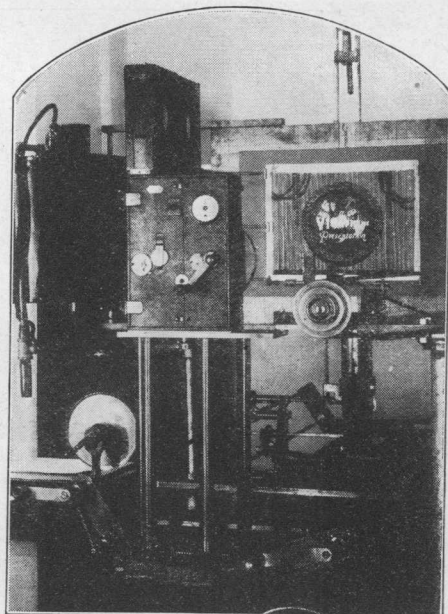
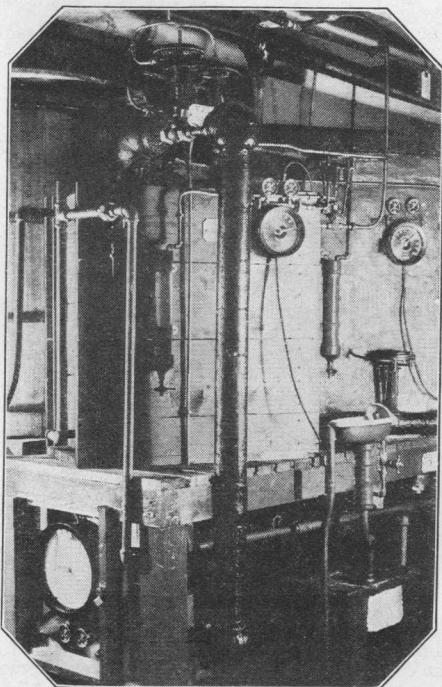


Movies Take On Color

By A. P. PECK

EVER since the invention of motion pictures, natural coloration in the films has been a goal toward which experimenters have worked with but little success until comparatively recently. All sorts of schemes have been tried, ranging from hand tinting of the individual frames to the simultaneous projection of two films, dyed in a separate color range.

The public, however, is critical of its entertainment, and crude efforts at natural color have been greeted with coolness and disfavor. Then the process of film coloration known as Technicolor was introduced, and as it was improved it found favor. Now comes Technicolor's only serious competitor, Photocolor, with a fully equipped plant for processing film and with a fully developed system for producing colored movies that faithfully reproduce on the screen the original subject.

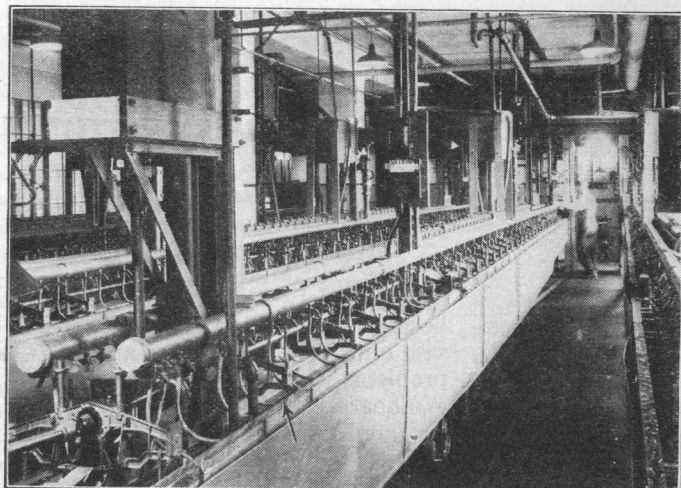


TITLING

In the foreground is the camera; in the background is the stand holding the copy

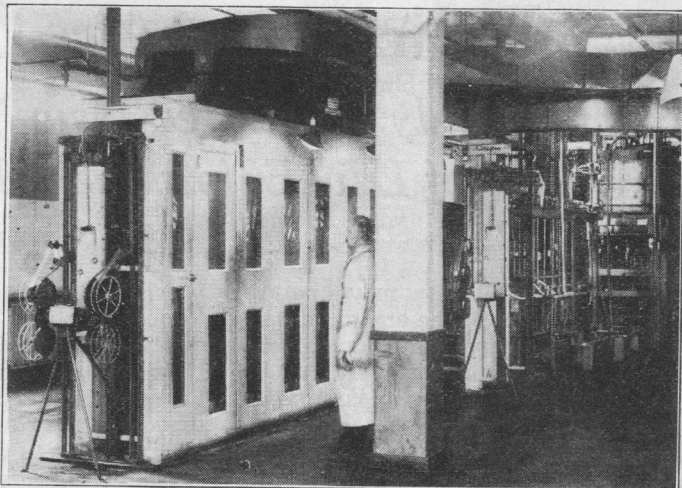
← **TEMPERATURE CONTROL**

Absolute control of the temperature of the solutions is obtained by circulating water



GREEN-BLUE DYEING

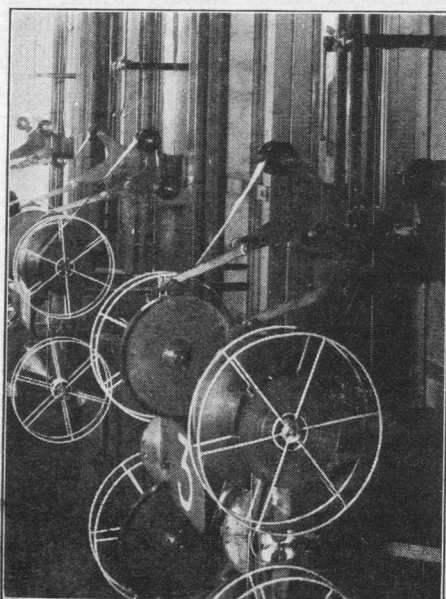
The film, indicated by the arrow, floats on a carefully regulated solution of dye, absorbing the color in the emulsion on one side



RED-YELLOW DYEING

After one emulsion is dyed, as at left, the film is run through the red-yellow bath, where the emulsion on the other side absorbs color

All photographs courtesy Photocolor Corporation



← **TAKE-UP**

After the dyeing operations, the film is dried and wound on these take-up reels

At a recent showing of a Photocolor production, the writer was favorably impressed with the degree of accuracy achieved in reproducing that bugbear of all color photography—flesh tints. Also, unusual in colored movies, pure blacks and clear whites furnished a pleasing contrast to the colors, all reproduced in the proper tones.

The Photocolor process has been under development for several years, during which time it has been refined to a point where a completely equipped plant is ready to start work on feature length productions. Essentially the system is as follows:

The camera is equipped with two lenses and operates the negative film

at two and one half times normal speed. This is done because two frames of the film are exposed simultaneously, one through a filter for the red-yellow tones, and the other through a filter for the green-blue tones. There is a space between the frames that is eliminated in the printing. In the printing machine, which is accurate to within one ten-thousandth of an inch, alternate frames are printed on one side of a double-emulsion film, and the remaining negative frames on the other positive emulsion. Thus, the simultaneously exposed frames are registered and combined. When the positive is developed it is still in black and white. One side is dyed with a green-blue dye and the other with a red-yellow dye, the result being a close approximation of natural coloration when projected on a motion-picture screen.