No. 776,593. PATENTED DEC. 6, 1904.

A. H. HUMPHREY.

LAMP HANGER OR SUPPORT.

APPLICATION FILED MAY 6, 1904.

NO MODEL. 2 SHEETS—SHEET 1.

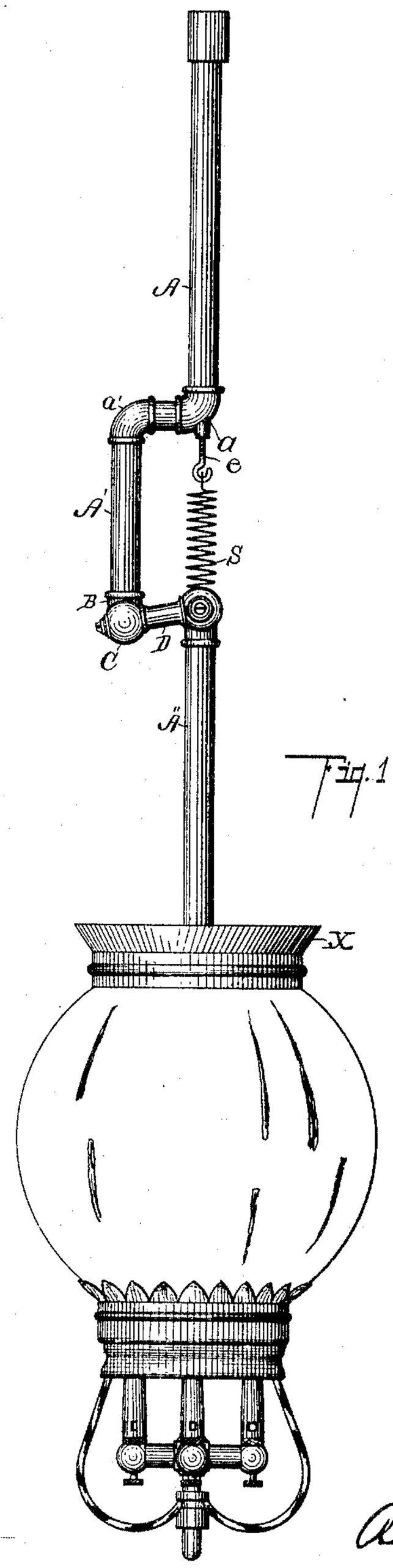

Fig. 1

Witnesses:
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Holland F. Adams

Inventor,
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By Otis A. Earl
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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 2.

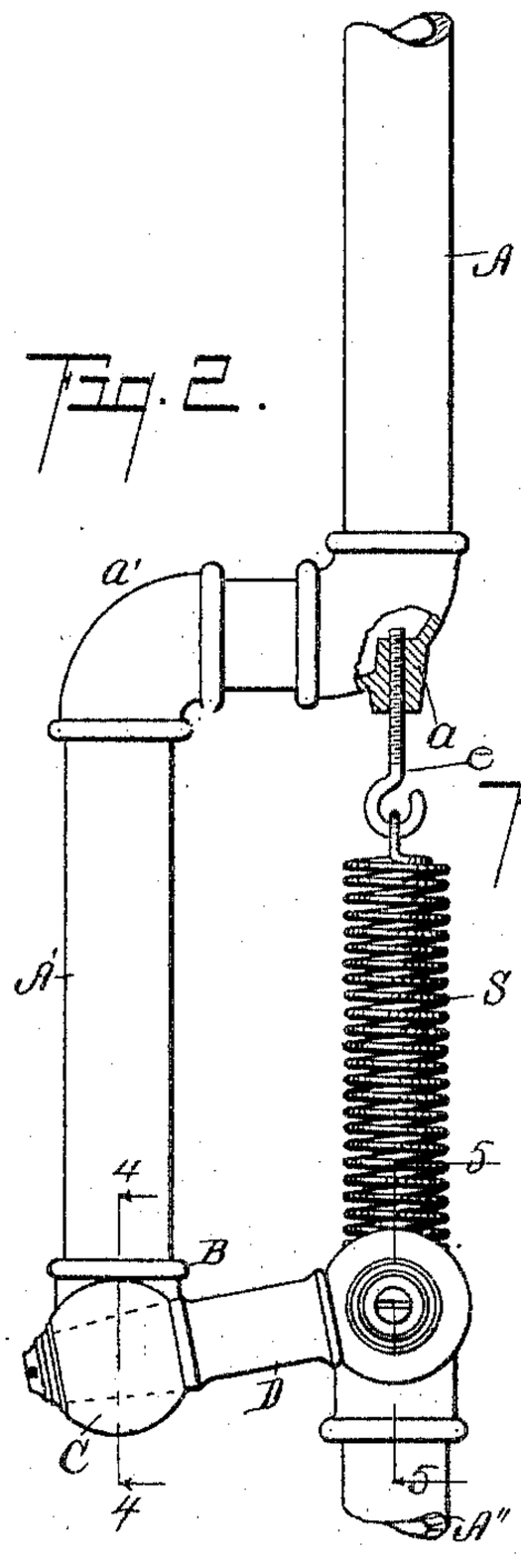


Fig. 3.

