

May 17, 1949.

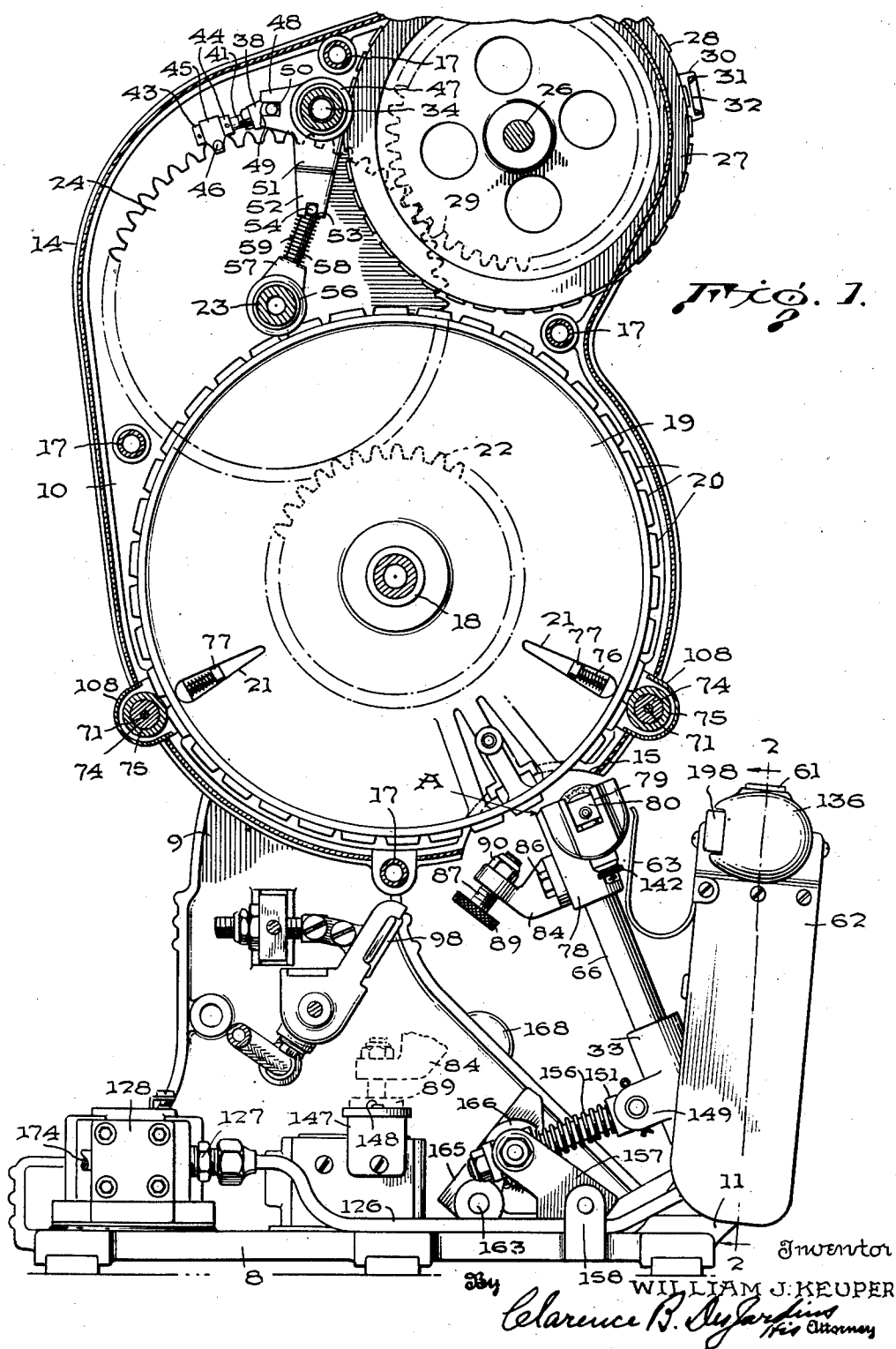
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2,470,622

