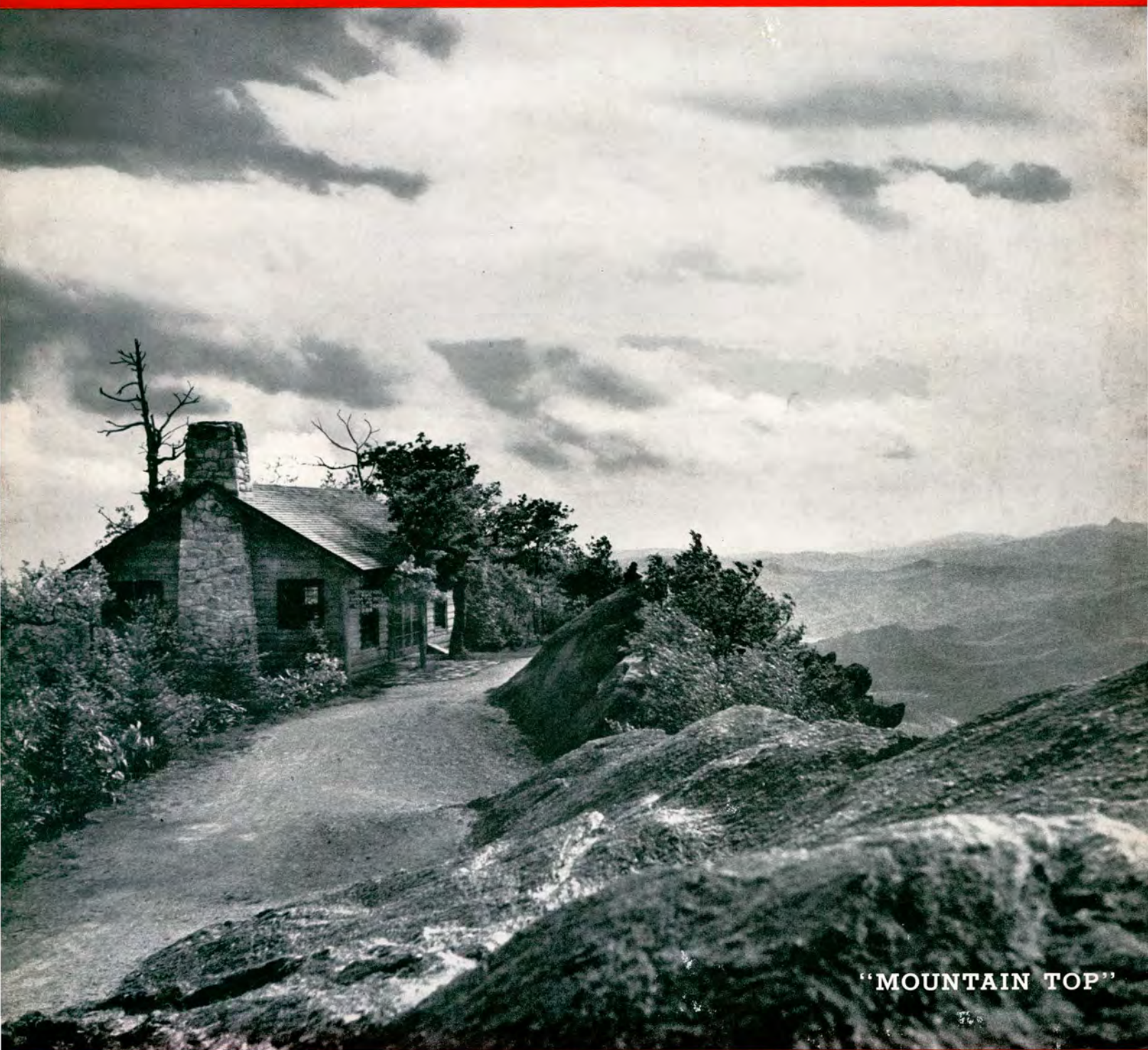
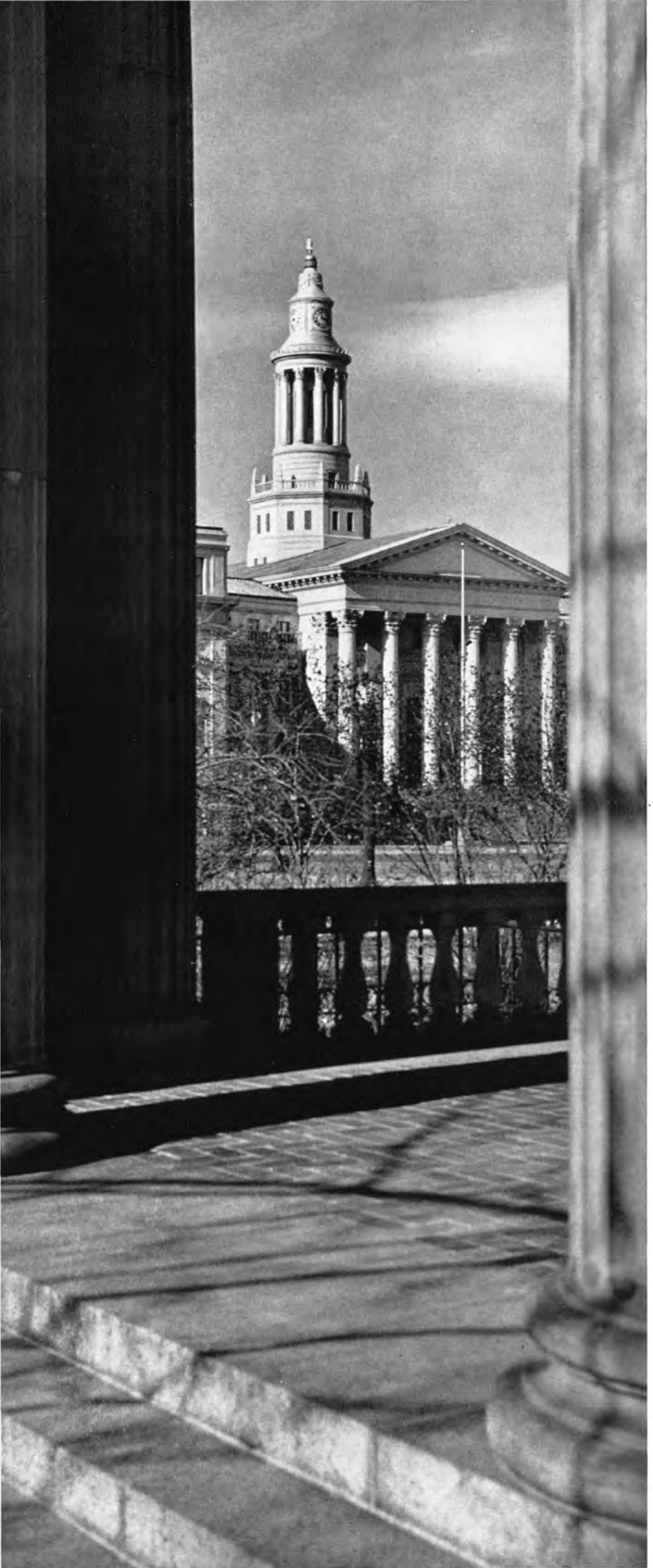
KODAK

