## 'Miracle' Film Process Boon At Southbridge

By WILLIAM F. HOMER, JR.

SOUTHBRIDGE—American glass lenses and frames. Optical Company has driven a This is no optical illusion. It is

spectacular \$12,000,000 stake in-to show business after a century "miracle" film process out of the and a quarter of making eye- Cinerama mold, called Todd-AO.

The "Todd" part is for Mike Todd, cigar-waving Broadway producer whose insistence and persistence finally led to "Cinerama out of one hole," — one camera instead of three.

## 4000 EMPLOYES

AO, naturally, stands for American Optical, whose 4000 employees here and a \$70,000,000 yearly sales backbone from its regular products suddenly gave both skills and dollars an unex-pected Hollywood touch.

What happens when the formerly austere largest maker of opthalmic and optical products acquires a P. T. Barnum complex? Less than two weeks old is the first inclusive verdict from New York's Rivoli Theater.

"'Oklahoma' is Okay!"

The new Todd-AO, draws its "miracle" tag from an unbelievable 2½ year development through two separate corporations. What happens when the form-

The change from optimism to "Oklahoma" has yoked such improbable companions as Todd, American Optical's scholarly Dr. Brian O'Brien, 150 company engineers and researchers, a Dutch projector maker, filmdom's George Skouras, a devastating flood and a reluctant Rodgers and Hammerstein.

Serious, informative William F. Peck, now president and general manager of AO's motion picture products division here, after years as head of the Buffalo instrument division, can't estimate what Todd-AO means to the optical maker's profits. It's mostly on a fee and

future dividend basis.
He can tell you how closely
"Oklahoma" came to being rechristened "By the Waters of the
Quinebaug."

## PLANT FLOODED

Just two months and three days ago, four feet of Quinebaug water, revved up by a broken dam, raced through the lavish reception room where we talk. Thirteen feet, seven inches of water filled the sprawling brick main plant, one of 10 buildings, below the second floor stairway, and "wooden desks hung from the steam pipes."

In the path-of the river, as it whirled flood and debris down stricken Mechanic street, stood AO's research center full of Todd-AO equipment.

"Only good fortune and good By April. 1953, Todd-AO was construction saved the lab," Peck into the development stage.

explains.

"Four feet of water raged outside the windows, as the research center became an island. feet of water raged TODD-AO BUNDLE search center became an island. Fortunately, doors and windows sat so tightly that only an inch of water seeped onto the floor. The only real Todd-AO delay we had was from the power failure."

The plant as a whole rallied from disaster as fast as a ball player to a steak dinner. By Oct. 1, in a month and a half,

player to a steak dinner. By Oct. 1, in a month and a half, full production in all sections was resumed. Public Relations Director George Anderson places total damage at "nearer \$1,000,000" than first reports of \$10,000,000. "We did work we could not have hired at any price," he explains, "in the greatest show of human spirit we ever saw. Time off meant nothing. We had a coffer dam under a corner of the ruined power house in three days. We opened up building walls to drive in tractors to scoop out mud."

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SOUGHT SINGLE CAMERA

The Mike Todd spark of persistence that led to Todd-AO burned just as bright. He had worked on the Cinerama "roller coaster" film. He thought the process too complicated (three cameras, three projectors, three operators) and too costly. He started hunting for his "Einstein of the optical

Todd met Dr. Brian O'Brien, then director of the Institute of Optics at University of Rochester. The scientist was cool at first to the single camera idea, advised visiting the principal optical companies for necessray

optical companies and money and brains.

The Todd-AO laboratory luck food held earlier. When in the flood held earlier. When Todd came around to visit American Optical, there was O'Brien

installed as vice-president and director of research.

With O'Brien, younger AO executives convinced the then elderly president, Walter A. Stewart, that the Todd idea was feasible and that it was the state of the feasible and that it represented progress from lenses and frames.

AO funds and manpower went work in November, 1952, to work in November, 1952, under O'Brien and E. Weldon Schumacher, then vice-president, now president of the com-pany. By enlisting outside help, an estimated three years work was completed in four months.

For financing this Skouras and AO formed Magna Theater Corporation. By June, 1954, Todd-AO Corporation was set up for licensing and commercial distribution. Magna and AO

cial distribution. Magna and AO have equal voting power in this. Technically, the Todd-AO "bundle" includes 70 mm. film, double the standard width; a tall, wide. deeply curved screen to cut distortion; a projector that handles 35 mm. as well as 70 mm. film widths; and a camera whose nine inch "bugeve" lens gives a 128 degree field of vision. Cinerama gets only 145 degress with three cameras. In degress with three cameras. In Todd-AO, too, the audience "gets into the act."

Of the Todd-AO future, al-though there's "no business like show business," the optical company officials see it frosting on the cake. Lenses and frames are still the bread and butter.