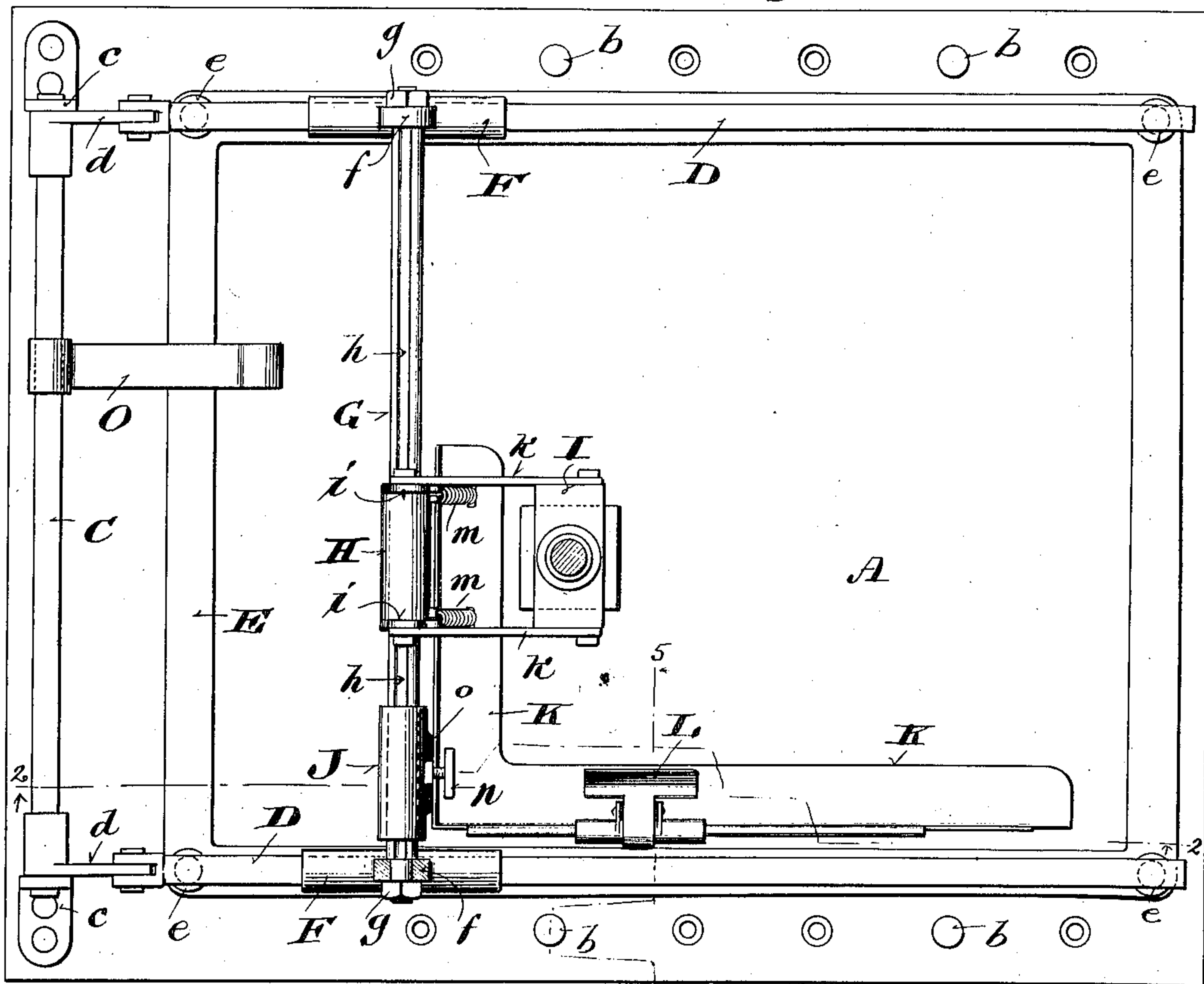


O. LOEWENBACH,  
MANIFOLDING APPARATUS.  
APPLICATION FILED JULY 24, 1907.

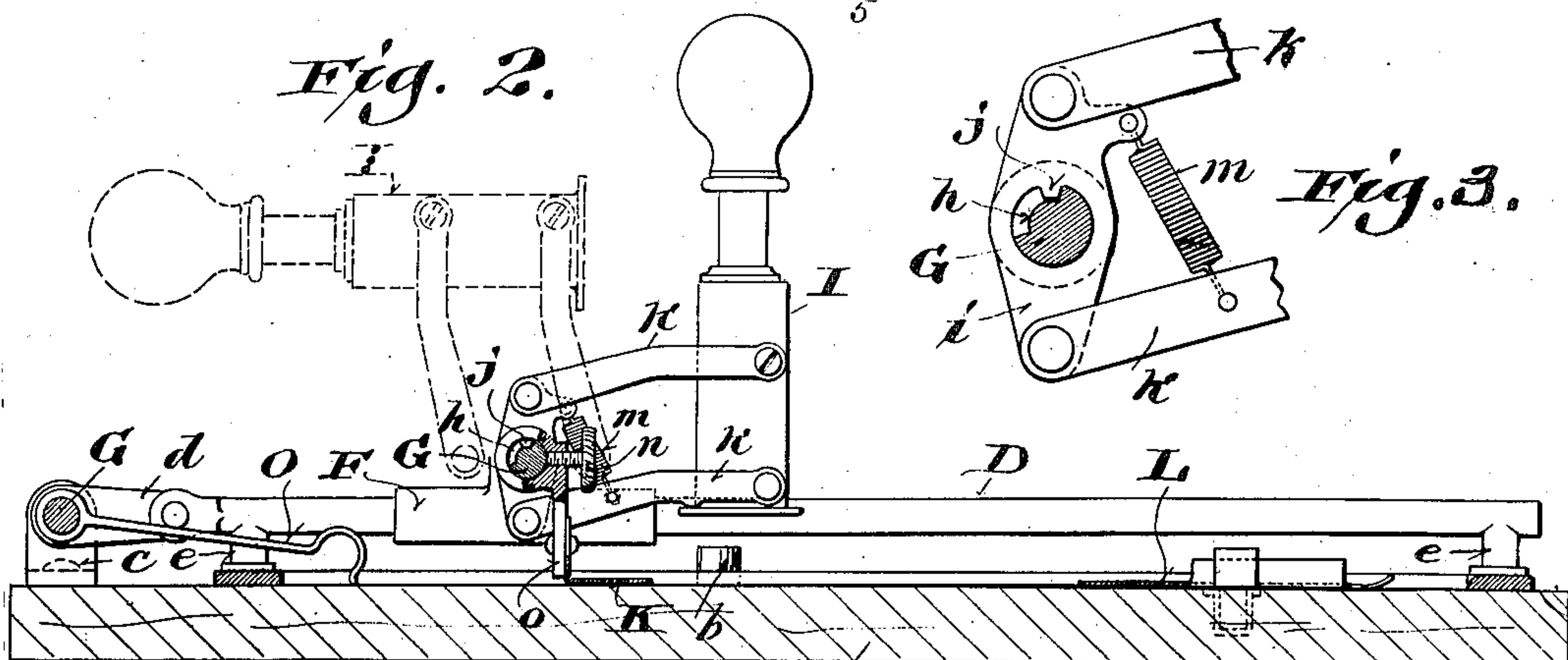
933,910.

Patented Sept. 14, 1909.

*Fig. 1.* 2 SHEETS—SHEET 1.



