

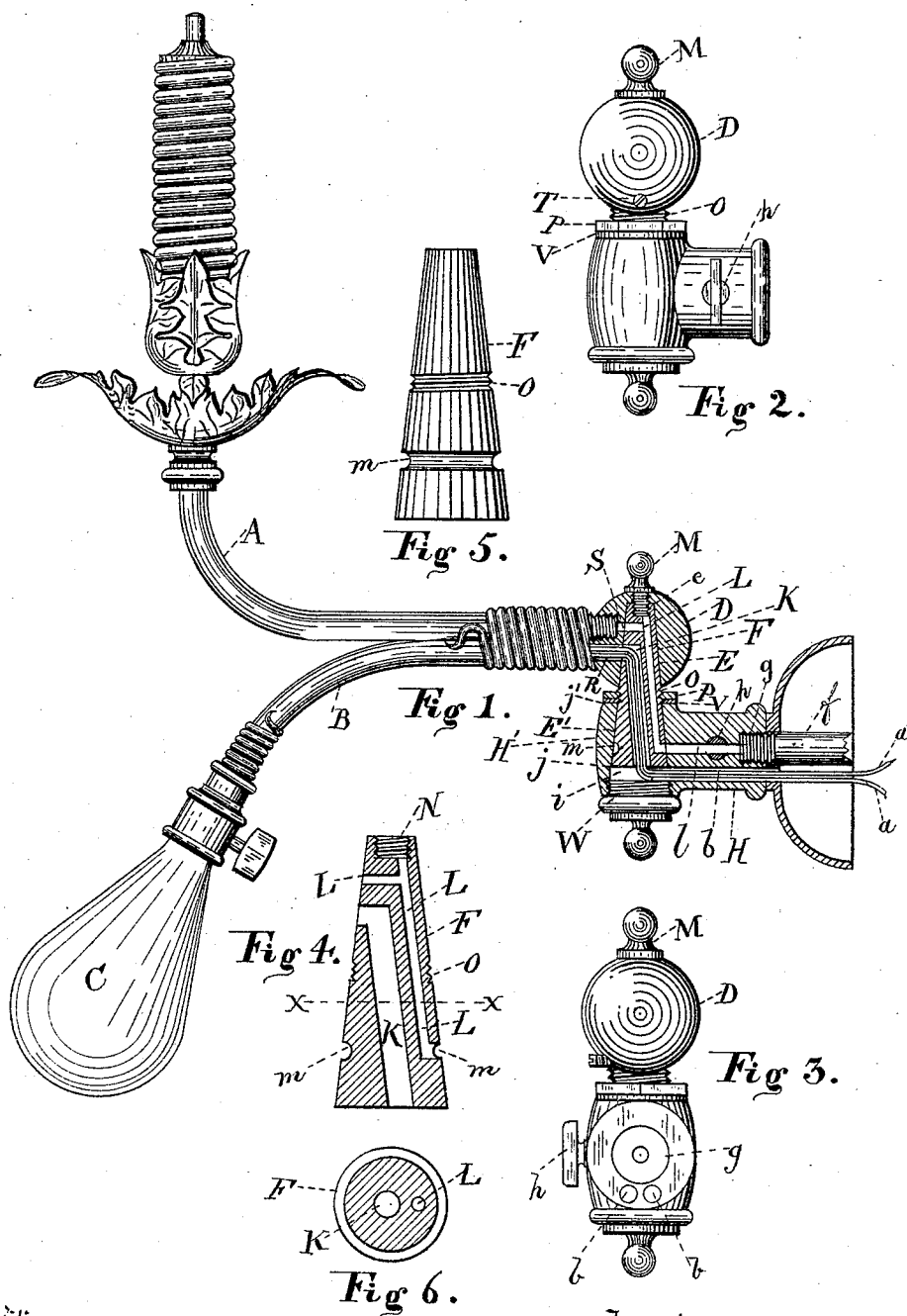
(No Model.)

G. A. LOEBEN.

COMBINATION GAS AND ELECTRIC LIGHT FIXTURE.

No. 529,451.

Patented Nov. 20, 1894.



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UNITED STATES PATENT OFFICE.

GUSTAV ADOLF LOEBEN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF TWO-THIRDS TO CHARLES FALKENSTEIN AND GEORGE FALKENSTEIN, OF SAME PLACE.

COMBINATION GAS AND ELECTRIC LIGHT FIXTURE.

SPECIFICATION forming part of Letters Patent No. 529,451, dated November 20, 1894.

Application filed June 7, 1894. Serial No. 513,733. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV ADOLF LOEBEN, a citizen of the United States of America, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improvement in a Combination Gas and Electric Light Fixture and Bracket; and I hereby declare that the following is a full, clear, and exact description of my invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in combination gas and electric light fixtures and brackets, of that class which require to have one or more swinging or folding joints, and is more especially designed for use and adaptation to those fixtures generally known as folding wall brackets, or for drop light fixtures where it is desirable to have the same arranged that they may be readily swung upward or out of the way, when required, and the objects of my invention are: First, to provide a swinging, or pivotal flexible joint for use with combination gas and electric light fixtures, or for brackets, or fixtures intended for use with electric light only, that will possess desirable advantages over all others as now in general use; second, to construct a swinging, movable joint for use with combination gas and electric light fixtures, or brackets, that will remove all danger of injuring the electric conductors, or insulation of the same, by swinging or pushing the fixture to and fro in its various positions; third, to provide a movable, swinging joint for gas and electric light fixtures whose construction will prevent wear and abrasion of the electric wires, connecting the fixture, and which will be effective in its operation, simple in construction, and inexpensive in manufacture.

