AMERICAN CINEMATOGRAPHER

The Motion Picture CAMERA Magazine

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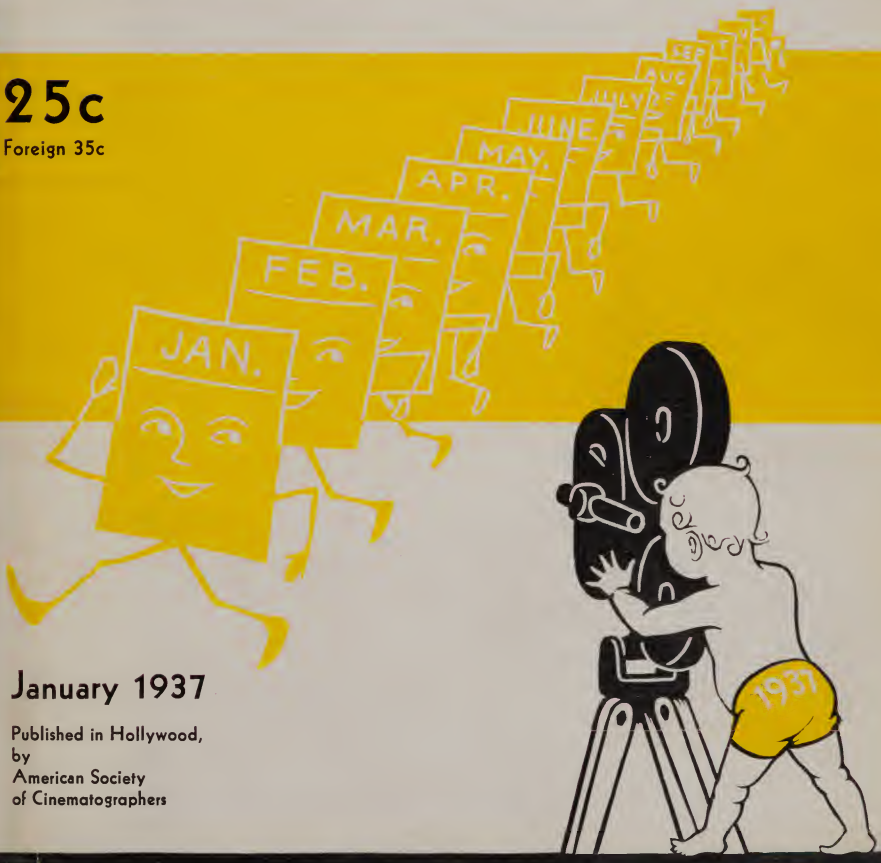

January 1937

Published in Hollywood,
by
American Society
of Cinematographers

AMERICAN CINEMATOGRAPHER

A Technical and Educational publication of motion picture photography.

Published monthly by the
AMERICAN SOCIETY
OF CINEMATOGRAPHERS, INC.
1782 N. Orange Drive
Hollywood, California

Telephone GRanite 2135

JOHN ARNOLD, President, A.S.C.
FRED JACKMAN, Treasurer, A.S.C.

Volume 18 January, 1937 Number 1

What to Read

Next Month

- A New Device has been designed and put into use at one of the major Hollywood studios to secure photographic effects more smoothly and without stopping the camera. We will tell you about it next month.
- More important technical developments are in progress. Some that have been theoretical for some time. We'll tell you about one of them next month.
- A.S.C. Members are returning from foreign assignments. We'll try to corner a few so as to give you their impressions of the motion picture business in other localities.

ESTABLISHED 1918. Advertising Rates on application. Subscription: U.S. $2.50 a year; Canada, $3.50 a year; Foreign, $3.50 a year. Single copies, 25c; back numbers, 30c. Foreign single copies, 35c; back numbers, 40c.

THE AMERICAN SOCIETY OF CINEMATOGRAPHERS was founded in 1918 for the purpose of bringing into closer confederation and cooperation all those leaders in the cinematographic art and science whose aim is and ever will be to strive for pre-eminence in artistic perfection and technical mastery of this art and science. Its purpose is to further the artistic and scientific advancement of the cinema and its allied crafts through unceasing research and experimentation as well as through bringing the artists and the scientists of cinematography into more intimate fellowship. To this end its membership is composed of the outstanding cinematographers of the world with Associate and Honorary memberships bestowed upon those who, though not active cinematographers, are engaged none the less in kindred pursuits, and who have, by their achievements, contributed outstandingly to the progress of cinematography as an Art or as a Science. To further these lofty aims and to fittingly chronicle the progress of cinematography, the Society's publication, The American Cinematographer, is dedicated.

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CARRYING LIGHT TO THE DESERT

To bring artificial lighting onto a desert location may seem like "carrying coals to Newcastle"—yet that is what was done in filming the "Garden of Allah." With the brilliant sunlight of the desert flooding the scenes, carbon arcs were used to "boost" the light intensity at the center of interest and action.

Only the carbon arc is capable of producing light of greater brilliancy than daylight on the desert.

Some of the powerful carbon arc lamps which were used in the filming of these desert scenes are shown in this behind-the-scenes shot of one of the huge oases constructed for this magnificent production.

Behind the scenes during the filming of Selznick International's all Technicolor production, "The Garden of Allah," from the Robert Hichens play and book. Co-starring Marlene Dietrich and Charles Boyer. David O. Selznick, Producer; Richard Boleslawski, Director; Howard Greene, Photographer; Hal Rosson, Photog. Advisor; W. A. Oettel, Studio Chief Electrician

Carbon arc lighting has proved a necessity for color and is finding increasing favor for black and white productions.

- PROVIDE LIGHT OF DAYLIGHT QUALITY MORE BRILLIANT THAN DESERT SUNLIGHT
- COOL
- FAST
- SILENT

Let our representatives demonstrate the advantages of carbon arc lighting for motion picture photography

NATIONAL PHOTOGRAPHIC CARBONS

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American
Cinematographer

January
1937

A.S.C. Moves Into New Home

WE HAVE MOVED into our new home. Still in the heart of Hollywood, but tucked in beneath the mountains with spacious grounds and a fine rambling house to accommodate all of the American Society of Cinematographers' activities.

For many years the Society occupied the offices it owned in the Guaranty building on Hollywood Boulevard. The sale of the building gave the officers and board of governors an opportunity they were looking for for the past several years: a building that could act both as a club house and a business quarters for their association.

This new home, located at 1712 N. Orange Drive, is only a few blocks from Hollywood Boulevard, and directly back of the famous Grauman's Chinese theatre. It occupies the corner of North Orange Drive and Franklin Boulevard. The structure is a one-story building with a penthouse.

The building itself houses a commodious rotunda, a billiard room, library, directors' room, card rooms, dining room, locker rooms, kitchen, and offices for the clerical force.

The spacious outdoor grounds will contain a cage for practicing golf; a Badminton court and later a swimming pool.

The American Society of Cinematographers, as is well known, is the oldest organization in the motion picture industry. Its purposes, in addition to being technical and scientific, is to also have a social angle. This phase of the Society could not be entered into in the past as much as the membership and officers desired as the association did not have quarters that would permit gatherings of this kind. This new home, however, offers facilities of a club and a meeting place for the membership that is not equalled by any other organization in the motion picture industry. The grounds are large enough to permit of parking of members' cars. It has books and magazines that will allow those who desire, to delve into the newer things in photography and also to do a bit of research.

Current photographic and cinematographic magazines from all over the world are on file. Latest books on all phases of the industry are kept in the library. Experimental facilities will be added where members of the research committee and other members can have laboratory facilities. It is the plan to erect a small studio for experimental photography and portraiture adequately equipped with lights and the other facilities necessary to properly carry out this work.

The new home of the American Society of Cinematographers is emblematic of many years of patient, industrious and sincere work on the part of the Cinematographers of Hollywood. It is an emblem of an ideal set out to achieve almost twenty years ago. It stands as a monument to the camera profession as a symbol of their earnestness, their sincerity and their ability to hang together.

The cinematographer may point with considerable pride to the new home of the American Society of Cinematographers.

Stills From "The Garden of Allah"

Attacking

REGARDLESS of whether or not the present interest in natural-color productions continues, the motion picture industry has a definite and growing color problem to solve. This is the question of supplying an increasing demand for natural-color still photographs. Newspapers, rotogravure supplements, "fan" magazines and the so-called "class" magazines are making more and more use of color in their pages. Since motion picture personalities are not only news but also (especially the feminine contingent) excellent pictorial material, Hollywood's press-relations bureaus are receiving an increasing number of requests for "color art." This pressure, in turn, is being passed on in no uncertain terms to the phototechnical artists in the studio still departments.

The demand for color stills is from three principal sources, each setting its own standards of color excellence. The first is from the growing group of newspapers using what might be termed "semi-color" pictures in their dramatic sections. All of them are somewhat limited by the technical problems of reproducing full-color pictures with the coarse-screen engravings which must necessarily be used when printing on newsprint paper. In their simplest form, these journals' attempts at color may be said to paint their pictures with a very broad brush indeed: they suggest color, rather than actually reproduce it. Broad areas of the background, costumes, and in some cases a player's flesh-tones or hair are printed in color, though it may bear little enough relation to the coloring of actuality. Details, such as eyes, jewelry, etc., are generally left to black-and-white. None the less, this form of color reproduction can be surprisingly effective.

In a few instances, some large newspapers have made very praiseworthy attempts at reproducing bona-fide color in spite of the limitations of their printing materials.

The second group includes several Sunday rotogravure supplements and the majority of the "fan" magazines. These use a higher grade of engraving and, in the latter group especially, better paper and printing. Obviously, they must have a finer type of color photograph with which to work.

The third group, though definitely in the minority in point of numbers, makes up for it in prestige. This group comprises one or two of the highest-grade "fan" magazines, and such "class" magazines as "Esquire," "Stage," "Vogue," and the like. Their engraving, paper and color-printing are unsurpassed. Certain of them justifiably boast the finest color reproduction in the world.

Obviously, these three groups need pictures of different standards of quality. A picture which would make a very acceptable newspaper color picture might prove entirely too crude for the perfected reproduction of one of the "class" group, while a "Vanity Fair" type of color still would prove no better than an ordinary color shot if given the adequate but not superlative reproduction of the average paper or magazine of the middle group.

Inevitably the question of cost enters. Natural-color stills are more expensive to make than black-and-white ones. They require more care in the dark-room, and photographic printing in color is as yet relatively slow and costly. Throughout, a certain degree of specialized technique is required; the more so, naturally, in producing the highest-grade color pictures for the de luxe magazines.

Accordingly, in almost every studio, three different grades of color stills are turned out, to serve the three different types of outlet.

The most elementary type, used principally for newspaper reproduction, is an ordinary black-and-white still, hand-colored. This is usually done on an 11x4 print, with all colors. A well-colored example of this type can be quite pleasing. There is a distinct advantage in that a print from any existing negative may be transformed into a color-print by this method, at a minimum of expense. There is a further advantage at times in that the coloration of the print may be based more on art than on fact. The extent of detail-coloration, too, may be coordinated to the newspaper's needs.

The intermediate group may as a rule be served with natural-color transparencies which, while good, need not adhere to the perfection demanded by the highest-class group. Virtually all of this field is supplied with transparencies made by the Dufay process. This consists simply of a special film, which may be exposed in any still-camera. Special filters make it possible to photograph Dufaycolor stills under any light condition—daylight, Photoflash, normal incandescent lighting, or arc lighting. The base of this film is covered with a pattern of microscopically fine rulings in the three primary colors—red, blue and green. When the film is placed in the holder with the emulsion-side away from the lens, this screen (reseau) acts as an infinite number of tiny filters. In the image of a red object, for instance, the blue and green rulings would absorb the light falling on them, leaving only the emulsion behind the red rulings to receive an exposure. The exposed film is developed, flashed and reversed into a positive. When the picture is viewed by transmitted light, the tiny filters reproduce the color of the original subject. In our red object, the reversal process has left the innumerable tiny sections beneath the red-filter rulings clear, while those beneath the blue green lines remain opaque. Thus we see that part of the picture only through the red-line portions of the screen, and the image is reproduced in red. If the object were some other color, its image would be reproduced by a combination of varying degrees of density in two or more of the primary-color

the Problem of Color Stills

by
William Stull, A.S.C.

filter rulings. Black would mean opacity in all three sections; white, uniformly high transmission in all three.

