April 16, 1957 C. A. KETCHUM 2,788,769

AIR OPERATED GARMENT PRESS HAVING TWO DIFFERENT PRESSING PRESSURES

Filed Dec. 23, 1952 2 Sheets-Sheet 1

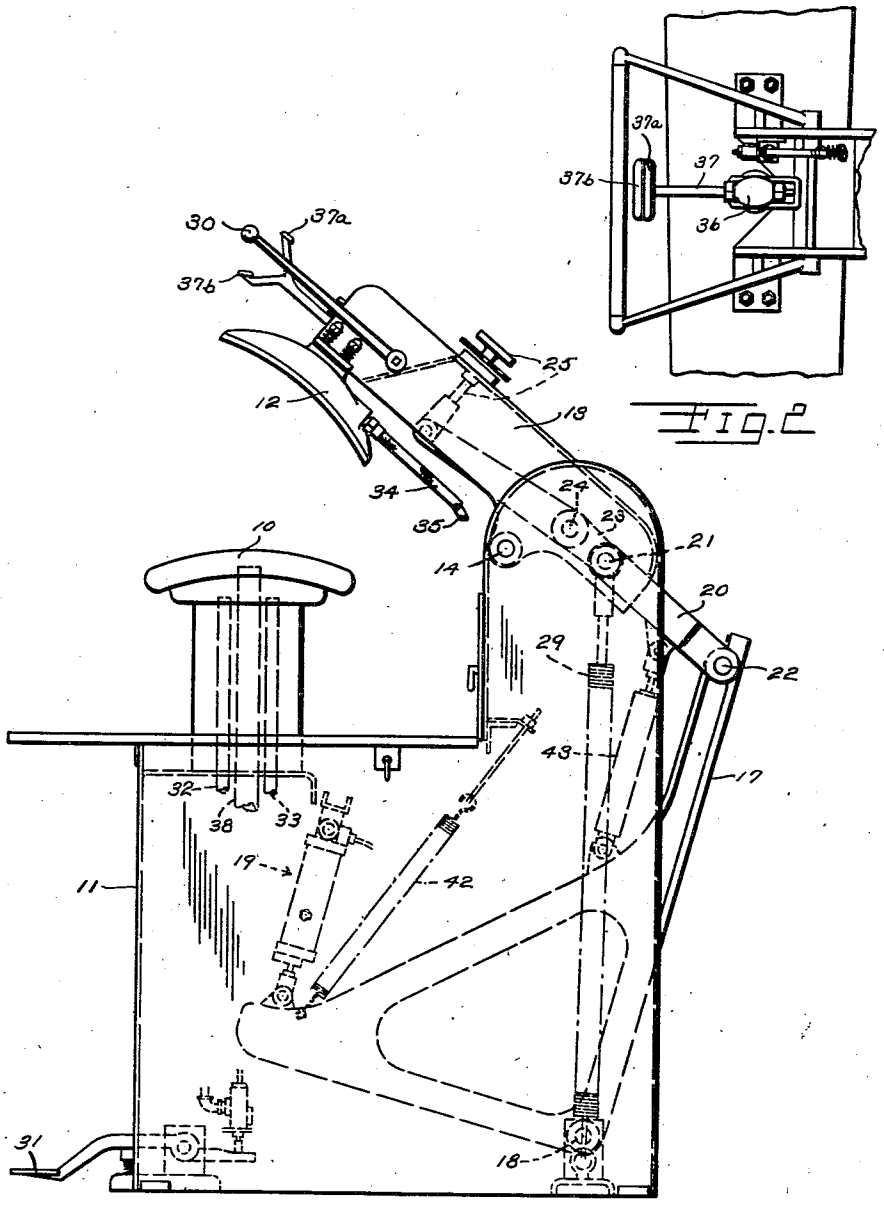


FIG. 2

FIG. 1

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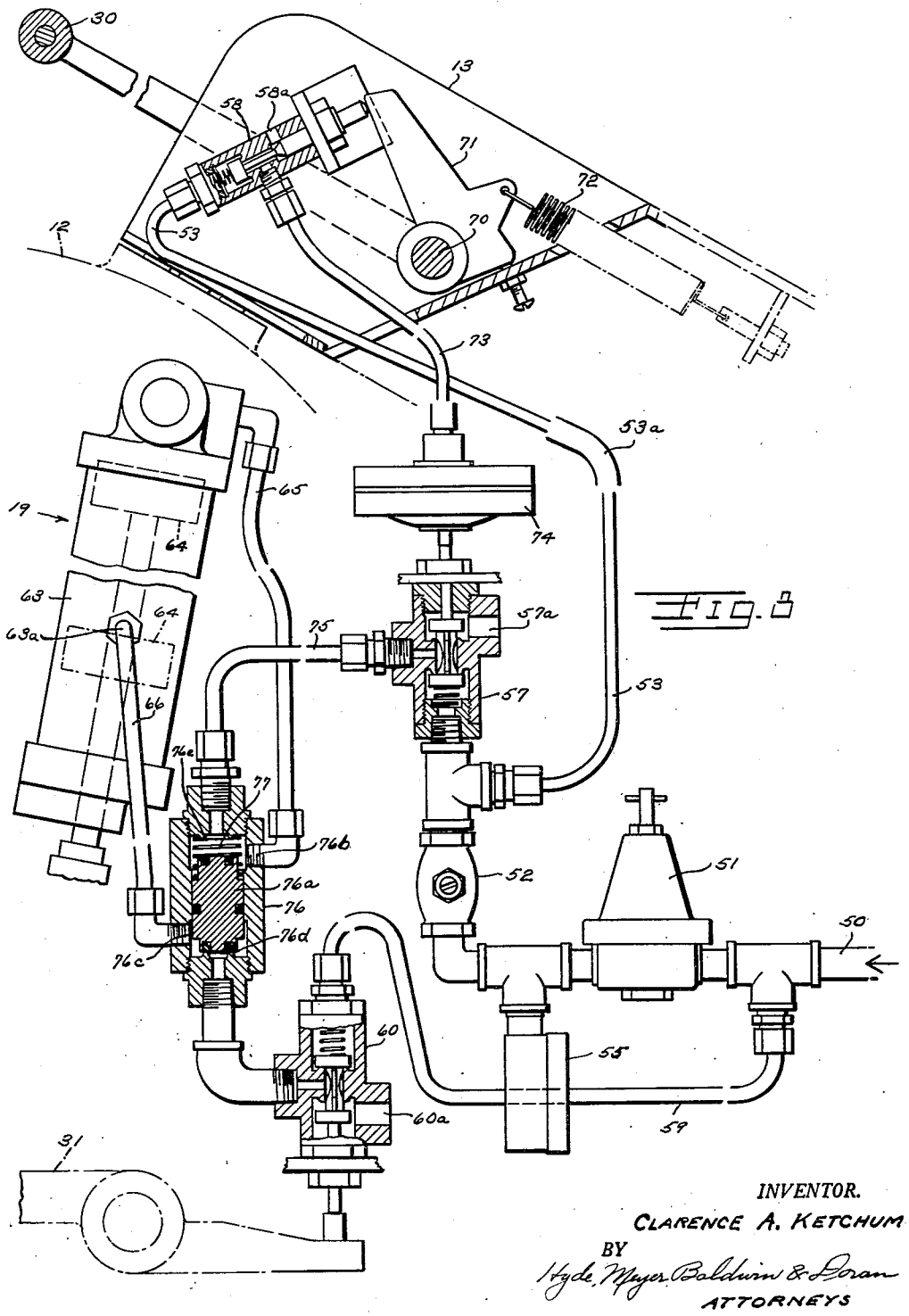


Fig. 8

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AIR OPERATED GARMENT PRESS HAVING TWO DIFFERENT PRESSING PRESSURES

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Application December 23, 1952, Serial No. 327,524

11 Claims. (Cl. 121—38)

This invention relates to improvements in a garment press and more particularly to a garment press having a closing and low pressing pressure means and an increased pressure pressing means.

One of the objects of the present invention is to provide a garment press having means for closing the press and exerting a relatively low pressing pressure and having means for exerting a higher pressing pressure when in the closed position.

A further object of the present invention is to provide a fluid pressure operated garment press with means for closing the press and exerting a relatively low pressing pressure by a low fluid pressure and means for exerting a higher pressing pressure by a high fluid pressure when the press is closed and means for preventing the closing of the press from its open position by only the high fluid pressure.

A further object of the present invention is to provide a fluid pressure operated garment press with means for closing the press and exerting a relatively low pressing pressure by a low fluid pressure and means for exerting a higher pressing pressure by a high fluid pressure when the press is being closed and means for preventing normal closing of the press by the low fluid pressure if the high fluid pressure is being used.

A further object of the present invention is to provide a fluid pressure operated garment press with means for closing the press and exerting a relatively low pressing pressure by a low fluid pressure and means for exerting a higher pressing pressure by a high fluid pressure when the press is being closed and means permitting release of the first means when the high fluid pressure is being used and the press is closed.