LAUNDRY MARKING MACHINE

Filed Aug. 10, 1944

6 Sheets-Sheet 1



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2,470,622

LAUNDRY MARKING MACHINE

Filed Aug. 10, 1944

6 Sheets-Sheet 2

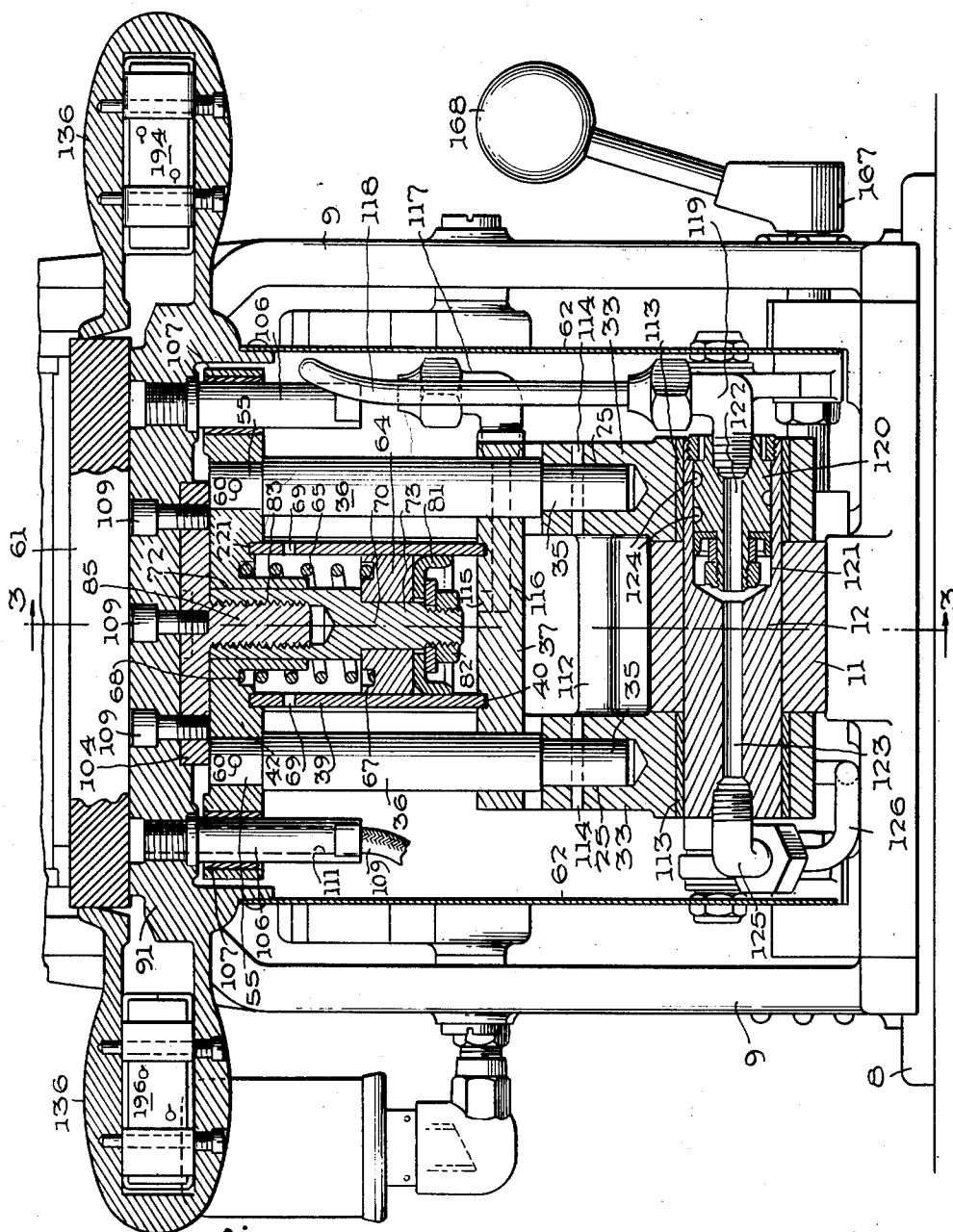


Fig. 2.

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LAUNDRY MARKING MACHINE

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6 Sheets-Sheet 3

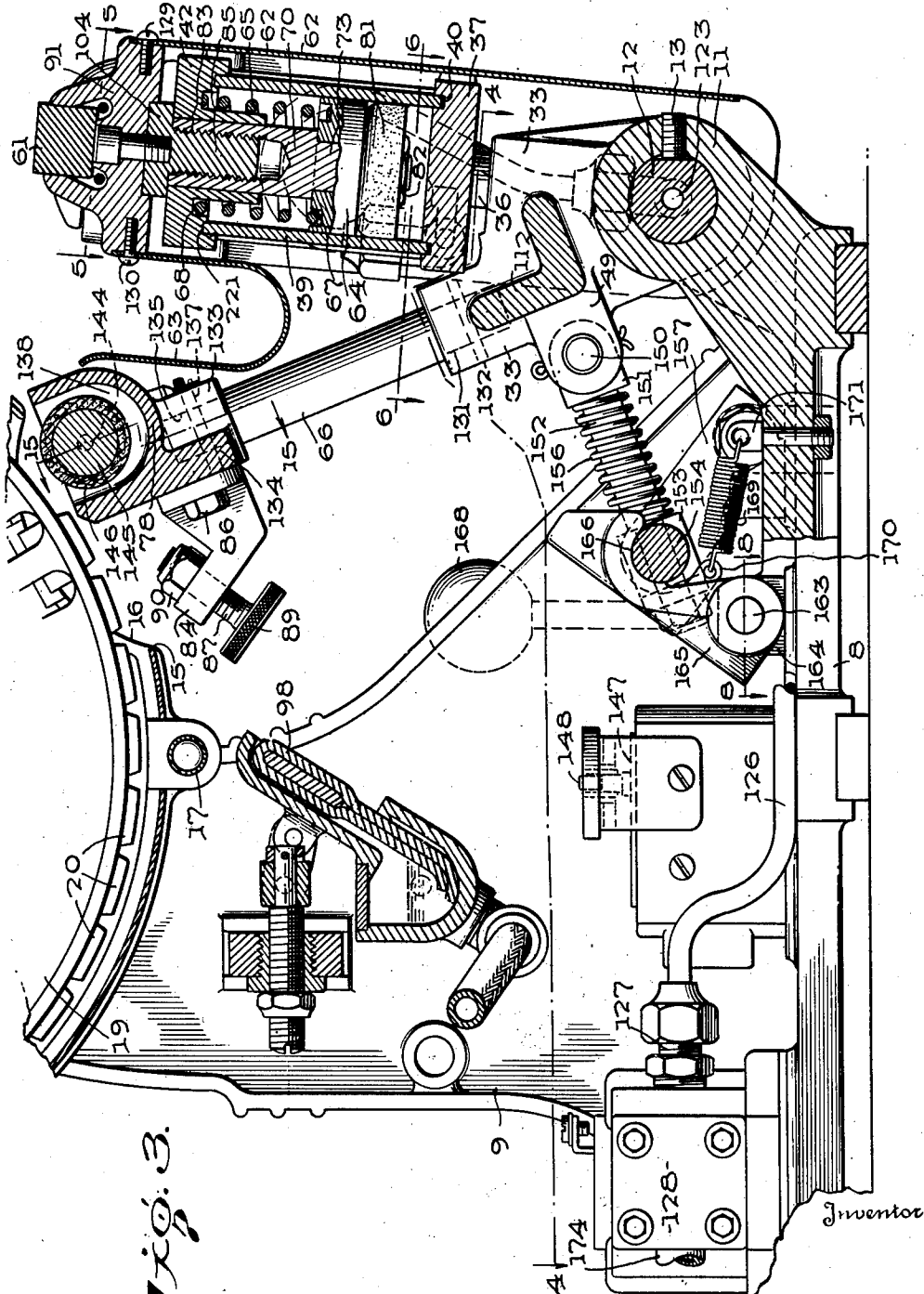


Fig. 3.

