

# George Eastman

[George Eastman](#) (July 12,

1854 – March 14, 1932)

was an inventor in the  
photography field,  
specifically the invention  
of photographic film to  
replace photographic  
plates, thus leading to the  
technology used by film  
cameras prevalent in the  
20th Century. I'm

confident he would have

marveled at the digital revolution dominant in the 21st

Century. He was one of the founders of [Eastman-](#)

[Kodak Company](#). Unfortunately, the company

essentially went out of business in the early 2000's,

continuing only in a small niche of the market.



**George Eastman**  
(1854-1932)

George is the sixth great grandson of Plymouth Colony Governor William Bradford, who is my sevnth great grandfather. George is the sixth cousin, once removed to me. He is a sixth cousin, once removed to my son-in-law, Steven O. Westmoreland.

George Eastman was an ingenious man who contributed greatly to the field of photography. He developed dry plates, film with flexible backing, roll holders for the flexible film, a Kodak camera (a convenient form of the camera for novices), and an amateur motion-picture camera. Through his experimental photography, he accumulated a large sum of money. His philanthropic personality prompted him to give his money to various business endeavors, including the University of Rochester.

He was a high school dropout, judged 'not especially gifted' when measured against the academic standards of the day. He was poor, but even as a young man, he took it upon himself to support his widowed mother

and two sisters, one of whom was severely handicapped.

He began his business career as a 14-year old office boy in an insurance company and followed that with work as a clerk in a local bank.

He was George Eastman, and his ability to overcome financial adversity, his gift for organization and management, and his lively and inventive mind made him a successful entrepreneur by his mid-twenties, and enabled him to direct his Eastman Kodak Company to the forefront of American industry.

But building a multinational corporation and emerging as one of the nation's most important industrialists required dedication and sacrifice. It did not come easily.

The youngest of three children, George Eastman was born to Maria Kilbourn and George Washington Eastman on July 12, 1854 in the village of [Waterville](#),

some 20 miles southwest of Utica, in upstate New York. The house on the old Eastman homestead, where his father was born and where George spent his early years, has since been moved to the [Genesee Country Museum in Mumford, N.Y.](#), outside of Rochester.

When George was five years old, his father sold his nursery business and moved the family to Rochester. There the elder Eastman devoted his energy to establishing [Eastman Commercial College](#). Then tragedy struck. George's father died, the college failed and the family became financially distressed.

George continued school until he was 14. Then, forced by family circumstances, he had to find employment.

His first job, as a messenger boy with an insurance firm, paid \$3 a week. A year later, he became office boy for another insurance firm. Through his own

initiative, he soon took charge of policy filing and even wrote policies. His pay increased to \$5 per week.

But, even with that increase, his income was not enough to meet family expenses. He studied accounting at home evenings to get a better paying job.

In 1874, after five years in the insurance business, he was hired as a junior clerk at the [Rochester Savings Bank](#). His salary tripled -- to more than \$15 a week.

When Eastman was 24, he made plans for a vacation to [Santo Domingo](#). When a co-worker suggested he make a record of the trip, Eastman bought a photographic outfit with all the paraphernalia of the wet plate days.

The camera was as big as a microwave oven and needed a heavy tripod. And he carried a tent so that he could spread photographic emulsion on glass plates before exposing them, and develop the exposed plates

before they dried out. There were chemicals, glass tanks, a heavy plate holder, and a jug of water. The complete outfit was a pack-horse load, as he described it. Learning how to use it to take pictures cost \$5.

Eastman did not make the Santo Domingo trip. But he did become completely absorbed in photography and sought to simplify the complicated process.

He read in British magazines that photographers were making their own gelatin emulsions. Plates coated with this emulsion remained sensitive after they were dry and could be exposed at leisure. Using a formula taken from one of these British journals, Eastman began making gelatin emulsions.

He worked at the bank during the day and experimented at home in his mother's kitchen at night. His mother said that some nights Eastman was so tired he couldn't undress, but slept on a blanket on the floor beside the kitchen stove.

After three years of photographic experiments, Eastman had a formula that worked. By 1880, he had not only invented a dry plate formula, but had patented a machine for preparing large numbers of the plates. He quickly recognized the possibilities of making dry plates for sale to other photographers.

In April 1880, Eastman leased the third floor of a building on State Street in Rochester, and began to manufacture dry plates for sale. One of his first purchases was a second-hand engine priced at \$125.

'I really needed only a one horse-power,' he later recalled. 'This was a two horse-power, but I thought perhaps business would grow up to it. It was worth a chance, so I took it.'

As his young company grew, it faced total collapse at least once when dry plates in the hands of dealers went bad. Eastman recalled them and replaced them with a good product. 'Making good on those plates

took our last dollar,' he said. 'But what we had left was more important --reputation.'

