Nov. 15, 1938. W. RITZERFELD 2,137,096

ROTARY REPRINTING AND COPYING MACHINE AND A METHOD OF OBTAINING PRINTED COPIES FROM A MIRROR SCRIPT ORIGINAL

Filed Sept. 28, 1937 2 Sheets-Sheet 1

Fig. 1

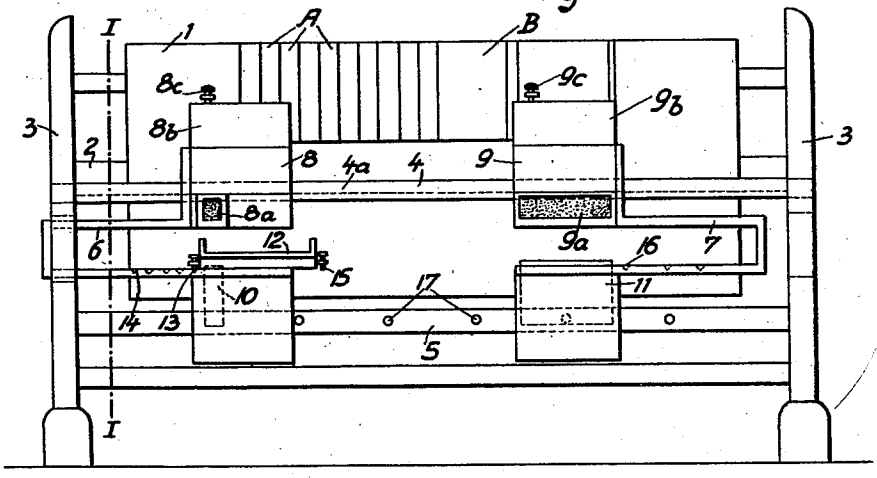


Fig. 2

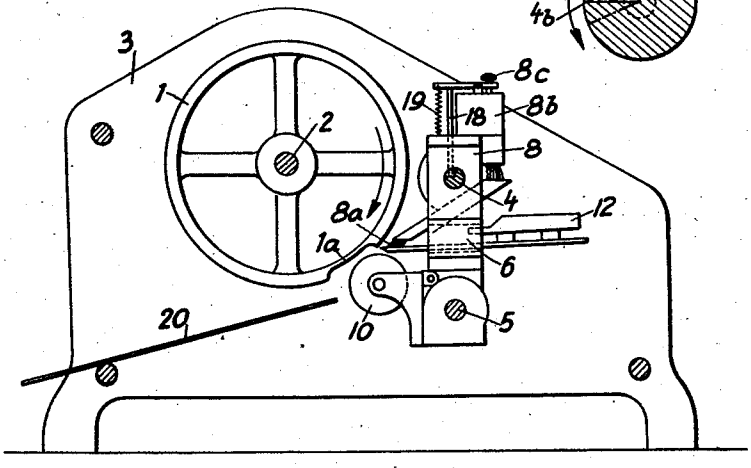
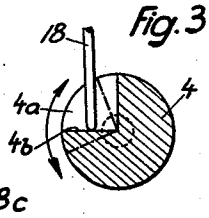