Dufaycolor has a number of distinct advantages for this work, together with a few disadvantages which somewhat limit its scope. It may be photographed very easily by almost any capable still photographer; it requires no special equipment other than the filters used to balance it to the different light-sources. Its sensitivity is relatively high (Weston 8 for daylight, and 2 for Mazda light), permitting short exposures and excellent photoflash results. Compared to other types of direct color photography, it is relatively inexpensive. Against these advantages may be set the fact that each Dufay shot results in but a single positive transparency, which must as a rule be considered as an exclusive picture for one paper, even though a duplicate (if such could be made) might very well be used in several other journals circulating in other parts of the country. There is also the mosaic pattern of the reseau to be considered: this pattern, unless a special technique is used in making the color engravings, can conflict objectionably with the halftone screen used in the cuts. This, while it is primarily a problem for the printing and engraving staffs of the journal using the picture, is something the studios must sometimes consider. A surprising number of the best newspapers, rotogravure supplements, and "fan" magazines, however, use Dufay stills with satisfactory results.

In this connection, it seems strange that the studios have without exception ignored the well-known Finlay process, which permits the duplication of positive natural-color transparencies on any scale. In this process, the taking and viewing screens are separate units. The exposure is made with the taking screen in contact with the negative plate. This is developed in the usual way, as a black-and-white negative. Any number of positives—in full color—may be printed from this negative. The positive is a glass plate bearing, in addition to the sensitized emulsion, a suitably ruled viewing-screen. Registering marks are provided on the negative, and before making the print, these are registered with the positive's screen. The print is made and developed in the usual manner, and gives very fine color-reproduction. The costs of this are about on a par with Dufay, and there is the advantage of being able to produce as many duplicate color-transparencies as may be desired. A further advantage is the fact that the cost of negative-making is low, and negatives may be proofed in black-and-white before incurring the expense of making color-prints.

In this process, as in Dufay, there is the slight disadvantage of the screen-pattern in engraving; but the makers provide excellent "block-out" screens for making the color-separation engravings. The excellence of the results obtainable with this process may be indicated by the fact that a majority of "The National Geographic" Magazine's color photos are Finlay plates.

Philip M. Chancellor, A.S.C., A.R.P.S., F.R.G.S., who is probably the outstanding Finlay exponent on the coast, has in collaboration with the well-known optical engineer Hartley Harrison, developed a remarkable optical device for eliminating grain in Finlay reproductions.

The highest, and as yet the most costly development of color still photography is the making of three-color prints on paper from three color-separation negatives exposed simultaneously in the so-called "one-shot" cameras. Due to the elements of complication and expense, the use of this type of color is generally restricted to pictures made especially for use in the very highest type of magazines. Practically every studio has been doing some research along these lines, and a few have plans for entering the field on a relatively large scale. In addition, certain individual photographers, here and in the east, have made this type of picture on direct assignment from various magazines.

Two types of "one-shot" cameras exist: the full dialyte type and the semi-dialyte type. Both work with some type of optical beam-splitter. In the full dialyte the image is split three ways, either by prisms placed behind the lens, or by two transparent mirrors arranged to transmit one image straight through to the rear of the camera, while reflecting two other images to two other plate-holders placed at suitable positions at the sides of the camera. Suitable filtering records the red on one plate (or film), the blue on a second, and the green on a third. In the semi-dialyte cameras, a single mirror is used to reflect one image to a single emulsion, while the direct beam passes through the mirror to record the remaining two colors on a bipack. This, in principle, is similar to the working of a three-color Technicolor cine camera. Theoretically, the full dialyte type will give superior definition, as well as a more perfect color separation, but in practical use the delicacy of the beam-splitting elements is a distinct liability. The semi-dialyte is more simply constructed, and in practice gives definition much better than purely theoretical consideration would anticipate.

With the three color-separation negatives made with either of these types of camera, the problem of making

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Milton Krasner, A.S.C.

Krasner Capitalizes Available Assets

by
Harry Burdick

MILTON KRASNER, A.S.C., has been engaged in this strange industry of ours, which has to do with little spools of celluloid ribbon, for well on to two decades. This interesting interval of career service was prefaced, when he was just a sprout, by a period of observation in a proud picture palace in—of all places!—Brooklyn. Here he was in the projection room. Between spaces of glueing an eye to the peek-hole to view the screened galloping images, he performed a highly useful task. He rewound the reels as they came from the projection machine.

This, of course, was many years back. But the impressions gained at that vantage post were so indelibly impressed as to remain to this day. It equipped him with a priceless catalog of audience reaction to basic screen situations and treatments. And, as basic human emotions change little over the centuries, today he finds himself with camera deliberately and purposely playing on the same emotional chords that responded so fully to the cruder works of studio pioneers. A most valuable and useful cinematographic talent. Whatever other ingredients his pictures may contain, you may be assured they are well packed with that intangible something known as Audience Appeal. Which may be one reason why his cinematographic attentions are in constant demand by canny producers.

As may have been gleaned, Krasner is an observant sort of fellow. And his observations are unfailingly stored away for fuller contemplation. Many years ago, he found himself pondering, from keen observation of subjects coming before his camera, the unfamiliar truth so well known to medical men that few human bodies beyond infant age are structurally perfect, either objectively or subjectively.

More within camera range, few if any heads and faces functioning under studio lights are anatomically perfect from a photographic standpoint, either as to general conformation or detail of feature.

This incomplete degree of prevailing physical perfection, even among hand-picked nominees, worried him no end. Until he dug deeply into the topic and found it to be a normal condition.

Infants are practically perfect photographically. Nature has provided symmetry to their features and a firm, well-modeled texture to their skin. As they grow, the harmony of line gets out of balance; Nature is busy in other departments.

As the adult stage is reached, a man or woman with photographically perfect face is a freak, viewed physiologically. Tissues are constantly breaking down. Metabolism brings about subtle and gradual physical changes imperceptible to the eye perhaps but glaringly apparent to the camera. Sensitivity of nerves and muscular tone are affected. Texture of skin is constantly changing. It's all entirely natural and normal.

Now realizing that all players must possess facial features both "good" and "bad" as judged by general audience standards of accepted beauty, Krasner resolved to make cinematic assets of the "good" points available and let the liabilities fall where they may—preferably in shadows. He would photograph only the best features.

This applies mainly to women players with whom beauty is of greater screen value than with men who, at the most, need only to appear as handsome rascals.

In this semi-clinical vein, Krasner studies his stars in terms of inches, lenses and lights. He has evolved an inclusive classification of types, each calling for specialized treatment, for beautiful women rated solely by the means with which they can be most effectively photographed.

His screened results are highly pleasing to audiences and, needless to mention, to the individual stars. As result, there is always considerable maneuvering on the part of players to function before his lenses. Krasner has shot every picture one prominent star has made in Hollywood for the past seven years and, so help me, she looks younger now than then.

With male players, he strives more for personality and character delineation. That's why he fairly rollicks through dramatic scenes done in low key.

He employs little light, comparatively, and few units of light. The fewer the units, the better the control of light, he feels. And this helps in achieving his purpose of apparent simplicity in scene revelation; simple and easy for audience assimilation, that is.

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Producing Shorts Down in Tahiti

by
Max Dupont, A.S.C.

THE ISLAND of Tahiti hardly seems like a producing center. One would not believe that the town of Papatee could claim a 35mm laboratory. Both statements are true and I am lord and master of both enterprises.

About four years ago I went to Tahiti with my family. At that time I did the camera work on Douglas Fairbanks' picture "Robinson Crusoe." While the picture has gone down in history my enterprises in Tahiti still continue. In addition to my plantation I have this small 35mm laboratory which has a capacity of a thousand feet or so a day. This same laboratory does considerable still printing for the retail stores in Papatee. It also turns out a large number of post cards for popular consumption.

In between these activities my son and myself turn out about three to four short subjects each year for the French government and a like number for private distribution in France.

Naturally in four years we have solved what might be termed the technical side of picture making in this South Seas island. We not only have humidity to fight but also intense heat at times. This latter taught us never to place our film on the ground. The heat given off from the sand is too intense for the film to stand. We always keep the film a few feet off the burning sand. When photographing natives I hardly use any filter stronger than the K-2. The reason for this is that we do not want to lighten them too much, but want them to appear as natives of the South Seas. A heavier filter would lighten them too much.

While on the subject of photographing the Tahitian I might say they are all more or less natural born actors, this is possibly because they always act natural. They are not self conscious which gives them neither that awkward restraint nor the tendency to over-act.

One of the most interesting pictures I have made in Tahiti was a record of a leprosy case for the French government. They use a medicine which when injected turns the diseased portions of the body blue. In photographing this I naturally secured the proper contrast by using a red filter. This held the blue back making it dark and the red lightened the natural brown colors of the native's skin so that the doctors could quickly determine what portions were affected and how the medicine was working on the patient by the reducing of the blue area as time went on.

This experiment was photographed over a period of three months with daily takes which were immediately developed and printed in my laboratory for observations by the doctors in charge.

While I was operating on a small scale, still when occasion demanded we could do a very acceptable job, on order, in view of the fact that my son is also a sound engineer as well as being schooled in the operation of a camera. He acted as my second whenever occasion demanded.

One of the greatest interests among the natives of Tahiti is the motion picture. Papatee has a picture house. It shows twice a week. A native would sell anything to se-

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At the left the star of "Tabu" still acting and the idol of the island.

Bifocal Lens-System for Optical Effects

by
Joseph Valentine, A.S.C.

THERE IS A VERY considerable advantage, in making any kind of a "trick" shot, if the completed effect can be seen at the time, by visual inspection through the camera. Not only does it make for better photography, but it makes possible a more understanding co-operation between the Cinematographer, the Director, and the players. No better proof of this need be mentioned than the universal use of the projected background process. Before it was developed, we had a variety of methods by which virtually the same composite effects could be obtained: but we did not use them to anything like the degree we use "process" today. In all of them, the people on the set were working more or less blindly, for too much of the trickery was done afterwards. You might know what was to be added to the shot, and tell your people, "Stop here, for there is a wall. And there's going to be a tree there—you can't stand in that spot." But as they could see nothing, they could not be altogether natural nor convincing in their actions. With the projected background, the player can easily see what the finished shot will look like. He—and the Director, as well—can do his work more intelligently because of that knowledge.

In the same way, there are several existing ways of producing the type of multiple-image tricks about to be discussed; optical printing, matte shots, multiple printing with fixed or travelling mattes, and the like. But in all of them, one works blindly, with only a mental picture of what the finished scene is to be.

In collaboration with Hartley Harrison, I have recently developed a simple device which enables one to make many of these effect shots directly in the camera, with the exact effect visible at all times on the ground glass. The device had its beginning about four years ago, when I was photographing a musical film at another studio. At that time, filming a dance routine, I felt that the effectiveness of the scene would be markedly enhanced if the number were portrayed as though the chorus were performing on a mirrored glass floor. It would then, as now, have been possible to produce the effect by the conventional method of optical printing. But I felt that method offered too much complication, and too many shortcomings. For instance, any type of multiple printing involves a delicate job of matting, and the matte-line between the feet of the dancers and their apparent reflections would be glaringly obvious; it would shout of "trick photography" even to the layman, and destroy the illusion I was trying to create. Also, these methods involve more or less "duping" of the negative, with consequent losses in photographic quality and uniformity.

