

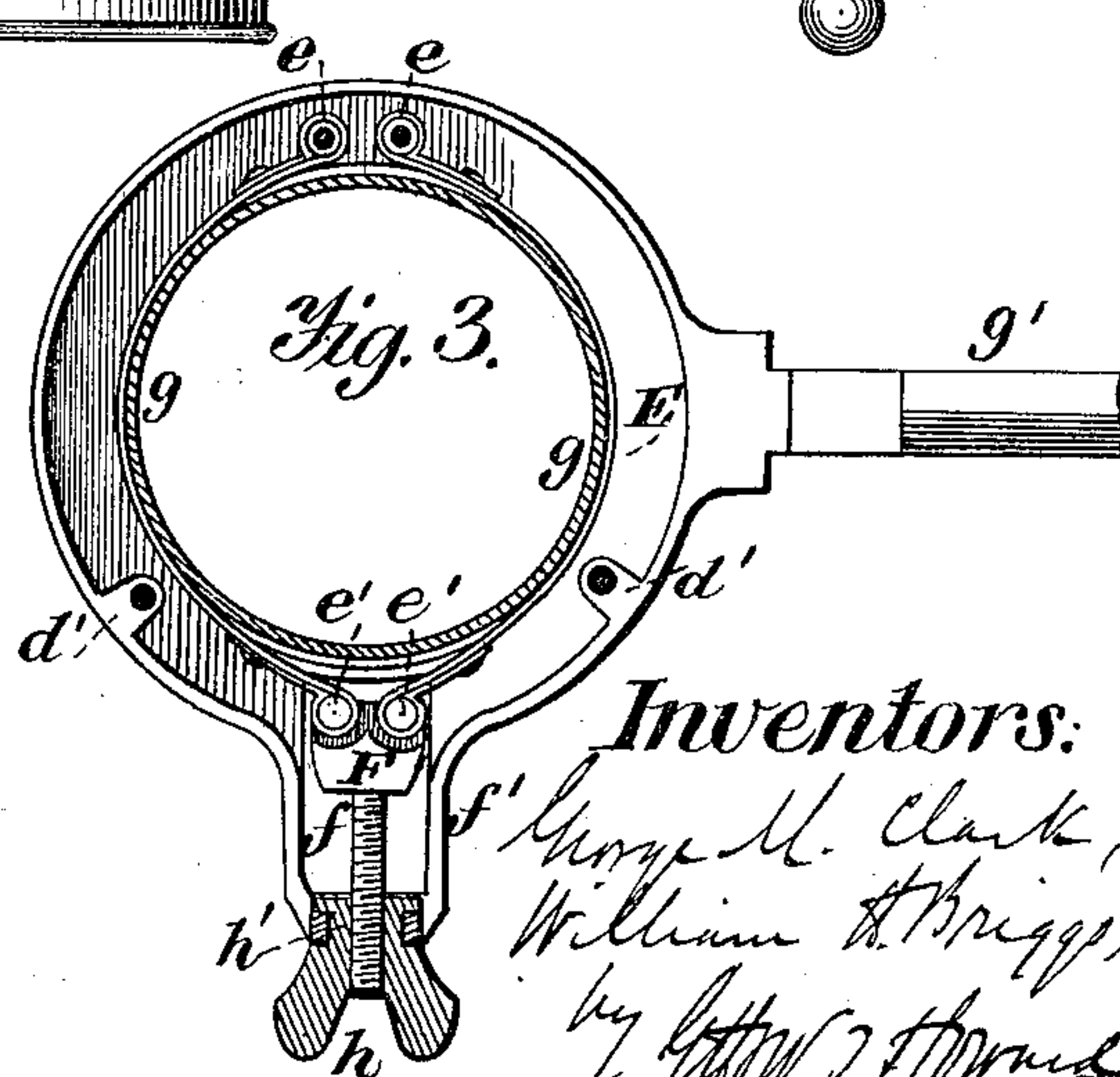
