

No. 861,417.

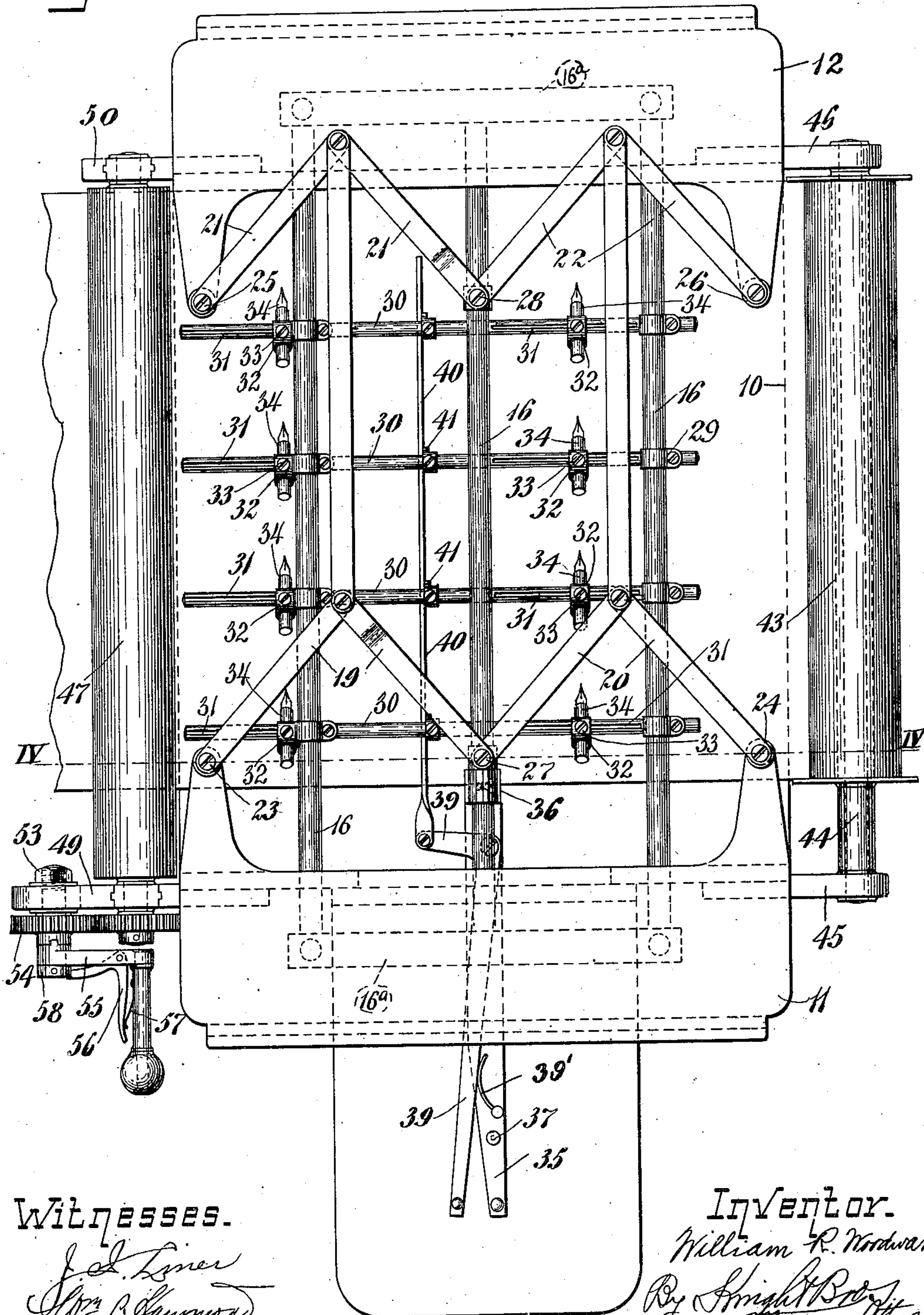
PATENTED JULY 30, 1907.

W. R. WOODWARD.
MEANS FOR SIMULTANEOUSLY WRITING A PLURALITY OF SIGNATURES
OR INSCRIPTIONS.

APPLICATION FILED JULY 31, 1906.

2 SHEETS—SHEET 1.

Fig. 1



Witnesses.

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Inventor.

