

PATENT SPECIFICATION



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COMPLETE SPECIFICATION.

Improvements in or relating to Objective Mounts for Photographic Cameras.

We, ERNST LEITZ G.M.B.H., a Company organised under the Laws of Germany, of Optical Works, Wetzlar, Germany, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to a photographic camera having a telemeter of the kind in which the focussing movement of the camera objective is transmitted to the movable member of the telemeter by means of lever or other suitable mechanism operated by a cam ring connected to the objective mount. With such an arrangement the substitution of another objective of different focal length necessitates modification of the intermediate mechanism through which the objective movement is transmitted to the camera, and it has been proposed to provide each objective mount with a cam ring of a shape appropriate to the focal length of the objective in the mount, so that the whole mount with its cam ring can be removed from the camera and replaced by another when desired.

The present invention has for its object so to arrange the objective mount and the cam ring as to facilitate manufacture by mass production methods, and to this end the cam ring is constructed as a separate element so that any one of a set of cam rings of different shape can be selected for attachment to the objective mount in accordance with the focal length of the objective in the mount. The cam ring is preferably provided with a flange which can be clamped against a shoulder on the mount by means of an annular member in screwthreaded engagement with the mount. In a convenient arrangement the mount is formed in two concentric parts between which the cam ring is located, the attachment of the cam ring to one of the parts serving to secure the two parts firmly together. The objective mount is preferably in screwthreaded engagement with a separate outer member which can be fixed to the camera, so that the focussing movement takes place between the mount and

such outer member.

A preferred construction according to the invention is illustrated by way of example in the accompanying drawing.

In this construction the objective mount containing the lenses A of the objective is formed in two parts B C, one within the other. The inner part B abuts against an internal shoulder C<sup>1</sup> on the outer part C and has an externally screwthreaded extension B<sup>1</sup> below the shoulder C<sup>1</sup>. The outer part C also has an extension C<sup>2</sup> below the shoulder C<sup>1</sup>, this extension being provided externally with a quick pitch screwthread C<sup>3</sup>, on which engages a flanged outer member D adapted to be fixed to the camera.

Within the extension C<sup>2</sup> of the outer part C is inserted a cam ring E having a curved lower edge E<sup>1</sup>. The cam ring E is secured to the objective mount by means of an internally threaded member F which is screwed on to the extension B<sup>1</sup> of the inner part of the mount so as to force a flange E<sup>2</sup> on the cam ring against the shoulder C<sup>1</sup> of the outer part and at the same time to force this shoulder against the inner part B. Thus the member F serves not only to attach the cam ring E to the mount but also to clamp the two parts of the mount together, so that the cam ring and the two parts of the mount form a rigid unit movable on the quick pitch screwthread C<sup>3</sup> by means of a handle G for focussing purposes within the outer member D.

The cam surface E<sup>1</sup> of the cam ring E acts through a suitable lever mechanism (not shown) on the movable member of the telemeter with which the camera is provided, so that the focussing movement of the objective by operation of the handle G is transmitted to the telemeter and simultaneously effects adjustment thereof. The slope of the cam surface E<sup>1</sup> is chosen to suit the focal length of the objective A, and a different cam ring E is provided for each objective, thus ensuring that the telemeter adjustment will take place on a scale suited to the focal length of the objective.

Having now particularly described and ascertained the nature of our said inven-

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tion and in what manner the same is to be performed, we declare that what we claim is:—

1. An objective mount for photographic cameras of the kind described, in which the cam ring, through which the focussing movement of the objective is transmitted to the telemeter, is constructed as a separate element, so that any one of a set of cam rings of different shape can be selected for attachment to the objective mount in accordance with the focal length of the objective in the mount.

2. An objective mount as claimed in Claim 1, in which the cam ring is provided with a flange which can be clamped against a shoulder on the mount by means of an annular member in screwthreaded engagement with the mount.

3. An objective mount as claimed in

Claim 1 or Claim 2, in which the mount is formed in two concentric parts between which the cam ring is located, the attachment of the cam ring to one of the parts serving also to secure the two parts firmly together.

4. An objective mount as claimed in Claim 1 or Claim 2 or Claim 3, in which the mount is in screwthreaded engagement with a separate outer member which can be fixed to the camera, so that the focussing movement takes place between the mount and such outer member.

5. The objective mount for photographic cameras substantially as described and as illustrated in the accompanying drawing.

Dated this 5th day of July, 1932.

KILBURN & STRODE,  
Agents for the Applicants.

[This Drawing is a full-size reproduction of the Original.]