For a better understanding of the merits and objects for which my invention is intended, they will be more readily understood by a brief description of the disadvantages attended by the use of the old or present methods, the construction of which has only allowed for a limited movement of the fix-

tures, and then only when necessity required, as by the old system of providing for the electric conductors to pass the joint, there is and always has been, great danger of breaking off the conductors, or injuring them, thereby making it necessary to exercise great caution in the adoption, and use of swinging or jointed fixtures, for electric light, or combination gas and electric light brackets, and owing to these disadvantages the use and adoption of swinging brackets, or pendent fixtures, has hitherto been limited; but fixtures made with swinging joints, and embracing my invention may be safely adopted and used in locations of every description, without entailing any risk or danger of breaking the electric conductors, or injuring the insulation, and thereby permitting the free use and adoption of a class of fixture that is very convenient and desirable, and free from all danger of injury from the use, or constant movements, or changed positions, as are usually incurred in all swinging fixtures.

I attain the objects of my invention by the use and construction of a joint shown in the accompanying drawings, where for illustration, and to more clearly describe the practical operation of my invention I have confined my drawings and description, as would be applied to a combination gas and electric light swinging bracket, having what is generally known as one or single swing joint, as now in general use; but I wish it understood that my invention is applicable to all fixtures, where a joint can be employed that is required to swing, or assume various positions.

In the accompanying drawings, Figure 1 is a side elevation of a combination fixture and showing my invention in section. Fig. 2 is a side elevation of the invention. Fig. 3 shows a rear view of the invention. Fig. 4 shows a sectional view of the bored plug or key piece removed from the other parts of joint. Fig. 5 is an elevation of the bored plug or key piece. Fig. 6 is a cross sectional plan of the bored plug or key piece on the line *x x*.

Similar letters of reference indicate the same parts of the various figures of the drawings.

Referring by letter to the drawings, A represents the gas pipe of a combination gas and electric light bracket fixture.

B is the pipe or fixture through which are run the electric wires or conductors, *a a'* which supply current to the electric lamp C.

D is the upper portion or half of the swinging joint of the fixture, which may be round or ball shaped as shown, or can be made in any desired form as may be required for ornamental and decorative effect. This upper portion D of the joint, has an interior coned or tapered opening E bored almost through in a diametrical line, and forming a chamber or socket in which the tapered key or plug F is fitted.

The lower half or portion H may be so constructed as to screw in or on to the outlet nipple of the gas pipe *f* as at *g*, and is provided with the gas regulating tap *h*. On the lower side of this socket H two holes or ways, *b b* are bored for the electric wires or conductors *a* and *a'* to pass through. The end of this socket H has a straight bored aperture *i* which extends inwardly for a distance sufficient to full clear or pass the inside ends of the openings *b b* as far as *j*. From the point *j* a coned or tapering opening E' is made entirely through the end portion H', of the socket H from the point *j* to the top of the portion H', of the socket H, or as far as *j'*.

The coned or tapered plug or key F as shown in Figs. 1, 4, and 5, is provided with the bored out openings K and L, the larger passage K being provided for the electric conductors, and the smaller one L for the gas. This tapered key F is provided with the internally threaded opening N at its upper end, in which the clamping screw M engages, and secures the upper portion or ball D, of the joint to the key, which is set with its passages K and L corresponding to the ends or outlets, in the ball D to the gas pipe A, and electric conductor pipe B.

The gas passage L terminates at its base in the groove *m* which is provided as a passage for the gas when the fixture is moved or turned in various positions.

The tapered key F is provided with the screw thread O, which engages with adjusting nut P. The part or ball portion D of the joint is provided with a locking or clamping screw T which secures the part D in a permanent position on the key F with the gas passage *s*, and passage R for electric wires, corresponding to the passages L and K in the key F.

In assembling the various parts together as shown in Fig. 1, the key F is pushed up into its position, and the washer V and adjusting nut P are applied, being so regulated as to admit of the free movement of the key F. The ball or upper portion D having the fixture

pipes A and B previously secured, is then placed on the upper and projecting end of the key F, and secured in its permanent position by the screw M, and clamping screw T, the lower screw threaded plug W effectually closing the lower end or opening of the chambered space *i*.

It will be apparent that a fixture constructed on, or embracing the principles of my invention, will admit of the free movements desired in swinging wall brackets, without any danger of injury to the electric conductors, which pass into the chamber or space *i*, located below the base of key F, and afterward pass through the opening K in key F, which is free to turn or move above the passages *b b*, by which the conductors enter the space *i*.

Minor changes in the form, details, or construction may be resorted to without departing from the principles, or sacrificing any of the advantages of my invention.

Having fully described the operation, construction, and objects of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A gas and electric light fixture, or bracket, comprising in its construction the combination of a swinging joint, formed with the upper portion or joint D, provided with the tapering opening E, and clamping screws M and T, the said screws securely attaching the portion D, to the tapered key F, and having the tapered key F adjustably secured in the tapered opening H', of the lower portion of the joint H, by nut P, washer V, and secured by nut P, engaging with the threaded portion O of the key F, the portion H having a passage *g* for the gas, and passages *b, b*, for electric conductors, and provided with the chamber *i* below the base of the key F, and the opening of chamber *i* closed with the screw threaded plug W, all or their equivalents operating substantially as shown, and described, and for the purpose set forth.

2. A gas and electric light fixture or electrolier, comprising in its construction the combination of a tapered key or plug F having the internally threaded opening N, and arranged to be secured to the upper portion D of the joint by the clamping screw M, and provided with the bored out vertical, and transverse passages L and K, and groove *m*, and having the externally threaded portion O near its middle all substantially as shown and described, and for the purpose specified.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

GUSTAV ADOLF LOEBEN.

Witnesses:

HARRY J. FRANZ,
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