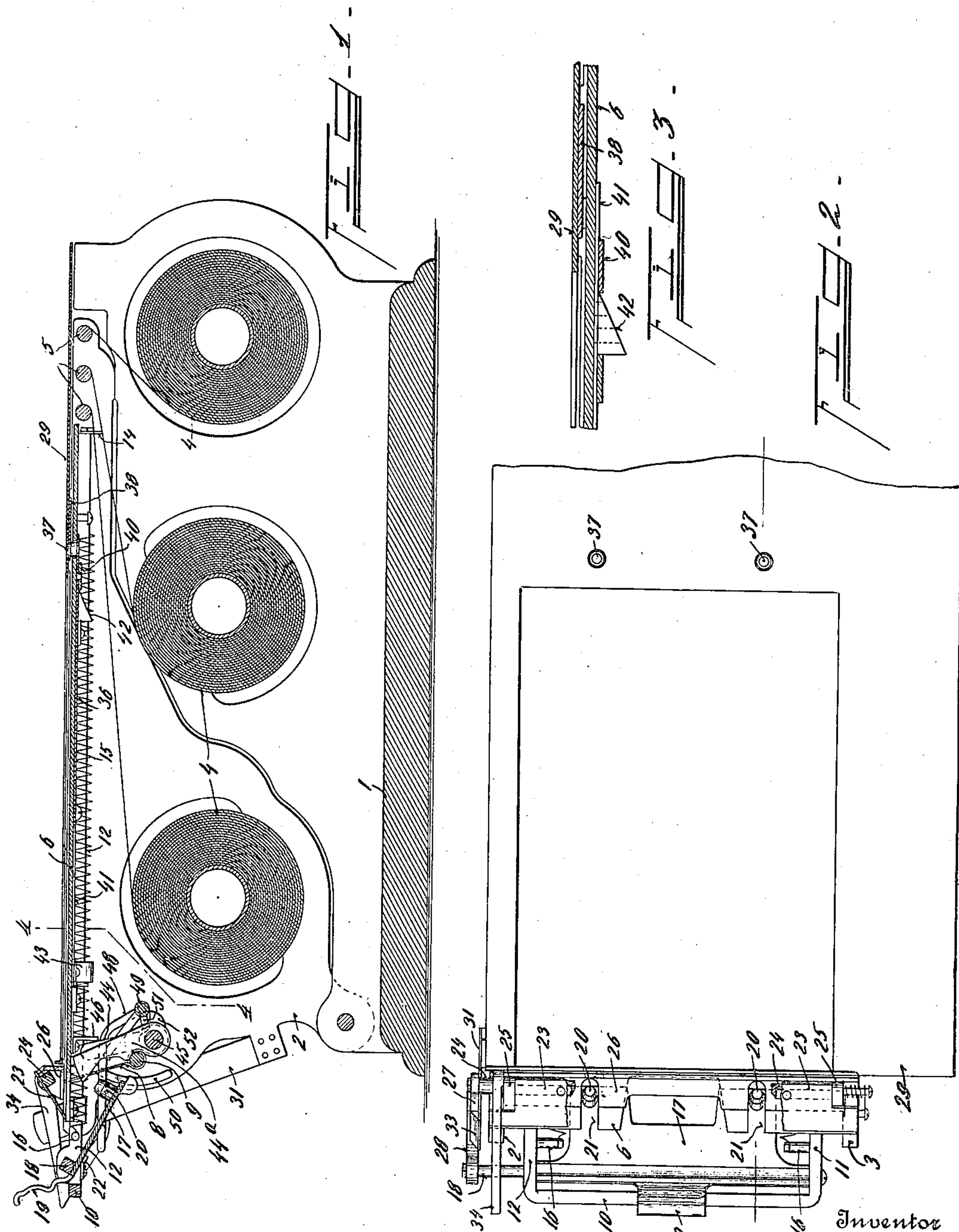


Jan. 2, 1923.

A. KRAUTH.
AUTOGRAPHIC REGISTER.
FILED JULY 10, 1915.

1,440,877

2 SHEETS-SHEET 1



Witnesses

Emma Spener
G. L. Brown.