I felt sure that some sort of reflecting surface could be placed in front of the lens to reflect an inverted image of the scene into the desired position. It was easy enough to determine that the idea was theoretically sound. But it seemed impossible at that time to work out the constructional details satisfactorily. Several preliminary designs were tried, but they did not produce the effect I wanted. There must be a very definite relationship between the photographic lens, and the size and position of the reflecting unit.

During the intervening years, both Mr. Harrison and I have carried on considerable research into the problem, and I have naturally hoped to be assigned to a production which would make such an effect desirable. That opportunity came this fall, when Universal assigned me to direct the photography of "The Top of the Town," a spectacular musical film. At the same time, too, Harrison and I hit upon the correct constructional principles for our device.

Accordingly, one was built and put into practical use in filming one of the production's most spectacular dance routines. For the first time, it became possible to produce the effect of a mirror floor without the limitations of multiple printing methods, or the expensive construction of an actual glass floor which would, incidentally, be likely to defeat itself by reflecting all the overhead lighting and other unwanted things, as well.

The "bifocal" lens-system which Mr. Harrison and I have built is a simple device which can be fitted onto any Mitchell camera. It is compact. It permits easy and positive adjustment to meet any condition. The camera may be perambulated or panned without destroying the mirror effect. And the effect can be seen—exactly as it will appear on the screen—on the ground glass of the camera before the shot is made!

The device consists of a lens in a standard mount, with the bifocal duplicator adjustably mounted in front of it. The lens used has a focal length of 28mm.; due to the action of the duplicator, it has an angular field approximating that of a 55mm. objective.

The duplicator consists of either a prism or a front-surface mirror mounted at a certain angle below the lens, with a dividing flap placed along the optical axis of the lens, normally dividing the lens in half horizontally.

In use, the upper half of the lens functions normally, and forms the direct image of the object in the usual manner at the lower half of the camera's aperture. The duplicating reflector reflects an inverted image of the object on the upper half of the aperture. These images are only half the size they would normally be with a lens of given focus, since but half the lens is used to produce them.

To be of practical utility, the device must of course be capable of adjustment, so that the reflected image and the direct one may be coordinated. This is done by a control which tilts the reflecting surface, thereby moving the reflected image up or down in relation to the direct image. The dividing flap is also capable of adjustment, and provides a clean, natural-looking blend between the two images. There is no heavily-defined "matte-line."

These adjustments would in themselves be useless if it were not possible to turn the device, to "level up" the shot laterally. The entire mount may be rotated on the

An enlargement from a 35mm frame of negative shot during production. The mirror effect was secured by the method described by Mr. Valentine in this article.

lens, and secured in any position from the horizontal to the vertical.

In actual use, the bifocal duplicator is most simple to use. Since it shows to the eye exactly what will be seen on the screen, it is quickly adjusted to produce the desired effect. It may be adjusted to reflect any desired part of the scene: the reflection may cut the scene exactly in half, or comprise a greater or smaller portion, as may be requisite. Since it is virtually a part of the lens, it is possible, once the unit has been adjusted, to pan or dolly the camera quite normally, retaining the mirrored effect.

A surprising thing about the unit is the fact that although theoretically one would expect a considerable loss in exposure-values, due to using but half of the lens, and to the added glass-air surfaces of the duplicator, there is no appreciable loss of exposure. In our preliminary tests, the same scene was photographed simultaneously by an ordinary camera, and by a camera equipped with the duplicator. Both shots were made with the same diaphragm and shutter settings. As far as exposure values go, there was not a particle of difference between the two negatives: both received the same development, and printed on the same light. No difference in density or contrast was discernible on the screen.

The optical characteristics of these shots are noteworthy. In a multiple-printed reflection shot, there is no apparent falling off in the definition of the "reflected" image, whereas in actuality, there should be a certain falling off toward the reflection-line. In similar shots made with the duplicator, this natural falling off is noticeable, adding considerably to the naturalness of the effect on the screen. In addition, the blend between the direct and the reflected images can not only be positioned accurately, but made very smooth and convincing.

The possibilities opened up by this device seem endless. It can of course be used as freely—and even more effectively—in color as in black-and-white. It permits the making of many types of matte shots; of certain types of "wipe" effects; of duol-roles, disappearances, etc., with the utmost facility. The exact effect will be instantly visible on the camera's focusing-screen, so that not only the Cinematographer, but the director and actors as well will know precisely what is being done. There should be a definite financial saving to the studio in making these shots directly on the set, without special after-treatment or delays. The limits of the application of this principle seem to be set largely by the limits of the user's imagination.

I would like to pay tribute to Hartley Harrison who, as an optical engineer, collaborated so extensively with me in the design of the duplicator, and who, when the design was finally evolved and an opportunity to make practical use of the unit suddenly arose, performed miracles in constructing a device of such optical and mechanical perfection in an unbelievably short time. It is greatly to his credit that the device worked perfectly the first time it was tested. With a few minor refinements that actual use has suggested, the duplicator is being patented, and will in time be made available commercially.

A.S.C. MEMBERS ON PARADE

● **Dr. Herbert Meyer, A.S.C.,** who has headed the Hollywood Research Laboratories for Agfa Ansco Corp., has resigned from that company to become financially interested in C. King Charney Inc., American distributors of Agfa 35mm products in America.

Dr. Meyer will continue in both an executive and scientific capacity with the Charney corporation. He will supervise much of the local laboratory research work as well as giving part of his time to other executive duties.

● **Frank Good, A.S.C.,** recently wrote an article for this publication on the use of the exposure meter for balancing set lighting. In the course of the article there was a statement made that a certain lens setting would over-expose. This should have read under-expose. The change was made by our good proof reader who recently bought a brownie,—the combination of owning a brownie and reading proof on the American Cinematographer naturally made him an authority, so he changed Frank's terms. You see that fellow is still struggling with the idea of F:16 being a smaller opening than F:8. It just can't be—it's a larger number. Anyhow, those who gloated over this mistake can now go back to their own mistakes and have a good time.

● **William Dietz, A.S.C.,** is batching while Mrs. Dietz visits in Canada. Bill is cultivating a beard.

● **Hal Mohr, A.S.C.,** started the direction of his first picture, "Class Prophecy," for Universal studios, under his dual contract of Director of Cinematography and Director of Production.

● **Milt Krosner, A.S.C.,** has a two-year-old boy. He has shot 16mm of Krasner Jr. since he was born. Milt is finishing his first Kodachrome reel of the youngster.

● **Dwight W. Worren, A.S.C.,** has a unique hobby: he builds telescopes. Dwight does the whole job, even to grinding the lenses and mirrors. Wonder if our Associate Member, **Dr. W. B. Royton,** who designs lenses for Bausch and Lomb, doesn't complete the gag by making 16mm. movies his hobby? If so, he and Dwight ought to get together. **Joe Wolker, A.S.C.,** would make it a swell threesome, for Joe collects lenses!

● **Hal Rosson, A.S.C.,** got plenty of compliments after the preview of his latest, "The Garden of Allah," but he's still trying to figure out whether one telegram from a golfing crony was a compliment or a dirty dig. The wire read: "I can't understand how a guy who plays the kind of golf you do can photograph a picture like that!"

● **Dove Abel, A.S.C.,** is being labeled the "Tap Dancing Cinematographer" by the boys in R.K.O. studio Dave has been shooting the Astaire pictures and it is claimed can already swing a wicked heel . . . or is it just exercise he is taking?

● **Paul Eagler, A.S.C.,** is New Yorking it. He's hoping the snow stays up in Santa Claus land until he finishes his background shots for Goldwyn and 20th Century-Fox. While in New York City Eagler is headquartering with Frank Zucker.

● **Georges Benoit, A.S.C.,** writes us from France that the Paramount studios which were being rented for the past three years will now be closed completely.

Benoit himself is just finishing a production with Sacha Guitry, one of France's celebrated authors and actors. His next production will be "Blanchette" with Marie Bell. This will be the third feature Benoit shot with this star. Following the Marie Bell production, Benoit is assigned to direct cinematography for a Joan Warner picture. Miss Warner is an American appearing in French music halls doing a fan dance. Benoit opines it's going to be funny.

● **Charles Long, A.S.C.,** is directing the photography for the Hathaway production "Souls at Sea" at Paramount studios.

● **Paul Perry, A.S.C.,** returns to Hollywood next week from a trip around the world. Perry has been in Manila for more than two years, a year in India and Malay and in London for the past few months. He was with the Granville Expedition in India. Welcome home, Paul.

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Karl Freund, A.S.C., is rickshawing Director Sidney Franklyn on "Good Earth" location. Whether Karl is paying a bet or indulging in a new bit of exercise has not been explained to us.

Attacking the Problem of Color Stills

Continued from page 7

economical paper prints in color remains. Several studios have gotten excellent results from Chromatone and allied processes. In this process, a black-and-white print is made from each separation-negative on a sheet of a special stripping-paper. After developing the prints, each is toned its proper color (i.e., the color COMPLEMENTARY to that of the filter through which its negative was exposed). The gelatine emulsions are then stripped from their paper bases, and reassembled one over the other, in register, on a white paper base. When the print has dried, the result is a permanent unit, reproducing the picture in full natural color.

Ray Jones and Lynn Vinnette of Universal's Still Department have taken a definite lead in this field, using a process of this general type which they have developed themselves. Despite limited laboratory facilities, they are doing excellent work, turning out a surprisingly large number of really fine color prints each week. Upon the completion of laboratory expansion now planned, Jones expects to be able to produce upwards of twenty first-class color prints per week, at a cost low enough to be commercially proctical.

For color prints of the very highest quality, three-color Carbro is unquestionably the ideal process. Unfortunately, this process is slow, complicated and expensive. In some instances it has been possible to turn out Carbro prints for as little as $30 per print; in most instances the cost is considerably greater. In this process, three ordinary bromide prints are made from the three separation-negatives. Three appropriately colored Carbro tissues are "sensitized" in a bath of Potassium Bichromate, Potassium Ferricyanide, and Potassium Bromide and then immersed briefly in a weak solution of Acetic Acid, Hydrochloric Acid and Formaldehyde. The tissue is then squeegeed into contact with its appropriate bromide print, which has previously been thoroughly soaked. The two are left in contact for 15 minutes or more, and then separated. The tissue is then squeegeed to a well-soaked sheet of transfer paper, allowed to remain in contact therewith for half an hour, and stripped off, while the transferred image is developed in warm water. The three color-separation prints are naturally superimposed in register to form the final full-color print, on an appropriate paper base.

While several studios have turned out varying numbers of Carbro prints, Metro-Goldwyn-Mayer seems most active in this direction. Under the direction of Milton Browne, this department is laying plans for an extensive color laboratory, separate in both plant and personnel from the black-and-white still laboratory, and turning out hand-colored stills, Dufay transparencies, and both Chromatone and Carbro prints. Construction is slated to begin soon on this plant, which it is stated will represent an investment of $10,000 or more. With a corps of laboratory specialists in the color field, working in their own plant, Brown should certainly improve the already outstanding results his staff have been achieving, and materially lessen the costs of color stills. He has very wisely chosen to specialize in the laboratory end, holding that the best results in photographing will come from using his regular still photographers, carefully coached in color-technique by factory experts, to make the pictures themselves. Results so far appear fully to justify this course. Virtually all of his men have at one time or another made excellent Dufaycolor, and all received special instruction from Dufay factory experts, who have since praised MGM's Dufays very highly.

At Paramount, while research in color-still work has been retarded by the studio's recent reorganization, Harry Cottrell and his staff have done excellent work. In addition to hand-coloring and Dufay, some work has been done with specially built "one-shot" cameras, and especially in the problem of printing from separation negatives. Praiseworthy results have been had from lithographic color-printing, a method which if used in volume should go far to reduce the cost of prints, though it is very costly if used on a small scale. Now that studio's difficulties are at an end, Cottrell has ambitious plans for meeting the demand for color.

Warner Brothers, under Elmer Fryer, have concentrated principally on Dufay, and with a new building housing Fryer's department, increased work in color is planned. At RKO, Ernest Bachrach is taking a different course, considering it better to stick to hand-coloring until a more commercially satisfactory method of producing direct color is found.

