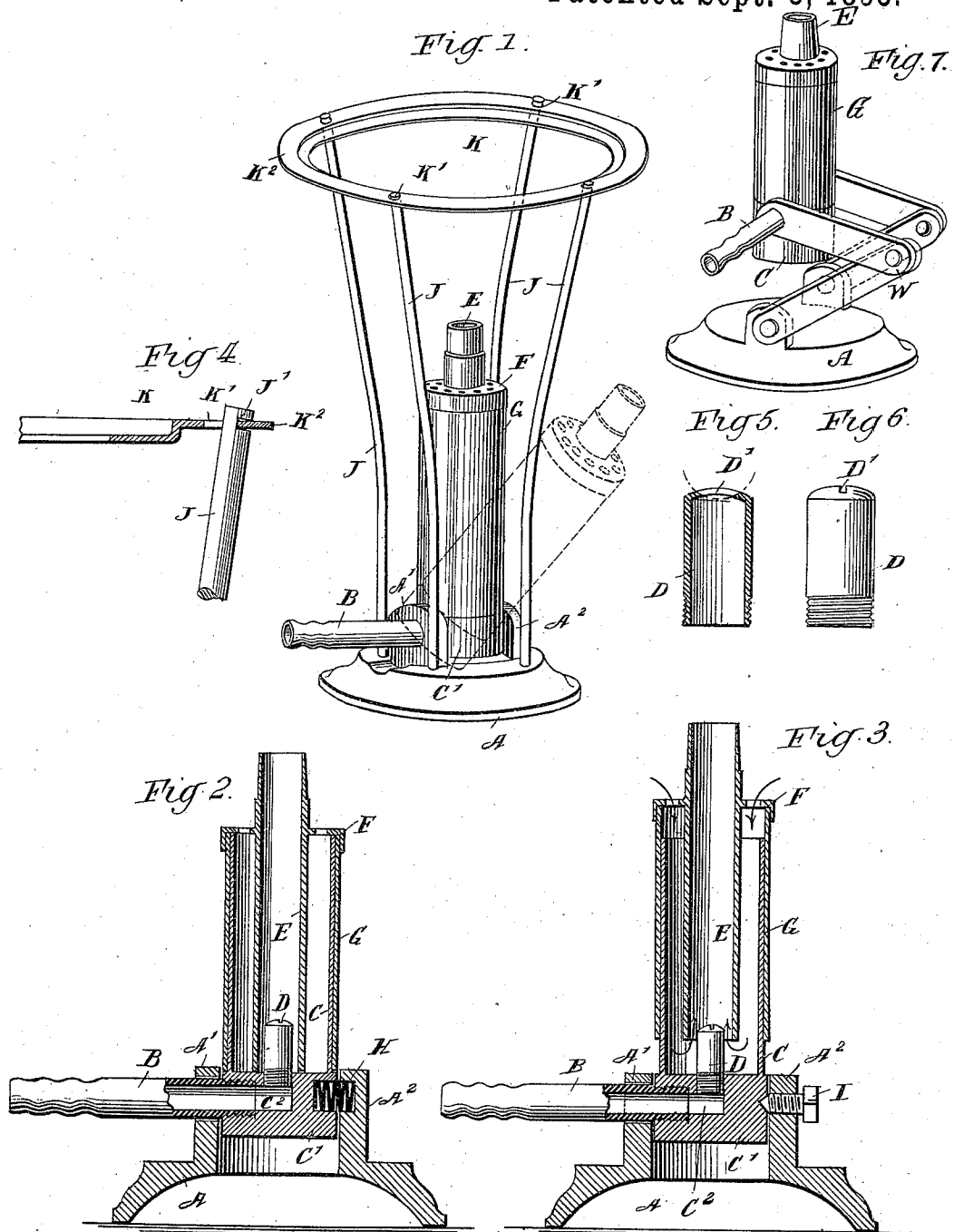


(No Model.)

C. E. DRESSLER.
GAS BURNER.

No. 545,783.

Patented Sept. 3, 1895.



WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES E. DRESSLER, OF NEW YORK, N. Y.

GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 545,783, dated September 3, 1895.

Application filed August 18, 1894. Serial No. 520,682. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. DRESSLER, of New York city, in the county and State of New York, have invented a new and Improved Gas-Burner, of which the following is a full, clear, and exact description.

The invention relates to gas-burners such as shown and described in Letters Patent of the United States No. 457,153, granted to L. H. Friedburg on the date of August 4, 1891.

The object of the invention is to provide a new and improved gas-burner more especially designed for heating purposes and arranged to permit the user to turn the burner into any desired position to allow of using the burner in connection with a blow-pipe and also for other purposes.

The invention consists in certain parts and details and combinations of the same, as will be hereinafter fully described, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the improvement. Fig. 2 is an enlarged sectional side elevation of the same. Fig. 3 is a similar view of a modified form of the same. Fig. 4 is an enlarged sectional side elevation of the support for vessels. Fig. 5 is an enlarged sectional side elevation of the burner-tip. Fig. 6 is a side elevation of the same, and Fig. 7 is a perspective view of a modified form of the improvement.

The improved gas-burner is provided with a base A, carrying the upwardly-extending lugs A' and A², of which the lug A' is apertured and forms a bearing for the gas-supply pipe B, connected at its outer end with a suitable source of gas-supply and at its inner end is secured in the closed bottom C' of a casing C, preferably made cylindrical in shape and open at the top.

