(No Model.)

C. H. MILLER.

SECTIONAL HOOD FOR GAS AND AIR FUEL MIXING CHAMBERS.

No. 381,632. Patented Apr. 24, 1888.

Fig. 3

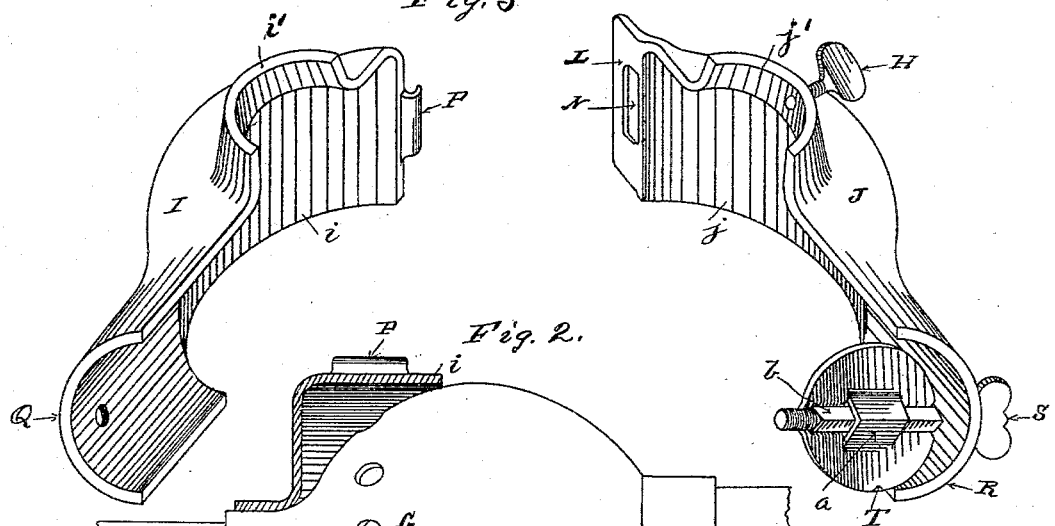


Fig. 2.

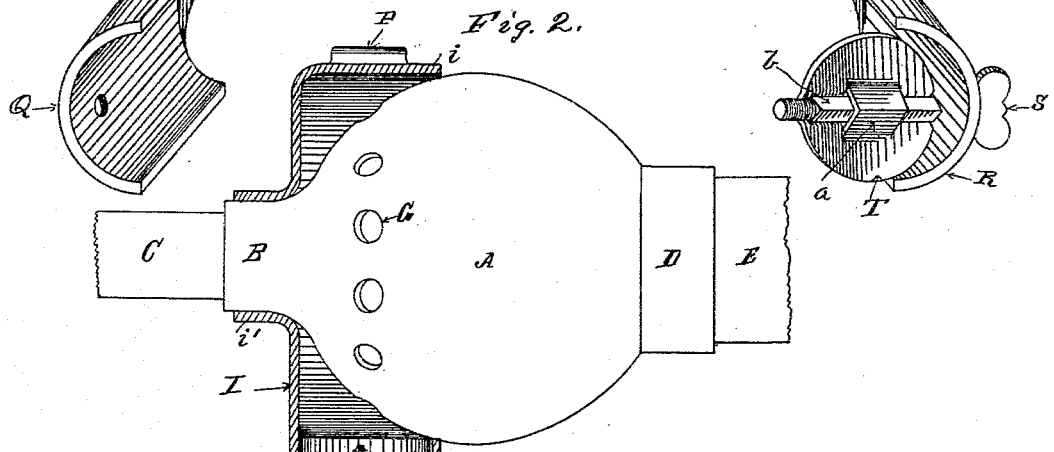
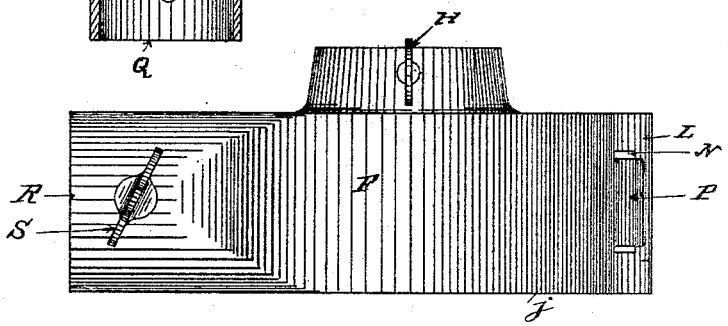


Fig. 1.



