

E. O. CARTWRIGHT.

PRINTING PRESS.

APPLICATION FILED AUG. 15, 1907.

926,851.

Patented July 6, 1909.

6 SHEETS—SHEET 1.

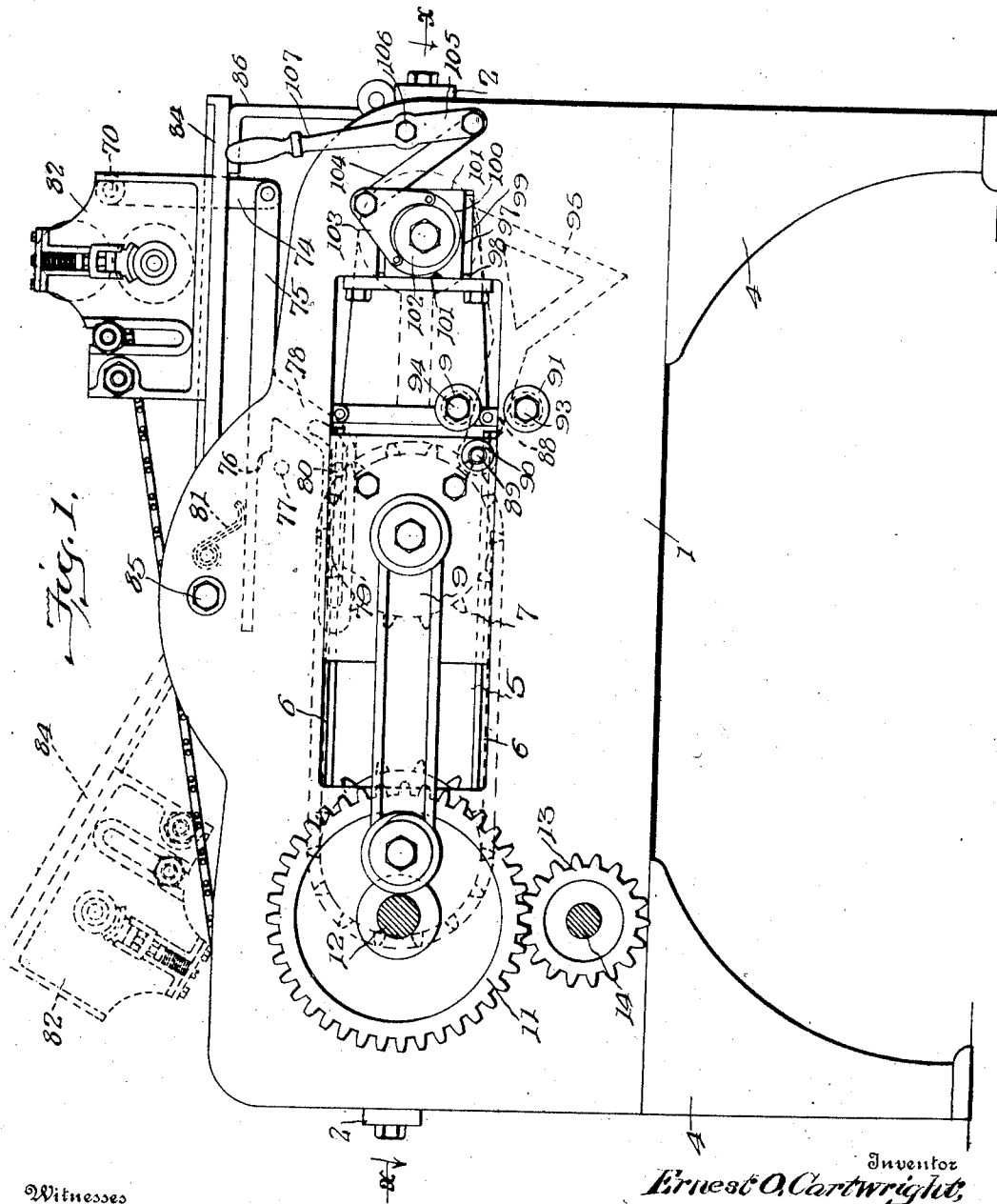


Fig. 1.

Witnesses

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 6 SHEETS—SHEET 2.

