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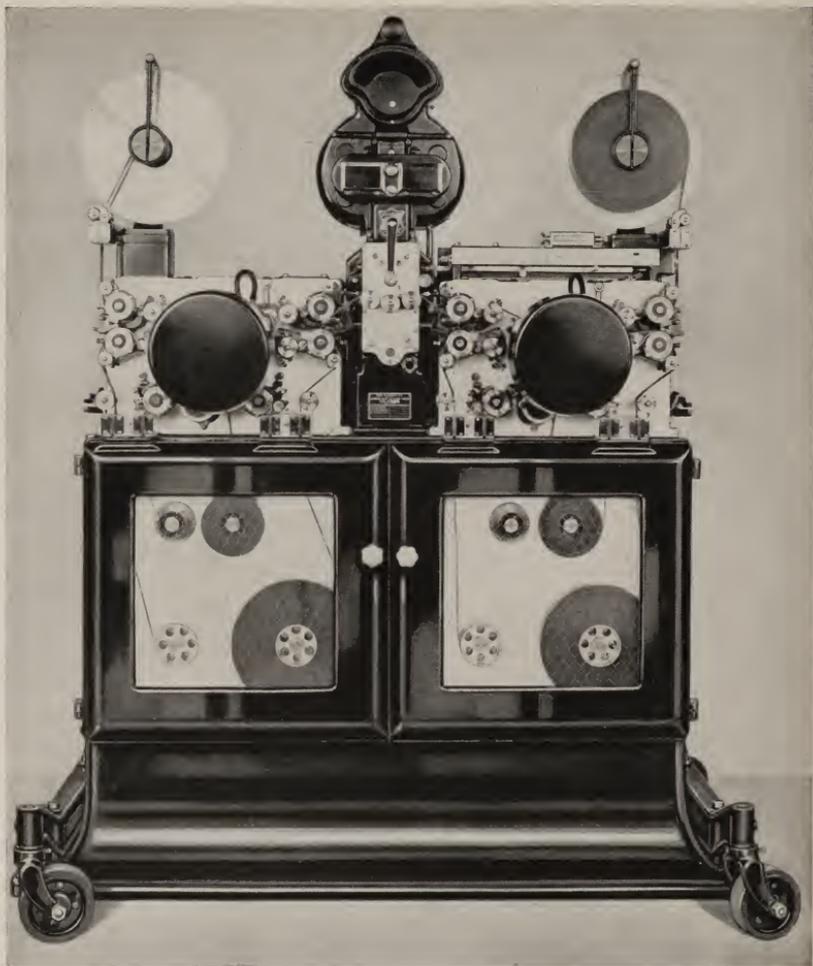
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WHAT SAYS THE MORN?

By George Blaisdell

A WISE DECISION

THERE WILL be strong commendation for M.G.M. because of its final decision to retain in the picture "Saratoga" all of the work in it of the late Jean Harlow, the remaining scenes to be played by Mary Dees, for two years the late player's stand-in. The marked interest of the general public in the work of Miss Harlow is in no way honestly to be ascribed to morbidity. Rather is it due to the same motive that animates a playgoer to attend the farewell performance of an old stage favorite.

Here the performance, while the last work of the player, also was one in which the public never had seen her. It truly will be a farewell, even though an unconscious one on the part of the actress. The decision to intrust the remaining appearances to Miss Dees was a logical one. It may have far-reaching consequences, too. Surely the stage is set for that eventuality.

UNIVERSAL "HAS" SOMETHING

UNIVERSAL is in for a season of moneygetting with its sequel of "Western Front." And while one division of the company will be busy counting the coin that flows from the showings of "The Road Back" several other divisions at least will be entirely occupied trying to keep pace with the controversy that will trail along at the same time.

"The Road Back" has many factors of sterling entertainment. It is stark drama to begin with, a melodrama that grips. It is propaganda, undisguised, not even shielded by the thinnest veil. It is inflammatory, unquestionably, insofar that it will put across its message and bury it deep in the hardest-shelled skull that is permitted to get within range of a screen.

It will give pause even if it does not shake the faith of believers in the necessity for and integrity of the courts. The courts are openly flouted; and so cleverly has the author Remark or the script writer built the story to the point of entrance into the courtroom that lawyers will be the first to acknowledge their whole foundation is under assault. Its release throughout the United States at this moment will make it no easier for

the desperately fighting backers for maintenance of the Supreme Court as it is.

So the picture that Universal has given us will carry a two-edged sword. One edge will cut deeply into the militaristic spirit as the Germany of old knew that evil thing. The other will cut into the court system that departs from the rules—and the practice—of ordinary justice.

There will be plenty of influential persons in the United States who will contract hoarseness of the throat yelling, "Stop it!"

Regardless of how badly the rulers of England may want to condemn the subject it is somewhat doubtful if they try it. What Germany and Italy and possibly Russia will do is hardly in the realm of doubt.

Several things will stand out, however, entirely apart from the controversy. It is a great story, greatly made. James Whale directed. One young man who attained a seat with the best in screen or any other acting

ranks is John King. And he is surrounded by some exceptional talent.

Don't for a moment think you are letting yourself in for an hour and three-quarters of unrelieved tragedy. Tragedy there is, it is true, present in abundance. So also are there lighter moments, not diversion that is dragged in by the heels as too often happens, but developed naturally. "The Road Back" is certain to be a lively candidate for one of the best ten. But go see this great subject—and start your own fights.

ERNEST TORRENCE, ACTOR

AT THE JUNE meeting of the Los Angeles 8mm Club routine business was shooed aside that members and their guests again might look upon "The Covered Wagon." And when at last the show started there followed the almost instantly responsive thrill that seems to be an inescapable accompaniment to gazing upon this really moving picture.

It mattered not that the medium through which the famous old story slipped up behind us, so to speak, and willy nilly took entire possession of our consciousness was a print no longer new and was on 8mm film, thrown on a substandard screen by a projection machine anchored in the aisle of the Bell and Howell auditorium.

Forgotten was the absence of the great screen and the brilliant professional picture we had viewed on other occasions. Present and controlling was the deep thrill that flows along with a great story, peopled with great characters, all of them motivated and dominated by the primal urge of the pioneer.

Torrence Scores Hit

In a lucid moment there came to this reporter a thought of the tragic passing of Emerson Hough, creator of this truly epic, who lived until the completion of the picture but whose death descended upon him before having a chance to see it on the screen.

That was a case with the individual where death itself may not have been the major tragedy—where fame follows after death.

As the story was unfolded on the

Continued on Page 312

What a Mother She Would Make

While a dreamin' and a seemin'
To be ridin' my ole hoss
And a tendin' and a mendin'
All these yearlin's for the boss
I've been pond'rin' while a wand'rin'
Why I'm loco in the coko . . .
But the answer now I know!
There's a lassie, tall and classy,
With a cinch around my heart . . .
And I'm hopin' while a dopin'
How to figger out a start
That this lassie, tall and classy,
Sure will rope me to a stake . . .
Workin', playin', I keep sayin'
What a mother she would make!

* * * * *

There's a lassie, tall and classy,
Who can ride and rope and bake;
There's a lassie, dark and classy,
With a calm no storm can break;
There's a lassie, lithe and classy,
And I'm trailin' in her wake . . .
O this lassie, blithe and classy,
What a mother she would make!

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HESSERCOLOR IS ALL SET TO ENTER STILL MARKET

ONE OF THE major announcements to be made in this year of color progress comes from the Hesserolor Corporation, the technical founder of which is Edwin Bower Hesser. The pronouncement concerns the realm of still pictures and tells of the emergence of the inventor from the field of experiment into that of commercial reality.

The stage of research and experiment has covered many years. In the course of that time a large number of magazine covers and national advertisements in color have come from under his hand. During the past year the process of making negatives and finishing them in color commercially and with fidelity, comparative economy and entire dispatch has been so thoroughly demonstrated to the satisfaction of investors that the corporation comes into the active market with the assurance of abundant financial resources for any possible requirement.

For the purpose of making Hesserolor available throughout the United States and in due course of Canada also the corporation is making a proposal to outstanding photographers in centers that logically will supply and support a demand for the unusual, even unique, quality of photography that is Hesserolor.

Will Form Partnerships

The proposal calls for no investment on the part of the photographer, conceding he has a studio and a good camera and a good lens. He is supplied with the film in a sealed holder, which after exposure is similarly returned to the company's headquarters for developing and printing. On the return of the finished print to the photographer the latter forwards to the corporation a percentage of the stipulated and general fee for the service.

In other words, the company proposes to enter into partnership with those it may believe to be the most skilled photographers in their community.

It is suggested that where possible those photographers with whom alliances may be formed will come to Hollywood in order they may establish more intimate contact with the

Plans Partnership With Photographers of Rank Across the United States

By GEORGE BLAISDELL

comparatively slight deviations from the standard black and white procedure.

Where a personal visit is not practical it is believed the ground reasonably may be covered through comparatively brief instructions on lighting and other factors. Another plan being considered is the creation of a small traveling crew that will make brief visits to places where their presence may be requested.

"Simply described," states the letter that went out to the photographers, "Hesserolor is a patent-protected method of printmaking in color, preferably used in conjunction with negatives made in the Hesserolor manner, but also applicable to any truly correct and absolutely accurate set of four-color separation methods, for this is a four-color process."

No Filters Used

The company has a demonstration studio at 8951 Sunset Boulevard, Hollywood, and invitations have been sent to representative photographers to visit the studio and witness the making of natural color pictures.

"It is not necessary that a photographer should have had color experience," declared Hesser in the course of a talk during the month. "Of course it is obvious he must have normal vision and there be no trace of color blindness—and photographers, like others, have been known to be troubled that way.

"On a Technicolor set a still man may walk in and shoot without any change in lighting or delay in preparation. The light meter should be used as usual. No filters are employed.

"The main thing to remember is this: If the photographer likes the picture on his ground glass he is going to have a picture just like that on his print. He may know that here his negative may be retouchable for

color just the same as in black and white."

Asked as to the time limit on developing and printing following exposure the inventor declared as yet he did not know. Tests have been made on negatives purposely withheld from developing for a period of six months with resulting prints possessing no discoverable diminution in brilliance from the standard established in normal service.

There are exposures now awaiting processing that purposely have been withheld from developing for a period of a year.

Four Centers Eventually

In reply to a question as to what was considered normal service this reporter was told that ordinarily a week was sufficient in which to take full and deliberate care of the developing, proofmaking, retouching and printmaking in color.

In the beginning the center of activities will be Los Angeles, although it is conceded that later there will be stations in New York and Chicago as well. In time it is anticipated it will be necessary to establish a fourth center in Toronto. Each station will be equipped to supply negatives in five varieties, all of them plainly marked.

Asked as to the size of negative preferred it was said by all means for the color work 11 by 14 inches was deemed desirable, although cameras equipped for 8 by 10 inches may be used.

Returning to the subject of time involved between exposure and finished print the inventor said in a majority of instances twenty-four hours would be sufficient if no delaying circumstance attended the routine from start to finish and if the exposure were made near the finishing laboratory.

Speed Where Necessary

Under stress of extreme emergency four hours have served to return a print where exposure was made near the laboratory.

One factor emphasized is that the process is straight negative and posi-

AID OF FOREIGN OFFICIALS VITAL IN RECORDING OF SCREEN STORIES

Bearer of Big Camera Must Satisfy Authorities He Is Straightforward Before He Is Given Entree to Homes

By CHARLES W. HERBERT, A.S.C.

WHETHER YOUR assignment is handling a major studio production unit on a foreign location, filming foreign backgrounds, or, as in my own case, bringing back authentic foreign "stories" for films like "The March of Time," the cooperation of foreign officials is vital to success.

Not so many years ago the mere possession of a professional motion picture camera was an open sesame to almost any foreign country. Officials and private citizens alike were eager to help you make your pictures.

Of late things are different. Instead of being a passport to cooperation, a professional camera is now in most countries a passport to suspicion and hampering official red tape. There is a very definite reason for this.

We Americans regard the movies—including even newsreels—solely as entertainment. Your foreigner, and particularly the official foreigner, in almost every other country in the world sees in the cinema first of all the most powerful means of propaganda that exists; the entertainment factor is purely secondary.

Foreign Officials Sensitive

While strange to us, this is natural enough for practically every important foreign government has one or more agencies devoted to making movies for propaganda purposes. We all know how eagerly the Soviet Government in Russia has seized upon the power of the screen to inculcate its people and the world at large with the Soviet ideal; but we don't often realize that many other Governments, with vastly differing ideals, also have been active in using the screen to implant their ideals in the minds of

their peoples and to carry their story to the world.

After all, they've had a good example before them. We in America set it, quite unintentionally, but none the less effectively.

If you don't believe this, just consider how during the past twenty-five years American cars, American clothes, American informality and American slang have spread all over the world in the wake of American movies.

We didn't intend our films as salesmen or missionaries; we simply filmed our stories in what to us was the natural idiom. But Mr. and Mrs. Average Theatregoer in London, in Milan,



Charles W. Herbert, A. S. C., at home on his ranch in Wyoming.

in Cairo, in Osaka or in Nanking saw it on the screen, liked it, and did their best to imitate what they saw.

Just as in this country you will find thousands of imitation Shirley Temples, abroad you'll find hundreds of thousands of serious men and women imitating the things they see in American movies.

Inevitably, this makes the foreign official intensely conscious of the propaganda value of movies. So they often read into our pictures things we've never thought of. For instance, suppose in one of our pictures we show an Italian eating spaghetti in an amusing way. Our producer uses the scene just because it is amusing. But the Italian, so much more conscious of film-propaganda, reads into the scene a subtle insult to his nation.

Cameraman Suffers

A film like "Shanghai Express" or "Oil for the Lamps of China" introduces Chinese bandits or starving coolies as an element in the fictional plot. We consider them simply as dramatic factors, or as interesting local color. But the educated Chinese feels we've gone out of our way to imply that all Chinese are bandits or coolies. Of course he doesn't like it, especially when there are so many nice things we could show about his country—but don't.

It all sums up to spell trouble for any American cameraman who goes to that country to make movies.

Two other things add to this. Globe-trotting Yankee lensers have penetrated almost everywhere. And they haven't all left the most favorable reputations behind them. On the one hand there is the chap sent out by some big firm and forced to travel on too short a schedule, "covering" China, perhaps, in just the few hours his boat stops in Shanghai or Hong-kong. On the other hand, there is the free-lance drifter, who knows mighty well he won't be back, and whose only interest in the place is to get a sensational "story" that will shock a newsreel editor into buying.

Good Blamed for Bad

In either case, the cameraman puts himself into the hands of the guides who, like so many cultures, swarm around each cruise boat. These fellows thrive on sensationalism. They know it is human nature for the average traveler of any nationality to take an embarrassed pride in being able to whisper confidentially to his friends at home of the terrible, shocking things he saw on his tour.

Naturally, the guide outdoes himself for the cameraman, and shows him shocking scenes of wholesale beatings, opium dens, and all sorts

of viciousness. And the man with the camera recognizes it as a "story"—and films it. The drifter doesn't care about anything more.

The reputable man would like to get something more honestly typical of the place, but that takes time, which is impossible if his superiors have routed him on a Cook's tour schedule. And the camera profession has another black eye, while the next man to make pictures there will have new obstacles in his path.

The only way to overcome these difficulties, and the resulting strict regulations virtually every country has found it necessary to enact, is to take time.

My recent experience in China was illustrative of this. In my own case, there were added difficulties, for shortly before two incidents occurred which made cameramen of any nation officially unpopular. First a man disguised as a cameraman had attempted to assassinate a high official.

Chiang Shoots 16s

Second, following a clash between Chinese civilians and Japanese sailors, a very secret conference had been arranged between Generalissimo Chiang Kai-Shek and the Japanese Ambassador. Due to the extreme tension on both sides, it had been agreed that the press and all photographers be excluded. But two carloads of Japanese photographers "crashed the gate" behind the Japanese Envoy's car—and immediately the two statesmen shook hands in formal greeting, shutters clicked and cameras ground.

