Oct. 12, 1948. W. G. H. FINCH 2,451,079

FACSIMILE APPARATUS RECORD MOUNTING MEANS

Filed Jan. 24, 1946 2 Sheets-Sheet 1

Fig. 1

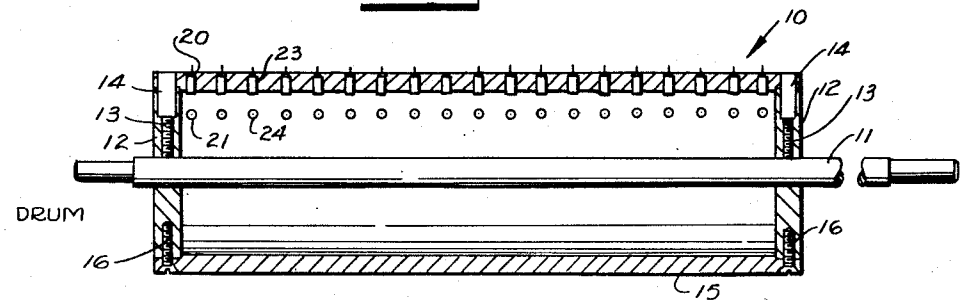


Fig. 2

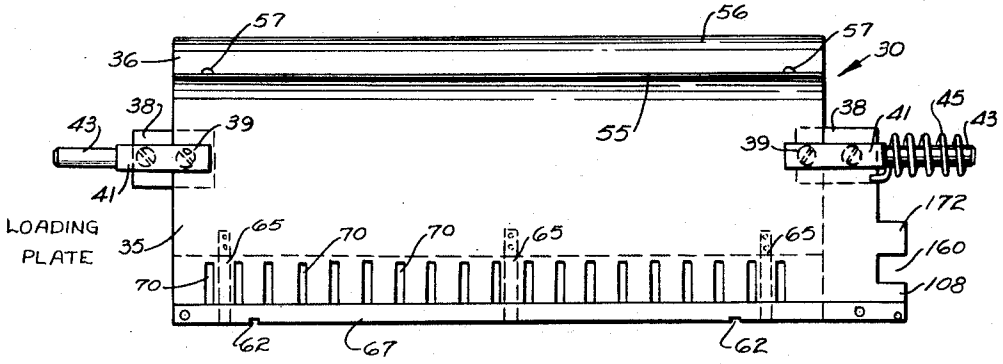
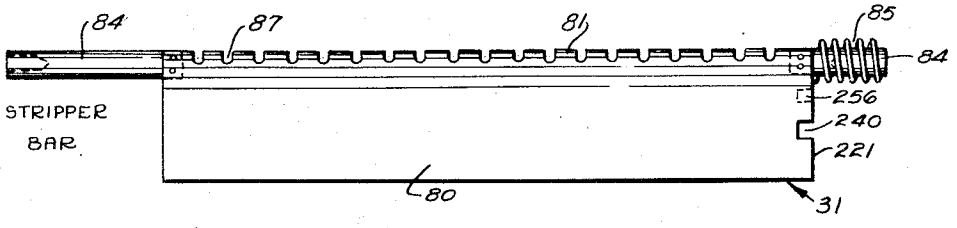