By

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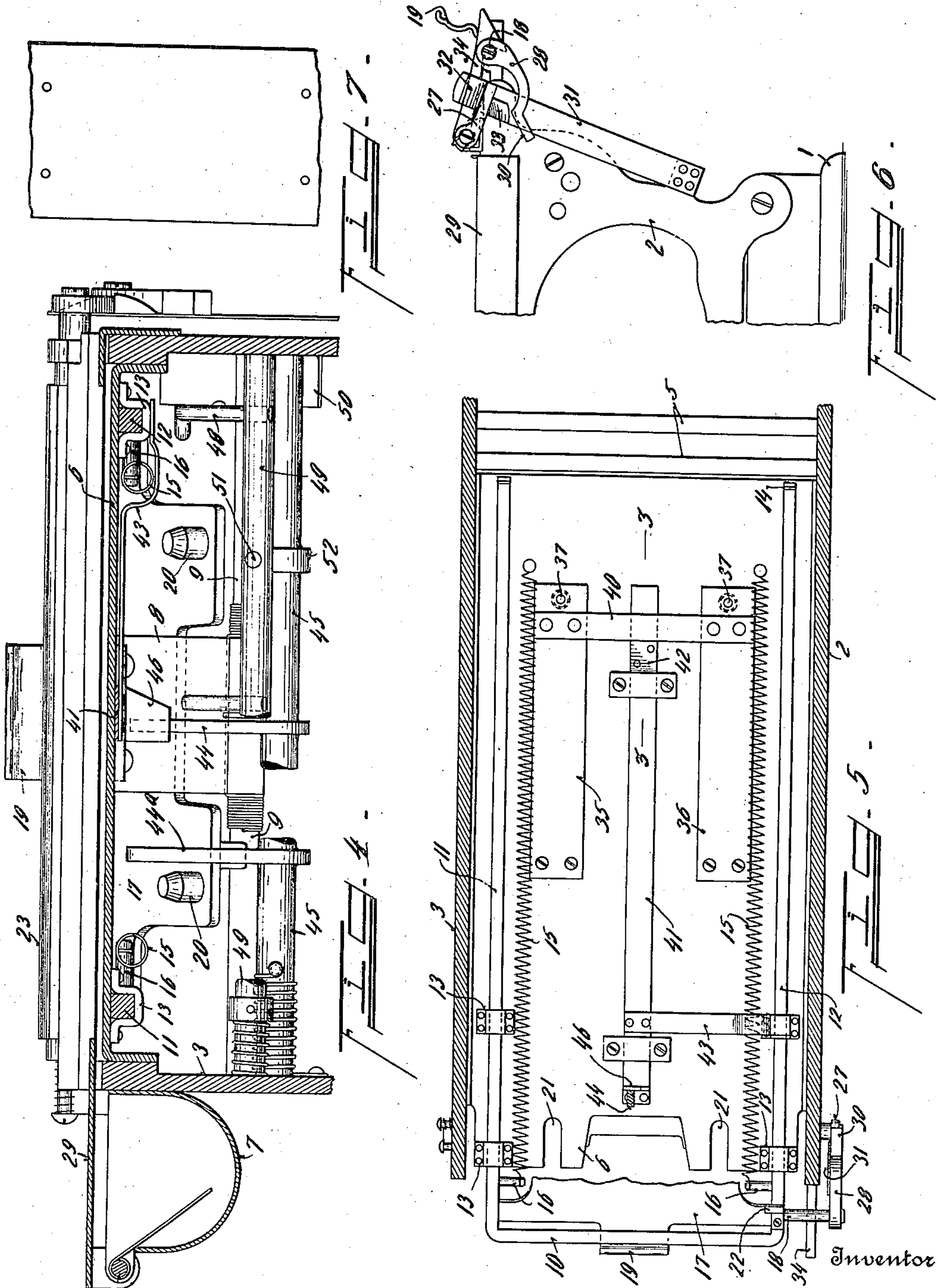
Attorneys

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Nord & Nord

Attorneys.

UNITED STATES PATENT OFFICE.

ALBERT KRAUTH, OF HAMILTON, OHIO; FRITZ G. DIESBACH ADMINISTRATOR OF
ALBERT KRAUTH, DECEASED.

AUTOGRAPHIC REGISTER.

Application filed July 10, 1915. Serial No. 39,124.

To all whom it may concern:

Be it known that I, ALBERT KRAUTH, a citizen of the United States, and residing at Hamilton, in the county of Butler and State of Ohio, have invented a new and useful Improvement in Autographic Registers, of which the following specification is a full disclosure.

My invention relates to paper feeding devices, of utility primarily in manifolding machines or autographic registers for withdrawing the paper from the machine in definite measured lengths or in full form lengths, adapting the delivered portion of the paper to be severed from the continuous strip, and leaving a successive form length in a determinately retained position for subsequent use.

