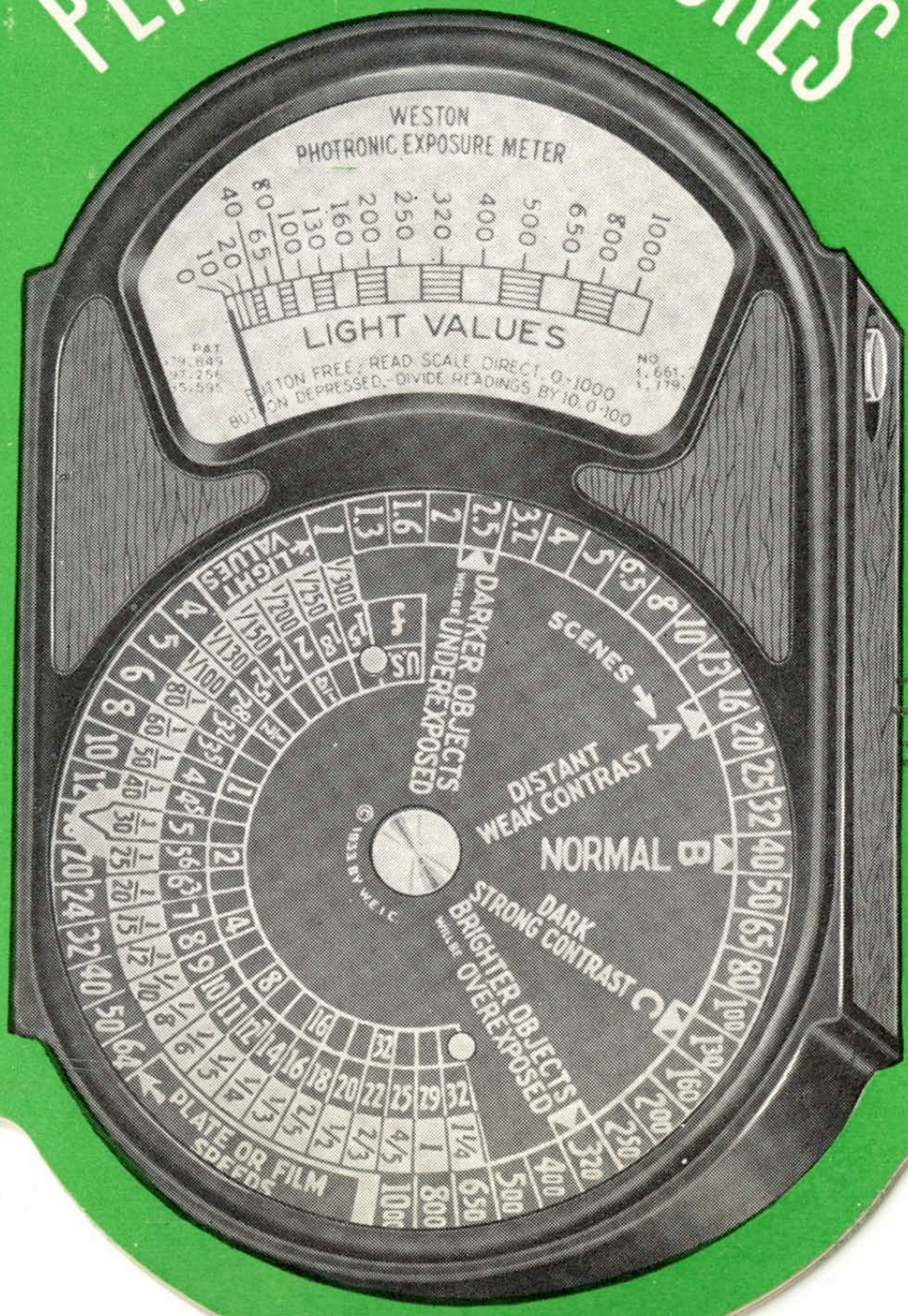
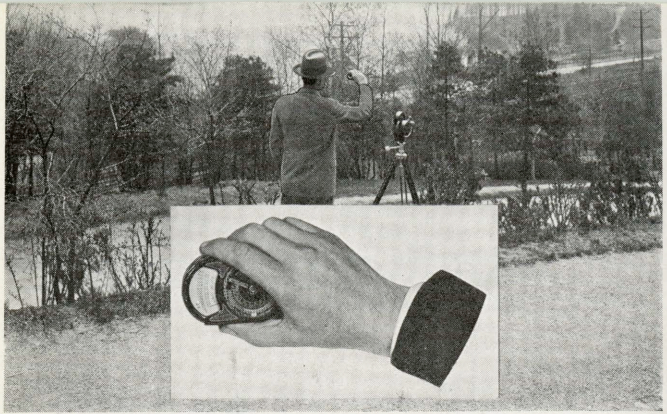
PERFECT EXPOSURES



