

May 5, 1936.

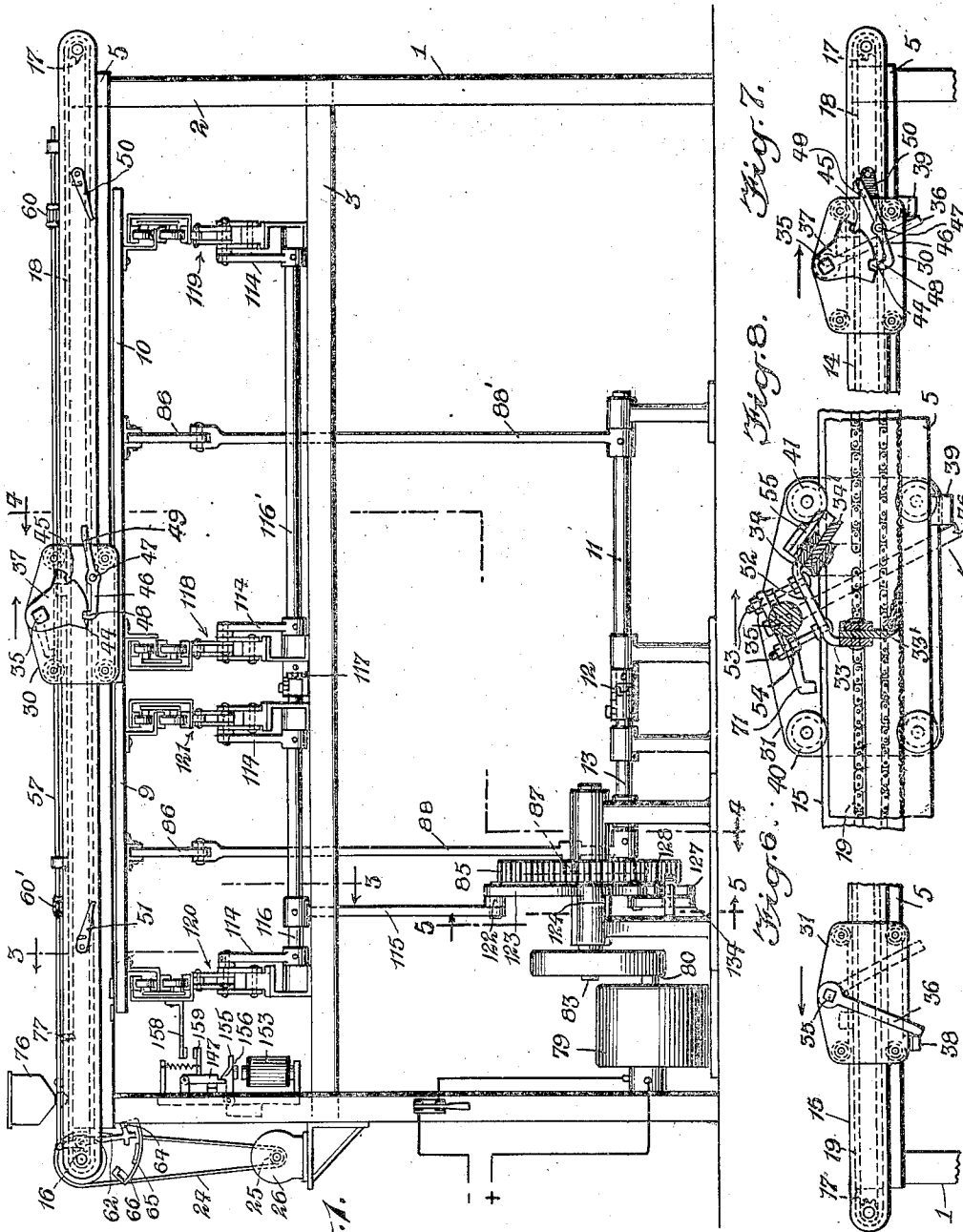
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4 Sheets-Sheet 1