A MAGAZINE FOR EASTMAN EMPLOYEES



"MOUNTAIN TOP"

AUGUST 1941



IN THIS ISSUE

"THROUGH THE PILLARS"

(*See page 5*)

SEMIANNUAL STATEMENT

EASTMAN SAVINGS AND LOAN ASSOCIATION

JUNE 30, 1941

SEMIANNUAL

EASTMAN SAVINGS AND

ASSETS AND LIABILITIES

ASSETS

	JUNE 30, 1941	JUNE 30, 1940
First Mortgage Loans	$7,202,389.18	$6,628,879.37
Share Loans	89,663.50	76,448.35
F. H. A. Modernization Loans	92,173.66	104,526.90
Real Estate Sold under Contract	106,513.98	105,321.93
Real Estate Owned	109,073.08	154,817.88
U. S. Government Bonds	155,580.00	15,000.00
Shares in Savings and Loan Bank and Other Associations	109,000.00	109,200.00
Cash on Hand and in Bank	675,244.18	617,139.56
Cash Deposited with the Federal Reserve Bank of New York	37,500.00*	.....
Due from Members for Taxes and Insurance Advanced	46,579.39	55,476.88
Furniture and Fixtures, *Less* Depreciation	10,561.65	8,852.59
Other Assets	711.00	1,683.25
	$8,634,989.62	$7,877,346.71

*This deposit qualifies the Association to act as agent for the sale of United States Defense Savings Bonds of Series E.

