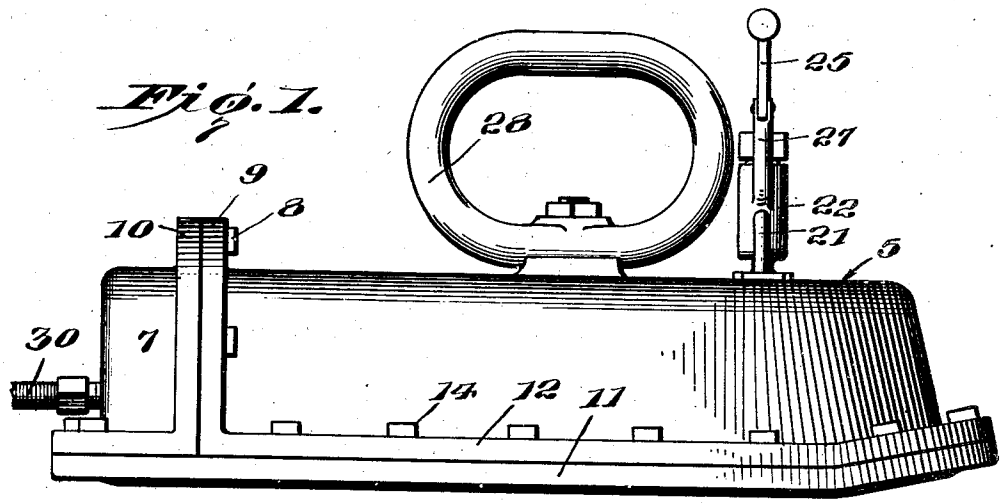
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A. GRAF

STEAM HEATED IRON

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Fig. 1.



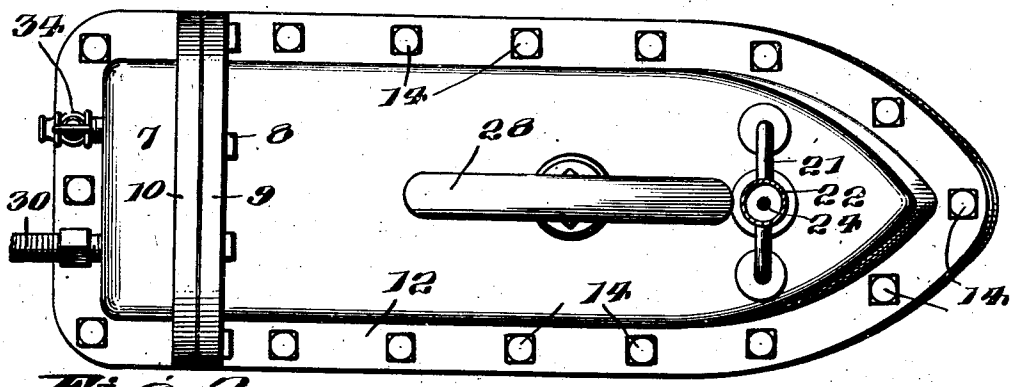


Fig. 2.

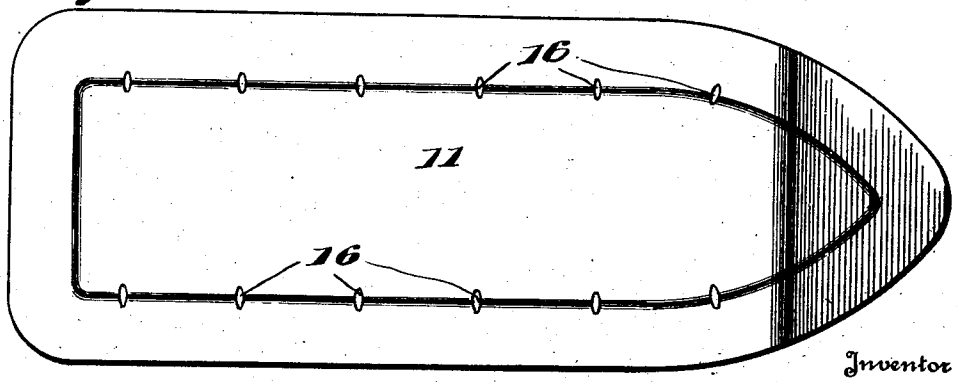


Fig. 3.

