

# The Wonderful Moving Pictures in Color

By L. A. GRIFFITH (A Member of the Kinemacolor Cast)



**"MOVIES" MADE ON A MOUNTAIN TOP.**  
This scene was posed at the Grand Canyon of Arizona in a play called "The Explorers." This was so as to get natural scenery as a background. Mrs. Griffith, the girl, is the author of this article. The natural colors of the mountain show in the film.



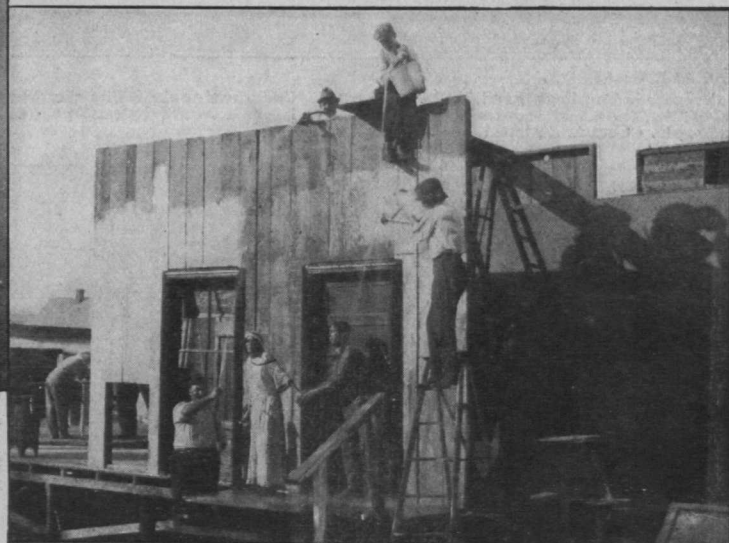
**REHEARSAL OF A COMIC INDOOR "SET."**  
Jack, the young man with uplifted hand, is swearing he will never build another house. Every person shown in the picture is an actor. Only two walls are used in making an indoor scene. The other two sides are open, but they never show in the finished film.



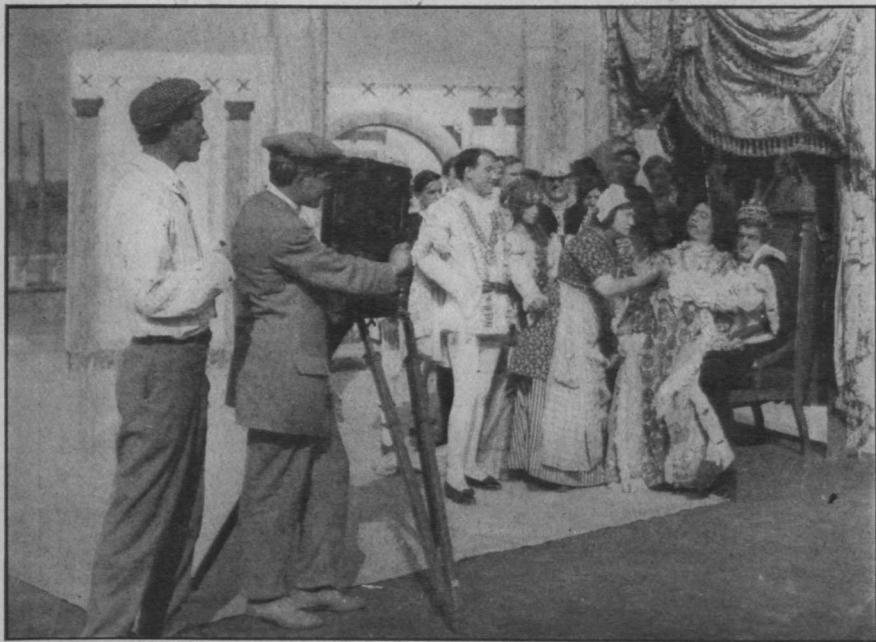
**THREE YOUNG ACTORS.**  
Children are becoming more and more prominent in moving picture acting. These are dressed, or rather undressed, to represent papooses for a play laid near the Grand Canyon.



**DAVID MILES,**  
Head of the production department of one of the foremost motion picture companies in the United States. He is a wonder at getting effect in a picture.