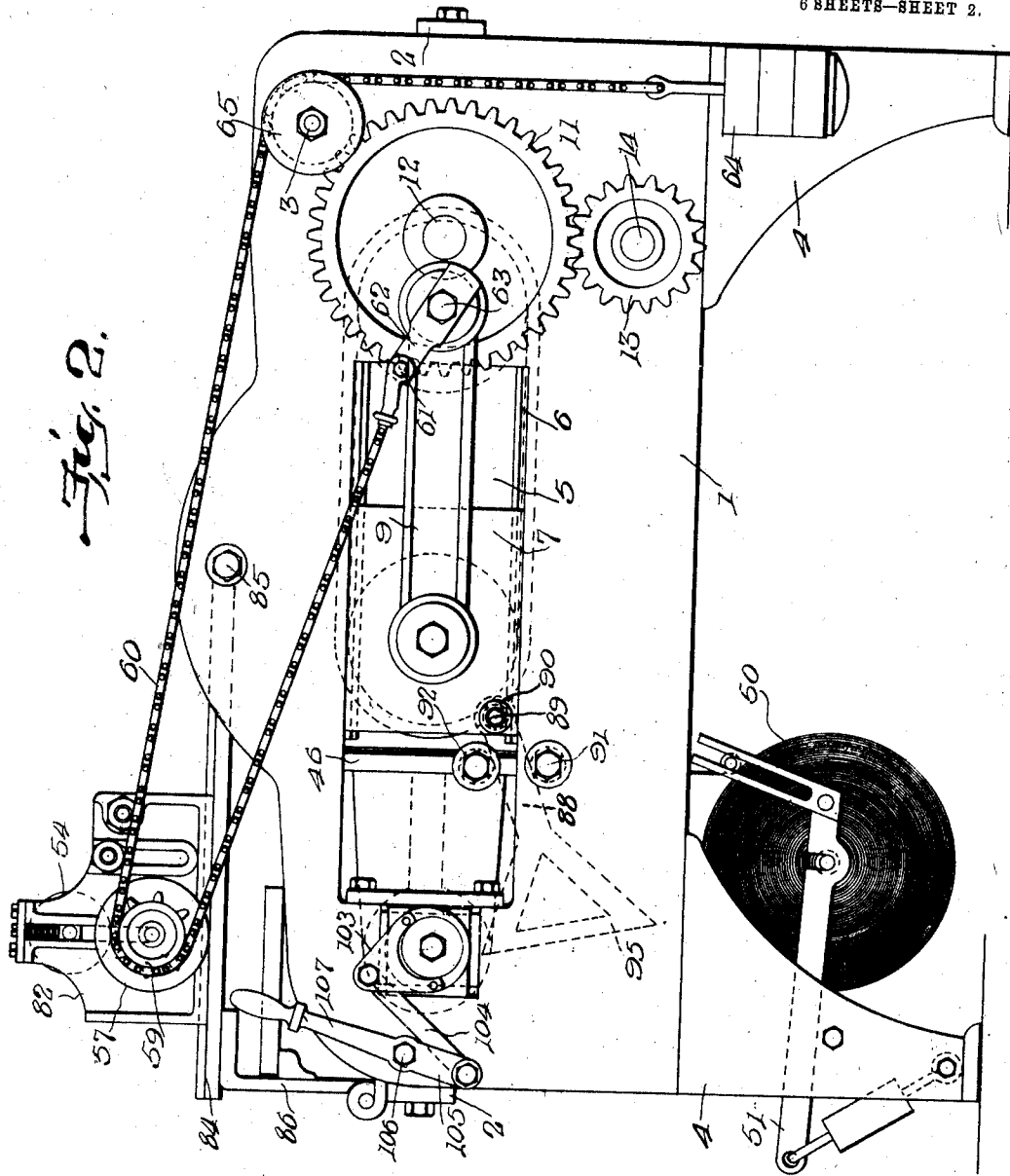


Fig. 2.

Witnesses

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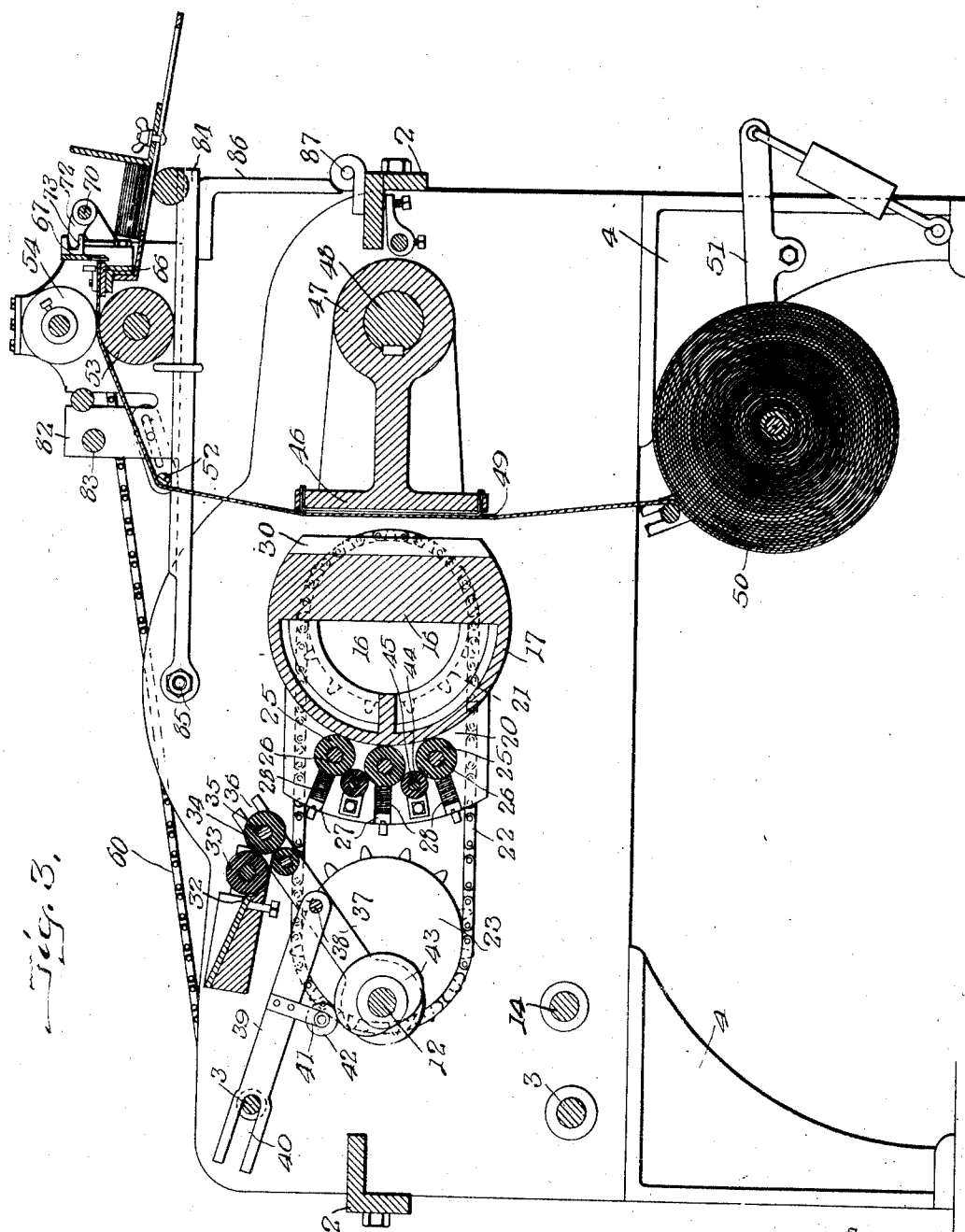
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6 SHEETS—SHEET 3.