Fig. 3



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Fig. 4

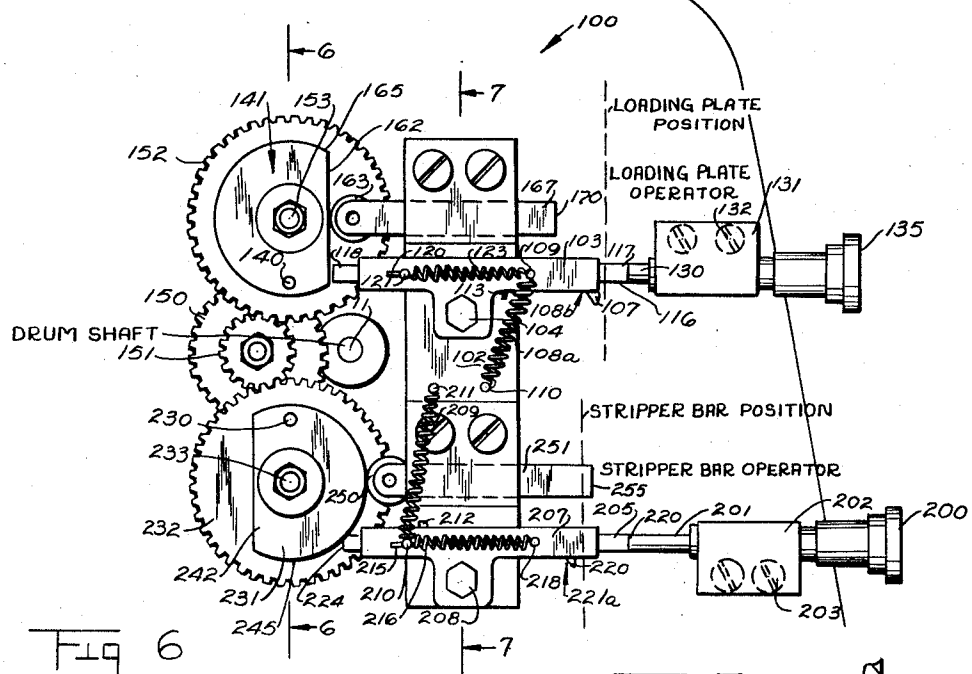


Fig 6

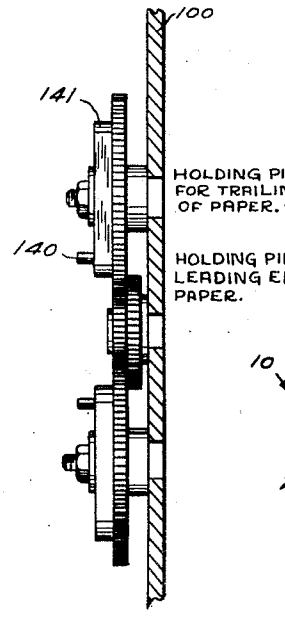


Fig. 5

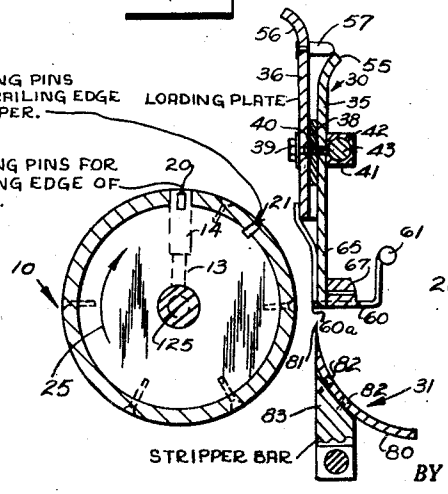
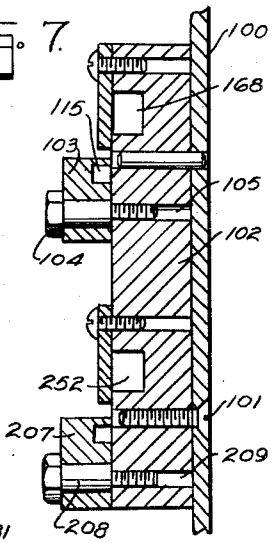


Fig. 7.



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UNITED STATES PATENT OFFICE

2,451,079

FACSIMILE APPARATUS RECORD MOUNTING MEANS

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Application January 24, 1946, Serial No. 643,105

12 Claims. (Cl. 271—3)

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My present invention relates to facsimile apparatus of the type in which a record sheet is helically scanned on a drum and more particularly to automatic means for mounting and securing a record sheet on the drum and for automatically removing the same at the conclusion of the scanning operation. Heretofore, various devices requiring manual operations have been utilized for mounting facsimile sheets on both the transmitting and receiving drums of facsimile apparatus. These devices have included clamps, garter springs and various other arrangements which required manual wrapping of the sheet around the drum and manipulation of the various securing elements.

My invention contemplates a device in which the user in the facsimile apparatus will simply drop a sheet into a slot and press a button; the apparatus will then wrap the sheet around the drum and secure the sheet thereon.

At the conclusion of the transmitting and recording operation, the operator of the apparatus need merely press another button and the machine will thereupon release the sheet from the drum and deliver the same to the outside of the machine.

Essentially, my invention contemplates a construction in which the drum is provided with two rows of pins or other similar securing members extending parallel to the axis of the drum; the space between the pins being relatively small—slightly larger than the angular rotation of the drum required for synchronizing purposes.