Fig. 3



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Fig. 5

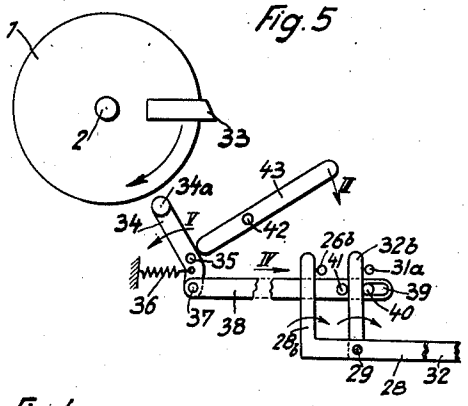
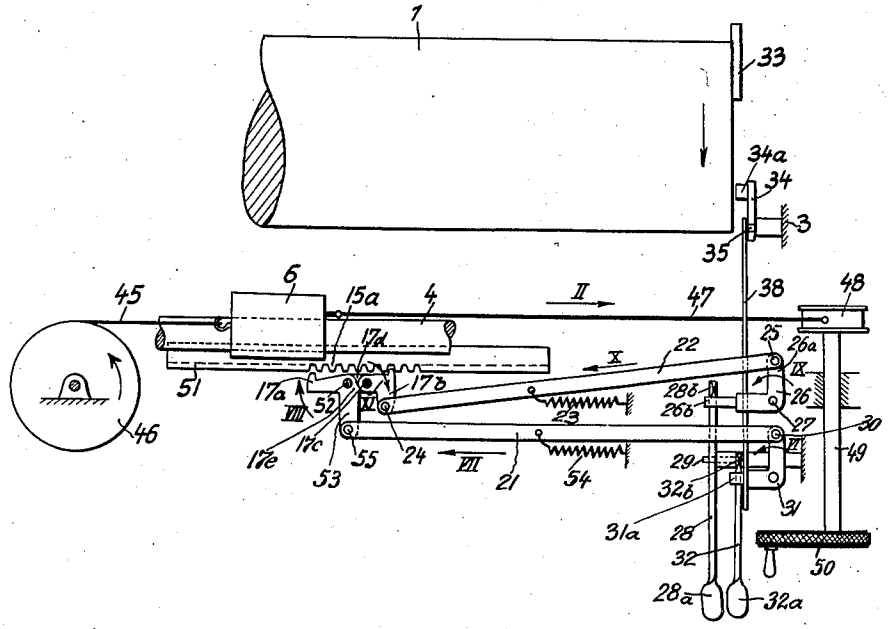


Fig. 4



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UNITED STATES PATENT OFFICE

2,137,096

ROTARY REPRINTING AND COPYING MACHINE AND A METHOD OF OBTAINING PRINTED COPIES FROM A MIRROR SCRIPT ORIGINAL

Wilhelm Ritzerfeld, Berlin, Germany

Application September 28, 1937, Serial No. 166,171
In Germany September 30, 1936

20 Claims. (Cl. 101—132)

The invention relates to rotary reprinting and copying machines and a method of obtaining printed copies from a mirror script original, the lines of which run in the direction of rotation of the printing drum, on sheets or the like previously moistened with a readily volatilizing liquid.

The object of the invention is to provide means for obtaining in one operation, from the same mirror script original copies which have partly the same and partly a varying content. Copies of this kind are used, for example, in the preparations for manufacturing work pieces for machines or the like which have to pass through a number of working processes. A number of operation labels become necessary of which each one has a constant text comprising, for example, the marking of the machine, the order number, the marking of the work piece itself, of the material and the like, whilst the varying text comprises for example the indication of the workshop (forge, turning shop, milling shop etc.), the method of treatment, tolerances and the like.

The method according to the invention consists broadly in effecting the reprinting at two different parts of the printing drum and so that at one place the constant text of the original is transferred to a plurality of the sheets to be printed and, on the contrary, at another place so that on each sheet of the plurality of sheets to be printed there is transferred another, varying part of the original.

A rotary reprinting machine according to the invention serving for carrying out this method is, in general, characterized by a frame, a printing drum rotatably mounted on said frame, means for rotating said printing drum and two printing units which are adjustable independently from one another parallel to the axis of the printing drum. Preferably they can be fixed relatively to the latter in the temporary printing position. Means for exhangeably holding the mirror script original on said printing drum may be provided. Each of the two printing units may comprise in the known way either a moistening device and a counter pressure roller, or may also comprise means for feeding the sheets to be printed, say a supply table in combination with these parts. However, a single supply table which may be adjusted relatively to both printing units by suitable means, e. g. by means for seizing (stopping) and may be coupled with one or the other unit may be used alone, according to requirements. It is clear that in the case of two tables the same means for adjusting may be used. It is desirable to arrange both printing units on guide means, e. g. slidably on one or more common guide bars or rods running parallel to the axis of the printing drum and to make these adjustable in a known way by e. g. seizing (stopping) means and by connection members both automatically from the printing drum and also by hand. The adjustment of the unit reprinting the varying text may be effected automatically by lines or sections (varying amount of adjustment) and the fixing of the two units in the temporary printing position may likewise be effected automatically. The means necessary for carrying out these steps are known: Different distances of the seizing (stopping) means and connection and coupling members. Another feature of the rotary reprinting machine according to the invention is that the moistening devices have supplying means for the moistening liquid, e. g. each device may have a liquid conduit, controlled automatically from the printing drum, each of which can be shut off separately. E. g. a turnable rod may be provided with which the valve rods are in engagement. Means are provided to move said turnable rod forward and back. E. g. this may be accomplished by a crank shaft arranged with one end coupled to the front wall of the drum. More especially the rotatable rod may show an axially extending sector-like recess and the front of the valve rod may be arranged towards the lower surface of the recess. Thereby the valves may be opened together or alternately. Further details of the invention will appear from the following constructional description of the machine:—

The accompanying drawings illustrate schematically one constructional example of the machine. Fig. 1 is a front view, Fig. 2 a vertical section on lines 1—1 of Fig. 1, Fig. 3 an enlarged cross section taken through one of the guide rods for the printing units.

