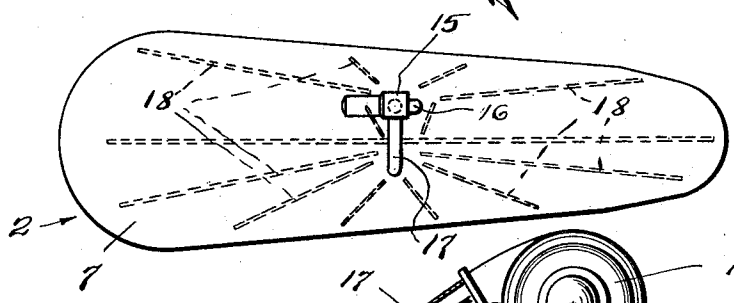
Sept. 6, 1932. E. DAVIS 1,876,277

AIR CIRCULATING MEANS FOR PRESSING MACHINES

Original Filed Nov. 17, 1928

Fig. 3.



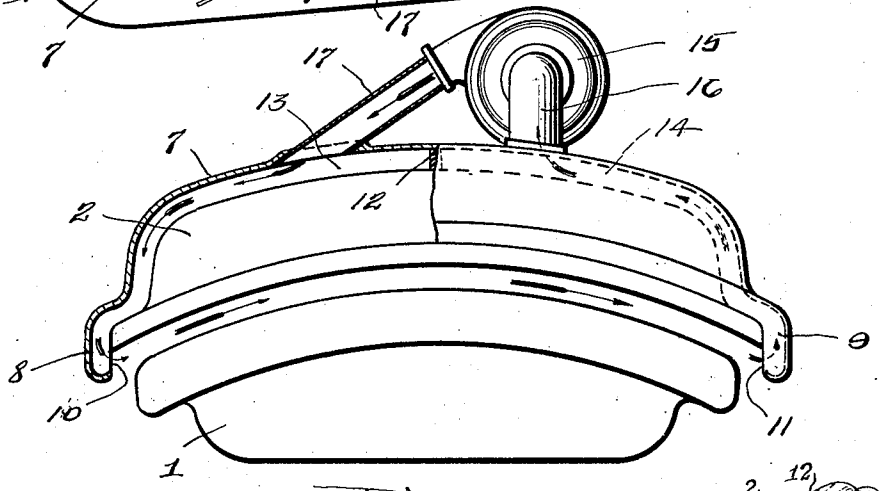


Fig. 2.

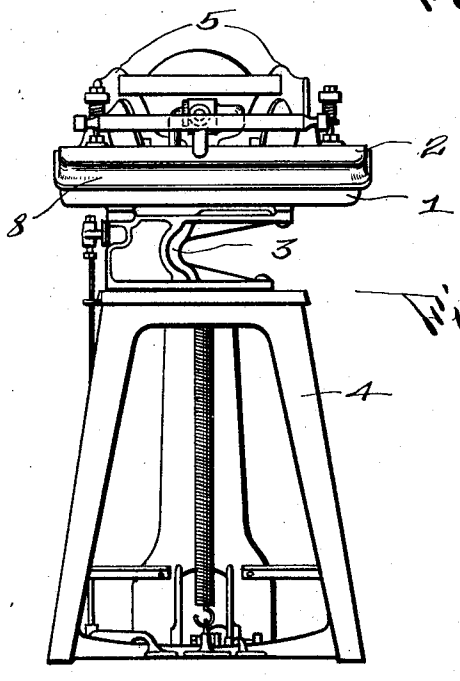


Fig. 1.

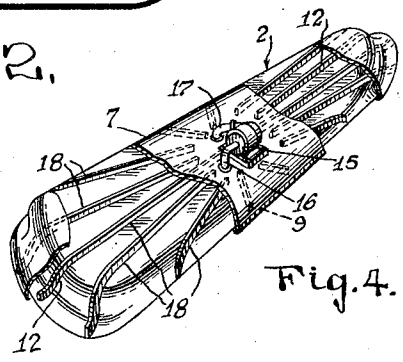


Fig. 4.

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UNITED STATES PATENT OFFICE

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AIR CIRCULATING MEANS FOR PRESSING MACHINES

Application filed November 17, 1928, Serial No. 320,146. Renewed August 6, 1931.

This invention relates to pressing machines as garment and laundry pressing machines, and has for its object means for blowing a fluid, preferably air, across the pressing face of said elements, particularly when they are slightly separated in order to remove steam and vapor evaporating from the garment or article being pressed and to dry the garment, which means is particularly simple and economical in construction and readily applied to a pressing machine.

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

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

Figure 1 is a front elevation, parts being omitted, of a pressing machine embodying my invention.

Figure 2 is an enlarged end elevation of the cooperating pressing elements, one being shown partly in section.

Figure 3 is a plan view of one of the pressing elements.

Fig. 4 is a perspective view of the head, the jacket being partially broken away.