*Fig. 2.*



*Fig. 3.*

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*Fig. 6.*

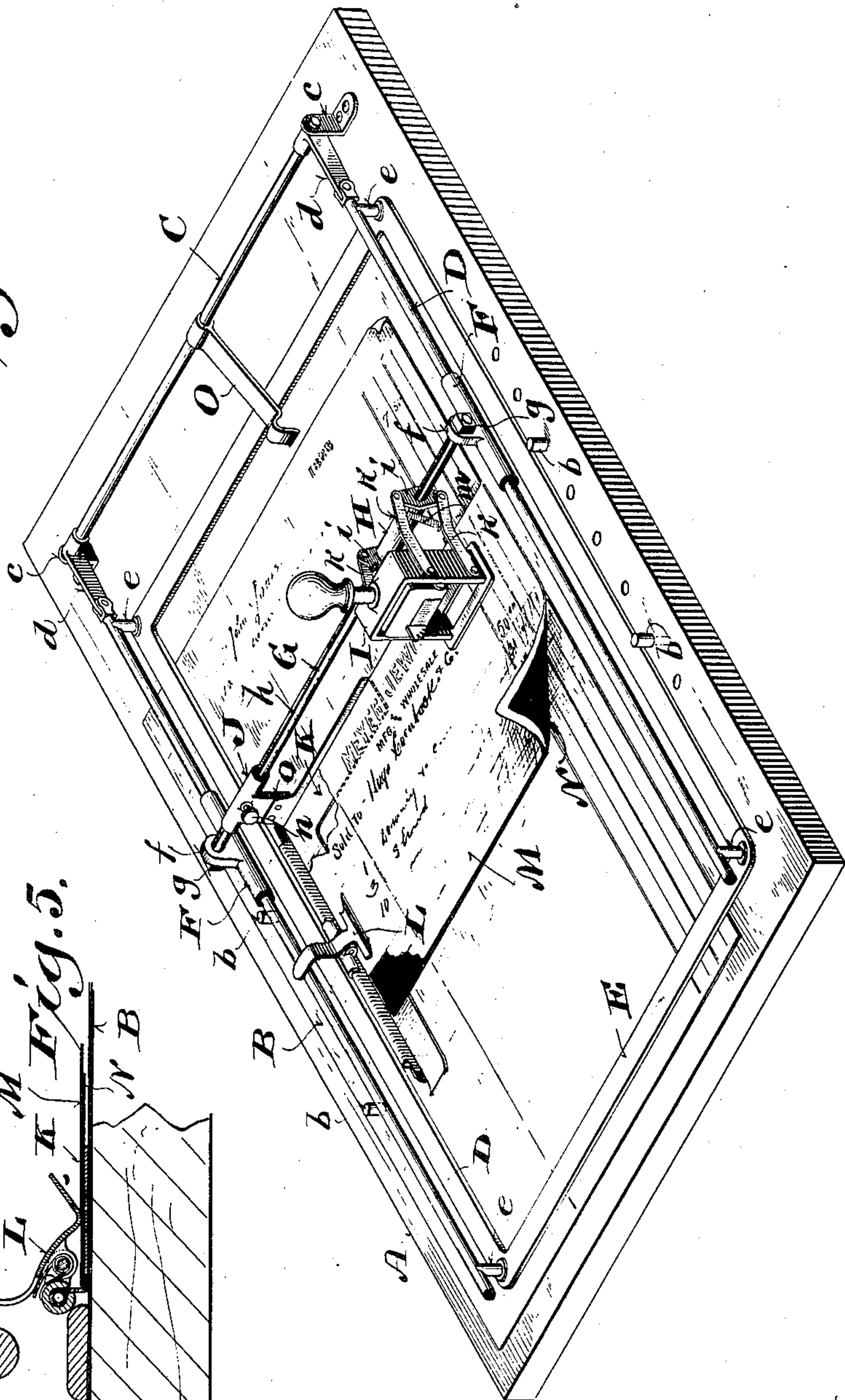
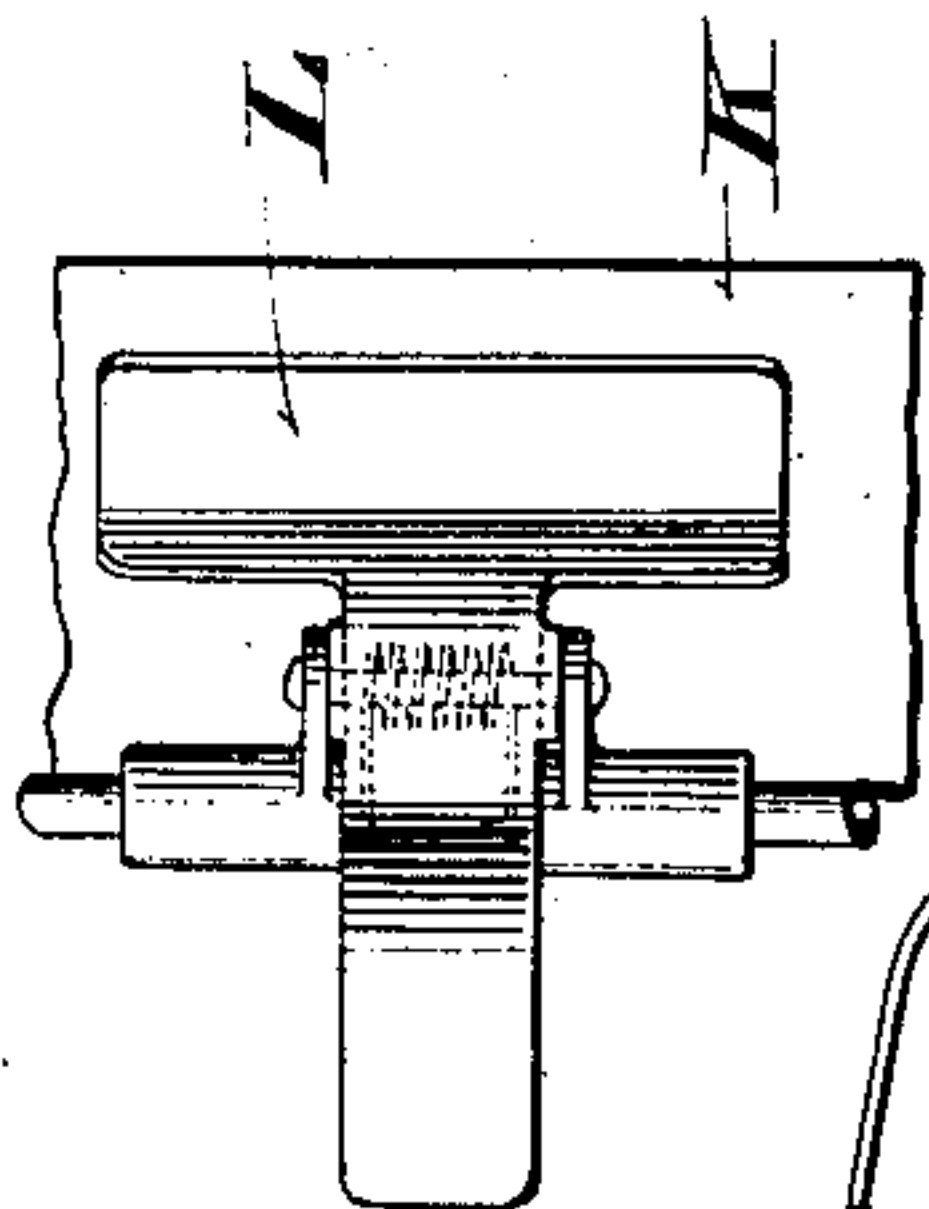