Several of the studios are either buying or building various types of "one-shot" cameras. The most popular appear to be the imported Bermphol, and the locally-manufactured Curtis camera. A fuller description of these and other cameras will be given in a later article.

There are in addition several independent photographic artists who have done more or less natural-color work among the studios, usually on assign-

ment from magazines. James N. Doolittle is one of the leaders in this field, producing outstanding three-color prints, and Edwin Bower Hesser, who has developed his own process, "Hessercolor," has a long line of excellent magazine-covers to his credit. While these two monopolize most of this type of work locally, several others have been carrying on research, and more than a few eastern color-still experts have from time to time come to Hollywood on special commissions.

This development of color photography in the studios is bound to have far-reaching effects on commercial color. The major part of the cost of color to a magazine is the cost of the natural-color photograph. Locally, these costs range from a minimum of $150 per picture to $500 or $1,000 per picture, while eastern workers commissioned to produce Hollywood "art" may, with transportation, expenses and all, easily increase the price to $2,000 or $3,000 PER PICTURE. The economic result when the studios begin turning out equally good color prints, and supplying them to the magazines gratis, will be interesting—except to those concerned in keeping color expensive. And while our studio "still men" may not have enjoyed the widespread publicity some of the outside color experts have received, it is safe to predict that they will need little more than the expansion going on right now to equal and outstrip these more publicized colorists.

Producing Shorts in Tahiti

Continued from page 9

cure money to go to the movies. They are especially fond of western pictures—those we see are from five to six years old.

Some time ago four youngsters ranging from 10 to 14 years sailed from an island 900 miles away to come to Papatee merely to see a picture. It is uncanny how the natives can judge direction. While there is a school of navigation operated on the island these youngsters make first rate navigators without that knowledge. It seems to be a sixth sense with them. In other words they have a feel for navigation.

These four boys were exhausted when they landed as their food had run low. Their entire supply consisted of native fruits and water.

Those natives who know something about acting, having served for some of the Hollywood companies that have come down to Tahiti, are becoming wise in the way of pictures. The fellow who acted for Mirnau in "Tabu" is insis-

tent that close-ups be made of him in any picture in which he might appear. If sufficient close-ups are not shot he walks off the set. And he knows just where the camera must be set for a close-up.

The natural beauty of Tahiti is a photographer's paradise. While I spent considerable time in the laboratory I am sure I exposed more film than I would have exposed in Hollywood on an ordinary job. This film was not confined to any particular type of photography, but was over a wide range giving me additional knowledge of photographic effects because I was not restricted to any particular set. It taught me many ways of handling sun and shadows when the light source was not exactly to my liking. It gave me an education in the handling of people that I could not have secured any other place.

Constant photographing of the natives, scenes in hospitals for the French government and scenes of activities, documetary in nature for the government to study not only offered a wide latitude of photography, but demanded a versatility of expression that was necessary to bring out all the charms native to the island.

Krasner Capitalizes Assets

Continued from page 8

He has long been of the belief—doubtless a hang-over from his youthful projection room days—that audience interest lies in Star and Story—and in that sequence.

In this respect, also, he gives them what they want. He lights his set, then his stars in balance. He builds his room, so to put it, then furnishes it. The resulting composition reveals sharply etched characters performing in bold relief against an enhancing background.

On the set, he works swiftly and deftly, aided by a camera crew of several years uninterrupted association that functions with the well-timed co-ordination of a Notre Dame backfield.

There is, he confesses, one angle of his reputation for capitalizing visible physical assets that is sometimes distressing. Whenever the studio has garnered a stage or radio celebrity and tests are in order, he is requisitioned for the important assignment. This, he swears, inevitably occurs while he is between pictures and is just stepping up to the first tee or climbing aboard some friend's boat for a holiday. But as it all adds to the family exchequer, he bears it manfully.

He has presided over cameras in most of the major studios. Currently he is of that hand selected band of front-flight cinematographers carrying the new Universal banner. Under that

studio's policy of encouraging the utmost of cinematographic achievements, films of notable significance can well be expected to flow from his cameras. Surely, audiences will like them. And that, when all is said and done, is the ultimate cinema criterion of the day.

GRUSH PASSES

• Mr. Merton E. Grush, president of C. P. Goerz American Optical Company, died suddenly on Dec. 1, at his residence in Winchester, Mass.

Mr. Grush became president of the C. P. Goerz American Optical Co. at the time the ownership of the company was acquired through purchase by a group of Americans. He was always keenly interested in the success and growth of his business.

A. S. C. On Parade

Continued from page 12

• **Harry Perry, A.S.C.,** went a-hunting for deer up in Utah. His hunting pal was Captain A. H. Hardy, one of the country's best known all-around marksmen; representative for the Peter Cartridge Company for the past 40 years. He took Hardy along to show him how to shoot; how an expert really bags a deer. Harry got a deer and Hardy is still up there banging away trying to get his first for the season.

• **Max Dupont, A.S.C.,** is in Hollywood from Tahiti on a visit. Max has been away from these shores many years.

• **Fred Jackman, A.S.C.,** has gone real estate. Fred opened a subdivision adjacent to the Lakeside golf course. The Jackman subdivision has its own private lake. Fred's doing it in a big way . . . and the lots are really selling.

• **Paul Eagler, A.S.C.,** went east for the Goldwyn company to make process shots in and about New York City. Paul will be away for about a month.

• **Len H. Roos, A.S.C.,** suffered a tragic loss in the recent death of Mrs. Roos while Len was making travel-films in North Africa. Mrs. Roos had for some years been a victim of severe pulmonary ailments, and was at home in California at the time of her death.

Len made one of the fastest air-and-sea dashes on record in his race against death from Algeria to Hollywood. The A.S.C. extends its sincerest sympathies to Len, the more so since Mary Roos was one of the most popular of A.S.C. wives.

● Many messages for the holiday were received from members over sea. Some were for the society itself and others for individuals. It was fine to see that mail pouring in during the Holidays. Perhaps a few felt a bit home sick. However, we envy those who partook of a bit of Ye Olde Englishe Plumbe Puddinge and a spot of ale.

● And for those over seas here's one that will make you feel a bit jealous. The studios here in Hollywood actually closed for the three days of Christmas, Saturday and Sunday.

● And say you fellows over there, here is another bit of news. The Santa Anita track opened as usual on Christmas day and of course the usual thing. Some are out and some are in.

● It's a bit too early in fact several days or we would tell you who won the Rose Bowl game.

● There was a liberal painting of snow on the mountains over Hollywood during the Holidays. You missed something. The weather was also o bit unusual—we had a darn good thunder storm.

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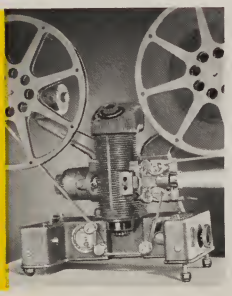

Filmo Auditorium Projector, Model 130 (*Left*)

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AMATEUR MOVIE SECTION

SOCIETY OF AMATEUR CINEMATOGRAPHERS

Contents . . .

Next Month . . .

- The Professional Cinematographer in the studio has a language all his own. He has given names to articles, equipment and accessories that are colorful. We will give you some of these names next month and tell you what they mean.
- There will be more about the Prize contest pictures. We will give you the list of winners of honorable mention.
- We will also give you the cue music to the prize winning productions. This is music to be picked from practically any record catalog.

Ruth Stuart Wins Triple Recognition in 1936 Contest

EACH YEAR the contest sponsored by the American Society of Cinematographers through this magazine seems to bring forth a surprise. For several years the 8mm cinephotographers have been setting the pace, but never has any of them reached the goal achieved this year by Miss Ruth Stuart.

Miss Stuart has been a contributor to this contest every year for the past three years; in 1933 she was given the medal for travel pictures.

Her 200 ft. 16mm subject "Doomsday" was also awarded honors in the British contest conducted by the British Institute of Amateur Cinematographers. In the American Society of Cinematographers contest just closed she was given a recognition for the Outstanding picture, in photography and Documentary pictures.

It will be surprising to many that this unusual honor should befall a woman. Photography, by the unwritten law, is supposedly the realm of the male species. Miss Stuart, however showed such a fine understanding of the value of pictures that move, how to fabricate these moving photographs into an interesting document that would hold any audience anywhere in the civilized world. For a person who films she must have developed a stony heart in order to cut as judiciously as this picture indicates. There is a tempo to the production that is very seldom achieved by an amateur. There are no obvious pet shots or scenes. Each sequence, each scene, each picture was left in the production for a purpose to give it atmosphere to help the story along.

Miss Stuart is not only a photographer, but she is an editor and a cutter of high ability. Her selection of types and the manner in which she hadled them shows a large measure of directorial ability.

It was the belief of the judging committee that Miss Stuart was richly deserving of the honor bestowed upon her.

Myron F. Pettengill was awarded the trophy for Scenario pictures. This is a 16mm film of about 400 ft. It is a story of the Northwest Mounted. Pettingill is to be commended for his direction, his types, and the way in which he costumed his people. He injected little touches in his characters that left no doubt as to what they represented. He costumed them convincingly. It had many indoor scenes and of course a large amount of outdoor snow scenes. There was a fine handling of the camera.

The Home Movie award went to Jocelyn F. Hollywood for his 8mm picture "Two Kids and a Pup." The subject was truly home movie in nature. A brief continuity that showed the pup being brought home; both boy and girl wanted it and finally a compromise where it is agreed one day the boy is to have the pup and the next day the girl; the children thus to alternate for peace's sake.

Then is shown how the boy plays with a dog. He goes to a wooded lot, pretends to be hunting, etc. The girl, however, treats the dog the same as she would a doll. Makes clothes for it, dresses it up and places it in the doll buggy.

Then comes the day when the girl decides to cheat a bit and rushes home to be the first to have the dog. When the boy arrives she has the dog completely covered in the doll buggy. However, at the crucial moment it rears its head and the fight is on.

The mother then decides to settle the controversy by having the children stand at one end of the yard while she takes the dog to the other end. They are to call the dog and the one to whom the dog goes is to play with it that day. They are set, the dog is let loose and just at that moment another dog passes by and the pup rushes between the children after the other dog and thus the story ends.

Hollywood's cutting and photography were good. And the handling of the whole picture was highly commendable.

J. Kinney Moore receives the first recognition of that type offered by the society to an amateur. The medal for Special Effect Photography for his picture "Nite Life." This, by the way was shot in color.

The story is merely a fabrication to take care of the many trick things Moore wanted to do. He uses split stage a great deal. His work has been done very smoothly. For instance you see him rise from his bed, while he still lies there, much as they do in death scenes in the professional movies when the soul is supposed to be leaving the body. Possibly we will have to credit Mrs. Moore for some of this work as obviously Mr. Moore played the part of the two in one person. However, according, to

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1936 WINNERS

RUTH STUART, Manchester, England. Received the award far Outstanding Film of contest, Phatagraphy and Dacumentary film for the one entry "Doomsday," a subject approximately 200 ft., 16mm.

MYRON F. PETTENGILL, Lynn, Mass. Received the award for Scenaria pictures with his productian "The White North." 16mm.

JOCELYN F. HOLLYWOOD, New York City was awarded the Home Movie trophy far his picture "Twa Kids and a Pup." 8mm.

J. KINNEY MOORE, Beverly Hills, Calif., was awarded recognition in a special class created far his picture "Special Effect Phatagraphy" far his picture "Nite Life." 16mm.

L. CLYDE ANDERSON, Salt Lake City, Utah, was awarded the medal for Calar photography, for his picture "Octaber By-ways." 16mm.