Figs. 4 and 5 show how the displacement of one unit is carried out automatically or by hand from the printing drum.

Fig. 4 is a plan view.

Fig. 5 illustrates the device in detail in side elevation.

The printing drum 1 is rotatably mounted with its axle 2 in the side walls 3 of the machine, which also carry the guide rod 4 which can be turned forward and backward around its longitudinal axis, and the fixed guide rod 5. The slide members 6 and 7 of the printing units are displaceably guided on these rods. Each one of these units consists in the known way of a moistening device 8, 9 and a counter pressure roller 10, 11. In the starting position of the printing

drum 1 the counter pressure rollers 10, 11 are disposed opposite the recess 1a of the drum 1 so that the displacement of both units can be effected without the mirror script original, stretched on the printing drum, becoming effaced or damaged.

The unit 6 serves for reprinting the varying text A on the sheets to be printed. For this purpose it has a moistening strip of felt 8a of line width which is supplied from the liquid container 8b through the valve 8c. The counter pressure roller 10 is also made of line width. The unit 7 serves for reprinting the constant text B on the sheets to be printed. To this end it has a moistening strip felt 9a which extends over a number of line widths so that therefore on the sheets to be printed a strip can be moistened on which a whole section of the original can be printed. This moistening strip of felt 9a is supplied from the liquid container 9b through the valve 9c. The width of the counter pressure roller 11 corresponds to the width of the strip of felt 9a.

12 is a supply table for the sheets to be printed. In the constructional example illustrated, (Fig. 1), the supply table 12 is coupled with the printing unit 6 by means of a suitable spring pressed pin 13 engaging in corresponding recesses 14 in the carriage 6. Since a number of recesses 14 are provided the supply table can be adjusted relatively to the moistening device 8a and the counter pressure roller 10 according to requirement. The supply table 12 can further be coupled with the unit 7. In this case a spring pressed pin 15 engages in the recesses 16 of the carriage 7.

A number of borings or recesses 17 are arranged on the rod 5 and in these borings spring pressed pins (not shown) of the printing units 6 and 7 can engage, whereby the units are fixed on the rod 5 in the temporary printing position.

The control of the valves 8c and 9c is effected by reason of the valve rods 18 being in engagement with the rotatable rod 4. This latter has an axially extending recess 4a (Fig. 3) on the under surface 4b of which abut the lower ends of the valve rods 18. If the rod 4 is turned forward and backward in the direction of the arrows into the dotted position and back, which can be effected with the aid of known means (coupling means), not illustrated, from a driven part of the machine, the valves 8c and 9c are raised by tension springs 19 (Fig. 2) at periodic intervals so that a correctly measured quantity of liquid can pass to the felt strips 8a and 9a from the containers 8b and 9b. The closing of the valves 8c and 9c takes place automatically during the return of the rod 4 into the basic position shown in Fig. 3.

The printed sheets or the like, after leaving the printing drum 1 and the counter pressure roller 10, are taken up by a delivery table 20 and passed for example to a collecting container (not illustrated).

Referring now to Figs. 4 and 5, the unit printing the varying text (6) is connected through the tension element 45 with a spring roller 46 constructed in the known way. A second tension element 47 leads to a winding up drum 48 which is fixed on the axle 49 of a ratchet drive (not illustrated). The drum 48 and with it also the printing unit 6, as well as all parts connected with it, can be actuated with the aid of a crank wheel 50 in such a way that the printing unit 6 is moved against the action of the ratchet drive 46 in the direction of the arrow II, whereby the element 45 is unwound from the spring drum 46.

