

DENNIS STOCK



Exakta
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Exakta

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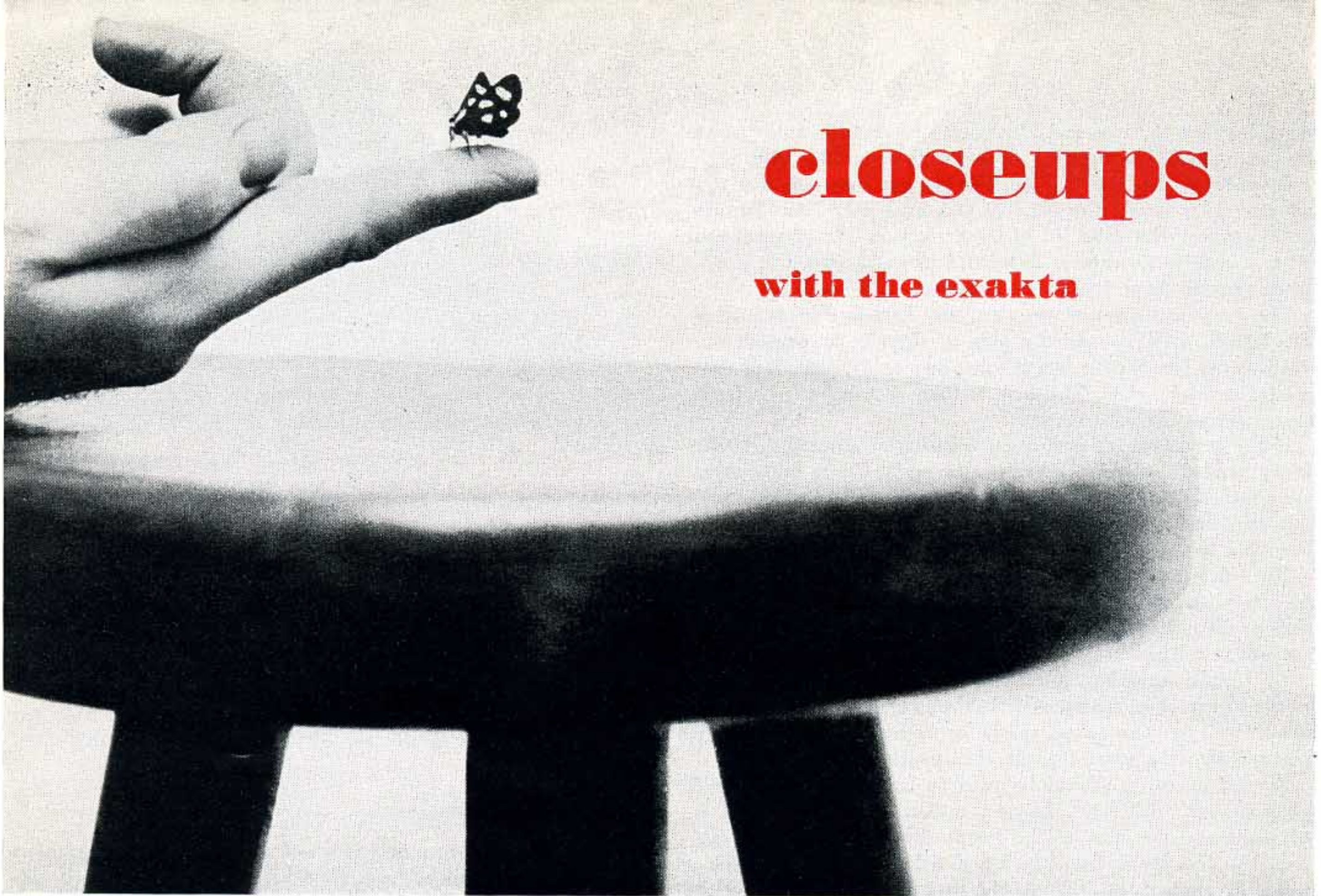
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PHOTO BY HANS NAMUTH



closeups

with the exakta

MURRAY LADEN

By DAVID GERRITT

TO many camera owners, there is only one photographic world—that of people and buildings and everyday objects. To a KINE-EXAKTA cameraman who is adventurous, however, there are many photographic worlds and one of the most exciting is the universe of tiny objects.

This magic world—imposingly called macrophotography in scientific jargon—is a relatively new discovery, confined largely to scientific, industrial, police and educational fields.

Yet macrophotography offers the KINE-EXAKTA owner an opportunity to take perhaps the most stimulating and interesting shots he has ever taken and his subjects are never any

farther away than arm's length. The technique is simple and requires only little additional equipment.

The KINE-EXAKTA is better suited for closeup photography than other kinds of cameras because it is a single lens reflex. Parallax, which makes closeups very difficult or impossible with other kinds of cameras, does not exist with the single lens reflex. The exact picture mirrored in the ground glass is the picture the lens takes.

The KINE-EXAKTA can be focused down to about three feet, depending upon the lens being used. For macrophotography, it is necessary to focus closer on objects, therefore, adapter rings and extension tubes must be used.

The tubes increase the image distance or focal length (dis-

THIS is the first issue of the EXAKTA Magazine. On its pages you will find the photographic experiences and pictures of people who, like yourself, own EXAKTA cameras and use them in an imaginative way.

The purpose of our magazine is to bring together all EXAKTA owners, professional and amateur, so that you may share experiences and information in the interest of better photography. We also want to tell you about the proud heritage of the EXAKTA cameras and about the distinguished record they have achieved since the first EXAKTA was introduced by Ihagee Camera Works in Dresden in 1933.

This is your magazine and we want to publish your photos and articles. Preparing this issue has been a revelation. Hundreds of photos and many article suggestions have poured in from EXAKTA owners. We welcome comments, suggestions and pictures from readers and feel confident that with such help each issue will prove that EXAKTA owners are the bearers of a great tradition—the makers of photo masterpieces.

tance between the lens and film plane) so that the subject can be photographed in original or larger than real-life size.

In order to use the KINE-EXAKTA for macrophotos, two adapter rings (back ring No. 140 and front ring No. 141) are indispensable. With the aid of these rings, macro pictures can be taken when the camera is focused upon an object at a distance ranging from 9.85 to 13.75 inches.

The rings are screwed together, the lens is removed from the KINE-EXAKTA, and the pair of rings is bayoneted into the bayonet lens mount in the same way as the lens. Red dots must face each other. The lens is then fastened to the front ring carrying the lens mount.

If the extension is insufficient, focusing at shorter distances being needed, extension tubes can be used. Three basic tubes are available and these form a variety of combinations permitting focusing at a great range of distances, as shown in the table on this page.

No. 142 is a 5 mm tube; No. 143 is 15 mm; and No. 144 is 30 mm long. These tubes combine to form as long an extension as 50 mm. The extension tubes cannot be used without the adapter rings.

To install the tubes, the back ring (No. 140) is attached to the camera lens mount and the front ring (No. 141) to the lens. The extension tubes, single or in any combination, are screwed into the open threads of the adapter rings.

Careful attention should be paid to lighting. Do not flood your subject with light, because a flat, washed-out effect is obtained and the heat of the lamps may burn up your subject. Use low-power floodlamps and diffuse them with tracing paper or similar methods. Avoid shadows.

One or two lamps on both sides of the subject at a 45° angle generally are sufficient.

Use an exposure meter. Special pains must be taken in closeup photography to get a correct reading with the meter because it covers a much larger area of the field than the subject does. Hold a piece of cardboard in the position the subject will occupy and take your reading from it.

Keep backgrounds simple and contrasty in tone with the subject. Photograph a light subject against a dark background and vice versa.

EXOTIC-LOOKING plant is dandelion, shot with EKAKTA and extension tube.