The strip or strips of paper employed are provided with apertures or perforations arranged in definite spacing longitudinally of the strip, or relatively to the lengths of the forms or sheet sizes, so that the perforations may be utilized as stations to arrest the feed or progress in the delivery of the paper and also serve for coupling the strip to the withdrawing devices.

An object of the invention is to provide paper withdrawing or feeding devices movable in a direction with the feed of the paper, having means adapted to be coupled or engaged through an aperture in the paper, whereby both withdrawing devices and paper move as a unit to deliver a definite length of paper.

Another object of the invention is to provide a manifolding machine containing a strip of paper having longitudinally spaced apertures, with withdrawing devices movable in a direction of paper withdrawal from the machine, including means movable to engage through a registering aperture in the paper for coupling the paper to the withdrawing devices, together with means limiting the withdrawing motions through paper arresting devices engaging with an aligned aperture in the paper when advanced in registry therewith. The latter devices normally serving as confining devices for the paper against displacement or movement thereof within the machine and releasable coordinately at the commencement of a paper withdrawing operation.

Another object of the invention is to relieve the paper of any undue tension or frictional resistance acting to retard its free delivery or unduly strain the paper which may injure or tear the paper at its engaged perforations.

Other objects of the invention relate to means for controlling the various coacting devices in their sequence of operation directed to increase the efficiency of the machine, to safeguard against any accidental incomplete performance of any of the parts, which might interfere with the successful operation of the devices for each sheet or paper length delivery, together with other features and advantages more fully disclosed in the description of the accompanying drawings, forming a part of this specification, in which drawings like characters of reference denote corresponding parts throughout the several views, of which:—

Fig. 1 is a central vertical section through a manifolding machine embodying my invention. Fig. 2 is a top plan view of the forward portion of the machine shown in Fig. 1 with portions thereof broken away for clear illustration of parts otherwise hidden. Fig. 3 is an enlarged detail sectional view taken on line 3—3, Fig. 5. Fig. 4 is an enlarged section of the forward upper portion of the machine taken on line 4—4 of Fig. 1. Fig. 5 is a bottom plan view of the writing table and mechanism mounted thereon. Fig. 6 is a detail elevation of a portion of one side of the machine principally illustrating the devices for raising the tearing blade at the commencement of a paper withdrawing motion. Fig. 7 is a plan view of a portion of paper strip illustrating the spaced perforations longitudinally.

As the invention in its preferred embodiment is used in connection with a manifolding machine or autographic register, the description following will, in general, be confined to such type of machine, although it is obvious that its use may extend in other fields within the concept herein.

The manifolding machine illustrated comprises a base 1 supporting the side frames 2, 3, preferably each of sectional or two part form, in which one part of each side frame is rigidly mounted or secured upon the base 1, and the other part of each connecting uni-

tarly with its opposite companion side section, and hingedly connecting with the rigidly supported side frame sections, the construction following a practise common in the art, with its advantages well known.

The supply webs of paper 4 are suitably supported and journaled between side frames, with the number of webs optional to meet the demands of the trade. The paper strip from each of the webs are threaded to pass respectively over the guide rollers 5 journaled in the side frames, freely guiding the paper over the writing table 6; the writing-table connecting the hinged sections of the side frames. A margin-frame extends in superposed relation over the writing-table and hingedly mounted upon a carbon-paper container. The margin-frame can thus be swung upwardly for accessibility in threading the paper over the writing-table.

A tension blade 8 fixed upon a rock shaft 9 journaled in the side frames is provided at the forward portion of the machine, with the blade yieldingly urged to engage the under surface of the writing table to prevent reactionary motion of the paper upon the writing table, and means provided, to be hereinafter more fully described, for setting the tension blade in a released position. The parts above described represent elements generally combined in a manifolding machine, and may be said to have reached a recognized standard, and therefore do not require further reference as to their specific details of construction.

