Oct. 31, 1961 F. H. RICHTERKESSING 3,006,516

GARMENT FINISHER AND MEANS FOR CONTROLLING FLOW OF PROCESSING FLUIDS THERETO

Filed Sept. 5, 1957 5 Sheets-Sheet 1

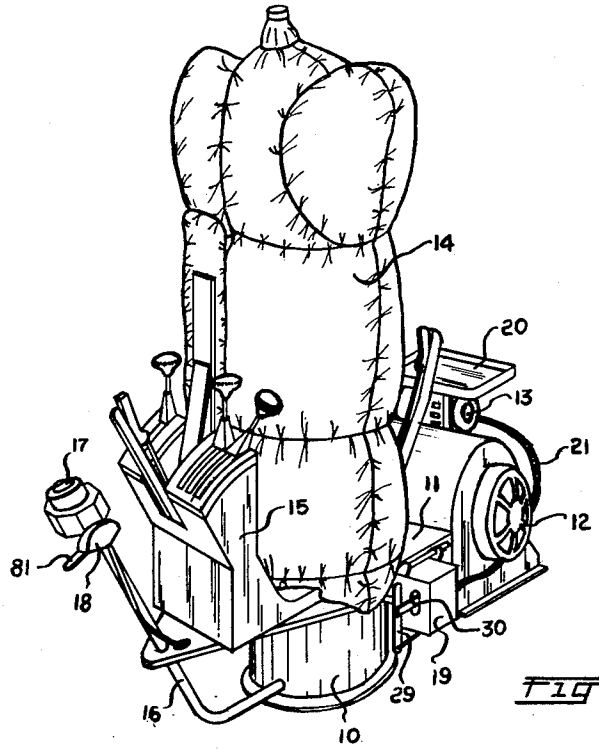


Fig. 1

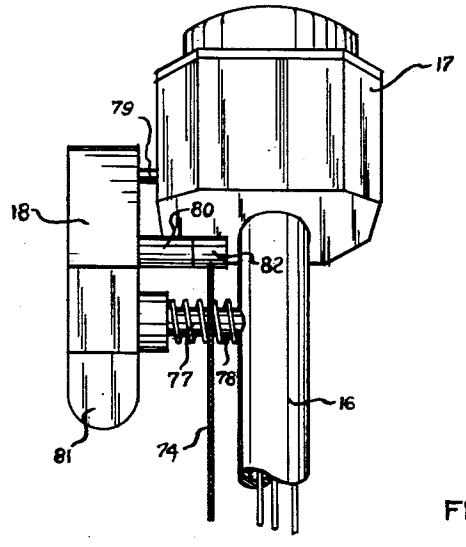


Fig. 9

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GARMENT FINISHER AND MEANS FOR CONTROLLING FLOW OF PROCESSING FLUIDS THERETO

