H. COESTER.

Extension Gas Fixture.

No. 105,911. Patented Aug. 2, 1870.

Fig: 1.

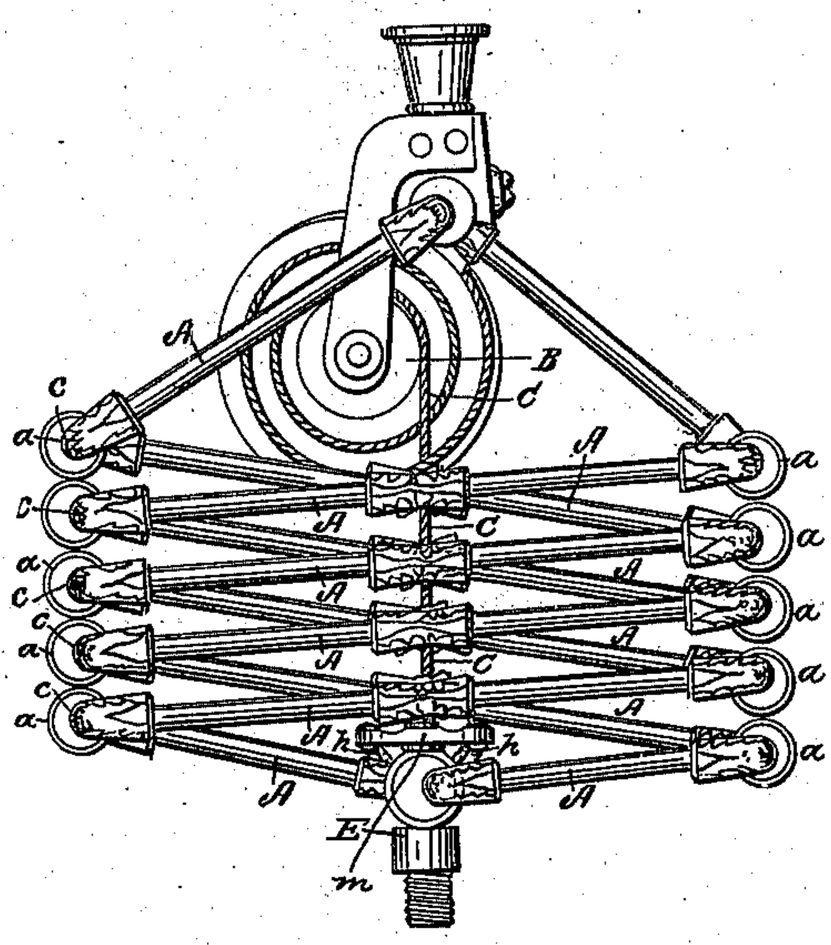


Fig: 2.

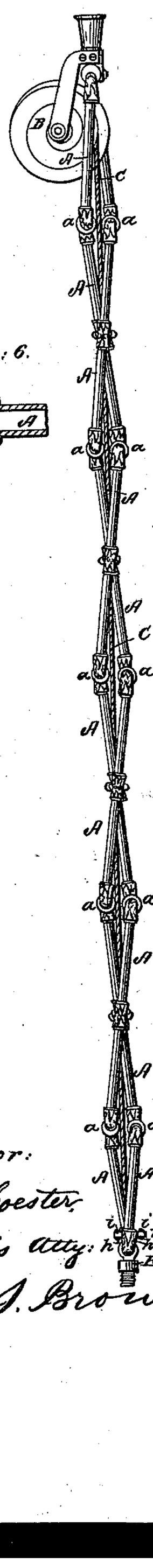


Fig: 3.

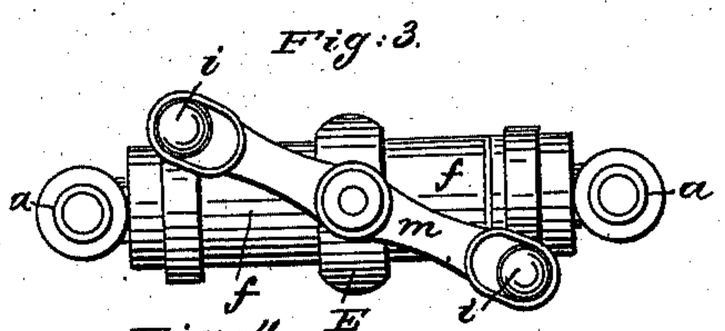


Fig: 4.

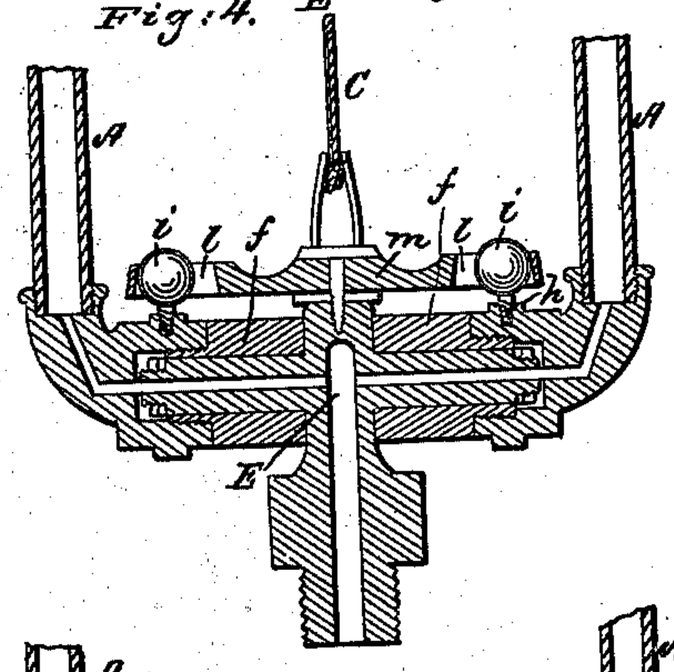


Fig: 5.

