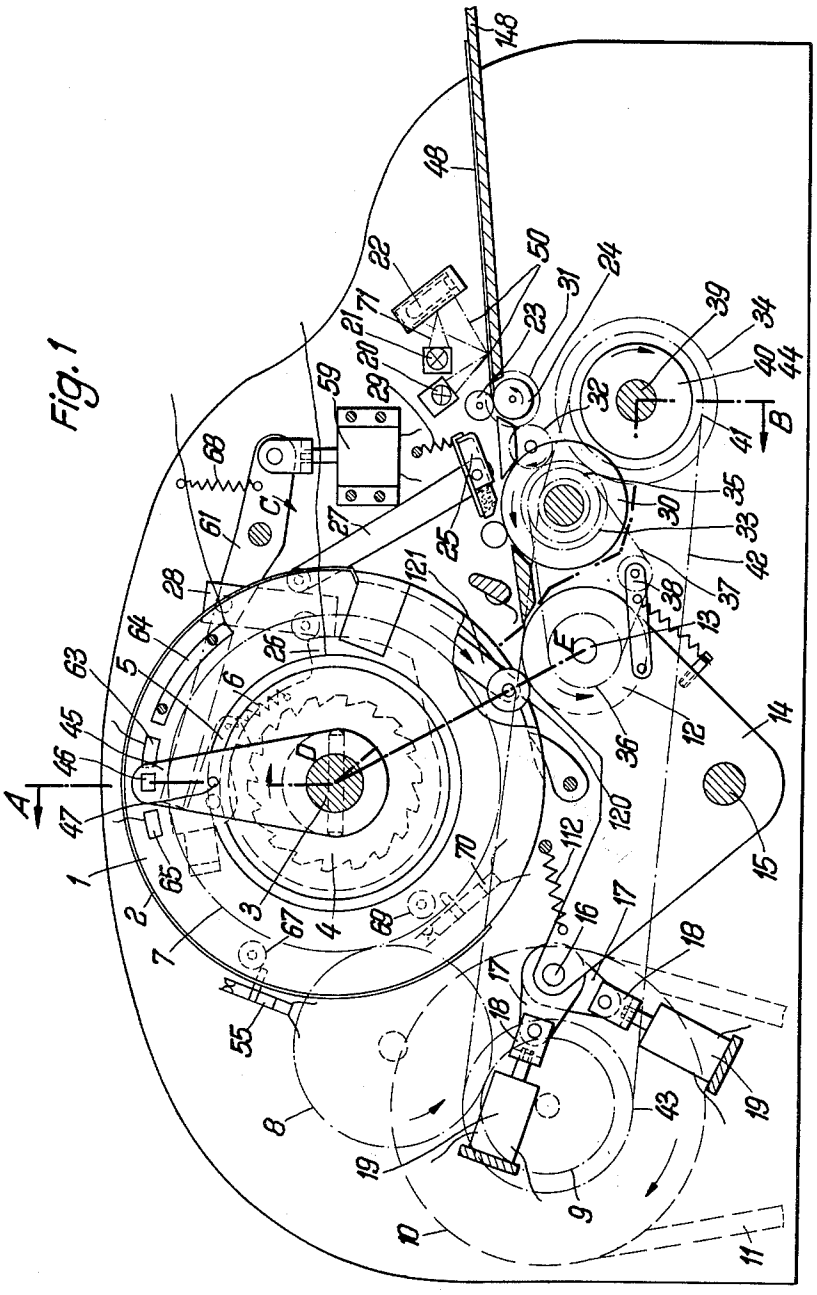
Jan. 16, 1962 W. RITZERFELD ETAL 3,016,825