Filed Sept. 5, 1957 5 Sheets-Sheet 2

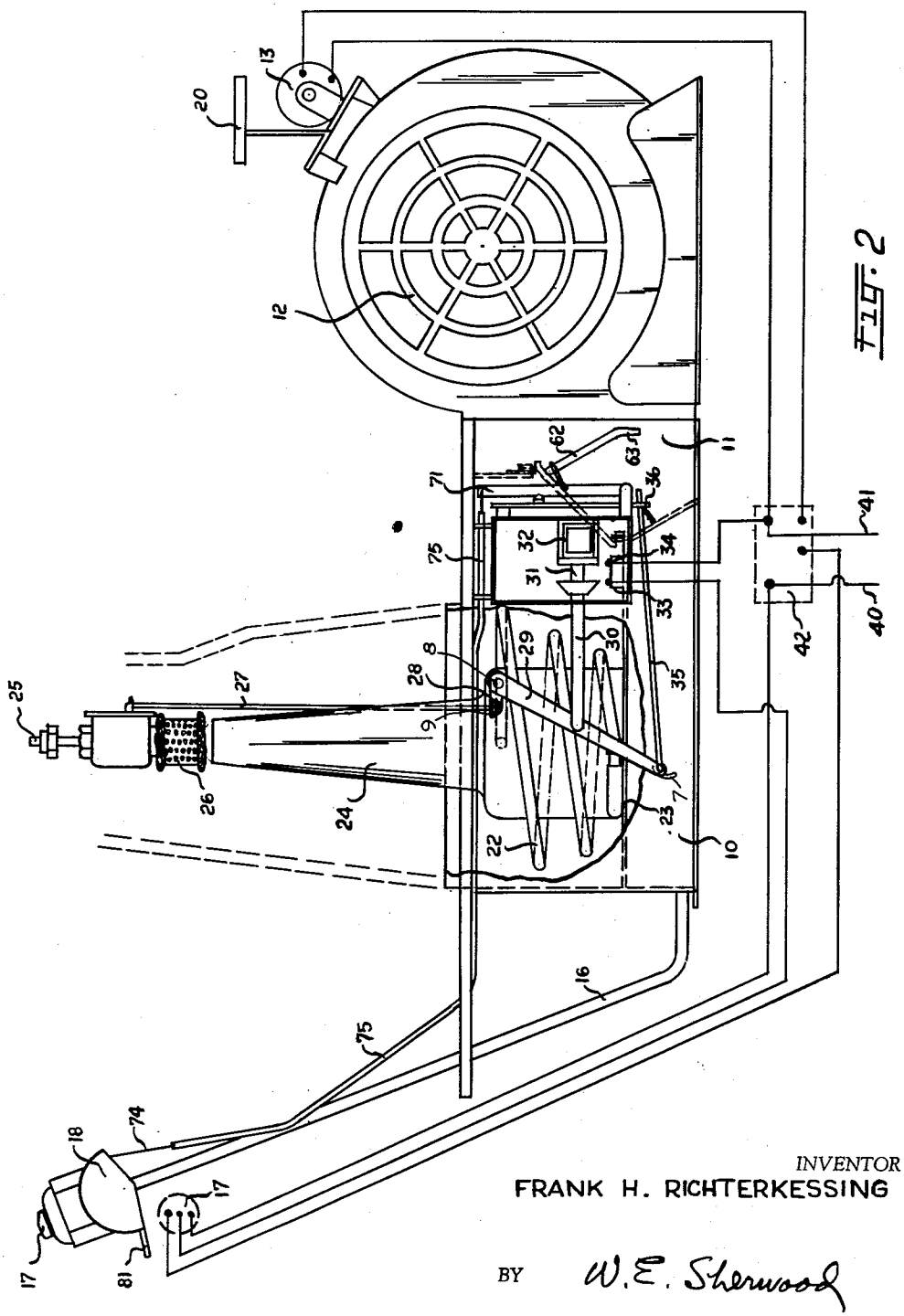


FIG. 2

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GARMENT FINISHER AND MEANS FOR CONTROLLING FLOW OF PROCESSING FLUIDS THERETO

Filed Sept. 5, 1957 5 Sheets-Sheet 3

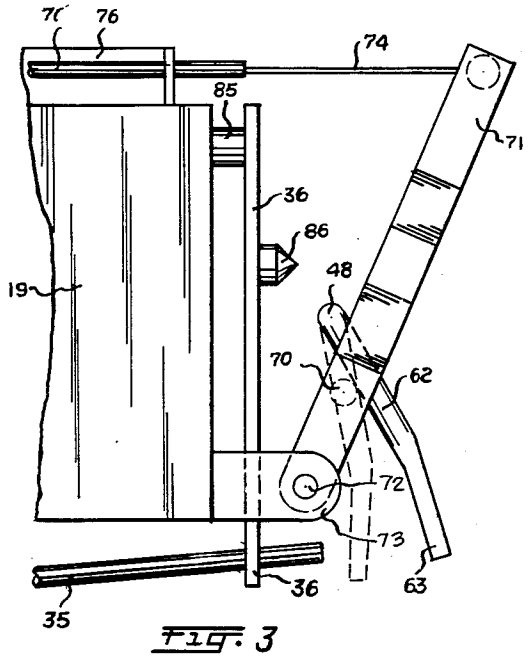


Fig. 3

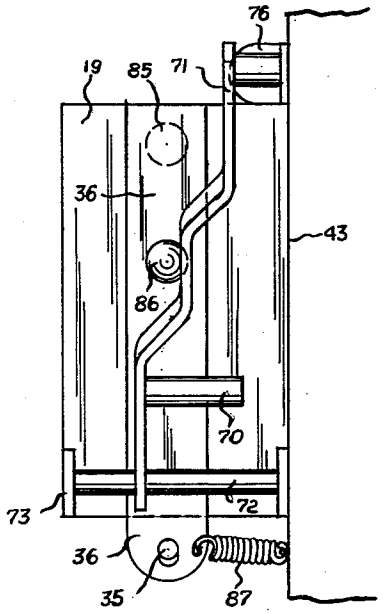


Fig. 4

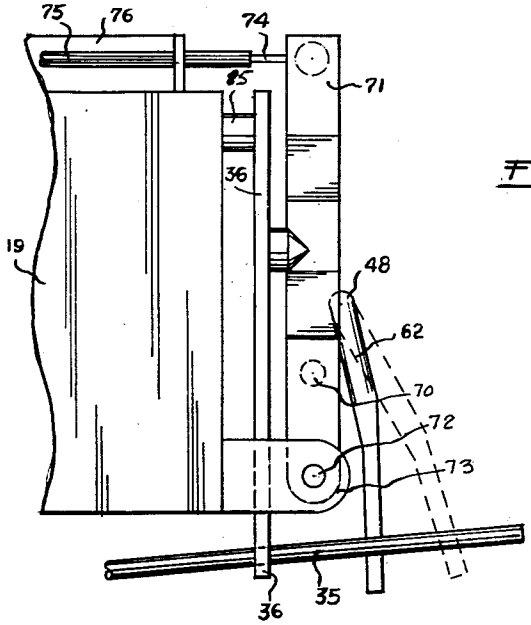


Fig. 5

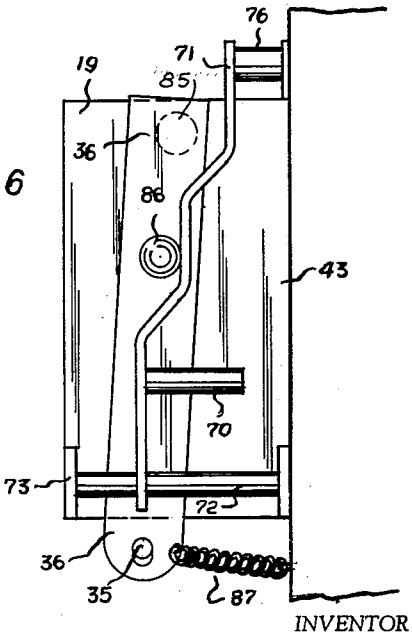


Fig. 6

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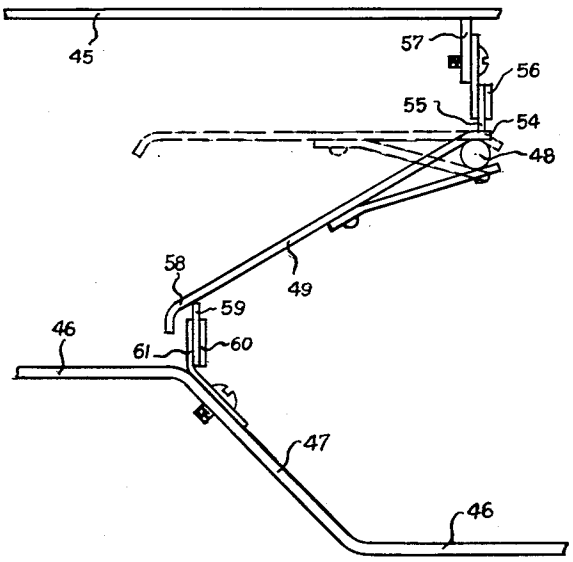