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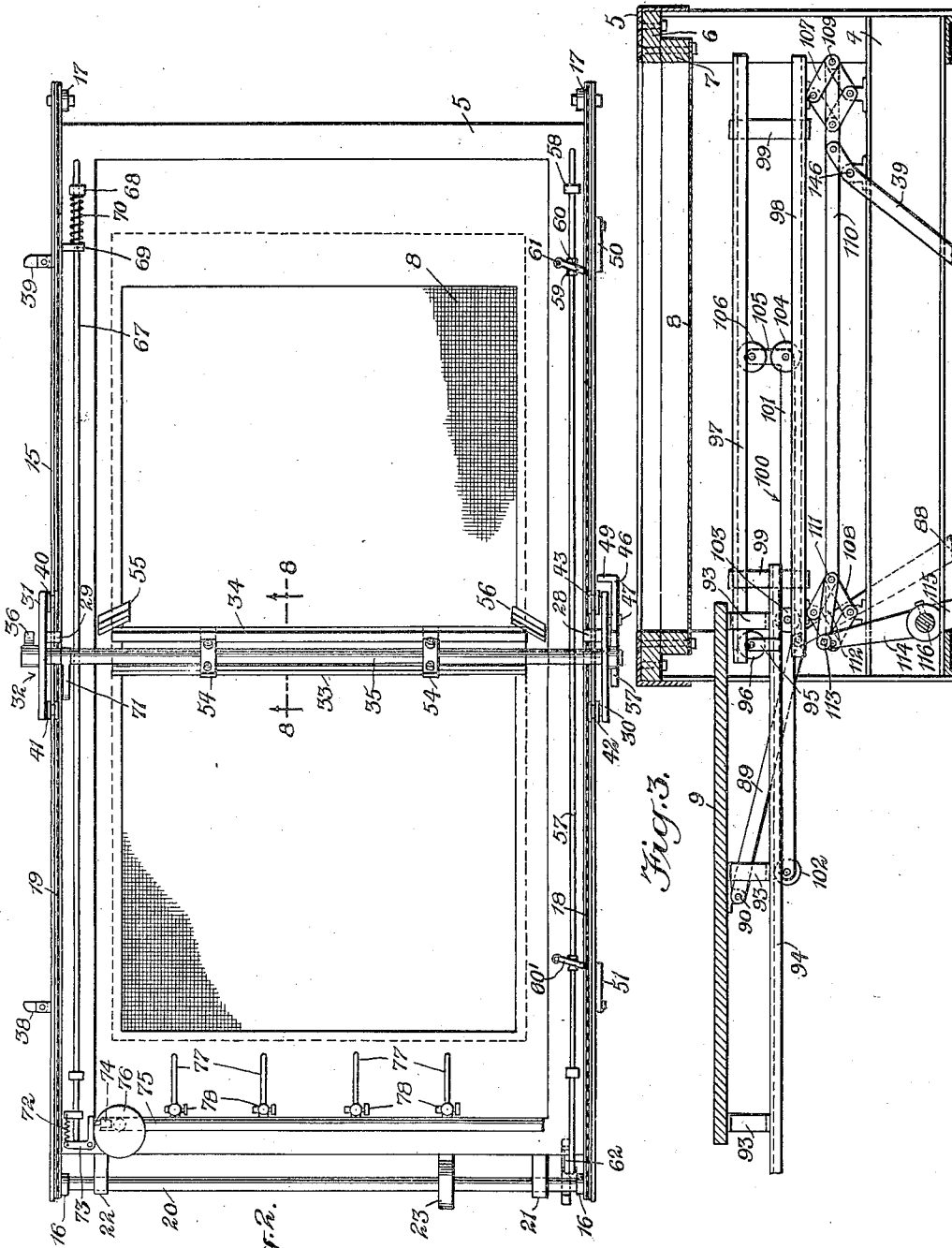
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Fig. 4.

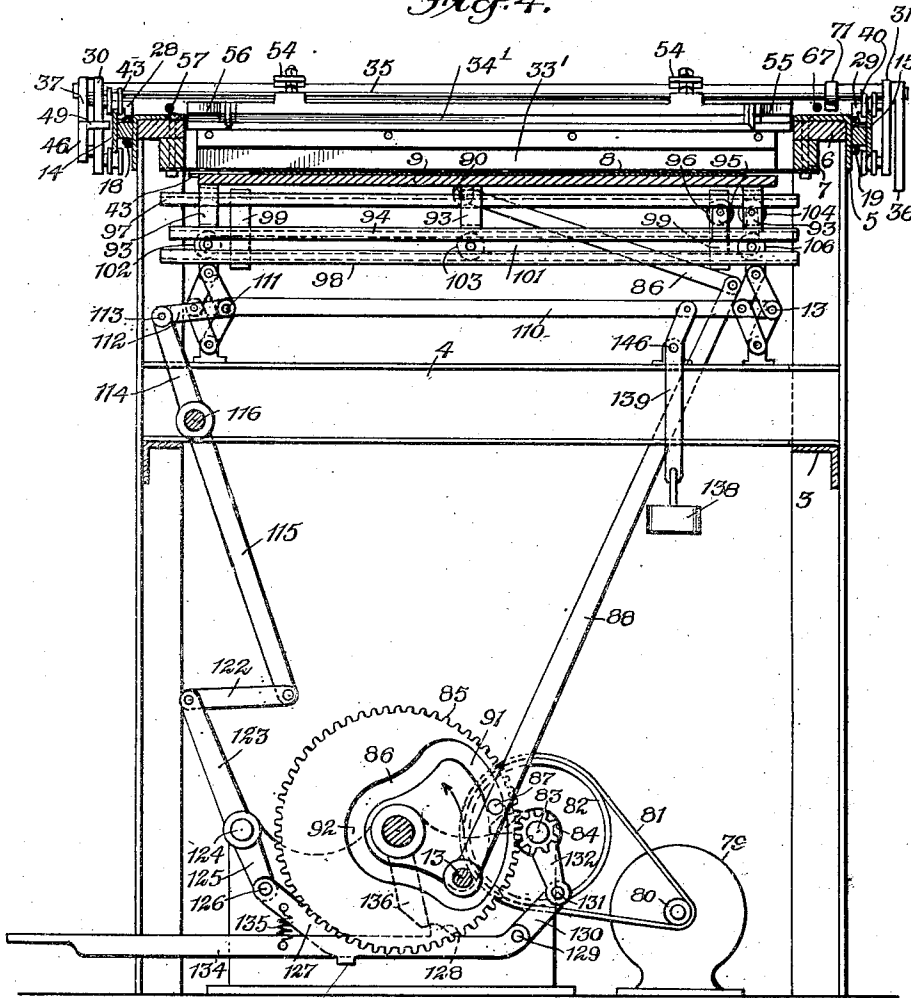
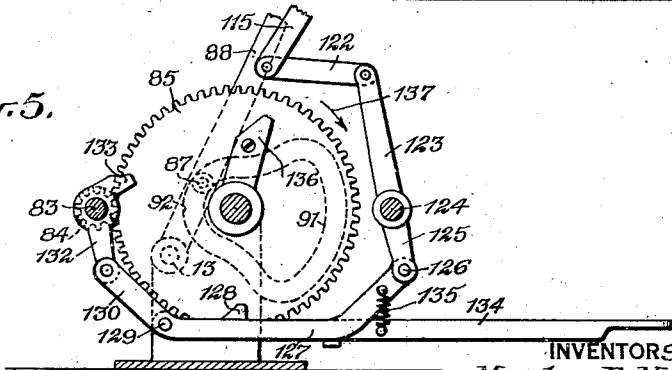


