

No. 820,096.

PATENTED MAY 8, 1906.

A. VON CHIGOR.
HEATER.

APPLICATION FILED FEB. 19, 1904.

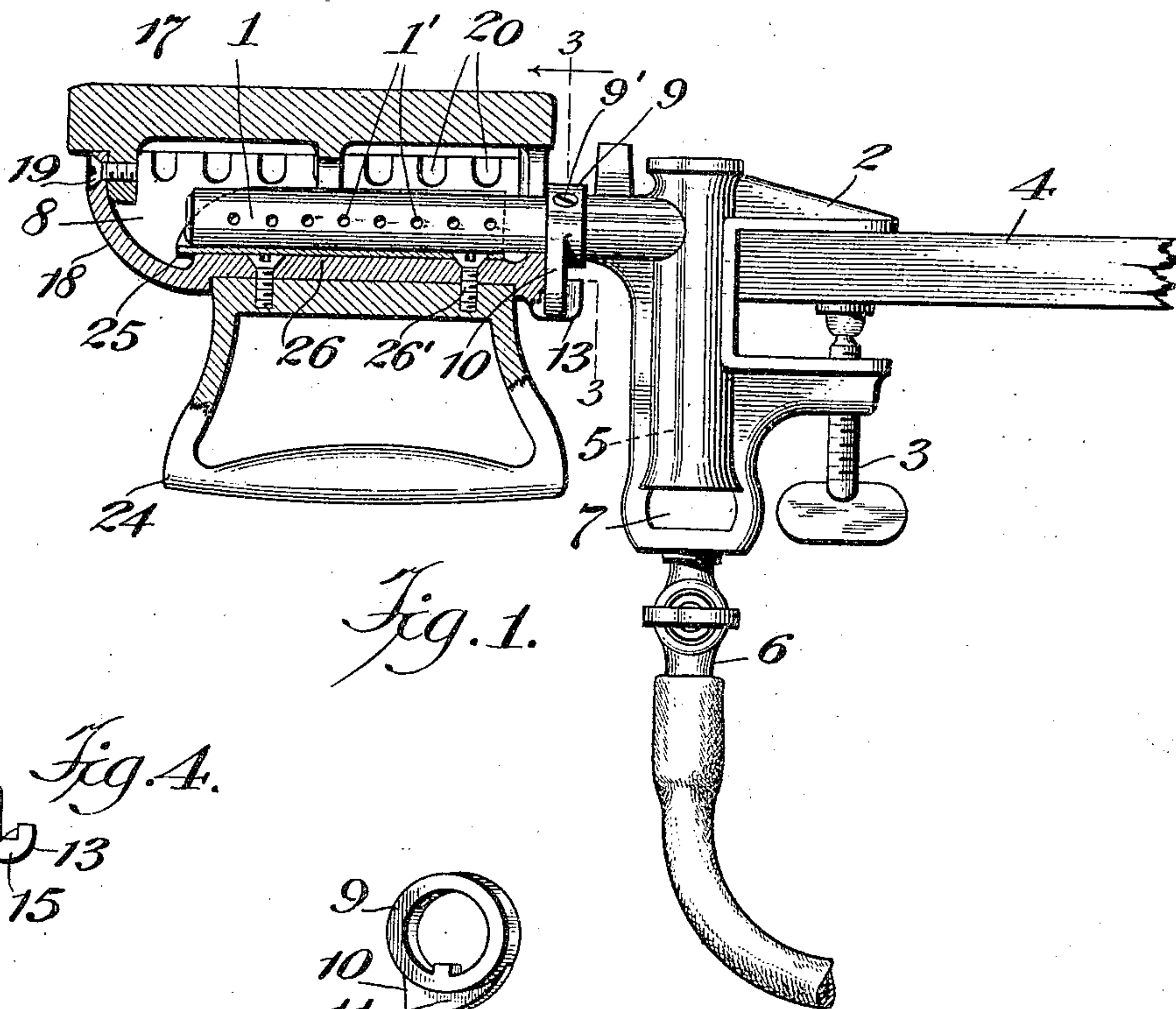


Fig. 1.

