EASTMAN KODAK COMPANY

... a brief history



• In 1875 the art of photography was about half a century old. It was still a cumbersome chore practiced primarily by studio professionals and a few ardent amateurs who were challenged by the difficulties and complexities of making photographs.

About 1877, George Eastman, a young bank clerk in Rochester, New York, began to plan for a vacation in the Caribbean. A friend suggested that he would do well to take along a photographic outfit and record his travels. The "outfit," Eastman discovered, was really a cartload of equipment (including a lighttight tent), and field photography with the "wet" plates of the day demanded that the photographer should also be something of a chemist, a contortionist, and a man-of-all-work. Wet plates required preparation immediately before exposure, and development immediately thereafter—wherever one might be.

Eastman decided that something was very inadequate about this system Giving up his proposed trip, he began to study photography. At that juncture, a fascinating sequence of events leading to the beginning of the Eastman Kodak Company had begun.

a new ídea . . . • Before long he read of a new kind of photographic plate which had appeared in Europe and England. This was the dry plate—a plate which could be prepared and put aside for later use, thereby eliminating the necessity for tents and field-processing paraphernalia. This appealed to Eastman. Working at night in his mother's kitchen, he began to experiment with the making of dry plates. He had no scientific training, but he was methodical, precise, and ingenious. Also, when he had a hunch he followed it.

Out of his experiments came a successful series of dry plates and, even more important, an idea for a machine which could produce them uniformly and in quantity.

 Because London was the center of the photographic and business world, he journeyed there in 1879 and obtained a patent on his plate-coating machine. An American patent on it was granted the following year.

In 1880 George Eastman rented a third-floor loft in Rochester, and began the manufacture of dry plates commercially. His success in the venture so impressed Henry A. Strong, a hard-headed businessman who roomed with the Eastmans, that Strong invested some money in the infant concern. On January 1, 1881, Eastman, together with Strong, formed a partnership called the Eastman Dry Plate Com-



This self-portrait was made by George Eastman as an experiment with a new film in 1884.

pany. Late that year Eastman resigned from his position at the Rochester Savings Bank to devote all his time to the new company and its business.

George Eastman worked day and night. While actively managing all phases of the firm's activities, he continued his research in an effort to further simplify

a patent, a process, a purpose



The company's first home was on the third floor of this building on State Street in Rochester.

photography. His diligence paid off in new inventions and discoveries, and, in 1884, he startled the trade with the announcement of film in rolls, together with a roll holder adaptable to nearly every plate camera then on the market. Eastman dreamed of a "complete system of photography" and, with the introduction of the No. 1 Kodak camera in 1888, the foundation was laid for the fulfillment of this goal.

In contrast to the cameras then on the market, which required a tripod for support, the Kodak camera was a light, portable instrument that could be easily carried and hand-held during operation. It was priced at \$25, loaded with enough film for 100 exposures. After exposure the camera and film were returned to Rochester, where the film was developed, prints made, and the new film inserted at a cost of \$10. The next year, the No. 2 Kodak cam-

era, a larger model, was announced. Thus began a procession of continual improvements in Kodak cameras and other photographic equipment.

• In 1884 the Eastman-Strong partnership had given way to a new firmthe Eastman Dry Plate and Film Company—with 14 share owners. A successor-named the Eastman Company-was formed in 1889.

The company has been called the Eastman Kodak Company since 1892, when the Eastman Kodak Company of New York was organized. In 1901, the present parent firm—the Eastman Kodak Company of New Jersey—was formed under the laws of the State of New Jersey.

Since its founding, seven men have served Kodak as president. At the firm's beginning in 1880, George Eastman was the sole proprietor. When the Eastman Dry Plate Company was formed in 1881, Eastman and Henry A. Strong became joint proprietors. From the organization of the Eastman Dry Plate and Film Company in 1884 until 1919, Strong was the president of the successive companies; during the same period George Eastman served as treasurer and general manager. Eastman was named president in 1919 and became chairman of the board of directors in 1925. His successor as president

