

J. O. LAMOUREUX.
 STAMP CANCELING MACHINE.
 APPLICATION FILED SEPT. 28, 1917.

1,261,039.

Patented Apr. 2, 1918.
 4 SHEETS—SHEET 1.

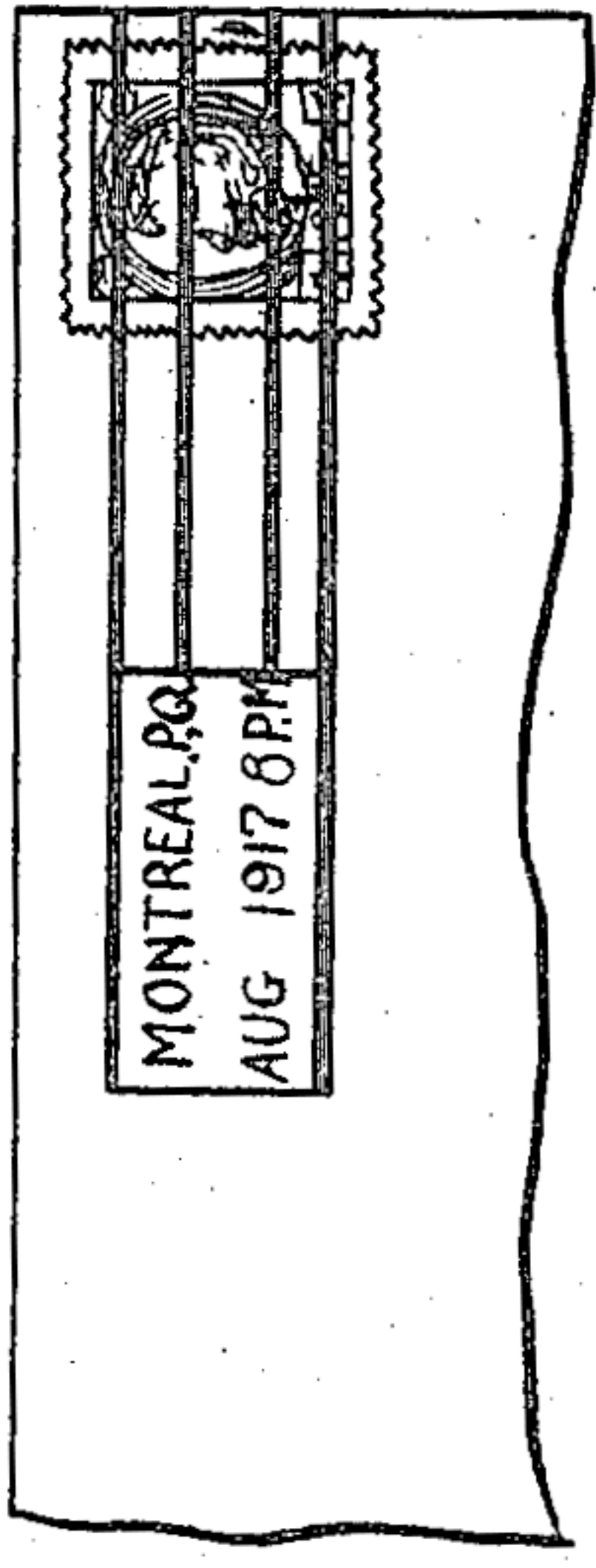


FIG. 12.