A further object of the present invention is to provide a garment press operated by fluid pressure and having the fluid pressure control characterized by its structural simplicity and ease of operation with safety under all conditions.

Other features of this invention reside in the arrangement and design of the parts for carrying out their appropriate functions.

Other objects and advantages of this invention will be apparent from the accompanying drawings and description and the essential features will be set forth in the appended claims.

In the drawings,

Fig. 1 is a side elevational view of a fluid pressure operated garment press constructed according to the present invention;

Fig. 2 is a top plan view of a portion of the pressing head member; while

Fig. 3 is a diagram of the fluid pressure control for the garment press in Fig. 1.

Before the garment press and its control here illustrated is specifically described, it is to be understood that the invention here involved is not limited to the structural details or arrangement of parts here shown since garment presses and controls embodying the present invention may take various forms. It also is to be understood that the phraseology or terminology herein employed is for purposes of description and not of limitation since the scope of the present invention is denoted by the appended claims.

The garment press in Fig. 1 broadly includes a pressing buck member **10**, having a padded construction and being fixed to a frame **11**, and includes a swingable pressing head member **12** secured to the distal end of a head lever **13** which in turn is pivotally mounted to the frame **11** at pivot **14**. This pressing head member **12** is swingable between an idle, normal, or open first position spaced from the stationary buck member **10**, as shown in Fig. 1 in the drawings, and a working or closed second position with the head member **12** exerting a pressing pressure against the stationary buck member **10**.

A mechanism is provided for moving the head member **12** between these two positions. It includes a toggle wherein the lower toggle link is formed by a bell crank **17** and the upper toggle link is formed by toggle link **20** pivotally connected to the bell crank **17**. The bell crank **17** is pivotally connected at **18** to the frame so that one arm of the bell crank is pivotally connected to the toggle link **20** at **22** while the other arm is pivotally connected to a power means, generally shown as **19**, for moving the head member **12** from its idle, first position in Fig. 1 to a closed or working, second position exerting pressure against the stationary buck member **10**. The upper toggle link **20** is pivotally connected to the head lever **13** at pivot point **21**. This pivot point **21** is adjustable with respect to head lever **13** to allow for varying the compression between the pressing members **10**, **12** and for compensating for worn padding on the buck member or head member **10** or **12**. Pivot point **21** is at the end of an adjustment lever **23** pivoted within the head lever **13** at pivot point **24** and is adjustable by means of screw **25** on the other end of adjustment lever **23** threaded into head lever **13**.

The swingable head pressing member **12** can be easily moved from its idle, normal, first position shown in Fig. 1 to its working position wherein it exerts a pressing pressure against buck member **10**. A main spring **29** serves to normally hold the head member in or to move it to the open position shown in Fig. 1. Although the pressing head member **12** could be manually lowered to light pressing contact, the usual mode of obtaining an initial contact is by actuating handle **30** on the press head member, which actuation causes pressure to be exerted by the power means **19** for advancing the head member **12** toward the stationary buck member **10** and for exerting a low pressing pressure against the stationary buck member **10**. Then, foot pedal **31** can be depressed to increase the pressing pressure exerted by the power means **19** as the head member **12** approaches pressing contact with the buck member **10**. As the pressing position is approached, the toggle composed of bell crank **17** and toggle link **20** approaches a straightened position to exert a force between the two pressing members **10** and **12**. The foraminous pressing portion of each of these members is always heated by steam to effect the pressing operation so that when the pressing members **10** and **12** are in their closed position pressing is performed. Inlet and outlet steam lines or pipes **32**, **33** supply the buck member **10** while flexible steam lines **34**, **35** supply and exhaust the head member **12**. Also, treating steam may be admitted through the perforated or foraminous pressing portion of the buck member through steam line **38** and admitted through the perforated or foraminous pressing portion of the head member by means of a conventional head steam valve **36** in Fig. 2 that is operatable by means of a control lever **37** having finger bars **37***a*, **37***b* located behind and below the control handle **30** in Fig. 1.

This arrangement is such that when the press operator is holding the head member down in pressing engagement with buck member **10**, finger bar **37***a* is conveniently located for operation by the same hand that holds down control handle **30**.

When it is desired to steam part of a garment by holding it under the head member **12** when the press is in the Fig. 1 open position, the finger bar **37***b* may be used to avoid inadvertent operation of the control handle **30** to close the press. The steam to the buck member **10** can be controlled by a foot operable pedal, similar to foot pedal **31**, operable on the usual steam valve (not shown). The foraminous upper portion of the buck member **10** can communicate, if desired, through a line such as **38** with a source of vacuum under control of a conventional valve (not shown).

