

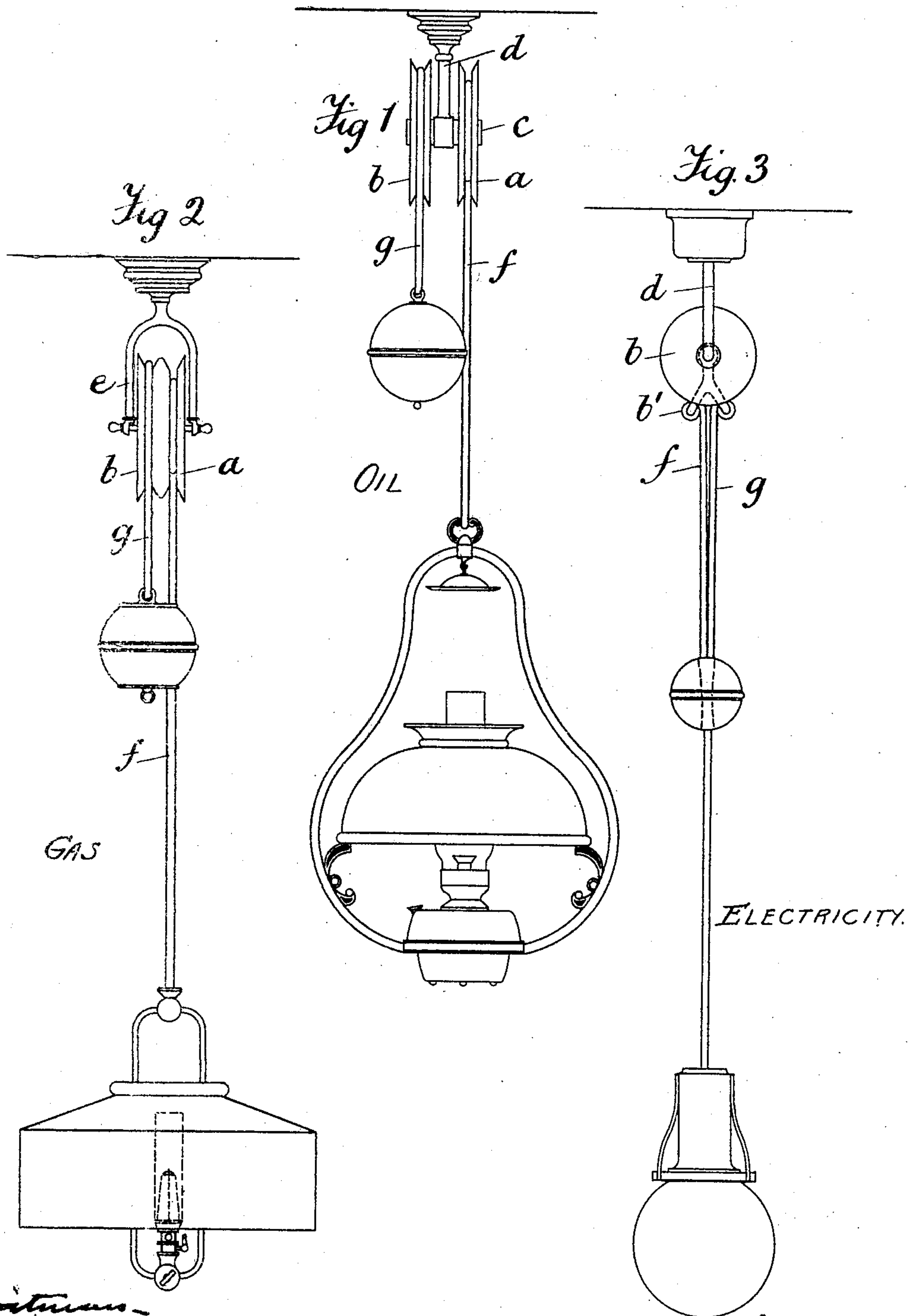
No. 774,852.

PATENTED NOV. 15, 1904.