COPY SHEET TRANSPORTING APPARATUS FOR PRINTING MACHINES

Filed July 21, 1959 3 Sheets-Sheet 1

Fig. 1



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COPY SHEET TRANSPORTING APPARATUS FOR PRINTING MACHINES

Filed July 21, 1959 3 Sheets-Sheet 2

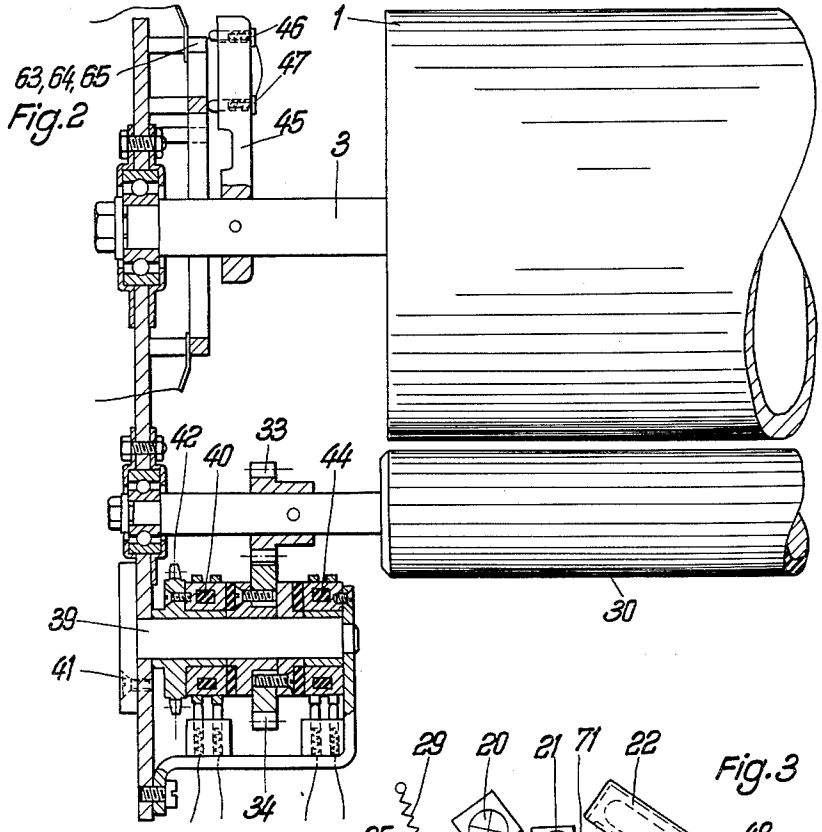


Fig.2

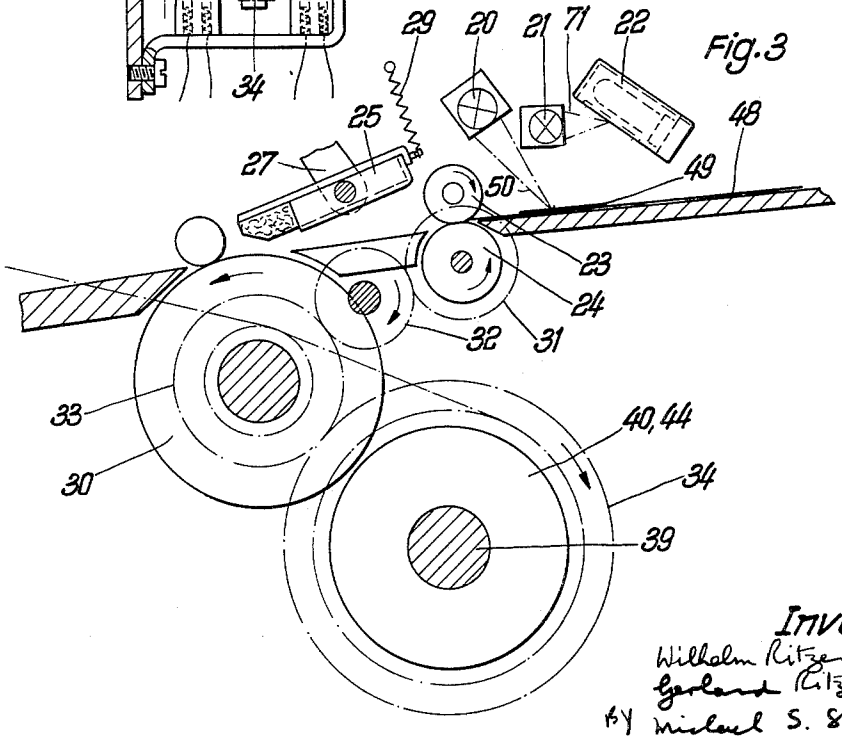


Fig.3

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COPY SHEET TRANSPORTING APPARATUS FOR PRINTING MACHINES

Filed July 21, 1959 3 Sheets-Sheet 3

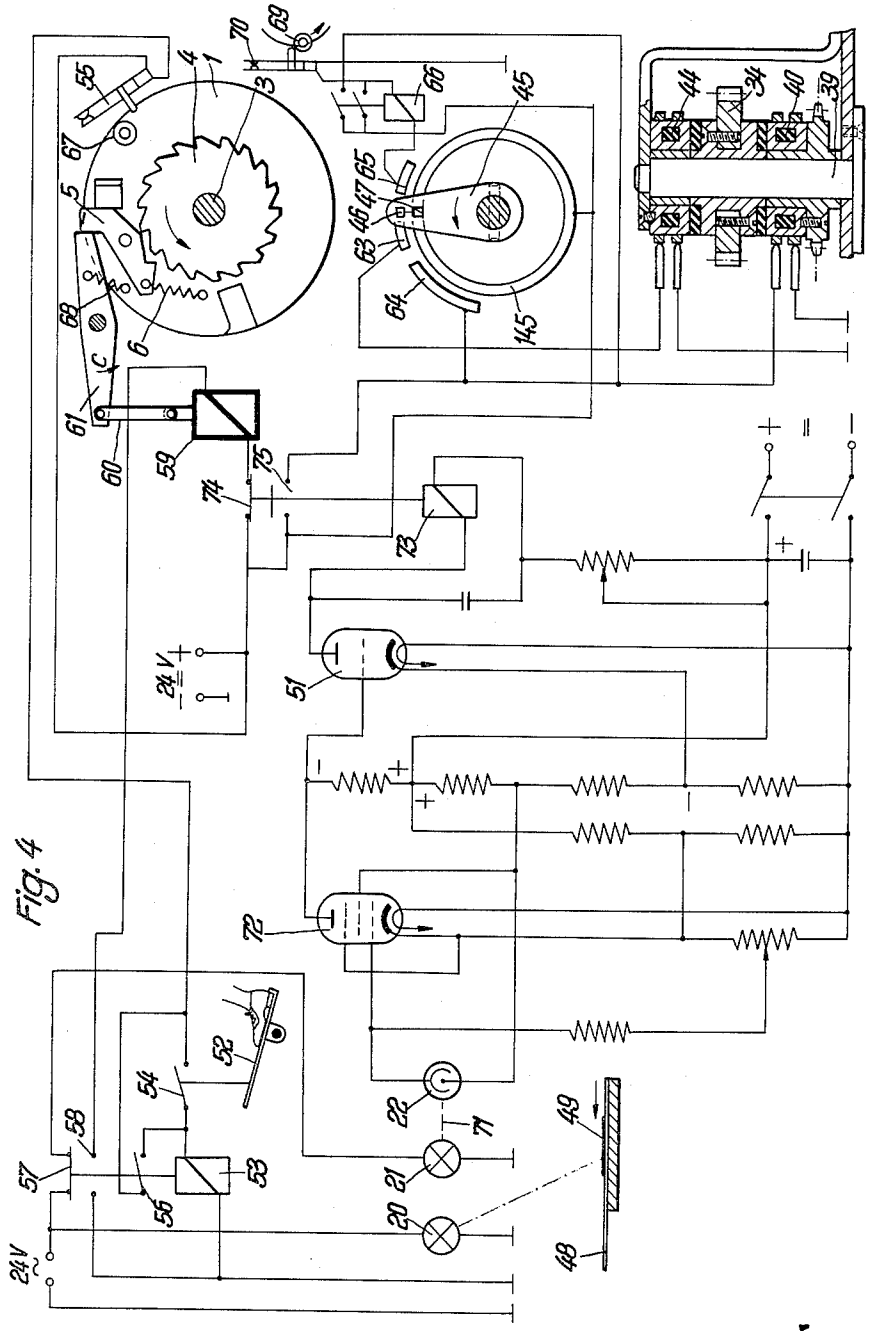


Fig. 4

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COPY SHEET TRANSPORTING APPARATUS FOR PRINTING MACHINES

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33 Claims. (Cl. 101—234)

The present invention relates to a copy sheet transporting apparatus for printing machines, and more particularly to an apparatus for transporting copy sheets to the printing line between a pair of rollers, and through the printing line while the rollers are spaced from each other. In this manner, sections of the copy sheet on which printing is undesired, are transported through the printing line and printing takes place only on desired sections of the copy sheets.

Printing machines, and particularly rotary duplicating machines, are known, which are capable of printing selected sections of a printing form adjacent each other on a copy sheet. It is desired only to print on empty sections of the copy sheets, and to avoid printing on sections of the copy sheets which were imprinted by a previous printing operation.

Printing machines are known, in which the copy sheet has to be manually inserted in a predetermined position to effect imprints only on desired sections. Printing machines of this type provide transporting rollers which are manually operated to place the copy sheets in the desired position relative to the printing rollers. The known apparatus has the disadvantage that the copy sheets have to be very carefully, and consequenly very slowly, placed in the transporting means so that the empty section on which printing is desired, is exactly positioned. Such presetting of the copy sheets frequently requires more time than the printing operation by which sometimes only a few lines are inserted between previously printed text portions.

On the other hand, the manual setting is still insufficiently accurate, so that the newly printed lines were not exactly positioned relative to the previously printed lines. Furthermore, when the manually operated transporting means are rapidly operated, the copy sheets are thrown by inertia action of the transporting rollers into undesired positions, so that an exact placing of the copy sheets cannot be obtained.

It is one object of the present invention to overcome the disadvantages of known copy sheet transporting apparatus for printing machines, and to provide a transporting apparatus for transporting copy sheets accurately into desired printing positions.

Another object of the present invention is to control the transporting apparatus for the copy sheets by electromagnetic coupling means which respond quickly, and result in accurate placing of the copy sheets.

Another object of the present invention is to control the transporting means by switches operated during rotation of a printing roller, and dependent on the position thereof.

Another object of the present invention is to provide markings on the copy sheet, and to control the transporting means by sensing means responding to such markings.

A further object of the present invention is to associate the markings with previously printed text portion, for example by printing the markings together with the text portions, so that printing on previously printed portion is automatically prevented.

A further object of the present invention is to transport copy sheets between two spaced printing rollers as long as markings indicate that the respective sections of the printing form are already printed, to stop the transporting means temporarily, and to then control the transporting means by conrol means responding to the turning movement of the printing roller. It is yet an object of the present invention to transport the copy sheets by transporting means which are driven from drive means independently of the printing rollers.

It is also an object of the present invention to rotate a counter pressure roller cooperating with the printing roller carrying a printing form while the transporting means are actuated to transport copy sheets through the space between the printing roller and the counter pressure roller.

It is also an object of the present invention to simultaneously drive transporting rollers, the counter pressure roller, and a moistening roller cooperating with moistening means for copy sheets, as required for duplicating operations.

It is still a further object of the present invention to use the counter pressure roller as a transporting roller, while the same is spaced from the printing roller.

It is also an object of the present invention to use the transporting means for ejecting a copy sheet after the printing operations have been carried out.

With these objects in view, the present invention mainly consists in an apparatus for transporting copy sheets in a printing machine, the apparatus comprising a printing roller; a counter pressure roller defining a printing line with the printing roller; moving means for moving one of the rollers to and from a printing position; transporting means, preferably including transporting rollers, and a roller cooperating with the counter pressure roller for transporting copy sheets to and through the printing line; drive means; electromagnetic coupling means for coupling the transporting means to the drive means; and control means for energizing and de-energizing the electromagnetic coupling means.

