H. I. FRANKEL AND H. M. DUSTIN.

VALVE FOR IRONS.

APPLICATION FILED MAR. 10, 1920.

1,432,682. Patented Oct. 17, 1922.

Fig. 1.

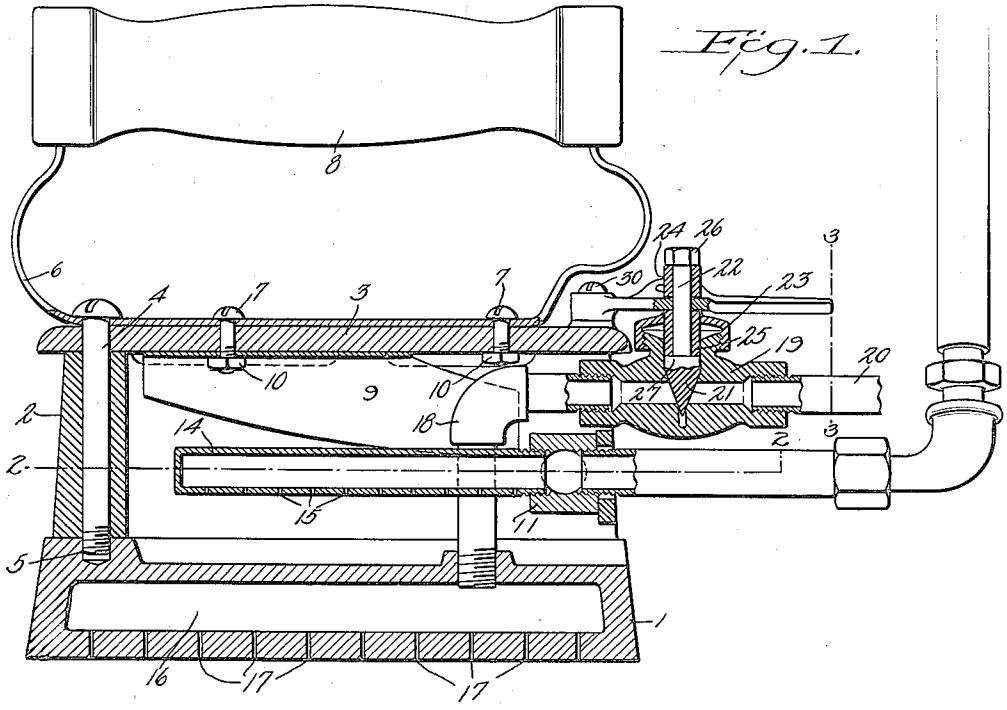


Fig. 2.

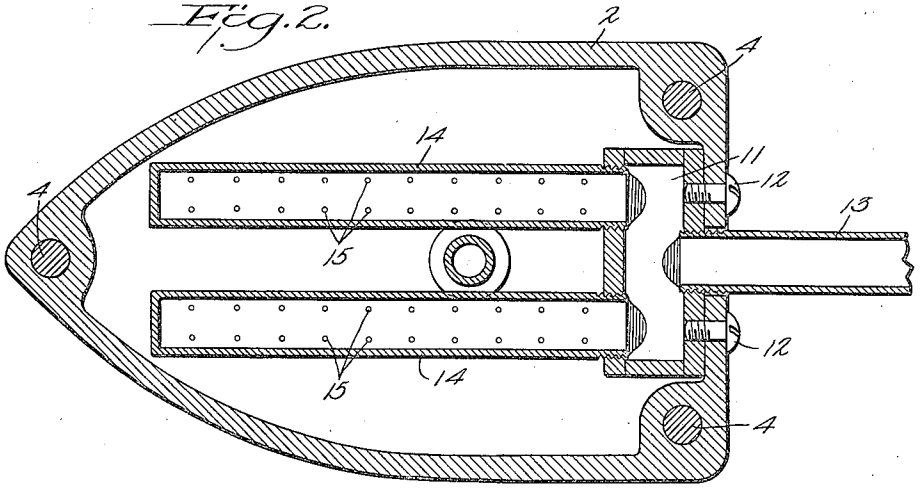


Fig. 3.

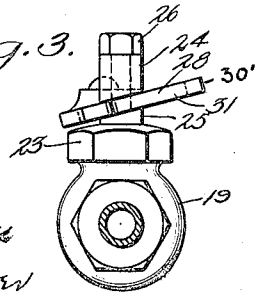
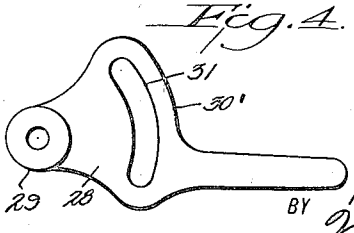


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

HARRY I. FRANKEL, OF NEW YORK, AND HAROLD M. DUSTIN, OF BROOKLYN, NEW YORK.