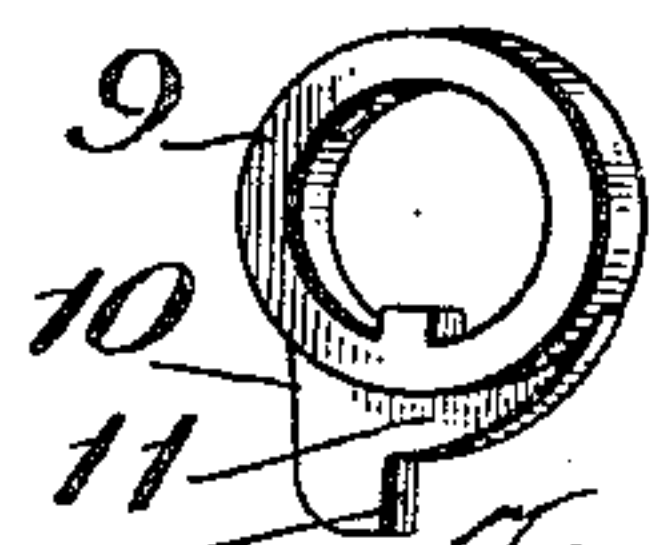
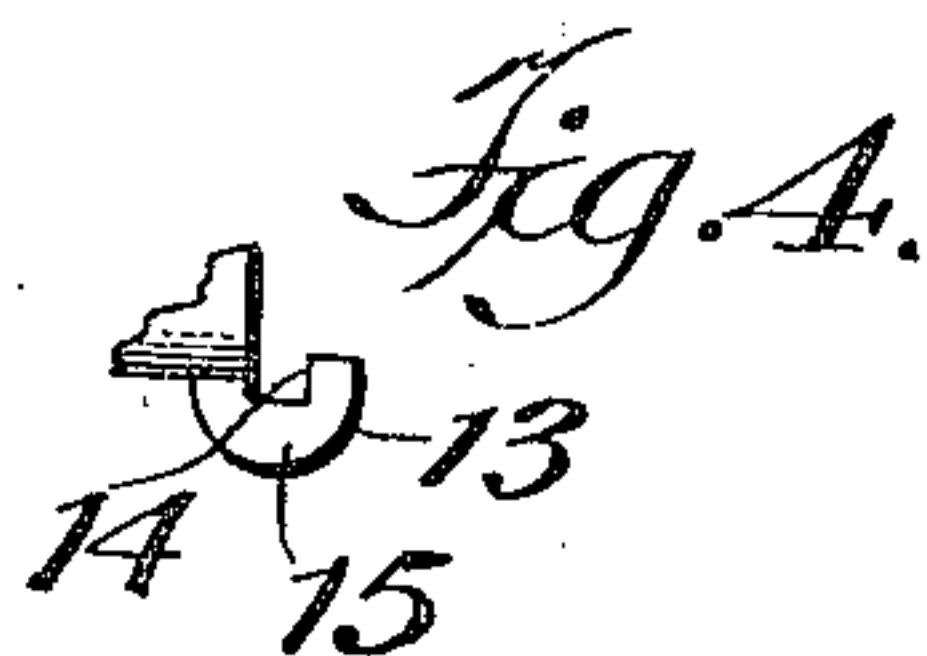


Fig. 5.

