

Nov. 26, 1935.

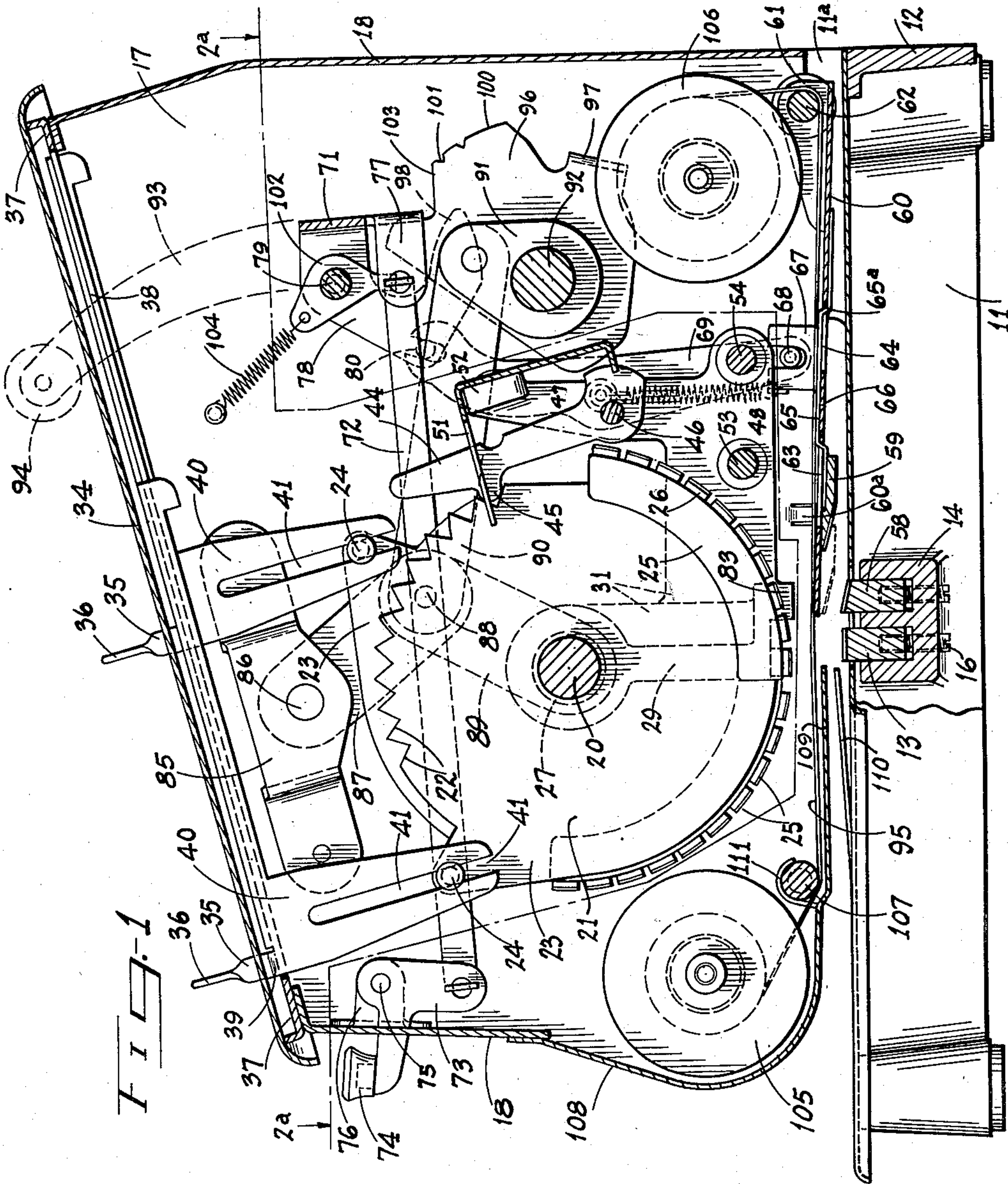
W. B. PAYNE

2,022,136

PRINTING APPARATUS

Filed April 7, 1932

5 Sheets-Sheet 1



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2,022,136

5 Sheets-Sheet 2

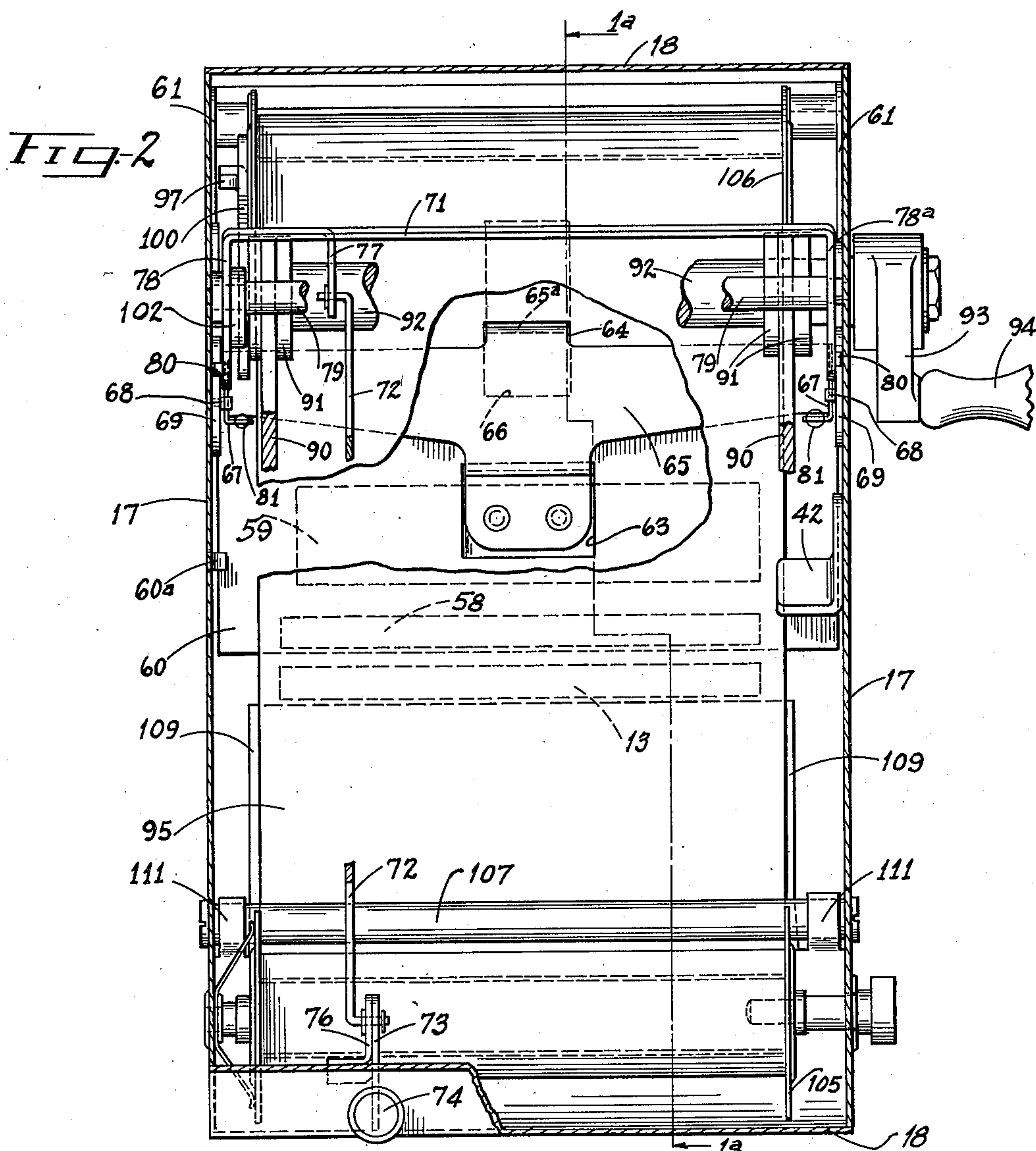


Fig.-9

NEW YORK COMPANY
GENERAL SUPPLIES

ROCHESTER, N.Y. _____ 19____

PAY TO THE
ORDER OF

EXACTLY \$ 98778 & 69 CTS

\$98778.⁶⁹

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Nov. 26, 1935.