**WHAT A PICTURE CAMERA DOES NOT SHOW US.**  
This scene is about Jack and his house. In the finished production the three men above pouring the water to secure a rain effect do not show. They are "off stage." Only three characters appear in the completed picture.



**"BEGIN THE ACTION—CAMERA!"**  
At this call all the actors assume their poses and are not allowed to step out of their characters until time is called. This is a dramatization of an adaptation of the introduction to Shakespeare's "Taming of the Shrew."



**GETTING THE FINAL ORDERS.**  
The production manager with the papers in his hand is giving the last instructions to his cast in putting on a moving picture play at the Grand Canyon. A troupe spends a summer on the Pacific Coast and takes many pictures.

IT is the moving picture age and the moving picture itself is progressive and progressing. It might be said that there are three stages of its development: The first is in the reproduction of the plain dull photos. These give us all the action but no color and no sound. The wonderful success of the moving picture without these additional accessories has impressed all who have observed its rapid development and growth, so that scarcely a community, large or small, is without its 5 or 10 cent moving picture show.

The second step, that of producing the moving pictures in the natural colors, has reached the practical stage where it is of commercial value. To Messrs. Urban & Smith, who after twelve years constant study in the realms of physics, perfected the Kinemacolor process, we are indebted for the new era which has dawned for the moving picture industry. The kinemacolor pictures are thus far familiar to the larger part of the American public, mostly through the presentation of the Coronation pictures of King George IV of England and the Durbar festivities in India. In no instance must kinemacolor be confounded with the hand-tinted films or those machine colored by the

stencil method. This work we are familiar with through the pictures of the French firms of Pathé, Gaumont and Eclair.

Kinemacolor moving pictures are not colored artificially. Nature does the work and it is this invention or discovery that gives particular value to the Kinemacolor photos. The process is highly technical and a full description would necessitate a long scientific disquisition. The real secret of the kinemacolor process is in the sensitizing of the film. This necessitated exhaustive experiments covering a period of nearly three years. Finally a product was obtained which in ordinary sunlight is sensitive to color waves from the brightest of violets to the darkest of reds. When the kinemacolor camera is at work, a pair of carefully selected light-filters sift the color waves of the scene on to this highly sensitized film and permit them to be recorded separately and in due proportions. After the reel of film bearing these color records has been subjected to the proper developing and drying processes, it is placed in the motion picture projecting machine.

This is fitted with somewhat similar filters, and as the film is run through and thrown on the screen, the color

waves are again set in motion. The proportion of colored light then served out to the observers being the same as at the outset, the original scene is reconstructed, as it were, to the eye. We now see an exact reproduction of every color that entered into the landscape, the green of the trees and grass, nature's flowers in all their lovely colors, the little red cottage by the roadside or the marble palace on the heights and the interior decorations of rooms, even to the soft coloring of a rug.

The third and perhaps greatest of all the coming developments of the moving picture is the reproduction of the sound with the motion. This is still in the experimental stage. The writer had the pleasure of witnessing a private exhibition in Paris. It was a great success and would have been still greater if in addition to the pictures and concurrent sounds, the Kinemacolor process could have been introduced so that we should have had in color, sound and motion, apparently an actual reproduction of the living beings who participated in the exhibition. It is said that the greatest difficulty in producing moving pictures with the voices of the participants lies in the fact that the sounds

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must be reproduced by phonographic devices. It sometimes happens that the film breaks and that part has to be speedily cut out and replaced. This can be done with the film, but it is difficult then to make a readjustment of the phonographic devices so as to synchronize the sounds. Edison and others are working on this problem with every hope of its speedy solution.

Public exhibition of the Kinemacolor pictures thus far have been limited, but it is now being widely extended so as to cover as great a field as the old-fashioned moving picture occupies. In such a competition the popular fondness for color will make the kinemacolor moving pictures so popular that we shall soon have nothing else excepting in places where anything will be accepted because of its cheapness and variety.

Enormous amounts of money are spent in the preparation of moving pictures. Magnificent studios with fully equipped scenic departments, property rooms, wardrobes for costumes and dressing rooms with shower baths have been built by some companies. The studios are equipped with glass roofs so that on bright days the mercury and other lighting effects which take the place of the sunlight on dark days, may be dispensed with. Large tracts of land are being leased by Picture Companies in many parts of the United States. Motoring through the picturesque parts of Southern California signs may be seen, here and there, bearing the information, "Picture rights reserved," with the name of the Company in question. Even the beautiful old California missions have found commercial value, as the Selig Co. has a special grant for their sole use for picture purposes. In return, besides the annual rental, it is understood that the Selig Company is to undertake the restoration of the missions.