When the power supply to the power means **19** is cut off, the head member moves from the closed position, wherein it exerts a pressing pressure against the buck member **10**, back to the idle or normal open position shown in Fig. 1. Spring **42** acts to start the opening movement by breaking the almost straight toggle formed by bell crank **17** and toggle link **20** while main spring **29** continues the clockwise movement of the head member **12** toward the open position and then holds the head member in this open position shown in Fig. 1.

A snubber **43**, pivotally connected at opposite ends to the toggle link **20** and bell crank **17** for controlling the movement of the press head member **12**, provides quiet and smooth operation of the press.

The present invention relates primarily to the power means **19** and the controls therefore responsive to the manual actuation of handle **30** on the head member and foot pedal **31**. These components provide not only means operatively effective for advancing the head member **12** toward the operative or closed position and for exerting a low pressing pressure between pressing members **10** and **12** but also means operatively effective for exerting a higher pressing pressure on the pressing members in their closed position after the head member **12** approaches the closed position. Handle **30** provides a manual control for the first means while foot pedal **31** provides the manual control for the second means.

Power means **19** in the present disclosure takes the form of a fluid pressure operated power means operable by any type of pressure fluid, such as, compressed air, hydraulic liquid, etc. The control in Fig. 3, however, is structurally set up for using air pressure, but it should be readily understood that any other type pressure fluid can be used instead. Here, a single high air pressure source supplies air for both low and high pressure operation. The high air pressure source (not shown) can be connected to inlet air line **50**, and then the air flow line branches off into a low air or fluid pressure line and a high air or fluid pressure line with the low air pressure line operable by the control handle **30** and the high air pressure line operable by the foot pedal **31**. On the low air pressure line, the air pressure from the source goes through a reducing valve **51**, an air flow or needle valve **52** to be held by a normally closed valve **57**, a branch line **53** having a flexible or rubber section **53***a* to permit relative movement between the upper and lower sections of air line **53** when the head member **12** swings between the closed and open positions, and is held by normally closed pilot valve **58**. The pressure in the low air pressure line is indicated by pressure gauge **55**. In the high air pressure line, air under full line pressure goes by way of air line **59** to normally closed valve **60** where it is also held until actuation of foot pedal **31**.

Air pressure operated power means **19** includes a cylinder **63** pivotally mounted at its upper end to frame **11** and includes a piston **64** reciprocably mounted therein and pivotally mounted at its lower end to the leftward extending arm of bell crank **17** in Fig. 1. The pressure

fluid normally acts on the upper face of the piston in Fig. 3 which upper face serves as a working face. This piston reciprocates between a first position, as shown in Fig. 3 corresponding to the normal, idle, open position with the head member **12** spaced from the fixed buck member **10** in a manner shown in Fig. 1, and a second position with the piston **64** at the lower end of the cylinder **63**, corresponding to the closed, second or working position with its pressing pressure being exerted against the buck member **10** by the pressing head member **12**. However, when piston **64** reaches the dot-dash line of Fig. 3, just past port **63***a*, the head **12** is substantially in engagement with the buck **10**.

A low air pressure line **65** is connected to one end of the cylinder **63** for fluid communication with the working face of piston **64** and a high air pressure line **66** is connected to the cylinder **63** by port **63***a* for fluid communication with the piston **64** therein. It should be readily apparent that the low air pressure line, when air pressure exists therein, will advance the pressing head member **12** toward its operative closed position and will then cause head member **10** to exert a low pressing pressure on buck member **10**. The high air pressure line **66**, being connected to the cylinder side wall at port **63***a* intermediate between the extreme positions of the piston **64**, cannot be used initially to advance the head member **12** to the closed position, but instead is used for exerting higher pressure on piston **64** only after the head member **12** approaches the closed or second position after piston **64** passes the inlet port **63***a* so that pressing members **10** and **12** are substantially in contact before the higher pressure can be exerted on piston **64**. Thus, only low pressure is available until the head is safely closed and the higher pressing pressure can be exerted only when the press is closed.

The control means in Fig. 3 is operatively connected to both the low and high air pressure lines between the source of air pressure on air line **50** and the press actuating cylinder **63**. This control means individually controls the air pressure flow between the high air pressure lines **59** and **66** and between the low air pressure lines from reducing valve **51** to line **65** responsive to the actuation respectively of control handle **30** and foot pedal **31** so as to operatively connect either the low or the high air pressure source in fluid communication with power cylinder **63** at the proper time.