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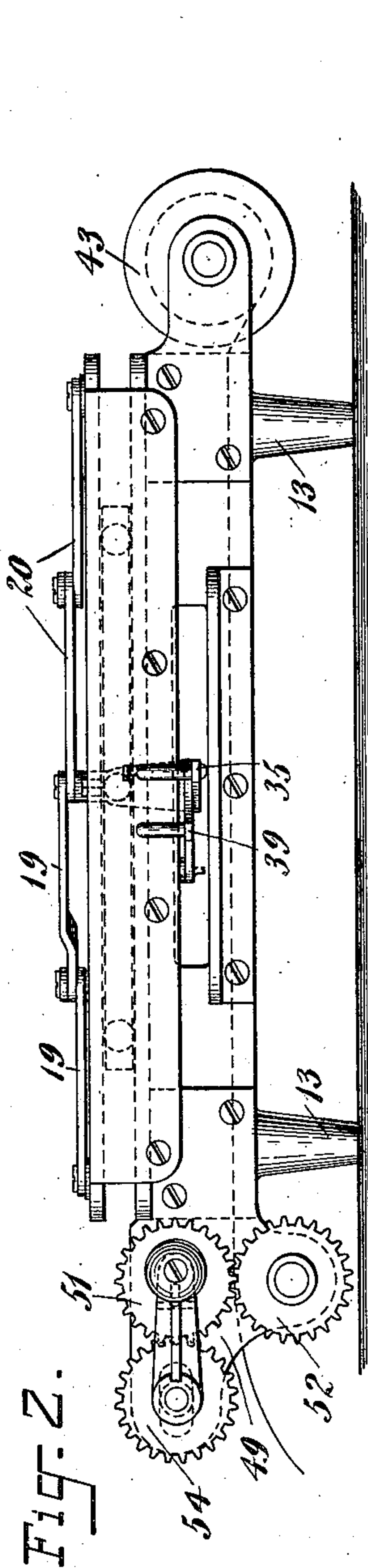
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2 SHEETS—SHEET 2.



Witnesses.

J. L. Limer
Wm. R. Hammond

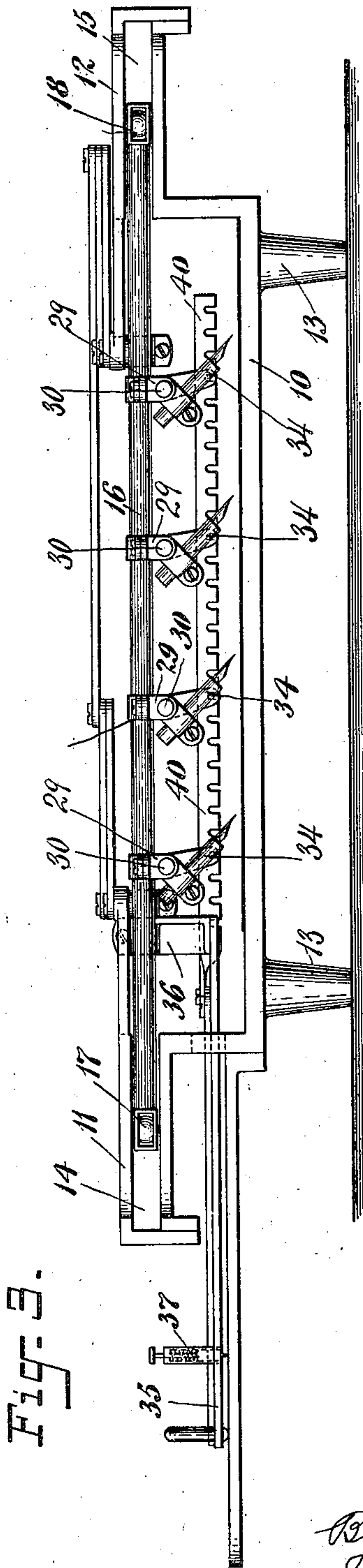


Fig. 3.