51 is a toothed rod carried on the printing unit 6, in the toothing 15a of which the ratchet and locking member 53, which is rotatable around an axis 52, engages. The member 53 consists of the two toothed pawls 17a and 17b which are rotatably connected together around a pin 17c. A nose 17d carried on the pawl 17b which abuts against a stop 17e on the pawl 17a prevents rotation of the pawl 17b against the toothing 15a when the pawl 17a is rotated around the pin 16 against the toothing 15a. The rod 21, which is under the influence of the tension spring 54 and rotatable around the pin 55, is connected to the member 53. A second rod 22, which is under the influence of the tension spring 23, is connected with the pawl 17b and is rotatable around the pin 24. The other end of the rod 22, rotatable around the pin 25, is connected with the one arm 26a of the angle lever 26 which is mounted so as to be rotatable around the pin 27. The second arm 26b of the angle lever 26 is under the influence of a key lever 28 which is rotatably mounted on the axis 29. The end 28b disposed opposite to the key 28a is, as can be seen from Fig. 5, turned upwards. This upwardly bent end 28b abuts against the arm 26b of the angle lever 26. The rod 21 is pivotally connected at 30 with one arm of the angle lever 31, the second arm 31a of which abuts against the upwardly bent end 32b of the lever 32 provided at its free end with a key 32a.

On the side wall of the drum 1 is arranged a stop 33 which is fixed within range of the pin 34a of a double lever 34 rotatably mounted on the side wall 3 of the machine at 35. This lever is under the influence of the spring 36 and is further pivotally connected at 37 with the rod 38 which is guided by means of the slot 39 and of the pin 40. A pin 41 is fixed on the rod 38 and abuts against the upwardly turned end 32b of the lever 32 likewise rotatable around the pin 29. Further, the lever 34 abuts against one arm of an adjusting lever 43 rotatably mounted at 42, which is rotatable in the direction of the arrow III. In the position illustrated by Fig. 5 the pin 34a is disposed in range of the stop 33, so that on rotation of the drum 1 in the direction of the arrow (Fig. 5) the lever 34 is rotated, the rod 38 is displaced in the direction of the arrow IV and the lever 32 is thus influenced and acts in turn, through the angle lever 31, on the rod 21 and the member 53.

If during use of the machine the printing unit 6 with all its accessory parts is to be automatically adjusted by one line by the drum 1, this is effected by the stop 33 of the drum pressing against the pin 34a. The lever 34 is thereby moved in the direction of the arrow V, whilst the rod 38 is displaced in the direction of the arrow IV (Fig. 5). This latter rotates, through its pin 41, the rod 32, which, in turn, presses through its arm 32b on the arm 31a of the angle lever 31 and rotates the latter in the direction of the arrow VI (Fig. 4), whereby the rod 21 is displaced in the direction of the arrow VII. The member 53 is thereby rotated so that the pawl 17a is moved in the direction of the arrow VIII against the toothing 15a, whilst simultaneously the pawl 17b moves out of the toothing 15a. The movements of the teeth 17a and 17b are so related that the tooth 17a engages in the toothing 15a as soon as the sliding part 6 is displaced by the width of one line under the influence of the spring action of the drum 46 and of the tension element 45. When this has

occurred the tooth 17b prevents any further movement of the printing unit 6 with all of its parts.

The same operation can, however, be effected by hand by depressing the key 32a, or the lever 43 is rotated in the direction of the arrow III. The lever 34 is thereby rotated under the influence of the spring action 36 oppositely to the direction of the arrow V so that the pin 34a comes out of range of the stop 33. If the key 32a is depressed the same operation is repeated as above described.

If, however, the part 6 is to be displaced for adjusting to any one row through a number of line spacings, the key 28a is depressed. The lever 28 thereupon produces through its end 28b a rotation of the lever 26 in the direction of the arrow IX so that the rod 22 is displaced in the direction of the arrow X. The latter rotates the pawl 17b by itself alone in such a way that its tooth moves out of the toothing 15a of the rod 51 in the direction of the arrow XI (Fig. 4). The part 6 can thereupon be moved towards the left for any desired number of lines together with all the parts carried by it and can be again locked on releasing the key 28a. The return of the part 6 with all its parts in the direction of the arrow II is effected through the gear 48, 49, 50.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed I declare that what I claim is:—

1. The method of printing onto copy sheets previously moistened with a readily volatilizing solvent a text having a constant portion to be imprinted onto each of said copy sheets and a varying portion having a plurality of lines to be selectively imprinted onto said copy sheets which comprises tensioning around the circumference of a printing drum a copyable mirror script original bearing said text with its lines in the direction of rotation of said drum, moistening a strip of said copy sheet having a width corresponding to that of said constant portion with a readily volatilizing solvent, moistening another strip of said copy sheet having at least a single-line width with said solvent, and subsequently passing said moistened copy sheet in contact with said original to print said constant portion and at least one line of said variable portion onto said copy sheet at different portions thereof.