Cutting

THE FIRST THING anyone should realize about "cutting film" is the fact that a good cutter does quite as much of his job with his brain as he does with his scissors. There, I suspect, is where many a good 16mm. and 8mm. film meets its Waterloo: the scenes are neatly spliced together; the bad shots and fogged frames are cut out—but beyond this elementary assembling, the film isn't really "cut" at all, in the professional film-editor's sense. Actually, this stage should be only the beginning of the job: the point where you can stop thinking of your film as a collection of individual scenes and begin to view it more broadly, as a whole production.

From then on, you've got to ask yourself, "Does this advance the idea my production is trying to put over, or is it side-tracking it?" Generally speaking, a picture, like a train, should be kept on the main line; but sometimes it is just as necessary to slip onto a side-track. Knowing when to do this—and when not to—is what makes the difference between good editing and bad.

One of the most important of these little side-tracks is what the writers call "atmosphere" or "local color." Rightly used, it will make any picture more convincing. Wrongly used, it can make even a good film seem as boring as one of those political orators who talk all night and say nothing.

"Atmosphere" may be defined as the innumerable little details which combine to make up the individuality of any given place. When you are actually there, you may not notice them consciously, but they nevertheless form a sort of identifying pattern in your mind. If, in a picture, they're missing, you may not realize what it is, but you know something is wrong, and you feel that the picture is somehow incomplete—unconvincing. Sometimes these things are big; sometimes they are little. Anyone who has been in Chicago, for instance, will remember the wind on Michigan Avenue, and the unique whistle-notes of the traffic policemen. In New York, the ubiquitous "15 and 5" on taxicabs is as much a part of the scene as is the more publicized skyline. On the other hand, much of the intimate action you'd shoot on a vacation in Yosemite could conceivably have been filmed somewhere else: but if you give the audience a glimpse of Half Dome or El Capitan somewhere in the sequence, they know it's Yosemite, even though the close-ups were really made in your home-town park!

You will have some sort of "atmosphere" to contend with in almost every type of picture, regardless of the subject-matter. In some films—especially travel reels—the atmosphere is virtually the story. In others, the atmosphere, while subordinate in importance to the action, is nevertheless an important part of the picture. In still others, the atmosphere, while it can't be wholly eliminated, must be very distinctly only a background for the action—and an unobstrusive background, at that.

Professionally, a picture like "The Good Earth," which I recently edited, offers a somewhat spectacular example of the blending of atmosphere and action. Dramatically, "The Good Earth" has a very strong story. At the same time, the action is laid in a richly atmospheric locale. And that background plays a vital part in the lives of the characters portrayed. The background itself helps you to understand why "Wang" and those around him act as they do.

Just the same, that background can't be allowed to leap forward and stop the story: so how do we arrange it? In general, we establish our atmospheric background at the beginning of a sequence, and then let it flow along as a natural undercurrent behind the action of the rest of the sequence. That is the logical way to present things, for we've only let the atmosphere intrude at a time when some change in action or locale has made a break in the audience's train of thought.

There is, for example, the sequence in which Wang returns to his home in the country. The first shot of the sequence is made looking through the cart in which he is riding. We see Wang in the cart, and the bowed top of the cart serves as a frame for an extreme long-shot of the valley in which the native village lies. Everything seems the same as when he last saw it: and in the succeeding atmosperic shots, the audience sees the countryside and its details through Wang's eyes. When the cart stops, and Wang is ready to get out and find his friends, the local color is thoroughly established, and we are ready to carry on with the story. Yet there is no feeling that the story has been interrupted! When, in the background of later shots, we see these details—when we see the coolies ploddingly working the treadmill that pumps water to irrigate the rice-fields—the long-horned, shaggy buffalo—the dyked rice-fields—the terraced hillsides—the crumbly-walled village—we aren't surprised: like Wang, we knew they would be there. We'd seen them before; they had become a natural part of the picture.

It was the same with many other important sequences. The start of the picture, naturally. The locust sequence. The city sequence, where through Wang's eyes, we saw the sights of a teeming Chinese city that had so much wonder for a poor country farmer.

Of course, in a film like "The Good Earth" we had a rather extraordinary problem in balancing action and atmosphere. Not every production offers such a wealth of

A scene from "Good Earth" —It is pervaded with "atmosphere" of a Chinese countryside.

to Balance Atmosphere and Action

by
Baron Basil Wrangell
Film Editor of "The Good Earth."

atmospheric material, nor does it offer such spectacular opportunities to make it an integral part of the story. But nearly every picture has some atmospheric color that has to be blended with the action to make a coherent, convincing whole. And most of them can be handled in this same way.

The same treatment can be applied to home movies, too. And don't make the mistake of thinking that you haven't a dramatic story in your home movie, you haven't a story to tell, or that you haven't local color to establish! You have, if you will only stop to figure out what they are. Every picture worth making—certainly every picture worth showing, has same idea to get across to whoever sees it. That's the story! The people or things portraying that idea have to move against some background, and that background will inevitably have details that differentiate it from any other. There's your atmosphere! Blend the two judiciously, and you have a complete picture—one that tells you **what** is done, shows you unmistakably **where** it is being done, and (if necessary) **who** is doing it.

Take the least likely subject—say a photomicrograph of a crystal formation in a mineral. You could get the whole thing over within one or two micrographic shots of the crystals. But that would leave a lot of questions unanswered. What kind of mineral was it? What did it look like? Where did it come from? How was it found? Was it picked up, or mined? How was it prepared: was it kept in its natural state, refined, smelted, alloyed, cut, flaked, or broken? How was it magnified to make the shot; in fact was it magnified at all? If so, how much? If you answer all of those questions—and all but the first and the last can best be answered in pictures—you'll have a pretty complete reel leading naturally up to the actual cinemicrographs, which form the climax of the "story" your picture is telling.

Suppose, on the other hand, that you visit the Shanghai race-track to see the race for the Sassoon Cup. Your actual story is, of course, the race itself. But it's the local color that will make your film different from any other horse-race at any other track. If you miss that atmosphere, you might as well have stayed at home and filmed a race for selling-platers at the county fair! You should begin your picture with some shots that definitely establish the facts of Shanghai: the Bund; the amazingly cosmopolitan crowds in the Foreign Quarter—Occidentals of all natians and classes—natives; Mandarins, War Lords, coalies, and the like—the bearded Sikh policemen from India—glittering Rolls-Royces—'rickshaws—wheelbarrows. Through these shots, work progressively and quickly closer to the race-track enclousure. Show the track itself, and its setting. Then show the crowd—faultlessly clad Britishers, as formally correct as though they were at Epsom on Derby Day—uniformed French—precise Japanese, camera in hand—pretty Chinese girls in their heavy silken pajama-like costumes—wealthy Chinese merchants in elaborate, skirted gowns—brisk, Americanized "young China" in Hart-Schaffner & Marx suitings and straw hats. Next show the stacky little Manchu ponies and their riders: you can't find their like at Santa Anita or Churchill Downs! Finally—the race itself!

But perhaps the pictures you make are the more "homey"

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A Family Scenario of Interiors for Winter Shooting

by
Stan Barry

DURING WINTER weeks of indifferent sunlight and frigid exteriors many amateur cine-cameras turn indoors for activities. Here, with lighting conditions completely under control, photographic values and mood can be definitely set and subjected to the creative talents of the home cinematographer. There is no more convenient nor suitable location for this exercise than your own home, nor better players for your lens than members of your own family. So here is a bit of domestic drama that requires practically no staging. Yet it is opportunity for effective family portraiture which will find valued place in the household film album.

This skeleton scenario makes continuity easy to attain in the editing. It permits endless variation to accommodate your particular menage. Mother plays the main supporting role with Daughter, or Daughter and Son, or any casting combination your home contains, in stellar character parts. You are free to operate in your multiple identity of producer-director-cameraman-electrician and financial backer.

MAIN TITLE:

SCENE 1: LONG SHOT. Full figure view of Mother in kitchen busily occupied at kitchen work-table.

SCENE 2: MEDIUM SHOT of Mother at the table. A spread of cake-making utensils nad materials is recognizable on the table as Mother is vigorously beating with a spoon the batter in a bowl.

SCENE 3: CLOSE-UP. Mother's face as she is intently stirring the mixture. CAMERA TILTS down to catch her hands engaged at the mixing bowl which can be seen together with its whirling contents. CAMERA PANS slightly to pick up opened cook-book leaning against cup, its pages evident. INSERT of portion of cook-book page with the identifying recipe caption "Chocolate Cake," to establish the fact that cake is in the making.

SCENE 4: MEDIUM SHOT. From a low angle. Kitchen door opens Daughter appears, makes a survey of the kitchen scene and then scampers in.

SCENE 5: MEDIUM SHOT. Mother at the table. Daughter runs in. On tip-toe peers into the bowl. An inquisitive little finger steals into the bowl.

SCENE 6: CLOSE SHOT. Daughter's finger wipes a sample of cake batter from the bowl, makes fast time to her mouth. She tastes the sample elaborately and critically. It wins her approval.

SCENE 7: MEDIUM SHOT. Mother at table with Daughter avidly interested at her side. Mother reaches for flour sifter, proceeds to sift the last bit of flour from it into the batter. Daughter must help; she begs to handle the flour and reaches for the sifter.

SCENE 8: CLOSE SHOT. Daughter's tiny hands sifting the flour into the bowl. Her face beaming proudly.

SCENE 9: MEDIUM CLOSE SHOT. Mother stirring the flour into the batter. Daughter insists she take a turn at it, is awarded the spoon and stirs as best she can.

SCENE 10: MEDIUM SHOT. Mother takes over the stirring process from Daughter. Then, the batter completed, Mother takes up a cake pan, sifts into it a dusting of flour.

SCENE 11: CLOSE SHOT. Pan being shaken by Mother to distribute the flour evenly. Daughter's small hand comes into the scene extending a small or child-size cake pan. It gets a pinch of flour from Mother.

SCENE 12: CLOSE UP. Daughter's two chubby hands shaking the tiny baking pan—just as Mother did.

SCENE 13: MEDIUM SHOT. Mother takes the bowl of batter as if to pour it in her cake pan. Daughter makes violent protest. Smilingly, Mother lowers the bowl to Daughter's level. Daughter takes an overflowing spoonful of batter and transfers it with great attempt at neatness to her miniature pan.

SCENE 14: CLOSE UP. Daughter's little hands—one grasping the cake pan, the other the spoon—as the batter is smoothed out very evenly in the pan.

SCENE 15: MEDIUM SHOT. Mother hears the telephone bell off-stage, places the batter bowl on the table, hurries away—into camera.

SCENE 16: LONG SHOT. The telephone stand in your home. Mother enters rapidly, from camera, takes receiver and enters into conversation.

SCENE 17: MEDIUM SHOT. Daughter, at the table alone, left to her own devices, places her pan on the table, reaches up and gives the batter another stirring.

SCENE 18: CLOSE SHOT. Daughter is stirring the batter. She stops, looks about the table at the collection of materials spread out there. Taking the flour sifter, she tries to add more flour. But it is empty. She puts it down and looks for other suitable ingredients to add. Her hand picks up a large salt container, brings it above the bowl, tips it up and long streams of salt flow freely and continuously into the batter until they dwindle away, the container empty. Again, Daughter helpfully stirs the batter.

SCENE 19: MEDIUM SHOT. At the telephone, Mother concludes her conversation, turns away to the kitchen.

SCENE 20: MEDIUM SHOT. Daughter stirring the batter. All traces of the salt have disappeared. Mother comes in, takes bowl and empties contents into her cake pan.

SCENE 21: LONG SHOT. Mother takes up her filled cake pan and Daughter takes hers. CAMERA PANS to follow them to the stove where both pans are placed in the oven. As the oven door closes, we FADE OUT.

SCENE 22: FADE IN on LONG SHOT in your living room. It is late afternoon. One or more neighbors or relatives must have dropped in and are being given tea by Mother and Daughter.

SCENE 23: MEDIUM SHOT. Mother serving the freshly-baked cake.

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Scene from S. D. Child's picture, "I'd Be Delighted To." This picture evidenced great care and many rehearsals.

