T. D. PALMER.

GARMENT PRESSING MACHINE.

APPLICATION FILED JAN. 25, 1911.

1,141,902. Patented June 1, 1915.

Fig. 1.

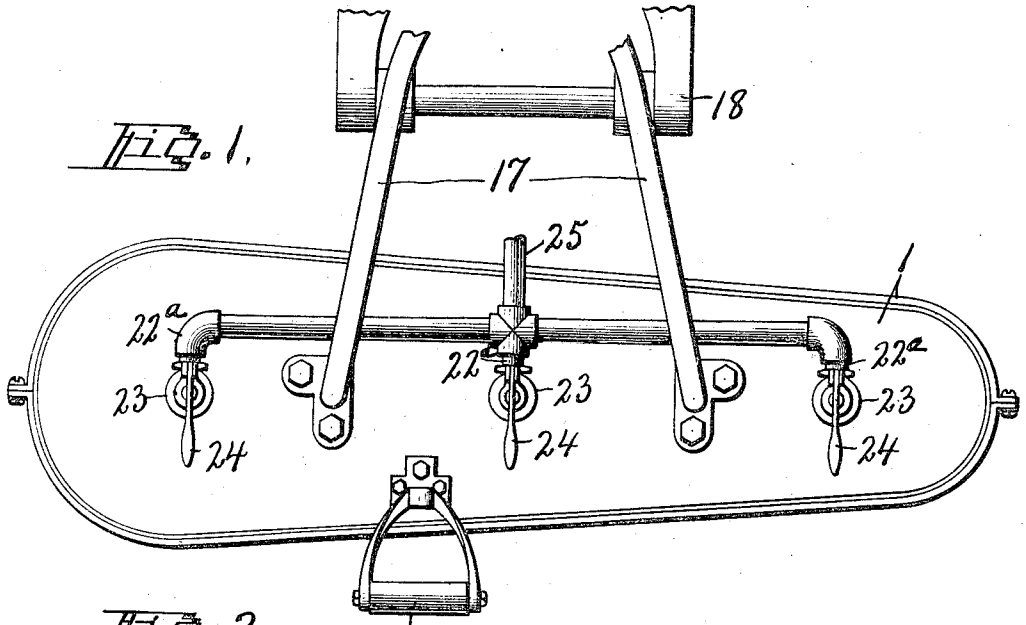


Fig. 2.

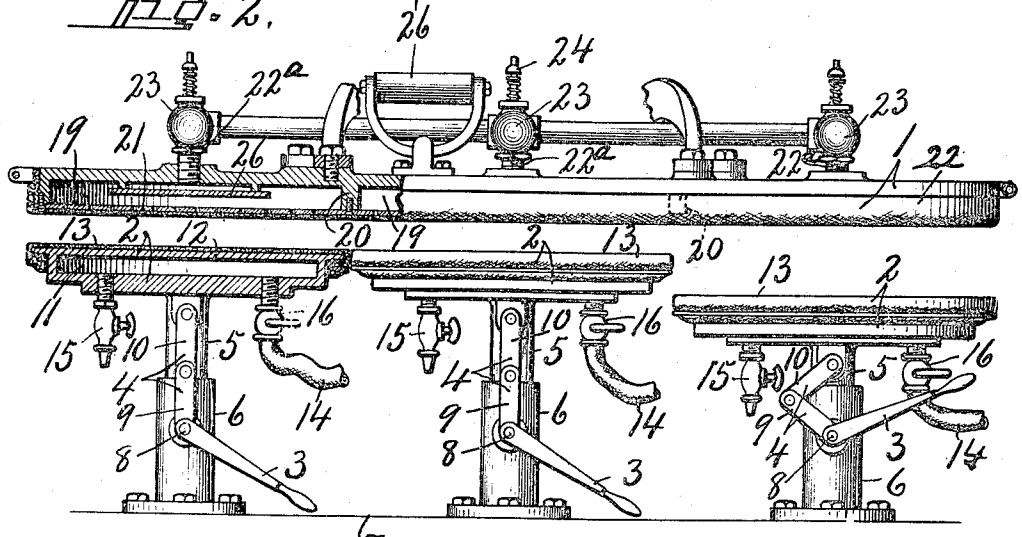
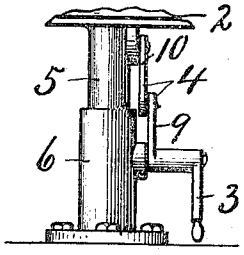


Fig. 3.



