

A New Art Is Born in Tribune Color Studio

Real Drama in Camera Magic

By GUY MURCHIE JR.

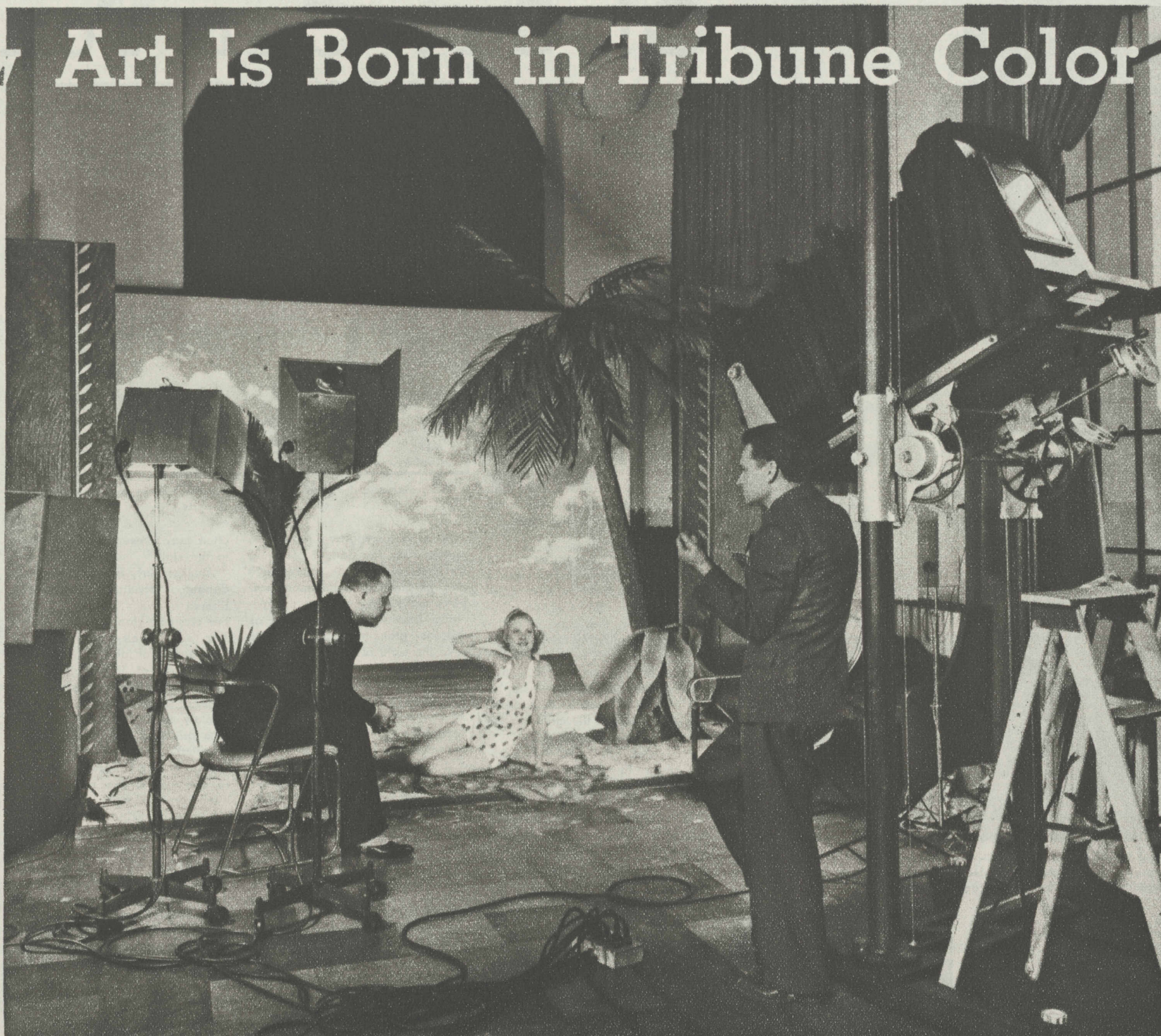
HOW would you like to be sitting under the palm tree beside the girl on the beach who appears on the front page of today's picture section?

If you were there, and human, you would be entranced—you couldn't help it. But the kick you'd get would not come from the beauties of nature, human or otherwise. No, you wouldn't see any nature there at all. Instead you would find yourself surrounded by so many gadgets of artifice and marvels of simulation that you would think you were in a dream.