The low air pressure flow is controlled by control handle **30** through a pilot air valve **58** to cause closing of the press. As the operator pulls down control handle **30**, shaft **70** and arm **71** secured thereto is rocked against the pull of spring **72** anchored at its right end to head lever **13**. This movement of arm **71** opens pilot valve **58** against the bias of its spring so that air from low air pressure line **53** is admitted to conduit **73** for moving diaphragm **74** downwardly to open normally closed valve **57** by a downward movement against the resilient bias of its spring. The small pilot valve **58** is operated by a very light touch which permits operation by control handle **30** and does not tire the operator. In addition, the air exhausted from the press actuating cylinder **63** does not have to travel all the way back to and through pilot valve **58** but only to valve **57** where it exhausts through exhaust port **57***a* therein, as will be brought out in more detail hereinafter. The exhaust from diaphragm **74** travels through line **73** to leave the pilot valve **58** through exhaust port **58***a*.

When the normally closed valve **57** is opened by the diaphragm **74**, low pressure air travels from needle valve **52** through air line **75** to a slide piston type valve **76**. The valve piston **76***a*, normally being held in the Fig. 3 position by spring **77**, permits the air to go from air line **75** through the low air pressure valve ports **76***e* and **76***b* to low air pressure line **65** and the cylinder **63**. Then, low air pressure moves the piston **64** downwardly to advance

pressing head member 12 from the open position in Fig. 1 to light pressing engagement with the buck member 10 and the garment to be pressed thereon. When piston 64 passes downwardly below the port 63a as the press closes, low pressure air travels through line 66 to valve port 76c of slide piston type valve 76 wherein it is held since valve piston 76a is urged downwardly by spring 77 with its bottom seat blocking valve port 76d.

When it is desired to exert extra pressure on the work being pressed, foot pedal 31 is depressed to open the normally closed valve 60 against the resilient bias of its spring. Then, air under full line or high air pressure goes to the bottom inlet port 76d of slide piston type valve 76. The difference in pressure on the bottom and top faces of valve piston 76a causes the valve piston to move upwardly in Fig. 3 against the resistance of the low air pressure and of spring 77 to close the low air pressure inlet valve port 76e. This upward movement of the valve piston 76a uncovers the high air pressure valve port 76c so that high pressure air can travel from the line 59 through the open valve 60, through high air pressure valve ports 76d and 76c, line 66, through port 63a and into the cylinder 63 above the working face of piston 64. Although this high pressure air backs up through the low air pressure inlet line 65, it is held at the slide piston type valve 76 since the low air pressure inlet valve port 76e is now closed since the valve piston 76a firmly seals this port.

The opposite ends of the valve piston 76a provide individual flow closures, one for the high air pressure line and one for the low air pressure line, that are interlocked so that when either is closed the other is open but spring 77 normally keeps the low air pressure line closure open when no air is passing through the slide piston type valve 76.

This control has several advantages. First, to assure safety during press operation the structure described prevents the advance of the head member 12 from the elevated open position in Fig. 1 toward the closed position when the high air pressure control pedal 31 is depressed. The press cannot be closed under high pressure by actuation of the foot pedal 31. When the foot pedal is depressed, high pressure air raises the valve piston 76a to enter the cylinder by the side port 63a below the piston 64 to thus hold the piston in its Fig. 3 position and to hold the press open while the air bleeds out through a vent at the bottom of the cylinder 63. The amount of venting, determined by the size of the vent, is such that the pressure on the bottom of the piston 64 is at least equal to that exerted on the top even though some venting occurs. This can be assured either by building up sufficient pressure below the piston 64 or by moving piston 76a upwardly to partially or completely close port 76e. Second, to assure safety during press operation, it is also impossible to cause the press to close even by actuation of the low air pressure control handle 30 while the high air pressure control pedal 31 is depressed. The valve piston 76a is forced upwardly by the high pressure air to close the low air pressure inlet valve port 76e to prevent the admission of low pressure air to the top part of cylinder 63 above the piston 64. Therefore, the pressing head member 12 cannot be lowered out of its normal, idle, open position shown in Fig. 1. Third, the structure will keep the pressing head member 12 in the closed position in pressing contact with the buck member 10 when the low air pressure control handle 30 is released if the high air pressure control pedal 31 remains depressed. The control handle 30 may be released, if desired, because the low air pressure inlet valve port 76e is closed by valve piston 76a so that the low pressure air serves no useful function in holding the pressing members 10 and 12 together. The pressing head member 12 will be held closed under high pressure so long as the foot pedal 31 is held in the depressed position. This is a desirable feature since it has been customary for press operators to thus release the control handle 30 on the head lever of the standard manual, foot operated press to momentarily rest their arms while the garment is held under high pressure. Fourth, the operator cannot insert his fingers between the pressing members during high pressure operation. It should be noted that head member 12 is substantially in contact with buck member 10 when piston 64 passes inlet port 63a so that the operator cannot insert his fingers between the pressing members at the time the higher pressure becomes effective.

