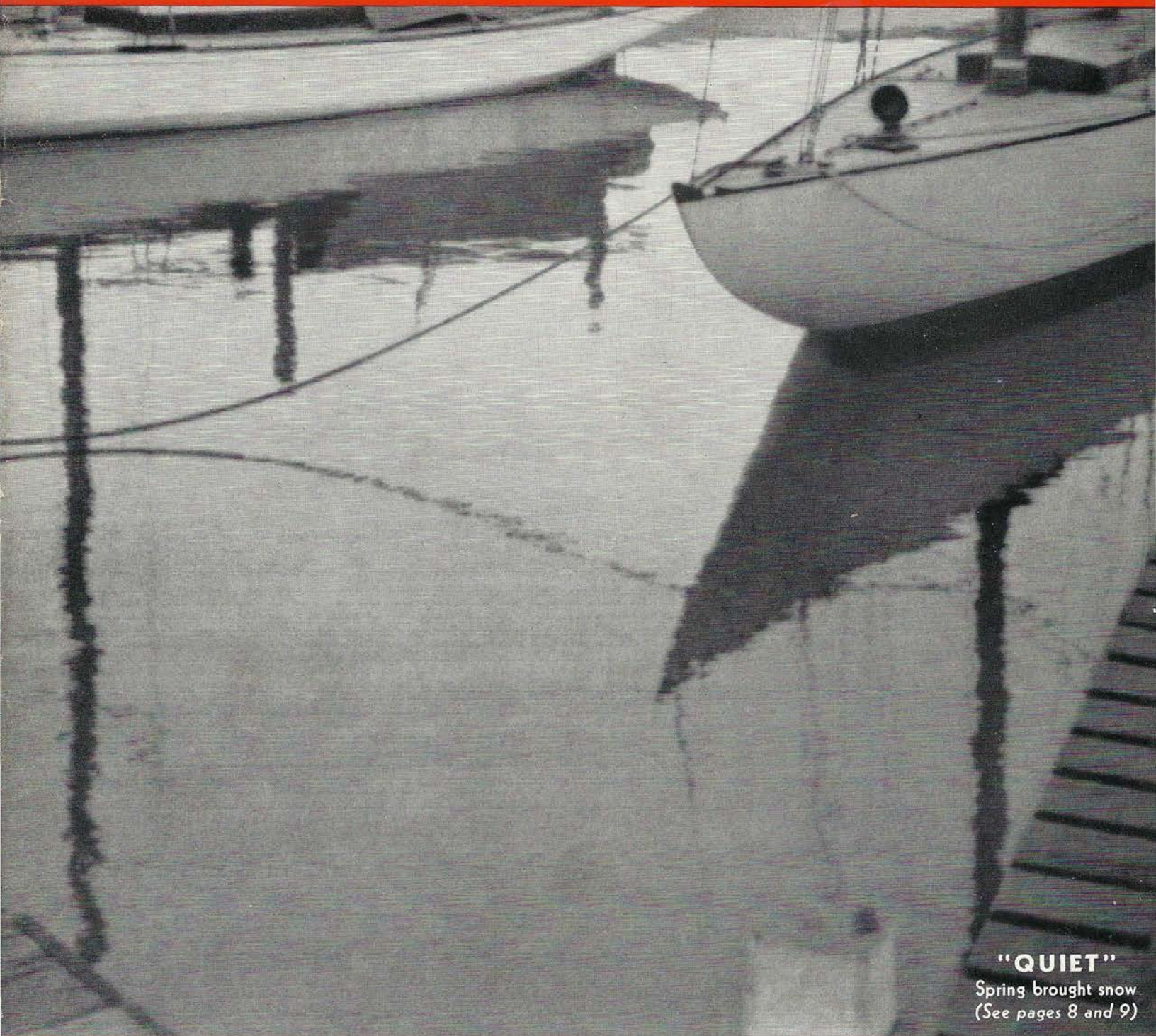


KODAK

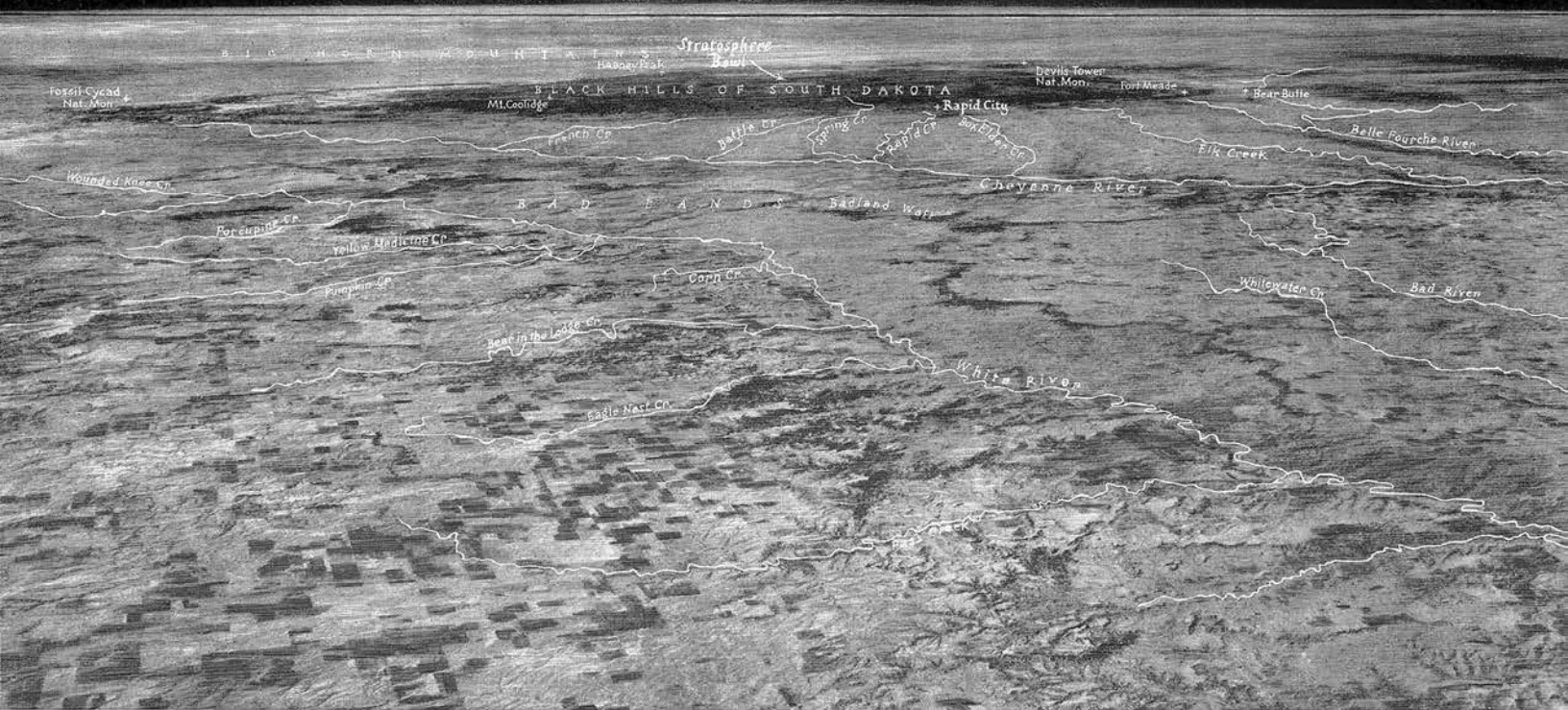
A MAGAZINE FOR EASTMAN EMPLOYEES



"QUIET"

Spring brought snow
(See pages 8 and 9)

JUNE 1936



THIRTEEN MILES HIGH. From 72,395 feet above sea level, the highest point reached by man, Captain Albert W. Stevens, of the Army Air Corps, made this photograph from the balloon, *Explorer II*. An area larger than Indiana appears in the picture, but the land shown is in South Dakota, with Wyoming and Montana in the distance. The straight black line below the horizon was ruled in to show the curvature of the earth. Faintly above the horizon may be seen the boundary of the "dust sphere" (the lower air), above which is the stratosphere. The line of sight from the camera to the top of the "dust sphere" is entirely through the stratosphere. The nearest objects in the foreground are more than 30 miles away; the Black Hills, from 120 to 180 miles; the horizon, 330 miles. Captain Stevens made the photograph with a lens from Hawk-Eye on infra-red-sensitive film from Kodak Park. The photograph is copyrighted, and is reproduced with the courteous permission of the *National Geographic Magazine*

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KODAK

Volume 15

JUNE 1936

Number 3

Photography: From Tan to Talkies

From Fanatical Alchemists To the Family Album, Some History of Picture-Making

THE SHOULDERS of Epidermis—he of the bulbous biceps that were the pride of Athens—were sore.

They were not sore from the mighty fling of the discus which on that day had broken all world's records—and that doesn't mean just the little world about Athens, but the whole world, extending to remote Egypt on the south, and to the colonies in Sicily, beyond which was only the sunset.

It wasn't the result of physical effort pained the great athlete, but the effects of that same sun—which every day fled from sight before the muscular brain of Epidermis could quite contrive how to dodge the stinging rays. Communion with any number of statues of Phoebus Apollo, the sun god, seemed to do no good. Later in the season his deep tan would be a talking point; but now the shoulders of Epidermis were sore.

But enough of that. Even with the Olympic games nearly upon us, this isn't a sports writer on track and field records, foreign and domestic, but instead a chronicler of photography reasoning where and how his particular science "got that way."

One of the earliest manifestations of photography was on the shoulders of the fictitious and symbolical Mr. Epidermis and his fellow sufferers from sunburn in the aeons preceding.

Every modern sun-tanned back is second cousin to a piece of light-struck photographic film. Both phenomena—the effect of the sun on film and on skin—are evidences of the photochemical action of light—which means simply the ability of light to produce a chemical change.

A still earlier photochemical phenomenon is sunlight's effect on the green color of plants. An entirely unfictitious Greek, Aristotle, observed the fact and recorded it for posterity.