THIS MONSTER is an ordinary fly. Such closeups make macro-photography one of the most exciting fields for the EXAKTA owner.

Also use a very stable tripod with a ball and socket head.

It is important to remember that an increase in the extension requires an increase in exposure time. The chart below lists the exposure factor (increase in exposure time) necessary for the various combinations of tubes.

It may occasionally be necessary for the photographer to compute the exposure time for an unusual subject. This can be done easily with the aid of the following formula:

$$\text{Exposure time increase} = \frac{\text{Distance of lens from the film plane}^2}{\text{Focal length}^2}$$

Quite often it is helpful to know what the size of the object in the picture will be in relationship to its actual size. It may be computed with the following formula:

$$\frac{\text{Focal length of lens}}{\text{Distance of lens from film plane minus the focal length}} = \frac{\text{size of the object}}{\text{size of the image}}$$

The answer is in terms of a ratio, such as 1 : 1 or 1 : 2, etc.

In closeup photography, focusing must be critical to avoid blur in the picture. The lens should be stopped down a bit to increase the depth of field and insure sharpness. Any regular KINE-EXAKTA lens may be used.

This table shows distance, focal length, exposure factor and scale of picture when adapter rings, extension tubes and a Tessar 3.5 lens are used.

Extension tubes	Total distance cm.	Image distance cm.	Subject distance * cm.	Exposure factor	Scale of pictures
Without bayonet rings and tubes	Infinity	5	Infinity 64.5	1.0	variable
Both bayonet rings (140 and 141)	41	6	35.0 25.0		
Both bayonet rings and Tube 142 (5 mm.)	31.5	6.5	25.0 20.0	1.6	1 : 3.9
Tube 143 (15 mm.)	24.0	7.5	16.5 15.0	2.2	1 : 2.2
Tubes 142+143 (20 mm.)	23.0	8.0	15.0 13.5	2.5	1 : 1.9
Tube 144 (30 mm.)	21.5	9.0	12.5 11.5	3.2	1 : 1.4
Tubes 142+144 (35 mm.)	21.0	9.5	11.5 11.0	3.5	1 : 1.2
Tubes 143+144 (45 mm.)	21.0	10.5	10.5 10.0	4.3	1 : 1
Tubes 142+143+144 (50 mm.)	21.0	11.0	10.0 9.5	4.8	1 : 0.9

* The first figure of this column is based on use of the Tessar f 3.5 lens focused at infinity. The second figure is based on the lens being focused on nearest distance (0.70 meter).

To convert centimeters to inches, multiply by 0.3937 inch. Total distance is distance between subject and film plane. Image distance (focal length) is distance between lens (at diaphragm plane) and film plane. Subject distance is distance between subject and lens diaphragm. Exposure factor is increase in exposure necessary when using tubes or rings. Scale of pictures is ratio of 1 cm of subject on film to real-life size.

PHOTOS BY ALFRED EISENSTAEDT
AND HANS NAMUTH

AMERICA'S favorite pastime during the summer without a doubt is going to the beach. When the mercury shoots up to the sizzling mark, nearly everyone who can get away packs a light lunch and heads for the sandy strip that is washed by the cool waters of a river, lake or ocean.

Most people take along a camera on such an outing are contented to take only record shots of the family and a shot of the sky if the clouds happen to be dramatic in appearance. Such picture possibilities are not to be ignored, of course, but there usually are a number of other splendid picture subjects on and around the beach that are often neglected.

For instance, rarely does a photographer shoot a full beach scene. One would think that there would be hundreds of such pictures, but a glance through photo albums of camera owners would indicate otherwise.

Famous Alfred Eisenstaedt, *Life* photographer, took his KINE-EXAKTA to New York's Jones Beach one day this summer and on one roll produced a number of striking pictures. Magazine photographer Hans Namuth also took his EXAKTA to the beach at Bridgehampton, L. I., and got splendid results. Some of their pictures, examples of photos awaiting everyone, are reproduced on this page.

There is, of course, no handy formula for good pictures. Such photos usually are the result of keen vision—the ability to see as well as look—and the industry of the photographer.

However, observance of a few simple rules when you take your EXAKTA to the beach result in improved pictures.

Since there generally is plenty of sunlight, use a relatively slow black-and-white film to get finer grain and, consequently, better enlargements. Under bright sun, normal exposure for a film such as Super-XX is 1/100 or 1/250 at f 22. A slow film, such as Panatomic-X requires an opening of f 11.

Take along at least a yellow filter to dramatize clouds. Make certain that you double your exposure when using the filter.

Take along color film and duplicate your black-and-white shots in color. If you have a second EXAKTA, load it with color and use the other for black-and-white exclusively. Designate which is which by a piece of the film box taped to the back of each camera. Use an exposure meter.

Flash equipment is extremely useful for shots taken against the sun when the face of your subject is in the shadow. Use blue bulbs for color.

If you don't have flashbulbs with you, a white towel or cardboard can be used as a reflector to fill in the shadows.

Compose your picture carefully in the EXAKTA ground glass or prism viewfinder. Take your time about shooting and press the shutter release only when you feel certain that you have the picture just right.



**On the
beach**
pictures galore await
your Exakta

BEACH SCENES, like this one, confront all photographers at one time or another but few ever snap such a picture. Alfred Eisenstaedt shot this one Sunday afternoon at Jones Beach, New York.



ABSTRACT FORMS often can be found in familiar subjects such as the lifeguards, above. A pretty girl and a prop, such as a boat, left, are enough for a pleasing picture. Photographers should be on the lookout for such subjects. Pictures by Eisenstaedt.

A CHARMING CHILD is often a photographic windfall on the beach.



All the photographer has to do is watch and keep his camera ready.



taking strobe pictures with the exakta



LEAPING IN AIR, dancer Walter Nicks was photographed by Dennis Stock while executing a modern dance movement.

By Dennis Stock
Photographs by the Author

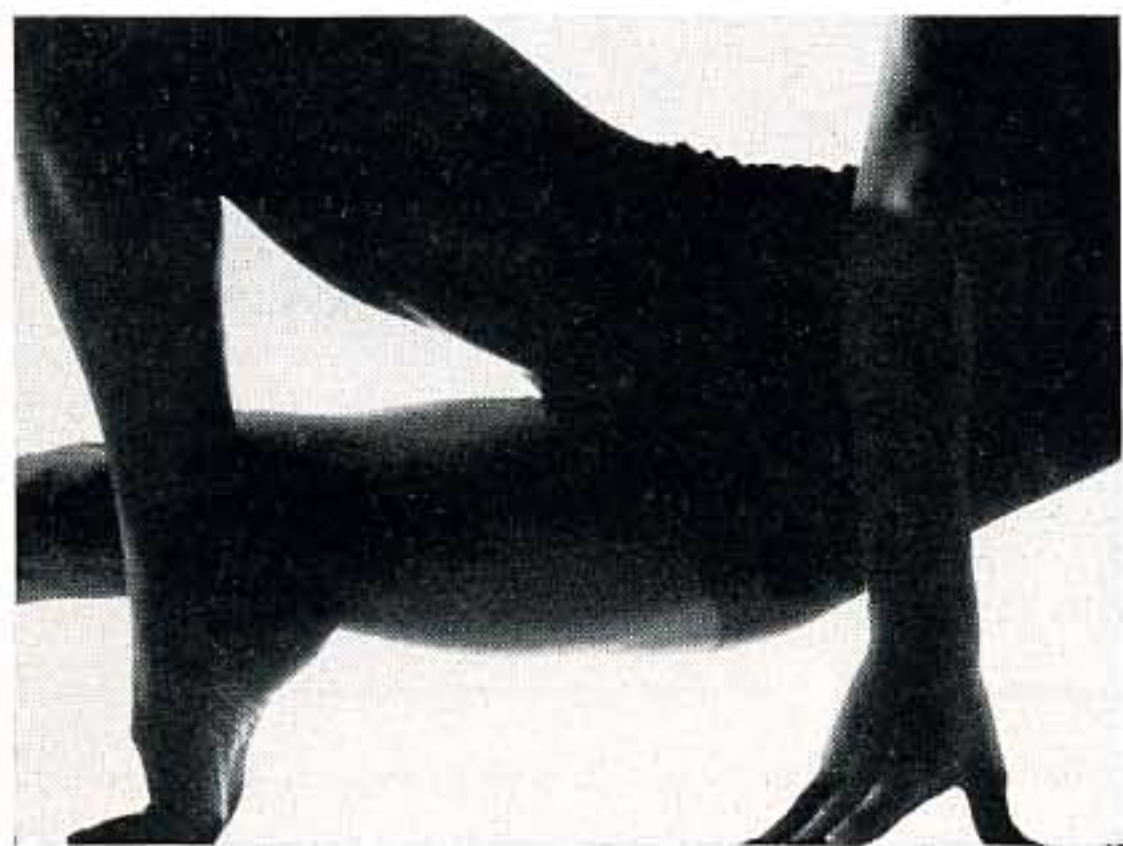
ONE of the wonderful things about photography is that it is constantly changing. There is always something new, something different for the photographer to try, some new development that will permit him to cross an unexplored frontier.