The strip of paper fed within the machine usually represents preprinted blank forms of bills of lading, sales record slips or the like, successively printed longitudinally of the strip, subdividing the strip in definite sheet lengths. For manifolding purposes it is essential that the forms on one strip be maintained in registry with the duplicate forms of the strip or strips beneath, and a corresponding exactness followed in the delivery of the sheets. That is, the feed or withdrawal motion of the strips should terminate after a full form or measured sheet length delivery, so that a proper severance of the sheet from the strip can be made, and the successive length properly located within the machine for its subsequent use. To produce such results with mechanical pull-out and paper feeding devices, as heretofore attempted, required mechanism built or operated in micrometric accuracy, or they fail in their attainments and even under the most refined conditions were unsuccessful in continually requiring readjustment. This primarily was due to a variance in the sheet lengths from that determined upon or corresponding with the prescribed degree of motion of the feeding or withdrawing mechanism. This is caused sometimes by a change in the texture of paper, or climate

conditions producing different degrees of contraction or expansion, slight slippage in gripping of the paper when feeding, and however slight the variation may be in one sheet length, it multiplies with the successive sheet lengths so as to require readjustment of the paper.

It is customary in the manufacture of the printed form strips to perforate the same at determined spacing longitudinally and preferably within a blank space between the forms, or within each sheet length, to be utilized in compiling or filing the individual sheets after they are severed from the strip. Such perforations are made in the process of printing, insuring accuracy as to their relative spacing longitudinally of the strip and especially as to location within each form or sheet length, and I utilize such perforations as stations for engagement with the paper in withdrawing and for intercepting its progress, so that any slight variance in the sheet lengths or relative perforation spacing is not detrimental to the efficient operation of the withdrawing mechanism. The paper is only arrested in the withdrawal from the machine after a full sheet movement, retaining a successive sheet in a proper location within the machine. The withdrawing devices engage through the perforations to pull the paper from a sheet delivery with no occasion for slippage of the paper or any one of the several manifold strips. All strips move in unison, and in relative registry with the extent of withdrawing motion automatically limited when the progress of the paper is arrested. Thus, the stroke of the withdrawing mechanism need not correspond accurately in length to the lengths of the sheets.

Beneath and supported upon the writing table 6 I provide a pull member comprising a yoke 10 formed of a bar bent into U-shape, with the limbs 11, 12 slidably supported within the straps 13, dependently fixed to the lower surface of the writing table. The rear ends of the limbs 11 and 12, either one or both, are provided with a stop flange 14 adapted respectively to engage the rearmost guide straps 13 to limit the forward movement of the pull member 10. A pair of springs 15, each having one end fixed to the writing table, and their opposite ends fixed to the pull member, or as shown, each respectively connected to a pin 16 projecting from the respective limbs 11 and 12 of the pull member, is provided for returning the pull member to its normal position for a subsequent paper withdrawing operation. The pull member 10 is provided with a paper-engaging member comprising a blade 17 fixed upon the rock shaft 18 journaled upon the pull member, said blade having a projecting thumb piece 19 for swinging the blade to engage the pins 20, fixed to and

projecting from the blade, into and through a pair of perforations in the paper strip or strips. The writing table is notched as shown at 21, 21, Fig. 2, to provide a clearance for the pins and enable the pins to be moved rearwardly beyond the front edge of the writing table, and to a proper location for engagement with the perforations in the paper. This requirement is, however, necessary only where it is desirable to have the writing table projecting forwardly beyond the limit of pin motion. Thus, to engage the paper for a withdrawing motion the pin member is rocked to move the pins 20 upwardly through the perforations in the paper and thus retain the same during the entire withdrawing stroke, and when released will swing downwardly, out of engagement with the paper, as shown in Fig. 1. Gravity being relied upon for the return movement of the pin member 17, although tension means may be provided. The pin member 17 is limited in its movement in one direction by a stop 22 projecting from one arm of the pull member 10, and in an opposite direction by the thumb piece 19 engaging against the cross-bar of the pull member 10.

In machines of this class, it is customary to provide a tearing blade at its forward end, across which the paper is severed. Various means have been employed for accomplishing the severance of the paper, some devices being automatically operated, while others manually. It is desirable to have the tearing blade pivotally movable, so that its cutting edge can be moved away from the tearing blade in loading the machine, or at the commencement of the paper withdrawing motion, and also in this instance, to move to a position for clearing the paper engaging pins when the pins are engaged through the paper. The form of tearing blade herein provided comprises a cutter blade 23 fixed to a rock shaft 24 properly journaled upon the frame of the machine, in this instance in bearing ears 25 fixed to and projecting from a cross-bar 26.

