, in combination with means for controlling the rotating movement of said pen-bar with reference to said frame—whereby the pens are maintained in a constant position with relation
70 to the writing surface.

4. A document supporting bed; a pair of brackets mounted on said bed; a rocking fulcrum rod mounted in said brackets and adapted to move longitudinally with relation to said rod; a rectangular frame
75 mounted on said rod; means for securing a parallel transverse movement of said frame with relation to said rod to and from said bed; a pen-bar having a plurality of pens
80 secured thereto and journaled in said frame; in combination with means for controlling the rotating movement of said pen bar with reference to said frame and means for counterbalancing the weight of said pen-bar and
85 pens.

5. A frame; a pen-bar having a plurality of pens secured thereto and journaled in said frame; in combination with means for controlling the rotating movement of said
90 pen-bar with reference to said frame—said means being detachably secured to said pen-bar whereby, on disconnecting said means, said pen-bar may be turned to place said pens in a reversed position with their
95 points upward.

6. The combination of the following elements, to-wit: a document supporting bed; a pair of brackets mounted on said bed; a fulcrum rod mounted in said brackets and
100 adapted to move longitudinally with relation to said rod; anti-friction rolls interposed between said fulcrum rod and said brackets; a pair of bell-crank levers having horizontal and vertical arms pivoted to said
105 fulcrum rod; a connecting rod joining the outer ends of the vertical portions of said bell crank levers; a rectangular frame having its vertical sides pivoted to the outer ends of the horizontal arms of said bell
110 crank levers, whereby said frame is secured to move longitudinally with said fulcrum rod but held to move transversely with relation to said rod; and a pen-bar having a plurality of pens secured thereto and mounted
115 in said frame.

7. The combination of the following elements, to-wit: a document supporting bed; a fulcrum rod mounted above said bed; a rectangular pen-carrying frame mounted on
120 said rod and adapted to move transversely therewith to and from said bed, to move longitudinally with said rod and to swing transversely with said rod as a fulcrum—said fulcrum rod being in substantially a central
125 position on said frame—whereby said frame is balanced on said fulcrum rod.

8. A document supporting bed; a fulcrum rod mounted above said bed; a rectangular pen-carrying frame mounted on
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said rod and adapted to move transversely thereon to and from said bed, to move longitudinally with said rod and to swing transversely with said rod as a fulcrum; a pen-bar having a plurality of pens secured thereto and mounted in said frame; in combination with means for counterbalancing the weight of said frame and pen bar.

9. A document supporting bed; a swinging rectangular frame mounted above said bed; a pen-bar journaled in said frame; in combination with means for controlling the rotating movement of said pen-bar with reference to said frame.

10. A document supporting bed; a rectangular frame mounted above said bed and adapted to move longitudinally with relation to said bed and to swing transversely across said bed; a pen-bar having a plurality of pens secured thereto and journaled in said frame and means for controlling the rotating movement of said pen-bar with reference to said frame.

11. The combination of the following ele-

ments, to-wit: a document supporting bed; a rectangular frame mounted above said bed and adapted to move longitudinally with relation to said bed and to swing transversely across said bed; a pen-bar having a plurality of pens secured thereto and journaled in said frame; a horizontal arm extending sidewise from said pen-bar and a guideway for said arm.

12. Means for attaching the pilot or controlling handle to the pen-bar, comprising means for holding the pilot; a slotted link—said pilot being secured to said link and said pen-bar being slotted to receive said link; clamping means in said pen-bar to hold said link—said link being adjustable lengthwise of its slot in said pen-bar.

In testimony whereof I affix my signature in presence of two witnesses.

F. AMOS JOHNSON.

Witnesses:

T. O. MACKINNON,
MICHAEL J. KING.