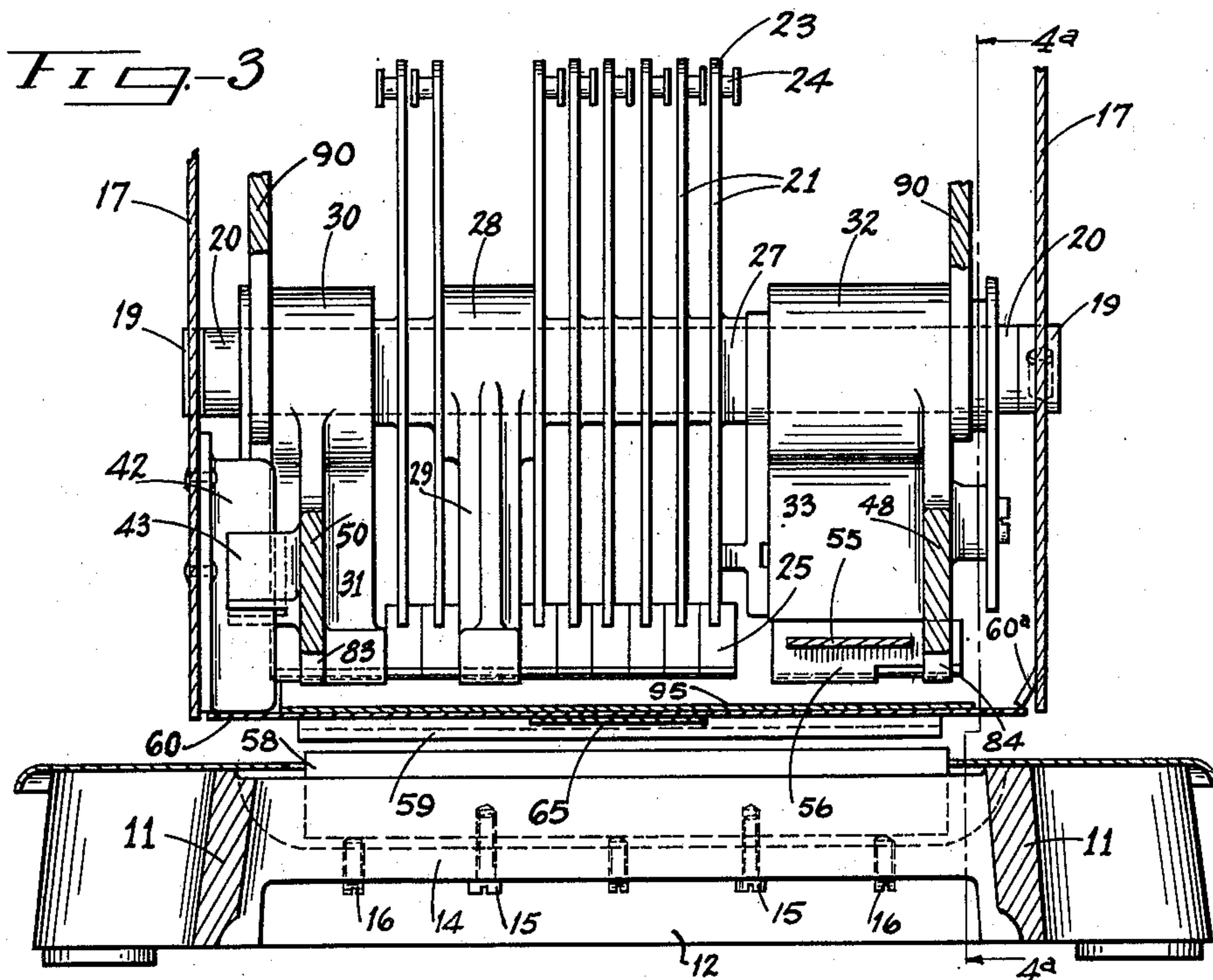
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PRINTING APPARATUS

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5 Sheets-Sheet 3



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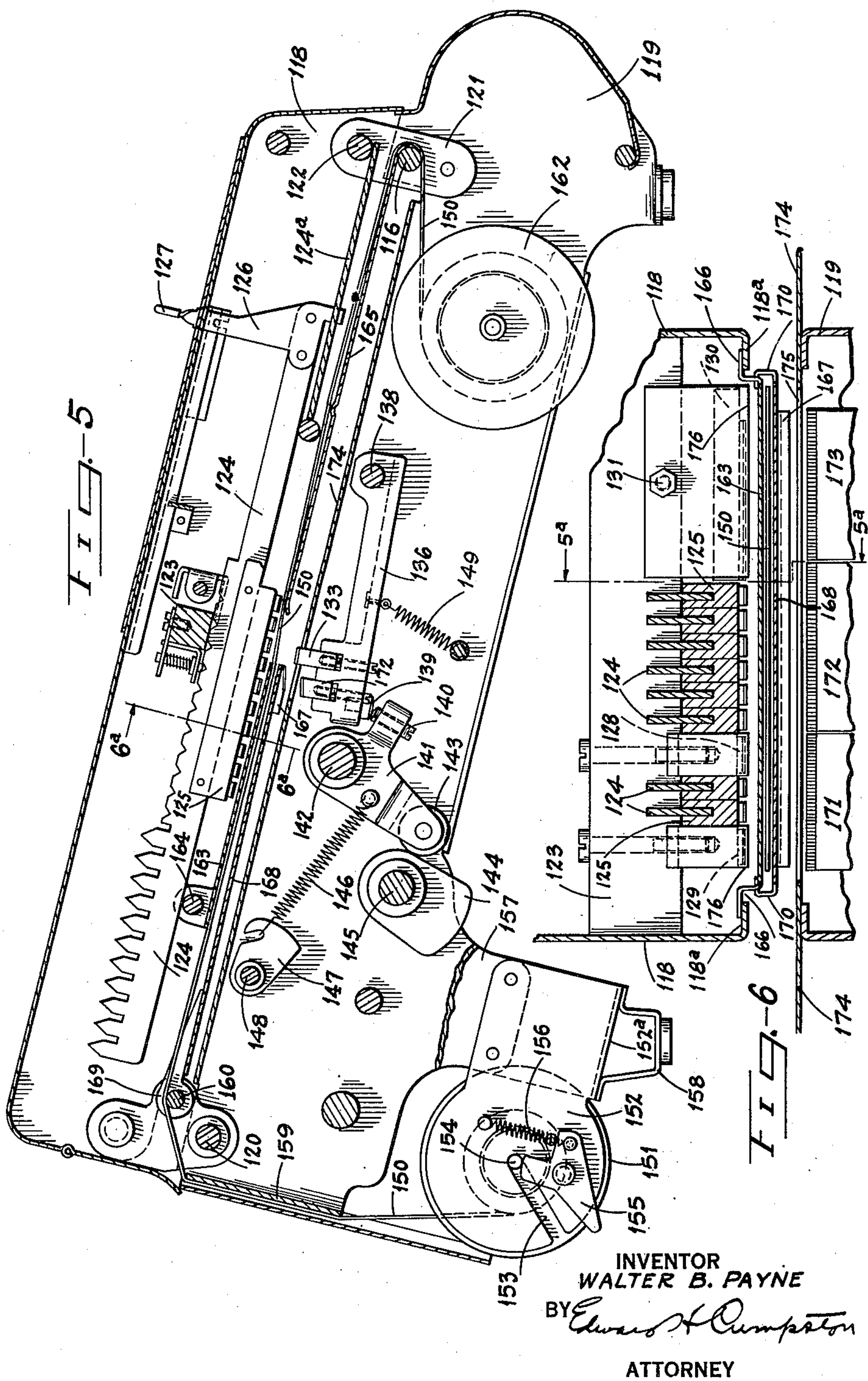
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PRINTING APPARATUS