LIABILITIES

	JUNE 30, 1941	JUNE 30, 1940
Due to Shareholders:		
On Income Shares	$4,273,800.00	$3,963,900.00
On Savings Shares	1,994,502.05	1,782,589.52
On Installment Shares	1,674,977.63	1,523,458.23
	$7,943,279.68	$7,269,947.75
Prepayments by Members for Taxes and Insurance on Mortgaged Properties	$ 56,378.55	$ 44,543.52
Deferred Profit on Real Estate Sold	24,058.97	24,655.82
Other Liabilities	1,509.83	592.15
Reserves for:		
Mortgage Loan Losses	45,000.00	30,000.00
Real Estate Losses	20,000.00	15,000.00
Contingencies	25,000.00	25,000.00
	$ 90,000.00	$ 70,000.00
Surplus	$ 383,000.00	$ 315,000.00
Undivided Profits:		
Undivided Profits at December 31	110,642.20	107,877.97
Add: Profits for Six Months Ended June 30	37,380.69	51,326.77
	$ 148,022.89	$ 159,204.74
Deduct: Amounts Transferred to:		
Surplus	.....	2,000.00
Reserve for Mortgage Loan Losses	901.83	.....
Deferred Profit on Real Estate Sold	.....	3,319.84
Reserve for Real Estate Losses	10,358.47	.....
Miscellaneous Transfers, Net	.....	1,277.43
	$ 136,762.59	$ 152,607.47
	$8,634,989.62	$7,877,346.71

The above statements have been prepared from the b
Association and, in our opinion, correctly set forth the conditi
and expenses for the half year ended on that date, as shown by
count or certificate from the depositories. Certain other test
year were not audited in detail.

INUAL REPORT
AND LOAN ASSOCIATION

INCOME ACCOUNT FOR SIX MONTHS ENDED JUNE 30, 1941

EXPENSES AND DIVIDENDS

	For the Six Months Ended JUNE 30, 1941	JUNE 30, 1940
Expenses:		
Salaries	$ 23,517.98	$ 22,492.73
Salaries for Outside Services	343.45	510.72
Attorney's Fees and Costs	1,842.72	628.35
Depreciation on Furniture and Fixtures	1,352.35	976.66
Advertising	387.15	403.24
Office Supplies and Stationery	632.68	1,107.79
Printing and Postage	949.41	606.94
Social Security Taxes	865.29	1,091.66
Organization Dues	279.71	321.00
General Expense	2,547.72	4,087.70
Real Estate Commissions	874.00	941.50
Real Estate Repairs and Maintenance	1,879.39	5,010.83
Real Estate Taxes and Expenses	7,683.71	10,824.15
Premiums on F. H. A. Modernization Loans	289.62	424.83
Loss on Sale of Repossessed Real Estate	.....	9,608.16
Prepaid Real Estate Expenses Written Off	.....	3,064.60
	$ 43,445.18	$ 62,100.86
Dividends:		
On Income Shares	$ 63,014.25	$ 58,400.25
On Savings Shares	15,280.47	13,858.70
On Installment Shares	29,636.57	26,893.58
	$107,931.29	$ 99,152.53
Transferred to Surplus	$ 8,000.00	$ 8,000.00
Net Profit for Period Transferred to Undivided Profits	37,380.69	51,326.77
	$196,757.16	$220,580.16

INCOME

	For the Six Months Ended JUNE 30, 1941	JUNE 30, 1940
Interest on Investments:		
First Mortgage Loans	$177,284.57	$157,546.15
Share Loans	2,055.25	1,961.08
F. H. A. Modernization Loans	4,349.65	3,969.75
Real Estate Sold under Contract	2,051.70	2,483.07
Advances for Taxes and Insurance	1,483.81	1,482.53
Shares in Savings and Loan Bank and Other Associations	1,613.75	1,715.75
U. S. Government Bonds	.....	4,865.33
Port of New York Authority Bonds	.....	1,155.56
	$188,838.73	$175,179.22
Rents from Real Estate Owned	6,316.26	9,683.18
Dividends Forfeited on Shares Withdrawn	753.62	427.05
Profit on Sale of Repossessed Real Estate	709.11	.....
Profit on Bonds Sold	.....	34,861.21
Miscellaneous Receipts	139.44	429.50
	$196,757.16	$220,580.16

om the books and accounts of the Eastman Savings and Loan
ıe condition of the Association on June 30, 1941 and the income
shown by the books. Cash and securities were verified by actual
other test checks were made, but the transactions for the half

Auditors: JEAN B. PIERCE
JEROME E. DOYLE
RICHARD J. RAHM

KODAK

Volume 20 AUGUST 1941 Number 8

Kodak Park at Half-Century Mark

Of the Origin and Growth of A Great Industry; Of a Man Who Made His Dreams Come True

THE YOUNG MAN—who didn't look his 35 years, in spite of a navy-style beard—was glad to get the $2.50 money order that fell out of the letter. Business was fine; but every $2.50 coming in made it finer.

To say that the older man—who was 42, but perhaps it was his gray hair that made him look slightly older—to say that he was equally pleased, because of what his $2.50 had bought, would be one of the major understatements of all time. He exclaimed vehemently to his associates: "That's it. We've got it. Now work like hell" . . .

