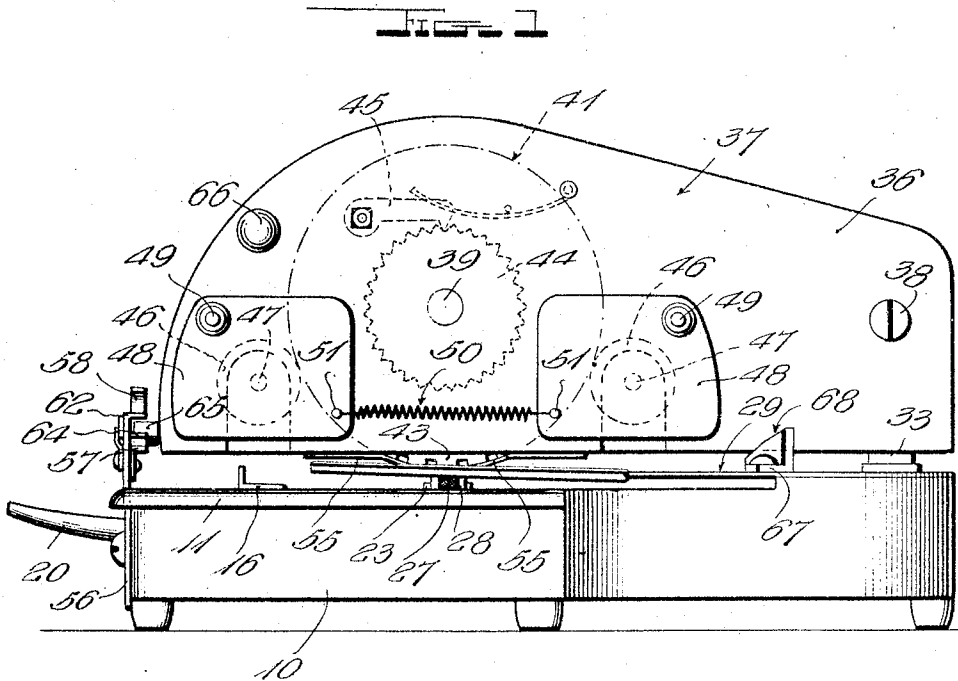
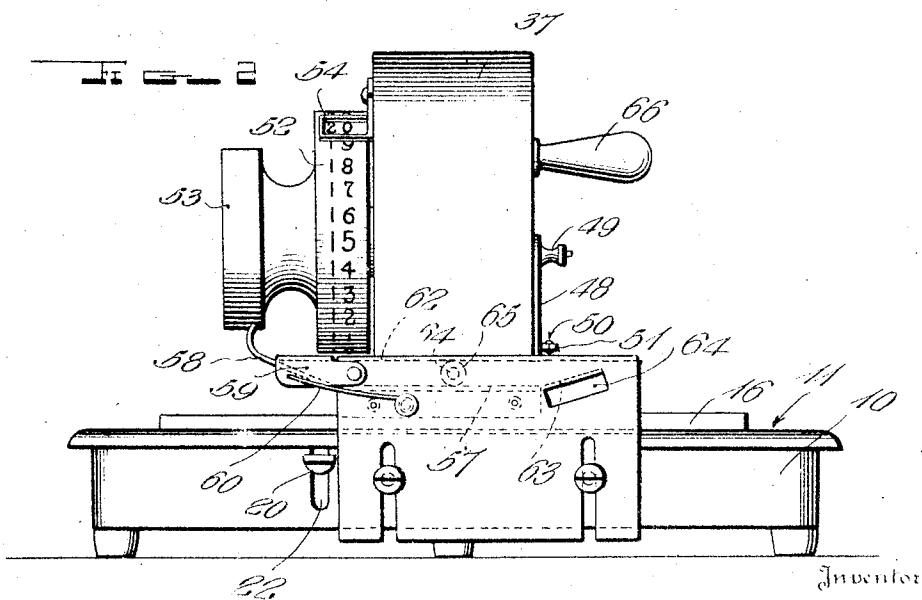


C. H. HASBROUCK.
MACHINE FOR PROTECTING CHECKS AND THE LIKE.
APPLICATION FILED SEPT. 12, 1918.

1,357,090.

