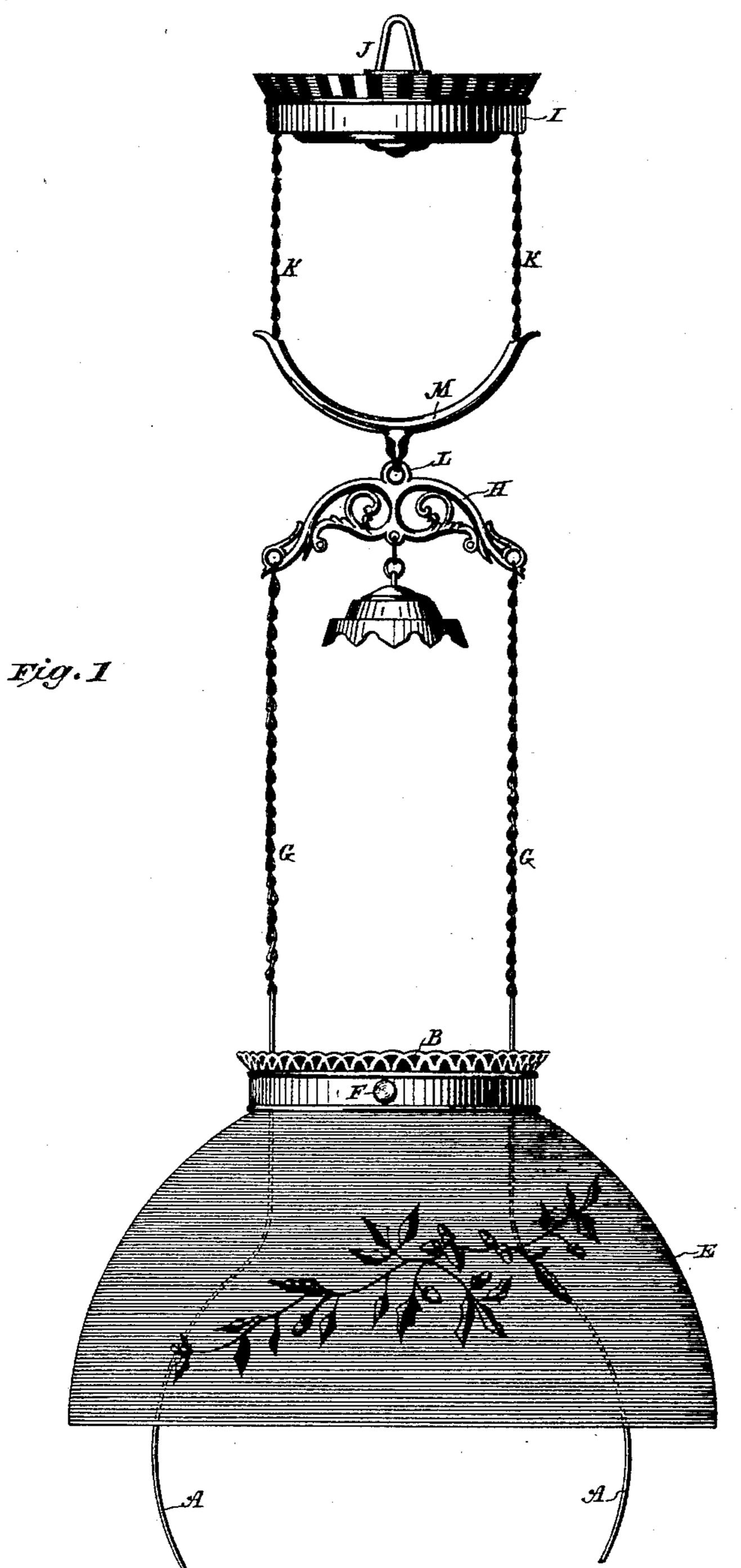
## J. E. BOHNER. SUSPENSION LAMP FIXTURE.

No. 454,420.

Patented June 16, 1891.



