

WILLIAM VAN DOREN KELLEY

(1876-1934)

William Van Doren Kelley was born at Trenton, N. J., March 8, 1876. While a youngster in the Trenton schools, he exhibited a talent for invention and in addition, became interested in theatricals. Thus was laid the foundation for his later activities in the field of the motion picture. His ability as an inventor and his interest in the theater led him to stage acts of magic and illusion with the acumen and showmanship of a much older person.

While still young, "Bill" began to earn his living as a show-card and window-display artist. This activity led to a partnership in an advertising sign business with a brother, George Kelley, in Brooklyn, N. Y.

The history of their business was marked by the invention of many successful devices, among them being the "flashing light" type of sign introduced about 1910, which became very popular and made a good income for the company.

In the meantime, as funds became available from the profits of the business, Kelley devoted his spare time to working on a process for coloring motion pictures. He had first become interested in the problem after a trip with Joseph Mason to England for Biograph in 1910. Kelley's job at that time was to decorate and make attention-attracting devices for the Biograph showhouses in England, and he also worked with the Biograph camera. He realized the value that color would give to the films, and from then on his cherished dream was to invent a process for coloring motion pictures. Every spare cent and every moment not used for earning a livelihood was directed toward achieving this goal.

In 1913 he formed a company called "Panchromotion" for the development of an additive color process somewhat similar to the Kinemacolor of that time. In order to minimize color fringing, one of the deficiencies of such systems, he increased the number of pictures taken in a given unit of time. He also tried to improve the color rendition by using three and four colors in the color-wheel on the projector; the Kinemacolor used only two

The color experiments were conducted in the basement of a house at 1586 E. Seventeenth St., Brooklyn, N. Y. During this time a double-coated stock and a bleach formula which had much to do with the success of the later Prizma process were perfected. From Brooklyn the Panchromotion Company moved to quarters in a vacant garage in Jersey City, N. J. By this time, a certain measure of success had attended Kelley's endeavors, and Prizma Incorporated was formed with sufficient capital to undertake regular production.

Subsequently to 1916, Prizma sent cameramen with the Prizma filter-wheel cameras throughout the world to make travel and nature pictures. The negative films were returned and finished at the Prizma laboratory.

The first Prizma film was *Our Navy*, released in 1917 at the Forty-Fourth Street Theater in New York City, and also shown about the same time at the Strand Theater in that city. The color was produced by an additive process, using a color-wheel on the projector.

Kelley was not satisfied, however; he believed that the color could be applied directly to the film by a subtractive system. In order to carry out this idea, he entered a partnership with Carroll H. Dunning and Wilson Saulsbury, and a laboratory was opened at 205 W. Fortieth Street in New York City under the name "Kesdacolor."

Their first film made by the subtractive process was a picture of the American flag. In a length of fifty feet it was shown at the Roxy and Rialto at New York, on September 12, 1918.

Shortly after the success of this showing, Kelley returned to the Prizma Company, which was reorganized. Longer films were undertaken, and in 1919 a single-reel travel subject was subtractively colored.

J. Stuart Blackton of Vitagraph saw this picture and was so impressed that he decided to make a feature-length picture in Prizma color. *The Glorious Adventure* was released in April, 1922.

Kelley continued his researches far afield in a search for yet untried methods in color. In 1919 he produced a series of colored animated cartoons which were drawn by Pinto Colvig; in 1923 he developed a stereoscopic motion picture novelty in color; in 1924 he introduced Kelley-Color which was an imbibition process. In this last-named system, two colors were imbibed upon a black-and-white key image. In 1926 he became associated with Max Handscheigl in the formation of the Kelley-Color Company which was bought by Harris-Color in 1928. In 1929 Kelley started his experiments with

the bi-pack negative method, which has since been widely used in making "process shots" and color-separation negatives.

During the last days of his life, Kelley was working upon a system in which the bi-pack negative films were cemented together before perforating, thus assuring better registration and a closer union of the two strips of film during the photographing. The cemented films were to remain cemented until after development.



W. V. D. KELLEY

The only medal ever issued by the Society of Motion Picture Engineers was presented to him on October 13, 1919, "for achievement in color motion pictures."

Kelley contributed many papers dealing with color photography to the *Transactions* of the Society, and served as chairman of the Color Committee for many years.

The Society and the industry sustained a great loss in Bill's passing.

W. E. THEISEN