

Oct. 4, 1949.

E. DAVIS ET AL

2,483,812

SINGLE-LAY SHIRT PRESS

Filed Oct. 23, 1945

6 Sheets-Sheet 1

FIG. 2

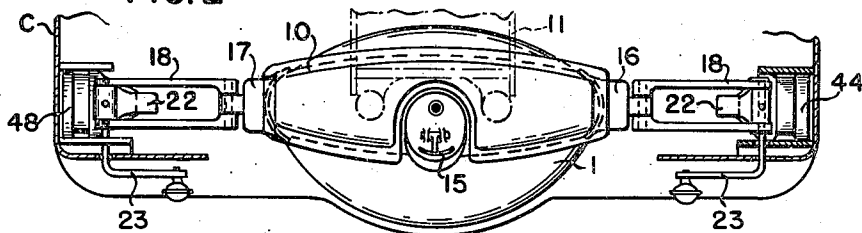
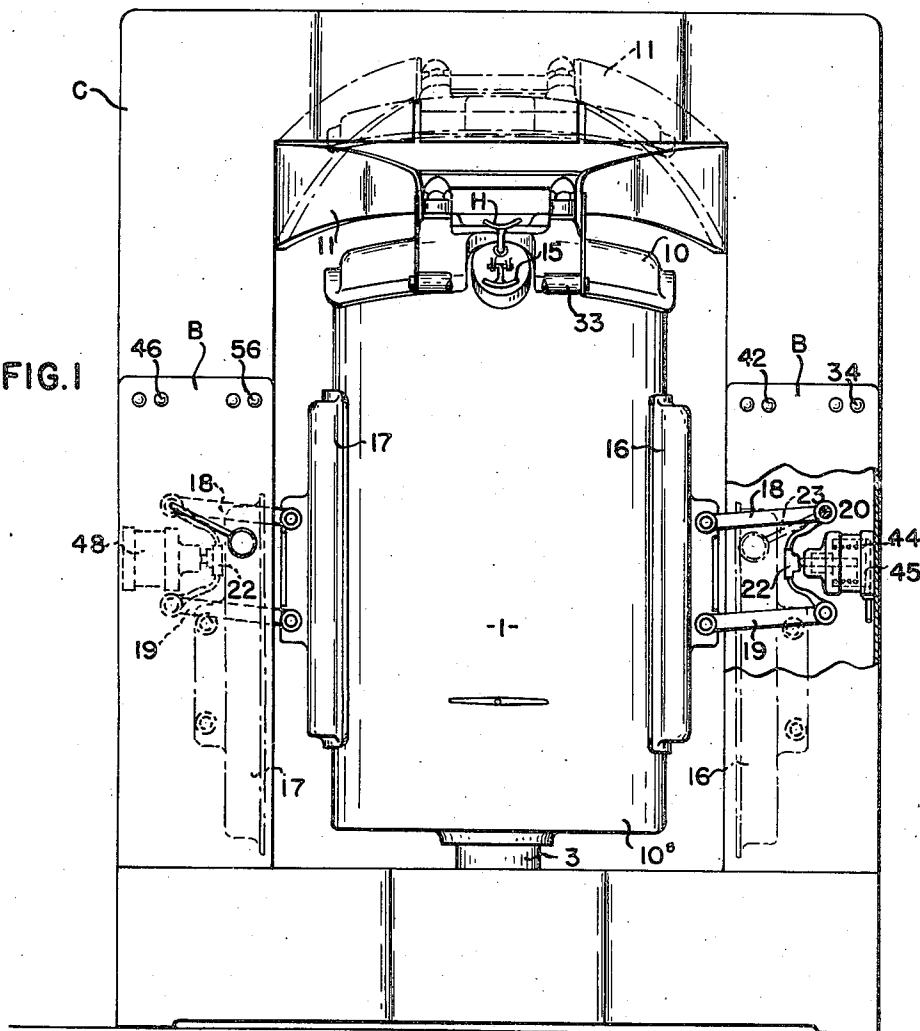


