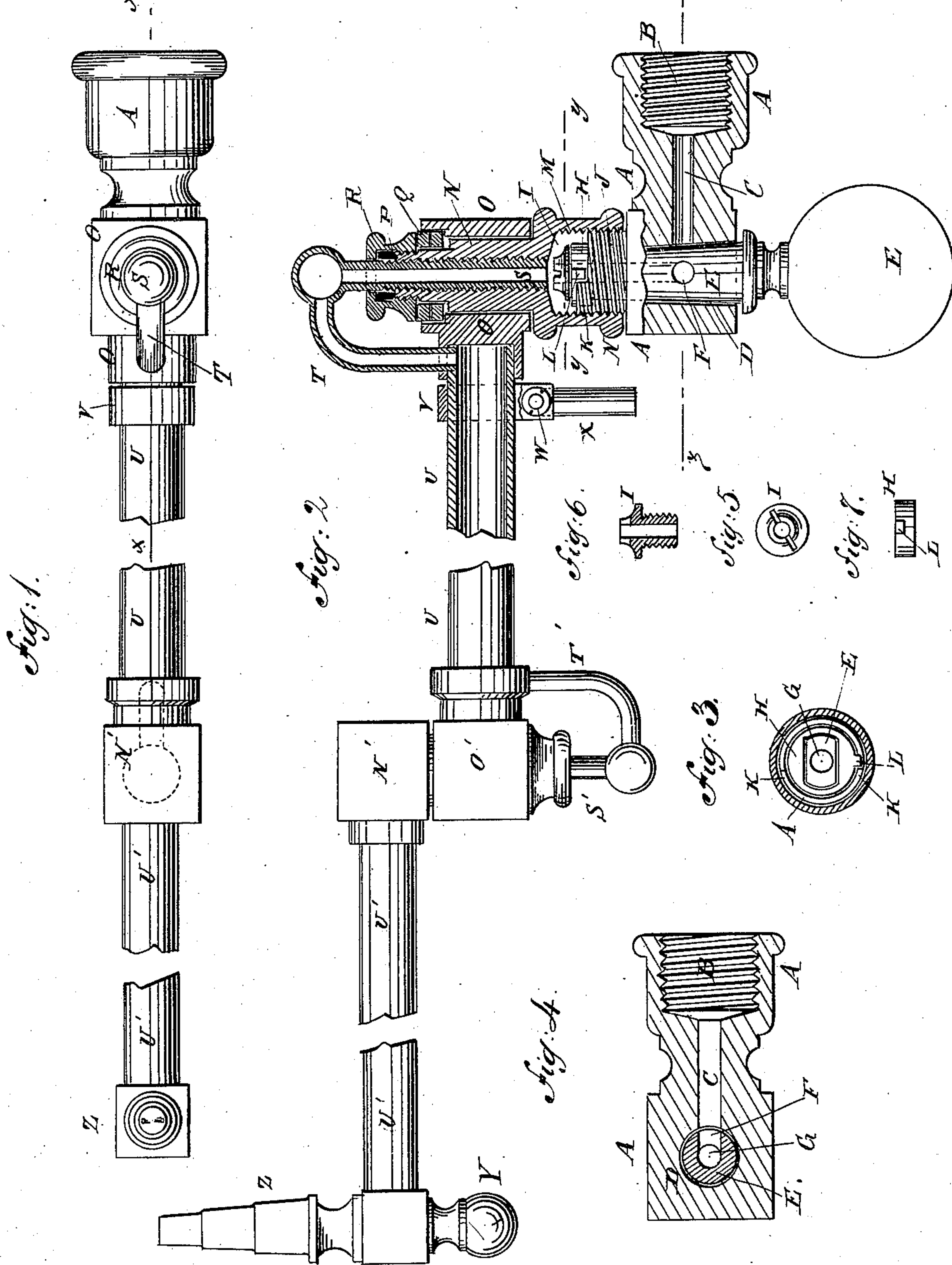


(No Model.)

H. P. DREW.  
FITTING FOR GAS BRACKETS.

No. 304,918.

Patented Sept. 9, 1884.



WITNESSES:

*Chas. Nida*  
*C. Sedgwick*

INVENTOR:

*H. P. Drew*

BY

*Munn & Co*

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

HENRY PHILIP DREW, OF NEW YORK, N. Y.

## FITTING FOR GAS-BRACKETS.

SPECIFICATION forming part of Letters Patent No. 304,918, dated September 9, 1884.

Application filed February 16, 1884. (No model.)

### *To all whom it may concern:*

Be it known that I, HENRY PHILIP DREW, of the city, county, and State of New York, have invented certain new and useful Improvements in Fittings for Gas-Brackets, of which the following is a full, clear, and exact description.

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 figures.

Figure 1 is a plan view of a gas-bracket to which my improvement has been applied, parts being broken away. Fig. 2 is a side elevation of the same, parts being broken away and partly in section, through line *xx*, Fig. 1. Fig. 3 is a sectional plan view of a part of the same, taken through the line *yy*, Fig. 2. Fig. 4 is a sectional plan view of a part of the same, taken through the line *zz*, Fig. 2. Fig. 5 is a plan view of the perforated screw for fastening the stop-cock plug in place. Fig. 6 is a sectional side elevation of the same. Fig. 7 is a side elevation of the stop-washer of the stop-cock plug.