. . . and soon a new invention, motion pictures, was ready to be added to the photographic arts. They had "got it" indeed.

So successfully, in fact, did Eastman's roll of film from Rochester work in Edison's "phonograph arrangement"—as people outside the laboratories at Orange called the Kinetoscope—that a new industry was created: the great photoplay industry, which two years ago noted the fiftieth recurrence of the date when Edison came home from a trip to Paris and saw the movies that his staff had made on the Eastman film for which he had expressed such vehement enthusiasm.

A New Plant . . .

This year, 1941, marks another fiftieth anniversary: completion of a half century since the film factory of the oldest manufacturer of film went into operation. . . . It was in 1891 that Kodak Park's first small group of buildings began to function. This little industrial plant out in the country beyond Rochester's city limits could not, even in the fertile imagination of its founder, foreshadow today's 97 large buildings on a 400-acre site surrounded by the homes of many thousands of employees; could not foreshadow the largest photographic plant in the world—and yet there was already a kinship. The 1891 Kodak Park and the 1941 Kodak Park were both conscientious servants of the photographers of their day.

. . . Followed Popularity

The Eastman business was already eleven years old by 1891, and the Eastman transparent film had already been on the market two years. The significance of Kodak Park was that the film photography introduced by George Eastman had quickly become so popular as to necessitate building a separate film plant.

Eastman's film was a wonder of the world as the mauve decade got set for the transition from bustles to bustle. This man and his growing business had turned photography from a clumsy operation so difficult and arduous as to interest only the most ardent; from that into a wildfire hobby for everybody. His Kodak and his film made the world photo-

Kodak Park: the world's largest photographic plant—97 major buildings, 400 acres—as seen from the air. What camera saw fifty years ago next page shows

Kodak Park as it looked half a century ago, a ten-acre tract with three buildings—and a future in film

graphic minded. In the early nineties, any reference to using a Kodak was a sure-hit "gag" for vaudevillians and writers, because everybody had begun to take pictures.

These historical facts serve to show how Eastman happened to have the film Edison needed to complete his motion-picture invention. It was simply a roll that got diverted from being used in somebody's grandfather's Kodak. . . .

George Eastman didn't just suddenly produce film because he got the idea that it would be fine if pictures could be taken on rolls of a transparent flexible substance. He wasn't the kind of man to whom things suddenly happened. He made things happen.

An Amateur . . .

It was back in the late 1870's, when Eastman was a youthful clerk in a bank, that he became interested in the backbreaking art of photography. In pursuit of this interest he lugged his mule-load of equipment around with the best of them. Taking a picture in those days was a matter of unslinging your pack, pitching a "dark tent," sensitizing your glass plates in the tent, putting them in the camera dripping wet, going back into the tent to develop the plates, paying off the boy you had hired to help you pitch the tent—and then returning home to sleep it off. Eastman mastered that kind of photography; but he kept his eyes open. He was starting upon a long lifetime of being ahead of the game.

He read in English journals of a new kind of plate—gelatin dry plates—that could be sensitized at home before the outset of a photographic expedition. The doom of the dark tent was near. The young enthusiast followed the printed directions and made some dry plates for his own use. Then he experimented, and made better plates. Next he invented and patented an apparatus for coating dry plates mechanically. In 1880 he went into business as a manufacturer of the new plates.

He kept his job at the bank, and ran his new business in between times. Even then, while he was a bank clerk at a small salary, this man never did things in a small way. His business employed six persons, and the employees' pay roll approximated what the boss earned at the bank.

An unusual situation, certainly, but George Eastman was an unusual young man. In this prophet of modern photography, this foster father of the motion-picture industry, we find something rare: a hardheaded visionary. Mr. Eastman dreamed dreams and made them come true. He envisioned successful business principles to give broad effect to improvements in photography . . . but these principles were secondary to a vision of photography itself, the reason for the business.

. . . Becomes a Leader

The new glass plates boomed. The leading photographic-supply house of the time took a contract with the young manufacturer for his product. It was obvious that George Eastman had hit upon something good. He had a comfortable business by the bridle; but that didn't lull the proprietor, now no longer a clerk in the bank, into complacency. He kept on thinking and came to the realization that there might be a still vastly better form of photography just over the hill, in spite of the advantages dry plates offered. Glass plates weren't yet the answer. They were too heavy, and they would break.

What change would remove photography from the rarified atmosphere of mystic devotion by a scattered battalion—scatterbrained, their contemporaries thought them—and make it an easy and pleasant occupation for a nation; for the world?