Eastman's experiments were directed to the use of a lighter and more flexible support than glass. His first approach was to coat the photographic emulsion on paper and then load the paper in a roll holder. The holder was used in view cameras in place of the holders for glass plates.



This system of photography using roll holders was immediately successful. However, paper was not entirely satisfactory as a carrier for the emulsion, because the grain of the paper was likely to be reproduced in the photo.



Eastman's solution was to coat the paper with a layer of plain, soluble gelatin, and then with a layer of insoluble light-sensitive gelatin. After exposure and development, the gelatin bearing the image was stripped from the paper, transferred to a sheet of clear gelatin, and varnished with collodion -- a cellulose solution that forms a tough, flexible film.

As he perfected transparent roll film and the roll holder, Eastman changed the whole direction of his work and established the base on which his success in amateur photography would be built.

He later said: 'When we started out with our scheme of film photography, we expected that everybody who used glass plates would take up films. But we found that the number which did so was relatively small. In order to make a large business we would have to reach the general public.'

Eastman's faith in the importance of advertising, both to the company and to the public, was unbounded. The very first Kodak products were advertised in leading papers and periodicals of the day -- with ads written by Eastman himself.

Eastman coined the slogan, 'you press the button, we do the rest,' when he introduced the Kodak camera in 1888 (his patent was awarded September 4, 1888) and

within a year, it became a well-known phrase. Later, with advertising managers and agencies carrying out his ideas, magazines, newspapers, displays and billboards bore the Kodak banner.

Today, company advertising appears around the world and the trademark Kodak, coined by Eastman himself, is familiar to nearly everyone.



his inability to maintain an active life, and set about putting his estate in order.

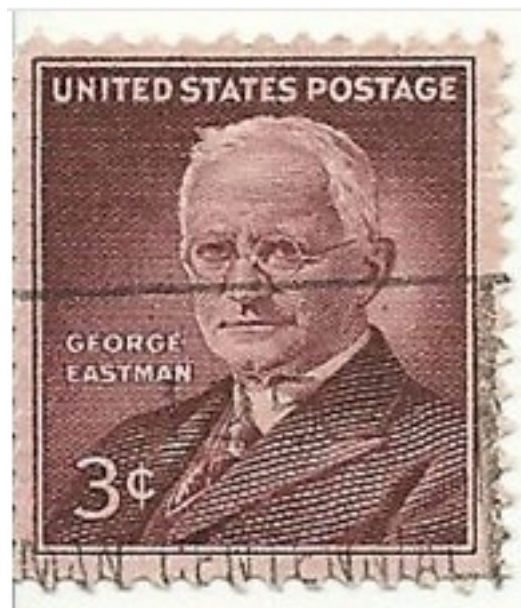
Eastman was a stupendous factor in the education of the modern world, said an editorial in the New York Times following his death. Of what he got in return for his great gifts to the human race he gave generously for their good; fostering music, endowing learning, supporting science in its researches and teaching, seeking to promote health and lessen human ills, helping the lowliest in their struggle toward the light, making his own city a center of the arts and glorifying his own country in the eyes of the world.

During his lifetime, he gave away an estimated \$75 to \$100 million, mostly to the [University of Rochester](#) and the [Massachusetts Institute of Technology](#) (under the name of 'Mr. Smith'). The Rochester Institute of Technology has a building dedicated to Mr. Eastman, in recognition of his support and substantial donations. MIT has a plaque of Eastman (the rubbing of which is traditionally considered by students to

bring good luck) in recognition of his donation.

Eastman also made substantial gifts to the Tuskegee Institute and the Hampton Institute. Upon his death, his entire residuary estate went to the University of Rochester. His former home at 900 East Avenue in Rochester was opened as the [George Eastman House International Museum of Photography and Film](#) in

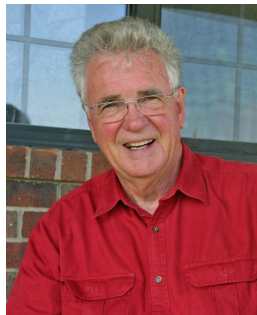
1947. On the 100th anniversary of his birth in 1954, Eastman was honored with a postage stamp from the United States Post Office.



In 1907, Eastman's mother died, devastating him completely. His close relationship with Josephine Dickman deepened after this, but, despite many speculations about them marrying, he remained a life-long bachelor. He mellowed somewhat, though, and became interested in philanthropy. He gave huge donations to MIT, the Hampton Institute, the Tuskegee



Information for this composure about George Eastman came from numerous on-line searches. If you need URL confirmation for any aspects, contact me for documentation.



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