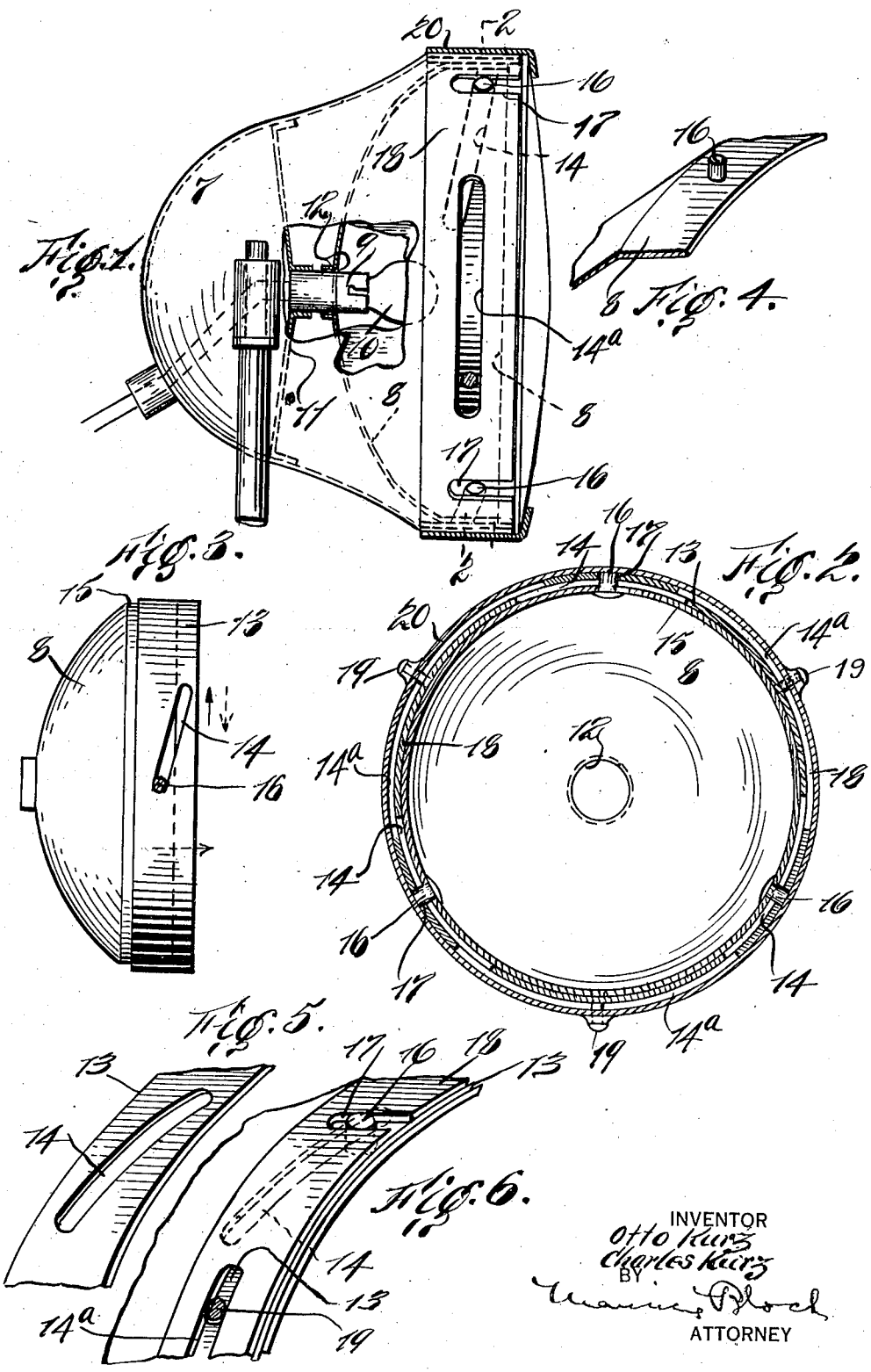
O. & C. KURZ.

FOCUSING DEVICE FOR ELECTRIC LAMPS.

APPLICATION FILED APR. 1, 1918.

1,292,616. Patented Jan. 28, 1919.



INVENTOR
Otto Kurz
Charles Kurz
BY
Maurice Block
ATTORNEY

UNITED STATES PATENT OFFICE.

