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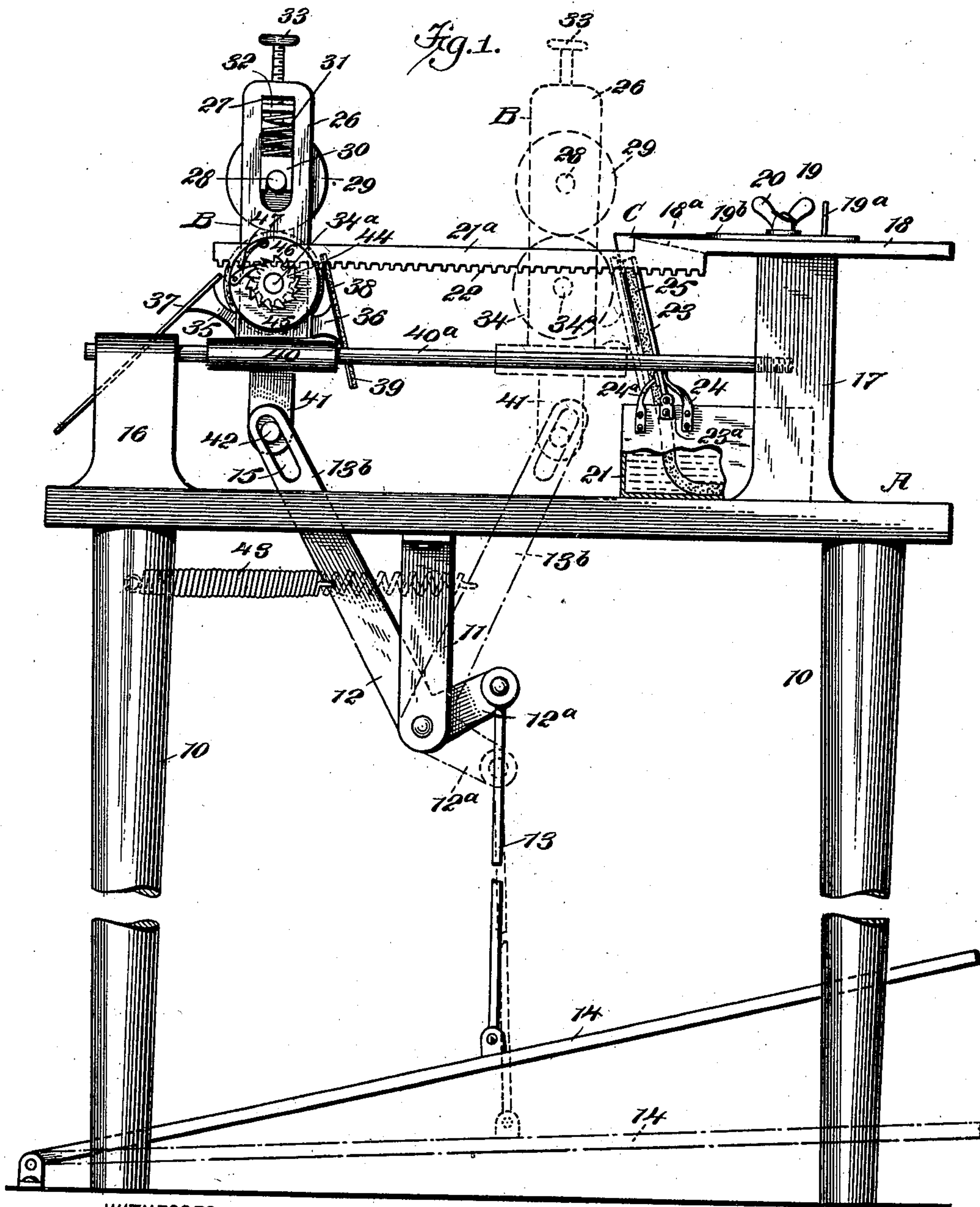
Patented May 14, 1901.

A. HEYDRICH.  
ENVELOP SEALING MACHINE.

(Application filed Feb. 12, 1901.)

(No Model.)

4 Sheets—Sheet 1.



WITNESSES:

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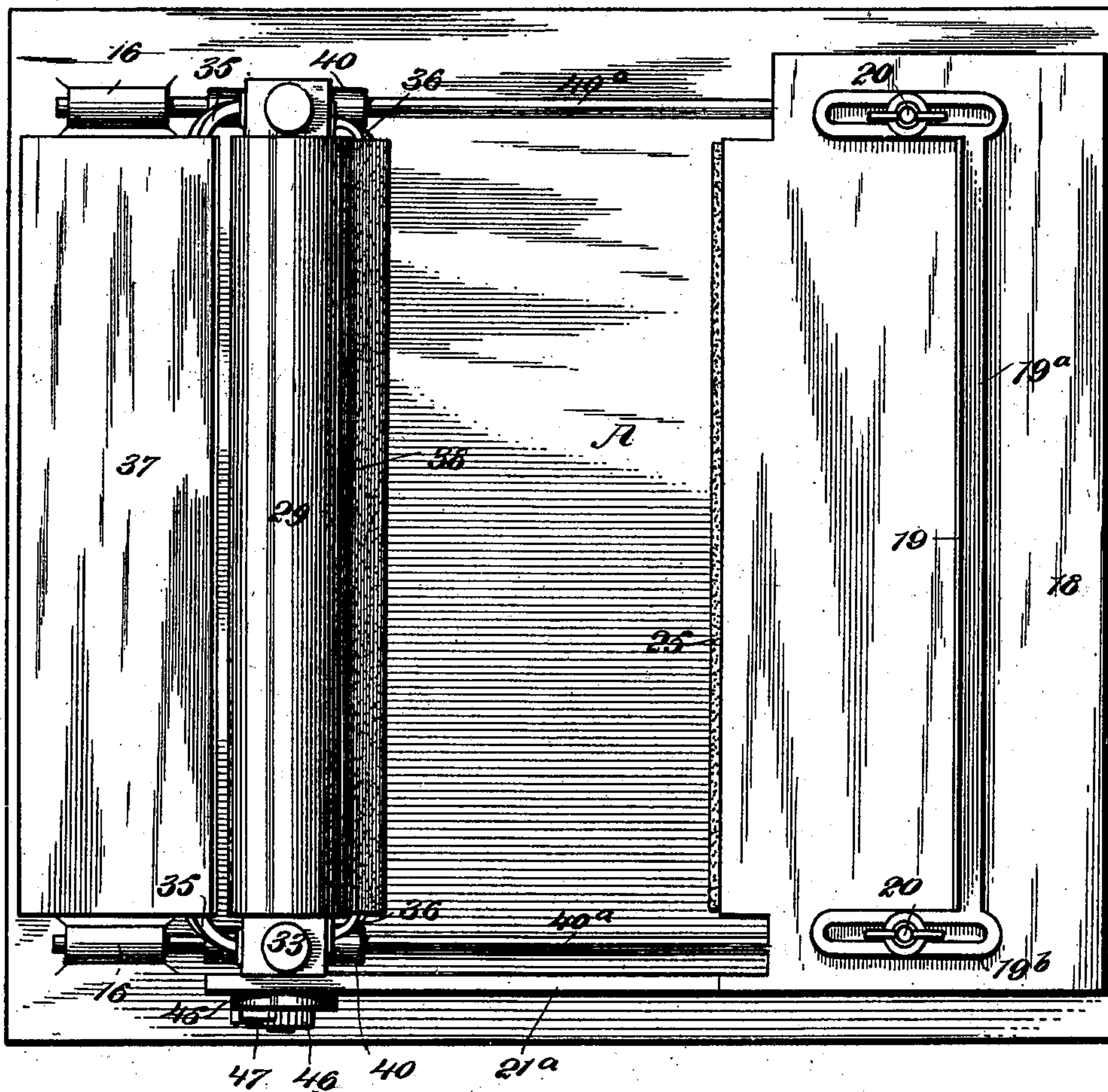
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Fig. 2.