E. J. SHAW.  
ADJUSTABLE PENDANT.  
APPLICATION FILED MAR. 7, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



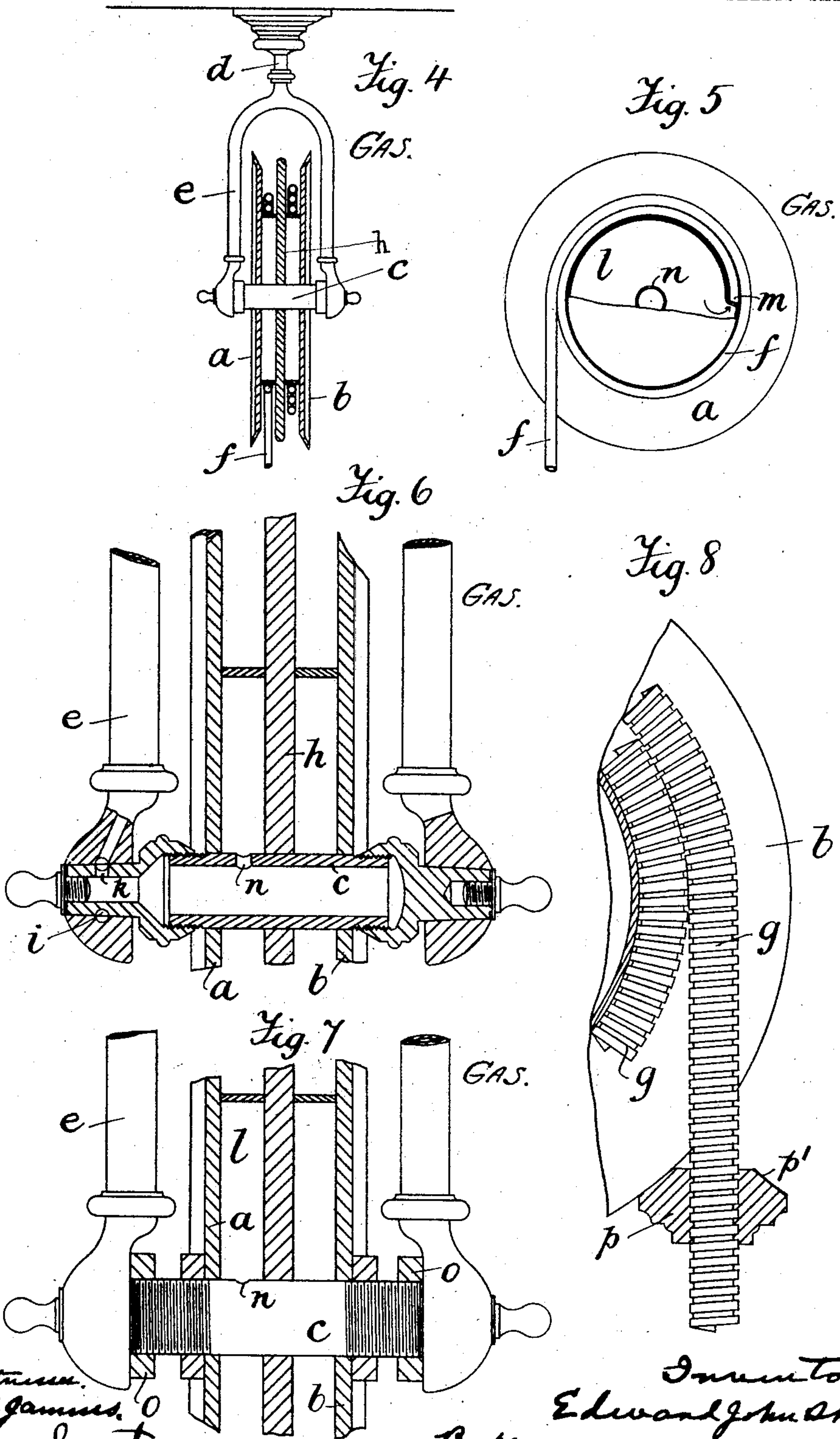
Witness—  
Roger W. James,  
John Smyth.

Inventor.  
Edward John Shaw.  
By Frankland James,  
his Attorney.

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2 SHEETS—SHEET 2.



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# UNITED STATES PATENT OFFICE.

EDWARD JOHN SHAW, OF WALSALL, ENGLAND.

## ADJUSTABLE PENDANT.

SPECIFICATION forming part of Letters Patent No. 774,852, dated November 15, 1904.

Application filed March 7, 1903. Serial No. 146,639. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD JOHN SHAW, manufacturer, a subject of the King of England, residing at Lonsdale House, Lichfield Road, Walsall, in the county of Stafford, England, have invented a certain new and useful Adjustable Pendant, of which the following is a full, clear, and exact description, and for which I have applied for Letters Patent in Great Britain, dated January 21, 1903, and in Germany, dated February 2, 1903.

This invention relates to an adjustable pendant for hanging lamps, lamp-shades, covers, bird-cages, and other articles, the pendant consisting, essentially, of two drums or pulleys mounted on an axle supported at a determined height and the flexible connections, which suspend, respectively, the lamp and the balance-weight, being wound on the pulleys in opposite directions, so that as one is wound up the other is unwound.

The invention also comprises means for continuously supplying electric current, oil, or gas to a lamp attached to this double-pulley pendant, and other portions relate to a friction or locking device for preventing the pulleys from rotating when the suspended articles are in the desired position and to means for holding the balance-weight centrally above the lamp.

