



June 28, 1932.

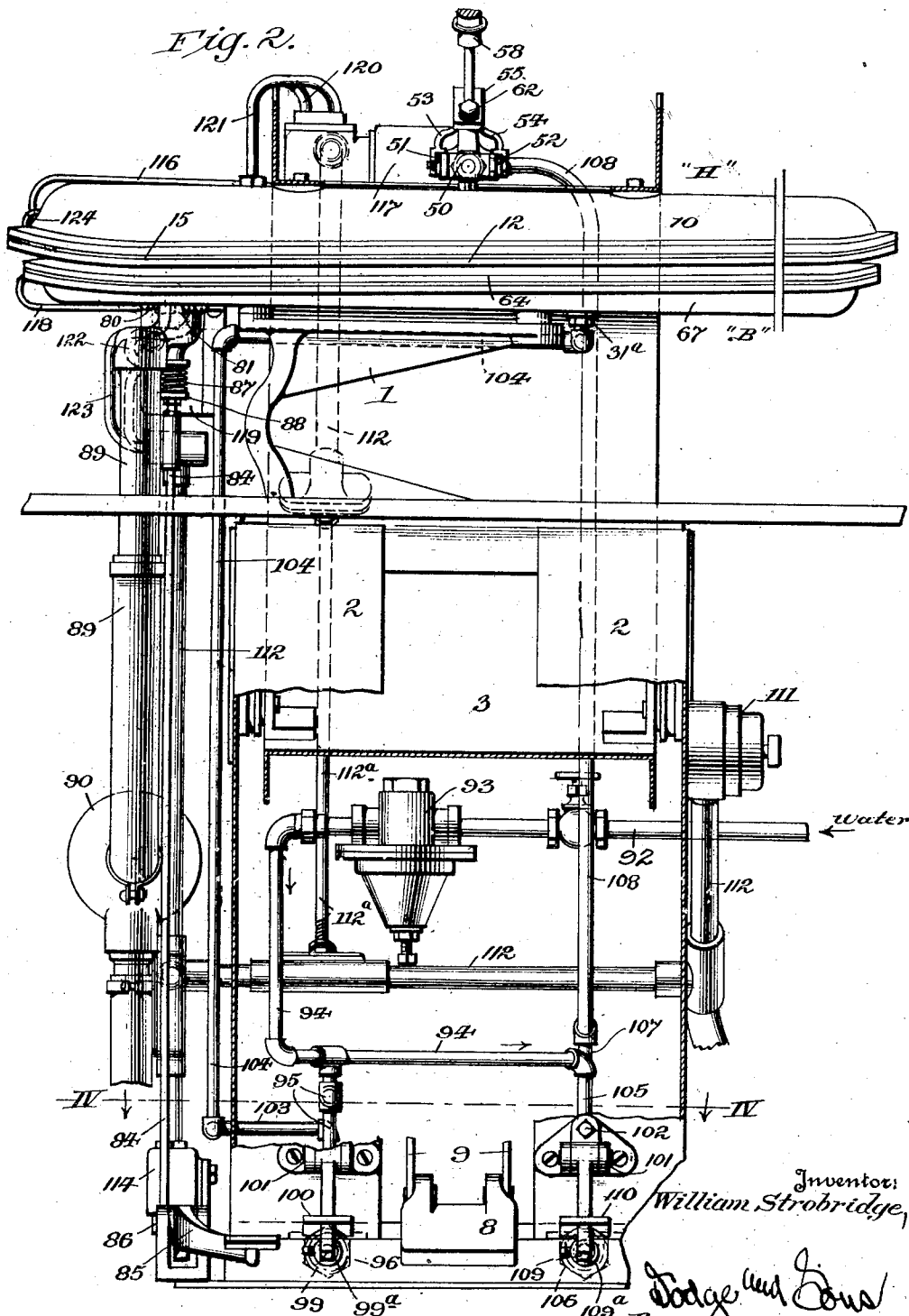
W. STROBRIDGE

1,865,151

PRESS

Filed Oct. 18, 1929

6 Sheets-Sheet 2



June 28, 1932.