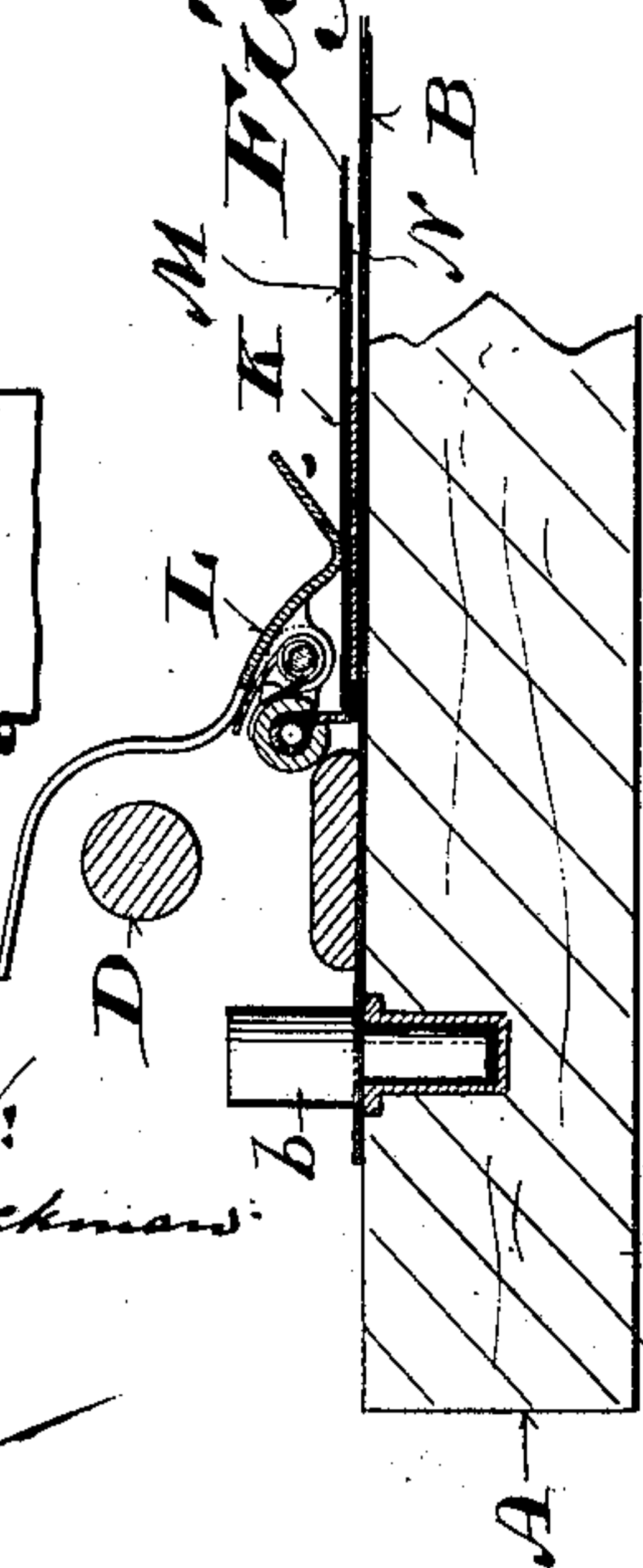
Fig. 4.