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2,470,622

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6 Sheets-Sheet 4

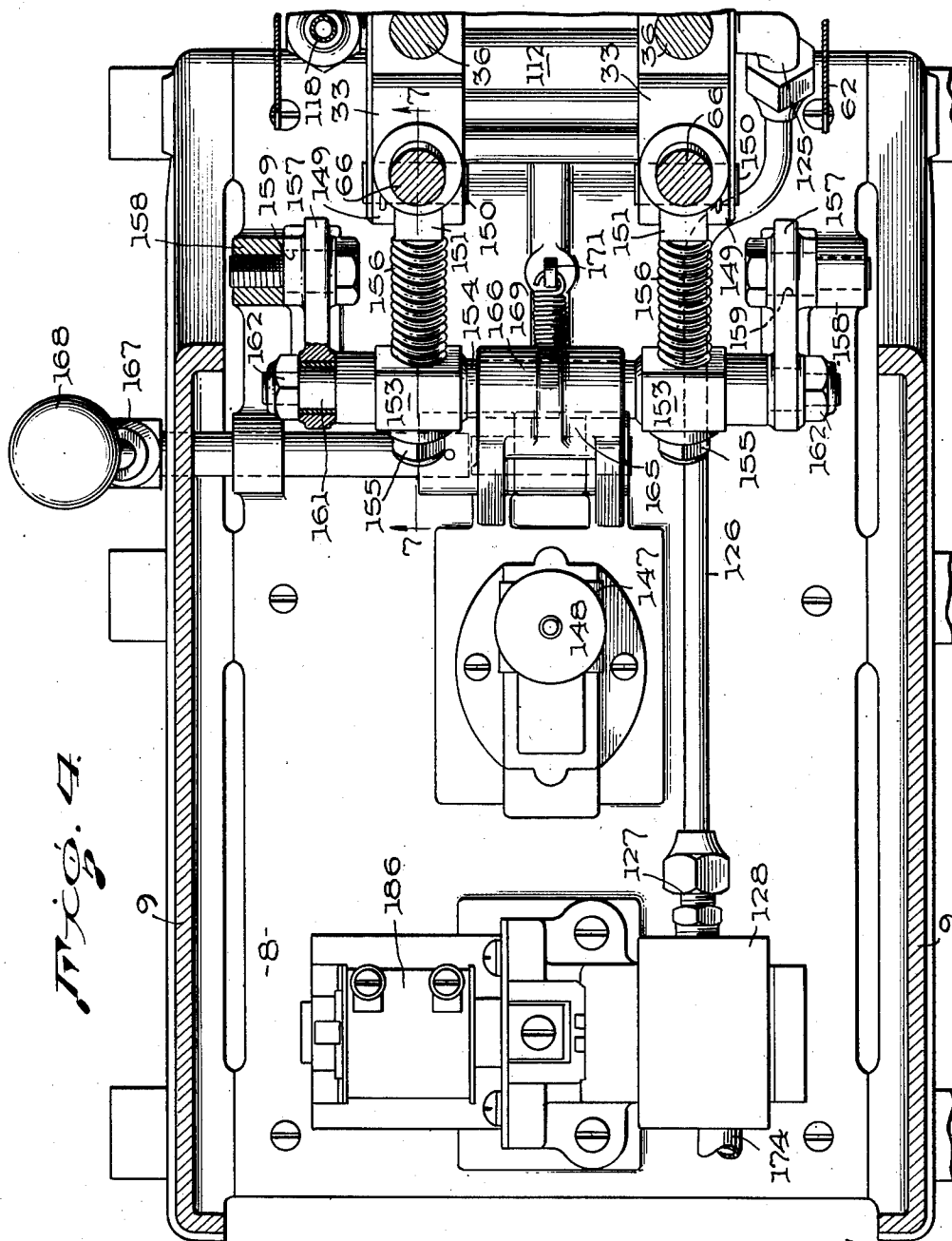


Fig. 4.

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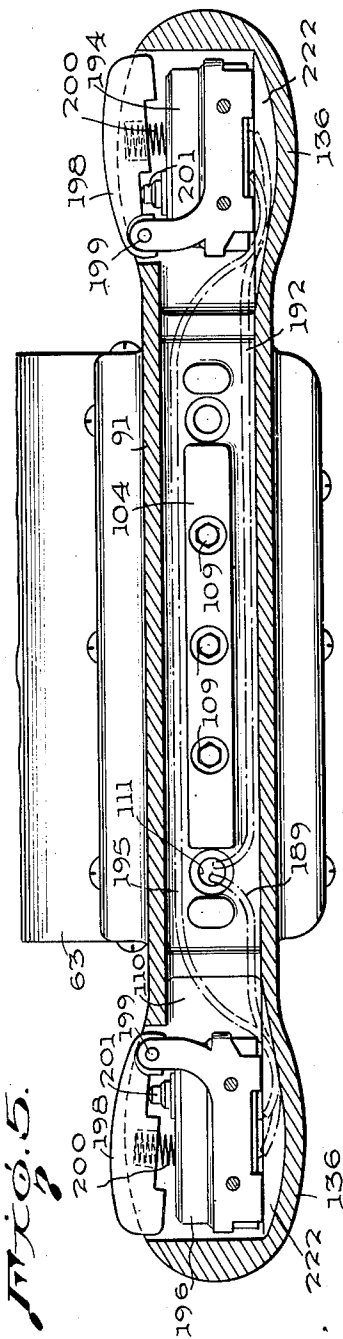
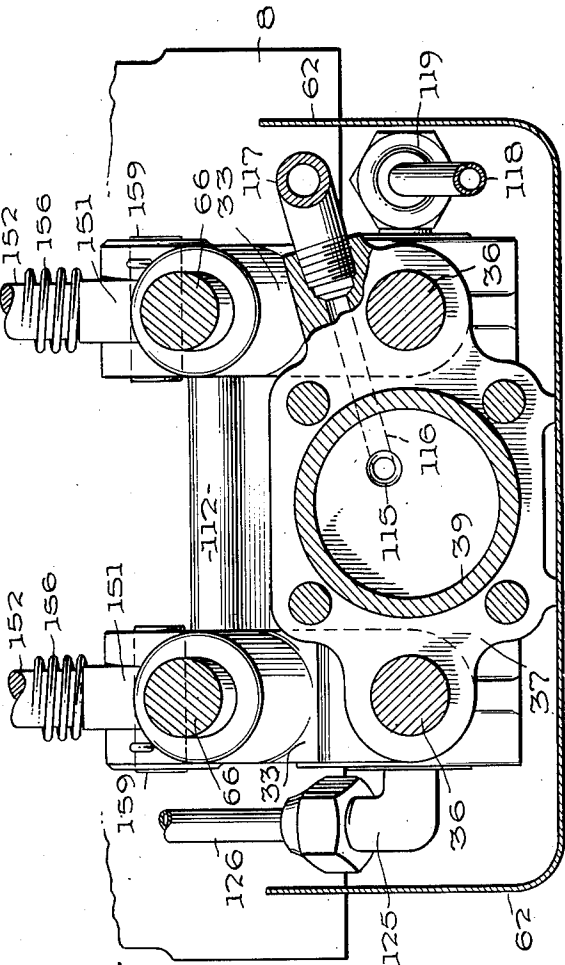
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LAUNDRY MARKING MACHINE