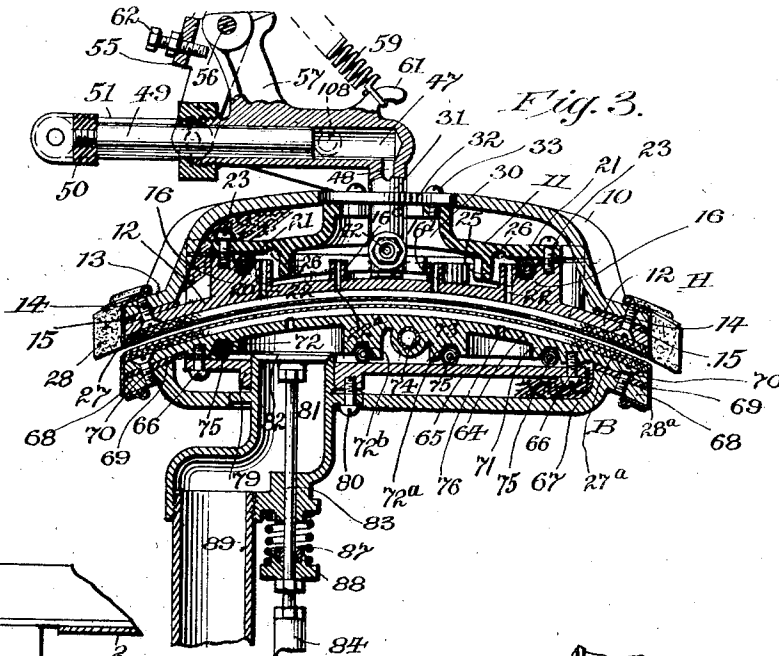
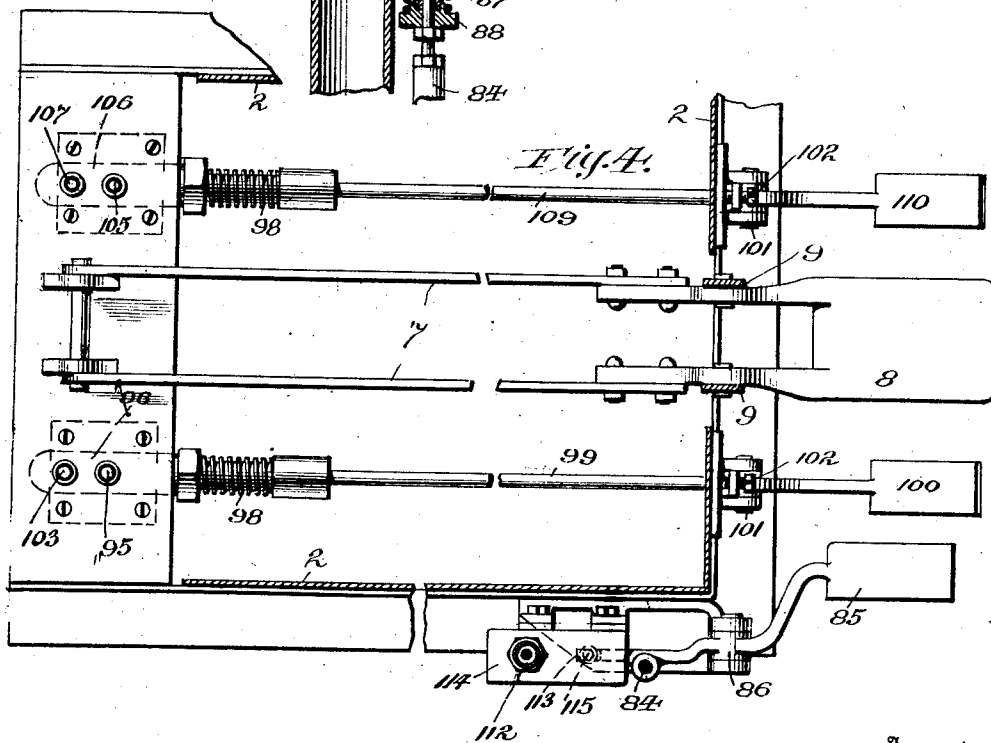
W. STROBRIDGE

1,865,151

PRESS

Filed Oct. 18, 1929

6 Sheets-Sheet 3



Inventor:  
William Strobridge,

By *Lodge and Sons,*

Attorneys.

June 28, 1932.

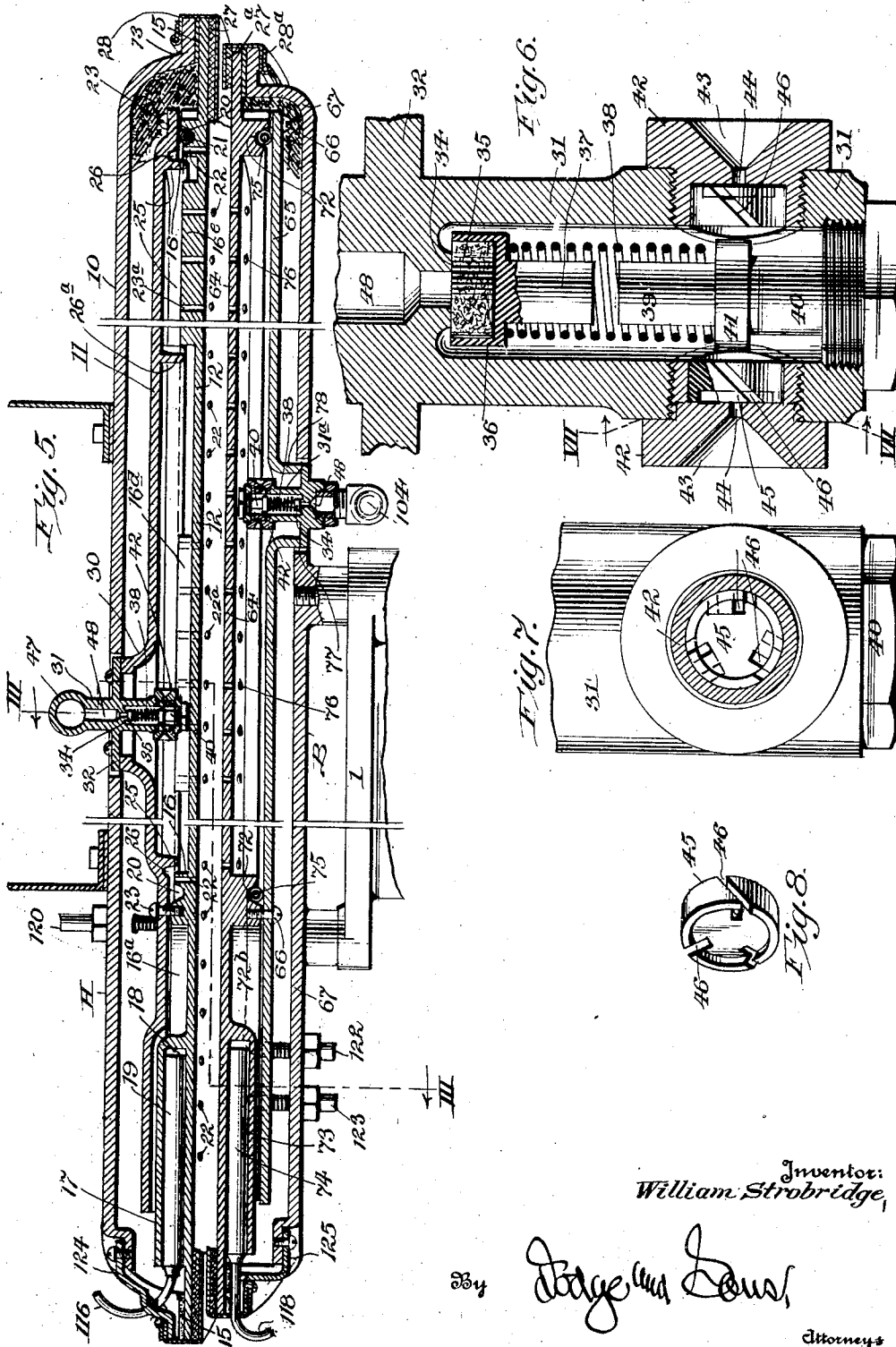
W. STROBRIDGE

**1,865,151**

PRESS

Filed Oct. 18, 1929

6 Sheets-Sheet 4



June 28, 1932.