Patented Oct. 26, 1920.

4 SHEETS—SHEET 1.



C.H. Hasbrouck

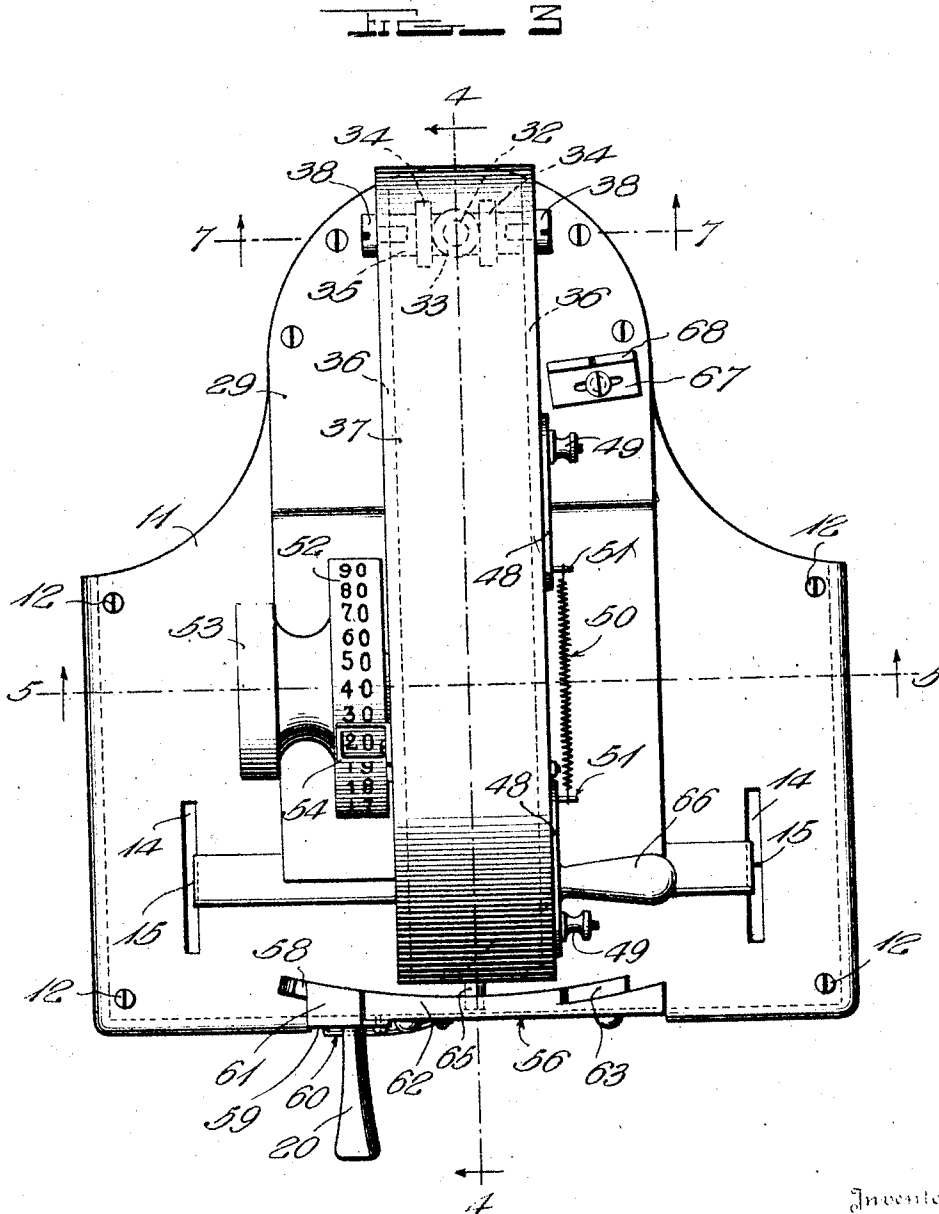
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Inventor