My apparatus includes a pressure plate so arranged that it may receive and hold a sheet with means for moving the leading edge of the sheet against one of the rows of pins so that the sheet may be impaled thereon. Subsequent rotation of the drum winds up the sheet around the drum and when the trailing edge passes the second row of pins, this edge is also impaled thereon. On completion of the scanning operation, a stripper bar or blade is moved into engagement with the drum to pick up the leading edge of the sheet from the pins. The stripper bar or blade remains in contact with the drum for one revolution until it strips off the trailing edge of the sheet from the drum. The sheet then slides out through an appropriate opening in the housing of the apparatus.

A primary object of my invention is, therefore, the provision of novel means for mounting a sheet on the drum of facsimile apparatus.

Another object of my invention is the provision of novel automatic means for securing a sheet around the drum of facsimile apparatus.

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Another object of my invention is the provision of novel automatic means for mounting and removing facsimile sheets with respect to the drums of facsimile apparatus.

The foregoing and many other objects of my invention will become apparent in the following description and drawings in which:

Figure 1 is a cross-section view of a drum of facsimile apparatus showing the arrangement of the mounting means thereon.

Figure 2 is an elevation of the loading plate for mounting a facsimile sheet on the drum.

Figure 3 is an elevation of a stripper bar or blade for removing the facsimile sheet from the drum.

Figure 4 is a side view of the operating elements for operating both the loading plate and the stripper bar.

Figure 5 is a cross-sectional view of the drum and mounting means taken parallel to the plane of Figure 4 showing the position of the loading plate and stripper bar with respect to the drum.

Figure 6 is a cross-sectional view taken on line 6—6 of Figure 4 looking in the direction of the arrows.

Figure 7 is a cross-sectional view taken on line 7—7 of Figure 4 looking in the direction of the arrows.

Referring now to Figures 1 to 5, I have here shown the drum 10 of my novel facsimile apparatus, which drum is mounted on the driven shaft 11. The drum comprises a pair of end plates 12, 12 keyed to the shaft 11 by the set screws 13, 13 accessible for adjustment through the openings 14, 14. The surface of the drum 10 is formed of a metallic sheet 15 placed around the end plates 12 and secured thereto by the screws 16, 16.

The securing elements for releasably securing a facsimile sheet on the drum comprise the two rows of pins 20 and 21. Each of the rows of pins 20 and 21 comprises a number of pins force fitted into the openings 23, 24 in the surface 15 of the drum; the pins 20 and 21 projecting out from the surface of the drum.

The drum rotates in the direction indicated by the arrow 25 of Figure 5.

The row of pins 20 engages the leading edge of the facsimile sheet and as the drum 10 rotates, the facsimile sheet is wound up thereon until the trailing edge of the facsimile sheet is engaged by the row of pins 21. The facsimile sheet is then securely held on the drum 10.

In stripping the facsimile sheet from the drum 10 a stripper bar or blade first engages the leading

edge of the sheet on pins 20 and lifts that edge off the drum. As the drum continues its rotation, as indicated by the arrows, the sheet unwinds from the drum 10 until the stripper bar lifts the trailing edge of the sheet from the pins 21. The sheet then falls down into an appropriate opening or receptacle from which it may be removed.

The loading plate 30 is shown in Figures 2 and 5 and the stripper bar or blade 31 is shown in Figures 3 and 5

The loading plate 30 actually comprises two plates 35 and 36 substantially parallel to each other and spaced from each other by slightly more than the thickness of a facsimile sheet by the spacing washers 38.

The spacing washers 38, 38 extend only slightly in from the lateral ends of plates 35 and 36 to provide appropriate spacing without interfering with the facsimile sheet of the two plates 35 and 36.

The plates 35 and 36 and the spacing washers 38 are interconnected by the bolts 39, 39 which pass through appropriate registering openings therein and which are received in the threaded opening 40 of the bar 41 at each side.

Bar 41 on each side has a central opening 42 receiving the rod 43 on each side; the said rod being keyed to the bar 41 by the bolts 39. Consequently, plates 35 and 36 and the rods 43, 43 are integrated as a single unit. Rods 43, 43 are supported in appropriate rotatable bearings in the end frames not shown of the machine and are so arranged that the lower end of the loading plate 30 may rotate into engagement with the drum.

The upper ends of plates 35 and 36 are flared respectively at 55, 56 in order to readily admit a sheet of paper.