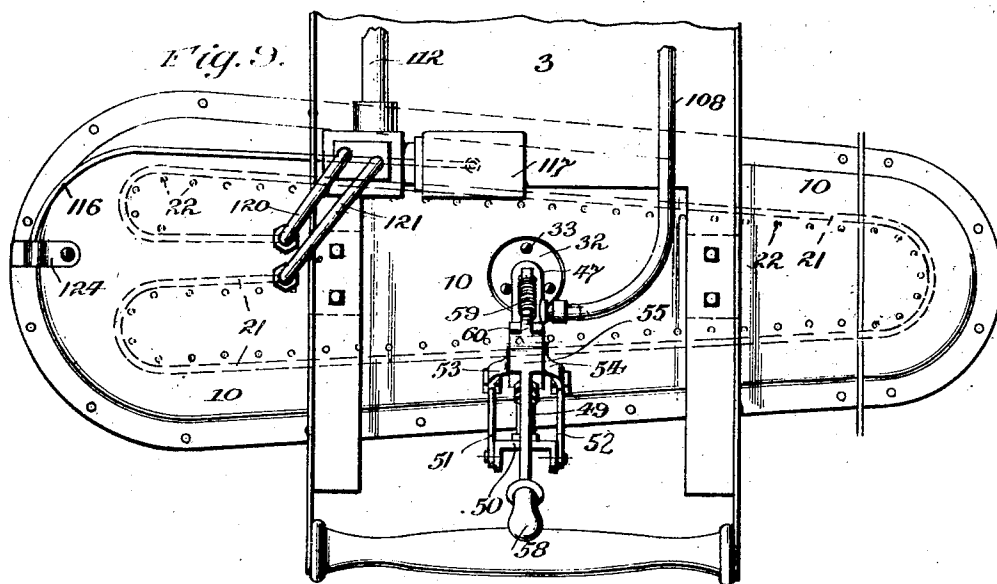
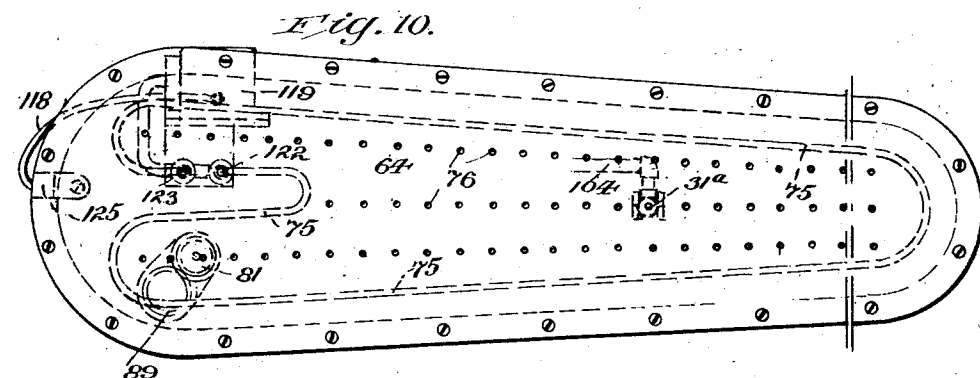
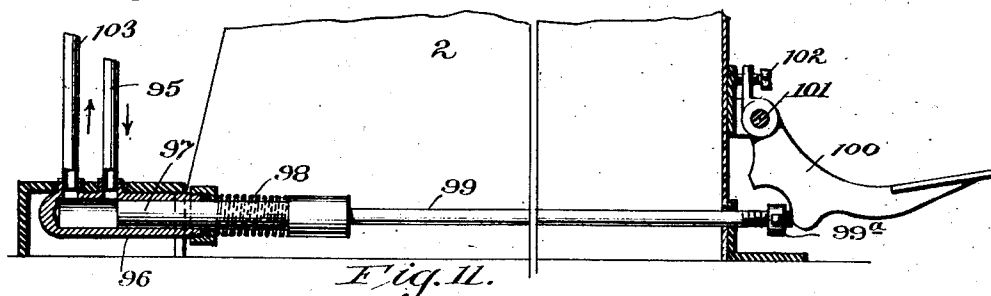
W. STROBRIDGE

1,865,151

PRESS

Filed Oct. 18, 1929

6 Sheets-Sheet 5



Inventor:  
William Strobridge

334

Dodge and Lous,

Attorneys.

June 28, 1932.

W. STROBRIDGE

1,865,151

PRESS

Filed Oct. 18, 1929

6 Sheets-Sheet 6

Fig. 12.

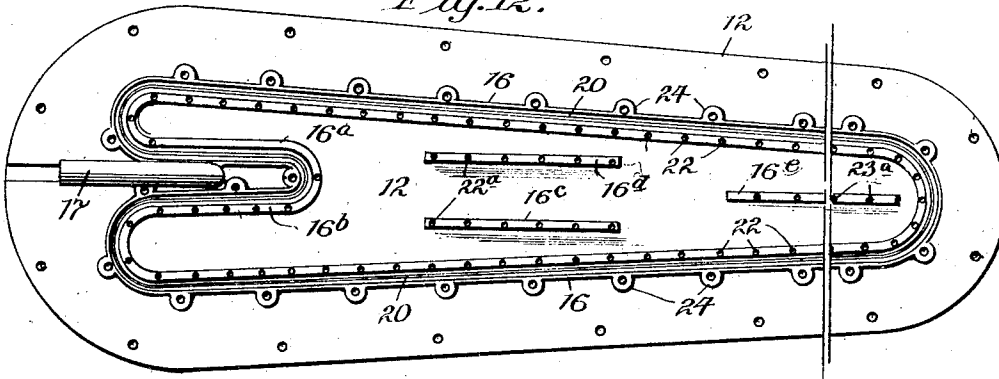


Fig. 13.