Fig. 7

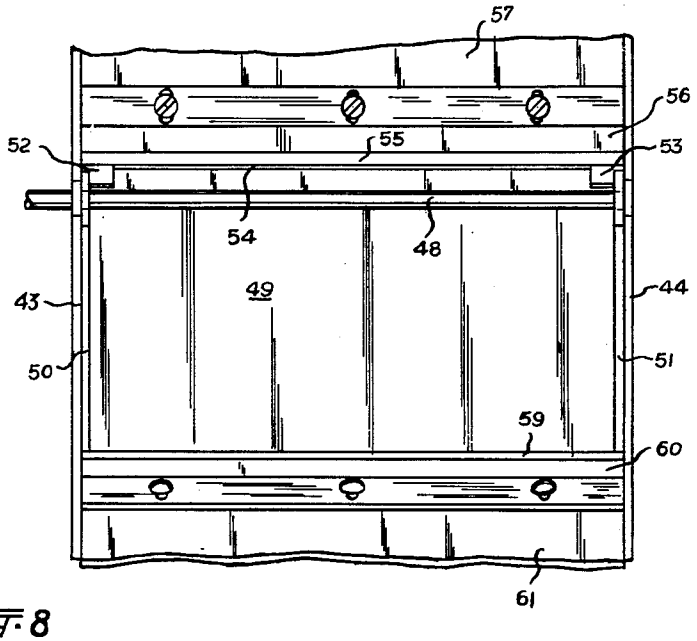


Fig. 8

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GARMENT FINISHER AND MEANS FOR CONTROLLING FLOW OF PROCESSING FLUIDS THERETO

Filed Sept. 5, 1957 5 Sheets-Sheet 5

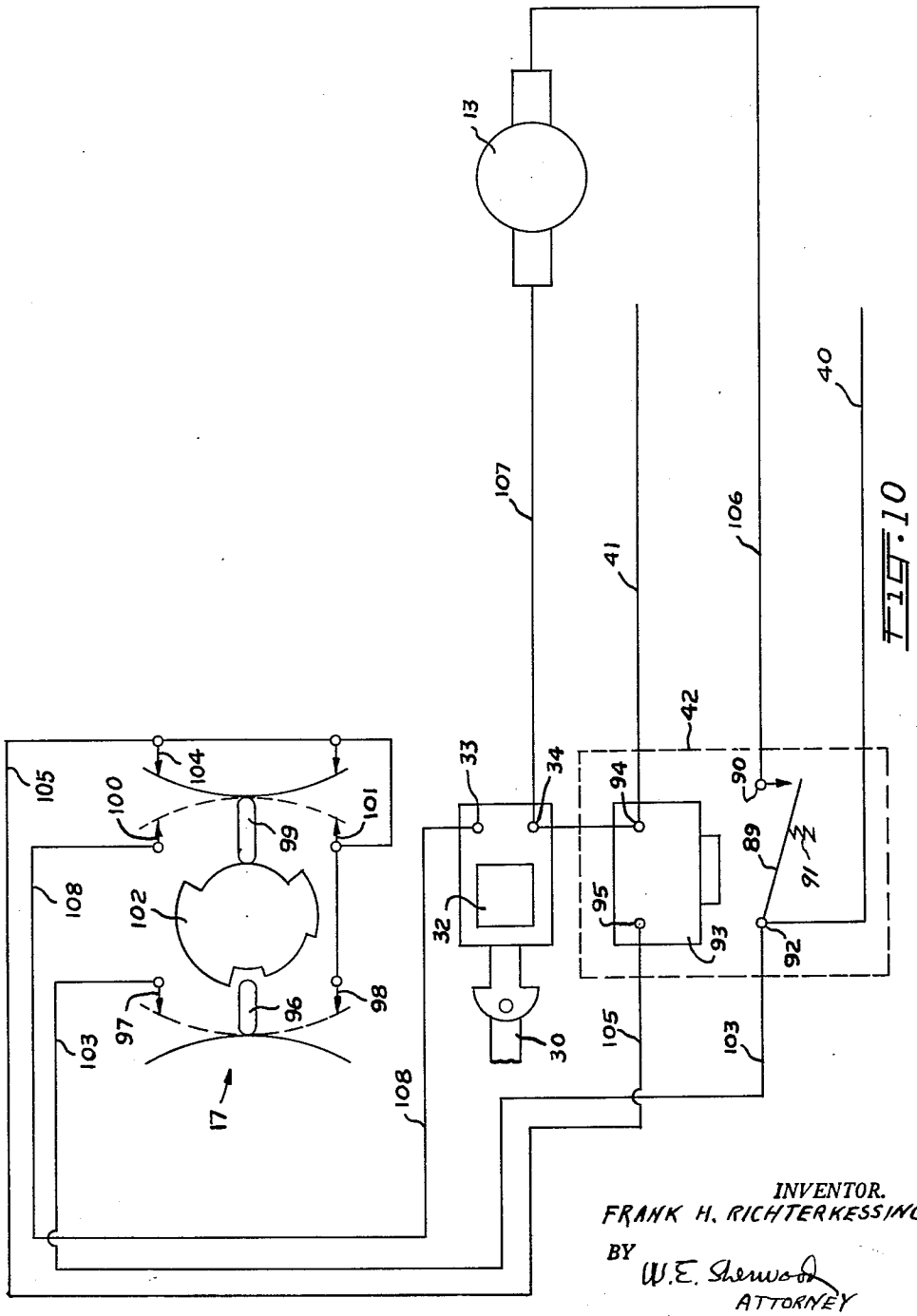


FIG. 10

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United States Patent Office 3,006,516
Patented Oct. 31, 1961