Fig. 5.



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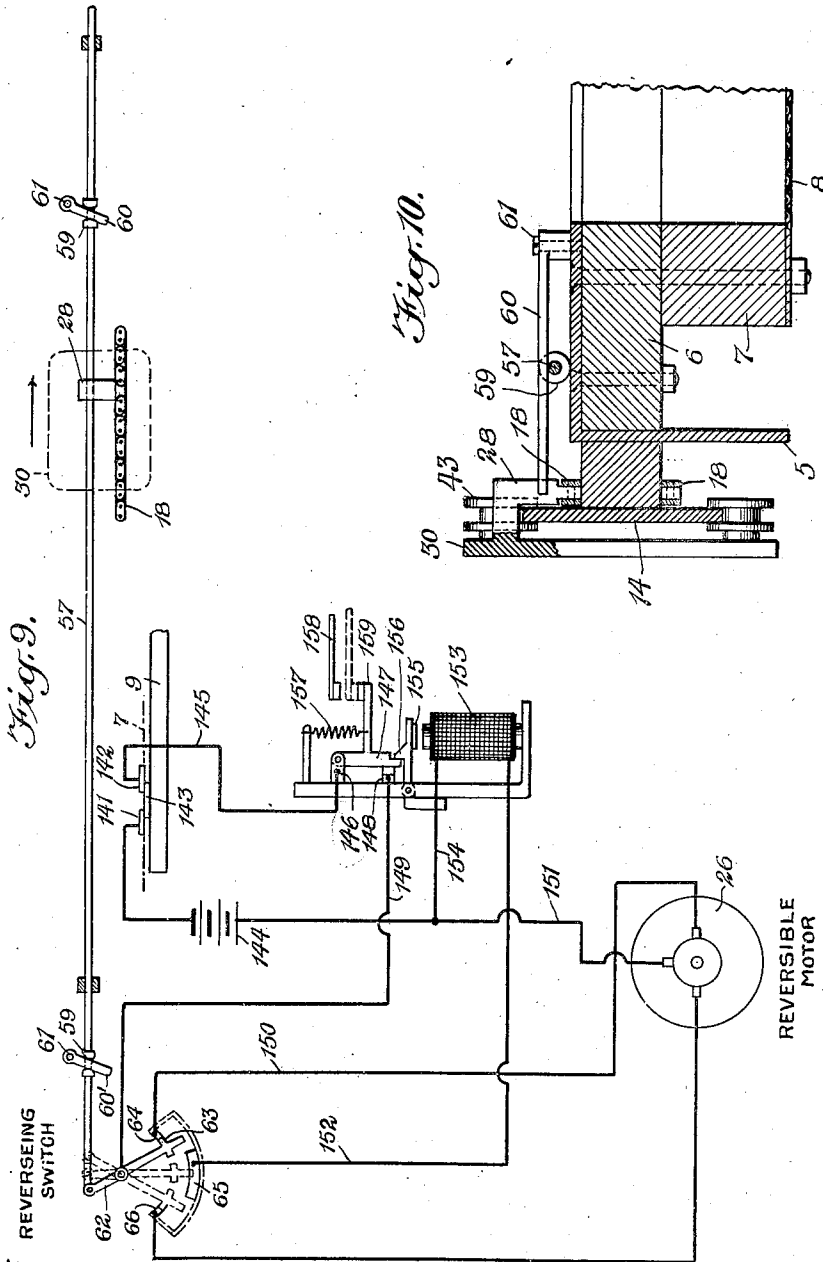
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5 Claims. (Cl. 101-123)

This invention relates to stencil printing machines and has for an object to provide an improved construction wherein a large print or a small print can be secured as desired.

Another object of the present invention is to provide a stencil printing machine which may utilize paints, lacquers, inks, liquid or semi-liquid materials, and colors upon wood, metal, cloth, cardboard, paper or other materials to form letterheads, illustrations or other configurations or protecting coatings in one or several colors.