The Kinemacolor Company, that is the American dramatic branch which was organized only last summer, rehearsed or rather performed at Whitestone, L. I., in a secluded spot, but not too secluded to prevent the presence of strolling visitors. Just as soon as the cooler and shorter days of autumn came on, the whole Company was put aboard the California Limited and sent to Los Angeles, where in the bright sunlight and in the warmth of that agreeable fall and winter climate the taking of pictures can continue indefinitely. The three dramatic Companies, numbering seventy-five persons in all, consisted of thirty-eight acting people, twenty-five men and ten women, and three children, three directors, scenario editor, camera men, operators, assistants, one master carpenter and six assistants, scenic artists, property men, printers, developers, stenographer and two chauffeurs, as the Company brought their own automobiles, and also two specially prized exhibition horses. The only stop en route to California was made at the Grand Canyon of Arizona where a story entitled "The Explorers" was produced.

Photographically, the Grand Canyon of Arizona was made for the Kinemacolor, as the marvelous coloring is no small part of the wonder and majesty of Arizona's National Park. Four days were consumed in the production of this photo play, a very limited time when one realizes that it takes a few days to become at all acquainted with the Canyon and to locate the vantage points for "backgrounds" so as to combine the best of scenic effects with the location best suited to the action of the story.

The first day's work took place just seven and one-half miles from the hotel, which meant an early morning start at 7 A. M. With two guides, four pack mules—two carrying a full equipment of eating necessities and plenty of water in canteens, and the other two the costumes, camera and make-up—the twelve acting people cast for this particular story began the ride down the Bright Angel Trail on mule back. When one considers that the descent is 3130 feet between the "rim" and the plateau, a sheer drop, it is not to be marvelled at that it was a most quiet and subdued little cortege that wound down the chasm's side and that the nerveless mules were spoken to only in the most caressing tones. About eleven A. M. a stop was made at the edge of the plateau. Here the mules were lightened of their burdens until the return trip.

With the Colorado, that most mysterious, mad-rushing river, just below and in the solemn majesty of one of God's most holy Cathedrals, the make-up boxes were opened and in dressing rooms improvised on ledges of rock, costumes were donned and grease paints were working to the completion of the perfect portrayal of the different characters

of the story. With the camera perched on a dizzy rock, and the producer directing from an equally dangerous point, the story began,—a thrilling moving picture of a rescue shown along a narrow strip of rock, not more than two feet wide, with a direct descent of 1300 feet where the slightest dizziness or misstep would mean a frightful death. About 3:00 P. M. the ascent up the trail began, an early start considering that there were yet two more hours of sunlight. But it would never do to be making the up-trail after dark.

That night a really tired little company of actors, possibly more lame and stiff than tired, went early to bed and found better rest and sweeter sleep than they had known in many days. As only four days had been slated for the stop at the Canyon, the next morning meant another early start but this time through the wonderful pine forest on the way to Hopi Point. As this trip on the mules was over a comparatively flat country and the day's work enacted on substantial mother earth, night found the Company quite bright and cheerful, so a visit to the Hopi House was made.

About noon of Saturday, the last scene in the Canyon story, where the girl is about to leap from the brink of the precipice, was completed and that evening farewells were said to host and friends at El Tovar. The next afternoon Los Angeles was reached and then Hollywood, barely thirty minutes on the trolley from Los Angeles. A plot of land four and a half acres had been selected here for the Kinemacolor studio. Numerous buildings have been erected with two enormous stages on each of which, if necessary, three companies can be working at the same time. There are fourteen dressing rooms and a "projecting" room, in itself a small sized theatre, where the pictures are first shown. As the entire work of printing and developing the moving picture is done on the grounds, this necessitates a complete equipment for same, and one entire building is given over to this part of the work.

