



BEACH
MULTI-FOCAL LENS



INSTRUCTIONS
FOR USING THE
BEACH
MULTI-FOCAL LENS
Series A



THE Beach Multi-focal lens Series A is not convertible and can be used only in its entirety. Being practically true in drawing or perspective it is not necessary that a longer focal length should be used. This form is much more convenient because of its speed, than are single elements.

This lens is corrected for visual and chemical focus but in getting acquainted with it, we urge that actual exposures be made because the image as seen upon the ground glass is of a different quality from that of other lenses and it really records greater depth on the sensitized material than the ground glass actually indicates. This is due solely to a transparency in the shadows.

In comparing the Beach Multi-focal lens for speed and depth of focus with other types of lenses, it is imperative that the diaphragm settings and exposures be identical in both cases. For instance, the Beach Multi-focal lens Series A wide open is marked Ex. 11.7 which is equivalent to $f3.3$ from the standpoint of exposure. Therefore it should be used against a lens of like speed. If a lens at its widest aperture is $f5.6$ the Beach Multi-focal lens Series A must be diaphragmed down to Ex. 10 which in exposure value is equivalent to $f5.6$ and so on. The necessary exposures in their respective cases should be similar if a true comparison is to be made. Here it may be stated that very short exposures may be made and development prolonged without a loss of quality.

THE DIAPHRAGM

The rapidity of this lens is gained by the excess surface caused by the concentric curves and because



of this unique construction, this lens admits more light to the plate than do other lenses of equal diameter and focal length. Owing to this unusual feature the diaphragm markings of the Beach Multi-focal lens Series A could not be computed in the f system and therefore it became necessary to adopt a new diaphragm system which is known as the Ex. or Exposure system. This has been computed on actual exposure values. For the convenience of the photographer who is accustomed to working with diaphragm markings in the f system, the following table will assist in regulating proper exposures. This table shows the comparative markings in both systems.

Ex. 11.7	=	$f3.3$	Ex. 6	=	$f22$
Ex. 11	=	$f4$	Ex. 5	=	$f32$
Ex. 10	=	$f5.6$	Ex. 4	=	$f45$
Ex. 9	=	$f8$	Ex. 3	=	$f64$
Ex. 8	=	$f11$	Ex. 2	=	$f90$
Ex. 7	=	$f16$	Ex. 1	=	$f128$

Therefore if the diaphragm setting on the Beach Multi-focal lens Series A should be Ex. 10 it will be noted that the equivalent diaphragm in the f system is $f5.6$.

FOCUSING

As with any lens it is best where convenient to have the camera level with the subject and the swings set square. Altho the swings can be used in any way desired, a slight tipping of the ground glass will be found sufficient in almost any case as this lens is very sensitive to the swing.

The greatest importance should be attached to

the securing of a clearness of focus over the whole subject. One great advantage in the use of this lens lies in the possibility of obtaining greater depth of focus at a large aperture. The simplest way to focus is to begin by sharpening the image in the distance and then to bring this sharpness forward until it shall spread over the whole area of the desired picture or subject. This cannot be too strongly emphasized. Focusing back, or as some would say, a split or divided focus should be adopted as a positive rule in the use of this lens. The only chance for failure lies in disregarding this suggestion. Herein is the secret of success—focus thoroughly over the whole subject and do not attempt to sharpen some particular point.

For large heads the full aperture Ex. 11.7 will probably give the mellowness and depth desired, and in making groups or photographing smaller features it will be found that a smaller aperture of Ex. 10 or Ex. 9 will be more effectual. This should be governed by the taste of the operator.

DEVELOPING

Developing should be carried well into the shadows as the lights do not easily block. Great brilliancy can thus be obtained and a stereoscopic roundness and richness of texture will do away with the sodden and uncouth shadows of the usual photograph.

Since the characteristics of this lens vary from those in other lenses on the market today, it will be found that like other precision instruments, some time may be required to become thoroughly familiar with its superior qualities.



OUR **ADVISORY SERVICE** IS EXTENDED TO EVERY USER OF THE BEACH MULTI-FOCAL LENS. WE SHALL BE PLEASED **TO AID** THOSE WHO MAY ENCOUNTER DIFFICULTIES WITH THIS LENS AND WOULD CONSIDER IT A PRIVILEGE TO ANSWER LETTERS OF INQUIRY CONCERNING ANY UNCERTAINTY OF ITS USE. **SEND YOUR SPECIMENS** TO US, MR. HOWARD D. BEACH WILL **CRITICIZE YOUR PRINTS** WITH THE IDEA OF OFFERING SUGGESTIONS THAT WILL ENABLE YOU TO OBTAIN THE BEST THAT WE KNOW THIS LENS IS CAPABLE OF PRODUCING. HE WILL ALSO PASS ON **NEW IDEAS** OF PICTURE MAKING WHICH MAY NOW BE ADAPTED WITH THE ADVENT OF THIS MODERN INSTRUMENT.

