No. 896,229. PATENTED AUG. 18, 1908.

J. B. MORRISON.

SAD IRON.

APPLICATION FILED FEB. 9, 1907.

Fig. 1.

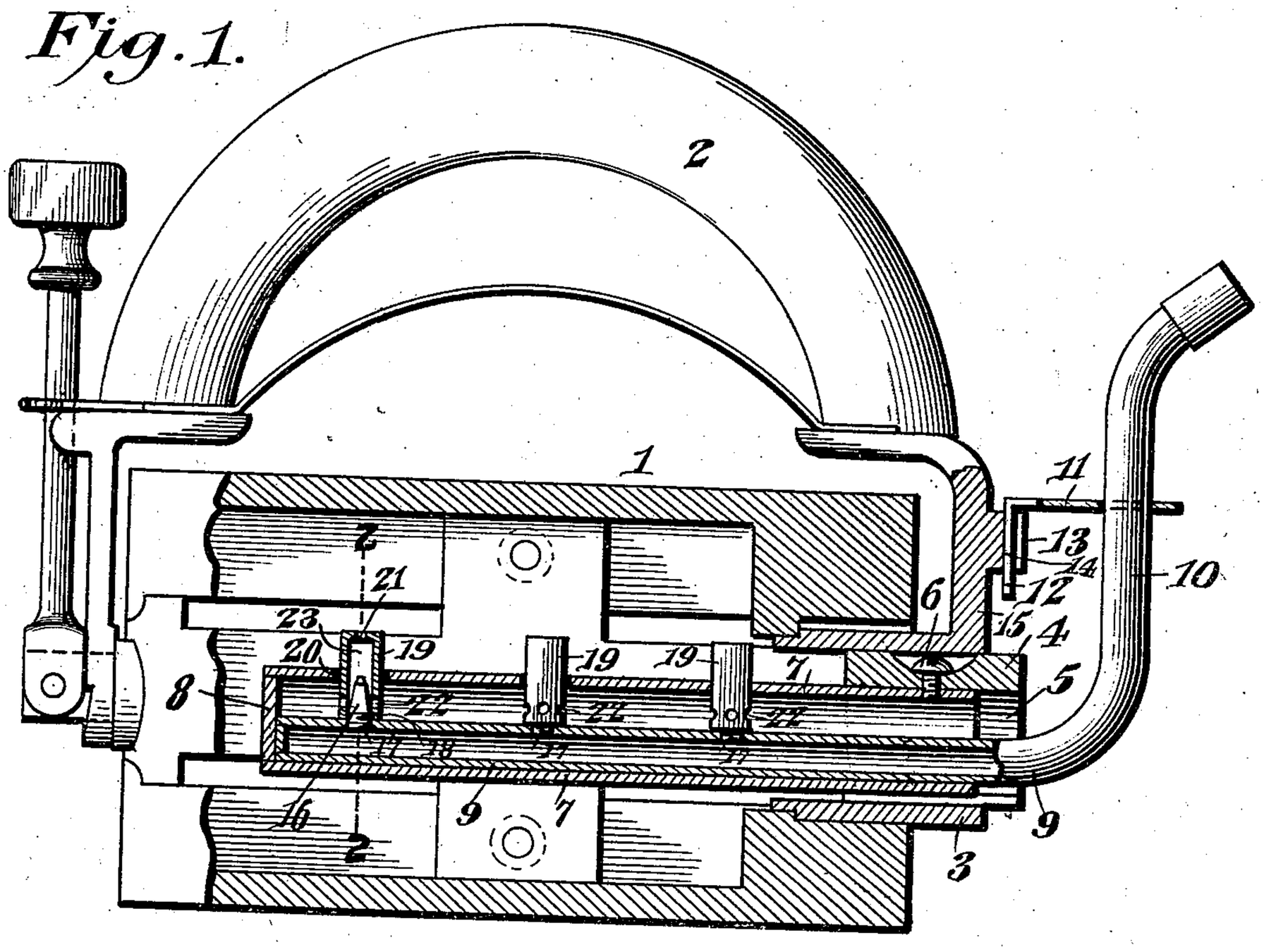


Fig. 2.