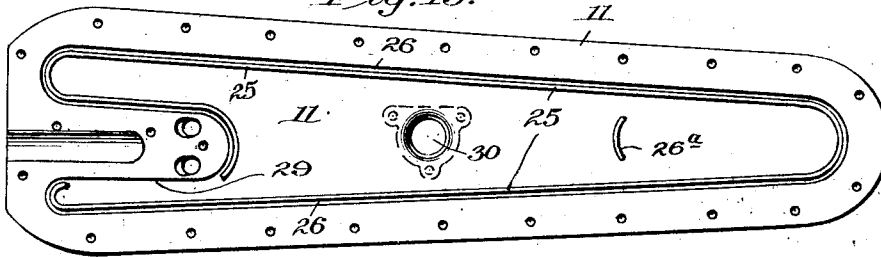
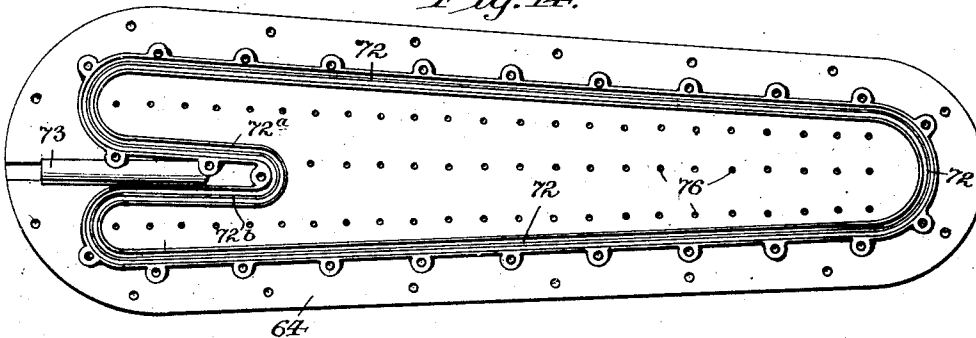


Fig. 14.



Inventor:  
William Strobridge

224 Dodge and Sons,

Attorneys

## UNITED STATES PATENT OFFICE

WILLIAM STROBRIDGE, OF SYRACUSE, NEW YORK, ASSIGNOR TO UNITED STATES  
HOFFMAN MACHINERY CORPORATION, OF NEW YORK, N. Y., A CORPORATION OF  
DELAWARE

## PRESS

Application filed October 18, 1929. Serial No. 400,708.

This invention pertains to presses of the garment and laundry type.

The main object of the invention is the production of a press wherein electricity is employed as the medium for heating the pressing elements, to produce steam employed to moisten the goods, when necessary, and to produce a suction through one of the pressing elements and the garment or goods resting thereon.

More specifically, the invention pertains to means for ensuring the requisite control of the current so that the proper degree of heat is maintained in the pressing elements at all times. Furthermore the invention has for an object the utilization of the heated pressing elements in and of themselves as the surfaces for conversion of the water, in sprayed or mist-like form, into steam which is ejected by its own pressure onto the goods being treated. Further objects and advantages will hereinafter appear.

I am aware that, broadly considered, electricity has been employed both as a heating and as a steam producing medium in presses, but in all those instances which have come to my attention no adequate heat control has been provided and generally some special means, aside from the pressing elements, has been provided for generating the steam.

One embodiment of my invention is illustrated in the annexed drawings wherein:

Figure 1 is a side elevation of a press with the pressing elements in approximately closed position,

Figure 2 a front elevation with parts broken away,

Figure 3 is a transverse vertical section taken on the line III—III of Figure 5,

Figure 4 is a transverse horizontal section taken on the line IV—IV of Figure 2,

Figure 5 is a longitudinal section of the head and buck,

Figure 6 is a detail sectional view of one of the spray nozzles and its controlling valve,

Figure 7 is a detail sectional view taken on the line VII—VII of Figure 6,

Figure 8 a perspective view of one of the spray producing elements,

Figure 9 a top plan view of the upper

pressing element and a portion of the supporting frame,

Figure 10 a top plan view of the lower pressing element,

Figure 11 a sectional elevation showing in detail one of the foot operated pumps for forcing water to one of the spray heads or nozzles,

Figure 12 a top plan view of the lower element of the head or upper pressing element,

Figure 13 a like view of the lower or bottom face of the intermediate member of the head, and

Figure 14 a plan view of the uppermost buck element as seen from the underside.

In the embodiment of the invention illustrated it is shown as applied to a press wherein there is a fixed buck or lower pressing element and a cooperative head or upper pressing element, the latter being carried by a suitable support to effect movement thereof toward and from the buck.

In the drawings, Figures 1 and 2, H and B denote generally the head and buck respectively.

The buck is mounted upon a suitable support 1 surmounting a fixed main frame 2.

The head is shown as secured to the forward overhanging end of an inverted L-shaped frame 3. Said frame has rollers, designated by 4, attached thereto, which rollers extend into guide or cam ways 5 and 6 to cause the frame 3 to swing forwardly and rearwardly and to carry the head into and out of pressing relation with the buck. Any suitable means may be employed for effecting such movement and the same is not shown in detail. Suffice it to say that a pedal lever 7 carrying a pedal 8 at its outer end is connected by draw links 9 to the actuating mechanism. Inasmuch as no claim is made to the frame structures or the head actuating means the latter is not shown in detail. Any form may be employed.

It is designed to produce in each the head and the buck a heated chamber, one surface or element whereof forms the pressing face of such member, and to provide means whereby a charge of water may be sprayed into the

same and transformed into steam which passes outwardly through the pressing surface.

Associated with each of the pressing elements is a thermostatic bulb which cooperates with, or forms a part of, an adjustable switch included in the line leading to the electric heating element housed in the pressing element.

