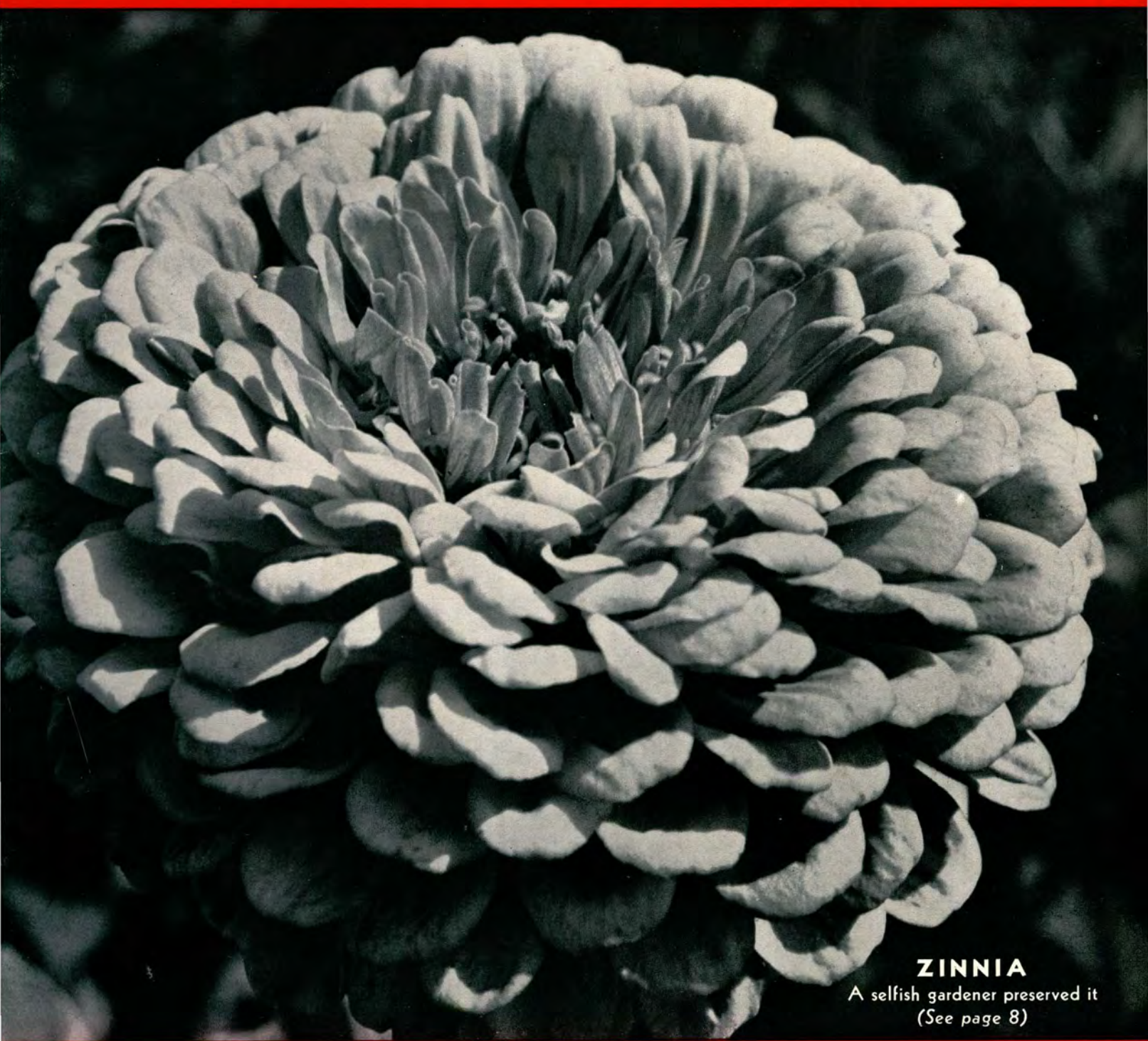
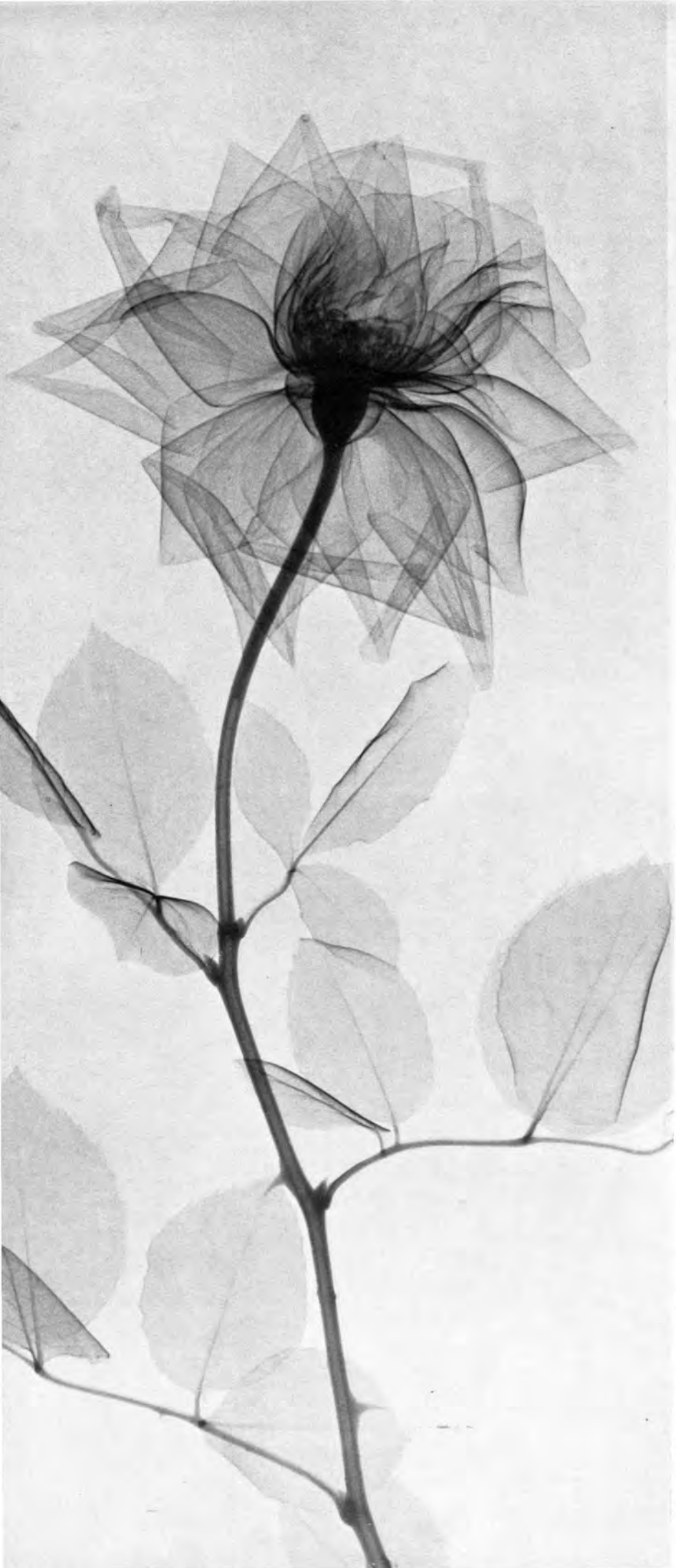
KODAK

A MAGAZINE FOR EASTMAN EMPLOYEES



ZINNIA
A selfish gardener preserved it
(See page 8)

AUGUST 1936



PREVIEW

"LOOK IN THE HEART OF A ROSE." The x-ray technician took the song-writer literally, and here is the result. Clear through flowers is really a fascinating way to photograph them, but it's not so simple as the flower photography—the outside of flowers—described on page 8. For making x-ray pictures of anything so delicate as flowers, "soft x-rays" must be used: rays longer in wave length than the x-rays which record on film such structures as human chests and the steel welds of Boulder Dam's water tunnels

KODAK

Volume 15 AUGUST 1936 Number 4

Take a Tour Inside an Emulsion

This young lady on positive movie film . . .

. . . begins to show her granular structure

Through a microscope it becomes apparent what a photographic image actually is: a pattern of extremely small silver grains, which extends over the surface of the film

Visit in the Lilliputian Land Of Grains You Can Not See That Make Images You Can

EVERY TIME a Kodak shutter clicks, many million things happen.

How can that be? . . . Here's how.

Photographic film—if you examine an unexposed roll—appears to be covered with a thin coating of caramel custard. But the emulsion—which makes film look like that dessert, and which takes the picture—isn't so simple as it seems. It is really made up of billions of individual, minute crystals of light-sensitive silver bromide.

