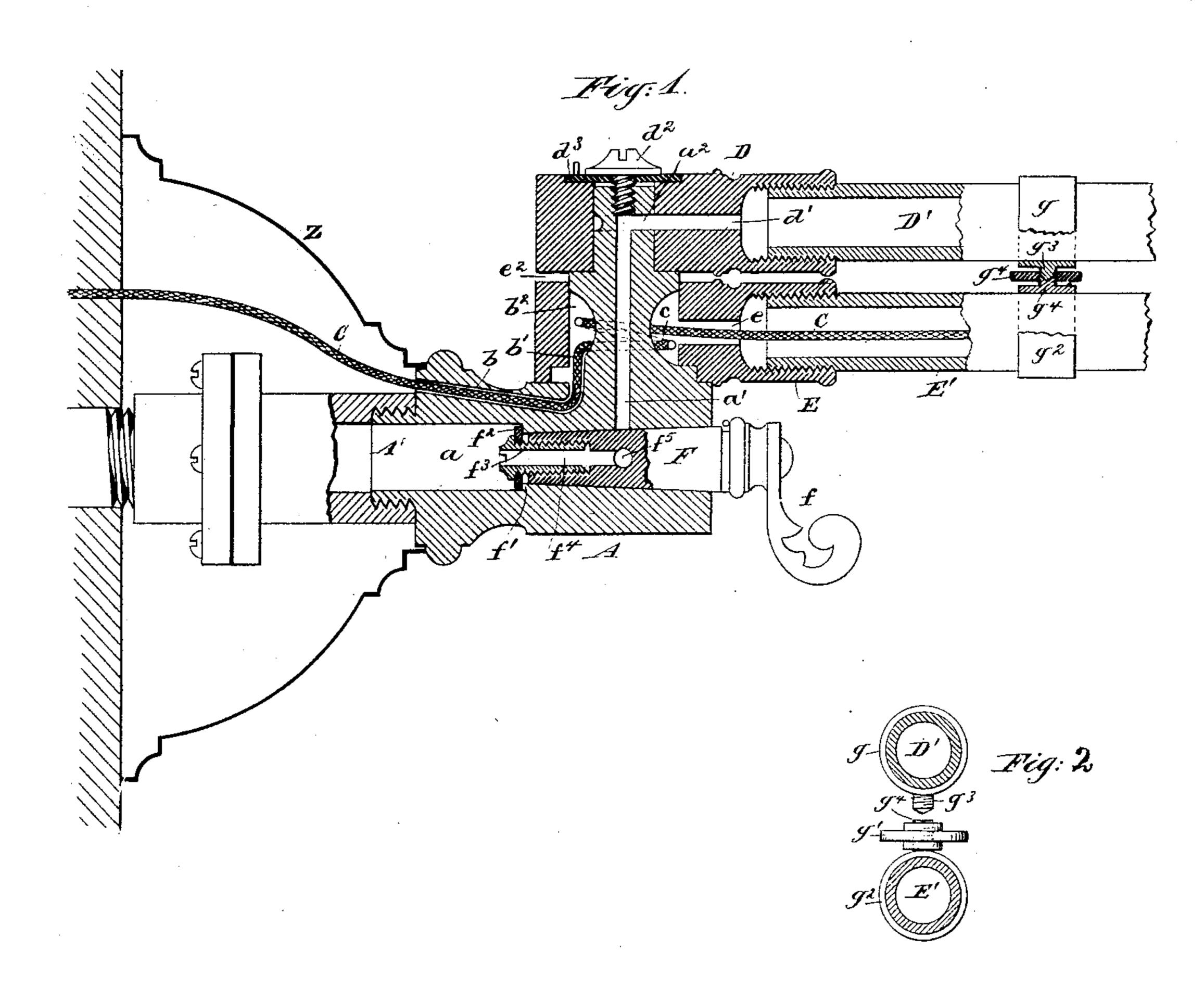
O. STROM.

COMBINATION FITTINGS FOR GAS AND ELECTRIC LIGHTS.

No. 460,095. Patented Sept. 22, 1891.



Witnesses:

Charles R. Searle. Chas. S. Barber. Inventor:

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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OLAF STROM, OF BROOKLYN, NEW YORK, ASSIGNOR OF ONE-HALF TO GEORGE ANGELL, OF SAME PLACE.

COMBINATION-FITTINGS FOR GAS AND ELECTRIC LIGHTS.

SPECIFICATION forming part of Letters Patent No. 460,095, dated September 22, 1891.

Application filed December 27, 1890. Serial No. 375,955. (No model.)

To all whom it may concern:

Be it known that I, OLAF STROM, of the city of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Combination-Fittings for Gas and Electric Lights, of which the following is a specification.

This invention relates to partially turning or swinging fittings for gas and incandescent electric lamps, and is designed especially for those which project from walls and combine in one fixture conduits for both gas and elec-

tric-light wires.

The objects sought to be attained by my improvement are simplicity and economy in construction, ease in fitting the parts together,

and facility in wiring.

The main feature in my improved fitting is a main or base casting (adapted to be fixed to a wall) bored or cored out for the gas-conduits and for passages through which the electric wires are led, and having bearings formed directly thereupon for the butts or sockets of the branch pipes conveying the gas and wires to the burners and lamps separated by an offset supporting the upper independent of the lower, so that the same may be swung or adjusted to different angles independently of each other.

