

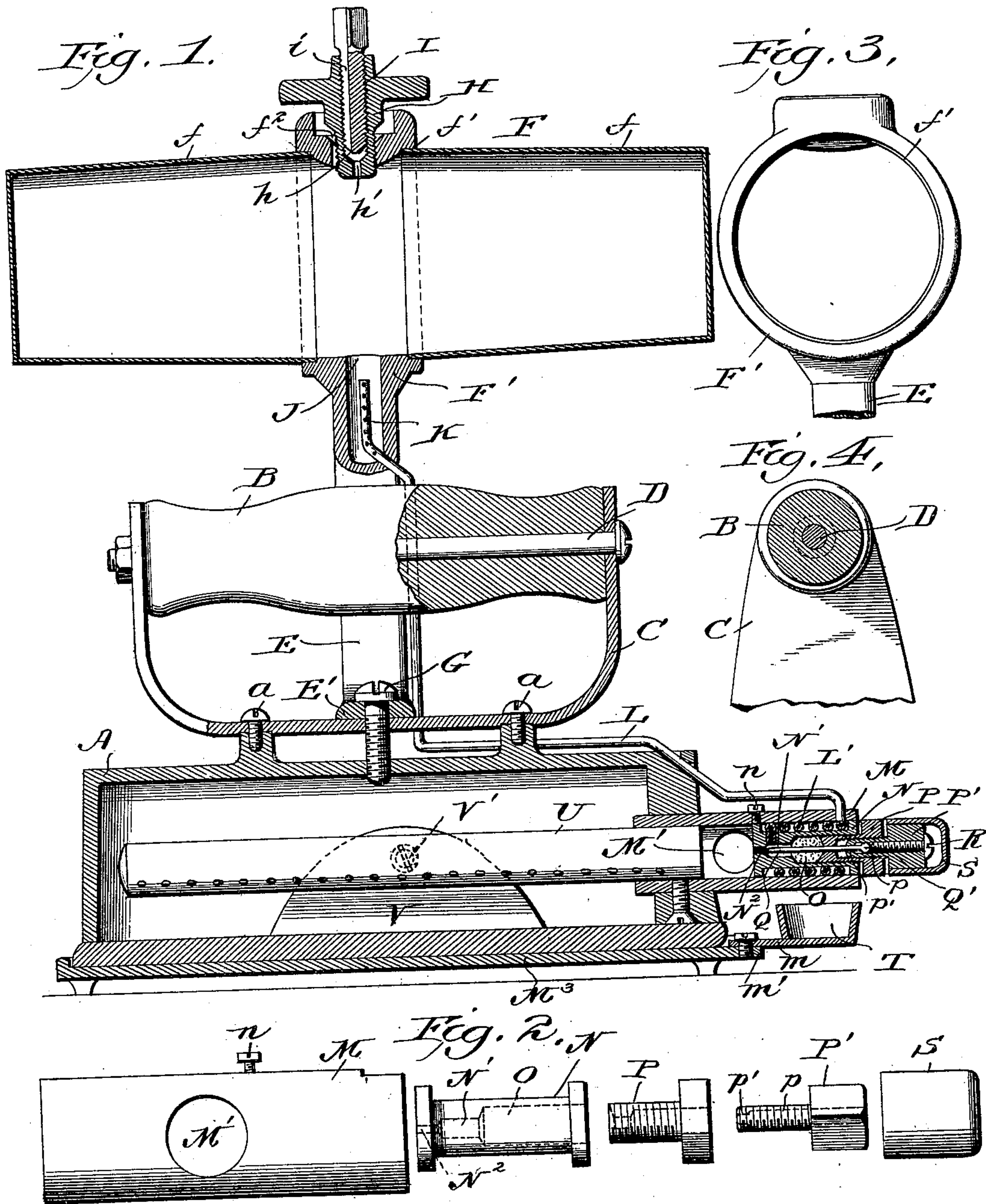
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Patented Aug. 22, 1899.

E. HEDGES.
GASOLINE HEATED IMPLEMENT.

(Application filed Sept. 30, 1898.)

(No Model.)



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GASOLENE-HEATED IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 631,368, dated August 22, 1899.

Application filed September 30, 1898. Serial No. 692,303. (No model.)

To all whom it may concern:

Be it known that I, EDWARD HEDGES, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Gasolene-Heated Implements; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in flat-irons and similar articles; and it consists partly in the combination of the jet-block and jet-nozzle and coiled feeding-tube, practically producing a generator and jet-block combined in one piece, in the especial construction of the reservoir and its combination with the feed-pipe and supporting devices, and in the especial construction and combination of the means for supporting the burner and injecting fuel into the same, with the various supporting and attaching devices, the gasolene-feed pipe and the body of the implement, as well as in certain additional details of my improved device, substantially as set forth.

In the accompanying drawings, Figure 1 represents a vertical longitudinal central section of a gasolene-heated flat-iron embodying my invention. Fig. 2 represents a detail side elevation of the bobbin-shaped jet block and nozzle, the screw which serves as a tubular packing-follower, the tubular plug which is turned into the end of the same, the needle-rod and the screw for holding it in place, these parts being slightly detached from each other. Fig. 3 represents a detail view in elevation of the reservoir-holding ring, taken at right angles to Fig. 1; and Fig. 4 represents a detail cross-section of the handle, illustrating in elevation the breadth of its support.

