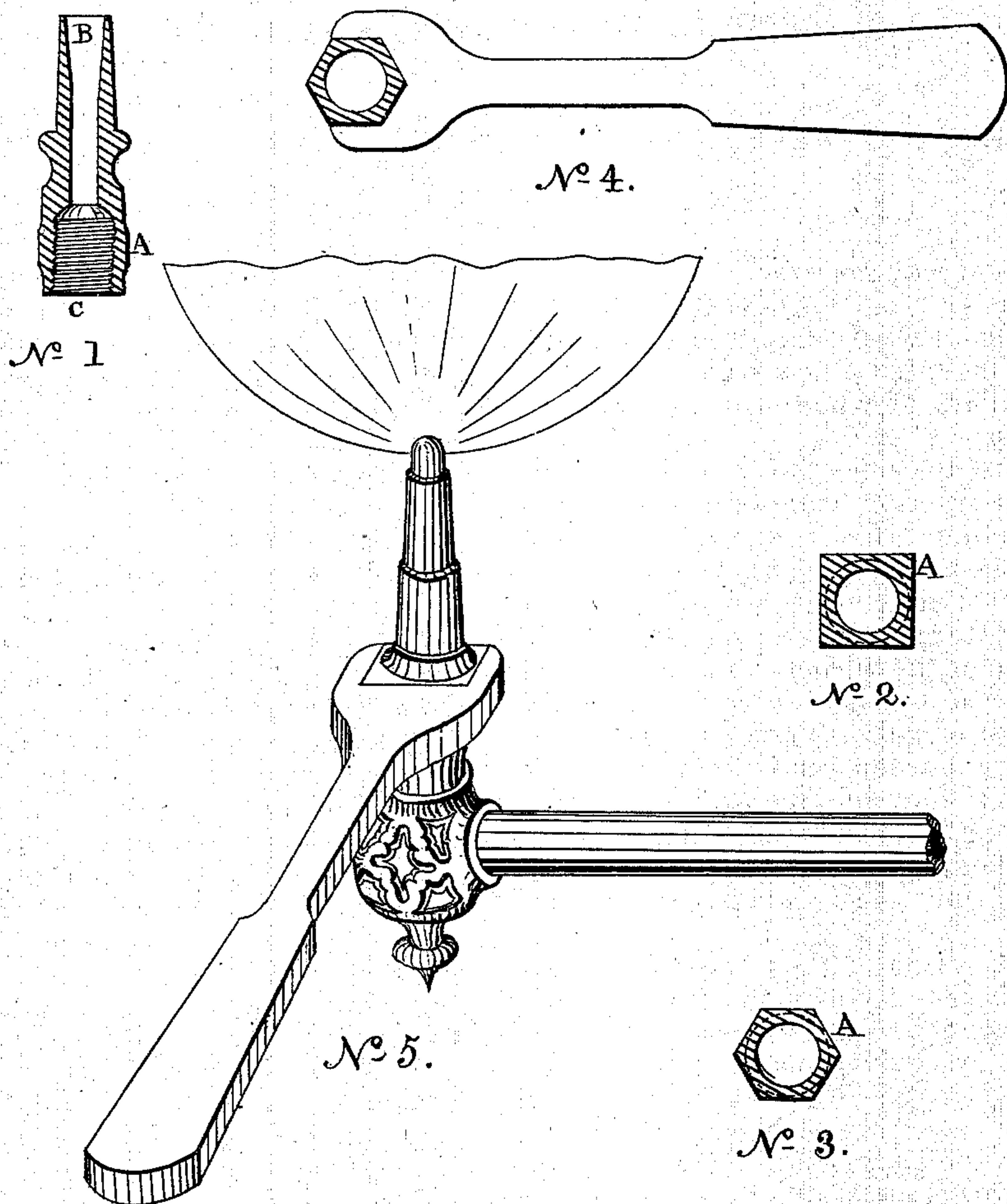


D. E. RYAN.  
Gas-Burners.

No. 139,481.

Patented June 3, 1873.



Witnesses,

*D. W. Martin*  
*Jay Cox Winterwood*

Inventor.

*Daniel E. Ryan.*



# UNITED STATES PATENT OFFICE.

DANIEL E. RYAN, OF CINCINNATI, OHIO.

## IMPROVEMENT IN GAS-BURNERS.

Specification forming part of Letters Patent No. **139,481**, dated June 3, 1873; application filed November 5, 1872.

*To all whom it may concern:*

Be it known that I, DANIEL E. RYAN, of Cincinnati, county of Hamilton and State of Ohio, have invented a new style of Gas Burners and Pillars, of which the following is a specification:

The nature and object of my invention consists in constructing gas burners and pillars in such a manner that they can be attached to or detached from gas-fixtures with an ordinary wrench, and entirely without the use of gas-fitters' tongs or pliers; and also, that the construction of the burners will admit of their being attached to the fixtures by the fingers tight enough for all ordinary purposes.

Heretofore burners and pillars have been constructed round, and required a gas-fitters' tongs, having teeth on the inner surface of the jaws, whereby the burners or pillars might be clasped firmly in attaching them or taking them off.

The construction of the burners heretofore, and the impossibility of attaching or detaching them except in the manner described, has been a very great drawback in their use, as it required a gas-fitter or expert to place or displace them, or the use of tongs constructed specially for the purpose, with the great drawback that the teeth of the tongs in all cases marred the burners by indentations, cutting, and abrasions, thereby detracting from the finish and value of the burners when once applied.

In my invention I have entirely overcome all the objections named by constructing burners and pillars with an angular offset on the outside surface, whereby a wrench can be applied so as to screw or unscrew to or from the gas-fixtures, and in setting them on to make a tighter joint than possible with any other burners.

To enable others to make and use my invention, I will proceed to describe it.

No. 1 is a vertical sectional view of a gas-pillar, A being the offset; B, the opening for the burner-tip; and C, the opening where the pillar is screwed onto the gas-fixture. No. 2 is a cross-sectional view of the offset, shown in a square form. No. 3 is a cross-sectional view, showing the offset in a sexagonal form. No. 4 is a cross-sectional view of No. 3 with a wrench in position to place or displace the pillar. No. 5 is a perspective view of a burner in position on a gas-fixture and a wrench as applied for attaching or detaching.

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

A gas burner and pillar having a special or grasping surface of angular or equivalent form on its outer sides, constructed in the manner shown and described, and for the purpose set forth.

DANIEL E. RYAN.

Witnesses:

TAYLER WINTERWOOD,  
D. M. MARTIN.