An additional object, more specifically, is to provide a machine which may use the stencil and method set forth in the patent issued to Huxley D. Kem, No. 1,478,745.

A further object of the invention is to provide a construction of stenciling machine which will greatly simplify the stenciling operation while at the same time providing a construction which may produce stencil impressions at a slow rate of speed or at a high rate of speed.

An added object is to provide a stenciling machine wherein a stencil impression may be secured on each cycle of movement of the ink distributing device so that upon each stroke thereof an impression may be secured.

In the accompanying drawings—

Figure 1 is a side view of a machine disclosing an embodiment of the invention;

Figure 2 is a top plan view of the machine shown in Figure 1;

Figure 3 is a fragmentary sectional view through Fig. 1 approximately on the line 3-3, the same being on a slightly enlarged scale;

Figure 4 is a sectional view through Figure 1 on the line 4-4, the same being on an enlarged scale;

Figure 5 is a sectional view through Figure 1 on the line 5-5, the same being on an enlarged scale;

Figure 6 is an enlarged fragmentary side view of the squeegee carriage disclosing certain features of the invention;

Figure 7 is an elevation of the opposite end of the carriage shown in Fig. 6;

Figure 8 is a sectional view through Fig. 2 approximately on the line 8-8, the same being on an enlarged scale;

Figure 9 is a diagram showing the wiring system used in Fig. 1;

Figure 10 is a detailed fragmentary sectional view illustrating how the shift lever coacts with the stop carried by the operating chain.

Referring to the accompanying drawings by numerals, 1 indicates a frame of any desired kind

provided with suitable uprights and suitable transverse bars to support the various parts of the machine. It will be observed that the frame 1 includes a number of legs 2, longitudinal bars 3, and one or more transverse bars 4. Connected to the top of the posts 2 is an angle bar frame 5, as shown in Fig. 4, and connected to this frame is a wooden frame 6 having a depending section 7 carrying the stencil screen 8. These parts may be secured together in any desired manner as, for instance, by bolts so that they may be maintained as a unit on the posts 2 or may be secured thereto separately. For instance, the angle frame 5 is adapted to be separately bolted to the wooden frame 6 and additional bolts used for securing the depending section 7 and the stencil screen 8 in place. The stencil screen 8 may be of any desired type of stencil screen used in machines of this type as, for instance, the stencil screen disclosed in Patent No. 1,478,745, issued to Huxley D. Kem on December 25, 1933.

In using the stencil screen it is customary to spread ink or other suitable coloring matter over the screen to secure the desired impression on paper or other material arranged therebeneath. In the present invention efficient means have been provided for securing this action and the parts have been so arranged that a very large stencil impression may be secured or a comparatively small one. In addition the spreading means have been so formed that an impression or print may be secured on each back and forth movement of the spreading means.

As illustrated in Fig. 1 there are provided tables 9 and 10, table 9 being comparatively small, while table 10 is comparatively large. Both tables may be operated simultaneously when a large print is required, or only table 9 when a small print is desired. At the lower part of Fig. 1 may be seen a shaft 11 which is operatively connected to table 10 as hereinafter described, and this shaft is secured by couplings 12 to shaft 13, coupling 12 being adapted to be in coupling position when both the tables 9 and 10 are used, but when coupling 12 is moved to disengaged position shaft 11 and table 10 and associated parts will remain idle, even though table 9 and associated parts are functioning. It will be noted that all of the driving or actuating means are associated with table 9, so that it is only necessary to couple or uncouple the coupling 12 when it is desired to use or discard table 10. These two tables are arranged below the stencil screen 8 and are adapted to hold one or more sheets of paper or

other material against the stencil when the machine is in operation.

A pair of tracks 14 and 15 are secured to the frame 5 by bolts or other means, said tracks being shown in section in Fig. 4. These tracks carry at the respective ends sprocket wheels 16 and 17 for accommodating the respective chains 18 and 19, as illustrated particularly in Fig. 2. Sprocket wheels 16 are rigidly secured to shaft 20, which shaft is supported by the tracks 14 and 15 and also by suitable brackets 21 and 22 secured to frame 5. A pulley wheel 23 is rigidly secured to shaft 20 and accommodates the belt 24 which passes over a suitable driving pulley 25 connected to and operated by an electric motor 26. By reason of this construction it will be seen that whenever motor 26 is operated the chains 18 and 19 will be moved. During the operation of the machine these chains are adapted to be moved to a certain extent in one direction and then reversed to be moved to the same extent in the opposite direction. This is done by reversing the motor 26 as hereinafter fully described. Brackets 28 and 29 are secured to the respective chains 18 and 19, bracket 28 carrying a plate 30, while bracket 29 carries plate 31. These two plates with certain other parts form the squeegee carriage 32 adapted to carry the respective squeegees 33 and 34 which will be hereinafter more fully described. A shaft 35 extends from one side of the machine to the other, as shown in Fig. 1, and through both plates 30 and 31, said shaft being rotatable in these plates and carrying at the end near plate 31 a reversing arm 36, and at the opposite end a locking segment 37. The reversing arm 36, as shown in Figs. 1 and 6, is adapted to strike either of the abutments 38 or 39 according to the end of the machine at which the squeegee carriage is positioned.