In the bottom C' and centrally therein is secured a burner-tip D, connected at its lower end by an opening C² with the inner end of the gas-supply pipe B, so that gas can freely pass into the tip to escape through the slot D' thereof to be burned in the usual manner. The slot D', as illustrated in Fig. 5, is cut by a circular saw, so that the length of the slot

is less than the interior diameter of the tip to cause an accumulation of gas within the tip, so that an ample supply of gas is always obtained at the slot D' to insure a steady burning of the gas and a uniform flame, especially when turned low.

Centrally arranged within the casing C and surrounding the tip D is the tube E, provided at its upper end with an apertured cap F, secured on a sleeve G, fitted to slide vertically on the casing C, so that on raising or lowering the sleeve G the tube E is likewise raised or lowered and its lower end correspondingly adjusted relative to the tip D.

It will be seen that by the arrangement described the casing C, with the tip D, tube E, and adjustable sleeve G, can be swung into an inclined position, either to the right or left, as indicated in dotted lines in Fig. 1, so that the flame emanating from the upper end of the tube E can be used, in connection with a blow-pipe, to bring the flame to the desired object.

In order to hold the casing C and the parts carried thereby in an inclined position, I provide a coil-spring H, set in a recess in the lug A² and engaging a recess in the bottom C', directly opposite and in alignment with the pipe B, so that the spring H not only presses the casing against the inner face of the lug A' to hold the casing in position, but also serves as an auxiliary pivot for the said casing in addition to the pipe B.

As shown in Fig. 3, the spring H is dispensed with and instead a pointed screw I is employed, screwing in the lug A² and engaging a conical recess in the bottom C'. By screwing up the screw I sufficient friction is obtained to securely hold the casing C and its contents in an inclined position.

As illustrated in Fig. 7, the burner, instead of being directly pivoted in the base A, is pivoted on pairs of connected links W, pivoted on the base A, so that the burner can be raised or lowered or extended sidewise and turned into a desired position on the upper links. The pivots of the links are sufficiently tight to hold the said links in the position to which they are moved. The supply-pipe B forms one of the pivots, the same as in the other forms described, and the burner is held in position either by a spring, as shown in

Fig. 2, or by a set screw, as shown in Fig 3. Although I have shown and described the form of burner for which the previously-mentioned Letters Patent have been granted, it is evident that the device can be readily applied on any kind of Bunsen burner. The base A also supports a stand comprising a series of upwardly-extending rods J, engaging with their upper ends apertures K', formed in the flange K² of a support K, adapted to form a resting-place for vessels and other articles to be heated from the flame emanating from the tube E at the time the casing C is in a vertical position. The upper ends of the rods J are formed with recesses or cuts J', adapted to engage the thin metal forming the flange K², to securely connect the said flange with the rods, as plainly indicated in Fig. 4.

It is understood that the rods J are of a springy material, so as to readily bend outward to engage with their slots J' the said flange K², whereby the support K is firmly held on the upper ends of the rods J.

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

1. A gas burner, comprising a base provided with opposite supports on its upper surface, one of the said supports being provided with an opening, and a cylindrical burner provided at its lower end with a supply pipe projecting at right angles therefrom, the burner being arranged between the supports with the supply pipe projecting through the opening of the said support and forming a pivot by which the burner is pivoted, whereby the burner can be held in a vertical or inclined position, substantially as described.

2. A gas burner, comprising a base provided with opposite supports on its upper surface, one of the said supports being provided with an opening, a cylindrical burner provided at its lower end with a supply pipe projecting at right angles therefrom, the burner being arranged between the supports with the supply pipe projecting through the opening of the support, and by which the burner is pivoted, and a tension device arranged in the opposite support and engaging the burner to hold it in the position into which it is moved, substantially as described.

3. A gas burner, comprising a base provided with opposite lugs, links pivoted to the lugs, and a burner having its lower end pivoted to and between the links, substantially as described.

4. A gas burner, comprising a base provided with opposite lugs, a pair of links pivoted to the lugs, a second pair of links pivoted to the first named links, and a burner having its lower end pivoted between the second pair of links, substantially as described.

5. A gas burner comprising a base provided with upwardly projecting and opposite lugs, a pair of links pivoted to the lugs, a second pair of links pivoted to the first pair of links, one of the second pair of links being provided with an opening, and a burner provided with a supply pipe projecting at right angles therefrom and working in the opening of the link and by which the burner is pivoted to and between the second pair of links, substantially as described.

6. A gas burner, comprising spaced supports, a burner having a central burner tip, a supply pipe projecting from the lower end of the burner through an aperture in one of the supports, whereby the burner is pivoted between the supports, and a spring in recesses in the base of the burner and one of the said supports, substantially as shown and described.

7. A gas burner, comprising a casing provided with a bottom having a lateral opening, a tip secured in the center of the base and with which the lateral opening thereof communicates, a supply pipe secured in the lateral opening of the base of the casing, and a tube adjustable on the casing and projecting down into the casing and around the tip, substantially as described.

8. In a gas burner, a base, vertical rods secured to the base and having their upper ends recessed on one side, and a support provided with openings to receive the upper ends of the said rods the recesses of which engage the support, substantially as described.

CHARLES E. DRESSLER.

Witnesses:

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C. SEDGWICK.