It took me more than a month to secure permission to make pictures in China. The only way I finally succeeded was by appealing directly to Generalissimo Chiang himself.

I had brought several "March of Time" stories I had made, to show the sort of pictures I wanted to make in China. Finally I was granted an audience at which to show them to the Generalissimo and his wife.

Before I showed my films they screened a 16mm. reel made on one of their recent trips to another part of China. During the screening of this personal film they sat close together on a divan, chuckling over their screen antics just like any young American married couple. But when my pictures started, they moved to opposite ends of the divan, and studied the screen as intently as might be expected of the virtual rulers of a vast country.

When the screening was over the American-educated Madame Chiang turned and spoke to her husband in Chinese for a minute. Then he spoke to the interpreter, who relayed to me the most welcome words I've ever

heard—that the Chinese Government would give me every cooperation in trying to make equally sincere films of China!

A representative of the powerful Officers' Moral Endeavor Association was assigned to act as my guide, interpreter and friend while I made my pictures. Through his efforts I gained access to things I could never have filmed otherwise—the homes, for instance, of really representative Chinese leaders.

Inside a Fairyland

Without this help I could not have had this privilege. Alone I would probably not have known such places existed, for most Chinese pay little attention to beautifying the street frontage of their homes; I might have passed them by a dozen times, unnoticed.

But inside is an amazing change—here are all the rich furnishings we associate with the home of a wealthy Oriental, and in addition a veritable fairyland which is the garden. Here is the real center of the family's life during the summer months.

Once you have gained access, filming in these surroundings is a joy, not only because of the pictorial beauty and unusualness of the setting, but because of the friendly cooperation given by the owners to one they know is trying to film an honest picture of the real China.

Another part of my story was China's industries. Here again I received a surprise, for China knew of specialized line production long before Henry Ford was born. Only the vari-

ous operations may take place in the homes of a number of families, with only assembly done in the factory.

Chinese craftsmen can copy European or American products with amazing fidelity and speed. Part of my story followed some very up-to-date furniture through its manufacture to its sale in a thoroughly modern Shanghai department store and its use in a modern Chinese home.

The store, as modern as any in America, cooperated to the extent of calling back its entire staff after the usual closing hour so I could make scenes impossible during business hours!

This experience, with similar ones in many other countries, convinces me that if you can only make foreign officials understand that in making pictures you want to help rather than malign their country, you need have no fear of being hampered by any official restrictions.

On the contrary, you will be helped to get pictures no cameraman before you could know about—much less photograph. They will be genuinely representative of the country and interesting to editors and audiences anywhere. And—you will be welcomed when you return for more pictures!

Censorship? Well, in China I solved the problem with a 16mm. camera. I duplicated every 35mm. shot I made in 16mm., which was processed there in China. The Chinese officials saw exactly what I had filmed, while my 35mm. negative was thus able to go back to America for the finest type of professional laboratory treatment.



Charles W. Herbert, A. S. C., (at typewriter), on location in Egypt.

INDIA'S PICTURE MEN FACED BY HANDICAPS

WHEN Bill Deming emerged from U. S. C. he joined up with Thomas H. Ince as radio engineer. In that capacity he installed radio equipment in the producer's yacht and then in the Ince home, so ship could contact shore. From there he went to the Fox lot, and in due course of time sound followed radio. Then Bill went into business for himself, and successfully. He was asked to come to India and make the first sound picture in that country—and did so. That was in 1930. He made others there, for a year and a half. Then he returned home. After another session in production work at the Fox studio he returned to India in 1935 and made a series of six pictures. Recently he signed with General Pictures Corporation as executive producer to make a series of eight pictures and is actively at work on that program.

For seven years one of the hobbies of Bill Deming has been to climb in the air. Now he has a partner, a four-year-old son. When his partner-passenger is aboard the direction to the man whose lap he adorns is simple: "Let's go find a train!"

And so from high in air the very young man delights in watching the trains far below creep over the rails.

By WILFORD DEMING, Jr.

GRADUALLY the United States through the influence of its motion picture productions is breaking down the barriers in India that shut from the screen the great mass of women who in this country would be eligible to appear before the camera.

In America as well as in Europe the women of the screen and stage, too, of course are welcome anywhere. And so, too, may the women from anywhere enter upon work for stage or screen. But seclusion of women is even today a predominant feature of Indian life, which is a regrettable situation from the viewpoint of the Indian film industry, beyond question.

From the outlook of the industry, which naturally is debarred from the benefit of the services of many women of unusual intelligence and capacity and many other qualities that sometimes distinguish the outstanding women players, this feminine situation is a millstone around the neck.

It is my conviction that in due course of time the ban will be lifted and all the women of India left free to take a part in the making of pictures. That American screen is too potent an influence, too powerful an example, especially when its forces are joined with those of Europe.

Who shall say that sooner or later some woman of undeniable position will step out in front and make the issue?

And speaking of handicap there is scant understanding of the number of these that exist—in major dimensions, too.

India a Continent

There is the matter of sound, or the dialogue that has been a major factor ever since sound was injected into the situation. India is a country

of countries, its people enmeshed beneath some two hundred languages and dialects.

The world or Asiatic map we see, on which India is represented by a patch of color corresponding to other British possessions, is seriously misleading. India is more truly a continent, with its five major lingual divisions and the political partitioning involving nearly two hundred independent states.

Today motion pictures in India are being made in three lingual divisions. For the widest distribution, and especially aimed at the Mohammedan masses in the Northwest, Urdu or Hindustani is used. However, while this language is understood approximately by two-thirds of India's three hundred and fifty millions, it is useless in Southern India, where the predominant tongue is Tamil, or in the Northeast, where Bengali is spoken.

Nowhere else in the world do age-old superstition and mysticism walk hand in hand with modern science as is the case today in the Indian film industry.

Even the most enlightened producer would refuse to start a production on an astrologically "unfavorable" day, or without elaborate ceremonies bespangled with potent charms. There will be burning incense, the sprinkling of cast and cameras with red powder, and the breaking of coconuts.

Seclusion of Women

Even though productions may be scheduled far in the future, an astrologer's announcement of a particularly favorable day will find every studio in a scramble to undertake the ceremonies and grind a few feet of film on this magic day, thus sending the picture off to a flying start under the mystic guidance of the stars.

Of interest may be the fact that this faith in the planets is not confined to any one or several of the communities; rather it is shared by all.

The seclusion of women is a particularly serious problem to the Indian film producer, for his only



Wilford (Bill) Deming, Jr. Executive Producer General Pictures.

NEW TOOLS

LABORATORIES are today doing what was long thought impossible. With the aid of Eastman Fine-Grain Duplicating Films they are producing duplicates of such high fidelity that they equal the originals in quality. These special Eastman films are important new tools that will substantially aid the motion picture industry. Eastman Kodak Company, Rochester, N. Y. (J. E. Brulatour, Inc., Distributors, Fort Lee, Chicago, Hollywood.)

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PRECISION LIGHTING

Academy Award Winner Describes New Technique—Use of Spotlights

Abridged from a Paper Presented at the Spring Convention of the Society of Motion Picture Engineers, in Hollywood, May 24, 1937.

By GAETANO GAUDIO, A.S.C.

DURING the past year my attempts to solve the lighting problems created by today's super-speed films and the moving camera technique have evolved a definitely new technique of lighting.

It might be called "precision lighting," for it is achieved almost exclusively with precision lighting tools—spotlights. The general floodlighting equipment which was formerly used to assure a safe exposure level of illumination overall is no longer needed or used. Instead, every detail of both actors and set is lit with light beams projected from spotlights. This makes no difference in the amount of light used, but it makes a tremendous difference in the result on the screen. Every beam can be controlled precisely.

Our normal concept of light is that it comes from above. Outdoors, even on a cloudy day, the light comes from the sky. Indoors, either from windows or lighting fixtures, the illumination comes downward from above. Why, then, should we play light on our sets from any angle but above?

Likewise, in a set where we try to get some separation between players and set by contrasting well-lit players against a darker back wall, if we use front light from units on the floor, the light will not stop after illuminating the player, but will continue onward to disturb the lower keyed lighting of the wall.

Therefore on all of my recent productions, including "Anthony Adverse," I have done my lighting almost entirely with spotlights arranged on the lamprails above the set. Only in rare instances is it necessary to use any lamps on the floor.

Importance of Dimmer

There is another precision lighting tool which plays a big part in my new lighting technique—the dimmer. My electrical crew always keeps from four to half-a-dozen or more small dimmers available on any of my sets. With them I can rebalance my lighting by bringing this unit up or that one

down as the players or the camera moves about the set.

For instance, in "Zola," there is a scene in an artist's studio. The far wall is solid from the floor to about five feet up, from where it consists solely of broad skylights. In real life all of the illumination would come from that skylight, and the wall would be in a heavy shadow.

As I lit the scene a series of spotlights on the lamprail above projected their beams down through the skylight. From the opposite rail I projected just enough diffused light to relieve the shadows from the key light and keep the scene from becoming a silhouette.

This lighting balance was not, however, enough to show up an actor's facial expression if that was important. Here is where the dimmers played with their part. For a good part of the scene Paul Muni played with his back to the camera; then he turned facing the camera to speak an important line. Now my lighting balance was no longer dramatically correct, for while the semi-silhouetted effect reproduced what the eye would naturally see it was dramatically necessary to follow the actor's facial expressions.

Focal Highlight

So I used a small dimmer, connected only to the lamps focused on Muni. Normally, these lamps were dimmed out. As Muni started to turn, the dimmer slowly brings the intensity of those lamps up to the correct level. When he turns away again, the lamps are dimmed once more. Properly synchronized with the move, the change is not noticeable on the screen.

There is a natural focal highlight in every scene. Almost always, this coincides with the center of interest of that scene. The lighting should radiate from this natural focal highlight. There may be, and almost always are secondary principal highlights, but they should be distributed in pleasing relationship to this main center of interest and light.

Creating motion picture lightings

from this viewpoint permits—even compels—the use of more natural lighting effects. For instance, suppose I am seated in a room at a desk. A desk light creates a strong focal highlight where I sit. Farther down the room is a window through which the light from outside creates a secondary highlight area. If I rise from the desk and walk to the window, you would see me pass through the shaded area and then enter the secondary highlight.

Ordinary set lighting technique would either create those two highlight areas and leave a dark, almost opaque shadow between them, or illuminate the whole room uniformly, making little or no distinction between the highlight areas and the naturally shaded areas.

Lit as I have been trying to light my scenes this past year, the shadow areas would be carefully lit with spotlight beams so that the illumination gradually fell off as I left the main highlight area and then increased again as I approached the second highlight area.

Lighting as in Life

The audience would be aware that I had left the sphere of one logical light source and moved into the influence of another. I would not be unnaturally illuminated as I crossed the room, but neither would I vanish into a pitch-black shadow.

If when I stood by either of these principal light centers the lighting which produced the effect when I was not there should not produce the desired modeling of my form when I was in that position, additional spot-lighting units could be brought up with dimmers when I approached, and dimmed again when I left.

The same technique is just as good if the camera were dollyed across the room with me. In fact, I think it would enhance the impression of actually moving with a player. You do not, if walking through a room with a person, expect to see him always perfectly illuminated as you move from the region of one light source to that of another. Why should we try to make our lighting of dolly shots absolutely uniform on the screen?

Personally I try to simulate the natural effect in lighting my dolly shots, letting the players walk through shadow-areas from one logical highlight source to another. I try, of course, to have the highlight points coincide with the dramatically important parts of the action and especially with places the characters stop for any length of time.

The scene in "White Angels" in which Kay Francis walks through the

Continued on Page 288

Composition



Off-stage shot during the filming of Selznick International's Technicolor production, "A Star is Born," co-starring Janet Gaynor and Fredric March.

Story by

WILLIAM A. WELLMAN
and
ROBERT CARSON
DAVID O. SELZNICK
Producer

WILLIAM A. WELLMAN
Director

HOWARD GREENE
Photographer

W. OETTEL
Studio Chief Electrician

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The art of composition has been an important factor contributing to the high standards which motion picture production has attained. This art includes careful consideration of lighting as one of its most important features. The studied attention given to light composition is evident in the outstanding pictures of the year.

The Carbon Arc lends itself perfectly to all requirements of motion picture production, as in this outdoor setting from "A Star is Born," taken on a beautiful Beverly Hills estate. Carbon arcs provide illumination surpassing sunlight in brilliancy yet blending perfectly in color quality. This daylight quality assures full range of gradation and pleasing softness without flatness or loss of realistic modeling.

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TELEVISION OF TODAY HAS LONG ROAD TO GO

Picture Small, Cost High, Show
Poor and Patronage Meagre, Says
Scientific Committee of Academy

IN short, the picture is small, the cost high, the show poor and the patronage meager. That is the summing up of television today from the viewpoint of the motion picture producing industry as declared by the Research Council of the Academy of Motion Picture Arts and Sciences.

The report is signed by members of the Scientific Committee, composed of Carl Dreher, chairman; Gordon Chambers, L. E. Clark, J. G. Frayne, Berton Kreuzer, Wesley C. Miller, Hollis Moysé and William Mueller.

Here is the interesting document:

THE Research Council's first report on the status of television was released on May 15, 1936. This, the second announcement on the subject, is therefore a review of a full year's progress in this field.

The members of the reporting committee are too well aware of both the potentialities and uncertainties of technological research to claim infallibility for such predictions as their task entails. It happens, however, that only one of the forecasts contained in the 1936 report requires, as yet, any essential modification.

In every other particular the 1936 report is as valid now as when it was issued.

To quote from that report it is still improbable that television will burst on an unprepared motion picture industry. Many millions of dollars must be invested before nationwide urban exploitation of television becomes possible in the United States. The start of such a development, forecast for 1937-8, is confirmed. Television service for rural areas is still beyond the calculable future.

What England Has Done

The one change to which we would call attention is that recent improvements in the design of electronic projection devices give promise of a considerable enlargement of television screen areas, the realization of which would vastly accelerate the evolution of television as a practical art.

It is legitimately claimed for the transmissions inaugurated from the Alexandria Palace in London, Nov. 2, 1936, that they constitute the first and

only existing public television service. For this achievement the British Broadcasting Company, the Marconi-Electrical Musical Industries, the receiver manufacturers, and the other governmental and private interests involved deserve the credit due to pioneers in a difficult field.

Looked at realistically, however, theirs is still an experiment, as is any enterprise in which more problems are raised than solved. The accomplishments may be summed up as follows:

1. Regular transmissions for two hours a day over a period of seven months, using an all-electronic system with 405 lines and 50 pictures a second, interlaced.

2. The sale of not over 1000 television receivers in a highly populous area within, roughly, a sixty-mile radius from the transmitter.

3. The development of technique and operating organization, including multi-camera pick-up, studio procedure, special effects, training of personnel, accumulation of engineering data, etc.

4. As a special event, the televising of the coronation procession, under adverse weather conditions, to some thousands of viewers.

The Cloudy Side

Our British correspondents agree, however, on the following adverse conclusions:

1. The received pictures, which are of the order of 7½ by 10 inches, are too small to afford more than scant entertainment value, even if other technical difficulties, such as a

consistent lack of definition in the longer shots, are overcome in due course.

2. The cost of the receivers, 60 and 80 pounds (\$278.70 and \$371.60), makes television a toy of the well-to-do.

3. The theatrical content of the video broadcasts has rarely risen above the level of mediocrity.

In short, the picture is small, the cost high, the show poor, and the patronage meager. Even allowing for the success of the coronation visual broadcast we have to date an entertainment tour de force rather than a spontaneous growth in answer to a genuine public demand.