Witnesses

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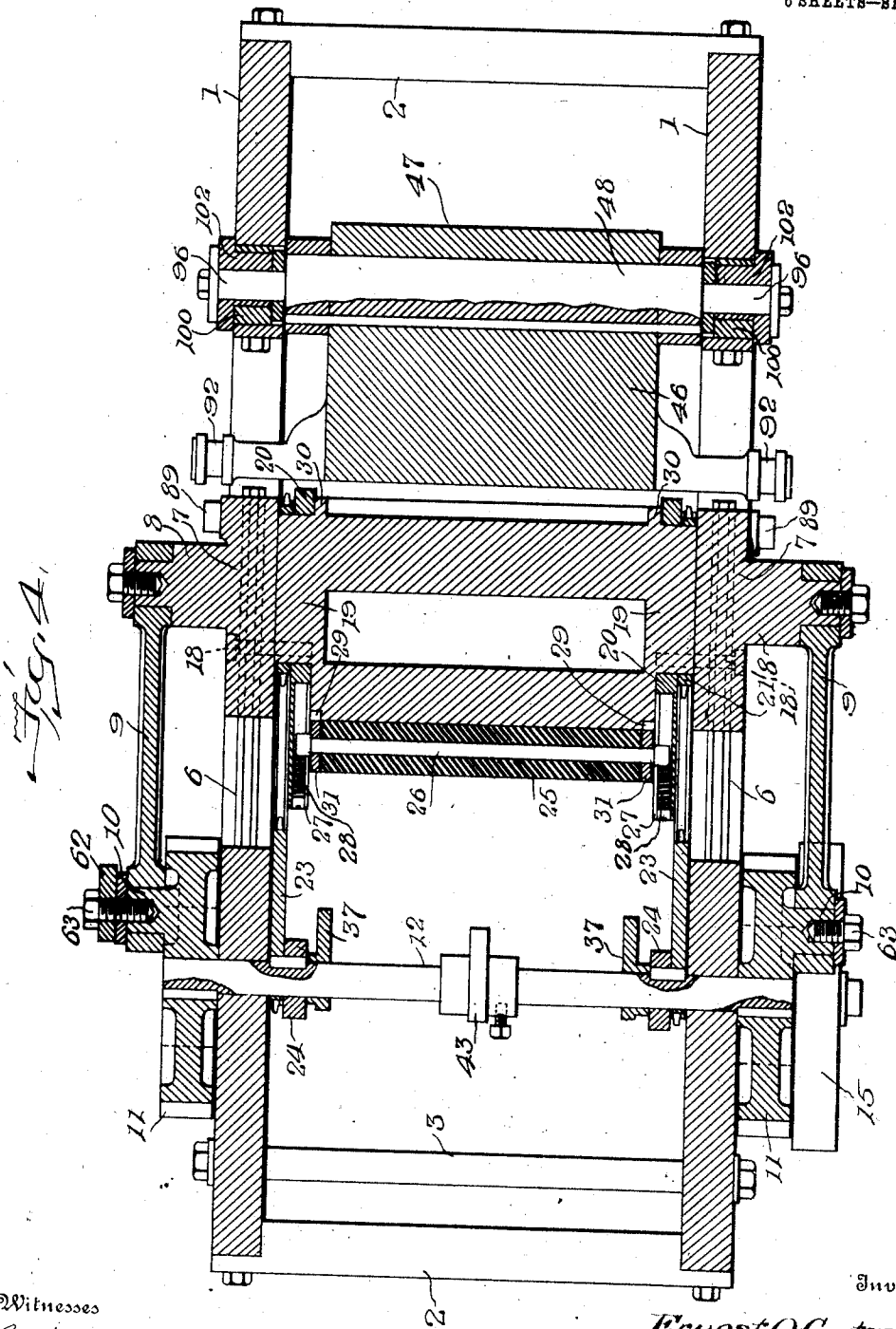
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6 SHEETS—SHEET 4.



Witnesses

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8 SHEETS—SHEET 5.

Fig. 5.

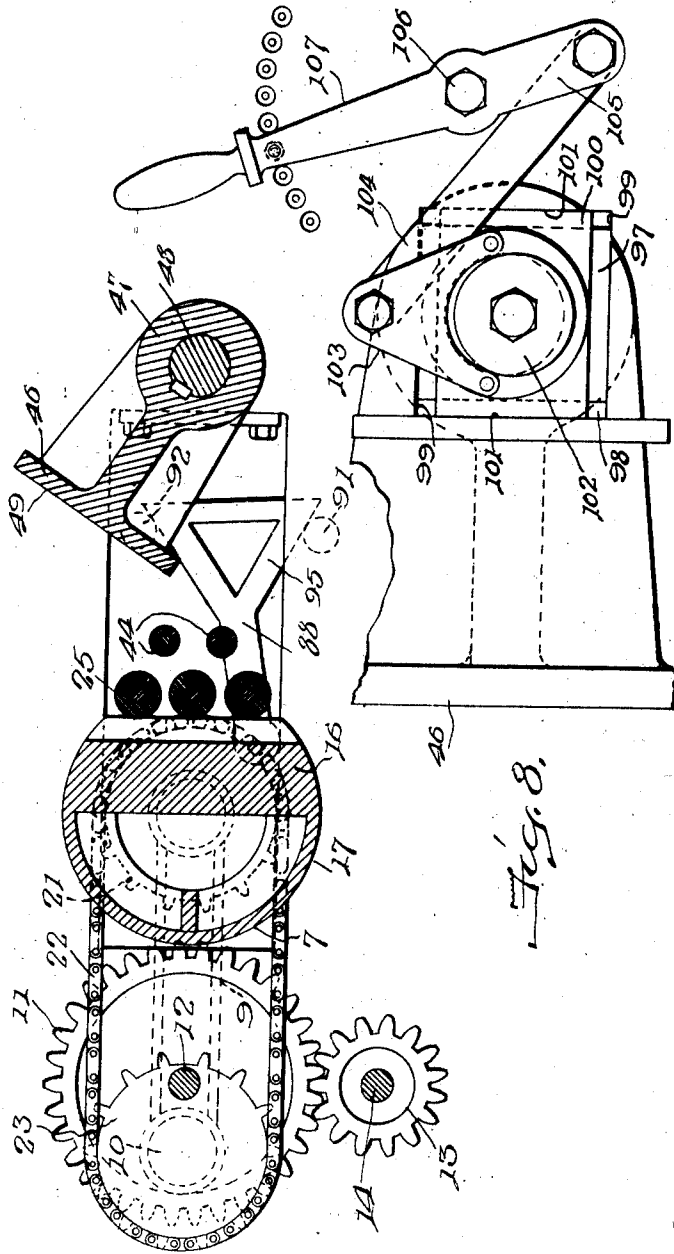


Fig. 8.