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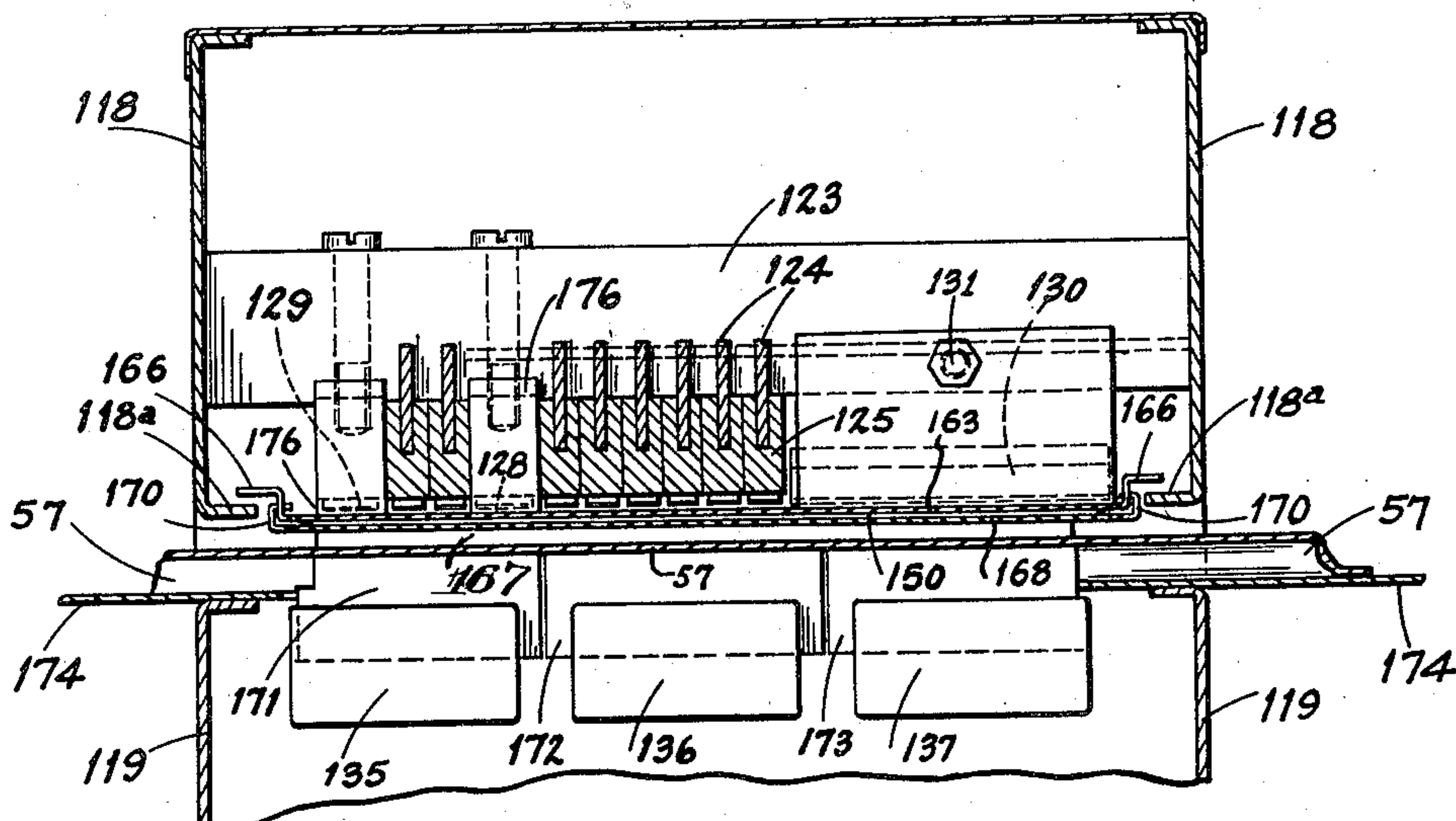
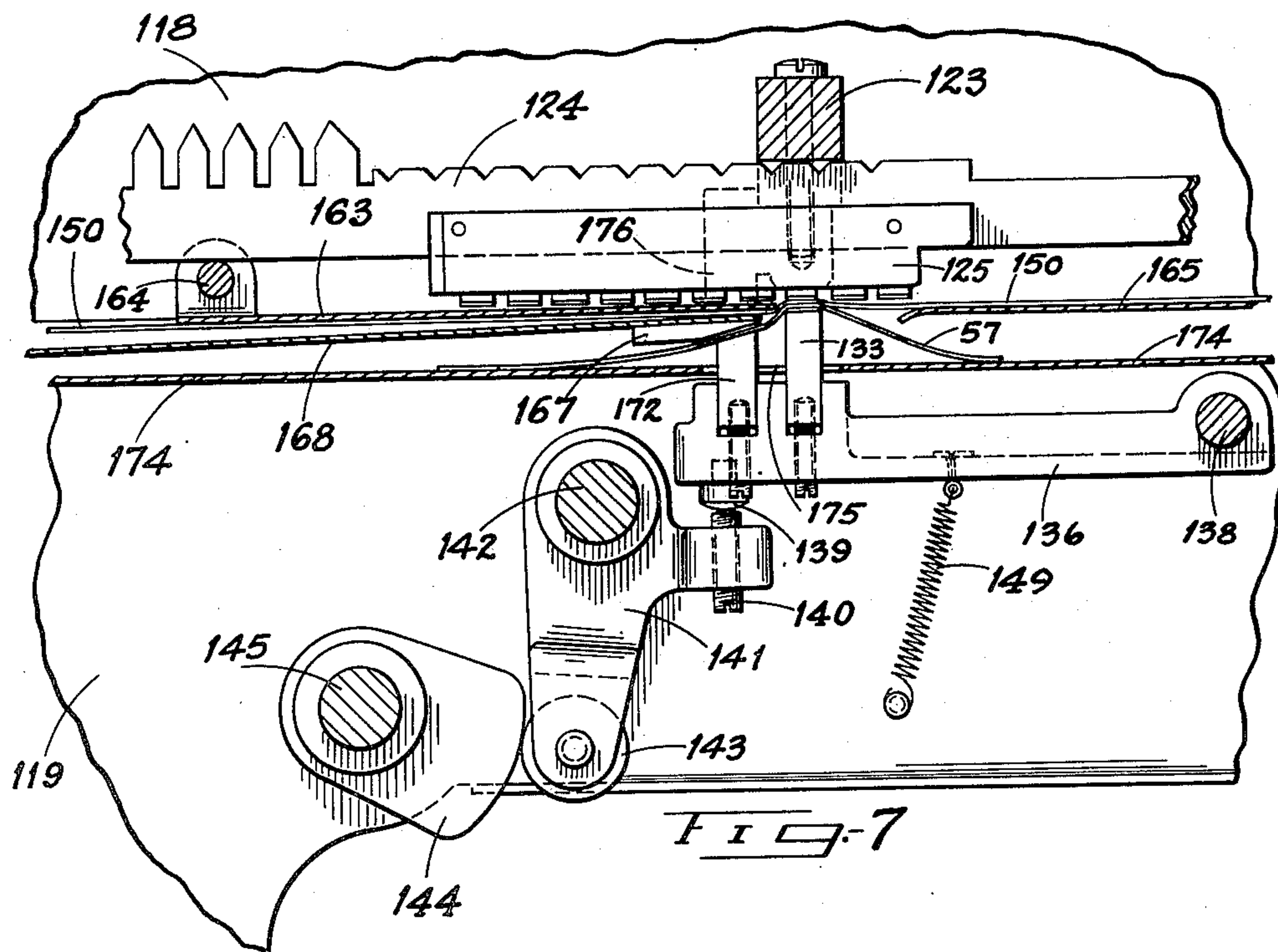
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2,022,136

PRINTING APPARATUS

Filed April 7, 1932

5 Sheets-Sheet 5



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UNITED STATES PATENT OFFICE

2,022,136

PRINTING APPARATUS

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corporation of New York

Application April 7, 1932, Serial No. 603,828

46 Claims. (Cl. 101—19)

The present invention relates to printing apparatus intended primarily for printing checks, drafts, and similar instruments, although it may be employed for printing various other articles such, for example, as bills, statements, and the like.

One object of the invention is to provide in a machine of the class described, improved mechanism of a simple and practical nature for effecting the printing and other operations described herein.

A further object of the invention is to provide an improved arrangement of parts for printing upon sheets of various kinds and for crimping or scarifying the same while in printing position within the machine.

A further object of the invention is to provide in a machine of the class described, associated printing and scarifying or crimping couples, the arrangement being such that the couples are actuated by common operating means, one in advance of another, by different movements of the operating means.

A still further object of the invention is to provide an improved machine having associated printing and crimping couples, and in which an inking ribbon is extended between the members of the printing couple and is operated independently of the members of the crimping couple.

A further object of the invention is to provide an improved machine of the class described in which an inking ribbon is fed between the members of a printing couple and between one of said members and a crimping couple and in which one member of each couple is moved substantially at the same time for cooperation with its opposing member.

To these and other ends the invention resides in certain improvements and combinations of parts, all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings:

Fig. 1 is a longitudinal vertical section through the machine, taken approximately on line 1a—1a of Fig. 2;

Fig. 2 is a sectional plan, taken approximately on line 2a—2a of Fig. 1, certain parts being broken away to better illustrate different forms of the construction;

Fig. 3 is a fragmentary sectional elevation taken substantially on line 3a—3a of Fig. 4;

Fig. 4 is a fragmentary sectional elevation taken approximately on line 4a—4a of Fig. 3;

Fig. 5 is a longitudinal vertical section of a

modified form of machine with certain parts omitted, taken approximately on line 5a—5a of Fig. 6;

Fig. 6 is a fragmentary transverse sectional elevation taken substantially on line 6a—6a of Fig. 5;

Fig. 7 is a fragmentary vertical section drawn to an enlarged scale and showing the parts for moving the crimping and printing platens to operating position.

Fig. 8 is a transverse sectional elevation showing the lower members of the printing and crimping couples moved to operating position, and

Fig. 9 is a fragmentary view of a sheet operated upon by a machine constructed in accordance with the invention.

The same reference numerals throughout the several views indicate the same parts.

The present invention relates to printing apparatus having improved means for both printing and crimping or scarifying the sheets on which the printing operations are performed. The present machine is particularly adapted for printing and crimping checks, drafts, and similar instruments and is designed for rapid and effective operation in printing and crimping the sheets, the operations of printing and crimping the sheets being effected without having to shift the position of the sheets within the machine for the different operations. In the sheet shown in Fig. 9 illustrating by way of example one of the particular usages of the machine, the amount of the check and other desired characters are illustrated in one line while in another line the signature of the payee is shown which is protected by crimping that portion of the sheet upon which the signature is written.

The preferred embodiment of the invention disclosed in Figs. 1 to 4 inclusive, is in the nature of an improvement on the machine shown in Patent No. 1,787,234, issued in the name of Raymond E. Bohrer et al. In the drawings of the present machine certain parts of the printing and setting-up mechanisms and other parts have been omitted, the same being fully shown and described in said patent.

Furthermore, the modified form of invention, shown in Figs. 5 to 8 inclusive, is of the general type of the machine shown in a joint pending application filed by Libanus M. Todd and Walter B. Payne October 18, 1930, and bearing Serial No. 489,618.

Referring to the drawings, there is illustrated a machine comprising a base having side walls 11 and end walls 12, this base being provided

with feet adapted to rest on any suitable supporting surface such as a table or desk. A platen 13 may be adjustably mounted on a cross rail 14 carried by the side members 11 of the base, the platen being adjusted by means of the draw screws 15 and adjusting screws 16, as best shown in Fig. 3. It will be understood that the platen preferably has its upper surface roughened for cooperation with the roughened type faces on the printing instrumentalities to be described later, so that an embossing or shredding action on the paper takes place when the type and platen faces are brought into engagement with the opposite sides of the paper.

Above the base, and supported from it by suitable brackets partly indicated at 11a there is mounted a casing including side walls 17 and end walls 18. In the side walls 17 slots are formed which serve as guideways for the reduced or flattened ends 19 of a shaft 20 which extends across the machine between the two side walls 17, so that rotation of the shaft is prevented, although it may move bodily in a transverse direction, the flattened ends sliding in the slots of the side walls during such movement.

Rotatably mounted upon the shaft 20 is a plurality of printing instrumentalities such as the type segments 21. Each of these segments is preferably of the shape shown in Figs. 1 and 4 and includes a series of teeth 22 formed on a portion of the periphery of the segment, and an extension 23 which has a pin 24 fixed therein and extending laterally to one side thereof. Around a portion of the periphery of each type segment 21 and approximately opposite the extension 23, is fixed a type block 25 having type faces 26 formed thereon. The type faces may represent digits from 0 to 9 inclusive, or the type block may carry any other suitable or appropriate characters. Each type face is preferably serrated or roughened for cooperation with the roughened platen 13, as above described.