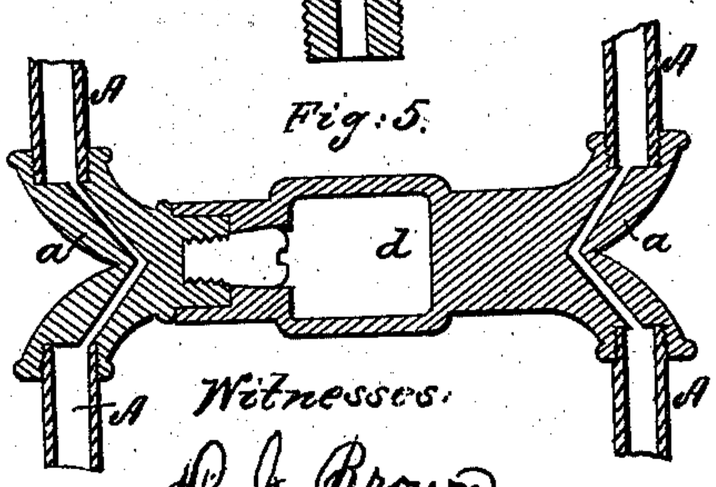
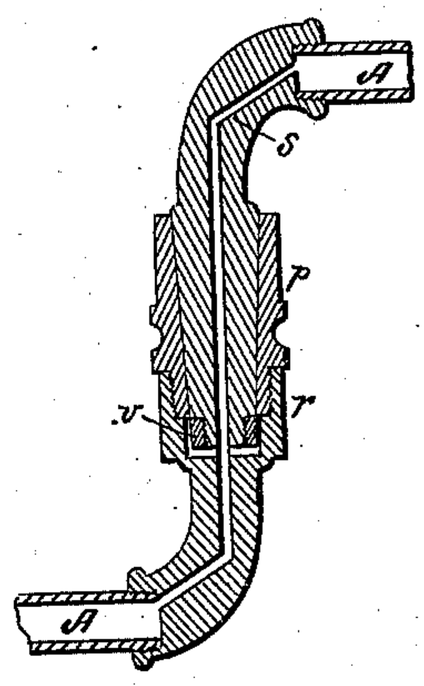


Fig: 6.



Witnesses:
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R. D. Smith

Inventor:
Henry Coester.
By his atty:
H. J. Brown

UNITED STATES PATENT OFFICE.

HENRY COESTER, OF NEW YORK, N. Y.

IMPROVEMENT IN EXTENSION GAS-FIXTURES.

Specification forming part of Letters Patent No. **105,911**, dated August 2, 1870.

To all whom it may concern:

Be it known that I, HENRY COESTER, of the city, county, and State of New York, have invented certain Improvements in Extension Gas-Fixtures; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a side view of the extension-fixture when closed or drawn up; Fig. 2, a corresponding view, on a smaller scale, of the fixture when extended or lowered; Fig. 3, a top view of the "regulator" or device by which the connections are kept in an upright position at all times; Fig. 4, a central longitudinal vertical section of the same; Fig. 5, a horizontal section of one of the cord-guides; and Fig. 6, a central vertical section of one of the joint-connections of the tubes.

Like letters designate corresponding parts in all of the figures.

Let A represent the extension tubes, jointed at *a a*. A single spring-pulley or fusee-barrel, B, is employed, and a single cord, C, extending therefrom to the lower part of the fixture. This single cord is located centrally within the extension-tubes, passing successively through guide-apertures *d d* in the several middle connecting-bars, D D, of the tubes Thus a simple, complete, and neat arrangement is obtained, and one less liable to get out of order than other plans heretofore in use.

The regulator for keeping the fixture in the proper position as the angles of the connecting-tubes vary consists of separately-turning plugs *f f*, screwed upon the lower connection, E, and to these or to the connections *g g*, united thereto, are respectively attached or formed therewith short pins or studs *h h*, terminating in round heads or balls *i i*, which fit loosely in the eyes or sockets *l l* of a cross-bar, *m*, secured upon the center of the connection E, substantially as shown, obliquely to the line of the connection. The lower end of the cord C is attached to the connection at this point. The arms of the bar *m* are of equal length, and cause both plugs *f f* to turn simultaneously and equally as the tubes change their angles, the balls *i i* moving in opposite directions. The same or a similar arrangement is made with the upper connection of the fixture. The plugs *i i* are secured to the connection E by inside nuts and washers, *n n*, the plugs fitting in conical barrels. Thus the joint is completely concealed, and cannot be disarranged, nor be liable to leak gas. A similar connection is made between one tube and another, as shown in Fig. 6. A sleeve or nut, *p*, to which one connection, *r*, is screwed, has a conical bore which fits over the conical plug of the other connection, *s*, and the two are secured together by a nut, *t*, and washer *u* inside of the connection *r*.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination and arrangement of the guide-apertures *d d* and central cord, C, substantially as herein specified.

2. The regulator composed of the plugs or barrels *f f*, projecting pins *h h*, with heads *i i*, and the cross-bar *m*, with its sockets *l l*, all arranged substantially as and for the purpose herein specified.

HENRY COESTER.

Witnesses:
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