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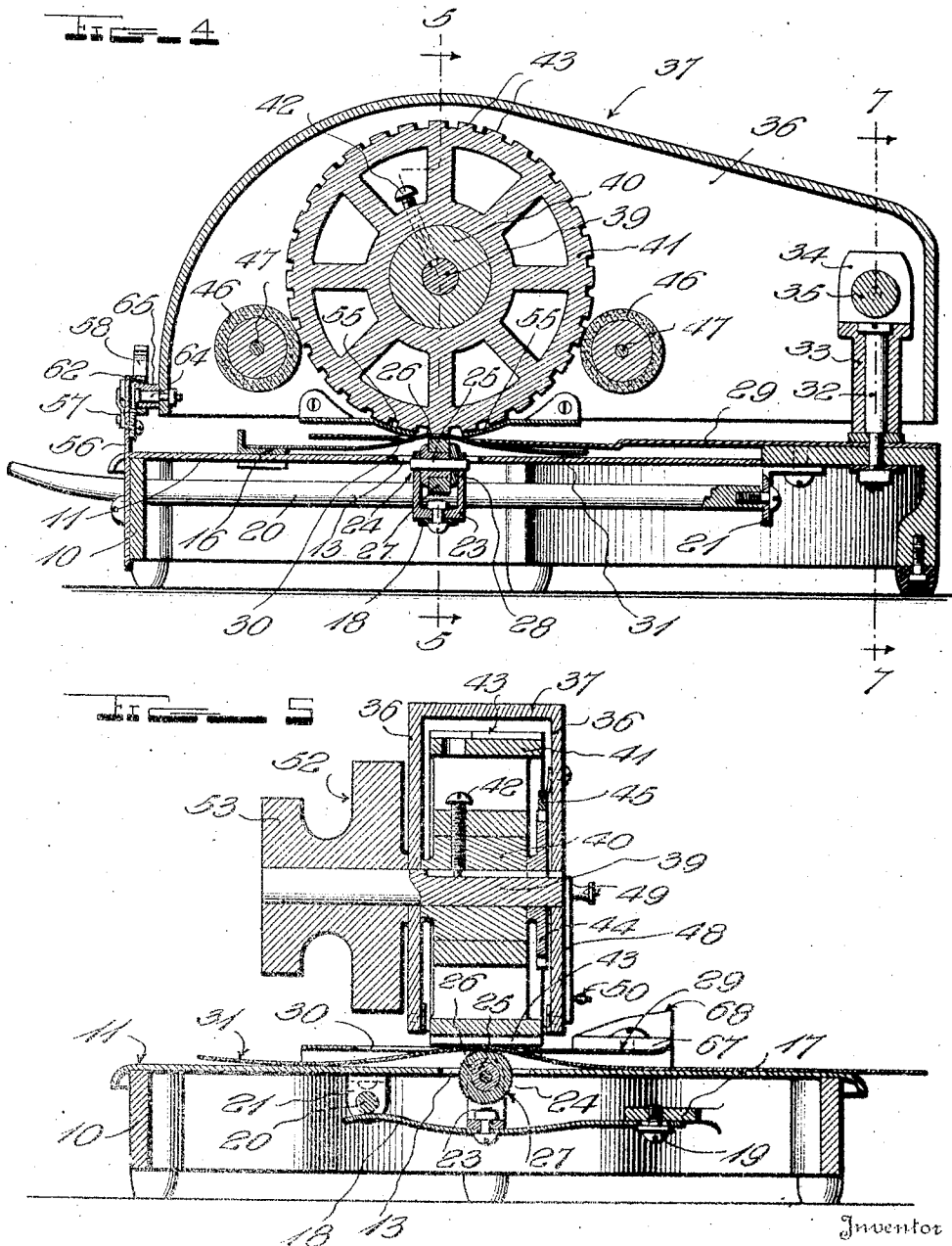
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