As for the economic question it is no nearer solution than when the experiment was inaugurated. It is argued that, if larger governmental subsidies can be secured, better shows will become available, and eventually widespread public interest and participation can be enlisted. Perhaps so.

As Uncle Sam Sees It

In the United States a few thousand radio amateurs listened to the Highbridge audio broadcasts in 1916; a few years later the number of broadcast listeners had risen into the millions.

In the case of British television it is too early to draw conclusions. At the moment one can only say that such an efflorescence is a hope rather than an early probability. By the end of the year there should be signs of a healthy impetus from within, or the enterprise will begin to have the appearance of that languishing type which needs interminable injections of outside aid.

In the United States the active television interests have accepted the Radio Manufacturers' Association standard of 441 lines, a frame frequency of 30 pictures a second, a field frequency of 60 pictures a second, interlaced, and an aspect ratio of 4:3, the same as in motion pictures.

These are the present characteristics of the test transmissions by the

SHOT DURING THE FILMING OF SELZNICK INTERNATIONAL'S NEW PRODUCTION
"THE PRISONER OF ZENDA". . . . featuring Ronald Colman and Madeleine Carroll



FOR LIGHTING IN CLOSE QUARTERS . . . NOTHING BETTER THAN G-E MAZDA LAMPS

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GENERAL  ELECTRIC
MAZDA LAMPS

REEVES COMBINES LIGHT TESTER AND SENSITOMETER, TOO

WITHIN the past month Art Reeves, maker of recording and laboratory equipment, has announced a combination sensitometer and light tester known as the Reeves Sensitester. Designed primarily as a really accurate light test machine, the new device has been found sufficiently accurate to serve the purpose of a dependable, practical sensitometer as well. In the final design now in production this phase has been developed to the point where, under test, the machine has been found to match closely the results had with standard sensitometers.

Both the sensitometer and the more familiar light tester work to a similar end: the making of a graduated series of exposures on a strip of sensitive material, the graduations running from a known minimum by fixed steps to a known maximum.

In a light tester these exposure steps are proportioned to correspond to the printing light settings of the printer to be used in printing from the negative being tested. In the sensitometer the steps increase by a fixed geometric progression. In this case inaccuracies which would be negligible in a light tester can become intolerably large.

Most sensitometers are of what is termed the "time scale" type, in which the exposing light is constant, but is allowed to act for varying intervals on the film. Fluctuations in the current supply of either the light source or the exposing mechanism can introduce great variations in the accuracy of such time scale sensitometers.

Simple Principles

Accordingly elaborate precautions are taken to assure uniformity in light and timing. It has been agreed by the leading experts that an "intensity scale" sensitometer, in which all steps received the same exposure time, but different intensities of light, would be ideal, but no consistent method of metering the light seemed practically available.

The Reeves light tester,

however, worked upon a very simple principle, or pair of principles, in achieving this end. It metered the light through a series of diaphragms and controlled the time by the counterweighted pendulum of the metronome—two almost ideally consistent principles. From this start it was natural to develop a light tester sufficiently accurate to serve also as a sensitometer. The new sensitometer is the result.

When used as a film light tester the negative to be tested is threaded across the machine from one rewind to another. The positive film upon which the light test is to be printed is

threaded from an inclosed feed magazine, over a sprocket and under a pressure pad or platen, past another sprocket and into an inclosed take-up magazine.

When making a test the horizontal bar extending across the front of the machine is depressed. This lowers the platen and magazine assembly, bringing the two films into contact across the exposure plane. At this moment the exposure is made. As the control bar is raised the exposed section of film is automatically wound into the take-up magazine and a fresh section of film brought into place.

Timing Controlled

The exposing light is metered through a series of adjustable diaphragms which may be pre-set to match the characteristics of any printer. This gives 11 graduated exposure steps corresponding to printer lights 1 to 21. In addition, the machine also prints the marginal footage number, eliminating any chance for confusion of similar takes.

The timing of the exposure is controlled by an adaptation of the metronome's counterweighted pendulum principle. As the position of the counterweight is adjustable, the timing of the pendulum's swing—and hence the exposure—is adjustable.

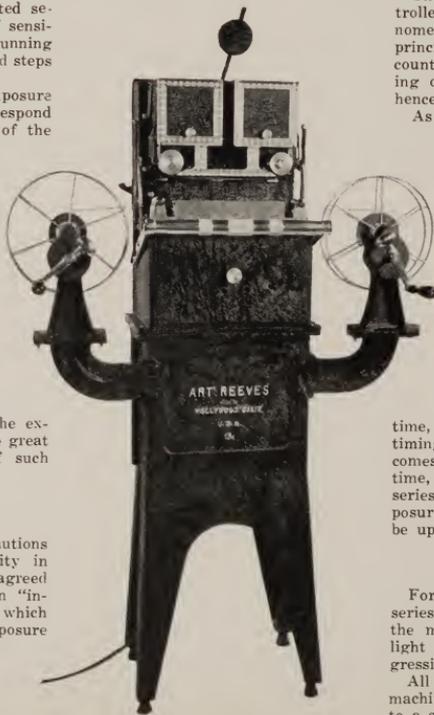
As the platen is brought down the metronome arm is released. As it starts its swing it switches on the exposing light. As it finishes its swing it switches off the light and is itself locked in place, ready for the next test.

Combining these two principles of proved accuracy makes it possible to utilize the same machine as an accurate sensitometer. Since the unvarying metronome pendulum times the exposure, and all the exposure steps are made at the same time, no outside factor can alter this timing. Since the light for all steps comes from a common source at one time, and is metered through a fixed series of diaphragms, the relative exposures of the various steps cannot be upset.

Doubling Up

For this purpose, a supplementary series of fixed diaphragms is built into the machine. Each of them admits light in a fixed, logarithmically progressing ratio.

All that is necessary to convert the machine from use as a light tester into a sensitometer is to pull a control



Artreeves Sensitester

KRUSE BUILDS RENTAL CRANE

Henry Kruse is showing at his camera rental plant at 103 North Cahuenga, Hollywood, his new camera crane just completed by the Studio Equipment Company. The machine weighs two and a half tons. By employing counterweights placed at the hand of the operator it is possible to move the boom as desired with a minimum of effort.

Chairs are provided for two at the camera mount. When the boom is extended the camera lens is 15 feet from the floor. At this elevation the crane may be turned completely around. Over all the crane is 19 feet. Its width is 5½ feet, and its height, with horizontal boom, is 7½ feet. The length of the boom from its axis is 12 feet. The crane may be steered either front or rear.



Kruse Camera Rental Crane designed to "fit in" between the lesser and greater machines now in use in Hollywood. Camera has sweep of from 3 feet elevation to 15 feet above the floor. Showing camera at lowest point of operation.

PHILIPPINE THEATRES GAIN

During the first quarter of 1937 there were 223 motion picture theatres licensed to operate in the Philippine Islands, an increase of 10 percent compared with the number licensed during the first quarter of 1936, according to American Trade Commissioner J. Bartlett Richards, Manila, in a report to the Department of Commerce.

Nine theaters operated by the American Army and Navy hospitals and post exchanges which do not require licenses are not included, it was stated.

Theatres in the Philippines appear to have done considerably better in 1936 than in 1935 due to more prosperous conditions throughout the islands. All of the distributors appear to have had improved royalties and prospects for the year 1937 appear to be fairly good, according to the report.

FILM SCHOOL IN BRAZIL

Trade Commissioner J. Winsor Ives, at Rio de Janeiro, reports in connection with "Motion Picture Month," which is now being celebrated in Brazil, the Associação Cinematográfica de Produtores Brasileiros (Cinematographic Association of Brazilian Producers) has announced the establishment of a motion picture school.

The purpose of the school, which will have its headquarters in Rio de Janeiro, is to locate new talent for casting in domestic productions. Aspirants for parts in these productions

have been invited to register at the school, which will maintain a file of all applicants for the use of members of the association in selecting talent. Each individual application is to be accompanied by a photograph of the person registering.



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HESSERCOLOR IS ALL SET TO ENTER STILL MARKET

Continued from Page 273

tive, and that a hundred positives may be taken if deemed necessary.

An instance was cited where a photograph designed for a magazine cover was exposed at 10 o'clock in the forenoon and in the afternoon a print was on the way east by air.

The attention of the reporter was called to a commercial photograph framed on the wall. It was one of remarkably fidelity to its original still-life subjects. The exposure had been made at 11 o'clock in the morning. The print was completed the morning following. The inventor chuckled at this point.

"And the next morning I got the check," he went on. "Since then I have been told the 24-sheet for which

this served as the copy had turned out most successfully."

The reporter suggested to the inventor the feasibility of taking his color camera into the major art galleries and reproducing the works of the masters, ancient and modern.

There was a twinkle in Hesser's eyes. He took his visitor by the arm and led him toward a good-sized painting of Will Rogers, rugged, characteristic, and attired in the garb of the outdoors.

"Take a good look at it," he suggested. The reporter did just that. The inventor then led his visitor toward an 11 by 14 reproduction of the painting, striking in its faithfulness.

"That's the answer," was the inquirer's comment.

Hesser spoke of the rapid increase in the use of color on newspapers and on magazine covers. He told of demonstrations he recently had seen in the East, indicating not only great progress in the field of reproduction but also in that of lowered costs and making possible the wider use of color in printing.

Wide Adaptability

In the motion picture industry the possibilities of the use of stills in color were unbanded, declared the inventor. Skilled cameramen, following a production from the beginning of its filming, under the spell of a good story would shoot scenes at their dramatic height, and bringing into the picture all the intensity of the moment and the charm of person and background. As lobby displays the value of these later on would be incalculable.

The reporter was given an opportunity of seeing two close-up head portrait exposures made. There seemed to be no difference between the routine followed and that of the orthodox black and white preliminaries. Standing behind the ground glass there was a chance to watch the photographer as quickly and with entire facility he shifted angle and distance until the features of the model were in perfect focus and also framed within the two perpendicular boundary lines that indicated when the subject was properly centered.

Without Makeup

Once that point was reached it was a matter of but a moment to insert the holder in the camera, press the button and send the negative on its way to the developer.

We cannot leave this story without reference to the quality of possibly fifty prints we studied and admired in the Hesser color studio. Two of the most attractive were of young matrons who stepped before the camera without benefit—or handicapped by if you be old fashioned—of make-up. Purposely we aim to underwrite this paragraph, leaving the forming of a true estimate of it to those who at some time in the future may be so fortunate as personally to view the collection.

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CHEMISTRY'S WORK TOLD BY MORRISON

"Man in a Chemical World," by A. Cressy Morrison, has just been published by Charles Scribner's Sons of New York and London. The publication, which is of 285 pages and index, is an outgrowth of the remarkable celebration in 1935 of the three hundredth anniversary of the birth of chemical industry in the United States. It is a review that is designed to show the great contribution of chemical industry to the welfare of every human being.

The responsibility for the preparation of such a book was placed upon the executive committee of the American Chemical Industries Tercentenary and by that body in turn upon the author.

In a foreword by Arthur W. Hixson of Columbia University, general chairman of the committee, it is set forth the book is intended to be educational, from the cultural as well as the utilitarian points of view, and its object is to impress the man in the street with the fact that the chemical industries of the United States render a service that touches practically every activity in which he engages.

The chairman goes further in declaring the main purpose of the book is to awaken him to the realization that he is utterly dependent upon these industries not only for the necessities and luxuries of life but also for his very existence.

"Indeed, it is not an overstatement," declares the author, "to say that practically every one of this country's forty-odd million employed persons owes his job to chemical industry!"

Under the caption of "Center of Modern Life" seventeen representative industries are enumerated in an illuminated round robin. These are electricity, agriculture, building, paper, cosmetics and detergents, transportation, paint, textiles, refrigerating and conditioning, photography, leather, drugs and medicinals, petroleum, rubber, mining, glass and ceramics and molded products.

Packed as is the book with information not ordinarily available to the man in the street it is of decided interest.

Rotary Protects in Water Scenes

THE PROBLEM caused by water striking camera lenses when making rain or sea sequences is solved by a new rotary windshield developed under the direction of John Arnold, A.S.C., at the MGM studio. The device consists of a disc of optical glass mounted between the camera's lens and matte box. This disc is revolved at high speed (500 rpm.) by a separate electric motor, thus immediately throwing off any water or spray falling on the glass.

A pair of auxiliary squeegees are provided, but do not appear to be actually needed, since the high-speed rotation has in tests proved sufficient to insure blurless pictures even with a two inch stream of water playing constantly on the disc. The device was used extensively on "Captains Courageous," and has seen service since on several rain and water sequences.



Rainshield protects lenses during filming of water scenes. John Arnold A.S.C. at Camera.

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A. S. C. ON PARADE

● Victor Milner, A.S.C., and vice president of the society, was chairman of the A.S.C.'s third monthly stag party Monday evening, June 28. The guest speaker of the evening was Cecil B. DeMille. Then there were Ben Blue and his Stooges to finish what C. B. started.

● Archie Stout, A.S.C., recently placed under a term contract by Goldwyn, has been shooting at Catalina on "The Hurricane." Many of the

scenes have been taken on and around a Samoan schooner.

● Hal Mohr, A.S.C., has been placed under contract by Walter Wanger with a stipulation that part of the contract will be as a director. Hal will supervise the camera work on "I Met My Love Again," and following that will be assigned a story for direction.

● James Wong Howe, A.S.C., has

been named by Selznick-International to photograph "Adventures of Tom Sawyer."

● Louis A. (Charley) Bonn, A.S.C., has been honored by being made a Fellow of the Royal Photographic Society of Great Britain.

● Gilbert Warrenton, A.S.C., is home after a ten weeks' baking at Uncle Sam's navy station at Pago Pago, where he took many scenes for Monogram's "Paradise Isle." Though he shared the island with Archie J. Stout, A.S.C., and Paul Eagler, A.S.C., he saw little of them—while in the islands. The return was on the same boat, however. While Gil was away he purchased a 16-foot outrigger as a present for his two sons, fifteen and seven years old, who will find plenty of use for it during the summer at the ranch at Carlsbad, Calif. There was some fun during the stay at the island, and among other festivities was the party at which Gil was named lalanui, or high chief.

Taking effect immediately, Gil has been signed by Monogram to a term contract. Somehow or other, there seems to be some connection between the tangents on this story: He goes away, does his stuff, comes home—and finds a job waiting.

● Frank Good, A.S.C., with a camera crew of twelve, has sailed for Ketchikan, Alaska, where he will take scenes for Paramount's "Spawn of the North." Among these sequences will be the salmon run. The crew will be away six weeks. On its return a company of 200 will proceed to Lake Tahoe for the big show.

● Bert Glennon, A.S.C., sartorial tops on any stage he is called upon to brighten, to bring out the best in those who people it, unwittingly caused the boys extreme concern the other day on the set where Goldwyn's "Hurricane" was being fabricated. Arrayed in spotless and creamy trousers creased up and down to the last available pica, with shoes whiter of the white, shirt much more ditto



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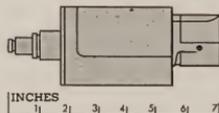
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and adorned and enhanced by scarf not only immaculate but turned to the last thousandth of an inch in such manner as clearly to demonstrate how deeply rare genius may submerge plain craftsmanship.

Over this symphony with an ease of which none could be unconscious rested a sport coat—aw, but why all the language? "If Bert wears it it must be good."

In vain the boys waited for Bert to seek shelter or take protection from the storm and the mud that seemed to be everywhere—or at least to make a change of clothing. But it was no go.

The storm raged, yet Bert did exactly what all good sailors do under like circumstances. He just let it rage.

On a near-by set Gregg Toland, A.S.C., presided over the making of a scene for "Dead End." He was in sport shirt and in garb generally that looked not quite like the real McCoy when encountered on the Boardwalk, if you get what we mean. But strangely enough where his brother cameraman faultlessly arrayed was struggling through gales fit to pack hell a mile and then some Gregg in working clothes was looking across one of the most beautiful and rarely peaceful scenes you would find in a week's hunt among the theaters.