I will first describe the construction of the head. Said member is composed primarily of three elements, an outer enclosing member 10 and intermediate member 11 and a lower or outer pressing element 12.

Member 10 is arched transversely and is formed with an outward extending flange 13 to which the pressing element 12 is secured by screws 14, a suitable insulating gasket 15 being placed between the parts at this point.

The pressing element 12 is provided on its upper face inward of its edge and so spaced as not to contact the element 10, with an upwardly extending continuous rib or flange 16. As will be seen upon reference to Figure 12, the rib at one end of the head, at the wider end if the head is tapered as is usual, turns inwardly upon itself, forming in effect a loop, the portions 16<sup>a</sup> and 16<sup>b</sup> whereof stand in spaced relation. Between these sections there is formed an enlargement 17 which is bored out to form a pocket 18 for the reception of a thermostatic bulb 19 hereinafter referred to in detail.

Rib 16 has a continuous groove 20 formed in its upper face for the reception of a heating element 21. As will be appreciated, the heating element follows the recurved portions of the rib and as a consequence the wider end of the element 12 has more heating surface exposed thereto. A series of openings 22 extend through the rib and the body of the element 12 opening through the lower face thereof, Figures 3 and 5, for the passage of steam generated within the head.

Overlying plate 12 is the element 11 which is secured thereto by screws 23 taking into lugs 24, Figure 12, extending outwardly from rib 16. Plate or element 11 is formed on its underface with a rib or flange 25 having the same general contour as rib 16 but so positioned and proportioned that it stands inwardly of and spaced from said rib 16 while overlapping the same to a slight extent. A channel 26 is formed in member 11 around the flange 25. Said flange, channel 26, and the rib 16, see Figures 3 and 5, form a recurved passage through which the steam generated in the space or chamber between the plates 11 and 12 must pass before it escapes through the openings 22. Such arrangement precludes the passage of unvaporized water particles to the outer face of the pressing element and to the padding and covering 27 and 28 which may be placed over such face.

In order to prevent water particles from being carried laterally and to the openings 22 adjacent the spray nozzle hereinafter referred to, I preferably form a pair of up-standing ribs 16<sup>c</sup> and 16<sup>d</sup> upon the pressing plate 12. These ribs stand inwardly of the rib 16 and are provided with perforations or openings 22<sup>a</sup> which extend downwardly through the outer face of the member 12. A third rib, as 16<sup>e</sup>, extends upwardly from the plate 12 at the narrow end of the element and is likewise provided with openings as 23<sup>a</sup>. This rib is designed to cause the steam to pass equally through the openings 22 located in the member 16 at each side of the member 16<sup>e</sup>. Cooperating with this member 16<sup>e</sup> is a baffle 26<sup>a</sup>, Figure 13, which baffle, see more particularly Figure 5, stands in alignment with the discharge nozzle employed to inject the water into the head. The various ribs and baffles tend to secure an even distribution of the steam over the head and to preclude the passage of any water particles into the discharge openings 22, 22<sup>a</sup> and 23<sup>a</sup>.

As will be seen upon reference to Figure 13, rib 25 is interrupted at one point, as at 29, in order that the steam generated within the chamber between the plates 11 and 12 may pass outwardly into contact with the bulb pocket 17. At this point the heating element 21 may be covered or so constructed as to be inactive. In other words, the length of the inactive portion of the element may be designed to control a more uniform distribution of heat and consequently the temperature of the lower face of the pressing element 12.

Plate 11, see more particularly Figures 3 and 5, is formed at its midlength with an upwardly extending hollow dome-shaped member 30 which is open at its upper end. Extending into the opening is a nozzle element denoted generally by 31 and having a flange 32 which is seated upon the upper end of the dome-shaped member and secured thereto in any suitable manner as by screws 33.

The member 31 is made hollow throughout its lower portion and at the upper end of such portion is provided with a valve seat 34 against which is normally seated a valve 35, shown in the present instance as mounted in a valve body 36 having a downwardly extending stem 37. The stem is encircled by a spring 38 which at its lower end encircles a post or stud 39 formed as a part of a plug 40 screwed into the lower portion of the body 31. The plug, as will be noted, is provided with an annular flange or collar 41 against which the lower end of the spring 38 bears.

It will be appreciated, of course, that any type of valve may be employed instead of that shown so long as means is provided for imposing the desired load upon the valve.

Member 31, adjacent its lower end, is provided with two oppositely disposed threaded openings in each of which is mounted a spray nozzle. Said nozzles are preferably alike in form, hence a description of one will suffice for both.

Screwed into the threaded opening is a plug-like element 42 having a frusto-conical opening 43 formed in its outer face and connecting with a relatively small cylindrical opening 44 which passes inwardly and terminates in an annular recess formed in the inner face of said plug-like element. Mounted within said recess is an element designed to impart a swirling motion to the liquid forced outwardly therethrough and through the opening 44 by a pump later to be described. Said element is of the form best shown in Figure 8. It may be said to comprise a cup-shaped member 45 having a series of spirally disposed slots 46 formed by cutting openings through the circular or cylindrical wall thereof, said slots or openings extending into the flat body portion of said cup-shaped member. This member is placed within the recess formed in the inner face of the plug 42 with the open side thereof adjacent the port or opening 44.

The member 31, as will be seen upon reference more particularly to Figures 3 and 5, extends above the flange 32 and extending laterally therefrom, and as an integral portion thereof, is a pump cylinder 47, the cylinder communicating through an opening 48 with the chamber in the member 31, the opening 48 terminating adjacent the valve seat 34.

Mounted within the cylinder is a piston 49 to the outer end of which is connected a cross bar 50 which in turn is connected by a pair of links 51, 52 to the lower ends of a pair of arms 53 and 54 formed as downward extensions of a lever 55, pivoted at 56 to a bracket 57 extending upwardly from the pump cylinder. A handle 58 is connected to the forwardly extending portion of the lever 55. A spring 59 is connected to a lug 60 extending outwardly from the lever 55 and to a lug 61 formed as an integral portion of the pump cylinder. The spring tends to retract the piston 49. A screw 62 adjustably mounted in the lever 55 acts to limit the throw of the lever when pulled downwardly by the handle 58 and consequently regulates the amount of water which may be forced through the spray nozzle by the pump. The piping whereby the water is fed to the pump cylinder will be later set forth.