When traveling to the left, as shown in Figs. 2 and 6, the arm 36 will strike the abutment 38 which is fastened in any desired manner to the frame 5. When the parts are moving to the right, as shown in Fig. 2, arm 36 will strike abutment 39. The striking of these abutments will cause shaft 35 to be swung to a certain extent and thereby swing the squeegee 33 from the position shown in Fig. 8 upwardly and the squeegee 34 downwardly. Plate 31 is provided with upper and lower wheels 40 and 41 whereby this plate may readily ride on the rail 15. Plate 30 is likewise provided with rollers 42 and 43 which ride on the rail 14, as shown in Fig. 4. The locking segment 37, as shown in Figs. 2 and 7, is rigidly secured to shaft 35 and is provided with notches 44 and 45. A pawl 46 is pivotally mounted at 47 on plate 30 and is provided with a turned-up end 48 adapted to fit into either of the notches 44 and 45. This pawl is also provided with an intumed extension 49, as shown in Fig. 2, whereby it may strike the inclined stop 50 when the parts are traveling to the right, and against the inclined stop 51 when traveling to the left. The end of pawl 46 having the extension 49 is heavier than the opposite end, so that the turned-up end 48 will automatically move into and remain in one of the notches of the locking segment 37 unless moved therefrom.

When the parts have been moved to substantially the position shown in Fig. 7 the arm 36 will begin to function and swing the squeegee to the position opposite that shown in Fig. 8, and also swing the segment 37 until the notch 47 is beneath the extension 49, whereupon after the extension 49 of pawl 46 has passed over the abut-

ment 50 it will drop down and then move back to the left until it is free. As soon as it drops down the extension 49 will move into notch 45 and thereby lock the squeegees 33 and 34 against swinging movement until they reach the other extreme end of their travel. It will be noted that the inclined stops 50 and 51 are swingably arranged but the swinging movement is limited and normally they are in the position shown in Fig. 1. As the pawl 46 moves under these stops they will swing upwardly slightly to allow this to take place and will then move back to the position shown in Fig. 1.

The squeegees 33 and 34 are illustrated particularly in Fig. 8 and are identical in construction and really form a single unit which is made up of bar 52 held in place by suitable bolts 53, which bolts are secured to a small plate 54 bolted or otherwise secured to shaft 35. The squeegee plates 33' and 34' may be of metal, rubber or other desired material and secured to plate 52 by suitable rivets or other means. These parts are so proportioned, as shown in Fig. 8, that the arm 36 will be at a certain angle when the plate 33' is functioning, and at an opposite angle when the plate 34' is functioning. The squeegee 34 is provided with auxiliary squeegees 55 and 56 which are arranged at a slight angle, as shown in Fig. 2, and only function when the squeegee is moving to the left. This is to take care of any accidental overflow of ink or coloring matter so as to direct the same back onto stencil screen 8. It will be understood from the above that when the chain is moving to the right, as shown in Fig. 2, the squeegee 33 will be functioning and the parts will travel to the right end of the machine until pawl 46 and arm 36 function to release the squeegee and reverse the parts ready for a return trip.

In order to make the return trip the sprocket chains 18 and 19 must be reversed and also the motor 26. To accomplish this there is provided a rod 57, shown in Fig. 2, guided in suitable guide brackets 58 carried by frame 5. A pair of abutments 59 is secured to the rod 57 and a reverse lever 60 is pivotally mounted at 61 on frame 5 and extends between the abutments 59 so as to be swung by these abutments or rather to move these abutments when the bracket 28 engages and moves the arm. It will be seen from Fig. 2 that as the bracket 28 moves to the right it will strike the reverse lever 60 and swing the same to an opposite angle. This will move rod 57 to the right and shift the arm 62 (Fig. 9) so that the contact end 63 will move off contact 64, engage the comparatively long contact 65 for a moment, and then move onto contact 66. The switch arm 60 and the bracket 28 are so positioned in relation to the abutment 59 that the reverse action takes place immediately after or substantially simultaneously with the reversing of the squeegees 33 and 34.

In addition to the reversing action just described there is provided a pump and certain other parts for distributing ink and other coloring matter to the stencil screen. As illustrated in Fig. 2 there is provided a rod 67 supported by suitable guides 68 carried by frame 5. This rod at the right hand end is provided with an abutment 69 rigidly secured to rod 67, and between this abutment and one of the guides 68 there is positioned a spring 70 which tends to hold the rod and abutment in the position shown in Fig. 2. When the squeegee and associated parts move to the right the hook 71 which is rigidly secured to shaft 35 will engage the abut-

ment 69 and move the same against the action of spring 70, thus moving rod 67 to the right and holding the same there until the squeegee has been reversed. As rod 67 moves to the right it will bring the spring 72 under tension. This spring is connected with bell crank lever 73, said lever being pivotally mounted on frame 5 with one end connected with the piston 74 extending into the distributing tube 75. An ink reservoir 76 is mounted to discharge ink by gravity into the distributing tube 75, but when the piston 74 is forced into the tube 75 the inlet from the reservoir is closed but the ink in the tube is brought under pressure and is discharged with some considerable force out the various nozzles 77, the opening in these nozzles being regulated by a suitable valve 78. In this way whenever the parts move to the extreme right hand end of the machine a supply of ink will be discharged onto the stencil screen 8 near the left hand end, which ink is later engaged by and spread over the stencil screen by the squeegee plate or doctor 33'.