Witnesses: Raphaele Vetter Robt F. Gaylord

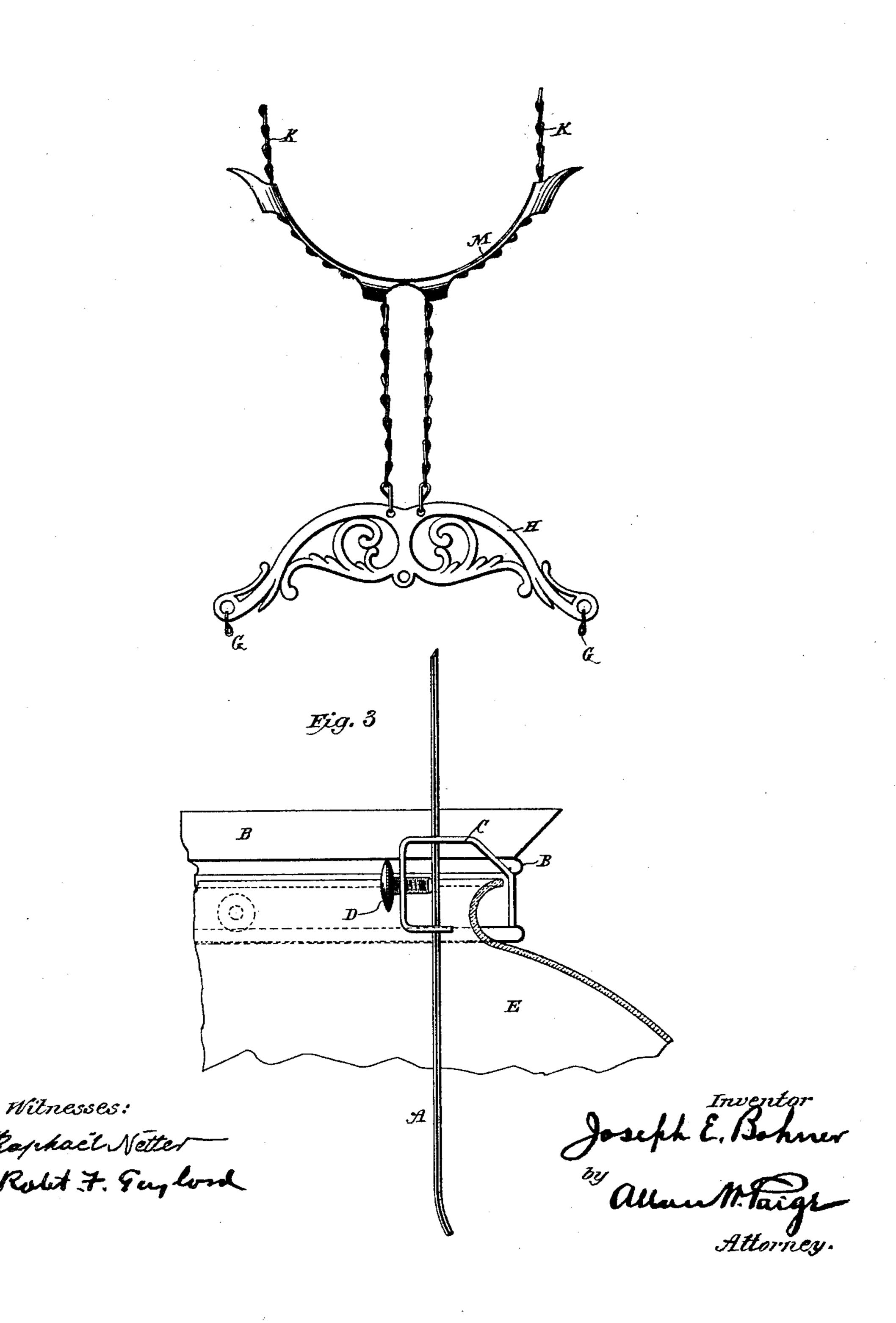
Joseph Engeton by allan M. Farge Attorney. (No Model.)

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Fig. 2



## UNITED STATES PATENT OFFICE.

JOSEPH E. BOHNER, OF ANSONIA, CONNECTICUT, ASSIGNOR TO WALLACE & SONS, OF SAME PLACE.

## SUSPENSION-LAMP FIXTURE.

SPECIFICATION forming part of Letters Patent No. 454,420, dated June 16, 1891.

Application filed December 22, 1890. Serial No. 375,435. (No model.)

To all whom it may concern:

Be it known that I, Joseph E. Bohner, of Ansonia, in the county of New Haven and State of Connecticut, have invented certain 5 new and useful Improvements in Suspension-Lamp Fixtures, of which the following is a description, reference being had to the accompanying drawings.