Centering pins 57, 57 are secured to the flared portion 56 of the plate 36 at the outer ends thereof in order to properly define the area in which the sheet is to be inserted. The sheet on which a record is to be made or the sheet from which a record is to be transmitted is inserted between flared portions 55, 56 of plates 35 and 36 between the pins 57, 57. The paper sheet drops down between these plates onto the end of supporting bars 60.

Supporting bars 60 are independently supported on transverse rod 61 which parallels the plate 30. The supporting bars 60 pass through the slots 62, 62 at the lower end of plate 35 and project outwardly at 60*a* beyond the lower end of plate 35 in order that the end of the paper sheet may rest thereon.

The paper sheet is held against the inner surface of plate 30 by the light leaf springs 65, 65 and is thus held in position for further operations.

The lower end of the plate 35 is further reinforced by the bar 67 so as to be entirely rigid. The lower end of plate 35 is also provided with a plurality of slots 70, 70 registering with the pins 21 and 20 so that the pins may move readily past the lower ends of the plate.

With the paper sheet now inserted between the flared ends 55, 56 of plates 35, 36 and approximately centered between pins 57, 57, the end of the paper sheet drops down onto the extensions 60*a* of the lower supporting bars 60 and is held flat against the plate 35 by the light leaf spring 65.

The drum is rotating in the direction indicated by the arrow 25.

At some point between the row of pins 21 and the row of pins 20, the lower end of the loading

plate 30 rotates toward the drum causing the lower end of the sheet to come into contact with the drum. As the pins 20 pass the lower end of the sheet, the lower end of the sheet is impaled thereon and the sheet is then pulled along by the drum and slides out past the leaf springs 65. The pins 20 can pass readily through the plate 35 owing to the slots 70, as above pointed out. Then as the row of pins 21 now moves past the lower end of the loading plate 30, the trailing end of the sheet is impaled on the pins 21 and the sheet is wrapped around the drum and securely held thereon.

The apparatus shown in Figures 4, 6 and 7 is designed to operate a loading plate at the proper instant to bring the lower end of the sheet held thereby against the drum after the row of pins 21 has moved past the lower end of the plate and before the pins 20 have moved past that point.

The stripper bar of Figure 3 is operated in a fashion somewhat similar to that previously described in connection with the loading plate.

In the following description reference should be made to Figures 3 and 5. The stripper bar comprises a curved plate 80 terminating in a blade-like end 81. The curved plate 80 is secured in any suitable manner as by the screws 82, 82 to the supporting members 83 which in turn are keyed to the end rods 84, 84. The entire stripper plate is thus rotatable in appropriate bearings in which the end rods 84, 84 are held. The entire stripper bar is biased by coil spring 85 so that the blade 81 tends to rotate into contact with the drum.

The blade portion 81 of the plate 80 is provided with a plurality of slots 87 registering with the pins 20 and 21, so that the pins may readily pass through the blade 81 even while the blade 81 is in contact with the surface of the drum.

The apparatus of Figures 4, 5 and 6 is so designed that it will operate the blade portion 81 of the stripper bar 80 against the surface of the drum 10 after the pins 21 have passed the blade 81 but before the pins 20 have passed the same. When thus operated, the blade 81 will lift the leading edge of the paper off the pins 20 and cause the paper to slide down the curved surface of the plate 80 as the drum rotates.

On completion of a single cycle rotation of the drum the trailing edge of the paper held by the pins 21 moves past the blade 81 and this trailing edge is also lifted from the drum.

The paper is now free to drop down entirely past the curve of the stripper bar 80 and into an appropriate slot or opening of the machine or into an appropriate receptacle.

In Figures 4, 5, 6 and 7, I have shown the mechanism for operating the loading plate and stripper bar into appropriate engagement with the drum in order to mount and secure a sheet on the drum and in order to remove a sheet therefrom.

The end frame 100 of the housing of the machine has secured thereto in any suitable manner, as by the bolts 101, a casting 102 on which is mounted the operating elements which co-act with the loading plate and stripper bar. The rocking arm 103 is pivotally mounted on the bolt 104 threaded into an appropriate opening 105 of the casting 102. Rocking arm 103 is provided at its forward end with a chamfered latch tip 107. The chamfered latch tip 107 engages extension 108 of the loading plate 30 and prevents the lower end of the loading plate 30 from being

moved into engagement with the drum under bias of plate 35.