But isn't that the way it goes? One likes 'em one way and t'other another.

• Harry Fischbeck, A.S.C. will for quite some weeks be equipped with one less alibi when accounting for his non-appearance at the monthly get-together of the A.S.C. Mrs. Fischbeck is on her way to the Orient, all set to add to the film lustre of the family. With her she carried a Filmo and oodles of Kodachrome between which she intends to do plenty of real stuff.

Council Makes Changes

THE Research Council of the Academy of Motion Picture Arts and Sciences has mailed 19,000 copies (one to every motion picture theatre

in the United States and Canada) of a Technical Bulletin outlining the changes in adjustment of the theatre reproducing equipment necessary in order to adopt the new Research Council standard electrical characteristics for two way reproducing systems in theatres.

This new standard electrical characteristic, which is one of the most important and far reaching technical standardizations since the adoption of the standard Academy aperture in 1931, will permit the theatre to obtain the advantage of the latest studio sound recording practice and will result in a more uniform sound quality from all producing companies in all theatres.

This standard, which was adopted

by the Research Council upon the recommendation of the Council's committee on standardization of theatre sound projection equipment characteristics, under the chairmanship of John Hilliard of Metro-Goldwyn-Mayer studios, evolved as a result of a great variety of sound tests made in a large number of theatres.

As a preliminary step in their investigation leading to the adoption of this Standard, the committee prepared a test reel, containing a 250-foot section of release print from each studio, so chosen that the assembled test reel contained representative examples of both dialogue and music recordings made under average as well as extreme conditions by each studio sound department.

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PRECISION LIGHTING

Continued from Page 278

hospital wards ministering to the wounded was lit this way, with the lighting on her at each stopping point controlled by dimmers.

It will be seen that this type of lighting must be very closely interlocked with composition. That is as it should be, for composition is really more than a mere geometrical arrangement of lines, masses and objects. Composition should properly be a part of lighting, and lighting a part of composition. The best composition can be ruined by wrong lighting, while a technically perfect lighting can be bad if it is not coordinated with the composition.

The technique I have described does not require either more angles of illumination or more lighting units than the conventional general-lighting technique. It permits the use of lower light-levels. It enables one to take more complete advantage of today's film, lenses and lamps. It greatly simplifies the lighting of moving-camera shots. And the results on the screen are both more artistic and more natural.

REEVES COMBINES

Continued from Page 282

button which replaces the variable light tester diaphragm assembly with a fixed set of sensitometric diaphragms.

The resulting sensitometric strip has but half as many gradational steps as do those made on a standard sensitometer, but these steps have been made to match identically the alternate steps on standard sensitometric strips. For the practical purposes of the average laboratory they should serve as well as standard types.

It is obvious that since the gamma is a function primarily of the straight line portion of the H. & D. curve, which may be plotted equally well from less closely spaced points, that gamma may be determined with equal facility from these more simple strips.

This has been proved in both tests as fully as they might, largely because since they have no sensitometer available in their own plant it is inconvenient to make the frequent processing and measurement of sensitometric strips a part of routine.

The practical value of a dual purpose machine of this type can hardly be overstated. Despite the excellent service rendered by the film manufacturers in making sensitometric strips for laboratories there are many plants too remotely located to make use of this service, and consequently forced to forego the aid of sensitometric control.

Moreover, many even of the more centrally situated major laboratories do not utilize sensitometric safeguards



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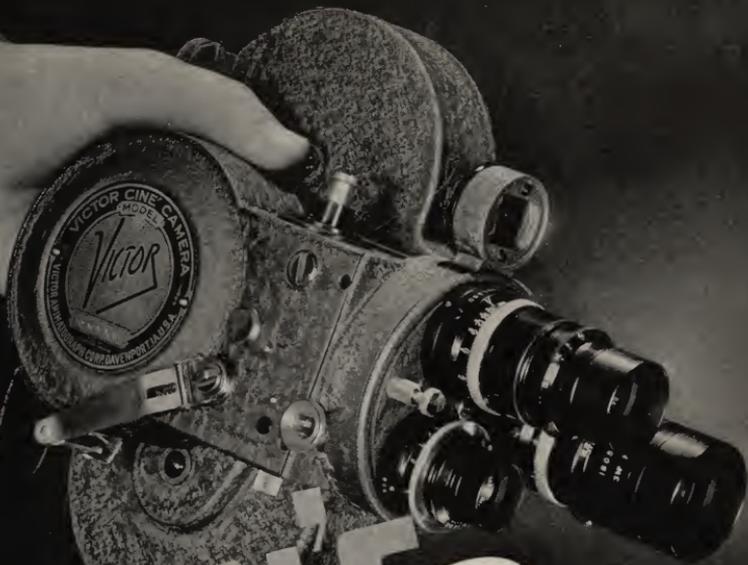
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NOTABLE HONORS FOR AMATEUR PRODUCTION

IN ITS APRIL issue The American Cinematographer told the story of two amateur photographers who in carefree fashion said good-bye to friends in Los Angeles and Chicago and set forth into the Dark Continent on holiday bent. They went equipped to take motion pictures if they saw anything they considered worthy of the 35mm. film with which they were stocked.

It was a new medium to them, their previous experience having been with the 16 size.

Naturally there hardly could have been a thought of capturing anything that by any possibility could be rated as professional entertainment. Very likely an interrogation at Lloyd's might have resulted in information there was not a chance in a hundred thousand such a thing would happen.

Public Loves Novelty

So when last March the editor of the American Cinematographer was privileged to be the first news writer to get a peek at "African Holiday" and following the viewing made his typewriter say daringly complimentary things about the picture shot by Mr. and Mrs. Harry C. Pearson in Africa he did not need to be told he was taking a long chance.

But he also knew as a result of a few contacts with the man in the street across a period of a quarter century in or maybe near the picture business that the public dearly loves a novelty. It loves the feeling of security in the sincerity of its entertainers—and it will walk a mile any time to sit out in front of a show that can measure up to that qualification. And the patience of the public has been somewhat ruffled at times by the vagaries of shows that some one said had come from Africa.

"The screened result will bring a thrill of pride to amateur cinematographers throughout the world," wrote this magazine's editor after that initial showing. "To the regular followers of the screen as well as to the millions of just casual customers and even the non-cinematographers the picture will possess rare interest.

"It will stand on its own merit in any dual program into which an exhibitor may choose to shove it—with an excellent opportunity, in showman's parlance, of 'hogging the show.'"

"African Holiday" Now in Fourth Week in N. Y. Theatre—Press Gives to Pearsons Hearty Praise

But let's skip that ancient history. In the last month "African Holiday" has been going places. A contract has been signed with the Pacific Geographic Society whereby that organization secures the west coast premier of the picture for two performances, Civic Auditorium in Pasadena October 19 and Shrine Auditorium in Los Angeles October 21.

Follow Other Expeditions

It may be interesting to amateur cinematographers to note what Margaret Hughes, manager of the Pacific Geographic Society, wrote to the Pearsons that those of them who had seen the subject were of the opinion it is one of the finest things that has come to the field of exploration through a camera.

"We will follow with great interest," she went on, "your subsequent expeditions, confident that visual education has acquired two extremely skillful technicians with the flair for showmanship, human interest and scientific information splendidly balanced."

By the way, "African Holiday" is now in its fourth week at the Filmmarte Theatre in West Fifty-eighth street, New York.

Amateurs undoubtedly will find interest in following the opinions of the hard-boiled screen critics of the New York press. B. R. Crisler in the New York Times declared: "The scenes develop that shimmering pictorial beauty and enchantment, compounded of terror, disgust and fascination, which have been associated with Africa for so long that the very word has become a poetic evocation. You don't have to be either a zoologist or a big game hunter to appreciate and enjoy a vicarious experience like 'African Holiday' . . . a show in any language."

The New York Daily News declared that while the Pearson picture has no continuity, no faked romances and no stuffed boa-constrictors, "it is the real thing, sometimes beautiful, some-

times startling, sometimes revolting, yet always interesting."

The Herald-Tribune declared the "inescapable feel of Africa sifts through the screen."

Impresses With Sincerity

At this point it may have interest to quote the New York Film Daily, daddy of the daily film trade papers. These are the ten-minute eggs which as a rule give no quarter to any new comer. But let's listen to the Film daily:

"Here is a jungle film that has not a single hoke scene in its length and impresses with the sincerity of the entire adventure. The editing job is very fine, and the entire trip is presented with smoothness and a fine contrast of thrill scenes with more subdued views. The scenic shots are very unusual."

In Los Angeles Edwin Schallert praised the picture in the Times, saying it would fascinate audiences. And on the air Elza Schallert over a nation-wide hook-up advised her hearers to go and see the picture, adding that the Pearsons "are now definitely established as outstanding motion picture impresarios."

Honored by Museum

So it would seem that when The Cinematographer declared "African Holiday" was "there" it not only uttered what has been also uttered by all others who have had the opportunity to say it but said it first.

Speaking about saying it first this magazine suggested in its article the picture was a theatrical—i.e., a professional—film. Robert Garland, in The New York Sunday American under an eight column banner, declared:

"'African Holiday' is as professional a job of cinematography as anything Hollywood has turned out so far. . . . The subject takes its place as one of the outstanding travelopege picturizations of the year."

And on the day we go to press word comes from New York the trustees of the American Museum of Natural History have elected Mr. Pearson a life member of that great institution. The action was taken in recognition of his work on "African Holiday" and of his gift to the museum of a positive print of the film and of the naming of the body eventually as custodian of the negative.

AMATEUR-PRO OR PRO-AMATEUR IS KENNETH FORBES

OUT AMONG the hills at the foot of towering Mount San Antonio, two score or more miles from Hollywood, Kenneth Forbes, amateur photographer, lives on the Loma Vista Rancho. That is, he may be an amateur in a manner of speaking. He was once an amateur, anyway. The appellation is subject to discount, however, since he was chosen to photograph the finish of the horse races at the Santa Anita track. That he has been doing for a couple of years.

It is a responsible job, as it is certain to be when the finish of any race may be marked by a situation where upon the proper and mutual functioning of photographer and equipment depends the satisfactory disbursement of huge sums of money—probably running into a half-dozen figures at least.

This race timing camera was especially made by Eastman for the specific purpose to which it is adapted. The cameras and developing equipment are high speed in every sense of the word. Cameras operate at seven times normal speed and the enlarged print is finished and delivered to the race stewards in three minutes. Lenses used are four inch telephotos with aperture speeds of *f* 2.7 and *f* 1.6. The film used is a special hyper-sensitized emulsion on 16 mm. base. About twenty-five feet of film are exposed in the recording of each finish. Of this length somewhere between eight and twelve feet are exposed on the actual finish.

Many Title Outfits

Forbes' first efforts with the camera were inspired by his wish to make a photographic record of his children as they grew up. With that as a beginning, in 1928, he has steadily expanded his plant until now he has a complete laboratory for developing and printing 16mm film and for developing, printing and enlarging stills.

There is one of the most elaborate titling outfits perhaps to be found anywhere. The photographer admits

many of these as he has found them are far from desirable. In any event, he admits, he has been a good customer for the manufacturers.

A studio building of early California design holds the projection room and laboratory. There is an ample water supply and there are abundant facilities to handle 100 feet of 16mm film at a time.

Built out from the wall is a good-sized concrete film vault. Seemingly there are hundreds of subjects stored here. No attempt was made by the visitor to count them. Every can was labeled with its title. Some were reductions of professional performances, but the majority were of the rancher's own creation.

A measure of his skill was demonstrated to the members of the Los Angeles 16mm Club at the organization's June meeting. The subject was taken from a small motorboat moving swiftly over the surface of the artificial lake created at Boulder Dam. The showing was heartily applauded.

Suggestions on the part of the photographer that the screened result of his work be criticised failed to develop a single yip on the part of the members. Nor did insistence on criticism make any difference. Unanimous decision on the part of a full house to maintain silence proved the picture was okeh with each individual.

One series of pictures being created in which our rancher-photographer is keenly interested is exposed in India. Carl Lawrence, a coworker in the Forbes laboratory, is the son of an East Indian missionary, due in a year or two to retire from his post and return to his old home.

Theatre Affiliation

The father has an affection for the land in which he has lived for so many years and for the people in it. He has been anxious to possess a filmed

When Not Shooting Horse Racing Finish or 16mm Camera or Managing a Theatre He Runs a Ranch

record of the home life and customs of those among whom he has worked so long. With that aim he has exposed many rolls of film which are being edited and titled in this laboratory in the shadow of Old Baldy.

One of the greatest interests in Forbes' life is his affiliation with the Padua Institute, a California non-profit educational corporation which among other things controls and operates the Padua Hills Theatre. The guiding spirit of the institution is Mrs. Bess A. Garner, member of an old Claremont family. It had been created for community purposes some time previously, but due to the pressure of the times had not succeeded. It consisted of a theatre seating some 300 persons, restaurant, stores and other buildings and ample parking space.

One object nearest to Mrs. Garner's heart is the preservation for the benefit of generations to come of the folklore and customs of old Mexico. With the entrance into Mexico of the motion picture had come with it modern customs. With the passing of the older generation were passing also the old songs and dances and community festivals.

Under Mrs. Garner's sponsorship and with the benefit of every assistance that could be granted by the Mexican authorities Kenneth Forbes went into Mexico with his still and movie cameras. He made a photographic record of the country and its people, of the homes in which the people lived and their churches and public buildings.

Stock Company of Youth

To the number of 500 he made still pictures of the people and their costumes—in every-day and in festive garb. He took shots of nooks and corners of the highways and byways that might be needed as a guide in

the creation of stage sets. For behind all these travels of nine thousand miles over the deserts and mountains of Mexico was another step in preparation for a secondary but also major project of Mrs. Garner.

That was the creation of the Mexican Players of the Padua Hills Theatre. It meant the organization of a stock company of young Mexicans, boys and girls, of an average age of perhaps twenty years and of a number as high at times as thirty.

Padua Institute offers courses, particularly for the Mexican Players, in music, especially Mexican folk music, folk dancing, Spanish, etc., for any one interested.

To acquire some of the dances of old Mexico is a simple matter, the rancher-photographer explains. To the young players is shown on a screen the record of a folkdance made by him on his long trip. After a single showing or perhaps two the players step into it. And another dance has been saved for the present generation at least and possibly for posterity.

The girls live in dormitories under the care and protection of a house mother. The boys have their own quarters. The youngsters come from the countryside and nearby cities and are accepted following a selective process in the details of which it is found the parents are much interested. The result is a group that is a credit to any country.

Theatre Man, Too

The players do more than present plays in Mexican, for the most part at least, and of early California or Mexican locale four evenings and two afternoons each week in the year. They build scenery for the sure-enough theatre, a structure which back stage marshals all the mystifying gadgets of ropes and switches to be found in any legitimate house.

It is here that Kenneth Forbes enters the scene, for he is the superintendent of the theatre and responsible for the creation and care of all of its properties.

The players also cook and serve the meals in the dining room, which provides luncheon, tea and dinner every day in the year. During the serving of meals some of the Players with vocal and instrumental music and with dances entertain the diners.

It may be of interest to note the prices charged in this restaurant and theatre by this non-profit educational institution. Luncheons, served between 12 and two, are a dollar. Dinner, between 6 and 8, costs \$1.50. Admission to the theatre is \$1. The food is excellent. As this reporter was present on a Monday night he missed the show.

As a guest of the superintendent-

photographer we accompanied him to dinner that first Monday in June. The atmosphere was of another country—the atmosphere of Mexico.

At the side of the dining room as we entered were two musicians. To the music they were playing a boy and girl were dancing.

Coming to the selected table was a dark-complexioned maid—actress and waitress, too—petite, smiling, charming. She had the unconscious glide of the trained dancer. Her slim figure strikingly was set off by the long skirt of another generation.