3,006,516

GARMENT FINISHER AND MEANS FOR CONTROLLING FLOW OF PROCESSING FLUIDS THERETO

Frank H. Richterkessing, Louisville, Ky., assignor to W. M. Cissell Manufacturing Company, Louisville, Ky., a corporation of Kentucky

Filed Sept. 5, 1957, Ser. No. 682,147
18 Claims. (Cl. 223—70)

This invention relates generally to garment finishers of the type having a distendable, fluid-pervious bag into which air and steam are supplied. In particular, it relates to an improved finisher having means for readily selecting and controlling the flow of such processing fluids into the bag, both as to the timing of the flow thereof, and as to pressure of the air supplied, thus to increase the capability of the finisher to handle normally difficult garments, such as chamois or suede lined articles, as well as to improve the efficiency of the finisher in handling garments of lighter materials. Moreover, the invention, by reason of automatic control features embodied therein, is directed toward the feature of relieving the operator of the necessity of remaining at a fixed station during the cycle of finishing operation.

An object of the invention is to provide an improved finisher having means for supplying steam and full air pressure simultaneously into the finisher bag.

Another object is to provide an improved finisher having an air control means selectively adjustable from a position at which air is bled into the finisher bag in a small amount to a position in which air is forced thereinto in a large amount and under full pressure.

Another object is to provide an improved finisher having a solenoid operated steam supply valve and a motor driven air blower both controlled from a single timer arranged to energize initially the motor and solenoid simultaneously and to de-energize the motor after the solenoid de-energization and after expiration of a suitable drying period.

Another object is to provide an improved damper in the air supply conduit of a garment finisher for preventing the condensation of steam within the finisher.

A further object is to provide an improved finisher having all control means manually operable from a single operating station and normally requiring no continual personal attention of the operator after the finishing cycle is initiated.

Other objects and advantages will become apparent as the description proceeds and when considered in conjunction with the accompanying drawings in which:

FIG. 1 is a perspective view of a complete garment finisher embodying the invention;

FIG. 2 is a diagrammatic view of the base assembly of the garment finisher, showing the electro-mechanical portions of the steam and air supply;

FIG. 3 is a side elevation view of a portion of the mechanical means for controlling air flow and positioned to permit minimum flow of air;

FIG. 4 is an end view of the apparatus shown in FIG. 3 and with the damper arm removed;

FIG. 5 is a side elevation view of a portion of the mechanical means for controlling air flow and positioned to permit maximum flow of air simultaneously with supply of steam;

FIG. 6 is an end view of the apparatus shown in FIG. 5 and with the damper arm removed;

FIG. 7 is a side view of the air supply conduit showing the mounting of the improved gravity biased damper therein;

FIG. 8 is an end view of the damper shown in FIG. 7;

FIG. 9 is an end elevation view of the mounting of the timer and the air selector means viewed from a position looking toward the normal operating station, and

FIG. 10 is a circuit diagram in greater detail of the circuit shown diagramatically in FIG. 2.

In carrying out my invention, I prefer to employ a bag type finisher having a removable inner form mounted for rotary movement upon a stationary base assembly and of the general type more fully disclosed in the copending application of Frank H. Richterkessing and William M. Cissell, Serial Number 586,710, filed May 23, 1956, now Patent No. 2,948,443, granted August 9, 1960. The form is encased in a distendable bag, such as nylon, or the like, and steam and air are supplied from sources within the stationary base assembly. An electro-mechanical arrangement, including appropriate linkages, permits both the motor for driving the blower for supplying air and the solenoid for controlling a valve to release steam, to be operated in a cooperative manner and to function automatically after the selected position of a manually set timer and of a manually set air controller has once been established.

The settings of the timer and air controller are adapted to be chosen from a wide range of processing capacities so that the garments of a wide range of materials, for example, from sheer, delicate garments to heavy fabrics, such as corduroy, chamois or suede garments, may be rapidly finished upon the same machine.

Referring first to FIG. 1, the stationary base assembly includes a hollow base portion **10** having an air conduit **11** leading thereinto and receiving air from a blower **12** driven by electric motor **13**. A form encased in a distendable, fluid-pervious bag **14** is rotatably mounted upon the base assembly and has rigidly fixed thereto a housing **15** serving to mount the handle for a front clamp and a series of improved lever actuated controls for adjusting the periphery of bag **14** to accommodate various sizes and styles of garments, all as more fully set forth in the copending application of Frank H. Richterkessing and Walter M. Ingold, Serial Number 673,360, filed July 22, 1957, and issued as U.S. Patent 2,889,969. By means of a rigid tube **16** extending from the base portion **10**, a conventional automatic timer **17**, of the type shown in my copending application Serial No. 519,752, filed July 5, 1955, now abandoned, is mounted at an operating station closely adjacent the normal position of the control levers and handle on the rotatable portion of the apparatus. In addition, an air controller **18**, later to be described, is mounted alongside the timer, thus making available to the operator at a single station all of the controls which he normally employs in finishing a garment. Also mounted upon the base assembly is a solenoid enclosure **19** and a platform **20** for providing a convenient location at which the operator may deposit auxiliary devices, such as clamps, sleevers, and the like, without bending over. An armored cable **21** contains electrical leads between the solenoid enclosure and the motor, it being understood that electrical leads between the timer and solenoid enclosure are contained in the hollow tube **16**. Motor **13** preferably runs at constant speed and drives blower **12** at constant speed, the pressure of air being supplied into the entrance of conduit **11** therefore being constant while the motor is running and the pressure of air entering bag **14** being regulated by the setting of a damper located in that conduit and later to be described. It will be understood that different air pressures are required in the bag depending upon the fabric of the garment being processed.