Rocking arm 103 is biased in a clockwise direction by the tension spring 108a connected between the pin 109 on rocking arm 103 and the pin 110 on the casting 102.

An appropriate stop 113 is provided on casting 102 to limit clockwise rotation of rocking arm 103 to the position shown.

Rocking arm 103 is provided with a groove 115 in which is mounted the sliding bar 116 and the end 117 projecting from the right side of rocking arm 103 and the end 118 projecting from the left side of rocking arm 103.

A communicating slot 120 is provided in rocking arm 103 so that the pin 121 of the sliding bar 116 may extend through the slot 120 and engage one end of the tension spring 123, the opposite end of which is held on the pin 109. Tension spring 123 thus biases the sliding bar 116 to the right.

A push rod 130 is slidably mounted in the auxiliary housing 131 secured in any suitable manner, as by the bolts 132 to the end frame 100, the said push rod terminating in the front push button 135.

Push button 135 when pushed in will push the end 117 of the sliding bar 116 to the left in the rocking arm 103 thus pushing the end 118 of the sliding bar 116 into position to be engaged by the pin 140 mounted on cam 141.

The drum shaft 11 is connected through the gear train 150, 151 to the gear 152 rotatably mounted on the stud 153. Cam 141 rotates with gear 152. The gear ratio between the gear on shaft 11 and gear 152 is 1 to 4 so that the shaft 11 rotates four times for each rotation of the gear 152 and cam 141.

When now the push button 135 is pushed in thus pushing the end 117 of the sliding bar 116 to the left and pushing the end 118 of the sliding bar 116 to be engaged by the pin 140, then on continued rotation of the drum 10 and the gear 152, the pin 140 will strike the end 118 of sliding bar 116 and depress it. This will cause the rocking arm 103 to rotate counterclockwise lifting the latching tip 107 into the space 160 (Figure 2) of the loading plate.

The loading plate 30 will now be free to rotate in response to the bias of spring 45 to bring the lower end of the loading plate against the drum. Pin 140 is so arranged that it will strike and depress the end 118 of the sliding bar 116 only at a point wherein the space between pins 21 and 20 is opposite the lower end of the loading plate 30.

The cam 141 is so arranged that thereafter the flat surface 162 thereof will move opposite the roller 163 for approximately ¼ turn of the gear 152 and hence for a full revolution of the drum 10. At the end of this time, the sheet has been fully rotated on the drum in the manner previously described and the loading plate should be returned to its initial position.

Immediately after the pin 140 has depressed the end 118 of sliding bar 116, it moved beyond this end so that the spring 108a could return the rocking arm 103 to its original position.

At this time, the portion 108 of the loading plate has moved to approximately the position shown by arrow 108b of Figure 4. It is now necessary to return the loading plate to its original non-loading position and to do so promptly.

At the completion of the rotating revolution of the drum and after the trailing edge of the paper has been loaded on pins 21 and before the lower end of the loading plate 30 could again contact pins 21 and rub over the paper, portion 165 of cam 141 moves opposite the roller 163. Roller 163 is mounted on the end of sliding bar 167 slidable in the slot 168 of casting 102.

The end 170 of the sliding bar 167 registers with extension 172 (Figure 2) of the loading plate 30 and as the roller 163 and bar 167 are moved to the right, the end 170 of the bar 167 bearing against extension 172 of the loading plate moves the lower end of the loading plate out to the right with respect to Figure 4.

Portion 108 slides past the chamfered surface of latch tip 107 lifting the rocking arm 103 as it passes; and after it passes the latch tip 107, spring 108a resets the rocking arm 103 to its original position where latch tip 107 latches the loading plate 30 to non-engaging position. The paper sheet is thus loaded on the drum.

When it is desired to remove the paper sheet from the drum, then the operator pushes in the button 200 mounted on the end of rod 201 slidably mounted in the bracket 202 secured by the screws 203 to the frame 100. Rod 201 then pushes in the sliding bar 205 pushing it toward the left in the rocking arm 207, which rocking arm is previously mounted on the stud 208, the end of which is threaded into the opening 209 in casting 102.

Rocking arm 207 is biased in a clockwise direction by the tension spring 209 captured between pin 210 of the sliding bar 205 of rocking arm 207 and pin 211 on the casting 102.