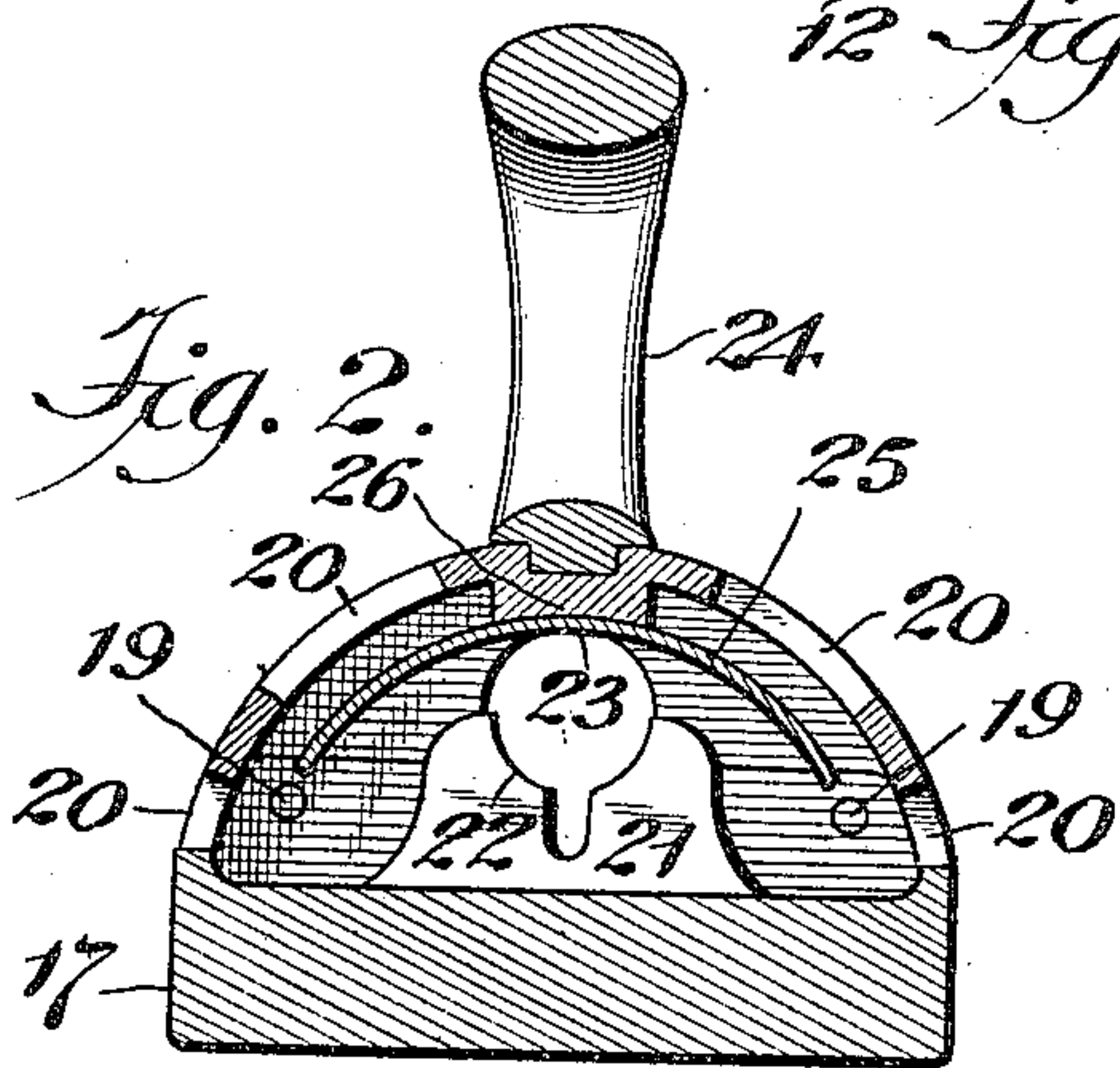


Fig. 2.

