

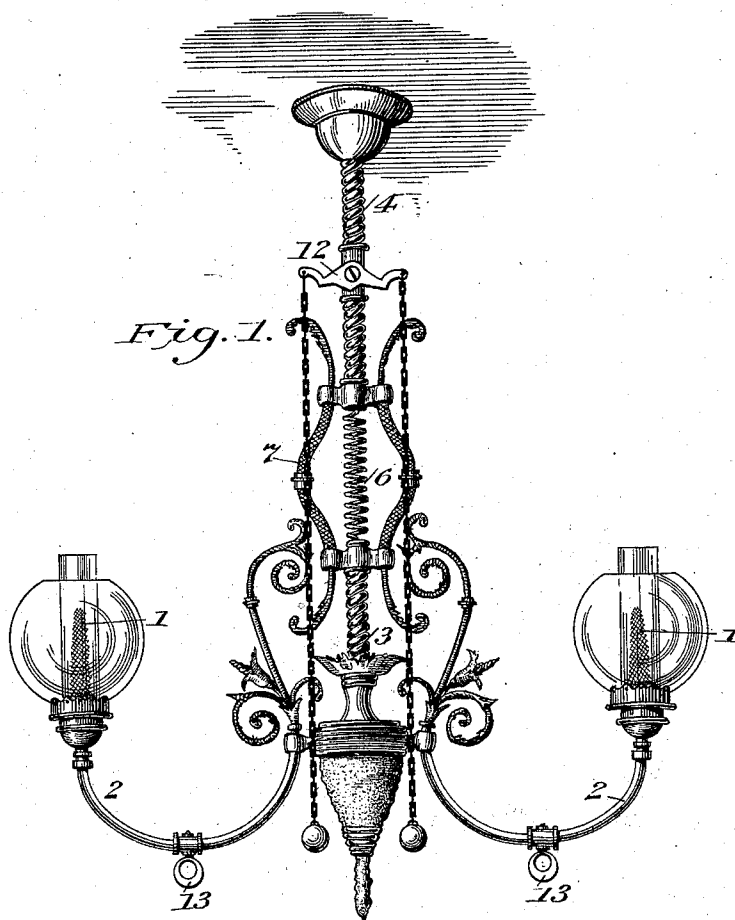
(No Model.)

3 Sheets—Sheet 1.

J. W. McKNIGHT.
FIXTURE FOR INCANDESCENT LAMP BURNERS.

No. 558,911.

Patented Apr. 21, 1896.



Witnesses
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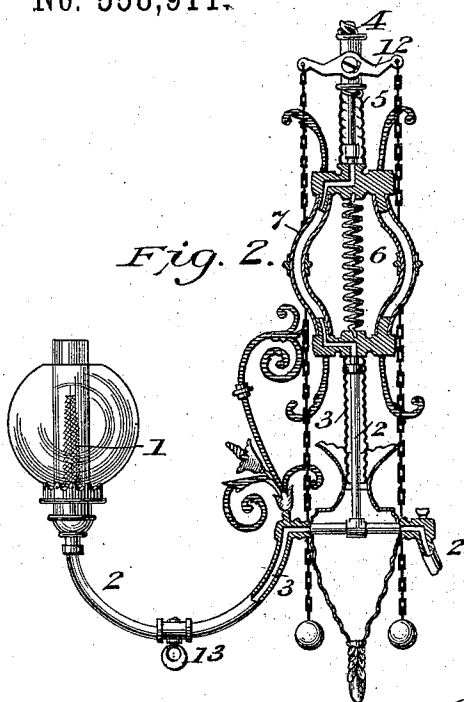


Fig. 2.

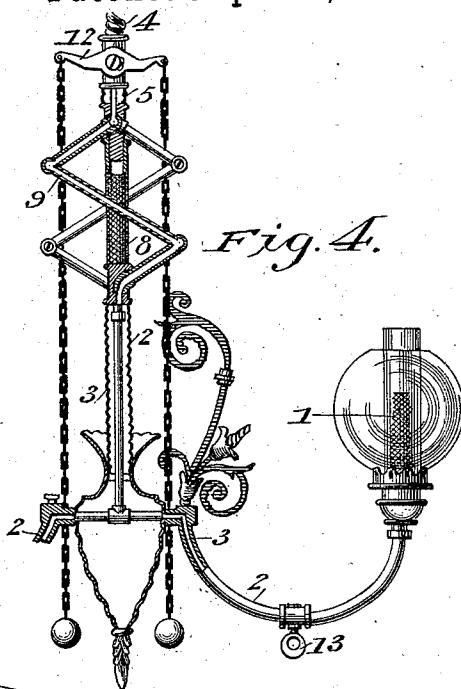


Fig. 4.