The space between the upward face of the plate 11 and the underface of the member 10 will be packed with heat insulating material, which, of course, tends to prevent radiation of heat from the places 10 and 11 and to thereby keep the pressing plate or element 12 hot as well as the plate 11.

The buck, as is the case with the head, is

formed from three plates. The upper pressure applying plate is designated by 64 and is contoured to conform with the face of the presser plate 12 of the head. Below said plate is the intermediate plate 65 held to the former by screws 66. The outer plate is designated by 67 and is provided with a marginal flange 68 upon which is imposed an insulating gasket 69. Screws 70 attach the upper plate 64 to the flange 68 and thus secure these two members together.

The upper member 64 is provided on its under face with a downwardly extending rib 71 having a groove or channel 72 formed in its outer face. The rib, as is the case with plate 12, is recurved upon itself, as 72<sup>a</sup> and 72<sup>b</sup>, and between said recurved portions there is formed a pocket 73 for the reception of a thermostatic bulb 74 to which further reference will be made later on.

Mounted within the groove or channel 72 is a heating element 75, the controlling circuit for which will be later on described.

Plate 64 is provided with a plurality of openings 76 which, of course, are in communication with the chamber formed between the plates 64 and 65.

Bottom plate 67 is provided with an opening, as 77, and the plate 65 is formed with a downwardly extending collar 78 which extends into the opening and is designed to receive the spray nozzle for ejecting and vaporizing the water in the chamber formed between the upper and intermediate plates. The spray nozzle in this instance is designated generally by 31<sup>a</sup> and is of the form heretofore described in connection with the head, or that disclosed in Figures 6 to 8. The space between the intermediate member 65 and the outer or lower member 66 will be filled with suitable heat insulating material, partly shown in Figures 3 and 5 but omitted from the remainder of the structure with a view of avoiding confusion as to the parts.

Suitable padding and press cloths 27<sup>a</sup> and 28<sup>a</sup> will be present, if need be, although where the machine is used for laundry purposes the padding and cloth is not always necessary.

Plate 65 is provided with an opening defined by a downwardly extending collar 79, Figure 3, and the plate 67 is likewise provided with an opening in alignment with the collar but somewhat larger than the latter. Extending through these openings and secured in position by screws 80 is a pipe 81 terminating at its upper end within the chamber formed between the upper and intermediate plates 64 and 65, respectively. At its upper end the pipe or fitting is formed with a valve seat upon which normally rests a valve 82, the stem 83 whereof passes downwardly and is connected to a push rod 84, Figures 1 and 2, which rod at its lower end bears upon a foot

pedal 85 fulcrumed at 86 upon the base of the machine.

A spring 87, encircling the lower end of the valve stem 83, takes against the fitting 81 and against a washer 88 secured to the valve stem or rod and acts to normally hold the valve to its seat.

Fitting 81, see more particularly Figure 3, is provided with a lateral offset, the lower end of which has connected thereto a pipe 89 leading to an exhaust pump 90 driven by an electric motor 91. The circuit for this motor will be later described. This pump tends to create an exhaust or vacuum through the buck when the motor is in operation.

The apparatus is so designed that water may be forced into the head spray either through the hand pump heretofore described or through a foot actuated pump. The spray for the buck is designed to be operated through a foot pedal though of course a hand pump might be employed.

The valved water supply pipe, see Figure 2, is designated 92 and is connected into a reducing valve 93. From this valve extends what may be termed a common supply pipe 94 for the pumps. Said pipe, see Figures 1, 2 and 11, is provided with a branch or lateral 95 which extends downwardly and into a pump cylinder 96. In this cylinder works a piston 97 normally retracted by a spring 98.

A rod 99 extends forwardly from the piston and contacts a foot lever 100 pivoted at 101 upon the frame of the machine and adjustable as to its throw by a stop screw 102.

A stop washer 99<sup>a</sup>, Figure 11, is adjustably secured upon the outer end of the rod 99 and limits the inward movement of said rod, and consequently of the piston 97, whereby the volume of water expelled from the cylinder 96 may be regulated.

Extending from the rear end of the cylinder 96 is a pipe 103, said pipe extending forwardly and then upwardly, as at 104, and connected into the lower end of the spray nozzle 31<sup>a</sup>.

As will be readily appreciated, upon depression of the lever 100 piston 97 will be moved inwardly, covering inlet pipe 95, and the water which is trapped in the outer end of the cylinder will be forced upwardly through the pipes 103, 104 and into the spray nozzle 31<sup>a</sup>. From this nozzle it will be forced outwardly toward each end of the buck or into both ends of the chamber formed between the upper pressing plate 64 and the intermediate plate 65. By reason of the swirl plate 45 the water, as it is forced outwardly through the opening 44 and into the frusto-conical opening 43, will be atomized and thrown outwardly toward each end of the chamber. The walls of this chamber being heated the water vapor will be converted into steam which will then issue through the openings 76 formed in the plate 64.

The pipe 95 is provided with a second lateral extension 105, which pipe leads into a second pump 106, Figure 4, designed to force water upwardly to the head. The pump 106 is provided with an outlet pipe 107 connected in turn to a flexible pipe or conduit 108 which extends upwardly and is carried by the head-carrying frame 3. It opens into the pump cylinder 47, heretofore described, and forward of the piston 49 when the latter is in its retracted or normal position. Such inlet is denoted in dotted lines in Figure 3.

Pump 106, or the piston therein, is actuated through a rod 109 cooperating with a pedal lever 110. A stop collar 109<sup>a</sup> is secured to the rod 109 and as a consequence regulates the volume of water expelled by the pump 106. The arrangement is similar to that shown in Figure 11, heretofore described in connection with the buck pump.