These crystals are suspended in gelatine—like another dessert: Jello with chunks of fruit in it.

Silver-bromide crystals undergo a change when the light strikes them in the camera. The light does something to the particles that lets them turn into black metallic silver in the process that is familiarly known as "developing" the film.

But let's jump ahead for a moment to the time when the film has been exposed in a camera and then developed.

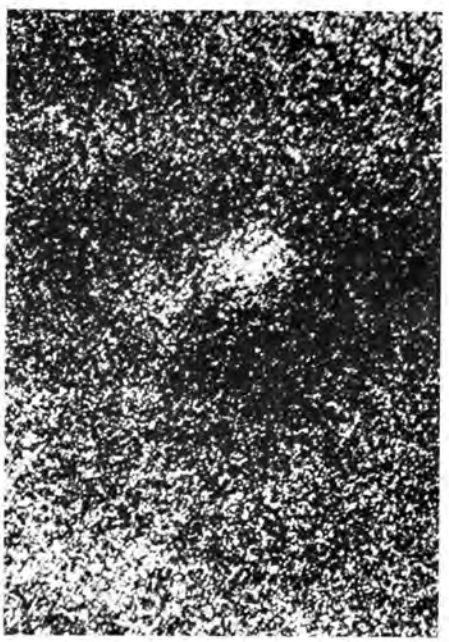
What does a picture look like? Well, it looks like a picture—that's the only good comparison—a picture, with shadows blending smoothly into light parts. Under the enlarging eye of a magnifying glass, however, it ceases to be a picture and appears as a rough, granular pattern.

Examined under a high-power microscope, the photographic image is different again. It is then seen to be composed of an enormous number of separate black grains—each grain under sufficient magnification looking like a tiny mass of coke.

The particle population of film is enormous: from half a billion to five billions of the minute particles of silver bromide to every square inch of film surface—or, in other words, a population of from one

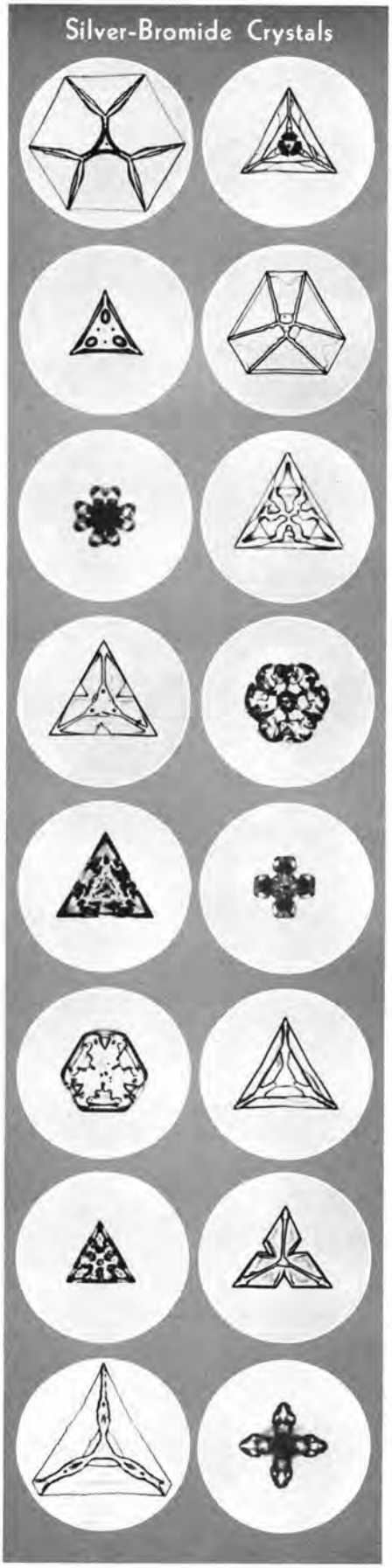
(*Please turn to the next page*)

Yes, she's really made of silver grains . . .



. . . as this substantial magnification proves

The highlight on the eye is bright because very few silver-bromide crystals at that point changed to silver in the developer. Dark areas exist where more crystals changed



Silver-bromide crystals, specially prepared in the Research Laboratories and highly magnified

Tour Inside an Emulsion

(Continued from the preceding page)

hundred to even one thousand times greater than that of Greater New York, on an area a little larger than one's thumb nail!

A Mosaic of Grains

These myriads of light-sensitive crystals are the mosaic that forms a picture where light strikes. They vary in size, from those so small as to be invisible under the most powerful microscope, to those that loom large under a microscope and may even be so big as one six-thousandth of an inch!

In the film, these particles are not all in the same plane, but are in many planes, one below the other. That is why, when an emulsion is photographed through a microscope at high magnification, some particles are in focus, while others are out of focus. Yet the emulsion coating on a film is perhaps one two-thousandth of an inch in depth!

All the crystals in a film are not equally sensitive to light. On the average, the larger the particle the more sensitive is it likely to be. Therefore, the larger ones are affected first. At places where the amount of light reaching the film is greater, the number of crystals affected is greater and the resulting negative is denser, the final print is consequently lighter.

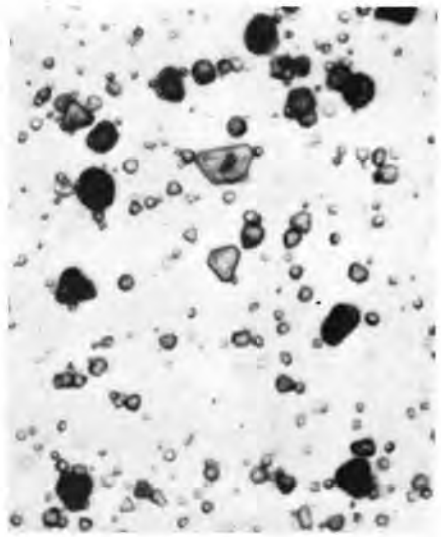
In "fast" film—Super Sensitive Panchromatic, for example—the crystals may average one twenty-thousandth of an inch across. In positive film for projecting motion pictures, they will be much smaller.

The sensitive silver-bromide crystals affected by the light when a picture is snapped carry what is known as a "latent image." It is so called because it lies hidden until it is revealed by development.

The Developer's Job

While there is no discernible change in the silver-bromide crystals after their exposure, the developer reveals that a change indeed took place in the particles affected by light—for, after development, a photographic image formed of black metallic silver stands forth in the midst of areas of other particles remaining in the form of the original bromide.

The developer's job is to reduce to metallic silver any silver-bromide crystals that were affected by light. When the film is developed, it appears dark where the subject photographed reflected light upon the film through the lens; and, where the subject was dark and therefore didn't reflect light to the sensitive grains, the film retains the caramel-custard color.

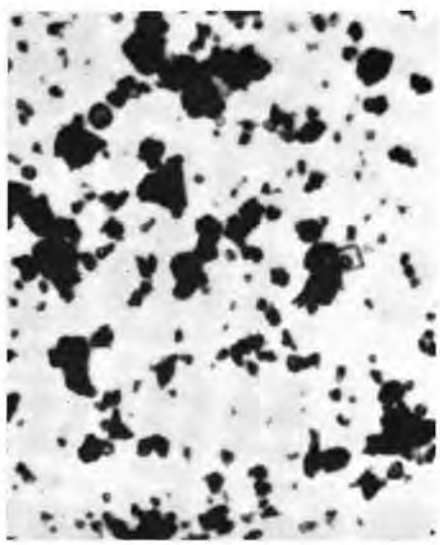


Before development: transparent crystals of silver bromide—here magnified 2,500 times

It is, then, millions of grains of metallic silver, converted from silver bromide by light and development, that form the "negative" image—the opposite in tone values of the original subject of the photograph.

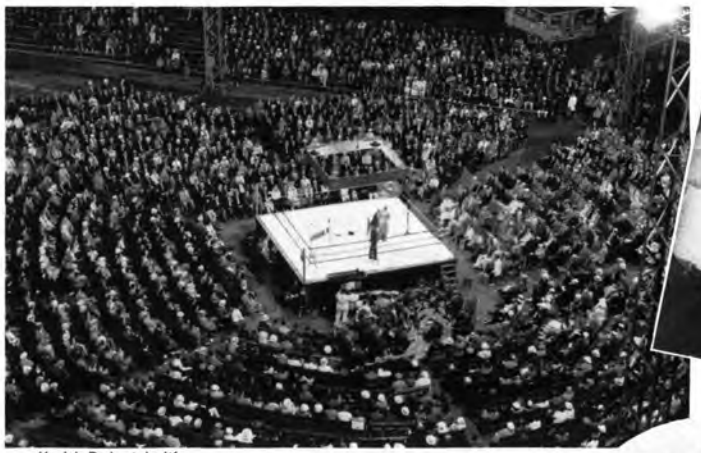
But what happens to the crystals that were not affected by the light? They remain on the film as silver bromide. If they were not removed, they too would become affected by light and the negative would be darkened. It would "fade," as we call it. That's where "fixing" comes along. The unaffected particles are dissolved out by a solution known as "hypo."