Witnesses

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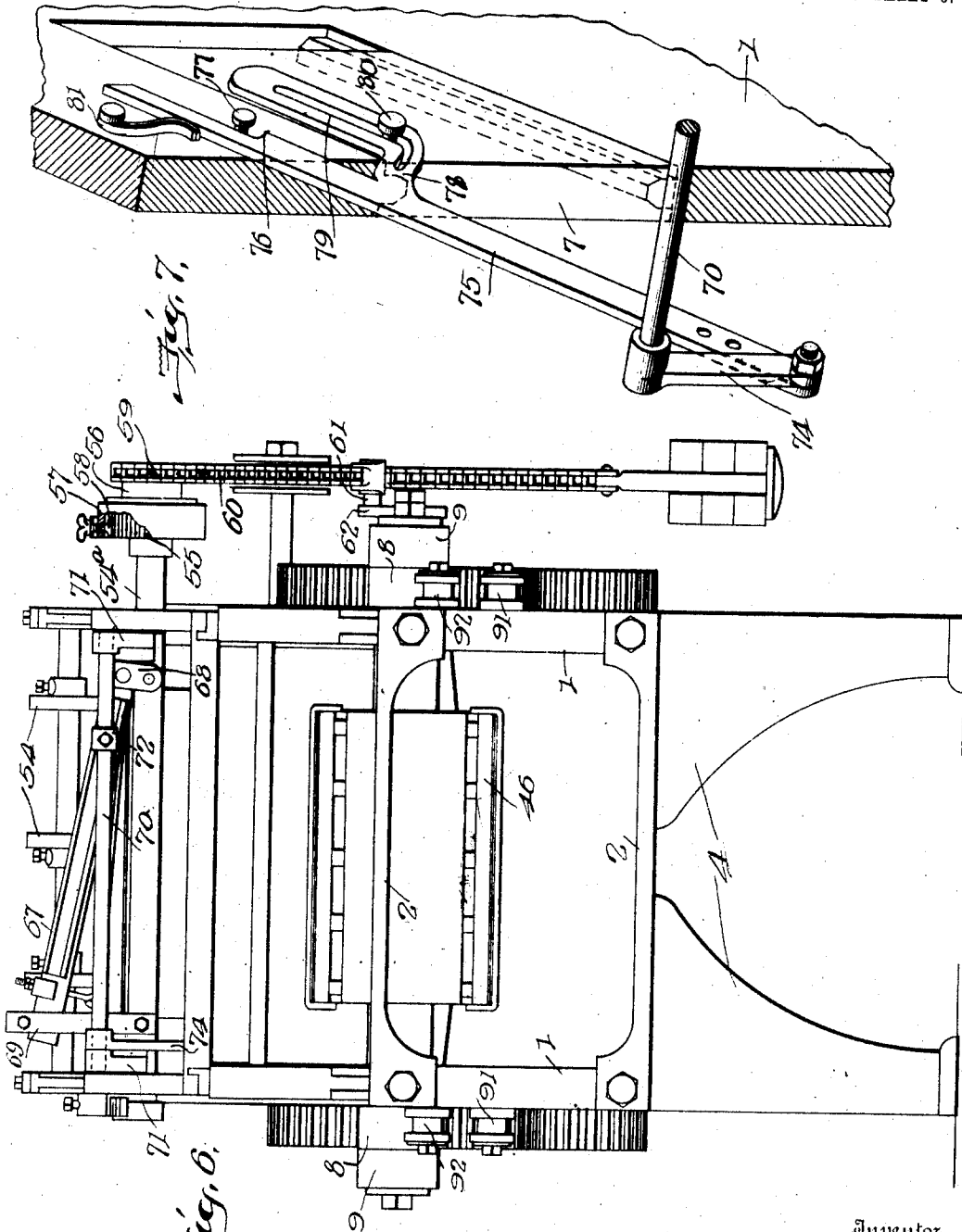
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6 SHEETS—SHEET 6.



Witnesses

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UNITED STATES PATENT OFFICE.

ERNEST O. CARTWRIGHT, OF SPRINGFIELD, OHIO, ASSIGNOR OF ONE-HALF TO LOUIS FISHER,
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PRINTING-PRESS.

No. 926,851.

Specification of Letters Patent.

Patented July 6, 1909.

Application filed August 15, 1907. Serial No. 388,573.

To all whom it may concern:

Be it known that I, ERNEST O. CARTWRIGHT, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Printing-Presses, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to printing presses, and more particularly to what are known as platen presses, and the objects of the invention are: first, to construct a platen printing press which may be readily converted from a
15 continuous or automatically fed press into a hand fed press: second, to embody such a construction in a horizontally reciprocating press, in which the platen is normally in a fixed position and lies in the same horizontal
20 plane with the form bed, the form bed reciprocating in a horizontal plane toward and away from the platen; and further, to so improve the operating mechanism and the details of construction of the machine as to im-
25 prove the operation of the machine and render the same more accurate.

With these objects in view my invention consists in certain novel features of construction, and in certain parts and combination
30 hereinafter to be described, and then more particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a printing press embodying my invention; Fig. 2 is an elevation of
35 the side of the machine opposite that shown in Fig. 1; Fig. 3 is a longitudinal sectional view, taken vertically through the machine; Fig. 4 is a longitudinal sectional view, taken horizontally of the machine on the line $x x$ of
40 Fig. 1 and looking in the direction of the arrows; Fig. 5 is a detail view of the form bed, inking rollers and platen; Fig. 6 is an end elevation of the machine; Fig. 7 is a detail view of the operating mechanism for the
45 paper cutter; and Fig. 8 is a detail view of the throw-off mechanism.