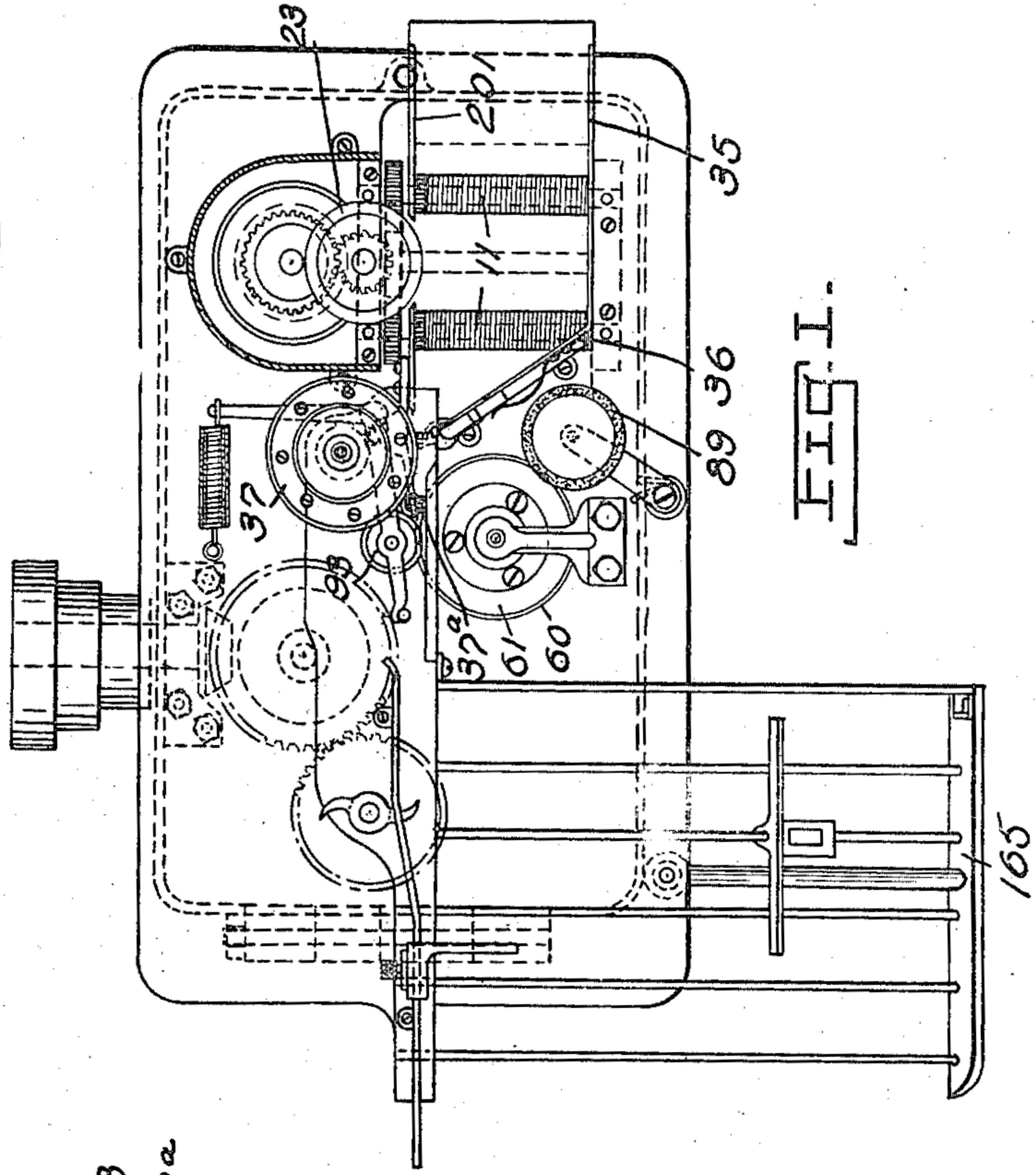


FIG. 1.

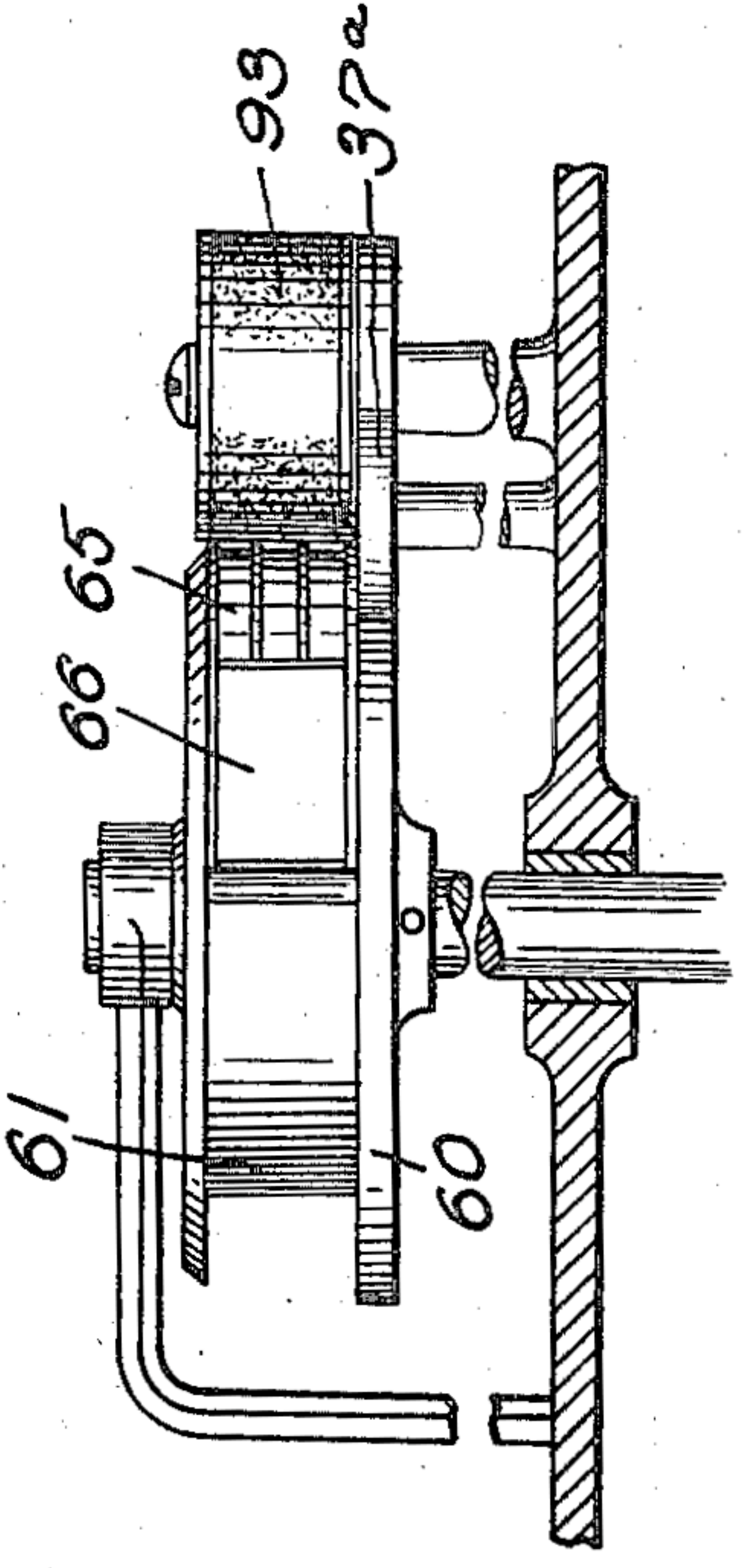


FIG. 13.

Inventor
 J. O. Lamoureux

By *Lewis & Pearsall*

Attorney

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4 SHEETS—SHEET 2.