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2,470,622

LAUNDRY MARKING MACHINE

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6 Sheets-Sheet 6

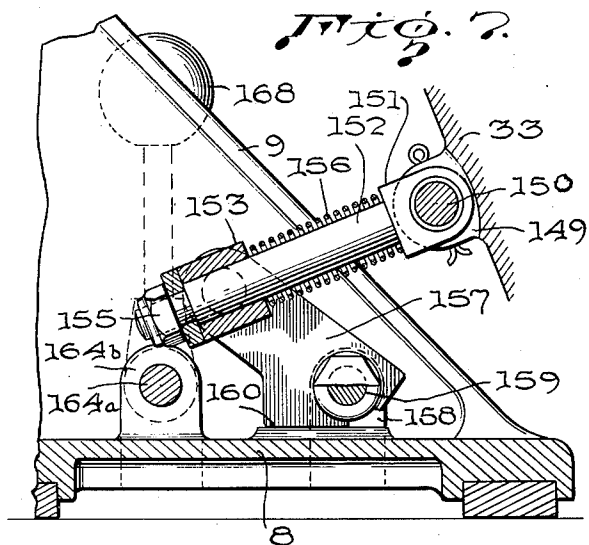
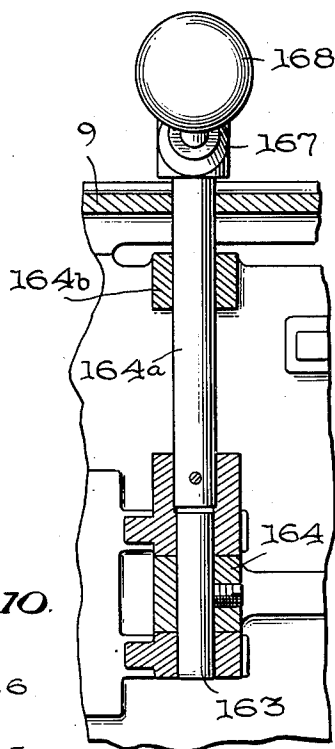
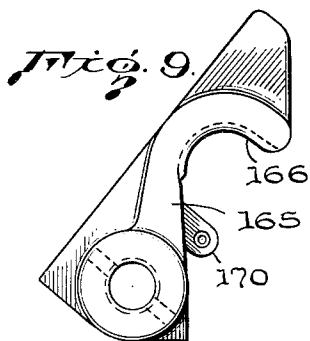
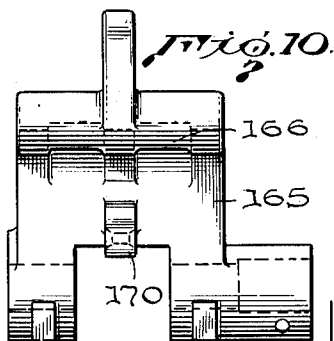
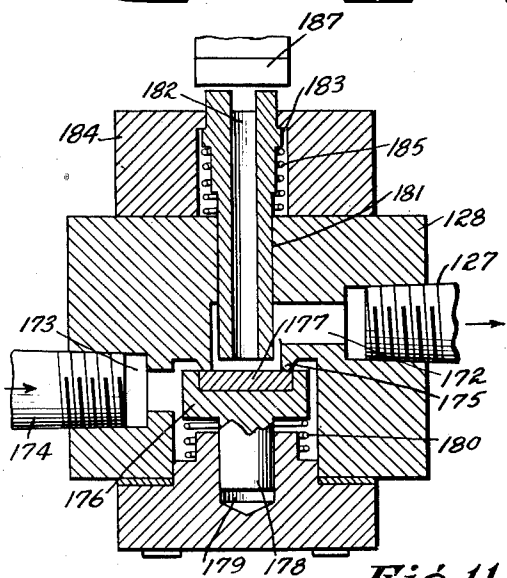
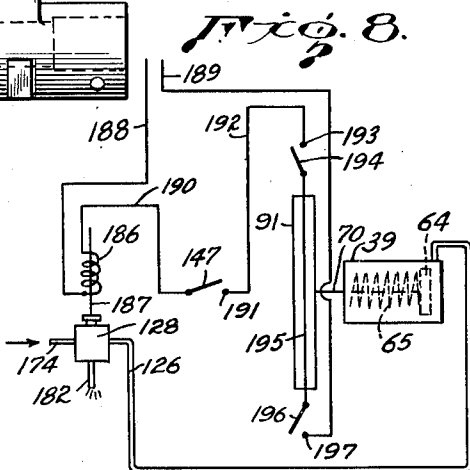


Fig. 12

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Fig. 11

UNITED STATES PATENT OFFICE

2,470,622

LAUNDRY MARKING MACHINE

William J. Keuper, Cincinnati, Ohio, assignor to
The National Marking Machine Company, Cincinnati, Ohio, a corporation of Ohio

Application August 10, 1944, Serial No. 548,863

8 Claims. (Cl. 101-94)

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My invention relates to improvements in laundry marking machines and, more particularly, to improvements in the laundry marking machine disclosed and claimed in my pending applications for United States Letters Patent, Serial No. 463,082, filed October 23, 1942, upon which patent, No. 2,370,735, was issued on March 6, 1945, Serial No. 470,052, filed December 24, 1942, upon which patent, No. 2,384,035, was issued on September 4, 1945, and Serial No. 529,882, filed April 5, 1944, now Patent Number 2,443,426, issued June 15, 1948.

The principal object of my present invention is to provide a laundry marking machine of simple, compact and inexpensive construction, by means of which a number of identifying characters may be printed upon articles to be laundered, or other material, held upon the platen of the machine by the operator.

A further object of my invention is to provide improved means for controlling the movement of the platen, on which the article to be marked is held, toward the type located at printing position, to take an imprint therefrom upon said article.

A further object of my present invention is to provide, in a laundry marking machine having a platen-carrier rockable from normal to printing position, improved means for limiting the movement of the platen-carrier from printing to normal position, and simple releasable devices by means of which the platen-carrier can be released to swing forwardly beyond the normal position, for purposes of inspection or repair.

Further objects, and objects relating to details of construction and economies of operation, will definitely appear from the detailed description to follow. In one instance, I have accomplished the objects of my invention by the devices and means described in the following specification. My invention is clearly defined and pointed out in the appended claims. A structure constituting a preferred embodiment of my invention is illustrated in the accompanying drawings, forming a part of this specification, in which

Fig. 1 is a vertical, sectional view of a laundry marking machine embodying my invention, taken in a plane just inside the left-hand side member of the frame.

Fig. 2 is a sectional view of the platen-carrier, and the means for moving the platen toward the type, taken on the line 2-2 of Fig. 1.

Fig. 3 is a vertical, sectional view through the lower portion of the laundry marking machine, taken on the line 3-3 of Fig. 2.

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Fig. 4 is a plan view of the base of the machine, and the parts mounted thereon, taken on the line 4-4 of Fig. 3.

Fig. 5 is a horizontal, sectional view through the platen and the platen handles, taken on the line 5-5 of Fig. 3.

Fig. 6 is a horizontal, sectional view through the platen-carrier, taken on the line 6-6 of Fig. 3.