In these drawings, in which I have shown the preferred embodiment of my invention, the press is shown as supported in a frame
50 composed of two similar parallel horizontal plates 1, connected at their opposite ends by suitable transverse bars or members 2, the forward end of the machine being further strengthened by the rods 3, located near the

top and bottom, respectively, of the side 55 members 1. This frame may be supported in any suitable manner, that preferred consisting in the supports or legs 4 secured to the frame at each corner thereof. Each of the side members 1 is provided at its central
60 portion with an opening 5, having horizontal lateral edges 6 which form guideways for the slide blocks 7, which, in turn, support and actuate the combined form bed and inking drum. A horizontal movement of the recip- 65 rocation is imparted to the slide blocks in any suitable manner, that which I prefer being by means of the construction shown, in which each slide block is shown as provided with a pin or trunnion 8 upon the reduced 70 outer end of which is journaled one end of a pitman 9. The opposite end of the pitman is journaled upon a wrist pin 10 eccentrically mounted on the gear 11 which is secured to the outer end of a shaft 12, journaled in the 75 side members 1 of the frame and meshing with a pinion 13 mounted upon a shaft 14 also journaled in the side members 1 of the frame and having mounted thereon, preferably on the outer end thereof, beyond the 80 pinion 13, a driving gear, such as the pulley 15 adapted to receive a belt, by means of which the shaft 14 is rotated and the slide blocks 7 reciprocated in unison.

The form bed and inking drum are com- 85 bined in a single structure, the former being indicated by the reference numeral 16 and the latter by the reference numeral 17. They are preferably integral or formed of a single piece, being cast in the form of a cylinder, 90 hollowed for lightness and flattened on one side thereof to constitute the form bed. This casting is secured to the slide block 7 by means of screw bolts 18, passing through the slide blocks and screwing into the ends of the 95 casting. Said casting is provided at each end with a cylindrical trunnion 19, and on these trunnions are loosely mounted the revolving carriers 20 which support and actuate the form-inking rollers. Each of these 100 carriers is in the form of a segment of a wheel or disk of greater diameter than the inking drum, and they are given a constant rotary motion while the press is in operation to cause them to travel around the form bed 105 and inking drum as these latter reciprocate. To this end, each carrier 20 has connected therewith a sprocket wheel 21, the sprocket

wheel and carrier being preferably of a combined width such as to equal the length of the trunnion 19 on which they are mounted, and thus fit between the body of the combined form bed and inking drum and the corresponding slide block 7 in such a way as to hold the carriers against lateral displacement. Around each sprocket wheel 21 there passes a sprocket chain 22, said chain also passing around a sprocket wheel 23 eccentrically mounted on the shaft 12. The sprocket wheels 23 are secured to hubs or sleeves 24 on the shaft 12, in order to effect a satisfactory connection between said sprocket wheels and the shaft. The eccentricity of the sprocket wheels is equal to the travel of the slide blocks 7, and is so arranged that the sprocket chains 22 are kept at an even tension and the carriers 20 are rotated at an even speed as the slide blocks reciprocate. The form-inking rollers, indicated by the reference numeral 25, are preferably three in number, and are supported in the carriers 20 by having their shafts 26 extended through radial slots 27 in the carriers, which latter are provided with springs 28, mounted in recesses with which the slots 27 communicate, said springs bearing on the ends of the shaft 26 to press the rollers 25 radially inward into proper contact with the inking drum and with the type or other impression surface on the form bed. The ends of the inking drum are rabbeted or cut away, as indicated at 29, and the form bed is provided with transversely extending ribs or flanges 30 arranged near the ends thereof, and on the ways thus provided travel the bearing rollers or wheels 31 with which the form roller shafts 26 are provided, by means of which the relations of the rollers to the printing and ink-distributing surfaces are properly maintained.

The cylindrical surface of the inking drum 17 is supplied with ink from the fountain 32 which is located in the forward part of the press and is provided with a suitable supply roller 33 which may be actuated in any suitable manner. The ink is transferred from the fountain 32 to the drums 17 by means of a ductor roller 34, having its shaft 35 journaled at its opposite ends in bearing slots 36 formed in the ends of the arms 37 journaled at their opposite ends on the shaft 12 near the side members 1 of the frame. The shaft 38 extends between the arms 37 intermediate the ends thereof, and journaled on the shaft 38 is a second arm or lever 39 having its outer end provided with an elongated slot 40, adapted to engage the connecting rod 3 which extends between the side members 1 of the frame and to form a guide for the lever 39. The lever 39 has rigidly secured thereto, intermediate its ends, a downwardly extending member or finger 41, provided at its lower end with a roller 42 lying in

the path of and adapted to be engaged by a cam 43 rigidly mounted on the shaft 12. As the shaft 12 rotates, the enlarged portion of the cam 43 comes into contact with the roller 42 of the arm 41 and forces the same upwardly, rocking the lever 39 about its pivotal connection to the rod 3 and raising the outer end thereof, thereby elevating the arms 37 and the ductor roller 34, which is carried thereby, and bringing the roller into engagement with the supply roller 33 of the fountain 32. As the shaft 12 continues its rotation, the roller 42 passes off the enlarged portion of the cam 43 and permits the lever 39 and arm 37 to move downwardly, thereby bringing the ductor roller 34 into engagement with the cylindrical surface of the inking drum 17 and supplying the same with ink. The movement of the cam 43 is so timed with relation to the movement of the slide block 7 that the ductor roller will move downwardly as the inking drum approaches the forward end of the machine. The form rollers 25 are provided with suitable vibrators or reciprocating rollers 44 for distributing the ink along the surface of the form rollers. The vibrators 44 are mounted upon shafts 45 rigidly secured to the carriers 20, intermediate the slots 27 therein, and adapted to support the vibrators 44 in such a position that they will be engaged by the form rollers 25 when the same are in engagement with the inking drum 17 and have been pressed outwardly against the tension of the spring 28, and will be out of engagement with the form rollers when the same are in engagement with the form.

In connection with the horizontally reciprocating form bed, which is always maintained in a vertical position throughout its range of movement, I employ a normally fixed or stationary platen 46, located in the path of the form bed, with the face adjacent to said form bed, which receives the tympan, held firmly in vertical position, in exact parallelism with the form bed, so that a square impression contact is always obtained, since the form bed and printing surface of the platen are always parallel with each other during the printing operation. The platen is provided with a sleeve 47, by means of which it is rigidly secured to a normally stationary shaft 48, which shaft is supported at its ends in the side members 1 of the frame. The impression surface 49 of the platen is co-extensive in length with the body portion of the casting of which it forms a part, being therefore also coextensive in length with the sleeve 47, and the frame members 1 are located close to the end of said casting. By reason of this construction, the platen is supported so close to its ends as to prevent any springing of the frame from inequalities of the impression surfaces, thereby maintaining the parallelism of the platen and form bed.