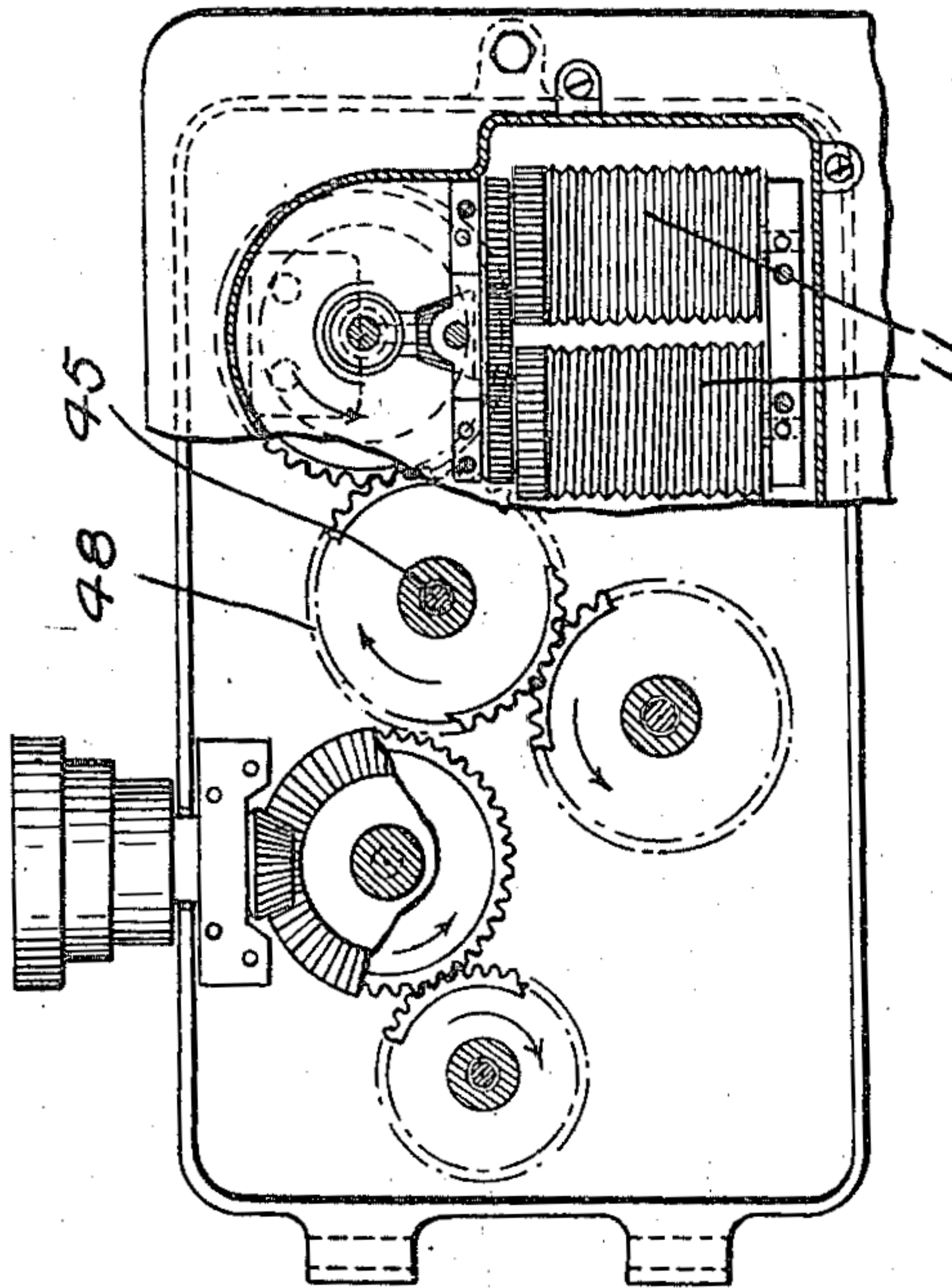


FIG. 10

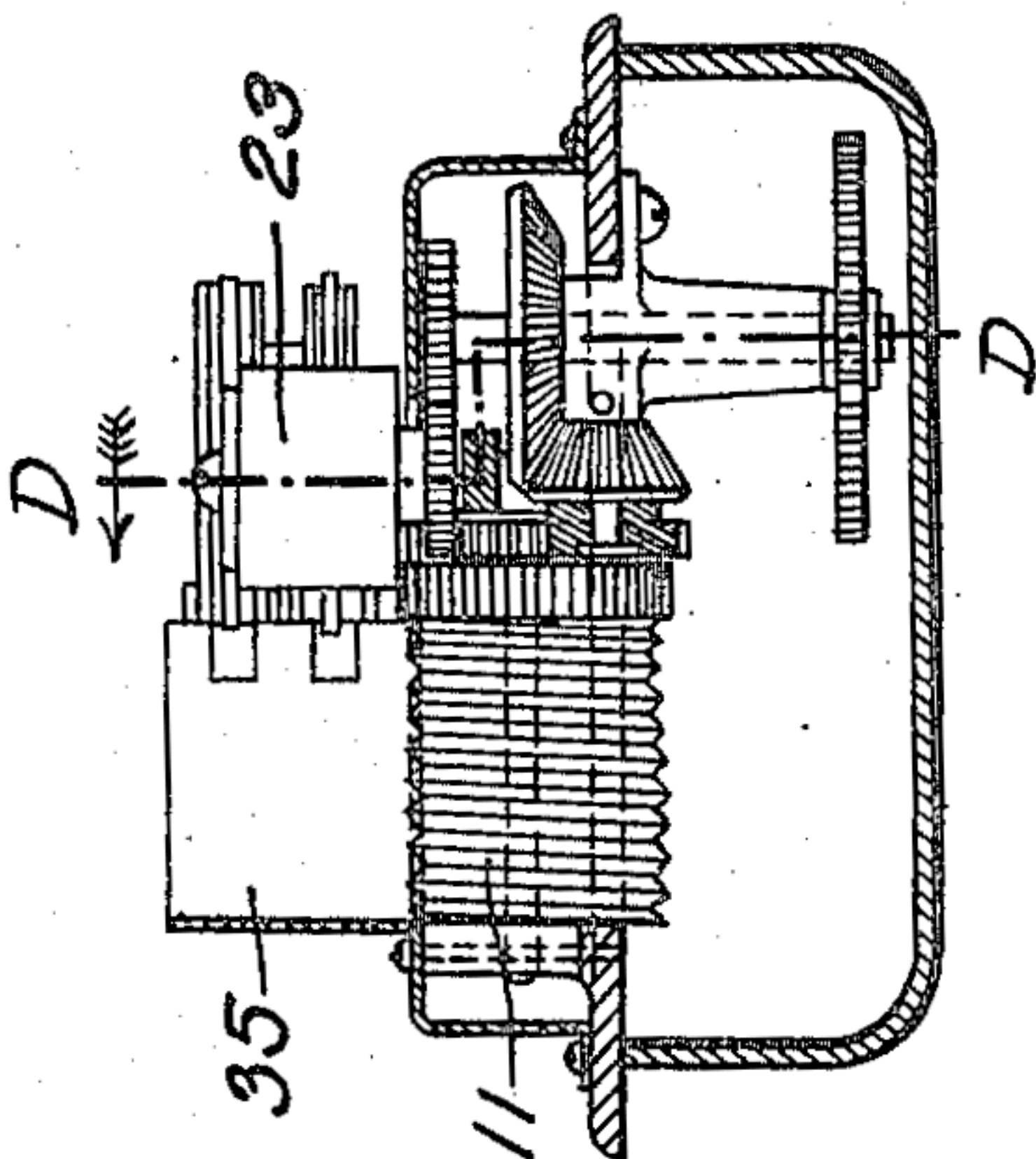


FIG. 11

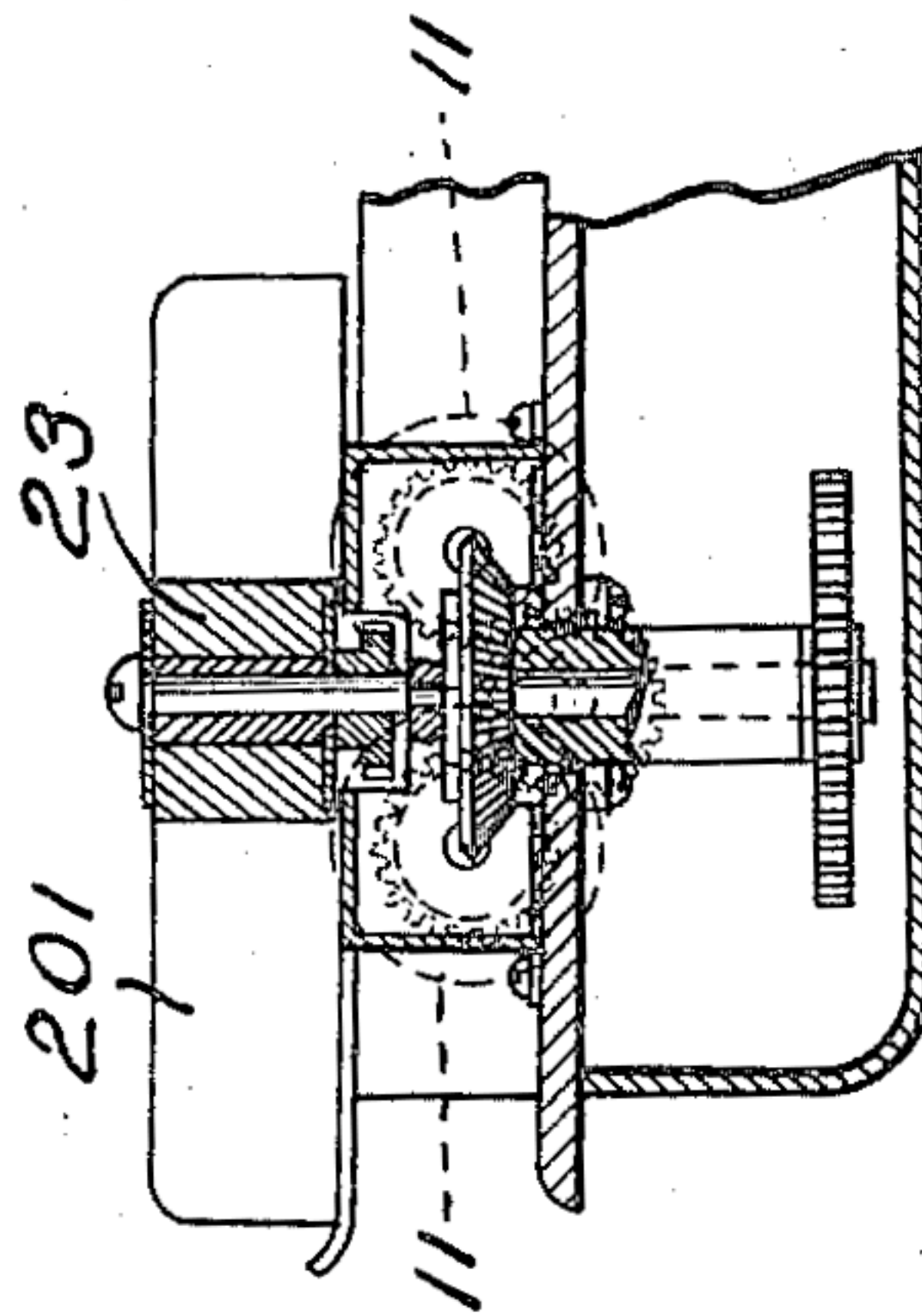


FIG. 12

Inventor
 J. O. Lamoureux

By

Lewis A. Hays

Attorney

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4 SHEETS—SHEET 3.