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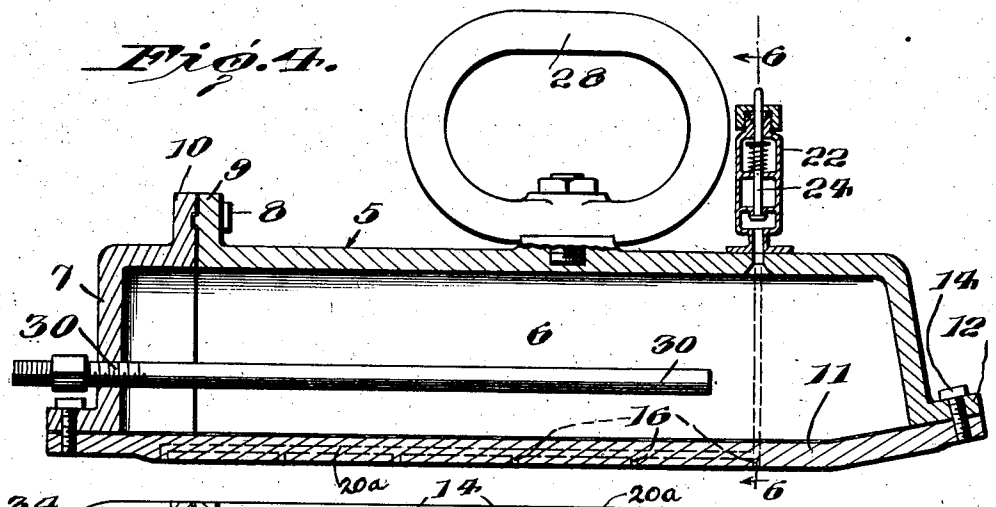
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STEAM HEATED IRON

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Fig. 4.



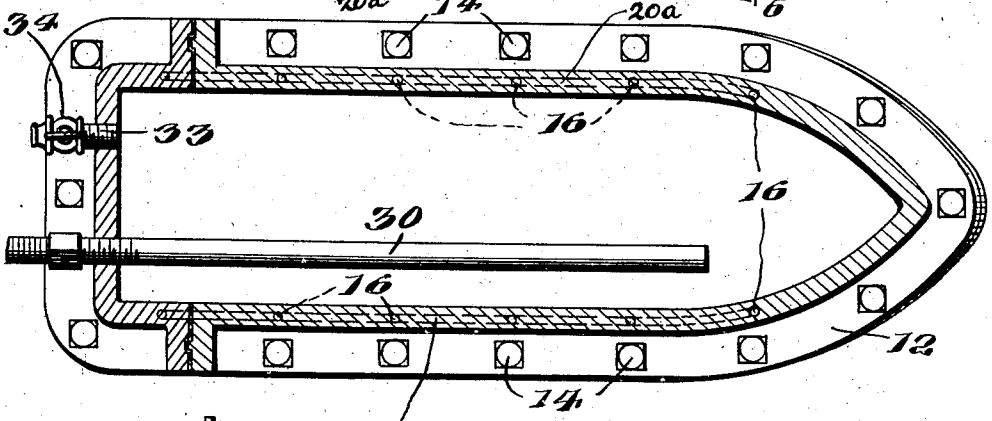


Fig. 5.

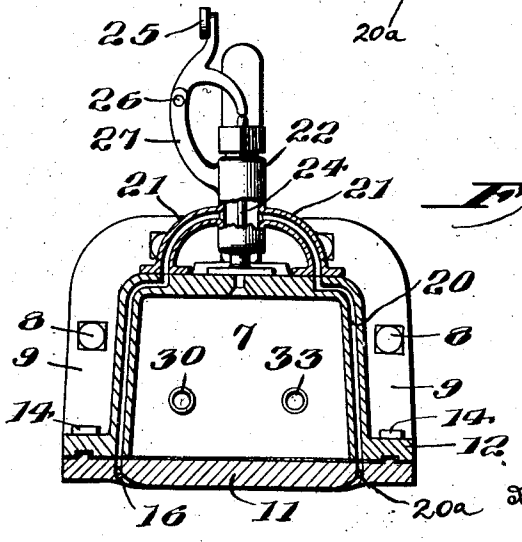


Fig. 6.

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UNITED STATES PATENT OFFICE.

ADOLPH GRAF, OF CHICAGO, ILLINOIS.

STEAM-HEATED IRON.

Application filed January 11, 1924. Serial No. 685,655.

This invention relates to steam heated irons especially adapted for pressing fabrics.

In all steam heated irons of which I am aware the steam is discharged into direct contact with the fabric at right angles thereto and forms holes in the fabric which must be closed with care when the job is finished and the steam jets of the iron extend in a row midway of the longitudinal edges of the iron so that only a limited area is covered.

It is therefore an important aim of this invention to provide a steam iron wherein the steam is discharged at an acute angle to the surface of the fabric and therefore prevents damage to the fabric and more thoroughly steams the same.

A further object of the invention is to provide an iron of the character described wherein the steam jets are located in rows adjacent the longitudinal edges of the base of the iron so as to cover a relatively wide area and bring about the thorough and efficient steaming of the fabric.