(Please turn to page 15)



After development: transparent crystals have turned into grains of black metallic silver

Kodak at Play



Kodak Park night life
K.P.A.A. smoker

Painless extraction
K.O.R.C. picnic

Time out! H.-E. Camera Club

When K.O.R.C. ladies golfing go (left)

Bowling belles
K.O.R.C. picnic

Breaking the news gently
K.O.R.C. girls' golf

Up—and over!
K.P. Camera Club

A good show—Camera Works picnic

Three K.O.R.C. golfers learn their scores in the men's golf fray

Admiration or consternation?
Camera Works men's golf

Clothespin race—Hawk-Eye picnic

Groaning board—smiling faces
Sales Department picnic

Baffled by a bunker
Camera Works men's golf

They huffed and they puffed
Camera Works picnic

PANORAMA

Last Surprise

THE HUMAN CRITTER'S ability to keep on being surprised in a world full of surprises is—well, it's surprising. . . . But here's one more, before we all lapse into a state where nothing is unexpected.

This is about a wasp laying an egg in China and a man wading in the mud. Both work for the Kodak Company, only the wasp doesn't know it. Their job is to produce a developer: pyro.

The wasp begins: lays an egg on a leaf bud of an oak tree. That makes a round "gallnut" grow on the tree. Off it comes, and into a shipment across the Pacific to Rochester—for gallnuts are a source of tannic acid, a useful ingredient.

At Kodak Park—Building 40—this strange raw material is crushed, and then allowed to ferment in a muddy mass in wide vats. Now it's the man's turn. He puts on his big hip boots and spades up the mud: which would be great fun!

And that's how pyro gets its start toward price list and developing tray, where films become negatives.

Prolific Shipbuilder

SHIPBUILDER John F. Collins, of the Kodak Office, landed in these pages a few months ago with his beautiful model of the *U. S. S. Texas*. Now he is skipping over Lake Ontario's waves in a motorboat—no mere model—that he has just completed. Since he is photographer first, shipbuilder afterward, he is thinking of naming the new craft the *S. S. Panchromatic*.

Appreciation

FEW PERSONS at Kodak Park whose work is not right on the route covered by visitors realize how many tourists inspect the largest Eastman plant. From far and near, every day, they come to be conducted on tours of the Park, and in the course of a year they number thousands.

Once a party of visitors included a prosperous-looking man who listened attentively to the guide's remarks, and was obviously very much interested in everything he saw—but who volunteered no comments of his own: definitely the "good listener" type. For more than an hour he continued to absorb information about Kodak Park in strict Coolidgiate silence.

Toward the end of the trip the party halted in the Fire Department while the guide placed a telephone call. The silent visitor stepped over to the fire engine, and casually snapped the gong with his finger. This made a faint ringing sound: whereupon he volunteered his first comment of the afternoon.

"Nice bell!"

Then he relapsed into wordlessness.

Transatlantic Kodachrome

FLASH!! The *Queen Mary* is steaming up New York Harbor to end her first Atlantic crossing.

Whirrrrr! Eight Ciné-Kodaks are in action, filming her from tall buildings, from tugs, from airplanes, from her own deck.

Hummmm! An air liner returns the films to Rochester, in time to be rushed to Kodak Park for processing on the night shift.

Off to New York, to catch the great ship's return voyage, goes 5,400 feet of Kodachrome portraying her arrival in New York. . . .

At the Southampton dock, the film was met by representatives of Kodak Limited. Three hours later it was at Kodak, Kingsway, London.

That was just after 7 p.m. The mass of film had to be edited into pleasing sequences of scenes, and par was to have edited reels in six cities in time for the pictures to be projected the next morning. The widespread public enthusiasm for the *Queen Mary* in Britain made the first voyage an excellent subject for demonstrations of Kodak's color movies for amateurs.

At daybreak, the completed reels were aboard trains speeding for Glasgow, Dublin, Newcastle, Birmingham, Liverpool, and Hull.

The film for Dublin still had the Irish Sea to cross; but a clipping reposing beside the typewriter as this account is written records a Dublin journalist's praise for the Kodachrome movies he had seen—less than a week after the film left Rochester!

That's speed—when you consider that Kodak is not engaged in the newsreel business, on either side of the Atlantic.

The movies were made by Harris B. Tuttle, of the Advertising Department, and a group of young men that included several members of the staff of Eastman Kodak Stores, New York.

Amateurs with Gusto

IT'S NOT ONLY by sending photographers to New York that we can acquire pictures of the *Queen Mary's* arrival—and other timely events. The Company publishes *Pictures*, a clever little four-page paper for amateur photographers; and the readers are encouraged to submit snapshots.

They respond with gusto. In a year, somewhat more than sixty thousand photographs have been received, from all states and from abroad.

The first amateur's *Queen Mary* picture arrived two days after the ship was in port. A photograph of the *China Clipper* landing in Honolulu came air mail on the *Clipper's* return trip. Olympic tryouts were covered.

The staff of *Pictures* finds it easy to keep abreast of the progress of the great new bridge being built at San Francisco. Tourists impressed with its grandeur may be counted on to keep the record up to date.

Perhaps the most curious news that has cropped up through these pictures is the existence of a large organization for the interchange of locomotive photographs. Like stamp-collectors, the members trade engines: a snapshot, for instance, of New York Central locomotive No. 411 in exchange for Santa Fe No. 215. The difference is that these collectors can manufacture their own trading chips with a Kodak, a roll of film, and a visit to the roundhouse.

From Light to Dark

"WHERE WAS MOSES when the light went out?" The childhood answer to that question rhymed, but it wasn't particularly believable. Nevertheless, "Down in the cellar eating sauerkraut," with the illumination suddenly turned off, did conjure up a picture of a very dark situation.

Then, there was the blind man in a dark room looking for a black cat that wasn't there.

But now, at last, comes a description of darkness that's still darker: "Imagine all the light bulbs at Kodak Park illuminated—at one spot—and then suddenly extinguished." There are fifty thousand of them!

Of course they all aren't in one spot; but, as figures go, fifty thousand light bulbs makes the Park's mere seventy-five hundred electric motors seem almost inconsequential!

Castle in Maine — Before and After

This is the house that Fred built. "Fred" is Frederick Q. Avery, who has been a salesman for Eastman Kodak Stores, Boston, for 34 years. A pleasant-looking house, isn't it, with its snow-white walls and windows that peep out upon a well groomed lawn. It's right on the Damariscotta River, two miles from Newcastle, Maine. And now, surprise, surprise! . . .

The house-builder himself: Mr. Avery's smile has that "something attempted, something done" expression. The pictures tell the story

. . . This is the house he built it from! Mr. Avery bought this run-down house for eight hundred dollars and, largely from his wage dividends, began to transform it ten years ago. The "face-lifting" consisted, in part, in building a piazza, a porch, a lean-to, and two dormer windows. The barn became a garage. And, in the interior of the house, two small rooms were converted into one large living room; an inviting fireplace was installed to mellow cool Maine nights; and a modern bathroom awaits the guest who shrinks from "roughing it." And what was the cost when the work was all through? Twenty-five hundred dollars, complete—and a lot of fun

Activities Calendar

August 15—Camera Club beach party at the Camera Club cottage

August 22—Camera Works golf tournament for men, at Midvale

—Camera Club children's party at the Camera Club cottage

August 29—Kodak Park golf tournament for men, at Lake Shore

—Camera Club contest for cottage pictures, at the cottage: entries and awards in one evening; also a Ciné-Kodak contest

September 19—Kodak Office golf tournament for men

—Hawk-Eye golf tournament for men and women

September 21—Hawk-Eye noon baseball league, championship play-off

Late September—Kodak Office golf tournament for girls

Late September—Camera Works golf tournament for men

October 5—Kodak Office Bridge Club, first fall meeting

Versatile Photographer

IN A RECENT ISSUE of *Vogue* appeared an appreciation of the *Queen Mary* from the pen of a famous young Englishman named Cecil Beaton. The article was illustrated with the author's own drawings of scenes on the ship.