The main body portions of the type segments 21 are preferably formed of comparatively thin sheet material, and the type blocks 25 are considerably thicker, as shown in Fig. 3, since the type blocks must be at least as thick as the width of the type characters formed on them. The type segments are placed on the shaft 20 with the adjacent sides of adjacent type blocks practically in contact, and with the body portions 21 spaced from each other, as clearly shown in Fig. 3. To hold the body portions 21 in alignment and to prevent the possibility of their wobbling or sliding longitudinally along the shaft 20, each of the segments 21 is preferably fixed to a sleeve 27 rotatably mounted on the shaft 20. Each of the sleeves is of a length approximately equal to or very slightly greater than the thickness of the type blocks 25. The end of the sleeve on each type segment may therefore bear against the end of the sleeve on the next type segment, and when adjacent segments are positioned in this manner the type blocks will be approximately in contact with each other, as shown in Fig. 3. Thus each type segment is independently rotatable upon the shaft 20 and is held in proper relationship to the other segments by means of the sleeve construction above described, the shaft constituting carrying or holding means for the printing instrumentalities.

Preferably two of the type segments at the left hand end of the group, as viewed in Fig. 3, are separated slightly from the others, to differentiate between the numerals printed for dollars

and those for cents. This separation may be accomplished by a collar 28 fixed to the shaft 20, preferably by a pin, not shown. A radial extension 29 is formed on the collar and preferably carries at its end a printing type comprising the word "and" or other suitable characters.

Another collar 30 is pinned to the shaft 20 at the left of the two type segments for printing the cents, these two type segments being held in proper alignment by the collars 28 and 30 and being prevented from moving longitudinally along the shaft by the collars. The collar 30 also has an extension 31 somewhat similar to the extension 29 on the collar 28. This extension 31 may have printing types formed at the end thereof, these types being adapted to print any suitable characters such as "cts."

At the right hand side of the machine, as viewed in Fig. 3, is a collar 32 also pinned to the shaft 20 and so arranged that the type segments for printing the dollars are held between the collar 32 and the collar 28 so that longitudinal movement of the type segments along the shaft is prevented. The collar 32 also carries a radial extension 33 similar to the extensions 29 and 31 on the other collars 28 and 30 respectively. The extension 33, however, is shorter than the extensions 29 and 31, and it does not carry any printing type at the end thereof.

It will be seen that the shaft 20 comprises holding means spaced from and substantially parallel to the platen 13, and that it carries a plurality of printing instrumentalities, these instrumentalities being held in position on the shaft or holding means by the collars above described so that they are properly aligned and retained against movement longitudinally of the supporting member. Furthermore, each separate printing instrumentality is independently settable to a position for printing any one of the characters formed on it, and all of the printing instrumentalities are bodily movable as a whole toward and away from the platen, this bodily movement taking place when the supporting or holding member 20 is moved upwardly or downwardly in the slots formed in the side wall of the casing.

The mechanism for setting the printing instrumentalities in position to print the desired characters, and for moving them bodily to effect the actual printing, will now be briefly described. Referring to Fig. 1 it will be seen that the casing of the machine is provided with a cover plate 34 having a series of slots, not shown, formed therein which are parallel to each other and extend longitudinally of the machine, the number of these slots being equal to the number of type segments in the machine. Setting instrumentalities, adapted to move the type segments into position for printing the desired characters, are slidably mounted in the slots. These setting instrumentalities of which only two are shown, may comprise bent sheet metal slides 35 having portions extending upwardly through the slots in the cover plate and terminating in finger pieces 36 by which each of the slides may be moved to any desired position along its slot. Below the cover plate and parallel thereto is a retaining plate 37 having longitudinal slots 38 therein, parallel to the slots in the cover plate but preferably offset therefrom. Each of the setting slides 35 is bent to form a horizontal offset portion 39, Fig. 1, resting upon the retaining plate 37 and a vertical portion 40 extending downwardly through the slot 38 in this retain-

ing plate for cooperation with the pins 24 on the type segments 21, the pins being received within slots 41 formed in the vertical portions 40 of the slides. It will be obvious from Fig. 1 that movement of the slides 35 along their slots will rotate the type segments 21 about the axis of the shaft 20. By moving the finger pieces 36, the type segments 21 may therefore be set to any predetermined position, so that any selected character on each type segment will be placed in proper position to cooperate subsequently with the printing platen 13, as more fully shown and described in the above mentioned patent.

The shaft 20 carrying the type bars, in addition to being guided by the side walls of the casing, is also guided by an angular shaped plate 42 on one of the side walls of the casing, the inner edge of the plate extending into a notch formed in a lug 43 carried by the extension 31 of the collar 30 on the shaft 20, as best shown in Figs. 3 and 4.

Means is provided for holding the type segments 21 in the position in which they are set to prevent accidental displacement thereof, such means preferably comprising spring pressed detents 44 having projections 45 for engagement with the teeth 22 of the segments, the detents being pivoted upon a suitable support, preferably a rod 46, Fig. 1. One end of the rod is secured upon an upstanding portion 47 of a rearwardly extending arm 48 on the extension member 33 carried by the shaft 20 and the other end of the rod is supported by a similar upstanding portion 49 of an arm 50 on the extension member 31 carried by the shaft 20, Fig. 3.

A comb plate 51 is suitably connected with and supported by lugs 52 on the upstanding portions 47 and 49 of the arms 48 and 50, the comb plate being slotted in the usual manner to receive and guide the detents 44 which hold the type segments in their different adjusted positions.

The arms 48 and 50 are connected by a pair of rods 53 and 54 arranged to support a slide, not shown, which carries a suitable part, such as a tongue 55 for supporting the prefix type block 56, Fig. 3, which together with the slide is operated by mechanism, not shown, similar to that disclosed in the above mentioned patent. The prefix block normally occupies a position beneath the end of the extension 33 of the collar 32 and may be provided with any desired characters such, for example, as those shown on the check 57 in advance of the characters representing the dollars and cents in the same line therewith as indicated in Fig. 9.

The means for crimping or scarifying that portion of the check or other instrument having the payee's name written thereon preferably comprises a fixed member 58 and a movable member 59, normally out of alinement with the fixed member and arranged to be moved into position to cooperate therewith and to be actuated by parts of the mechanism associated with the operating means for shifting the movable elements of the printing couple into position to cooperate with the fixed elements thereof. The fixed crimping element or platen 58 may be supported by any suitable means but is preferably carried by the cross rail 14 for supporting the platen 13 of the printing couple as shown in Fig. 1. The platen 58 may be formed in one or more sections, but preferably comprises a single bar having the upper sheet receiving face thereof scored or roughened in any desired manner for cooperation

with the scored face of the movable element 59 between which and the fixed element the sheet is inserted and operated upon as shown in Fig. 4. Adjustment of the fixed element 58 for cooperation with the movable element 59 to obtain the best results in the use of the parts is preferably effected by means of any desired number of screws, preferably arranged in the manner of the screws 15 and 16 shown in Fig. 3 for adjusting the printing platen 13.

The upper element 59 of the crimping couple extends transversely of the machine beneath a pivoted supporting plate 60, the front end of which overlies the platen 58 and the rear end of which is provided with upstanding portions 61 at its sides through which extends a supporting rod 62 as shown in Fig. 1. The pivoted plate 60 is provided with front and rear openings 63 and 64 through which extends holding means 65 for the upper member 59 of the crimping couple, said means being in the form of a slide and having front and rear downwardly offset portions and extending beneath the plate 60 as best shown in Fig. 1. The front portion of the slide is secured within a recess formed in the upper crimping element 59 and the rear portion is free to slide in engagement with the bottom surface of the plate 60 while the intermediate portion rests upon and is supported by the portion 66 of the plate 60 lying between the openings 63 and 64 therein. Movement of the slide to shift the crimping element 59 into alinement with the lower element 58 is limited by the engagement of a shoulder 65a on the slide with the portion 66 of the pivoted plate 60. The extremities of the slide which overlie the plate 60 at the sides of the casing are turned up to form tongues 67 which are slotted to receive the pins 68 on the lower ends of the operating levers 69 for the slide, said levers being disposed adjacent the side walls of the casing and pivotally supported by pins 70 secured upon said walls. With this arrangement it will be seen that the slide is in straddling relation with respect to the ribbon lying adjacent thereto.

The levers are actuated by a yoke 71 which in turn is actuated by a link 72 extending forwardly and connected with one arm of a bell crank lever 73, the other arm of which extends through the front wall of the casing and carries an operating finger portion 74. The bell crank is pivoted at 75 to a bracket 76 on the front wall of the casing. The rear end of the link is connected with a downwardly and forwardly extending lug 77 on the yoke 71. The forwardly extending arm portions 78 and 78a of the yoke are pivotally received by a rod 79 extending transversely of the machine and having its ends suitably connected with the side walls of the casing. The arms 78 and 78a of the yoke are provided with pins 80 which extend within the notched upper ends of the levers 69 for shifting the slide 65 and the upper crimping element 59 thereon when the yoke 71 is swung to the position shown in Fig. 4 by depressing the key or finger portion 74 of the bell crank 73 at the front end of the machine. Upon release of the key by the operator the parts just described are returned to normal position by spring means 81, at which time the pivoted plate 60 and crimping element 59 thereon are pulled up from the lowered position shown in Fig. 4 to the normal position shown in Fig. 1 by the springs 81, the lower ends of which are connected with lugs 82 on the tongues 67 of the slide 65 and the upper ends of which are connected

with the pins 70 upon which the levers 69 are pivoted. The plate is limited in its upward movement by means of one or more lugs 60a struck inwardly from one of the side walls of the casing at the bottom thereof.

