To all whom it may concern:

Be it known that I, John Whitaker, a citizen of the United States, and a resident of Lansdale, county of Montgomery, State of Pennsylvania, have invented certain Improvements in Check Printing and Scarifying Machines, of which the following is a specification.

One object of my invention is to improve the construction of check printing or writing machines so that the payee's name on the check, draft, or other paper, will be scarified at substantially the same time as the amount of the check is being printed and while the paper is in the machine.

A further object of the invention is to provide an independent device for scarifying the check on the payee's line and to make the scarifying device adjustable, so that it can be located in the proper position in respect to the amount line.

In the accompanying drawings:

Figure 1 is a transverse sectional view through a check printing device illustrating my invention;

Figure 2 is a sectional plan view on the line 2-3 of Figure 1, of a portion of the machine and illustrating a check in position to be printed and scarified;

Figure 3 is a transverse sectional view of the scarifying device;

Figure 4 is a transverse sectional view of another type of machine, illustrating the mechanism for scarifying the payee's name;

Figure 5 is a transverse sectional view illustrating a modification in which the feed wheels are the scarifying devices for the line of the payee's name;

Figure 6 is a sectional view showing another modification of the invention as applied to a different type of machine from that illustrated in Figure 1;

Figure 7 is a transverse sectional view of the machine illustrated in Figure 6;

Figure 8 is a transverse sectional view of the scarifying device shown in Figures 7 and 8; and

Figure 9 is a view of a modification.

Figures 1 and 2 represent one type of machine, such as that described in the patent granted to me on the 8th day of October, 1918, No. 1,280,921. In the present machine the scarifying device is independent of the type cylinder and can be adjusted to accommodate checks in which the line for the payee's name and the line for the amount vary.

1 is the base of the machine. 2 is an overhanging frame forming, in the present instance, an integral part of the base. 3 is a removable cover plate to allow access to the interior of the frame. Mounted in bearings in the frame is a type cylinder 4, which is movable toward and from a fixed platen 5 mounted on a plate 6, shown by dotted lines, and adjustably secured to the base 1. 7 is a guard secured to the overhanging frame 2 and 8 is a plate attached to the base 1. The guard and the plate are spaced sufficiently apart to allow for the free passage of the check a. Fig. 3 is an operating handle for moving the cylinder 4 toward and from the platen, and 10 is a hand wheel on a shaft 11 to which the cylinder 4 is secured; on turning the hand wheel the proper type can be brought into alignment with the platen. On the shaft 11 is a setting disk 12 on which are numerals corresponding with the type on the cylinder, and 13 is a fixed pointer, so that when a certain character is in line with the pointer a like character on the cylinder is in the printing position.

The handle 9 is secured to one of the eccentric 14 and its movement is limited by stops 15, and the two eccentrics are connected together by a bar 16 shaped to clear the cylinder and the independent scarifying device and, in the present instance, carries a brush 17 which travels over the face of the type. 18 is an inking roll carried by a bracket 19.

20 is the main feed roll mounted on a shaft 21 having its bearings in the base, and on the shaft is a ratchet wheel 22 with which engage a pawl 23 on a lever 24 connected by a rod 25 to an arm 26 of a rock shaft 27, this shaft has an arm 28 connected to one of the eccentrics by a link 29, so that, when the eccentric is turned, the pawl lever will be depressed and when the type cylinder returns after making an impression the pawl will engage the ratchet wheel and turn the feed wheel to feed the check forward a given distance. 30 is a presser wheel mounted on an arm 31 of a rock shaft 32.
actuated by a lever 33 on the outside of the machine, so that the presser wheel can be raised to admit a check.

The above described mechanism may be modified without departing from the main features of my invention.

In the present instance, the type and the platen are both scored so as to scarify the paper, but, in some instances, the surface of the type may be plain and a scoring or scarifying platen may be used, such as illustrated in the patent granted to me on January 16th, 1917, No. 1,213,049.

In using a check writer, the date and the payee's name are usually written in long-hand, or on a typewriter; the check is then placed in the machine and the amount of the check is printed in the space designated. By my invention, which I now proceed to describe, the check at the space occupied by the payee's name is scarified while the check is in the machine and while the amount of the check is being printed. The scarifications may be made in the payee's space simultaneously with the printing of the amount or on the return movement of the type cylinder.

Referring to the first instance to Figs. 1 to 4, inclusive, 34 is a base plate of the scarifying device, supported in brackets 35, 35a on the base 1 of the machine. On the base plate 34 is a scarifying jaw 36, and pivoted to the plate at 37 is an arm 38 carrying a jaw 39 which is located above the jaw 36, and this arm is loosely connected to the shaft 11 by a link 40, Fig. 1, so that when the cylinder is moved toward its platen the upper jaw 39 will be moved toward the lower jaw 36 and will scarify the paper located between the jaws.

I preferably make the scarifying device adjustable so as to properly scarify checks on the line of the payee's name where the distance between the lines of the checks vary, and in this instance I use an adjusting screw 41 extending through the frame 2; this screw extends into a threaded opening 42 in the base plate 34, so that on turning the screw the base plate carrying the scarifying jaws will be moved. In order to adjust the lower jaw 36, I provide a set screw 43 which extends through the bracket 33 and supports the jaw end of the plate 34, so that on turning the screw, the jaw 36 can be raised or lowered, insuring the proper scarifying of the paper.