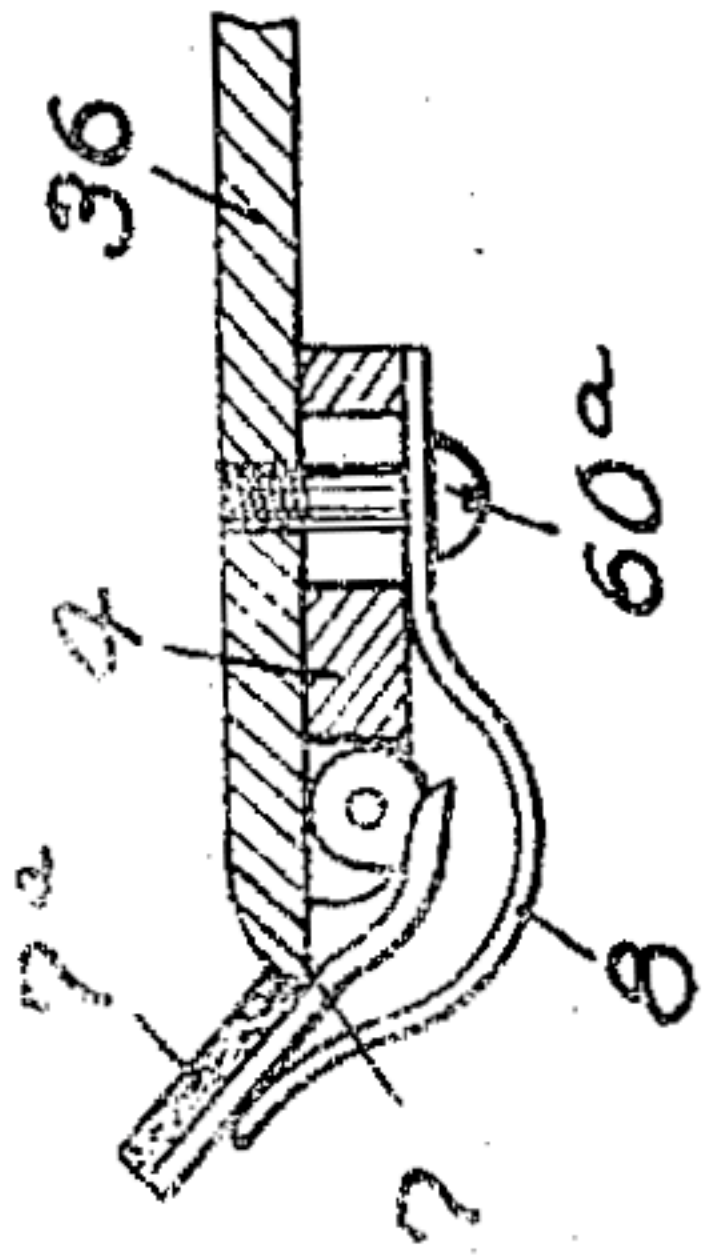
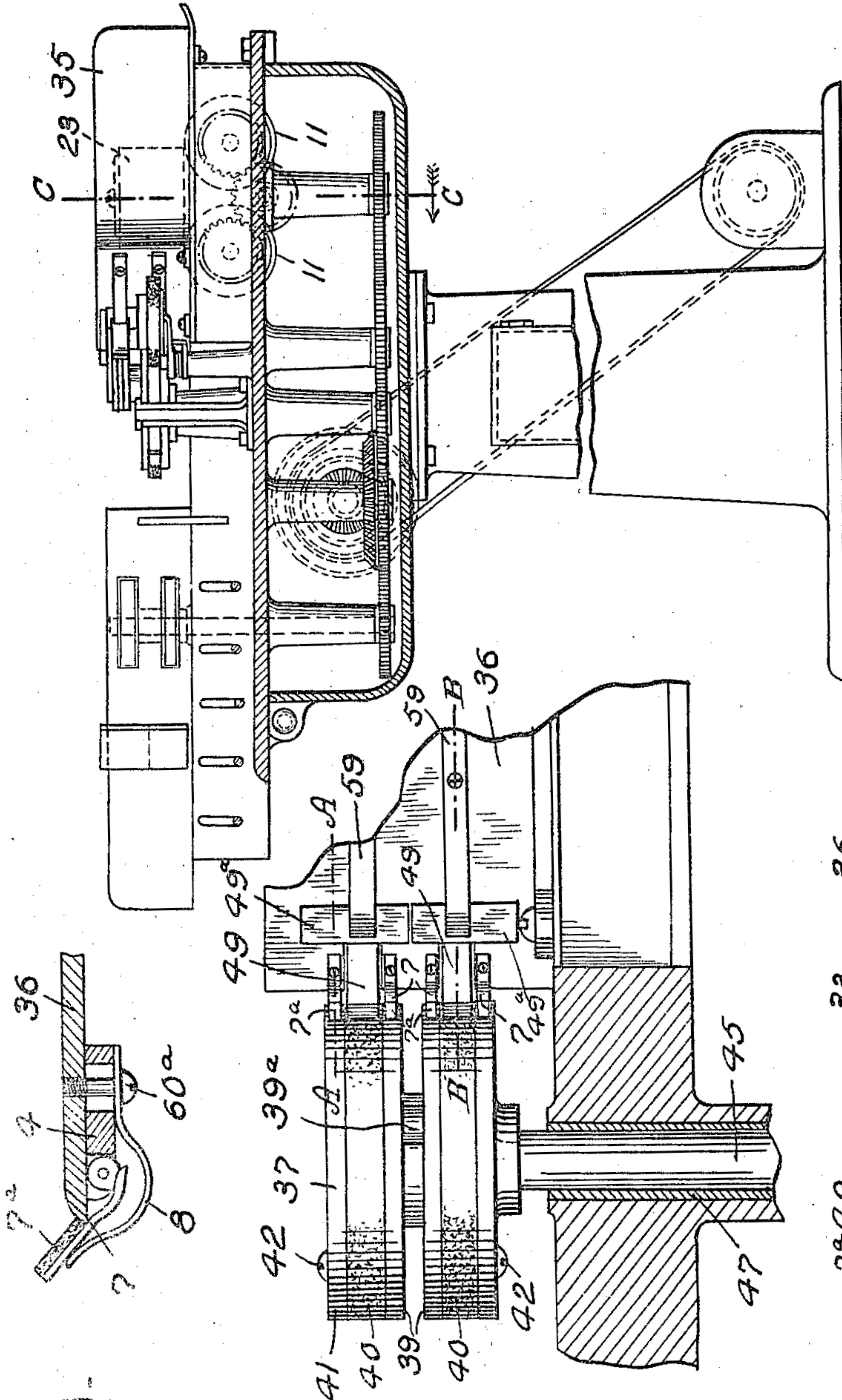


FIG. 3.

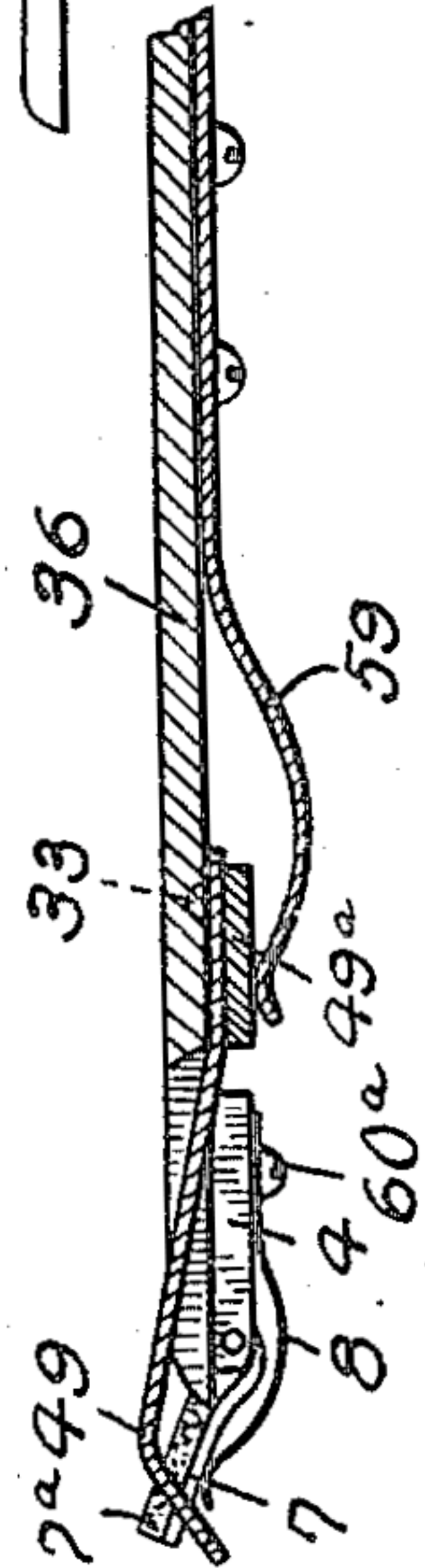


FIG. 7.