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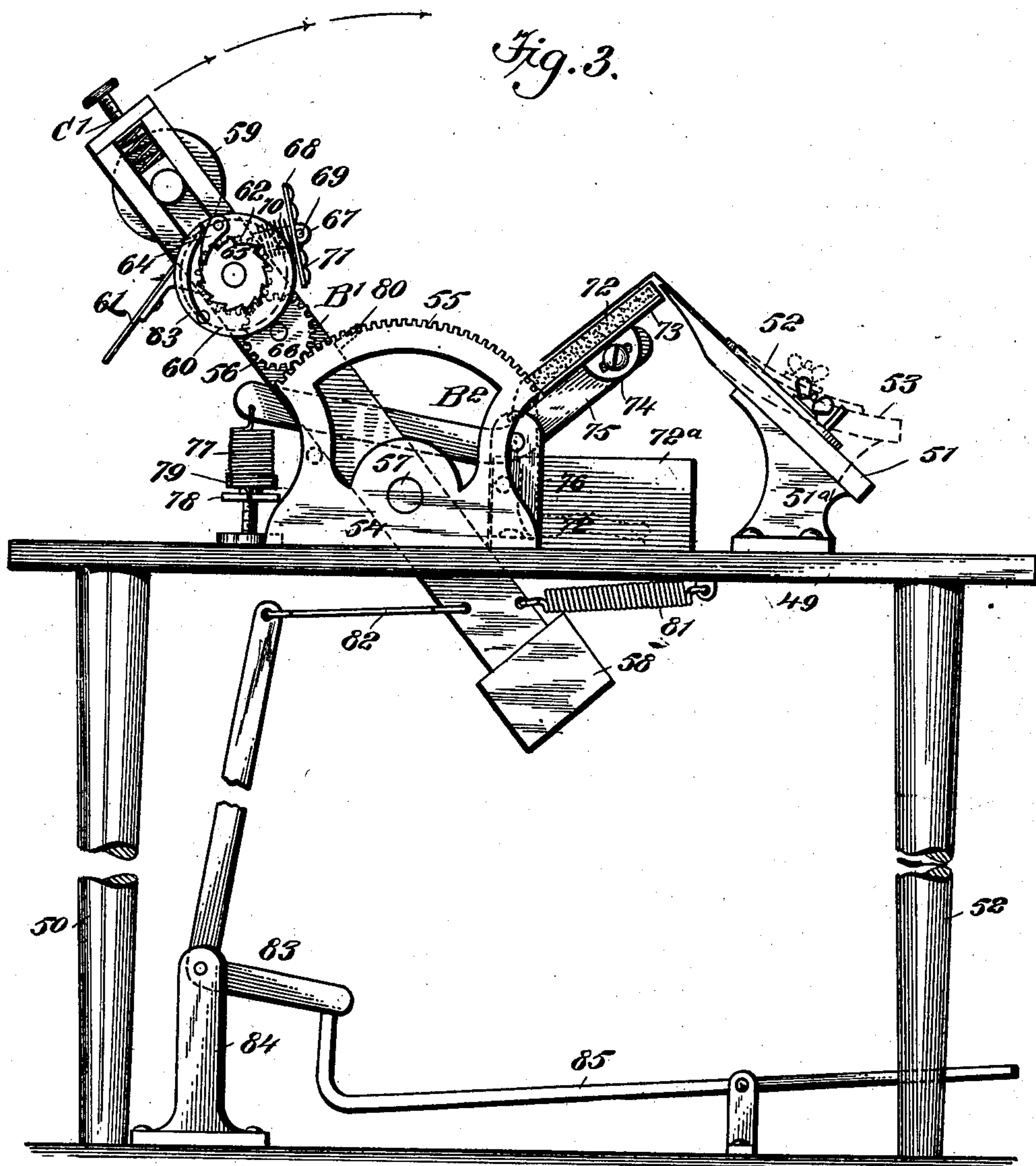
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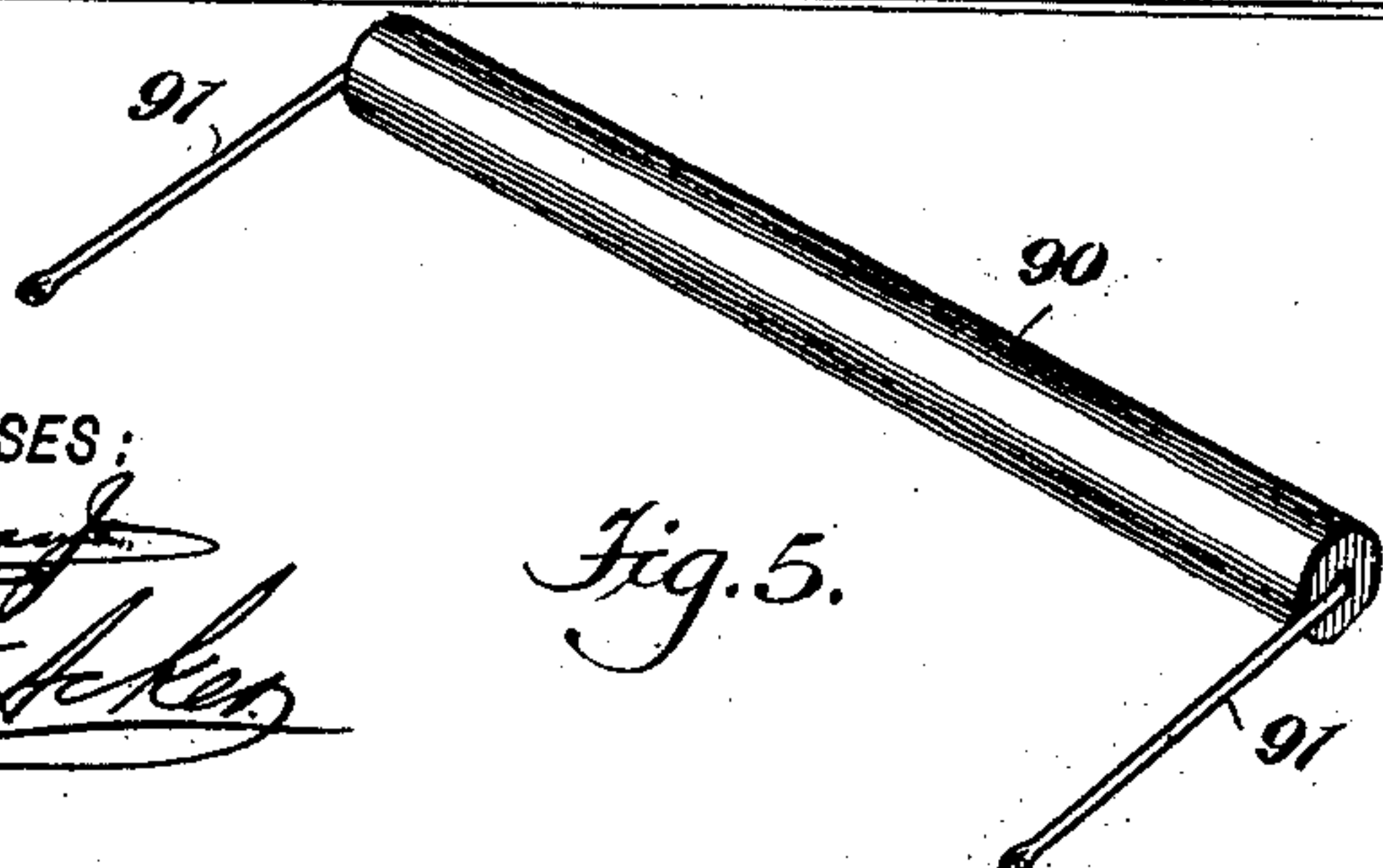
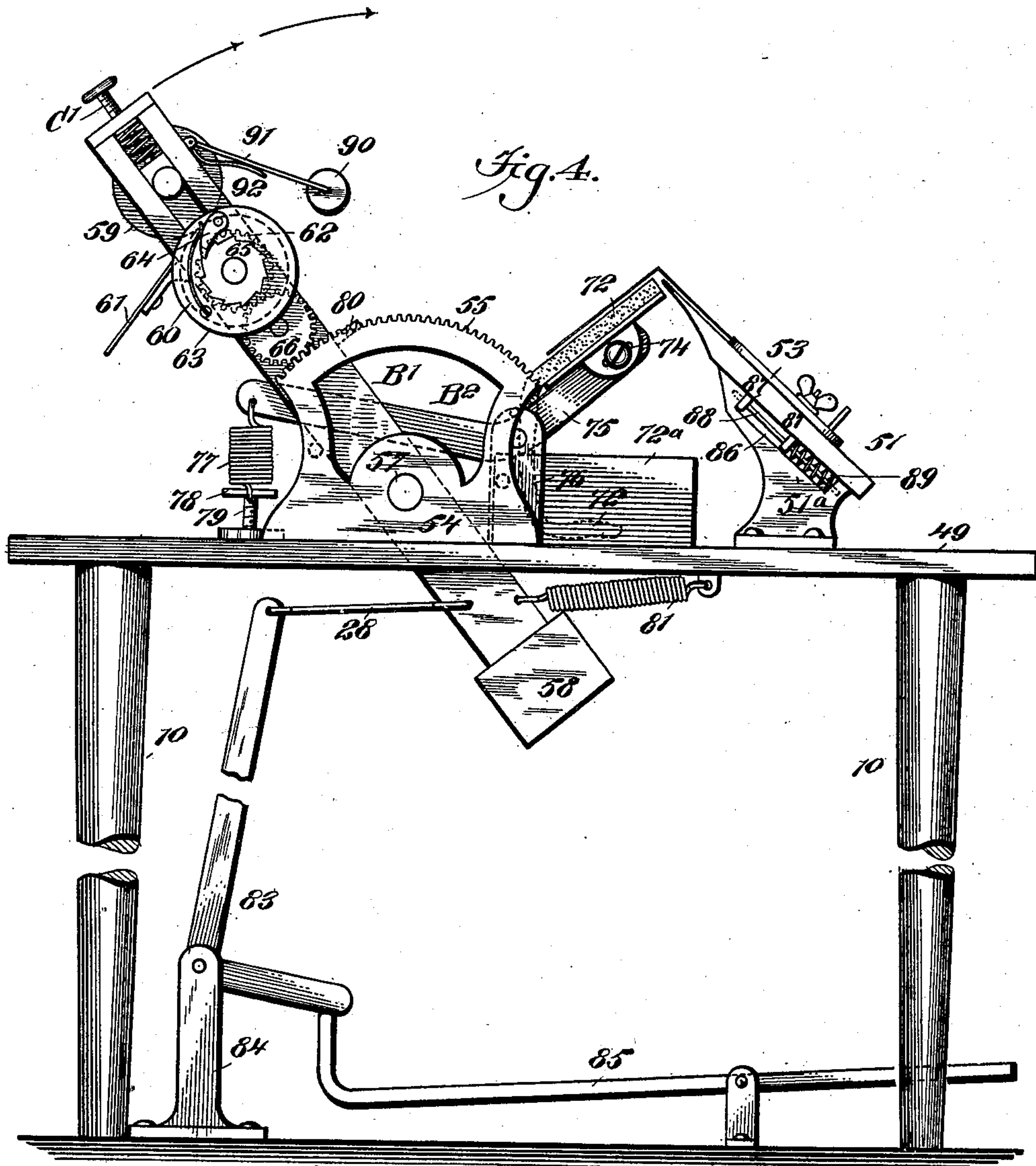
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4 Sheets—Sheet 4.