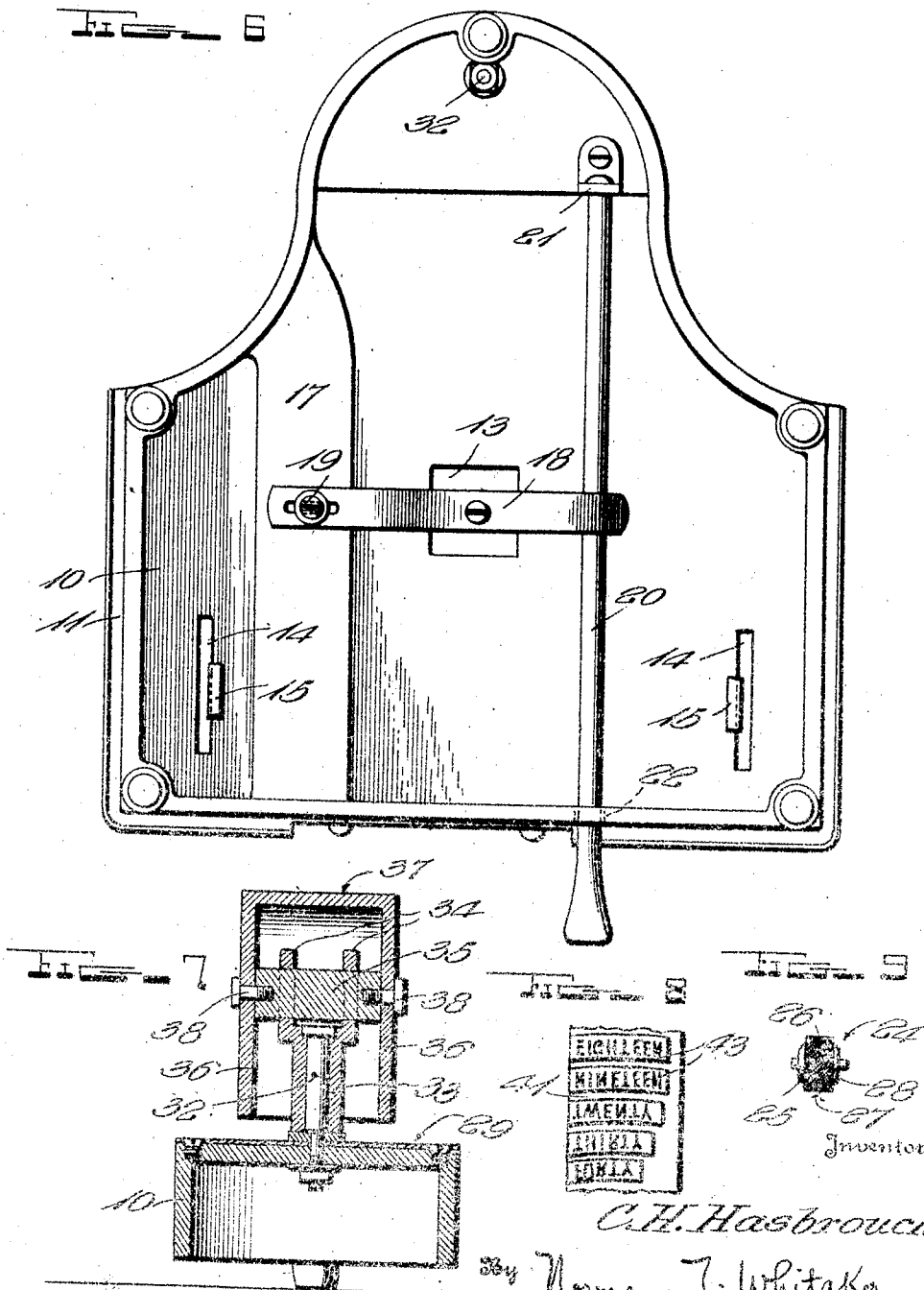
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4 SHEETS—SHEET 4.



