N. CROTSENBURG.

Flat-Iron Heater.

No. 208,075. Patented Sept. 17, 1878.

Fig. 1.

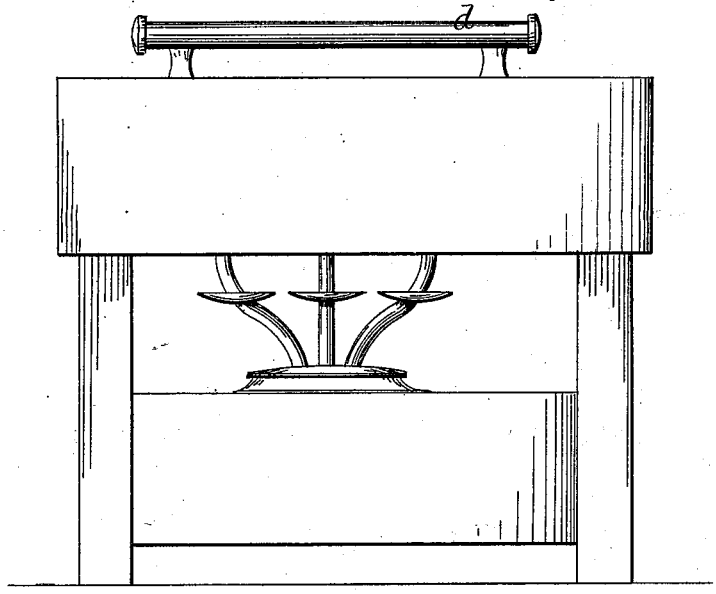


Fig. 2.

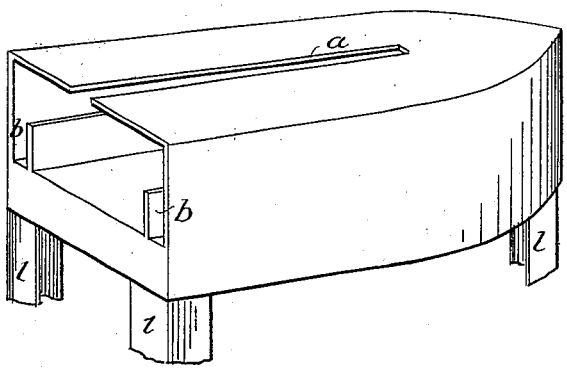
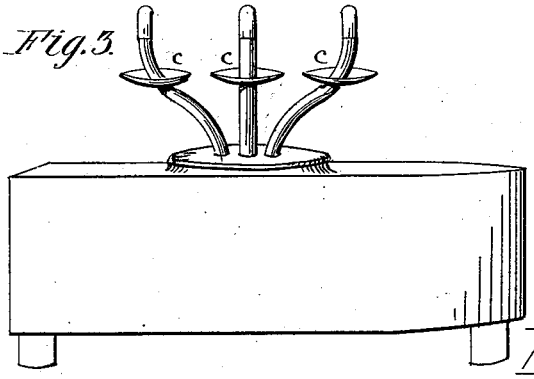


Fig. 3.



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UNITED STATES PATENT OFFICE.

NICHOLAS CROTSENBURG, OF JANESVILLE, WISCONSIN.

IMPROVEMENT IN FLAT-IRON HEATERS.

Specification forming part of Letters Patent No. **208,075**, dated September 17, 1878; application filed March 19, 1878.

To all whom it may concern:

Be it known that I, NICHOLAS CROTSENBURG, of the city of Janesville, in the county of Rock and State of Wisconsin, have invented a new and useful Improvement in Flat-Iron Heaters, for domestic and laundry use, which improvement is fully set forth in the following specification and accompanying drawing.

Figure 1 is a side view of a flat-iron heater set up for use with my improvement attached and the flat-iron *d* in place for heating.

Fig. 2 is a perspective view of the receiver or holder of the flat-iron while being heated, showing a slot, *a*, to receive the handle, and also showing on each side of the open end a flue or opening for draft. (Marked *b*.) This extends around the floor of the receiver, except at the open end, and is made by turning up the sides of the thin metal plate constituting the floor one-half to three-fourths of an inch in height, and leaving said flue for draft in width of opening one-fourth of an inch or more, depending on the size of the heater and number and size and burning capacity of the lamp-burners used. The receiver is constructed with three legs, as seen in Fig. 2, (marked *l l l*,) two at the open end and one at the acute angle. The legs are made of sheet-iron or other suitable metal, and are open on the inner sides, made at such angles as will form notches to easily receive the corners of the lamp, Fig. 3, and hold it in place under the receiver or holder.

Fig. 3 is the lamp, showing jet-burners with oval upward reflectors *c c c* on the burners. These reflectors serve the purpose of throwing off the rays of heat from the lamp and keeping it cool, and at the same time increase the heat at the floor on which the flat-iron stands. One reflector may be used, following the shape of the lamp and turned up at the sides, with curvature proper to concentrate the reflected rays of heat on the under side of the floor of the heater or holder.

My single reflector is made the full size of the floor or bottom of the flat-iron holder or receiver. The concave side of the reflector is turned upward toward the lower side of the said floor or bottom, and the stem of the burner or burners passed through the reflector, so that all descending rays of light and caloric are gathered up and thrown up against the under side of said floor of the receiver, and with the naturally ascending rays concentrated there, as in a common focus, greatly increasing the heating power applied to the bottom of the floor, and then passing around through the open flue to the upper side of the flat-iron. Thus all, or nearly all, the heating-power of the combustion is concentrated upon the flat-iron, and the lamp so protected as to remain entirely unaffected by the combustion, and cool as the surrounding atmosphere of the room.

The lamp will burn petroleum fluid, kerosene, gasoline, or benzine; or gas may be used; but petroleum fluid is preferred.

When the device is set up for use the flat-iron is placed in the heater through the open end, with the handle *d* projecting upward through the slot *a*. (Shown in Fig. 1.) One heater with the use of two flat-irons will heat the flat-irons as fast as any one person can use them. One should be placed in immediately on taking the other out. These heaters may be made double, to heat more than one iron at a time; but they will be found best in use single, so constructed in size as to leave as little space around the flat-iron as may be.

I am aware that flat plates have been used below the burners to shield the reservoirs; but such plates deflect the heat-rays sidewise, and do not concentrate them on the iron-holder above.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A flat-iron heater provided with a receptacle for the body of the iron, a lamp or burner below said receptacle, and side flues *b b*, forming communications between the receptacle and the place below, substantially as set forth.

NICHOLAS CROTSENBURG.

Witnesses:

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