The control means preferably include switch means operated by the printing roller during rotation thereof, so that the transporting means become operative in selected turned positions of the printing roller.

The control means also include sensing means which are responsive to markings on the copy sheet to operate the electromagnetic coupling means. The arrangement is such, that marked portions of the copy sheets are transported through the space between the printing roller and the counter-pressure roller as long as markings indicate that the respective sections of the copy sheets are not to be imprinted, for example because they have already imprints thereon.

The markings on the copy sheets for indicating desired, or undesired sections, may be marked on the copy sheets before the same are used, or may be marked during the first printing operation to indicate the sections of the copy sheets which are imprinted during such first printing operation. In this manner, printing on the marked sections is avoided during a second printing run through the machine.

In the preferred embodiment of the present invention the sensing means include at least one source of light which directs a beam of light onto the copy sheets to be reflected by unmarked sections into a light sensitive means, such as a photocell. Where markings appear on the copy sheets, no light is reflected into the photocell, so that electronic means controlled by the photocell are placed in different conditions according to the condition of the photocell. Switches and relays are controlled by the electronic means to effect operation of the transporting means as long as markings indicate undesired sections of the copy sheets. When the photocell is energized due to reflection of light from unmarked sections of the copy sheets, a relay is actuated to effect rotation of the printing roller by actuating an electro-magnetic operating member

of a one revolution coupling connecting the drive means with the printing roller. During rotation of the printing roller, other switch means are operated by the printing roller to effect actuation of the transporting means in selected positions of the printing roller.

In order to prevent that the printing operation starts when a copy sheet is introduced, two sources of light cooperate with the photocell, and the second source of light directly projects a beam of light into the photocell, until switched-off by an operator influenced switch means.

The apparatus functions also when copy sheets are used on which no markings are provided. The operator influenced switch means is connected into the circuit of the electromagnetic member by which the one revolution coupling means between the drive means and the printing roller is actuated.

When the printing roller starts rotation, switch means controlled thereby connect the electromagnetic coupling means of the transporting means, and effects transportation of the copy sheets. However, when the sensing means sense markings on the sheets, the electromagnetic member of the one revolution coupling means is temporarily disconnected so that the printing roller does not start its rotation, while the transporting means transport the respective copy sheet until the sensing means sense an unmarked section of the copy sheet. Thereupon, the electromagnetic member of the one revolution coupling means is energized, and the operation takes place under control of the printing roller.

The novel features which are considered as characteristic for the invention are set forth in particular in the appended claims. The invention itself, however, both as to its construction and its method of operation, together with additional objects and advantages thereof, will be best understood from the following description of specific embodiments when read in connection with the accompanying drawings, in which:

FIG. 1 is a fragmentary schematic cross sectional view of a duplicating machine incorporating the sheet transporting apparatus of the present invention, with conventional parts of the duplicating machine omitted for the sake of clarity;

FIG. 2 is a sectional view taken along lines A—B in FIG. 1;

FIG. 3 is a fragmentary cross sectional view showing a detail of FIG. 1 on an enlarged scale; and

FIG. 4 is a diagram illustrating the electric circuit of a printing machine incorporating the sheet transporting apparatus of the present invention as shown in FIGS. 1 to 3.

Referring now to the drawings, and more particularly to FIG. 1, a printing roller **1** has mounted thereon a printing form **2**, for example a duplicating master sheet. Printing roller **1** is rotatable on a shaft **3**, which also carries a notched wheel **4** which is fixedly connected to a gear **7**, and is driven through gears **8**, **9**, pulley **10**, and belt **11**. A pawl **5** is turnably mounted on the printing roller **1** and is urged by a spring **6** to engage one of the notches in wheel **4**. When pawl **5** engages wheel **4**, the printing roller **1** is coupled to the drive means **7** to **11**. In the position illustrated in FIG. 1, the printing roller is not driven by the drive means. A counter pressure roller **12** is rotatably mounted on lever means **14** wh.ch can be rocked about a shaft **15**. The free ends of lever means **14** carry a shaft **16** on which links **17** are mounted. Links **17** have forked members **18** which are connected to the armature of electromagnetic operating means **19**.

During rotation of the printing roller **1**, the electromagnetic means **19** are energized in predetermined selected positions of the printing roller **1**, so that the counter pressure roller **12** is moved from the spaced position illustrated in FIG. 1 to a printing position in close proximity to the printing roller **1** and cooperating with the same along a printing line defined by the plane D—E.

The energizing of electromagnetic means **19** is carried out in a known manner, for example by switches operated by cams controlled by the printing roller. This arrangement is not an object of the present invention.

In accordance with the present invention, a roller means **120** is carried by an arm **121** which is resiliently mounted on the printing roller. In the illustrated spaced position of the printing roller **1** and the counter pressure roller **12**, roller **120** is urged against the counter pressure roller **12** for transporting a copy sheet, as will be described later on.

Supply table means **148** are provided for copy sheets **48**. The copy sheet passes between a pair of transporting rollers **23**, **24**, and then between a moistening pad **25**, and a moistening roller **30**, which cooperates with a small counter roller. The copy sheet **48** further passes through a holding means **122** to the bight between the counter pressure roller **12** and the printing roller **1**, and in the position illustrated in FIG. 1 between roller **120** and counter pressure roller **12**. Roller **120** is in the illustrated position in the normal initial position of the printing roller **1** which is illustrated in FIG. 1.

A gear train **31**, **32**, **33** connects transporting roller **24** with moistening roller **30**. A gear **34**, meshing with gear **33** is turnably on a shaft **39** which also carries electromagnetic coupling means **40** and electromagnetic break means **44**, as best seen in FIG. 2.

Counter pressure roller **12** is connected by transmission means including the chain wheels **35**, **36**, the chain **37** and the tensioning wheel **38** to the gear **34**. Gear **34** is coupled to the continuously rotating chain wheel **41** when the electromagnetic coupling means **40** is energized. It is therefore apparent that upon energization of the electromagnetic coupling means **40**, the transporting means **23**, **24**, **120**, the moistening roller **30**, and the counter pressure roller **12** are coupled to the drive means **9**, **10**, **11** to be driven by the same for transporting the sheet **48** towards and through the printing line BE. An electromagnetic brake means **44**, is also mounted on shaft **39**, and brakes and stops gear **34** when energized. In this manner, not only gear **34**, but also transporting roller **24**, moistening roller **30**, and counter pressure roller **12** can be rapidly stopped.

A contact arm **45** is fixed on printing roller **1** for rotation with the same. During rotation of the contact arm with printing roller **1**, contact arm **45** successively connects contacts **63**, **64**, and after an interval contact **65** with a contact ring **145**, since corresponding contacts **46** and **47** on contact arm **45** are connected by an electrical conductor, as clearly shown in FIGS. 1 and 4. As best seen in FIG. 4, contact **63** is electrically connected to the electromagnetic brake means **44**, while contacts **64** and **65** are electrically connected to the electromagnetic coupling means **40**. The circuit of contact **65** includes a relay **66**, and a switch **70** which is operated by an actuating roll **69**, also shown in FIG. 1. Actuating roll **69** is fixed to gear **7** which rotates with notched wheel **4**.

Printing roller **1** also carries an actuating roll **67** cooperating with a switch **55**.

Pawl **5** is operated by a lever **61** which is urged by a spring **68** to hold pawl **5** in the position illustrated in FIG. 1, and electromagnetic operating member **59** is connected to lever **61** to operate the same, when energized. Switch **55**, operated by roll **67** on printing roller **1**, interrupts the circuit of electromagnetic operating member **59**. Electromagnetic operating member **59** is also connected into the circuit of a relay **53** which is energized by a switch **54** under control of an operator influenced foot pedal **52**.