This parallelism is the more perfectly maintained by reason of the construction and relative arrangement of the reciprocating form bed and the platen, which is such that the form bed is caused to reciprocate in substantially the same plane with said platen, that is, the line of movement of the form bed is in a plane extending at substantially right angles to the face of the platen when the platen is in its normal position. In the present instance, this plane is a horizontal one extending longitudinally of the press, as a whole, and intersecting both the form bed and the platen.

With the platen in its stationary position in the path of the form bed 16, it is adapted for use with an automatic paper feed and such a feed is herein shown, the web or roll of paper 50 being supported beneath the press in any suitable manner, preferably by mounting the same upon arms 51, which, in turn, are mounted on the members 4 at the opposite corners of the frame. The web of paper extends upwardly over the impression face 49 of the platen, over a suitable guide roller 52, located above said platen, and thence between the feed rollers 53 and 54 which are intermittently driven to feed the paper forward in the desired lengths, the upper roller 54 preferably comprising a plurality of disks, as herein shown. The means for so actuating these rollers may be of any suitable character, but I prefer that herein shown which consists in extending the shaft 54^a of the lower roller 53 beyond the supporting frame and providing the same with a suitable ratchet wheel 55, which is rigidly secured thereto. Journaled upon the shaft 54^a, beyond the ratchet wheel 55, is a sleeve 56 carrying at its inner end a suitable shell or casing 57, which extends about the ratchet wheel 55 and is provided with a spring-pressed/pawl 58, adapted to engage the teeth of the ratchet 55 as the sleeve 56 is rotated forwardly and to ride over the same on the return movement of said sleeve. The sleeve 56 carries at its outer end a sprocket wheel 59, about which extends a sprocket chain 60 having one end pivotally mounted on a pin 61 secured to an arm 62 near the outer end thereof, the arm 62 being adjustably mounted upon the wrist pin 10 of one of the gears 11. The arm 62 is preferably secured to the wrist pin 10 by means of the usual bolt 63, and, by loosening this bolt, the arm may be turned about its pivotal center on the pin, thereby varying the length of the throw thereof and correspondingly regulating the forward movement of the ratchet wheel 55 and roller 53, thus regulating the length of paper which is fed forward at each reciprocation of the form bed 16. The casing 57, carrying the pawl 58, is preferably returned to its normal or idle position by means of a weight 64 secured to the free end of the sprocket chain

60, which extends over a suitable pulley 65 mounted on the outer end of one of the connecting rods 3 at the forward end of the machine.

The paper is cut off into sheets by means of suitable shears which operate at each reciprocation of the form bed. These shears may be of any suitable construction, but I prefer the construction herein shown, which consists of a stationary blade or plate 66, 75 having a cutting edge adapted to cooperate with the blade 67, which is pivotally connected at one end to the supporting frame, as shown at 68, at a point beneath the level of the blade 66 and has its opposite end extending between suitable guides 69 adapted to move vertically as the blade is moved about its pivotal center. A rockshaft 70 extends transversely of the frame at the rear end thereof and is journaled near its opposite ends in suitable bearing brackets 71 which are rigidly secured to the supporting frame. A projection or finger 72 is adjustably mounted on the shaft 70 and is adapted to extend into a suitable guideway 73, carried by the blade 67, and to raise and lower said blade as the rockshaft 70 is rocked in its bearings. I prefer to rock the shaft 70 by means of a crank arm 74 which is rigidly secured thereto, preferably near one end thereof, and is connected at its outer end to a slide bar or rod 75 having its forward end cut away or reduced, as shown, to form a shoulder 76 and supported on a pin or projection 77 secured to the adjacent side member 1. An arm 78 extends downwardly from the bar 75, at a point intermediate the shoulder 76 and the rear end of the bar, to a point a short distance below the bar and thence extends in a forward direction substantially parallel with the bar 75, thus forming an L-shaped arm having its shorter member secured to the bar 75, as shown, and provided with a slot 79 extending for substantially the full length of both members and corresponding in shape to the shape of the arm 78. A suitable pin or projection 80, carried by the slide block 7 extends through the slot 79 and serves to actuate the bar 75 and thus rock the shaft 70 about its longitudinal axis.

With the slide block in its forward position, as at the beginning of a stroke, the pin 80 will be near the rear end of the slot 79 and the lower edge of the bar 75 will be engaged by the pin 77 at a point in the rear of the shoulder 76. As the slide block 7 moves forward, the pin 80 engages the rear wall of the vertical portion of the L-shaped slot 79 and moves the bar 75 rearwardly throughout the remainder of the rearward movement of the block 7. As the block approaches the rearward limit of its movement, the shoulder 76 of the bar 75 passes over the pin 77, allowing the bar 75 and the L-shaped member 78 to drop downwardly a distance sufficient to

bring the pin 80 into the vertical portion of the L-shaped slot 79. Thus, as the block 7 begins its forward movement, the pin will engage the forward wall of the vertical portion of said slot and carry the bar 75 toward the front of the machine a distance sufficient to rock the shaft 70 and raise the blade 67. When the shaft 70 has been rocked in such a manner, the shoulder 76 again engages the pin 77, and, riding over the same, raises the bar 75 and L-shaped member 78 a distance sufficient to bring the pin 80 into the horizontal portion of the L-shaped slot, thereby allowing the same to complete its forward movement without affecting the position of the bar 75. The weight of the bar 75 may be sufficient to maintain the same in engagement with the pin 77, but I prefer to provide a spring 81 which bears upon the upper edge of the bar and holds the lower edge thereof firmly in engagement with said pin.