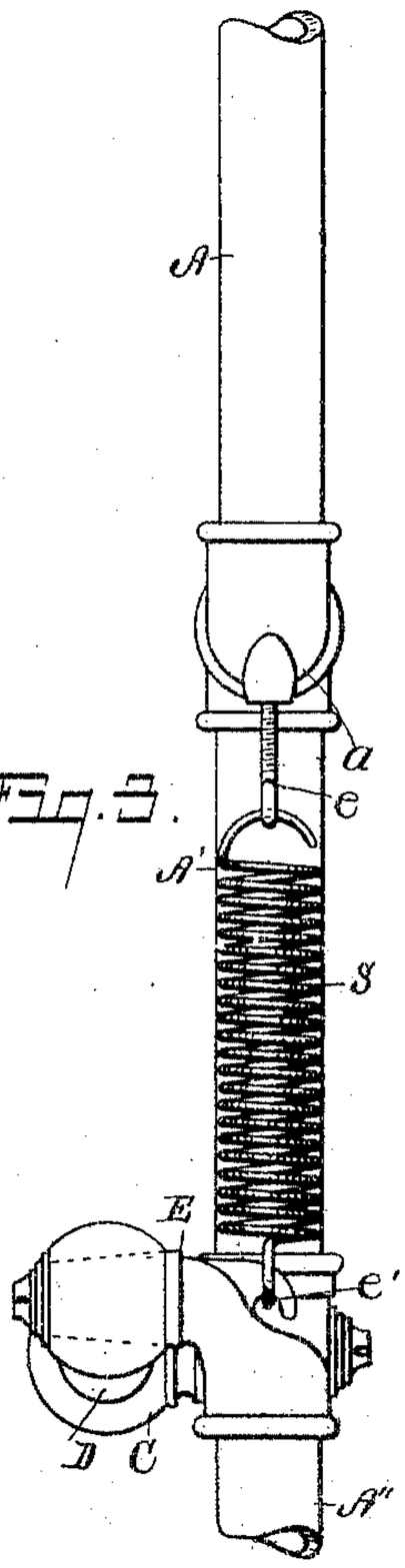


Fig. 6.

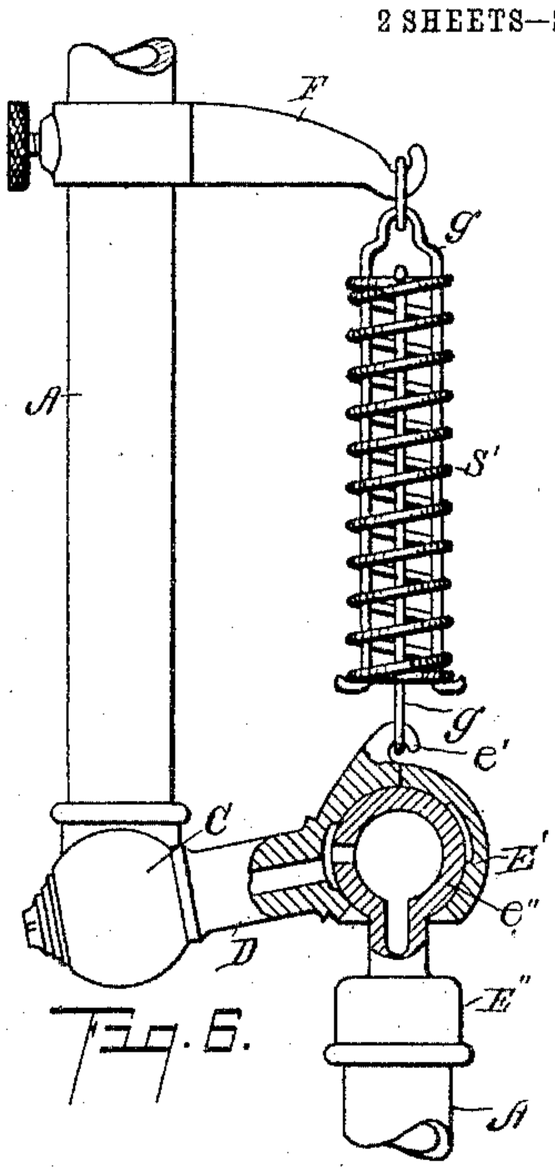


Fig. 7.