FIG. 1



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6 Sheets-Sheet 2

FIG. 3

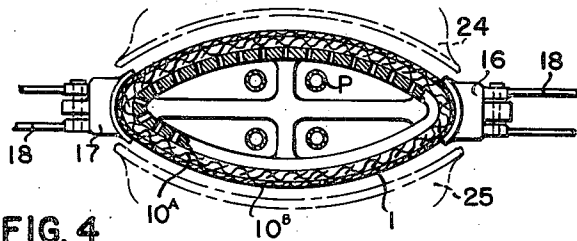
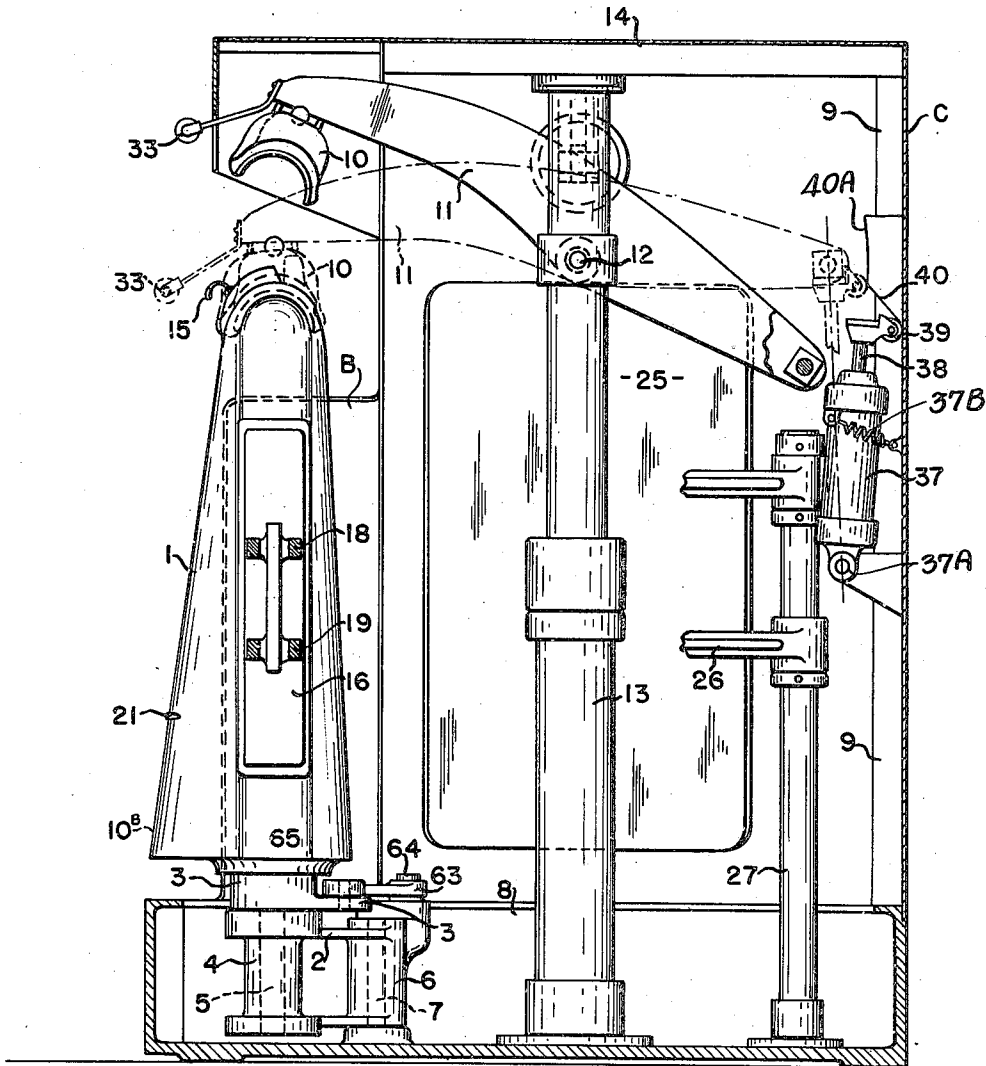


FIG. 4

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FIG. 5

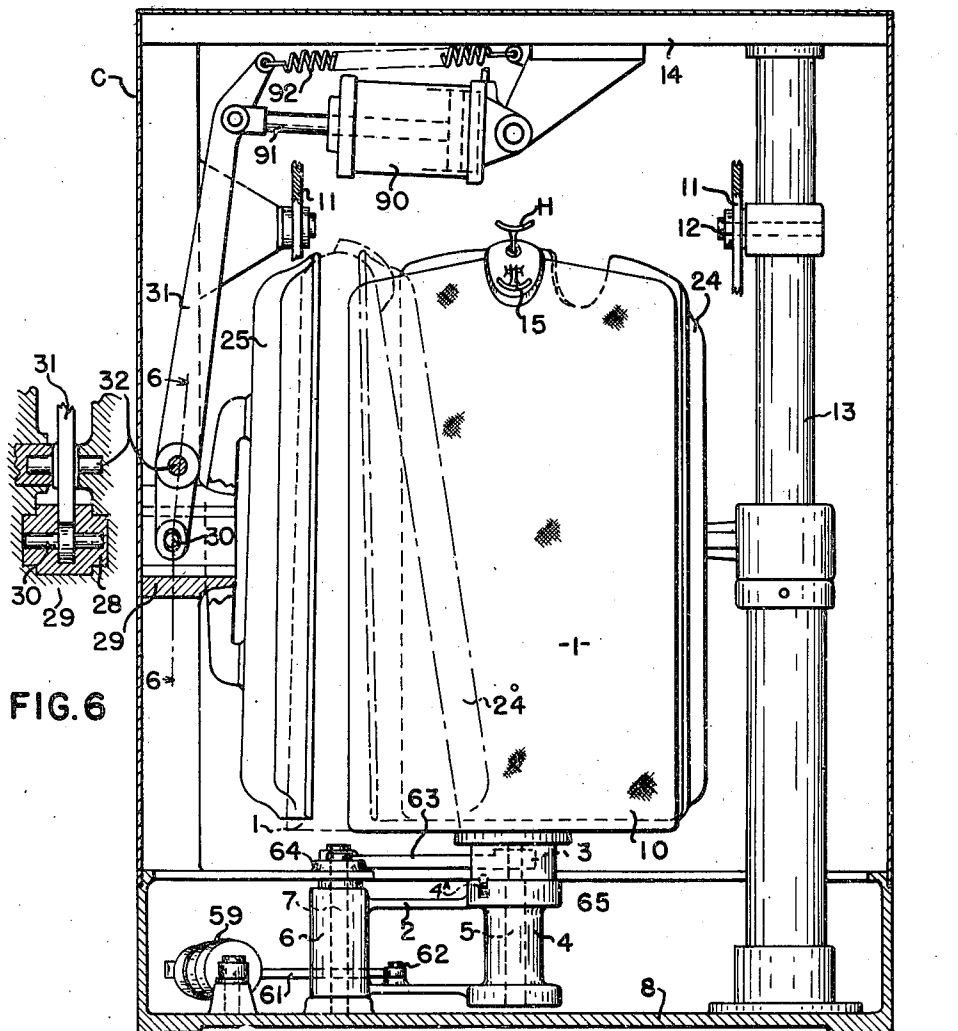
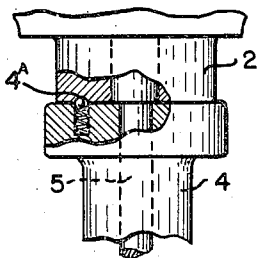