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Fig. 5.

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# UNITED STATES PATENT OFFICE.

ALFRED HEYDRICH, OF BROOKLYN, NEW YORK, ASSIGNOR OF THREE-FIFTHS TO ALEXANDER MCINTOSH AND ERNEST ROFFLOER, OF NEW YORK, N. Y.

## ENVELOP-SEALING MACHINE.

SPECIFICATION forming part of Letters Patent No. 674,240, dated May 14, 1901.

Application filed February 12, 1901. Serial No. 46,996. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED HEYDRICH, a subject of the Emperor of Germany, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Envelop-Sealing Machine, of which the following is a full, clear, and exact description.

One purpose of the invention is to improve upon the construction of envelop-sealing machines and to so construct a machine that the table upon which the envelop is placed to be sealed is stationary or has limited cushioned movement, and to provide means for moving the sealing-rollers to and from said table, together with means for dampening the gummed surface of an envelop prior to its being received between the sealing-rollers.

A further purpose of the invention is to provide the table with a gage or guide which will enable envelops of various sizes to be operated upon by the same machine, and, further, to so construct the actuating mechanism of the sealing-rollers and their carriage that the sealing-section of the envelop at the forward movement of the carriage will be received between the sealing-rollers, remaining in stationary and fixed position between the rollers during the return movement of the carriage in order to allow the mucilage to dissolve; but when the carriage again moves forward the sealing-rollers are set in motion and the envelop held between them is discharged.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improved machine. Fig. 2 is a plan view of the same. Figs. 3 and 4 are side elevations of machines, illustrating slight departures in the details of construction; and Fig. 5 is a detail perspective view of a clamping or ironing roller adapted to press the gummed face of an envelop against a moistening-pad.

A support A is shown as provided with legs

10, and at one side of the under portion of the support brackets 11 are downwardly extended. Between these brackets an angle or elbow lever 12 is pivoted at the junction of its members. The lower member 12<sup>a</sup> of the angle-lever 12 is much shorter than the upper member 13<sup>b</sup>, which extends up through the support A, a suitable slot being provided in the support to that end, as the upper member 13<sup>b</sup> of the angle-lever is adapted to have movement in direction of the front and rear of the said support A, as is indicated in Fig. 1. A pitman 13 connects the shorter and lower member 12<sup>a</sup> of the angle-lever 12 with a foot-lever 14, pivoted at its rear end to any available support. At the upper end of the upper member 13<sup>b</sup> of the angle-lever 12 a longitudinal slot 15 is made. At the rear portion of the support A standards 16 are located adjacent to the sides of the said support, and higher standards 17 are correspondingly located on the support A at what may be termed its "forward" end. The higher and forward standards 17 support a table 18, the table being a fixed one, and at the forward end of the table 18 the under face thereof is downwardly and forwardly inclined from the rear or inner face of the table, as indicated by the dotted lines 18<sup>a</sup> in Fig. 1. A gage or guide 19 is located on the upper face of the table 18, and this gage or guide, as is best shown in Fig. 2, consists of an angle body-bar 19<sup>a</sup>, which extends longitudinally of the table, and end loop-sections 19<sup>b</sup>, which extend transversely of said table, the gage or guide being held in place on the table by set-screws 20, passed through the loop-sections of the guide or gage and into the table. The table is adapted to receive an envelop C, and the gage or guide 19 is so adjusted on the table 18 that when an envelop is placed in engagement with the body-bar of said gage or guide the opposite edge will extend to the inner or rear edge of the table and the flap of the envelop will extend downward and slightly forward, as illustrated in Fig. 1.

A tank, box, or the like 21 is located on the support A, usually between the forward standards 17, and the tank or box 21 extends rearwardly beyond the said standards 17 and is



adapted to contain water. A rack 21<sup>a</sup> is secured to or made an integral portion of an end of the table 18, whose teeth 22 are formed in its under edge, extends rearward in a horizontal direction, as is also shown in Fig. 2. Two racks, however, may be used, if desired.