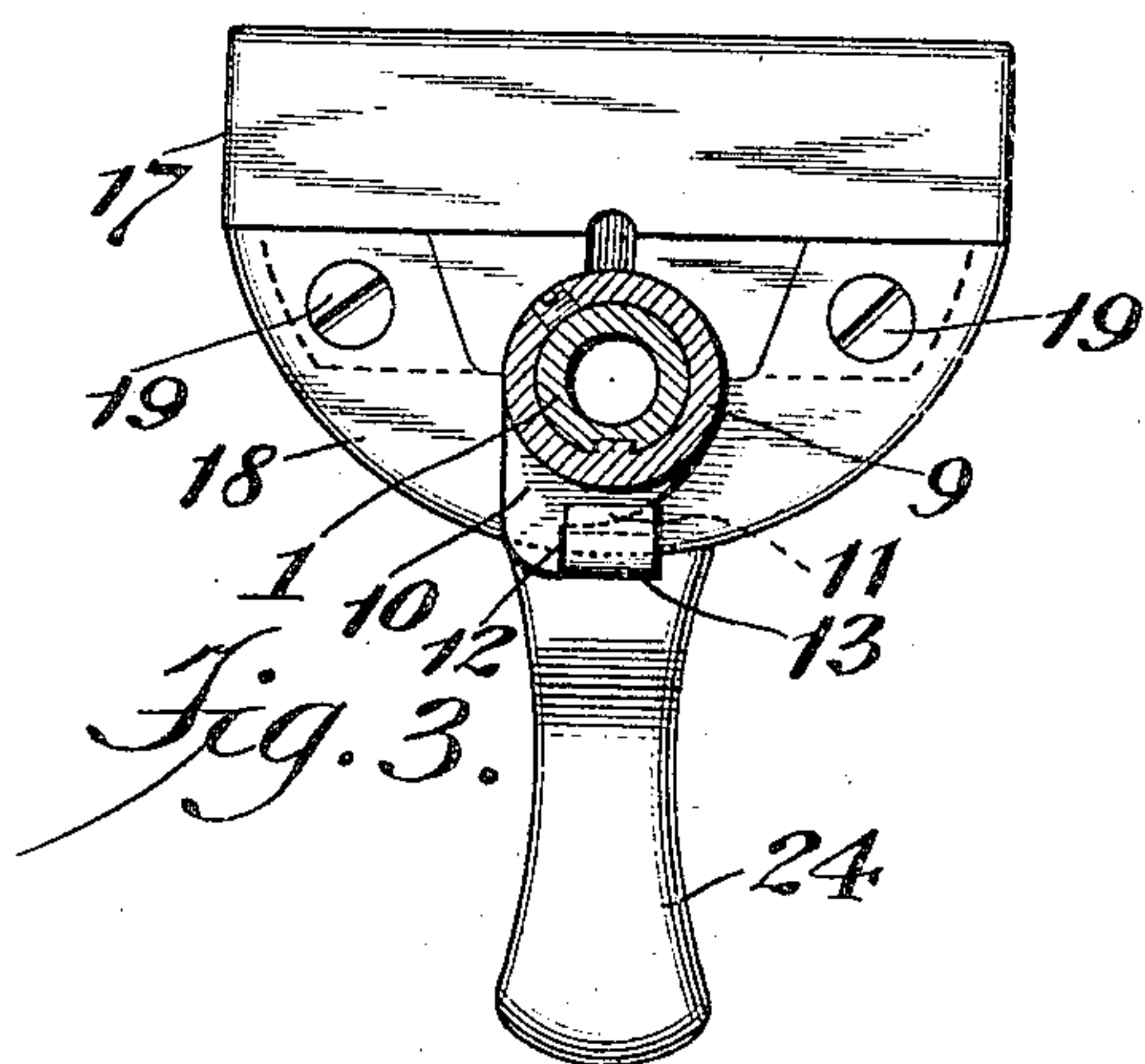


Fig. 3.

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UNITED STATES PATENT OFFICE.

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HEATER.

No. 820,096.

Specification of Letters Patent.

Patented May 8, 1906.

Application filed February 19, 1904. Serial No. 194,346.

To all whom it may concern:

Be it known that I, AMALIE VON CHIGOR, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Heaters, of which the following is a specification.

This invention relates to improvements in heaters, and particularly to that class of heaters adapted for heating sad-irons, a type of which is shown in Letters Patent Nos. 663,062 and 753,042, dated, respectively, December 4, 1900, and February 23, 1904, and comprises a suitable supporting-bracket carrying a Bunsen-burner tube upon which the sad-iron to be heated is adapted to be placed, means also being provided for so locking the sad-iron on the burner as to prevent its improper movement or accidental dislodgment.

In the operation of locating the sad-iron upon the burner-tube in position to be heated the operator usually slides the iron in its normal or upright position onto the burner and then turns it upside down thereon, so as to present the base of the iron (or the iron proper) to the flame of the burner. After the iron has been located it will be held against accidental movement or dislodgment from such position until such time as the operator desires to remove it from the burner. The means disclosed in my said Patent No. 663,062 for so retaining the iron in position on the burner comprises an arm projecting from one side of the supporting-bracket and having a hooked end for engagement with the handle of the iron. Such arm properly performs the function for which it is intended; but being fixed with relation to the bracket and the burner it will only engage and cooperate with irons of one standard size. It has therefore been one of the main objects of my present invention to provide a locking means for the purpose referred to that will operate equally well for irons of different sizes.

