

Todd-AO Improvements In Sound and Lighting

By Paul V. Beckley

Michael Todd's production of Jules Verne's "Around the World in Eighty Days," in the new Todd-AO motion picture process shows for the first time a screen with twice the illumination of any previous picture and a sound system so flexible that a character's voice seems to follow even the movement of his head as he leans forward in a chair.

Mr. Todd said the improvement in sound, due to employment of ninety-six positions of sound source pick-up when making quality of his picture about quality of his picture about which he had "no humility."

In making the scene in which Jose Greco dances on a table top in a Spanish cabaret, he said he insisted against the advice of all his technicians on planting the microphones underneath the table and recording the sound as the scene was photographed.

Either dubbing the sound in afterward or asking Mr. Greco to re-dance the scene to a playback would have caused errors in timing which, no matter how subtle, would have blurred the effect of the scene, he said.

Although the Todd-AO process was seen earlier in "Oklahoma," the improvements in sound and screen lighting were devised after that picture was filmed. Michael Todd jr., the producer's son, who will be general manager of the Rivoli during the run of "Around the World in Eighty Days," said the vastly increased light on the screen, representing the latest stride in the direction of naturalistic lighting, was made possible by two new improvements.

Lamps powerful enough to produce such screen illumination are not new, but Mr. Todd jr. pointed out that their heat would scorch the film or crack the projector's lens. To counteract this, a system of spewing air cooled to 30 degrees below zero on both sides of the film was devised.

Joe Tritsch, technical supervisor of the Michael Todd Co., devised this refrigeration process. In addition, Mr. Todd ex-

plained that the curved screen, which has a depth at the center of more than thirteen feet, has small ridges a sixteenth of an inch apart running up and down the surface. This does away with any tendency of the strong light on the surface to be deflected to the side. It also keeps the light on the sides of the screen from bouncing across to illuminate other portions of the screen, blurring the image.

The Todd-AO process uses a screen twenty-eight feet high and fifty-six feet wide, both higher and wider than that used in Cinerama. The camera angle employed in filming pictures can encompass 128 degrees as compared to 136 for Cinerama and 75 for CinemaScope. The picture is made on 65 millimeter film as compared to three separate 35 millimeter prints for Cinerama and 50 millimeter for CinemaScope 50.