A plate 23 extends transversely of the support A over the box 21, as shown in Fig. 1. This plate is connected by pivots 23<sup>a</sup> with the ends of the box 21, containing the water, and the plate 23 extends upward to a point near the inner edge of the envelop-carrying table 18 and has normally an upward and rearward inclination. Springs 24 are attached to the ends of the box 21 and have bearing at their free ends against the forward face of the plate 23, while arms 24<sup>a</sup> are also attached to the ends of the box 21 and extend forward to an engagement with the end portions of the plate 23 and limit the rearward movement of the plate; but the plate 23 may move forward against the tension of the springs 24. An absorbent pad 25 is attached to the rear face of the plate 23, and this pad is continued down into the box or receptacle 21, as shown in Fig. 1.

A carriage B is normally located at the rear of the machine. This carriage consists of uprights 26, having longitudinal slots 27 made in their upper portions, and the trunnions 28 of an upper sealing-roller 29 are passed through the lower portions of the slots 27, as illustrated in Fig. 1, and bearing-blocks 30 rest upon the upper faces of the trunnions 28, while springs 31 have bearing on the said blocks 30 and against plates 32, held to slide in the slots 27 of the uprights, which plates are moved upward or downward to increase or decrease the tension of the springs 31 through the medium of adjusting-screws 33, located at the upper portions of the standards. The upper sealing-roller 29 is held in engagement with a lower sealing-roller 34, whose trunnions 34<sup>a</sup> are journaled in the lower portions of the uprights 26. Arms 35 extend rearward from the lower portions of the uprights 26, the rear ends of which arms are inclined downward and rearward, and corresponding arms 36 extend forward from the forward edges of the uprights 26. The forward ends of these arms 36 are given a downward and forward inclination. A plate 37 is secured to the inclined ends of the rear set of arms 35, and the envelop, which is released from engagement with the sealing-rollers, will slide down the plate 37 to the support A or to a receptacle placed to receive the sealed envelops. A plate 38 is attached to the inclined ends of the forward set of arms 36, and upon the forward face of the plate 38 a covering or pad 39 of a yielding material, such as felt, is secured in any suitable or approved manner. Each upright 26 is provided with a longitudinal sleeve 40 at its bottom portion, and these sleeves 40 are held to slide loosely on guide-rods 40<sup>a</sup>, which rods extend from the rear standards 16 to the for-

ward standards 17. A downward extension 41 is provided at the lower end of one of the uprights 26, and this extension 41 is provided with a pinion 42, which is loosely passed through the slot 15 in the upper member 13<sup>b</sup> of the angle-lever 12, and a spring 43 is attached to the upper member of the said angle-lever 12 and to one of the legs 10 or to any convenient projection or surface of the support A. This spring 43 serves to hold the carriage B in its rear position, (shown in positive lines in Fig. 1,) and when the free end of the foot-lever 14 is depressed the spring 43 is placed under tension, as shown in dotted lines in Fig. 1, and the upper member of the angle-lever 12 is carried forward, thus taking the carriage with it. In Fig. 1 the carriage is shown in dotted lines in the position it occupies just prior to receiving an envelop between its sealing-rollers.

A rack 21<sup>a</sup> engages with a pinion 44, which pinion is attached to a disk 45, and this disk and attached pinion are loosely mounted on a trunnion 34<sup>a</sup> of the lower sealing-roller. Outside of the disk 45 a ratchet-wheel 46 is secured to the trunnion 34<sup>a</sup> of the lower sealing-roller, and a spring-controlled dog 47 is mounted on the disk 45 and engages with the teeth of the ratchet-wheel 46, as shown in Fig. 1. This mechanism may be duplicated at the opposite side of the machine when two racks are employed.

In the operation of the machine the envelop is laid with its back down on the table 18 and is adjusted by the gage 19 in such manner that the edge of the envelop at which the sealing-flap is located extends beyond the inner edge of said table 18, and the sealing-flap extends downward practically to an engagement with the moistening-pad 25, carried by the plate 23. When the foot-lever 14 is pressed downward, the carriage B is carried forward and the pinion 44, by engagement with the rack 21<sup>a</sup>, is turned in a direction to cause a dog 47 on the disk 45 to revolve the ratchet-wheel 46, thus turning the sealing-rollers 29 and 34. As the carriage, with the sealing-rollers revolving, approach the forward end of the machine the pad-face 39 of the forward plate 38, secured to the carriage, will strike the rear face of the pendent sealing-flap of the envelop and will press its gummed surface against the moistening-pad 25, and this pad and its carrying-plate 23 will be forced forward against the tension of the springs 24 until the lower edge of the pad 39 on the plate 38 only has engagement with the moistening-pad 25, thus releasing the moistened flap of the envelop, and at this time the forward edge of the envelop will have been received and drawn between the sealing-rollers 29 and 34. The foot-lever 14 is now relieved from pressure and the spring 43 immediately acts to restore the carriage to its normal rearward position, and while the pinion 44 revolves it simply turns loosely on the trunnion 34<sup>a</sup> carrying it, and the ratchet-



wheel will not be acted upon by the dog 47, which simply slips over the teeth of the ratchet-wheel, so that during the rearward or return movement of the carriage the sealing-rollers are not revolved and the envelop received between them is given time to permit its dampened mucilaged surface to adhere to the body of the envelop. When the movement of the carriage B is again directed forward, the sealing-rollers are again revolved and the sealed envelop is passed out from between the said rollers at the rear of the machine and will drop upon the conducting-plate 37 and be received by the support A or in a receptacle of any description.