Release of the pressing head member 12 from the working position wherein it exerts a pressing pressure against the stationary buck member 10 for return to the idle or normal open position shown in Fig. 1 is easily accomplished by exhausting the air from within cylinder 63. Springs 29 and 42, in elevating the pressing head member 12 to the normal open position shown in Fig. 1, also force the piston 64 upwardly to exhaust the air entrapped in the cylinder 63. If the press is being held closed under light pressure by only control handle 30, release of this handle allows the valve 57 to move to its normally closed position so that the air from cylinder 63 is exhausted through air line 65, slide piston type valve 76, air line 75 and out the exhaust port 57a of valve 57, which exhaust port is open when the valve is in its normal, closed position. However, if only the foot pedal 31 is being depressed, the release of the pedal with the consequent closing of valve 60 to its normal position causes a momentary exhaust of the air through its then open exhaust port 60a but when the valve piston 76a returns under the influence of spring 77 to its lower seat to close off high pressure inlet valve port 76d, the air in cylinder 63 is exhausted through the upper part of slide piston type valve 76 by air lines 65 and 75 to normally closed valve 57 and out its normally open exhaust port 57a.

It should be noted that the cylinder 63 exhausts through the same lines used for providing the cylinder with high and low pressure air but exhausting is operative only when the flow controller valves 57 and 60 are both closed to cut off air flow pressure through both lines from the pressure source. A review of the foreging description will also reveal that the structure prevents the exhausting of cylinder 63 through one of the pressure lines, either the low pressure or high pressure line, when air pressure is admitted to the cylinder 63 by only the other of said lines. Therefore, piston 64 can be subjected to either low or high pressure without any retarding effect by the other pressure line.

It should now be apparent that the press of the present invention may be operated to exert either a low or high pressing pressure between the pressing members 10 and 12, whichever is desired. Both the high and low pressing pressures are exerted by a single cylinder 63 and a single piston 64 to provide a compact unit when the flow controller means comprising air valves 57 and 60, pilot valve 58 and slide piston type valve 76 are operated properly. However, it should be readily apparent that power means 19 can consist of either a cylinder means and piston means with one cylinder and one piston, as described heretofore, or a cylinder means and piston means with two cylinders and two pistons, one cylinder and piston unit for high pressure and the other unit for low pressure operation. The latter can be used after suitable modifications have been made in the control of the present invention. However, the present structure described heretofore with only one cylinder and piston is much simpler and is to be preferred.

Various changes in details and arrangement of parts can be made by one skilled in the art without departing from the spirit of this invention or the scope of the appended claims.

What I claim is:

1. A press for finishing garments comprising a pressing

buck member, a head member mounted for movement from an idle first position spaced from said buck member to a working second position exerting pressing pressure against said buck member, a first means on said press operatively effective for advancing said head member toward said second position and for exerting a low pressing pressure on said members, a second means on said press operatively ineffective for advancing said head member from said first position toward said second position but effective for exerting a higher pressing pressure on said members when in said second position than said low pressing pressure of said first mentioned means, means on said press for automatically deactivating said first means in response to activation of said second means and before said second means exerts a higher pressing pressure on said members and means on said press for keeping said head member in said second position when said first means is deactivated.

2. A press for finishing garments comprising a pressing buck member, a head member mounted for movement from an idle first position spaced from said buck member to a working second position exerting pressing pressure against said buck member, a fluid pressure operated means for moving said head member from said first to said second position, means for operatively connecting a low fluid pressure source in fluid communication with said fluid pressure operated means when said head member is in the first position for exerting a force for advancing said head member toward said second position and for exerting a low pressing pressure on said members, means for operatively connecting a high fluid pressure source in fluid communication with said fluid pressure operated means for exerting a higher pressing pressure on said members when in said second position than said low pressing pressure of said low fluid pressure source, means on said press for keeping said head member in said second position when said low pressure source is deactivated, and valve means on said press operable by said higher pressure for preventing the advance of said head member from said idle first position by said low fluid pressure when said high fluid pressure is activated.