FIG. 8.

FIG. 5.

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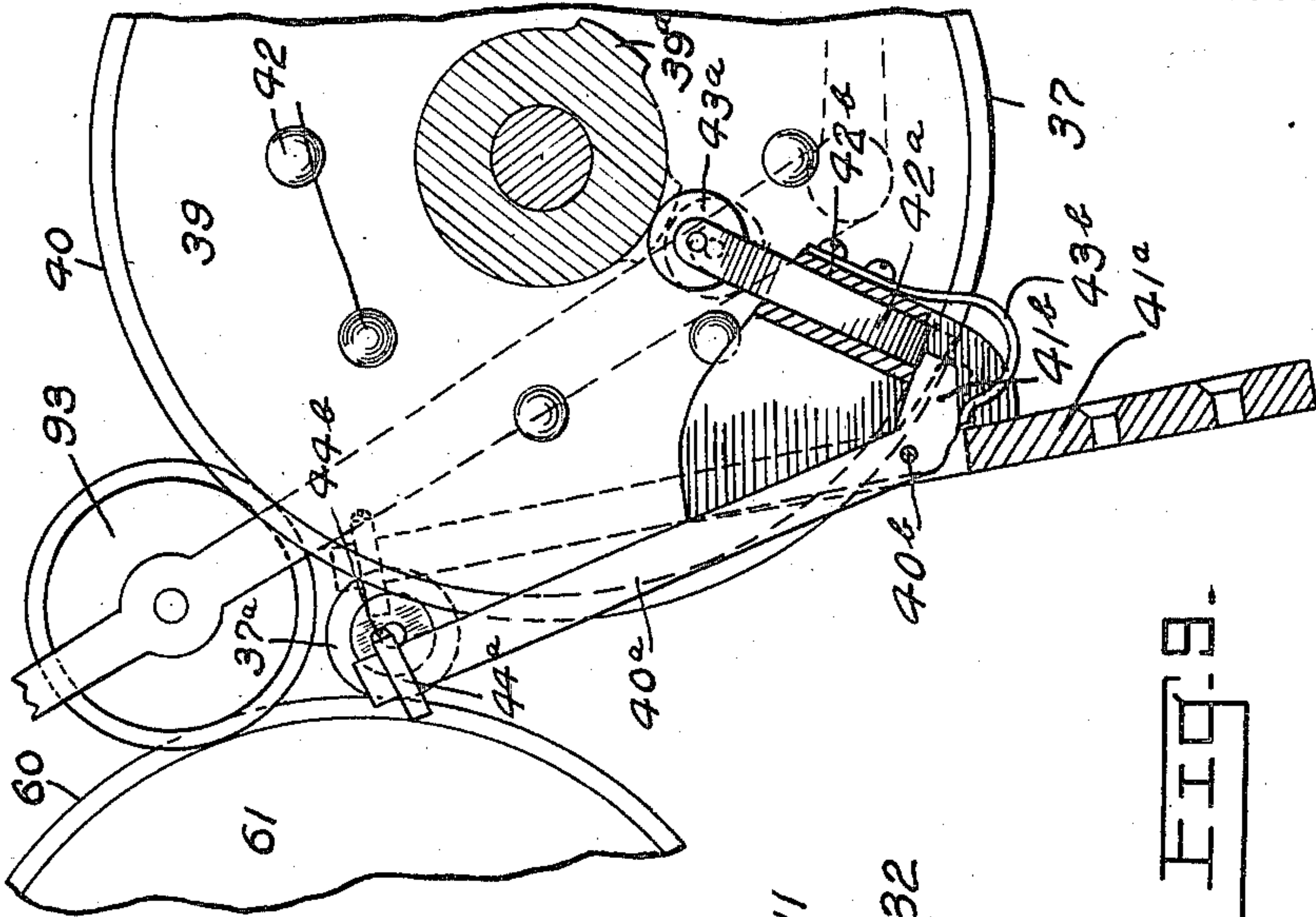
Lewis & Son