This invention relates to lamps known as 10 "hanging" or "extension" lamps; and it particularly relates to the suspension devices of

such lamps—that is, the means by which they are hung from the ceilings or walls of rooms. Ordinarily these lamps are secured 15 in a lamp-shaped frame, the branches of which extend upwardly at opposite sides of the lamp, and at the top of or above the lamp are attached to chain connections run-

ning to a ceiling-hook or other support. 20 Usually at some point in the suspension devices is a spring-drum, around which the chains or other part of the connections wind and from which they unwind as the lamp is elevated or lowered. When chains are used,

25 particularly of considerable length, as when lamps are suspended from high ceilings, there is naturally a tendency to their getting out of parallel to each other and to the lamp twisting or being held in an oblique posi-30 tion, and therefore horizontal evener-bars are introduced between the chains, so that the

possible irregular winding or unwinding of the chains on the spring-drum will not disturb the plumb and even position of the 35 lamp.

My present invention consists of new and improved connections between the evenerbar of the chains of a suspension-lamp and the chains of the spring-drum, whereby the 40 whole suspension connection from the ceiling to the lamp is kept in even and parallel form and readily adjusted to limit the extent of upward adjustment of the lamp.

In the drawings, Figure 1 is an elevation 45 view of the suspension devices of a lamp provided with my improvements, the lower part of the harp being shown cut away and the lamp omitted. Fig. 2 is a modified detail view of the evener-bar and its attachment 50 with the lower ends of the spring-drum chains.

of the shade hoop or ring and one branch of the lamp-supporting harp, showing the adjustable attachment of the former to the latter.

In the views, A A represent the upwardlyprojecting side arms of the harp of a suspension-lamp.

B is the shade-ring, supported on the harp by brackets C, Fig. 3, through slot-openings 60 in which the lamp-arms pass, and which have screws D arranged to firmly press the brackets upon and clamp them to the harp-arms.

E is the lamp-shade, the crown of which passes up into the ring or hoop and is there 65 secured in place by screws or other means in the usual manner. This attachment of the shade-ring to the harp permits the shade being adjusted to any desired height on the harp, as may be required, by lamp founts or 70 burners of varying height or for other reasons. It also affords, independently of its adjustable feature, a ready means by which the shade-ring can be attached to or removed from the harp.

G represents the vertical chains attached to the upper ends of the harp, and H the usual form of evener-bar, from the opposite ends of which these chains depend.

L is the canopy, which is provided with a 80 loop J, to engage a hook or bracket, and contains the well-known form of spring-drum around or from which the chains K are wound or unwound as the lamp is raised or lowered. The lower ends of these chains at- 85 tach to the evener H at its middle point, being hooked into the eye L.

Heretofore canopy-chains K have been attached to a bar in form similar to the bar H, and the two bars were centrally connected, 90 the result being that these bars readily took a position horizontally angular to each other. I however connect the canopy-chains at or near to the middle point of the bar H, and put the movable evening spreader M between 95 the canopy-chains. This spreader is tubular in whole, Fig. 1, or in part, Fig. 2, and is constructed to control and guide the canopychains from their widest parallel position to their connection with the bar H. As shown, 100 the chains each pass in at one end of this bar Fig. 3 is an enlarged detail view of a portion I and out at or near the middle thereof. This

spreader is free to be moved on the chains and may be adjusted to various positions thereon, so as to effect and maintain their even and parallel relation, not only to each other, but also to the chains of the lampharp. This evener may also be slid up on the chains, as seen in Fig. 2, when it serves as a stop to prevent the lamp being run up too high or out of reach. It is equally applicable to the harp-chains for the purpose of adjusting them relatively, as well as to the chains of other forms of suspension-lamps, and whether the pairs of chains run parallel or diagonally.

I have shown and described the flexible suspension parts as consisting of chains, but they may be composed of cords, wires, or other proper substitutes for such chains.

What is claimed as new is—

20 1. In combination with the suspension-

chains of a hanging lamp, a tubular spreaderbar arranged between the chains, each chain entering one end of the bar and passing out of the same at or near its middle portion, substantially as and for the purpose set forth. 25

2. In combination, in the suspension mechanism of a hanging lamp, the parallel chains K K, from which the lamp is suspended, and the spreader-bar M, movable on the chains, substantially as and for the purpose set forth. 30

3. In combination, the lamp-supporting chains G, the evener-bar H, and the chains K, with the spreader M, movably arranged upon them, substantially as and for the purpose set forth.

JOSEPH E. BOHNER.

Witnesses:
FRED. L. GAYLORD,
E. E. TRUMPBOW.