Considering now the diagrammatic showing in FIG. 2, a steam coil **22** is disposed within the base portion **10** above a support plate **23** which is spaced from the bottom of the base assembly and which bottom normally rests upon a floor. Steam is constantly supplied to the

top of the coil and withdrawn along with any condensate from the bottom of that coil. Adjacent the bottom of the coil which may be provided with radiating fins, not shown, a connection leads into the interior of a steam supply column **24** resting upon plate **23** and having a bearing seat **25** at its upper end upon which the rotatable form and its attachments is adapted to be seated, as more fully set forth in the copending application Serial Number 673,360 filed July 22, 1957. At an upper portion, the column has a steam distributing member **26** through which steam is dispersed into the interior of the bag when a steam release valve, not shown, contained within the column is opened by movement of a solenoid actuated rod **27**, the valve being biased into normally closed position.

At its lower end, the rod is loosely attached to one arm **28** of a bell crank by means of a short hook portion **9** of the lower end of that rod, which hook extends through a hole near the end of that arm; the bell crank also being provided with a longer arm **29** which extends downwardly exteriorly of the base assembly, the entire bell crank being pivotally mounted upon the lower part of the steam column along the axis indicated at **8**. Pivotally attached to arm **29** intermediate the ends thereof is a link **30** having a plunger **31** at its outer end, the plunger being disposed within solenoid **32** having terminals **33** and **34**. Also pivotally attached to arm **29** adjacent the bottom thereof as by a loosely engaging hook portion **7** is a damper-control-arm-engaging rod **35** journalled in a shift lever **36** for longitudinal movement therethrough. It will be understood that the bias upon the steam release valve which may be provided, for example, by a compression spring, is such as to hold the solenoid plunger in retracted position until current is supplied through the solenoid coil and thus the rod **35** is also held normally in retracted position as indicated in FIG. 2.

By means of leads **40** and **41**, electrical power is supplied to a conventional relay **42** and thence to contacts on timer **17** and through the timer to the solenoid circuit and to the motor circuit. The timer **17** is of the conventional type having separate circuits to the solenoid and to the motor so that the solenoid and motor are sequentially de-energized with the solenoid being de-energized first. However, upon initiating a cycle, the timer circuits serve to energize the solenoid and motor simultaneously. When motor **13** is energized, it drives blower **12** by any suitable means, not shown, such as a belt drive, and air under pressure is supplied into conduit **11**. For clarity, the leads to the contacts on timer **17** and to the motor **13** are shown in FIG. 2 as being outside tube **16** and cable **21**, whereas, in an actual installation, they are contained therein. The relay **42** is seen in greater detail in FIG. 10 wherein the relay arm **89** connected to terminal **92** is normally held by spring **91** out of contact with terminal **90**, but is moved into contact with that terminal **90** when a solenoid **93** connected across terminals **94** and **95** is actuated in dependence upon the setting of timer **17**. This timer has a suitable switch **96** between its terminals **97** and **98** and a second suitable switch **99** between its terminals **100** and **101**. These switches are of conventional construction being adapted to be moved between a position in which they make contact with their respective terminals (seen diagrammatically in dotted lines in FIG. 10) and a position in which they break such contact (seen diagrammatically in solid lines). For example, these switches may be of the type shown in the catalogue of the General Electric Company CR1070–C146 known as G.E. size 1 Switchette. Cam followers for these switches cooperate with means such as flexible leaf springs biased to open switch positions, and are in turn actuated by movement of the cam in the timer. Terminals **98** and **101** are suitably linked with each other and with terminal **104**. The rotatable cam **102** is normally moved manually by a knob in the outer surface

of the timer casing in order to begin a cycle of operation, movement of that knob serving to wind a spring motor or equivalent means (not shown) which thereafter causes the cam to move during a selected time period to a starting position for the next cycle and at which starting position both switches will again be in open circuit condition.

When the operator sets the timer for supply of either air, or air and steam jointly, switch **96** is closed and a circuit is made from lead **40**, relay terminal **92**, conductor **103**, timer terminal **97**, through switch **96**, timer terminals **98**, **101**, **104**, conductor **105**, relay terminal **95**, solenoid **93**, relay terminal **94** and return lead **41**. Relay solenoid **93** then closes arm **89** upon relay terminal **90** and a shunt circuit is then made from lead **40**, arm **89**, relay terminal **90**, conductor **106**, motor **13**, conductor **107**, relay terminal **94** and return lead **41**. The motor **13** driving blower **12** will continue to run so long as switch **96** remains closed.

If cam **102** has been turned only sufficiently to close switch **96**, but not switch **99**, then only air is supplied to the finisher and the steam valve solenoid remains inoperative. If, however, the cam has turned sufficiently to close switch **99**, then, in addition to the described circuits, another circuit is simultaneously made from lead **40**, relay terminal **92**, conductor **103**, timer terminal **97**, switch **96**, timer terminals **98** and **101**, switch **99**, timer terminal **100**, conductor **108**, terminals **33** and **34** on the steam solenoid **32**, relay terminal **94** and return lead **41**. Solenoid **32**, of course, is later inactivated as soon as the cam uncovers the follower of switch **99** and permits it to reopen. In addition, after the cam uncovers the follower of switch **96**, as when the drying cycle is completed, the circuit through the relay solenoid is reopened and relay arm **89** returns to its normal position breaking contact with relay terminal **90** and opening the shunt circuit to motor **13** which then comes to rest.