Fig. 7 is a detail, sectional view of the releasable means for retaining the platen-carrier from movement forward from normal position, taken on the line 7-7 of Fig. 4.

Fig. 8 is a sectional view, taken on the line 8-8 of Fig. 3, showing the latch shaft.

Fig. 9 is a view of the latch in side elevation. Fig. 10 is a view of the latch in front elevation.

Fig. 11 is a horizontal, sectional view through the electro-magnetic valve controlling the admission of fluid pressure to the platen-actuating means, and

Fig. 12 is a diagrammatic view showing the electric and pneumatic circuits for controlling the means for raising the platen toward the type.

In the drawings, the same reference numerals refer to the same parts throughout the several views, and the sectional views are taken looking in the direction of the arrows at the ends of the section lines.

My invention is embodied in a laundry marking machine which includes a type assembly adapted to locate printing type at printing position, a platen-carrier movable from a normal to a printing position and return, a platen slidably mounted on the platen-carrier, and means for moving the platen toward the type, when the platen-carrier is in printing position, for the purpose of carrying an article, held on the platen by the operator, against the type to take an imprint therefrom. One feature of my invention consists in providing improved means for controlling the movement of the platen toward the type. The platen-carrier has a cylinder mounted thereon in which a piston works, and the platen is secured to this piston. The platen is moved toward the type by admitting fluid pressure to the cylinder to move the piston and platen toward the type against the pressure of a spring, which normally moves them away from said type. The admission of fluid pressure to said cylinder is controlled by an electro-magnetic device, such as an electro-magnetic valve, and the circuit for said device includes a switch, which is engaged and closed, when the platen-

carrier is in printing position, by an element mounted on said platen-carrier and moving with it. Said circuit may also include a pair of switches mounted in the handles of the platen, which are adapted to be held closed by the operator while she holds the article to be marked on the platen. Thus, fluid pressure will not be admitted to the cylinder to move the platen toward the type until the platen-carrier is in printing position, and the operator has closed the switches in the handles, which makes sure that her hands will not be between the platen and the type.

Another feature of my invention consists of improved means for releasably holding the platen-carrier against movement forwardly from its normal position, which may consist of a pair of links pivotally mounted on the frame of the machine and having means for limiting their pivotal movement with respect to the frame, in one direction. A bar is journaled in the free ends of these links and guide rods pivotally connected to the platen-carrier may be slidably mounted in said bar. Heads secured to said guide rods engage this bar and normally prevent movement of the platen-carrier forward from its normal position. A latch shaft is provided, journaled in the frame and having a latch thereon which is yieldingly held in engagement with the bar and, thus, prevents the forward movement of said bar and holds the platen-carrier against movement forward from its normal position. This latch shaft may be rocked, to cause the latch to disengage the bar, and, under such circumstances, the platen-carrier may be moved forward from its normal position for purposes of inspection or repair.

Referring to the numbered parts of the accompanying drawings, I have shown a laundry marking machine including a type assembly adapted to locate printing type at printing position, which type assembly is substantially identical with that shown in my said pending application, Serial No. 529,882. The machine has a base 8, from which the frame side members 9 extend upwardly. Secured to said frame side members, or integral therewith, are housing side members 10 and the edges of the housing 14 are seated thereon. As shown in Fig. 1, this housing is cut away, at 15, adjacent the printing position, and the upper portion of the housing is also cut away to permit the setting wheels to project therefrom. The housing side members 10 have their lower edge portions curved inwardly, as at 16, adjacent the printing point. The side members 10 are connected by the spacing bars 17, and the parts 10 and 14 constitute a housing carried by the frame and enclosing the type wheels, the setting wheels and the intermediate gearing.

A horizontal shaft 18 is mounted in the housing side members 10, and extends transversely of the housing. A plurality of type wheels 19 are journaled on said shaft 18, parallel to each other, and each of these type wheels has on its periphery a plurality of spaced printing type 20. These type wheels may be lightened by forming the slots 21 therein, a few of which are shown in Fig. 1. A gear 22 is fastened to the side of each type wheel 19, coaxial therewith. A horizontal shaft 23 is mounted in the housing side members 10 and extends transversely of the housing. A plurality of gears 24 are journaled on shaft 23, there being one of them for each of the type wheels, and each of

said gears is in line with and meshes with gear 22 of the corresponding type wheel.

A horizontal setting wheel shaft 26 is mounted in the upper portion of the housing, being supported by the housing side members 10, and a plurality of setting wheels 27 are journaled on said shaft, parallel to each other, with their peripheral portions projecting from the upper portion of the housing through an opening formed therein for that purpose. There is one of these setting wheels for each of the type wheels, and each setting wheel bears, on its periphery, indicia, 28, in the form of characters corresponding to the characters on the printing type 20, and arranged on the setting wheel in the same angular relation to each other as are the corresponding printing type on the type wheel. A gear 29 is fast to each setting wheel 27 and coaxial therewith, and each of said gears meshes with the corresponding one of the intermediate gears 24. Gears 22 and 29 have the same number of teeth, so that a given angular movement of a setting wheel will produce the same angular movement of the corresponding type wheel. In this way, the type wheels may be adjusted, to bring selected type to printing position, by rotational adjustment of the setting wheels, in either direction.

Arms 30, secured to the side members 10 of the housing, support a sighting bar 31, which extends across the peripheries of the setting wheels 27, in front thereof, and has a sight aperture 32 therein, through which the indicia on the setting wheels may be viewed by the operator from the front of the machine. This sighting bar is so located, and the indicia are so placed on the setting wheels, that, when certain characters are visible through the sight aperture 32, the type wheels 19 will be adjusted so that the printing type having the same characters will be aligned at printing position.

To provide for locking the type wheels and setting wheels in adjusted positions, and for releasing them to permit their adjustment, as well as to align the type wheels with selected printing type at the printing line, I have provided an aligning mechanism which comprises a horizontal aligner shaft 34, supported by the housing side members 10. One end of this shaft projects through one of the side members and may have an operating handle (not shown) secured thereto, for convenience in rocking the shaft. An aligner frame is provided which includes hub portions secured to the shaft 34 and rearwardly projecting arms 38. In each of the arms 38, there is formed a threaded socket into which a threaded stud 41 is screwed. A block 45 is mounted on each stud 41, between the head 43 thereof and a collar 44 pinned thereto, and an aligning bar 46 is supported by and extends through these blocks 45. Said aligning bar is of such length as to extend across the entire set of gears 24, and the blocks 45 are so located with respect to the gears as to fit between certain of them, when the aligning bar is in engagement with the teeth of said gears. Thus, it will be seen that, when the aligning bar is in engaging position, it engages between teeth of all of the intermediate gears 24 and prevents movement of type wheels 19 and setting wheels 27. The shaft 34 can be rocked by its handle to throw the aligning bar to the disengaging position, in which the gears 24, setting wheels 27 and type wheels 19 are released and free to rotate.