Mr. Beaton's fame, however, rests neither on his pen nor his crayons. He is, instead, an outstanding photographer. . . . And now a titbit about him that will interest Camera Works: he started on his road to success with an inexpensive Kodak, and still prefers it to more elaborate cameras.

New Old Faithful

The 3A Kodak—postcard size—is the kind of camera that amateurs have sworn by since the turn of the century. Recently it appeared in new styling: the "3A Kodak, Series II."

New: The Bantam Special

The Outstanding Miniature Kodak Makes Its Bow

Here's the new Kodak Bantam Special, our finest miniature camera

IT COSTS $110 a pound—which suggests something pretty special. It is just that: the new Kodak Bantam Special, and it's all that the name would imply.

Our dealers' customers are hardly expected to order it by the pound. It's a camera, in fact, for discerning amateur photographers to buy if they want to purchase Kodak's finest miniature instrument.

A pound of Bantam Special is exactly one camera. That sixteen ounces contains some of the finest workmanship the Camera Works has produced, and a new high-precision lens by Hawk-Eye in the bargain.

The instrument just announced to the public uses film of the same size as the previous Kodak Bantams, and two types are available: Panatomic and Super X. The dimensions of the camera are 4⅞ inches by 3⅛ by 1 13/16—which is decidedly not large, as the comparison with a hand shows.

One of the most important features contributing to make our newest camera an exceptionally useful instrument is a coupled range-finder—which may be seen at one side. The range is found by moving a focusing knob until the split image in the range-finder is brought into a straight line. When that has been done, the camera is in focus. It is not necessary to take a distance reading from the range-finder and then set the focus, for the focusing mechanism is coupled with the range-finder.

This suggests the Bantam Special's size, and shows how the front, closed, gives protection

Eliminating the need to focus in terms of feet, the Bantam Special still possesses an auxiliary scale showing the distance, so that the focus may be set in advance to get ready for action shots; or to be used when the same picture is taken again.

The Special marks the appearance of the first of the Ektar lenses—the name being derived from the initials, "E. K." These are high-quality Kodak Anastigmats from a newly computed formula.

In the Ektars, the designers at Hawk-Eye have succeeded in reducing both the spherical and the chromatic aberration—speaking now in optical terms—to negligible proportions, at the same time maintaining a perfectly flat field, free from astigmatism and distortion to a degree that is remarkable in a lens of large aperture—for the Ektar on the Bantam Special is an *f*.2: very fast.

These attributes of the new Ektar all contribute to one end—microscopically clear negatives that will make enlargements rich in detail.

The Bantam Special's shape was designed for maximum convenience in the hand. The case is aluminum, with a black enamel finish between the raised ribbing.

When it is closed, the case provides complete protection for the lens, the shutter, the front elements of the view-finder, and the range-finder.

Humor Over Africa

The letters Mr. Eastman wrote home from his first African hunting trip were printed, upon his return, as a book, and he gave a copy to each employee who had been with the Company five years or longer. The collection made very good reading, with many glints of excellent humor.

Here is another chronicle: but it contains humor exclusively. It was written by H. I. Phillips and appeared in his newspaper column.

Mr. Eastman Shoots an Elephant

(*Mr. George Eastman, camera king, is on his way to British East Africa to hunt elephants—News item*)

Guide: Are you ready to start, sir?

Mr. Eastman: How's the light?

Guide: Very good.

Mr. Eastman (*looking out of tent*): It isn't as clear as I like it. To get the best results one needs a very bright day. Where's the sun? I shall want it back of me, over my right shoulder.

Guide: It'll be a lot brighter in an hour or two. Conditions should be ideal for shooting by noon.

Mr. Eastman: What are we going to shoot today?

Guide: Elephants.

Mr. Eastman: Then I suppose I'll need my biggest rifle, my 10 by 7 as it were. Still, I guess I'll take along a couple of

La Cucaracha

In English, it's "cockroach." At Kodak in Panama, the name is more romantic but the critter is a nuisance: he is much too fond of the tasty gelatine in emulsions on film

little guns too. It's surprising what fine results the little ones give sometimes.

Later—The Jungle

Guide: There's a splendid specimen just ahead, sir.

Mr. Eastman: What a wonderful study! Such lights and shadows!

Guide: You'd better let him have it, sir.

Mr. Eastman: I don't want to shoot while he's in the shade of that tree. And I want to work around him a little . . . so the sun will be just right.

Guide (*impatiently*): Now is the time to shoot, sir.

Mr. Eastman: But he isn't standing right.

Guide: What?

Mr. Eastman: He's facing me. I always like to shoot my elephants a little from one side. More profile, you know.

Guide (*as the elephant moves closer*): Really, sir, you ought to nail him at once.

Mr. Eastman: Can't you get him to face a little to the left?

Guide (*querulously*): It's very difficult to get elephants to pose exactly as one wishes, sir. They're quite stubborn in that respect.

Mr. Eastman: Elephants, like human beings, have their good sides and their bad sides, I'm sure. I don't want to shoot until I'm certain which is which.

Guide (*as the elephant comes dangerously close*): I'm warning you, sir, you'd better shoot.

Mr. Eastman: I always get the best results when a subject is about twenty feet from my rifle. Now he's about right. Attract his attention, please.

Guide: What?

Mr. Eastman: Wave something at him. I want him to look right into the gun.

Guide (*taking out a small stuffed bird and holding it aloft*): Watch the little birdie.

Mr. Eastman (*as the elephant stops and looks at the guide*): There! That's perfect. Hold it.

(*The elephant suddenly turns and runs. Mr. Eastman pulls the trigger, but the shell does not explode*)

Guide (*exasperated*): What happened?

Mr. Eastman (*breaking his rifle and discovering that the shell is one that had already been discharged*): Damn it! A double exposure! I tried to shoot two elephants on the same shell!

Employees Who Have Retired

Miss Minnie Izard
Kodak Park

Harry M. Fenn
Kodak Office

Arthur J. Davidson
Kodak Park

William P. Wentz
Motion Picture Sales

James Swanton
Kodak Park

Bernie Genthner
Kodak Park

Daniel L. Coakley
Kodak Park

William W. Bills
Kodak Park

Edward Statt
Kodak Park

Theodore Johnson
E. K. Stores, Chicago

Another League Heard From: They're Doing Things in Chicago

This softball team represents the Chicago Branch, Taprell, Loomis & Company, and Eastman Kodak Stores, Chicago. The percentage of games won is well up toward the hundred mark. In the front row, left to right, are Mees, Zanin, Sadowski, Kotovsky, Claussen, Murphy, and Wrona. In the back row, left to right, the members of the team are Stasiaf, Cook, Jones, Captain Hoppe, Zenge, Kohs, Spence, Gale, and Cichon

Cultivating Flowers by Camera

It's the One Tool Capable Of Making Gardens Bloom Right Through the Winter

AN IMPORTANT PSYCHOLOGIST, discussing "selfishness," describes the rapt admiration of a sunset as a state of mind entirely free from that quality. . . . But—says the psychologist—when the beholder remarks, "How I wish I could paint that!" selfishness has crept in: the desire, in this case, to possess something beautiful and never to lose it.

We gardeners are rewarded with our full measure of beauty; but I am not ashamed to admit that we are selfish within the psychologist's definition. Summer is an emotional whirl of blooming and fading. Every new bloom is a triumph, every fading is a tragedy, and there is something very personal in each. Nearly all gardeners would, if they could, preserve their cherished blossoms in photographs against the cold monotony of the coming winter.

They would if they could. . . .

The purpose of this article is to show that they can. Successful flower photography can be carried on with little equipment and with limited experience previously.

As for experience, the ability to make pleasing pictures of flowers depends largely on the knack of seeing flowers as pictures. As for equipment, the illustrations of this article—together with a large number of other flower photographs—were made on "SS Pan" film, without the use of light-filters or any other complicating element. The apparatus consisted of these simple parts: a 3A Kodak; a portrait attachment; a tripod; and several pieces of string.

[The photograph of a light-rose zinnia on the cover is an exception as regards the equipment in the foregoing list. It was made with a Kodak Recomar 33, on Panatomic Film. Exposure—for those who want details—was 1/10 second at *f*.22. The hour was 9:45 in the morning, when the sun was still low enough to give a pleasing side lighting.]

The string—and don't forget that several humble pieces of string in the pocket can serve many an exalted purpose—is intended to attach to the stems of flowers or the branches of foliage for holding them in place when they won't otherwise remain "in pose."