Referring now to FIGS. 7 and 8, the air conduit includes spaced side walls **43** and **44**, a top wall **45** and a bottom wall **46**, which preferably has an inclined portion **47**. Affixed to a transverse rod **48** journalled in the side walls of the conduit is an improved damper **49** which may comprise sheet metal. This damper extends substantially across the entire conduit, but has its side edges terminating a slight distance from the side walls thereof to provide narrow slits **50** and **51** which permit air to bleed through the damper even when the apparatus is not being operated. As will be apparent to those skilled in the garment finisher art, the condensation of steam upon metal parts following the conclusion of an operation may soak portions of the bag **14** with liquid and may contribute to the non-uniform finishing of the subsequent garment under treatment. Since steam in coil **22** is constantly available as a source of heat, a substantial convection current of air is permitted by my invention and this heated air constantly fills the interior of the bag between successive garment treatments. Such air of course, enters through blower **12**, even when at rest, bleeds through slots **50** and **51** in the damper, passes over coil **22**, and rises into the interior of the bag. Preferably, the damper also is provided with small cut away upper corners **52** and **53** to aid in the flow of air at the minimum setting of the air controller later to be described. In order, however, to insure a predetermined volume of air flow at that minimum setting, I provide improved seals which serve to limit air flow to the open spaces afforded by slots **50** and **51** and corners **52**, **53**. As a feature of the invention, the damper is automatically operable and requires no continued attention of the operator. Due to being mounted off-center upon rotatable rod **48**, the damper normally falls to closed position as seen in solid lines in FIG. 7, under the bias of gravity, but, if permitted by its position control arm, as will later be described, will rise to fully open position, as seen in dotted lines,

under the pressure from blower **12**. At its upper edge, I provide a curved portion **54** adapted to seat against a felt washer **55** carried by an adjustable plate **56** suitably mounted in slots in a partition **57**, extending downwardly from the top wall of the air conduit. Similarly, at its lower edge, a curved portion **58** rests upon a felt washer **59** carried by an adjustable plate **60** suitably mounted in slots in a partition **61** extending upwardly from the inclined bottom wall of the conduit.

With the above description of the damper in mind, reference now is made to FIGS. 3 to 6, inclusive. At the end of rod **48** adjacent the solenoid enclosure **19**, a damper position control arm **62** terminating in a flat abutment portion **63** is provided. In closed position, this arm is spaced from the solenoid enclosure and in open position closely approaches that enclosure. As the arm moves to open damper position, however, it travels in the plane of an arresting extension **70** mounted upon a lever **71** which is pivoted at its lower end upon a pin **72** mounted in a projection **73** extending to one side from the bottom of solenoid enclosure **19**. This lever may include a stepped configuration placing the upper end thereof inwardly of the lower end thereof and closely adjacent the side wall **43** of the air conduit. Connected to the upper end of lever **71** is a flexible push-pull wire **74** extending from a rigid guide tube **75** mounted in a bracket **76** attached to wall **43**. The wire, in turn, is encased in the tube **75** to a point closely adjacent the air controller **18** (FIG. 2) but with the final portion of the wire being exposed near its connection to that air controller in order to permit flexing of the wire about a comparatively short radius without binding in the tube.

As noted in FIGS. 1 and 9, the air controller comprises a segmental disc-like plate member having an arcuate face portion and pivotally mounted for rocking movement upon a stationary pin **77** projecting laterally from tubing **16** adjacent the timer **17**, which tubing provides a rigid support for the controller and at a convenient height. On its face portion, this controller is provided with indica indicating visually to the operator the position of wire **74** and thereby the position of lever **71** and its arresting arm **70** at any given time. A compression spring **78** surrounding pin **77** and bearing against the controller body prevents slippage or inadvertent movement of the controller while forward and rearward stops **79** and **80**, respectively, adapted to engage the body of timer **17**, limit the movement of the air controller settings and reduce stresses upon lever **71** and upon the damper when engaged by the arresting arm **70**. A short handle **81** is provided at one arcuate extremity of the air controller for manual use and at the other arcuate extremity a pin **82** is rotatably journalled in the end of stop **80** and has securely anchored thereto the end of push-pull wire **74**.

Accordingly, with the air controller positioned with stop **79** in engagement with the timer housing, lever **71** is fully extended as seen in FIG. 3, the arresting arm **70** is in contact with damper control arm **62** holding the damper in fully closed position even against the pressure of air from blower **12**, and a condition of minimum air supply, such as may be needed when a garment of sheer fabric is being processed, thus obtains. However, due to the construction of the damper, sufficient air is supplied to the bag to distend the same and to dry the garment.

Upon successive settings of the air controller with stop **79** farther and farther away from the setting for minimum air supply, the arresting arm is positioned farther and farther to the left in FIG. 3 until at a point of maximum air supply it no longer engages the damper control arm (at the dotted line position of that arm in FIG. 3 and at the solid line position of that arm in FIG. 5) and full air pressure may be supplied by the blower subject, however, to the timer operation later to be described.

As shown in FIGS. 3 and 4, I provide a shift lever **36** pivotally mounted at its upper end upon a pin **85** projecting from the end of solenoid enclosure **19** and permitting swinging movement of the shift lever in a plane normal to the plane of movement of both the damper control arm **62** and of the lever **71**. Extending from the shift lever is a cam member **86**, here shown as being of conical form, and normally held in the path of movement of stepped lever **71** as that lever reaches its position of maximum air supply. A tension spring **87** attached at one end to the bottom of the shift lever and at the other end to the base assembly holds the shift lever in position for such engagement with lever **71**. At its bottom portion, the shift lever guides the movement of damper-control-arm-engaging rod **35** which normally is in the same plane as the movement of damper abutment **63**. Accordingly, when timer **17** energizes both motor **13** and solenoid **32** simultaneously, and with the air controller positioned at a setting between minimum and maximum air supply, as above described, the energization of the solenoid **32** pulls rod **35** to the right in FIG. 3 against abutment **63** on the damper arm and holds the damper closed until the solenoid **32** is de-energized. In this way, the garment is first subjected to a processing fluid consisting essentially of steam and before being subjected to the full pressure of heated air. In general, most garments may be most efficiently finished by this cycle, the steam being supplied for about 8–10 seconds and being followed by an air drying treatment of about 60 seconds.

