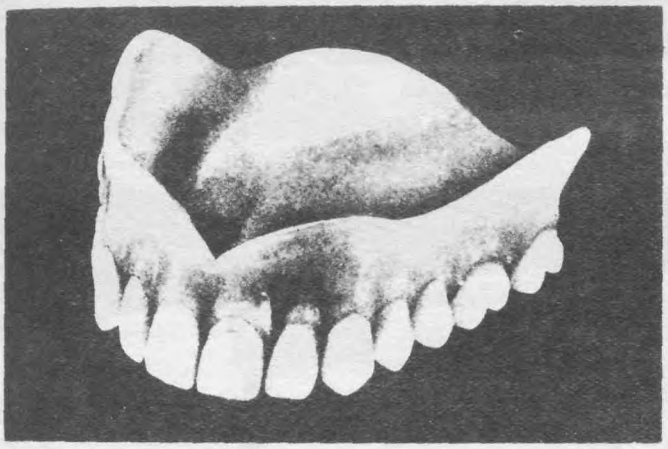
John Wesley Hyatt, born in Starkey, New York, November 28, 1837,was working as a journeyman printer in Albany when he decided to try to produce the much-needed material and win for himself the $10,000 prize.He had little knowledge of chemistry, but he started conducting his experiments in his spare time, at night and on Sundays. Although he discovered several compositions, none was good enough to replace ivory billiard balls.

With the help of his two brothers Hyatt set up a factory to make checkers and dominoes out of pressed wood. Meanwhile he continued his search for an ivory substitute. Finally, about 1868, he mixed flakes of paper, shellac and collodion (a cotton-like substance mixed with alcohol and ether). Together these materials hardened into a new product. Billiard balls made from it sold by the thousands.

Inspired by success, Hyatt continued his experiments. He treated ordinary cotton with acids to form what is called cellulose nitrate or pyroxylin, added camphor and produced a plastic that would take any shape and harden quickly.It was a new product and must, therefore,have a new name. Hyatt's brother,Isaiah, an editor, chose "celluloid," a combination of the word "cellulose" and "oid" (the Greek word meaning form).

Dentists were the first to make use of this new product to replace the dental plates of hard rubber then in use. The Hyatt brothers organized the Albany Dental Plate Company and prospered.



Plastic plates look and feel better

In 1871 they established the Celluloid Manufacturing Company and began making knife handles, piano keys,brushes and novelties. Two years later the factory was moved to Newark. Celluloid entered the political picture in 1872 when the first campaign buttons of that material were used in the contest between Grant and Greeley. Toward the end of the century, collars made of celluloid,which could be kept eternally fresh with a damp cloth, were a popular innovation.

The successful development of celluloid accelerated plastic research throughout the world. In Newark, N.J. the Rev.Hannibal Goodwin was handicapped by the continual breaking of the glass stereopticon plates he used to illustrate his Sunday School lectures.The minister saw that the celluloid developed by the Hyatt brothers, might be used to replace the glass plates which were so easily broken. His problem was to make celluloid as clear as glass.

In his parsonage attic Rev. Goodwin went to work. Occasionally his wife and family downstairs were disturbed by explosions.The walls of the old house, still standing on Broad Street, bear the stains and scars of the experiments; but by 1887 he had succeeded in making and patenting a transparent film that was flexible enough to be wound on spools. This was the beginning of the motion picture.