On the annexed drawings, illustrating the invention applied to lamps, Figure 1 shows one form of the invention fitted to a hanging oil-lamp. Fig. 2 shows another arrangement of the pulleys supporting a gas-lamp, and Fig. 3 shows a third form of the invention applied to an electrical lamp. Fig. 4 is an elevation, part section, of the double pulley drawn on enlarged scale. Fig. 5 is a side view of one of the pulleys. Fig. 6 is a sectional elevation of the hollow-axle arrangement for a gas-lamp, and Fig. 7 shows a friction or locking device on the axle. Fig. 8 is a view of a stop device for limiting the upward movement of the flexible connection.

Two grooved drums or pulleys *a b* are mounted on a common axle *c*, so as to be fast thereto. This axle is supported at a height which may itself be permanently or adjustably fixed, as will be understood. In Fig. 1

this axle is shown connected to a vertical pipe *d*, secured to a ceiling-rose and passing between the separate pulleys. In Fig. 2 the pulleys are arranged contiguous to each other, and the axle is supported by a forked arm *e*. A flexible connection *f g* is secured upon each of the pulleys, these connections being wound in opposite directions and their free ends being secured, respectively, to a lamp and to a balance-weight. In Figs. 1 and 2 the balance-weight is independent of the lamp; but in Fig. 3 it is shown hollowed centrally and arranged to slide upon the lamp connections. In Fig. 3 also two rollers *b'*, pivoted on a forked arm mounted loosely on the axle *c*, serve as guides for the connections *f g*. It will be seen, therefore, that as one connection, *f*, is pulled down, rotating the pulley *a*, the other connection, *g*, is coiled upon the pulley *b*, because the pulleys *a b* rotate in the same direction; but the connections *f g* are wound inversely. Preferably the double pulley is formed as shown in Fig. 4, the pulleys being formed by a common disk *h*, forming a partition, and the pulleys and axle rotate in the forked arms *e*.

Where an electric lamp is suspended from the pendant, (see Fig. 4,) the leads may pass down the pipe *d* and one of the arms *e*, electrical contact being made in any ordinary manner between the axle *c* and the connection *f*, supporting the lamp. This connection may be a flexible metallic pipe or a cloth-covered rubber pipe containing the electrical conductors supplying the lamp with energy. In the case of a gas-lamp, either household gas or acetylene gas, the service-pipe *d* communicates with one of the hollow arms *e*, and this supplies gas to the hollow axle *c*. (See Fig. 6.) In the arrangement there illustrated an annular groove *i* is formed on the periphery of the axle *c*, forming a continuation of the passage in *e*, and an orifice *k* leads from this groove to the interior of the axle. The pulley *a* is provided with a central chamber *l*, fitted with an indentation *m*, to which the flexible-pipe connection *f* is attached. This indentation is perforated to allow communication between the interior of the chamber *l* and the pipe *f*, as will be seen in Fig. 5, a por-



tion of the side of the chamber having been torn away. A flexible pipe *f* is used, which will not be crushed and impede the flow of gas. A flexible metallic pipe is suitable. A  
 5 second orifice *n* is formed in the axle within the chamber *l*, and gas passes from the axle *c* into chamber *l* through this orifice *n*. In the case of an oil-lamp a similar continuous feed may be provided under pressure of a head of  
 10 oil, the usual precautions against overflow being taken.

In Fig. 7 friction-plates *o* are mounted on the axle to prevent unintentional rotation of the pulleys *a* and *b* in their forked supports.

15 The stop device (shown in Fig. 8) consists of a nut *p*, screw-threaded internally and screwed upon the flexible metallic pipe. Its upper face *p'* is curved to the periphery of the pulley *b*, so that when the stop *p* rises with the  
 20 flexible connection *g* it meets the pulley *b* and by frictional engagement checks further upward movement of the dependent connection *g*.

The pulleys *a* *b* may be of equal size, or one may be larger in diameter than the other. In  
 25 the latter case the balance-weight is preferably secured to the flexible connection coiled upon the smaller pulley.

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

1. A pendant comprising an axle, a support

for said axle, said axle being journaled in said support, grooved pulleys upon said axle, said pulleys being rotatable with said axle, flexible connections coiled upon said pulleys, said  
 35 connections being formed of flexible metallic tubing and wound inversely upon said pulleys and adjustable stops screwed upon said flexible metallic tubes, said stops being shaped upon their upper faces to the curve of the pul-  
 40 ley-rims.

2. A pendant for gas-lamps comprising a hollow axle, a forked support for the ends of said axle, a hollow arm to said forked sup-  
 45 port, means whereby said hollow arm communicates with said hollow axle, grooved pulleys upon said axle, a central chamber to one of said pulleys, flexible tubular connections upon said pulleys, passages from said axle to  
 50 said chamber and from said chamber to one of said tubular connections, friction-plates upon said hollow axle, said friction-plates contacting with the arms of said fork-support, and adjustable stops screw-threaded upon said  
 55 flexible tubes.

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

EDWARD JOHN SHAW.

Witnesses:

WM. E. GODFREY,  
 SYDNEY H. PENN.