FIG. 6

FIG. 13



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FIG. 10

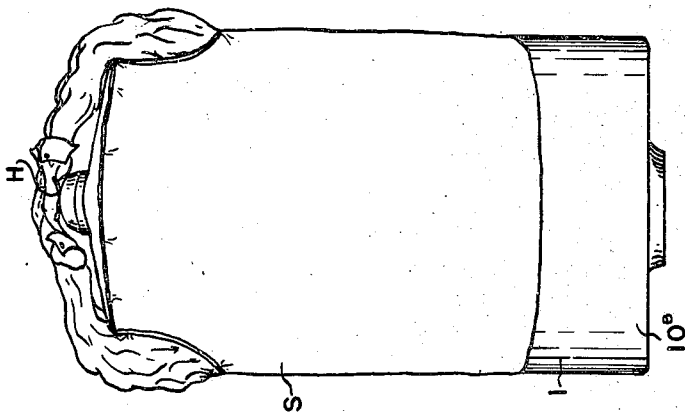


FIG. 11

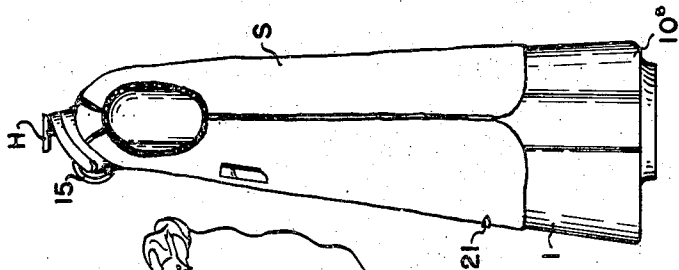
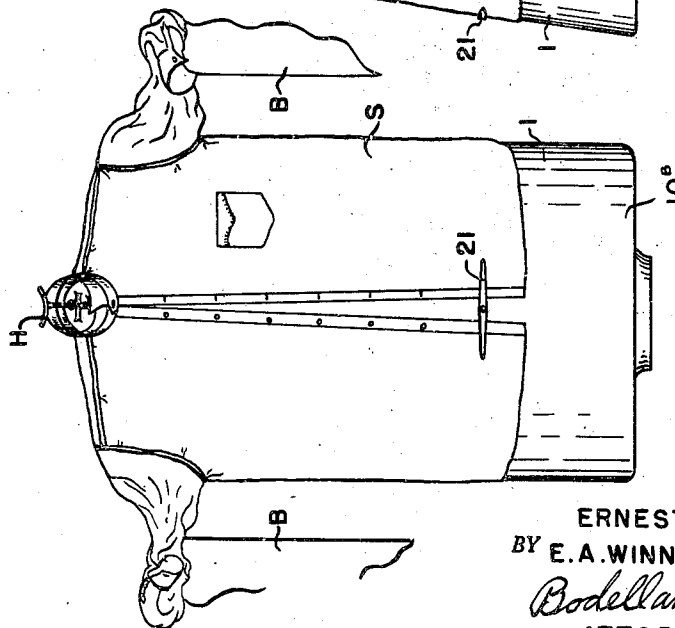


FIG. 9



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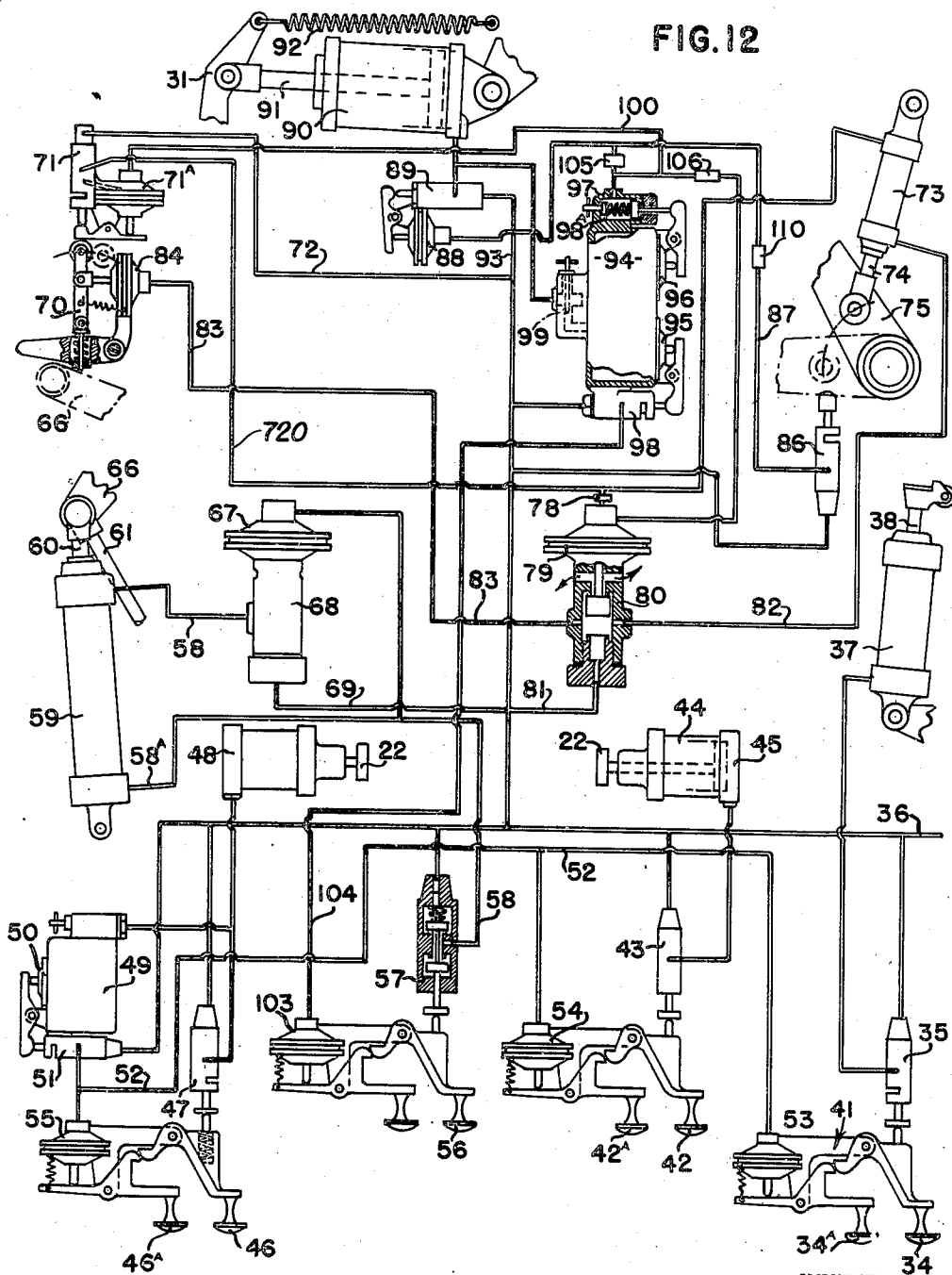
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6 Sheets-Sheet 6