For the actor in a moving picture company, early hours are the rule. When working at the studio the time of arrival is from eight to nine A. M. When the work is at some distant location, seven A. M. is none too early for the start. The director, photographer and those cast for the principal acting parts make the trip by automobile, and the long ride home, after working all day in the hot sun, is refreshing to tired nerves and bodies. There is to the moving picture actor, the pleasure and health of outdoor work and the inspiration of real, not painted scenery. To the artist the portrayal of a story such as Helen Hunt Jackson's "Ramona," produced by the Biograph Company at the actual places in Ramona's life, cannot fail to inspire a more perfect characterization than could be had at a rehearsal on the stage of a city theatre.

In the taking of the photo drama for moving pictures the scenes are not acted and photographed consecutively. It all depends on the scenes, technically called "sets." Should the second, fifth and ninth scenes happen in a drawing room, these are photographed while the drawing room scene is on the stage and the camera in its place. Then, should the story shift to the mountains, all scenes happening there will be taken. When the story is completed, the reel of film which is either one or two thousand feet long, must be cut, scene by scene, and then the parts pasted together to tell the consecutive story as in the script. It will readily be seen that the moving picture artist has a harder task than the artist in the drama of the spoken word, for he must act according to the location of story and not with the continuity of the plot enfolded. To approach a climax out of a clear sky is somewhat more difficult than gradually to work up to it from the very beginning of the story as on the dramatic stage. The rehearsal of a moving picture story is practically the same as one on the stage. Lines are spoken at both. They are not written but are supplied by the director and sometimes by the actor.

To be a successful moving picture actor, the first requirement is probably personality. And of equal value is an expressive face, with features that can project the ruling thought. It is an easier task to speak thoughts than to look them. Grace of figure and, for a woman, beauty of face, are absolute necessities. Grease paints and powders do not hide a multitude of sins from the strong lens of a moving picture camera.

The cost of the production of a story in Kinemacolor is considerably above the cost of the production of the same story in

black and white. The first extra item is the cost of the raw film, which is practically double that of the black and white. This is due to the special sensitizing of the film for color photography. Then again the working hours of a Kinemacolor day are considerably shorter than that of the black and white, as bright sunshine is imperative. The black and white picture companies can work some time after the sun sets and can even get better effects on days that are not cloudless. But the Kinemacolor must have the sunshine. So there is a considerable loss of time on cloudy days while salaries keep going on. As to the monetary rewards to the moving picture actor, salaries range all the way from forty dollars to three hundred per week and some actors have a percentage on all films in which they appear. In Kinemacolor there is more gratification to the artist for personal effort than in the black and white. The pleasure of seeing every color reproduced, so naturally that we see the textures of the garments, the shimmer of the silk and the depths of the velvet in the costumes, is no small reward to the patient artist. Kinemacolor has also a wider scope in the production of stories than the black and white. To illustrate: a story called "The Lady in the Red Coat" has just been produced. The pictures show the complications resulting from the fact that two women each wore coats of the same color. In a black and white moving picture this could not be made an effective story. And to think that now the whole world can be brought to us in form and color as Nature made it; and that the greatest artists in their greatest triumphs are ours for all time, just as we now see them, even to the color of their eyes and hair! What the future will bring can only be questioned, but the Kinemacolor is the latest and longest step in advance in the moving picture art.

## Unique Payroll of a Famous Railroad.

(Continued from page 666.)

Charles A. Jeffries, of Lancaster, Pa., enjoys the distinction of having been on the payroll of the Pennsylvania Railroad longer than any other employe. He was born October 8, 1822, and in July, 1846, was employed by the Columbia and Philadelphia Railroad as a fireman. He was made engineer in 1849, and in 1883 his occupation was changed to that of signal repairman.

The Pennsylvania Railroad trains its officers from the rank and file. Young men just out of school or college begin their work for the company by learning the very rudiments of railroading; and there are many years of hard work before they show their heads above their fellows, or their superiors learn they are fully fitted for promotion.

A census recently made of Pennsylvania Railroad officers gives striking evidence of the policy the Company pursues in training men. Of 178 officers included in the Railroad's official biographical list, 171, or 96 per cent., have been with the Company all of their business lives. Of the 178, those who received a college education number 84, or approximately 50 per cent. The seven cases where officers have not been in the service of the railroad ever since leaving school include such as required special training which the railroad did not offer.

## How Texas Does It.

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