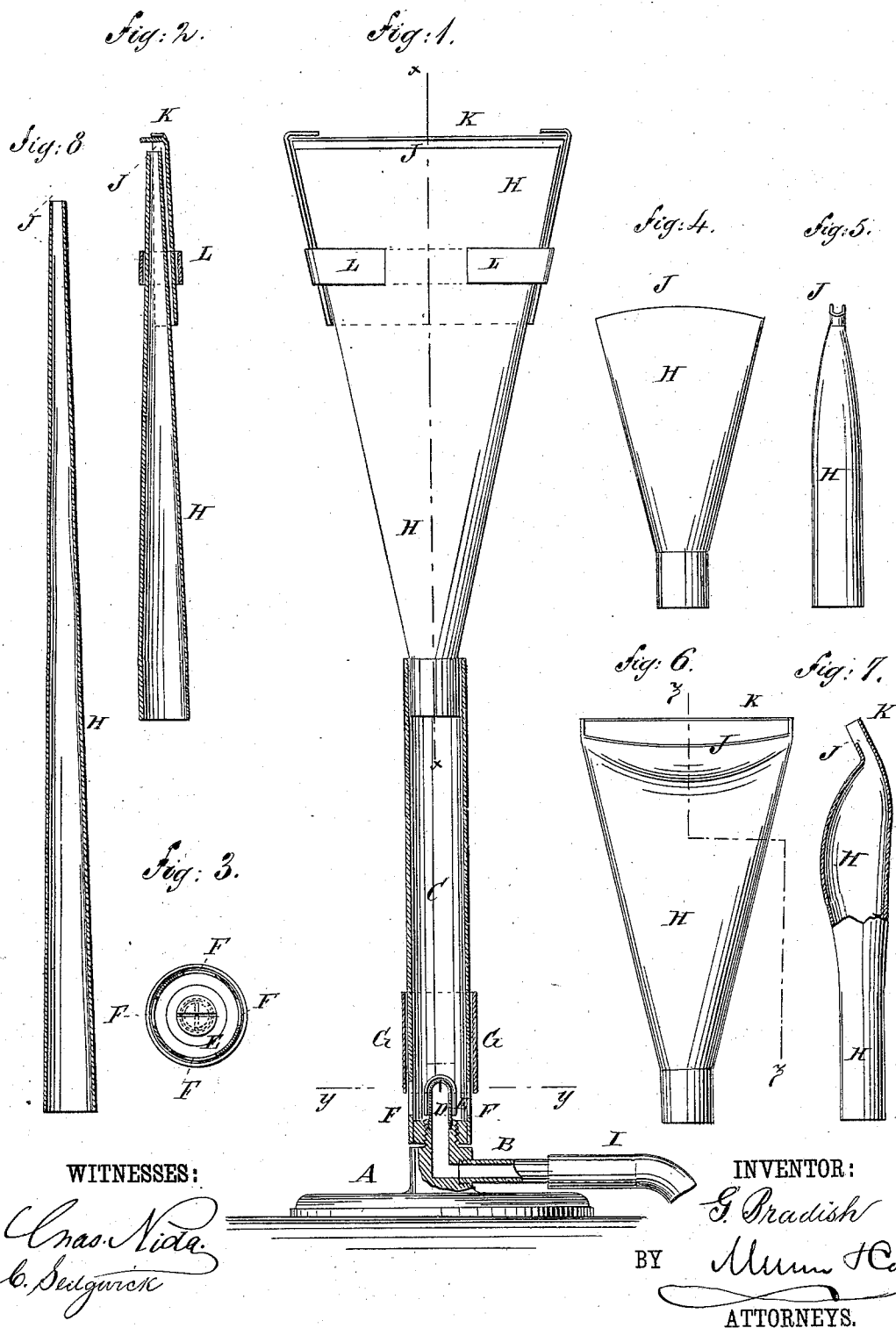


(No Model.)

G. BRADISH.
Paint and Putty Burner.

No. 242,871.

Patented June 14, 1881.



UNITED STATES PATENT OFFICE.

GEORGE BRADISH, OF BAY SIDE, NEW YORK.

PAINT AND PUTTY BURNER.

SPECIFICATION forming part of Letters Patent No. 242,871, dated June 14, 1881.

Application filed August 16, 1880. (No model.)

To all whom it may concern:

Be it known that I, GEORGE BRADISH, of Bay Side, in the county of Queens and State of New York, have invented a new and useful Improvement in Paint and Putty Burners, of which the following is a specification.