The cross-bar 26 is fixed to the side frames and extends across the writing table and slightly above the same to provide a passage for the paper and serve as a barrier against upward movement of the paper when the pins of the pull member engage through the apertures in the paper. This cross bar is similarly notched as the writing table for pin clearance. The rock shaft 24 carrying the tearing blade projects slightly beyond one of the side frames as shown in Fig. 2, to which an arm 27 is fixed, see also Fig. 6, which projects forwardly and is adapted to be engaged by the arm 28 fixed to the shaft or axis of the pin carrying blade 17. Thus when the pin carrying member 17 is rocked to engaged with the paper the arm

28 engages the lever arm 27, swinging the tearing blade upwardly moving its cutting edge away from the writing table sufficiently to clear the pull pins 20 as they advance with the paper forwardly. It will be observed that the arm 28 is provided with an elongated extension 30, which engages the arm 27, its length defining the period of knife release corresponding with the degree of motion required for moving the pins beyond a knife interfering reach. As the knife has a swinging action it is necessary to lock it in its normal position in severing the paper, and release it with the initial withdrawing movement of the pull member. This is accomplished in the construction illustrated by providing a flexible blade 31 having one end fixed to the side frame, with its opposite end provided with the cam blocks 32, 33, spaced apart to provide an intervening notch adapted to receive the knife arm 27 as shown in Fig. 6. Thus, as the arm 28 moves upwardly, it will engage the cam block 33, moving the flexible blade 31 laterally sufficiently to clear the knife arm 27 from the notch engagement or cam block 32. The arm 28 in its upward motion engages and swings the knife arm 27 moving the knife to a raised position. The rock shaft 24 carrying the tearing blade is under spring pressure to force the cutting edge of the tearing blade downwardly over the writing table and normally maintain the tearing blade in such position. The arm 28 of the pin carrying member when moved upwardly engages the arm 27 for raising the tearing blade, and the tearing blade is maintained in such raised position as long as the upward influence of said engaging arms 27 and 28 exists. As soon as the arm 28 is moved forward sufficiently to disengage from the arm 27, the tearing blade will automatically swing downwardly to its normal position. The lower cam block provides a greater lateral projection than the inclined cam block 32 to insure arm clearance from the notch, and also provide a stop for the arm in its return movement to prevent its moving beyond the notch of the blade 31 and insure its engagement therewith. The knife or tearing-blade 23 and the arm 27 connected therewith are released from their raised position after the arm 28 is moved forwardly with the pull member or carrier, and beyond its engaging reach with the arm 27. The timing for holding the tearing-blade in its raised position above the table, relative to a degree of pull motion of the pull member, depends upon the length of the arm extension 30, which, however, need only be sufficient to permit the detents 20 to be moved slightly beyond the tearing-blade, and avoids any interference between the detents and tearing-blade when withdrawing the paper.

To insure a full swinging motion of the pin member 17 in a paper engaging direction or degree of motion sufficient to properly couple the pins to the paper through the perforations, I provide a latch member 34 pivoted upon the tearing blade rock shaft 24 and projecting forwardly to engage the rock shaft 18 of the pin member 17, arresting any paper withdrawing motion until an ample coupling to the paper has been made. The latch member 34 is fulcrumed upon the tearing-blade shaft to swing independently thereof and permit it to be automatically raised when the shaft 18, in a return stroke of the paper withdrawing mechanism, engages the inclined or bevelled end of the latch member, for a relocking of the paper withdrawing mechanism at the end of its return stroke. The latch member 34 at its fulcrumed end has a shouldered hub, adapted to engage with a pin or shoulder projecting from the shaft 24 upon which the latch member fulcrums for coupling the latch member to said shaft 24, when the shaft is rocked to raise the tearing-blade. Thus the latch member is raised simultaneously with the tearing-blade and connecting in such instance with the detent carrying plate 17 through the shaft 24, arms 27 and 28 and shaft 18, the motion of the parts, therefore, is regulated so that the plate 17 must be raised to a point to properly engage its detents with the paper before the latch tooth will have been raised sufficiently to raise it to clear the shaft 18, and thereby unlatch the paper withdrawing mechanism.

It is obvious that various other means may be employed for requiring full strokes or motions for the various parts heretofore described, and therefore do not wish to be limited to specific details of construction herein disclosed.