2. In a rotary reprinting and copying machine printing onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for rotating said printing drum, a pair of printing units adapted to be displaced in a direction parallel to the axis of said printing drum, and means for adjusting the position of said printing units independently from one another in said direction.

3. In a rotary reprinting and copying machine printing onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for exchangeably holding a mirror script original on said printing drum, means for rotating said printing drum, a pair of printing units adapted to be displaced in a direction parallel to the axis of said printing drum, each of said units comprising a moistening device and a counter pressure roller, means for adjusting the position of said printing units independently from one another parallel to the axis of the printing drum, and means for displacing said units in said direction.

4. In a rotary reprinting and copying machine printing onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for exchangeably holding a mirror script original having a constant portion and a varying portion around the circumference of said printing drum, means for rotating said printing drum, a pair of printing units for reprinting said constant and said varying portion of the original respectively and being adapted to be displaced in a direction parallel to the axis of said printing drum, each of said units including a moistening device and a counter pressure roller, means for adjusting the position of said units independently from one another in said direction, means for displacing said printing units in said direction both manually and automatically by the rotation of said printing drum, and means for varying the amount of displacement of the unit reprinting the varying text.

5. In a rotary reprinting and copying machine printing onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for exchangeably holding a mirror script original having a constant portion and a varying portion around the circumference of said drum, means for rotating said drum, a pair of printing units for reprinting said constant and said varying portion of the original respectively and being adapted to be displaced in a direction parallel to the axis of said printing drum, each of said units including a moistening device and a counter pressure roller, means for adjusting the position of said units independently from one another in said direction, means for displacing said printing units both manually and automatically by the rotation of said printing drum, means for varying the amount of displacement of the unit reprinting the varying text, and means for automatically fixing the printing units in the temporary printing position.

6. In a rotary reprinting and copying machine printing onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for exchangeably holding a mirror script original having a constant portion and a varying portion around the circumference of said drum, means for rotating said drum, a pair of printing units for reprinting said constant and said varying portion of the original respectively and being adapted to be displaced in a direction parallel to the axis of said printing drum, each of said units including a moistening device and a counter pressure roller, means for adjusting the position of said units independently from one another in said direction, means for displacing said printing units both manually and automatically by the rotation of said printing drum, means for automatically fixing said printing units in their temporary printing position, and means for feeding clear sheets to be printed onto said printing drum.

7. In a rotary reprinting and copying machine printing onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for exchangeably holding a mirror script original having a

constant portion and a varying portion around the circumference of said printing drum, means for rotating said printing drum, a pair of printing units for reprinting said constant and said varying portion of the original respectively and being adapted to be displaced in a direction parallel to the axis of said printing drum, each of said units including a moistening device and a counter pressure roller, means for adjusting the position of said units independently from one another in said direction, means for displacing said printing units both manually and automatically by the rotation of said printing drum, means for automatically fixing said printing units in their temporary printing position, a supply table, means for adjusting said supply table with respect to said units, means for coupling said table with at least one of said units, and means for supplying readily volatilizing solvent to said moistening devices.

8. In a rotary reprinting and copying machine printed onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for exchangeably holding a mirror script original having a constant portion and a varying portion around the circumference of said printing drum, means for rotating said printing drum, a pair of printing units for reprinting said constant and said varying portion of the original respectively and being adapted to be displaced in a direction parallel to the axis of said printing drum, each of said units including a moistening device and a counter pressure roller, means for adjusting the position of said printing units independently from one another in said direction, means for displacing said printing units both manually and automatically by the rotation of said printing drum, means for varying the amount of displacement of the unit reprinting the varying text, means for automatically fixing both printing units in the temporary printing position, a feed table, means for adjusting said feed table with respect to said printing units, means for coupling said feed table with at least one of said units, means for feeding readily volatilizing solvent to said moistening devices including a conduit for each device, and means for controlling said feeding means.