The feed mechanism and the cutting-off mechanism are preferably mounted on a separate supporting frame comprising side members 82 connected by suitable transverse rods 83 and mounted upon arms 84 pivotally connected to the side members 1 near their rear ends, as shown at 85, and having their forward ends supported upon suitable members carried by the rear portion of the main frame. Preferably, these supporting members consist of brackets 86 pivoted at their lower ends to the transverse members 2 of the frame, as shown at 87. Thus, by removing the bar 75, the arms 84 and the supporting frame, with the feed rollers and cutting-off mechanism, may be swung forwardly into the position shown in dotted lines in Fig. 1.

When it is desired to operate the press as a hand-fed press, the supporting frame 82 is swung forward into the position shown in Fig. 1, and a suitable actuating member is attached to the sliding block 7 and is adapted to rock the platen and the shaft 48, upon which it is mounted, about the pivotal center and thus move the impression face 49 forwardly and into a position in which it is readily accessible from the rear of the machine. The actuating member, by means of which the platen is operated, preferably consists of an arm 88 adapted to be detachably connected at its forward end to the slide block 7 by means of a suitable pin 89, adapted to engage an aperture in the arm 88, and a hand nut 90. This arm 88 extends between suitable guides 91 and 92, preferably consisting of grooved rollers mounted upon pins 93 and 94, respectively, the pins 93 and 94 being mounted upon the frame member 1 and the adjacent side of the platen, respectively. The rear end of the arm 88 is of gradually increasing width, and, preferably, is substantially triangular, as shown at 95, and, as the

slide blocks 7 move forwardly, the inclined surfaces of the triangular member 95 are brought into engagement with the guides 91 and 92, respectively, thereby elevating the guide 92 which is carried by the platen and moving the platen out of the path of the form bed and into a position in which it is readily accessible from the rear of the machine. As the slide block moves rearwardly to make another impression, the wedge-shaped member 95 is moved out from between the guides and the platen is permitted to again assume its vertical position in the path of the form bed. When it is desired to again use the automatic feed mechanism, the operating mechanism for the platen is rendered inoperative by disconnecting the arm 88 from the slide block, thereby permitting the platen to remain stationary during the movement of the form bed. The platen may be operated with the guides 91 and 92 and arms 88 on either one or both sides thereof. I have here shown these members on both sides of the press, as more satisfactory results are obtained in this manner.

Provision is also made for moving the platen horizontally a slight distance for the purpose of "throwing off" the impression when necessary. To this end, the shaft 48 terminates at its ends in reduced bearing trunnions 96, each of said trunnions rotating in a horizontally sliding cross-head or box 97, mounted in a rectangular aperture 98, so that the lateral horizontal sides 99 of said aperture constitute guideways for said head, which is of less width than said aperture so that it may be moved horizontally therein. In front of the cross-head 97 is located, in the aperture 98, a sliding box 100 of a width equal to the width of the aperture 98, so that the vertical margins 101 of said aperture constitute guide margins for said plate or box which is of less width than the aperture 98 so that it is capable of sliding vertically therein. Within the box 100 there is mounted to rotate a sleeve 102, in which the corresponding trunnion 96 of the shaft 48 is eccentrically mounted. From this construction, it will be seen that when the sleeves 102 are rotated in their boxes 100, the shaft 48 will be moved horizontally, the arrangement of the guide plates being such as to maintain the axis of said shaft always in the same horizontal plane throughout its range of movement, thereby preventing lateral displacement of the platen. In order to permit the sleeves 102 to be readily operated simultaneously, said sleeves are provided on their projecting ends with arms 103, which are connected by links 104 and arms 105 projecting from the rock-shaft 106, extending transversely of the machine near the end thereof and controlled by a hand lever 107. This rock-shaft takes the place of one of the tie rods 3 of the frame.

The operation of the press will be obvious

from the description of the operation of the several parts thereof, and it will be apparent that I have provided a press which is adapted to be used with a continuous or automatic feed, and, when so used, the platen will be in perfect parallelism with the form bed and will remain in that position, thus giving a uniform impression; which is adapted to be employed as a hand press, the automatic feed mechanism being uncoupled and moved out of the way, and the operating mechanism of the platen being connected to the slide block carrying the form bed, whereby, the platen is moved out of the path of the form bed during the return stroke thereof and is moved into a position in which the sheet may be fed thereto by hand; further that I have embodied such a convertible press in a horizontal frame, in which the platen and form bed are normally in the same horizontal plane, the form bed reciprocating in a horizontal plane toward and away from the platen; and further, it will be apparent that I have improved the detail construction and arrangement of the parts so as to secure an improved operation of the press as a whole and to render the same more accurate in its operation.

I wish it to be understood that I do not desire to be limited to the exact details of construction shown and described, for obvious modifications will occur to a person skilled in the art.

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

1. In a printing press of the character described, a frame, a normally stationary platen mounted on said frame, a form bed mounted on said frame and adapted to reciprocate toward and away from said platen, actuating mechanism for moving said platen into and out of the path of said form bed, said actuating mechanism being adapted to be rendered inoperative, and automatic feed mechanism movably mounted on said frame.

2. In a printing press of the character described, a frame, a normally stationary platen mounted on said frame, a form-bed mounted on said frame and adapted to reciprocate toward and away from said platen, an arm removably secured to said form-bed, and means for operatively connecting said arm to said platen whereby the movement of said form-bed will move said platen into and out of the path thereof.

3. In a printing press of the character described, a frame having a guide, a normally stationary platen mounted in said frame and provided with a guide, a form bed mounted in said frame and adapted to reciprocate in the same plane with said platen, an arm adapted to be connected with said form bed, to reciprocate in unison therewith and having an inclined portion adapted to engage the

guides on said platen and said frame and move said platen out of the plane of said form bed.

4. In a printing press of the character described, a frame, a guide mounted therein, a normally stationary platen mounted in said frame, a guide carried by said platen adjacent to the guide on said frame, a form bed mounted in said frame and adapted to reciprocate in the same plane with said platen, an arm adapted to extend between said guides and to have one end connected with said form bed to move said arm in unison therewith and having its opposite end enlarged and adapted to actuate the guide carried by said platen to move said platen out of the plane of said form bed.