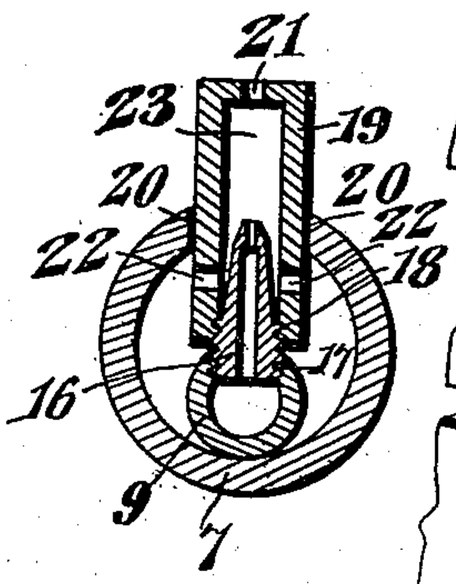
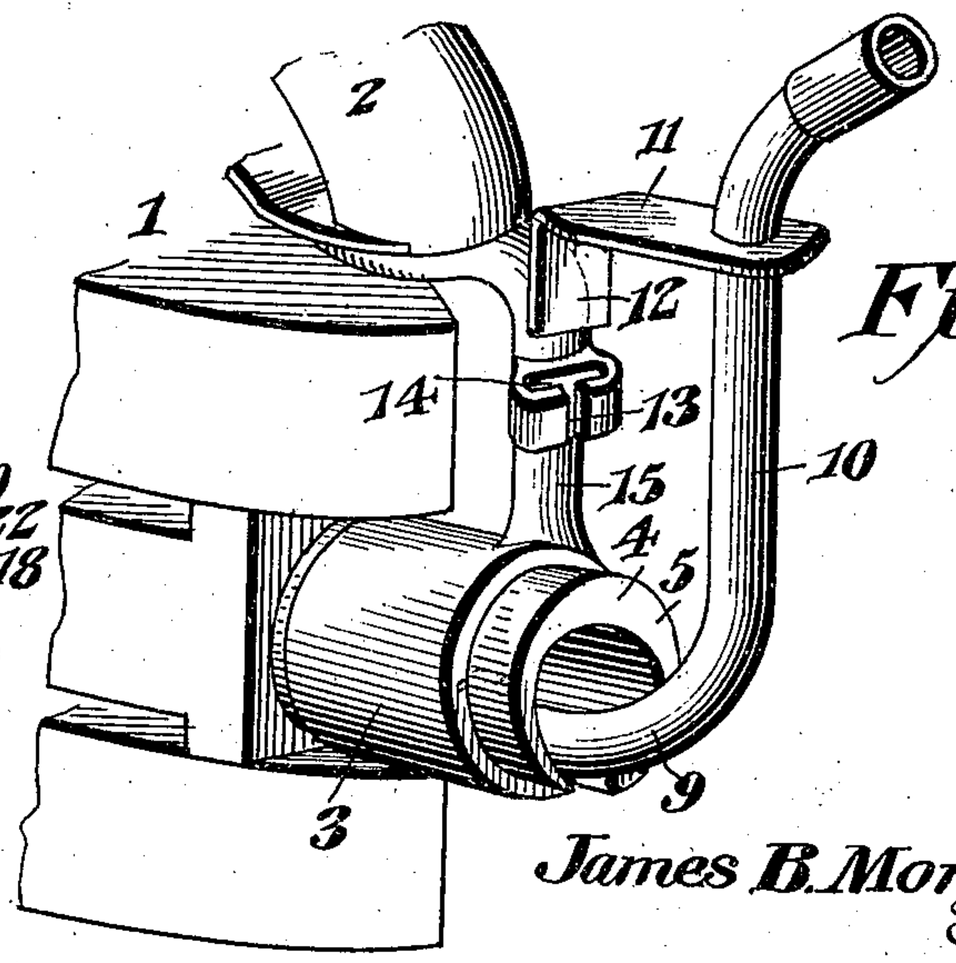


Fig. 3.



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JAMES BENJAMIN MORRISON, OF MINNEAPOLIS, MINNESOTA.

SAD-IRON.

No. 896,229. Specification of Letters Patent. Patented Aug. 18, 1908.

Application filed February 9, 1907. Serial No. 356,595.

To all whom it may concern:

Be it known that I, JAMES BENJAMIN MORRISON, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented a new and useful Sad-Iron, of which the following is a specification.

The invention relates to improvements in sad irons.

The object of the present invention is to improve the construction of sad irons, more especially the means for heating the same, and to provide a simple, inexpensive and efficient burner, adapted to be readily secured to and removed from the hollow body of a self-heating sad iron, and capable of affording a blue flame and of reducing the consumption of gas, and of preventing the burner tubes from clogging.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:—Figure 1 is a longitudinal sectional view of a sad iron, constructed in accordance with this invention. Fig. 2 is a transverse sectional view on the line 2—2 of Fig. 1. Fig. 3 is a perspective view of the rear of the same, illustrating the construction for detachably retaining the burner within the hollow body.