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UNITED STATES PATENT OFFICE

2,483,812

SINGLE LAY SHIRT PRESS

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Application October 23, 1945, Serial No. 624,034

10 Claims. (Cl. 223—57)

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This invention relates to garment pressing machines, particularly machines for pressing coat garments, and more particularly for pressing shirts. For convenience, it is hereinafter referred to as a shirt press.

The primary object of this invention is a machine in which the entire body of a shirt is pressed by a plurality of power operated pressing elements while it is dressed upon a form, without removing the shirt from the form, with means for controlling the pressing operations. The various pressing operations, as the pressing of the yoke, side seams, front and back of a shirt, overlap so as to avoid the formation of creases. Hence certain pressing operations, as the yoke and side seam operations, take place at the same time or period, the pressing elements effecting them constituting one group of pressing elements; and other pressing operations, as the front and back operations are performed at another period of the machine operation without removing the shirt from the form, the front and back pressing elements constituting another group of elements. The pressing operations of the two groups overlap. The invention therefore has for its object a shirt press in which the body of the shirt is pressed by a plurality of pressing operations while the shirt is dressed on a form.

The invention further has for its object a shirt press in which the body form is swivelled for facilitating the dressing of the shirt thereon and also moves from a first or starting or forward position in front of the frame or cabinet of the machine back into the machine where the front and back of the shirt are pressed with the body form taking a partial turn from its first or forward position to its second or bosom and back ironing position.

The invention further has for its object an operating and control system by which the pressing operations performed on the shirt when the machine is in first position in front of the cabinet, and when in the cabinet, occur successively.

The invention consists in the novel features and in the combinations and constructions hereinafter set forth and claimed.

In describing this invention, reference is had to the accompanying drawings in which like characters designate corresponding parts in all the views.

Figure 1 is a front elevation of the machine showing the yoke ironer and the side seam ironers in pressing position.

Figure 2 is a fragmentary plan partly in section of parts seen in Figure 1.

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Figure 3 is a side elevation of the machine, the cabinet and the frame in section.

Figure 4 is a transverse sectional view through the form, the side seam ironing elements being shown in pressing position and the pressing elements for the bosom and the back of the shirt being indicated in dotted lines to show the overlapping operation, although the front and back pressing elements are located within the cabinet and out of position to coact with the form when the form is in starting position or the side seams and yoke pressing operations take place.

Figure 5 is a front elevation, parts being removed, showing the relative position of the form in loading position and after the form has been moved into the cabinet, the position of the form after taking the quarter turn when shifted in the cabinet and of the coacting pressing elements for pressing the bosom and back of the shirt being indicated in dotted lines.

Figure 6 is a fragmentary detail sectional view taken approximately on the plane of line 6—6, Figure 5 of the mounting for a portion of the actuating means for one of the pressing elements in the cabinet.

Figure 7 is a plan view of parts seen in Figure 5 showing the form in starting position before shifting back into the cabinet and in shifted position in dotted lines.

Figure 8 is a fragmentary view of parts seen in Figure 7 showing the position of the form, when shifted into the cabinet in position to coact with the pressing elements therein to press the bosom and back of the shirt.

Figure 9 is a front elevation of the shirt form with a shirt dressed thereon showing the sleeves supported away from the shirt and the body of the shirt ready to coact with the yoke and side seam pressing elements or heads, parts of the collar holding clamp being removed.

Figure 10 is a rear elevation of the form with the shirt dressed thereon and the sleeves in position when ironing the front and rear portions of the shirt.

Figure 11 is a side elevation of the form with the shirt dressed thereon with the collar holding clamp in position, one of the shirt sleeves being shown as removed to show the collar clamp holder and to show the area adjacent the side seam to be pressed.

Figure 12 is a diagrammatic view of the operator controlled power mechanism for the movable parts of the press, various air valves being in section.