UNITED STATES PATENT OFFICE.

CHARLES H. HASBROUCK, OF BINGHAMTON, NEW YORK.

MACHINE FOR PROTECTING CHECKS AND THE LIKE.

1,357,090

Specification of Letters Patent.

Patented Oct. 26, 1920.

Application filed September 12, 1918. Serial No. 253,791.

To all whom it may concern:

Be it known that I, CHARLES H. HASBROUCK, a citizen of the United States, and resident of Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Machines for Protecting Checks and the like, of which the following is a specification.

This invention relates to machines for protecting checks and the like.

An important object of the invention is to provide in a machine of the above mentioned character a means whereby a maximum speed in the operation of the device as a whole may be attained.

A further object of the invention is to provide in a machine of the above mentioned character a means whereby the space between the several characters, when transferred upon the face of a check or the like, may be uniformly increased or decreased.

A further object of the invention is to provide in a machine of the above mentioned character a means whereby a check or other document desired to be operated upon may be effectively guided in its course of travel into and through the device when undergoing the printing operation, regardless of the relative movement of the several cooperating elements facilitating the feed operation of the work or documents.

A further object of the invention is to provide in a machine of the above mentioned character a means whereby a movable element carrying certain desired indicia may be moved in an oscillatory path with respect to the cooperating printing element to produce a straight line printing effect upon the check or other document desired to be operated upon.

A further object of the invention is to provide in a machine of the above mentioned character means for constantly retaining the inking mechanism in contact with the printing element provided with the desired indicia.

A further object of the invention is to provide in a machine of the above mentioned character a means whereby the several functioning elements thereof may be adequately protected from the contact thereof with dust, dirt, grit and other undesirable foreign matter.

A further object of the invention is to provide a machine of the above mentioned char-

acter which is simple in construction, strong, durable, reliable in operation and inexpensive to manufacture.

Other objects and advantages of the invention will be apparent when taken in connection with the accompanying drawings.

In the drawings, forming a part of this specification and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a side elevation of the machine embodying my invention,

Fig. 2 is an end elevation of the same,

Fig. 3 is a top plan view of the machine embodying my invention,

Fig. 4 is a vertical longitudinal sectional view taken on line 4—4 of Fig. 3.

Fig. 5 is a vertical transverse sectional view taken on line 5—5 of Fig. 3,

Fig. 6 is a bottom plan view of the machine,

Fig. 7 is a transverse sectional view taken on line 7—7 of Fig. 3,

Fig. 8 is an enlarged fragmental view of a portion of a printing wheel, and,

Fig. 9 is a side elevation of a platen wheel.

In the drawings, wherein is shown a preferred form of my invention, the numeral 10 indicates a base having a top cover 11 secured thereto by means of screws or the like as shown at 12. The cover 11 is provided centrally with a rectangular opening 13 and is further provided relatively near the edges thereof with a pair of elongated openings 14, which openings receive the bent ends 15 of an adjustable guide 16, the guide being mounted upon the upper faces of the cover 11 as clearly shown in Fig. 3.

To a lip 17 preferably formed integral with the base 10 as clearly shown in Fig. 5 there is secured a spring 18 by means of a screw or the like 19. The free end of the spring 18 is arranged to normally engage a platen releasing lever 20, the lever 20 being secured at one end to an L-shaped member 21 carried by the base 10 while the free end of the lever 20 is projected through an opening 22 provided by the base 10. To the spring 18 substantially intermediate its ends there is secured a U-shaped platen wheel frame 23 within which there is journaled a platen wheel indicated as a whole by the numeral 24, the platen wheel comprising a center hub 25 upon which is mounted an annular ring 26 provided with

a serrated face as shown at 27, the annular ring 26 being retained upon the center hub 25 by means of a separable shoulder 28. To one end of the base 10 there is secured
 5 a fender 29 bearing a spaced relation with respect to the cover 11 as clearly shown in Fig. 4.