Epidermis was neither observer nor prophet. He envisioned no future science of photography in his sun-burned shoulders. He merely said a word in ancient Greek that prudent translators have not passed down.

Even if the fact that the sun changed the color of his skin had seemed a wonderful discovery to our powerful friend, it would have done him no good. Some recording material more useful than human flesh was necessary if the dramatic history of photography were to go on.

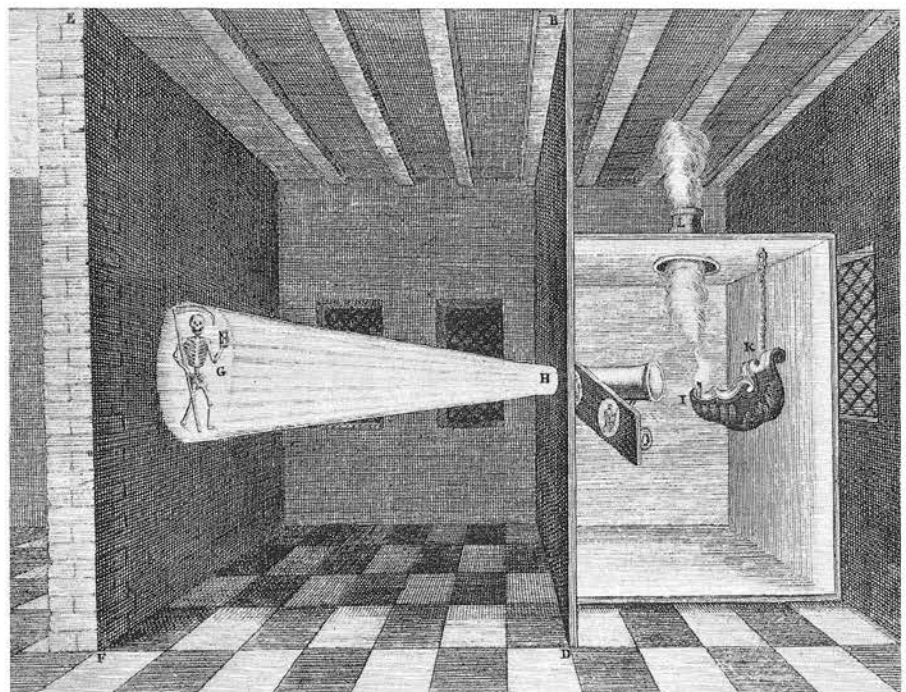
It did go on, of course; but the next episodes are vague, mysterious. We only know that—seven centuries before Columbus sailed toward the land of silk and money—silver nitrate was discovered.

That meant no more, at the time, than tanned shoulders, for no one knew what to do with silver nitrate; but it was actually the beginning of a long line of discovery, a line that has

extended all the way from the mystical gropings of those eighth-century scholars and their newly found compound, down to talking movies and photographs of the world from 72,395 feet up (see the photograph opposite).

Like electricity, photography as a possibility was latent but unsuspected during all the world's history—until suddenly the secret was learned and civilization found itself with a totally new addition to its repertory. In the case of photography, the necessary property of light was always existent and the sensitive material was waiting. But it was not until after Columbus had gone home again and left America to baseball and beauty parlors that the idea began gradually to develop.

Those strange alchemists who spent their lives—at about Shakespeare's time—trying to make gold out of the base metals stumbled upon the



Not quite up to 1936's projectors, this one was nevertheless worth describing in a book in 1671

observation that silver nitrate and other compounds of silver were sensitive to light.

Their discovery was to be far more valuable than gold to an age that gets its education and its entertainment and its news of the world from photography, which means also motion pictures; but those patient wise men could not foresee it. They merely recorded their finding and turned back again to their fruitless quest for gold that could actually be touched by the hand.

The Camera's Beginnings

A more practical man, a German with the practical name of Schulze, did something with the alchemists' discovery. He went so far as to obtain a copy of writing on a sensitive surface of chalk and silver nitrate. The search had really just begun: but scenarios and the snapshot album were at last on the way.

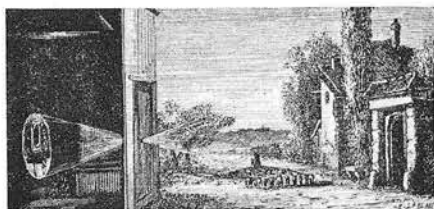
So much, at present, for the film. What about the camera?

It was not, in Schulze's day—which was two generations before George Washington's—a neat little device that could be bought for a few dollars and carried around on all occasions. Instead, it was a piece of real estate—a building; the most popular booth at the carnivals where Schulze's contemporaries satisfied the same desire for entertainment that would now take them to the movies.

Those who paid the price of admission went right into the "camera obscura"—which meant "dark room." On a table top in the center they saw the pictures, projected by a lens and mirror in the roof of the room from objects outside. This novel device didn't make a picture that could be carried away. Its results simply shone on the table while the light lasted.

A similar instrument but small enough to be carried—which was used to aid artists in drawing (note the age-old lure of labor-saving)—was the forerunner of cameras as we know them, just as Schulze's crude

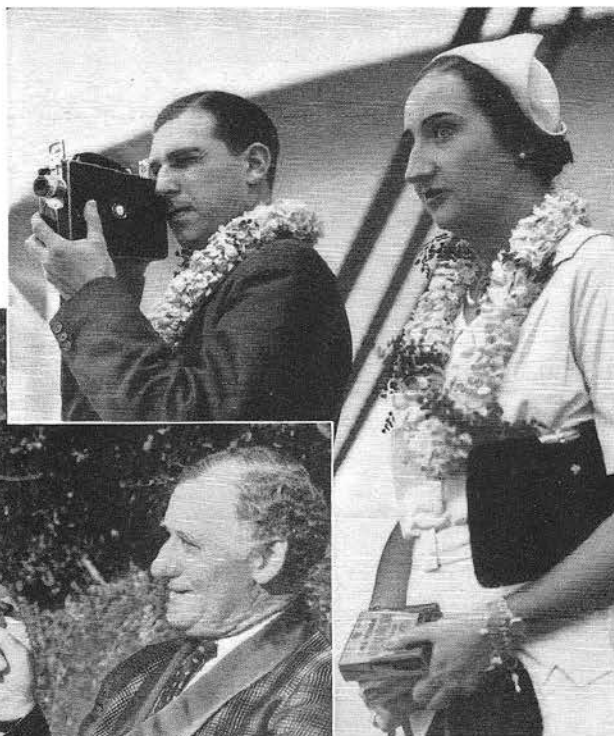
(Please turn to page 13)



The camera's ancestor: a dark room into which a lens transmitted the scene outside. The arch appears upside down. Years later, a prism cast the image on a table, and the "camera obscura" became a favorite feature at European carnivals

Two Ciné-Kodaks in Action

The leis show that their ship was in Honolulu when these honeymooners, Prince Don Juan of Bourbon and his bride, were found making movies on deck. The son and daughter-in-law of former King Alphonso, of Spain, touched Hawaii en route



Movie-making as a pastime is very popular in the capital of the movie-making industry. Fred Stone and his daughter, Paula, noted entertainers, seem to entertain themselves well with a bit of filming in Hollywood

From International News Photos

Kodachrome for the Eight

EVER SINCE THE FIRST announcement of Kodachrome, more than a year ago, the question has been asked, "When shall we have Kodachrome for the Ciné-Kodak Eight?" Offhand it may have appeared to the persons asking the question that, with 16-millimeter Kodachrome an accomplished fact, 8-millimeter could be announced at once for use by owners of Eights.

There were problems, however: problems occasioned by the smallness of the image—the fact that the 8-millimeter image is only one-fourth the area of the 16-millimeter.

Now the job has been done. Eight-millimeter Kodachrome is currently being offered to the public.

It is a new film, and it is processed by a newly developed technique. These two factors give a highly satisfactory image.

At first, 8-millimeter Kodachrome will be processed at Rochester only.

As in the case of 16-millimeter Kodachrome, movies in full color with the Eight are as easy to make as black and white.

Photographic Finishes

SO CLOSE were the finishes of more than half the horse races run at Narragansett Park, near Providence, on two days near the end of the season, that development of photographs was required to determine the official victories. The photographic timing apparatus is of the type developed by Electrical Research Products, Incorporated, in conjunction with the Eastman Kodak Company. Two or three inches separated the leading horses' noses in several cases.

Correction

WE ARE SORRY to have misspelled the name of Miss Jeanne Groet, of the Advertising Department Studio, in April KODAK. "Groet" was wrong. Correct spelling: "Maloney"—Mrs. George.

Lens-Making at a Glance

A Pea-Sized Glass Can Make The Grand Canyon Reappear—When Hawk-Eye Goes to Work

A CINÉ-KODAK EIGHT is in action on the brink of the Grand Canyon. . . .

Out before the camera stretches a magnificent vista: miles on miles of sheer cliffs and strange rock formations, gorgeously colored.

Within the camera, a lens no larger than a pea gathers the rays of light reflected from the vast scene and lays them on tiny rectangles of the new 8-millimeter Kodachrome Film—with such exactness, point for point and color for color, that when the film is projected on the movie screen the whole grand panorama reappears.

Yet that perfect little lens, with its precise ability to guide light rays, was just a square of glass until Hawk-Eye went to work on it.

Multiply that lens by the hundreds of thousands necessary to equip Kodaks, Ciné-Kodaks, Brownies, Recordaks, enlargers, and other Eastman apparatus; divide by the fact that each of these lenses has to be shaped *precisely* like every other of its kind; and you have a manufacturing operation well worth looking at.

Exact specifications must be met by these lenses, from the moment the raw optical glass enters the factory until the last stage of mounting for installation in a camera.

Lens discs are molded red hot. Later, an electric annealing oven removes any strain that may be present in the discs by subjecting them to heat rising automatically to 1000 degrees and then cooling down gradually over a period of four or five days.