As soon as the reverse lever 60 has been moved to its reversed position the parts will be moved to the dotted position shown in Fig. 9 and the motor 26 will be reversed, whereupon the parts will be reversed and will move back to their first position, namely, the position near the left hand end of the machine, as shown in Fig. 2. As soon as the parts approach the left hand position the pawl 46 will coast with the inclined abutment 51 for releasing the locking segment 37, and also the lever 36 will approach and begin to be moved by its reaction with the stop 38. After these parts have functioned or substantially at the end of the functioning action, bracket 28 will engage the reverse lever 60' and move rod 57 in the opposite direction, whereupon motor 26 will be again reversed. This action is carried out as long as the machine functions.

While the above various actions take place the parts beneath the frame 5 also function in certain timed relation to the movement of the squeegee and other parts. For instance, it is necessary for the tables 9 and 10 to move downwardly and then outwardly to the position shown in Fig. 3 to receive a new sheet of paper or other material, and then inwardly and back against the stencil screen 8. It will be understood that upon each back and forth movement of the squeegee this takes place, namely, the parts move to the position shown in Fig. 3 upon each movement of the stencil to the right, and then again upon each movement to the left, so that a new print is secured upon each cycle of reciprocation. Separate means have been provided for moving the parts upwardly and downwardly outwardly and inwardly, though they are both associated with the same driving mechanism and the same actuating gear. As shown in Fig. 1 the various parts for shifting the tables are driven by the motor 79 which is an electric motor of any desired kind, and which is provided with a small pulley 80 on which is mounted a belt 81, said belt also passing over the large pulley 82, whereby said large pulley is caused to function. A shaft 83 is secured to the large pulley 82 and to this shaft is rigidly secured a pinion 84, as shown in Fig. 4, said pinion continually meshing with the teeth of the driving gear 85. It will be understood that the driving gear 85 is continually rotating when the machine is in operation. This gear at one side is provided with a cam groove 86 accommodating the pin 87 carried by the lever or arm 88, which lever is rigidly se-

cured at the lower end to shaft 13. As the gear wheel 85 rotates the arm 88 is caused to swing back and forth and shaft 13 to rock. If the clutch 12 is functioning the arm 88' will swing back and forth in a similar manner to arm 88. Arm 88 is pivotally connected at the upper end to a link 89 which link is pivotally connected at 90 to the table 9. It will be seen that when arm 88 swings to the right, as shown in Fig. 4, certain parts will be moved outwardly, as shown in Fig. 3. When the arm swings in an opposite direction the parts will move back towards the right from the position shown in Fig. 3 to that shown in Fig. 4. While the pin 87 is in the large arc 91 the table 9 will remain in its inner position, and when the pin 87 is in the small arc 92 of groove 86 the table 9 will remain stationary in its outer position. The parts of the cam groove 86 between the arcs of the sections 91 and 92 act to cause a swinging movement of arm 88. It will thus be seen that upon each rotation of the driving gear 85 there will be two stationary periods for the table 9 and two movable periods. In order to secure this result there are provided a number of legs 93 adjacent the respective ends of the table, as illustrated in Fig. 1. It will be observed from this figure that there are two sets of legs and associated parts, and as the respective parts are identical in structure a description of one will apply to both.

The various legs 93 are rigidly connected with the supporting bar 94, which bar has a bracket 95 carrying a roller 96. Roller 96 is positioned to roll against the end surface of track 97, which track is parallel with the lower track 98 and connected thereto by suitable connecting straps or legs 99. A floating support 100 is carried by the tracks 97 and 98, said floating support comprising a bar 101 on which rollers 102, 103 and 104 are mounted, said rollers normally rolling on the upper surface of track 98. Bar 101 has an upstanding section 105 carrying roller 106, which rolls against the under surface of top rail 97. As table 9 and associated parts are moved in and out, the various rollers function to permit an easy sliding action, and also function with the other parts to maintain table 9 horizontal.

While table 9 and associated parts are moving inwardly and outwardly, the supporting rails 97 and 98 are stationary, but are adapted to be moved upwardly to the position shown in Fig. 4 when the stencil is to be used, and later downwardly to the position shown in Fig. 3. This action is repeated as the device continues to function. In order to move tracks 97 and 98 upwardly and downwardly there is provided a pair of double toggles 107 and 108 mounted at the respective ends of the tracks on suitable brackets carried at one end by bar 4, and connected by suitable brackets at the opposite end to track 98. Toggle 107 is pivotally connected at 109 to link 110 and to toggle 108 at 111. An auxiliary link 112 is also pivotally connected to toggle 108 at 111, said auxiliary link being pivotally connected at 113 to the outer end 114 of lever 115, said lever being pivotally mounted at 116. Mounting 116 is a shaft having the ends rotatably mounted in a suitable fitting carried by bar 4, so that the two sets of mechanisms connect with table 9 and will function simultaneously and in an identical manner, each mechanism being, as above set forth, identical to that shown in Fig. 3.