To the theatre superintendent there was an approach of deference and of cordiality, mingled poise and of shyness—for all the world like a figure stepping out of a great painting. It was an artist's ideal.

To the uninitiated in this colorful bit of foreign and delightful atmosphere there came a weird catch in the throat, a mist in the eye. For a flash the visitor was a boy again, back in rural New England.

And the bold, the pushful, ultra-sophisticate was a half-century below the horizon.



fooling the demon earthquake god—To avoid the hazard of destruction when mounted in church towers these bells of Old Mexico were suspended in giant olive trees. Photographed by Kenneth Forbes.

DIFFUSED LIGHTINGS MAKE MOST NATURAL COLOR FILM

KODACHROME has very definitely progressed beyond the point where its users must blindly follow the rule book and expect standardized results. It has got to the point where each serious minded cinematographer can safely try using the methods that appeal to him, confident he will get the sort of a picture that appeals to his taste. So there can probably be no one rigidly best way to shoot Kodachrome.

In other words, the things I have found to give me the type of Kodachrome shots I personally prefer may not suit the taste of every other filmer; they are offered here because I feel they are helpful and because I am sure there are other Kodachrome users whose ideas about good color must be similar to mine.

When I go out to shoot a 16mm. roll of Kodachrome I handle it exactly as I would use black-and-white in a studio camera. If I would shoot my black-and-white scene at f:11 I make my Kodachrome scene at f:11 and get far more satisfying results. If a given lighting would suit me in black-and-white, I know it will be equally good in color.

Of course in my 16mm. film I have the technical advantage of a 216 degree shutter opening as compared to the 170 degree shutter of my studio cameras; so if one has one of the sub-standard cameras with a smaller shutter aperture my parallel between black-and-white and color would not hold so completely.

Don't Dress for Color

The first thing to think about in any kind of filming is what we are going to shoot. In my case, the answer is the same as the majority of amateurs would make—the family and especially the children. People are always the most interesting subjects if they are photographed attractively and doing something more definite than mere posing for a picture.

One of the first things I had to overcome was my wife's natural desire to dress the children extra colorfully for a color picture. I imagine it is the same in most families. After all, what we're interested in is the person—not the clothes. Too much color in the clothing can steal the scene from almost anyone.

So I make it point number 1 always to film the children in whatever

Kodachrome Enthusiast Gives Own Experience in Getting Good Shots When a-Gunning Color

By JOHN ARNOLD, A.S.C.

clothes they happen to be wearing regularly at the time. If my young son happens to be wearing his red Fire Chief hat—well, it's in the picture. If he is all in white, or in just ordinary old clothes, I still don't make any effort to get added color.

It is quite the same with Mrs. Arnold and the girls; if one of them happens to be wearing a bright-colored dress, all right; if they are in softer shades, or grays, browns or black, that also is all right.

Once you've tried both, you'll agree that softer, less conspicuous colors will give the most thoroughly natural pictures. When we have a process that will give us natural color, why try to get unnatural color effects?

Shoot in the Shade

As every Kodachrome filmer knows, the process has made amazing gains in speed this last year. When the process first appeared, it was rather necessary to expose it in a good strong light. Today, softer lightings are not only possible, but much more desirable.

In the studio world, when we make exterior scenes and want a soft lighting, we can suspend a dark muslin scrim between our actor and the sun to diffuse the light. With a home movie camera we can't do this, but we can almost always move our subject out of the direct sunlight into the shade and gain a similar effect.

In my own 16mm. Kodachroming I almost never shoot scenes of people except in the shade.

This is especially important in close shots of women and children. Normally, their faces are combinations of soft, curving lines. Photographing them in the direct sunlight not only tends to make them screw up their faces against the glare, but gives a harsh, angular modeling which destroys those pleasing curves. In addition, with the somewhat more limited latitude of color processes, it tends either to overexpose your highlights

or to leave the shadows unpleasantly black.

Since Kodachrome, like any color process, has less latitude than black-and-white, exposure is vitally important. Whatever method you have of determining exposure stick to it as long as it is accurate. If, like most professionals and some of the more advanced amateurs, experience has taught you how to judge exposure values accurately by eye, don't change just because you are shooting color.

If, on the other hand, you use an exposure meter—and have learned how to use it with accuracy—don't let anyone lure you to trying any other method. If your color exposures are less consistent than your black-and-white ones, stop and reason out what you may have done wrong before you start to blame the process!

It is an excellent idea to keep careful, written notes of each Kodachrome scene—details of subject, lighting, background, coloring, exposure, and so on. When the film is processed, study it with these notes.

They will help you see just what you had to shoot, what you did, and what produced each effect. Keeping these written notes about each scene will quickly give you an invaluable store of accurate information about getting results in color—more accurate and more lasting than mere memory.

If you think you haven't time for such notekeeping, remember that the Technicolor experts keep the same sort of notes about every scene, even on the biggest professional productions—and they are the industry's foremost color specialists!

Controlling Color

In Kodachrome, this matter of exposure is important in two ways. First of all, because in a broad sense it means the difference between getting a really good shot and getting a poor one. Secondly, because with exposure you can, to a surprising extent, control the way your colors will look on the screen.

A strictly normal exposure will give you colors just about as you actually saw them. A somewhat fuller exposure will tend greatly to soften the colors. A lessened exposure—of course within the film's exposure latitude—will tend to brighten the colors.

In much the same way, pictures

shot in a diffused light—as on a cloudy day or in the shade—will have softer colors, while scenes filmed directly in the bright sunlight will have brighter colors. So you see you can suit your individual color taste with almost any subject.

If you are one of those who prefer brighter colors, but at the same time want your people to look better than the ordinary brilliant snapshot lighting permits, you can help yourself a lot with reflectors.

There is nothing mysterious about a reflector or its use. Any reflector is simply a good sized square of something capable of reflecting the beams of the sun so they can be thrown back toward the subject, to illuminate shadows.

In a pinch, a bit of white cloth like a sheet will do; in fact, I have known professional cinematographers to use bedsheets as emergency reflectors on location. A projection screen will do quite well, too. Those amateurs who have supplanted their early aluminum and silver-coated screens with the more modern beaded type can well employ the old ones for reflectors.

Be Consistent

Such reflectors naturally reflect a somewhat diffused light, and are called "soft reflectors." If you want a slightly stronger reflection, yet one that is diffused a bit, use a good-sized sheet of plywood coated with aluminum paint or with sheets of tinfoil.

And if you want the most intense beam use a reflector of burnished tin. In general, however, moderately soft reflectors will give the most pleasing results, especially in color. And your victims across the camera will find them much easier to look into than the hard type.

Finally, the most important thing in color filming is to be consistent. You can with a little practice suit your color effects to your own taste. By choosing the right lighting and exposure you can get soft colors, average colors, or brilliant colors.

But don't mix these effects. There's nothing so irritating as a "spotty" color picture, in which most of the scenes flow along with one type of color treatment but where this photographic continuity is marred every now and then by a shot or two of an entirely different grade of coloration.

If, for instance, the cinematographer's exposure and lighting are generally calculated to keep the colors soft, the effect of an occasional, unlucky underexposure or harder lighting will suddenly show colors which hitherto have been soft as exaggeratedly vivid shades. The sudden change is like an unexpected blow.

If you wish to avoid this—and who

Bell and Howell Installs Vaporate Film Treatment

BELL AND HOWELL announces installation of complete equipment for applying to motion picture film the Peerless Vaporate film treatment for prolonging the life of film which is ready for the projector. The machinery necessary to effect this treatment has been placed in the company's main office and manufacturing plant in Chicago, and the Vaporate service is available to movie makers throughout the country through Bell and Howell's network of authorized dealers.

Before deciding to adopt this newest and most effective method of film treatment, exhaustive tests were conducted, even though the adoption of the Vaporate treatment by United Artists, Twentieth Century-Fox and other major Hollywood studios had already placed upon it the stamp of professional approval.

Results were convincing, proving that beyond all doubt those amateurs who wish to take extra precautions to

preserve their films for the years to come will do well to have them subjected to this treatment.

The Vaporate Film Treatment imparts several qualities to the finished film, and is not a mere chemical bath. The film is placed in a staunch steel chamber which is hermetically sealed. The air within the chamber a vacuum as nearly absolute as it is possible to obtain is created therein. Excess moisture in the film itself is thus withdrawn from the pores, leaving the steel chamber as the air is removed. Certain chemicals are then introduced in the form of vapors which penetrate the film completely, entering and sealing the pores.

Film Made Tougher

The film is made tougher, yet retains its pliability. It is made impervious, yet it is lubricated externally. Its melting point is many degrees higher. It is protected against heat, climatic action, abrasion, and excessive moisture.

The Vaporate Film Treatment may be applied to Kodachrome film as well as to black-and-white. In fact, since this color film is more susceptible to excessive moisture than is black-and-white film, Vaporate is particularly recommended for Kodachrome. This treatment in no way affects the quality or bonding properties of splices made after treatment. In short, this new service offered by the Bell and Howell Company has no disadvantages, and it offers certain decided benefits long desired by serious amateurs.

Its cost for either Kodachrome or black-and-white film is extremely low, only \$1.50 per 400-foot reel of 16 mm. film and \$1.25 per 200-foot reel of 8 mm. film.

NEW JUDGING METHOD

Assistant Attache Stephenson, Berlin, reports AGFA has developed a photographic method for use in judging sporting contests. Two slow motion cameras are combined to make stereoscopic shots of the events at the goal at the rate of 190 pairs a second. The time also is indicated on the film. By this method it is possible to fix time differences up to 1-1000th second. By a special process the films can be developed within 10 minutes after taking.



It's just as easy to pose people in the shade—and they look much more natural.

GETTING BEST OUT OF YOUR EXPOSURE METER

EXPOSURE METERS are a good deal like cameras in at least one respect: they report truthfully on what they see. And, like cameras, they leave it up to the man at the camera to determine what they shall see and how they shall see it.

In that fact lies 90 per cent of the trouble of those cinemateurs who complain their exposure meters don't work accurately. If they would simply take the trouble to understand their meters they would not only find them remarkably accurate but helpful in many new ways very few of us imagine possible.

Since the Weston meter is one of the more widely used photoelectric exposure meters in this country, let's take it as an example. Many of the following remarks can, however, be applied in a general way to most of the several other types of electric-eye meters.

First of all, you want to be sure the meter is adjusted to give a truthful reading. Personally, whenever I take my meter out to use it, I begin by checking the adjustment. This is easy.

Simply place the electric eye of the meter tightly against some opaque object—the palm of your hand will do—so that no light can enter the cell.

It Sees All You Let It See Just as Far as Does a Camera, But It's Up to You Just What and How

By William Stull, A.S.C.

The indicating needle should read exactly zero. If it does not, use the adjusting screw to bring it to a zero reading. (If you haven't a small screwdriver handy, your thumbnail will do excellently for this.)

Check Adjustment

If you're working in a dry, cold climate the glass over the instrument may sometimes pick up a static charge sufficient to attract the needle and give an erroneous reading. This can be removed by merely blowing on the glass. Incidentally, it's a good idea always to be sure the glass over the photocell eye is clean. Dirt or grease will throw the reading off.

Now you know your meter is correctly adjusted, what is it going to see?

No exposure meter, unaided, can act selectively. The best it can do is

average up the pattern of light and shade it sees. This may be technically correct, but it does not always give us the exposure that is genuinely right for the picture we're shooting to attain.

Suppose, for instance, we're making a long shot of a couple of pretty girls on a hilltop, with a distant landscape background. The meter would average up the exposure required for the girls and that for the background; and as the distant scene reflects more intense light, and requires a lower exposure, the result would almost inevitably be an underexposure on the subjects. In other words, we would lose the shadow detail on the girls.

Yet it is the girls we're most interested in photographing. The background is purely incidental.

Use Meter Close to People

The way to overcome this is to show the meter that part of the shot in which we're most interested. In this case, the girls. Take the reading with the meter fairly close to the girls—say 10 to 12 inches; closer if there's a good deal of shadow in which we want detail.

A good guide in this is to take the reading at a point where it is possible to move the meter several inches either in or out without substantially altering the reading. It is hardly necessary to add a caution to be sure the meter isn't reading in its own shadow or yours.

I suppose nine out of ten meter users take their readings using the "B" or normal arrow on the calculator dial. This has the advantage of simplicity, but it isn't by any means getting all the meter can give. Those four other indicators on the dial—they're labeled U, or darkest objects underexposed; A, or distant views; C, or dark, strong contrast, and O, or brightest objects overexposed—were put there for a purpose.

For instance, take those extremes, U and O. They represent the safe exposure range of the average film. If you take a reading on the darkest shadow area of the scene, and another on the brightest area, you will be technically safe as long as those two readings come between the points bounded by U and O on the dial.

If you are more interested in shad-



The result of taking meter reading from camera position with the "B" (normal) arrow. The dark foreground misled the meter and overexposed the more important distant background.

ow detail than in the highlights swing the calculator dial over so that U is a couple of points below your actual shadow reading. If the highlights are more important reverse the procedure to the right.

In filming landscapes we are usually much more interested in the distant part of the view than in the immediate foreground, which is often included only as a sort of frame for the actual view. Left to itself, the meter would average up the correct exposures for these two parts of the composition and generally would give a fairly correct exposure for the foreground and an overexposure for the distant background, which is just what we don't want.

Setting for Landscapes

The designers, however, foresaw this, and provided point A on the dial. This gives half normal exposure, and is often just what we want in scenes of this nature, and in scenes where there is a large, nearby expanse of water, snow, or other highly reflective surface.

If you want to be absolutely sure, and can do it, there is another trick that is helpful under these circumstances. Simply take your meter reading from a position far enough into your picture so that the meter doesn't see the foreground but reads only on the distant background. Then, unless you want to be sure of foreground shadow detail let the foreground exposure take care of itself. If you want more exposure in the foreground take a separate reading on it alone and make sure its lowest reading comes within the range bounded by minimum exposure point U.

All of which brings up the matter of sky exposure values. Most instruction books say to hold the meter pointing slightly below level, to exclude most of the sky, when there is a large expanse of it in the picture.

Technically this is correct enough, but sometimes, as in making filtered shots where filtered sky and clouds figure importantly, this will give an overexposed sky and defeat the effect of our filtering.

In a case like that two separate readings are indicated. First, one of the groundward part of the scene, as per instructions. Second, a reading primarily of the intensity of the sky.

If we take this latter as our actual reading, modifying it only enough so that the more normal reading on the darker part of the composition comes within the range bounded by U, but with the light value used in making the final calculation as close as possible to the higher reading, we will probably get the effect we want.

On the other hand, suppose our shot

is more concerned with shadow detail than with highlights. Well, when we were most interested in the brighter or more distant part of the picture, we used point A, which halved the exposure, rather than the normal point B. In just the same way, if we're more interested in the darker or shadowed areas, we can take our reading using point C, which doubles the exposure.

Automatic Filter Calculations

Point C, since it doubles the exposure, is naturally the point to use when we are using a two-times filter.

But the meter will help us just as well with any other filter, no matter what its factor. All that is necessary is to divide the speed rating of the film we're using by the filter's factor, and reset the meter to this new film speed. Then take the readings as usual.

Suppose, for instance, we are using a Superpan film which has a Weston speed rating of 24, and a 25-A filter which on that film has a factor of 4. We simply divide the film speed (24) by the filter factor (4), which gives us 6. Then we reset the meter to use 6 as the film speed and take the reading as usual.

Suppose our light value reading was 500, which would give an unfiltered exposure of f:22 at the average cine camera shutter speed of one-thirtieth second. The same light reading, with the film speed reset at 6, gives us an indicated exposure of f:11, which is correct for our 4-times filter. If we used an Aero 2 filter, which on that film has a factor of 2½, a strict mathematical division would give us a speed factor of 9.6, but in practice

we can forget the fraction and set the meter for a speed of 10.