In Figs. 3 and 4 I have illustrated a slight deviation in the construction of the machine. With relation to Fig. 3 a support 49 is sustained by legs 50, and at the forward portion of this support a pedestal 51<sup>a</sup> is secured to said support. On this pedestal a table 51 is mounted, upon which the envelop to be sealed is placed. In this form of the machine the envelop-table 51 is shown inclined instead of straight, as illustrated in Fig. 1, and said envelop-table 51 is provided with a gage 52, corresponding in construction to that which has been described. The inner edge of the table 51 is made more or less sharp. Instead of the upper or outer face of the table 51 being straight the said upper face 53 may be concaved, as shown in dotted lines in Fig. 3, so that when a well-filled envelop is placed on the table it will have bearings at its longitudinal edges and points near such edges, while the concavity 53 will accommodate the bulk of material in the envelop and not interfere with the proper sealing of said envelop. Standards 54 are secured to the support 49, one at each side, and one of the standards 54 is provided at its upper portion with a segmental rack 55. A carriage B' is provided for the sealing-rollers, as in the other form of the device; but the side bars 56 of the carriage B' are fulcrumed, as at 57, in the standards 54, so that the carriage instead of having a sliding movement has a rocking movement. The carriage normally stands inclined rearward at its upper portion or at that portion which is above the support 49, and the carriage extends down through a suitable opening in the support 49 and is provided, preferably at its lower end, with a balance-weight 58. The sealing-rollers 59 and 60 are mounted in suitable bearings in the side members 56 of the carriage B', and the manner in which these sealing-rollers are mounted is practically the same as has been heretofore described, the upper roller having a tension device C' controlling its movement to and from the lower roller 60. The carriage B' is provided with a shelf or platform 61 at the rear, the said shelf or platform being so placed that it is opposite the contact-points between the two sealing-rollers, and this platform or shelf is adapted to direct the envelops downward and away from the carriage after

the envelops have been sealed by being passed between the rollers 59 and 60. A gear-wheel 62 is loosely mounted upon a trunnion of the lower sealing-roller 60, and this gear is preferably attached to or made integral with a disk 63. Outside of the disk 63 a ratchet-wheel 65 is secured upon said trunnion, and the teeth of this ratchet-wheel are engaged by a spring-pressed dog 64, carried by the disk 63. A second gear 66 meshes with the gear 62 and with the teeth of the rack 55, so that when the lower end of the carriage B' is carried to the rear and the upper end of the carriage is carried in direction of the table 51 the gear 66 will communicate motion to the gear 62, and the said gear, through the medium of the disk 63 and dog 64, will cause the ratchet-wheel 65 to turn, and thus set the sealing-rollers 59 and 60 in motion; but upon the return movement of the carriage the dog 64 simply slides over the teeth of the ratchet-wheel 65 and the sealing-rollers remain stationary or inactive. Lugs 67 extend forwardly from the front longitudinal edges of the side members 56 of the carriage B' at a point slightly above the bearings for the trunnions of the lower sealing-roller, and a clamping-plate 68 is mounted for self-adjustment on these lugs 67, the said clamping-plate near its ends having slots through which the lugs pass, and these slots are of greater length than the width of the lugs to permit the clamping-plate to rock thereon. The clamping-plates are prevented from leaving the lugs by passing pins 69 through the lugs in front of the plate, and springs 70 are coiled around the lugs at the rear of the clamping-plate, having bearing against the back of said plate and against the frame of the carriage B', so that the plate will be yieldingly held on said lugs. Thus it will be observed that the clamping-plate is so supported that it can readily adjust itself on a moistening-pad, to and from which it is adapted to be moved, as hereinafter described. The front face 71 of the clamping or pressure plate or pad 68 is roughened in any suitable or approved manner. For example, it may be provided with longitudinal vertical or diagonal ribs on its front face, or the front face may be provided with a series of points more or less sharp extending therefrom. The moistening-pad 72 is located just below the inner edge of the envelop-receiving table 51 and has a downward and rearward inclination. This moistening-pad 72 may be of any absorbent material and is attached to a back plate 73, which plate is provided with lugs 74, and these lugs are adjustably attached to the upper members of the angular side bars 75 of a rocking frame B<sup>2</sup>, the side bars of the said frame being pivoted near the junction of its members upon standards 76, attached to the support 49. The moistening-pad 72 may be made to offer more or less spring resistance to the clamping or pressure plate 68 by the following construction: Springs 77 are attached to the rear ends of the members of the side bars



of the rocking frame B<sup>2</sup>, and these springs are likewise attached to the end portions of a plate 78. An adjusting-screw 79 is passed through the central portion of this plate and into the support 49 or a receiver carried by the said support. This spring adjustment of the moistening-pad 72 is provided in order that the machine may be used in connection with envelopes made of all characters of paper, since some paper of which envelopes are made is much more absorbent than others.

When an envelop to be sealed is placed upon the table 51, the flap extends down in contact with the working face of the moistening-pad 72, and it may be here remarked that this moistening-pad 72 extends down into a receptacle 72<sup>a</sup>, containing water or other liquid. When the carriage is rocked forward at its upper portion, the clamping-plate 68 accommodates itself to the moistening-pad and presses the gummed flap sufficiently to thoroughly moisten the gum. After the flap has been properly moistened, projections 80 (shown in dotted lines and located on the front longitudinal edges of the side bars of the carriage) come in contact with the pad at a point below the sealing-flap and force the moistening-pad 72 forward, thus leaving a space between the moistening-pad and the clamping-plate. At this moment the sealing edge of the envelop is received between the rotating sealing-rollers 59 and 60, and the sealing-flap of the envelop is free to leave the pad. Before the carriage commences to return the envelop will have been drawn some distance rearward between the sealing-rollers and will be held in such position as the carriage makes its rearward movement; but when the carriage commences another forward movement and the rollers 59 and 60 commence to revolve the envelop, which was held pressed between the sealing-rollers, will be discharged over the shelf or platform 61.