OTTO KURZ AND CHARLES KURZ, OF NEW YORK, N. Y.

FOCUSING DEVICE FOR ELECTRIC LAMPS.

1,292,616. Specification of Letters Patent. Patented Jan. 28, 1919.

Application filed April 1, 1918. Serial No. 225,932.

To all whom it may concern:

Be it known that we, OTTO KURZ and CHARLES KURZ, both citizens of the United States of America, residing at New York city, Bronx county, State of New York, have invented certain new and useful Improvements in Focusing Devices for Electric Lamps, of which the following is a full, clear, and exact description.

This invention has for an object to provide a focusing device for electric lights, that is to say, a device to adjust a reflector relatively to an electric lamp to obtain the best results from said lamp. To focus the rays of light, we provide a special arrangement of parts to impart a longitudinal movement to the reflector, that is to say, a longitudinal movement relatively to the axis of the lamp, whereby the position of the lamp and reflector can be changed relatively to each other.

A preferred mechanism for mechanically producing the abovenamed results will hereinafter be set forth, reference being had to the accompanying drawing, wherein:—

Figure 1 is a side elevation of an electric lamp made in accordance with our improvement, but broken away to illustrate the support for the lamp-socket;

Fig. 2 is a sectional front elevation, the section being taken on a line 2—2 in Fig. 1;

Fig. 3 is a detail side elevation of the reflector and cam-ring therefor;

Fig. 4 is a fragmentary detail perspective view of a portion of the reflector;

Fig. 5 is a similar view of a portion of the cam-ring; and

Fig. 6 is a fragmentary perspective view of the casing, cam-ring and reflector assembled.

As has been stated, the object of our invention is to adjust a reflector relatively to its lamp to focus the rays of light. As herein embodied our improvement consists of a suitable casing 7 to house a movable reflector 8 and a fixed lamp-socket 9 to support a lamp 10. The socket 9 will be held fixed by a suitable support, such for instance as is indicated by 11. The reflector 8 will be provided with an opening 12 located centrally thereof for the passage therethrough of the socket 9. The reflector 8 will be movably mounted within the casing, that is to say, mounted for movement longitudinally of the axis of the casing 7. To actuate the reflector longitudinally of the casing, we provide a ring 13 having angular or cam slots 14, said ring being loosely fitted over the flange 15 of the reflector 8, that is to say, the cam-ring is rotatably mounted upon the flange of the reflector.

To prevent rotation of the reflector 8, when its cam-ring is rotated, we provide same with pins 16 which engage longitudinally disposed slots 17 in the flange 18 of the casing 7. The casing flange is further provided with transversely disposed slots 14^a through which locking-screws 19 pass, which screws lock the cam-ring 13 to a rotatable collar 20 carried by and mounted exteriorly of the flange 18 of the casing 7. As can be seen in Fig. 6, the binding-screws which are carried by the collar 20 pass through the transverse slots 14^a and engage the cam-ring 13; hence when the collar 20 is rotated the cam-ring 13 will also be rotated, thereby causing the reflector 8 to be moved longitudinally of the lamp casing. The pins 16 carried by the reflector will, when the cam-ring is rotated, move longitudinally of the slots 17, but the reflector will not be rotated. The casing 7 will be fixed relatively to the rotatable collar 20 and cam-ring 13.

It will be apparent that the focusing of the rays of light is accomplished by manipulating the collar 20 to move the reflector longitudinally of the casing 7.

What we claim as our invention is:

1. In an electric lamp, a casing having transversely located slots, a reflector within the casing, a ring having angularly disposed slots rotatably mounted on said reflector, means carried by the reflector to engage said slots, a rotatable collar carried by the casing, and connecting means passing through said collar and through the transverse slots in the casing to engage said ring whereby said collar and ring will be rotated in unison, for the purpose set forth.

2. In an electric-lamp, a casing, a fixed bulb-socket carried thereby, a reflector provided with an opening located centrally thereof, said socket being located within said

opening and having a slidable engagement therewith, means to slidably connect the casing and reflector, a rotatable ring unsecured to the reflector but connected therewith, and means carried by the reflector coöperating with said ring to adjust the reflector longitudinally of the casing.

Signed at New York city, N. Y., this 30 day of March, 1918.

OTTO KURZ.
CHARLES KURZ.

Witnesses:
MAURICE BLOCK,
EDWARD A. JARVIS.