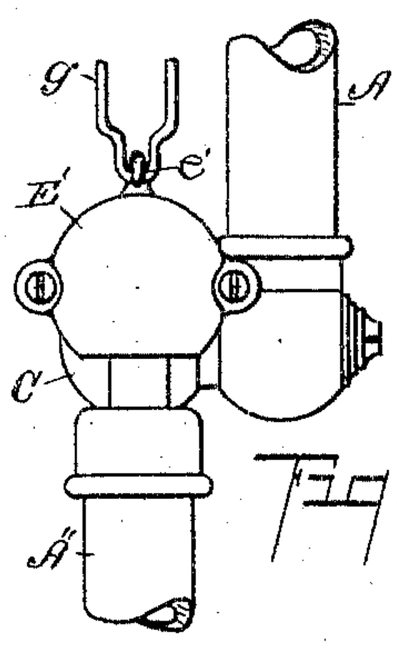


Fig. 4.

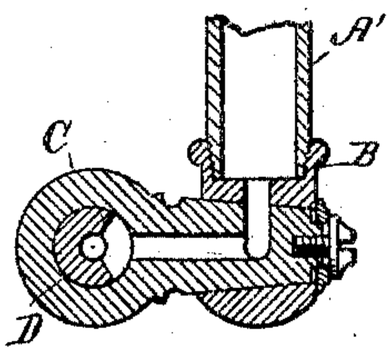
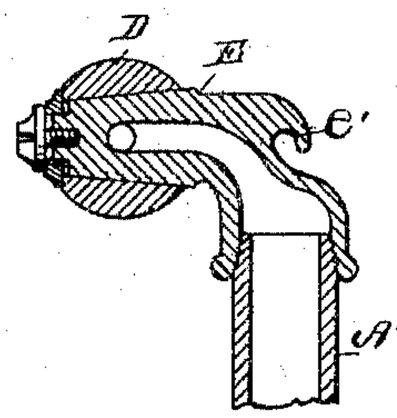


Fig. 5.



Witnesses:

Ethel A. Selden

Holcomb & Holcomb

Inventor,

Alfred H. Humphrey

By Otto A. Carl

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No. 776,593. Patented December 6, 1904.

UNITED STATES PATENT OFFICE.

ALFRED H. HUMPHREY, OF KALAMAZOO, MICHIGAN.

LAMP HANGER OR SUPPORT.

SPECIFICATION forming part of Letters Patent No. 776,593, dated December 6, 1904.

Application filed May 6, 1904. Serial No. 206,662. (No model.)

To all whom it may concern:

Be it known that I, ALFRED H. HUMPHREY, a citizen of the United States, residing at the city of Kalamazoo, county of Kalamazoo, State of Michigan, have invented certain new and useful Improvements in Lamp Hangers or Supports, of which the following is a specification.

This invention relates to improvements in hangers or supports for gas-lamps.

The main object of this invention is to provide an improved hanger or support for gas-lamps by which the lamp is supported so that it is free to move in any direction.

Further objects and objects relating to structural details will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

The invention is clearly defined and pointed out in the claims.

A structure embodying the features of my invention is clearly illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation view of a structure embodying the features of my invention. Fig. 2 is an enlarged detail side elevation view, partially in section, to show the structural details of my improved lamp hanger or support. Fig. 3 is a detail elevation view looking from the right of Fig. 2. Fig. 4 is a sectional view taken on a line corresponding to line 4 4 of Fig. 2, showing the arrangement of parts. Fig. 5 is a detail sectional view taken on a line corresponding to line 5 5 of Fig. 2, showing the arrangement of parts. Fig. 6 is a detail elevation view of a structure, showing a modification of my invention, the same being partially in section to show the arrangement of parts. Fig. 7 is a detail elevation view looking from the left of Fig. 6.

In the drawings the sectional views are taken looking in the direction of the little arrows at the ends of the section-lines, and similar letters of reference refer to similar parts throughout the several views.

Referring to the drawings, the gas delivery or supply pipe is made in sections A A′ A″, the section A being the top section, A″ the lamp-section, and A′ the connecting-section therefor. The sections A and A′ are connected by elbow-couplings *a a′*. On the lower end of the section A′ is a head B. Journaled in this head is a laterally-projecting stem C. A horizontally-disposed arm D is journaled in this stem C. The elbow-like member E on the upper end of the lamp-section A″ is journaled in the arm D. The coupling members are all provided with suitable passages for the delivery of the gas therethrough. Thus connected, the lamp, as X, on the lower end of the section A″ is free to swing in any direction and also to move up and down.

