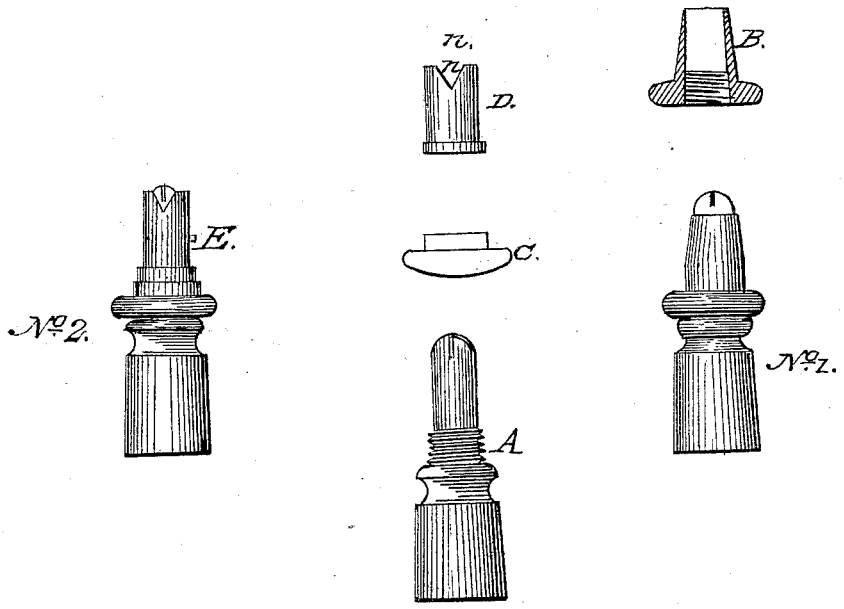
D. H. SOLLIDAY.

Gas Burner.

No. 6,212. Patented March 20, 1849.



UNITED STATES PATENT OFFICE.

DANIEL H. SOLLIDAY, OF PHILADELPHIA, PENNSYLVANIA.

GAS-BURNER.

Specification of Letters Patent No. 6,212, dated March 20, 1849; Antedated January 9, 1849.

To all whom it may concern:

Be it known that I, DANIEL H. SOLLIDAY, of the Northern Liberties, of the city of Philadelphia, in the State of Pennsylvania, have invented a new addition to burners intended for the consumption of carbureted hydrogen or street gas, by which their light is improved, and of which I do hereby declare that the following is a full and exact description.

The nature of my invention consists in applying a tube, band, ring or other similar body near to the orifice of the gas-burner, which by altering the shape or thickness of the flame and the direction or force of the stream of gas escaping from the burner, shall increase the light caused by the consumption out of the same, of any given quantity of gas.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

In the first place I construct my gas burner after the manner of those commonly termed batwing burners and provide the same with a screw as in the accompanying drawings (A). To this in the next place I add a tube (B) which is also furnished with a screw in such a manner that when it is adjusted to its place as at No. 1, the tube may be raised and lowered by means of the same; and this describes one form of my invention.

In another form I take an ordinary batwing burner provided with a screw as in the accompanying drawings (A) and likewise with a nut (C). When this nut is screwed on I slip over the burner a separate tube (D) the lower edge of which rests on the nut (C). This tube is provided with a slit on the side through which a small screw or pin (E) is inserted and fastened to the burner in such a manner as to allow the tube (D) to be raised and lowered without turning. This tube (D) has on its upper edge two notches (*n n*) in a line with the slit of the burner, which completes the construction of the second form of my invention (No. 2). When my burner is constructed in either of these forms and the tube adjusted to the proper height by means of the screw and nut, it will be found that the flame resulting from the consumption of a given quantity of carburetted hydrogen gas out of said burners will be much increased in brilliancy, compared with burners to which my invention has not been applied.

What I claim as my invention and desire to secure by Letters Patent, is—

1. In the first place the application to gas burners of a ring, band or tube of any kind, movable or stationary or made with the said burner out of the same piece, for the purpose of increasing the light by altering the shape, direction or force of the stream of gas escaping from a gas burner of any construction whatever.

2. I also claim in the second place and desire to secure in the same manner the application of notches to the upper edge of the tube for the purpose of giving shape or brilliancy to the flame resulting from the combustion of gas from burners to which a tube, band or other similar body has been applied.

3. I also claim in the third place and desire to secure as aforesaid the mode of regulating the flames of gas burners having a band tube, ring, or similar body, namely, by raising and lowering said tube, band, ring or other similar body, by means of a nut and screw or slide or by any other known means of changing the relative position of the edge of the tube, and the nipple, of any kind of gas burner to which my invention may be applied.

DANL. H. SOLLIDAY.

Witnesses:

G. W. JACKSON,

GEO. W. ASH.