Attorney

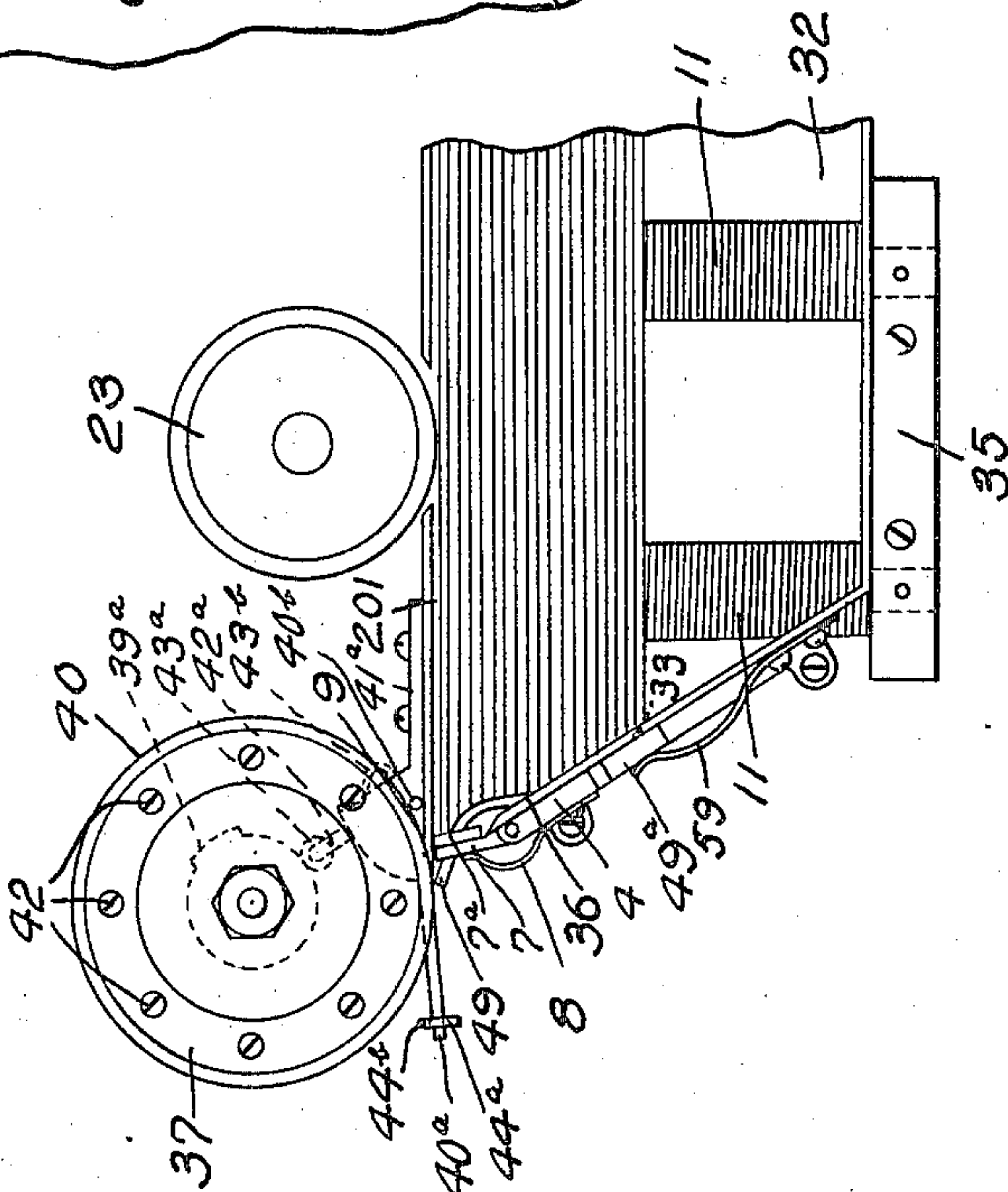
Inventor
 J. O. Lamoureux

1,261,039.

4 SHEETS—SHEET 4.



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विष्णु

Lewis & Paine
Attorney

UNITED STATES PATENT OFFICE.

JOSEPH OMER LAMOUREUX, OF MONTREAL, QUEBEC, CANADA.

STAMP-CANCELING MACHINE.

1,261,039.

Specification of Letters Patent.

Patented Apr. 2, 1918.

Application filed September 28, 1917. Serial No. 193,663.

To all whom it may concern:

Be it known that I, JOSEPH OMER LAMOUREUX, residing at 978 St. Denis street, in the city of Montreal, in the Province of Quebec, in the Dominion of Canada, have invented certain new and useful Improvements in Stamp-Canceling Machines; and I do hereby declare that the following is a full, clear, and exact description of the same.

The invention relates to an improved feeding and stamping mechanism for stamp canceling machines, and is for stamping envelopes, post cards or other like mail matter of any size, in succession from a pack or stack thereof.

It has for its object to provide a very accurate mechanism adapted to operate on varying sizes and qualities of general mail matter as easily as when operating on uniform material, and to obtain this result without the necessity of any prior adjustment.

The invention particularly relates to a feeding mechanism which is an improvement on the form shown in my Patent No. 1,162,700, patented November 30th, 1915.

It also relates to an arrangement of stamping mechanism, in combination with the feeding mechanism, whereby an intermittent instead of a continuous feeding and stamping may be obtained. The object of the intermittent system is to obliterate the portion of the envelop which bears the stamp, omitting the remaining portion.

The invention will be readily understood with the aid of the accompanying drawings in which:

Figure 1, is a plan view of the top mechanism.

Fig. 2 is a plan view of the driving mechanism, the top of the machine having been removed.

Fig. 3 is a side view of the machine.

Fig. 4 is an enlarged side elevation of the stamping roller and pressure rollers.

Fig. 5 is an enlarged side elevation of a portion of the feeding plate and roller.

Fig. 6 is an enlarged sectional view of a portion of the feeding mechanism on line A—A Fig. 5.

Fig. 7 is an enlarged sectional view of a portion of the feeding mechanism on line B—B Fig. 5.

Fig. 8 is an enlarged plan view of the

feeding mechanism, a portion of the feeding table and the feeding rollers.

Fig. 9 is a much enlarged plan view of the intermittent mechanism, the feed roller being shown in section.

Fig. 10 is a vertical section on line C—C of Fig. 3.

Fig. 11 is a vertical section on line D—D of Fig. 10.

Fig. 12 is an enlarged fragmentary view of a stamped envelop.

Reference should be made to my Patent No. 1,162,700, patented November 30, 1915, for a detailed description of the working of the various parts in which the same mechanism is described, except that the stamp canceling system by abrasion is eliminated from the machine illustrated.

Referring to the drawings, the container for the pack of envelops is formed by the slotted bottom plate 32, the parallel walls 35 and 201 and the angle wall 36. 11, 11 are the screw feed rollers projecting through the slots in the bottom and intended to constantly keep the pack of envelops pressed against the wall 201, and its envelop driving roller 23, with the ends of the envelops pushed against the wall 36. As each envelop comes into contact with the roller 23, it is driven forward (lengthwise of the envelop), and forced into contact with the second driving roller 37, through a slot, left by the non-meeting ends of walls 201 and 36 (Fig. 1), all the parts thus far described being similar to those shown in my prior Patent No. 1,162,700.

One improvement over the construction shown in the previous application consists in the special arrangement of the pressing fingers working in connection with the driving roller 37. As shown in Figs. 5, 6, 7 and 8, the spring fingers 7 and 49 are mounted on the outside of the wall 36, in a particular manner to be later described and cooperate with the driving roller 37 in substantially the same manner as in my Patent No. 1,162,700.