When foot pedal **52** is depressed, relay **53** is energized through contact **54** and contact **55**, which is normally closed. Relay **53** is energized, and closes the holding contact **56**, and contact **58** so that electromagnetic operating member **59** is energized, and releases through lever **61**, pawl **5**, which engages notched wheel **4** so that print-

ing roller 1 is coupled to notched wheel 4 and to the drive means 7 to 11 for rotation. After a single revolution has been completed, roll 67 opens switch 55, so that relay 53 is de-energized, and disconnects electromagnetic operating 59. Spring 58 pulls lever 61 against pawl 5, so that it releases notched wheel 5 when the printing roll 1 is again in the initial position shown in FIG. 1. The above described elements consequently constitute a one-revolution coupling means including the electromagnetic operating member 59 for coupling the drive means to the printing roller for a single revolution.

The moistening pad 25 is carried by lever 27 which engages a lever 28 having a cam follower roller cooperating with a cam 26 which is connected to printing roller 1 for rotation. Consequently, the moistening pad will be urged in certain angular positions of the printing roller 1 to engage the copy sheet 48 while the same passes over moistening roller 30. A spring 29 acts on the moistening pad 25. The above described elements are capable of automatically operating the transporting means for the copy sheet 48, as will be described hereinafter in detail. In addition thereto, sensing means are provided for sensing markings 49 on a copy sheet 48', as best seen in FIG. 3. The sensing means include a first source of light 20 directing a beam of light 50 against the copy sheet so that the beam of light is reflected into a light sensitive means, shown to be a photocell 22. When the beam of light 50 of the source of light 20 impinges a marking 49 on a copy sheet 48', as shown in FIG. 3, no light will be reflected by the markings 49, and therefore no light from the source of light 20 will enter photocell 22.

A second source of light 21 is provided which projects a beam of light 71 directly into photocell 22. The sources of light 20 and 21 are controlled by contacts of relay 53 as will be described hereinafter with reference to FIG. 4.

Photocell 22 is connected by an amplifier including the electronic tube 72 to the grid of a gas triode 51 in whose anode circuit a relay 73 is located. Contacts 74 of relay 73 is located in the circuit of electromagnetic operating member 59 of the one revolution coupling means.

The above described apparatus operates in the following manner:

The foot pedal 52 is operated by the operator, so that relay 53 is energized through normally open contact 54 and normally closed contact 55. Holding contact 56 is closed and holds relay 53. Switch 57 is opened, so that the lamp 21 is switched off. However, the beam of light 50 of lamp 20 is reflected by the unmarked copy sheet 48 into photocell 22 so that gas triode 51 remains extinguished in spite of the fact that lamp 21 was switched off. Contacts 74 remains closed, and electromagnetic operating member 59 is energized so that lever 61 operates pawl 5 to engage notched wheel 4 so that the one revolution coupling is in coupling position connecting the drive means with the printing roller 1 which starts to rotate.

Contact arm 45 rotates with the printing roller, and contact 46 first engages the fixed contact 63 which is connected to the electromagnetic brake means 44, as best seen in FIG. 4. Brake means 44 tend to stop gear 34, but since gear 34 is at a standstill, the energization of the electromagnetic brake means 44 is of no consequence during this operation.

During further turning of the printing roller 1, contact 46 engages the fixed contact segment 64 so that the electromagnetic coupling means 40 is energized, and couples gear 34 to the continuously driven chain wheel 41, so that transporting roller 24, moistening roller 30, and counter pressure roller 12 are rotated as long as contact 46 passes over the contact segment 64. Contact segment 64 extends through a selected angle, and during this part of the revolution of printing roller 1, the printing form 2 has not yet reached the printing line between printing roller 1 and counter pressure roller 12. Since the transporting means are rotated by the drive means through gear 34, sheet 48 is transported by transporting rollers 23, 24. Sheet 48 passes into a position located between the moistening path 25 and the moistening roller 30, and in this moment, cam 26 operates the moistening means to lower pad 25 so that the copy sheet is moistened as required for duplicating printing operation.

Sheet 48 is further transported to the printing line between the printing roller 1, the printing form 2 and the counter pressure roller 12. During such passage of the copy sheet, electromagnetic means 19 are energized at selected intervals to move the counter pressure roller 12 to its printing position whereby selected sections of the printing form 2 are imprinted on the copy sheet in a known manner.

When the printing operations have been completed, contact 46 of contact arm 45 engages the fixed contact 65 which is connected to relay 66. Relay 66 is energized and again energizes the electromagnetic coupling means 40, which was de-energized when contact 46 left the contact segment 64. When electromagnetic coupling means 40 is energized by switch 46, 65 the transporting roller means 23, 24, 25, and the counter pressure roller 12 turn again and are effective to eject the copy sheet 48 while the counter pressure roller 12 is already retracted by spring 112 to a position spaced from the printing roller 1.

Shortly before printing roller 1 arrives in its initial position illustrated in FIG. 1, the roll 67 on printing roller 1 opens the normally closed contact 55 so that electromagnetic operating member 59 is de-energized and spring 68 retracts lever 61 so that pawl 5 releases notched wheel 4 and interrupts the one revolution coupling between the drive means and the printing roller when the printing roller arrives in its initial position.

Rollers 24, 30 and 12 continue to turn until roller 69 of drive means 7 opens the normally closed switch 70 whereby relay 66 is de-energized, and the electromagnetic coupling means 40 is de-energized so that the transporting means stop.

During the above described operation, the photocell 22 has no influence on the operations, since light from lamp 20 reflected by the copy sheet 48 maintained the gas triode 51 in extinguished position. When printing operations are desired on forms which already have printed sections, markings 49 are provided on the copy sheet 48' in the region of the already printed text. For example, a dark border may be printed adjacent the longitudinal edge of a copy sheet 48' extending for one line space. Consequently the markings associated with several lines will form a continuous marking line 49, and wherever the copy sheet has no printed text, the marking line will be interrupted.

If a thus marked copy sheet 48' is placed on table 148, with its leading edge engaging the transporting rollers 23 and 24, the beam of light produced by lamp 20 will not be reflected into photocell 22, since the dark marking 49 prevents such reflection. However, lamp 21 projects a beam of light into a photocell 22, so that the gas triode 51 remains extinguished.

Selector means may now be operated in a known manner to select the angular positions of the printing roller 1 in which the electromagnetic means 19 are energized to move the counter pressure roller to its printing position. This arrangement is known and not an object of the present invention.

When the foot pedal 52 is operated by the operator, contact 54 is closed, and relay 53 is energized so that contact 56 is closed. Foot pedal 52 is immediately released, while relay 53 holds itself by contact 56. The normally closed contacts 57 is opened, so that lamp 21 is extinguished, and no light falls in the photocell 22 as long as the beam of light 50 of limp 20 is not reflected due to the presence of a marking 49. When no light falls into the photocell 22, the gas triode is ignited, and relay

73 is energized. Contact 74 is opened, so that the electromagnetic operating member 49 of the one revolution coupling means is not energized. However relay 73 closes contact 75, which is located in the circuit of the electromagnetic coupling means 40 so that the same are energized, and drive means 41 is coupled to gear 34 so that transporting roller 24, moistening roller 30 and counter pressure roller 12 are rotated, and transport copy sheet 48' toward the printing line D—E. Since printing roller 1 is at a standstill, roller 120 cooperates with the rotating counter pressure roller 12 to further transport the copy sheet 48' through the printing line. Consequently, those sections of the copy sheet, which were previously printed, and which have corresponding markings 49 are transported through the printing lines without being reprinted until the copy sheet arrives in a position in which an empty unprinted section of the copy sheet is located in the region of the printing line. When this is the case, no marking is located opposite the lamp 20, so that the beam 50 is reflected into the photocell 22. The gas triode 51 is extinguished, relay 73 is de-energized, electromagnetic operating member 59 is energized, one revolution coupling 14, 4, 5 is actuated and couples the printing roller to the drive means, so that the printing roller 1 and the contact arm 45 perform a single revolution as described above. During such revolution, the stationary contacts 63, 64 and 65 are consecutively engaged by contacts 46 effecting the previously described operations so that printing takes place on the free sections of the copy sheet. When another marking line passes under beam 50 of lamp 20, the gas triode 51 is again ignited.