The fender 29 is provided relatively near its free end with an opening 30, the opening being arranged directly above the platen wheel 24 as clearly shown in Fig. 4 in order that a portion of a check or the like indicated by the numeral 31 may be effectively operated upon as will be more readily understood when considering the hereinafter described operation of the machine. To one end of the base 10 there is connected a vertically arranged pintle 32 upon which is loosely mounted a sleeve 33 which
 20 sleeve is provided with a pair of arms 34. Within the arms 34 there is journaled a shaft 35, which shaft is secured to the side walls 36 of a housing 37 by means of screws or the like 38. Within the housing 37 there is journaled a shaft 39 upon which is mounted a hub 40 carrying a printing wheel 41, the printing wheel and hub being secured in position by means of a set screw 42 one end of which engages the shaft 39
 30 as clearly shown in Fig. 5. Upon the periphery of the printing wheel 41 there is arranged a plurality of printing blocks 43. These printing blocks, as clearly shown in Fig. 8, are arcuate in shape, they having
 35 a center of curvature coincident with the axis of the pintle 32 and are provided with suitable indicia as shown. To the shaft 39 there is secured a ratchet wheel 44 which co-operates with a co-acting spring pressed
 40 pawl 45, the pawl 45 being arranged within the housing 37 and serving as a means for preventing accidental rotation of the printing wheel 41 during the printing operation.

Within the casing 37 there is arranged
 45 a pair of inking rollers 46 which are loosely mounted upon spindles 47 carried by plates 48, which plates are pivotally connected to the housing 37 by means of screws or the like 49. In order to retain the inking rolls
 50 46 firmly in contact with the printing wheel 41 there is provided a spring 50 having its ends connected to pins 51 carried by the plates 48 as clearly shown in Figs. 1 and 3.

Upon the shaft 39 there is secured a disk 55 52 having formed integral therewith a hand wheel 53. Upon the face of the disk 52 there is arranged a plurality of numerals as clearly shown in Fig. 3, which numerals correspond with the indicia provided by the
 60 printing blocks 43. In order to aid one to correctly determine the printing position of a printing block selected to be used in a printing operation as will more fully be set forth in the hereinafter described operation

of the machine, there is provided a gage 54 65 which is secured to a side of the housing 37.

Within the housing 37 there is arranged a pair of wings 55, the wings 55 being secured to the side walls 36 by means of screws as shown and having their free ends
 70 terminating in proximity to the platen wheel 24 as clearly shown in Fig. 4. As will be readily understood by those skilled in the art that the wings 55 serve as a means for preventing an undesirable portion of
 75 the check or document 31 from coming into contact with the printing wheel 41.

To one end of the base 10 there is secured a vertically adjustable plate 56 which is provided on one side thereof with a support 57, 80 one end of which support is bent upwardly and extends an appreciable distance beyond the edge of the plate 56 as clearly shown at 58. In proximity to the curved end 58 of the support 57 there is pivotally connected
 85 to the plate 56 a leaf 59, the leaf 59 being normally retained in position as shown in Fig. 2, by a spring 60. The leaf 59 carries a flange 61, which flange lies in a plane common with a flange 62 provided by the plate
 90 56 at the upper edge thereof. In proximity to the support 57 there is provided an auxiliary support 63 which is arranged obliquely with respect to the support 57 and formed by striking out a portion of the
 95 plate 56 as clearly shown at 64. To the end of the housing 37 there is secured a stub shaft 64 carrying a roller 65, the roller being adapted to move longitudinally upon the support 57 and the flange 62 during the
 100 printing operation and return of the printing wheel 41 to a normal position.

As a means for moving the housing 37 with respect to the base 10 during the printing operation there is provided a handle 66 105 which is secured to the housing by any suitable means and preferably arranged relatively near the end thereof as clearly shown in Fig. 3.

Upon the base 10 there is arranged an adjustable plate 67, which plate is provided with a flange 68 having its face inclined as clearly shown in Fig. 1. This flange is adapted to support the housing 37 immediately prior to the engagement of the printing wheel 41 with the platen wheel 24. By changing the position of the plate 67 I am enabled to vary the space between the several words or characters printed upon the check or other document 31. The spacing of the
 120 printed words is a highly important factor in a machine of this character and is accomplished for example in the following manner: Since the work 31 is fed into the machine by the contact of the printing wheel
 125 41 with the cooperating platen wheel 24 the length of travel of the work 31 prior to the printing of a word depends upon the point

on the platen wheel at which the printing wheel 41 comes into contact therewith. Should the plate 67 be moved to left rather than to the right in Fig. 5 the edge of the printing wheel, due to the inclined face of the flange 68, would be lowered, as it moved laterally, to contact with the platen wheel 24 nearer the top thereof than if the plate 67 were moved to the right. Therefore, due to the variation of the length of feed preliminary to the printing of a word, the space between the words printed would be diminished by moving the plate 67 to the left and increased by changing the position of the plate to the right.