A further object is to provide an iron of the character specified which is simple and safe in operation and which may be economically manufactured.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings forming a part of this application and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a side elevation of the improved iron.

Figure 2 is a plan view of the same.

Figure 3 is a bottom plan view of the iron.

Figure 4 is a vertical longitudinal sectional view through the iron.

Figure 5 is a horizontal sectional view through the iron.

Figure 6 is a vertical transverse sectional view through the iron, the view being taken on line 6—6 of Figure 4.

In the drawing wherein for the purpose of illustration is shown a preferred embodiment of the invention, the numeral 5 designates a metallic body hollowed as illustrated in Figure 4 to define a chamber 6 adapted for the reception of steam by means of which the iron is heated.

In carrying out the invention the rear end portion or back 7 of the body is cast separately from the major portion of the body and is secured thereto by means of fastening bolts 8 which extend through flanges 9 and 10. The flanges 9 and 10 have a steam tight connection with each other by the tongue and groove connection illustrated and a suitable gasket so as to positively prevent leakage of steam at this point.

The bottom or base 11 is secured to the body of the iron and more particularly to a laterally projecting flange of the body by means of fastening devices 14 preferably in the nature of cap screws. Figure 1 and Figure 6 illustrate that the edge portions of the base are offset slightly and at the inner portions of the offsets the base is provided with a plurality of spaced steam nozzles or jets 16, the terminal portions of which are directed inwardly toward the longitudinal center of the iron.

By providing two spaced rows of steam discharge jets and disposing the same at an obtuse angle the steam is presented to the material in such a manner that it will not form holes in the material or otherwise damage the same.

By dividing the steam into two rows when it was formerly supplied to the material in one the force of the jets is very much diminished while the volume and effect are slightly augmented due to the fact that the outlets of the nozzles are greater in area than the cross sectional area of the nozzles intermediate the ends thereof. Also, by providing the steam outlets at opposite sides of the iron, the area covered by the steam is substantially increased and the operator may therefore substantially increase production.

The steam is supplied to the several nozzles 16 by way of ducts or channels 20 in the side walls of the iron opening into longitudinal ducts or channels 20^a in the bottom 11 with which the nozzles 16 communicate, the upper portions of the ducts 20 having communication with curved branches 21 of a valve casing 22.

Figures 4 and 6 illustrate that a valve 24 within the casing 22 controls the flow of steam from the chamber 6 to the branches 21 of the valve casing. The valve stem may be operated by the manual depression of a lever 25 pivoted as indicated at 26 to a bracket 27 to unseat the valve 24 and thus permit steam to flow upwardly from the chamber 6 into the branches 21. When the lever 25 is released the valve 24 will be re-

turned to its seat to cut off the flow of steam by means of a coil spring having connection with the stem.

The lever 25 is preferably located adjacent the handle 28 and is under complete control of the operator at all times so that the quantity of steam supplied to the material may be accurately regulated.

Steam may be supplied to the chamber 6 by a supply member 30 and the exhaust of the steam is by way of an outlet member 33 which may be provided with a valve 34.

With reference to the foregoing description taken in connection with the accompanying drawing it will be seen that the material operated on by the iron is thoroughly steamed with a minimum discharge of steam and that the operator may steam a comparatively large quantity of material due to the fact that the spaced rows of steam outlets cover a wide area.

Furthermore, the fact that the steam outlets 16 discharge the steam at an acute angle to the material prevents damage to the material as the steam will not be directed through the material for forming a series of small holes in the same. The steam strikes the material at an angle other than a right angle and consequently cannot damage the material.

I claim:—

1. A steam iron comprising a hollow body having laterally projecting flanges on opposite sides thereof, a base having a steam tight connection with said flanges, said body and said base being provided with communicating steam passages, the passages in said base having their outlet portions extended at an acute angle to the material operated on, and means for supplying steam to said body.

2. A steam iron comprising a steam containing body, and a base connected to the body and having a plurality of rows of inwardly inclined steam outlets adapted to direct the steam inwardly toward the longitudinal center of the body.

3. A steam iron comprising a body having side walls provided with laterally projecting flanges, a base connected to said flanges, said side walls and said base being provided with communicating steam passages, the terminal portions of the steam passages in the base being directed inwardly toward the longitudinal center of the base and being enlarged in cross sectional area.

4. A steam iron comprising a body having side walls provided with laterally projecting flanges, a base connected to said flanges, said side walls and said base being provided with communicating steam passages, the terminal portions of the steam passages in the base being directed inwardly toward the longitudinal center of the base, means to supply steam to the interior of said body, and a valve controlling communication between said passages and said interior of the body.

In testimony whereof I affix my signature.

ADOLPH GRAF.