Witnesses.

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GARMENT-PRESSING MACHINE.

1,141,902. Specification of Letters Patent. Patented June 1, 1915.

Application filed January 25, 1911. Serial No. 604,626.

To all whom it may concern:

Be it known that I, THEODORE D. PALMER, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Garment-Pressing Machines, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to certain improvements in garment pressing machines somewhat similar to that set forth in my pending application #447,776 filed August 10, 1908, except that in the present case the buck is composed of sections each movable to and from the pressing position, while the head is provided with a corresponding number of non-communicating steam chambers. These machines are used somewhat extensively for pressing newly made garments for clothing manufacturers, such, for example, as overcoats, undercoats, vests, men's trousers and boys' knee pants, as well as skirts and various kinds of ladies' garments, the garments of each class being usually pressed successively in each lot of garments. For example, the operator may be required to operate the machine for some time upon vests until the supply is exhausted and then to change immediately upon overcoats or men's trousers or intermediate sized garments.

The main object, therefore, of my present invention is to enable the machine to be easily and quickly adjusted to operate upon garments of different sizes without excessive waste of steam or extra wear and tear upon such parts of the pressing elements as are not required for use.

Other objects and uses will be brought out in the following description.

In the drawings—Figure 1 is a top plan of a portion of a garment pressing machine showing particularly the form of the press head and buck and also showing the steam supply pipes and part of the supporting frame upon which the movable press head is mounted. Fig. 2 is a front elevation partly in section of a buck and press head showing the steam supply pipes for both of the pressing elements and also showing the supports and operating means for the buck sections. Fig. 3 is a side elevation of one of the supports and operating means for one of the sections of the buck.

As shown in the drawings this machine comprises a vertically movable press head —1— and an underlying buck composed of a series of, in this instance three, separate sections —2— arranged end to end and each adapted to be moved vertically to and from its pressing position by any suitable operating means, such, for example, as a lever —3— and toggle joint —4—, said sections being guided in their vertical movements by telescoping supports —5— and —6— secured respectively to the underside of the sections —2— and to a suitable supporting table —7— indicated by a single line in Fig. 2.

Each operating lever —3— is shown as pivoted at —8— to one side of the corresponding supporting base —6— and is provided with a rigid arm —9— which is pivotally connected to a link —10—, the latter being similarly connected to the underside of the corresponding buck section —2— thereby forming a toggle connection between the lever and buck section.

The pivotal connection of the link —10— with the underside of the corresponding buck section —2— is directly over the fulcrum —8— of the lever —3—, while the pivotal connection between the arm —9— and link —10— is movable to and from a position between and in the same straight line with the first named pivots so as to establish a toggle lock for holding the buck section in its extreme upward or pressing position, the toggles for each of the bucks being substantially identical, thereby assuring the disposition of the upper surface of the buck section in the same horizontal plane when they are adjusted for use.

Each buck section is preferably hollow for forming a steam chamber —11— having an imperforate top —12— covered by a suitable press cloth —22—, each steam chamber being provided with a supply conduit —14— and valved drain pipe —15—, the latter serving to draw off any water of condensation which may accumulate in the chamber. These steam pipes —14— may be connected to any available source of supply, not necessary to herein illustrate and are provided with suitable valves —16— for controlling the entrance of steam to their respective chambers, the object being to keep the buck

sections hot ready for use at any time and also to expedite the drying of the garment after being subjected to steam and mechanical pressure.