In accordance with my invention, I am not limited to this conventional cycle of treatment and when treating garments requiring both steam and full air pressure simultaneously, may readily supply these processing fluids merely by adjusting the air controller **18** in advance. By moving the air controller until stop **80** engages the timer housing, the wire **74** is pulled outwardly to a position at which a stepped portion of lever **71** engages against cam **86** and forces that cam to one side. As this occurs, shift lever **36** is pivoted about pin **85** and the bottom of the lever swings outwardly bringing the path of travel of rod **35** out of the plane of damper abutment **63**. Thereafter, when the timer energizes the motor and solenoid **32** simultaneously, rod **35** passes by arm **62** and the damper rises to fully open position while steam is being supplied to the interior of the bag. The combined effect of steam and full air pressure serves to drive the steam quickly into the garment positioned on the bag and to shorten the time required for finishing a garment of the more difficult types above mentioned.

If the next garment to be finished is of a delicate material, the air controller is then reset to give a limited air pressure and spring **87** automatically returns the shift lever into normal position at which rod **35** is guided into contact with the abutment **63** to prevent steam and full air pressure being supplied simultaneously and which might damage the delicate material.

It will now be apparent that by this invention, I am able to increase the capabilities of a garment finisher to handle a wide variety of types of garments on the same machine in an efficient manner and without diminishing the advantages found in the garment finisher described in copending application, Serial No. 586,710.

To recapitulate, the objectives of the invention are thus accomplished since by means of the timer, the solenoid **32** and the motor for the blower are, during any given cycle, both energized initially simultaneously. The steam valve is opened while the solenoid **32** is energized, but the damper may selectively be either open or substantially closed while the steam is being supplied to the garment, depending upon the prior positioning of the shift lever. Even when that lever is set to hold the damper closed during steam supply, the damper itself permits sufficient air to bleed therethrough to minimize condensation of the steam upon the parts of the apparatus and to force the steam with a light pressure through the bag and

into the garment. Conversely, when the lever is set to permit full opening of the damper during steam supply, full air pressure may be applied to the bag and garment along with the steam and thus, the steam is forced into the garment, even though it may be of a heavy material, such as suede or chamois. When the solenoid **32** is de-energized, the steam valve is closed and the damper-control-arm-engaging rod **35** is withdrawn. The blower motor, however, remains energized, due to the timer setting and the damper then swings open to the extent permitted by the prior positioning of lever **71**. So long as the motor continues to operate, heating air is then forced into the bag for drying the garment. Even after the motor stops operating, air bleeding through slots **50** and **51** in the damper rises by convection currents into the form and serves to minimize condensation of moisture.

While I have shown a particular embodiment of the invention it will be understood, of course, that I do not wish to be limited thereto, since many modifications may be made. I, therefore, contemplate, by the appended claims to cover any said modifications as fall within the true spirit and scope of my invention.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. A garment finisher having a distendable, fluid-pervious bag, a stationary base assembly, a blower for directing air under pressure through said base assembly and into said bag, a steam source for furnishing steam into said bag and having a steam control valve, a motor for driving said blower, means including a normally closed damper mounted in said base assembly between said blower and bag and openable under pressure of air supplied from said blower, a form mounted on said assembly and supporting said bag, a solenoid for actuating said steam control valve, and means including a timer having an electrical circuit to said motor and to said solenoid and adapted to operate said motor concurrently with, and subsequent to valve-actuation operation of said solenoid whereby air may be furnished selectively under pressure into said bag concurrently with, and subsequent to steam flow thereinto.

2. Apparatus as defined in claim 1 including, air controller means for varying the extent of opening of said damper thereby to regulate the flow of air into said bag.

3. Apparatus as defined in claim 2, wherein said timer and air controller means for varying said damper are mounted for manual control at a single operating station.

4. In a garment finisher having a distendable, fluid-pervious bag, a stationary base assembly, a form for supporting said bag upon said base assembly, a steam coil in said base assembly, means connected to said coil and adapted for selectively releasing steam into said bag, an air conduit for directing air over said coil and into said bag in heated condition and means for supplying air into said conduit; the improvement comprising means for preventing collection of steam condensate upon said bag and form and including a damper pivotally mounted in, and wholly enclosed by, said air conduit between said steam coil and said air supply means and normally resting in closed position, said damper being mounted for swinging movement within said air conduit and having at least one side edge spaced from a wall of said air conduit to provide a space permitting said air to bleed therethrough with said damper in closed position and in a predetermined quantity serving to insure a convection current of heated air into said bag sufficient to prevent condensation of steam therein.

5. Apparatus as defined in claim 4 wherein said means for supplying air includes a motor driven blower, a manually operable air controller having means projecting into the path of movement of the damper structure thereby to regulate the permissible opening of said damper to a selected point within the range of fully open to fully closed position, said damper being pivotally mounted at an upper portion thereof and being adapted to be lifted by the pressure of air supplied from said blower to a setting selected by said air controller, and said space within said conduit between said one side edge of said damper and said wall of said conduit being of a size insufficient to pass sufficient air to cause damage to sheer garments placed on said bag and receiving heated air under pressure from said blower while said damper occupies said closed position.

6. Apparatus as defined in claim 4 including, a top seal and a bottom seal mounted in said air conduit and adapted respectively to contact the top and bottom edges of said damper while occupying its closed position, thereby to assist in supplying air in said predetermined quantity to said bag.

7. In a garment finisher having a distendable, fluid-pervious bag, a stationary base assembly, a form for supporting said bag upon said base assembly, an air conduit for directing air into said bag, a blower for supplying air at constant pressure into said conduit, a damper in said conduit biased to closed position and adapted to be lifted to open position by pressure of air supplied by said blower, a damper control arm mounted exteriorly of said conduit, a manually adjustable air controller, a pivoted lever mounted adjacent said conduit and having an extension disposed in the plane of movement of said damper control arm for movement into and out of the path of movement of said arm, and means connecting said air controller and one end of said lever for selectively positioning said extension for engagement with said control arm as said damper is lifted by the pressure of air from said blower, thereby to predetermine the pressure of air supplied to said bag.

8. Apparatus as defined in claim 7 wherein said air controller is disposed at an operating station remote from said damper and wherein said connecting means comprises a flexible push-pull wire.