Figure 13 is a fragmentary view, partly in sec-

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tion, showing the supporting bearing for the form permitting swivelling of the form and the stop or clutch arrangement for locating and holding the form in starting position.

This shirt pressing machine comprises a body form mounted so that a shirt body may be readily dressed thereon, pressing elements or heads mounted and located to press different portions of the shirt on the form and in their joint operation pressing the entire body of the shirt, the pressing elements being arranged in a plurality of groups, here shown as in two groups, the pressing elements of one group being operable into pressing position so that they are pressing at the same period in the operation of the machine, the elements or heads of the other group being alternately operable into pressing position with the heads of the former group, one of said group of heads lapping the ironing area of the heads of the other group, and means for operating and controlling the operations of the elements or heads of the groups.

In the illustrated embodiment of the invention, the form is shiftable from ironing or juxtaposition with one group into ironing position with the other group; and the operating and control means operate to effect the successive operation of the elements of one group and the release thereof, the shifting of the form from juxtaposition to said one group of pressing elements into juxtaposition to the pressing elements of the other group, the operation of the elements of the other group, the release of the latter and the return of the form to its starting position.

1 designates the form on which the shirt S is dressed; and 2 the carrier for the form, the form being swivelled on the carrier which turns about an upright axis, it having a hub 3 at its lower end having a bearing on the carrier 4 and also having an upright spindle 5 swivelled in the carrier. The carrier is here shown as a double swinging rock arm or a swinging arm having a hub 6 mounted on an upright axis 7 in the base 8 of the frame 9 of the machine. This frame may be of any suitable construction. It is enclosed in a cabinet C open at its front side. The body form 1 is detachably clutched to its hub 4 by a clutch device, as a spring-pressed poppet 4A which, when sufficient turning force is applied, uncouples and permits the form to swivel fully to facilitate dressing of the shirt thereon. The poppet 4A snaps into coupling position when the form is in starting position. As best seen in Figure 4, the form is preferably flattened elliptically in cross section and includes a covering of spring padding 10A and fabric wrapper 10B. The form may be formed hollow for a heating medium supplied through steam pipes P and may be perforated for permitting the passage of steam through the perforations and the covering to moisten the shirt on the form. The pipes have suitable control valves therein and are connected to a steam supply through flexible hose which permits the swivelling and shifting of the form. The heating of the form forms no part of this invention.

10 designates a yoke pressing element suitably shaped to press the shoulders and yoke of a shirt, this being a head carried by a lever 11 extending forwardly and rearwardly and pivoted at 12 to upright frame members or pillars 13 extending between the base 8 and the top plate 14 of the frame 9. The lever may be actuated as will be hereinafter described. There is a suitable neck or collar band holder 15 on the form. The con-

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struction of this holder forms no part of the invention. In so far as this invention is concerned, it may be of any suitable construction to hold the collar when the shirt is dressed on the form. The form 1 is of such size as to receive several sizes of shirts and is provided with a holding clamp 21 to hold the shirt when stretched on the form. The front edges of a coat shirt diverge toward their lower ends to an extent dependent on the size of the shirt, the front edges of small shirts diverging more than larger sizes. The side seam pressing elements are wide enough to cover an area in which the side seams of the small and large shirts will lie. When the side seams and yoke of the shirt are pressed, the sleeves are draped over portions B of the cabinet at the front of the machine and when the form 1 is moved back into the cabinet, the sleeves are supported by a convenient holder H at the top of the form.

16 and 17 designate, respectively, right and left pressing elements for pressing the side seam areas of the shirt on the form, when the form is in its loading or forward position out of the cabinet. As shirts are of different sizes and lengths, these pressing elements 16, 17 are adjustable vertically, so as to press side seams up to and including the arm hole seams, as can be seen in Figures 9 and 11. These pressing elements 16, 17, when properly adjusted, would operate several inches below the top or yoke portion of the shirt. The side seam pressing elements 16, 17 are so adjustable by hand. The ironing pressure is applied thereto by power operating mechanism. The elements 16, 17 are supported by parallel linkage 18, 19 pivoted at like ends to the elements 16, 17. The links 18, 19 are connected by a yoke 22 at their outer ends to which the power is applied. The parallel links 18, 19 are operated to elevate or lower the pressing elements 16, 17 to locate them relative to the arm holes by means of a handle lever 23.

24 and 25 designate the pressing elements within the cabinet and located to press the bosom and back of a shirt after the form 1 with the shirt thereon has been shifted into the cabinet between these pressing elements. The pressing element 24 is carried by a double yoke arm 26 pivotally mounted on an upright 27 of the frame, this yoke arm 26 carrying the pressing element 24 at its outer end. It is actuated, as will be hereinafter described. The pressing element 25 is shown as provided with a slide 28 (Figures 5 and 6) guided in an upright 29 in the frame and having a pivotal connection at 30 with the arm of a lever 31 pivotally connected at 32 to the upright 29. This lever is actuated by power, as will be hereinafter described.

The elements or heads 10, 16 and 17 constitute one group of press heads or elements, and the press heads or elements 24, 25 the other group.