This question occupied the thoughts of the busy plate-manufacturer when he didn't have to be thinking about supplies of glass, keeping-quality of emulsions, and sales.

The Eastman answer to any major question was action: not impulsive, immediate action, but rather a persistent effort culminating in an effective solution. This quality was an important part of George Eastman's genius. The result of action in response to the problem of how to simplify photography was the first roll film. . . . That was in 1884.

This film was paper, from which the emulsion layer was stripped after exposure and development, to be laid on a sheet of glass for printing.

Eastman's work with the paper film cost him his plate contract heretofore mentioned, because the distributing house with whom Eastman had the contract feared that film would displace plates, and an unsatisfactory relationship between manufacturer and wholesaler resulted.

Enter the Kodak . . .

George Eastman was not deterred. He promoted the new paper film actively. Eastman's film was in that stage when he introduced the Kodak in 1888—and, incidentally, made up the name out of nothing. The Kodak was important—a camera that could be held in the hands to take pictures—but something even more important was coming in 1889.

What happened in that next year? Did Eastman suddenly receive a flash of inspiration that dictated to him how to make transparent film? No. . . . His paper film had been on the market less than two years when he engaged a chemist; confided to him the need of a film base that would be transparent as well as flexible; defined for him, from his own study

of the subject, the chemical paths that could best be explored; and set the chemist to work. That had been in 1886. Eastman's hiring of Reichenbach is the first known example of employment of a scientist by an American manufacturer to devote all his time to chemical research. It preceded, incidentally, any disclosure of work by any other inventor on transparent film.

. . . and Transparent Film

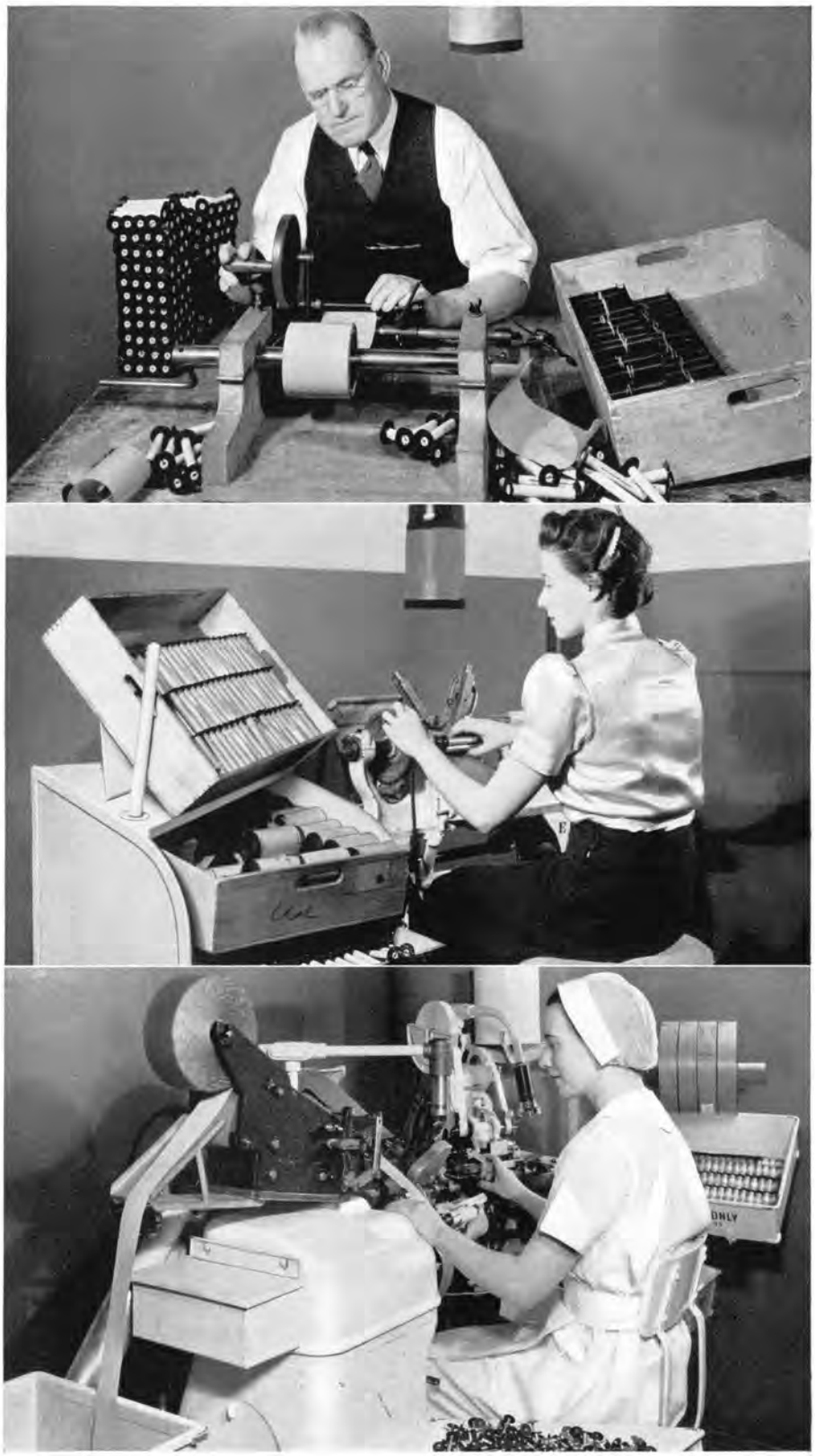
In 1889, after nearly three years of experimenting, the Eastman quest was successful. Transparent film was made.