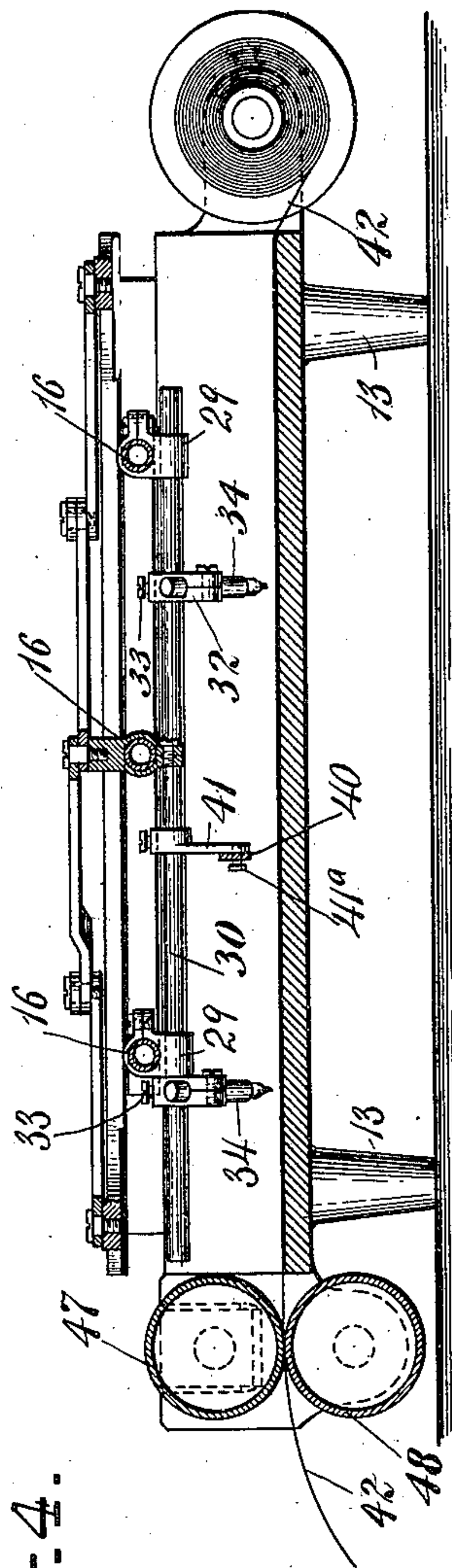


Fig. 4.

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UNITED STATES PATENT OFFICE.

WILLIAM R. WOODWARD, OF NEW YORK, N. Y.

MEANS FOR SIMULTANEOUSLY WRITING A PLURALITY OF SIGNATURES OR INSCRIPTIONS.

No. 861,417.

Specification of Letters Patent.

Patented July 30, 1907.

Application filed July 31, 1905. Serial No. 271,886.

To all whom it may concern:

Be it known that I, WILLIAM R. WOODWARD, a citizen of the United States, and a resident of the borough of Brooklyn, in the city and State of New York, have invented a certain new and useful Improvement in Means for Simultaneously Writing a Plurality of Signatures or Inscriptions, of which the following is a specification.

My invention relates to a device for making simultaneously a plurality of inscriptions, such as, signatures, upon a number of checks, bank-notes, stock certificates, bonds or coupons, or any documents requiring signature.

The object of my invention is to obviate the necessity of signing large numbers of such papers singly.

Heretofore, it has been necessary for the proper officer to sign stock certificates, checks, or other papers separately. Where there are a great number of these papers to be signed, as in transfers, dividend payments, &c., it is obvious that considerable time and labor are involved.

My invention largely economizes both labor and time, as it enables the officer to sign the papers in groups of ten, twenty, fifty or even more at one operation.

To clearly illustrate an apparatus embodying my invention, I shall describe the same in detail with reference to the accompanying drawings, in which like numerals of reference are used to indicate the same part in the various views, and in which:

Figure 1 is a top plan view of the complete apparatus. Fig. 2 is an end elevation of the same. Fig. 3 is a side elevation of the same with one of the feed rollers removed, and Fig. 4 is a sectional elevation of the same taken on the line IV—IV, of Fig. 1.

Referring now more specifically to said drawings, 10, 11 and 12 indicate the main frame or bed-plate, of suitable metal, supported by the legs 13. Slots 14 and 15 are provided at the front and rear of the bed-plate, and in these slots the carriage 16 rolls upon its ball bearings 17 and 18, under the control of the pantographic links 19, 20 and 21, 22. These links are pivotally connected at 23, 24 and 25, 26, to the portions 11, 12 of the bed-plate, and at 27, 28 to the carriage 16. The carriage 16 consists preferably of a skeleton frame of two or more longitudinal bars 16 (three are shown in the drawings) rigidly secured together by suitable transverse bars 16^a, two of which are shown in the drawings rigidly secured to the ends of the longitudinal bars.