The carriage B' may be operated in any desired manner. Usually, however, it is held in its rearwardly-inclined normal position by a spring 81, attached to the bottom front portion of the carriage and to the under face of the support 49. A link 82 is attached to the rear lower portion of the carriage and to an angle or elbow lever 83, located beneath the support and fulcrumed upon a suitable standard 84. This lever 83 is in its turn connected with a suitably-fulcrumed foot-lever. It will be understood, however, that other power may be utilized for operating the carriage. I furthermore desire it to be understood that instead of using one set of sealing-rollers a double set may be employed, one behind the other, in which event the envelop will be passed completely between one set of rollers when the first set is in operation and will be received and temporarily held between the second set of rollers during the rearward movement of the carriage, to be discharged from the second set at the next forward movement of the carriage.

In Fig. 4 the construction is identical with that shown in Fig. 3, with the exception that a clamping or ironing roller 90 is substituted for the clamping-plate 68. This clamping or ironing roller 90 may be of any suitable construction and is mounted to turn upon a bail 91. This bail is pivoted at the forward upper edge of the frame of the carriage B', usually at a point at or near the bearing for the upper sealing-roller 59, and said bail 91 is normally supported, as is also shown in Fig. 4, in a downwardly and forwardly inclined position. In the operation of this form of the machine as the carriage is carried forward the roller 90 will engage with the upper portion of the sealing-flap of the envelop and will roll down the same, causing said flap to be properly pressed against the moistening-pad. Another slight change in construction is shown in Fig. 4, which consists in giving the envelop-table 51 a slight cushioned movement. To that end a standard 51<sup>a</sup>, on which the table 51 is mounted, is provided with a longitudinal slot 86 in its upper edge, and lugs 87 are attached to the bottom of the table, extending into said slot or recess 86, and said lugs loosely travel on a rod 88, having bearing against one end of the slot or recess and against one of the lugs 87. The purpose of giving this cushioned movement to the table 51 is to prevent the possibility of the fingers of the operator becoming cut or jammed to any serious extent between the forward edge of the table and the carriage.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In machines for sealing envelopes, or in machines of like character, an envelop-receiving table arranged to support the envelop to be sealed, a carriage movable to and from said table, and sealing-rollers mounted in the said carriage and adapted to receive between them the envelop on the table and remove said envelop, for the purpose set forth.

2. In an envelop-sealing machine or a machine of like character, a table adapted to receive an envelop the sealing-flap whereof extends downward beyond an edge of the table, a gage for the envelop carried by the table, a carriage having movement to and from the said table, sealing-rollers mounted in said carriage, adapted to receive the sealing-flap section of the envelop between them and automatically remove the envelop from said table, and a moistening mechanism for the gummed portion of the flap of the envelop supported by the table, the said mechanism being brought into action by the movement of the carriage toward the table, as and for the purpose specified.

3. In envelop-sealing machines, or machines of like character, a fixed table, a carriage provided with sealing-rollers, a mechanism for moving said carriage to and from said table, a moistening device for the sealing-flap of an envelop, and a pressure device



forming a portion of the carriage and arranged for engagement with the moistening device, for the purpose set forth.

4. In an envelop-sealing machine, or machines of like type, an envelop-receiving table, an adjustable envelop-gage carried by the table, a moistening device for the envelop-flap located adjacent to the table and having spring-controlled movement in one direction, a carriage mounted for movement to and from the table, sealing devices mounted upon the said carriage, a pressure device connected with the carriage and adapted for engagement with the moistening device, and a mechanism substantially as described for moving the carriage to and from the table and revolving the sealing devices at the forward movement of the carriage, permitting the said devices to remain idle during the return movement of the carriage, as described.

5. In envelop-sealing and like machines, an envelop-receiving table, a water-receptacle, an absorbent material extending from the receptacle, a pivoted spring-controlled support for said absorbent material, a carriage mounted to move to and from the table and provided with sealing-rollers, an actuating device for the carriage and rollers, and a pressure member connected with the carriage and arranged for contact with the said absorbent material, for the purpose set forth.

6. In envelop-sealing machines, an envelop-receiving table, a gage adjustable upon the said table, comprising an angle-body bar, loop members, and adjusting devices passed through the said loop members, a carriage provided with sealing devices, which carriage is movable to and from the said table, an actuating mechanism, substantially as described, for the carriage and its sealing devices, and a conducting member for envelops connected with the said carriage, as set forth.

7. In envelop-sealing machines, an envelop-receiving table, a gage adjustable upon the said table, comprising an angle-body bar, loop members and adjusting devices passed through the loop members, a carriage provided with sealing-rollers, which carriage is movable to and from the said table, an actuating mechanism, substantially as described, for the carriage and its rollers, a conducting member for the envelops connected with the said carriage, a water-receptacle, an absorbent material which enters said receptacle and extends outward therefrom, a support for the absorbent material, having an upward and rearward inclination, the said support being pivoted to the said receptacle and being spring-controlled in its forward movement, and a pressure-plate having a downward and forward inclination, connected with the said carriage and adapted for engagement with the absorbent material, for the purpose set forth.

8. In an envelop-sealing machine, an envelop-receiving table for envelops having limited cushioned movement, a carriage mov-

able to and from the table, sealing-rollers mounted in the carriage and adapted to receive between them an envelop upon the table, and means for imparting rotary motion to the sealing-rollers when the carriage is moved in one direction and rendering the said rollers idle when the carriage is moved in a reverse direction.

9. In an envelop-sealing machine, an inclined stationary table arranged to support the envelop to be sealed, a carriage mounted for movement to and from the table, sealing-rollers mounted in said carriage, adapted to receive between them the envelop on the table and remove said envelop, a moistening-pad adapted to receive the sealing-flap of the envelop upon the table, and a pressure device connected with the carriage, which pressure device engages the sealing-flap on the moistening-pad at the movement of the carriage toward the table and forces the sealing-flap against the moistening-pad.

10. In an envelop-sealing machine, an inclined stationary table for supporting an envelop, a carriage mounted for movement to and from the table, a moistening-pad adapted to receive the sealing-flap of the envelop on the table, and a pressure device connected with the carriage, which pressure device engages the sealing-flap on the moistening-pad at the movement of the carriage toward the table and forces the said flap against the moistening-pad.

