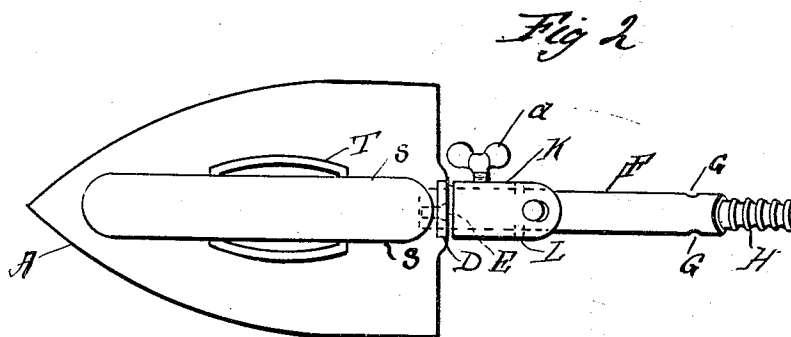
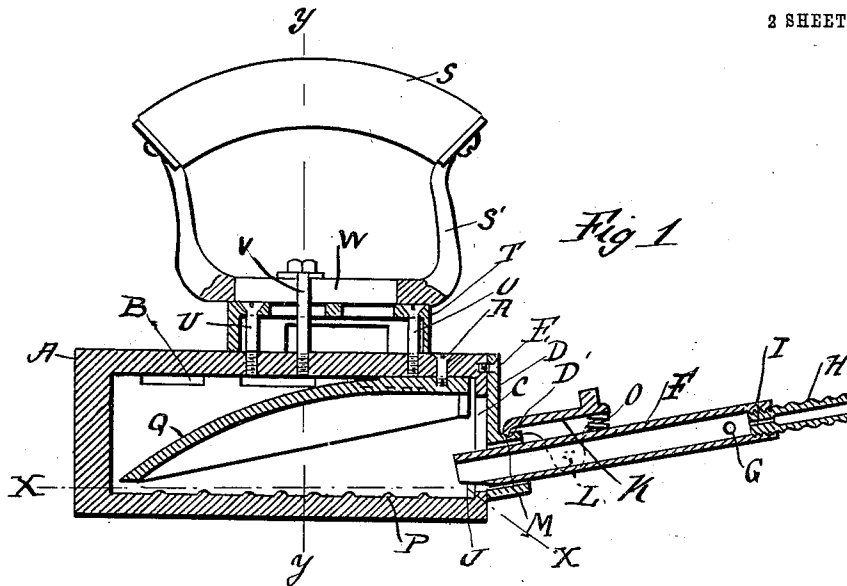


J. H. BROWNLEE.
GAS HEATED IRON.
APPLICATION FILED APR. 2, 1909.

992,334.

Patented May 16, 1911.

2 SHEETS—SHEET 1.



WITNESSES

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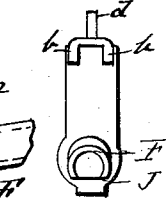
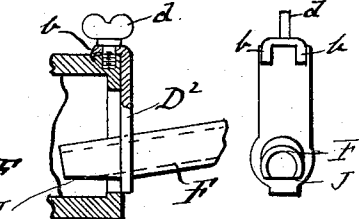
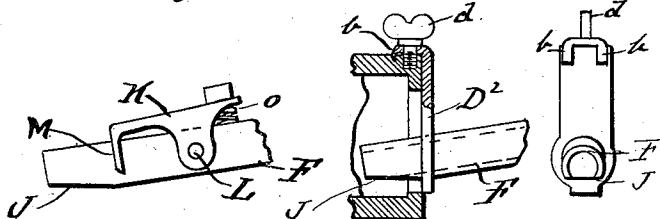
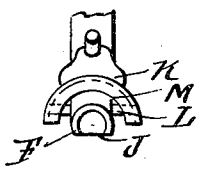
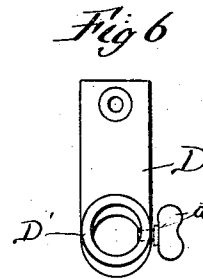
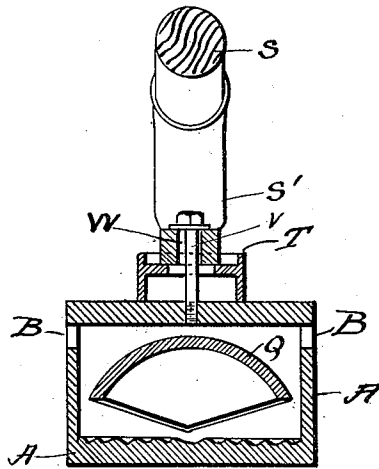
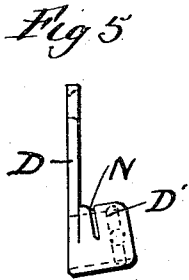
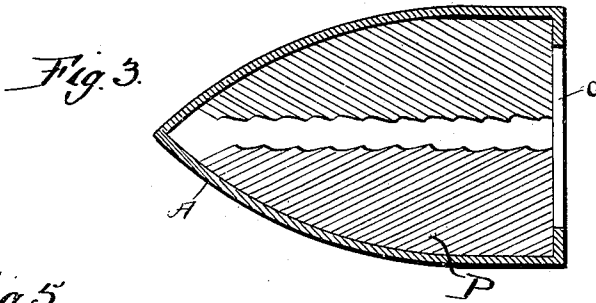
ATTORNEY

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2 SHEETS—SHEET 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

JAMES H. BROWNLEE, OF PHILADELPHIA, PENNSYLVANIA.