The machine is also provided with means for restraining or limiting a continued free withdrawal of the paper after a determined length has been delivered, and also to confine a successive length of paper within the machine upon the writing table. The mechanism employed engages through perforations in the paper as they are brought into registry and which is operated in harmony with the pull-out or withdrawing mechanism so as to release its paper engagement, preferably simultaneously with the paper engaging motion of the pin member 17, and is maintained in a released position during a greater portion of the travel or feed of the paper relieving the parts of frictional resistance interfering with a free paper withdrawal. Such mechanism comprises a pair of flexible blades 35, 36, having one end secured to the under surface of the writing table, see Fig. 5, and their opposite ends each provided with a pin 37, adapted to engage through apertures in the writing table,

cross-bar 38, and margin frame 29, and also through a registering aperture in the paper upon the writing table. The blades are unitarily joined by a cross bar 40. To move the pins 37 to and retain them in a paper releasing position, I provide a slide-bar 41 slidably mounted upon the under surface of the writing table, having a wedge block 42 fixed thereon and adapted to engage between the writing table and cross-bar 40 in a movement in one direction, thereby depressing the flexible blades 35, 36, withdrawing their pins 37 from the paper and retaining them below their paper intercepting path, until released by the paper withdrawing devices.

The slide-bar 41 is moved in one direction by the paper pull-out or withdrawing devices during a portion of their forward or paper-withdrawing motion, and in an opposite direction by the pin-carrying blade 17 for a proper time control of the paper arresting devices. Thus, at the commencement of a paper withdrawing operation, the paper arresting devices are actuated to withdraw the pins 37 from the paper and withheld until a determined length of paper has been pulled over the table or withdrawn from the machine, whereupon the pin devices are released, adapting the pins 37 to engage against the under surface of the paper and through a registering aperture.

A bar 43 is fixed to the slide-bar 41, see Fig. 5, projecting laterally into the path of the stop flange or lip 14, projecting from the limb 12 of the pull member. The lip engages the arm 43 toward the forward limit of motion of the pull member, connecting the sliding parts for moving the slide-bar 41 a distance sufficient to disconnect or relieve the cross-bar 40 of the cam or wedge influence. Such action permits the pins 37 to move upwardly and engage with the paper and through a registering aperture in the paper when brought into alignment by the advance of the paper.

The bar 41 is moved in an opposite direction for withdrawing the pins 37 from the paper, by the pin-carrying blade 17, which in its upward swing engages with the arm 44^a fixed upon the rock shaft 45, see Fig. 1, such shaft being provided with an arm 44 adapted to engage with a lip 46 dependently projecting from the slide-bar 41. Thus, when the arms 44 and 44^a are moved rearwardly by the pin-carrying blade 17, they will correspondingly move the slide-bar 41, bringing its wedge block 42 into engagement with the cross-bar 40, depressing the pins 37 below their paper intercepting position.

When loading the machine, it is desirable to have the retaining pins 37 free from the paper path, and to this end, I provide means for rocking the shaft 45 to swing its arm 44 independently of the pin member 17 to move

the slide-bar 41 rearwardly for depressing the pins. This comprises a lever arm 48 fixed upon a rock shaft 49 journaled within the side frames, said arm adapted to engage with the edge of a flange 50 integral with and projecting from a side frame adjacent the arm 48 and notched at the limit of arm throw as at 58, Fig. 1 for locking the arm. The rock shaft 49 has a pin 51 engaging with a toothed collar 52 fixed upon the rock shaft 45 so as to move said shaft and its arm 44 with the downward movement of the arm 48 to move the arm 44 rearwardly, imparting the required rearward motion to the slide bar 41.

Having described my invention, I claim:—

1. In a manifolding machine, a frame structure including a writing-table over which a strip of paper is drawn, the paper being longitudinally provided with spaced apertures, means mounted to reciprocate longitudinally of the writing-table, and a detent carrying handle member mounted upon said means, having detents moved by the member into engagement with registering apertures in the paper for pulling the paper with said handle member and means.

2. In a manifolding machine, a frame structure including a writing-table over which a strip of paper is drawn, the paper being longitudinally provided with spaced apertures, a slide member slidably mounted within the frame reciprocable longitudinally to the writing-table, a pin carrying handle member hingedly mounted on said slide member and movable transversely to the table to engage the pins through registering apertures in the paper for pulling the paper with said member.

3. In a manifolding machine, a frame structure including a writing-table over which a strip of paper is drawn, the paper provided with apertures for regulating the successive advancements of the strip over the writing-table, a slide member movable longitudinally of the table having pins movably mounted thereon for engagement with the registering apertures in the paper for withdrawing the paper with a forward movement of said slide member, and vertically disposed depressible pins located in rear of said pins on said slide member that engage registering apertures to arrest the withdrawal of said paper.