This gives us an indicated exposure of f:14, which is within an infinitesimally small fraction of a stop of being the mathematically correct exposure, which would actually be f:13.8.

Sometimes, as in using very heavy filters like the 25-A or the "F" on regular Pan, our recalculated filtered film speed will have a lower value than the engraved film speed scale on the meter, as in the case of a 25-A, which has a factor of 10 on regular Pan (16 Weston regular speed), and would give a corrected speed of 1.6.

In this case simply carry on beyond the marked speeds, remembering that the speed value is divided by two at every third division. Some of the newer Weston meters, like the Universal Model 650, have a speed scale that ranges down to 1; but older ones, like the popular Model 617, range only down to 4.

In this case our adjusted speed of 1.6 will be found by setting the film speed arrow in the fourth notch to the left of 4, and, still assuming a light value of 500, our indicated exposure will be f:5.6, which is quite adequately accurate compared to the theoretically correct exposure of f:5.7.

Remember Shutter Openings

Finally, there is the matter of shutter speeds. The Weston Cine meter arbitrarily divides camera into two types, providing for exposures respectively of one-thirtieth and one-fortieth second. Many users of the more flexible universal and still camera meters use one-thirtieth second as the point for making their reading. In some cases this is accurate enough, but in



For this shot, the meter was read on the "A" (½, or distant view) mark on the calculator dial. Believe it or not, both pictures were made on the same film (Agfa Super Plenachrome) on a hazy afternoon, and no filter was used in either case. Correct exposure can often be as helpful as filtering in revealing distant landscapes.

others it is likely to give you a nasty over or under exposure.

So—know the shutter opening of your camera! Most Eastman Cine-Kodaks, for instance, have a shutter opening of 170 degrees, which gives (at 16 frames a second) an exposure of one-thirty-fourth second, for which the reading from the one-thirtieth second indication is reasonably correct. The Victor, on the other hand, has a 206 degree shutter and a Filmo 70 a 216 degree shutter, which gives exposures of approximately one-twenty-eighth and one-twenty-seventh second, respectively.

With these cameras I have found it safer to base my reading upon an exposure time of one-twenty-fifth second rather than one-thirtieth second. On the opposite extreme, such cameras as the Filmo 75, the 8mm. Filmos, the Keystones and others have still smaller shutter openings, so that for the best results you should calculate your exposures on a basis of one-fortieth

and in some cases (Keystone and Stewart-Warner 8s, 16, B and A-7), one-fiftieth second.

Slow Motion Exposures

For camera speeds faster or slower than the normal 16 frames a second they diminish or increase in proportion to the relation of the speed used to the normal 16 speed. For instance, the generally highest slow-motion speed is four times the normal 16, or 64 frames a second. Accordingly, the exposure will be four times as fast; in the case of a Filmo 70, it would be approximately one-one-hundredth second, while in a Cine-Kodak about one-one hundred twentieth second.

With a universal type meter you would make your readings direct at these speeds, getting for our mythical 500 light on a Weston 24 Superpan film a normal speed exposure of f:22 with a Cine-Kodak and at 64 speed f:11.

Naturally, you can also pre-set your meter's film speed setting to calculate this, just as you would a 4x filter exposure. For slower speeds, like 8, which is half normal, you read from setting halved exposure point A, rather than the B (normal) arrow. You can get the same result by doubling the film speed setting. For a speed of 12 frames you would move the film speed setting one notch to the right.

In any event, the really important thing is to get acquainted with your exposure meter and to learn what it can really do for you. It isn't a mind-reading robot; but if you will help it to understand your problem it can and will give the correct answer, and simplify your filming technicalities amazingly. If you won't understand and help it all that is left is to blame failures on the meter, rather than taking the blame yourself.

After all, a meter can't talk back to defend itself!

HERE'S THE ANSWER

DESERT FILTERING

I will be in charge of cinephotography on an expedition to central Australia. The climate of this region is very hot and dry, similar, I should say, to your very arid Southern Arizona deserts. The colors of soil and rocks are yellowish-brown to cayenne red; vegetation—shrubs and trees—gray-green to very dark green. There is no grass. The sky is deep blue with rarely any clouds. Lighting, very hard, with a good deal of glare from the sand and stony ground, results in very strong contrasts.

What is the best method of tackling this job? The film stocks available out here are Eastman Regular Panchromatic and S. S. Panchromatic; and Agfa (German) Panchromatic and Isopan I. S. S. (an improved Superpan). Camera, Filmo 70D-A.

My aim is to secure natural tones in sky, without it becoming too leaden by over-filtering, and a fair degree of correction in rocks, vegetation, etc., while keeping contrast right.

What type of film would you advise? Would the use of filters increase contrasts too much? If not, what filters would you suggest? Does extreme heat cause trouble with S. S. Panchromatic?

J. T. HAMILTON,
Heidelberg, Australia.

CHOOSE BEST FILM

It is not this magazine's policy to recommend any specific product when several of similar merit are available; much less to do so at this distance, where minor differences in emulsion or processing might give characteristics different from those we are familiar with here.

Since your problem is one of contrasty lighting, begin by choosing the make of film which in tests under known conditions gives you the softest contrast. Obviously, if an emulsion gives contrasty results under normal conditions, it will be just that much contrastier under the extreme-contrast lighting you refer to.

Dry heat, even though extreme, is not likely to cause trouble if you take elementary precautions, keeping your film in a shaded place, as cool as possible, and having it processed as soon after exposing as is reasonably possible. What causes most of the trouble with film deterioration in tropical climates is excessive humidity combined with the heat. This can be guarded against by getting your film in the special tropical packing, in which each roll is packed under ideal conditions and hermetically sealed. I understand that this packing is no more expensive, though it often requires a special order. It is always good insurance when you ex-

pect to encounter any abnormal conditions.

The Eastman laboratory here reports no trouble from 16mm. film—black-and-white or color—received in the summer from such dry, torrid points as the Imperial Valley and the Arizona deserts. They qualify this, of course, by pointing out that the people there are usually able to get their film to the laboratory fairly soon after exposure.

A General Rule

However, unless you encounter high humidity they say you ought to be quite safe if you can get your film to the lab within three months or so after exposing. In any event, it is best to have film processed as soon as possible after use.

As to the use of filters, this will depend largely upon the effect wanted in each shot. For instance, if you wanted to accentuate the red rock formations, you would use different filters than if you wanted to accent the vegetation, or to secure a normal effect.

There is one general rule of filtering: if you want to lighten any color, use a filter of that color; if you want to darken a color, use a filter of opposite color.

The filters that contain red—beginning with the orange (i.e., yellow plus red) "G" and 21 and going on up through the various red filters—tend to increase contrast pretty well in proportion to their redness. The yellow filters do not increase contrasts so much, if at all, on modern films; and some of the green filters, under

Continued on Page 309

"Here's the finest all-round home movie camera you can buy"—say its many thousand users



Magazine Ciné-Kodak

CHECK the features of Magazine Ciné-Kodak against your own idea of what the perfect movie camera should be. First, of course, it loads with 50-foot magazines of any of four films—Ciné-Kodak Panchromatic, Super Sensitive "Pan," regular Kodachrome, and Kodachrome Type A for Photoflood light. Wholly or partly exposed magazines may be slipped in and out of the camera at will, without the need of wasting even a single frame.

Footage indicators on the magazines, which register whether they are in or out of the camera, tell you how much unused film remains. The camera may be operated at 8, 16, or 64 frames per second. And alongside the secured winding crank there's a tiny button that pulses under your fingertip once every twenty frames of film so that you can gauge scene length.

Eight Interchangeable Lenses

Magazine Ciné-Kodak's standard lens, Kodak Anastigmat f.1.9, is interchangeable with any of six telephoto's and a wide angle lens by the simplest, most positive method ever devised. Press a button, turn the standard lens, and off it comes. Substituting an accessory lens is every bit as easy. One finder system serves them all. Price, \$125 with f.1.9 lens—your choice of three carrying cases, extra.

EASTMAN KODAK COMPANY, ROCHESTER, N. Y.

Loads in 3 seconds

1
Pull the finger tab to "Open"—the released hinged cover opens to disclose a glistening chromium interior.



2
Slip in a film magazine. There's nothing inside the cover, or on the magazine, that requires adjustment.



3
Close the cover as you would a book, pull the finger tab to "Run"—you're set to shoot.



CAMERA SPEED CHANGE WILL HELP YOUR SHOT

By DWIGHT W. WARREN, A. S. C.

ONE OF THE most generally misunderstood adjustments on 16mm. and 8mm. cameras is the one that controls the speed at which the picture is taken. Practically all home movie cameras, in addition to the standard speed of 16 frames a second, provide a number of additional speeds below and above normal. The range usually is 8, 12, 14, 16, 24, 32, 48 and 64 frames a second.

Practically every cinematographer of my acquaintance has tried these speeds at least once. But most of them, once the novelty of making slow-motion shots, or using half-speed to gain added exposure in a bad light, has worn off, confine their moviemaking to the standard 16-frame speed. Some of them have even remarked that the extra speeds are a nice plaything, but of little practical value in serious moviemaking.

I disagree with that sentiment! Using varied camera speeds professionally has helped butter my bread for many years, and has proved its practical worth in every kind of professional production. It can be just as useful in amateur filming with 16mm. or 8mm. film running through the camera.

Just consider the elementary foundation of the matter: if we run our camera faster than normal we record the action on an abnormal number of frames, so that when the film is projected at normal speed the action apparently takes longer and is slower. If we run the camera slower than normal we expose fewer frames, and when projected the action takes less time and is apparently faster.

Shooting Planes

Equally elementary is the idea of using the higher "slow-motion" speeds to slow down fast action such as diving, football, track events and the like, so that they are intelligible on the screen. And once we've paid for the footage that races through the camera at 64-frame speed—over 100 feet of 16mm. film per minute—most of us discover that for a lot of sports the intermediate slow-motion speeds—32 and 48—are almost as good and a lot cheaper.

But there are quite a few subjects that can be filmed much better at these intermediary speeds

than either at normal or at the highest slow-motion rates—for example, airplanes racing, or stunting near the ground. Filmed at 16, they're likely to race through the picture much too fast to be interesting; filmed at 64, they would be slowed too much. But at 32 or 48, they are slowed just sufficiently.

Shooting from a moving vehicle like an auto, train or airplane is often a problem at normal speed because of the effects of vibration. Speeding the camera up to 24 or 32 smooths out the vibration a lot, and will usually give you a less blurry picture without slowing the action objectionably.

Incidentally, if you are shooting from your own car, try driving a bit faster than normal, and shooting, say, at 32. The higher speed of the car will make the road jolts tend to overlap, and the higher camera speed will slow things down nearer what you want and at the same time smooth out the vibration and bumps.

When Timing Action

Most instruction books advise beginners to use the slower speeds to gain more exposure when the light is bad. And those who try it quickly find that the slower speeds make the action move faster. Well, there are lots of scenes where we really would benefit if the action moved faster.

For instance, suppose you want a shot of your friend's new roadster apparently tearing along wide open. Slowing your camera down to 12 or 8 while he drives at 40 miles an hour is

easier—and often a lot cheaper—than actually hitting 80 and collecting speeding tickets.

There is one thing which almost always differentiates amateur films from the professional product. This is the timing of necessary but relatively unimportant actions.

In the amateur film they drag, but the professional has learned a variety of ways of pepping them up so they won't interfere with the more important action. Some of these are artifices of acting, direction and cutting. Another is a trick of using camera speeds, and this is something that can with a little practice be used with equal success by the amateur.

Amateur cine cameras, in fact, seem almost to have been built with this trick in mind. The speed control in most cases works directly on the governor, and can be manipulated whether the camera is stopped or running.

Suppose we have a sequence which is to show some people coming hurriedly out of a house, piling into a car and driving off with a rush. If we shoot it all at normal speed, our people will come out of the house in the proper hurry, and pile into the car hastily enough—but in most cases, the car won't accelerate fast enough to give us the effect we're after.

The camera can help us here. Shoot everything at normal speed up to the moment the people are in the car. Then drop the camera speed down to 12 or even 8 frames a second. On the screen the car will seem to leap away like an unleashed greyhound.

To do this properly, your camera must be on a tripod. Then you will have both hands and eyes free to manipulate your speed change.

Compensate Exposure

The change in exposure when you drop from 16 speed to 12 is slightly over a quarter of a stop; that is, if the normal speed part of our scene is shot at f:16, the 12-speed part, to maintain the same exposure-level, ought to be shot at f:18.

In some cases, where the film receives photocell-controlled processing, this change is small enough to be automatically compensated in the processing. If you find that the laboratory handling your par-



ticular type of film does not or can not make such compensation, it requires only a bit of practice to be able to make the compensation yourself, changing camera speed with one hand and lens-opening with the other.

On the Cine Kodak Special, incidentally, you can make this compensation the way the professional does, by reducing the shutter opening—in this case, closing it from full opening to three-fourth opening. If you have much of this sort of thing to do, you will in many cases find it helpful to fix little extension operating rods on both the camera speed and diaphragm controls.

Changing from 16 to 8 speed means a full stop less exposure. Once you have this trick down so you can do it smoothly you will find lots of little ways of using it. For instance, en-

trances and exits in many amateur films drag. You can help remedy this fault by dropping your speed down to 14 or 12 just for the exit or entrance and carrying on at normal speed for the rest of the scene.

When Shooting Fights

With some cameras, like certain of the Victor models, for instance, you can make minor speed changes like this simply by varying the pressure on the release button.

Often in professional pictures it is helpful to use this trick just for one little bit of action in the middle of a scene. For instance, a scene where someone takes off a coat or wrap between other more important actions; dropping down to about 14 just for that action and then continuing normally will let us get that bit over



INDIA HANDICAPPED

Continued from Page 276

source of actress material is from the dancing girl and outcast classes.

This unfortunately often causes moral conditions that influence legitimate bankers in refusing financial support. And of course this leaves the situation open to shylock money lenders who collect 4 percent a month, fat bonuses and other perquisites that extend the clock around.

This restricted social status makes difficult the use of story material familiar to other parts of the world, forcing the film producer to select his plays from the "Arabian Nights," mythology, or ancient king, prince or princess formula tales.

Among the many letters that came to my desk in Bombay during 1935-6 was one from a well-educated young man who signed himself B. A. In applying for a position he wrote:

Music in Indian Films

"As regards my qualifications they are as follows (educational): I am an arts graduate of Allahabad University. I can speak Urdu and Hindi with correct pronunciations. I can sing and know scientific music. Besides these, I know riding, swording, swimming, driving and other minor things required for the line. As I have trained myself especially for the cinema line I hope you will kindly consider my case."

One section of this youth's letter concerns a subject worthy of much greater study than space or even my personal knowledge permits. That deals with the use of music in Indian films. At least half of an Indian picture's appeal is definitely in the lap of the so-called musical director, who in nearly every case with which I have had personal contact far from deserves his title.

It is the custom in every Indian film, without exception, to include from ten to fifteen and often more songs. Some may be original "song poems," others traditional and folk songs. Dramatic action is stopped from time to time that the hero or heroine may break forth and sing.

Audience approval is noted by the acceptance of the musical rhythm, and a popular or well received number will be instantly accompanied by the snapping in time of hundreds of fingers throughout the theater.

Land of Paradoxes

Indian music consists of melody and rhythm, without harmony. In an orchestral group conventionally all instruments play simultaneously following the tune. In an attempt to vary this on an occasion when I was favored with an unusually intelligent musical director we searched the hill music tunes for suitable scores for the particular picture.

I then ran a number of Paul Whiteman's recordings for the Indian director, emphasizing arrangement and orchestration, and our final result with an Indian music not only was startling but widely acclaimed.