The portrait attachment is simply an extra lens, a standard Eastman accessory, to slip over the front of the camera lens. Through the use of a portrait attachment, a much larger image can be obtained than would result without its use. Brownies and most Kodaks are designed to take no pictures at distances less than six feet.

Frederick W. Brehm's hobby—gardening—and his occupation—photography—fit snugly together, and Mr. Brehm, who is a member of the Service Department, tells about it here

The addition of a portrait attachment transforms the camera at will into one that can make arm's length close-ups of flowers or faces.

Ability to see flowers in terms of lights and shadows is the secret of satisfactory flower photography. This rule does not mean that one must take a course in photographic lighting or digest any complicated instructions, but rather that a photographer of gardens must practice acute observation and must learn to see flowers, not as the brain rationalizes them into diagrams of beautiful shape and color, but as natural objects brilliant with sun on this petal and shaded by a leaf on that.

There is one outstanding "bonus" for gardeners who become interested in photographing flowers: a reward not connected with the resulting pictures. That is an increased appreciation of form, of color, of lighting. In plain words, when you set about flower photography you will see in flowers something that you have never seen before. There may be as much satisfaction in the making of the photographs as in their possession.

Let me suggest a preliminary glance at the illustrations of this article to understand the most important point I am able to make: that shadows are necessary to reproduce form in a picture. Without shadows, a bloom would be just a blob. . . . Because that is true, it is essential in planning a

If this white tree peony had been photographed at noon, with the sun shining directly down on it, the shadows that give form would have been lost; but at 9:30 the pattern was there

Two ways to photograph viburnum: the purpose of this one, to show the blossom on the bush

Greater care must be exercised in photographing small, light-colored flowers than for those of larger structure. Too much sun could easily turn a cluster of delicate small flowers into one mass of white. It is the "modeling" of each flower—to use a professional term—that makes many a picture well worth an amateur gardener's saving.

When larger flower forms are the subject, there is less need to shun the sun—but Old Sol should still be kept in his place, which is low and at one side.

If the lesson of seeing flowers in terms of light and shadow is learned, the position of the camera will take care of itself. The lens is simply a mechanical eye that interprets form much the same as your own eye. No matter how low-growing the flower, stoop down until the view of it is pleasing to the eye—never forgetting to see in terms of light and shadow. Then set the camera in the same position the eye occupied: and little is left but to "press the button."

The purpose of this photograph was to record the viburnum's structure in detail. A portrait attachment made the difference, by permitting the picture to be snapped close to the flowers

For the gardener beyond the novice stage, there is much satisfaction in planning and watching the rotation of bloom. Turning for a moment from the subject of photographing blossoms and clusters of blossoms, let me remark that a photographic record of plant location will be of assistance when a change is to be made in the garden's arrangement.

The early flowers—crocuses, tulips, daffodils, and the others—disappear, and annuals are often planted over them. If a change in the plantation scheme should be desired, a photographic record of the earlier blooms would mark the exact location of bulbs whose foliage had disappeared.

But that is really a side issue. Here are the main points: learn to see what the camera will see; model with shadow for lovely effects; use panchromatic film; use a portrait attachment to get satisfying close-ups.

Then you will have a collection of flowers, summer or winter, that is a thing of beauty for your friends and a cherished possession for yourself: something worth being selfish about.

Again, "modeling" with light: these magnolia blossoms were photographed by a late, low sun

photograph, in order to make the most of the subject, to note when the light is from the right direction.

The best results in flower photography are obtained, not at high noon, but in the early morning or the late afternoon—when the direction of the light is from the side: and, fortunately, when gardeners may be at home. Since the blossoms usually turn toward the sun, the camera can be placed at such an angle that shadows will be cast by parts of the blossoms.

A hazy day when the sun is under light clouds is the ideal time for flower photography; and on such a day there are no air currents to disturb the delicately poised blossoms.

Side lighting did two things to this clump of crocuses bordering a walk: it outlined their shape, giving roundness, and it embellished the picture with a pleasing row of silhouettes

THE EDITOR'S PAGE

The Salon Is Coming

THE ELEVENTH Kodak International Salon of Photography will be held in Rochester December 3rd, 4th, 5th, and 6th of this year. The closing date for entries is announced for November 1st.

The December dates are interesting for Rochester employees and their families, because these Kodak salons have become an event, with a capital "E." Not only the pleasing and excellent pictures, but also the spirit of the thing—the chance to walk around among the results of the skill and enthusiasm of colleagues far and near—these have made the salons more popular each year.

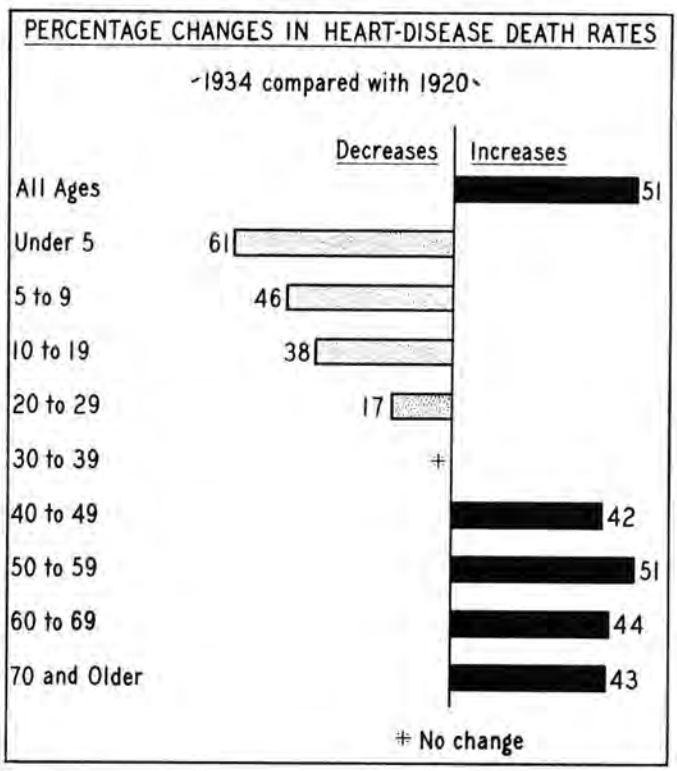
The November date is interesting for hundreds of our people throughout the world who will—as past experience predicts—submit more than eight hundred photographs for judging, the majority well worthy of going on exhibition, even though there will be room to hang less than half. That's where the competition comes in.

The Kodak International Salon has definitely made good. It has given our spare-time photographers something high to aim at. It has introduced many who were not photographers to the pleasure and satisfaction of making artistic pictures. It has given a great many more persons, who don't aspire to make pictures for salons, an opportunity to see excellent and enjoyable work in the medium of the Company's products.

Several thousand persons saw the pictures when the Kodak International Salon was in Rochester in 1934. Kodak people in 21 countries submitted 799 prints to the salon last year, when it was in England. These figures are impressive—but not surprising to those who have seen the recent salons.

The Eastman Gold Medal will again be awarded to the photograph adjudged the best in the show. The total number of trophies will be the largest ever presented to Kodak Salon winners.

Detailed information about how to submit prints will be forthcoming later. Meanwhile, the sun is shining for making hay and photographs.



His Pride's Our Vanity

THE EDITORS are preening themselves just as if it were their own house. . . . "So We Have Decided to Build a House," we headlined in the June number, introducing the reasoning of an employee who had figured out in detail that he would save money over the next ten years by having his own home, instead of renting.

We hereby report that the theoretical house which the reasoning led to is no longer theoretical. A site has been selected and the walls are up. The young man whose calculations we printed has just told us.

It is nothing but vanity that makes the editors proud to see a home materialize that was nothing but type in KODAK's pages only two months ago; but the man who had worked out the reasoning has just cause for pride. He weighed the factors carefully, checked his calculations with experienced persons, and then went ahead.

That kind of thinking, and that way of going at a personal problem, are a pretty sure means of making good on advice in the *Kodak Works Bulletin*, Harrow:—

The best place to live is inside your income

The Chart on This Page

THE CHART ON THIS PAGE sheds some light on that vague but important subject, the increase of heart disease. In his discussion of the question, on the opposite page, Dr. Crain tends to be optimistic about continued reduction of heart ailments in the younger groups, but he feels that there's work to be done in the middle-age group. His references to means of preventing and controlling heart disease are well worth noting.

The chart was prepared by the American Heart Association, on the basis of United States mortality statistics. The information it conveys is the percentage of increase or decrease in deaths from heart disease per hundred thousand population in fourteen years, by ages.