Stop 212 limits the clockwise rotation of the rocking arm 207. The rocking arm 207 is provided with the slot 215 through which the pin 210 of sliding bar 205 projects and the sliding bar 205 is biased to the right by the tension spring 216 engaged between pin 210 and the stationary pin 218 on the rocking arm 207. The rocking arm 207 is provided with a chamfered latch tip 220 against which rests the portion 221 (Figure 3) of the stripper bar 80.

When the push button 200 is pushed in pushing rod 201 against the end 223 of sliding bar 205, the opposite end 224 of sliding bar 205 is pushed into the power of movement of pin 230 mounted on the cam 231, which cam is keyed to the gear 232 rotatable on the stud 233.

As previously described in connection with gear 152, the gear ratio between drum shaft 11 and gear 232 is 1 to 4 so that the drum rotates four times for each revolution of gear 232.

Pin 230 is so arranged that it will strike the end 224 of sliding bar 205 at the time when the blade 81 of the stripper bar 80 is between pins 21 and 22 of the drum. When the pin thus strikes the sliding bar 205 it rotates the rocking arm 207 counterclockwise to lift the latch tip 220 from its engagement with portion 221 of the stripper bar into the opening 240 of the stripper bar, so that the stripper bar may move from the dotted line position shown in Figure 4 toward the left and so that the blade 81 may engage the drum. Portion 221 of the stripper bar thus moves to the position indicated by the arrow 221a of Figure 4.

On completion of a full revolution of the drum, the stripper bar has thus stripped the sheet from the facsimile drum and it is now necessary to reset the stripper bar away from the drum.

The cut away section 242 of cam 231 corresponds approximately to one revolution of the drum. During the rotation of the various elements, the section 242 of cam 231 is opposite

the roller 250. As soon as the stripping revolution of the drum has been completed, the section 245 of the cam moves opposite the roller 250 and thus pushes the roller and the push bar 251 on the end of which it is mounted to the right. Push bar 251 slides in the slot 252 of casting 102. The end 255 of push bar 251 pushes against the portion 256 of the stripper bar of Figure 3 pushing the stripper bar out once more away from the drum and causing the opening 240 to move outwardly past the chamfered portion of the latch tip 220 until section 221 of the stripper bar snaps behind the latch tip 220. The stripper bar is thus reset.

By this means, it will be seen that in order to place a sheet on the facsimile drum the facsimile apparatus is started so that the drum rotates. A sheet is dropped between the flared portions 55, 56 of the loading plate and drops to the bottom of the loading plate against the end 60a of the supporting bar 60.

When it is desired to place the sheet on the drum, button 135 is pushed in. As the space between pins 21 and 20 of the drum 10 passes the lower end of the loading plate, the rocking arm 103 is swung counterclockwise by pin 140 to release the latch tip 107 from section 108 of the loading plate 30. This permits the coil spring 45 to drive the lower end of the loading plate against the drum so that the leading edge of the sheet may be impaled on the pins 20. The drum rotates pulling the sheet out from between the plates 35 and 36 of the composite loading plate 30 until the trailing edge of the sheet is impaled on pins 21. At this time section 165 of cam 141 pushes roller 163 and push bar 167 to push out the lower end of the loading plate 30 and engage it once more behind the latch tip 107.

When it is desired to remove the sheet from the drum, then the button 200 is pushed in; when the portion of the drum between pins 21 and 20 moves opposite the blade portion 81 of stripper bar 80, the pin 230 causes rocking arm 207 to move counterclockwise unlatching the stripper bar 80 and permitting the coil spring 85 to drive the blade 81 against the drum surface. Blade 81 then lifts the leading edge of the sheet off the pins 20 and causes the sheet to slide down the curve of bar 80 to an appropriate slot or receptacle and remains in contact with the drum as the drum rotates until it lifts the trailing edge of the sheet off the pins 21.

At this time, section 245 of cam 231 moves opposite the roller 250 pushing the bar 251 to the right to push the blade 81 of the stripper bar 80 away from the drum and to reset the stripper bar 80 against the latch tip 220.

By the foregoing means, therefore, I have provided simplified automatic push button operated mechanical means for mounting a record sheet on a facsimile drum and removing the sheet therefrom.

Since many variations and many modifications of my loading and stripping device will now be obvious to those skilled in the art, I prefer to be bound not by the specific disclosures herein contained but only by the appended claims.