Long rows of machines are to be seen, grinding or polishing lenses, . . . swaying monotonously, as convex or concave "shells" rub abrasives over the glass discs mounted with pitch on "blocks," . . . forming thousands of lenses at a time into proper contours.

Each Kodak Anastigmat must successfully pass ten rigid tests. In two final tests, which are identical, the judgment of one set of inspectors is pitted against that of another.

Hawk-Eye lenses don't all stay on the ground. It was one of our lenses that Captain Stevens used to record, on Eastman film, the photograph inside the front cover of this magazine.



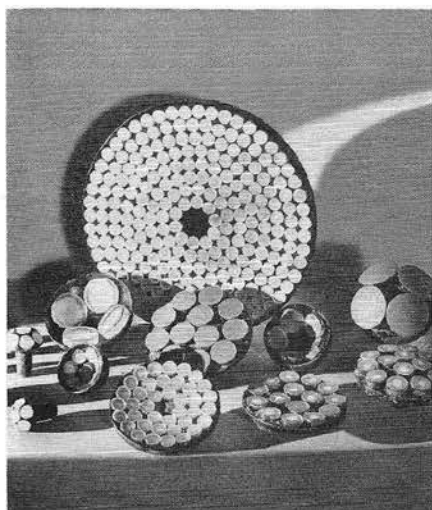
Perfection of lens surfaces is checked with a test lens of equal but opposite curvature. If the two curves differ by $1/100,000$ inch, then circles of color appear in the test glass



The first step: optical glass is softened in a furnace with a temperature of 1600 degrees, and then is molded into lens discs by a punch



Canada balsam cements together "crown" glass and "flint." Use of two glasses in one lens element corrects certain optical aberrations



Lens discs ready for grinding and polishing



"Shells," rotated by these machines, rub abrasives over the mounted lens discs to grind them

P A N O R A M A

Skeptic's Rebuttal

OUTSIDE A WINDOW of McCurdy & Company, Rochester department store, stood Carl Skaer, publicity director of the store, casting an appraising eye over a display of neckties made from Eastman Acetate Yarn.

An alert, dignified gentleman walking along the sidewalk paused beside him and looked in the window, too.

"What do you think of those ties?" asked Mr. Skaer, eager to obtain the opinion of "the man on the street."

"Pretty good-looking."

"Made from Eastman yarn," Mr. Skaer said, with a "believe it or not" ring in his voice.

The dignified gentleman looked quizzically at Mr. Skaer. He took off his hat.

"See this hat?" he asked. Then, with an elaborate wink, he pronounced: "Made by the John Deere Plow Company."

He walked away and disappeared around the corner . . .

. . . around the corner, and into the store by another door to buy three ties made from Eastman Acetate Yarn: the same substance as safety film.

Dead Language

THE BUSINESS LIBRARY at the Kodak Office, like the Research Library at Kodak Park, is not often stumped by requests. Demand for a Latin dictionary, for instance, was recently supplied by Miss Ethel Shields, the business librarian.

It's surprising to find a Latin dictionary required in Kodak's business activity. It's perhaps more surprising to find it available.

The available copy, Miss Shields explained to the young lady who requested it, had belonged to her grandfather, and was a very old book.

"Oh, that's all right," the inquirer replied. "There probably haven't been many changes."

Animal Kingdom

SINCE LAST JUNE, these creatures have appeared on this page, turning it into a virtual zoo: a rhinoceros; a horse; a baby seal; a blue elephant; baby pigs; a pigeon; and a goldfish.

It's June once more, and we give you—a rabbit.

Miss Rosalie Meng, Kodak Office Mail Department, saw him first, sitting beside the starter's desk at the

entrance to the tower elevators. Miss Meng thought he was a rat, sent forth a shriek.

Starter "Ben" Knight was not there, but two knights-errant were on hand. From their elevators dashed Oliver Metzger and Donald K. Fraser. Gleefully, they pounced upon the "rat," rushed him to the basement.

His box was large. Frank Dunleavy, of the Camera Works, volunteered a smaller one. During the transfer from one box to the other, the rabbit saw an opening, bolted off.

How to catch him again? A trap was devised, baited with lettuce each night for a week. Each night for a week the bait disappeared; but, at last report, the trap had not sprung.

An old cookbook gives a recipe for a fine rabbit stew. It begins: "First catch your rabbit."

Flavored Fog

AN EARLIER NUMBER of KODAK described the way Hollywood studios make an artificial fog by vaporizing mineral oil through nozzles. Now comes a flash from California: they are vaporizing peppermint oil, instead, because it tastes better to the actors working in the fog.

The item wasn't dated April 1st—but it did predict development of a red-and-white-striped peppermint fog that could be cut into chunks.

Mystery Solved Again

WHEN'S a moving not a moving van? "When it's standing still," would be one answer (greeted, no doubt, by a chorus of "boos").

A better answer, based on fact: "When it's a garage."

A previous issue of KODAK solved the mystery of what was apparently an oversize circus wagon, which stood behind Building 48 in Kodak Park. Laden with the possessions of Dr. Max Herzberger, of the Research Laboratories, it had been hoisted aboard ship in Holland for the trip to the new Herzberger home here.

Now, after many months, there is a new mystery. Where has the van gone?

The answer this time is no farther to seek than Hudson Avenue, Rochester.

Alfred C. Spuck, of the Roll Coating Department, is building a new house. The van that once hauled goods through the streets of Rotterdam, in the land of tulips, seemed to him a likely garage—so he bought it.

Once Upon a Time

INTO DR. GALLAHER'S office, in the Medical Department at Kodak Park, walked a worried-looking man.

"I'm uneasy about my weight, Doctor," he said. "Don't think it's all that it should be."

Dr. Gallaher examined him. "What's the least you've ever weighed?" the doctor asked.

"Eight pounds," came the reply.

Homemade Gadget

IT'S REASSURING to amateur inventors to find at Kodak Park—that labyrinth of intricate machinery—here and there an obviously homemade apparatus doing a useful job. In the P. and S. Department—powder and solution, for any who are mystified—one sees girls dropping into funnels little cardboard boxes that they have just filled with powder and have sealed. The boxes fall through the funnels, and that's that.

But, in falling through, they have to open a little gate, balanced with a weight. A box that hasn't enough powder in it won't be heavy enough to open the gate, and has to go back for more.

The simple funnel arrangement saves all the trouble of weighing each box. What's more, every time the gate opens it operates a counter, so that it is known how many boxes have been filled, without anybody's bothering to remember.

Trick of the Trade

SPEAKING OF the P. and S. Department, there's a trick of the trade to catch the fancy of a casual visitor. Labels for tin cans containing chemicals are dampened before being stuck to the cans. When they dry, they shrink so as to be perfectly smooth—and you have a result that anyone whose business wasn't putting labels on cans might puzzle over for weeks.

Not to mention the problem of getting Kodak paste and glue into tubes that have only a little hole in the spout (remembering the city chap who knew why cream costs more: because it's harder to milk the cows into small bottles). Well—about paste and glue—they don't bother with the spout. Those substances are put into tubes through the open bottom, the bottoms are mechanically crimped and then bound with strips of metal.

Pictures of Ideas: Statistical Charts

Graphs Turn Relationships Between Columns of Figures Into Easy Reading. Try It!

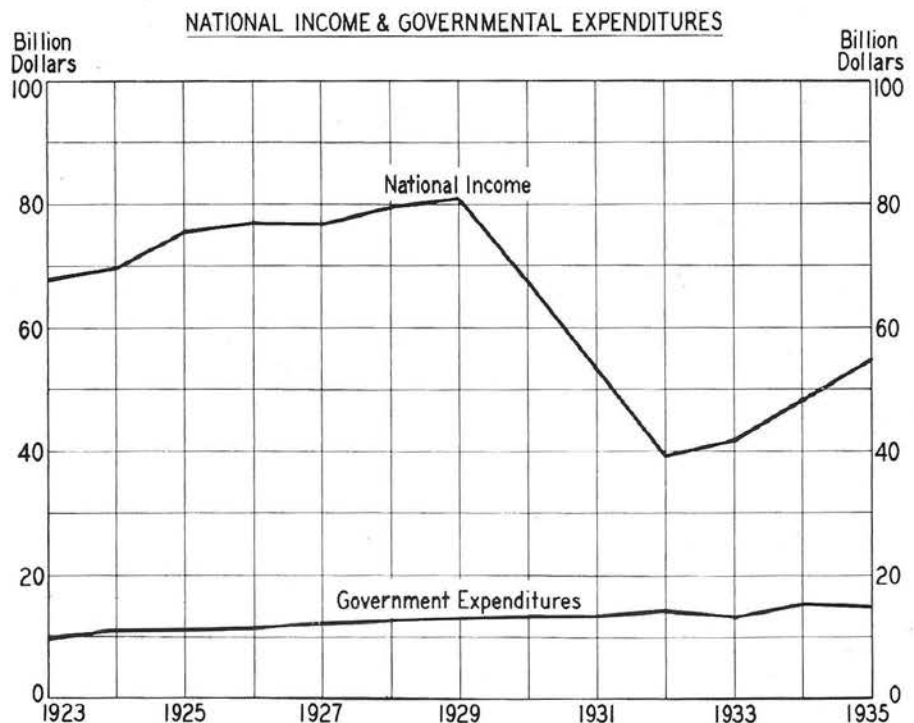
EVERY DAY, millions of people go to the movies in preference to reading an equally good or a better story. Magazines and newspapers are filled with pictorial illustrations used by advertisers to catch the attention and stir the imagination of readers. A picture can convey in an instant an idea that might take pages of printed words for description.

Statisticians are therefore only human—not highbrow—when they make charts. No one can think of two numbers and attempt to comprehend their relationship without, at least unconsciously, visualizing them.

A number that does not bring to mind some picture of quantity remains meaningless. Charts in all their various forms represent the efforts of statisticians to apply the advantages of pictures to statistical data.