One of the phases of photography in which there has been a great deal of development in recent years is electronic flash. This type differs from ordinary flash in that the same bulb is used repeatedly and the flash duration is much shorter.

Electronic flash is commonly known among photographers as strobe. Technically speaking, however, there are two distinct, general types of electronic flash, speedlight and strobe.

Both speedlight and stroboscopic units operate in a similar way; that is, the shutter is opened and the light flashes, the theory being that the gas inside the flash tube ignites when electricity is discharged through it. The difference between the two, however, lies in several factors, including the fact that the strobe unit can be flashed more times per second than the speedlight.

Both speedlight and strobe units require a charging period



BEAUTIFUL FORM of Nicks' body ordinarily would be hard to photograph without some movement.

OUTSTRETCHED ARMS don't even show a quiver, were shot at about 1/5,000 second at f 8.





FROZEN IN ACTION, Nicks' body contrasts vividly against white background. Such shots would be difficult with flash.

between flashes to build up enough power for the next flash. The speedlight requires a much longer period of time for recharging than the strobe unit.

The ordinary speedlight may build up its charge in a period ranging from 5 to 20 seconds. The strobe unit, on the other hand, may be fired as fast as 6,000 times a second. Gjon Mili, famous New York photographer, has such a unit.

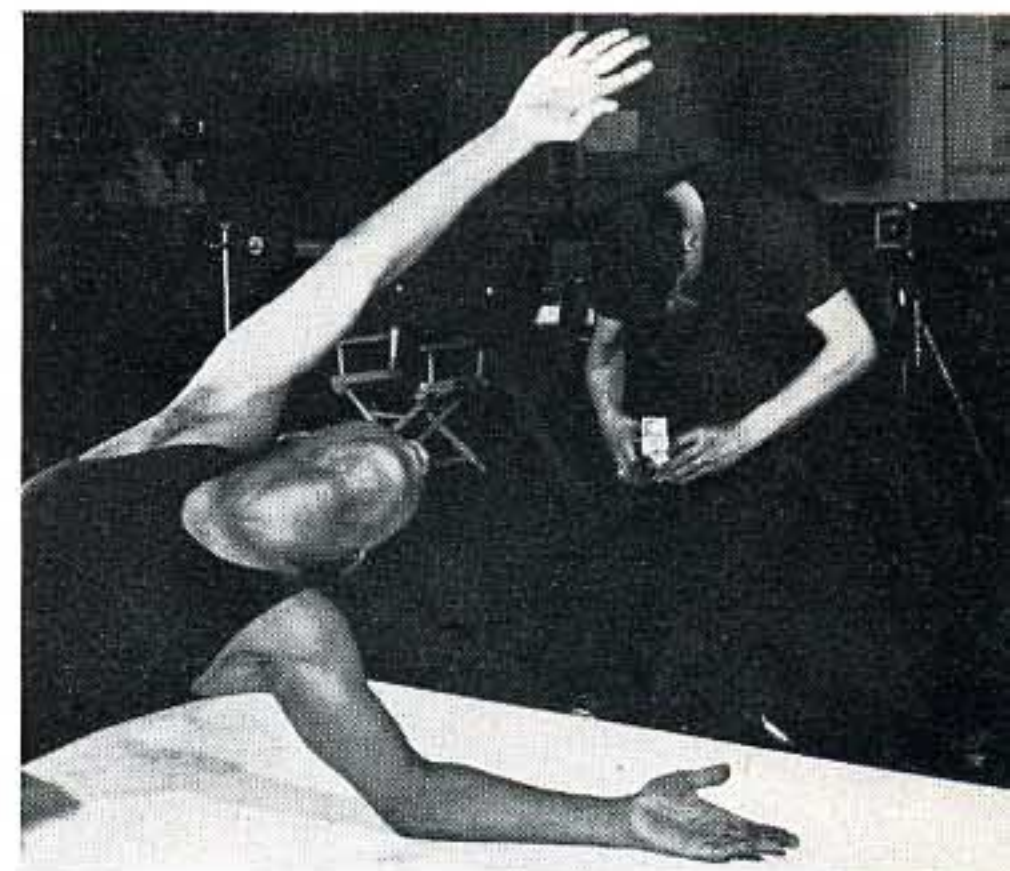
Speedlights normally have a flash duration of from 1/3,000 to 1/5,000 second, but some will flash as fast as 1/30,000 second. Strobe units can have flash durations of much less time. Prof. Harold Edgerton of Massachusetts Institute of Technology, one of the pioneers of electronic flash, built a unit that flashes at 1/1,000,000 second.

Since strobe units require much more power than speedlights in order to furnish very fast repeating flash, they are necessarily bulky and out of the amateur and average professional's class. Also they are much more expensive.

Speedlights, however, are relatively inexpensive and well-worth the expenditure. In recent years, a number of manufacturers have put speedlights on the market (they may be called strobe in the trade name or description, but they belong in the speedlight class) for about \$100. With these units, photographers can discover an exciting type of photography.

By this time, anyone who reads a magazine or newspaper

DENNIS STOCK, 22-year-old free-lance photographer, taking the pictures shown on this page and on the cover of this magazine.



knows what electronic flash pictures are like. There have been hundreds of pictures of athletes, dancers and other people "frozen" by the camera while they were engaged in some form of rapid activity.

Electronic flash has much value to all types of photographers. When many shots are to be made in succession, it is more economical than flashbulbs and incandescent light. It is much more convenient to use than flashbulbs.

To the press, sports, dance, portrait, fashion and theater photographer, it is an invaluable way to freeze action and a time saver.

To the scientist, it is a way of capturing on film insects and animals who move too fast to be photographed with any other light source.

Electronic flash can be used indoors and outdoors, for open shutter and synchronized exposures. It can be used as a main or fill-in light. It can serve as a soft, penetrating light or to obtain contrasting effect. In other words, electronic flash has many uses for the photographer plus the advantage of extremely short exposure.

Most photographers would do well to start with a small portable speedlight. There are two types and the type that suits your camera is the one to use.

The internal relay flash unit has the same time delay as an ordinary flashgun, 20 milliseconds. The Edgerton triggering circuit, which is used on all other types, has no time delay. The latter type of unit is the one to use with the KINE-EXAKTA V, which has built in strobe contacts.

The shots on this page and the one used as the cover of this magazine were taken to illustrate some of the things possible with strobe on the EXAKTA. The model is Walter Nicks, a dance instructor at the Katherine Dunham school.