Witnesses.
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UNITED STATES PATENT OFFICE.

CHARLES H. MILLER, OF ERIE, PENNSYLVANIA.

SECTIONAL HOOD FOR GAS AND AIR FUEL MIXING CHAMBERS.

SPECIFICATION forming part of Letters Patent No. 381,632, dated April 24, 1888.

Application filed October 21, 1887. Serial No. 253,045. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. MILLER, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Sectional Hoods for Gas and Air Fuel Mixing Chambers; 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, forming part of this specification.

My invention consists in the improvements in sectional hoods for gas and air fuel mixing chambers hereinafter set forth and explained, and illustrated in the accompanying drawings, in which—

Figure 1 shows a side view of my improved sectional hood. Fig. 2 shows a side view of a gas and air fuel mixing chamber with one of the sections of my improved hood in place thereon. Fig. 3 shows a perspective view of the two sections of my improved hood separate from each other.

Like letters refer to like parts in all of the figures.

The objects of my improvement are to construct a hood for gas-fuel-mixing chambers in sections, so that it can be put on or taken off without interfering with the pipe-connections, and to provide a regulating-damper, by means of which the air-supply can be varied at pleasure.

In the construction shown in the drawings, A is a gas and air fuel mixing chamber, consisting of a hollow globular-shaped body provided at one end with a screw-threaded neck, B, in which a gas-supply pipe, C, is secured, and at the other or opposite end with a larger screw-threaded neck, D, in which a pipe, E, leading to the burner, is secured, the chamber A being also pierced with openings G near the neck B, through which air passes into the mixing-chamber A, to be intermingled with the gas supplied from the pipe C, after which the intermixed gas and air passes through the pipe E to the burner. (Not shown.) These features do not constitute any part of my invention, but show the operation and application of my device, hereinafter described.

In the construction of my improved sectional hood F for gas and air fuel mixers I make it in two sections, I and J, (see Fig. 3,) so that when they are joined together, as hereinafter described, the complete hood F, Fig. 1, will fit over and embrace the neck B on the mixing-chamber A, to which it can be secured by means of a thumb-screw, H, and inclose the openings G of the mixing-chamber, as illustrated in Fig. 2, by the position of the section therein shown. The sections I and J are provided with the semicircular flanges *i'* and *j'*, respectively, which bear at one end against the neck B of the mixer A and are held in position by the set-screw H in the flange *j'*. On the upper part of one of the sections J, I make a flange, L, in which I provide an opening, N, and on the upper part of the other section, I, I make a hook-shaped lip, P, adapted to enter the opening N and engage with the upper part of the flange L when the sections I and J are brought together, and through the lower ends, Q and R, I place a thumb-screw, S, which when screwed into place holds the two sections I and J securely together, forming a complete hood, covering the openings G in the mixing-chamber A. The lower portions, Q and R, of the sections I and J, I make semi-tubular in shape, so that when the sections I and J are brought together the parts Q and R form a downwardly-projecting tubular passage, through which air is supplied to the inside of the hood F, and thence through the openings G to the mixing-chamber A. The part of the clamping-screw S passing through the tubular passage formed by Q and R, I make, preferably, square in cross-section, and place thereon a damper, T, having a socket, *a*, adapted to fit upon the square portion *b* of the screw S, so that by turning the screw S the damper T will turn therewith, by means of which the damper T can be adjusted to vary the air-supply as desired. It is obvious that my improved hood can be applied to or detached from the gas and air fuel mixing chamber without disturbing the pipe-connections at any time when desired, and also that the air supplied to the burner can be controlled at pleasure.

Having thus fully described my invention, so as to enable others to make and use the same, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A hood for a gas and air mixing chamber, formed in two sections, having means for securing them together, and the flanges *i'* and *j'*, and provided with a tubular extension for the inlet of air, in combination with a damper pivoted in the said tubular extension for regulating the inlet of air, substantially as set forth.

2. A hood for a gas and air mixing chamber, consisting of the two sections I and J, provided with the semicircular flanges *i'* and *j'*, the semi tubular extensions Q and R, the perforated flange L, and the hook-shaped lip P, in combination with the damper T, pivoted in the said extensions Q and R, and the thumb-screws S and H, for operating the damper and clamping the sections in position, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES H. MILLER.

Witnesses:
H. J. CURTZE,
W. D. FEIDLER.