The cover illustration serves to show the actual size of the Weston Universal Exposure Meter, Model 617, for both still and movie cameras. This meter is a product of the Weston Electrical Instrument Corporation, internationally famous for high quality instruments for half a century.

Why I need an EXPOSURE METER

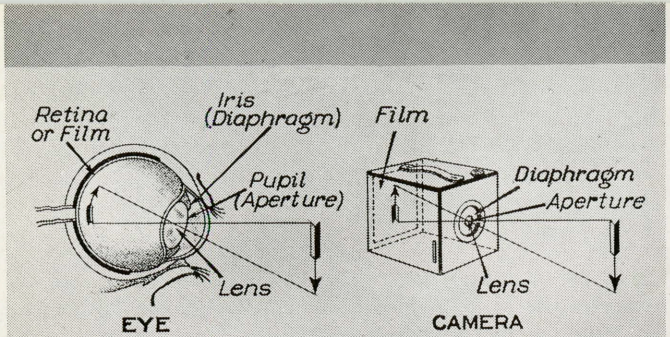
By H. M. RICKS



HOW TO HOLD AND AIM THE WESTON UNIVERSAL EXPOSURE METER

● Remember how many times we have been disappointed when we looked at our prints . . . or our movie pictures . . . because so many of them were either over or under exposed? We looked at these badly exposed or lost negatives and consoled ourselves with the thought that the light was tricky or bad . . . or we had taken the pictures of a late afternoon . . . or there was too much contrast . . . etc., etc.

● There is a whole flock of such excuses for poor negatives in common use . . . but there is one principal reason for our failure to obtain perfect negatives every time we take a picture. That reason is our inability to accurately gauge the light and set our aperture and shutter time to correspond. For a camera will faithfully portray on the film everything the eye can see . . . with the same fidelity . . . if the exposure settings are correct. That statement may seem rather strong, **but, nevertheless, it is a fact.**

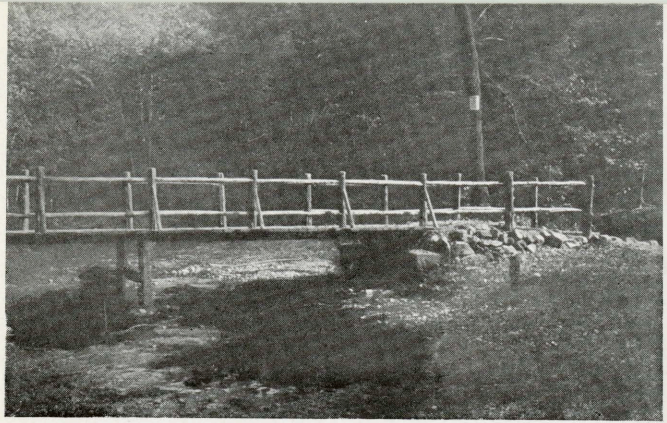


YOUR CAMERA IS SIMILAR IN MANY RESPECTS TO THE HUMAN EYE

● Naturally the thought arises in your mind, "how, then, is it possible for me to set my shutter and f stop correctly every time?" Fortunately, that's a simple matter now. No, you don't have to be an expert photographer . . . you don't have to squint through tubes, match colors or make computations from charts. All you need is a small device which accurately measures light values and translates those values for you into correct camera settings . . . a Weston Exposure Meter.