The laboratory product was quickly manifolded into an article for the photographic trade; and, throughout the period of years when the new amateur photography was establishing itself, the Eastman organization was the only manufacturer to make film available to the photographic public.

Photography was forty years old when George Eastman obtained his first patent. In the forty years since Daguerre's success, photography had achieved little progress toward the simplification that would make it universal. The wet-plate photography of the 1870's was not very much less difficult than the Daguerreotype photography of the 1840's. But then, after forty years, came this young man with a future: with a future for photography in his active mind. By the time the art was ten years older he had led it to the brink of its great present. He had given us transparent film and he had given us the Kodak.

Thus it was to Eastman that Edison turned when he wanted to try film as the possible missing link in his motion-picture experiments, and young Eastman—who probably affected a navy-style beard in those days in an attempt to look older than his thirty-five years—was able and willing to sell a roll to the inventor of the electric light and the phonograph. Thus, also, such a ready demand was created that the Eastman business, still youthful and small, decided a building in downtown Rochester was not satisfactory as a permanent site for the manufacture of film, and Kodak Park had its genesis. Construction commenced in 1890, and the first few buildings were occupied in 1891, fifty years ago.

Spooling Then and Now



William Connors, general foreman of the N. C. Slitting and Spooling Department, Kodak Park, demonstrates (top picture) the spooling operation of 46 years ago, when he joined the Company at the age of sixteen. He is using one of the original hand spoolers. Successor to the hand spooler was the spooling lathe shown in the middle picture. Continued improvement has made both of the early models "museum pieces," as Mr. Connors puts it. The picture at the bottom shows a semiautomatic lathe

PANORAMA

Add Odyssey

WE'VE BEEN GNASHING OUR TEETH at ourselves ever since we spotted our unpardonable misspelling on page 1 of July KODAK. "Quayaquil," we wrote, instead of, "Guayaquil." And to Miss Helen Williams, head of the Order Department, Kodak Office, who gently but firmly conducted our eyes to the offending spot, our sincere thanks.

Mention of teeth calls to mind that when we interviewed Captain Johnson last month he told of a ceremony he witnessed in the little southern Bali port of Benua. This was (steady now!) the tooth-filing ceremony. The rite is performed for various reasons: because a relative is sick, for marriage, or even as a beauty treatment.

"When the chief dentist-priest gets down to work, he simply takes a good-sized file, plants the victim on his back and rubs away," Captain Johnson related. "The grating and rasping is terrible, sometimes making the spectators faint, but the patient suffers no apparent pain. In the end, the victim's four front teeth are often ground down about a third to make them all even in length."

Venerable Film

NEWSPAPER CLIPPING from Defiance, Ohio:

"Edward S. Bronson, whose panoramic photographs of Defiance scenes have made him for many years one of this city's best-known amateur photographers, today claimed a record of some kind for having developed a printable film nearly 28 years after exposure.

"In company with the late E. M. Pease of Defiance, Mr. Bronson visited Chillicothe on September 26, 1913, to study methods of conducting the Chillicothe Fall Festival, and returned to Defiance with photographs of Chillicothe street scenes. Some of the films were developed but one was overlooked, and inadvertently stored with old photographic supplies.

"As a result it has reposed through all the years until recently discovered in Mr. Bronson's files. Today it had been developed and the negative was clear enough to print fairly well."

And a letter from Mr. Bronson:

"I purchased the film from your local dealer, H. H. Mollencup, from whom I have always purchased Kodak supplies. . . .

"Might also say that the weather on the Chillicothe date was very unfavorable for taking pictures, and after developing several rolls, which did not turn out any too well on that account, just neglected to develop this last one and it has been lying among my supplies through all the changes of summer and winter atmosphere until now. Only out of curiosity was it developed, and with such surprising results. . . .