The news is full of figures these days: figures of the greatest importance. Yet it is perfectly natural that figures are uninteresting and laborious reading to most persons. The same information, presented in chart form, makes a quick and lasting impression on the mind.

To the question, "How does one read charts?" the answer of the Company's Statistical Department is, "Just look at them!" Training or



This chart shows the relation of total government expenditures to the national income

experience is unnecessary for understanding them. The eye does the trick. That's why charts are made.

Here's an experiment.

Government expenditures are headline news—yet how many faithful readers of newspapers know clearly how public expenditures really stand?

Examine the figures on government spending and national income in the adjoining column. . . .

What do these statistics signify? Is it perfectly clear? . . .

Well, would charts help? Two appearing on this page graph the figures we've waded through—or haven't!

The "line chart" above shows (1) that there has been a constant increase in government expenditures, while national income was fluctuating widely; and (2) that, while national income declined in the depression, government expenditures increased.

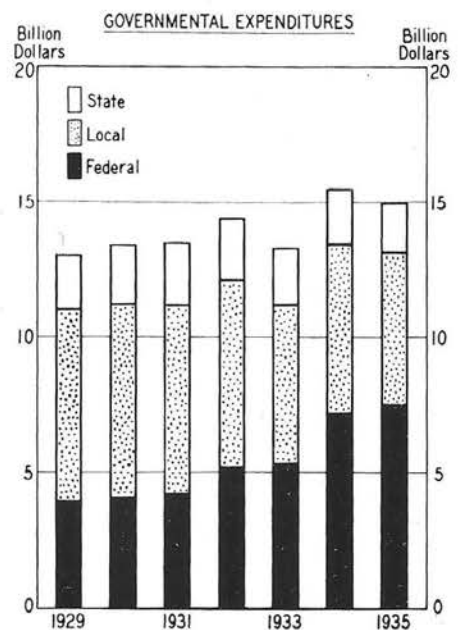
It can be seen that in the past few years government expenditure was a much larger proportion of the national income than in the years before 1930. The lines, as they come closer together, reveal that.

Government expenditures were slowly going up while national income—from which taxes must come—was being cut in half.

But what about all we have heard of the rapid increase in government expenses in the past several years? According to the chart, government

expenditures didn't go up at all sharply until 1934, and then actually declined slightly in 1935.

The "bar chart" gives the clue. It breaks down the "government expenditures" line on the other chart into federal, local, and state spending. It shows that, while annual federal expenditures were going up $3\frac{1}{2}$ billion dollars from 1929 to 1935, state and local spending decreased enough so that the total went up only 2 billion.



The scale is here magnified for easy analysis

National Income—in billions of dollars

1923	68.4	1930	67.9
1924	69.9	1931	53.6
1925	75.9	1932	39.5
1926	77.2	1933	41.9
1927	77.0	1934	48.6
1928	79.7	1935	55.0
1929	81.0		

Government Expenditures—in billions

	Total	Federal	Local	State
1923	9.9	3.9	4.8	1.2
1924	11.0	4.1	5.5	1.4
1925	11.1	3.8	5.8	1.5
1926	11.6	3.9	5.2	1.5
1927	12.2	4.1	6.1	1.7
1928	12.6	4.0	6.8	1.8
1929	13.0	3.9	7.1	2.0
1930	13.4	4.1	7.1	2.2
1931	13.5	4.2	7.0	2.3
1932	14.4	5.2	6.9	2.3
1933	13.3	5.3	5.9	2.1
1934	15.5	7.2	6.2	2.1
1935	15.0	7.5	5.6	1.9



O U T O F T H E H A T

The draw goes on. Out of the hat come the varied experiences of Kodak people. And humor mingles with thrills in these true stories that are highlights of the adventures of three of our colleagues—on land and on sea, and in the air.

Perilous Passage

Against burros, as a class, John H. Schoenweitz, of the Shipping Department, Kodak Office, harbors no hard feelings . . . wherein, be it known, Mr. Schoenweitz displays rare restraint, indeed.

Not very long ago, Mr. Schoenweitz saw a burro craning over a narrow cliff ledge to browse. He wouldn't have given the incident a second thought had he not happened to be astride the burro, making the descent of the Grand Canyon (average depth, one mile).

A sudden start . . . a plunge . . . eternity. That's what even the gentlest tug on the reins might cause. Better far, he decided, sit tight, say nothing, and hope that the beast would not lean over too far. He'd heard, back in his native Rochester, that burros were sure-footed. Mere hearsay, that! And what did hearsay matter at a time like this?

Besides, it was 1929, the year when everything was toppling over: Wall Street; castles in the air; John Doe. What chance had he, here on the edge of a great abyss, astride a frisky donkey? The cards, to himself Mr.



John H. Schoenweitz; a burro browsed

Schoenweitz with reluctance admitted, were stacked against him!

The end came—and he dismounted, his spine still a quiver. Neglecting not a single shrub along that perilous passage, the burro had done a thorough job of demonstrating how a burro ought not behave when traversing a three-foot-wide ledge.

Mr. Schoenweitz has preserved photographs of many memorable events that have taken place since he came to Kodak in 1906. No picture of that burro is included. Mr. Schoenweitz does not need any. He describes the animal perfectly!

Lost at Sea

Because a man had an attack of gout, John W. Coolidge, Building 50, Kodak Park, was lost somewhere on the vast Atlantic Ocean.

The man with the gout was captain of a troopship Mr. Coolidge was aboard as a member of a gun crew. The ship had put out from Bordeaux,



John W. Coolidge: he felt the ship shiver

France, Hoboken-bound with a regiment returning from the war.

"Yes, it does seem incredible," Mr. Coolidge agrees, "but it's true. The old man had to go below, and the next thing we knew we were lost."

But the toughest spot during the war, so far as Mr. Coolidge was concerned, was off South Brooklyn.

With a companion, he was over his ship's side, on a painting stage, when a barge bore down on them. Up the ropes they scurried, hand over fist. As they reached safety, they heard a crash, felt the ship shiver from stem to stern, and saw their shattered platform sailing swiftly out to sea.

It was in the same harbor, too, that they found an affable stranger,



Edward Peck Curtis: he was an ace

garbed in clerical black, prowling through the bowels of the ship. It was no place for a clergyman, they assured him, as, with the deference due his cloth, they led him to the upper regions. A false move gave rise to suspicions. They questioned him.

"Search me!" he invited.

They searched him—and found three live bombs in his pockets!

No Rest on Laurels

Walter Duranty tells us about him in his book, "I Write as I Please."

Harold Buckley, chronicling the exploits of the 95th Aero Squadron (the first American flying squadron to go to the front in the war), recounts many of his deeds.

Files in army headquarters in France and the United States hold records of the decorations he received from Marshal Pétain and General Pershing on behalf of their governments.

Edward Peck Curtis, of the Kodak Office, sales manager of the Motion Picture Film Department, was only twenty years old when he went overseas in 1917 as an American Field Ambulance Corps driver. When, two years later, he received his honorable discharge, he was an ace with six enemy planes to his credit, and the youngest major in the American Air Service, to boot!

Toul; Château Thierry; St. Mihiel; Argonne-Meuse—in each of these engagements did this pilot distinguish himself, always where the odds against him were greatest.

On the day after the Argonne drive was begun, volunteers were requested

for a mission from which, they were warned, they would probably not return alive.

"Curtis," Mr. Buckley tells us in his chronicle, "was the first to offer himself . . . to fly thirty kilometers behind the enemy lines . . . for an hour under continual fire at a perilously low altitude, with the added likelihood of being shot down by an enemy patrol if the ground fire didn't get him first. . . . It was a dark, dismal day, a perfect setting for deaths and funerals. . . . We really thought we were saying good-bye forever when Ted started. . . . An hour later . . . we heard a familiar hum, . . . knew they were home again.

"Ted might have rested on his laurels for the rest of the day at least, but . . . towards evening he was off again with his patrol. . . ."

After the armistice, Mr. Curtis was sent by the State Department to the Baltic States, as aide to the United States Commissioner. At their headquarters in Riga, Latvia, was Walter Duranty, as correspondent of the *New York Times*.

Unusual Warfare

Mr. Duranty recounts in his book an incident that occurred in Riga, late one night when he and Mr. Curtis were walking home from a bridge party at the British Mission.

Deep in conversation, they did not hear the challenge of a sentry outside the Lettish Foreign Office. He fired, the bullet passing "not more than six inches" above Mr. Duranty's head.

"Automatically I threw myself flat on the ground," he says, "but Curtis was made of sterner stuff. He ran across the road to the sentry, cursing furiously in English. . . . The sentry did not fire again. . . ."

Mr. Curtis and Mr. Duranty missed a train one morning in Russia, and, though neither man is of the crying type, they almost wept; for with the train went a chance of seeing a most unusual form of warfare!

The train was armored, mounting 3-inch cannon and machine guns in two cars, and an old British 4.7 naval gun in a third car. It was on its way to do combat with another train.

But the young aide and his newspaper-correspondent companion were not unfortunate. They learned, that evening, that the old naval gun had burst and blown everyone in the car to pieces. Had they caught the train, they would have been in that car!

Mr. Curtis came to Kodak in 1920. His first job was in the Accounting Department at State Street. Later, he worked in the Research Laboratories.

This "Junk" Took the Prize



Perplexity: Teacher John W. McFarlane inspects Christian S. Schick's (Camera Works) prize-winner in a contest for the most impromptu homemade enlarger that will nevertheless get results

"GRADUATION EXERCISES" of the advanced-amateur photography course. On the stage, a tent-like covering.

Under the "tent," what? Mr. Schick hauled on the cord, and up whisked the covering, to reveal—a garbage pail, handsomely decorated with red ribbon. Thus rewarded was superior crafts-

manship in a not too serious contest. . . . The course's best picture won a prize for H. Lou Gibson, Kodak Office. . . .

The advanced-amateur course is one of the activities of the Kodak Camera Club, which, with a membership of 902, is second in size only to the famed Royal Photographic Society, London.