9. In a garment finisher having a distendable, fluid-pervious bag, a stationary base assembly, a form for supporting said bag on said assembly, an air conduit for directing air into said bag, a motor driven blower for supplying air at constant pressure into said conduit, a damper in said conduit biased to closed position and adapted to be lifted to open position by pressure of air supplied by said blower, a damper control arm mounted exteriorly of said conduit, a steam source for furnishing steam into said bag and having a steam control valve, means including a solenoid for actuating said steam control valve, a manually adjustable timer having an electrical circuit to said solenoid and to said blower motor, a damper-control-arm-engaging rod connected to said solenoid and operable simultaneously therewith, and a shift lever loosely attached to and journalling said rod, said lever being adapted to move between a first position in which said rod is guided by said lever into abutting relation with said damper control arm while said timer is energizing both said solenoid and said blower motor thus to hold said damper closed against said air pressure and a second position in which said rod is guided by said lever out of the path of said control arm while said timer is energizing both said solenoid and blower motor thus to permit said damper to swing to open position under said air pressure, and a manually adjustable air controller means for moving said shift lever.

10. Apparatus as defined in claim 9 wherein said timer and air controller means are mounted adjacent each other thereby to provide a single operating station for the operator of the finisher.

11. In a garment finisher having a distendable, fluid-pervious bag, a stationary base assembly, a form for supporting said bag on said assembly, an air conduit for directing air into said bag, a motor driven blower for supplying air at constant pressure into said conduit, a damper in said conduit biased to closed position and adapted to be lifted to open position by pressure of air supplied by said blower, a damper control arm mounted exteriorly of said conduit, a manually adjustable air controller, a piv-

oted lever mounted adjacent said conduit, means connecting said air controller and said lever, a steam source for furnishing steam into said bag and having a steam control valve, means including a solenoid for actuating said steam control valve, a manually adjustable timer having an electrical circuit to said solenoid and to said blower motor, a damper-control-arm-engaging rod connected to said solenoid and operable simultaneously therewith, a shift lever loosely attached to and journalling said rod and movable between a first position in which said rod is guided into engagement with said damper arm and a second position in which said rod is guided out of engagement therewith, and a cam member rigidly affixed to said shift lever in the path of movement of said pivoted lever and engaged thereby when said pivoted lever is moved to one extreme position by said air controller, whereby upon movement of said air controller to said extreme position said cam moves said shift lever to guide said rod out of the path of said damper arm and to permit supply of air at full pressure into said bag simultaneously with supply of steam thereinto as said motor and solenoid are energized simultaneously by said timer.

12. Apparatus as defined in claim 11 wherein said damper-control-arm-engaging rod has a length sufficient to engage said damper arm when in closed damper position during actuation of said solenoid and to hold said damper closed when said shift lever cam is out of contact with said pivoted lever.

13. Apparatus as defined in claim 11 including resilient means for normally holding said shift lever cam in one extreme path of movement of said pivoted lever.

14. Apparatus as defined in claim 11 wherein said shift lever is mounted for movement in a plane normal to the plane of movement of said pivoted lever.

15. In a garment finisher having a distendable, fluid-pervious bag, a stationary base assembly, a form for supporting said bag upon said assembly, an air conduit for directing air into said bag, a blower for supplying air at constant pressure into said conduit, a damper in said conduit biased to closed position and adapted to be lifted to open position settings by pressure of air supplied by said blower, a damper control arm mounted exteriorly of said conduit, manually adjustable air controller means for establishing the pressure at which air is supplied to said bag from said conduit and including a support attached to said base assembly, a plate mounted upon said support for rocking movement thereon, a flexible push-pull wire attached to said plate, a guide tube enclosing a substantial portion of said wire and extending to a point adjacent said air conduit, a pivoted lever mounted adjacent said conduit and having an extension disposed in the plane of movement of said damper control arm, said lever being attached to and operable by said wire whereby, upon movement of said plate said lever may be selectively positioned to bring said extension into a position at which said damper control arm abuts against said extension and restrains said damper to a maximum opening corresponding to the predetermined air pressure selected for said bag.

16. Apparatus as defined in claim 15, wherein said plate is provided with indicia for indicating visually the location of said extension with respect to said damper control arm.

17. A garment finisher having a distendable, fluid-pervious bag, a stationary base assembly, a blower for directing air under pressure through said base assembly and into said bag, a steam source for furnishing steam into said bag and having a steam control valve, a motor for driving said blower, means including a regulatable damper structure mounted in said base assembly between said blower and said bag for controlling the air pressure within said bag by regulating the volume of air supplied into said bag, means including an adjustable member for selectively controlling the extent of opening of said damper structure during operation of said blower, a form mounted on said base assembly and supporting said bag, a solenoid for actuating said steam control valve, and means including a timer having an electrical circuit to said motor and to said solenoid and adapted to operate said motor concurrently with, and subsequent to, valve-actuation operation of said solenoid whereby air may be furnished selectively under pressure into said bag concurrently with, and subsequent to, steam flow thereinto and at a volume and pressure commensurate with the setting of said adjustable member.

18. A garment finisher having a distendable, fluid-pervious bag, a stationary base assembly, a blower for directing air under pressure through said base assembly and into said bag, a steam source for furnishing steam into said bag and having a steam control valve, a solenoid for actuating said valve, a motor for driving said blower, an electrical circuit including said motor and said solenoid, means controlled by the operator of said machine and including a timer means in said circuit for activating and inactivating said solenoid and said motor, the circuit through said timer means providing for predetermined periods of activation of said solenoid and said motor and for automatic inactivation thereof at the conclusion of said predetermined periods, at least a portion of said respective periods of activation including a simultaneous activation of both said solenoid and said motor, an adjustable damper means in said base assembly between said blower and said bag, and means operable independently of said timer means for selectively varying the setting of said damper means.

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