Relay 73 disconnects the electromagnetic operating means 59, so that the coupling 4, 5 is disconnected, and printing roller 1 stops. Consequently, the transporting means transport the marked section of the copy sheet through the printing line without printing on the marked imprinted sections. When light is again reflected by the copy sheet into the photocell, coupling 4, 5 is coupled, and the printing roller continues its turning movement, while the counter pressure roller 14 is operated by electromagnetic means 19 to imprint the free sections of the copy sheet.

Preferably, the printing form 2 carries in addition to its text, lateral printing portions for printing adjacent each line of the text, a marking corresponding to marking 49 which is effective as above described when the printed copy sheet is run through the machine a second time.

As explained above, assuming markings 49 on copy sheet 48, the copy sheet is transported by rollers 30, 12 and 121 at the beginning of the operation between spaced printing rollers 1 and 12. When sensing means 20, 22 sense no marking anymore on copy sheet 48, printing roller 1 starts its rotation, as explained above. Thereby, roller means 120 would start moving with printing roller 1 while counter pressure 12 still rotates, so that the copy sheet would be thrown out by roller 120. This is avoided by the electromagnetic brake means 44 which are energized as soon as contact 46 engages fixed contact 63 at the beginning of the turning movement in printing roller 1. The energized electromagnetic brake means 44 stops gear 34, and thereby rollers 24, 35 and counter pressure roller 12. Consequently, the copy sheet remains in the position which it assumed when printing roller means starts its rotation. Shortly thereafter, contacts 46 engages fixed contact 64 so that electromagnetic means 40 is again energized, and effects rotation of the transporting means and further transport of the copy sheet.

After the entire copy sheet has been printed on selected sections thereof, contact 65 is again engaged by contact 46 resulting in energization of the electromagnetic coupling means 40, and operation of the transporting means for ejecting the copy sheet.

It will be understood that each of the elements described above, or two or more together, may also find a useful application in other types of transporting apparatus for copy sheets differing from the types described above.

While the invention has been illustrated and described as embodied in a sheet transporting apparatus for transporting copy sheets through a printing machine in accordance with markings on the copy sheets, it is not intended to be limited to the details shown, since various modifications and structural changes may be made without departing in any way from the spirit of the present invention.

Without further analysis, the foregoing will so fully reveal the gist of the present invention that others can by applying current knowledge readily adapt it for various applications without omitting features that, from the standpoint of prior art, fairly constitute essential characteristics of the generic or specific aspects of this invention and, therefore, such adaptations should and are intended to be comprehended within the meaning and range of equivalence of the following claims.

What is claimed as new and desired to be secured by Letters Patent is:

1. In a printing machine, in combination, a rotary printing roller; a rotary counter pressure roller, one of said rollers being movable to and from a printing position in close proximity to the other roller for defining a printing line with the same; moving means for moving said one roller to and from said printing position; transporting means for transporting copy sheets to the bight between said rollers and through said printing line and including transporting rollers and a roller means mounted on said printing roller and cooperating with said counter pressure roller in the initial position of rest of said printing roller; means connecting said transporting rollers and said counter pressure roller for rotation; drive means; electro-magnetic coupling means for coupling said transporting means to said drive means; and control means for energizing and deenergizing said electro-magnetic coupling means so that said counter pressure roller and said roller means transport copy sheets while said one roller is retracted from said printing position.

2. In a printing machine, in combination, a rotary printing roller; a rotary counter pressure roller, one of said rollers being movable to and from a printing position in close proximity to the other roller for defining a printing line with the same; moving means for moving said one roller to and from said printing position; transporting means for transporting copy sheets to the bight between said rollers and through said printing line and including transporting rollers and a roller means mounted on said printing roller and cooperating with said counter pressure roller in the initial position of rest of said printing roller; means connecting said transporting rollers and said counter pressure roller for rotation; drive means; electro-magnetic coupling means for coupling said transporting means to said drive means; and control means for energizing and de-energizing said electro-magnetic coupling means, said control means including first switch means and second switch means operated by said printing roller during rotation thereof and being connected into the circuit of said electro-magnetic coupling means for energizing and de-energizing the same, respectively so that said counter pressure roller and said roller means transport copy sheets while said one roller is retracted from said printing position.

3. In a printing machine, in combination, a rotary printing roller; a rotary counter pressure roller, one of said rollers being movable to and from a printing position in close proximity to the other roller for defining a printing line with the same; moving means for moving said one roller to and from said printing position; transporting means for transporting copy sheets to the bight between said rollers and through said printing line and including transporting rollers and a roller means mounted on said printing roller and cooperating with said counter

pressure roller in the initial position of rest of said printing roller; means connecting said transporting rollers and said counter pressure roller for rotation; drive means; electro-magnetic coupling means for coupling said transporting means to said drive means; electro-magnetic brake means for stopping said transporting means; and control means for energizing and de-energizing said electro-magnetic coupling means, said control means including first switch means and second switch means operated by said printing roller during rotation thereof and being connected into the circuit of said electro-magnetic coupling means for energizing and de-energizing the same, respectively, so that said counter pressure roller and said roller means transport copy sheets while said one roller is retracted from said printing position, said control means further including third switch means operated by said printing roller and being connected into the circuit of said electro-magnetic brake means for energizing and de-energizing the same respectively.

4. In a printing machine, in combination, a rotary printing roller; a rotary counter pressure roller, one of said rollers being movable to and from a printing position in close proximity to the other roller for defining a printing line with the same; moving means for moving said one roller to and from said printing position; transporting means for transporting copy sheets to the bight between said rollers and through said printing line, said transporting means including a pair of transporting rollers, and roller means mounted on said printing roller and cooperating with said counterpressure roller in the initial position of rest of said printing roller; means connecting said transporting rollers and said counterpressure roller for rotation; drive means; electro-magnetic coupling means for coupling said transporting means and said counterpressure roller to said drive means; electro-magnetic brake means for stopping said transporting means; and control means for energizing and de-energizing said electro-magnetic brake means and said electro-magnetic coupling means so that said counter pressure roller and said roller means transport copy sheets while said one roller is retracted from said printing position.

5. In a printing machine, in combination, a rotary printing roller including means for attaching a master to the periphery thereof; a rotary counterpressure roller, one of said rollers being movable between a spaced position and a printing position in close proximity to the other roller for defining a printing line with said master; moving means for moving said one roller between said spaced and printing positions; transporting means for transporting copy sheets to the bight between said rollers and through the printing line; drive means for rotating said printing roller; electro-magnetic coupling means for coupling said transporting means to said drive means; sensing means for sensing selected sections of the copy sheet; control means connecting said sensing means to said electro-magnetic coupling means, said sensing means controlling said electro-magnetic coupling means through said control means to effect energizing and de-energizing of the same in accordance with sensed selected sections of the copy sheets so that said transporting means stop with said copy sheets when selected sections of the copy sheet are located at the printing line.

6. In a printing machine, in combination, a rotary printing roller including means for attaching a master to the periphery thereof; a rotary counterpressure roller, one of said rollers being movable between a spaced position and a printing position in close proximity to the other roller for defining a printing line with said master; moving means for moving said one roller between said spaced and printing positions; transporting means for transporting copy sheets to the bight between said rollers and through the printing line; drive means for rotating said printing roller; electro-magnetic coupling means for coupling said transporting means to said drive means; electro-magnetic brake means for stopping said transporting means; sensing means for sensing selected sections of the copy sheets; control means connecting said sensing means to said electro-magnetic coupling means and including switch means operated by said printing roller and connected to said electro-magnetic brake means, said sensing means controlling said electro-magnetic coupling means through said control means to effect energizing and de-energizing of the same in accordance with sensed selected sections of the copy sheets so that said transporting means stop with said copy sheets when selected sections of the copy sheet are located at the printing line and are braked by said brake means.