"My camera is one of your No. 4 Panorams which I have been using since 1905, and is still giving the best of service."

Facts and Figures

IT TAKES about 163,600,000 miles of wire annually for about 160,000 uses in the daily life of the United States—everything from paper clips to piano wire. . . . Thirty pounds of textiles, 250 pounds of paper, 600 pounds of steel, 2500 pounds of oil products, and 7500 pounds of coal are consumed annually for each person in the United States. . . . Once dependent upon foreign sources in a great many cases, the United States now imports only about 5 per cent of its dyes, and exports more than it buys from foreign countries. In this development, Kodak's research played its part. . . . Nine thousand separate parts and 90,000 rivets go into the "airframe"—which doesn't include the engine, landing gear, instruments, guns, or propeller—of one modern pursuit plane. . . . A generator of 108,000-watt capacity is a feature of Grand Coulee Dam, and is expected to go into operation during summer. The construction of the generator itself took three years. It weighs 2,367,000 pounds. Production of power at Grand Coulee Dam began with 10,000-kilowatt generators.

Add Ship Names

IN MARCH KODAK this page carried under the heading, "Navy Notes," a few random facts about the United States Navy, supplementing an article in the same issue on the potent guardian of our seas. It remained for a recent issue of *The New Yorker* to round out one of our items, dealing with the origin of ship names:

"Mine-sweepers are named after birds: *Bobolink, Owl, Catbird.* Submarine rescue vessels are given bird names, too: *Chewink, Pigeon, Ortolan.* For coastal mine-sweepers, a type recently put into service, the Navy has adopted such abstract and high-flown names as *Adamant, Conqueror,* and *Heroic.*

"Among the other small fry, destroyer tenders bear the names of mountain ranges, valleys, and the like: *Sierra, Cascade, Yosemite.* Seaplane tenders take their names from islands, inlets, coves, or bays, such as *Pine Island* and *Oyster Bay.* . . . The humble repair ships get names from mythology: there's one surprised repair ship named *Vestal.* Oilers are named for rivers—*Brazos, Cimarron,* and *Tippecanoe*—and cargo ships for stars: *Capella, Sirius,* and *Spica.* Ocean-going tugs take the names of Indian tribes, and that's the only way we'd ever have learned of the existence of the Algorma, Kalmia, and Pinola Indians. *Relief, Mercy, Solace,* and such names indicate hospital ships."

Ammunition ships, reported *The New Yorker,* are named for the ingredients of smokeless powder: *U.S.S. Nitro, U.S.S. Pyro,* and so on.