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To provide for yieldingly holding the aligning bar in either engaging or disengaging position, spring toggle mechanism is provided which comprises a pair of bell cranks 47, journaled on hub extensions of the side members 10, concentric with shaft 34. The rearwardly extending arm 48 of each bell crank has a notch 49, which receives the stud 50 projecting laterally from an arm of the aligner frame, so that said bell cranks are rocked as the frame is rocked to move the aligner bar from one position to the other. The downwardly extending arms 51 of said bell cranks are forked, and each of the fork arms 52 has a notch 53, in the lower end thereof, receiving a stud 54 projecting from a pin block slidably mounted on a post 58. Members 56 are journaled on hub extensions of side members 10, concentric with shaft 23, and have shouldered portions 57 from which the posts 58 project. Springs 59 are mounted on said posts and compressed between the shouldered portions 57 and the said pin blocks 55.

Type cleaning rollers are provided in front of and behind the printing line, which is indicated by the arrow running from the reference character A, and engaging the faces of the printing type on type wheels 19, so that, when said type are moved from the printing position, in either direction, they will pass a cleaning roller and the ink will be removed therefrom before said type move above the horizontal plane including the axis of the type wheels. Each of these type cleaning rollers comprises a cylinder 74 mounted on a pintle 71 and having a felt covering 75. The roller thus constructed is drawn toward the axis of the type wheels by springs 76 engaging heads 77 on rods which carry the ends of said pintles. Each type cleaning roller may be enclosed within a casing 108.

The platen-carrier, the mounting for the platen thereon, and the means for moving the platen to and from the type, are substantially the same as disclosed in my said application, Serial No. 470,052. A bearing pin 12 (Figs. 2 and 3) is secured by the set screw 13 in a bracket 11 projecting upwardly from the base 8 of the machine. The spaced hubs 33 of the platen-carrier are journaled on the projecting ends of the bearing pin 12, in bushings 113 carried by the latter. These hubs are connected by the cross member 112 forming part of the platen-carrier. Sockets 25 formed in the platen-carrier receive the reduced ends 35 of posts 36, which project upwardly through openings in the cylinder base 37. Said posts are secured in sockets 25 by the pins 114. A cylinder wall 39 is mounted on the base 37, the lower edge thereof being received in an annular groove 40, formed in the top surface of said base. The reduced upper ends 55 of said posts extend through openings in a cylinder head 42 and are secured thereto by the pins 60. Said head 42 has an annular groove 221, which receives the upper end of the cylinder wall 39. Thus, the cylinder is made up of the cylinder wall 39, the base 37, and the head 42, all held together by the posts 36 and mounted on the platen-carrier 33.

A piston 64 works within the cylinder 39 and a spring 65 is interposed between piston 64 and head 42, and tends to move the piston away from said head. The lower end of the spring is seated in an annular groove 67 formed in the upper surface of piston 64, and the upper end of said spring is seated in an annular groove 63 formed in the lower surface of head 42. Vents 69 are

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provided in the upper portion of the cylinder wall 39. A piston rod 70 is slidably mounted in a passage 72 formed in the head 42, and has a reduced portion 73 which extends through the piston 64 and through a leather washer 81, the whole being secured together by a nut 82 screwed on the threaded lower end of the piston rod. A bracket 104 has a depending threaded stud 85, which is screwed into a threaded socket 83, formed in the upper end of the piston rod 70, whereby said bracket, piston rod and piston are secured together. A platen 91, provided with a handle 136 at each end thereof, is secured to the bracket 104 by the screws 109, and a platen insert 61, of rubber or like resilient material, is inserted in a recess in the upper surface of said platen. The article to be marked is to be held on this platen insert 61 by the operator, while gripping the handles 136 for rocking the platen-carrier from the normal to the printing position and returning it therefrom. Posts 106 are secured to the platen 91 and project downwardly therefrom through bushings 107 mounted in openings provided in the head 42. These posts serve to help in guiding the platen for movement relative to the platen-carrier and the cylinder. One of these posts is provided with a passage 111 for receiving the electric cable 109, by which the circuit leads are carried to the switches mounted in the handles 136, to which reference will be made hereinafter. A passage 110 (Fig. 5) is formed in the platen, through which the wires can extend from the passage 111 to the switches.

An upwardly opening port 115 (Fig. 6) is formed in the cylinder base 37, within the confines of the cylinder wall 39, and connected by a passage 116 to an elbow 117, the latter being connected by a tube 118 (Fig. 2) to an elbow 119 screwed into a plug 120, which is rotatably mounted within a recess 121 in one end of the bearing pin 12. Elbow 119 communicates with an axial passage 122 in the plug 120, which is in line with an axial passage 123 in the bearing pin 12. The plug 120 is provided with external oil grooves 124 to assist in making a seal between the wall of the plug and the wall of recess 121. An elbow 125 is screwed into the other end of the bearing pin 12 and communicates with passage 123. Said elbow 125 is connected by tube 126 to a coupling member 127 (Fig. 3), which is connected with the outlet of an electro-magnetic valve, indicated generally at 128. This valve controls the admission of fluid pressure to the cylinder to operate the piston against the pressure of spring 65, the fluid pressure passing through the tube 126, passage 123, passage 122, tube 118, passage 116 and port 115 to the interior of the cylinder, below the piston 64.

A casing 62 is secured to platen 91 by screws 129, and encloses the ends and front of the platen-carrier and the parts carried thereby. A guard 63 is secured to the rear side of the platen by screws 130, and extends downwardly and is then curved upwardly, as shown in Fig. 3.

Upwardly and rearwardly extending posts 66 have their lower reduced ends received in sockets 131 in the platen-carrier 33, and they are secured thereto by the pins 132. A casing 78 is mounted on the upper ends of these posts, said casing having bosses 133 connected by a flange 134, and the posts 66 having reduced upper ends 135, received in sockets in said bosses 133, and secured thereto by the pins 137. This casing is hollowed out to form a trough 138, open at the top, and

which receives an inking roller. The end walls of this casing have rectangular notches 79 (Fig. 16) formed therein, in which the heads 80 of pins 139 are slidably mounted. Said pins have reduced ends 140 (Fig. 15), which are slidably mounted in the casing 78 and springs 141 are interposed between the heads 139 and a portion of the casing. The reduced ends 140 of the pins project below the lower portion of the casing and nuts 142 are secured on the threaded lower ends thereof.