Projecting through slots in the base plate 8 are two or more adjustable guides 44 for the check; by adjusting these guides the lines of the check can be brought into alignment with the printing and scarifying devices.

In Fig. 5, I have illustrated a modification in which the lower jaw 36a is secured in a fixed position on the plate 6a and the jaw 36a is adapted to fixed bearings and is actuated by a lever 45 connected to the jaw by a link 46 and to an operating arm 47 by a link 48; the arm is connected to the frame by a link 49. In this case however, there is no adjustment of the scarifying jaws toward or from the printing platen.

In Fig. 6, I have illustrated a modification in which the feed rolls 20 and 30 are so located as to be in line with the space 75 of the check occupied by the payee's name. The surfaces of these two rollers are so cut that they will intermesh and scarify the paper passing between them, so that these rollers not only feed the paper to the machine but scarify it at the same time the check is being printed with the amount. These rollers can be adjusted longitudinally on their shafts so as to move them toward or from the platen to agree with a given check, and the shaft of the upper roller is pivoted so that the roller can be raised by means similar to that in Fig. 1, to allow a check to be inserted in the machine.

In Figs. 7, 8, and 9, I have shown another type of check printing machine in which my invention can be applied. In this instance, a longitudinal shaft 11a is mounted in the frame 2a and longitudinally movable on this shaft is the type cylinder 4a. Movable with this type cylinder, in the present instance, is the inking roller 18a. The shaft 11a is connected by beveled gears to a handled operating shaft 50 and the feed mechanism is actuated by a cam 51 at the opposite end of said shaft. The platen wheel 53 is carried by a frame 53a on a rock shaft 52, which is actuated by the cam 51, and on turning the shaft 50 the check is fed transversely through the machine.

Extending parallel with the shaft 11a is a shaft 54 geared to the shaft 11a by gearings 54a, and on this shaft is a scarifying wheel 39a, which scarifies the paper on the line of the payee's name. This wheel has a tongue adapted to a spline in the shaft 54 and is carried by a bracket 55 adjustable longitudinally on the frame 2a. In the present instance the frame is slotted and screws pass through the slots and into the bracket 115 so as to hold the bracket in position after adjustment. Directly below the shaft 54 is a second shaft 56, which is carried by a frame 57 pivoted to huds 58 on the base 1. A wheel 36c is carried by the shaft 56. The 120 frame 57 overlaps the frame 53a and is pressed down by a spring 59. When the platen wheel 53 is raised it lifts the wheel 36c into position. The surfaces of the two wheels 36c and 39a are so formed that they will mesh and will scarify the paper passing between them, thus the check is not only printed but the paper at the space on which the payee's name has been previously written is also scarified.
In Fig. 10, I have illustrated another modification, in which scarifying wheels 36' and 39' are so adjusted in respect to each other that when the paper is fed through the machine by the feed rolls 20' and 30' there will be sufficient power and friction to cause the paper to be drawn through the space between the two scarifying rolls, so as to scarify the paper of the check as it is intermittently moved through the machine. The scarifying roll 39' can be raised with the feed roll 30' to allow the check to be inserted in the machine.

It will be seen that, by any one of the above described constructions, a check or other paper having a space in which a name is to be written, such as a payee's name, and a space for the amount indicating its value, can be printed on one line with the amount and scarified on that line, as well as scarified on another line, such as that occupied by the payee's name, while the check is passing through the machine.

The words “scarify” and “scarifying,” used in the specification and claims, are intended to include disturbing or displacing the fibers of the paper in any manner, or puncturing or perforating the paper.

I claim:

1. The combination in a machine for printing the amount indicating the value of a paper, of means for printing the amount; and independent means for scarifying another portion of the paper, such as the line of the payee's name on a check; an operating lever; connections between said lever and the printing and scarifying means, whereby said printing and scarifying can be effected by the movement of a single lever.

2. The combination in a machine for printing the amount indicating the value of a paper, of means for guiding the paper in a given path transversely through the machine; means for printing the amount on one line; independent means for scarifying another line, such as that of the payee's name, without altering the longitudinal position of the paper; and a single, operating lever for actuating both the printing and scarifying means.

3. The combination in a machine for printing the amount indicating the value of a paper, of means for simultaneously printing the amount and scarifying the paper under the printed matter; independent means for scarifying another line, such as that occupied by the payee's name; and adjusting mechanism for the said independent scarifying means.

4. The combination in a check writer, of means for simultaneously printing the amount indicating the value of the paper and scarifying the paper under the printed matter; independent means for scarifying a section of another line, such as that occupied by the payee's name; means for imparting movement to the independent scarifying means with the movement of the printing device; and mechanism for adjusting the independent scarifying means in respect to the line of printing.

5. The combination in a check writer, of a frame; a printing and scarifying cylinder and platen; means for operating the same; a sliding base plate carrying a scarifying jaw at one end; an arm pivoted to said plate and also carrying a scarifying jaw in line with the jaw of the base plate; a connection between the arm and the operating means of the printing cylinder; and a set screw on the frame engaging the base plate to adjust the plate in respect to the printing line.

In witness whereof I affix my signature.

JOHN WHITAKER.