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*Fig. 5.*



Inventor:

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By *Cliphant & Young.*  
Esqrs



# UNITED STATES PATENT OFFICE.

OSCAR LOEWENBACH, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO B. LOEWENBACH & SON, OF MILWAUKEE, WISCONSIN, A FIRM.

## MANIFOLDING APPARATUS.

933,910.

Specification of Letters Patent. Patented Sept. 14, 1909.

Application filed July 24, 1907. Serial No. 385,393.

*To all whom it may concern:*

Be it known that I, OSCAR LOEWENBACH, a citizen of the United States, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Manifolded Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof.

The improvements consist in what is herein shown, described and claimed; the object of the invention being to provide simple economical apparatus designed to facilitate recording of accounts or other writings in whole or part.

Figure 1 of the accompanying drawings represents a plan view of apparatus in accordance with my invention partly in horizontal section and contracted, but which illustrates the general construction and arrangement of parts of same; Fig. 2, a side elevation of the apparatus partly in section, this view being indicated by lines 2—2 in Fig. 1; Fig. 3, a partly sectional side elevation on an enlarged scale of a fragment of the apparatus; Fig. 4, a plan view of another fragment of the apparatus also on an enlarged scale; Fig. 5, a sectional view of a fragment of the apparatus likewise on an enlarged scale, this view being indicated by line 5—5 in Fig. 1, and Fig. 6, a perspective view of said apparatus in its preferred form, its application with reference to original and record sheets being illustrated.

Referring by letter to the drawings, A indicates a portable base provided with preferably bushed holes in series parallel to its adjacent longitudinal edges. Pins *b* are set in selected holes in the base to engage with binder-post holes of a loose-leaf ledger-leaf B, this leaf being held by one or the other sets of pins according to the side to be operated upon. Adjacent to its upper edge, the base is provided with brackets *c* that serve as bearings for end-journals of a transverse rod C having arms *d* fast thereon adjacent to said bearings. In pivotal connection with said arms are ends of parallel guide-rods D connected by posts *e* with a rectangular frame E, and sleeves F have play on said guide-rods between supporting posts of same. These sleeves are provided with ears *f*, and the ends of a transverse guide rod G are held fast in said ears by means of nuts *g* or otherwise as may be most

convenient in practice, said sleeves and rod in connection therewith constituting what is hereinafter termed a carriage.

The rod G of the carriage is longitudinally grooved, the width of the groove *h* approximating one-third of the circumference of said rod. Guided on this rod is a loose sleeve H having end-plates *i* extending in opposite directions therefrom, and radial stop-lugs *j* of the plates engage the groove of the rod to limit swing of the sleeve and parts in connection therewith. Parallel links *k*, in pairs, connect the extremities of the end-plates *i* of the sleeve H with the sides of a consecutive numbering stamp I of ordinary construction a duplicator stamp being preferably employed. This stamp is held in normal lifted position by springs *m* connecting ears of the end plates *i* of the sleeve H with links *k*, said stamp being moved downward against resistance of the springs by which it is automatically returned to said normal position on being relieved of pressure, the movement of said stamp in working position being on a vertical plane. Because of the engagement of the lugs *j* of the end-plates *i* of the sleeve H with the groove of the carriage-rod G, the numbering stamp I may be swung up out of the way as shown by dotted lines in Fig. 2. Another loose sleeve J is guided on the carriage-rod G, and provided with a set-screw *n* by which it may be fastened in adjusted position. Riveted or otherwise rigidly secured to a depending lug *o* of the sleeve J is a right angle gage-plate K both arms of which are vertically flanged and soldered or otherwise rigidly secured on a preferably rolled edge of a flange of said plate is a spring-controlled paper-clip L, a lever portion of same being extended over an adjacent guide-rod D for the carriage aforesaid. A bill M or other writing sheet and an underlying sheet of carbon-paper N are held by the clip and the gage-plate over the aforesaid ledger-leaf or other record sheet under the frame E, and in order to obtain clearance for the placing or removal of said record-sheet, said frame is swung up on the pivots connecting the guide-rods D with the arms *d* of the rod C, it being held in elevated position by a swing-hook O that is loose on said rod and engageable with the rod G of the carriage at any convenient point of same.