"Kodak" as a company



H. A. Strong













W. G. Stuber F. W. Lovejoy P. S. Wilcox T. J. Hargrave A. K. Chapman W. S. Vaughn

was William G. Stuber. Following Eastman's death, Stuber became chairman of the board and Frank W. Lovejoy was made president. In 1941, Thomas J. Hargrave was elected president, Lovejoy became chairman of the board, and Stuber became honorary chairman. Perley S. Wilcox served as chairman of the board from Lovejoy's death in 1945 until Hargrave's election in 1952. Dr. Albert K. Chapman succeeded Hargrave as president until his election to the position of vice-chairman of the board in 1960, when the current head of the Eastman Kodak Company, William S. Vaughn, took office. In 1962, after the death of Hargrave, Chapman became chairman of the board.

basic business principles

- From the start, Eastman had three basic principles for the business. These were:
 - · Mass production at low cost
 - · World-wide distribution
 - · Extensive advertising

Today these principles are generally understood and accepted, but in 1880 they were novel. Eastman saw them as closely related, for mass production could not be justified without wide distribution which, in turn, needed the support of strong advertising.

To Eastman's first basic principles of business, he added these policies:

- Foster growth and development through continuing research
- · Treat employees in a fair, self-respecting way
- · Reinvest profits to build and extend the business

The history of the Eastman Kodak Company is, in fact, one of progress in the development of these basic principles.

mass production at low cost • In the very early years of the company, Eastman was preoccupied with the idea of supplying the tools of photography at the lowest possible cost to the greatest number of people. The rapid growth of the business made large-scale production a necessity. Much time and ingenuity went into the creation of labor-saving machinery and processes for manufacturing film to enable the new company to turn out high-grade merchandise at a phenomenally low cost for that period.

In 1896 the 100,000th Kodak camera was manufactured; and film and photographic paper were being made at the rate of about 400 miles monthly. This was indeed "large-scale production at low cost for the world market," and the resultant savings were passed along to a public which was rapidly becoming picture-conscious. In 1895 the Pocket Kodak Camera was introduced at a price of \$5.00. Not content with this. Eastman worked toward a camera which would operate simply and efficiently and sell for \$1.00. The result of these efforts was the first of the nowfamous Brownie cameras in 1900. Photography was at last within the reach of nearly everyone.



1888: the No. 1 Kodak camera.



1963: the Kodak Instamatic camera.

All of this was accomplished by the turn of the century. In the years following, right up to the present day, Kodak has adhered to the policy of making the newer and better methods evolved through continued research available to the users of its products.

• From the sixteenth century on, some great photographic discoveries had come out of Europe. Niepce and Daguerre in France, Talbot in England, and others laid the foundations for the techniques leading to present-day photography. By the time George Eastman launched his dry-plate business in 1880, European interest in photography was keen.

world distribution

Eastman early realized the potentialities of the world market. Only five years after the company was established in the United States a sales office was opened in London. Within the next few years, particularly after the introduction of the Kodak camera and Eastman's simplified methods, picture-taking spread like wildfire.

In 1889, the Eastman Photographic Materials Company, Ltd., was incorporated in London, England, to handle distribution of Kodak products in countries outside of the Americas. At first all goods were manufactured in



The Harrow Works in England, Kodak's first plant outside the U.S., began operations in 1891—just a few years after the company was founded.



Today's large and modern Harrow plant includes recreation facilities for employees.

Rochester, but before long the combined foreign and domestic demand overreached the plant resources. Construction of a factory at Harrow, England just outside of London—was completed in 1891. Today Kodak Limited has plants in several additional locations in England, as well as widespread sales, distribution, and film processing facilities. Employment throughout England totals more than 11,000 persons. By 1900 distribution outlets had been established in France, Germany, Italy, and other European countries. A Japanese outlet was then under consideration, and construction of a factory in Canada was under way with the organization of Canadian Kodak Co., Limited.

The Rochester Export Territory was established in the early 1900's for the distribution of Kodak materials to South America and to the Far East. Service to the Orient was broadened in 1907 when a small photographic plate manufacturer in Australia joined Kodak to form Kodak (Australasia), Pty. Ltd., a company which today boasts a modern manufacturing plant and employs about 2,500 men and women.