THIRTY-FIRST SEMIANNUAL REPORT
EASTMAN SAVINGS AND LOAN ASSOCIATION

Assets and Liabilities as of June 30, 1936

Assets		
Loans on Bonds and Mortgages	$8,192,859.96	
Less: Repayments	4,262,684.15	
Net Amount Due		$3,930,175.81
Cash in Bank and on Hand		79,676.52
Loans on Shares		66,477.88
Demand Loans		200,000.00
Home Owners Loan Bonds		131,156.25
Government and Other Bonds		277,718.75
Modernization Loans (Federal Housing Administration)		35,234.85
Investment in Savings and Loan Bank		1,000.00
Investment in Other Associations		8,200.00
Furniture and Fixtures	$ 10,989.82	
Less: Reserve for Depreciation	9,454.31	
		1,535.51
Real Estate		131,188.71
Real Estate Contracts		25,781.45
Real Estate Special Advances		3,528.58
Bond Interest Accrued		4.03
Taxes and Insurance Advanced		41,125.75
Prepaid Real Estate Expense		9,094.14
Sundry Debtor (Appraisal Fees Advanced)		106.00
		$4,942,004.23

Liabilities		
Due to Shareholders:		
On Installment Shares	$ 730,218.36	
On Income Shares	2,493,700.00	
On Saving Shares	814,811.60	
	$4,038,729.96	
Dividends Declared and Credited	554,048.43	
		$4,592,778.39
Guaranty Fund		224,292.76
Reserve for Accrued Interest	$ 35,000.00	
Reserve for Taxes and Insurance Advanced	25,000.00	
Reserve for Real Estate Advances	3,528.58	
Contingent Reserve	10,000.00	
		73,528.58
Undivided Profits at Dec. 31, 1935	$37,740.31	
**Less:* Miscellaneous Charges	306.80	
	$ 37,433.51	
Add: Profit for six months ending June 30, 1936	4,264.02	
		41,697.53
Unearned Profit on Real Estate Investments		9,706.97
		$4,942,004.23

*Write off of Taxes and Insurance advanced per instructions from banking department.

INCOME ACCOUNT FOR THE SIX MONTHS ENDING JUNE 30, 1936

Expenses		
Salaries	$11,637.98	
Advertising	265.97	
General Expense	751.38	
Office Supplies and Stationery	458.50	
Printing and Postage	152.67	
Depreciation on Equipment	415.64	
Real Estate Repairs and Expenses	16,372.03	
Adjustment Account	125.89	
Attorney's Fees and Costs	1,625.20	
Prepaid Real Estate Expenses	1,414.43	
Unemployment Insurance	55.73	
		$ 33,275.42
Dividends		
On Income Shares	$54,330.69	
On Saving Shares	11,162.37	
On Installment Shares	18,467.85	
		83,960.91
Net Profit for period transferred to Undivided Profits		4,264.02
		$121,500.35

Income		
Interest on Investments:		
Mortgages	$104,742.19	
Notes	2,118.80	
Shares in Other Associations	12.50	
Taxes and Insurance Advanced	1,169.52	
Cash on Special Deposit	250.00	
Home Owners Loan Corp. Bonds	1,760.36	
Real Estate Contracts	156.59	
Federal Housing Administration Loans	1,250.42	
Government and Other Bonds	2,745.50	
		$114,205.88
Rents from Real Estate Owned		5,523.86
Dividends Forfeited on Shares Withdrawn		228.39
Miscellaneous Receipts		8.50
Profit on Sale of Securities		1,533.72
		$121,500.35

We have examined the books and accounts of Eastman Savings and Loan Association for the six months ending June 30, 1936 and the above Balance Sheet has been prepared therefrom. We certify that it correctly represents the condition of the Association as shown by the books for the period ended that date.

Auditors: John C. McEntee
J. Miller Richey
S. B. Slade
Floyd R. Spencer

A Doctor Looks at the Heart Question

Cardiac Ailments: Are They Really Increasing? What Are The Causes? A Brief Survey

We all know that automobile accidents ended more than thirty-five thousand lives in this country in 1934. But how many of us are aware that heart disease claimed some seven times as many victims in the same period? This article traces various causes of heart disease and offers "safety first" information.

THE QUESTION is frequently asked, "Are deaths from heart disease increasing and, if this is true, what can be done about it?"

For a number of years heart disease has headed the list of causes of death, and the mortality rate is indeed still increasing. It is estimated that at least 2 per cent of the United States population suffer from organic heart disease. This prevalence is serious, even apart from the deaths caused.

However, by analyzing the mortality rates according to age periods, we find that the situation is not so alarming as it appears at first glance [see the opposite page].

Almost the entire increase in heart disease has occurred in persons over forty years of age, while for those under thirty the rates are low and decreasing—and particularly is that true in the group under five years.

These decreases in the younger age groups are probably due to such factors as the conquest of infectious diseases in childhood. There is reason to feel that the intensified health work with infants, the preschool child, and school children is helping to bring about this decline in death rates from heart disease in the earlier years.

The Principal Causes

To get a clearer conception of what must be done to combat the inroads of organic heart disease, we should know something about its principal causes.

Let us first consider the rheumatic group of causes. This includes rheumatic fever (inflammatory rheumatism) and chorea (St. Vitus's dance). To quote from a publication of the American Heart Association: "Rheumatic fever is, in children and young adults, the origin of more diseased hearts than other causes combined.

"Although we do not know definitely the cause of rheumatic fever, there is enough evidence to make us feel fairly certain that we are dealing with a germ disease. These germs, or the poisons which they manufacture, attack many different structures in the body: the joints, the muscles, the nervous system, the heart.

"To the average person the term, 'acute rheumatism,' means an illness characterized by fever, and joints which are red, swollen, tender, and painful when moved. However, in many cases, particularly children, there may be little or no fever. . . . The heart may be seriously affected without any joint involvement."

Health Habits Count

To prevent rheumatic infection, it is necessary to cultivate good health habits and to avoid colds and sore throats. Abscessed teeth should be extracted and diseased tonsils should be removed. Poor housing conditions—living in a damp place, in particular—are believed to predispose people to rheumatism.

If one has had rheumatic fever or chorea, it is necessary to have repeated examinations of the heart so that it may not be overstrained by too much activity. This applies particularly to children.

Other germ diseases, such as pneumonia, scarlet fever, and diphtheria, may cause heart disease. But these are unimportant when compared with rheumatic fever. On the other hand, syphilis is an important cause.

Dr. Rufus B. Crain, of the Medical Department staff, Kodak Office, the author of this article

In a certain number of deaths from heart disease, the cause is not definitely known. As methods of diagnosis improve, the size of this group of cases should progressively decrease.

The largest heart-disease group is made up of individuals whose hearts have undergone degenerative changes. In these changes, the blood vessels, particularly, lose their elasticity and become hardened, or calcified. This process is called arteriosclerosis. With the blood supply impaired, the heart muscle becomes weakened.

These changes are the natural accompaniment of old age, and when they are found in elderly individuals they need cause no alarm. In fact, with the increase in the average life span more persons are entering this group than ever before. More than two-thirds of the deaths from heart disease occur after the age of sixty.

It is only the increase of this form of heart disease in middle life, as shown by our chart [opposite], that should give us concern.

Here the value of regular and complete physical examinations—x-ray study included—has been demonstrated. In this way it is often possible to detect the first signs of diseased processes in the heart and blood vessels and to institute measures which may prolong an individual's life. The heart will respond in a remarkable way if given a chance. Much depends upon learning to live within the capacity of one's heart.

Nature's Prank

Flower freak: a rose that grew from a rose in the garden of William Durkin, of Building 29, Kodak Park. Mr. Durkin is properly mystified

OUT OF THE HAT

Music and war, the sound and the fury—those are the subjects that seem to come out of the hat most frequently. This time, we give you: rider, flier, smeller, fiddler. Next time? Whatever the fates may bring!

And Giants and Giraffes

Contortionists squeak unless they are oiled thoroughly.

From John Barnhardt, of the Hawk-Eye Works, comes this information. Contortionists, confides Mr. Barnhardt, sleep in well oiled rubber gowns, to keep their muscles in trim.

Mr. Barnhardt is something of an authority on contortionists (and giants and giraffes). He has toured the United States and Canada as a stunt rider with the Barnum & Bailey Circus. His first glimpse of the city of Rochester was from the windows of the circus train in which, with eight hundred fellow performers (not counting the animals), he arrived here for a one-night stand in 1902.

Already an expert horseman when he ran away from home to join the circus, it took him only ten months to become a top-notch stunt rider.

There's little slacking in circus life, he says. Daily rehearsals and an exceedingly steady life are "musts" where so much depends on keen eyes and steady nerves.