9. In a rotary reprinting and copying machine printing onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for exchangeably holding a mirror script original having a constant portion and a varying portion around the circumference of said printing drum, means for rotating said printing drum, a pair of printing units for reprinting said constant and said varying portion of the original respectively and being adapted to be displaced in a direction parallel to the axis of said printing drum, each of said units including a moistening device and a counter pressure roller, means for adjusting the position of said printing units independently from one another in said direction, means for displacing said units both manually and automatically by the rotation of said printing drum, means for varying the amount of the displacement of the unit reprinting the varying text, means for automatically fixing both printing units in the temporary printing position, a feed table, means for adjusting said feed table with respect to said printing units, means for coupling said feed table with at least one of said units, a liquid conduit for each of said moistening devices for feeding readily volatilizing solvent thereto, valve means for each of said conduits, a valve rod for each of said valves for opening and closing the same when actuated, and means including a rotatable rod having a sector-like recess therein for actuating said valve rods and to control the flow of liquid through said conduits.

10. In a rotary reprinting and copying machine printing onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for holding a mirror script original having a constant portion and a varying portion around the circumference of said printing drum, means for rotating said printing drum, a pair of printing units adapted to be independently displaced in a direction parallel to the axis of said printing drum and each including a moistening device and a counter pressure roller, one of said units having a moistening device and a counter pressure roller of at least single line width for printing said varying portion of the original, the other of said units having such of multi-line width for printing said constant portion of the original, means for adjusting the position of said printing units, and manually operative elements and elements automatically operated by the rotation of said printing drum to displace said printing unit of single line width by a predetermined amount to selectively copy at least a single line of said varying portion of the original.

11. In a rotary reprinting and copying machine printing onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for holding a mirror script original having a constant portion and a varying portion around the circumference of said printing drum, means for rotating said printing drum, a pair of printing units adapted to be independently displaced in a direction parallel to the axis of said printing drum and each including a moistening device and a counter pressure roller, one of said units having a moistening device and a counter pressure roller of at least single line width for printing said varying portion of the original, the other of said units having such of multi-line width for printing said constant portion of the original, means for adjusting the position of said printing units, manually operable elements and elements automatically operated by the rotation of said printing drum to displace said printing unit of single line width by a predetermined amount to selectively copy at least a single line of said varying portion of the original, and means for automatically fixing said printing units in the temporary printing position.

12. In a rotary reprinting and copying machine printing onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for holding a mirror script original having a constant portion and a varying portion around the circumference of said printing drum, means for rotating said printing drum, a pair of printing units adapted to be independently displaced in a direction parallel to the axis of said printing drum and each including a moistening device and a counter pressure roller, one of said units having a moistening device and a counter pressure roller of at least single line width for printing said varying portion of the

original, the other of said units having such of multi-line width for printing said constant portion of the original, means for adjusting the position of said printing units, manually operable elements and elements automatically operated by the rotation of said printing drum to displace said printing unit of single line width by a predetermined amount to selectively copy at least a single line of said varying portion of the original, means for automatically fixing said printing units in the temporary printing position, and means for feeding the sheets to be printed to said printing drum.

13. In a rotary reprinting and copying machine printing onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for holding a mirror script original having a constant portion and a varying portion around the circumference of said printing drum, means for rotating said printing drum, a pair of printing units adapted to be independently displaced in a direction parallel to the axis of said printing drum and each including a moistening device and a counter pressure roller, one of said units having a moistening device and a counter pressure roller of at least single line width for printing said varying portion of the original, the other of said units having such of multi-line width for printing said constant portion of the original, means for adjusting the position of said printing units, manually operable elements and elements automatically operated by the rotation of said printing drum to displace said printing unit of single line width by a predetermined amount to selectively copy at least a single line of said varying portion of the original, means for automatically fixing said printing units in the temporary printing position, a feed table for feeding sheets to be printed to said printing drum, means for adjusting said feed table with respect to said printing units, means for coupling said feed table with at least one of said units, and means for supplying a readily volatilizing solvent to said moistening devices.

14. In a rotary reprinting and copying machine printing onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for holding a mirror script original having a constant portion and a varying portion around the circumference of said printing drum, means for rotating said printing drum, a pair of printing units adapted to be independently displaced in a direction parallel to the axis of said printing drum and each including a moistening device and a counter pressure roller, one of said units having a moistening device and a counter pressure roller of at least single line width for printing said varying portion of the original, the other of said units having such of multi-line width for printing said constant portion of the original, means for adjusting the position of said printing units, manually operable elements and elements automatically operated by the rotation of said printing drum to displace said printing unit of single line width by a predetermined amount to selectively copy at least a single line of said varying portion of the original, means for automatically fixing said printing units in the temporary printing position, a feed table for feeding sheets to be printed to said printing drum, means for adjusting said feed table with respect to said printing units, means for coupling said feed table with at least one of said units, means for supplying a readily volatilizing solvent to said moistening devices, and means for controlling the flow of said solvent to said moistening devices.