Once you pass the commercial barriers of modern seaboard cities you will find that India lives as did the Europe of feudalism.

It has been my very good fortune to have been the invited guest of several state rulers during my work in India. And within the palaces of each of these rulers one finds conditions different, as kaleidoscopic, as is the land itself.

Often wonder is expressed at the contrast between the immense personal fortunes possessed by these princes and the comparative squalor in which they often live. Aside from personal fortunes and possessions I serious-

ly doubt if any average American family would happily exchange living conditions with many of India's wealthiest princes.

with more quickly and get on with the really important action.

In filming fights, we can make the actual knockout blow seem much harder by dropping the camera speed just as the blow starts, and then changing back to normal as soon as it connects.

Really, this matter of using camera speeds is like any other camera trick. Used simply as an obvious trick—as you probably used your first slow motion—it is only a trick and of no practical value.

But used for an intelligent reason, well, it won't draw any "Ohs" and "Ahs" from the audience, for if you do it right they won't notice it. But it will make your pictures better and add something of professional smoothness to your technique. Try it!

Early last year the writer was the guest of the ruler of a northern Mohammedan state. This Nawab had built for himself a palace of marvelous beauty on the outside of the ancient ancestral fortress city.

He had included a bathroom that was a masterpiece worthy of Cecil B. DeMille's finest efforts. After a few months of living in this new palace his Highness tired of the deeply carpeted halls, the soft down mattresses, the sunken garden that in miniature rivaled the New Delhi grounds of the Viceroy . . . and the magnificent bathroom . . . and retired within the walls of the old fortress. There he has since lived.

New Swimming Hole

The new palace, after a short period of retirement, became the visitor's guest house. But, for all its airconditioning, screening and comfortable beds, there was a serious lack. The native architect seemed to believe that one bathroom in the house was sufficient. So the "chamber of commerce" and the old tin bathtub prevailed in all of the guest rooms.

There is a bit more to that story. It is a tale of a man who had been on the road in the dust all day and rebelled at the tin bathtub. With a towel he outwitted all the guards, entered his Highness' bathroom, turned the water into the sunken tub and slid in. Then the terror of it. The water was highly perfumed. For two days it was necessary to go through the ritual for a wind direction test whenever in the company of his Highness and then as discreetly but nevertheless just as surely make a careful move to the lee side of the prince.

Major Gadgets Galore on Bell & Howell "Streamline 8"

THE NEW 8 mm. camera just announced by the Bell and Howell Company is not only "palm size," as the company advertises, but it is palm fitting as well. It is called the Filmo Streamline 8, and it is a smart and neat job.

This newest Filmo is the same size as the original Double 8, which made 8mm. history, and, as the illustration shows, its die-cast aluminum case is designed along the flowing lines which characterize everything, these days, from motor cars to ocean liners.

The serious 8mm. amateur will welcome the single frame device on the Streamline 8, a mechanism which permits the user of 8mm. film to enjoy animation work. With this camera the traveler will be able to photograph maps of his wanderings, with the course of his journey extending itself, dot by dot, from one city to another.

The table-top enthusiast will enjoy

making motion pictures of jointed dolls and animals, and movies of the toys in action under the tree next Christmas.

A new exposure guide is built into the camera, a guide which permits quicker light readings. Choice of two speed ranges is available, 8, 16, 24, 32 and 16, 32, 48, 64 frames per second.

Taylor-Hobson Lens

The lens is a Taylor-Hobson 1 $\frac{1}{2}$ -inch, F 2.5, fully corrected for both black-and-white and natural color film and is instantly interchangeable with an almost unlimited selection of other lenses. One-inch and 1 $\frac{1}{2}$ -inch lenses are mounted directly for the Streamline 8, and the camera is equipped with two viewfinder masks outlining the exact fields encompassed by these lenses. In addition, an expensive adapter makes possible the

use on the camera of any lens supplied for the Filmo 70 line of instruments.

Ease in Threading

The Streamline 8 retains the same sturdy and accurate mechanism which powers previous Double 8s. Threading this camera is simplicity itself. You simply attach the end of the double width film to the take-up spool and, without threading any sprockets at all, drop both spools on their spindles with the film passing through the gate. When you close the camera door the gate automatically is closed and the accurate, gear-driven footage dial is set at the starting position.

Uniform Exposure

Before the motor runs down to the extent that there no longer is sufficient power to move the film at a constant speed, the power automatically is cut off, thus insuring uniform exposure from the beginning of the run to the end.

End-fog is at a minimum in the Streamline 8, for when all film has been run on to the take-up spool the very end of the film remains taut in the gate, preventing the exposed film from spiraling loose on the take-up spool and becoming lightstruck.



Bell and Howell's Streamline 8.

Complete Projectionist Is Now in Second Edition

Kinematograph Publications Ltd. of London has issued its second edition of *The Complete Projectionist*. It is entirely revised and covers every phase of the projectionists' and cinema technicians' work and with up-to-the-minute details of all the newest equipment. There are a number of new chapters on mirrorphonic sound, television, color and sub-standard film for commercial and educational purposes.

There are 310 pages and 194 illustrations and blueprints. The book is written by R. Howard Cricks, F.R.P.S., and edited by Alex J. Martin. The title page declares the publication is "A textbook for all who handle sound and pictures in the kinema." Actually it is more than that.

Within its pages there is much that will deeply interest the amateur photographer, especially one who is in the advanced category. This is especially true of the chapters on "Color Films" and "Sub-Standard Films and Projection" as well as that on "Principles of Television."

The book is simply and interestingly written.

CONDITIONS IN ORIENT FINE, DECLARES FISHER

UNDER THE caption "Joe Fisher Heard From" on the first page of the March issue of this magazine the editor told how when Paul Perry was leaving for the Orient quite a number of months prior to that time the cameraman had been asked to say "Hallo" to Joe Fisher of Amalgamated Theaters in Singapore—and how Paul on his return to the States had reported on his message delivered: and how Joe had "just laughed." It is an easy matter to visualize the theater man continuing in that mood for several moments.

For on the too rare occasions in which we have collided with this citizen of the world who lives on the other side of the old ball there have been a lot of hours in which mirth was not submerged.

Harking Back

In a letter dated 6th May which came to this desk June 7 reference is made to a convention held in 1914 in New York. Really it was a "wonderful" convention, as Joe remarks. And prominently present as the big stars were Anita Stewart, John Bunny, Maurice Costello, and Lillian Walker. That was quite understandable, as all were residents of Flatbush, not ten miles from the convention hall. Those were the days when Vitagraph had a stock company that was the peer of all comers.

The Moving Picture World printed a daily bulletin the week of the convention and trade exposition. This reporter very distinctly remembers that incident, because it was on him fell the job of getting it out—each day, that is, until Saturday, which proved to be playday for some. Very likely the memories of that day still linger with Joe and with some of his friends, or the beginning of the day does anyway.

Introducing Joe Fisher

Reference was made in March to the unusual film collection which Joe has assembled, a choice bit here and a choice bit there given him by filming world adventurers. It will be noted he is still adding to it. But let's give him a chance to tell his own story. Here it is, under the letterhead of the Amalgamated Theaters Ltd., operating the Capitol, Pavilion, Alhambra, Marlborough and Theater Royal:

Singapore, 6th May, 1937

Dear George:

A few days ago Len Roos, who is out here making Technicolor shorts for Warners, walked into my office and handed me your American Cinematographer for March with the little paragraph about myself. It was good to know that you had not forgotten our pleasant associations.

Do you remember that wonderful convention we went to in 1914 when Anita Stewart, John Bunny, Maurice Costello and Lillian Walker were the big stars? That was my first trip to the States from South Africa, and I have done nine trips around the world since then, and have certainly seen some marvellous changes and developments in this great industry all over the globe.

South Africa Booms

I only returned a few months ago by the Empress of Britain from an extended trip through South Africa, and was really astounded to find the remarkable developments in new theatres, etc., in that country.

Business conditions out here are fine and we have really no cause for complaints in that direction.

I have made a number of very interesting additions to my cine collec-

tion and am now getting some beautiful results in Kodachrome.

This week we are having outstanding celebrations for the Coronation, and as the natives, particularly the Indians and Chinese, are putting on some very spectacular shows and processions I am looking forward to getting something really out of the ordinary.

Recently I have had some very interesting visitors out here, among others Charlie Chaplin and Paulette Goddard and Syd Chaplin. I inclose a photo taken with Charlie and my brother Julius, who is our publicity director.

I would appreciate if you would convey my regards to any of the old gang you may meet, such as Ernie Palmer, who incidentally did two pictures for me in South Africa in 1916; Frank Lloyd, Al Green and any others.

I would much appreciate hearing from you whenever you have the time. With sincere good wishes and kindest regards, I am

Very sincerely yours,
JOE FISHER.



CASTLE EDITS HIS THIRD

A third news picture edited by Eugene W. Castle for the home movie field has been given national distribution, "The Life of Edward—Britain's Ex-King." It covers highlights of his colorful career from boyhood to his recent marriage.



Photographed at Amalgamated Theaters Ltd., Singapore, with left to right Joe Fisher, Charles Chaplin and Julius Fisher.

NEWS OF THE MOVIE CLUBS

INDIA FORMS AMATEUR BODY

INDIA NOW has a cine amateur organization. It was formed in Bombay April 22 under the auspices of the Motion Picture Society of India. Two hundred enthusiasts were present. Sir Phiroze Sethna was chairman. He addressed the gathering, outlining the growth of the amateur division of cinematography in other countries, and expressed the hope that not only would India have contests of its own but that it would enter subjects in the international contests in other countries.

The founders of the major society have not been inactive in recent months. Last August an effort was made to induce the Government to exempt sub-standard apparatus from import duty in order to encourage the production of amateur educational and cultural films.

More recently the major society has been in communication with at least nineteen amateur organizations throughout the world and has established good contacts with some.

Stanley Jepson explained the importance of a central organization for amateurs as a common place of meeting for exchange of ideas and experiences. Narrating its advantages to the members, he said the guidance of technical experts which will be arranged by the group was sure to prove of immeasurable value for improving the standard of work. Equipment too expensive for any individual member to be expected to buy but nevertheless necessary for quality work would be owned by the organization for common use.

H. E. Ormerod was named chairman of the committee elected for the first year. The initial meeting of the group was held May 14. The proceedings were recorded on film, with the aim of showing them to those attending the meeting to follow.

The offices of the Motion Picture Society of India are in the Mherwan Building, Sir Phirozshaw Mehta Road, Bombay.

PHILADELPHIA CINEMA CLUB

IF ONE were reporting the June meeting of the Philadelphia Cinema Club as a musical the title probably would be a "symphony of color." Practically the whole meeting, which was held in the Hotel Adelphia, was devoted to a study of color, and a re-

view of it as presented by, let us say, the super amateurs of the club.

R. W. Bugbee, chairman of the program committee, took it on himself to present a film made by himself and containing all of the well-known mistakes of amateurs. Mr. Bugbee spoke while the film was being run, calling attention to the errors as they occurred on the screen. As a direct comparison between this type of work

and something that is really in the super fine class for amateurs Mr. Bugbee then exhibited his film synchronized with Joyce Kilmer's poem "Trees."

The combination of the Kodachrome picturization of the various types of trees, coupled with the sound of the poem with both words and music, practically brought the house down. Then to keep the audience at fever pitch Mr. Sharp presented a reel in black and white, synchronized to Debussy's "Faun," and next presented a Kodachrome film, also synchronized to music.

Robert W. Crowthers, the eminent illustrator, who had been handling the sound apparatus for the other members, presented a complete Kodachrome epic of over 2000 feet, the Shining Mountains, which included scenes in Glacier National Park. The title work was all handled by Mr. Crowthers, was all in Kodachrome, and was among the finest club members have had the pleasure of reviewing.

Work is progressing on a film leader for the club.

The meeting recessed for the summer with an attendance close to 80.

The second annual summer contest was brought to the attention of the members, which will have no limitations, other than not over 400 feet of 16mm or the equivalent 8 mm. Prizes will be awarded after proper review, and criticisms on the various films offered.

B. N. LEVENE,
6245 State Rd., Phila., Pa.
Chairman of Publications Committee

LOS ANGELES 8MM CLUB

The regular meeting of the Los Angeles 8mm Club was held in the Auditorium of Bell and Howell, 716 North La Brea, June 8. Dr. F. R. Loscher, president, was in the chair.

Vice President John E. Walter was called upon to present a new member button to Dr. Eleanor M. Marks. This brings the total for the first half of the year to six active women members.

An open discussion was had in regard to the new constitution and the adoption of by-laws to govern the business of the club. Several suggestions were offered by various members of a few changes. Ted Halzhausen moved that the constitution as submitted be changed to read; "All

SPEAKING OF BULLETINS

THE LATEST candidate for honors in the bulletin field is the Philadelphia Cinema Club. That thriving organization with its May issue chalked up No. 1. A tip to members of clubs that begin the publication of a bulletin:

Preserve your copies, especially No. 1.

You may not regard them so highly the first few issues. Then suddenly a member comes to life and decides he is going to preserve a file of the numbers just as they have come from the press.

The main thing then is try and find them. As a rule a search proves "they just ain't."

The Philadelphia Club, under the leadership of the publications committee, B. N. Levene, chairman, has made a good start. As often happens at the beginning of publication there is a lot of scratching to fill one side of a letterhead. After the bulletin gets rolling there is something to be left out even with two pages to fill.

The 8mm Club here in Little Old L. A. is going places, too. Its bulletin is beginning to grow—fast—as it can't help doing in fertile soil like that.

Speaking about bulletins, there is that Chicago News Flashes. Its June issue was Volume 3, No. 3, in four pages. It will hold summer meetings. That is real enthusiasm.

And then there is the Close-Up of Metropolitan of New York—a regular granddaddy: Volume 5, No. 10. More power to it.

members shall be amateurs"; that each article shall carry a heading. These were carried.

Lewis Graves, editor of The Writers' Workshop, was with us and was introduced to the members.

The ever popular technical committee functioned in its regular ten minute period, creating its usual interest among the members. The use of a microphone during the session proved to be quite successful. Secretary Armstrong was instructed to "pass the hat" and collect 10 cents from each member to help defray the expenses of the rental of the film for the evening. The rental was paid and \$3.39 put in the treasury.

Following the technical committee, President Loscher announced that the picture we were about to see, "The Covered Wagon," from Kodascope Libraries, should prove a benefit to all members as it was made in the good old "silent days" and would show how titles were used as well as cutting and continuity for our own pictures.

Announcement was also made that William Stull of the American Cinematographer, who has some 1600 records in his library, scored the picture for us and we enjoyed seeing the picture with perfect musical scoring. The picture and music were a great success.

Reminding us of the days when intermissions were had at our regular theatres in the middle of the picture, an intermission was held at the end of the third reel.

M. R. Armstrong, Secretary

NEWS FLASHES,

WITH ITS June issue the Chicago Cinema Club closes down its "publication plant" until September 1. The editor must go on vacation, he says—which means he is leaving 'em flat. "How about sending in some sketches, pictures, articles, etc., to the editor for the next issue?" he asks. But notice is given that all the meetings scheduled for July and August are covered in the June number.

On June 17 the Chicago Cinema Club played host for its Third Annual reception to the fair sex. There were refreshments, dancing and of course music.

Among the subjects featured at the club during the month were, on the 3rd, "Film Analysis." On the 10th there were "The Art of Editing Motion Pictures" and "What to Shoot at Vacation." On the 24th "Fishing by Rod and Camera" was discussed by Mr. Vacin, Chicago sportsman and naturalist. The speaker has fished around and throughout the North American continent. During the last three years he has spent his vaca-

INTERESTING IT WAS

READ ALL about the International Salon as proposed by our own Mr. Duncan MacD. Little. You will find an interesting heart to heart talk by Mr. Little in the May number of the American Cinematographer. — Close-Up, bulletin of the Metropolitan Motion Picture Club of New York.

tions in Wyoming fishing for trout. Some of those he caught were of sufficient size to find their way into the Field Museum in Chicago. He has done much filming of scenes in this country at heights of from 8000 to 11,000 feet altitude.