The head —1— is movable vertically to and from the buck and for this purpose is provided with rearwardly projecting arms —17—, which are pivotally connected to a suitable supporting frame —18— some distance to the rear of the pressing elements so as to allow ample room for spreading out the garments upon the buck. This head is preferably hollow and provided with a series of, in this instance three, non-communicating steam compartments or chambers —19— corresponding in number and position to the buck sections —2—, said compartments being divided one from the other by transverse partitions —20— located directly over the lines of division between the buck sections so that the form and area of each compartment —19— is substantially the same as the upper surface of its corresponding buck section with which it is adapted to coöperate in pressing garments.

Each chamber or compartment —19— is provided with a perforated bottom plate —21—covered by a press cloth —22— for distributing the steam more evenly over the surface of the garment while under pressure, these bottom plates being preferably continuous across the entire lower surface of the press head.

Each chamber is provided with a steam supply pipe —22ª— having a self-closing valve —23— adapted to be opened by a hand lever —24— within easy reaching distance of the operator, said supply pipes preferably merging into a single conduit —25— which may be connected to any available source of steam supply not shown.

The steam entering each chamber encounters a baffle plate —26— which is arranged across the inner end of the inlet within the chamber —19— and serves to distribute the steam more evenly throughout said chamber.

In Fig. 2 I have shown the buck section at the right as depressed or lowered from its pressing position leaving the other two sections in position for pressing medium sized garments but it is evident that either of the latter sections may be lowered and only one section used if desired or all three sections may be elevated to the same plane for use in pressing overcoats, trousers and large garments, the single sections being used for pressing vests, knee trousers and similar small articles.

By dividing the head —1— into a series of non-communicating steam compartments, each adapted to coact with one of the buck sections, it is evident that any one or more of these buck sections may be used in connection with the corresponding compartment for subjecting sueh garment to steam and mechanical pressure irrespective of the other sections and their corresponding compartments. That is, when one buck section alone is used in connection with the head, the others may be lowered to the position shown at the right of Fig. 2 by simply raising the lever —3—, whereupon the head may be brought down to its pressing position upon the garment and corresponding valve —23— opened by means of the lever —24— to admit steam thereto while under pressure, leaving the remaining compartments free from steam pressure and thereby not only economizing in steam but also avoiding the escape of such steam into the room in which the machine is located and also preventing excessive wear and tear upon such parts of the machine as are not in actual use.

I preferably employ steam under high pressure which is more rarefied and drier than low pressure steam, thereby avoiding excessive moistening of the garment and permitting such garment to dry quicker than would be the case if low pressure steam were used.

Any suitable means, not necessary to herein illustrate or describe, may be employed for raising and lowering the press head —1— and for this purpose I have shown the press head as provided with a hand piece —26— by which it may be manipulated.

What I claim is:

1. A garment pressing machine comprising two pressing elements, one of which is composed of chambered sections, each movable independently toward and from the other element, said elements being fixed against relative lateral movement.

2. In a garment pressing machine, a vertically movable press head having separate chambers, and a buck composed of sections, one for each of said chambers, each section being movable to and from the head.

3. A garment pressing machine comprising two pressing elements, one of such elements being composed of sections, each movable independently of and toward and from the other element, said other element having non-communicating steam chambers each coacting with one of said sections.

4. In a garment pressing machine, a buck and a swinging press head, one of such parts being composed of sections, one of which sections is movable toward and from the other part independently of another section.

5. In a garment pressing machine, a buck and a press head, one of such parts being composed of chambered sections arranged end to end, one of the sections being adjustable relatively to another section toward and from the other part, and means for locking the adjustable section in its pressing position.

6. In a garment pressing machine, coacting pressing elements, each having a plu-

rality of non-communicating steam chambers, each provided with a steam inlet pipe having a valve for controlling the passage of steam to the corresponding chamber, the chambers of one element being movable separately into pressing co-action with corresponding chambers of the other element.

In witness whereof I have hereunto set my hand on this 19th day of January 1911.

THEODORE D. PALMER.

Witnesses:
H. E. CHASE,
E. F. SPEARING.