7. In a printing machine, in combination, a rotary printing roller including means for attaching a master to the periphery thereof; a rotary counterpressure roller, one of said rollers being movable between a spaced position and a printing position in close proximity to the other roller for defining a printing line with said master; moving means for moving said one roller between said spaced and printing positions; transporting means for transporting copy sheets having markings thereon adapted to indicate sections of the copy sheets; drive means; electro-magnetic coupling means for coupling said transporting means to said drive means; other coupling means for coupling said printing roller to said drive means; sensing means responsive to the markings on the copy sheets to assume a first condition when sensing markings, and a second condition when sensing unmarked sections of the copy sheets; and control means connecting said sensing means to said electro-magnetic coupling means to energize the same in one of said first and second conditions whereby selected sections of the copy sheets are transported to the printing line in said spaced position of said one roller, said control means connecting said sensing means to said other coupling means to effect rotation of said printing roller only when selected sections of the copy sheets are located at said printing line.

8. In a printing machine, in combination, a rotary printing roller including means for attaching a master to the periphery thereof; a rotary counterpressure roller, one of said rollers being movable between a spaced position and a printing position in close proximity to the other roller for defining a printing line with said master; moving means for moving said one roller between said spaced and printing positions; transporting means for transporting copy sheets having markings thereon adapted to indicate sections of the copy sheets; drive means; a coupling including an electro-magnetic member for coupling said printing roller to said drive means; electro-magnetic coupling means for coupling said transporting means to said drive means; sensing means responsive to the markings on the copy sheets to assume a first condition when sensing marks, and a second condition when sensing unmarked sections of the copy sheets; first control means connecting said sensing means to said electro-magnetic coupling means to energize the same in one of said first and second conditions whereby selected sections of the copy sheets are transported to the printing line in said spaced position of said one roller; and second control means connecting said sensing means to said electro-magnetic member to energize the same in the other of said first and second conditions for effecting rotation of said printing roller.

9. In a printing machine, in combination, a rotary printing roller including means for attaching a master to the periphery thereof; a rotary counterpressure roller, one of said rollers being movable between a spaced position and a printing position in close proximity to the other roller for defining a printing line with said master; moving means for moving said one roller between said spaced and printing positions; transporting means for transporting copy sheets having markings thereon adapted to indicate sections of the copy sheets; drive means; a

coupling including an electro-magnetic member for coupling said printing roller to said drive means; electromagnetic coupling means for coupling said transporting means to said drive means; sensing means responsive to the markings on the copy sheets to assume a first condition when sensing marks, and a second condition when sensing unmarked sections of the copy sheets; first control means connecting said sensing means to said electromagnetic coupling means to energize the same in one of said first and second conditions whereby selected sections of the copy sheets are transported to the printing line in said spaced position of said one roller; and second control means connecting said sensing means to said electromagnetic member to energize the same in the other of said first and second conditions for effecting rotation of said printing roller; electro-magnetic brake means for stopping said transporting means; and control switch means operated by said printing roller during rotation thereof and connected to said electro-magnetic brake means to actuate the same for stopping said transporting means in a selected turned position of said printing roller.

10. A machine as set forth in claim 9 and including a printing form mounted on said printing roller for making imprints on the copy sheets in said printing position of said one roller during rotation of said printing roller, said printing form including printing portions for printing text portions and markings associated with said text portions so that when the thus marked and printed copy sheet passes again through the printing line, said text portions are not imprinted again.

11. In a printing machine, in combination, a rotary printing roller including means for attaching a master to the periphery thereof; a rotary counterpressure roller, one of said rollers being movable between a spaced position and a printing position in close proximity to the other roller for defining a printing line with said master; moving means for moving said one roller between said spaced and printing positions; transporting means for transporting copy sheets having markings thereon adapted to indicate sections of the copy sheets; drive means; electro-magnetic coupling means for coupling said transporting means to said drive means; sensing means including at least one source of light for directing a beam of light onto the markings of the copy sheets, and light responsive means positioned to receive reflected light of the beam from unmarked sections only of the copy sheets; electronic means connected to said light responsive means and being controlled by the same as to assume a first condition when the beam of light impinges on markings and to assume a second condition when the beam of light is reflected into said light sensitive means by unmarked sections of the copy sheets; and control means connecting said electronic means to said electro-magnetic coupling means to energize the same in one of said first and second conditions whereby selected sections of the copy sheets are transported to the printing line in said spaced position of said one roller.

12. In a printing machine, in combination, a rotary printing roller including means for attaching a master to the periphery thereof; a rotary counterpressure roller, one of said rollers being movable between a spaced position and a printing position in close proximity to the other roller for defining a printing line with said master; moving means for moving said one roller between said spaced and printing positions; transporting means for transporting copy sheets having markings thereon adapted to indicate sections of the copy sheets; drive means; a coupling including an electro-magnetic member for coupling said printing roller to said drive means; electromagnetic coupling means for coupling said transporting means to said drive means; sensing means including at least one source of light for directing a beam of light onto the markings of the copy sheets, and light responsive means positioned to receive reflected light of the beam from unmarked sections only of the copy sheets; electronic means connected to said light responsive means and being controlled by the same as to assume a first condition when the beam of light impinges on markings and to assume a second condition when the beam of light is reflected into said light sensitive means by unmarked sections of the copy sheets; first control means connecting said electronic means to said electro-magnetic coupling means to energize the same in one of said first and second conditions whereby selected sections of the copy sheets are transported to the printing line in said spaced position of said one roller.

13. In a printing machine, in combination, a rotary printing roller including means for attaching a master to the periphery thereof; a rotary counterpressure roller, one of said rollers being movable between a spaced position and a printing position in close proximity to the other roller for defining a printing line with said master; moving means for moving said one roller between said spaced and printing positions; transporting means for transporting copy sheets having markings thereon adapted to indicate sections of the copy sheets; drive means; a coupling including an electronic-magnetic member for coupling said printing roller to said drive means; electro-magnetic coupling means for coupling said transporting means to said drive means; sensing means including at least one source of light for directing a beam of light onto the markings of the copy sheets, and light responsive means positioned to receive reflected light of the beam from unmarked sections only of the copy sheets; electronic means connected to said light responsive means and being controlled by the same as to assume a first condition when the beam of light impinges on markings and to assume a second condition when the beam of light is reflected into said light sensitive means by unmarked sections of the copy sheets; first control means connecting said electronic means to said electro-magnetic coupling means to energize the same in one of said first and second conditions whereby selected sections of the copy sheets are transported to the printing line in said spaced position of said one roller; electro-magnetic brake means for stopping said transporting means; and control switch means operated by said printing roller during rotation thereof and connected to said electro-magnetic brake means to actuate the same for stopping said transporting means in a selected turned position of said printing roller.

14. A machine as set forth in claim 13 and including switch means operated by said printing roller during rotation thereof and connected to said electro-magnetic coupling means for energizing the same during turning of the printing roller through at least one selected angle; and including a printing form mounted on said printing roller in a position for passing through said printing line after said printing roller has turned through said selected angle.