Making Cinema Stars of Amateurs

by
S. Sylvan Simon
Test Director, Universal Studios

I SUPPOSE I am closer to the acting problem of the amateur film maker than the average studio executive. For my job has to do almost entirely with amateur actors; amateur in the sense, at least, of being without professional experience before studio cameras, although many of them have well-won reputations gained from the theater or microphone. I am the one who directs the screen tests you read of in your favorite, if any, movie chatter column.

My work is very much parallel to that of the amateur cinematographer who is searching for an acceptable cast to enact a playlet before his camera. The procedure we have evolved from long experience may be helpful to you.

It is no idle rumor that Hollywood studios are constantly on the lookout for new faces, new material for the endless film manufacturing process that carries on year after year. Actors are our stock of trade. They are what we make pictures of. Old ones become obsolete. New models must be found to take their places.

Here at the new Universal studios, we have a special department engaged in this work. It functions as a separate but complete producing unit—and it deals mostly with actors unfamiliar with camera technique. I'll tell you how we go about getting results.

I average around forty interviews a day with applicants for film work. Many are movie-mad gals whose main reliance is a cosmetic kit. A few have potential and sincere possibilities. These are the ones we take in hand for testing.

In these applicants I look first for a reasonably normal and presentable appearance. But personality is what I watch for. An individual with winning personality will transmit that characteristic to the screen. The reverse is likewise true. If you place a dull and cold personality in your picture, it simply will not have a warm appeal to you or your audiences.

By personality, I mean individual traits, mannerisms, expressions, facial gestures—the visible indications of character. By some unknown means, the camera emphasizes them. But they must be natural. The camera is quick to detect and magnify artificiality in this regard.

The first visit of the selected unknown is to the make-up room. Here, under photographic light, the face is studied. Particularly with women, the hair has much to do with facial appearance. It is a frame for the picture. The hairdress adopted by most women is not necessarily the most advantagous coiffure from a pictorial angle. We do not hesitate to rearrange it with particular eye to the play of light and shade on the new style.

Any obvious physical defects, such as a blemish or two, can be taken care of with make-up. You can get the same make-up that we use, in small inexpensive kits with directions for application. It is worth toying with. You want your players to look as well as possible on the screen.

With appearance taken care of, we search for a role suitable for the individual capabilities of the candidate for acting honors. We don't expect a jolly chap with face lined from smiling to portray a dour character. We try to make it possible for him to be himself. I feel this to be extremely important in casting amateur actors. Don't require too much character acting from them. Pick people for your parts who are of themselves the needed characters. A comic should be a comic, not a stooge.

A college boy is pictorially a better campus character than is an insurance salesman of the same age and get-up. So, the insurance man is pictorially a better business character. A nurse in nurse's costume is—a nurse. But some other young lady, even though she be your wife's best friend, in the same costume is not perforce a nurse on the film.

With a suitable part for the applicant to play, or with our play suitably cast, we are ready for the camera. First is a make-up test, with actor in costume and make-up. It runs 65 to 100 feet of film, in 35mm. of course. It is worth while, for in it any pictorial deficiencies can be checked. The actor is in repose, sitting usually, and the shot includes the face from profile to full face to the other profile—thus getting all the angles.

Now for the actual acting. Your playlet is in script form, of course. Give a copy to each actor. Let him study it at leisure and get the spirit of the thing. Then tell him your conception of the story as an entirety, and its development scene by scene. Give him time to commit it to memory.

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Dramatizing a Cow Proves to be Good Business

by
J. R. Jameason

IT IS A MOOT QUESTION whether persons of exceeding innate resourcefulness and creative ingenuity are impulsively attracted by amateur cine-cameras or whether the usage of the compact cinematographic instruments brings to the surface and develops these estimable human qualities.

Either way, the fact is constantly being evidenced that cine-filmers are wholly capable of turning out cinematic compositions of such originality of conception and magnificence of production as fairly to astound the onlooker.

Indeed, these smaller cameras seem to offer constanr challenge to the individual's inventive talents. Where mechanical limitations of the equipment leave off, sheer creative expedients move in.

Outstanding instance is the 2,000-foot 16mm all-color film, "The Story of Linetta," produced las tyear by Franklin P. Judson, a comparative camera neophyte of but four years lensing experience.

Frankly, it is a commercial picture designed to further the advertising program of Adohr Milk Farms, a prominent Los Angeles producer and purveyor of dairy products. And, as such, it is pertinent example of the 16mm film's invasion of industry formerly usurped by the larger 35mm relative.

A staunch believer in modern publicity media, the Adohr concern had, during the previous ten years, contracted for the making of three professionally-made films. Results were not entirely encouraging. Firstly, the pictures were coldly commercial. Secondly, the promised theatre showings did not always materialize and audience response was vague and untraceable.

Judson is a member of the company's publicity staff.

He was convinced that a film properly made would be good investment. In the face of three previous disappointments, he was tackling a tough assignment. But the very thoroughness with which he was forced to prepare his preliminary material contributed in no mean measure to the film's ultimate success.

He wrote a story—on paper. He put it in scenario form—on paper. He selected some four hundred locations and camera set-ups—and put them on paper. In fine, much thought and consideration went into the planning of the picture.

Then, synopsis in hand, he visited and conferred with various groups—women's clubs, civic organizations, schools and such—and ascertained their interest in a film to be produced to this plan, thus assuring future audiences for the picture.

He devoted three months to shooting the picture—and every one of the four hundred scenes was shot according to script! Another month went to cutting, editing, titling and the recording of musical and narrative accompaniment on discs. Four months of patient work and an expense sheet running above the five thousad dollar mark. A sizable undertaking with a photographic instrument frequently labeled a "toy."

He used no professional actors, built no sets. The film is an actual document of actual events, and he had to grab them as best he could.

His star is, as the title implies, Linetta, a buxom but beauteous matron scaling some one thousand pounds. The film traces her life and her upbringing from the time she was a mere seventy-two pound infant to her triumphant coup of annexing top national honors in the only type of beauty contest she could enter. Linetta is a prize-winning champion Guernsey cow, pride of the famous Adohr milk-producing herd.

Except for the fact that practically all of the scenes take place on Adohr farms and ranches, there is no advertising whatsoever in the picture.

Judson's deft imagery makes a "glamour girl" of Linetta as surely and by the same means as a studio cinematographer englamours his two-legged stars. The screen-spectator finds himself warming under a definite sympathetic attitude toward the young lady and shares in her ultimate victories. Suspense is exciting as the judge narrows his selection to Linetta and a competitor in the finals of the championship competition. In short, he has taken a most commonplace subject—a cow, albeit a very noble lineaged cow—and dramatized it into an absorbing item of screen entertainment.

Upwards of one hundred thousand people have seen this film since it was first exhibited in January of this year.

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Still of Marlene Dietrich in "The Garden of Allah" photographed in color by Harold Rosson, A.S.C.

How to Shoot Kodachrome Light Effects

by
Harold Rosson, A.S.C.

ONE OF THE first things to learn in any kind of color cinematography is the fact that good lighting is good lighting whether you are shooting black-and-white or color. In other words, it has been my experience both with Technicolor and with Kodachrome that the mere fact of color does not demand on uninterestingly flat lighting. That myth originated years ago, when it was a real problem to get enough light to make a color-film exposure in any process. I found it possible to balance my lighting in "The Garden of Allah" exactly as I would had I been shooting black-and-white. In my substandard Kodachroming, I also light exactly as I would in black-and white. In each case, I get a better effect than I would in monochrome, because color gives me a more natural picture than can monochrome.

Of course you must use more light in shooting color, for the light has more to do. In Technicolor, the light that makes your picture is spread out over three separate films. In Kodachrome, it must act upon three separate emulsion layers in the one film. With more wark to do, but no more time to do it in, there must simply be more light to do the job. But as the Eastman emulsion experts are constantly increasing the sensitivity of their films, especially Kodachrome, we are finding it possible to use less and less light all the time.

In any event, the safest course to take in exposing Kodachrome is to follow the dictates of your exposure-meter. The Technicolor people centainly have had more experience shooting color than any other graup in the world, and I notice they carefully check up on the lighting of each scene with a special Weston photocell illuminometer. If they can take time ta do this on productions where the overhead is mounting at the rate af many hundred dollars per minute, we home-movie makers certainly should do so toa.

There is an old saying among photographers, "Expose for the shadows; the highlights will take care of themselves." It is an excellent axiom far black-and-white, but it does not hold true in color. With any color process, the highlights are the troublesome things: if they are overexposed, they become just a colorless white glare. So in color, the safest rule is to expose for the highlights, and balance the shadows to them.

The matter of shadow-lighting depends to a great extent upon the kind of shadows you want. In any event, don't be afraid of shadows in a color shot. They "make" the picture, even more than they do in black-and-white. And ort interior scenes especially, you can control the shadows to suit your need. You can get soft, luminous half-shadows, if you want wholly natural effects. And you can also get rich, jet-black shadows if you want stronger effects. Personally, I revel in the latter type of shadows as Kodachrome reveals them: the process gives you shadows of such body you feel that they might almost have been cut from black velvet.

For this type of shadows, simply light for your highlights and middle lights, and keep the light away from the shadowed areas as much as possible. You don't have to keep the light altogether away from these shadows, since the process has considerably less latitude than black-and-white; but you should see to it that there is a considerable difference in intensity between the middle lights and the shadows.

For more normal effects, you naturally want more light in your shadows. For this sort of thing, a good ratio is 1:3. That is, one-third as much light in the shadow areas as in the highlights. An easy way to balance your lighting to this ratio is to light your highlights first, taking readings with the "B" (normal) pointer on your Weston meter. When this illumination is built up to the right point to give a good exposure, take further measurements of the shadow-lighting, keeping the dial an your meter set as before, with the "B" pointer on the highlight reading. If your shadow-side reading corresponds to the light-

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WHEELS OF INDUSTRY

8mm Camera

● Bell & Howell Company makes the announcement that it has started delivery on two new lower-priced Double Eight motion picture cameras. These cameras differ from the Company's other, and earlier, Double Eight model (134-A) only in the following respects: 12½mm. F3.5 instead of 12½mm. F2.5 lens; handset footage dial rather than automatically reset footage dial: no viewfinder field area masks. The lens seat is the same as the present Filmo 8mm. cameras so that lenses may be interchanged at will. The new cameras are Model 134-C with 8, 16, 24, and 32 speeds at $49.50, and Model 134-D with 16, 32, 48, and 64 speeds at $54.50.

● Burleigh Brooks announces a new ROLLEICORD camera in the 6x6cm. (2¼"x2¼") size. This model is now equipped with either a Zeiss Triotar f/4.5 or f/3.5 lens and has a high-speed (f/3.2) focusing finder lens. Additional refinements include a Depth of Focus scale, eye-level observation of ground glass image and automatic film transport.

● An International Exhibition of Applied and Scientific Photography will be held in Rochester in March, 1937, under the sponsorship of the Rochester Scientific and Technical Section of the Photographic Society of America. The objective of the exhibition will be to show examples of the application of photography to the various branches of science and technology.

The following sections have been organized:

I. Color Photography: (a) processes in detail (b) transparencies (c) prints
II. Astronomy and Metrology
III. Aerial Photography
IV. Photomicrography: (a) metallography (b) other subjects
V. Medical Photography: (a) prints (b) radiographs (c) motion pictures
VI. X-Ray in Industry
VII. Documentary Photography: (a) small film library work (b) instrument reading (c) miscellaneous
VIII. High Speed Photography
IX. Stereo-Photography: (a) prints (b) transparencies (c) motion pictures
X. Photography in Physics and Chemistry: (a) X-ray spectrography (b) cosmic and other ray effects (c) miscellaneous
XI. Photographic Sensitivity: (a) photographic effects (b) light-sensitive substances
XII. Miscellaneous

All correspondence in regard to the Exhibition, or requests for entry blanks should be addressed to the Secretary, C. B. Neblette, F.R.P.S., Department of Photographic Technology, Rochester Athenaeum and Mechanics Institute, Rochester, New York.