The girl, you would discover to be so coated with skin salve and artful make-up that you couldn't see a square inch of real girl anywhere. The tree would be revealed as a few bits of palm cleverly attached to a hollow stick stuck into a jardiniere. The beach would turn out to be only a thin sprinkling of sand, while the blue background of sea and sky would be nothing but two painted pieces of wall board.

These are the methods of practical art in a modern color photographic studio such as the spacious high-ceilinged room on the twentieth floor of Tribune Tower where this photograph recently was taken and processed.

To walk into this Tribune studio you would think you were entering a modern art museum. On the walls of soft grayish-blue hang exquisite color photographs of beautiful girls and steel mill scenes and platters of grapes. The windows, twenty feet high, are arched at the top and descend



Glamor and Beauty in Pictures

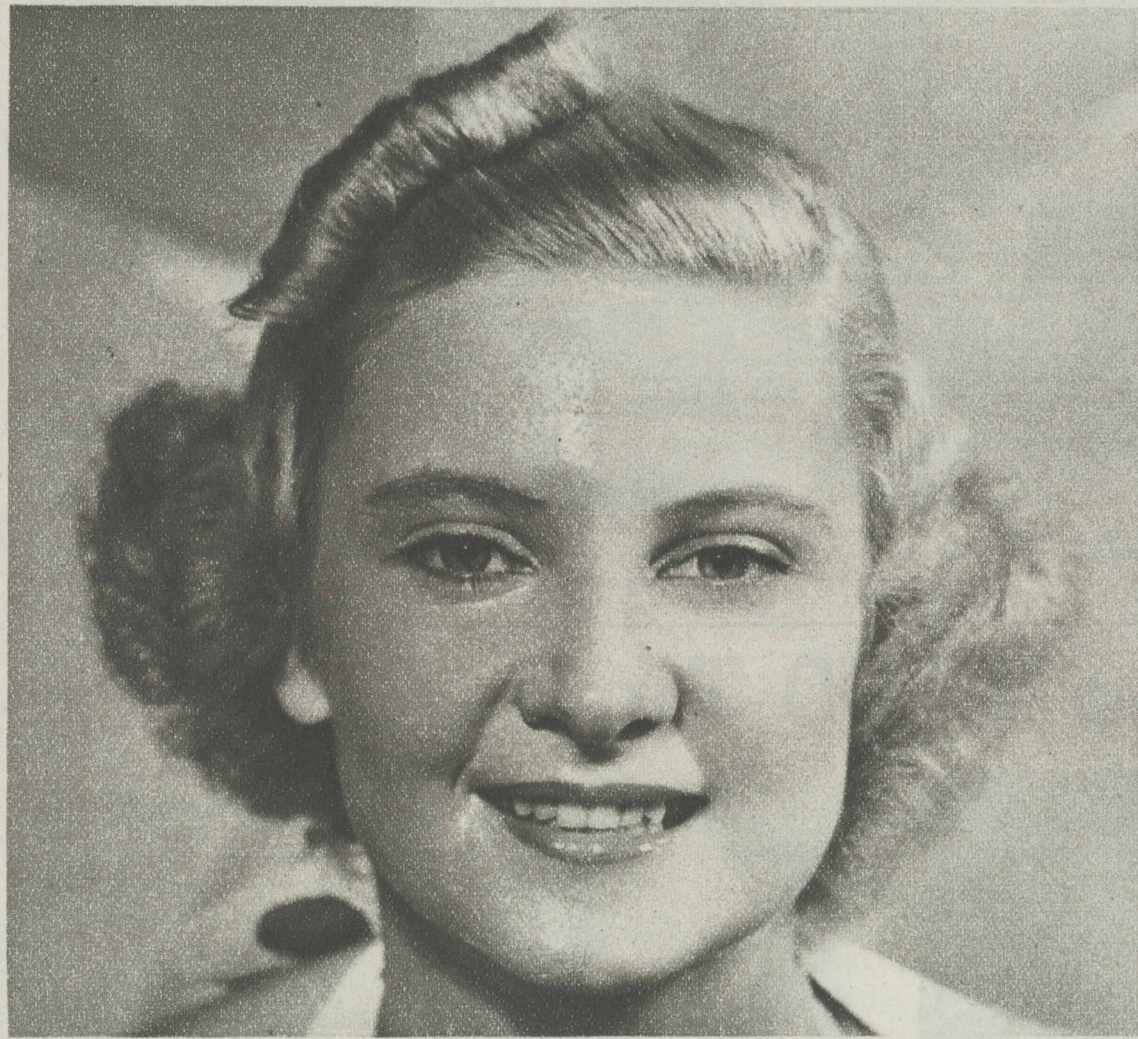
one red, one blue, one yellow, to the corresponding bromide prints till each sheet of pigment has absorbed the image from its print; (4) transferring the three single-colored images from the pigment sheets to three pieces of celluloid; (5) transferring the three images from the celluloid to a single sheet of paper, one on top of another so that they exactly "register" or fit each other, the blue being on the bottom and the yellow on top, and (6) making the finished print by transferring the layers of pigment images to another sheet of paper in reverse order with the blue layer, the one that gives the image its sharpest definition, on top.