Looking Down from Man's Highest Up

Inside the front cover is printed a photograph of the curving horizon, taken by Captain Stevens from an altitude of 72,395 feet. At the same height, an automatic camera with its lens mounted in the bottom of the balloon's gondola snapped this downward view.

Near the right edge of the picture may be seen the meteorograph that hung 33 feet below the gondola. Thirteen miles farther down appear 100 square miles of South Dakota. Top right, touching the highway that crosses the picture, may be seen a little town, Parmelee. Copyright by the National Geographic Society





"Lower Manhattan," by V. Standish Chapman, Kodak Office: 3rd prize

"Mischief" won 2nd prize for Frank Miller, Kodak Office, and scored highest in the balloting for popular choice



"Market Day," Moses W. Van Campen, Building 35, Kodak Park: First prize

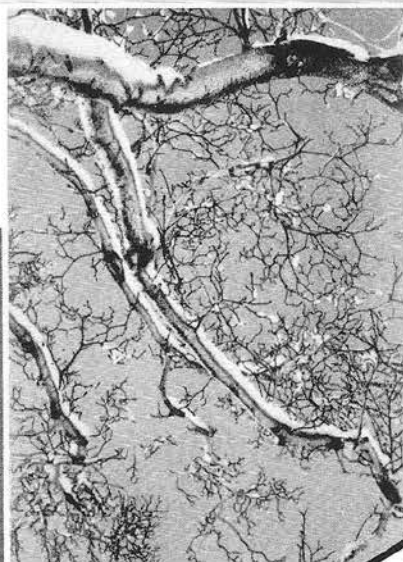


The eight photographs below the title band are among those which received recognition in the competition of Eastman

employees in Rochester for the James H. C. Evanoff Trophy. The seven above the band are among those given awards in the Kodak Camera Club's spring exhibition for beginners—"beginners" being defined as those who had not exhibited photographs in large salons.

These spring contests brought out unusually many pleasing snow scenes, several of which, among the winners, there was not space to reproduce here with the others.

The two contests attracted 222 entries this year, half again as many as in 1935. In addition, 37 colored prints were submitted, most of them made by the Eastman Wash-off Relief Process. Connoisseurs considered the quality of the pictures to be exceptionally high.



"Winter Trim," by H. Lou Gibson



"Brook in Winter"

Mr. Gibson's picture won a certificate; also another prize (see page 7)

"Haircut"



"The Shepherd and his Flock"



A certificate in the Evanoff competition was awarded to Chester W. Wheeler, of Building 29, Kodak Park, for a group of three photographs including this pleasing one

A Collection of Winning Pictures from Two



Untitled



"Solitude"

The three photographs to the left won certificates of merit. "Brook in Winter" is by Martin H. Donahoe, Jr., Kodak Office. The untitled picture is by Crawford Schwendler, Building 12, Kodak Park. "Solitude" is by Malcolm Taylor, Jr., Building 35, Kodak Park

Spring Photographic Competitions in Rochester

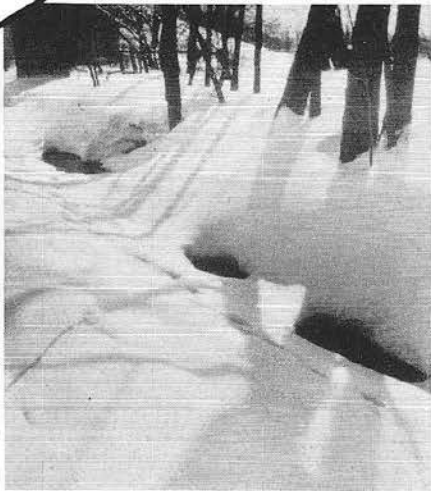
"Mute"



"Winter's Mood"



"January Afternoon"



Morocco"



chin of Fez"



"Mary"

The cluster of three photographs to the left won a year's possession of the James H. C. Evanoff Trophy, and permanent possession of a gold medal as well, for William E. Barr, of the Kodak Office

Two of three winter scenes, made by Ernest R. Taylor, Building 14, Kodak Park, which won a certificate of merit

A certificate rewarded William Holland, Building 35, for the two photographs, "Mullen" and "Mary," and the one on the front cover, which is entitled, "Quiet." The Evanoff Trophy is offered for the best three prints by one exhibitor, the prints being judged individually, and not as a group

"Mullen"



THE EDITOR'S PAGE

1936 Wage Dividend

THE COMPANY'S 24TH WAGE DIVIDEND will be paid on the 1st of July, 1936—at double the 1935 rate. Last year's rate was $\frac{1}{2}$ per cent of total wages or salary received during the preceding five calendar years. This year the rate is 1 per cent.

The reason for this doubling is that declaration of dividends on the Company's common stock increased from \$4.50 a share in 1934 to \$5.50 in 1935. For each dollar of dividends—above \$3.50 a share—declared in the preceding year, the wage dividend amounts to $\frac{1}{2}$ per cent of five years' pay. Since \$5.50 is two dollars above \$3.50, it is easy to see that $\frac{1}{2}$ per cent is taken twice, making 1 per cent, in computation of the 1936 rate.

It's all a matter of following the formula that has been in effect for a number of years; although the question of whether or not the wage dividend is paid is decided each year by the directors. The 1936 payment has been voted, and \$1,136,297.15 to cover it was included under "Accounts Payable" on the balance sheet.

Dividends to the stockholders, and in consequence wage dividends to the employees, are made possible by the successful operation of the business. It was the Company's increased earnings in 1935 that accounted for

the increased dividends and the doubling of the wage-dividend rate that followed under the formula.

The simplest way for anyone to calculate his own wage dividend is to add together his earnings in the years 1931, 1932, 1933, 1934, and 1935, and take 1 per cent of it. The easiest way to figure 1 per cent is to move the decimal point two digits to the left.

All regular employees—not including those hired specially for part-time work—who actually worked 26 weeks in 1935 are eligible for the wage dividend.

Hands Across the Sea

IN AN INTERNATIONAL ORGANIZATION like Kodak, hands across the sea necessarily means trips across the sea, if the units of the organization are to have the advantages of close contact with other units. This spring, Kodak in the United States has been visited by associates from Australia, France, and Germany.

From the continent halfway round the world that is almost exactly the same size as the United States comes Frederick E. Manning, a director of Kodak Australasia, who works in conjunction with J. J. Rouse, the chairman, in management of the Australian sales organization.

Sales headquarters are at Sydney, on the eastern coast. The factory, near Melbourne, in the south, manufactures roll film, cut film, x-ray film, plates, photographic papers, mounts, and chemicals. The base for film and sensitized papers comes from Kodak Park, and practically all the Kodaks and accessories sold by Kodak Australasia are Camera Works products from Rochester. Mr. Manning says. The Company's *Australasian Photo-Review* is the only photographic journal in the Southern Hemisphere.

From France our visitor is Harold A. Ritter, who maintains contact with the managers of various European countries in the direction of sales. From Germany, still more recently, has come Frank Robinson, manager of the factory of Kodak Aktiengesellschaft at Cöpenick, near Berlin.

Photographic Statements

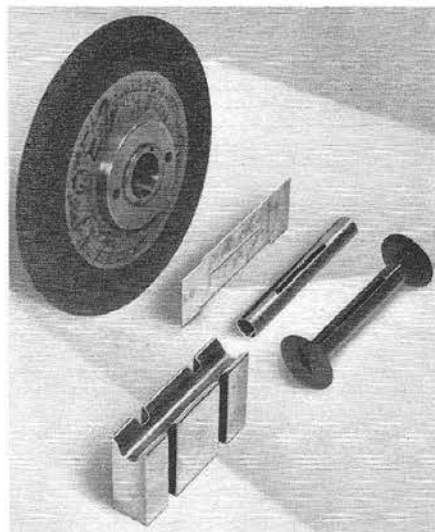
THE DOCUMENT appearing at the left is an Eastman Savings and Loan Association account card, photographically copied. In place of the usual quarterly accounting typewritten on a printed form, shareholders of the Savings and Loan recently for the first time received facsimiles like this one. If the change proves popular, it will be continued.

The method of reproduction is to film the original cards with a Recordak, an Eastman apparatus first developed for photographing checks, but now also adapted for other business documents. A single 200-foot roll of 16-millimeter film in a Recordak can record 7,000 account cards. The copies sent to shareholders were produced by enlargement from the miniature film images.

S-20163						
76182		ROBERT ROE		10.00		
1936	DEPOSIT WITHDRAWAL	DATE	SALARY	1935	DEPOSIT WITHDRAWAL	BALANCE
			237.16			
6	10.00	JAN 6	247.16			
13	10.00	JAN 13	257.16			
20	10.00	JAN 20	167.16			
27	10.00	JAN 27	177.16			
3	10.00	FEB 3	187.16			
10	10.00	FEB 10	197.16			
17	80.00	FEB 17	117.16			
24	10.00	FEB 24	127.16			
3	10.00	MAR 3	137.16			
10	10.00	MAR 10	147.16			
17	10.00	MAR 17	157.16			
24	10.00	MAR 24	167.16			
31	10.00	MAR 31	177.16			
7	10.00	APR 7	187.16			
14	10.00	APR 14	197.16			
21	10.00	APR 21	207.16			
28	10.00	APR 28	217.16			
5	10.00	MAY 5	227.16			
12	10.00	MAY 12	237.16			
19	10.00	MAY 19	247.16			
26	10.00	MAY 26	257.16			
2	10.00	JUN 2	267.16			
9	10.00	JUN 9	277.16			
16	10.00	JUN 16	287.16			
23	10.00	JUN 23	297.16			
30	10.00	JUN 30	307.16			
DIV	.73	MARCH 31	187.89			

His Thinking Made Dies Live Longer

Expensive Parts Now Give Ten Times the Service Because Of A Suggestion - System Proposal



This is the wheel—that sharpened the die—that bent the blank—that formed the core—that became the spool—for Kodak Film in the camera. . . . Notice that the core is of exactly the same radius as the die by which it was formed. The emery wheel is given the same radius, by means of Mr. Heintz's suggestion, so that it can be used to shape dies accurately.