● Burleigh Brooks announces the DOLLINA II, a miniature camera using 35mm. cine film—possessing a coupled, built-in range finder and selling with varying lens equipment. A range finder of conventional type and precise optic is synchronized in this camera with the camera lens. It has a rapid Compur shutter with speeds up to 1/500 second, automatic counting and film locking device, optical, tubular view-finder and readily accessible focusing knob assuring quick and accurate focus. It is fully self-erecting. A sturdy cast metal body encloses all the delicate parts. Its dimensions are: 5x3¼x1 2/3 inches and it makes 36 exposures on 24x36mm cine film. It comes equipped with either the Xenon f/2, the Xenar f/2.9, the Tessar f/2.8 or the Radionar f/2.9.

Expansion

● Harry Lott, who for the past twenty years has handled sales and service for Bell and Howell's New York City office is now associated with Motion Picture Camera Supply, Inc., acting in the same capacity.

J. Burgi Contner, having recently assumed sole management of the organization, advises that Mr. Lott will also direct service work and repairs on laboratory and camera equipment in the newly equipped machine shop.

● Burleigh Brooks announces a new camera, the PILOT 6—a reflecting camera making 16 pictures on 120 roll-film. Its dimensions when closed do not exceed 4¼x4¼x3¼". Its optical equipment consists of either an f/6.3, f/4.5 or f/3.5 lens which may be focused as close as 3 ft. Manipulation is simple . . . setting of lever actuates mirror and shutter simultaneously. The ground glass finder shows an image of the subject in sharp delineation and for critical focus, a magnifier is provided. The PILOT 6 has 3 essential speeds, 1/25, 1/50, and 1/100 second, also time and bulb. Other refinements include easy observation of diaphragm stops from top of camera, place for cable release, wire frame finder for eye-level observation and tripod socket.

Moving

● Neumade Products Corporation of 427 West 42nd Street, New York City, is moving its present quarters on the 4th floor, and will occupy the entire 7th floor of the same building.

The larger quarters were made necessary with the addition of a completely equipped modern machine shop, where in addition to the other work, experimental and development work will be carried on.

Oscar F. Neu, president of the Corporation, announces that the new quarters will be officially opened on December 30th.

New Foth Camera

● A new Foth-Derby Camera incorporating all the advantages and refinements of the standard instrument has been placed on the market. This model has an all cast metal body and is provided with a dependable, optically precise, built-in range finder.

Polarization Filter

● The Kin-O-Lux Company of New York City announce the taking over of the Marks Polarization Filter. According to their claims this filter consists of a single crystalline sheet with effective polarization throughout the entire visible spectrum. They claim high transparency, uniform color response and that it does not scatter the rays. They claim it can be used in ordinary filter mounts without lens hood. They claim a light transmission of almost 50% or an increased exposure time of one stop.

AMATEUR MOVIE CLUB NEWS

ANNUAL ELECTION was held by the Los Angeles 8mm club on Saturday night, Dec. 19th. Dr. F. R. Loscher succeeded Dr. Henry Linek as president.

Other officers elected and installed were J. E. Walters, vice-president, and M. R. Armstrong, secretary.

The meeting was opened by retiring Vice-President Earl Janda in the absence of Dr. Linek, who was sick.

This annual affair of the 8mm club takes the form of a banquet, cocktail party and dance. There were more than 100 present.

The winners of the annual contest included Alexonder Leitch for his picture "Gun Law," the second prize went to Clifford Carpenter for his picture "Dod's Day Off," and the third prize went to Bion Vogel for his picture "Rowdy's Pals." There were eight prizes in all to be competed for by eleven entrants.

● Titles and Editing was the subject of the November meeting of the Philadelphia Cinema Club. This talk was given by Mr. Neil P. Horne of the Home Movie Service of New York City. The Horne organization specializes in 16mm photography and projection, according to the announcement, and is at present making several industrial and commercial films. Mr. Horne presented sample titles to illustrate his talk.

The December meeting which was held on Tuesday night, December 8th, in the Gold Room of the Engineers Club, had as its main speaker Dr. James Monroe Thorington, Editor of American Alpine Journal.

● The Metropolitan Motion Picture Club held its December meeting on the 10th of the month. The speaker of the evening was J. D. Smith of the Fairchild Aerial Surveys Inc., who spoke on Filming from the Air. He described interesting experiences and suggested means of obtaining successful results in this type of movie shooting. He projected two of his own reels taken from the air.

Other screenings were films made by Sidney Moritz. He presented "Italy" and "The Nearest East." A school play, "The Spanish Grandee," was projected by Vincent McGarrett. Miss Annette Decker showed "From Geyser and Lake."

● The Metropolitan Motion Picture Club held its Decem- structions for advanced amateurs and a group of talks for beginners. These discussions take place immediately after the screenings.

This club also announces an increase in their membership dues from $3.00 to $5.00.

The club's annual contest closes on January 1st. The rules are as follows: All entries must be in 16mm or 8mm size. The maximum footage is 400 ft. for 16mm and 200 ft. for 8mm. There will be three groups. Travel and Scenic; Photoplay; Miscellaneous. No limitations as to color. Only members in good standing are eligible to compete. A member may enter only one film in any group and not more than two in the entire contest. A film that has received an award at any previous club contest will not be occepted.

● The Portland Cine Club has closed a busy year. The annual prize pictures will be announced in February. Secretary Arthur E. Gibbs announces more than a dozen prizes will be awarded.

● The Los Angeles Cinema Club held its annual meeting and banquet on December 1st in the dining room of the Los Angeles Stock Exchange club. More than a hundred were present.

This club has instituted an annual contest among its members. This year their pictures were judged by the members of the Sunkist Movie Makers. Mr. Elbert Griffith of that organization was present to announce the findings of the Sunkist organization.

The first prize went to Mr. Guy Nelli for his picture "The Lost Wax Process." The second prize was given to Major Rutland for his film "Yosemite in Color"; the third award went to I. O. Levy for his picture "Our Vacation, July, 1936"; the fourth to Franklin Skeele for his picture "Clouds for Sale." The fifth prize went to Dr. A. Freebairn for his picture "Magnet"; the sixth prize went to Fred L. Wright for "San Joaquin Valley," the seventh to Ed Pyle for "Death Volley and Boulder Dam."

The new officers elected for the coming year were as follows: Dr. LeRoy Bailey, president; A. L. Gram, vice-president and Dr. A Freebairn, secretary.

● Japan is now going to be numbered among those countries conducting annual contests. Fred C. Ells who was awarded a prize by this magazine several years ago for his fine production of "Rice" and who last year contributed that beautiful picture "In The Beginning" is among those sponsoring this competition. He sends us the following notice:

"His Excellency Prince Yamashina, member of the Japanese Imperial Family, as Honorary President of the Sakura Kogata Eiga Kyokai, issues a world-wide invitation to all amateur 16mm. movie makers, to participate in Japan's first international amateur movie contest, closing August 31st, 1937.

"An accomplished cameraman himself, Prince Yamashina heads the Empire's largest movie club of nearly seven hundred members, among whom are K. Tsukamoto and F. C. Ells, medal winners in several international contests, and many other enthusiastic workers. The Sakura Eiga Kyokai, which translated reads, "Cherry Amateur Movie Society," holds meetings monthly, at which technical lectures are given by outstanding amateurs and professionals; publishes a bi-monthly magazine in Japanese which is distributed to members free of charge, and holds club competitions twice a year.

"Japanese amateurs have contributed liberally toward competitions in other lands and now look forward hopefully to seeing the best work the Western movie makers have to offer for 1937. Further particulars regarding the competition may be had from Mr. C. Aochi, care R. Konishi & Co., Muromachi San Chome Nihonbashi, Tokyo, Japan."

Cutting to Balance Atmosphere and Action

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sort—informal glimpses of your own family. Your own home has just as much local color, if you'll only stop to think about it. What are the things that make your home different from that of your neighbor? They are the things that will make your home movie different from any that anyone else could make! I don't mean the obvious things, necessarily—the house itself and its furnishings, or even you and the family. I mean the little details—the cat curled up by the fireplace, or your dog calmly usurping your private chair; Junior's toys carelessly scattered about the place; one of Sister's dolls sprawled rakishly on the piano. And in this sort of picture, little characteristic actions are as truly atmospheric as places or things. I knew a man who had a cat whose pet trick was to go to the window and spit at an imaginary dog; another, whose dog always brought the newspaper in to his master. They are all part of the atmosphere that makes one home differ from another. They should certainly be glimpsed in a home movie.

Getting down to details, how should we cut these atmospheric shots into our picture? Should they be close-ups, or long-shots?

Generally speaking, I think that where the atmosphere is part of a background—as in "The Good Earth," or the Shanghai race—it should usually be presented in long-shots. You aren't so much interested in the details, as you are in the composite effect produced by them. And in a case like that, if you single out any particular detail or individual, your audience will jump to the conclusion that it is a part of your story, rather than the atmosphere. They will expect to see more of it later. Of course, there are exceptions; some atmospheric details simply demand closer shots, just as in real life they would demand closer inspection. In a Chinese setting like that of "The Good Earth," the coolie-power water pump calls for closer shots; but unless the water-pumpers are to figure in the story, we needn't be interested in close-ups of their faces; their feet, endlessly climbing the treadmill, are more important. In the same way, the wild animals of Yosemite or Yellowstone are important parts of the atmosphere, and should be shown in close shots. But if none of your particular picture-party is feeding the bears or the deer, you'd better make your close-ups of the animals being fed by offstage hands, and avoid getting close shots of people who aren't a real part of your cast.

On the other hand, where your atmosphere is more a matter of characteristic action, it is best to tell it in close shots. For instance, the dog that brings in the newspaper. Show a two-shot of the newsboy giving him the folded paper. Then a close follow-shot of the dog trotting into the house. Finally, a close-up of him putting the paper in his master's lap. From this, you can proceed with your other scenes of the master and the rest of the family.

There is always a question about getting these atmospheric shots. Editing a picture already made, you simply have to make the best of what you actually have. But you'll naturally get the best results if you keep an eye open for local color while you are shooting—if you plan for it ahead of time. A professional film editor seldom has much opportunity to be in on the planning. He takes what the director gives him. But he is working with a man who appreciates the value of atmosphere, and takes care to get it. Some directors have an inborn instinct for such things, and shoot their action and atmosphere with such precision that very little editing is needed; they virtually cut with the camera. Others, equally successful, haven't this knack, but they take endless pains to provide sufficient footage of everything so that the film editor has a world of material to select from: innumerable varied angles, long-shots, medium-shots, and detail close-ups. Some of them may expose a tremendous amount of film, but they leave no stone unturned in their effort to give the editor a complete selection of material.

The non-professional filmer has, in a way, a certain advantage over the professional. Usually he is his own Cameraman, his own Director, and his own Film Editor. Perhaps he hasn't a Van Dyke's instinct for cutting with his camera. Certainly he can't afford to expose the endless footage a professional could. But since he himself is to edit the scenes into a complete picture, he is in an enviable position to foresee just what he, as editor, will need, and to shoot it.

In view of all that, I can't help hoping that a little thought in the amateur's film-editorial capacity will prevent him from letting his enthusiasm for pretty shots as a cameraman run away with him. In too many amateur films you will see a pretty scenic shot—effective in itself—followed by two, three, or half-a-dozen duplicate scenes, identical except for some small detail of filtering or exposure. Once is enough! The most beautiful shot, repeated, loses effectiveness with each repetition. The ideal thing to do would be to be so sure of the best way to treat a shot that you only need

to shoot it once. But if you must experiment, don't weaken your picture by showing all the less successful "takes" on the screen. There is a great deal of merit in the way one celebrated photographer used to teach his pupils still-photography. He would give them a camera with only a single plate in it, and tell them, "Bring me back a picture. Take all day to make it if you wish. Make sure that you can't possibly improve either your subject or the way you photograph it. But only expose that one plate—and bring me back a picture!"