Valve 35 is so loaded as to prevent ingress of water to the spray nozzle except that it be forced inwardly either through the actuation of the hand pump mounted upon the head or the foot actuated pump. It is to be understood that operation of either the hand pump or the foot pump 106 will cause the water to be forced outwardly through the spray nozzle into the heated chamber formed in the head between the heated plates 11 and 12.

It will, of course, be readily appreciated that instead of having the pipe or conduit 108 opening into the pump cylinder 47 the hand pump might be omitted entirely, in which case the pipe or conduit 108 would open directly into the body of the spray nozzle.

Any unvaporized water particles will be precluded from passing downwardly through the openings 22 in the plate 12 by reason of the tortuous passage formed by the rib 25 and the channel 26, the latter being directed toward the upper end of the openings 22.

The same spraying effect obtains in the buck when the pedal 100 is depressed to force a charge of water from the pump cylinder 96. In this instance, however, any unvaporized particles would tend to drop on the plate 65, hence there is no necessity of producing a trap, as in the head, for such unvaporized water particles.

The valve in the spray nozzle 31<sup>a</sup> employed in the buck is so loaded as to preclude its being opened except under water pressure produced by the pump 96.

By reason of the fact that the amount of water which is forced inwardly to the head or the buck, as the case may be, may be regulated through increase or limitation of the pump capacity, the amount of steam generated and passing to the garment or article being operated upon is more or less under the control of the operator. For example one stroke of the pump might give sufficient moisture in the form of steam for light materials,

such as silks, but two or more strokes might be desirable or in fact necessary for suits and overcoats. The steam which issues through the perforations from the buck or from the head is not superheated but on the other hand is moist and therefore readily dampens the garment or article under treatment.

Secured to one side of the press frame is a main switch 111 which controls the input of current to the thermostatic switches connected into the circuits for the heating elements and the motor for driving the exhaust pump or fan.

Wires or cables will preferably be enclosed in conduits, the latter being denoted generally throughout the structure by 112. A flexible conduit 112<sup>a</sup> carries the wires which lead to the heating element and the thermostatic switch associated with the head.

Adjacent the pedal 85, or the inner end thereof, which is preferably rounded as at 113, is located a switch 114. A movable switch element 115 overlies the element 113 and when the lever pedal 85 is depressed said member 115 is moved upwardly, closing the switch and causing current to flow through the motor 91 and thus actuate the exhaust fan 90. At the same time rod 84 is elevated and the valve 82 is raised off of its seat, allowing suction to obtain within the chamber formed between the plates 64 and 65, and inwardly through openings 76. So long as the pedal 85 is held down the fan or pump will continue to function. When, however, the pedal is released current will be cut off from the motor and the valve simultaneously closed. The closing of the valve closes off the chamber above mentioned and precludes the dissipation of heat outwardly through the conduit or precludes the flow of air upwardly through the heated chamber.

The bulb 19 is a closed one, except for a capillary tube 116 which extends to a thermostatic switch 117 involving an expansible element such as a metallic bellows. This latter element in turn effects the opening and closing of the switch according to the expansion or contraction of the liquid within the thermostatic bulb 19. The switch may be so adjusted as to maintain a given heat in the heating element, and the parts which it in turn heats, but upon rise of temperature above the desired or predetermined degree the expansion of the liquid within the bulb 19 will cause the switch 117 to be opened thus cutting off current from the heating element. Likewise contraction of the liquid due to the cooling of the pressing surface will close the switch 117 thus closing the circuit through the heating element.

Leads 120 and 121 are connected to the heating element 21. They are also connected, respectively, to the line and to one of the terminals in the switch 117, the other terminal in the switch being connected into the

line. Thermostatic bulb 74, mounted in the buck, is connected through a capillary tube 118, similar to the tube 116, with a second thermostatic switch 119. Leads 122 and 123 are employed in connection with the heating element 75 in the buck and the thermostatic switch 119 to connect the elements in the manner just described in connection with the heating element in the head.

As will be seen upon reference to Figure 5, the member 10 is cut away at one end and provided with a removable cover plate 124 to afford access to the thermostatic bulb 19 in order that the same may be readily positioned and as readily removed in case of need. A cover plate 125, similar to 124, is provided at the end of the buck to afford access to the thermostatic tube 74.

It is thought that the operation of the structure will be clear from the foregoing description. It is to be noted that no special means, such as exteriorly located steam generating plants or elements are employed and that insofar as the head and buck of the machine are concerned the structure follows the same general line of practice as obtains in the trade to-day. Furthermore, no special means for generating steam independent of the head and buck structure are employed but the heated elements of such members are employed as the means for imparting the necessary heat to the structure to bring about the conversion of the water spray or mist into steam.

It will be appreciated, of course, that various modifications may be made in the structure without departing from the spirit of the invention and the claims are to be construed in light of this understanding.

What is claimed is:

1. A pressing structure for garment pressing machines and the like, comprising in combination, an element having a perforate pressing face; a second element secured thereto and in spaced relation therewith, thereby forming a chamber therebetween; means for spraying water into said chamber and into direct contact with the walls thereof; an electric heating unit lying in contact with said elements to heat the same; and thermostatically controlled means likewise associated with said elements acting to control the input of current to said heating unit.

2. A structure as set forth in claim 1, wherein means is provided to prevent unvaporized water particles from passing to the perforations in the pressing element.

3. A pressing structure for garment pressing machines and the like, comprising in combination, a plate having a pressing face and a rib extending around the opposite face, said rib having openings extending there-through and through the pressing face; a second plate secured over and in spaced relation to the first plate, said second plate hav-

ing a rib formed upon its under face, said rib standing inwardly of the rib of the first plate and spaced therefrom; means for heating said plates; and means for spraying water into the chamber formed by the spaced plates.