11. In an envelop-sealing machine, a table adapted to receive envelops to be sealed, a carriage mounted for movement to and from the table, sealing-rollers mounted in the carriage, adapted to receive between them the envelop on the table and remove said envelop, a moistening-pad independent of the carriage, and a self-adjusted pressure device supported by the carriage and adapted to act upon the moistening-pad, as described.

12. In an envelop-sealing machine, a support for an envelop, a tension-controlled moistening-pad adjacent to said support, a carriage mounted for movement to and from the support, and a self-adjusting pressure device connected with the carriage and arranged for pressing engagement with the moistening-pad when the carriage is moved toward the support.

13. In an envelop-sealing machine, a support for an envelop, a tension-controlled moistening-pad adjacent to said support, a carriage mounted for movement to and from the support, sealing-rollers mounted in the carriage, a self-adjusting pressure device connected with the carriage and arranged for pressing engagement with the moistening-pad when the carriage is moved toward the support, and a projection from the carriage, arranged to force the moistening-pad rearward prior to the envelop being received between the sealing-rollers, thus forming a space between the moistening-pad and pressure device, which space relieves the sealing-flap of the envelop



and permits the envelop in its entirety to be drawn between the sealing-rollers.

14. In an envelop-sealing machine, a support, an envelop-receiving table connected with said support, a carriage mounted on the support and having movement to and from the said table, which carriage is counterbalanced and has pivotal support, a rack carried by the said support, sealing-rollers mounted in said carriage, a driving connection between one of said rollers and the said rack, which driving connection operates the sealing-rollers only when the carriage is carried in direction of the envelop-receiving table, a tension-controlled moistening-pad located adjacent to said table, a pressure device loosely and yieldingly mounted on the carriage, and means substantially as described for moving said carriage to and from said table and the said moistening-pad, as specified.

15. In an envelop-sealing machine, a table adapted to receive an envelop, the flap of which extends down beyond the edge of the table, a moistening device for moistening the gummed portion of the flap of the envelop, and sealing-rollers movable toward and from the table and adapted to receive the sealing-flap section of the envelop between them and remove the envelop from the table after the flap has been moistened, as set forth.

16. In an envelop-sealing machine, a table adapted to receive an envelop, the flap of which extends down beyond the front edge of the table, a moistening device at the front edge of the table, sealing-rollers movable toward and from the table for receiving the envelop between them and removing it from the table, and means for pressing the flap of the envelop upon the moistening device prior to the sealing-rollers reaching the end of their movement toward the table, as set forth.

17. In an envelop-sealing machine, an inclined table adapted to receive an envelop with its flap extending down beyond the edge of the table, a yieldingly-mounted moistening-pad at the front edge of the table and upon which the gummed portion of the flap of the envelop rests, sealing-rollers movable toward and from the table for receiving the envelop between them and removing it from the table, and means movable with the sealing-rollers for engaging the moistening-pad as the rollers move toward the table to press the flap upon the moistening-pad and to depress the said pad, as and for the purpose set forth.

18. In an envelop-sealing machine, an inclined table adapted to receive and support an envelop with its flap extending down beyond the edge of the table, a yieldingly-mounted moistening-pad at the front edge of the table and upon which the flap of the envelop rests, a carriage movable toward and from the table, sealing-rollers mounted in the carriage, means for imparting rotary motion to the rollers when the carriage moves toward the table, the said rollers being stationary

when the carriage moves from the table, and a pressure device carried by the carriage in advance of the rollers, said pressure device being mounted to rock and yieldingly supported, as set forth.

19. In an envelop-sealing machine, an envelop-receiving table, a moistening device for the envelop-flap, a carriage mounted to swing toward and from the table, sealing-rollers mounted in the carriage, a fixed rack, and a driving connection between one of the said rollers and the rack, said driving connection being so constructed as to operate the sealing-rollers only when the carriage is swung toward the table, as set forth.

20. In an envelop-sealing machine, a table adapted to support an envelop, a carriage movable toward and from the table, and a sealing device comprising relatively movable members mounted in the carriage and adapted to receive between them the envelop and remove it from the table, as set forth.

21. In an envelop-sealing machine, a table adapted to support an envelop, a carriage movable toward and from the table, a sealing device comprising relatively movable members mounted in the carriage, and means for imparting movement to the members of the sealing device as the carriage moves toward the table, the said members being stationary when the carriage moves away from said table, as set forth.

22. In an envelop-sealing machine, a table adapted to support an envelop, a carriage movable toward and from the table, a sealing device comprising relatively movable members mounted in the carriage, means for imparting movement to the members of the sealing device as the carriage moves toward the table, the said members being stationary when the carriage moves away from the table, and a moistening device for applying moisture to the envelop-flap, said moistening device being brought into action by the movement of the carriage toward the table, as set forth.

23. In an envelop-sealing machine, a table adapted to support an envelop with its flap-section extending beyond the edge of the table and its flap extending downward, a carriage movable toward and from the table, a sealing device comprising relatively movable members mounted in the carriage, means for imparting movement to the members of the sealing device as the carriage moves toward the table, the said members remaining stationary when the carriage moves away from the table, a moistening device upon which the flap of the envelop rests, and means for pressing the flap upon the moistening device prior to the carriage reaching the end of its advance movement, as set forth.

24. In an envelop-sealing machine, a table adapted to support an envelop with its flap-section projecting beyond the edge of the table and its flap extending downward, a car-



riage movable toward and from the table, sealing-rollers mounted in the carriage, means for rotating the rollers as the carriage moves toward the table, the rollers being stationary  
5 when the carriage moves away from the table, a moistening-pad upon which the flap of the envelop rests, and means carried by the carriage for engaging the moistening-pad to press the envelop-flap upon the pad prior to

the carriage arriving at the end of its movement toward the table, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALFRED HEYDRICH.

Witnesses:

J. FRED ACKER,

EVERARD BOLTON MARSHALL.