● Now, each and every one of us needs an exposure meter if we wish to obtain good exposure results. The reasons will be obvious after reading this little booklet. But before we get further along, let me just say a few words about the operation of the Weston Meter.

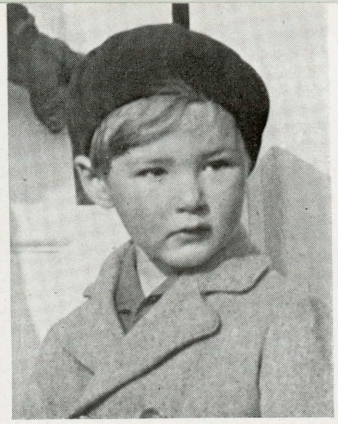
● It is a simple, compact device, small enough to fit your pocket and contains a Weston life-time photoelectric eye. You simply



A WESTON EXPOSURE METER WILL PREVENT BADLY EXPOSED PICTURES

point the "eye" at the subject you wish to photograph, and the meter will tell you the correct shutter speed and f stop to use. That's all there is to it. But it will insure sharp, clear pictures every time. If you are not acquainted with this Weston Meter, your photographic dealer will be glad to demonstrate one to you.

What is Exposure? Briefly, exposure is the selection of the proper lens aperture and shutter speed for the brightness of the particular scene and the emulsion speed of the film. It is the one phase of photography which baffles even the expert professional when in unfamiliar surroundings. Of course, the professional can produce uniformly exposed photographs in his studio, but that is because he is dealing with standardized studio lighting. But in the great outdoors, where light conditions vary, they, too, find it impossible to get uniformly good exposure results . . . unless they have some means of measuring the "scene brightness".



A WESTON EXPOSURE METER ASSURES PICTURES WORTHY OF ENLARGEMENT

Scene Brightness. When you look at an object, the impression you receive is caused by the reflected light from that object and by its shade and color contrast. It is exactly the same in photography. When you take a picture, the impression on the film is caused by the light reflected from the object being photographed. In photography this reflected light is known as "scene brightness". And in photography a true estimate of scene brightness must be had in order to insure correct exposure settings.

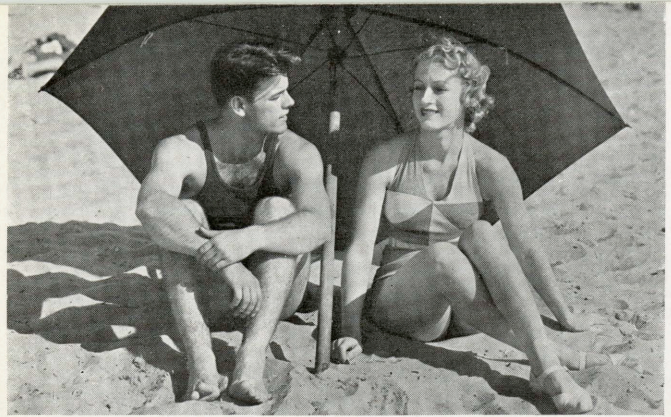
The Eye Cannot Measure Scene Brightness. We said before that an accurate estimate of scene brightness was necessary for correct exposure. If our eyes were capable of furnishing this estimate with some degree of accuracy, there would be no exposure problem. But, unfortunately, this is not possible, for the eye cannot readily detect even large changes in light conditions. It is designed for a different purpose. It sees **well** under a wide range of light conditions without our becoming conscious of any change. For example, you read a paper in the early morning light about as easily as at noon. Yet the light at noon is many hundreds of times stronger.

A WESTON EXPOSURE METER BRINGS RESULTS FOR THE MINIATURE CAMERA USER

In fact, it has been established that light intensities can be changed a hundred-fold without the eye recognizing such change. How, then, can the eye be expected to measure scene brightness for us with any degree of accuracy, especially since our photographing is done under so many totally different light conditions?

Your Eye and Your Camera. Your camera is similar in several respects to your eye. Both have a lens through which light passes to a sensitive surface, the retina in the case of the eye and the film in the camera. Both also have an iris or stop which controls the amount of light passing through the lens to the sensitive surface. And to control the time of exposure, the camera also has a shutter which cuts off scene impression, just as the eyelids cut off visual impressions.