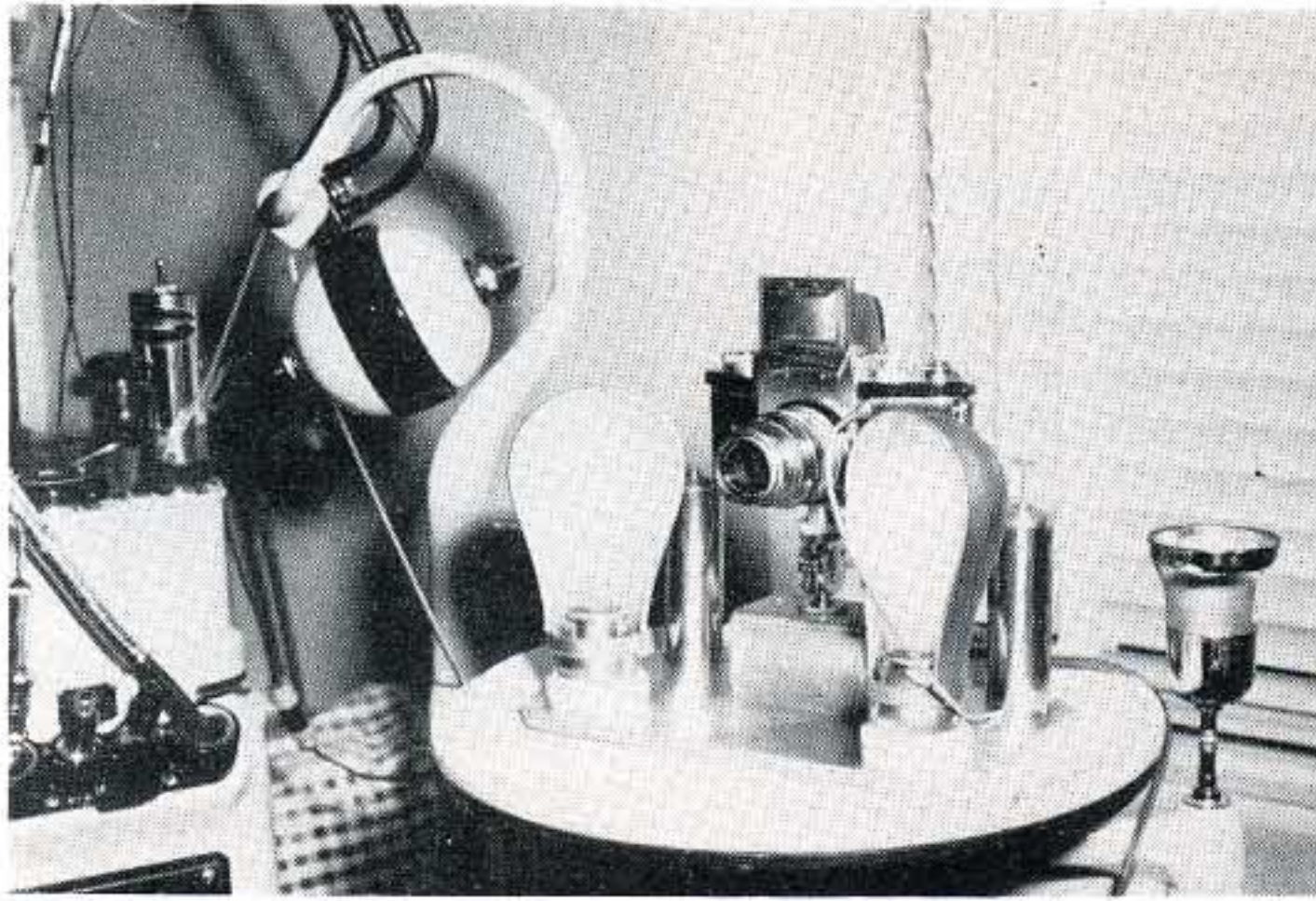
For these pictures, I used a raised platform and a white background. Two units were placed on each side of the stage and one in the back, center, all aimed to illuminate the background.

Using the Biotar f 2 on the EXAKTA, I shot at f 8 to over-expose the background and make it even more white. The shutter was set at 1/50 second, although the actual flash duration was about 1/5,000 of a second.

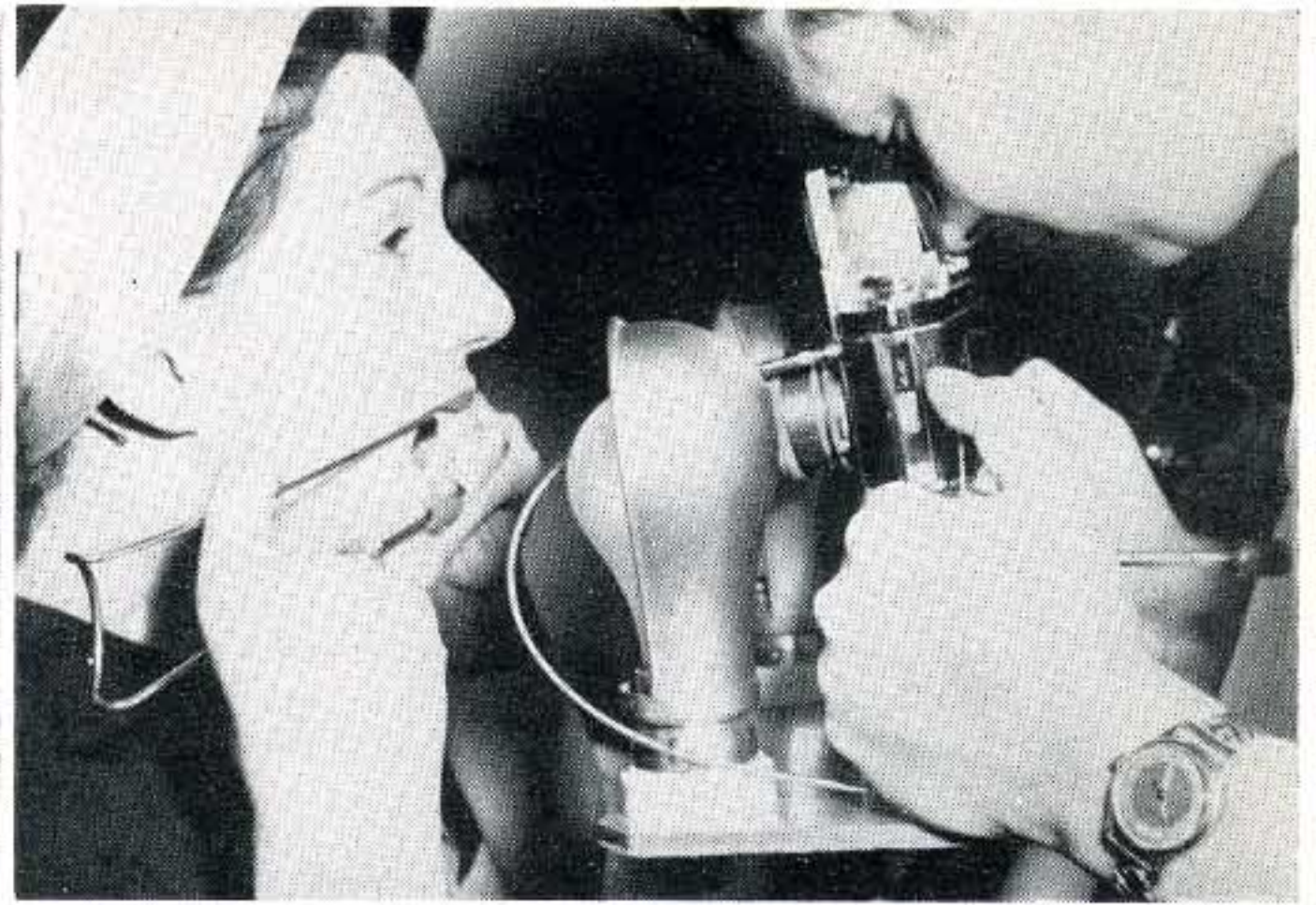
The film was developed for 3½ minutes in DK60A, the most efficient for speedlight pictures. It was given half normal development in order to cut down grain.