This pressing machine comprises, generally, cooperating pressing elements having relative movement one toward and from the other, one of said elements having means for passing a current of air across the pressing face thereof and hence across the pressing face of the other element when the elements are close together by blowing crosswise of said elements from one lengthwise edge and sucking the air from the opposite lengthwise edge.

I have here shown my invention as embodied in the conventional type of pressing machine in which the cooperating pressing elements are a stationary buck 1 and a pressing head 2 movable toward and from the buck 1.

The buck is mounted on a suitable bracket or goose neck 3 which in turn is mounted on a frame 4 and the head is carried by a suitable support as the usual yoke lever 5, this yoke lever being actuated in any well known manner to move the head toward and from the buck.

The means, forming the subject matter of this invention, to blow the air across the pressing face of the head and buck or across the article on the buck by blowing from one margin and sucking from the opposite margin, is here shown as associated with the head 2. The means here shown comprises a jacket 7 covering the upper and side surfaces of the head or arranged in juxtaposition thereto to receive heat from the head, it being understood that the head is usually formed hollow and heated by steam or any other suitable heating medium, the jacket being formed with conduits or channels 8, 9 extending along and overhanging opposite edges of the head. The channel 8 has outlet openings or slots 10 arranged to project a current of air crosswise of the pressing face of the head, and the channel 9 has inlet openings 11 similarly located in order to withdraw the air and the vapor or steam carried thereby. The jacket 7 is divided by a partition 12 to form the chambers 13 and 14.

The air is circulated by any suitable device as by a blower 15 having its intake 16 opening into the chamber 14 and its outlet 17 opening into the chamber 13.

The head is formed with suitable radially extending distributing plates 18 within the jacket 7 for the purpose of distributing the air currents and obtaining substantially uniform flow throughout the entire length of the discharge and suction slots 10 and 11.

During the operation of the machine, the blower is running constantly although suitable means may be provided for running it when desired or for running it only when the head is close to the buck.

In operation, as the head approaches the buck, the current of air projected across the face of the head or between the head and the buck carries away any moisture or steam evaporating from the garment or other article on the buck and is drawn through the inlets 11 into the channel 9 and chamber 14. Owing to the heat of the head, the moisture laden air is dried and again recirculated. As the press again opens up, after the pressing

operation, the current of air again drives off any vapor emanating from the garment on the buck. Obviously some of the air which is discharged through the slots 10 will escape and will not be drawn in through the slots 11 at the other side of the head. The slots 11 will therefore draw in a certain percentage of unheated air. The temperature of the air entering through the slots 11 is therefore materially lower than that of the air discharged through the slots 10. As the air passes over the heated head the temperature will rise and the relative humidity will be materially reduced so that when the air is discharged from the slots 10 it will be capable of absorbing moisture and drying the garment, or other work, which may be placed between the pressing elements.

What I claim is:

1. A pressing machine comprising cooperating pressing elements having relative movement one toward and from the other, one of said elements being heated and formed with chambers arranged in juxtaposition thereto to receive heat therefrom, one chamber being formed with discharge openings at one margin of the pressing element and arranged to discharge across the pressing face thereof and a second chamber being formed with inlet openings along the opposite margin, and a circulating device having an outlet connected to one chamber and an inlet connected to the second chamber.

2. A pressing machine comprising cooperating pressing elements having relative movement one toward and from the other, one of said elements being heated and formed with a jacket divided into two chambers, one of said chambers having discharge openings along one margin of said element and directed across the pressing face thereof, the other chamber having intake passages similarly located along the opposite edge of the pressing element and a circulating device having an outlet opening into the chamber having the discharge passages and an inlet communicating with the chamber having the inlet passages.

3. A pressing machine comprising cooperating pressing elements having relative movement one toward and from the other, one of said elements being formed with a heating chamber and having a jacket having discharge openings along the margin at one edge of said element and directed across the pressing face of said element and intake passages similarly located along the opposite edge of said element and means for blowing the air through the jacket and the discharge passages and for withdrawing the air by suction through the inlet passages and the jacket.

4. A pressing machine comprising cooperating pressing elements, one of which is movable toward and from the other, one of said elements being divided into two adjacent compartments, one compartment containing a heating medium, the other compartment being divided into two chambers, one chamber having openings along one edge of the pressing element, and the other chamber having openings along the opposite edge of the pressing element, a circulating device mounted upon said pressing element and having its suction end connected to one chamber, and its discharge end to the other chamber, each of said chambers having distributing plates extending from the connections of the circulating device toward the openings along the edge of the pressing element.

5. In a garment pressing machine cooperative pressing elements having relative movement one toward and from the other, one of said elements being formed with a heating chamber and having a jacket and a discharge conduit for directing air discharged from the jacket across the pressing face and across a garment or other article adjacent thereto; and means for supplying air to the jacket and causing air to discharge therefrom.

In testimony whereof, I have hereunto signed my name, at Syracuse, in the county of Onondaga, and in the State of New York, this 14th day of November, 1928.

ERNEST DAVIS.