The Eye is Automatic. When you look at an object you obtain a sharp, clear impression of that object whether in sunlight or in deep shade; regardless of scene brightness. That is because the iris of the eye **automatically** controls the amount of light passed through to the retina. It admits just the right amount of light necessary



A WESTON EXPOSURE METER ASSURES EXCELLENT BEACH PICTURES

for you to see clearly. If there is but little scene brightness, or reflected light, the iris opens wide; if there is a great amount of light, the iris contracts . . . always admitting the amount of reflected light necessary for a clear impression.

Your Camera is Operated Manually. Unlike the eye, your camera is a manually operated device. **You** must determine and set the stop opening and shutter speed, dependent on the scene brightness, in order that only the correct amount of light is passed through the lens to the film. If you admit too much or too little light, the result will be over or under exposed negatives. If you admit just the right amount of light you will have a correctly exposed negative—every time. But to do this accurately, you must have some means of measuring scene brightness which is completely independent of eye judgment. Optical meters and daylight tables fail to solve this problem because in their use the eye is still called upon to judge light and shade conditions.

A WESTON EXPOSURE METER ASSURES SHARP, CLEAR VACATION PICTURES

At Last—a Real Exposure Meter. Eye judgment, or, in other words, guess-work, has at last been removed from the exposure problem. A practical exposure meter is now available that measures the brightness of the scene absolutely independent of eye judgment.

- This device, the Weston Universal Exposure Meter, is instantaneous in its response to scene brightness whether photographing distant scenes or close-ups under trees, during full daylight or in the fading light of early evening. It indicates, with equal fidelity, scene brightness in the clear atmosphere of mountainous country or in the peculiar photographic light of the tropics.

- The scene brightness measurements are immediately converted by a single turn of the exposure dial into proper shutter speeds and f stops. The exposure dial also takes into account the speed of the particular film being used.

- If you are interested in better still or motion pictures, see this unusual device at your favorite dealer. It will insure perfect exposures on every shot and bring a new thrill to your photography.

OWNERS EVERYWHERE ENTHUSIASTICALLY ENDORSE WESTON EXPOSURE METERS

- "I purchased one of your PHOTRONIC Exposure Meters when they were first introduced by you, and since that time I have used it with uninterrupted satisfaction. Moreover, as I have already informed you, I consider it the greatest contribution to photography since the substitution of a celluloid for a glass film base."

- "I have used every kind of photographic exposure meter that has come out for years. Though I have had forty years' experience in photographing, this exposure problem was not satisfactorily solved till I got a Weston Meter. I am enthusiastic about it."

- "I wish to add to my request for the advanced booklet the comment that I am entirely pleased with the Weston Meter. I have always prided myself on rarely making a bad miss on exposure, but the manner in which I can now obtain negatives of uniform density by the use of your meter is amazing. I have been very pleased to recommend it to several of my friends."

SOME OF THE SATISFIED USERS OF THE WESTON UNIVERSAL EXPOSURE METER

PROFESSIONAL PHOTOGRAPHERS

UNITED STATES SIGNAL CORPS

ADMIRAL BYRD EXPEDITION

HOLLYWOOD CAMERA MEN

SMITHSONIAN INSTITUTE

MARTIN JOHNSON EXPEDITION

MEMBERS OF ROYAL FAMILIES

AMATEUR PHOTOGRAPHERS

SETH PARKER EXPEDITION

CAMERA CLUB MEMBERS

NATIONAL GEOGRAPHIC MAGAZINE

WESTON ELECTRICAL INSTRUMENT CORPORATION
NEWARK, N. J.