In combination with the above my invention also provides for a gas-cock within the main casting and a device for coupling the branches when it is desired that they shall be

kept together.

For full comprehension of the different features of the invention and of their joint operation, reference must be had to the accompanying drawings, forming part of this specification.

In said drawings, Figure 1 is a central vertical section of my improved combination-fitting; and Fig. 2 is a cross-section taken through the two branch pipes, showing device for locking same together when desired.

Similar letters of reference indicate like

parts.

A represents the main or base casting adapted to be connected to the usual escutcheon or wall plate Z by means of the screwed extension A'. The gas-passages a a' a' are bored or cored out within this main casting,

preferably at right angles to each other, as shown. There is a smoothly-finished upright axis on this base-casting, having an offset at about the mid-height, for purposes which will 55 presently appear. The conduits b b' for the electric wires are formed substantially parallel to a and a' in the same casting, the passage b' terminating in an enlarged space or channel b^2 . This latter is intended to contain a 60 slackened or coiled portion c of the electric conductor c, which is thus arranged in order to permit free movement of the electric branch without straining the wires.

D is the butt or socket into which the gas-65 pipe D' is screwed, and E the butt or socket for the electric branch E', each being mounted

on an extension of the casting A.

Referring now more especially to Fig. 1, it will be seen that the sockets D and E are arranged the former immediately above the latter. That part of the casting A which affords a pivot-bearing for the former is of less diameter than that which forms the bearing for the latter below, the intervening step portion being 75 provided with the annular channel or space b^2 for the coils c of electric wire, and also containing the branch conduit b'. The gas-conduit a^2 connects with a perforation a' in the gas-socket D, and the channel a' leads into a perforation a' in the electric-wire socket E, and both then lead to the respective branches.

The gas-conduit a is bored conically for a portion of its length to receive a spigot F, provided with an external handle or lever f, 85 inserted therein from that side of the casting A which is opposite to the screwed extension A'. The small end of the conical bore affords an adjacent annular shoulder f', against which will bear a washer f^2 , a screw f^3 serving to 90 hold said washer and spigot closely together, while permitting the latter to turn.

In order to effect connection between the gas-passages a and a', I drill a central hole f^4 through the binding-screw f^3 , and also provide the spigot F with a corresponding hole along the line of the axis, and with a proper perforation f^5 to be turned into and out of connection with the gas-passage a' in the casting A, the whole thus forming an effective 100 gas key or cock.

In drilling the gas-passage a' it is necessary

to commence from the exterior of the casting A. Therefore to close the opening and also to bind the socket D properly to said casting, I use a screw d^2 and washer d^3 , as shown.

It is important that there should be no friction between the sockets D and E. Therefore I make the bearing for the socket D smaller than for the socket A and produce a corresponding offset in the central axis. The lower bearing has a little greater height than the depth of the socket. By this means I so arrange their bearings upon the casting A that there shall be a space e between them, as seen in Fig. 1. This construction insures that either pipe may be turned or swung horizontally to any desired extent when required without moving the other.

The modification, Fig. 2, shows the same essential features, save that the gas-cock F 20 is dispensed with, and the socket E for the electric wires C is journaled upon a part of the casting A at that side of the center which is opposite to the bearing of the gas-socket D, a screw e' and washer e^2 (similar to those 25 marked d^2 and d^3 , respectively) being employed to retain this socket E in place, while allowing it to move in like manner to D. In this modification the channel b^2 for the slack wire c is not annular, as in Fig. 1, but is 30 simply formed in one side of the extension from the casting A, thence opening into the conduit e. To bring the branch pipe E' close underneath the pipe D', I form an elbow E² upon the socket E, and in this make a pas-35 sage e^4 , usually at right angles to that marked e, and leading thence into the horizontal branch pipe E'.

To keep the pipes D' and E' the proper distance apart to stiffen and also lock them 40 together, so that they may swing together upon their bearings, I use the locking device

G, (shown in Figs. 1 and 3,) or its equivalent, such as is illustrated in Fig. 4. Upon each of the pipes I secure collars or segments $g g^2$ at any suitable point, such as the mid-length of 45 the branch, and arrange upon the opposing faces of these collars short screwed projections g^3 g^4 , extending into close proximity with each other, so as to allow of their joint engagement with an adjustable screwed coup- 50 ling g'. This latter is adapted to be turned by hand, and is adjusted so as to engage with both of the screws $g^3 g^4$ when both branch pipes are to be kept together, and with one or the other alone when the gas-bracket and 55 electric-light branch are intended to be moved separately.

I claim as my invention—

1. In combined electric and gas fittings, two offsets arranged on the axis with a space 60 between the electric arm below and the gasarm above such offset, giving an independent bearing to each, substantially as described.

2. The combination, with the branch pipes D' and E', of a locking device composed of 65 two screws g^3 g^4 , one on each pipe, and a nut adapted to serve as a connection between said screws, substantially as and for the purpose specified.

3. In combined electric and gas fittings, the 70 key for gas drilled from one end of plug through screw and washer and far enough into said plug to connect with vertical gasway in stationary fitting, substantially in the manner set forth.

In testimony that I claim the invention above set forth I affix my signature in presence of two witnesses.

OLAF STROM.

Witnesses:

ROBT. A. KELLOND, CHAS. S. BARBER.