I claim:

1. In facsimile apparatus, a rotatable cylindrical drum; means for mounting a facsimile sheet on said drum; said means comprising two rows of pins extending from the surface of the drum parallel to the axis of the drum; one row of pins being adapted to impale one margin of said facsimile sheet; the other row of pins being adapted to impale the opposite margin of said facsimile sheet; and a loading plate having one end engageable with said drum; said loading plate including means for supporting a facsimile sheet; manually operated means for preparing the loading plate for a sheet loading operation; a member movable with the drum and connectable with the loading plate at a specific angular position of the drum when said manually operated means is operated to cause said one end of the loading plate to move against said drum to impale the sheet carried thereby on the pins of the drum.

2. In facsimile apparatus, a rotatable cylindrical drum; means for mounting a facsimile sheet on said drum; said means comprising two rows of pins extending from the surface of the drum parallel to the axis of the drum; one row of pins being adapted to impale one margin of said facsimile sheet; the other row of pins being adapted to impale the opposite margin of said facsimile sheet; and a loading plate having one end engageable with said drum; said loading plate including means for supporting a facsimile sheet; manually operated means for preparing the loading plate for a sheet loading operation; a member movable with the drum and connectable with the loading plate at a specific angular position of the drum when said manually operated means is operated to cause said one end of the loading plate to move against said drum to impale the sheet carried thereby on the pins of the drum; and another member movable with the drum and operable at another specific angular position of the drum to move said end of said loading plate away from the drum.

3. In facsimile apparatus, a rotatable cylindrical drum; a row of pins extending from the surface of the drum and along a line parallel to the axis of the drum and adapted to impale a portion of a facsimile sheet; and a loading plate having one end engageable with said drum; said loading plate including means for supporting a facsimile sheet; manually operated means for preparing the loading plate for a sheet loading operation; a member movable with the drum and connectable with the loading plate at a specific angular position of the drum when said manually operated means is operated to cause said one end of the loading plate to move against said drum to impale the sheet carried thereby on the pins of the drum.

4. In facsimile apparatus, a rotatable cylindrical drum; a row of pins extending from the surface of the drum and along a line parallel to the axis of the drum and adapted to impale a portion of a facsimile sheet; and a loading plate having one end engageable with said drum; said loading plate including means for supporting a facsimile sheet; manually operated means for preparing the loading plate for a sheet loading operation; a member movable with the drum and connectable with the loading plate at a specific angular position of the drum when said manually operated means is operated to cause said one end of the loading plate to move against said drum to impale the sheet carried thereby on the pins of the drum; and another member movable with the drum and operable at another specific angular position of the drum to move said end of said loading plate away from the drum.

5. In facsimile apparatus, a rotatable cylindrical drum; means for mounting a facsimile sheet on said drum; said means comprising two rows of pins extending from the surface of the drum

parallel to the axis of the drum; one row of pins being adapted to impale one margin of said facsimile sheet; the other row of pins being adapted to impale the opposite margin of said facsimile sheet; and a stripper bar having a blade engageable with said drum; manually operated means for preparing the stripper bar for a sheet removal operation; a member movable with the drum and connectable with the blade at a specific angular position of the drum when said manually operated means is operated to cause said blade to move against said drum to remove said sheet from said pins.

6. In facsimile apparatus, a rotatable cylindrical drum; means for mounting a facsimile sheet on said drum; said means comprising two rows of pins extending from the surface of the drum parallel to the axis of the drum; one row of pins being adapted to impale one margin of said facsimile sheet; the other row of pins being adapted to impale the opposite margin of said facsimile sheet; and a stripper bar having a blade engageable with said drum; manually operated means for preparing the stripper bar for a sheet removal operation; a member movable with the drum and connectable with the blade at a specific angular position of the drum when said manually operated means is operated to cause said blade to move against said drum to remove said sheet from said pins; and another member movable with the drum and operable at another specific angular position of the drum to move said blade away from the drum.

7. In facsimile apparatus, a rotatable cylindrical drum; a row of pins extending from the surface of the drum and along a line parallel to the axis of the drum and adapted to impale a portion of a facsimile sheet; and a stripper bar having a blade engageable with said drum; manually operated means for preparing the stripper bar for a sheet removal operation; a member movable with the drum and connectable with the blade at a specific angular position of the drum when said manually operated means is operated to cause said blade to move against said drum to remove said sheet from said pins.