In use, the operation of the device is as follows: A check or other document 31 is inserted into a machine between the printing wheel 41 and platen wheel 24, assuming of course that the roller 65 is resting upon the flange 62. The housing 37 is then swung on its pivot 33 to the right as shown in Fig. 3 whereupon the roller 65 drops upon the auxiliary support 63. The housing 37 is then moved to the left as shown in Fig. 3 whereupon the roller 65 passes from the auxiliary support 63 between the flange 62 and the support 57. The printing wheel 41 then engages the check or document 31 at a point on the platen wheel 24 whereupon the check or document is fed through the printing machine and at the same time the characters carried by the printing block 43, the printing block having been previously selected by the aid of the dial 52 and the gage 54, are printed upon the check or document 31. Immediately subsequent to the printing operation as described the roller 65 passes from between the flange 62 and the support 57 and is moved up the inclined curved end 58, thereby lifting the leaf 59 against the influence of the spring 60. After the roller 65 has moved sufficiently near the end of the curved end 58 the leaf 59 under the influence of the spring 60 assumes its normal position as shown in Fig. 2, whereupon the housing 37 may be moved to the right as shown in Fig. 2 to permit the carrying out of another operation. Should it be desired to remove the check or document 31 while the same is confined between the printing wheel 41 and the platen wheel 24 the lever 20 may be pressed to relieve the platen wheel 24 from engagement with the work, thereby permitting the check or document to be readily withdrawn.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same, and that various changes in the shape, size and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, what

I claim as new and desire to secure and protect by Letters Patent of the United States, is:

1. A machine of the character described comprising a platen wheel, a printing wheel adapted to be moved in a curved path over the platen wheel, said printing wheel being moved in a plane parallel to the axis of said platen wheel, and means for retaining the printing wheel in engagement with the platen wheel during a printing operation.

2. A machine of the character described comprising a platen wheel, a printing wheel having characters arranged thereon in a curved line, means for oscillating the printing wheel in a horizontal plane about a given point for engaging the platen wheel and printing wheel during the printing operation, and means for disengaging the platen wheel and printing wheel immediately subsequent to the printing operation.

3. A machine of the character described comprising a platen wheel, a printing wheel, and means for moving the printing wheel into engagement with and over the face of the platen wheel in a curved path, said printing wheel being moved in a plane parallel to the axis of said platen wheel.

4. A machine of the character described comprising a base, a platen wheel, a housing pivotally connected to said base, a printing wheel carried within said housing, means for moving the housing whereby the printing wheel is moved into engagement with and over the face of the platen wheel in a curved path, and means for disengaging the printing wheel from the platen wheel immediately subsequent to the printing operation.

5. A machine of the character described comprising a platen wheel, a printing wheel, means for removing the printing wheel into engagement with and over the face of the platen wheel in a curved path, said printing wheel being moved in a plane parallel to the axis of said platen wheel, means for disengaging the printing wheel from the platen wheel immediately subsequent to the printing operation, and means for retaining the printing wheel out of engagement with the platen wheel during the return movement of the printing wheel.

6. A machine of the character described comprising a platen wheel, a printing wheel, means for moving the printing wheel into engagement with and over the face of the platen wheel in a curved path, means for disengaging the printing wheel from the platen wheel immediately subsequent to the printing operation, means for retaining the printing wheel out of engagement with the platen wheel during the return movement of the printing wheel, and means for varying the point of contact between the printing wheel and platen wheel.