5. In a printing press of the character described, a frame, a guide roller mounted on one side of said frame, a normally stationary platen mounted in said frame, a guide roller carried by said platen adjacent to the guide roller carried by said frame, slide blocks mounted in said frame, means for reciprocating said slide blocks, a form bed carried by said slide blocks, an arm adapted to extend between said guide rollers and having one end thereof adapted to be connected to one of said slide blocks, the opposite end of said arm having oppositely inclined portions adapted to engage said guide rollers and move said platen out of its normal position.

6. In a printing press of the character described, the combination, with a frame, a normally stationary platen mounted thereon, a form-bed mounted on said frame and adapted to reciprocate in the same plane with said platen, automatic feed mechanism mounted on said frame adjacent to said platen and adapted to be moved into an inoperative position at the opposite end of said frame.

7. In a printing press of the character described, a main frame, a normally stationary platen mounted in said main frame, a form-bed mounted in said main frame and adapted to reciprocate in the same horizontal plane with said platen, feed rollers adapted to intermittently feed a web of paper over said platen, a supporting frame for said rollers, said rollers being normally supported on one end of said frame, arms secured at one end to said supporting frame and pivotally connected at the other end between the ends of said main frame, whereby the arms may be rotated about their pivotal center to move said feed rollers into an inoperative position at the opposite end of said frame.

8. In a printing press of the character described, a frame, a normally stationary platen mounted in said frame, a form bed mounted in said frame and adapted to reciprocate toward and away from said platen, a positively driven gear mounted on said frame and adapted to reciprocate said form

bed, feed rollers mounted on said frame near said platen, pawl and ratchet mechanism carried by one of said rollers and provided with a sprocket wheel, a sprocket chain having one end connected to a pin eccentrically mounted on said gear and extending about said sprocket wheel, and a weight connected to the other end thereof.

9. In a printing press of the character described, a frame, a normally stationary platen mounted therein, slide blocks mounted in said frame, a form bed carried by said slide blocks, gear wheels mounted on said frame and having wrist pins eccentrically mounted thereon, pitmen connecting said slide blocks to said wrist pin, means for actuating said gears, feed rollers mounted on said frame near said platen, ratchet mechanism connected to one of said rollers and provided with a sprocket wheel, a sprocket chain extending about said sprocket wheel, an arm adjustably mounted on the wrist pin of one of said gears and having its free end pivotally connected to one end of said sprocket chain, and a weight connected to the opposite end of said chain.

10. In a printing press of the character described, a main frame, a normally stationary platen mounted on said main frame, a form bed mounted on said main frame and adapted to reciprocate in the same plane with said platen, a supporting frame movably mounted on said main frame, feed mechanism mounted on said supporting frame near said platen, cut-off mechanism mounted on said supporting frame beyond said feed mechanism, said supporting frame being adapted to be actuated to move both the feed mechanism and the cut-off mechanism into an inoperative position.

11. In a printing press of the character described, a frame, a platen mounted therein, slide blocks mounted in said frame, a form bed carried by said slide blocks, feed mechanism mounted on said frame near said platen, cut-off mechanism beyond said feed mechanism comprising a pivoted blade, a rockshaft, means for operatively connecting said rockshaft to said blade, a crank arm carried by said rockshaft, and a bar pivotally connected to said crank arm at one end and connected near its other end to said slide blocks.

12. In a printing press of the character described, a frame, a platen mounted therein, slide blocks mounted in said frame, a form bed carried by said slide blocks, means for actuating said slide blocks, feed mechanism mounted above said platen, cut-off mechanism beyond said feed mechanism comprising a blade pivotally connected to said frame at one end and having a guide therein, a rockshaft supported from said frame, a finger carried by said rockshaft and adapted to en-

gage the guide on said pivoted blade, a crank arm carried by said rockshaft, a bar pivotally connected at one end to said crank arm and having a cut-away portion near the opposite end thereof, a pin carried by said frame adapted to support said bar, a downwardly extending portion carried by said bar and having an L-shaped slot therein, and a pin carried by one of said slide blocks and adapted to engage said L-shaped slot.

13. In a printing press of the character described, a frame, a normally stationary platen mounted in said frame, a combined form bed and inking drum, mounted in said frame, adapted to reciprocate toward and away from said platen, inking rollers adapted to revolve about said inking drum and said form bed, an ink supply fountain mounted in said frame, arms pivotally supported in said frame, a ductor roller mounted at its opposite ends in said arms, a second arm pivotally connected at one end to said first-mentioned arms and having its opposite end slotted to engage a fixed part carried by said frame, and a cam mounted on a rotating part of said press and adapted to engage a part carried by said second arm.

14. In a printing press of the character described, a frame comprising side members and connecting rods extending between said side members, a normally stationary platen mounted in said frame, slide blocks mounted in the side members of said frame, a driving shaft journaled in said frame, means for operatively connecting said driving shaft to said slide blocks, a combined form bed and inking drum carried by said slide blocks, a form roller adapted to rotate about said inking drum and form bed, an ink supply fountain mounted in said frame, arms pivotally mounted at one end on said driving shaft, a ductor roller mounted in the outer ends of said arms, a shaft extending between said arms intermediate their ends, a second arm pivotally connected to said shaft and having its outer end slotted to engage one of the connecting rods of said frame, a downwardly extending member carried by said second arm intermediate its ends, and a cam mounted on said driving shaft and adapted to engage said downwardly extending member.

15. In a printing press of the character described, a frame, a normally stationary platen mounted on said frame, a form-bed mounted on said frame and adapted to reciprocate in the same plane with said platen, automatic feed mechanism movably mounted on said frame near said platen, and actuating mechanism for moving said platen into and out of the plane of said form-bed, said actuating mechanism being adapted to be rendered inoperative.

16. In a printing press of the character described, a frame, a normally stationary

platen mounted in said frame, slide blocks
mounted in said frame, a form bed carried
by said slide blocks, a driving shaft journaled
in said frame and having gears at the oppo-
5 site ends thereof, pitmen connecting said
gears to said slide blocks, feed mechanism
movably mounted above said platen, and
means actuated by the reciprocation of said

slide blocks to move said platen into and out
of the plane of movement of said form bed. 10

In testimony whereof, I affix my signature
in presence of two witnesses.

ERNEST O. CARTWRIGHT.

Witnesses:

E. O. HAGAN,
EDWARD L. REID.