As shown in Figs. 1, 5, 8 and 9, the driving roller 37 has two friction faces 40, which may be of rubber, projecting slightly beyond the flanges of the roller and held in place by the ring flange 41 and screws 42. The roller 37 has a depressed central portion 39 provided with an eccentric surface 39^a, said roller being suitably mounted on

shaft 45, passing through bearing 47 and driven by a gear 48. In order to assure the feed of but a single envelop at a time, through the slot 9, the fingers 7 and 49 are provided as above referred to.

As shown in Figs. 5, 6, and 7, the spring fingers 49 are provided with an enlarged portion 49^a at one end having a plurality of hemispherical projections 33, resting in corresponding cavities in the wall 36. Bearing on the enlarged portion 49^a is a leaf spring 59, secured to the wall 36. The free ends of the spring fingers 49 are slightly curved and bear against the friction face 40, the spring 59 yielding because of its own resilience, and upon increased pressure as by a thick envelop, is capable of still further yielding because of the turning of the enlarged portion 49^a against the pressure of the spring 59.

The spring fingers 7 are shorter than the fingers 49 and are close to the edges of the flanges of the roller 37 and ring flange 41. They are pivotally secured in the blocks 4 secured by the screws 60^a to the wall 36. Bearing on the flat surface portions of the spring fingers 7 are the leaf springs 8, which retain the fingers. On the bearing end of each of the fingers is provided preferably a rubber cap 7^a as disclosed in Fig. 6.

The operation of this portion of the device is as follows: As soon as an envelop comes into contact with roller 23, it is thrust forward through the slots 9 and comes into contact with the friction band 40 and carried forward to the stamping roller where it is held a predetermined length of time before engaging the same, which will be described fully later.

As soon as the envelop comes under the spring fingers 49, spring fingers 7 come into contact with the edge of the envelop adjacent thereto, and prevent it from being carried forward. The envelop which comes under spring fingers 49 is slightly curved by the pressure of the springs 59; this curvature reduces the friction between the envelop passing and the next to it and assures positive disengagement. The spring fingers 7 being independent of one another and of the spring fingers 49, are now readily adaptable to any unevenness of the envelops and insure a more positive action than the similar arrangement described in my patent above referred to. The fingers 7 serve as above mentioned to close the delivery slot against the passage of any envelop except that one being delivered by roller 37.

As the envelop leaves the roller 37, it will be engaged and carried by the roller 37^a which bears against the lower enlarged portion 60 of the printing drum 61, then to be engaged by the pressure roller 93, mounted and operated in the manner described in my prior patent. The roller 37^a is of great

importance for reasons that will be given hereinafter.

The printing drum with which this roller coöperates is provided with recesses and seats to receive removable type or printing plates 65, having the usual canceling lines thereon and also printing plate 66 having the post-office's name and date thereon.

The driving roller 37, has an eccentric portion 39^a as described above, which co-acts with the intermittent system. This intermittent system consists of a rod 40^a pivotally secured at 40^b in a block 41^a which is rigidly secured to the wall 201. The end 41^b projects on one side and is adapted to contact with the plunger 42^a which slides in the sleeve 42^b formed in said block 41^a, and has a bearing roller 43^a which is held by pressure of the leaf spring 43^b against the smaller inner portion of the roller 37. The leaf spring 43^b is curved at one end so as to contact with the end 41^b of the rod 40^a, and normally pressing said rod against the plunger 42^a, thus causing said rod to pivot and project at approximately the center of the roller 37^a. The free end of said rod 40^a is provided with cross or stop bar 44^a which is adjustably secured thereto by the screw 44^b. The said stop bar must be so adjusted that it will project right above the meeting point of said roller 37^a and the enlarged printing drum portion 60. By a proper adjustment of the printing drum, the driving roller 37, and the intermittent rod 40^a, the leading end of the envelop will be engaged by said rod 40^a, holding it a sufficient space of time, so that the printing space of said drum will begin printing simultaneously with the release of the leading end of the envelop by the stop bar 44^a and its engagement by the roller 37^a. Thus the printing will always begin with the leading end of the envelop, as illustrated in Fig. 12, and will be sure to cancel all of the stamps. If the stamp is two inches long, a space of two inches on a four inch envelop will be left blank, thus printing only partly across the envelop and clearing the space usually used for the name and address of the sender.

Obviously these dimensions may be varied to suit the exigencies of any particular post-office and are given solely by way of example.

The purpose of this arrangement of stamping device is to provide for intermittent cancellation in a continuous system as described in my former patent.

The feeding roller 37 and printing drum 61 are geared together and driven by a gear train which is disclosed in Fig. 2. It is identical to that disclosed in my former patent, but for the abrasion gearing which has been eliminated.

The printing drum comes into contact with the ink roll 89 which has been de-

scribed in my former patent as well as the collecting rack 165, which is adapted to collect the mail matter after it has been through the canceling device.

5 What I claim is:

1. In a stamp canceling-machine, a driving roller, having equi-spaced friction portions on its periphery and an eccentric intermediate portion, a pressure roller and a printing drum located in advance of the driving roller, a small roller adjacent said driving roller bearing against said printing drum, means for continuously rotating said roller and said drum, and means co-acting with said eccentric intermediate portion of said driving roller causing an intermittent movement of the envelopes.

2. In a stamp-canceling machine, a driving roller having equi-spaced friction portions on its periphery and an eccentric intermediate portion, a pressure roller and a printing drum located in advance of the driving drum, a small roller adjacent said driving roller bearing against said printing drum, means for continuously rotating

said roller and drum, and an arm co-acting with said eccentric portion of said driving roller pivotally secured at an end and provided with a cross bar at its other end.

3. In a stamp canceling machine, a driving roller having equi-spaced friction portions on its periphery and an eccentric intermediate portion, a pressure roller and a printing drum located in advance of the driving drum, a small roller adjacent said driving roller bearing against said printing drum, means for continuously rotating said roller and drum, an arm pivotally secured at one end, a plunger the ends of which contact with the eccentric portion of the driving roller and an end of said arm respectively, and means at the outer end of said arm to stop the envelopes.

Signed at Montreal, Quebec, Canada, this 24th day of August, 1917.

JOSEPH OMER LAMOUREUX.

Witnesses:

A. P. DEAL,
C. PATENAUDE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."