The sad-irons used in connection with the class of heaters referred to comprise a body portion having a longitudinal opening therein to receive the burner-tube and also having a series of air-inlet openings in its upper wall communicating with the said longitudinal opening therein, which opening constitutes a combustion-chamber. These air-inlets, however, in the event of the gas or fuel supply not being closed off prior to the removal of

the iron from the burner, permit of the escape therethrough of the flame during the removal of the iron and so cause liability of the operator's hand being burned, and it has therefore been a further object of my present invention to so construct or equip the iron as to prevent possibility of such occurrence.

Referring to the accompanying drawings, forming part of this specification, Figure 1 is a sectional side elevation of a heater and sad-iron embodying my invention, the heater being attached to one edge of a table or bench. Fig. 2 is an enlarged central cross-section of the sad-iron removed from the heater. Fig. 3 is a section through line 3 3 of Fig. 1, and Figs. 4 and 5 are detail views to be hereinafter referred to.

Similar reference characters designate like parts in the several figures of the drawings.

The heater herein shown as embodying my present improvements is substantially the same in certain of its main features as that shown and described in my said prior patent, No. 663,062, and comprises a Bunsen-burner tube 1, carried by a clamp-bracket 2, having the usual clamp-screw 3 for securing the bracket to the edge of a table, bench, or other desired support 4, the said burner-tube being provided with burner-openings 1' in its longitudinal sides and at its rear end communicating with a passage or conduit 5 in the bracket 2, into which is received the gas and air constituting the fuel for the burner, the gas being adapted to be supplied from any suitable source of supply through a pipe 6, the discharge end of which is arranged with a space 7 between it and the mouth of the conduit 5 to permit of the admission of air into the latter for admixture with the inflowing gas.

The sad-iron herein shown for use in connection with the heater is also of the same general type as that disclosed in my said prior patent, No. 663,062, the same comprising a body portion having a longitudinal opening therein to receive the burner-tube 1, onto which the iron is adapted to be placed to be heated. The means herein shown for locking or retaining the iron in proper position on the burner differs, however, from that of my said prior patent. In the present case an element shown in the form of a collar 9, located on the burner-tube adjacent to its

rear end, is provided with a flange 10, projecting in a direction outwardly from the periphery of the burner and formed to constitute a locking element or device to cooperate with means on the article to be heated to lock the latter in position on the burner in a manner to be presently set forth. This collar 9 also carries a stop device to limit and arrest the turning movement of the iron when moved into locked position, which stop device may be in the form of an abutment, as at 12, which I have shown in the drawings as being a part of the flange 10, the face of the abutment being disposed in a plane at right angles to the engaging face of the locking device 11. To cooperate with the faces of the locking device 11 and abutment 12, the sad-iron is provided at its rear end with a projecting hook-shaped arm 13, which when the iron is turned upside down on the burner-tube to its heating position is moved into cooperative engagement with the flange 10, the said arm 13 having a locking-face 14 for engagement with the flange-face 11, constituting the locking device, to prevent longitudinal displacement of the iron from the burner, and a second face 15, which is a side face of the arm 13, for engagement with the face of the abutment 12 to limit the turning movement of the iron on the burner and insure its base being properly positioned relative thereto for heating.

The element embodying the collar 9 is preferably made longitudinally adjustable on the burner-tube, as herein shown, in order that the flange 10, with its locking-faces, may be adapted for cooperation with irons of different lengths or sizes, a set-screw 9' being employed to secure the collar in adjusted position.