Means for moving the plate 60 downwardly to urge the upper member of the crimping couple into cooperating relation with respect to the lower member, as shown in Fig. 4, preferably comprises the lugs or projections 83 and 84 on the lower ends of the extensions 31 and 33 respectively, depending from the collars 30 and 32 on the shaft 20, and similar lugs on extension 29 and prefix block 56, as shown in Fig. 3, the extensions being actuated by the toggle mechanism which is similar to that shown in the above identified patent.

The toggle mechanism is supported by a pair of U-shaped brackets 85, one on each of the side walls of the casing and each bracket having a stud 86, the outer end of which is preferably carried by the side wall of the casing with which the bracket is connected. Depending from each of the studs is a pair of links 87, only one of which is shown. Another stud 88 is carried by the lower ends of the links and receives the upper end of the single link 89, the lower end of which receives and is free to rotate upon the shaft 20 when operating to lower or raise the same during the printing and crimping operations. The toggle links 87 and 89 at each end of the shaft are operated by a rearwardly extending link 90 connected at its front end with the stud 88 which connects the links 87 and 89 and having its rear end connected with an arm 91 on an operating shaft 92. The shaft is journaled in the side walls of the casing and has one end extending beyond the casing and provided with a crank arm 93 having a handle 94 thereon for operating the same to effect operation of said shaft and toggle arrangement.

Upon moving the crank in the proper direction the toggle arrangement is operated to lower the shaft 20 and the type carrying parts thereon and if this is done when the adjustable element 59 of the crimping couple is in the non-operating position shown in Fig. 1, the type which has been set in alinement with the printing platen 13 will cooperate therewith to print through the ribbon 95 and upon the check or other sheet 57, the selected characters alined with the platen 13. However, if the movable element 59 of the crimping couple has been adjusted into alinement with the fixed element 58 thereof, then upon operating the toggle arrangement to lower the shaft 20 the projections 83 and 84 on the extensions 31 and 33 and similar projections on extension 29 and type prefix block 56 will lower the plate 60 and cause it to move the upper crimping element downwardly into the crimping position shown in Fig. 4, in which the type of the printing couple is held spaced from printing position. From this arrangement it will be seen that the operations of printing and crimping cannot be performed at the same time but that they can be performed one in advance of another by separate operations of the crank arm, in one of which operations the crimping element 59 will have been adjusted into alinement with the crimping bar 58 and in the other of which it will be at one side of the bar as shown in Fig. 1. Thus common operating means is provided for successively performing the printing and crimping operations, either of which may be performed in advance of the other as desired. In the crimping operation it is of course, first necessary to

depress the key 74 at the front of the machine before pulling down the handle 94 of the crank arm but in the printing operation, after the type has been set up, the crank arm only is operated.

The toggle arrangement during the crimping operation is limited in its movement to operating position by an arm 96 fixed on the shaft 92 adjacent one end thereof, said arm carrying a laterally extending lug 97 which when the parts are in the position shown in Fig. 4 engages an extension 98 on the lever operating arm 78 of the yoke 71 when the key 74 of the bell crank 73 has been depressed to swing the yoke for the purpose of moving the levers 69 to advance the slide 65 and the adjustable crimping element 59 thereon into alinement with the fixed crimping element 58. It will be seen from Fig. 4 that in this position of the parts, the pressure which can be exerted by the toggle arrangement on the shaft 20 and the projections 83 and 84 for depressing the plate 60 and crimping element 59 is limited by engagement of the lug 97 with the extension 98 of the yoke arm 78. Upon release of the operating crank the parts will be returned from the lowered position shown in Fig. 4 to normal inoperative position as indicated in Fig. 1, by suitable spring means, not shown.

The arm 96 on the shaft 92 carries a segment 100 notched at 101 to receive the lower end of a pawl 102 free to swing upon the yoke-supporting rod 79. The pawl will engage within the notches when the crank arm is moved far enough to lower the shaft 20 and the printing type carried thereby to a position slightly above the final printing position, from which position the pawl, through cooperation with the segment will prevent return of the parts to normal position until the full stroke of the operating crank and toggle mechanism has been completed to insure the printing operations in the manner intended. The pawl which rides on the face 103 of the segment is snapped into the notches by a spring 104 when it reaches the same and the spring later serves to return the pawl to normal position when the toggle mechanism is returned to normal position. However, it will be noted from Fig. 4 that the crimping operation is completed before the notched segment of the arm 92 is moved far enough for the pawl to engage within the notches of the segment to which position movement of the parts is limited by engagement of the lug 97 on the arm 96 with the extended part 98 of the yoke arm 78 to prevent excessive pressure on the parts during the crimping operations.

The ribbon 95 is carried by the front and rear spools 105 and 106 respectively, which are suitably supported for rotation upon the side walls of the casing. The ribbon is extended beneath the rod 62 at the rear of the machine and is carried forwardly above the plate 60 and beneath a rod 107 adjacent the front spool 105. A removable cover plate 108 is provided at the front of the machine and has a portion 109 lying beneath the ribbon and cooperating with a plate 110 on the base to form a guideway for the check, which is supported by the plate 110 when inserted within the machine as shown in Fig. 4. The cover plate 108 may be supported in any desired manner, but is preferably held by a pair of tongues 111 thereon which are hooked over the rod 107 as shown in Fig. 1 at points adjacent its ends. Any suitable means, not shown, may be provided for rotating one or both spools to feed the ribbon beneath the printing type and the platen 13, preferably by a step by step movement.

It will be seen from Fig. 4 that while the inking ribbon is extended between the upper and lower members of the printing couple it is not extended between the members of the crimping couple, but instead travels in a plane at one side of both members of the crimping couple and preferably at the upper side thereof. It therefore operates independently of the crimping couple, but between the latter and the upper member of the printing couple.

With the arrangement described above, it is a comparatively simple and easy operation, after setting up the desired printing characters, to operate the crank to print the amount on the check, allowing the parts to return to normal position and then depressing the key 74 to shift the crimping element 59 into registry with the lower element 58 and again operating the crank to complete the crimping operation. However, this order of operation may be reversed if desired as the two operations are distinct one from another.

The modification shown in Figs. 5 to 8 inclusive embodies improvements applicable to the machine shown and described in the above mentioned application, the present disclosure omitting various parts of the prior machine and disclosing only such parts as are deemed sufficient to properly illustrate the modified form of the present invention.

The improvements, as in the above described form of the invention, relate to the idea of combining the printing and crimping couples in a machine in which the printing is effected through an inking ribbon, fed between the platens and printing type of the printing couple but in which the ribbon operates at one side of both members of the crimping couple and independently of each, as in the preferred form of the invention. However, in the modified form, the printing and crimping operations take place substantially at the same time.

The machine shown in the application referred to above is one which is motor driven and in which the check or other sheet to be printed is advanced step by step to different printing positions by means of a continuously operated belt, which is omitted from the drawings of the present application. In the machine of the application, neither the prefix nor the printing characters are shiftable longitudinally of the line of printing and it is therefore necessary to move the sheet to be printed relative to the printing characters, at least in certain cases, in order to insure uniformity in the location on the sheet of the different characters to be printed from time to time.

The machine shown in Figs. 5 to 8 inclusive comprises a pair of upper and lower frame sections or casings indicated respectively by the reference numerals 118 and 119, Fig. 5, the upper casing being pivoted at 120 to swing upon the lower casing to a substantially vertical position whereby to render the operating parts readily accessible for cleaning or adjustment when desired. Suitable retaining means is provided for securing the upper casing upon the lower casing, comprising lugs 121 extending upwardly from the lower casing inwardly of and adjacent the side walls of the upper casing, a retaining rod 122 being inserted through the side walls and the lugs whereby the two casings are secured in proper position one relative to another.

Disposed within the upper casing 118 are the various printing types, arranged beneath a cross rail 123 as best shown in Fig. 6. The printing types include a series of selectively shiftable

printing or type carrying members 124, Fig. 6 slidable longitudinally of the machine and each carrying a type element 125, the front ends of the members 124 being guided by a plate 124a extending transversely of the casing. The type elements are formed with printing types for printing any desired matter, preferably numerals from 0 to 9 inclusive. Any desired number of type elements may be provided but in the present arrangement eight are shown, six for printing the dollar characters and the other two, spaced therefrom, for printing the characters representing cents. The printing members are moved selectively for alignment with the platens therebeneath by shifting the type carrying bars 124 longitudinally of the machine by means of the arms 126 and the finger portions 127, it being understood that the type and setting-up mechanisms are substantially the same as shown and described in the pending application referred to above. In addition to the type or printing members 125 there are provided type blocks 128 and 129, the former being preferably designed to print the word "And" and the latter the characters "Cts.", although other characters may be substituted for those shown if desired.

In addition to printing the amount itself, mechanism is provided for printing a suitable prefix in front of the amount to avoid the possibility of raising the latter, the prefix preferably comprising the characters "Exactly \$", as shown on the printed sheet 57 in Fig. 9. These characters are carried by the type block 130 suitably connected with the cross bar 123 and preferably made adjustable longitudinally thereof and secured by a clamping bolt 131 extending through a slot in the bar, not shown.