Where the table 10 is functioning the clutch 117 is engaged so that the shaft 116' may function similar to shaft or pivotal structure 116 in order

that the respective mechanisms 118 and 119 may operate in an exact manner to the mechanisms 120 and 121, which latter mechanisms are identical and also identical with mechanisms 118 and 119. The lever 115, as shown in Fig. 4, is connected by a link 122 to the upper end of lever 123 which lever is pivotally mounted at 124. The lower end 125 of lever 123 is pivotally connected at 126 to a reciprocating bar 127, which is pivotally connected at 129 to link 130, which link in turn is pivotally connected at 131 to arm 132, said arm being pivotally mounted on shaft 83 and provided with an extension or abutment 133. A foot pedal 134 has one end pivotally connected to the bar 127 at 129, said foot pedal being normally supported in an elevated position by spring 135 so that the abutment 128 may be positioned as shown in Figs. 4 and 5 during normal operation of the machine. When it is desired to prevent rising of table 9 a person may place his foot on pedal 134 and depress the same so that the abutment 128 will be moved out of the path of movement of the actuating block 136, said block being rigidly secured to the actuating or driving gear 85. When the gear 85 rotates as indicated by the arrow 137 in Fig. 5, which is the only direction in which it does rotate, the block 136 will naturally rotate therewith and will eventually engage the abutment 128 and move this abutment, pedal 134, and bar 127. This action will also cause the link 130 to swing arm 132 and extension 133 so that extension 133 will project into the path of movement of the block 136. Continued movement of block 136 with gear wheel 35 will, a little later, cause the block 136 to strike the extension 133 (Fig. 5) and move all the parts back to their normal position.

When the block 136 moves the abutment 128, for instance, to the position shown in dotted lines in Fig. 4, such movement will operate the various levers just mentioned, so that the lever 115 will cause the tracks 97 and 98 to move upwardly and the table 9 to press the paper or other article carried thereby against the stencil screen 8. The parts will remain in elevated position until the block 136 strikes the extension 133, whereupon all these levers, links and the like will be moved in the opposite direction and the toggles 108 and 109 will be again moved to the position shown in Fig. 3. This action is repeated on each rotation of the gear wheel 85 unless pedal 134 is depressed. When this occurs the block 136 will naturally not engage abutment 128 and, consequently, table 9 and associated parts will not be raised to elevated position. As there is very little or no pressure on the table 9 it will remain in its elevated position through the friction of the various parts assisted by the weight 138, which weight is pivotally mounted on the lever 139 pivotally carried at 140 by a suitable bracket, said lever at one end being pivotally connected with link 110. It will be evident that the weight 138 may be of any size and weight, so that the parts may function in the proper manner and as just described.

It will be observed that the back and forth movement of the squeegee is timed with the in and out and up and down movement of the table 9. Whenever the table 9 attempts to move upwardly and it is desired that there be no print made, the operator merely depresses the pedal 134 and the various parts will function except those which raise and lower the table 9.

In order to cause the various parts to function in proper order a particular electric circuit is provided, as shown in Fig. 9, which controls cer-

tain of the parts. The motor 79, shown in Fig. 1, operates continuously, and the driving gear 85 also operates continuously, but the motor 26 is adapted to be operated at certain times and then stopped and then reverse and operate in the opposite direction for a certain time and then stop. This is in order to hold the squeegee stationary at each end of its travel while the table 9 moves upwardly, downwardly and then back and upwardly. In order to secure this result the parts are arranged as shown in diagram in Fig. 9.

From this diagram it will be seen that the reversing rod 57 reverses switch 62 and thereby secures certain results. In addition there are provided stationary contacts 141 and 142 on frame 5, said contacts coacting with a third contact 143 carried by the table 9. When the parts are as shown in Fig. 9 the motor 26 is functioning to move the squeegee to the right. It will be observed that current will pass from the source 144 to contact 141, then through contact 143 and contact 142, wire 145, post 146, knife switch 147, post 148, wire 149 to switch arm 62, contact 64, wire 150, motor 26 and back through wire 151 to the source of current 144. As long as current is flowing in this direction the squeegee and associated parts will be moving to the right, as shown in Fig. 9. As soon as bracket 28 strikes the reverse lever 60 switch arm 62, as heretofore described, will move over rather quickly to contact 65 and along this contact and finally over to contact 66. As soon as arm 62 leaves contact 64 the circuit just described will be deprived of current though the momentum of the parts will be sufficient to permit the reversing arm 60 to function as just described. As the switch arm 62 engages contact 65 current will flow from a source of current 144 to contact 144 and then through contact 143 and contact 142, wire 145, post 146, knife switch 147, post 148, wire 149, switch arm 62, contact 64, wire 152, the winding of the electromagnet 153, wire 154, back to wire 151. Current flowing in this circuit will energize magnet 153 and cause the same to pull the armature 155 so as to swing the catch 156 downwardly whereupon spring 157 will quickly swing the knife switch 147 outwardly and thereby break the circuit at this point.