The pictures reproduced here are from straight prints on No. 3 contrast paper.

More technical information is of little value to anyone wanting to shoot strobe because the photographer will have to make his own computations for the specific unit he gets. The manufacturers furnish the necessary data.



DENTAL PHOTOGRAPHY can be made painless with the aid of a set-up as the one above. KINE-EXAKTA V is shown with Photodont.



PATIENT HOLDS mouth open while dentist focuses, preparing to photograph her dental arches with EXAKTA attached to Photodont.

dental photography

By Stanley L. Gibbs

NO modern dentist would attempt to record, diagnose or treat an oral condition without a radiograph. A newer aid to dental recording is photographing the external features of the mouth.

Such photographs provide accurate, complete records of the texture, color, location and general appearance of the oral condition. They also simplify diagnosis and permit the observing of changes over a period of time. Consequently, more and more dentists are turning to photography as an invaluable aid with many uses.

Photography of the mouth is more difficult than many other types of picture taking because of the following problems:

Focusing. Dental photographs are taken at short distances. Focusing errors, therefore, are more likely.

Parallax. This is the difference between what the camera viewfinder sees and what the lens takes. Since the dental photographer works at close distances, this problem can be quite serious.

Lighting. The problem is twofold. The patient must be kept comfortable during the focusing and adjusting and the light must be properly directed, balanced and of sufficient intensity to furnish an evenly lighted black-and-white or color picture without burning up the patient.

Exposure. The photographer must determine the optimum speed and lens diaphragm opening for his purpose.

The first two problems can best be eliminated by a single lens reflex camera, such as the KINE-EXAKTA, with extension tubes. (See pages 3 and 4 for information on the use of extension tubes.)

For convenience in handling, storage and economy of operation, the 35 mm camera is unsurpassed in dental photography. Since color pictures are usually desirable, the fact that transparencies are generally returned from the processing laboratories already mounted for use in a viewer or projector is of importance to the dental photographer.

Color film for a larger-size camera is returned unmounted

and is awkward to handle and project. In addition, it is more expensive.

The author has devised a compact unit, called the Photodont, which solves the problem of comfort, manipulation and lighting. The Photodont consists of a metal base upon which is mounted two hand grips, one containing a shutter release and the other a high-intensity-light button.

In front of the hand grips are mounted two floodlamp sockets with reflectors. In the center of the base is a flexible camera mount.

The Photodont has an adjustable compact light source that can be regulated to give either a flat or cross-lighting effect. The latter is used when the operator wishes to create the effect of elevation, or texture by the creation of shadow. This is done by taking the pictures at close range and rotating the lamp reflectors until the desired effect is created and viewed on the ground glass.

In some instances the reflector on one lamp should be turned so that practically none of its light falls on the subject. Flat lighting is used for most color work because Kodachrome film has little exposure latitude and, therefore, requires even lighting. The use of a good exposure meter is recommended to obtain proper settings.

The wiring of the Photodont is so arranged that the lamps glow at a low intensity while the camera is being focused. Before the picture is snapped, a switch is thrown to increase the voltage going through the lamps. They will burn at full 500 watts when the micro-switch in the handle is depressed.

Two No. 1 floodlamps are used. They are ample in intensity and Type A Kodachrome is balanced for it. If Ansco color film is used, a UV 15 filter must also be used.

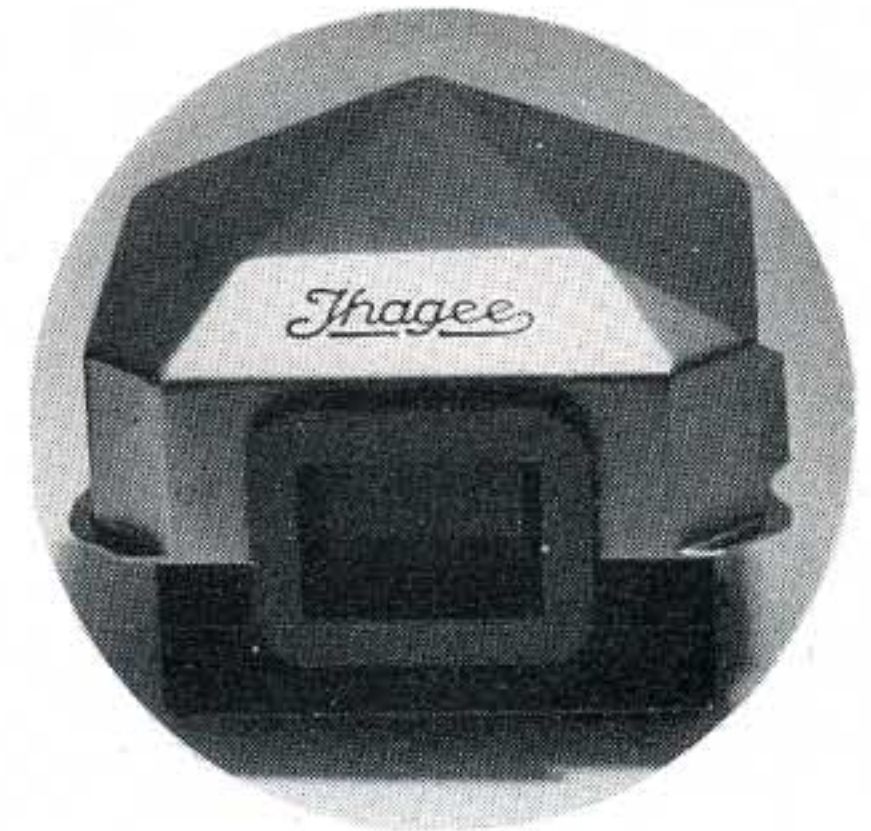
In exposing the picture, the smallest diaphragm opening should be used to utilize depth of field with the fastest possible shutter speed to minimize motion. With your exposure meter and depth of field chart for your lens (See page 4 for chart to use with extension tubes), first compute what lens diaphragm opening you will require to get everything in the area you are photographing sharp. Then use the fastest speed the meter says can be used.

THE EXAKTA PRISM FINDERS

For years reflex camera users have suffered the inconvenience of not being able to focus at eye level. Now KINE-EXAKTA owners are being offered a new optical development to eliminate this inconvenience—the prism viewfinder.

The new Penta Prism finder has been specially designed for the 1950 KINE-EXAKTA V. The Penta Prism is easily interchanged with the reflex hood finder. The regular camera finder is removed simply and the Penta Prism is locked in its place, becoming a part of the camera.

With the prism finder, the KINE-EXAKTA is even more useful as an all-purpose camera, especially for sports, high-speed and press photography. The reflex image in the prism finder shows the subject as it actually is, without reversal of sides. The Penta Prism sells for \$68.50, tax included.



The Pentagon Prismatic Viewfinder is designed to be used with the KINE-EXAKTA I and II. It is attached easily and firmly to the open hood of the finder of the camera, resting on top of the camera.

As with the Penta Prism, focusing and composing of pictures is performed at eye instead of waist level. The Pentagon can be removed quickly when the camera is not in use. It sells for \$48, tax included.

Both prism finders are invaluable accessories. The eye of the photographer and the lens travel in the same direction. Consequently it is always possible for the camera to follow the subject without difficulty. Most important, the prism finders permit the camera to be used along the vertical plane while the photographer faces his subject.



a new exakta lens

In response to a long-time need and demand by KINE-EXAKTA owners, KINE-EXAKTA has added a new and unique lens to its family of lenses—the Retrofocus f 2.5, with a wide angle and 35 mm focal length.