In practice, the record-sheet B is posi-



tioned on the base A under the frame E, the bill or other writing sheet M and sheet of carbon-paper are clipped on the gage-plate K and the carriage and said gage-plate adjusted with reference to that portion of said record-sheet upon which said writing or a portion of the same is to be duplicated. The writing or any portion of same is then gone over with a stylus and thus duplicated on the record-sheet, or the writing may be done at this time on the uppermost sheet. Extra copies of the writing may be had by employing more record and carbon-paper sheets as is customary in manifolding operations, and the billing or other writing may be done direct upon the superimposed writing-sheet. The serial number of the bill or other writing is had by impacting the numbering stamp I before or after the manifolding operation and if the carbon-paper is not sufficiently sensitive, said stamp may be set to repeat a number one or more times and impacted on the original and copies separately.

If the recording is to be done in a book or upon a pile of record sheets the aforesaid rocker permits of an elevation of the frame E and parts therewith to overlie a leaf of said book, and it is to be understood that said frame may be detached from said rocker should it be desirable to perform record operations upon loose leaves or in a book on a support other than the base A aforesaid.

I claim:

1. A manifolding apparatus comprising a frame, parallel guides supported on the frame, a carriage adjustable on the guides, a gage-plate suspended from a transverse member of the carriage, and means in connection with the gage-plate for holding an original writing sheet, carbon-paper and record sheet on said plate.

2. A manifolding apparatus comprising a frame, parallel guides supported on the frame, a carriage adjustable on the guides, a gage-plate on the carriage adjustable transversely to the guides, and means in connection with the plate for holding sheets of paper on said plate.

3. A manifolding apparatus comprising a frame, parallel horizontal guides supported on the frame, a carriage adjustable on the guides, a right-angle gage-plate suspended from a transverse member of the carriage,

both arms of the plate being vertically flanged, and a spring-controlled paper-clip in connection with one of the flanges of said plate.

4. A manifolding apparatus comprising a frame, parallel guides supported on the frame, a carriage adjustable on the guides, a gage-plate and numbering stamp in connection with a member of the frame, and means in connection with the gage-plate for holding an original writing sheet, carbon paper and record sheet on said plate under said stamp.

5. A manifolding apparatus comprising a base, an oscillative member having arms and mounted on the base, a frame in pivotal connection with said arms, parallel guides supported on the frame, and a paper-holder carriage adjustable on the guides.

6. A manifolding apparatus comprising a base provided with holes in series parallel to an edge of same, pins engageable with the holes to be engaged by binder-post holes of a record-sheet, an oscillative member having arms and mounted on the base, a frame in pivotal connection with said arms, parallel guides supported on the frame, and a paper holder carriage adjustable on the guides.

7. A manifolding apparatus comprising a base, an oscillative member having arms and mounted on the base, a frame in pivotal connection with said arms, parallel guides supported on the frame, a paper-holder carriage adjustable on the guides, and a hook hung on said oscillative member for engagement with said carriage when said frame and parts therewith are swung up out of the way.

8. A manifolding apparatus comprising a frame, parallel guides supported on the frame, a carriage adjustable on the guides, a gage-plate suspended from a transverse member of the carriage, and means in connection with the gage-plate for holding sheets of paper on said plate.

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee in the county of Milwaukee and State of Wisconsin in the presence of two witnesses.

OSCAR LOEWENBACH.

Witnesses:

N. E. OLIPHANT,  
GEORGE FELBER.