Enough for the making of a carbo print, as these natural color prints are called. We have covered the production end of the studio function. Now what about the artistic side of color photography: the conception, creation, and composition of the subject that the camera is to take?

First comes the request for a picture. It may be an assignment to illustrate a story for The Sunday Tribune (as is the case with the pictures in this section and on the front page of the picture section), or it may be a call for a shot of a platter of roast turkey for advertising purposes.

Generally the photographers themselves are left free to choose the exact composition in form and color that will best make the picture asked for. Mr. Johnson or Hull will simply arrange the subject in the position or attitude that strikes his fancy, composing it by trying out various combinations of

This is how the color photograph on the front page of today's picture section was actually taken, but even in this candid shot the artificiality of the girl's color, of the beach, and the palm trees is not apparent.



Here is the model with half of her face covered with a thick coating of makeup salve. This base is always applied before she faces the color camera.

newspaper reproduction that were considered impossible two or three years ago. This is effected by a combination of improved camera construction and printing technique on the one hand and a pioneer's ingenuity in solving a multitude of widely different problems peculiar to a brand new art on the other.

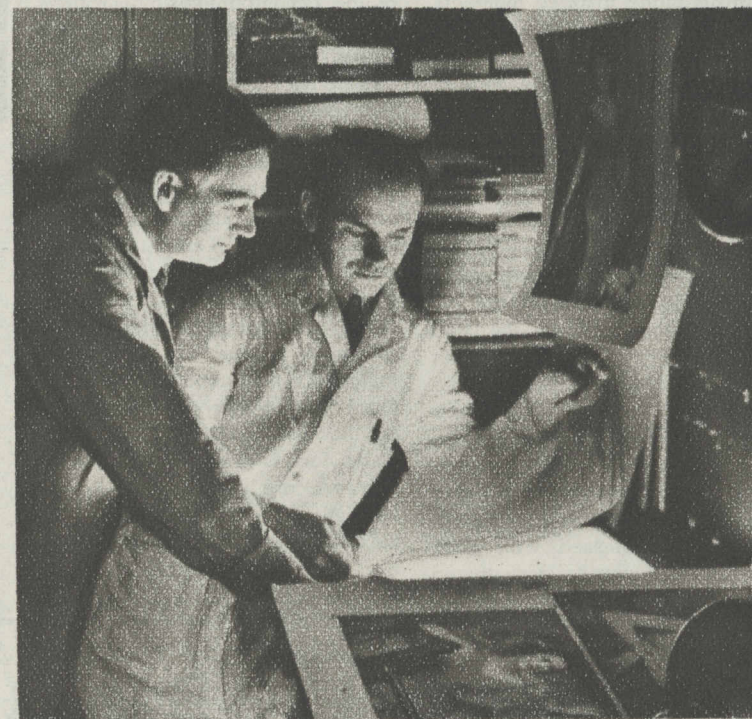
The decisive step ahead in camera construction is exemplified in the almost magical single-exposure natural-color camera invented by Bernphol of Germany and built specially for The Chicago Tribune last year. The unique feature of this camera is that it takes three perfectly co-ordinated pictures at one snap of the shutter and through a single set of lenses, one picture being made with only red light, one with blue, and one with greenish yellow.

Formerly these three necessary pictures (without which a natural color photograph cannot be printed) had to be snapped one after the other with the same camera, the film plates and color filters being shifted between each shot, while the subject being photographed was kept rigidly in position. Naturally the fifteen seconds or so required to complete this

triple-shift maneuver made it impossible to photograph anything but still life. Spontaneous facial expressions, wind-blown hair, and stepping feet were out of the question.