Miniature camera owners for years have sought a lens that would offer three very important advantages—high speed and large aperture, wide angle and short focal length. For technical reasons, it has been impossible to use shorter lenses than 40 mm with the KINE-EXAKTA. Out of the laboratories of famous Paris lensmaker Pierre Angenieux has come the answer at last—the Retrofocus—and it is available now exclusively to KINE-EXAKTA owners.

The Retrofocus is an inverted telephoto objective with a very large aperture, a design unknown until now. Wide open at f 2.5, it can be used with the greatest success for high-speed and dim light photography.

It can also be used for all normal photographic needs and may be closed down to f 22. The lens has excellent definition throughout its entire coverage area and furnishes photographs that are crisp and sharp over the entire negative area.



Extreme wide angle coverage, an invaluable asset to the miniature camera user, may be obtained with the Retrofocus. The lens has an angle of 64° as compared with 45° to 40° of 50 mm and 58 mm lenses—and will cover a huge area even when focused upon a near object.

Depth of field, which miniature camera owners are constantly seeking to increase, is extreme with the Retrofocus.

The Retrofocus is coated, of course, and comes in an attractive black-and-chrome, lightweight mount with bayonet fittings so that it can be inserted in the original EXAKTA camera mount.

An unusual feature of the Retrofocus is the duplication of the diaphragm stop and distance indicators on both sides of the mount.

The Retrofocus, complete with lens caps, sells for \$99.50.

shooting into the light

if you know how, it's no trouble at all to shoot contre jour without fogging film

By Murray Laden

ONE of the popular fallacies of photography is that the camera should never be pointed directly at the light source. This restrictive idea, which can cramp any photographer's style, is a hangover from the early days of picture taking.

When photography was beginning to take hold with the public, the film and equipment manufacturers were faced with the problem of minimizing the chance of failure when an untrained amateur used a camera. So they hit upon an idea to make picture taking foolproof. They proclaimed loud and far that photographs should be taken with the sun at the photographer's back. In this way they were certain that the camera user would get a picture and any picture was better than none.

As photography developed, the basis of this belief became cloaked with the mantle of age and for a long time few bothered to question it. The theory, by this time axiomatic, was perpetuated by being passed on from one person to another.

Even today, while all photographers continually use side and back-lighting to good advantage, few amateurs still venture to do what many consider impossible—shoot directly into the light. They still are afraid of fogging the film.

Those who do shoot *contre jour* generally confine themselves to outdoor photos. Perhaps because there is little call for such pictures or apparent reason to do so, few camera owners try such shots indoors.

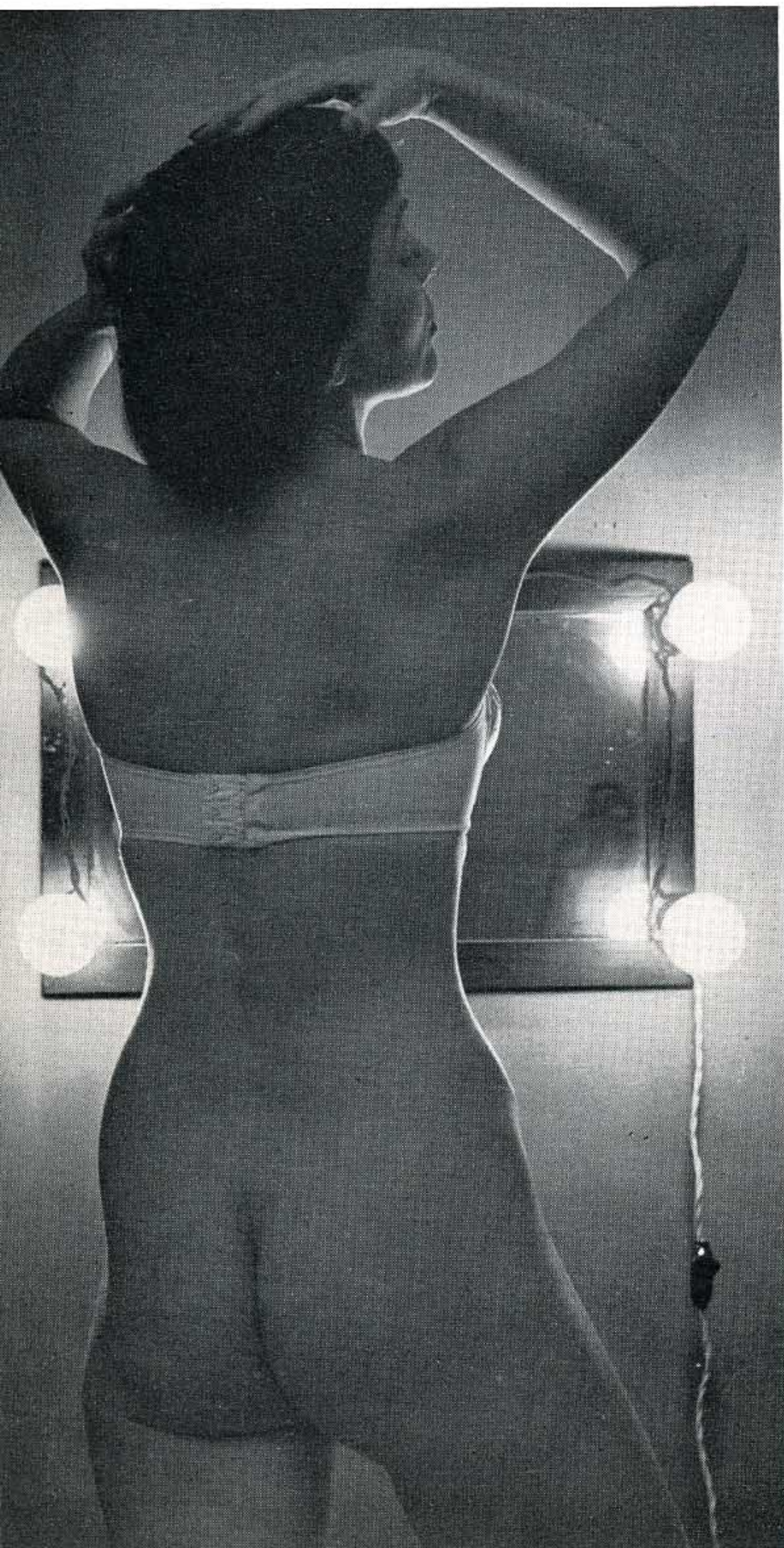
Some time ago, I decided to experiment along these lines indoors. The picture reproduced on this page is one of the results.

The problem here was to get a soft, attractive tone in the model's back and arms and show full detail, yet avoid light flare and burning out the light bulb at each corner of the mirror. Exposing for the model's back under ordinary circumstances would mean overexposing the light bulbs so that they would become a flared quartet in the print. Exposing for the light bulbs would mean underexposing the model's back and loss of detail.

The solution was simply to balance the lighting. Instead of ordinary bulbs, four No. 1 floodlamps (250 watts each) were used in the sockets at the mirror. The model's back was lighted with a 1,000 watt spotlight.

In this particular case, I preferred to overexpose a bit and underdevelop. Therefore, I shot at 1/10 second at f 8. I gave the film a short development in Microdol, about 12 minutes at 68° F. The picture shown here is practically a straight print.

The absence of light flare can be attributed, not only to the balanced lighting, but to the coating of the Tessar 3.5 lens I used on my EXAKTA. As a matter of fact, any ordinary EXAKTA lens could have been used since today they are all coated. The development of lens coating has done a great deal to make photographers conscious of against-the-light photography and as soon as camera owners are fully aware of the possibilities this field of picture taking undoubtedly will make great strides.



the exakta for copy work

By Hannes Beckmann

Photographer, Museum of Non-objective Painting

MAKING slides in black-and-white and color seems to have become one of the most important tasks in photography for the scientist, art teacher and salesman.