ALBERT J. HEINTZ, of Building 48, Kodak Park, had a lot of time to think, as, by rubbing with emery powder and a brass rod for hours on end, he patiently wore cylindrical grooves into hardened steel dies. His thinking produced: (1) a new method of doing the same job better; (2) a saving to the Company from being able to use the expensive steel dies more than ten times longer; and (3) a \$200 check.

But let's go back to the beginning.

The first operation in making film spools—in Building 48—is accomplished by a machine that stamps out flat pieces from long strips of steel, at the rate of nearly two a second, and then—faster than the eye can follow—rolls those pieces of steel into cores for film spools. The cylinder is formed by strokes from two dies like the one appearing at the left.

The first stroke, from below, bends the flat piece of steel around a rod into a U shape. The second stroke, from above, completes the bending, so that the cylindrical core results.

The cylinder has to be perfect in shape—differing from true roundness by not more than a blonde hair's thickness—or the cores will not weld firmly to the spool ends, the film won't wind smoothly through the camera.



Albert J. Heintz and the diamond-pointed tool that shapes emery wheels to make more accurate dies for cores of film spools at Kodak Park

But even hardened steel dies show wear from their constant beating against steel, and have to be replaced.

New dies are made in Building 48. Ordinary machining does not make a groove perfect enough in shape for this use—so that the operation of "lapping," which is the business of long-continued rubbing with a brass rod and emery, has been necessary.

After a die had become worn, it was possible to "sharpen" it by repeating the same operation of lapping; but the hand operation was not accurate enough so that the dies could be sharpened more than one and a half times, on the average.

That's where Mr. Heintz, whose job is making and sharpening these dies, did his thinking. Through the suggestion system, he proposed buying a diamond-pointed tool for shaping an emery wheel to the exact radius of the groove needed in the dies.

His suggestion was adopted—for Kodak Heights at Toronto, as well as for Kodak Park—and now the method is to make new dies, and sharpen old ones, with a grinding wheel rather than with a hand-propelled brass rod. Whenever the grinding wheel begins losing its shape, the diamond-pointed tool is brought into play again.

The new method is so much more accurate that the dies can now be sharpened fifteen or twenty times before they have to be discarded.

That's just one of many interesting recent suggestions in Kodak plants.

Suggestion No. 1. Who? What? When?

THE SUGGESTION system has played an invigorating part in the life of the Eastman Kodak Company for a good many years. Just how many years can be seen from the reproduction of Suggestion No. 1 beside these words.

The first suggestion was made by a man who is still at Kodak Park. William M. Connors, now foreman of the Film Spooling Department. Its adoption was reported by another man still with the Company: Frank W. Lovejoy, now president, then superintendent of a department at the Park.

Mr. Connors has doubtless made more far-reaching suggestions since then; and, indeed, the suggestion bulletin of just a year later pointed out: "Repairs should not be made the subject of suggestions unless a new method of making repairs is proposed." But Mr. Connors deserves acclaim for being the first suggester.

Form No. 1

SUGGESTION BLANK.

Write Clearly and Fully. State your ideas so that we can understand them. Be sure to Sign Your Name in full.

Suggest that the windows in Black Paper Slitting room be washed

ADOPTED.
ACKNOWLEDGED.

APR 8 1898

Signed *William M. Connors*

First suggestion, when the system began in '98

Other Kodak Park people whose suggestions were adopted in that first month in 1898 were George Allen, Building 30; Fitz Henry Boyer, Building 36; R. E. Gunner L'Hommedieu, Building 36; Frank H. Haddleton and Claude E. VanHouten, Building 23.

So We Have Decided to Build a House!

What a Kodak Employee Found When He Compared the Costs Of Home-Ownership With Rent

The editors learned that a Kodak employee of their acquaintance had decided to acquire a home—and that he had worked out his calculations with unusual thoroughness. They asked him if he would jot down his reasoning for publication. Here it is. The young man himself wishes to be anonymous.

WE MUST MOVE this fall. Our lease will not be renewed.

Rents are going up. Desirable homes are not available except at rentals prohibitive to us. Apartments are not suitable for children. We have discovered that we must pay about ten dollars more per month next year for a less satisfactory house. What can we do about it?

To determine our course of action, we made a few guesses about the business cycle and the building cycle for the next decade. We applied this

How Much House for How Much Money?			
Value of house and lot	\$4,000.00	\$6,000.00	\$8,000.00
Loan available	3,200.00	4,800.00	6,400.00
Monthly payments on principal and interest	24.00	36.00	48.00
Estimated taxes and insurance (per month)	10.00	12.00	14.00
Total monthly payment required	34.00	48.00	62.00
Down payment (20 per cent of purchase price)	800.00	1,200.00	1,600.00
Legal fees, mortgage tax, and so forth	64.00	96.00	128.00
Total initial investment required*	\$64.00	1,296.00	1,728.00
4 per cent interest on investment (per month)	2.88	4.32	5.76
Estimated cost for repairs and upkeep (per month)	2.34	3.00	3.66
Total cost for comparison with rent (per month)	39.22	55.32	71.42
Paid on principal in ten years: equity in house	1,300.00	1,950.00	2,600.00

*Plus the cost of additional furnishings (variable)

guess to our particular situation, and concluded that our rent would probably increase by fifteen to twenty dollars a month in the next five years above the increase we face now.

Within a few years, our choice of location will be restricted. We shall require a house near a school where

children can walk safely without having to cross any boulevards.

By adding the average rental cost for each year, we calculated the total amount we would expect to pay to the landlord for ten years. This gave us a basis for comparing the cost of building or buying, on a site that will meet our requirements, with the cost of renting. The table we worked out [see the top of the page] indicates the possibilities.

The table illustrates that the house one can afford depends upon the amount available to invest and the size of the rent-payment one makes.

With an average rental cost for ten years of \$55 monthly, one can build a house—and save during the same period just about \$1,950. This would allow one to sell the house for about 75 per cent of its cost at the end of ten years, and still not lose money in comparison with renting for the next ten years. The actual monthly cost for this house would be between \$45 and \$50, depending upon the taxes and the final plans.

It is difficult to estimate accurately all the incidental expenses of home ownership. Many are offset by intangible pleasures. Others are offset by rental expenses infrequently considered: as, for example, moving bills, new curtains and fixtures, and gasoline used in searching for a suitable home with low rent during a period that will favor the landlord.

We can not afford to build now the house we may like to have ten or fifteen years hence. Consequently, if we build a small house now, we will have laid the foundation for the future "estate." We are glad our lease will not be renewed. It forced us to investigate the building and buying opportunities available.

Tour the U. S. A. with Garret Feenstra

NINETY-TWO HUNDRED miles without a puncture, and at a cost of less than a cent a mile!

Garret Feenstra, formerly of Building A:3, Kodak Park, and now enjoying the leisure of retirement, has much to tell after a bus tour that took him by easy stages from Rochester to the Pacific, and recently home again. . . .

Yellowstone Park, with its giant geysers, waterfalls, and rugged rocks; Butte, Montana, with a rodeo in full swing, and, when the show was over, roystering cowboys upturning automobiles just for the fun of it (the while Mr. Feenstra peered from the safety of his hotel window). . . .

Through the Rockies to Spokane, then on to Seattle and Portland, and into California. . . .

From Eureka, through the giant redwood groves, to Redding, pausing by a tree en route that bore the inscription: "I am 3,800 years old; 310 feet high; and 28 feet in diameter." Mr. Feenstra jotted it down for skeptics' benefit.

In San Francisco, during a stay of a month and a half, he made daily trips to see the new San Francisco-Oakland Bay Bridge.

Then to Los Angeles, the largest city in area in the United States, whence he "explored" the surrounding country. He visited San Diego's fair to see the Eastman Kodak exhibit there.

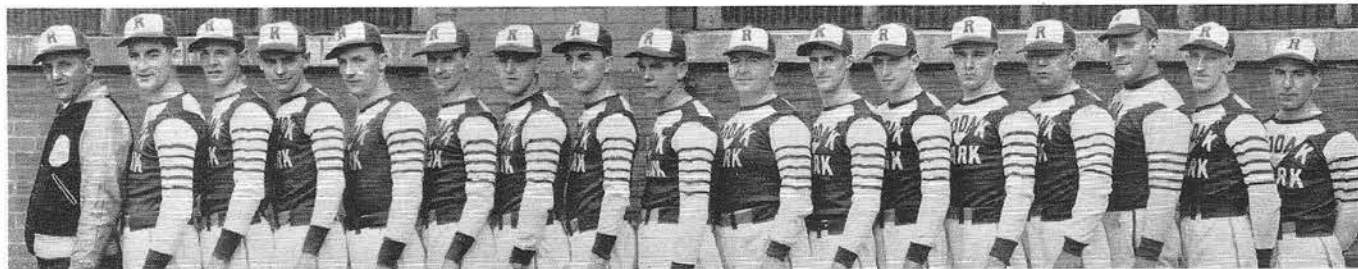


Tourist and trophies: in the vial, sand from the Painted Desert; on the table, petrified wood

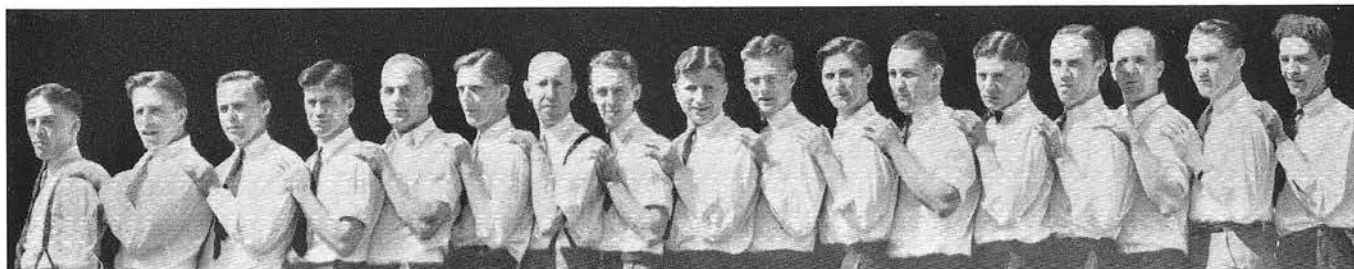
Mr. Feenstra's tour lasted ten months. He left Rochester on July 5th of last year and got back on May 1st of this year. The fare for the tour, excluding excursions "on his own hook," was just a little more than \$86!