3. A press for finishing garments comprising a pressing buck member, a head member mounted for movement from an idle first position spaced from said buck member to a working second position exterting pressing pressure against said buck member, a fluid pressure operated cylinder means and piston means for moving said head member from said first to said second position with said piston means having a working face reciprocable in said cylinder means between first and second positions corresponding to the first and second positions of said head member, a low fluid pressure line connected to said cylinder means in fluid communication with said piston means working face in the first position for exerting a force on said piston means for advancing said head member toward said second position and for exerting a low pressing pressure on said members, a high fluid pressure line operatively connected to said cylinder means side wall in fluid communication with said piston means working face when it is located between said first and second positions for exerting a higher pressure on said piston means working face after said head member approaches said second position so that a higher pressing pressure is exerted between the members in the closed second position than said low pressing pressure, means on said press for keeping said head member in said second position when said low pressure line is deactiated, and piston valve means on said press for preventing the advance of said head member from said first idle position by said low pressure when said high pressure is activated, and control means for individually controlling the fluid flow in said high and low pressure lines.

4. A press for finishing garments comprising a pressing buck member, a head member mounted for movement from an idle first position spaced from said buck member to a working second position exerting pressing pressure against said buck member, a fluid pressure operated cylinder and piston for moving said head member from said first to said second position with said piston having a working face reciprocable in said cylinder between first and second positions corresponding to the first and second positions of said head member, a low fluid pressure line operatively connected to said cylinder in fluid communication with said piston working face in the first position for exerting a force on said piston for advancing said head member toward said second position and for exerting a low pressing pressure on said members, a high fluid pressure line operatively connected to said cylinder side wall in fluid communication with said piston working face when it is located between said first and second positions for exerting a higher pressure on said piston working face after said head member approaches said second position so that a higher pressing pressure is exerted between the members in the closed second position than said low pressing pressure, and control means operatively connected to both the low and high pressure lines between the source of pressure for each line and the cylinder, said control means including a flow controller means for selectively and individually admitting or cutting off fluid flow pressure through each individual line to said cylinder, including cylinder exhaust means operative only when said flow controller means cut off fluid flow pressure through both lines.

5. A press for finishing garments comprising a pressing buck member, a head member mounted for movement from an idle first position spaced from said buck member to a working second position exerting pressing pressure against said buck member, a fluid pressure operated cylinder means and piston means for moving said head member from said first to said second position with said piston means having a working face reciprocable in said cylinder means between first and second positions corresponding to the first and second positions of said head member, a low fluid pressure line operatively connected to said cylinder means in fluid communication with said piston means working face in the first position for exerting a force on said piston means for advancing said head member toward said second position and for exerting a low pressing pressure on said members, a high fluid pressure line operatively connected to said cylinder means in fluid communication with said piston means working face when it is located between said first and second positions for exerting a higher pressure on said piston means working face after said head member approaches said second position so that a higher pressing pressure is exerted between the members in the closed second position than said low pressing pressure, means for keeping said head member in said second position when said low pressure line is deactivated, and means for preventing the advance of said head member from said first idle position by said low pressure when said higher pressure is activated, and control means operatively connected to both the low and high pressure lines between the source of pressure for each line and the cylinder means for controlling pressure fluid flow to said cylinder means, said control means including a flow controller means for individually admitting or cutting off fluid flow pressure through each individual line to said cylinder means, including cylinder exhaust means operative only when said flow controller means cuts off fluid flow pressure through both lines.

6. A press for finishing garments comprising a pressing buck member, a head member mounted for movement from an idle first position spaced from said buck member to a working second position exerting pressing pressure against said buck member, a fluid pressure operated means for moving said head member from said first to said second position, a low fluid pressure line

operatively effective upon said fluid pressure operated means when said head member is in the first position for exerting a force for advancing said head member toward said second position and for exerting a low pressing pressure on said members, a high fluid pressure line operatively effective upon said pressure operated means for exerting a higher pressing pressure on said members when in said second position than said low pressing pressure of said low fluid pressure line, and control means operatively connected to both the low and high pressure lines between the source of pressure for each line and the fluid pressure operated means, said control means including a flow controller means for individually admitting or cutting off fluid flow pressure through each individual line to said fluid pressure operated means, including exhaust means for said fluid pressure operated means for exhausting through said lines and operative only when said flow controller means cuts off fluid flow pressure through both lines, and including means for preventing exhausting of said fluid pressure operated means through one of said lines when fluid pressure is admitted to said fluid pressure operated means by only the other of said lines.