The operating mechanism and the control system will now be described. After a shirt has been dressed on the form the operator first brings the yoke pressing element 10 down in contact with the yoke of the shirt on the form. The carrying arm 11 is provided with a handle 33 for this purpose. During the dressing of the shirt on the form, the form may be swivelled by applying a turning force thereto sufficient to dislodge the poppet 4A, and when the dressing is completed, the form is swivelled to normal position when the poppet 4A locates it in normal position. He then adjusts the side seam pressing element 16 to the proper height by operating the handle 23 to vary the angle of

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the parallel links 18, 19. He then performs the same operation with respect to the other side seam pressing element 17. Immediately after pulling the yoke pressing element 10 down in contact with the shirt dressed on the form 1, he operates a handle 34 to open a valve 35 in a power system, as a compressed air system, permitting air to pass from the main air line 36 through the valve 35 to a cylinder 37 to actuate a piston therein, the rod 38 of which is provided with a head 39 having a roller coacting with an inclined wedge surface 40 on the frame. The cylinder 37 is mounted to oscillate about the pivot 31A against the action of a returning spring 37B. When the piston in the cylinder 37 is energized, the cylinder 37 shifts about its pivot to the left (Figure 3) as the roller 39 moves about the cam 40. This causes the head 39 to press up on the rear arm of the yoke arm and apply pressure, and hence to press the yoke press ironer or element 10 down on the shoulder or yoke of the shirt on the form 1. During this pressing movement, the roller 39 moves along a surface 40A on the same block on which the cam surface 40 is provided. The operating member 34 is provided with a mechanical latch 41, and this latch is released by power, as will presently appear. The latch may be released manually and is provided with a manual or button 34A for this purpose. The operator may want to release the power after it has been once applied for readjustment of the pressing element, and hence the manual release is provided. The latch mechanism 41, as here shown, includes a pair of pivoted hooks, which extend toward each other. Operation of the member 34 engages one hook with the other hook, so that when the member 34 is operated to open the valve 35, the valve 35 is latched in open position. To release the valve, the other hook may be operated by a release member 34A or automatically, as will be hereinafter described. The valve member of the valve 35 is self-returning to normal position. It is of the combined intake and exhaust type. Any suitable valve may be used. After the element 16 has been adjusted to the proper height, the operator operates a lever or manual 42, similar to the manual 34. This operates a valve 43 which permits air to flow from the main line 36 through the open valve 43 to an air motor device, as a cylinder and piston motor 44, 45, which is connected to the yoke 22 between the parallel levers 18, 19. The manual 42 is held in its latched position in the same manner as manual 34 and has a manual release button 42A. Next the operator adjusts the side seam pressing element 17 by operating handle 23 and then operates a third manual 46 which opens the valve 47, similar to valves 35 and 43. Hence, air is permitted to flow from the main line 36 to a cylinder and piston motor 48, similar to the cylinder and piston motor 44, 45, to actuate the yoke 22 of the mechanism for operating the side seam pressing element 17. The manual 46 has a locking device and release mechanism including a manual release 46A similar to that of the manuals 34 and 42. When the valve 47 is open, air also passes from the main line to a timer 49 adjusted so that the pressure builds up during a predetermined time interval to operate an air pressure device, as a diaphragm in a diaphragm chamber 50 which, when a predetermined pressure is reached, opens a normally closed valve 51, which permits air to flow to a manifold line 52 connected to release or diaphragm chambers 53, 54 and 55 for tripping the latches 41 of the manuals 34, 42 and 46. Hence, after a pre-

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determined pressing time, the valves 35, 43 and 47, which are self-returning valves of the combined intake and exhaust type, are opened to exhaust the air from the cylinder 37, 44 and 48 respectively, permitting the yoke pressing element 10 and the side seam elements 16, 17 to return to their open positions.

The operator then operates a fourth operating member or lever 56 to open a normally closed intake and exhaust valve 57. This permits air to flow from the main line 36 through the valve 57 and pipes 58, 58^a, to one end of the cylinder 59 (Figure 8) to actuate the piston therein, the rod 60 of which is connected by a link 61 to the carrier 4, eccentric to the axis of the carrier at 62 (Figures 5 and 8). During this movement of the piston in the cylinder 59, the carrier conveys the form backwardly from its forward position into its second position in the cabinet in juxtaposition to the pressing elements 24, 25, and during this movement the form is given a partial or a one-quarter turn about its axis by suitable mechanism, as a guide link 63 (Figure 3) pivoted at 64 to the fixed frame 8, as the axis of the carrier 2, and at 65 to the hub 3 eccentric to the axis thereof. The valve 57 is shown in section and is illustrative of the valves 35, 43, 47 and 51.

When the valve 57 is opened by operating the fourth operating member or lever 56, the air also passes to a diaphragm chamber 67 which operates a valve 68 in the pipe 69 from the main line 36 to the upper end of the cylinder 59, this operation of the valve cutting off the flow of air to the cylinder 59 and opening the upper end of the cylinder 59 to the exhaust of air. Hence, when the valve 57 is returned to its normal position, as will be presently described, and the air exhausted from the cylinder 59 and from the diaphragm chamber 67, air will again pass through the pipe 58 to the upper end of the cylinder 59 (Figure 12), causing the form to return to its starting or position out of the cabinet. The closing of the valve 57 takes place after the pressing elements 24, 25 have been released and returned to their open position. When the form 1 has been shifted into the cabinet and into pressing relation with the pressing elements 24, 25 or in the positions shown in broken lines in Figures 7 and 8, the piston rod 60 of the piston working in cylinder 59, opens, through a lever 70 (Figure 12), a valve 71, similar to the valves 35, 43, 47, 57, and permits air to flow from the main line 36 through pipes 72, 720 to one end, as the upper end (Figure 12) of a cylinder 73 (Figures 7 and 12), the rod 74 of which is pivoted to one link 75 of a toggle, the other end of which is pivoted at 76 or at the joint of the toggle, to one end of the other toggle link 77, which in turn is connected to the yoke lever 26 of the pressing element 24. The toggle is formed with a stop joint which stops it in a straight line or dead center position. The air also passes from these pipes 72, 720 through a suitable orifice or reducing valve 78 to a diaphragm chamber 79 operating a valve 80, which is normally in position to permit the exhaust of air from the other or lower end of the cylinder 73, so that the piston in the cylinder 73 can operate to straighten the toggle 74, 77 and close the pressing element 24. Before such operation of the valve 80, the air passes from the main line through the pipe 81, valve 80 into the lower end of the cylinder 73, to cause its piston to fold the toggle into the position shown in Figure 7, and hence open the pressing element 24. When in normal position, the air passing from the main