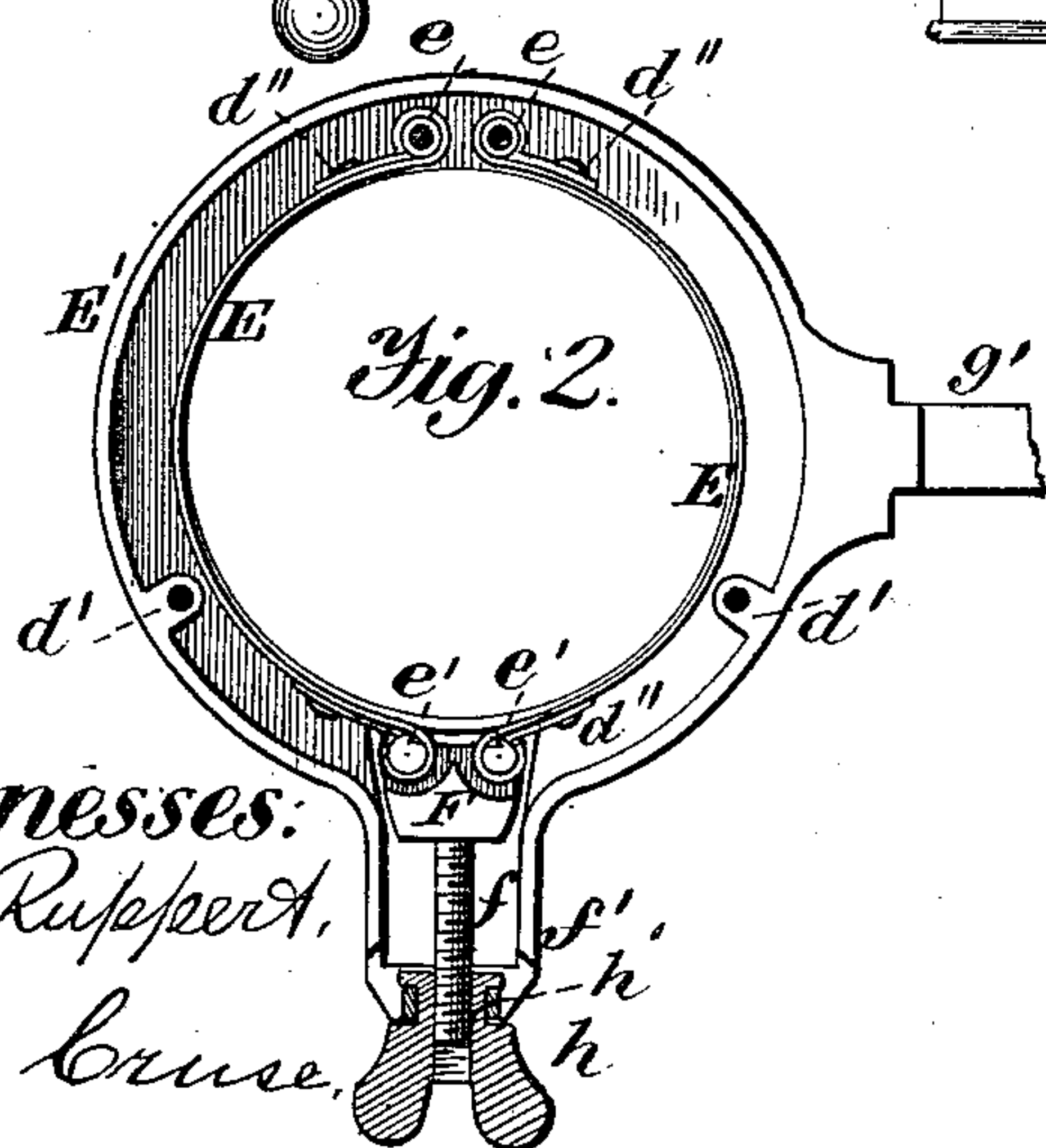