And even then there are plenty of hazards. During a performance in Montreal, he was thrown and broke an arm. In other spills, he escaped serious injuries by a hair's breadth. "But," he says, "that's circus life. While the spectators are cheering madly, like as not a performer is just beginning to breathe freely after some close shave."

Mr. Barnhardt's most prized possession is not a relic of the sawdust ring, but an eighteen-inch boat model of his own making. The model has been copied, on a much larger scale, with his consent. The copy is a tugboat!

John Barnhardt: contortionists squeak

Barnstormer

It compares with the *Hindenburg* as a whaleboat with the *Queen Mary*, but in 1909 the dirigible in which Evan J. Parker "barnstormed" was to newspaper reporters a "monstrous looking thing, with the mere atom of a man hung in under it, and a whirling propeller at the peak."

Evan J. Parker: he poised for his picture

Mr. Parker, now of Building 103, Kodak Park West, admits readily that aviation has advanced not a little since the pioneer days when he thrilled a nation as a pilot.

By walking fore or aft along the framework, he could point the nose downward or upward. Standing amidships, with the motor turned off, he could poise in the air while admirers took his picture.

By turning his dirigible into a parachute, Mr. Parker once saved his life at Boise, Idaho. While soaring at a thousand feet—his "highest up" mark was two thousand—he ran into a heavy wind that distorted the frail, cigar-shaped gas bag. The propeller caught in one of the wires that held the framework on which he stood and drew it taut against the bag, ripping a twelve-foot gap through which the hydrogen rapidly escaped.

Edwin F. Link: he banged the bass drum

Here was a test for coolheadedness! Mr. Parker was equal to it. He walked to the end of the framework, which directed the torn nose downward; the rapidly deflating bag began to balloon like a parachute, and soon he was dropping gracefully to earth!

So hazardous was his life that he changed his name, to keep his mother from anxiety for his safety, and flew before thousands as "Captain Dallas."

Gas Sentinel

Nominated for election to the I've-Held-an-Unusual-Job Club: Edwin F. Link, of the Camera Works.

Mr. Link's qualification: gas sentinel in France.

Translated, gas-sentinel duty meant standing out in the open in dead of night and smelling shells as they screamed overhead! If the sentinel's nostrils detected gas, he sounded an alarm for his sleeping companions by banging on a piece of iron piping.

An odd job enough in itself, all will agree, but rendered doubly odd by the fact that Mr. Link's army status was that of musician, first class. He banged the bass drum and cymbals in the regimental band.

Mr. Link's wartime assignments did not stop at smelling enemy shells for gas: he also acted as ambulance man, telephone operator, lineman,

and—when opportunity offered—entertainer for the other soldiers! He is an expert pianist.

Music is in the Link blood. His father was director of Link's Martial Band, which played at President Grant's funeral in New York. So it was but natural that Kodak's Mr. Link should organize his own orchestra—and it was a swell orchestra, too, as many Kodak people can testify. It played for two years for noon-hour dances in the Kodak Office auditorium!

From Far, Far Away

CHILDREN GROW UP thinking that if they dig a deep enough hole they will come to China. Adults who are curious may do some measuring on a globe and learn where that imaginary hole through the core of the earth would really come out. The point just halfway round the world from the geographical center of the United States is in the Indian Ocean, seven or eight hundred miles west and south of the southwest tip of Australia.

Mr. Mergard, a recent visitor in Rochester, just misses being the Kodak man stationed farthest away from the United States, for there is one Kodak establishment closer to "around the world" than the Kodak Limited branch in Java, of which he is the manager. The Australian company's branch in the city of Perth is actually the most remote from the United States.

His headquarters are in the city of Batavia. The Javanese branch includes in its territory Barnum's "wild man's" land of Borneo.

Advertising material prepared by the Kodak branch in Java is printed in two languages: Dutch and Malay.

Gilbert A. Mergard, manager of the branch of Kodak Limited at Batavia, Java, close to the halfway point round the world from America

Bass Fiddler for a President

He joined the Navy to see the world and, unlike the sailors in the recent song hit, he saw it.

"Round the world twice. Three times through the Strait of Magellan. Nine months on the Presidential yacht, *Mayflower*." Robert Bee, of Building 50, Kodak Park, ticked off his ramblings on his fingers. "It's a great life, the Navy," he reminisced.

Robert Bee: he went deeper

Born in Germany, Mr. Bee came to this country when he was eight years old. At sixteen he joined the Navy and went aboard the *U. S. S. Washington*, all ready to become a member of the ship's band.

Instead, he was given a bugle and, like many another young apprentice, told that there were exactly 142 different calls to be memorized. "It was no cinch," says Mr. Bee.

From the bugle, he went deeper: to the tuba and the string bass. Because of his unusual prowess with the last-named instrument, he was chosen as a member of the 24-piece string orchestra to play on the *Mayflower* during the Wilson administration. The President and Mrs. Wilson, he says, were lovers of Hawaiian music.

Mr. Bee's first visit to Punta Arenas, in the far south of South America, is a cherished memory. Speculation ran rife throughout the voyage as to what strange sights awaited in that town, more than seven thousand miles away.

"The very first thing we saw when we got there," says Mr. Bee, "was a large sign, in English, saying: 'You press the button, we do the rest.' "

A Memorable Landing

Although now the record-breaking flight and successful landing of the stratosphere balloon, *Explorer II*, have passed into history, this photograph at the exact moment when the gondola came in contact with the ground is still well worth publication. It was taken by Richard H. Stewart and Captain James Haislip from one of the airplanes following the flight. The picture, copyright by the National Geographic Society, is reproduced by special permission of the *National Geographic Magazine*

Files on Film: The Recordak Does It

Newspaper Pages Now Can Be Recorded by Our System For Copying Checks, Documents

WHAT ROUND WAS IT when Dempsey knocked out Carpentier? What was Coolidge's majority in 1924?

If your arms are strong enough to match your patience, the information awaits in newspaper files—to be found in public libraries or publishing offices: volumes as large as a newspaper and so thick that they outweigh a loaded suitcase.

Handling the heavy bound volumes of back copies is strenuous work for anybody who wants to see what was "in the paper" a few years ago—but the discomfort of lifting these tomes can't compare with much greater disadvantages that newspaper files in this form hold for librarians and for publishers.

The world keeps making news, and advertising goods, at the rate of thirty or forty or fifty newspaper pages a day. Month by month the files of hundreds of these large newspapers grow, eating up valuable city storage space. A full year of a paper the size of the *New York Times* occupies about 50 cubic feet, for instance.

Newsprint paper deteriorates rapidly, and that has been another "headache" for libraries and newspaper offices. Even so short a time as five years is sometimes the life span.

These were serious problems, indeed. Space was precious. The history of our generation was on those decaying pages. . . . Then came Kodak's Newspaper Recordak!

Fifty Cubic Feet in One

The photographic apparatus called the Recordak was already used in banks and business houses for making miniature photographic records of checks, bills, and other commercial papers. The principle of this machine made at the Camera Works was applied to recording newspaper pages on 35-millimeter safety film—standard-width movie film—as an answer to the problems of the newspaper files.

First, the result. A newspaper that filled fifty cubic feet with its year's files now can be stored on film in one cubic foot. Contemporary records on rapidly yellowing newsprint can now be permanent on safety film. Handling heavy bound volumes is likewise no longer necessary.

There isn't anything theoretical about the Newspaper Recordak system. Nine newspapers are already having all their editions regularly copied on film for use in their own files and in public libraries. Look up Dempsey *vs.* Carpentier—1921—in the New York Public Library and you will have to manhandle a volume; but inquire for the *Herald-Tribune's* account of Louis *vs.* Schmeling—1936—and out of the archives will come a roll of film. . . . But how did it get there?

Newspaper pages on film, in the actual size to which the Newspaper Recordak reduces them for the files

Automatic Recording

Any newspaper wishing to put its files on film simply sends to Rochester every month a double set of copies. This bulk shipment comes to Building 13, Kodak Park, where the one Newspaper Recordak in existence performs its operation.

The newspapers are taken apart into single pages, in correct order, which are then put through the machine. Operating automatically and with rapidity, the Newspaper Recordak photographs some thirty pages a minute. Thus, in thirty minutes, or not much more, the pages of a month's file of an average newspaper can be recorded on a master negative. From that, as many films can be printed as the newspaper office and public libraries may require.

Like the commercial Recordak, the Newspaper Recordak conveys past the lens of a camera inside the machine the material to be photographed. In synchronism with the moving newspaper pages, a motion-picture film inside the camera passes by the lens and makes the record.