The platens 133 which cooperate with the printing members are preferably formed in three sections one of which is shown in Fig. 5. One platen 133 cooperates with the type blocks 128 and 129 and the types 125 therebetween to print a part of the amount, such as the word "And", together with the characters "Cts." and the units and tens of cents interposed therebetween. Another platen 133 cooperates with type members 125 for printing the dollars and the other platen 133 cooperates with the characters on the block 130 to print the characters "Exactly \$", as shown on the check in Fig. 9.

The platens 133, are carried by separate levers 135, 136, and 137 the ends of which are in Fig. 8, the levers being mounted to swing upon the transverse shaft 138 as shown in Fig. 7. The platen levers are provided with pins 139 having heads extending below the bottoms of the levers for cooperation with the adjusting screws 140 on the platen actuating levers 141, one of which is located opposite each of the platen carrying levers. The levers 141 are mounted to swing on a transverse shaft 142 and are provided with rollers 143 which are engaged by the cams 144 on the transverse cam shaft 145 arranged to be driven by suitable mechanism, not shown, such as that disclosed in the application referred to above for driving the corresponding shaft shown therein.

The roller on the lever 141 is held in engagement with the cam 144 by means of a spring 146 connected at one end with the lever and at the other end with a part 147 loosely mounted on a support 148 extending transversely between the side walls of the lower casing 119 as shown in Fig. 5. Likewise the platen carrying levers have springs 149 connected therewith for holding the

heads of the pins 139 in engagement with the adjusting screws 140 carried by the levers 141.

The inking ribbon 150 is preferably wound upon a spool 151 supported at the rear of the machine in spaced connected brackets 152 which are slotted at 153 to receive the trunnions 154 on the ends of the spool, which are supported by the levers 155, held in normal supporting position by springs 156 as shown in Fig. 5. The brackets 152 connected by a transverse portion 152a are suitably supported preferably by the downward extensions 157 of the lower casing with which the rear shoes 158 for supporting the casing are connected.

The ribbon 150 is carried upwardly behind the rear wall portion 159 of the lower casing over a rod 160 and thence around a rod 161 at the front of the casing, from which the ribbon extends to the feed spool 162 suitably supported between the side walls of the casing. The feed spool is operated by mechanism, not shown, preferably corresponding to that provided for operating the ribbon feed spool disclosed in the application referred to above.

The ribbon is extended beneath a guide plate 163 pivotally supported by a transverse rod 164 in the upper casing 118, the rod also serving to support the type carrying bars 124 in their back and forth movement within the upper casing. The ribbon, at the right of the printing platen, Fig. 5, overlies a suitably supported guide plate 165 extending rearwardly from the roller 161 to a point slightly spaced from the front end of the guide plate 163 whereby an opening is afforded for the passage of the printing platens when they are raised to move the ribbon into engagement with the type members extending beneath the cross bar 123 in alinement with the platens.

The plate 163 is provided at its opposite sides and adjacent its front end with upwardly extending lugs 166 which normally rest upon the inwardly turned flange portions 118a of the upper casing 118, as shown in Fig. 6, it being understood that the plate 163 is free to swing about the axis of the supporting rod 164 at the rear end of the plate.

The upper element of the crimping couple, indicated at 167, is carried by plate 168 the rear end of which is provided with supports 169 pivoted upon the rod or roller 160, over which the ribbon is extended. The front end of the plate 168 is provided at its opposite sides with upwardly and inwardly extending lugs 170, the extremities of which rest upon the guard plate 163 beneath which the ribbon is fed.

The lower crimping elements which cooperate with the upper element 167 of the crimping couple are indicated at 171, 172, and 173, in Fig. 6, and are supported respectively by the platen levers 135, 136, and 137, the rear ends of which are shown in Fig. 8.

The sheet 57, is inserted within the machine, upon the shelf 174 in the proper position for printing, the plate being supported by the upper edges of the side walls of the lower casing 119 as shown in Figs. 7 and 8, or if preferred the sheet may be carried by a suitable holder or guide means, such as the sheet holding means disclosed in the above identified application. The plate 174 is provided with an opening 175 through which the lower elements of the printing and crimping couples are moved for cooperation with the overlying elements of said couples when the cams are operated to actuate the levers 141 for raising the levers 135, 136, and 137, which carry

the printing and crimping platens as shown in Fig. 7. When the platens are moved to operating position as shown in Figs. 7 and 8, the check or other sheet to be printed is moved by the printing platens into engagement with the ribbon, which is pressed against the face of the type alined with the printing platens and the printing operation is thereby effected. At the same time, or at about the same time, the lower crimping elements will cooperate with the overlying crimping element 167 to crimp or scarify that portion of the check on which the payee's name is written, so that the two operations of printing and scarifying the check are completed substantially at the same time. When the cams are moved from the operating position shown in Fig. 7 the levers 141 will be rocked by the springs 146 to the position shown in Fig. 5 and at the same time the platen carrying levers will be pulled down to normal position by the springs 149.

In moving the crimping platens to operating position the pressure exerted on the upper crimping element 167, carried by the pivoted plate 168, will cause the front end of the latter to be elevated which in turn will cause the pivoted guide plate 163 to be swung upwardly approximately to the position shown in Figs. 7 and 8. In this position the front end of the guide plate 163 will engage suitable stops 176 formed on the rear portions of the type carrying blocks 128, 129, and 130, as shown in Fig. 6 and by dotted lines in Fig. 7, to prevent the plate 163 from contacting with the type.

From Figs. 5 to 8 of the drawings and the above description relating thereto, it will be seen that various characters can be readily printed on checks, drafts, and other instruments by the feeding of an inking ribbon between the opposing members of the printing couple and that the sheets can be scarified or crimped by the elements of the crimping couple operating at one side of and independently of the inking ribbon. In other words, the ribbon is fed between the members of the printing couple and also between the type members of the printing couple and both members of the crimping couple but not between the latter. As in the preferred form of the invention the movable members of the printing and crimping couples are actuated by common operating means, although in the modified form it is the lower members of the two different couples which are moved rather than the upper members, as in the arrangement shown in Figs. 1 to 4 inclusive.

The operation of the modified arrangement is the same as that of the machine described in the application referred to above, that is, so far as the printing operations are concerned. The operation of the crimping couple will be readily understood from the description above, this operation requiring no additional effort on the part of the operator since at each printing operation the lower crimping members are moved into position to cooperate with the upper crimping members by the levers which operate the platens of the printing couples.

The stops 176 for resisting the pressure produced by the crimping couple are preferably located on the rear ends of the type carrying blocks 128, 129 and 130 and extend slightly below the type. However these pressure resisting members may be located at other points if desired and independently of the type carrying parts for it is not the intention to limit them to any particular location or manner of support. With the parts

in the operating position shown in Fig. 7 the ribbon guide plate has been moved up into engagement with the pressure resisting stops 176 under the action of the plate 168 which carries at its front end the upper crimping member 167, between which and the lower member 176 the sheet 15 to be printed is shown. The ribbon, it will be noted, lies between the plates 163 and 168 and is pressed between the front ends of said plates during the printing and crimping operations. As soon, however, as the pressure on the levers 135 is released to permit them to move downwardly to the position shown in Fig. 5 the pivoted plates 163 and 168 will return to normal position and thus free the ribbon for advancement above the crimping couple and between the upper and lower members of the printing couple. The guard 163 in addition to forming guide means for the ribbon serves to protect the same by preventing it from coming in contact with the type overlying the crimping couple, the type being also protected by maintaining the guard in spaced relation thereto through the medium of the stops or pressure resisting members 176 extending slightly below the type and checking the upward movement of the guard when the parts are moved to the operating position shown in Fig. 7.

I claim:

1. In a machine of the class described, a printing couple, a crimping couple at one side of the printing couple, a ribbon for inking one member of said printing couple arranged for advancement between the members of the printing couple and means interposed between the ribbon and the crimping couple for holding it in spaced relation to the cooperating portions of the crimping couple.

2. In a machine of the class described, a printing couple, a crimping couple at one side of the printing couple, a ribbon for inking one member of said printing couple arranged for advancement between the members of the printing couple and independently of the cooperating faces of the members of the crimping couple, one of said couples when the opposing members thereof are in a predetermined relation serving to check operation of the other couple, and means for operating said couples.

3. In a machine of the class described, a printing couple, a crimping couple at one side of the printing couple for crimping the sheet to be printed, an inking ribbon extending between the members of the printing couple, means operating to support the ribbon independently of the cooperating faces of the crimping couple and of that portion of the sheet lying between the members of the crimping couple, actuating means for moving one member of the printing couple into cooperative relation with respect to the other, and means associated with the actuating means for moving one member of the crimping couple into position to cooperate with the other.

4. In a machine of the class described, a printing couple, a crimping couple for the sheet to be printed, a ribbon for inking one member of said printing couple arranged for advancement between the members of the printing couple, means operating to support the ribbon independently of the cooperating faces of the members of the crimping couple and of the portion of the sheet to be crimped, and means associated with one member of one couple arranged to move one member of the other couple into cooperating relation with respect to its opposing member.

5. In a machine of the class described, a print-

ing couple and a crimping couple each including a shiftable member for cooperation with the opposing member thereof, one shiftable member of one of the couples being adjustable to a predetermined position and effective when in said position to guard the shiftable member of the other couple against movement to cooperating position with respect to its opposing member, an inking ribbon arranged for operation between the members of the printing couple and independently of the members of the crimping couple, and means for moving the shiftable members of said couples into cooperative relation with respect to the opposing members thereof.