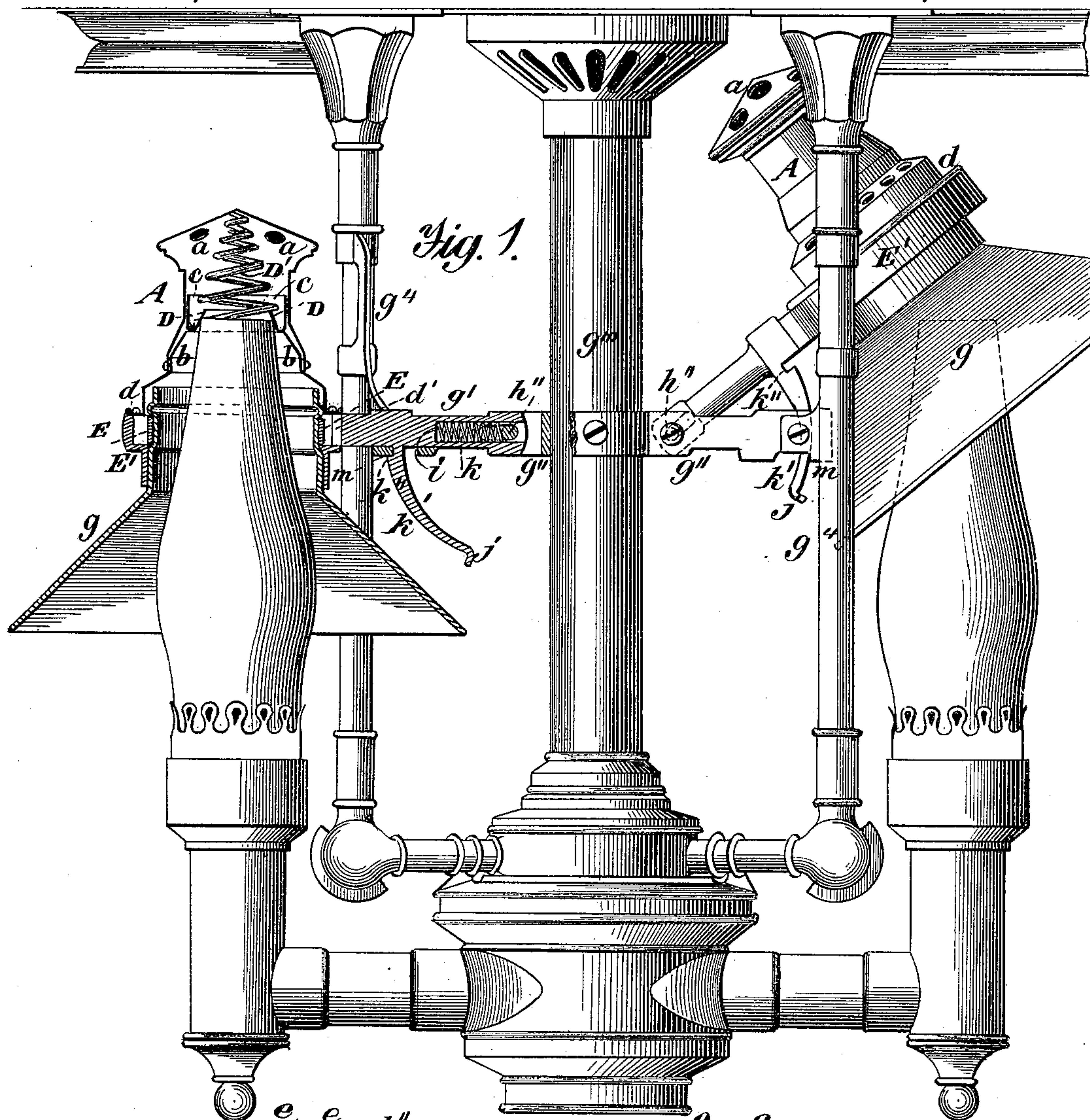
(No Model.)