The carriage 16 has longitudinally adjustable thereon, a number of hangers 29 which have bearings for and support a plurality of rock-shafts 30 having longitudinal grooves 31 and carrying pen grips 32 which are laterally adjustable on the shafts 30 by means of set

screws 33 engaging the grooves 31. These pen grips 32 have clamped in them the fountain pens (or indelible pencils) 34, as most clearly shown in Fig. 3.

The carriage 16 is operated by a handle 35 rigidly secured thereto by an upwardly projecting right angle connection 36, and this handle has a pen or pencil 37 as a guide to assist the operator. Pivoted upon the handle 35 is a bell-crank lever 39 which is under the tension of a spring 39' and is pivotally connected with and adapted to reciprocate a notched bar 40, extending longitudinally beneath the carriage 16, and above bed 10.

Each of the rock-shafts 30 has keyed to it a depending rock-arm 41 provided with a laterally projecting pin 41^a, (see Fig. 4) which is adapted to engage one of the notches of bar 40, said bar 40 being supported upon said pins 41^a. The longitudinal movement of notched bar 40, under the action of bell-crank lever 39 will simultaneously rock all of the shafts 30 in their bearings and cause the pens 34 to be elevated or depressed in unison. The bar 40 is notched from end to end to permit of the adjustment of the pen carrying rock-shafts 30, said shafts being adjustable toward or away from each other, longitudinally of the carriage 16, to position the rows of pens closer together or farther apart. The individual pens are also adjustable transversely of the carriage to position the columns of pens closer together or farther apart as may be necessary. The spring tension on the bell crank 39 tends to hold the pens in elevated position when not under control.

The papers to be signed, may be fed to the machine in any suitable manner, by hand, or on a ribbon carried by a roller 43 which has its axis 44 journaled in front and rear brackets 45 and 46 suitably secured to the bed-plate 10. The ribbon is drawn off at the discharge side of the table between two rollers 47 and 48 suitably journaled in front and rear brackets 49 and 50, on the frame. These rollers 47 and 48 have at their front ends the gears 51 and 52 which are in mesh with each other. Fixed upon the front bracket 49 is a stud 53 which carries a gear 54 meshing with the gear 51, and an operating crank 55 for rotating the gear 54. The operating crank 55 has pivoted thereon detent 56 under the tension of a spring 57 and one of its arms is adapted to be moved by the spring pressure into a recessed portion of the retaining collar 58 of the stud 53 to hold the operating crank against rotation. By depressing the other arm of the detent against the spring tension, the crank is released for rotating the gear 54, and thus drawing off a fresh group of papers for signing.

It is understood that this drawing (Fig. 1) represents but a foreshortened view—as for the sake of clearness several rows of pens have been omitted. Also that many changes in details of construction may be made

without affecting the spirit of the invention—for example, the means here shown for driving the paper feed, is illustrative merely, and may be varied in many ways. So also the portions of the pressure varying lever with relation to handle 35, may be altered—as I may prefer to locate it above or to the other side of the said handle.

It will also be clear that the spirit of my invention includes broadly the movement of the pens over the documents or the movement of the documents under the pens.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. A device for simultaneously writing a plurality of signatures comprising in combination a bed plate, a carriage, means for supporting and guiding the carriage over the bed plate, holding it from vertical motion but allowing it to move parallel to said bed-plate, means for restricting the said carriage to a motion of translation, a plurality of writing members movably supported on said carriage, hand-controlled means for guiding said carriage over the bed-plate and hand controlled means acting upon all the writing members simultaneously for forcing the writing members toward the bed-plate by reaction against said carriage.

2. A device for simultaneously writing a plurality of signatures, comprising in combination a slotted bed-plate, a carriage engaging in the slots of said bed-plate and free to move therein parallel to the bed-plate but held thereby from movement vertical thereof, means as pantographic links for restricting the said carriage to a motion of translation, a plurality of writing members movably supported on said carriage, hand-controlled means for guiding said carriage over the bed-plate and hand-controlled means acting upon all the writing members simultaneously for forcing the writing members toward the bed-plate by reaction against said carriage and bed-plate.