The object of this invention is to prevent gas from escaping, strengthen the brackets, and prevent the swings from being turned too far.

The invention consists in the construction and arrangement of parts as will be herein-after described and claimed.

A is the stop-cock, the shank of which is provided with a female screw, B, to receive the screw-thread cut upon the end of the gas-pipe to which the bracket is to be attached. In the shank of the stop-cock A is formed a perforation, C, leading from the bottom of the female screw B to the tapering hole D, in which the key E works. In one side of the key E, and in such a position as to be on a level with the perforation C, is formed a hole, F, leading into the longitudinal perforation G, extending down from the upper end of the said key E. The opposite sides of the upper end of the key E are flattened to fit into the oblong hole in the washer H, which is secured in place upon the said key E by a screw, I, which screws into a screw-thread in the upper end of the perforation G of the said key E, and is perforated longitudinally for the passage of

the gas. With this construction, when the stop-cock is open, the passage of the gas through the said stop-cock will be unobstructed.

The upper end of the male screw J, formed upon the top of the stop-cock A, is cut away for a little more than half its circumference to form two shoulders, K, for the lug or pin L, formed upon or attached to one side of the washer H, to strike against, to prevent the key E from being turned more than half a revolution, or more than a quarter of a revolution, in either direction from the open position. With this construction the lug or pin L will be less liable to break and cannot drop out, so that there will be less liability of turning the gas off and putting out the light and then turning the gas on again accidentally than with the ordinary construction, as the key E, in case the pin L should break, must be turned through an entire revolution before the gas is turned on again, unless the operator, after turning off the gas, reverses the motion and turns the said key back, which he is not likely to do.

Upon the male screw J is screwed the female screw M, formed in the lower end of the plug N, upon which the swinging socket O fits and works. The outer surface of the end of the plug N and the inner surface of the corresponding end of the socket O are rabbeted to receive the spring-washer Q, which is held down by a nut, R, screwed upon the said rabbeted end of the plug N. The upper end of the plug N is concaved to form a stuffing-box, P, into which packing is pressed by the nut R. Through the entire length of the said plug N is formed a perforation, in the inner surface of which is formed a screw-thread, to receive the tubular screw S.

With the upper end of the tubular screw S is connected the end of a tube, T, which is bent downward, and has its end inserted in a hole in the side of the pipe U, and soldered to the said pipe. With this construction no gas can come in contact with the swing-joint, and any gas tending to escape must pass along the long screw-threads connecting the tubular screw S and the plug N and through the stuffing-box P, which it cannot do.

In case the bracket is made with more than one joint, each succeeding joint is formed with



a swinging socket, O', a cylindrical plug, N', a tubular screw, S', and a bent pipe, T', in the manner hereinbefore described with reference to the first joint, except that the socket O' and bent pipe T' may be connected with the inlet-pipe U, and the said plug N' connected with the outlet-pipe U'. Around the inner end of the first pipe U is placed an open band, V, with its ends downward. Between the ends of the open band V is secured, by a clamping-screw, W, the upper end of a hanging arm, X, which is made of such a length that its lower end will strike against the shank of the stop-cock A and prevent the pipe U from being turned through an entire revolution, so that the upper joints of the bracket cannot be turned so far as to be injured by those handling the said bracket. When the bracket has been put up, the stop V W X can be removed, as the pipe U cannot then be swung through an entire revolution. For the same purpose a knob, Y, can be attached to the lower end of the burner Z, as shown in Fig. 2, to stop against either side of the pipe U.

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

1. The combination, with the stop-cock having the hole D and perforation C, of the key E, and its washer held to turn within the hole D, vertical aperture G, and horizontal aperture F in said key, the latter aperture coinciding with aperture C, tubular screw I in the

upper end of the key E, and the plug M, secured to the stop-cock, and having a central aperture communicating with the discharge-pipe and with the stop-cock through the tubular screw, substantially as set forth. 35

2. The combination, with the rabbeted cylindrical plug N, provided with the long screw S, and the bent pipe T, of the rabbeted swinging socket O, and its pipe U, spring-washer Q, and the nut R, the latter surrounding the upper end of the long screw and screwing onto the top of the plug N, substantially as set forth. 40 45

3. In gas-bracket fittings, the combination, with the cylindrical plug N, and the swinging socket O and its pipe, of the long tubular screw S and the bent pipe T, substantially as herein shown and described, whereby the passage of the gas through the swing-joint will be unobstructed and the gas will be kept from coming in contact with the swing-joint, as set forth. 50 55

4. In gas-bracket fittings, the combination, with the outlet-pipe of the first joint, of the open band V, the arm X, and the clamping-screw W, substantially as herein shown and described, whereby the swinging of the said pipe entirely around the swing-plug will be prevented, as set forth. 60

HENRY PHILIP DREW.

Witnesses:

JAMES T. GRAHAM,  
EDGAR TATE.