Figure 1 is a side elevation, partly in section, of the improvement. Fig. 2 is a sectional elevation taken through the line *xx*, Fig. 1. Fig. 3 is a cross-section taken through the line *yy*, Fig. 1. Fig. 4 is a side elevation of a burner without a lip. Fig. 5 is an edge elevation. Fig. 6 is a side elevation of a burner with a permanent lip. Fig. 7 is an edge elevation, partly in section, through the line *zz*, Fig. 6. Fig. 8 is a sectional elevation of a tapering burner.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish burners for burning paint from wood and metal work, so constructed that the paint can be softened and removed from a panel without affecting the molding, and from a molding without affecting the panel, from surfaces of any shape, and from crevices, and that may also be used for burning the putty from window-sash without affecting the sash-rails.

A represents the stand of a Bunsen burner. B is the tube through which the gas is introduced into the tube C, where it is mixed with air, so as to produce intense heat by its combustion as it issues from the upper end of the burner. The gas passes from the tube B into the tube C through a nipple, D, which has a slit across its upper end, through which the gas escapes into the tube C. Upon the nipple D is placed another nipple, E, which is also made with a slit across its upper end, so that by adjusting the nipple E from a position with its slit parallel with the slit of the nipple D to a position with its slit at right angles with the slit of the said nipple D the quantity and pressure of the gas admitted to the tube C may be regulated, as required, at the point of escape of gas into the mixing-tube C. Air is admitted to the tube C through apertures F in its sides below the level of the top of the nipples D E, and the quantity of air admitted is regulated by a sleeve, G, placed upon the tube C, so that

it may be slid down upon the said tube C to cover the apertures F to any desired extent.

If desired, the sleeve G may have apertures formed in it similar to the apertures F, and the admission of air regulated by turning the said sleeve G more or less.

The joint between the tube C and the stand A is made loose, so that the tube C may be readily turned upon the stand A in adjusting the burner H, attached to the upper end of the said tube, to the work without turning the stand A, and bending the flexible pipe I, that connects the inlet-tube B with the gas-pipe, thus obstructing the free supply of gas. The burner H, attached to the upper end of the tube C, is widened into fan-shape, as shown in Figs. 1, 4, and 6, and its upper edges are then drawn toward each other, producing a narrow slot, J, through which the intermingled air and gas escapes to be burned, so as to produce a sheet of flame.

The slot J may be made wider or narrower, as the work to be done may require, and may be straight, as shown in Fig. 1, or arched, as shown in Fig. 4.

The sides of the flattened burner H may gradually approach each other, as shown in Fig. 2; or they may be parallel nearly to their tops, and then incline toward each other, as shown in Fig. 5, or they may pass up parallel and then have an outward swell upon one or both sides before inclining toward each other. as shown in Fig. 7.

For plain surface work the edges of the burner H, at the opposite sides of the slot J, may be of the same height as shown in Figs. 4 and 5; but for working along the edge of a molding, or working up to a line, the burner H should be provided with a lip or flange, K, inclining forward over the slot J, as shown in Figs. 1, 2, 6, and 7. The lip K may be formed permanently upon the burner by extending one of its edges above the other and then bending the projecting edge forward, as shown in Figs. 6 and 7; or the lip K may be formed upon the edge of a separate plate and secured detachably to the side of the burner H by an open band-clasp, L, or by other suitable means.

For working in angles and grooves and other confined spaces the burner H may be tapered

nearly to a point, as shown in Fig. 8, and may be made straight or curved, as may be desired, or as the work to be done may require.

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

1. A paint and putty burner, constructed substantially as herein shown and described, consisting of the stand A, inlet-tube B, having nipple D and adjustable nipple E, for regulating the supply and pressure of gas, the mixing-tube C, having air-inlet openings F, and an adjustable sleeve, G, for regulating the supply of air, and the flattened burner H, for producing a sheet-flame, as set forth.

2. In a paint and putty burner, the combina-

tion, with the nipple D of the gas-inlet pipe B, having a slit in its top, of an adjustable nipple, E, also having a slit in its top, substantially as herein shown and described, whereby the supply and pressure of gas can be regulated at or near the point of escape of gas, as set forth.

3. In a Bunsen burner, the slitted nipple E, arranged adjustably over the slitted nipple D, to regulate the flow of gas into the mixing-tube, as described.

GEORGE BRADISH.

Witnesses:

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