It is amazing to see the poor slides that are usually shown. One of the main reasons for this is failure to use the proper type of camera. The KINE-EXAKTA is well-fitted for such copy work.

My job in the Museum of Non-objective Painting is to make hundreds of sets of color slides of paintings belonging to the wonderful Guggenheim collection. These slides are meant to be used for visual education.

Since a great deal of the effect they produce is caused by their beautiful, pure colors, it is important to reproduce them as correctly as possible. Experience has shown us that the following methods are essential to our success.

We use only Kodachrome Type A for copying paintings and do not depend upon daylight. This film shows a tendency to warm coloring, better for our purposes.

It is essential, when taking pictures of colored objects such as paintings, to work in a room without daylight to avoid any blue cast. It is advisable also to have white or preferably neutral grey walls. The ceiling should always be white.

We use four No. 2 floodlamps (500 watts each) for small paintings and for those larger than 3x5 feet we use six bulbs. Kodak beam stand lamps are recommended because they give a diffused light and spot effects. They should be placed at distance of six to nine feet.

It is essential to use polaroid screens with the lamps for paintings with a glossy surface. Polaroid screens are even desirable with flat Tempera paintings because they give a deeper, more saturated effect.

The screens should have a diameter of 16 inches and not be clipped to the lamp because the heat will cause them to stain and buckle. We have obtained satisfying results without screens by shining our lamps against the ceiling. In either case, it is important that the entire area of the painting is

covered evenly with light.

To make certain of this, it is helpful to cover the entire painting with white paper. Then we hold a long pencil or stick at an angle of 45° against it. By its shadow we are able to see if the lamps on the right and left of the painting are providing equal illumination.

Our main difficulty is to keep the picture free of distortion and in full frame. After having experimented for some time with different miniature cameras, we finally settled on the KINE-EXAKTA because only ground glass control permits accurate focusing.

A check on focusing can be made with a piece of ground glass the exact size of the film frame. This can be taped to the inside of the KINE-EXAKTA from which the back has been removed.

We use only the finest quality coated lenses for copying work. The focal length depends upon the size of the painting. For paintings that are large we use a lens of 5 cm focal length. For paintings smaller than 3 feet, we use a telephoto lens of 8 to 15 cm focal length to avoid distortion.

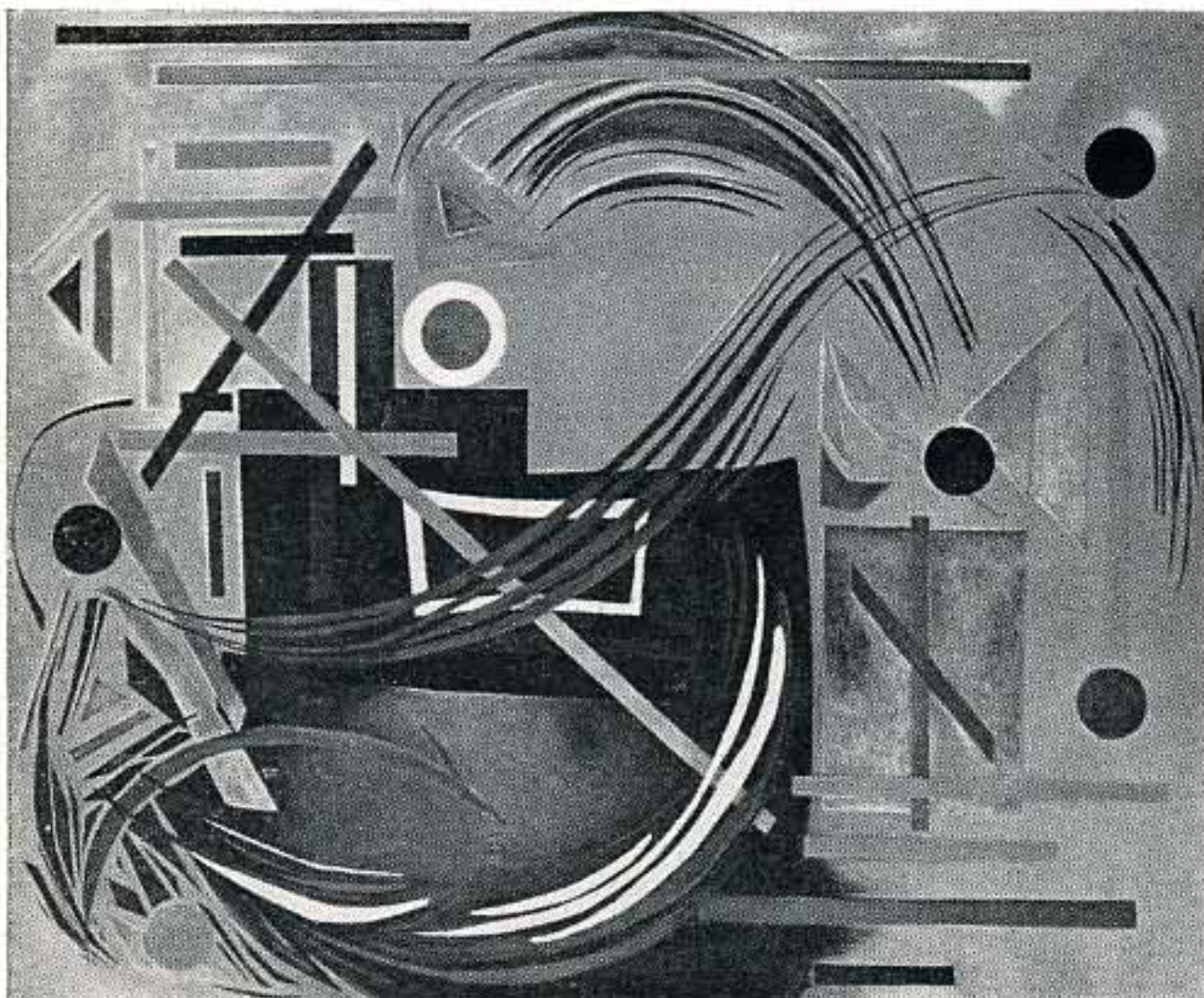
Exposure time must be calculated carefully. A good exposure meter like the Weston Master II is an absolute necessity. We have found that exposure meters for incident light are not as suitable because it is necessary to measure both the light and dark areas of a painting and determine the relationship between them.

When using polaroid screens, we measure the light reflected by the object through the screens to be used in taking the picture. Of course, the screens must already be adjusted to eliminate reflection before we take our meter readings.