G. M. CLARK & W. H. BRIGGS.

CAR LAMP.

No. 329,718.

Patented Nov. 3, 1885.



Witnesses:

A. Rupert.

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UNITED STATES PATENT OFFICE.

GEORGE M. CLARK AND WILLIAM H. BRIGGS, OF CHICAGO, ILL., ASSIGNORS
TO THE ADAMS & WESTLAKE MANUFACTURING COMPANY, OF SAME
PLACE.

CAR-LAMP.

SPECIFICATION forming part of Letters Patent No. 329,718, dated November 3, 1885.

Application filed January 24, 1885. Serial No. 153,879. (No model.)

To all whom it may concern:

Be it known that we, GEORGE M. CLARK and WILLIAM H. BRIGGS, both of Chicago, in the county of Cook and State of Illinois, have
5 invented certain new and useful Improvements in Lamps, of which the following is a specification, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

10 Figure 1 is a vertical elevation, partly in section, of a car lamp or chandelier embodying our invention. Figs. 2 and 3 show details hereinafter described.

Similar letters of reference indicate similar
15 parts in the respective figures.

This invention has special reference to an improvement in car lamps or chandeliers, and relates, first, to a device attached to the smoke-jack, having primarily for its object
20 the holding down of the chimney against or in contact with the burner. Heretofore it has been found that by the vibration of the car or from other causes, the chimney will work up from the burner, thus allowing air to enter at
25 the base of the chimney and producing a flickering of the flame. To give a steady flame and for other considerations it is also important that there should be a tight joint at the top of the chimney.

30 The first part of our invention, therefore, aims also to render tight the joint between the smoke-jack and the chimney. This part of our invention also permits the chimney to be raised sufficiently from the burner to allow
35 the lamp to be lighted without removing the oil-pot; and, further, has the effect of maintaining the chimney axially in the vertical center line of and concentric with the burner or wick-tube.

40 The second part of our invention has reference to a device for holding the shade within its socket without rattling, and also capable of receiving shades having the part to be clasped of different diameters.

45 The third part of our invention has reference to a hinged shade-holder. The object of this part of our invention is to allow of the removal or lifting of the shade without taking down the oil-pot, the shade being capable of

sufficient vertical movement to permit the
50 chimney to be taken out for cleaning, the trimming of the wicks, the lighting of the lamp, &c.

Referring to the first feature of our invention, A is the shell of the smoke-jack, which
55 is provided with the usual openings, *a*, for the escape of heat and smoke. A cone-shaped annulus or interior projection, *b*, is formed within the smoke-jack, which annulus normally serves as the seat of the cone-shaped
60 sleeve D, which has a cylindrical upper portion, *c*. Above the sleeve D, and within the cylindrical portion *c*, is placed a spiral spring, D', the upper end of which bears against the
65 top of the smoke-jack, as shown. The tendency of the spring is to force down the cone-shaped sleeve D upon the interior projection, *b*, and also to keep the chimney down upon the
70 burner, thus securing the top of the chimney, and keeping it axially in the vertical line of the burner or wick-tube, and also preventing the inflow of air around the base of the chimney to the flame. Preferably, the opening at
75 the top of the sleeve D is about the size of the interior of the smaller or upper end of the glass chimney. When it is desired to light
80 the lamp, the chimney must be pushed up against the force of the spring, a sufficient space being thus provided below the chimney for the insertion of the match.