But now dancing girls, bubbling champagne, and rising cigaret smoke are all easy to catch in natural color through Bernphol's genius. It is all done with mirrors. Inside the new camera are two transparent reflectors, tilted at different angles, which have the property of reflecting part of the light which strikes them while allowing the rest to pass through them. Thus the light which enters the camera is simultaneously directed to three different film plates, each of which is covered by a different color filter and each of which records the image produced by light of its own appointed color.

The steps necessary to produce a color print from these three exposed plates are only another phase of photographic magic as practised in the Tribune color studio. The details of this process and the chemical content of the liquids used are a deep darkroom secret that even printers Gras and Mayoh scarcely dare whisper to each other while locked in their inner sanctum, so fearful are they of letting some rival studio hijack



This is the darkroom for color printing, in which the temperature and humidity are regulated with great precision to insure the best results.

the knowledge which they have gone to such lengths to obtain.

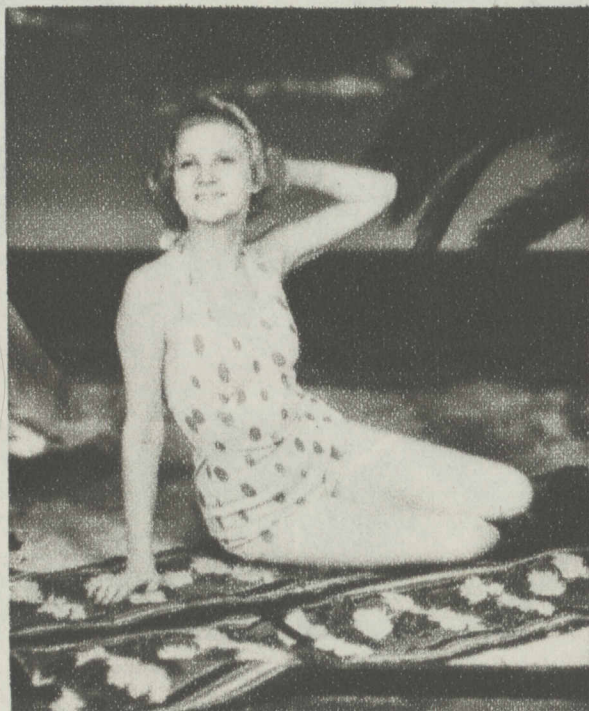
However, the process can be briefly outlined as involving the following steps: (1) development of the three film plates into negatives; (2) making black and white bromide prints from these negatives; (3) applying sheets of specially prepared pigment tissue,

"props" and illusion devices until he has what he is after.

As for the models, who are a vital part of most studio pictures, Johnson and Hull have a book which lists and describes models of all types—girls, men, children, old ladies, fat people, thin people, babies, the dignified, the cute—giving a photograph of each. This book often gives a clue to the right model for a given purpose.

In this connection comes the important problem of makeup, which has to be handled artfully to fulfill the individual requirements of each case. The ingredients of the base skin salves used are among the studio's famous secrets. But it can be told that they completely cover the skin, matching it so closely that the individual's complexion colors come out absolutely true to life in the finished print. The salves are necessary because the slight nuances of hue and reflected light on real skin are perceptibly exaggerated by the color camera and therefore must be controlled.

The final big poser that the photographers must cope with is the psychological factor in getting their models to take on the required facial expressions with convincing spontaneity. This often has to be done by cajolery, sometimes (especially in the case of temperamental movie actresses) by music. Anyhow, in one way or another, it is always done.



These three bromide prints are what the final color print was made from. The one at the left (taken through a greenish filter) determines the red pigment, the middle one (red filtered) determines the blue, and the one on the right (blue filtered) determines the yellow. Two of the pictures are here in reverse, owing to the fact that they were reflected from the two mirrors in the camera.

between graceful folds of rich red drapery. Through them you can snatch an aviator's view of the lake shore spreading out hundreds of feet below. The vaulted ceiling is of cobalt blue, from which dangle large light globes modeled after the planet Saturn.

All about the brownish floor of cork-rubber composition stand the various large cameras, high voltage lamps, and gayly colored stage settings.

In the rear, inconspicuously placed, are a dressing room and three darkrooms—one for film developing, one for making black and white prints, and a larger one for the complicated work of producing natural color prints.

The director and chief photographer of this dazzling realm in the Tribune Tower is one Edward Johnson, a stocky, middle-aged man of understanding face and experienced eye. With the assistance of Photographer Harry Hull and Carbo Printers Alfred Gras and William Mayoh, he weekly turns out color pictures for