15. In a printing machine, in combination, a rotary printing roller; a rotary counterpressure roller movable between a spaced position and a printing position in close proximity to said printing roller for defining a printing line with the same; moving means for moving said one roller between said spaced and printing positions; transporting means for transporting copy sheets having markings thereon adapted to indicate sections of the copy sheets and transporting the copy sheets to the bight between said rollers and through said printing line; drive means; a one revolution coupling for coupling said printing roller to said drive means and including an electromagnetic operating member; electro-magnetic coupling means for coupling said transporting means to said drive means; light responsive means; a first source of light for directing a first beam of light directly onto said light responsive means, a second source of light for directing a second beam of light onto the markings of the copy sheets and being positioned so that the beam of light thereof is reflected by unmarked sections of the copy sheets into

said light responsive means; electronic means connected to said light responsive means and being controlled by the same to assume a first condition when said light sensitive means is impinged by one of said beams of light, and a second condition when the first source of light is switched off and the second beam impinges upon a marking so that no light falls into said light responsive means; first control means for energizing and de-energizing said electro-magnetic coupling means and being controlled by said electronic means to energize said electro-magnetic coupling means in said first condition of said electronic means; second control means connecting said electronic means to said electro-magnetic member to energize the same in said second condition of said electronic means for effecting rotation of said printing roller; and operator influenced switch means connected into the circuit of said first source of light for switching the same off whereby upon actuation of said operator influenced switch means said electro-magnetic coupling means is controlled by said markings.

16. A machine as set forth in claim 15 and including switch means controlled by said printing roller during rotation thereof and connected into the circuit of said electro-magnetic coupling means for actuating the same in selected turned positions of said printing roller.

17. A machine as set forth in claim 16 and wherein said transporting means include transporting rollers, and roller means mounted on the printing roller cooperating with said counter pressure roller; and including means connecting said counterpressure roller and at least one of said transporting rollers for rotation.

18. A machine as set forth in claim 17 and including moistening means for the copy sheets and a moistening roller cooperating with said moistening means, said moistening roller being connected to said transporting rollers for rotation with the same when said electro-magnetic coupling means couples said drive means with said transporting means.

19. A machine as set forth in claim 15 wherein said electronic means includes a gas triode adapted to be extinguished when said light sensitive means receives light from one of said sources of light, and adapted to operate said electro-magnetic coupling means when an anode current flows therethrough, said light sensitive means being a photo cell connected to the grid of said gas triode.

20. A machine as set forth in claim 19 and including a relay connected into the circuit of said electro-magnetic operating member and into the circuit of said operator influenced switch means and of said first source of light in such a manner that said electro-magnetic operating member is only actuated when light falls into said light sensitive means indicating the absence of markings on the respective sensed copy sheet.

21. A machine as set forth in claim 20 and including electro-magnetic brake means for stopping said transporting means; and control switch means operated by said printing roller during rotation thereof and connected to said electro-magnetic brake means to actuate the same for stopping said transporting means in a selected turned position of said printing roller.

22. In a printing machine, in combination, a rotary printing roller; a rotary counterpressure roller movable between a spaced position and a printing position in close proximity to said printing roller for defining a printing line with the same; moving means for moving said one roller between said spaced and printing positions; transporting means for transporting copy sheets having markings thereon adapted to indicate sections of the copy sheets and transporting the copy sheets to the bight between said rollers and through said printing line; drive means; a one revolution coupling for coupling said printing roller to said drive means and including an electro-magnetic operating member; electro-magnetic coupling means for coupling said transporting means to said drive means; light responsive means; a first source of light for directing a first beam of light directly onto said light responsive means, a second source of light for directing a second beam of light onto the markings of the copy sheets and being positioned so that the beam of light thereof is reflected by unmarked sections of the copy sheets into said light responsive means; electronic means connected to said light responsive means and being controlled by the same to assume a first condition when said light sensitive means is impinged by one of said beams of light, and a second condition when the first source of light is switched off and the second beam impinges upon a marking so that no light falls into said light responsive means; first control means for energizing and de-energizing said electro-magnetic coupling means and being controlled by said electronic means to energize said electro-magnetic coupling means in said first condition of said electronic means; second control means connecting said electronic means to said electro-magnetic member to energize the same in said second condition of said electronic means for effecting rotation of said printing roller; operator influenced switch means connected into the circuit of said first source of light for switching the same off whereby upon actuation of said operator influenced switch means said electro-magnetic coupling means is controlled by said markings; electro-magnetic brake means for stopping said transporting means; and control switch means operated by the printing roller during rotation thereof and connected to said electro-magnetic brake means to actuate the same for stopping said transporting means in a selected turned position of said printing roller.

23. In a printing machine, in combination, a rotary printing roller; a rotary counterpressure roller movable between a spaced position and a printing position in close proximity to said printing roller for defining a printing line with the same; moving means for moving said one roller between said spaced and printing positions; transporting means for transporting copy sheets having markings thereon adapted to indicate sections of the copy sheets and transporting the copy sheets to the bight between said rollers and through said printing line; drive means; a one revolution coupling for coupling said printing roller to said drive means and including an electro-magnetic operating member; electro-magnetic coupling means for coupling said transporting means to said drive means; light responsive means; a first source of light for directing a first beam of light directly onto said light responsive means, a second source of light for directing a second beam of light onto the markings of the copy sheets and being positioned so that the beam of light thereof is reflected by unmarked sections of the copy sheets into said light responsive means; electronic means connected to said light responsive means and being controlled by the same to assume a first condition when said light sensitive means is impinged by one of said beams of light, and a second condition when the first source of light is switched off and the second beam impinges upon a marking so that no light falls into said light responsive means; first control means for energizing and de-energizing said electro-magnetic coupling means and being controlled by said electronic means to energize said electro-magnetic coupling means in said first condition of said electronic means; second control means connecting said electronic means to said electro-magnetic member to energize the same in said second condition of said electronic means for effecting rotation of said printing roller; and operator influenced switch means connected into the circuit of said first source of light for switching the same off whereby upon actuation of said operator influenced switch means said electro-magnetic coupling means is controlled by said markings; control switch means operated by said printing member during rotation thereof and connected into the circuit of said electro-magnetic coupling means for energizing and deenergizing the same in selected positions

of the printing roller at the beginning and end of each revolution thereof; a top switch connected into the circuit of said electro-magnetic coupling means and being operated by said drive means to disconnect said electro-magnetic coupling means a selected time after said printing roller has completed a single revolution under the control of said one revolution coupling means so that during the selected time the respective copy sheet is ejected by said transporting means.

24. A machine as set forth in claim 23, wherein said transporting means include a pair of transporting rollers and a transporting roller cooperating with said counterpressure roller; and including means connecting said counterpressure roller for rotation with said transporting rollers when said electro-magnetic coupling means is energized.

25. In a printing machine, in combination, a rotary printing roller including means for attaching a master to the periphery thereof; a rotary counterpressure roller, one of said rollers being movable between a spaced position and a printing position in close proximity to the other roller for defining a printing line with said master; moving means for moving said one roller between said spaced and printing positions; transporting means for transporting copy sheets to the bight between said rollers and through the printing line; drive means; electro-magnetic coupling means for coupling said transporting means to said drive means; and control means including sensing means for sensing selected sections of the copy sheets, said control means being connected to said electro-magnetic coupling means, said control means being operatively connected to said printing roller to effect rotation of the same, and said sensing means controlling said electro-magnetic coupling means to effect energizing and de-energizing of the same, said control means controlling said printing roller to rotate only when said sensing means sense that selected sections of the copy sheets are located at said printing line, said control means including switch means connected into the circuit of said electro-magnetic coupling means and being operated by said printing roller means during rotation thereof to energize said electro-magnetic coupling means in selected positions of said printing roller.