GAS-HEATED IRON.

992,334.

Specification of Letters Patent.

Patented May 16, 1911.

Application filed April 2, 1909. Serial No. 487,508.

To all whom it may concern:

Be it known that I, JAMES H. BROWNLEE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improvement in Gas-Heated Irons, of which the following is a specification.

My invention relates to a new and useful improvement in gas heated irons, and has for its object to overcome the disadvantage heretofore experienced in lighting the gas in said irons by providing a detachable burner which may be removed from the iron, lighted and readily reattached thereto, and a further object of my invention is to so construct the iron as to increase its heating capacity by directing the flame to the parts where the heat is most desired, and a still further object of my invention is to arrange for deflecting the heat and ventilating the connection between the iron and the handle, so as to keep the latter always cool.

With these ends in view, this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction in detail, referring by letter to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a longitudinal section of an iron made in accordance with my improvement, the handle being left in elevation. Fig. 2, a plan view of the iron. Fig. 3, a section at the line $x-x$ of Fig. 1. Fig. 4, a section at the line $y-y$ of Fig. 1. Fig. 5, a detail side view of the socket to which the burner is applied. Fig. 6, a rear view of the socket. Fig. 7, a side view of a portion of the burner showing the latch thereon. Fig. 8, an end view of the burner. Fig. 9, a section of a portion of the iron showing a slight modification of the manner of attaching the burner thereto, and Fig. 10, a front view of the modified form of fastening.

In carrying out my invention as here embodied, A represents the body of the iron which may be of any desired shape, and which I cast hollow and in one piece, having the slots B formed through the sides thereof, the back being open, as indicated at C.

D' represents a socket, having a shank D formed therewith, which latter is secured to the body of the iron by the screw E. This socket is adapted to receive the inner end of the burner F, which consists of a tube having the holes G for permitting the inflow of air and the gas supply nipple H, which is secured in the end of this tube and provided with the small outlet I by means of which the gas is projected with force throughout the length of the burner, which serves to draw the air in at the holes G and properly mix this air and the gas before it issues at the end of the burner where it is lighted to form the Bunsen flame. The inner end of the burner F is cut away upon the under side thereof on a slant, as indicated at J for causing the flame to spread at this point, and be deflected slightly downward into contact with the inside bottom wall of the iron.

K represents the latch, which is pivoted at L to the burner, and the nose M of this latch is adapted to engage the groove N formed on the top of socket D', and thus holds the burner in position in the socket. A spring O is located beneath the heel end of the latch so as to normally hold the nose M in engagement with the groove. By this arrangement it will be seen that the burner may be detached from the socket, the gas turned on and the burner lighted after the manner of an ordinary gas jet or Bunsen burner, after which the insertion of the burner in the socket will cause the flame to be projected into the body of the iron. This will entirely overcome the difficulty in lighting a burner that is permanently attached to the iron and prevents the explosions which otherwise take place when a light is applied to an iron filled with gas.

The bottom wall of the inside of the body of the iron is grooved, as indicated at P, so as to spread the flame so as to fully utilize it in heating the bottom surface and to assist in deflecting the heat against the bottom of the iron I provide a shield Q which is secured inside of the body by the screw R, and this shield serves the further purpose of keeping the heat from the top wall of the iron, thus lessening the amount which would otherwise be transmitted to the handle.

In order that comparatively no heat may reach the handle S, I provide a shoe T, the sides of which are open and which is secured to the top of the iron by the screws

U, and to this shoe is adjustably secured the handle frame S', by the bolt V passing through the slot W formed in the handle frame, said bolt being threaded into the top of the iron. By this arrangement the handle may be adjusted longitudinally on the iron as the operator may desire.

a represents the set screw, which is threaded through the wall of the socket D and may be used to bind the burner in place.

In Figs. 9 and 10 I have shown a slight modification of the manner of attaching the burner to the iron, in which the shank D² is secured to the burner, and the upper end of this shank has formed therewith the prongs b adapted to engage the upper surface of the top of the body and be held in place by the set screw d. In this construction when it is desired to remove the burner for lighting the set screw d is backed off when the burner may be removed carrying with it the shank D².

Having thus fully described my invention, what I claim as new and useful, is—

1. In combination in an iron of the character described, a hollow body, a socket se-

cured to said body, a burner, one end of which is adapted to pass through said socket, said end having its under side cut away, a latch pivoted to the burner and adapted to engage the socket, and a spring for holding the nose of the latch in engagement with the socket, as specified.

2. In combination a hollow body, a socket detachably secured to the rear end thereof, a burner adapted to slide through said socket, means for locking said burner in said socket, and a deflector mounted within said body one end thereof being secured to the top wall of the body at the rear end thereof, the opposite end of said deflector slanting downward in proximity to the bottom wall of the body at its forward end as shown.

In testimony whereof, I have hereunto affixed my signature in the presence of two subscribing witnesses.

JAMES H. BROWNLEE.

Witnesses:

WM. A. MCKIBBIN,
WM. MCSORLEY.