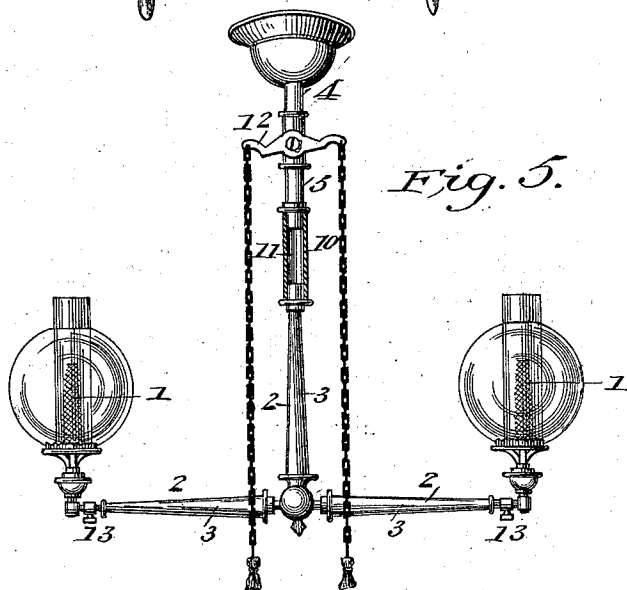


Fig. 5.

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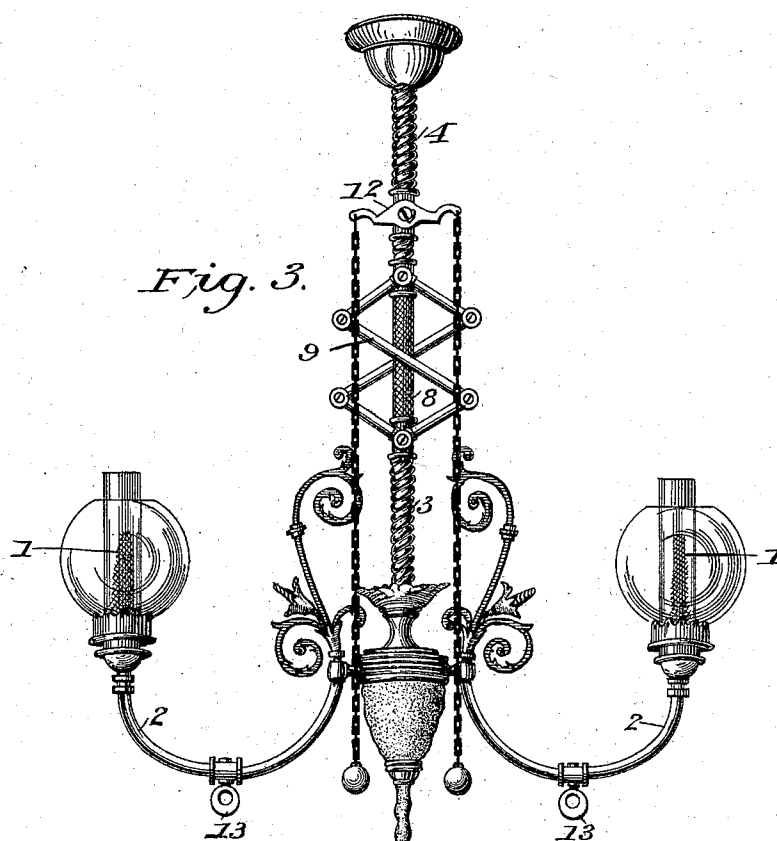
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3 Sheets—Sheet 3.

J. W. McKNIGHT.
FIXTURE FOR INCANDESCENT LAMP BURNERS.

No. 558,911.

Patented Apr. 21, 1896.



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UNITED STATES PATENT OFFICE.