6. In a machine of the class described, a printing couple and a crimping couple each including a shiftable member for cooperation with the opposing member thereof, the shiftable member of one of the couples being adjustable to and from a position of alignment with its opposing member, an inking ribbon extending between the members of the printing couple and arranged for advancement therebetween independently of the members of the crimping couple, means for moving said adjustable member to and from said aligned position, and mechanism for moving the shiftable member of the other couple into cooperative relation with respect to its opposing member, said last mentioned shiftable member having means associated therewith arranged when it is moved to a predetermined position by said mechanism to move the aligned adjustable member into cooperative relation with respect to its opposing member.

7. In a machine of the class described, a printing couple and a crimping couple each including a shiftable member for cooperation with the opposing member thereof, the shiftable member of the crimping couple being adjustable to and from a position of alignment with its opposing member, holding means for the shiftable member of the printing couple adjustable when the shiftable member of the crimping couple is out of alignment with its opposing member to shift the movable member of the printing couple to a predetermined position, means associated with the holding means arranged for movement thereby to move the shiftable member of the crimping couple when in said aligned position into cooperating relation with respect to its opposing member, an inking ribbon extending between the members of the printing couple and independently of the members of the crimping couple, and means for supporting the sheet to be printed between the opposing members of said couples.

8. In a machine of the class described, a selectively operable printing couple, a selectively operable crimping couple associated with said printing couple, one member of the printing couple being arranged when moved to a predetermined position to move the selective member of the crimping couple from selected position to crimping position, an inking ribbon extending between the members of the printing couple and operating independently of the crimping couple, and means for operating said printing and said crimping couples.

9. In a machine of the class described, a printing couple, an inking ribbon extending between the members of the printing couple, a crimping couple associated with the printing couple, one member of which is selectively movable to a predetermined position for cooperation with the other, operating means for moving said selective member to said position arranged in straddling

relation with respect to the ribbon, and means for operating said couples.

10. In a machine for printing sheets, a printing couple and a crimping couple each including
5 normally spaced members, an inking ribbon extending between the spaced members of the printing couple and between one member of the printing couple and the crimping couple and
10 in spaced relation to the cooperating faces of the latter, means for supporting the sheet to be printed between the ribbon and one member of the printing couple and that portion of the sheet to be crimped between the members of the crimping couple and independently of the ribbon,
15 means for operating said printing couple to print upon the sheet through the ribbon, and means responsive to said last mentioned means for operating the crimping couple.

11. In a machine of the class described, a
20 printing couple, one member of which is shiftable for cooperation with the other, a selective crimping couple associated with the printing couple, an inking ribbon extending between the members of the printing couple and between the
25 crimping couple and one member of the printing couple, means for moving the selective member of the crimping couple into alinement with its opposing member, said means including a yoke and a manually operable part connected
30 therewith, and toggle mechanism for moving the shiftable member of the printing couple into cooperative relation with respect to its opposing member when said selective crimping member is out of alinement with its opposing member, said
35 shiftable printing member being operable to move the selective crimping member into cooperative relation with respect to its opposing member when in alinement therewith, said toggle mechanism being limited in its movement by
40 a part on said yoke when operated to move the shiftable printing member into position to actuate the selective crimping member.

12. In a machine of the class described, a printing couple, a crimping couple, a ribbon for inking
45 one member of said printing couple arranged for advancement between the members of the printing couple and independently of the cooperating faces of the members of the crimping couple, and stop means associated with one member of
50 one of the couples arranged to limit the movement of one member of the other couple upon successful operation of said last mentioned couple.

13. In a machine for printing sheets, a printing couple including relatively movable members,
55 a crimping couple, an inking ribbon between the crimping couple and one member of the printing couple, means for supporting the portion of the sheet to be printed between the ribbon and one member of the printing couple
60 and the portion of the sheet to be crimped between the members of the crimping couple and independently of the ribbon, and common operating means for moving the one member of each couple for cooperation with its opposing member
65 to effect the printing and crimping operations substantially at the same time.

14. In a machine for printing sheets, a printing couple comprising a plurality of selective type carrying members and platen means for cooperation therewith, an inking ribbon extending
70 between the platen means and the type carrying members, a crimping couple both members of which are at the opposite side of the ribbon from said type carrying members, means for supporting
75 a portion of the sheet between the members

of the crimping couple independently of the ribbon and another portion between the platen means and the type carrying members, and means for moving the platen means to printing position and one member of the crimping couple into crimping relation with respect to the other substantially at the same time.

15. In a machine for printing sheets, a printing couple comprising a plurality of selectively arranged type carrying members and platen
10 means for cooperation therewith, an inking ribbon extending between the platen means and the type carrying members, supporting means for the platen means movable to shift it to printing position, operating means for said supporting
15 means, a crimping couple at the opposite side of the ribbon from the type carrying members, one member of the crimping couple being carried by said supporting means for movement thereby to crimping position, and means for supporting a
20 portion of the sheet to be printed between the members of the crimping couple independently of the ribbon and another portion between the ribbon and the platen means.

16. In a machine for printing sheets, a printing couple comprising a plurality of selectively arranged type carrying members and platen
25 means for cooperation therewith, an inking ribbon extending between the platen means and the type carrying members, supporting means for the platen means movable to shift it to printing position, operating means for said supporting
30 means, a crimping couple both members of which are at the opposite side of the ribbon from the type carrying members, supporting means for the crimping member nearest the ribbon permitting it to be moved from normal position by its opposing member in the direction of the type carrying members during the crimping operations, said last mentioned crimping member being
40 carried by said supporting means for movement thereby to crimping position, and means for limiting the movement of the crimping member nearest the ribbon when moved in the direction thereof by its opposing member.

17. In a machine for printing sheets, a printing couple including a type carrying member and a movable member, pressure resisting means, a crimping couple one member of which is movable in the direction of the pressure resisting
50 means and the other of which is shiftable and arranged during movement to crimping position to move the first mentioned crimping member into position to be arrested by the pressure resisting means, an inking ribbon extending
55 between the members of the printing couple and between the crimping couple and one member of the printing couple, and operating means for said printing and crimping couples.

18. In a machine for printing sheets, a printing couple including a movable member and a stationary type carrying member, pressure resisting means, a crimping couple the members of which are movable in the direction of the stationary type carrying member, means between the
60 crimping couple and the pressure resisting means arranged to engage the latter to limit the movement of the crimping couple in the direction of said type carrying member, an inking ribbon extending between the members of the printing
70 couple and between the crimping couple and said type carrying member, means for supporting the sheet between the members of the printing and crimping couples, and operating means arranged to shift the movable printing member to print-
75

ing position and the crimping couple in the direction of the stationary printing member to complete the crimping operation.

19. In a machine for printing sheets, a printing couple including a stationary type carrying member and a movable member, pressure resisting means, a crimping couple at one side of the type carrying member, means for supporting the sheet between the members of the crimping couple and between the members of the printing couple, an inking ribbon operating independently of the cooperating faces of the crimping couple and extending between the members of the printing couple, a movable guard for the ribbon extending between the latter and a portion of the stationary type carrying member and arranged in the path of the crimping couple and movable by the latter to engage the pressure resisting means during movement of the crimping couple to crimping position, and operating means for said printing and crimping couples.

20. In a machine of the class described, a printing couple comprising a type member and a platen spaced therefrom, stop means on said type member, an inking ribbon extending between the type member and the platen, a crimping couple at the opposite side of the ribbon from said type member, one member of the crimping couple being movable by the other in the direction of the stop means and limited in its movement by the stop means when said members are moved to crimping position, and common means for moving said crimping member to crimping position and said platen to printing position whereby to complete the printing and crimping operations at substantially the same time.

21. In a machine for printing sheets, a printing couple and a crimping couple, each including normally spaced members, one of each of which is shiftable for cooperation with its opposing member, an inking ribbon, means for supporting the ribbon between the spaced members of the printing couple and in spaced relation to the cooperating faces of the crimping couple during the printing and crimping operations, means for supporting the portion of the sheet to be printed between the ribbon and one member of the printing couple and the portion of the sheet to be crimped between the members of the crimping couple, and means for simultaneously moving the shiftable members of said couples into cooperating relation with respect to their opposing members.

22. In a machine for printing and crimping checks, a printing couple including cooperating type carrying and platen members, a crimping couple, means for supporting the checks between the cooperating members of each of said couples, an inking ribbon normally occupying a position between the type carrying member and the checks, means for supporting the ribbon in said position, and common means for operating said printing and crimping couples.

23. In a machine for printing and crimping sheets, a printing couple including cooperating type carrying and platen members, a crimping couple, means for supporting the sheets between the cooperating members of each of said couples, an inking ribbon normally occupying a position between the type carrying member and the sheet, spools at the opposite sides of said printing couple upon one of which the ribbon is wound, the other receiving the ribbon and being operable as a feed spool for advancing the ribbon between the members of the printing couple and in spaced relation to the cooperating faces of the crimping

couple during the crimping operation, and means for operating said printing and crimping couples.

24. In a machine for printing and crimping sheets, a printing couple including cooperating type carrying and platen members, a crimping couple, means for supporting the sheets between the cooperating members of each of said couples, an inking ribbon normally occupying a position between the type carrying member and the sheet, means for supporting the ribbon in said position, and actuating means movable to effect operation of one of said couples and subsequently movable to effect operation of the other couple without successful operation of the previously operated couple.

25. In a machine of the class described, a casing, a printing couple comprising a plurality of selectively arranged type carrying members within the casing and platen means for cooperation with said type carrying members, a crimping couple, means for supporting a sheet to be printed between the members of the printing and crimping couples, an inking ribbon extending between the type carrying members and the sheet means operating to support the ribbon in spaced relation to the crimping portions of said crimping couple during the crimping operation, and means for effecting operation of the printing and crimping couples.