4. In a manifolding machine, a frame structure including a writing-table for supporting a strip of paper, the paper longitudinally provided with spaced apertures, a member movable longitudinally of the table, detents mounted upon said member and movable transversely thereto to engage with registering apertures in the paper for drawing the paper over the writing-table in one stroke of said member, and locking means for said member operated upon by

said member for releasing said member after the detents are engaged through the perforations of the paper.

5. A device of the nature disclosed combining a frame structure including a writing table over which a strip of paper is drawn, the paper provided with longitudinally spaced apertures, a slide member mounted beneath the writing table and movable in a direction of paper withdrawal from the machine, a hinged member mounted on said slide member to swing transversely to said slide member and provided with means capable of engaging with registering apertures in said paper, means for restraining a withdrawing motion of said slide member releasable by said hinged member, and tension devices for returning said slide member after a paper withdrawal stroke.

6. A device of the nature disclosed combining a frame from which a strip of paper is withdrawn, the strip having apertures determinately spaced longitudinally, a member yieldingly urged toward the face of said paper adapted to engage through a registering aperture in the paper to intercept its progress, manually operated paper withdrawing means, and means having detents arranged to engage with apertures in the paper for releasing said member from its paper engagement coordinately with the commencement of a paper withdrawing motion of said withdrawing means.

7. In a device of the class described, a casing acting as a container for a strip of paper, the paper being provided with spaced apertures, the casing having a writing table over which the paper is drawn, means for moving the strip over said table comprising a member supported within said casing and movable in motions of reciprocation, a pin-carrying member fulcrumed upon said reciprocating member and movable in a direction transverse to the writing-table having pins adapted to engage through registering apertures in the paper for releasably coupling the paper to said reciprocating member with its paper advancing stroke.

8. In a device of the class described, a casing having a writing table over which a strip of paper is supported and drawn, the paper provided with spaced apertures longitudinally, means adapted to engage with the paper for drawing the paper a determined length over said table, and a member yieldingly urged against a surface of the passing paper to engage through a registering aperture in the paper to intercept its progress.

9. In a device of the class described, a casing having a writing table over which a strip of paper is supported and drawn, the paper provided with spaced apertures longitudinally, means adapted to engage with

the paper for drawing the paper a determined length over said table, a member yieldingly urged against a surface of the passing paper to engage through a registering aperture in the paper to intercept its progress, and means for controlling the operation of said member coordinately with the movement of said paper drawing means, for paper release and interception.

10 10. In a device of the class described, a casing, means movable in motions of reciprocation adapted to be coupled to the end of a strip of paper supported within the casing for withdrawing the paper, and means
15 for restraining motion of said first-named means against a paper withdrawing stroke releasable by said first named means with a paper coupling operation.

11. A manifolding machine comprising a
20 suitable frame work supporting a strip of paper, the paper having a longitudinally disposed series of aligning perforations, in combination with a device situated at the rear end of said frame unit and arranged to
25 enter said perforations seriatim, for regulating successive advancements of said paper, and slide means movable longitudinally of said framework and having means mounted thereon arranged to enter the per-
30 forations in the paper at the forward end of the paper for advancing the paper with said slide means.

12. In a device of the class described, a casing including a writing table acting as
35 a support and over which a strip of paper is drawn, the paper having spaced apertures longitudinally, a slide member movable in motions of reciprocation and in a direction corresponding to the travel of the paper
40 over said table, a swinging pin member on said slide member movable to engage its pins through registering apertures in the paper, a swinging tearing blade extending across said writing table, means for locking
45 said tearing blade, and devices operated by said pin carrying member for releasing said locking means and swinging said tearing blade.

13. A manifolding machine comprising
50 a suitable frame work including a rigid writing-table for supporting a strip of paper, the paper having a longitudinally disposed series of aligning perforations, in combination with a slide member movable
55 longitudinally of the writing-table, pins mounted on said slide member movable therewith, said pins being adapted to be moved manually transversely to the plane of the writing-table to engage perforations in
60 the paper at the forward end of the writing-table for advancing the paper with an advancing movement of said slide member.

14. A manifolding machine comprising a
65 suitable frame work including a rigid writing-table for supporting a strip of paper,

the paper having a longitudinally disposed series of aligning perforations, in combination with a slide member movable longitudinally of the writing-table, pins mounted on said slide member movable therewith, said
70 pins being adapted to be moved manually transversely to the plane of the writing-table to engage perforations in the paper at the forward end of the writing-table for advancing the paper with an advancing move-
75 ment of said slide member, and vertically disposed depressible pins at a rearward point of said writing-table and arranged to enter said perforations seriatim for regulating the successive advancements of the pa-
80 per, and means for depressing said pins below a paper engaging plane to release the paper.