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line through the pipe 81 and the valve 80 into the lower end of the cylinder 73 through the pipe 82, also passes through pipe 83 in the diaphragm chamber 84, which normally holds the lever 70 in position to close the valve 71 in the supply line to the upper end of the cylinder 73. The valve 71 is of the self-locking type so that when the valve is initially operated through the lever 70, air passes to a diaphragm 71A and the valve 71 is locked in open position. The diaphragm chamber 84 receives air normally from normally-open valve 80 through pipe 83 and thus holds open the valve 71. After the pressing element 16 has been brought into closed position, or as the toggle links 75, 77 straighten, a portion of the link 75 opens a control valve 86 to the intake of air from the main line, and air passes from the main line through the valve 86, pipe 87 to a diaphragm chamber 88 which opens a control valve 89 for a cylinder 90 having a piston therein, the rod 91 of which is connected to the lever 31 which actuates the pressing element 25, against the action of a suitable returning spring 92 (Figures 5 and 12) to close the pressing element 25 and squeeze the form between it and the closed pressing element 24. The opening of this valve 89 permits air to flow from the main line through the pipe 93, valve 89 to the cylinder 90 and also from the main line to a double timer 94.

The double timer 94 successively controls release of air from the cylinder 90 for the back pressing element 25, the de-energization of the cylinder 73 for the bosom pressing element 24, and the reversing of the piston in the cylinder 59 to move the form from out from within the cabinet to starting position. The timer may be of any suitable construction and includes an air chamber in which pressure is built up. The pressure in the air chamber of the timer 94 controls the operation of pressure operated devices, as diaphragms in diaphragm chambers 95, 96 to operate valves 97 and 98 respectively. The diaphragms in the chambers 95, 96 are adjusted to work at different pressures in any suitable manner, as for instance, they are operated by the air pressure against springs, which are adjusted for different loads, as spring 98A. Also, the timer is provided with a suitable adjusting or pressure regulating valve 99. The pressure device 95 is adjusted to work at a less pressure than the device or diaphragm in the chamber 96. When the pressing elements 24, 25 are closed, the pressure builds up in the chamber of the timer 94. The pressure when it builds up to a predetermined value first operates the diaphragm in the chamber 96. The diaphragm, through suitable mechanism, opens the valve 97 to exhaust, so that air exhausts from the diaphragm chamber 88 for the valve 89 controlling the flow of air to the cylinder 90. At the same time, while the valve 89 is open to exhaust, air exhausts from diaphragm chamber 74 through pipe 100 and the valve 97 permitting the valve 71 to close its intake and open its exhaust to the outlet of air from cylinder 73 for the pressing element 24 so that the pressing element 24 opens. Upon the return of the valve 89 to normal position, air from the main line will again pass through the pipe 83 to the diaphragm 84, returning the lever 70 to operating position through the piston rod 60, thus operating valve 71. Also, the air may exhaust back from the diaphragm chamber 79 of the valve 80, permitting the valve 80 to return to normal position, and thus permit the air to enter cylinder 73 from the main line and effect the

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opening of the press head 24. When the pressure builds up sufficiently to operate the diaphragm in the chamber 94, a valve 98 is opened, permitting the air to exhaust back from the diaphragm chamber 103 of the holding device for the manual 55, thus permitting the valve 57 to close. The air exhausts back through the pipe 104 through the valve 98. The return of valve 57 to open and normal position permits the air to enter the upper end of the cylinder 59 and through the link 51 return the form 1 from out of the cabinet into starting or loading and unloading position in front of the cabinet. Suitable check valves 105, 106 are located to prevent air from returning through the lines on which they are located, when such return would cause faulty operation. Also, suitable orifices 78 and 110 are provided to prevent air from passing freely through lines, and thus aid in the release of the diaphragms 79 and 88.

Thus, in the general operation, the yoke, side seam areas and the front or bosom and the back of the shirt are ironed without removing the shirt from the form. The yoke and side seams are pressed when the form is in starting position outside of the cabinet and the bosom and back after the body has been shifted back into the cabinet, and the operation of the pressing elements within the cabinet is controlled by the shifting of the form into the cabinet. The pressing elements coacting with the form, when the form is in first position outside the cabinet may be performed in any order, but it is more natural to first arrange the yoke and then the right and left hand pressing elements, although any other order may be used. The timer 49, however, is adjusted to be timed by the closing last of the pressing element 17 for the left hand side seam.

What we claim is:

1. In a shirt pressing machine, a supporting frame, a body form on which the shirt is dressed, the body form being elliptical in general contour in cross section, so that with the shirt dressed thereon the side seams are at the ends of the long diameter of the elliptical formation, a pair of side seam pressing elements and a pair of front and back pressing elements, the side seam pressing elements and the back and front pressing elements being movable in parallel planes with one pair of pressing elements in the rear of the other, a carrier for the form operable to shift the form from its position occupied when in juxtaposition to the side seam pressing elements into juxtaposition to the front and back pressing elements and to give the form a quarter turn during such shifting movement, and vice-versa, and means for controlling the successive operations of the pair of side seam pressing elements, the release of the same, the operation of the carrier, the operation of the pair of front and back pressing elements, the release of the same, and the reverse movement of said elements, carrier and form to return the form to starting position.