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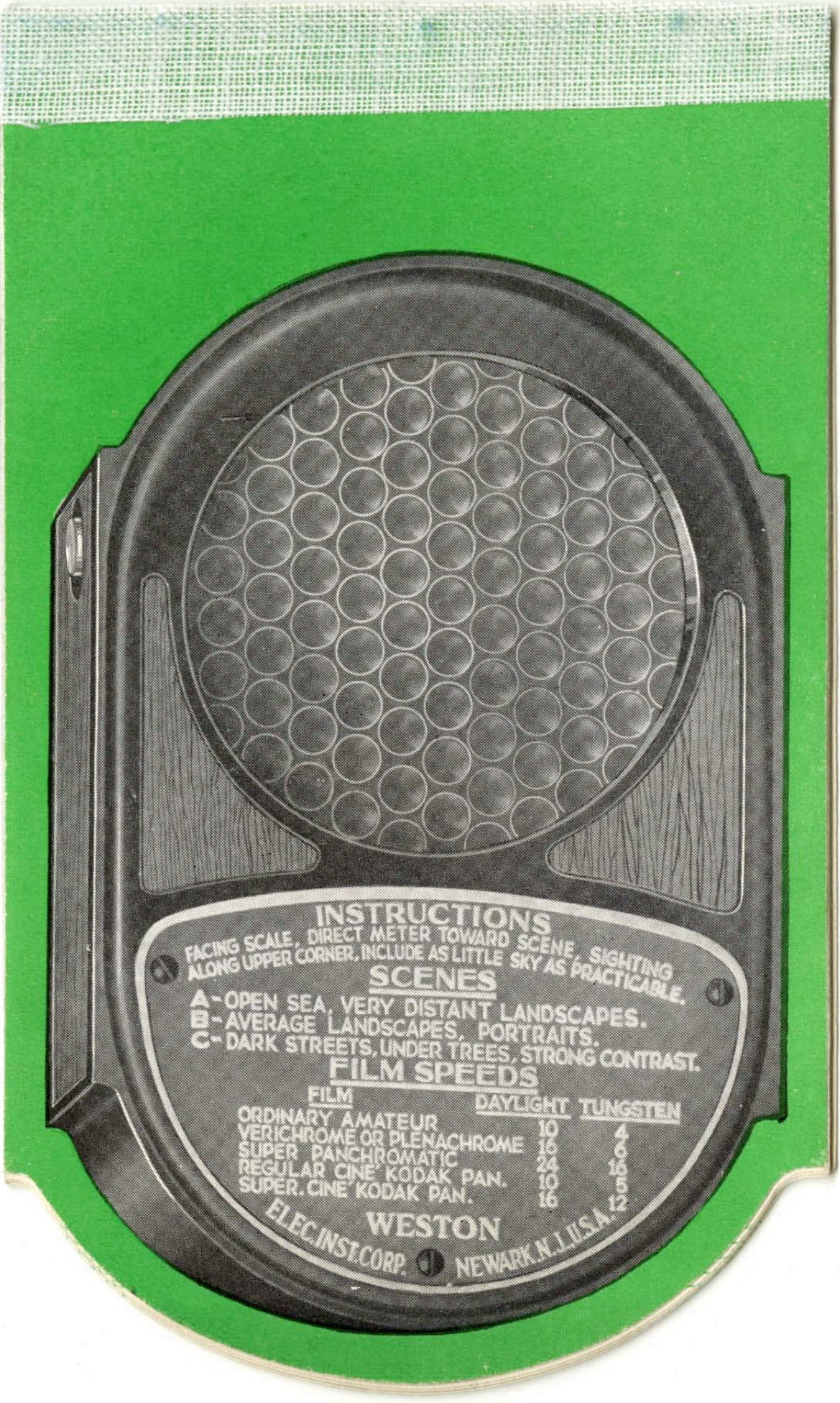
INSTRUCTIONS
FACING SCALE, DIRECT METER TOWARD SCENE, SIGHTING ALONG UPPER CORNER. INCLUDE AS LITTLE SKY AS PRACTICABLE.
SCENES
A - OPEN SEA, VERY DISTANT LANDSCAPES.
B - AVERAGE LANDSCAPES, PORTRAITS.
C - DARK STREETS, UNDER TREES, STRONG CONTRAST.
FILM SPEEDS
FILM DAYLIGHT TUNGSTEN
ORDINARY AMATEUR 10 4
VERICHROME OR PLENACHROME 16 8
SUPER PANCHROMATIC 24 16
REGULAR CINE KODAK PAN. 10 5
SUPER CINE KODAK PAN. 16 12
WESTON
ELEC. INST. CORP. NEWARK, N.J. U.S.A.