26. In a machine of the class described, a base, a casing connected with the base, a printing couple comprising a plurality of selective type carrying elements mounted in said casing and platen means supported on said base for cooperation with the type carrying elements, a crimping couple comprising cooperating elements, one of which extends within said casing and the other being supported on the base, an inking ribbon disposed within the casing and extending between the members of the printing couple means for supporting the ribbon in spaced relation to the crimping faces of said cooperating crimping elements during the crimping operation, and operating means for the printing and crimping couples.

27. A check writing machine for protecting the amount of a check and for crimping the payee-name line, comprising a printing couple including a plurality of selective type carrying members, a crimping couple at one side of the printing couple, means for supporting a check between the members of the printing and crimping couples, an inking ribbon extending between the check supporting means and the selective type carrying members for inking the markings of said members applied to the check, means for supporting and advancing the ribbon between the check supporting means and the selective type carrying members independently of the cooperating faces of the crimping members, and operating means for the printing and crimping couples.

28. In a machine of the class described, a printing couple, a crimping couple at one side of the printing couple, means for supporting a sheet to be printed between the members of the printing and crimping couples, an inking ribbon extending between the members of the printing couple, a shield at one side of the crimping couple adapted to hold the ribbon out of contact with the members thereof, and operating means for the printing and crimping couples.

29. In a machine of the class described, a printing couple, a crimping couple, one member of which is movable relative to and normally

spaced laterally from the other to crimp the sheet to be printed, an inking ribbon extending between the members of the printing couple and at one side of the crimping couple in spaced relation to the portion of the sheet extending between the members of the crimping couple during operation of the latter, means for shifting the movable element of the crimping couple horizontally and vertically into position to cooperate with its opposing member, and means for operating the printing couple.

30. In a machine of the class described, a printing couple, a crimping couple, an inking ribbon extending between the members of the printing couple, operating means for moving one member of the crimping couple into position to cooperate with its opposing member, said operating means including a part serving as a guide for the ribbon, and means for operating said printing couple.

31. In a machine for printing sheets, a printing couple, a crimping couple at one side of the printing couple, supporting means for the sheets, an inking ribbon extending between the members of the printing couple, said printing and crimping couples each comprising a movable element, actuating devices for shifting said movable elements to successively print and crimp the sheets, common operating means for said devices; and means for holding the movable element of one of the couples at inoperative position during cooperation of the movable element of the other couple with its opposing member.

32. In a machine for printing sheets, a printing couple comprising relatively movable platen and type carrying members, pressure resisting means, a crimping couple at one side of the printing couple, means for supporting the sheet between the members of the crimping couple and the members of the printing couple, an inking ribbon extending between the members of the printing couple, a guard for the ribbon extending between the latter and a portion of the type carrying member and in the path of the crimping couple, said guard being held by the pressure resisting means during movement of the crimping couple to crimping position, and operating means for said printing and crimping couples.

33. In a machine of the class described, a base, a frame overlying the base, a printing couple, a crimping couple, the corresponding members of said couples being normally spaced one from another, one member of each couple being supported on the base, an inking ribbon normally overlying the base and extending between the members of the printing couple, means above the base adapted to support the ribbon for advancement between the members of the printing couple, means for supporting a sheet to be printed between the ribbon and one member of the printing couple and between the members of the crimping couple, and means for moving one member of each couple into position to cooperate with its corresponding member.

34. In a machine of the class described, a frame, sheet printing means thereon comprising type holding means and platen means for cooperation with the type of the holding means, crimping means for the sheet associated with the printing means comprising relatively movable crimping parts, means for supporting the sheet between the type and platen means and between the relatively movable parts of the crimping means, an inking strip extending between the

type and the sheet carried by the supporting means, means for supporting the inking strip in spaced relation to said crimping parts during the crimping operation, and means for effecting cooperation between the type and platen means and between said crimping parts whereby to print and crimp the sheet.

35. In a machine of the class described, a frame, sheet printing means thereon comprising type holding means and platen means for cooperation with the type of the holding means, crimping means for the sheet associated with the printing means comprising relatively movable crimping parts, means for supporting the sheet between the type and platen means and between the relatively movable parts of the crimping means, an inking strip extending between the type and the sheet carried by the supporting means, means for supporting said strip in spaced relation to the cooperating faces of said crimping parts during the crimping operation, mechanism for effecting cooperation between the type and platen means to print on the sheet, and means associated with and adapted to be moved by a portion of said mechanism to effect relative movement of said crimping parts whereby to crimp the sheet when extending between said parts.

36. In a machine of the class described, a frame, sheet printing means thereon comprising type holding means and platen means for cooperation with the type of the holding means, crimping means for the sheet associated with the printing means comprising relatively movable crimping parts, means for supporting the sheet between the type and the platen means and between the relatively movable parts of the crimping means, an inking strip positioned at one side of said crimping means and extending between the type and the sheet carried by the supporting means, means extending between the ribbon and the sheet at one side of the printing means for separating a portion of the sheet from the inking strip during the printing operation, operating means for effecting cooperation between the type and platen means to print on the sheet, and means associated with said operating means for effecting cooperation between said crimping parts whereby to crimp the sheet.

37. In a machine of the class described, a printing couple adapted for operation upon a sheet, a crimping couple at one side of the printing couple, an inking ribbon extending between the members of the printing couple and overlying the crimping couple at one side thereof, means for supporting and guiding the sheet between the members of the crimping couple in spaced relation to the portion of the ribbon overlying the crimping couple and between the ribbon and one member of the printing couple, and operating means for said printing and crimping couples.

38. In a machine of the class described, a printing couple adapted for operation upon a sheet, a crimping couple at one side of the printing couple, an inking ribbon extending between the members of the printing couple and overlying the crimping couple at one side thereof, means for supporting and guiding the sheet into position to be operated upon by the members of the crimping couple and by the ribbon and the members of the printing couple, said supporting and guiding means maintaining the portion of the sheet operated on by the crimping couple out of contact with the ribbon during the crimping operation, and means for moving one

member of the crimping couple and one member of the printing couple for cooperation with the corresponding members thereof, the movable member of the printing couple causing the ribbon to engage the sheet during the printing operation.

39. In a machine of the class described, a printing couple adapted for operation upon a sheet, an inking ribbon extending between the members of the printing couple for cooperation therewith to print on the sheet, a crimping couple aligned with the ribbon at one side thereof, means for supporting the sheet between the corresponding members of the printing and crimping couples, means interposed between the sheet supporting means and the ribbon for separating the sheet from the ribbon at one side of the printing couple during the printing operations, and means for effecting operation of the printing and crimping couples.

40. In a machine of the class described, a printing couple adapted for printing a sheet, one member of said printing couple being adjustable relative to another and having different printing portions thereon, a crimping couple, an inking ribbon extending at one side of the crimping couple and between the members of the printing couple, a movable supporting device for one member of each of said couples, guide means for the ribbon located between one member of the crimping couple and one of the printing portions of said adjustable printing member, and means for operating said device to move the printing and crimping members thereon into position to cooperate with their corresponding members to print and crimp the sheet.

41. In a machine of the class described, a frame, sheet printing means thereon comprising platen means, a holding device, a plurality of selectively operable type carrying members adjustable upon the holding device each to a position opposite the platen means, crimping means for the sheet associated with the printing means comprising relatively movable crimping parts, means for supporting a sheet between the type and platen means and between the relatively movable parts of the crimping means, an inking strip positioned at one side of said crimping means and extending between the type and the sheet carried by the supporting means, means for moving the holding device to move the type for cooperation with said platen means, and means connected with the holding device and adapted to be moved thereby to effect cooperation between said crimping parts whereby to crimp the sheet.

42. In a machine of the class described, a frame, sheet printing means thereon comprising platen means, a holding device, guide means for the holding device, type holding parts carried by said

device opposite the platen means, crimping means for the sheet associated with the printing means comprising relatively movable crimping parts, means for supporting the sheet between the type and the platen means and between the relatively movable crimping parts, an inking strip extending between the type and the sheet, means for moving the holding device upon the guide means to move the type for cooperation with said platen means, and means connected with the type holding parts adapted to be moved thereby to effect cooperation between said crimping parts whereby to crimp the sheet.

43. In a machine of the class described, a printing couple, an inking ribbon extending between the members of the printing couple, a crimping couple at one side of the ribbon, actuating means for the crimping couple at the other side of the ribbon, and means for operating said printing couple and said actuating means.

44. In a machine of the class described, a printing couple, an inking ribbon extending between the members of the printing couple, a crimping couple at one side of the ribbon, actuating means for the crimping couple overlying the opposite side of the ribbon and adapted to engage the ribbon when operating the crimping couple, and means for operating said printing couple and said actuating means.

45. In a machine of the class described, a printing couple including type and platen means, an inking ribbon, means supporting the ribbon for advancement between the type and platen means, a crimping couple for the sheet to be printed aligned with the ribbon and located at the side thereof on which the platen is located, the portion of the sheet operated upon by the crimping couple being separated from the ribbon by one member thereof during the crimping operation, operating means for said printing couple, and means on said last mentioned means operable to effect cooperation between the members of the crimping couple.

46. In a sheet printing machine of the class described, a printing couple including type and platen means, an inking strip, a crimping couple for the sheet between the members of which the sheet is disposed while in position to be operated upon by the printing couple, one member of the crimping couple lying between the inking strip and the portion of the sheet to be crimped when said portion is in position to be operated upon by the crimping couple, means for supporting the inking strip for advancement between the type and platen means and in overlying relation relative to the crimping couple, and means for operating said printing and crimping couples in a predetermined timed relation.

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