4. A pressing structure for garment pressing machines and the like, comprising in combination, a plate having a pressing face and a rib extending around the opposite face, said rib having openings extending therethrough and through the pressing face, said rib likewise having a groove formed in its upper face; a second plate secured over and in spaced relation to the first plate, said second plate having a rib formed upon its under face, said rib standing inwardly of the rib of the first plate and spaced therefrom; an electric heating element seated in the groove in the rib of the pressing plate and held therein by the second plate; means for supplying current to said heating element; and means for spraying water into the chamber formed between said plates.

5. A pressing structure for garment pressing machines and the like, comprising in combination, a pair of plates secured to each other with the central portions thereof separated to produce a chamber; openings extending through one of the plates and in communication with said chamber; an electric heating unit held between and in direct contact with said plates; a rib extending downwardly from the uppermost plate into the chamber, said rib being located inwardly of the openings aforesaid; a spray nozzle located in the chamber; and means for supplying current to the heating element.

6. A pressing structure for garment pressing machines and the like, comprising in combination, a pair of plates secured to each other adjacent their marginal portions, said plates being separated to produce a chamber; a flange extending upwardly from the lowermost plate, said flange having a groove or channel formed therein at its upper side and likewise having openings extending there-through from the upper edge outwardly through the face of the plate; a heating element mounted in the groove and held to place by the uppermost plate; a rib formed upon the under face of the upper plate, said rib following the contour of the rib formed upon the lower plate but spaced therefrom; and means for ejecting water into the chamber formed between the plates.

7. A pressing structure for garment pressing machines and the like, comprising in combination, a pair of plates; means for securing said plates together along their marginal portions, the plates being so contoured as to form a chamber therebetween; a rib extending around the upper face of the lowermost plate and defining the chamber, said rib likewise having openings extending there-

through to the outer face of the plate and said rib being recurved upon itself adjacent one end of the plate; a heating element mounted in a groove formed in the upper face of the rib aforesaid; a flange or rib extending downwardly from the under face of the upper plate and located inwardly of the rib on the lower plate; means for introducing water into the chamber; and a thermostatic bulb located between the recurved portions of the flange formed upon the lower member.

8. A pressing structure for garment pressing machines and the like, comprising in combination, a lower plate having an up-standing flange extending around the same inward of its marginal portion, said flange being recurved upon itself at one end of the plate; a second plate secured to the upper plate, said plates being so contoured as to form a chamber or space between the same; a flange extending downwardly from the under side of the upper plate, said flange being contoured similarly to the flange upon the lower plate but spaced inwardly therefrom and being cut away at a portion corresponding to one side of the recurved portion of the first named rib; a heating element secured between the uppermost plate and the rib on the lower plate; and a thermostatic bulb carried by the parts and extending inwardly between the recurved portions of the ribs.

9. A pressing structure for garment pressing machines and the like, comprising in combination, an element having a perforate pressing face; a second element secured thereto and in spaced relation therewith, thereby forming a chamber between said elements; means for spraying water into said chamber and into direct contact with the walls thereof; an electric heating unit lying in contact with said elements to heat the same; a thermostatic bulb mounted in an opening in one of said elements and housed thereby; and a switch connected to said thermostatic bulb, said switch being included in a circuit connected to the heating element.

10. In a garment press, the combination of a head; a buck having a perforate face, the perforations whereof open into a chamber formed below said plate; means for heating said head and said buck; an exhaust line communicating with the lower portion of the chamber in the buck; a valve normally closing off said exhaust line; a pump in communication with said line outwardly of the buck and valve; an electric motor for driving said pump; a normally open switch included in the circuit leading to the motor, said switch having a movable element extending downwardly therefrom; a rod connected to and extending downwardly from the valve; means for normally closing said valve; and a foot lever underlying said rod

and the movable element of the switch, whereby upon rocking of the lever the valve will be raised from its seat and the switch closed.

11. In a garment pressing machine, the combination of a buck; a head having a chamber formed therein, the pressing face of the head likewise having openings extending therethrough into the chamber; means for heating the head; a spray nozzle located in the head and adapted to spray water into the chamber formed in the head; a pump located upon the head and in communication with the nozzle; a second pump located in the base of the machine, the discharge of said pump communicating with the cylinder of the first named pump; and means for actuating said second pump whereby either one or the other of said pumps may be utilized as desired.

12. A pressing structure for garment pressing machines and the like, comprising in combination, an elongated chambered pressing element having its pressing face provided with perforations extending into the chamber; means for directly heating the walls of said member; a spray nozzle extending into the chamber at substantially midlength thereof, said nozzle being provided with means for spraying water in opposite directions and toward each end of the chamber and into direct contact with the walls thereof; and means for forcing water into said nozzle.

13. A pressing structure for garment pressing machines and the like, comprising in combination, an elongated chambered pressing element having its pressing face provided with perforations extending into the chamber; means for spraying water into the chamber; means located within the chamber for causing steam which may be generated therein to travel a tortuous passage on its way to the perforations in the pressing face aforesaid; an electrical heating element for the structure; and a thermostatic bulb located at one end of the pressing member and included in the circuit leading to the heating element, said pressing member being provided with a passage for the travel of generated steam to the vicinity of said bulb.

14. A pressing element for garment pressing machines and the like, comprising in combination, a hollow pressing member having its pressing face provided with a series of perforations; an electric heating element for said hollow member; a switch located in the line leading to said element; means carried by the pressing member and associated with said switch and the heating element adapted to cause actuation of the switch upon variation of temperature in the pressing member above or below a predetermined range; and means for spraying water into said hollow pressing member.

15. A structure as set forth in claim 14, wherein the switch controlling means involves a bulb housed in the pressing member and a tube extending therefrom, said tube terminating in a metallic bellows within the switch, the bulb, tube and bellows being charged with an expansible medium.

16. A pressing structure for garment pressing machines and the like, comprising in combination a plurality of members secured to each other and so formed as to produce a chamber therebetween, one of said members having openings extending therethrough and in communication with said chamber; an electric heating unit clamped between and in direct contact with said members outward of the chamber; and means for spraying water into said chamber.

In testimony whereof I have signed my name to this specification.

WILLIAM STROBRIDGE.