Referring to the second feature of our invention, a plate-spring, E, is placed within an annular recess formed between the ring or smoke-jack support E' and the lower flange,
85 *d*, of the smoke-jack. The flange *d* is screwed to lugs *d'*, formed upon the ring or support E'. The spring E is formed in two sections, one end of each section being turned or bent
90 around a post or pin, *e*, and riveted to itself, as shown at *d''*. The free end of each section of the spring E attaches to a pin or post, *e'*,
95 formed upon a movable block, F, having as a part thereof a screw, *f*, which extends outward through a standard, *f'*, formed upon the ring or support E. The screw is provided with a
thumb-nut, *h*, having a sleeve, *h'*, which is embraced or partially surrounded by the standard *f'*, as shown in detail in Fig. 2. It will

be seen that by revolving the thumb-nut the two sections of the spring E may be drawn from a position concentric with the ring E' into such position as is indicated in Fig. 3—
 5 that is to say, the spring, from describing a circle, is caused to describe a sort of ellipse, by which the upper portion of the shade *g* is clasped. The plate-spring E has the effect of securely clasping the upper portion of the
 10 shade, and it is apparent that the spring may be made to receive and clasp shades having the portion to be clamped of varying dimensions.

Referring to the third feature of our invention, each stock *g'*, of which the ring or support E' forms a part, is pivoted at *h''* at an opposite side of the vertical center line of the lamp to the central horizontal bar, *g''*, which is rigidly secured to the central air-tube, *g'''*,
 20 and the standards *g⁴* of the lamp or chandelier. The inner end of each stock *g'* is slotted at *i*, and made tubular, as shown in section in Fig. 1. Within the tubular portion a spiral spring, *k*, is placed, which presses against the
 25 pivot *h''*, and has the effect normally of forcing the stock out from the vertical center line of the lamp or chandelier. Each stock *g'* is provided with a curved guide, *k'*, which extends downward therefrom, having in its upper end
 30 a notch, *k''*, and at its lower end a hook, *j*. The central horizontal bar, *g''*, is provided with a lip or catch, *m*, which, when the two stocks *g'* are in their horizontal and normal position, fits within the notch *v''* of the curved guard *k'*, to
 35 which the force of the spring has a tendency to bring it. As shown at the left of Fig. 1, the stock is horizontal or in its normal position, and, as shown at the right of said figure, the stock, with its ring or support holding the
 40 shade, is elevated. The purpose of the hook *j* is to prevent the too great movement of the shade, the hook coming in contact with the lip *m*, thus limiting the lift of the parts.

Having described our invention, we claim—

45 1. A smoke-jack, an annulus or projection fixed thereto, and a sleeve placed above the said annulus or projection and adapted to move

vertically within the smoke-jack, combined with a spring interposed between the top of the smoke-jack and said moving sleeve and
 50 pressing thereon, substantially as set forth.

2. A smoke-jack having the fixture *b*, combined with the movable cone-shaped sleeve D, and spiral spring D', substantially as set forth.

3. The ring or support E', having the stand- 55 ard *f'* and posts or pins *e*, combined with the plate-spring E, formed in two sections, the moving block F, screw *f*, thumb-nut *h*, and sleeve *h'*, one end of each section of the plate-spring being secured to a post, *e*, and the other
 60 end to the moving block F, substantially as set forth.

4. A central horizontal bar attached to the fixed portion of the lamp and a stock pivoted to the said bar at *h''*, combined with the smoke- 65 jack and shade-holder, the said stock being adapted to be lifted inwardly toward the fixed portion of the lamp, substantially as set forth.

5. A central horizontal bar combined with a hinged stock carrying the smoke-jack and shade-holder, and having a curved notched guard which extends downward, and is adapted when in its normal position to fit over a lip or catch formed upon said horizontal bar, 70 substantially as set forth.

6. A central horizontal bar combined with a tubular and slotted stock having an internal spring and a curved notched guard adapted to be forced by the action of the spring in contact with and locked upon a lip formed upon said 80 horizontal bar, substantially as set forth.

7. A hinged stock carrying the smoke-jack and shade provided with a curved notched guard having a lower hook, the pivoted end of said stock being slotted and tubular and pro- 85 vided with a spring, substantially as set forth.

In testimony whereof we hereunto set our hands and seals.

GEORGE M. CLARK. [L. S.]
 WILLIAM H. BRIGGS. [L. S.]

Witnesses:

A. WEINBERG,
 OSBORNE SAMPSON.