

1939

TECHNICOLOR

**The Color Process Born
in a Railroad Car
29 Years Ago**

By **LENNOX FOSTER**

TECHNICOLOR — conceived at Boston Tech and born in a railway car in 1917—attained its majority, properly enough, 28 years later when Dr. Herbert Thomas Kalmus, president and founder, received the 1938 Progress Award from the Society of Motion Picture Engineers at its annual convention.

To Dr. Kalmus, Technicolor's future looks brighter than ever during his two decades' struggle: so bright, in fact, that a \$1,500,000 expansion program was recently completed to care for the increased demand for Technicolor.

The story of Technicolor begins in 1915 when Dr. Kalmus and his associates became interested in a color process. Dr. Kalmus' task was to find a suitable name, and, a Boston Tech man himself, he combined "Technique," the engineering school's class annual, and Color and so was born Technicolor.

In 1917, sufficient capital was raised to set up a laboratory in a railway car and a happy group, under Dr. Kalmus' guidance, set forth for Florida to make an opus called "The Gulf Between." The process at that time required special projection equipment, and even though there was color on the screen, Dr. Kalmus realized "that such special attachments on the projector required an operator who was a cross between a college professor and an acrobat."

Technicolor then turned to an imbibition method, consisting of two gelatine reliefs produced upon thin celluloid, which were glued or welded together and dyed in complementary colors. This was the basis for the Technicolor two-component process and

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resulted in Joseph and Nicholas Schenck producing "The Toll Of The Sea." The picture was praised by leading artists, but insufficient laboratory capacity held up general release throughout the country. Other pictures followed, and this phase of Technicolor was climaxed when Douglas Fairbanks, convinced that the screen had never caught and reflected the real spirit of piracy in black and white, felt that color would make it successful. "The Black Pirate" was the result. It was a boxoffice success, but a headache to Technicolor. The double coated prints did not project sharply on the screen; the prints wore out easily; they scratched and cupped.

Back to the laboratory went Dr. Kalmus and his scientific associates, with the result that a two-color imbibition process on a single film was perfected. With the boom of '28 and '29, Technicolor surged forward and was used by nearly every major studio. But Technicolor realized that any two-color process was so limited that it was but a stepping stone toward greater perfection without which Technicolor was doomed.

Back to Wall Street went Dr. Kalmus and back to the laboratory went his associates. By 1932, Technicolor was ready for the industry with a three-color process. Walt Disney pioneered it, and his "Three Little Pigs" and other three-color cartoons of those days sold the public, helped sell the motion picture industry, and so sold Disney that all his product is now in Technicolor.

Gradually, the industry looked more kindly toward Technicolor and with each year, a greater number of features and short subjects has been made in this medium.

Much of this has been possible because of the perseverance and other sterling qualities of Dr. Kalmus' associates, including the late Dr. Troland and the late Andrew Callahan; G. F. Rackett, vice-president and assistant general manager; Natalie M. Kalmus, color control director; George Cave, in charge of Hollywood sales, and Robert Riley, head of the camera department. The duties of each are all important and each division must be letter perfect to produce a perfect Technicolor motion picture.