A designates the hollow body of the flat-iron; B, its handle; C, the handle-support, attached to its ends by a longitudinal bolt D and to the body A by screws *a*, the said support being broad enough to shield the hand against the heat from the iron body A. A standard E is provided with a foot E', extending over the lower central part of the said handle-support and rising above the handle B as a means

of central support for the cylindrical reservoir F, which extends longitudinally of the said flat-iron. The said foot is secured in place by a screw or bolt G, which passes downward through the handle-support into the top of the flat-iron body. The upper end of the said standard is formed integral with an annular casting F', which has annular sockets *f'* in its sides for receiving the open inner ends of two cylindrical sections *f*. These with said casting or band make up together the reservoir F aforesaid. At the highest point of this casting there is a screw-topped oil-inlet opening *f*², receiving a screw-plug H, the central bore *h* of which is screw-threaded to receive an air-inlet screw I, having longitudinal kerfs or grooves *i* connecting with inlet-aperture *h'* at the bottom of said bore or recess *h*, and thereby admitting air to the interior of the reservoir.

In the lowest part of the band F' and the upper end of the standard a recess or pocket J is formed, into which the perforated upper end K of an outlet-pipe L is introduced laterally and from below. This pipe L, which constitutes the gasolene-feed pipe for the burner, extends down along this standard and rearward along the top of the flat-iron body to a point in rear of the same, where it passes downward through the upper part of a cylindrical copper casing M, near the outer end of the latter, and is wound as a spiral generator L' on a bobbin-shaped jet-block N, which also constitutes or includes the jet-nozzle, and is held in place in the outer part of the said casing by a set-screw *n*. The said coil enters the inner bore or recess N' of the said jet-block just behind the discharge-opening N². The rear part of the said bore is enlarged to receive asbestos packing O and screw-threaded near its rear end for engagement with a tubular follower P, which compresses the said packing as it is screwed home. The outer part of this tubular follower has internal screw-threads receiving a screw-threaded plug P', having an enlargement *p* of its bore *p'* receiving the knob or head Q' of a needle-pointed rod Q, extending through the said packing and the said discharge-opening of the jet-nozzle and protruding a little beyond the same when in its inmost position, as

shown in Fig. 1. A screw R, turned into the rear end of the screw-plug P', keeps the said rod from escaping. The removal of this screw will leave the said rod in place, but free to
 5 be removed at will. When the said rod is worn or injured at the point, another may be substituted, the same screw being retained for holding it. When the screw becomes worn out, another may be substituted for it
 10 without removing the rod. When the screw is turned in or out, the rod does not follow its rotary and endwise motion, and is thereby spared nearly all friction. In these and other respects the screw and rod in two pieces have
 15 great advantages over an integral rod and screw. Whenever the rod is moved inward or outward, its point cleans the discharge-outlet.

S designates a protective cap fitted on the
 20 said screw-plug and protecting the screw R.

T designates a pan for gasolene to be ignited for heating the casing M and the generator inclosed therein when the device is to be started. The handle *m* of this pan is piv-
 25 oted to a lug or attachment *m'* of the flat-iron tray M³, so that it may be turned laterally out of the way.

U designates a cylindrical burner which is open at the rear end, the latter fitting into
 30 the forward or inner end of the cylindrical casing M, just behind the usual air-inlet M' in the side of the latter and in line with the jet-nozzle.

A rounded flange V, raised from the bot-
 35 tom of the flat-iron body within the same, serves as a support for the inner part of the said burner, being connected thereto by a screw V'.

By making the casing M of copper I se-
 40 cure increased conductivity of heat and make the generator more sensitive and efficient.

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

1. In combination with the body of a calo-
 45 rific implement or device and a burner for heating the same, a jet block and nozzle, dis-
 charging into the said burner, a tubular coil wound on the said jet-block to constitute a

vapor-generator and discharging into the said
 50 jet-nozzle, and means for supplying gasolene to the said coil, substantially as set forth.

2. In combination with the body of a calo-
 rific implement or device and a burner for heating the same, a spool-shaped jet-block
 55 which also constitutes the jet-nozzle, a vapo-
 rizing-pipe which is coiled on the said jet-
 block and discharges into the interior thereof, and a casing for the said block and coil sub-
 60 stantially as set forth.

3. In combination with the body of a calo-
 rific implement or device a jet-nozzle and packing in the bore thereof, a tubular follower
 for compressing said packing, a screw-plug
 turning into said follower and provided with
 65 an enlargement of the outer part of its bore, a needle-pointed rod protruding through the
 jet-nozzle and having its knob in the enlarged
 part of the said bore and a screw bearing on
 the said knob to hold the said rod removably
 70 in place substantially as set forth.

4. In combination with the body of a calo-
 rific implement or device, a standard arising therefrom and having at its top an annular
 casting with lateral sockets and means of in-
 75 gress and egress of liquid fuel and air and
 two cylindrical sections, which fit at their
 open ends into the said sockets and constitute
 with said annular part of the standard a cy-
 lindrical oil-reservoir for the supply of the
 80 said implement substantially as set forth.

5. In combination with the body of an im-
 plement, a cylindrical casing of copper fitting
 into the end thereof, a burner fitted into the
 inner end of this casing, a bobbin-shaped jet-
 85 block fitted into the outer end of the said cas-
 ing with its flanges against the inner face
 thereof, and a gasolene-feed pipe which winds
 on the said bobbin between the said flanges
 and discharges into the said jet-block as set
 90 forth.

Intestimony whereof I affix my signature
 in presence of two witnesses.

EDWARD HEDGES.

Witnesses:

CHAS. W. HOWARD,
 WILLIS MITCHELL.