The inking roller includes a cylindrical core 145, which has pins 144, secured thereto and projecting from the ends thereof, journaled in bushings carried by the heads 80. Said core 145 has a felt covering comprising a plurality of felt rings 146 mounted upon it. This inking roller is mounted in the casing 78 and pressed resiliently by springs toward the type. This casing and inking roller are so located with respect to the platen-carrier that, as the platen-carrier is rocked from normal to printing position, the inking roller will roll over the faces of type that have been brought to the printing line. When the platen-carrier is in normal position, the inking roller will be located slightly in front of and free of any type and, of course, as the platen-carrier is rocked from printing to normal position, the inking roller will again roll over the faces of the type.

A bracket 84 (Fig. 16) is secured by bolt 86 to the rear face of casing 78. A screw 87, having an enlarged head 89, is screwed into said bracket and held in adjusted position by a lock nut 90. This screw 87 is so adjusted that, when the platen-carrier is in printing position, the head 89 will have engaged and closed an electric switch mounted on the base 8 of the machine. This switch is indicated generally at 147 (Fig. 3) and has a plunger 148, which is engaged by the head 89 to close the switch, as indicated by dotted lines in Fig. 1.

Two pairs of ears 149 are provided, projecting rearwardly from the platen-carrier 33, and the head 151 of a guide rod 152 is pivotally connected between the ears of each pair by a pivot pin 150. The rear ends of these guide rods are slidably mounted in enlargements 153 of a transverse bar 154. Nuts 155, secured on the rear ends of the guide rods 152, limit the forward movement of said guide rods with respect to the bar 154, and springs 156 are compressed on said guide rods between the heads 151 and said enlargements 153 of the bar 154. Links 157 (Figs. 4 and 7) are pivotally mounted by pins 159 on brackets 158, secured to the base 8 of the machine, and each of the links 157 has a shoulder 160 adapted to engage the base 8 to limit the pivotal movement of said link in one direction. The transverse bar 154 has reduced ends 161 (Fig. 4), journaled in bushings in links 157, and nuts 162 screwed on the threaded ends of said bar retain it in position in said links.

A jack shaft 163 (Fig. 8) is secured in bearing 164 (Fig. 3) extending upwardly from the base 8, and a latch 165 is journaled on shaft 163 and provided with a hook portion 166, so located as to engage an intermediate portion of the bar 154, between the guide rods 152. A lever 167 is secured to one end of latch shaft 164a, which is journaled in bearing 164b and has one end secured to the hub of latch 165, and provided with an operating handle or knob 168, by means of which the shaft may be rocked to withdraw the latch 165 from engagement with bar 154. A

spring 169, connected at one end to a lug 170 on the latch 165, and at the other end to a bracket 171 secured to the base 8, normally draws the latch forward so that the hook portion 166 will engage the bar 154. The operator may withdraw this latch from engagement by rocking the shaft 164a, against the tension of spring 169.

Referring to Fig. 3, it will be seen that, with the latch 165 in engagement with bar 154, links 157 are held with their shoulders 160 in engagement with the base of the machine and the bar 154 may be considered as stationary. When the platen-carrier 33 is rocked rearwardly from normal to printing position, springs 156 will be compressed between the heads 151 and the enlargements 153 of bar 154, until the axis of pivots 150 crosses the line between the axis of bar 154 and the axis of the bearing pin 12, and, thereafter, the springs will expand and assist in moving the platen-carrier to the printing position. It is to be understood that the operator initiates the movement of the platen-carrier from normal to printing position by pushing rearwardly on the handles 136, and that the springs 156 complete this movement to printing position. The operator initiates the movement of the platen-carrier from printing to normal position by pulling forwardly on the handles 136 and the springs 156 are compressed until the axis of pivots 150 crosses the line between the axis of bar 154 and the axis of the bearing pin 12, and, thereafter, the springs 156 expand and complete the movement of the platen-carrier to the normal position.

When it is desired to move the platen-carrier, and the parts mounted thereon, forwardly from the normal position, as, for instance, when it is desired to inspect or repair the parts or adjust the inking roller or screw 87, the operator may rock shaft 163 counterclockwise (Fig. 3) by means of handle 168, thus withdrawing latch 165 from engagement with bar 154 and permitting links 157 to pivot about their pins 159, so that the platen-carrier may be moved forward from the normal position.

The construction of the electro-magnetic valve, indicated generally at 128, is best shown in the sectional view, Fig. 11. An outlet passage 172 is formed in the valve body, with which the coupling 127 for line 126 connects. An inlet passage 173, formed in the valve body 128, is connected with the tube 174, which leads to a source of fluid pressure (not shown). A valve seat 175 is located between the inlet passage 173 and the outlet passage 172, and a valve member 176, having a valve insert 177, is so located that said valve insert may engage the seat 175 to cut off communication between the inlet and outlet passages. Valve member 176 has a stem 178 slidably mounted in a socket 179 formed in the valve body, and is pressed upwardly toward the valve seat 175 by spring 180. A plunger 181 is slidably mounted in the valve body 128 and has a longitudinal passage 182 therethrough, which communicates with the atmosphere and forms an exhaust passage. Said plunger extends through a cap 184, secured to the valve body 128, and has a shoulder 183, between which and the valve body there is compressed a spring 185, which tends to move the plunger away from the valve insert 177. The solenoid 186 of this electro-magnetic valve, indicated diagrammatically in Fig. 12, when energized, moves an armature 187 against the outer end of plunger 181, so as to force said plunger inwardly, thereby depressing the valve member 176 and opening communica-

tion between the inlet and outlet passages. At the same time, the exhaust passage 182 is closed, since it is sealed by the engagement of the end of plunger 181 with the valve insert 177. Thus, it will be seen that this is a three-way valve and, when the solenoid 186 is deenergized, communication is cut off between the inlet 173 and the outlet 172, and the outlet 172 is connected with atmosphere through the exhaust passage 182. On the other hand, when the solenoid 186 is energized, communication is established between the inlet passage 173 and the outlet passage 172, and the latter is cut off from the atmosphere since exhaust passage 182 is closed.