Kodak Pathé of France was added in 1927, and the present factories at Vincennes, Sevran, and Chalon-sur-Saône keep more than 6,000 persons busy with the manufacture and sale of Kodak photographic products. The creation in Germany of Kodak A.G., widely known today as the maker of the famous Kodak Retina line of cameras, also occurred in 1927.

In the United States, the turn of the century saw the opening of regional sales divisions in New York, Chicago, and San Francisco. Additional sales divisions in Rochester and Los Angeles were established in 1946, in Dallas in 1950, and in Chamblee, near Atlanta, in 1954. Kodak Hawaii, Ltd., organized in Honolulu in 1928, became a regional sales division in 1959.

These are highlights of the growth that has brought about effective distribution to domestic and world markets. Kodak is now represented in a total of more than 115 countries and territories—at almost every point where economic and political conditions permit.

George 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 all the leading papers and periodicals of the day—with the ads

written by Eastman himself.

In 1889 had come the famous slogan "You Press The Button, We Do The Rest," coined by Eastman with the introduction of the No. 1 Kodak camera. Later, with advertising managers and agencies carrying out his ideas, magazines, newspapers, displays, and billboards bore the Kodak banner. Space was taken at world expositions, and the "Kodak Girl," with the style of her clothes and the camera she carried changing every year, smiled engagingly at photographers the country over. In 1897 the word "Kodak" sparkled from an electric sign on London's Trafalgar Square-one of the first such signs to be used for advertising. By 1899 Eastman was spending three-quarters of a million dollars a year for advertising—the largest advertising outlay of that time!

■ This early advertisement—like thousands since—stressed product quality.

advertising



Today Eastman Kodak Company advertising reaches out into all parts of the world, and the provocative word "Kodak," coined by George Eastman in 1888, is familiar to nearly everyone. The Kodak yellow "dress" of packaging for most company products and the Kodak corner curl are also widely known. These distinctive marks are among the company's most valued assets.

• The nucleus of Kodak's present complete research facilities was George Eastman's experimentation to perfect his first photographic plates. During the first years of the company, his own inventions were the bulwark of its progress. However, he pioneered in drawing upon colleges and universities for young scientists to swell the ranks of his research staff, beginning in 1886 with the

engagement of a chemist as a full-time researcher—one of the first in American industry.

Eastman was looking toward a laboratory devoted exclusively to photographic research. In 1912 his ambition was realized with the building of the Kodak Research Laboratories at Kodak Park. The laboratories were established under the direction of Dr. C. E. Kenneth Mees, one of the world's leading photographic authorities. The present Rochester laboratories are more than 20 times the size of the original three-story building, and the staff has grown from 20 to more than 1,200. Other important laboratories are located at the Tennessee Eastman and Texas Eastman divisions and in England, France, Switzerland, Panama, and Australia. Much development work is also done in engineering departments attached to each of the manufacturing plants. Kodak efforts have brought forth notable contributions to photography in the medical, scientific, educational, and entertainment fields, as well as the development of color film, amateur motion pictures, x-ray and dental films, safety (non-flammable) film for both amateur and professional.

research



1912: Kodak's first research building.



Today: company research facilities are widespread.

Through the medium of scientific research and development, photography has become a unique and powerful factor in human progress.

• Stemming directly from Kodak's research is the wide variety of photographic products which the company has introduced. Eastman's aim was the manufacture of "a complete system of photography"—to anticipate demand if possible, or to meet it speedily as it arose.

After the introduction of the first Eastman photographic dry plate in 1880, each successive year brought the presentation of new Kodak products; photography and the company's business forged ahead.

development of new products

The year 1889 saw the introduction of the first commercial transparent roll film on nitrocellulose support; this was the film which Thomas Edison used to make his first motion pictures. In 1896 Kodak perfected the first positive motion-picture film, a great boon to the budding motion-picture industry. In 1908 the company manufactured its first successful non-flammable film using safety (cellulose acetate) base. With continued research, this base was improved to suit a variety of film products and it gradually replaced the highly inflammable cellulose nitrate type.



Movies became a reality when Thomas Edison (r.) used Eastman's flexible film in his new system.