The sad-iron herein shown, as before stated, is of the same general type as that disclosed in my said prior patent, No. 663,062, and comprises a base 17, having a hood 18 detachably secured thereto at its upper side by screws 19, the said base and hood being formed with an opening or chamber 8 therebetween to receive the burner-tube and the hood being formed with openings or air-inlets 20 for the admission of air into the said chamber in the iron, which chamber constitutes a combustion-chamber. As a means for positioning the iron on the burner-tube the base of the iron is provided on its inner wall with fixed guide-stanchions 21 21, having recessed seats 22 in their upper edges which cooperate with the adjacent upper wall 23 of the iron to engage with the burner-tube and hold the iron in proper relation therewith. After the iron has been heated and the operator turns the same on the burner-tube to release it from locking engagement with the flange 10 the flame from the burner if the supply of fuel to the latter has not been shut off is liable to escape through the air-inlets 20 adjacent to

the handle 24 and burn the operator's hand. To prevent possibility of this, I have located a shield 25 in the chamber 8 of the iron in a position opposite those air-inlet openings 20 in the upper side of the iron, as most clearly shown in Fig. 2, which serves as a guard to prevent the escape of the flame through said openings under the circumstances referred to, this shield being secured to a longitudinal rib 26 on the inner wall of the hood 18 by one of the handle-attaching screws 26' and in a position with a space between it and that portion of the hood containing the openings, so as not to interfere with the admission of air into the chamber 8 through the said openings.

What I claim is—

1. In a heater, the combination of a burner-tube, an element mounted on said tube and adjustable longitudinally thereof, said element carrying a locking device and an abutment, and a sad-iron having a longitudinal opening to receive said burner-tube, and provided with means cooperative with said device to lock the sad-iron in position on the tube, said means constructed to engage said abutment and limit rotative movement of the iron.

2. In a heater, the combination of a burner-tube, an element mounted on said tube and adjustable longitudinally thereof, said element carrying a locking device and an abutment, and a sad-iron having a longitudinal opening to receive said burner-tube, and provided with means cooperative with said device to lock the sad-iron in position on the tube, said sad-iron being also provided with an abutting face to engage the abutment on the burner to limit rotative movement of the iron.

3. In a heater, the combination of a burner-tube, an element mounted on said tube and adjustable longitudinally thereof, said element carrying a locking device and an abutment, and a sad-iron having a longitudinal opening to receive said burner-tube, and provided with means cooperative with said device to lock the sad-iron in position on the tube, said means being formed with an abutting face to engage said abutment to limit rotative movement of the sad-iron.

4. In a heater, the combination of a burner-tube, a collar mounted on said tube and adjustable longitudinally thereof, said collar carrying a locking device, and a sad-iron having a longitudinal opening to receive said burner-tube and provided with means cooperative with said locking device to lock the iron in position on the burner.

5. In a heater, the combination with a burner-tube, of a collar mounted on said tube and adjustable longitudinally thereof, said collar being provided with a locking-flange and an abutment, the face of the latter being in a plane at right angles to the face of said flange, and a sad-iron having a longitudinal

opening to receive said burner-tube and provided with a projecting arm to engage said flange to lock the iron on the tube and an abutting face to engage the abutment on the collar to limit rotative movement of the iron.

5 6. In a heater, the combination of a burner-tube, a locking-flange projecting beyond the periphery of said burner-tube adjacent to one end thereof, and a sad-iron having a longitudinal opening to receive said burner-tube and provided at its rear end with a rearwardly-projecting locking-arm for coöperation with the said locking-flange.

15 7. In a heater, the combination of a burner-tube, a locking-flange projecting beyond the periphery of said burner-tube adjacent to one end thereof, a portion of said flange being formed to constitute an abutment projecting beyond the body of the flange, the face of the abutment being at right angles to the flange, and a sad-iron having a longitudinal opening to receive said burner-tube and provided

with a hook-shaped arm to hook over said flange to lock the iron on the burner, the side face of said arm engaging said abutment when the iron is in locked position to limit rotative movement of the latter.

8. In a heater, the combination of a burner-tube, an element mounted on said tube, said element carrying a locking device including in its construction an abutment, and a sad-iron having a longitudinal opening to receive said burner-tube, and provided with means coöperative with said device to lock the sad-iron in position on the tube, said means being constructed to engage said abutment to limit rotative movement of the iron.

Signed at New York, in the county of New York and State of New York, this 17th day of February, A. D. 1904.

AMALIE VON CHIGOR.

Witnesses:

GEO. H. WRIGHT,
A. KUSSNER.