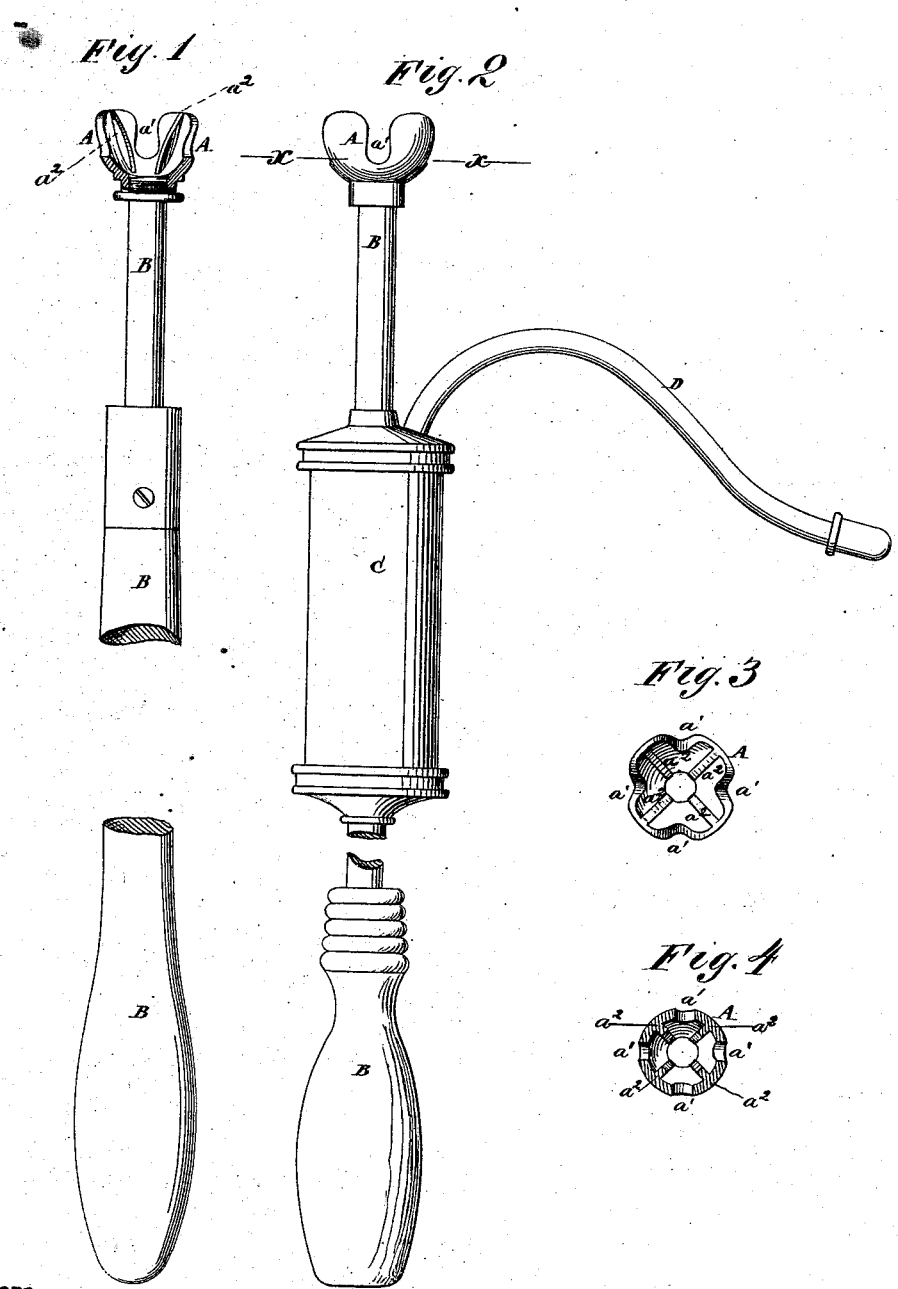


S. B. H. VANCE.  
Gas-Wrench.

No. 161,182.

Patented March 23, 1875



WITNESSES:  
*A. W. Almqvist*  
*A. J. Terry*

INVENTOR:  
*Saml B. H. Vance*  
BY *Wm. H. [Signature]*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE

SAMUEL B. H. VANCE, OF NEW YORK, N. Y.

## IMPROVEMENT IN GAS-WRENCHES.

Specification forming part of Letters Patent No. **161,182**, dated March 23, 1875; application filed March 1, 1875.

*To all whom it may concern:*

Be it known that I, SAMUEL B. H. VANCE, of the city, county, and State of New York, have invented a new and useful Improvement in Gas Key or Wrench, of which the following is a specification:

Figure 1 is a section of my improved wrench, part of the handle being broken away. Fig. 2 is a side view of the same shown as combined with a torch, and part of the handle being broken away. Fig. 3 is a top view of the same. Fig. 4 is a cross-section of the same taken through the line  $xx$ , Fig. 2.

Similar letters of reference indicate corresponding parts.

The invention consists in a key or wrench for turning the plugs of gas-pipes in dwellings, &c.; and relates particularly to the construction of the same hollow hemispherical in shape, with an inner strengthening-rib for each of the segments, into which its rim is divided by a series of notches, as hereinafter described.

A is the wrench, which is made in the form of a hollow semi-sphere, and is screwed or otherwise attached at its center to the end of a handle, B, which may be of any desired length. In the edge of the wrench A are formed two cuts, slots, or notches,  $a^1$ , crossing each other at right angles. The edge of the wrench A, at the sides of the notches  $a^1$ , is rounded off, as shown in Figs. 1, 2, and 3, to guide the handle of the stop-cock into the said notches

$a^1$ . The leaves or segments of the wrench A, between the notches  $a^1$ , have ribs  $a^2$  formed upon their inner or concave surfaces, as shown in Figs. 1, 3, and 4. The ribs  $a^2$  enable the wrench A to take hold of the handle of the stop-cock plug and turn it, however small it may be and whatever shape it may have. The ribs  $a^2$  also strengthen the wrench A, and, together with the shape of the said wrench, give it such a strength that it may be made light and neat, and still will not be liable to break when in use.

The handle B may be a plain handle, as shown in Fig. 1, or it may have a taper receiver, C, and holder D combined with it, as shown in Fig. 2.

I am aware it is not new to construct a wrench with a series of notches to receive a gas-plug.

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

The wrench A, made semi-spherical in form, with cross-notches  $a^1$  in its edge, and with ribs  $a^2$  upon the inner or concave surfaces of its segments, substantially as herein shown and described.

SAML. B. H. VANCE.

Witnesses:

ALFRED MURRAY,  
G. C. BARKER.