8. In facsimile apparatus, a rotatable cylindrical drum; a row of pins extending from the surface of the drum and along a line parallel to the axis of the drum and adapted to impale a portion of a facsimile sheet; and a stripper bar having a blade engageable with said drum; manually operated means for preparing the stripper bar for a sheet removal operation; a member movable with the drum and connectable with the blade at a specific angular position of the drum when said manually operated means is operated to cause said blade to move against said drum to remove said sheet from said pins; and another member movable with the drum and operable at another specific angular position of the drum to move said blade away from the drum.

9. In facsimile apparatus, a rotatable cylindrical drum; means for mounting a facsimile sheet on said drum; said means comprising two rows of pins extending from the surface of the drum parallel to the axis of the drum; one row of pins being adapted to impale one margin of said facsimile sheet; the other row of pins being adapted to impale the opposite margin of said facsimile sheet; and a loading plate having one end engageable with said drum; said loading plate including means for supporting a facsimile sheet; manually operated means for preparing the loading plate for a sheet loading operation; a member movable with the drum and connectable with the loading plate at a specific angular position of the drum when said manually operated means is operated to cause said one end of the loading plate to move against said drum to impale the sheet carried thereby on the pins of the drum; and another member movable with the drum and operable at another specific angular position of the drum to move said end of said loading plate away from the drum; and a stripper bar having a blade engageable with said drum; manually operated means for preparing the stripper bar for a sheet removal operation; a member movable with the drum and connectable with the blade at a specific angular position of the drum when said manually operated means is operated to cause said blade to move against said drum to remove said sheet from said pins.

10. In facsimile apparatus, a rotatable cylindrical drum; means for mounting a facsimile sheet on said drum; said means comprising two rows of pins extending from the surface of the drum parallel to the axis of the drum; one row of pins being adapted to impale one margin of said facsimile sheet; the other row of pins being adapted to impale the opposite margin of said facsimile sheet; and a loading plate having one end engageable with said drum; said loading plate including means for supporting a facsimile sheet; manually operated means for preparing the loading plate for a sheet loading operation; a member movable with the drum and connectable with the loading plate at a specific angular position of the drum when said manually operated means is operated to cause said one end of the loading plate to move against said drum to impale the sheet carried thereby on the pins of the drum; and another member movable with the drum and operable at another specific angular position of the drum to move said end of said loading plate away from the drum; and a stripper bar having a blade engageable with said drum; manually operated means for preparing the stripper bar for a sheet removal operation; a member movable with the drum and connectable with the blade at a specific angular position of the drum when said manually operated means is operated to cause said blade to move against said drum to remove said sheet from said pins; and another member movable with the drum and operable at another specific angular position of the drum to move said blade away from the drum.

11. In facsimile apparatus, a rotatable cylindrical drum; means for mounting a facsimile sheet on said drum; said means comprising two rows of pins extending from the surface of the drum parallel to the axis of the drum; one row of pins being adapted to impale one margin of said facsimile sheet; the other row of pins being adapted to impale the opposite margin of said facsimile sheet; and a loading plate having one end engageable with said drum; said loading plate including means for supporting a facsimile sheet; manually operated means for preparing the loading plate for a sheet loading operation; a member movable with the drum and connectable with the loading plate at a specific angular position of the drum when said manually operated means is operated to cause said one end of the loading plate to move against said drum to impale the sheet carried thereby on the pins of the drum; said end of said loading plate being biased toward said drum; latch mechanism retaining said end of said loading plate away from said drum; manual means for positioning said latch mechanism

to be released by another member movable with the drum and operable at another specific angular position of the drum.

12. In facsimile apparatus, a rotatable cylindrical drum; means for mounting a facsimile sheet on said drum; said means comprising two rows of pins extending from the surface of the drum parallel to the axis of the drum; one row of pins being adapted to impale one margin of said facsimile sheet; the other row of pins being adapted to impale the opposite margin of said facsimile sheet; and a stripper bar having a blade engageable with said drum; manually operated means for preparing the stripper bar for a sheet removal operation; a member movable with the drum and connectable with the blade at a specific angular position of the drum when said manually operated means is operated to cause said blade to move against said drum to remove

said sheet from said pins; said blade of said stripper bar being biased toward said drum; latch mechanism retaining said blade of said stripper bar away from said drum; manual means for positioning said latch mechanism to be released by another member movable with the drum and operable at another specific angular position of the drum.

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