VALVE FOR IRONS.

Application filed March 10, 1920. Serial No. 364,633.

To all whom it may concern:

Be it known that we, HARRY I. FRANKEL and HAROLD M. DUSTIN, both citizens of the United States, and residents, respectively, of the city of New York, borough of Manhattan, in the county of New York, and borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Valve for Irons, of which the following is a full, clear, and exact description.

This invention relates to improvements in irons, and more particularly to valve mechanism for a gas heated steam iron, an object of the invention being to provide in the base of the iron a steam chamber with steam orifices in the bottom face of the iron so that the steam can be directed onto the cloth or other goods during the ironing operation to moisten the goods and prevent the necessity of previously sprinkling the goods, and provide improved valve mechanism for controlling the flow of steam to the iron.

A further object is to provide an iron of the character stated in which the supply of steam can be easily, quickly, and positively regulated so as to discharge the proper quantity of steam in accordance with the material being ironed, and provide an improved construction and arrangement of parts whereby the iron is heated to the desired degree.

With these and other objects in view the invention consists in certain novel features of construction, and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings—

Figure 1 is a view in vertical longitudinal section through the center of the iron showing attached portions partly in section and partly in elevation;

Figure 2 is a view in horizontal section on the line 2—2 of Figure 1;

Figure 3 is a view in section on the line 3—3 of Figure 1; and

Figure 4 is a plan view of the steam valve operating lever.

Our improved iron comprises three main parts; namely, a base 1, a hollow body 2 located on the base, and a top plate 3 located on the hollow body, all of said parts secured together by screws 4 which are projected through the top plate 3, through the body 2, and are screwed into threaded sockets 5 in the base 1.

A handle bail 6 is secured by bolts 7 to the top plate 3 and supports a handle 8 above the iron, and a deflector 9 is secured to the under face of the top plate 3 by means of the bolts 7 and the nuts 10 thereon to deflect the flame and heat downwardly against the base 1. A distributing box 11 is secured in the end of the iron by screws 12 and a gas supply pipe 13 communicates with this box 11. A pair of burner tubes 14 are located in the hollow body 2 and communicate with the box 11 and are provided in their lower faces with burner orifices 15 to direct the flame downwardly against the base 1.

The base 1 is hollow forming a steam chamber 16 and the lower wall of the chamber constituting the bottom of the iron is provided with orifices 17 through which the steam is directed downwardly upon the goods being ironed. Steam is supplied to the chamber 16 by means of an elbow pipe 18 which communicates at its inlet end with a steam valve casing 19, the latter connected by a pipe 20 with the source of steam supply.

It is, of course, to be understood that the steam and gas supply pipes will have a certain flexible connection with their sources of supply to permit a free manipulation of the iron in use.

The valve casing 19 is provided with a conical vertically movable valve 21 having a stem 22 projecting upwardly through a removable cap 23 on the upper end of the casing 19. A pair of spacing sleeves 24 and 25 are provided around the stem 22 and a nut or head 26 is located on the upper end of the stem 22 and bears against the upper sleeve 24 and the lower sleeve 25 engages a shoulder 27 on the valve 21. A valve operating lever 28 is provided with a bearing 29 receiving a pivot screw or other securing device 30 connecting the same to the top 3 of the iron. This lever 28 is made with an integral laterally projecting cam plate 30′ having a slot 31 therein receiving the valve stem 22, the cam plate 30′ being located between the spacing sleeves 24 and 25, and said spacing sleeves having bevelled or cam faces of the same angle as the cam plate 30′ and engaged by the cam plate 30′ when the latter is swung laterally to positively move the

valve stem in either direction. This lever 28 facilitates the opening and closing of the valve and permits the valve to be opened to any desired extent and positively held at such position of adjustment, and as occasion may require, the lever 28 can be swung to the right and left by the operator as he moves the iron from one kind of goods to another. This is particularly desirable in ironing dresses or other articles of clothing made up of different materials, some materials requiring considerably more moisture than others during the ironing or pressing operation.

Various slight changes might be made in the general form and arrangement of parts described without departing from the invention, and hence we do not limit ourselves to the precise details set forth, but consider ourselves at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

We claim:

1. A valve mechanism for irons of the character stated, comprising a valve casing, a valve in said casing, a stem on the valve projecting out of the casing, a pivoted lever having a laterally projecting slotted cam plate receiving the stem of the valve, and spacing sleeves on said valve stem above and below the cam plate.

2. A valve mechanism for irons of the character stated, comprising a valve casing, a valve in said casing, a stem on the valve projecting out of the casing, a pivoted lever having a laterally projecting slotted cam plate receiving the stem of the valve, and spacing sleeves on said valve stem above and below the cam plate, said spacing sleeves having bevelled or cam faces conforming to the angular disposition of the cam plate.

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