JOHN WESLEY MCKNIGHT, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
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FIXTURE FOR INCANDESCENT-LAMP BURNERS.

SPECIFICATION forming part of Letters Patent No. 558,911, dated April 21, 1896.

Application filed July 5, 1895. Serial No. 555,043. (No model.)

To all whom it may concern:

Be it known that I, JOHN WESLEY MCKNIGHT, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Fixtures for Welsbach and other Incandescent Gas-Burners, of which the following is a specification.

Incandescent gas-burners—such, for example, as the well-known Welsbach burners—are efficient, satisfactory, and durable and have come into wide and general use. However, their use has been somewhat curtailed because the mantles or incandescents are not well adapted to sustain, resist, or withstand shocks, jars, or vibrations such as are imparted to them by the constant manipulation of the gas-supply valve in lighting and extinguishing them and such as occur in mills, storehouses, railway-cars, and other analogous structures.

It is the principal object of my invention to protect such mantles or incandescents from injury such as would arise from the necessary manipulations of the gas-supply valve and from shocks and jars otherwise imparted to the fixture. To this end my invention comprises the improvements hereinafter described and claimed.

The nature, characteristic features, and scope of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, and in which—

Figure 1 is a view of a two-part gas-fixture embodying features of my invention and having its fixed and movable parts connected by a spring-support and a flexible gasway and showing the gas-supply valve applied to the fixed part, whereby its manipulation does not shock or jar the mantles. Fig. 2 is a view, partly in section, of a portion of the fixture shown in Fig. 1. Fig. 3 is a view illustrating a fixture embodying a modification of my invention wherein the spring-support comprises an elastic body and the flexible gasway comprises flexibly-jointed sections of pipe. Fig. 4 is a view, partly in section, illustrating a portion of the fixture shown in Fig. 3; and Fig. 5 is a sectional view illustrating another

modification of my invention wherein the spring-support is bored to form the flexible gasway.

In the drawings, 1 are the mantles or incandescents of Welsbach or other type of incandescent gas-burners.

2 is the movable part of the fixture, that carries these mantles or incandescents and their burners, and it is provided with suitable gasways, as 3.

4 is the fixed part of the fixture, that is usually attached to the ceiling, roof, or other structure and is supplied with gas by means of a gasway, as 5, communicating with a suitable supply-pipe. (Not shown.)

The fixed and movable parts 2 and 4 are connected by a spring-support and by a flexible gasway. In Figs. 1 and 2 the spring-support comprises a spiral spring 6 and a flexible gasway 7, in Figs. 3 and 4 an elastic tube 8 and flexibly-jointed lazy-tongs 9, and in Fig. 5 use is made of an elastic tube 10, having an opening 11 through it.

12 is a gas-supply valve interposed in the fixed part 4 of the fixture and adapted to afford means for turning on and off the supply of gas for the purpose of lighting and extinguishing the burners, as it is frequently necessary or desirable to do.

13 are emergency-keys, which may be employed for extinguishing any one or more of the burners in case of an accident to its or their mantles or in case it or they are not required for the purpose of furnishing the requisite amount of light.

The mode of operation of a fixture of my invention may be described as follows: When the gas-supply valve 12 is opened or closed, which is done every time the burners are lighted or extinguished, a considerable shock or jar is imparted. However, this shock or jar does not reach the mantles or incandescents 1, but is confined to the fixed part 4 of the fixture. Moreover, the spring-support and flexible gasway not only prevent damage to the mantles or incandescents by taking up shocks and jars arising from the necessary manipulations of the gas-supply valve 12, but also take up such other shocks or jars as may be imparted to the fixed part of the fixture.

In consequence of the foregoing the life and

utility of the mantles are greatly increased and their liability to accidental breakage in turning on and off the gas is substantially eliminated.

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

The combination of, a two-part fixture having its movable part adapted to carry incan-
10 descents or mantles and attached to its fixed part by a spring-support and a flexible gas-

way, with, a gas-supply valve interposed in said fixed part whereby shocks and jars incident to the manipulation of said valve are confined to the fixed part, substantially as 15 described.

In testimony whereof I have hereunto signed my name.

JOHN WESLEY McKNIGHT.

In presence of—

EVAN J. LESTER,
K. M. GILLIGAN.