The resulting hundred-foot roll of 35-millimeter film carries from 825 to 850 newspaper pages.

Despite the extreme reduction of the pages, the clarity of the film lets them be projected, for reading, up to 150 per cent their original size.

The Projector

The reading is done with a viewing apparatus by means of which the newspaper pages can be read on a screen, inside the apparatus, without darkening the room. The projector can be loaded with a roll of film in a fraction of a minute. Any desired page can then be thrown on the screen in a few seconds.

Copies of desired news items can be made from the film by laying a sheet of photographic paper on the screen—which is much easier than copying with a pencil from the old-style files.

An order for the service has recently been placed by the publisher of the

Checks

Orders

Statements

two newspapers in Johnstown, Pennsylvania. His purpose is to recover, on film, files that were damaged by the March floods—and even files that suffered from the Johnstown flood of 1889.

The commercial Recordak, the first application of the principle, reproduces documents on 16-millimeter film. First developed by our subsidiary, the Recordak Corporation, New York, for copying checks passing through banks, the Recordak has since been put to use in commercial and industrial accounting, as well.

Banking Benefits

Unlike the Newspaper Recordak, of which the only recording machine is in Rochester, one of the commercial machines is placed in the office of each customer. Checks, and any other documents, are fed into this handsome piece of office furniture and are copied automatically.

For banks, the principal benefits are twofold.

First, the Recordak provides a facsimile copy, in miniature, of depositors' checks—for the bank's benefit in case of dispute or for the customer's benefit if he has lost a check and yet needs to prove that it was put through in payment of a bill.

Secondly, the Recordak has effected substantial economies in bank operation, both in the department where depositors' checks are accounted for and in the department that is the clearing point for checks on out-of-town banks. Time is money in banking. Saving a day's interest on a large number of checks by putting them through more quickly is often possible with the Recordak.

Typical, perhaps, of non-banking uses of the Recordak is the case of a large department store, which no longer keeps customers' statements in duplicate, but simply runs the statements through the Recordak before mailing them out to the customers—and thus saves stationery, effort, and storage space. The film becomes the store's only record.

This particular use of the Recordak, as a matter of fact, is one that the Kodak Company is experimenting with in its own procedure. The Bookkeeping Department is Recordaking the monthly statements that are mailed to customers.

Other uses of the Recordak being tried in the Kodak Office are in recording all incoming checks and all incoming orders. The film is then available in case the original document should be lost or disputed.

These Scots Are Kodapups

...or what *would* you call puppies raised by one Kodak employee and photographed by another?

SPEAKING OF HOBBIES—which we haven't been for several numbers—no greater enthusiast has been found than Dwight Hunter Smiley, Kodak Office. His hobby is these pups.

Say that they're cunning, and you have said only a quarter of it. They are aristocrats! Of their fourteen most recent ancestors, ten are "champions"—dogs that have been outstanding winners in the show ring, with such picturesque names as those of grandfather Champion Heather Fashion Hint and great-grandmother Champion Rosette of Rookes.

The photograph was taken by another hobbyist, Frank Miller, Kodak Office. His specialty seems to be appealing pictures of the young: witness his study of a little boy twinkling with blond mischief, in the Kodak Camera Club's show (see KODAK, June, 1936).

Tour Inside an Emulsion

(*Continued from page 2*)

Yes, an emulsion is a busy place when a Kodak shutter clicks! Yet when we take a snapshot we have to bother only with the subject, the speed, and the focus. Photography is that easy because in making emulsions at Kodak Park they've got those billions of grains under control!

A *negative* is dark where the subject was bright: for light affected the crystals on those parts of the film, and they turned into black silver

A *print* is white where the subject was bright: for the negative's black areas kept those areas on the paper from exposure during printing

Tenite Goes for a Ride—In 26 Cars

Steering wheels, dash controls, horn buttons, ash-tray and window-regulator handles, and gear-shift knobs: a cross section of 121 automobile appointments for which Tenite is used

SEVERAL SHOTS rang out in that Detroit office before the audacious marksman laid down his rifle. . . . A dent or two, showing where the bullets had hit and glanced off. That was all that inspection revealed.

So the automotive engineer wrapped up again the .22 rifle he had bought for his son, feeling that he had submitted Tenite gearshift knobs to an exacting—if impromptu and unorthodox—test; and feeling that Tennessee Eastman's plastic had given ample evidence of its strength.

Though Tenite made its automobile-world debut but a few years ago, this composition from our Tennessee plant is already a "big leaguer." It was used in eight makes of automobile in 1934; twelve in 1935; and twenty-six in the present year.

From Tenite are molded 121 different motor-car appointments, ranging from steering wheels to ash-tray knobs. It is estimated that eight out of every ten new models on the highways and byways of the United States this year have some Tenite in them. Many of them have Tennessee Eastman cellulose acetate also in the safety glass used for their windshields and their windows.

"Blood brother" to safety film and Eastman Acetate Yarn—all are made from cellulose acetate—Tenite is manufactured by a process that is unique in the rapidity with which orders for any color and grade can be filled for the molders who are our customers. Tenite is sold in three forms: (1) granulation, (2) sheets, and (3) blanks cut to shapes appropriate to the pieces to be molded.

The operations of molding Tenite into automobile "gadgets"—or other manufactured articles—consist, briefly, of heating the Tenite to proper temperature for molding, applying a pressure of approximately one ton to the square inch, and then cooling.

That Summons

"DON'T GIVE IT a thought. That summons doesn't mean a thing. They are merely trying to frighten you!"

Just the advice of one good friend to another—given free, gratis, and for nothing. And to those who realize what a summons means, it is advice that spells the end of even the most beautiful friendship!

Let's see just what a summons is. It may be defined in this fashion: the formal notice by which a party (you, in legal phraseology) is notified to appear and defend a court action.

When a summons is served—presented to the addressee—the recipient immediately comes under the jurisdiction of the court by which it is issued, and he must, within certain time limits, arrange to answer it.

What happens if the summons is ignored? Well, first of all, the person who so defaults may thereby incur a loss of substantial rights, including the right to defend himself against the plaintiff's claim; and the plaintiff—the person who caused the summons to be issued—may get a judgment against him: perhaps a judgment that is increased above the original sum by charges for interest and for costs. And there are many other severe penalties that can follow neglect of a summons. That is why you should never listen to advice that tells you a summons doesn't matter!

Advice that can't lead you astray is this: When you get a summons, consult your own attorney immediately, or, if you wish, avail yourself of the legal-aid service furnished by the Kodak Employees Association. Appointments can be made through the plant employment offices or, for Kodak Office employees, through the Industrial Relations Department.

Mr. Brehm's flower photographs (see the front cover and pages 8 and 9) have surely needed sprinkling, this dry summer. We offer: a photograph of a hose! The picture is from an advertisement of the United Carbon Company. Advertising photographs—and indeed any photographs—need suitable backgrounds. What better setting for a garden hose than a garden? The Irving Browning Studios put in the garden by printing from two negatives, thus making a "montage." A photomontage has somewhat the same effect as a chord in music

They can't spend a lot on their honeymoon

. . . but they can afford to keep it forever—in movies

A NEW TYPE OF CAMERA AND FILM makes inexpensive home movies possible. A twenty-five foot roll of Ciné-Kodak Eight Film runs as long on the screen as 100 feet of amateur standard home movie film. The Eight makes 20 to 30 black-and-white movie "shots"—each as long as the average scene in the newsreels—on a roll of film costing $2.25, *finished, ready to show.* Ciné-Kodak Eight is small, sturdy—costs but $34.50. As easy to use as a Brownie.

NATURALLY, it's a great occasion. The greatest ever. They have to watch expenses—but what of it? Inexpensive though their trip may be—their budget will let them save it forever—in home movies. A new, less expensive camera and film make it possible.

Ciné-Kodak Eight takes home movies at a fraction of their former cost . . . makes them available to everyone. With the Eight, and its special film, movies are no longer expensive . . . they are within reach of your budget. And as easy to make as snapshots. Find the secret of inexpensive movies . . . discover the Eight. See a Ciné-Kodak Eight at your dealer's today.

Now gorgeous full-color Kodachrome for Ciné-Kodak Eight

Just load your Eight with Kodachrome, and "shoot." Color movies are as easy to make as black-and-white. No extra equipment needed for all ordinary shots. The color is in the film . . . Eastman Kodak Company, Rochester, N. Y.

Ciné-Kodak Eight

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This attractive advertisement in the current Ciné-Kodak Eight series will be seen in *Time* for August 24th