Never during the entire journey did he feel lonely, he says. He found one of the Eastman Kodak Stores in every large city, and stopped in.

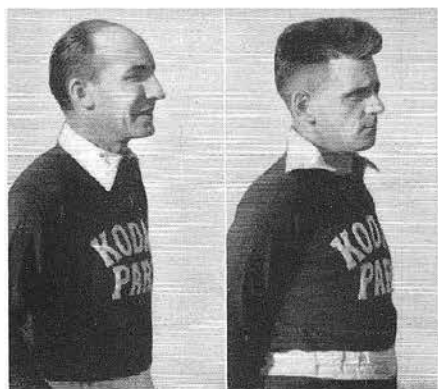
Sports Page: Looking the Teams Over



Here's the Kodak Park softball team, which rooters are backing to repeat last year's success. Left to right: Minella, Hogan, Selkirk, Dreschmidt, Lindhorst, Tinsmon, Gears, Leo Gallagher, Palumbo, James Gallagher, Hamil, Reisinger, Witzigman, Hopkins, Horn, Coogan, Scheid



The Camera Works team is ready for action in the Rochester Industrial Softball League. Left to right, the members are: Schirmer, Heberger, Rutan, Robert Culhane, Fess, McHugh, Olson, Edward Doyle, Herr, Welch, Emmett Culhane, Fahy, Rebman, Walker, Wakefield, Stein, Cropsey



Fyfe

Simpson



Hawk-Eye's softballers are competing in the Y.M.C. A. Twilight League. The team, left to right, is composed of: Greenauer, Rittinger, Farrell, Drojarsky, Clayson, Isselhard, Seebach, Yaekel, Casey, Dummer, Steinle, Ross, Klug, Graham, Brennan, Bauer, Pero, Richardson

At the left, the manager and the captain of Kodak Park's soccer eleven. Caught in pensive mood, they admit that their thoughts are on next season's activities, and the National Cup

From Tan to Talkies

(Continued from page 2)

reproduction of writing on sensitive material preceded photographic film.

Let's skip a bit, and soon we'll be among more familiar figures. We pass the names of Lewis and Scheele and Wedgwood and Davy and Herschel. They, and others, moved photography on toward the time when it would really take pictures, but there are too many for us to hold in memory comfortably.

Daguerre is different. We remember Daguerreotypes of our modest, beshawled great-grandmothers—pictures that could be seen when they were held so the light struck them at just the right angle, but that appeared blank otherwise. These pictures were Daguerre's great invention—just about a century ago—even

though now they seem only quaint and amusing; and even though good Madame Daguerre called in an alienist to test her husband's sanity in the midst of his experiments.

The sensitive surface for Daguerre's photographs was silver, darkened by iodine fumes. Light reflected from objects in front of the camera passed through the lens, struck the sensitive plate, and recorded a "latent image" corresponding to the light and dark areas of the scene in front of the camera. After the plate had been exposed in the camera, it was held over a dish of gently warmed mercury.

The mercury vapor clung to the parts of the plate where the light had acted. The silver iodide of the sensitive surface was then dissolved away by hypo, just as negatives and prints are "fixed" today, and the light areas

(Please turn to the next page)



First "model": Miss Dorothy Catherine Draper. Her brother, one of the earliest experimenters in America, took this Daguerreotype in 1840

Company Directors Elected

THREE DIRECTORS of the Eastman Kodak Company were elected to succeed themselves, at the annual stockholders' meeting in Jersey City, and one new director was elected.

Re-elected were James S. Watson, Thomas J. Hargrave, and Herman C. Sievers, all of whom are in Rochester. Mr. Hargrave and Mr. Sievers are vice-presidents of the Company.

The new director is Francis Russell Hart, of Boston. Mr. Hart succeeded George W. Todd, of Rochester, who was unable, because of prolonged illness, to continue as a board member.

Directors serve for a term of three years. The board numbers thirteen members, but only four or five of the terms expire in any one year.

Mr. Hart is chairman of the finance committee of the Massachusetts Institute of Technology, president of the United Fruit Company, and a director or trustee of various other businesses.



Francis Russell Hart, new Kodak board member

From Tan to Talkies

(Continued from the preceding page)

of the scene in front of the camera appeared mercury-white, whereas all the dark areas appeared in the black metallic silver of the plate's surface.

Daguerre's partner in this accomplishment was another Frenchman, Joseph Nicéphore Niepce, whose interest in photography was to find a method of automatically copying designs upon lithographic stone. But



Professional photography ninety years ago: an early Daguerreotype studio, drawn by Cruikshank, the caricaturist. One functionary times the exposure, while customers admire process and product

the one great name in photographic history, in addition to Daguerre's, that all the world identifies is that of George Eastman. Mr. Eastman took up the science a few stages beyond where Daguerre left off: and everybody took pictures!

The First "Model"

Probably people were in less of a hurry before the Civil War, and patience was less of a virtue. Miss Catherine Draper was no less a heroine, therefore, when she sat for the first photographic portrait made in America. There was no question of, "Now, hold still, please, just a moment!" Miss Draper had to remain rigid for a minute or so while the bright sunlight reflected from her heavily powdered face affected the plate—which was "faster," at that, than Daguerre's original plates.

Miss Draper's ordeal was much worse than that of the many hoop-skirted and top-hatted Americans who flocked into the Daguerreotype studios a few years later. The length of exposure was further cut down, and, besides, somebody invented those ice tongs to hold the head steady that were to dominate the bustle-and-whisker era.

The portrait sitters who followed Miss Draper had one bracing assurance. They knew what the resulting pictures would look like, and they seemed to approve and to anticipate with pleasure. Miss Draper, the first "model," was different. She hadn't the satisfaction of knowing that her beauty would be perpetuated by the process; and yet it was. Her Daguerreotype is still in existence (see page 13), and 1936 will acknowledge willingly its quaint charm.

The Direct Line

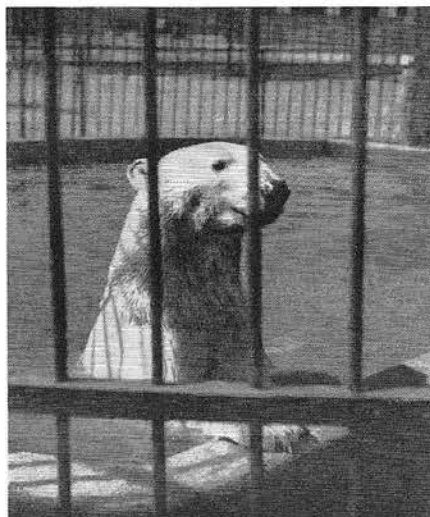
We say that Mr. Eastman took up photography a few stages beyond Daguerre. That isn't quite accurate. Daguerre's was the first successful photographic process, but it was the end of its line. Modern photography—the photography of Eastman—descended from a collateral branch. Daguerreotypes were positives, right out of the camera. When an Englishman named Fox Talbot made a negative, photography was ready to move on and leave the Daguerreotypes on the mantelpiece.

Fox Talbot had his schooling at Harrow, not far from the site of Kodak's present English factory. His interest in photography came from nothing more than a feeling that it would be charming if the pictures cast by the lens of a camera would

Activities Calendar

- Mid-June—Camera Works golf tournament for men
- June 20—Camera Club open house and basket picnic at the cottage, 888 Edgemere Drive, Island Cottage
- June 27—Camera Works annual picnic, at Seneca Park
—Camera Club beach party at the cottage
- July 11—Hawk-Eye Camera Club hike, to Churchville
—Camera Club beach party at the cottage
- July 18—Hawk-Eye Athletic Association picnic, at Island Cottage
—Camera Club movies at the cottage
- July 25—Kodak Park golf tournament for men, at Lake Shore
—Camera Club beach party at the cottage
- August 1—Camera Club children's party at the cottage
- August 8—Kodak Office golf tournament for men, at Lake Shore

Film from the South Pole



The bear was in Rochester, eight years later

THE PHOTOGRAPH above these words was made on film (Eastman Commercial Panchromatic) that had spent fourteen months on the South Polar continent with the first Byrd party.

The sheets of film in the particular tin with this one were not used—and Willard VanderVeer, movie cameraman with the expedition, recently gave

them to William J. German, of J. E. Brulatour, Incorporated, distributors of Eastman motion-picture film.

Not often have products of Kodak Park had to withstand the rigors to which this film was subjected. In the hold of the *City of New York*, twice it made the slow trip over the Equator in heat that went as high as 120 degrees—with sea air and tropical humidity to boot. The lowest temperature recorded by the expedition was 72 below.

Notably interesting is Mr. VanderVeer's description of the way film was "thawed out" for use when it was taken from storage in snow-block enclosures.

"There was always a difference of 30 degrees in the huts between the floor and face level. Our usual procedure was to bring in the film, place cans on floor for day, then on box second day, and third day on shelf about head high. Then the stuff could be handled comfortably."

To check on the keeping qualities, this negative was exposed—nearly eight years after the film was coated at Kodak Park. It came all the way back to Rochester before having its chance at a photograph of a polar bear.

imprint themselves on paper, instead of having to be traced by pencil; but it was with a fine scientific ability that he set out to find his method of making that happen.

His pictures were made on paper coated with silver iodide instead of on silver treated with iodine, and he used no mercury in development. That is why his image was a negative one instead of Daguerre's positive. By extremely long exposure through the paper negatives, it was possible to print positives—like Kodak prints.