15. In a rotary reprinting and copying machine printing onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for holding a mirror script original having a constant portion and a varying portion around the circumference of said printing drum, means for rotating said printing drum, a pair of printing units adapted to be independently displaced in a direction parallel to the axis of said printing drum and each including a moistening device and a counter pressure roller, one of said units having a moistening device and a counter pressure roller of at least single line width for printing said varying portion of the original, the other of said units having such of multi-line width for printing said constant portion of the original, means for adjusting the position of said printing units, manually operable elements and elements automatically operated by the rotation of said printing drum to displace said printing unit of single line width by a predetermined amount to selectively copy at least a single line of said varying portion of the original, means for automatically fixing said printing units in the temporary printing position, a feed table for feeding sheets to be printed to said printing drum, means for adjusting said feed table with respect to said printing units, means for coupling said feed table with at least one of said units, conduit means for supplying a readily volatilizing solvent to said moistening devices, valve means for controlling the flow of solvent in said conduit means, a valve rod for each of said valves for opening and closing the same, and means including a rotatable rod having a sector-like recess therein for actuating said valve rods and to control the flow of liquid through said conduits.

16. In a rotary reprinting and copying machine printing onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for exchangeably holding a mirror script original around the circumference of said printing drum, means for rotating said printing drum, a pair of printing units adapted to be displaced in a direction parallel to the axis of said printing drum, each of said units including a moistening device and a counter pressure roller, means for adjusting the position of said units in said direction independently from one another, and means for automatically fixing said printing units in their temporary printing position.

17. In a rotary reprinting and copying machine printing onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for exchangeably holding a mirror script original around the circumference of said printing drum, means for rotating said printing drum, a pair of printing units adapted to be displaced in a direction parallel to the axis of said printing drum, each of said units including a moistening device and a counter pressure roller, means for adjusting the position of said units in said direction independently from one another, means for automatically fixing said printing units in their temporary printing position, and means for feed-

ing copy sheets to be printed to said printing drum.

18. In a rotary reprinting and copying machine printing onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for exchangeably holding a mirror script original around the circumference of said printing drum, means for rotating said printing drum, a pair of printing units adapted to be displaced in a direction parallel to the axis of said printing drum, each of said units including a moistening device and a counter pressure roller, means for adjusting the position of said units in said direction independently from one another, means for automatically fixing said printing units in their temporary printing position, a feed table for feeding copy sheets to said printing drum, means for adjusting said feed table with respect to said printing units, means for coupling said feed table to at least one of said units, and means for feeding a readily volatilizing solvent to said moistening devices.

19. In a rotary reprinting and copying machine printing onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for exchangeably holding a mirror script original around the circumference of said printing drum, means for rotating said printing drum, a pair of printing units adapted to be displaced in a direction parallel to the axis of said printing drum, each of said units including a moistening device and a counter pressure roller, means for adjusting the position of said units in said direction independently from one another, means for automatically fixing said printing units in their temporary printing position, a feed table, means for adjusting said feed table with respect to said printing units, means for coupling said feed table with at least one of said units, a conduit for each of said moistening devices for supplying a readily volatilizing solvent thereto, and means for controlling the flow of solvents in said conduits.

20. In a rotary reprinting and copying machine printing onto copy sheets previously moistened with a readily volatilizing solvent, the combination comprising a frame, a printing drum rotatably mounted in said frame, means for exchangeably holding a mirror script original around the circumference of said printing drum, means for rotating said printing drum, a pair of printing units adapted to be displaced in a direction parallel to the axis of said printing drum, each of said units including a moistening device and a counter pressure roller, means for adjusting the position of said units in said direction independently from one another, means for automatically fixing said printing units in their temporary printing position, a feed table, means for adjusting said feed table with respect to said printing units, means for coupling said feed table with at least one of said printing units, a liquid conduit for each of said moistening devices for feeding readily volatilizing solvent thereto, valve means for each of said conduits, a valve rod for each of said valve means for opening and closing the same when actuated, and means including a rotatable rod having a sector-like recess therein for actuating said valve rods and to control the flow of liquid through said conduits.

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