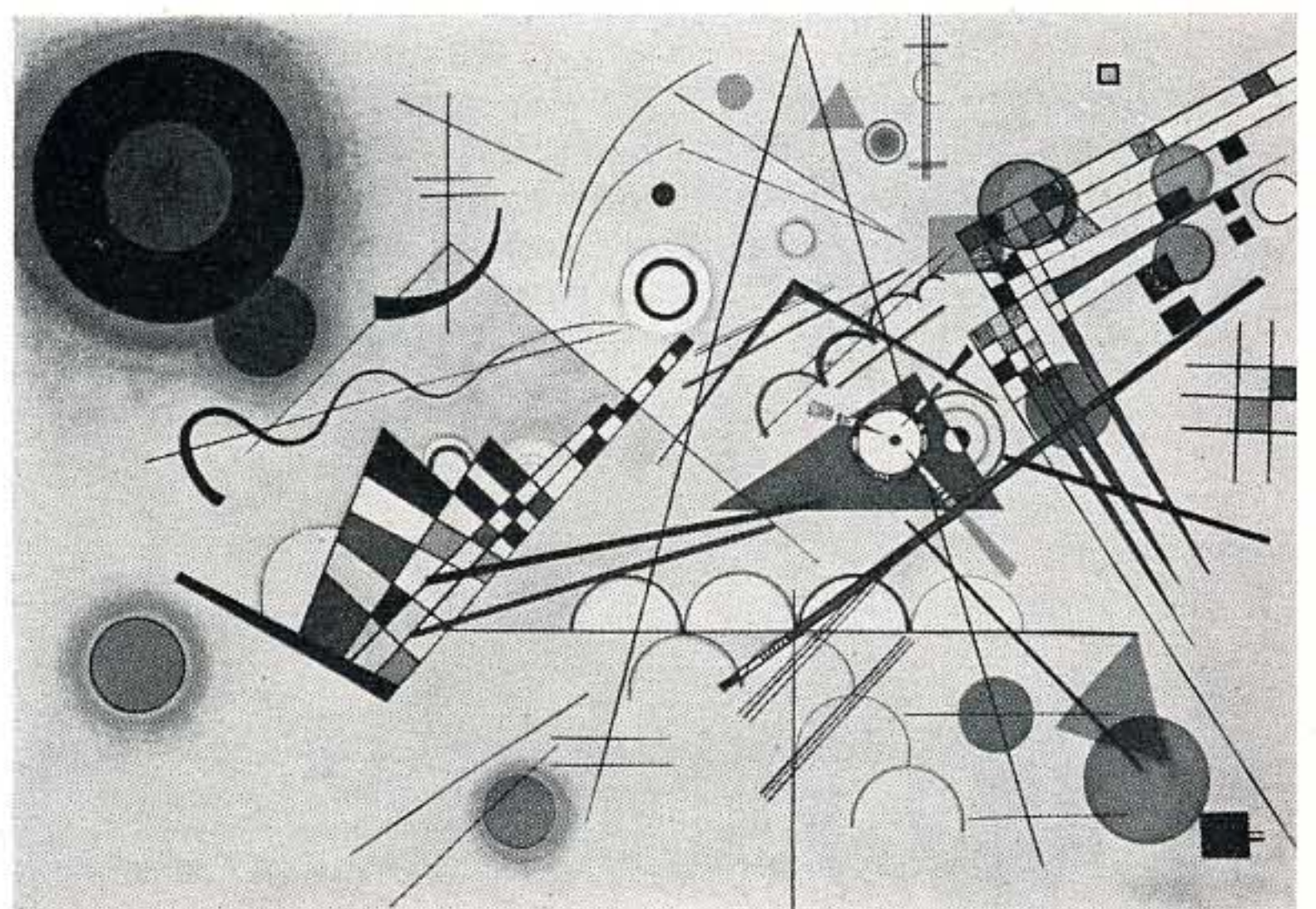
Since the screens cut the light down quite a bit, we often get a reading of 1 sec. at f 4.5 to f 7. We prefer to use longer exposures and smaller openings, however, to insure sharpness, therefore we often shoot at f 6.3 to f 11. The KINE-EXAKTA's exposure settings from 1-12 seconds are an invaluable aid to us.

One last hint. Check your camera shutter speeds. All camera shutters vary a bit from the specified exposure times and in delicate color work it is important that you know the amount of variation so you can compensate for it.

COLORFUL PAINTINGS, such as non-objective painter Hilla Rebay's "Royally," are in great demand in slide form as teaching aids.



FORM AND COMPOSITION are evident in this black-and-white reproduction of Kandinsky's "Composition 8." Both paintings were copied by Beckmann.

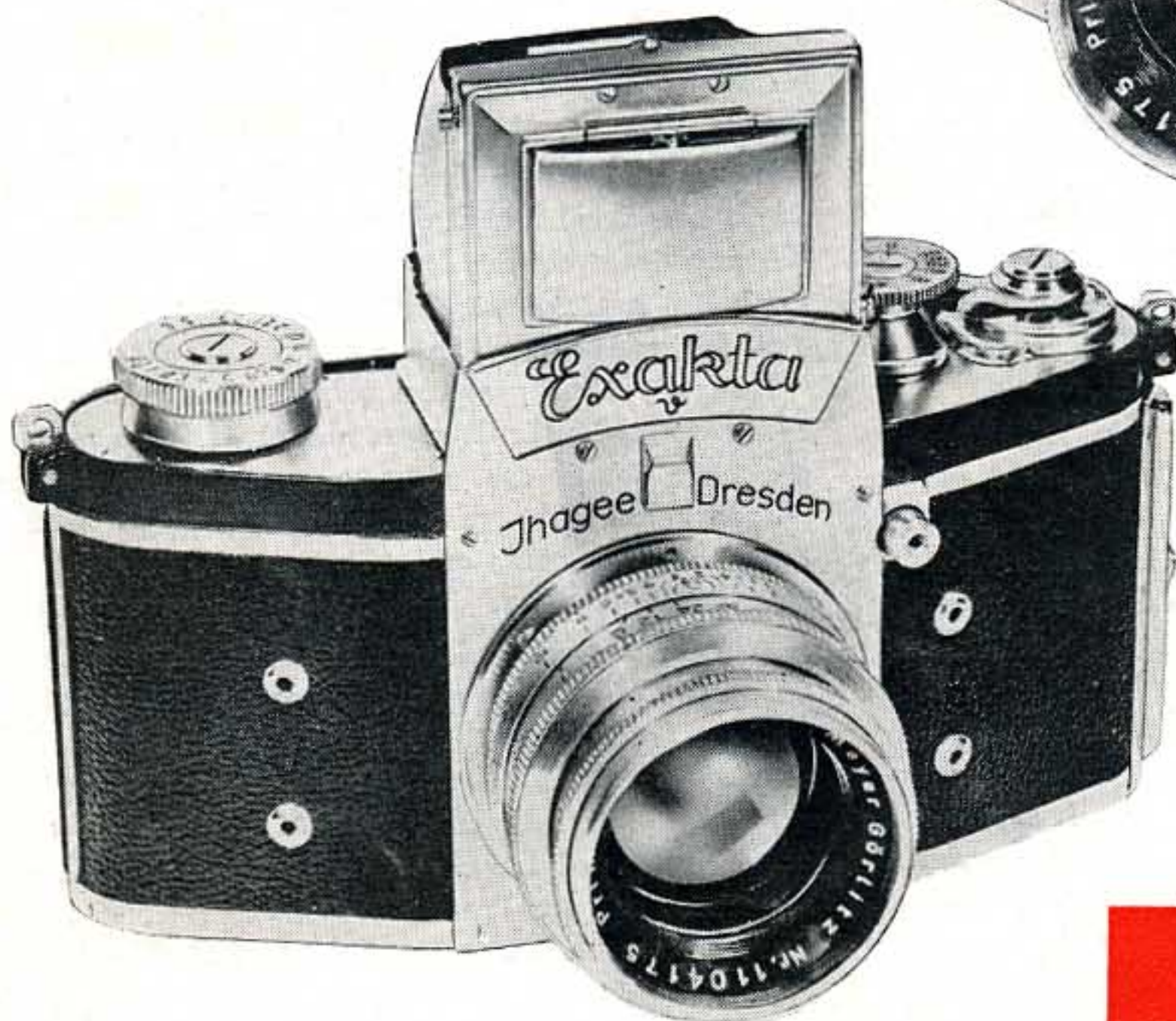


new model V KINE-EXAKTA



KINE-EXAKTA V with eye-level Penta Prism (reflex prismatic) viewfinder in position as part of the camera (above).

KINE-EXAKTA V with waist-level reflex viewfinder attached. Prism and waist level finders are interchangeable.



When purchasing a new Kine-Exakta be sure to ask for the guarantee and import certificates issued by the Exakta Camera Co., Inc., exclusive factory representative in U. S. A.



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* Prices fair traded



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