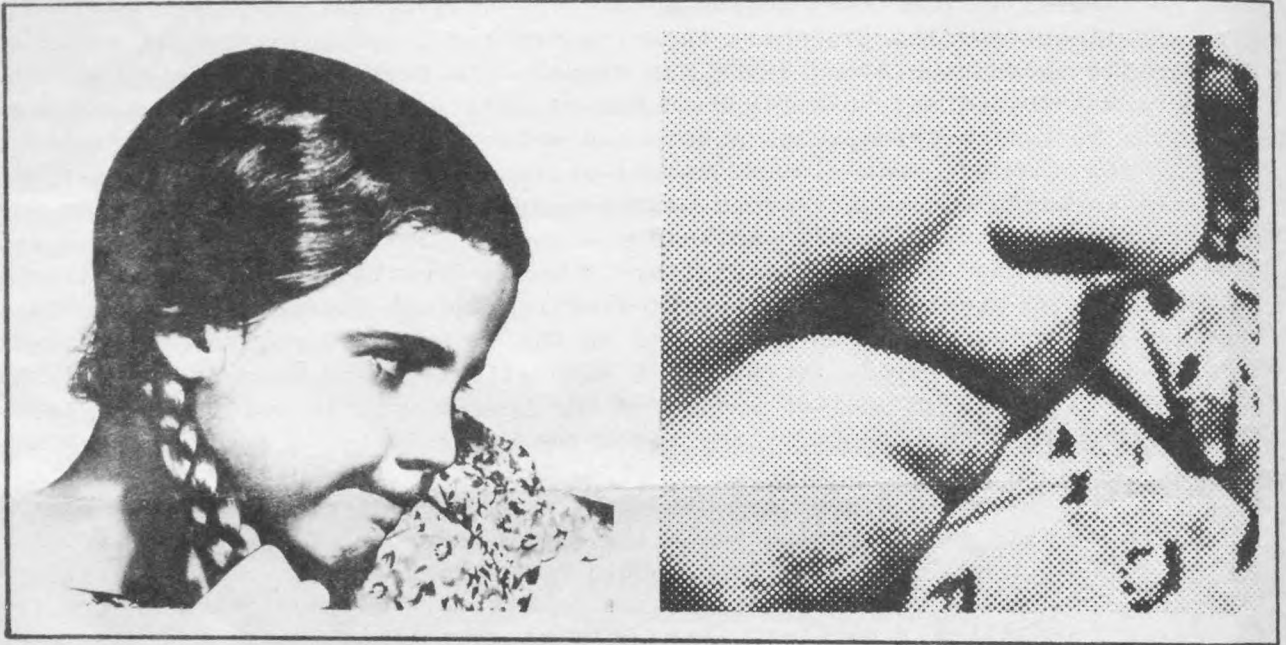


STORIES of New Jersey

were obtained. The closer the lines, the darker the shading.

But in 1839 Louis Daguerre invented the daguerreotype, and printers were faced with the problem of reproducing a photograph. A method had to be discovered that would translate all the delicate shades of a photograph into solid black and pure white. A plan was evolved to break the picture into little black dots by rephotographing it through a screen. The black parts of the picture photographed as dots that filled the holes in the screen; the gray parts made smaller dots; and the white portions made no dots at all. Because this method reproduced not only black and white but also the in-between tones, it was called half-tone engraving.



The two illustrations above are half-tones. The picture at the right is an enlargement of the nose, mouth and chin of the girl. The enlarged dots that give the effect of shading are clearly visible.

The plates for pictures, called "cuts," work like type. In relief cuts, the part that is to be black is raised; the part that is to be white is indented in intaglio cuts; and on planograph plates the black portion is chemically treated to pick up the ink.