Here's the Answer

Continued from Page 302

many conditions, tend to soften contrast.

Assuming that you do not want much, if any, color correction, there are two types of filter that will be most helpful to you. These are the Neutral Density filters, which are colorless, and certain others which combine a light color filter with a Neutral.

Controlling Glare

If you only want to reduce contrast

and control the glare from intensely bright sand and rocks, the Neutral Density filters are the thing. For 16mm. use it is possible to use the neutral density filters that were supplied for use with the old Kodacolor process, but to secure the widest range of control I suggest the regular Wraton Neutral Density filters. These are available in four densities: 25 percent absorption (factor on all films, 1.8); 50 percent (factor 3.1); 75 percent (factor 5.6) and 100 percent (factor 10).

Where you want this glare control combined with a mild or moderate color correction, there are the Wraton 3N5 and 5N5. These are respectively an Aero 1 filter combined with a 50 percent Neutral Density (factor on Eastman S.S. Pan, 4) and an Aero 2 combined with the 50 N.D. (factor on Eastman S.S. Pan. 5).

These and the N.D. series should take care of your problems if you want strictly normal effects and glare correction. If you should want to lighten the red rocks at the expense of increased contrast and a darkened sky, take along a red filter; if you want to lighten the greens of vegetation at the expense of darkening reds, etc., take a green filter like the X-2 or the 56B.

DANIEL B. CLARK, A.S.C.

TELEPHOTO MAGNIFICATIONS

How can you tell how much a given telephoto lens magnifies an object?

R. H. M., New York.

You can determine the magnification given by a telephoto lens in comparison with the image produced by your regular lens by simply dividing the focal length of the tele lens by that of the "normal" lens. For instance, the usual "normal" lens used on 16mm. cameras has a focal length of 1 inch (25mm.)

Comparing this with, say a 4-inch telephoto, we divide 4 by 1, and the answer, 4, tells us that the 4-inch lens magnifies 4 times or, to put it in a more practical way, that the image of any given object will be 4 times as big in a shot made with a 4-inch lens as in a shot made from the same position with a 1 inch lens.

CLYDE DE VINNA, A.S.C.

SCRANTON TO HOLD SALON

The Anthracite Salon will be held at Everhart Museum, Scranton, Penn., from September 18 to October 4, under the auspices of the Scranton Camera Club.

Entries close September 7, and will be limited to four prints. The fee will be \$1. Entrance blanks may be secured from the salon director, Everhart Museum, Scranton.



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Literature on Request



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TELEVISION OF TODAY

Continued from Page 280

National Broadcasting Company from the Empire State Tower in New York which are the nearest American equivalent to the British operations reviewed just prior.

(The former, however, is not a public service, the receivers, of which there are over one hundred, being in the hands of RCA executives and engineers who report confidentially on the results.)

The shows originate in a special studio in the RCA building and are

relayed to the transmitter over a coaxial cable and a radio link between the two buildings, the airline separation of which is under one mile. The power of the transmitter, 7.5 kilowatts, is sufficient to lay down a satisfactory signal on the optical horizon, which is some 43 miles from the top of the 1250-foot tower.

The size of the received pictures is about the same as in the British case, 7½ by 10 inches. Such a picture is afforded by a 12½-inch cathode ray tube, a size readily manufactured in the present state of the art.

Collecting Data

This experimental service has been in operation for about eleven months, with an interval to permit changing the transmitter from the earlier 343-line standard to 441 lines, and some briefer interruptions.

A mass of data on the technique of televising, electrical interference conditions, signal distribution, etc., has been and is being collected. Papers describing the technical aspects of the research are presented periodically

before the Society of Motion Picture Engineers, the Institute of Radio Engineers, and other recognized bodies.

In connection with one of the most recent of these papers there was a demonstration on a scale as large as 10 by 8 feet, using optical projection from a kinescope equipped with a suitable lens system, with, it is said, impressive results. (Similar experiments have been carried on in Germany, but there it was reported that the optical quality of the larger pictures was unsatisfactory.)

Occasional television programs are transmitted from a Philco station in Philadelphia and others. The Columbia Broadcasting System has announced its intention of installing a television transmitter on the Chrysler Tower in New York.

In Germany there is considerable television activity. Scenes from the Olympic Games were televised, but apparently the results were unimpressive. In France the forthcoming installation of a 36-kilowatt transmitter on the Eiffel Tower is announced. There are also reports of Russian purchases of television equipment in the United States.

Advance Study Prerequisite

Both here and abroad systematic engineering progress is being made in the development of high-definition television. The situation has reached a point where it warrants careful study and observation. Just as the physical equipment required cannot be brought into existence quickly it is impossible to acquire a background in a field as complex as television overnight, and study well in advance is a prerequisite of wise and economical planning.

The time is not far off when those engaged in motion picture production, and others whose interests are likely to be affected by the evolution of this new field, will do well to acquire as much familiarity as possible with its characteristics and methods.

We recur to the question of picture size. As soon as larger pictures are available with the requisite photographic quality television may be expected to gain marked impetus, and commercial application in the larger urban centers will not be long delayed.

The lesson to be derived from the British experience to date may be that, when those in a position to gauge entertainment value advise that a given picture size is inadequate for successful commercial application, no purpose is served by trying it out on the public. The likelihood of a favorable verdict does not increase with the size of the jury.

For the United States it is to be hoped that no attempt will be made

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AND MOVIE ACCESSORIES

to commercialize home television until a picture equivalent in definition to the best home movie projection, and not smaller than 18 by 24 inches, can be furnished with routine reliability. The most important interests in the domestic field appear to be committed to some such prudent policy.

East and West

New York and Los Angeles together constitute the principal reservoirs of movie, radio and television talent in this country. It may be expected, therefore, that when the problems of providing television service for the New York area are well on the way to solution, say in 1938 or early 1939, the next major urban area selected for television coverage will be that of Los Angeles.

The topographical and physical conditions in the two regions are quite different, and, it would appear, are on the whole more favorable in the West.

In New York the land elevations are relatively low, no point in any of the five boroughs, excepting Staten Island, being as high as 300 feet above sea level. To secure short-wave coverage, therefore, it is necessary to radiate from high buildings, of which there is no scarcity. However, the mass of steel structures on Manhattan Island of necessity casts radio shadows which complicate the problem of television distribution.

Los Angeles Has Edge

Los Angeles, in contrast, is a city of low structures, but natural elevations provide numerous sites from which television service could be effectively provided. Cahuenga Peak, for example, with an altitude of 1825 feet, affords an eminence about 50 per cent again as high as the Empire State Tower, commanding the San Fernando Valley to the north, the greater part of Los Angeles to the south and east, and the beach cities to the west. Topographically, as well as from the aspect of talent availability and entertainment facilities, Los Angeles is a peculiarly favorable site for a television center.

In view of the progress being made in television, this committee feels it advisable to report its findings semi-annually hereafter and is scheduling its work accordingly. The next report thus will be issued in January, 1938.



Joseph B. Thomson

Takes Out Patents For Making Photo on Metal

JOSEPH B. THOMSON, a resident of Brooklyn, N.Y., has taken out a patent on a process for making a photograph on metal. Also he has filed a corporation certificate under the name of Etchograph Corporation of America, of which he will be the sole owner.

While the inventor admits the process is not entirely different from that of engraving he insists there is a great deal more to it. The new photograph is entirely of metal structure, there being no emulsion, paint or pigment or materials sensitive to light employed in the finish of it.

The metals used are non-ferrous and not affected by climatic changes. Therefore they may be placed out of

doors if necessary. In appearance they are not much unlike paper, only, being embossed, are far more attractive. They are said to have a stereoscopic resemblance.

The metals used are copper, zinc, nickel and rhodium. The latter is a derivative of platinum, unaffected by the elements or anything destructive to metal. It is the inventor's suggestion they will last for all time. He first worked out his idea in 1934. He made a picture in the fall of 1935, successful in principle. Patents were granted in November, 1936.

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What Says the Morn?

Continued from Page 272

screen and we fell under the spell of the artistry of the late and lamented Ernest Torrence the mind reverted to a luncheon in the early twenties in the Astor in New York. The occasion was one of a series of celebrations around the conclusion of a year's showing in the Criterion of "The Covered Wagon"—incidentally a run establishing a record in the industry.

Present were all the Paramount bowwows, Zukor and Lasky leading. One of the honored guests was Torrence, who although he had been without a day's work in a year and a half prior to his entrance into the cast of the "Wagon" now the world around was acclaimed as a great actor.

In a response to a toast the actor told of his introduction to the screen as a "dirty dog heavy" in "Toltable David," an independent picture made in the mountains of the South with the object of selling it to one of the major companies. If recollection be correct it was Charles Brabin who produced and directed the subject and who when he came to sell it encountered the customary studied indifference of the buying distributor, singly or as a group.

Brabin was forced to sell the rights, according to the reports at the time, to Universal for \$25,000, the production cost—and a job as a director. The latter meant something worthwhile, for it was of long duration and of course remunerative. Incidentally U made a clean-up on the picture.

Killing an Obsession

Getting back to Torrence the player told of the unvarying response of casting directors when he applied for work—no, while undoubtedly he was a good actor, nevertheless he was a "dirty dog heavy" type and there was no such spot open. On unheeding ears fell information that the player had toured the British Isles and Europe as a concert pianist and at other times had been featured as a musical comedy artist.

For a year and a half Torrence did not get a day's work. Then he was sent for by Jesse Lasky. At the conclusion of the conference the producer remarked in exceedingly blunt fashion that he thought of the absence of good looks on the part of the actor, which the latter faithfully quoted but which will not be here because this writer entirely disagrees with the accuracy of the alleged statement.

The producer went on to remark he also believed Torrence was a good ac-

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REBUILT SILENCED AND STANDARD BELL & HOWELL 170 DEGREE CAMERAS—Hi-speed gear boxes, Bell & Howell Hi-speed shutters. Wall single system sound camera with direct drive motor, new type movement, variable area high fidelity galvanometer, microphone, amplifier, lenses, tripod and accessories. Complete, ready for operation. Two late model Bell & Howell splicers; rebuilt Duplex sound and picture printer; pair used Simplex portable sound projectors with 2000 ft. magazines. Precision, DeBrie and Bell & Howell pan and tilt tripods, Bell & Howell 1000 ft., 400 ft. magazines. Motors, sunshades, finders, lenses and all accessories. Write, wire or cable, **MOTION PICTURE CAMERA SUPPLY, INC.**, 723 SEVENTH AVE., NEW YORK, N. Y. CINECAMERA.

BELL & HOWELL 5-WAY SOUND PRINTER. Generators, Panel Control Boards, Duplex Printers, Sound Movielabs, Developing Machines, Blimps, Dolly, B & H splicers, Mitchell and B & H Silent Cameras, Motors, High Speed Gear Boxes, Light Testers, Projection and Lighting Equipment. Guaranteed optically and mechanically perfect. Send for 1937 Bargain Catalogue, Hollywood Camera Exchange, 1600 Cahuenga Blvd., Hollywood, California. Cable Hocamex.

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PRESS CARDS—For the freelance photographer, 25c. General News Box 25M, West Farms Station, New York City.

tor and he was going to give him a good job.

After that until the day of his death the actor worked as often as he desired and sometimes when he did not.

We can't let this pass without remarking one of the features of the showing at the 8mm club was the scoring contributed by our own Bill Stull. That covered both planning and executing. President Loscher before and after the showing praised the work that had been done. Bill returned in kind, commenting on the cooperation he had received from the president and Secretary Armstrong.

2 MITCHELL STANDARD SOUND CAMERAS—\$3350, \$2750, 2 BELL & HOWELL CAMERAS, 1 with eye shuttle movement \$1100. 1 with Fear sound movement including sound motor \$1250, 35mm Sound Recording Head with variable area \$300, 35mm B & H film perforator with new set of punches \$200. We buy and sell used equipment of every description. Write us your needs.

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AKELEY CAMERA NO. 287, like new, with two-inch, six-inch, twelve-inch and seven-inch lenses, five magazines, tripod, and specially constructed trunk to carry complete outfit. Ruby Camera Exchange, 729 Seventh Avenue (Cable address, Ruby-cam), New York City.

SPECIAL SINGLE SYSTEM CAMERA and full equipment. \$975. Box D, American Cinematographer, care of S. R. Cowan, 19 E. 47th St., New York City.

ART MOVIES, 16mm and 8mm. List Free. Box 16, Station W, Brooklyn, N. Y.

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WE PAY CASH FOR YOUR USED CAMERA, LABORATORY AND STUDIO EQUIPMENT.

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723 Seventh Avenue, New York City
Cable Address: Cinecamera

WANTED: We pay cash for everything photographic. Send full information and lowest cash price to Hollywood Camera Exchange, 1600 Cahuenga Blvd., Hollywood, Calif.

HOLLYWOOD HAS STOCK COMPANY

THE SECOND play to be staged by the Hollywood Little Theatre opened on the evening of June 14 to a crowded house. "Places, Please," by Auranora Rouverol, as interpreted by the Henry Santrey Players, was a worthy successor to "Thirteen Missing Minutes," the first to be shown. Yvonne Frances again held the feminine lead, while Wyndham Standing of the famous English family topped the men players. Jane Corcoran was in the leading feminine character part.

AMERICAN CINEMATOGRAPHER 1937 AMATEUR COMPETITION FOR 8mm AND 16mm SUBJECTS

⌘ \$1000 IN PRIZES ⌘ \$500 CASH \$500 EQUIPMENT

Grand Prize	\$200
Photography	50
Color	50
Scenario	50
Home Movie	50
Educational	50
Scenic	50
Total	\$500

Details of Equipment to be Announced Later No Entrance Fee. Original Films Only---No Dupes No Reduction from 35mm

THE RULES

The contest is world wide and open only to genuine 8mm or 16mm amateurs or amateur clubs.

The contest ends at midnight November 30, 1937. Entries, mailed or expressed, later than that time will not be eligible.

Pictures submitted will be judged by photography, entertainment and/or story value, direction, acting, cutting and composition.

The decision of the judges, among whom there will be prominent cameramen, will be final. Announcement of the awards will be made as soon after the close of the contest as possible and checks and prizes sent to the winners.

Pictures may be submitted either by individual amateur movie makers or they may be submitted by ama-

teur movie clubs. Each entrant must have his entry or entries accompanied by a sworn statement, the blank for which will be forwarded to him to fill in.

Contestants may enter as many subjects as they desire. One entry blank will cover all subjects.

The American Cinematographer reserves the right not to declare a prize for any classification if in the opinion of the judges there is not a picture submitted sufficiently good to be classed as a prize-winner.

The American Cinematographer, subject to the special notice printed below, also retains the right to make duplicates of such prize-winning pictures as it may indicate, for free distribution to clubs and amateur organizations throughout the world.

If you intend to enter the contest please send coupon on this page for official entry blank.

AMERICAN CINEMATOGRAPHER
1782 No. Orange Drive
Hollywood, California

Please send me one of your official entry blanks. I intend to enter a (16mm 8mm) picture in your 1937 contest. I understand my entry must be in your office not later than November 30, 1937.

Name.....

Street.....

Address.....

Special—While there has not been sufficient time in which to work out details it has been agreed in principle that the winner of the American Cinematographer contest unless he choose otherwise shall be a contender in the competition to represent the United States in the International Movie Show supervised by Duncan MacD. Little and sponsored by Columbia University Extension and if successful shall in due course be a contestant for an award in the great final.

One fundamental condition would be imposed upon the winner: That the film be placed in the custody of the International Committee and not be screened except by the committee until such time as the subject is returned to the owner following determination of its final status.

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