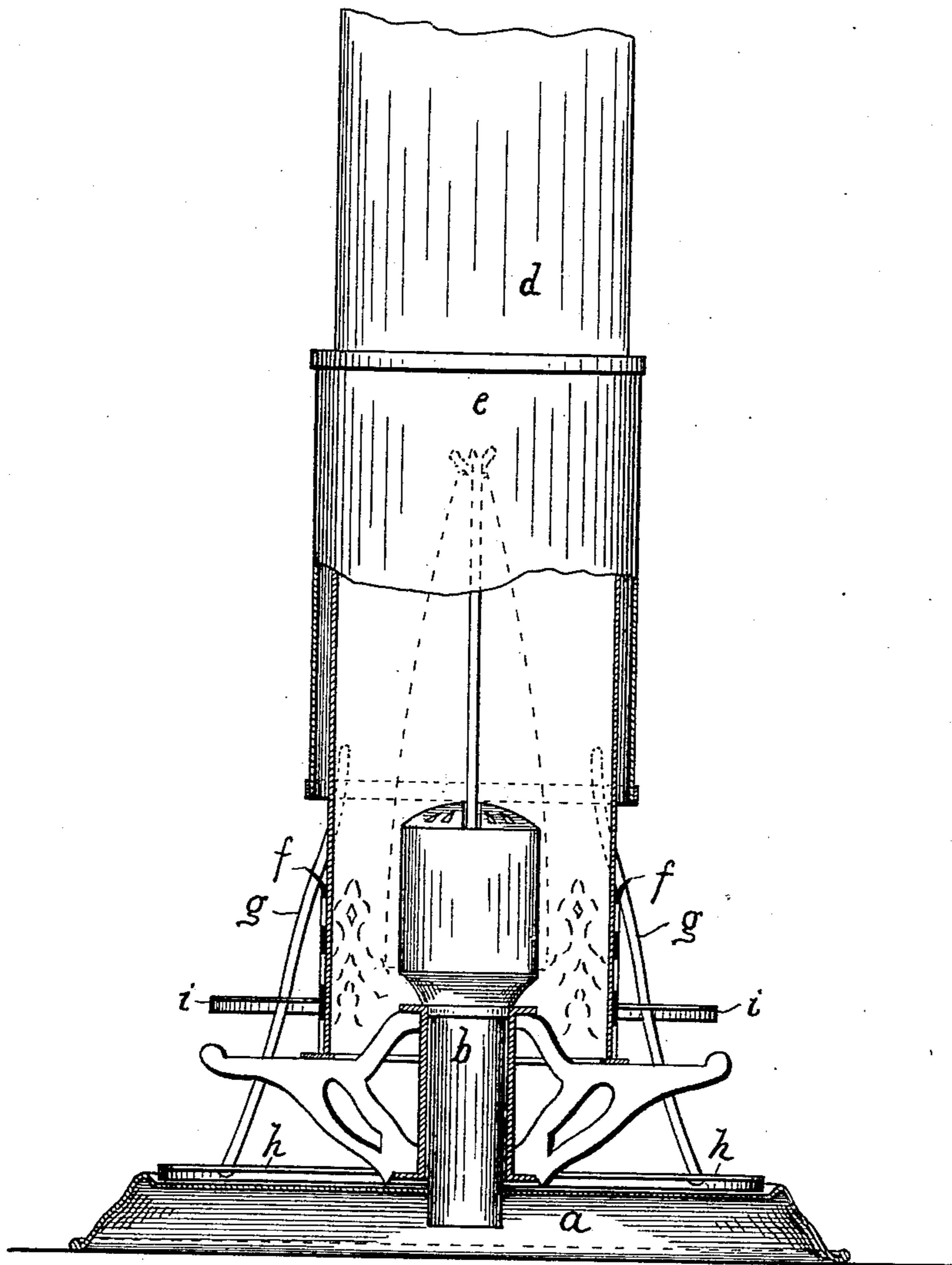


(No Model.)

F. A. F. GRAEFE.
PROTECTOR FOR INCANDESCENT MANTLES.

No. 602,505.

Patented Apr. 19, 1898.



Witnesses:

Robt A. Schuele
Maggie Oltsch.

Franz A. F. Graefe
Inventor.

By George Oltsch.
Att'y.

UNITED STATES PATENT OFFICE.

FRANZ AUGUST FRIEDRICH GRAEFE, OF HAMBURG, GERMANY.

PROTECTOR FOR INCANDESCENT MANTLES.

SPECIFICATION forming part of Letters Patent No. 602,505, dated April 19, 1898.

Application filed June 24, 1897. Serial No. 642,092. (No model.) Patented in Germany March 4, 1896, No. 56,121; in England March 9, 1896, No. 5,306; in Austria June 20, 1896, No. 46/2,479, and in Belgium December 9, 1896, No. 12/5,084.

To all whom it may concern:

Be it known that I, FRANZ AUGUST FRIEDRICH GRAEFE, a subject of the German Emperor, residing at Hamburg, in the German Empire, have invented certain new and useful improvements in apparatus for the prevention of glow-bodies becoming damaged in cleaning incandescent gas-lights, (for which I have obtained a patent in Germany, No. 56,121, dated March 4, 1896; in Great Britain, No. 5,306, dated March 9, 1896; in Austria, No. 46/2,479, dated June 20, 1896, and in Belgium, No. 12/5,084, dated December 9, 1896;) and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to provide means for removing the chimney used in connection with the incandescent gas-lights without a possibility of accidentally coming in contact with the mantle.

As is known, all mantles used in connection with incandescent gas-lights are very frail and liable to crumble to pieces upon receiving the slightest jar, and in order to facilitate the removal of the chimneys with safety for the purpose of cleansing, &c., I have constructed a device which is both simple in form and cheap of manufacture.

Referring to the drawing, the base portion *a*, which may be made of wood, metal, or any suitable material, is provided with a centering-tube *b*, formed integral with or otherwise connected with the base. The diameter of the centering-tube *b* corresponds in size with the burner-tube on an incandescent gas-light and over which the bracket supporting the chimney is placed to support the same. A metallic shell *e*, reaching to the height of the mantle, is carried by the wire supports *g*, which are connected with a ring *h*, and which

ring is seated within a corresponding groove or depression upon the base *a* to prevent lateral displacement of the same. Another ring *l* is secured to the wire supports *g* at a point intermediate of the lower end of the shell *e* and ring *h* for the support of the hand in holding the device in place and also prevent the bracket supporting the chimney from rising with the chimney while being removed.

In practice the burner is placed on the centering-tube to support the bracket carrying the chimney and mantle in an upright position. The shell is then placed over the chimney and the ring seated within the groove in base to prevent lateral displacement. The device is now held down with one hand and the chimney removed with the other hand, the shell *e* acting as a guide and making it impossible for the chimney to come in contact with the mantle. It is obvious that the chimney can be equally as well replaced without a possibility of coming in contact with the mantle. A heavy draft of wind will sometimes shatter the mantle, if unprotected, and the shell *e* will thus afford protection from injury from this source while the chimney is removed for cleansing or other purposes.

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

The combination of a shell *e* reaching to the height of the mantle to be protected and serving as a guide to the lamp-chimney, a base *a* and a centering-tube *b* therein for keeping in place the burner-tube, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

FRANZ AUGUST FRIEDRICH GRAEFE.

Witnesses:

GUSTAV LEIDENROTH,
CARL O. LANGE.