7. A press for finishing garments comprising a pressing buck member, a head member mounted for movement from an idle first position spaced from said buck member to a working second position exerting pressing pressure against said buck member, a fluid pressure operated cylinder and piston for moving said head member from said first to said second position with said piston having a working face reciprocable in said cylinder between first and second positions corresponding to the first and second positions of said head member, a low fluid pressure line operatively connected to said cylinder in fluid communication with said piston working face in the first position for exerting a force on said piston for advancing said head member toward said second position and for exerting a low pressing pressure on said members, a high fluid pressure line operatively connected to said cylinder side wall in fluid communication with said piston working face when it is located between said first and second positions for exerting a higher pressure on said piston working face after said head member approaches said second position so that a higher pressing pressure is exerted between the members in the closed second position than said low pressing pressure, and control means operatively connected to both the low and high pressure lines between the source of pressure for each line and the cylinder, said control means including a flow controller means for individually admitting or cutting off fluid flow pressure through each individual line to said cylinder, including cylinder exhaust means through said lines operative only when said flow controller means cuts off fluid flow pressure through both lines, and including means for preventing exhausting of said cylinder through one of said lines when fluid pressure is being admitted to said cylinder by only the other of said lines.

8. A press for finishing garments comprising a pressing buck member, a head member mounted for movement from an idle first position spaced from said buck member to a working second position exerting pressing pressure against said buck member, a fluid pressure operated cylinder and piston for moving said head member from said first to said second position with said piston having a working face reciprocable in said cylinder between first and second positions of said head member, a low fluid pressure line operatively connected to said cylinder in fluid communication with said piston working face in the first position for exerting a force on said piston for advancing said head member toward said second position and for exerting a low pressing pressure on said members, a high fluid pressure line operatively connected to said cylinder side wall in fluid communication with said piston working face when it is located between said first and second positions for exerting a higher pressure on said piston working face after said head member approaches said second position so that a higher pressing pressure is exerted between the members in the closed second position than said low pressing pressure, and control means operatively connected to both the low and high pressure lines between the source of pressure for each line and the cylinder, said control means including a flow controller means for individually admitting or cutting off fluid flow pressure through each individual line to said cylinder, said flow controller means including an individual flow closure for each pressure line and interlocking means operatively connecting said flow closures whereby when either flow closure is closed the other is open, said interlocking means being normally positioned so that the low pressure line flow closure is open.

9. In a pressing machine having relatively movable head and buck pressing members normally in open position and a cylinder and piston motor operatively connected between said members for causing relative closing movement of said members; the combination therewith of sources of higher and lower pressure fluid, conduit means connecting said lower pressure fluid source with the working face of said piston when said pressing members are in open position, a port through the wall of said cylinder uncovered to the working face of said piston only when said piston is in position corresponding to a substantially closed position of said pressing members, conduit means connecting said higher pressure fluid source with said port, a control valve in each of said conduit means, a piston valve having a chamber common to both of said conduit means, a valve piston reciprocable in said chamber, said conduit means connected with said two sources respectively communicating with opposite faces of said valve piston, and said valve piston having two positions where it respectively closes off one or the other of said sources while establishing communication with the source not stopped.

10. A press for finishing garments comprising a pressing buck member, a head member mounted for movement from an idle first position spaced from said buck member to a working second position exerting pressing pressure against said buck member, a fluid pressure operated cylinder means and piston means for moving said head member from said first to said second position with said piston means having a working face reciprocable in said cylinder means between first and second positions corresponding to the first and second positions of said head member, a low fluid pressure line connected to said cylinder means in fluid communication with said piston means working face in the first position for exerting a force on said piston means for advancing said head member toward said second position and for exerting a low pressing pressure on said members, a high fluid pressure line operatively connected to said cylinder means side wall in fluid communication with said piston means working face when it is located between said first and second positions for exerting a higher pressure on said piston means working face after said head member approaches said second position so that a higher pressing pressure is exerted between the members in the closed second position than said low pressing pressure, valve means for cutting off flow through said low fluid pressure line, and means for automatically closing said valve means in response to exertion of said higher pressure against said piston means.

11. A press for finishing garments comprising a pressing buck member, a head member mounted for movement from an idle first position spaced from said buck member to a working second position exerting pressing pressure against said buck member, a fluid pressure operated means for moving said head member from said first to said second position, means for operatively connecting a low fluid pressure source in fluid communication with said fluid

pressure operated means when said head member is in the first position for exerting a force for advancing said head member toward said second position and for exerting a low pressing pressure on said members, means for operatively connecting a high fluid pressure source in fluid communication with said fluid pressure operated means for exerting a higher pressing pressure on said members when in said second position than said low pressing pressure of said low fluid pressure source, and means for automatically cutting off said low fluid pressure source from said fluid pressure operated means in response to exertion of said higher pressing pressure in said fluid pressure operated means.

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