Finally, here's a suggestion I gleaned from a 16mm. reel one of my friends made of a motor tour he and his wife made. All along the trip he got shots of his wife painting out scenery. These were excellent introductions to the scenic shots. But he was too busy to get any shots of himself. He realized this, and planned beforehand how to get around it. When he got home, he made a dozen or more shots of himself, sitting at the wheel of his car, busily engaged in emptying a wicked-looking bottle down his throat. When he cut his picture, he used that as a "running gag." Every time he opened a new scenic sequence, he showed his wife pointing out the scenic features. And he showed himself—too busy wetting his whistle to be bothered about scenery! It made the picture complete, if not altogether characteristic. And it furnished a series of amusing, human touches—laughs that balanced the impressiveness of the scenic pictorialism.

Ruth Stewart Wins

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Moore's report there was a fine bit of co-operation and certainly a great deal of painstaking and careful figuring to secure the smooth results.

L. Clyde Anderson was given an award for Color photography, for "October By-Ways." We want to congratulate Mr. Anderson for his selection of colors. It is one of the very first amateur pictures we have seen where color was really properly balanced. There were no harsh notes to distract, but he chose scenes where the ensemble blended and where there was a fine eye-resting balance of color and also color composition. It was obvious that Anderson used haze filters on his outside scenes as the sky does not have that postcard-blue effect, but has been reduced to almost a gray haze which helps the fall colors in the trees and does not take the eye away from the main points of interest.

The medal awards this year are in the form of a pen and pencil desk set, the colors being black and silver. In

the center of the set is a sphere representing the world, with the eastern and western hemispheres engraved on it. This is to represent the world-wide nature of the contest. On this sphere is placed the raised man and the sphere is engraved with the award given.

As usual, entries came from practically every country in the civilized world. The contest was truly world-wide in nature. Next month we shall give the names of those who were given honorary mention and other highlights of the contest.

How to Shoot Kodacrome Light Effects

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value number one point to the LEFT of the "A" (left-hand) pointer, the shadow is receiving approximately 1/3 as much light as the highlight. Increase or cut down your shadow illumination by moving your lamps nearer to or farther from your subject until the meter tells you you have struck this ratio—and there you are, with your lighting nicely balanced!

Semi-silhouetted "contre-jour" effects can be very effective in color-shots of people against a strongly illuminated background, with only enough front-light striking the figure to avoid a fully silhouetted effect. But in making these shots, as we did several times in "The Garden of Allah," we found that as we progressed from the long-shots to the close-ups, it was necessary to use more front-light the closer we came. This was not for any strictly technical reason, but because in the closer shots audiences expect to learn something from the facial expressions of the players. To reveal those expressions, we needed a stronger front-light.

It is always well in any cine lighting to concentrate the illumination more on the face than on the figure. Of course, in a picture of a pretty girl, the face is by no means the only attraction; but it should be made the focal point of the audience's attention. The surest way to do this is to make the face the central point in your lighting scheme.

By the same token, the central point of interest in the face itself should be the eyes. Arrange your lighting so that the eyes are the dominant feature through being the most strongly illuminated. Then let your illumination fall off on the rest of the face. If you have a good reason for it, you can even cast strong shadows across parts of the face; they make very effective close-up lightings in color. But remember, keep the eyes dominant!

When you have a strong face to photograph—one that expresses really interesting character—color helps you to make the face dominate your composition. Don't be afraid to let the background fall off into inky shadows. One of the most effective scenes in "The Garden of Allah" was the scene where Charles Boyer admits to his wife that he is a renegade monk. In that scene, we see only Boyer's tortured face, strongly illuminated, against a sky lighted by a setting sun. The scene lasted feet—far longer than any possible combination of acting and photography could have carried the same treatment in black-and-white.

In general, women should receive a relatively soft lighting in color as in black-and-white, while men's faces call for more vigorous, contrasty treatment. The same is true of photographic diffusion. Diffusion is rarely advisable in long-shots, but in medium-shots and close-ups in color it can be very pleasing. And as you move the camera closer to your subject, you can use more and more diffusion, naturally using more for close-ups of women than you would for close-ups of men. But if you are going to intercut the two, don't diffuse the close-ups of your ladies and use no diffusion on similar shots of men; that discloses the trick, and robs it of its effectivness.

Finally, remember that in color, even more than in monochrome, it is important to have what a professional calls a "key light"—a main source of light from one side or the other. Suppose we have a long-shot of a person sitting in a chair, reading. The logical main source of light would be the reading-lamp beside the chair. Your actual illumination probably cannot come from that lamp—but by having it come from that side, it can apparently do so. If you move in to a close-up, the reading-lamp may no longer show in your picture, but the same key-light should be maintained. You may actually use a stronger light from that side, or a weaker one; you may fill in the shadows differently, or add new light somewhere else to model the face more pleasingly: but the main source of light should still be from the same general angle the "key light" from the reading lamp would logically come from. Larger

units, using either the new "No. 2" photofloods or even the mogul-based "No. 4" photofloods are very useful for this stronger source-lighting, while the regular "No. 1" photofloods, either in stand units or in the handy clamp-on reflectors, are fine for the general "filler light." But don't forget the importance of establishing and maintaining the "key light," for in finding it, you will have found the key to your whole problem of lighting.

Dramatizing a Cow Proves to be Good Business

Continued from page 30

All are in the delivery area of the company. A projectionist and full projection equipment for picture and sound are furnished without cost to interested groups. The picture is on special 2,000 feet reels. A 1,000-watt Bell & Howell projector is used and, in hotel ballrooms, images have been thrown as far as one hundred and sixty feet to fill a full-sized theatre screen. To the casual onlooker, nothing is lost in detail or effect by this long range throw from the color film.

Its intense audience appeal lies in the treatment and in the basic point that it brings real farm life before city dwellers. Judson tackled a homey, earthy subject and treated it in vein. The peaceful quietude of the farm, and the placid contentment of the cow, are captivated in mood and key. Simplicity of titles and absence of wipes, dissolves and other tricky effects—required by camera limitations—add to rather than subtract from the film's value.

As an advertising medium, it is strictly institutional in category. In far-sighted fashion, the Adohr people believe that company prestige gained by showing the care given their cows will be reflected in a greater public appreciation and buying of its products. Results to date prove the correctness of their premise. The fan mail resulting from a showing is surprisingly large.

It is the first endeavor to dramatize modern milk production, to visualize the scientific as well as the practical side of this important food supply. It is essentially educational in nature; the advertising content is so subtle as not to be obtrusive.

Of so-termed commercial films, Judson has arrived at the firm conclusion that they must have positive entertainment value and audience appeal, and be without open sales solicitation. The cold picturization of factory processes does not suffice.

For this work, he finds the 16mm. medium eminently satisfactory both for lensing and for projection. Portability and efficiency of current projection equipment solve many a problem.

Family Scenarios

Continued from page 28

SCENE 24: CLOSE UP of Mother as she puts piece of cake in mouth, tastes it—and registers vast astonishment. Follow with CLOSE UPS in similar vein of the other partakers of tea.

SCENE 25: CLOSE SHOT. Daughter looks from face to face in surprise and inquires—

TITLE: "What's the matter? Isn't the cake good? . . . Mine is."

SCENE 26: MEDIUM SHOT. Daughter jumping up and scurrying from the scene.

SCENE 27: MEDIUM SHOT. The distressed guests and embarrassed hostess.

SCENE 28: MEDIUM SHOT. Daughter rushes in, bearing her small cake from which one piece has been sliced.

SCENE 29: CLOSE SHOT. Daughter cutting her cake, a piece for each guest, which are handed about.

SCENE 30: CLOSE SHOT. Mother tastes her portion of this small cake. She makes it evident she is wondering why it tastes so different from the previous larger cake slice. Follow with CLOSE UPS in similar vein of the guests tasting and approving the cake.

SCENE 31: CLOSE SHOT. Mother and Daughter. Mother is questioning her young helper as to what might be wrong with her cake. Daughter gives it a modicum of thought. Then her little face lights up with a possible answer She runs out of scene.

SCENE 32: MEDIUM SHOT. The expectant circle of guests.

SCENE 33: MEDIUM SHOT. Daughter comes skipping in merrily. In her hand is the empty salt container. Proudly she hands it to Mother who now has the solution to her puzzle.

SCENE 34: MEDIUM SHOT. Mother shakes her head in patient resignation, mourning the inedible cake. The guests smile knowingly. Daughter takes up her piece of her cake and eats at it proudly.

SCENE 35: CLOSE UP. Daughter's face, a wide happy smile making proper disposition of a tasty piece of cake. FADE OUT.

Making Stars of Amateurs

Continued from page 29

Rehearsols take place on the set chosen for the scene—to acquaint the actor with his new surroundings. A high chair or packing box is moved to various places to represent changing camera set-ups. The whole idea is to make the actor feel at home in relation to the camera, to lose all self-consciousness, camera-fright or nervousness that may be present.

Action is run through—and in our case, dialogue—until a satisfactory performance is attained. This is done scene by scene through the script. The actors can time their movements with relation to others and with the set furnishings. They are also coached as to the direction of their eyes at all times—particularly in regard to avoid looking squarely into the camera.

We give them time to sleep over it, and next day assemble for actual shooting. Actors are fresh physically and mentally, and eager to move through roles they now know so well.

Here is the amazing point. In almost every instance, the first "take" is the best. We run through the action under the lights for the cameraman's benefit and also to refresh the actor's memory as to details. Then we take the scene. There have been times we have made re-takes, three or four of them—in the hope of bettering the scene. But invariably it is the first one we print.

Why? Because the actor goes through his business fresh, with verve and spirit and natural unharnessed spontaneity. He is not bowed down under the burden of acting. But after repeated rehearsing or re-takes, he becomes studiously aware of the effort he is striving to put forth and as a result becomes mechanical and not natural in his movements. Screened images are not so pleasing.

I can heartily recommend this advance-rehearsal method to every amateur producer of photoplays. Particularly with children will you find it productive of fine effects. It requires a bit more time and effort, but results more than repay you for the outlay.

• Burleigh Brooks announces a new all metal enlarging easel. This will be marketed under the trade name of Bee Bee All Metal Enlarging Easel.

As the name indicates it is made entirely of metal and it is the claim of Brooks that this feature eliminates a lot of trouble occasioned by materials that will warp and otherwise not retain their original shape. Inner margins are controlled simultaneously with one lever. It is claimed it is suitable for use with all enlargers.

A JUNIOR SOCIETY

for the Amateur

THE AMERICAN SOCIETY OF CINEMATOGRAPHERS has organized a junior branch of its association for the amateur to be known as the SOCIETY OF AMATEUR CINEMATOGRAPHERS.

FOR MANY YEARS amateurs have been requesting the American Society of Cinematographers to form an organization for them that would be representative, authoritative and instructive.

WHILE IT WOULD be easy to form such an organization in the spirit of enthusiasm that usually accompanies such pleas, but to insure the continuance of such an association it needs real ideals and a constructive policy.

THE APPLICANT must own a camera, he must have made motion pictures, and he must submit a picture to the reviewing board which is made up of members of the American Society of Cinematographers. This does not mean that the amateur is going to be judged by 100% professional standards as practically every member on the reviewing board operates either an 8mm or 16mm camera and is familiar with the shortcomings of the amateur's equipment.

MEMBERSHIP will include a subscription to the "American Cinematographer". It will also include the use of the outstanding films made by members of the Society of Amateur Cinematographers. As films are submitted, the best will be duplicated and an analysis prepared by a member of the American Society of Cinematographers. This analysis will go with the picture and the picture will be available to any member of the Society of Amateur Cinematographers.

WRITE FOR APPLICATION BLANK AND FULL PARTICULARS.

American Society of Cinematographers

6331 Hollywood Boulevard **Hollywood, California**