At substantially the same time that the circuit is broken by the knife switch the lever 115 and associated parts will function to lower the table 9 so as to break the engagement with contact 143. This is broken either simultaneously with or slightly before arm 62 moves onto contact 66. The table 9 will move downwardly as heretofore described, and then outwardly and remain in an outer position for a short time, then inwardly again and upwardly until contact 143 engages contacts 141 and 142. On the downward movement, however, the arm 153 will engage arm 159 carried by the knife switch 147 and force this knife switch downwardly so that the catch 156 may move upwardly and interlock therewith, magnet 153 being deenergized at this time as the arm 62 has moved off contact 65. This restores the circuit through contacts 141, 142 and 143, motor 26, and contact 66 and associated parts, so that when the table 9 moves upwardly again the circuit will be completed for motor 26 but the current will drive the motor in a reverse direction, whereupon the squeegee and associated parts will be moved to the left until it strikes the reversing arm 60', and the same operation will be repeated. It will be observed that even though the contacts 141, 142 and 143 are in en-

gagement, after the squeegee has reached either of its extreme positions, no current will be supplied as the movement of the switch arm 62 past and in engagement with contact 65 will cause the magnet 153 to function and open the circuit at this point, which circuit remains open until table 9 moves downwardly. Table 9 moves downwardly and breaks the circuit at contact 143 before the switch arm 158 actuates the switch 147, closing the same.

It will be noted that when the machine is once started it will automatically function continuously until the current is switched off from motor 79. It will also be noted that the squeegee is automatically supplied with ink or other coloring matter and that it moves down to one end of the frame, remains stationary there for a given period, and then moves back to the other end where it remains stationary for a certain period. Upon each movement of the squeegee a print or impression is secured. The shafts 11 and 116' operate to cause table 10 to be actuated in absolute unison with table 9. However, when it is desired to use table 9 alone the clutches 12 and 117 are disengaged. In addition, in order to shorten the movement of the squeegee it is necessary to move the abutment 50 to the left and to a position near the end of table 9. It will also be necessary to move the reversing arm 60 to a suitable place near table 9. The abutment 39 and members 68, 69 and 70 should be likewise moved down to a point near the table 9. When this has been done the squeegee will merely move back and forth over the table 9 but, as shown in the drawings, the various parts have been positioned so that the squeegee will move over both parts of the tables 9 and 10. In either event, the action is the same except that one produces a large print and the other a small print. Also, where small prints are desired, it is preferable to use only table 9 and move the reversing parts etc. near table 9 so that the device may operate at a higher rate of speed because of the shortness of travel of the squeegee.

We claim:—

1. A stenciling machine of the character described, including a plurality of supporting legs, a frame carried by said legs, a stencil screen carried by said frame, a table adapted to hold a sheet of paper or other material against said screen to receive an impression, a plurality of means for raising and lowering said table, a plurality of means for moving said table outside of said frame for holding the table outside of said frame for a given time, and then moving the table back within the frame while in a lowered position, a squeegee for spreading coloring matter over said stencil screen, power actuated means for moving said squeegee over said stencil screen, and means including an electric switch for shutting off said power actuated means on each stroke of the squeegee.

2. A stenciling machine including a squeegee

having a pair of spreading plates, a rock shaft rigidly secured to and supporting said plates, a pair of carriages for supporting said rock shaft, each of said carriages having a plurality of wheels, there being wheels arranged near the upper part and near the lower part, a track for each carriage, said wheels fitting against the upper and lower surfaces of said tracks, a traveling member connected with each of said carriages independently of said rock shaft for moving the carriage along said tracks, a reversing arm rigidly secured to said rock shaft adjacent the ends of said tracks engaging said reversing arm for causing an actuation thereof as the carriage moves, and means for rocking said spreading plates, said means functioning at each end of the travel of said carriages whereby one plate will function when the squeegee is moved in one direction and the other plate when the squeegee is moving in the opposite direction.

3. In a stenciling machine of the character described, a stencil screen and means for applying coloring matter thereto, said means including a squeegee, means for moving the squeegee over the stencil screen, a plurality of nozzles for discharging liquid coloring matter onto the screen, a reservoir for supplying liquid coloring matter to said nozzles, and a pump for causing the liquid coloring matter to be projected from said nozzles, said pump being operatively associated with said squeegee with the parts positioned to cause the pump to function when the squeegee has moved to its extreme farthest distance from said nozzles.

4. In a stencil printing machine, a stencil screen, a squeegee positioned to spread coloring matter over the screen, a shaft carrying said squeegee, a carriage at each end of said shaft for supporting the same, a track for each of said carriages, a chain secured to each of said carriages extending to the respective ends of the tracks, a sprocket wheel at the end of each of said tracks, said sprocket wheels accommodating said chains, a drive shaft connected to two of said sprocket wheels, power means for rotating said drive shaft, a pair of reversing levers for reversing said power means, and means extending from one of said carriages for actuating the reversing levers as the squeegee approaches the respective ends of said stencil screen.

5. A stenciling machine of the character described, including a support, a frame carried by said support, a stencil screen carried by said frame, a table adapted to hold a sheet of paper or other material against said screen to receive an impression, a squeegee for spreading coloring matter over said stencil screen, power actuated means for moving said squeegee over said stencil screen, and means including an electric switch for shutting off said power actuated means on each stroke of said squeegee.

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