In 1923 Kodak made amateur motion pictures practical with the production of 16mm reversal film on safety base. Experiments in the field of color photography have led to the introduction of many new films and processes continuously since 1928. The introduction of Kodachrome Film in 1935 revitalized the whole world of photography. Further improvements in the first safety-base film enabled the company to switch the production of professional motion-picture film to safety base in 1951. Kodak films and equipment are used in the television industry, the data processing field, and for missile and space projects.

The Verifax Office Copier system now makes it easy for a secretary or office

clerk to make rapid, permanent copies of letters and other business documents at a cost of only pennies per copy.

In 1963, Kodak stirred excitement throughout the photographic world with the introduction of Kodak Instamatic cameras and the Kodapak film cartridge. These two research achievements have made photography amazingly simple for the amateur snapshot artist by removing one of his last perplexing problems—the loading of a roll of film into a camera. The Kodapak film cartridge is simply dropped into the back of the Instamatic Camera.

Kodak has made its facilities for research and production available to the government during wartime. During World War I, Kodak developed and produced aerial cameras and trained aerial photographers for the Army Signal Corps. It created and made available 1,000 synthetic chemicals. In World War II, Kodak's Tennessee Eastman Company division operated for the government the Y-12 plant of Clinton Engineer Works to obtain Uranium 235 for use in the atomic bomb. The proximity fuse, termed second only to the atomic bomb in America's defense arsenal, was produced in Rochester. An explosive called RDX, which is 50 percent more powerful than TNT, was manufactured at the Holston Ordnance Works at Kingsport, Tennessee, after a large-scale production process was developed by Tennessee Eastman. Today, too, Kodak continues to play its part in the defense program.

George Eastman's dream of a "complete system" of photography has been more than realized. The Kodak line of equipment, film, paper, and chemicals serves nearly every photographic purpose. And from the research which led to these products have come a variety of non-photographic items now manufactured by Kodak, its affiliates, and divisions.

growth

• Business in the early days quickly outgrew the third-floor loft where George Eastman stirred his first emulsions. When Eastman and Henry Strong formed the Eastman Dry Plate Company in 1881, they moved to larger quarters down the street. It was soon evident that the new location could not contain the growing firm for long, and Eastman began to search for a more permanent business home. He chose a site at 343 State Street in Rochester. The present 19-story general office building stands on this site, expanded through the years by additional purchases.

In the beginning all manufacturing was carried on at State Street. By the late 80's it was clear to Eastman that he was going to need more space—lots of it—to house the manufacturing facilities the growing business demanded. This time he chose land on the outskirts of Rochester, and, in 1891, production began at Kodak Park. Today, at least 140 major manufacturing buildings spread out over Kodak Park's more-than 1,000 acres. About 20,000 people help produce the film, paper, and chemicals made there.

Camera Works, which opened in 1893 with one building, has grown to a plant of nine six- and seven-story buildings representing the hub of Kodak's production of cameras, projectors, and photoaids.

The Hawk-Eye Works was christened in 1911, and the lens department formerly housed at Camera Works was moved there. Hawk-Eye's present streamlined plant is one of the world's most complete optical works. It also produces Verifax copiers, Recordak microfilming equipment, and other products.

The Camera Works and Hawk-Eye plants were combined in 1956 to form the Apparatus and Optical Division. This new division brought together re-



◆The Kodak Park Works, the company's largest plant, was opened on the outskirts of Rochester in 1891.

This aerial view shows more than 140 production buildings today.



search, manufacturing, marketing, and related activities for increased operating efficiency.

The Lincoln Plant, also a unit of the Apparatus and Optical Division, is engaged largely in classified research and production work on special defense contracts.

diversification

• In 1920, Kodak bought from the government a hardwood distillation plant at Kingsport, Tennessee, for the manufacture of wood alcohol, a chemical vital to film making. The plant was named Tennessee Eastman Corporation. Now known as the Tennessee Eastman Company, this division has become a flourishing center for the manufacture of Estron and Chromspun acetate fibers, Verel modacrylic fiber, and Kodel polyester fiber, as well as Tenite acetate, butyrate, propionate, and polyester plastics, plus a large number of important industrial chemicals and dyes.



Tennessee Eastman in 1920 . .



 and now a major chemical, plastic, and fiber producer.