26. In a printing machine, in combination, a rotary printing roller including means for attaching a master to the periphery thereof; a rotary counterpressure roller, one of said rollers being movable between a spaced position and a printing position in close proximity to the other roller for defining a printing line with said master; moving means for moving said one roller between said spaced and printing positions; transporting means for transporting copy sheets having markings thereon adapted to indicate sections of the copy sheets; drive means; electro-magnetic coupling means for coupling said transporting means to said drive means; other coupling means for coupling said printing roller to said drive means; sensing means responsive to the markings on the copy sheets to assume a first condition when sensing markings, and a second condition when sensing unmarked sections of the copy sheets; and control means connecting said sensing means to said electro-magnetic coupling means to energize the same in one of said first and second conditions whereby selected sections of the copy sheets are transported to the printing line in said spaced position of said one roller, said control means connecting said sensing means to said other coupling means to effect rotation of said printing roller only when selected sections of the copy sheets are located at said printing line, said control means including switch means connected into the circuit of said electro-magnetic coupling means and being operated by said printing roller means during rotation thereof to energize said electro-magnetic coupling means in selected positions of said printing roller while said sensing means is in the other of said conditions.

27. In a printing machine, in combination, a rotary printing roller including means for attaching a master to the periphery thereof; a rotary counterpressure roller, one of said rollers being movable between a spaced position and a printing position in close proximity to the other roller for defining a printing line with said master; moving means for moving said one roller between said spaced and printing positions; transporting means for transporting copy sheets having markings thereon adapted to indicate sections of the copy sheets; drive means; a coupling including an electro-magnetic member for coupling said printing roller to said drive means; electro-magnetic coupling means for coupling said transporting means to said drive means; sensing means responsive to the markings on the copy sheets to assume a first condition when sensing markings, and a second condition when sensing unmarked sections of the copy sheets; first control means connecting said sensing means to said electro-magnetic coupling means to energize the same in one of said first and second conditions whereby selected sections of the copy sheets are transported to the printing line in said spaced position of said roller; and second control means connecting said sensing means to said electro-magnetic member to energize the same in the other of said first and second conditions for effecting rotation of said printing roller, said control means including switch means connected into the circuit of said electro-magnetic coupling means and being operated by said printing roller means during rotation thereof to energize said electro-magnetic coupling means in selected positions of said printing roller.

28. A machine as set forth in claim 27 wherein; said switch means includes two switches operated at the beginning and at the end of each revolution of said printing roller.

29. A machine as set forth in claim 28, and including a switch operated by said drive means after completion of each revolution of said printing roller, and being connected into the circuit of said electro-magnetic coupling means for disconnecting the same.

30. In a printing machine, in combination, a rotary printing roller; a rotary counterpressure roller movable between a spaced position and a printing position in close proximity to said printing roller for defining a printing line with the same; moving means for moving said one roller between said spaced and printing positions; transporting means for transporting copy sheets having markings thereon adapted to indicate sections of the copy sheets and transporting the copy sheets to the bight between said rollers and through said printing line; drive means; a coupling for coupling said printing roller to said drive means and including an electro-magnetic operating member; electro-magnetic coupling means for coupling said transporting means to said drive means; light responsive means; a first source of light for directing a first beam of light directly onto said light responsive means, a second source of light for directing a second beam of light onto the markings of the copy sheets and being positioned so that the beam of light thereof is reflected by unmarked sections of the copy sheets into said light responsive means; shiftable electric means connected to said light responsive means and being controlled by the same to assume a first condition when said light sensitive means is impinged by one of said beams of light, and a second condition when the first source of light is switched off and the second beam impinges upon a marking so that no light falls into said light responsive means; first control means for energizing and de-energizing said electro-magnetic coupling means and being controlled by said shiftable electric means to energize said electro-magnetic coupling means in said first condition of said shiftable electric means; second control means connecting said shiftable electric means to said electro-magnetic member to energize the same in said second condition of said shiftable electric means

for effecting rotation of said printing roller; and operator influenced switch means connected into the circuit of said first source of light for switching the same off whereby upon actuation of said operator influenced switch means said electro-magnetic coupling means is controlled by said markings.

31. In a printing machine, in combination, a rotary printing roller; a rotary counterpressure roller movable between a spaced position and a printing position in close proximity to said printing roller for defining a printing line with the same; moving means for moving said one roller between said spaced and printing positions; transporting means for transporting copy sheets having markings thereon adapted to indicate sections of the copy sheets and transporting the copy sheets to the bight between said rollers and through said printing line; a drive means; coupling means for coupling said transporting means to said drive means; light responsive means; a first source of light for directing a first beam of light directly onto said light responsive means, a second source of light for directing a second beam of light onto the markings of the copy sheets and being positioned so that the beam of light thereof is reflected by unmarked sections of the copy sheets into said light responsive means; shiftable electric means connected to said light responsive means and being controlled by the same to assume a first condition when said light sensitive means is impinged by one of said beams of light, and a second condition when the first source of light is switched off and the second beam impinges upon a marking so that no light falls into said light responsive means; first control means for actuating said coupling means and being controlled by said shiftable electric means to actuate said coupling means in said first condition of said shiftable electric means; second control means connecting said shiftable electric means to said printing roller to rotate the same in said second condition of said shiftable electric means; and switch means connected into the circuit of said first source of light for switching the same off whereby upon actuation of said switch means said coupling means is controlled by said markings.

32. In a printing machine, in combination, a rotary printing roller; a rotary counterpressure roller movable between a spaced position and a printing position in close proximity to said printing roller for defining a printing line with the same; moving means for moving said one roller between said spaced and printing positions; transporting means for transporting copy sheets having markings thereon adapted to indicate sections of the copy sheets and transporting the copy sheets to the bight between said rollers and through said printing line, said transporting means including transporting rollers, and a roller means mounted on said printing roller cooperating with said counter pressure roller in the initial position of rest of said printing roller; drive means; a coupling for coupling said printing roller to said drive means and including an electro-magnetic operating member; electro-magnetic coupling means for coupling said transporting rollers and said roller means to said drive means; light responsive means; a first source of light for directing a first beam of light directly onto said light responsive means, a second source of light for directing a second beam of light onto the markings of the copy sheets and being positioned so that the beam of light thereof is reflected by unmarked sections of the copy sheets into said light responsive means; shiftable electric means connected to said light responsive means and being controlled by the same to assume a first condition when said light sensitive means is impinged by one of said beams of light, and a second condition when the first source of light is switched off and the second beam impinges upon a marking so that no light falls into said light responsive means; first control means for energizing and de-energizing said electro-magnetic coupling means and being controlled by said shiftable electric means to energize said electro-magnetic coupling means in said first condition of said shiftable electric means to said electro-magnetic member to energize the same in said second condition of said shiftable electric means for effecting rotation of said printing roller; and operator influenced switch means connected into the circuit of said first source of light for switching the same off whereby upon actuation of said operator influenced switch means said electro-magnetic coupling means is controlled by said markings.

33. In a printing machine, in combination, a rotary printing roller; a rotary counterpressure roller movable between a spaced position and a printing position in close proximity to said printing roller for defining a printing line with the same; moving means for moving said one roller between said spaced and printing positions; transporting means for transporting copy sheets having markings thereon adapted to indicate sections of the copy sheets and transporting the copy sheets to the bight between said rollers and through said printing line, said transporting means including transporting rollers, and a roller means mounted on said printing roller cooperating with said counter pressure roller in the initial position of rest of said printing roller; drive means; coupling means for coupling said transporting rollers and said roller means to said drive means; light responsive means; a first source of light for directing a first beam of light directly onto said light responsive means, a second source of light for directing a second beam of light onto the markings of the copy sheets and being positioned so that the beam of light thereof is reflected by unmarked sections of the copy sheets into said light responsive means; shiftable electric means connected to said light responsive means and being controlled by the same to assume a first condition when said light sensitive means is impinged by one of said beams of light, and a second condition when the first source of light is switched off and the second beam impinges upon a marking so that no light falls into said light responsive means; first control means for actuating said coupling means and being controlled by said shiftable electric means to actuate said coupling means in said first condition of said shiftable electric means; second control means connecting said shiftable electric means to said printing roller to rotate the same in said second condition of said shiftable electric means; and switch means connected into the circuit of said first source of light for switching the same off whereby upon actuation of said switch means said coupling means is controlled by said markings.

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