The control circuit for the electro-magnetic valve 128 is shown in the wiring diagram, Fig. 12. Lines 188 and 189 are connected to a suitable source of electric current, not shown. Line 188 is connected to one terminal of the solenoid 186, and the other terminal of the solenoid is connected by lead 190 to the switch 147, already referred to and shown generally in Fig. 3. This is the switch which is closed by the movement of the platen-carrier to printing position. The contact 191 of switch 147 is connected by lead 192 to the contact 193 of a switch 194, mounted in one of the handles 136 of the platen. Switch 194 is connected by lead 195 to switch 196, mounted in the opposite handle 136 of the platen. The contact 197 for switch 196 is connected to line 189. Fluid pressure will not be admitted to cylinder 29, through electro-magnetic valve 128, to move the platen toward the type and take an imprint therefrom, until solenoid 186 is energized, and this requires the closing of the three switches 147, 194 and 196 on their respective contacts. As already stated, switch 147 will be closed when the platen-carrier is in printing position and the operator must hold the switches 194 and 196 closed by gripping them, as she holds the article to be marked upon the platen. This is a safety feature which prevents the operator from getting her hands between the platen and the type, and gives her ready control over the movement of the platen toward the type. Repeated movements of the platen toward and from the type, to effect repeated impressions on the article, may be secured by alternately releasing and gripping one of the switches 194, 196, to open and close the circuit to solenoid 186.

Details of switch 147 are not shown, as it may be of any well-known construction, closed by relatively slight movement of the plunger 148. The switches 194 and 196 may be of similar construction. These are best shown in Fig. 5 and each of them includes a lever 198, pivoted at 199, and pressed outwardly by a spring 200 away from the plunger 201. As shown, these switches 194 and 196 are mounted in recesses 222 in the handles 136, with the lever 198 projecting slightly beyond the normal contour of the handle. When the operator presses in on the lever 198, as she grips the handle 136, it will move inwardly against the pressure of spring 200 depressing the plunger 201, and thereby closing the corresponding switch upon its contact.

Ink is supplied to the inking roller 146 from an inking pad 98 that is adjustably mounted on the frame, and with which the inking roller cooperates when the platen-carrier is in printing position.

I am aware that the particular laundry marking machine disclosed herein may be varied considerably without departing from the spirit of my

invention and, therefore, I claim my invention broadly, as indicated by the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is:

1. In a machine of the class described including a type assembly adapted to locate type at printing position, the combination of a platen-carrier rockable from normal to printing position and return, a platen slidably mounted on said platen-carrier and on which an article to be marked is adapted to be held by the operator, fluid pressure means for moving said platen toward type at printing position to take an imprint therefrom, an electro-magnetic device controlling said fluid pressure means, an electric circuit including said device and a source of electric current, a switch in said circuit, and means adapted to close said switch upon movement of the platen-carrier to printing position.

2. In a machine of the class described including a type assembly adapted to locate type at printing position, the combination of a platen-carrier rockable from normal to printing position and return, a platen slidably mounted on said platen-carrier and on which an article to be marked is adapted to be held by the operator, fluid pressure means for moving said platen toward type at printing position to take an imprint therefrom, an electro-magnetic device controlling said fluid pressure means, an electrical circuit including said device and a source of electric current, a switch in said circuit, means adapted to close said switch upon movement of the platen-carrier to printing position, and means adapted to be actuated by the operator, while holding an article to be marked on said platen, for closing said circuit when the platen-carrier is in printing position.

3. In a machine of the class described including a type assembly adapted to locate type at printing position, the combination of a platen-carrier rockable from normal to printing position and return, a platen slidably mounted on said platen-carrier and on which an article to be marked is adapted to be held by the operator, fluid pressure means for moving said platen toward type at printing position to take an imprint therefrom, an electro-magnetic device controlling said fluid pressure means, an electric circuit including said device and a source of electric current, a switch in said circuit, means adapted to close said switch upon movement of the platen-carrier to printing position, and a pair of switches included in said circuit and adapted to be closed by the operator while holding an article to be marked on said platen.

4. In a machine of the class described including a type assembly adapted to locate type at printing position, the combination of a platen-carrier movable from a normal position to a printing position and return, a cylinder carried by said platen-carrier, a piston working in said cylinder, a platen secured to said piston, slidably mounted on said platen-carrier and on which an article to be marked is adapted to be held by the operator, means for admitting fluid pressure to said cylinder, an electro-magnetic valve controlling said means, an electric circuit including said electro-magnetic valve and a source of electric current, a switch in said circuit, and means adapted to close said switch upon movement of the platen-carrier to printing position.

5. In a machine of the class described including a type assembly adapted to locate type at

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printing position, the combination of a platen-carrier movable from a normal position to a printing position and return, a cylinder carried by said platen-carrier, a piston working in said cylinder, a platen secured to said piston, slidably mounted on said platen-carrier and on which an article to be marked is adapted to be held by the operator, means for admitting fluid pressure to said cylinder, an electro-magnetic valve controlling said means, an electric circuit including said electro-magnetic valve and a source of electric current, a switch in said circuit, means adapted to close said switch upon movement of the platen-carrier to printing position, and means adapted to be actuated by the operator, while holding an article to be marked on said platen, for closing said circuit when the platen-carrier is in printing position.

6. In a machine of the class described including a type assembly adapted to locate type at printing position, the combination of a platen-carrier movable from a normal position to a printing position and return, a cylinder carried by said platen-carrier, a piston working in said cylinder, a platen secured to said piston, slidably mounted on said platen-carrier and on which an article to be marked is adapted to be held by the operator, means for admitting fluid pressure to said cylinder, an electro-magnetic valve controlling said means, an electric circuit including said electro-magnetic valve and a source of electric current, a switch in said circuit, means adapted to close said switch upon movement of the platen-carrier to printing position, and a pair of switches included in said circuit and adapted to be closed by the operator while holding an article to be marked on said platen.

7. In a machine of the class described including a type assembly adapted to locate type at printing position, the combination of a frame, a platen-carrier mounted on said frame and rockable from normal to printing position and return, a pair of links pivotally mounted on said frame, means for limiting the pivotal movement of said links in one direction, a bar journaled in said links, a guide rod pivotally connected to said platen-carrier and slidably mounted in said

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bar, a head secured to the end of said rod remote from said platen-carrier, a latch shaft journaled in said frame, a latch fixed to said shaft and adapted to engage said bar to hold said links against pivotal movement in either direction, and means for rocking said latch shaft to remove the latch from engagement with said bar.

8. In a machine of the class described including a type assembly adapted to locate type at printing position, the combination of a frame, a platen-carrier mounted on said frame and rockable from normal to printing position and return, a pair of links pivotally mounted on said frame, means for limiting the pivotal movement of said links in one direction, a bar journaled in said links, a guide rod slidably mounted in said bar and pivotally connected to said platen-carrier, a spring on said guide rod interposed between a shoulder thereon and said bar, a latch shaft journaled in said frame, a latch fixed to said shaft and adapted to engage said bar to hold said link against pivotal movement in either direction, a spring holding said latch in engagement with said bar, and means for rocking said latch shaft to remove said latch from engagement with said bar.

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