In 1928 the Recordak Corporation was formed as Kodak's affiliate in the microfilm field by George L. McCarthy, inventor of the system. Although the original Recordak machine was devised for the protection of bank records, a broad line of Recordak microfilm systems now is used everywhere to store and preserve records: in industry, insurance, department stores, engineering, newspapers, libraries, government, and in a growing number of special uses.

Gelatine is one of the vital ingredients in film manufacture. Kodak makes some of its gelatine at the Kodak Park Works and a considerable amount also is made by the Eastman Gelatine Corporation at Peabody, Massachusetts, in a plant purchased in 1930 from the American Glue Company.

Distillation Products Industries, another of Kodak's Rochester divisions, began from a project in the Kodak Research Laboratories in 1927. From experiments on high vacuum protection of film has come this whole new industry engaged in the manufacture of vitamins and distilled monoglycerides, and in the marketing of some

4,000 synthetic chemicals primarily for use in scientific research.

At Longview, Texas, stands the company's newest U.S. manufacturing division—Texas Eastman Company. The plant, which began operations in 1952, manufactures basic chemical raw materials for use by Tennessee Eastman and other company units, and by the chemical industry. Production facilities for Tenite polyethylene plastic now have a capacity of over 120 million pounds a year. A company-designed unit for the production of Tenite polypropylene and Tenite polyallomer plastics began operating in 1960.

• Kodak payrolls and benefits have more than kept pace with employment. For example, the \$57 million paid out in 1940 to employees in the U. S. had, by 1962, multiplied more than seven times to \$434.5 million.

employee benefits

From the beginning, employee health, safety, and comfort set standards for building construction. Later these same factors found further expression in the formation of a safety committee in 1911, a medical department in 1914, and a sick benefit plan in 1920. In 1928 the establishment of the life insurance, disability benefit, and retirement annuity plans, further protected the security of Kodak employees.

One day in 1898 a Kodak Park man had an idea about window washing, told his boss, was awarded \$2 for his interest—and Kodak's suggestion system was born. Since then awards to employees for time- and money-saving ideas have amounted to over \$5 million.

George Eastman believed in rewards for work well done. As early as 1899 he gave a bonus out of his own personal funds to employees, and in 1912 he created the Kodak wage dividend plan. Since then, Kodak people in the U. S. have received more than \$500 million in wage dividends.

One of the oldest features of Kodak's employment program is perhaps the most notable and far-reaching. The troublesome problem of seasonal employment caused grave concern by the year 1900. People who were hired in the spring to make the extra film needed to meet summer demand had to be laid off in the fall, resulting in an unstable and inefficient employment situation.

The only solution was to distribute production over the year, making enough film during the dull periods to take care of demands during the busy season. But the risk was great. True, the keeping qualities of film had improved, but would they be good enough to maintain its effectiveness over the longer storage periods?

Eastman decided that the stakes were worth the gamble. The plan that followed was conceived and developed by Frank Lovejoy, then manager of Kodak Park and later president of the company. It was very successful and paved the way for general employment stabilization in the company's Rochester manufacturing units.

The principles by which George Eastman lived were apparent in all his actions. He believed in planned saving, and so made it easier for Kodak people to follow his example. In 1921 the Eastman Savings and Loan Association was founded to encourage employees to make arrangements for planned savings and to borrow money for home-building.

The Kodak employee always has had an opportunity to advance if he is willing to work and learn. Since 1916 the company has provided tuition aid benefits which enable Kodak men and women to take special courses at colleges and technical schools.

• A major factor in Kodak's growth has been the capital investment program to provide new buildings, better machines, and improved methods. This program is financed on a pay-as-you-go basis, plowing back part of the company's earnings each year. In the last five years, over \$300 million has been put into such additions and improvements to facilities in the U. S. alone.

Expansion of plants and distribution facilities has been accompanied by rising employment. The world-wide organization, which employed only about 40,600 back in 1940, today numbers over 78,000 persons. The largest plant, the Kodak Park Works, currently employs more than the total of all of the Rochester units in 1940.

reinvested profits



• Over 80 years have gone by since George Eastman set out to make the world picture-conscious. Photography has become a true servant of man in all of his many and diverse endeavors. As an outgrowth of this progress in photography, Eastman Kodak has developed a wide spectrum of other products and services to help make life more interesting and more abundant.















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