The lamp is yieldingly supported by a spring, which is connected to the depending-hook *e* on the lower end of the delivery-pipe section A and to the hook *e′* on the elbow member E. This hook *e′* is arranged so that the spring is attached to the member E substantially in line with the axis thereof and also at a central point in regard to the lamp-section A″, so that when the lamp is swung in any direction no additional tension is put on the spring. Thus supported, the lamp returns easily by its own weight and is not swung back by the tension of the spring. The attaching-hook *e* for the supporting-spring S is screw-threaded into a suitable boss on the elbow *a*, so that it may be adjusted to regulate the tension of the spring.

With the parts arranged as I have described I am enabled to support a lamp so that it is free to swing in any direction and is also yieldingly supported so that it is relieved of sudden jars. This is of particular advantage in factory buildings and in places where there are liable to be sudden jars or continued vibration or where objects are liable to come into contact with the lamp. As before stated, the lamp is free to move in any direction and is yieldingly supported, the advantages of which are apparent, particularly when used in relation with incandescent gas-lamps, in which the mantles are liable to be fractured by sudden jarring.

In the modified construction shown in Fig. 6 the section A′ of the gas-delivery pipe is omitted. In that structure I provide a lat-

erally-projecting adjustable arm F on the delivery-pipe section A to support the lamp. In this modified structure I show a compression-spring S′ instead of the spring S, as in the preferred construction described. This compression-spring S′ is arranged on the links *g*, one of which is secured to the arm F and the other to the hook *e′*. In this structure the arm D is provided with a suitable socket E′ to receive the ball *e″* of the coupling member E″ on the lamp-section A″, the two members forming a ball-and-socket joint.

I have illustrated and described my improved lamp-support in the form preferred by me on account of its structural simplicity and economy. I am aware, however, that it is capable of considerable variation in structural details without departing from my invention.

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

1. The combination with a gas-lamp of a supply-pipe therefor made up of a supporting-section and a lamp-section; a laterally-projecting stem journaled in said supporting-section; a horizontally-disposed arm journaled in said stem; an elbow on the upper end of the lamp-section, journaled in said arm; a hook on said elbow, substantially coinciding with the axis thereof and with the center line of said lamp-section; a supporting-spring; and means for adjusting said spring, all coacting for the purpose specified.

2. The combination with a gas-lamp of a supply-pipe therefor made up of a supporting-section and a lamp-section; a laterally-projecting stem journaled in said supporting-section; a horizontally-disposed arm journaled in said stem; an elbow on the upper end of the lamp-section, journaled in said arm; a supporting-spring connected to said supporting-section and to said elbow; and means for adjusting said spring, all coacting for the purpose specified.

3. The combination with a gas-lamp of a supply-pipe therefor made up of a supporting-section and a lamp-section; a laterally-projecting stem journaled in said supporting-section; a horizontally-disposed arm journaled in said stem; an elbow on the upper end of the lamp-section, journaled in said arm; a hook on said elbow, substantially coinciding with the axis thereof and with the center line of lamp-section; and a supporting-spring, for the purpose specified.

4. The combination with a gas-lamp of a supply-pipe therefor made up of a supporting-section and a lamp-section; a laterally-projecting stem journaled in said supporting-section; a horizontally-disposed arm journaled in said stem; an elbow on the upper end of the lamp-section, journaled in said arm; and a supporting-spring connected to said elbow and to said supporting-section, all coacting for the purpose specified.

5. The combination with a gas-lamp of a supply-pipe therefor; a laterally-projecting stem journaled in said supply-pipe; a horizontally-disposed arm journaled in said stem; pivoted connections for said lamp to said arm; a supporting-spring for said lamp connected thereto and to said supply-pipe; and means for adjusting said spring, for the purpose specified.

6. The combination with a gas-lamp of a supply-pipe therefor; a laterally-projecting stem journaled in said supply-pipe; a horizontally-disposed arm journaled in said stem; a pivoted connection for said lamp to said arm; and a supporting-spring for said lamp connected thereto and to said supply-pipe, for the purpose specified.

7. The combination with a gas-lamp of a supply-pipe; an arm journaled thereon; an elbow to which said lamp is connected, journaled in said arm; a hook on said elbow, substantially coinciding with the axis of said elbow and the center line of said lamp; and a supporting-spring for said lamp connected to said hook and to said supply-pipe, for the purpose specified.

8. The combination with a supply-pipe; a horizontally-disposed arm journaled on said supply-pipe; a lamp pivotally connected to said arm; and a spring for supporting said lamp connected thereto and to said supply-pipe, for the purpose specified.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

ALFRED H. HUMPHREY. [L. S.]

Witnesses:
OTIS A. EARL,
ETHEL A. TELLER.