Not only the negative and positive, but also development with organic reducers, must be credited to Talbot.

Glass became the accepted photographic medium after an English sculptor, Scott Archer, had invented the wet-collodion process in 1851. That method—in which glass plates were coated with collodion (gun-cotton dissolved in ether and alcohol) and sensitized with silver nitrate—was used almost exclusively for making negatives from 1860 to 1880; is still used by photo-engravers.

An amateur photographer in those years was a queer person: for he had to think it fun to go out on a photographic expedition carrying a bulky camera, . . . a heavy tripod on which

to rest his camera for the necessary long exposures, . . . burdensome and breakable plates, . . . a "dark tent" for sensitizing and loading and then developing his plates, . . . a nitrate bath, . . . and a water container. When the tent was up and any chinks were light-proofed, the devotee had to sensitize his plates and load them into the camera dripping wet; then to develop the negatives on the spot.

What a school of labor and adversity, that sort of pastime, to breed a pioneer like George Eastman! He was enthusiastic enough not to be deterred from photography, ambitious enough to improve the methods.

But what he did for photography is another story. From Epidermis to Eastman is enough of photography's history for one sitting. From the dark tent to the talkies must wait.



Amateur photography sixty years ago: note the "dark tent," the assistant, and the glassware

Crossroads of the Pacific

Ukulele, guitar, and hula lessons, coconut milk, curios—and Kodak film! Hawaii as it used to be, but with a hint of Hawaii as it is: modern. This would be an unusual photographic store on the American continent; and it's unusual, too, in the Hawaiian Islands. This Eastman dealer is catering to tourists



WHAT KING'S BIRTHDAY is celebrated by American citizens on June 11th?

No, there's no catch in it. The birthday is that of Kamehameha I, traditional hero of the Hawaiians.

Thirty-eight years ago, the islands of Hawaii annexed themselves to the United States. All Hawaiian citizens are American citizens.

The celebration this year was one of unusual pageantry. It marked the two-hundredth anniversary of Kamehameha's birth.

Participants in the festivities were many employees of Kodak Hawaii, Limited; Eastman Kodak Stores, Fort Street, Honolulu; and the Wai-kiki branch of the store in Honolulu.

From Frederick B. Herman, manager of Kodak Hawaii, Limited, recently on furlough in Rochester, come interesting highlights of life in the islands.

The Hawaiians are intensely fond of sports. One of these sports—one that Mr. Herman guarantees will upset the most firmly mounted dignity—is tobogganning down grassy slopes on ti leaves. The ti (pronounced "tea") leaf grows in clusters on stalks, and you simply pull off a bunch of leaves, straddle them. Willy-nilly, you're away!

Two pairs of trousers are recommended by Mr. Herman, who's been ti-leaf sliding several times!

The ti leaf has another use. From it is made a potent beverage. Thus it may "get one down" in two ways.

Football's a popular Hawaiian sport. It is played in the orthodox manner, save for one detail: the players do not wear shoes. When, as happens quite often, a game is arranged with a team that's shod, the Hawaiians don shoes,

too. But, if there's a field goal to be kicked, off come the kicker's shoes!

Elsewhere (see page 6) is an account of a ship that got lost crossing the Atlantic. In the Hawaiian Islands, they get along without the points of

the compass. Instead, location is reckoned "from mauka [the mountains] to maki [the sea]," and from one district to another.

The island of Hawaii, largest of the group—there are twenty islands altogether, nine inhabited—is, according to legend, the home of Pele. Pele is a woman, and mighty important. She's the goddess of volcanoes.

Mr. Herman was an eyewitness of the great eruption last November, when the mountain of Mauna Loa belched forth lava in a series of fountains that ranged in height from two hundred feet to eight hundred. The lava flowed down the mountain-side in five rivers for a distance of 47 miles. These rivers ranged from fifteen feet to sixty in depth, and averaged a mile wide. The heat from the lava flows was so great that Mr. Herman, armed with a camera, could not get any closer than ten feet in comfort.

Mr. Herman has lived in Honolulu since 1928, when Kodak Hawaii, Limited, was established. He heads a cosmopolitan staff. Numbering 42, it is composed of native Hawaiians, of Japanese, of Chinese, of Koreans, of Portuguese, Filipinos, and Americans.

Questions and Answers on the Benefits

April "Kodak" invited questions about the employee benefits. Here are several, with answers.

Q. I was employed several years with the Company and was laid off but have now been back to work for some time. Should I not have a new insurance certificate issued to me?

A. No, it is not necessary. The return of an employee after a layoff is reported to the Employee Benefit Department, and the original certificate becomes again in full force.

Q. I should be interested in seeing a statement indicating at what points in service with the Company a person becomes eligible to various benefits.

A. *After six months' service*
Life insurance equal to six months' salary. (It increases with additional service.) Benefits for total and permanent disability. (They increase with additional service.)

Sickness allowance. (It increases with additional service.)

After one year's service

Wage dividend (see page 10).

Unemployment benefits if laid off.

After fifteen years' service (women)

Retirement annuity at age 60.

After twenty years' service (men)

Retirement annuity at age 65.

Q. If I should die while covered under the group insurance plan, may my beneficiary receive the insurance in installments instead of a lump sum?

A. Yes. Various arrangements for installment payments may be made, if the beneficiary desires. The method of payment is optional with the beneficiary, but there is no arrangement for the employee himself to specify the method.

Q. Are there any restrictions to the payment of insurance depending on the cause of death?

A. No.

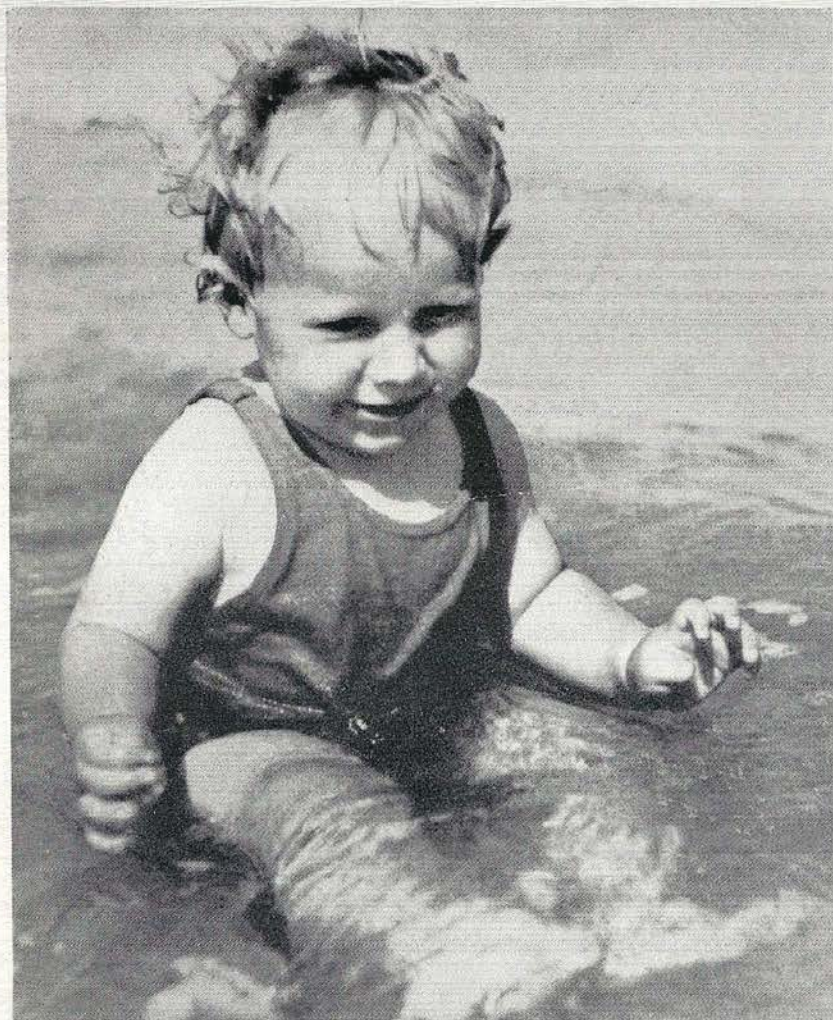
Q. What is Metropolitan Nursing Service? I've heard it mentioned.

A. The Metropolitan Life Insurance Company maintains a nursing service in Rochester, and in all other United States cities where there are Kodak employees, for the benefit of its policyholders. Employees covered under the group insurance may avail themselves of it. Full-time nursing care is not supplied, but the nurses will call daily when a patient needs a limited period of care. Arrangements may be made through the local Metropolitan office, or, in Rochester, through the Company's visiting nurses or the plant employment departments.



Art from the air. . . We are indebted to the Caterpillar Tractor Company, and to our own *Applied Photography*, for this artistic and successful photograph: artistic because light contrasts emphasize the diagonal lines, successful because every marking in the field retells the story of the tractor's work

Alleen de beste film



*...is goed genoeg
voor Uw foto's*

Z66'n opname van Uw baby wilt U Uw heele leven bewaren. De resultaten hangen voor het merendeel af van de filmsoort die U gebruikt. De beste en duurste camera ter wereld kan geen goede foto's geven als men goedkoope, minderwaardige films gebruikt. Kodak Film is de origineele, de ongeëvenaarde film. U kunt uit 4 soorten Kodak Film kiezen:

Baby voor 't eerst in zee

8 6 X 9 cm
opnamen
„Regular”
45 ct.



REGULAR
voor alledaagsche
opnamen buitens-
huis, bij helder
weer.

VERICHROME
bij twijfelachtigen
somer weer voor
alle soorten op-
namen.

PANATOMIC
een fijnkorrel
emulsie, speciaal
voor z.g. klein-
beeld-opnamen.

**S. S. PANCHRO-
MATISCH** voor
moeilijke opna-
men, b.v. binnens-
huis, bij kunstlicht
of 's avonds laat.

KODAK FILM

In Nagasaki or the Netherlands, Eastman film is ready for any job given it. Here's how Kodak in Holland says so