Like numerals of reference designate corresponding parts in all the figures of the drawing.

1 designates a hollow reversible sad iron body, connected at its ends with a handle 2, which is provided at the rear end of the body with a tubular member 3, forming one of the journals for the hollow sad iron body and receiving a collar 4. The collar 4, which is provided with an eccentrically arranged opening 5, is secured by a set screw 6 to the outer or rear end of a sleeve 7, which has its inner end 8 closed, and which receives a supply pipe or tube 9. The top portion of the collar 4 is thicker than the lower portion, and is provided with a recess to receive the head of the set screw 6, as clearly illustrated in Fig. 1 of the drawing. The supply pipe or tube 9, which is arranged upon the bottom of the sleeve, extends rearwardly and upwardly therefrom, being provided at the back of the sad iron with a vertical portion 10. The vertical portion 10 forms a guide for a catch 11, consisting of a plate having an opening, through which the vertical portion 10 passes, and provided with a depending tongue 12, which is adapted to engage a keeper 13. The keeper 13 is provided with a vertical opening 14 and consists of a pair of approximately L-shaped horizontally disposed lugs, formed integral with a stem or arm 15 of the handle 2. The stem or arm 15 connects the rear end of the handle with the tubular member 3. The catch 11 is slidable on the vertical portion 10 of the supply tube which is rigidly connected with the sleeve by the burner tubes, and the said catch is adapted by such sliding movement to engage the tongue 12 with the keeper and to disengage it therefrom. When the tongue is disengaged from the keeper 13, the collar 4 and the parts carried by the same may be removed from the hollow sad iron. The catch also maintains the burner in proper position with relation to the handle of the sad iron, when the hollow body is reversed.

The sleeve forms an air inlet for the burner, and the supply pipe or tube is pierced at the top by a plurality of nipples 16, having exterior screw threads 17 for engaging threaded perforations of the interiorly arranged portion of the supply tube 9. The exterior screw threads 16 of the nipples also receive lower interiorly threaded ends 18 of vertical burner tubes 19, which extend through openings 20 of the top of the sleeve 7. The upper ends of the vertical burner tubes 19 are provided with top or end walls, having centrally arranged perforations or jet apertures 21, at which commingled gas and air are ignited and burn in a blue flame. The air enters the vertical burner tube at the lower portion through inlet openings 22, and the upper portions of the vertical burner tubes constitute mixing chambers 23. The air inlet apertures 22 of the burner tube are located below the upper discharge ends of the nipples, which are tapered above the screw threads to provide the necessary interior space for the passage of air. The arrangement of the parts not only enable the commingled gas and air to burn a hot blue flame, but it also prevents the parts from becoming clogged, and the consump-

tion of the gas is reduced to a minimum. The exteriorly arranged portion of the supply tube may be connected with any suitable source of supply.

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

1. In a sad iron, the combination with a hollow body, of a burner comprising a sleeve forming an air passage, a supply tube extending into the sleeve and resting upon the bottom of the same, a nipple carried by the supply tube, and a burner tube surrounding the nipple and having its inner end closed by the same and rigidly connected with the supply tube by the said nipple, said burner tube being provided at its outer end with a jet opening and having one or more air inlet apertures near its inner end.

2. In a sad iron, the combination of a hollow body, a sleeve closed at its inner end and having its outer end open for the admission of air, a supply pipe extending into the sleeve at the closed end thereof and resting upon the bottom of the same and provided with a plurality of projecting nipples, and vertical burner tubes mounted on and having their inner ends closed by the nipples and rigidly connected with the supply tube by the same, said burner tubes being extended through the top of the sleeve and provided at their outer ends with jet openings and having lateral air inlet apertures located at points between the ends of the nipples near their lower ends.

3. In a sad iron, the combination of a hollow member, of a collar fitting within the hollow member and having an eccentrically arranged opening, a sleeve extending into the member and closed at its inner end and having its outer end open and secured within the eccentrically arranged opening of the collar, a supply pipe arranged within and resting upon the bottom of the collar, a nipple carried by the supply pipe, and a burner tube having its lower end closed by the nipple and rigidly connected with the supply pipe by the same, said burner tube being extended through the top of the sleeve and having its upper end arranged in the plane of the top of the collar.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JAMES BENJAMIN MORRISON.

Witnesses:

A. B. BUNTING,

A. D. ELLIS.