

# "TALKIE" TECHNIQUE

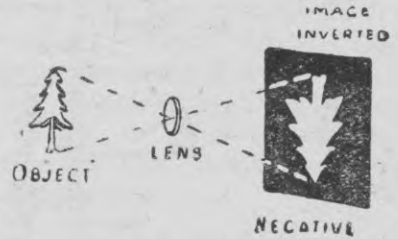
**T**HE acceptance of modern motion pictures as a universal form of entertainment, as well as a means of education, has led many to overlook the rapid developments which have taken place in photographic processes from the early still pictures and lantern slides to the modern machine which brings a faithful reproduction of the camera and sound to the screen.

It is of interest, then, to glance back occasionally to the « Good old days » and review the early beginnings of many of our modern amenities. With motion picture developments, naturally, the picture theatre had its rise from the first still photos and, in tracing its progress, it is really essential initially to outline the principles which govern photography.

In the first instance it is necessary to have a negative, that is a carrier usually made of glass or celluloid, which supports a « light sensitive » agent in the form of salts of silver. In the camera this negative is held in a « light tight » compartment and the photograph is taken by exposing the film or negative to light passing through the lens of the camera.

This process is brought about by the light being reflected from the object photographed and passing through the lens, impinging on the « light sensitive » material of the film and forming a latent image.

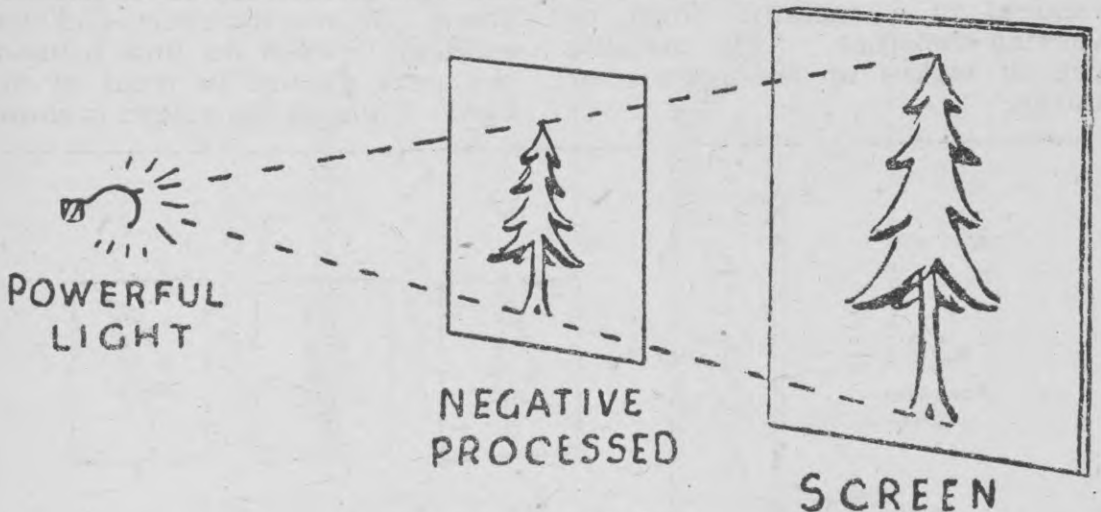
As will be seen from the diagram, the image as reflected on to the negative, is reversed. This is due to refraction which causes the light passing through the lens to



**PRINCIPLE OF THE CAMERA:**  
The image is normally smaller than object. Larger here for clarity.

cross. At this stage the picture on the negative is both upside down and opposite in tone value to the object.

In order to bring the image back to correct tone relationship with the object the negative is placed against a positive and light transmitted through the film.



STILL PICTURES  
PROJECTION ON SCREEN: The image here is larger.