3. A device for simultaneously writing a plurality of signatures, comprising in combination a bed-plate, a carriage having bearing and guided at each end in said bed-plate so as to have motion parallel thereto but not vertical thereof, means for restricting the said carriage to a motion of translation, a plurality of writing members movably supported on said carriage between its bearings in the bed-plate, hand-controlled means for guiding said carriage over the bed-plate, and hand-controlled means acting upon all the writing members simultaneously for forcing the writing members toward the bed-plate by reaction against said carriage.

4. A device for simultaneously writing a plurality of signatures, comprising in combination a bed-plate, a carriage mounted parallel thereto and movable parallel therewith, a series of parallel supporting members for writing devices attached thereto, each carrying adjustable writing devices, and each adjustable on said carriage so as to shift the writing devices in groups or columns toward or from each other, and hand-controlled means acting upon all the writing members simultaneously for forcing the writing members toward the bed-plate by reaction against said carriage.

5. A device of the character described comprising a suitably mounted carriage, rock shafts journaled therein, writing members mounted upon and independently adjustable on said rock shafts, means for moving said carriage, and means for rocking said shafts in unison to raise or depress said writing members.

6. A device of the character described comprising a bed plate, a carriage supported thereby and movable thereon, suitable controlling links connecting said carriage to said bed plate, a plurality of rock shafts journaled in said carriage, a plurality of writing members secured to each of

said rock shafts, means for rocking the rock shafts in unison to depress or raise said writing members simultaneously, and means for moving said carriage.

7. In a device of the character described, the combination with a suitably controlled carriage, a plurality of adjustably mounted rock shafts journaled therein, and a plurality of writing members adjustably secured on each rock shaft; of means for moving said carriage to cause the writing members to write, and means for rocking said rock shafts in unison to depress or raise the writing members simultaneously.

8. A device of the character described comprising a suitably mounted carriage, rock shafts journaled therein, adjustable upon the carriage, writing members adjustably secured on said rock shafts, means for adjusting the positions and angles of said writing members upon the rock shafts, means for moving said carriage to cause the writing members to write, and means for rocking said rock shafts in unison to raise or depress said writing members simultaneously.

9. A device for simultaneously writing a plurality of signatures or inscriptions,—comprising a bed-plate, a carriage adapted to move thereon, rock shafts journaled at variable intervals upon said carriage, writing members secured at variable intervals upon said rock shafts, rock arms secured to said rock shafts, a notched bar engaging the rock arms, a spring tensioned bell-crank lever adapted to reciprocate the notched bar against its spring tension to rock the rock arms, and a handle for moving said carriage.

10. A device for simultaneously writing a plurality of signatures or inscriptions, comprising a bed-plate, a carriage, ball bearings between the carriage and bed-plate, pantographic links adapted to control the movement of said carriage, rock shafts journaled in said carriage, writing members secured to said rock shafts so as to bear with substantially equal pressures upon the bed-plate, means for simultaneously rocking all of said shafts in equal degrees to vary such pressures of the writing members, and means for moving said carriage upon the bed plates under the control of said pantographic links.

11. A device for simultaneously writing a plurality of signatures or inscriptions, comprising a bed-plate, a carriage, ball bearings between the carriage and bed-plate, rock shafts journaled upon said carriage, writing members fixed upon said rock shafts so as to bear with substantially equal pressure upon the bed-plate, rock arms fixed to said rock shafts, a bar engaging all of said rock arms, a bell crank lever adapted to reciprocate said bar to rock the rock shafts and vary the pressure of said writing members, and a handle or lever for moving said carriage.

12. A device for simultaneously writing a plurality of signatures or inscriptions, comprising a bed-plate, a carriage, ball bearings between the carriage and bed-plate, pantographic links controlling the movements of the carriage, rock-shafts adjustably journaled upon said carriage, writing members adjustably fixed upon said rock-shafts, rock arms adjustably fixed to said rock-shafts, a bar engaging all of said rock arms, a bell crank lever operatively connected with said bar, and a handle for moving said carriage.

13. In a device of the character described, the combination of a bed-plate 11 having slots 14, 15, a rigid carriage 16 sliding in said slots parallel to the bed-plate, means for confining the carriage to a movement of translation, transverse adjustable rock-shafts 30 secured to said carriage, writing devices 34 secured to said shafts, rock arms 41 on said shafts, operating bar 40 adjustably connected to the series of rock arms, and hand-controlled means for operating said bar, substantially as and for the purpose set forth.

WILLIAM R. WOODWARD.

Witnesses:

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GEORGE A. ROEBERICH.