PUBLISHED
MAY 11, 1943.
BY A. P. C.

R. REUSS
PHOTOGRAPHIC CAMERAS
Filed Oct. 28, 1940

Serial No.
363,141

Fig. 1

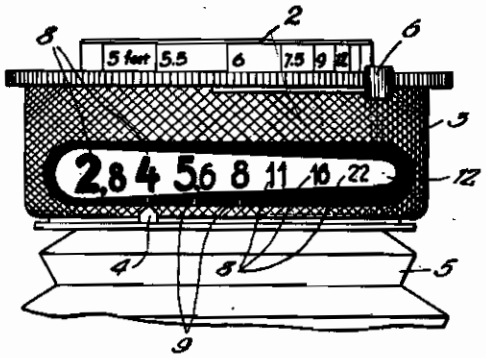
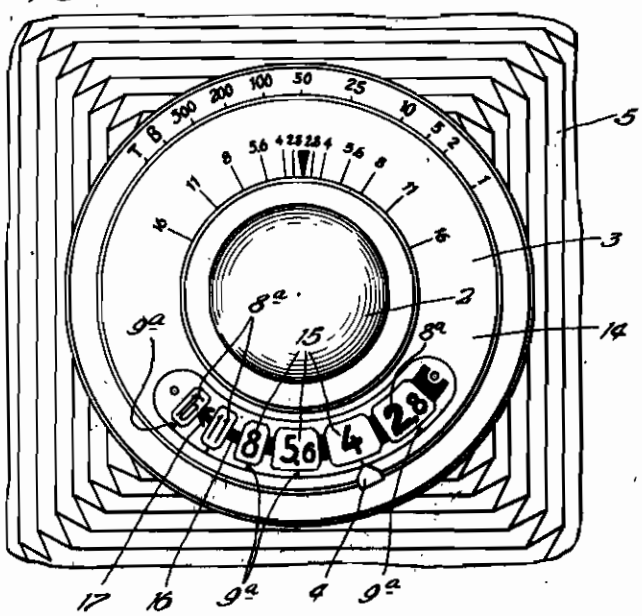


Fig. 2



Inventor:
Rudolf Reuss
By:-
Singer, Ehlert, Stern & Carlberg
Attys:-

Published May 11, 1943 Serial No. 363,141

ALIEN PROPERTY CUSTODIAN

PHOTOGRAPHIC CAMERAS

Rudolf Reuss, Dresden, Germany; vested in the Alien Property Custodian

Application filed October 28, 1940

The invention relates to improvements in photographic cameras and particularly is directed to a novel arrangement and design of the diaphragm aperture scale on camera objective mounts.

It is the principal object of the invention to provide camera objectives with a novel design of a diaphragm aperture indicating scale, including among other features a number of symbols which by their size of which they are made indicate the relative size of the various apertures to which the diaphragm is adjustable. Such an aperture scale is particularly useful for beginners in photography, who sometimes experience difficulties in correctly interpreting the customary diaphragm aperture scale in which the smaller numerals indicate larger absolute diaphragm apertures, while the smaller absolute diaphragm apertures are indicated by higher numerals, or so called *f*-values, since it is these values which determine the time of exposure. In accordance with the above named object of the invention the numerals indicating a large diaphragm aperture are made relatively large in size while the numerals indicating successively smaller diaphragm apertures are made correspondingly of successively smaller size.

Another object of the invention is to emphasize the importance of the diaphragm aperture indicating numerals by making the same not only of varying size, but also of varying degree of heaviness, the numerals indicating the large aperture being made rather heavy while the numerals indicating smaller apertures being made correspondingly lighter.

It is also an object of the invention to surround each numeral of the diaphragm aperture scale by a frame, which frames become successively smaller in size or area toward the end of the scale which indicates the smallest aperture size.

Other objects of the invention will be apparent or will be specifically pointed out in the description forming a part of this specification, but the invention is not limited to the embodiments herein described, as various forms may be adopted within the scope of the claims.

Referring to the figures which illustrate by way of example two embodiments of the invention:

Fig. 1 is a top plan view of a camera objective with a diaphragm aperture scale arranged on the circumference of the shutter casing, and

Fig. 2 is a front elevation view of a modification in which the diaphragm aperture scale is arranged on the front face of the shutter casing.

Referring to Fig. 1, the camera objective 2 in conventional manner is combined with a shutter, the shutter casing, of which is designated with 3, and an adjustable diaphragm of which only the diaphragm adjusting lever 4 is visible. A portion of the camera bellows is shown at 5 and the shutter tensioning lever is indicated at 6. The diaphragm aperture scale is arranged on the circumference of the shutter casing 3 and includes of a plurality of numerals 8, each of which indicates the *f*-value of the diaphragm to which the latter is adjusted when the diaphragm adjusting lever 4 has been moved opposite the scale division 8 which is associated with each numeral. It will be noted that the size of the numerals 8 decreases from the left hand end of the scale toward the right hand end of the scale to indicate that the size of the diaphragm aperture decreases when the lever 4 is moved toward the right hand side, although the absolute value of the numerals 8 increases from 2.8 to 22. Furthermore, the numerals 8 decrease gradually in heaviness from the left toward the right, the heavier numerals indicating that the diaphragm aperture increases in size when the lever 4 is moved toward the heavier numerals.

In order to emphasize additionally that the size of the aperture of the diaphragm is reduced toward the lighter numerals, the entire series of numerals 8 is surrounded by a longitudinal frame 12 whose width decreases gradually toward the right hand end.

In the modification illustrated in Fig. 2, the diaphragm aperture scale is arranged on the front face 14 of the shutter casing 3, and the numerals 8^a associated with the scale divisions 8^a are made all of the same size, but they are made of varying heaviness, the heavy numerals indicating that they represent diaphragm apertures of larger size as the lighter numerals. Furthermore, each numeral 8^a is set into a separate frame 15, which in the embodiment shown consist of a polygon, and each frame 15 has a different size. The larger frames indicate larger diaphragm apertures and the smaller frame correspondingly smaller apertures. In addition hereto, the frames 15 are connected with each other by an arrow 18 whose point 17 is directed toward the smallest frame 15 which surrounds the lightest numeral "16", while the tail of the arrow 16, increases in thickness toward the largest frame 15 surrounding the heaviest numeral "2.8".

The different additional symbols to distinguish the numerals from each other may be employed

in various manner to indicate more emphatically that the numerals of the smallest numerical value represent the largest diaphragm aperture. For instance the scale lines 9 and 9^a associated with the numerals 8 and 9^a respectively may be made gradually heavier from one end of the scale toward the other. The frames 15 may only be applied to the numerals 8^a at the end of the scale, and the area of the longitudinal frame 12 and that of the tail of the arrow 16 may be variably colored in such manner that the color becomes gradually darker toward the end of the scale which represents the smaller diaphragm apertures.

RUDOLF REUSS.