15. In a manifolding machine comprising a suitable frame work from which strips of
85 paper are withdrawn, the combination with a platen over which the paper passes longitudinally from the rear, a member slidably mounted to move longitudinally of the platen and beyond the forward end thereof,
90 pins mounted upon said member and movable to engage the paper at the forward end of the platen and withdrawn with said member.

16. In a manifolding machine comprising
95 a suitable frame work from which strips of paper are withdrawn, the combination with a platen over which the paper passes longitudinally from the rear, of pins located at the forward end of the platen adapted to
100 be moved to engage said paper, supporting means for said pins for moving the pins in motions of reciprocation longitudinally to the platen, vertically disposed depressible
105 pins located at the rear end of said platen to engage said paper, and means for moving said pins downward below the plane of said platen.

17. A manifolding machine comprising a
110 suitable frame work including a platen over which strips of paper are longitudinally withdrawn, the strips of paper having a longitudinally disposed series of equi-distant aligning perforations, a pin supporting device located at the forward end of said
115 platen and movable to bring its pins above the plane of the table to enter the perforations in said platen and slidable longitudinally of the platen for advancing the paper over the platen, depressible pins located at
120 points near the end of said pin supporting device arranged to enter said perforations seriatim, a member reaching to connect said device and depressible pins for unison control, whereby the depressible pins are moved
125 out of the plane as the pins of said device are moved to enter said perforations, and the parts restored to their normal position in a paper withdrawing operation of said device.

18. A device of the character described adapted for use with webs having successive symbols thereon, said webs being provided with perforations having a fixed relation to said symbols, comprising, in combination, a support for said webs, means for feeding said webs relative to said support, pins adapted to engage the perforations to retain a portion of the webs in predetermined positions, means for releasing the feeding means, and means for bringing the pins into the path of the web before the releasing of the feeding means, whereby the webs are not released until the pins are in position to intercept the webs.

19. In an autographic register, in combination, mechanism adapted to simultaneously feed a plurality of superposed apertured webs, means adapted to adjust portions of said webs relative to each other comprising a controlling finger reciprocal across the paths of the webs and held against movement longitudinally of said paths adapted to enter the apertures in the superposed webs, and means cooperative with said feed mechanism adapted to operate said finger.

20. In an autographic register, in combination, mechanism adapted to simultaneously feed a plurality of superposed apertured webs, means adapted to adjust portions of said webs relative to each other comprising a controlling finger reciprocal across the paths of the webs adapted to enter the apertures in the superposed webs, said feeding mechanism comprising a reciprocatory device adapted alternately to grip and release the webs, and means adapted, positively, to prevent advance movement of said device from initial web advancing position prior to gripping operation of said device.

21. A device of the character described comprising, in combination, a web support, reciprocating means for feeding a web relative to said support, means for adjusting the position of a portion of said web relative to said support, and means for operatively connecting said adjusting means to the feed-

ing means for a portion of the stroke of the feeding means, and for disconnecting the same during another portion of the stroke. 50

22. A device of the character described comprising, in combination, a web support, reciprocating means for feeding a web relative to said support, means for adjusting the position of a portion of said web relative to said support comprising a member movable into and out of engagement with the web, and means for operating said member, said latter means being connected to for movement by the feeding means only when the feeding means is in an extreme position of travel. 55 60

23. A device of the character described comprising, in combination, a support for a web, a reciprocatory means for feeding said web relative to said support, means adapted to engage said web to retain a portion thereof in predetermined position relative to said support, and means adapted to hold said engaging means in predetermined position during a certain position of the motion of the feeding means regardless of the direction of movement thereof. 65 70

24. A device of the character described comprising, in combination, a web support, reciprocatory means for feeding a web relative to said support, means for adjusting the position of a portion of the web relative to said support, and means for bringing the adjusting means into such connection with the feeding means as to cause the adjusting means to be operated by the feeding means during portions of the stroke and into such connection as to cause the adjusting means to be retained in predetermined position by the feeding means during other portions of the stroke. 75 80 85

In witness whereof, I hereunto subscribe my name, as attested by the two subscribing witnesses.

ALBERT KRAUTH.

Witnesses:

F. G. DIESBACH,
M. WM. KRAUTH.