7. A machine of the character described comprising a platen wheel, a printing wheel, a plurality of arcuate shaped printing blocks carried by said printing wheel, means for moving a selected printing block into printing position, and means for moving the printing wheel into engagement with and over said platen wheel, said printing wheel being moved in a curved path, and in a plane parallel to the axis of said platen wheel.
8. A machine of the character described comprising a platen wheel, a printing wheel, a plurality of arcuate shaped printing blocks carried by said printing wheel, means for moving a selected printing block into printing position, means for moving the printing wheel into engagement with and over said platen wheel, said printing wheel being moved in a curved path and in a plane parallel to the axis of said platen wheel, and means for retaining the printing wheel in a given position during the printing operation.
9. A machine of the character described comprising a platen wheel, a printing wheel, means for moving the printing wheel in a horizontal plane into engagement with and over the face of the platen wheel in a curved path, means for lifting the printing wheel to a second horizontal plane immediately subsequent to the printing operation.
10. A machine of the character described comprising a platen wheel, a printing wheel, means for moving the printing wheel in a horizontal plane into engagement with and over the face of the platen wheel in a curved path, means for lifting the printing wheel to a second horizontal plane immediately subsequent to the printing operation, and yielding means for retaining the platen wheel in engagement with the printing wheel during the printing operation.
11. A machine of the character described comprising a platen wheel, a printing wheel adapted to be moved in a horizontal plane into engagement with and over the face of the platen wheel in a curved path, means for lifting the printing wheel to a second horizontal plane immediately subsequent to the printing operation, and yielding means for retaining the platen wheel in engagement with the printing wheel during the printing operation, and manually operated means for overcoming the influence of said yielding means.
12. A machine of the character described comprising a base, a platen wheel, a printing wheel, said printing wheel being provided with arcuate shaped printing blocks, inking means carried by said housing, yielding means for retaining the inking means in engagement with the printing wheel, means for bringing a selected printing block into printing position, and means for moving the printing wheel in a horizontal plane over the face of the platen wheel in a curved path, means for retaining the printing wheel in a given printing position, and means for disengaging the printing wheel from the platen wheel immediately subsequent to the printing operation.
13. A machine of the character described comprising a platen wheel, a printing wheel adapted to be moved in a curved path over the platen wheel, means for retaining the printing wheel in engagement with the platen wheel during a printing operation, and means for varying the point of contact between the printing wheel and platen wheel.
14. A machine of the character described comprising a platen wheel, a printing wheel adapted to be moved in a curved path over the platen wheel whereby the work is fed to receive thereupon printed words, and means for varying the length of feed for a given printing operation.
15. A machine of the character described comprising a platen wheel, a printing wheel adapted to be moved in a curved path over the platen wheel whereby the work is fed to receive thereupon printed words, and means for varying the length of feed for a given printing operation prior to the printing operation.
16. A machine of the character described comprising a platen wheel, a printing wheel adapted to be moved in a curved path over the platen wheel, said printing wheel being moved in a plane parallel to the axis of said platen wheel, means for retaining the printing wheel in engagement with the platen wheel during a printing operation, and resilient means for retaining the platen wheel in engagement with the printing wheel during a printing operation.
17. A machine of the character described comprising a platen wheel, a printing wheel having printing characters arranged thereon in arcuate shaped rows, means for oscillating said printing wheel about the center of curvature of said arcuate shaped rows in a plane parallel to the axis of said platen wheel whereby said printing wheel is moved into engagement with and over the face of said platen wheel, and means for disengaging the printing wheel from said platen wheel subsequent to a printing operation.
18. A machine of the character described comprising a platen wheel, a printing wheel adapted to be oscillated about a given point whereby the printing wheel is moved into contact with and over the face of the platen wheel, means for retaining the printing wheel in a given horizontal plane during the printing operation, means for lifting the printing wheel into a second horizontal plane immediately subsequent to the printing operation, and means for retaining the printing wheel in the second horizontal

plane during the return movement of the printing wheel to a normal position.

19. A machine of the character described comprising a platen wheel, a printing wheel adapted to be moved in a curved path over the platen wheel, said printing wheel being moved in a plane parallel to the axis of said platen wheel, means for normally retaining the printing wheel in engagement with the

platen wheel during a printing operation, 10 automatically operated means for disengaging the platen wheel from the printing wheel subsequent to a printing operation, and means for retaining the printing wheel disengaged from the platen wheel during the 15 return movement of the printing wheel to a normal position.

CHAS. H. HASBROUCK.