2. In a shirt pressing machine, a supporting frame, a body form on which the shirt is dressed, a carrier for the form operable to carry the form from starting position in front of the press in which the shirt is dressed on the form into a second position, operating means for the carrier, a pressing element mounted to press the yoke of the shirt on the form when the form is in starting position, and operating means therefor, a pair of pressing elements and operating means

therefor operable to press the side portions of the shirt when in starting position, a second pair of pressing elements and operating means therefor operable to press the front and back of the shirt when in second position, and means for controlling the successive operations of the yoke pressing element and the side pressing elements, the release and return of the yoke and side pressing elements to starting position, the operation of the carrier, the operation of the front and back pressing elements, the release of the same, and the operation of the carrier to return the form to starting position.

3. In a shirt pressing machine, a supporting frame, a body form on which the shirt is dressed, a carrier for the form operable to carry the form from a starting position in front of the frame in which the shirt is dressed on the form into a second position within the frame, the carrier including a swinging arm, the form being swivelled on said arm, mechanism for rocking the arm and a connection between the rocking mechanism and the form to swivel the form to give it a partial turn during its movement from starting position to second position, pressing elements for coacting with the form when in starting position and operating means therefor and pressing elements for coacting with the form when in second position and operating means therefor.

4. In a shirt pressing machine, a supporting frame, a body form on which the shirt is dressed, a carrier for the form operable to carry the form from a starting position in front of the frame in which the shirt is dressed on the form into a second position within the frame, the carrier including a swinging arm, the form being swivelled on said arm, mechanism for rocking the arm and a connection between the rocking mechanism and the form to swivel the form to give it a partial turn during its movement from starting position to second position, pressing elements for coacting with the form when in starting position and operating means therefor, and pressing elements for coacting with the form when in second position and operating means therefor, and control mechanism operable to effect the successive operation of the pressing elements operable when the form is in first position, the release of the same, the operation of the carrier successive to the former operation and the successive operation of the pressing elements operating when the form is in second position.

5. In a shirt pressing machine, a body form on which the shirt is dressed, pressing elements for pressing different portions of the shirt on the body form and in their joint operation pressing the entire body of the shirt, the elements being arranged in groups, the pressing elements of one group being operable into pressing position so that they are pressing at the same time, the elements of the other group being alternately operable into pressing position with the elements of the first group and operating to lap the areas pressed by the first group, and means for controlling the successive operation and releasing of the groups of pressing elements.

6. In a shirt pressing machine, a body form on which the shirt is dressed, pressing elements for pressing different portions of the shirt on the body form in their joint operation pressing the entire body of the shirt, the elements being arranged in groups, the pressing elements of one group being operable into pressing position so that they are pressing at the same time, the side

seams, the yoke and the shoulders of the shirt from the collar to the sleeves and the pressing elements of the other group being operable to press the entire back and front of the shirt and to lap the areas pressed by the pressing elements of the former group, the elements of said other group being alternately operable into and out of pressing position with the elements of said one group, the body form being mounted to shift from juxtaposition with either group of elements into juxtaposition to the other group and means for successively effecting the operation of one group, the shifting of the form into juxtaposition to the other group, the operation of the pressing elements of the other group and the reverse of the shifting and pressing operations.

7. In a shirt pressing machine, a body form on which the shirt is dressed, groups of pressing elements for pressing different areas of the shirt, all of said pressing elements pressing substantially the body portion of the shirt, the pressing elements of one group pressing the yoke and side seam areas of the shirt from the collar to the sleeves, the pressing elements of the other group being operable into position to press the entire front and back of the shirt and being located to lap over on the areas pressed by said one of the groups, the form being shiftable from juxtaposition to one group of pressing elements into juxtaposition to the other group and back into juxtaposition to the first group, and power means operable to effect the successive operations of the groups of pressing elements and the shifting of the form from one group to the other between the pressing operations of the groups.

8. In a shirt pressing machine, a supporting frame, a body form on which the shirt is dressed, a carrier for the form operable to carry the form from a starting position on which the shirt is initially dressed on the form into a second position, means for operating the carrier and for giving it a partial turn relative to the carrier when moving from first position to second position and vice-versa, pressing elements for coacting with the form when in starting position, and operating means therefor, and pressing elements coacting with the form when in second position, and operating means therefor, and means for controlling the operations of all of said operating means.

9. In a shirt pressing machine, a supporting frame, a body form on which the shirt is dressed, a carrier for the form operable to carry the form from starting position in front of the frame in which the shirt is initially dressed on the form into a second position within the frame, operating means to actuate the carrier to move the form in one direction from starting position to second position and reversely in the same path from second position to first position, pressing elements for coacting with the form when in starting position and operating means therefor, pressing elements for coacting with the form when in second position and operating means therefor, and mechanism for controlling and timing the operations of the three operating means.

10. In a shirt pressing machine, a supporting frame, a body form on which the shirt is dressed, a pair of side seam pressing elements and a pair of front and back pressing elements, the side seam pressing elements and the front and back pressing elements being movable in parallel planes with one pair of pressing elements in the rear of the other, a carrier for the form operable

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to shift the form from its position occupied when in juxtaposition to the side seam pressing elements into juxtaposition to the front and back pressing elements, and in a retrograde direction, after the pressing operations, back to the first position in juxtaposition to the side seam pressing elements, whereby the form has a back and forth operating movement from one position to the other position and reversely back to the first position, and means for controlling the successive operations of the side seam pressing elements, the release of the same, the operation of the carrier, the operation of the pair of front and back pressing elements for releasing the same and the

reverse movement of said elements and of the carrier to starting position.

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