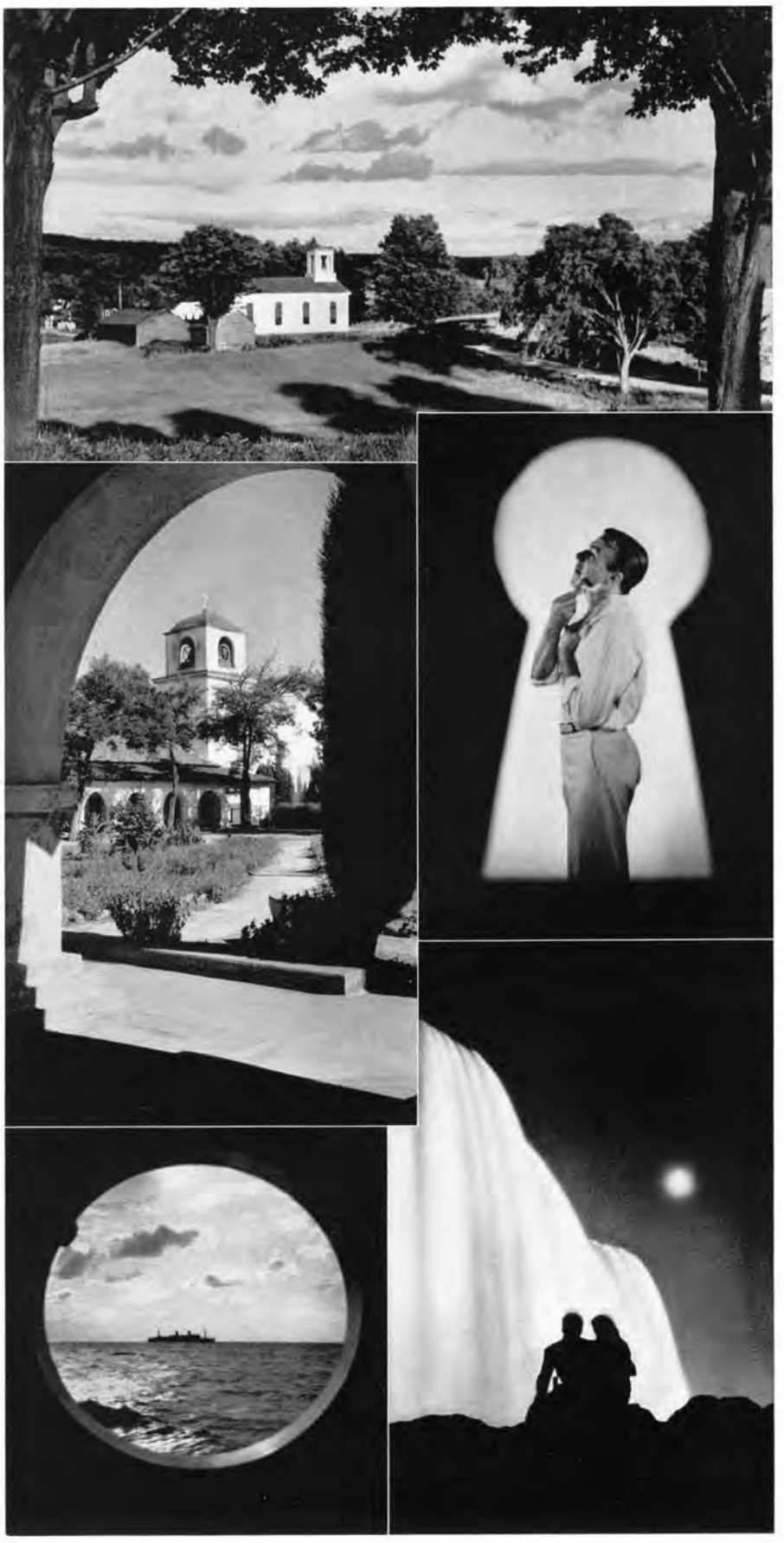
Dogs of War

WHEN THE BRITISH WAR OFFICE made an appeal to private owners of dogs to send their pets to serve the country, the response was immediate and splendid. Ten times as many dogs as were needed arrived, though the only breeds required were Alsatians, Airedales, Labradors, and certain kinds of sheep dog.

The dogs are to play their part in two ways: as scouts and as guards.

Frame for Added Picture Interest

Outdoors, or Indoors, You Will Find That Many Opportunities Await You: Why Not Seize 'Em?



FRAMES aren't necessarily found in stores. How often have you exclaimed over the beauty of some particular spot . . . and then discovered that it owed much of its charm to the fact that it was naturally framed by something—an opening of trees, an archway, a door, or some such thing? A watchful eye will discover frames for pictures everywhere.

And these frames serve a triple purpose. They give your pictures unity and charm; they help hold them together. Again, they add greatly to the sense of depth, and often give a picture a real third-dimensional feeling. They add variety to your album—an always welcome contribution.

Some Examples

The picture at the top of the page—taken with a Graflex, with an exposure of 1/40 second, at *f*/6.3—would be quite ordinary without its frame of leafy branches to tie it together and give it charm. This idea of a darker object in the immediate foreground is an old one, often used by artists, and it holds good for photographs too.

The picture next below and to the left—taken with a Six-16 Kodak, on Super-XX Film—is pleasantly set off and given perspective and contrast by the arch in the foreground. The picture to the right is an example of a different kind of "frame." Snapped with a Six-20 Brownie, on Super-XX Film, it just shows what an inquisitive camera can find!

The snapshot at the bottom left—taken with a 3A Folding Kodak—would have been commonplace without the sharply contrasting frame of the porthole. As it is, one senses busy lake or ocean traffic, convoys, and "ships that pass . . ."

Lastly, our peeping camera made a threesome—in the picture at the lower right, taken with a 1A Pocket Kodak, on Verichrome Film, with an exposure of 1/25 second, at *f*/7.7. This time the curtains of night frame the softly silhouetted figures.

Airgraph Service Aids Atkins

Letters on Micro-Film Permit All-the-Way Air-Mail Service Between Middle East, England

SLASHING MANY DAYS off transit time and slicing cost to a fraction of normal, a new kind of air-mail service was launched recently by the British Post Office in conjunction with Kodak Limited.

"Airgraphs," as the service is named, is the latest application of the Recordak system. Made available to British troops in the Middle East, it has already won the acclaim of officials, press, and public as a giant forward stride.

Ordinary air-mail letters from the Middle East to England must be carried part of the way by sea. They cost 30 cents for each half ounce, and average a month to five weeks in transit. Airgraphs cost only 6 cents, and take ten days, or less, to arrive at their destination.

How It Works

Here's how the new service operates:

Tommy Atkins writes his letter on a special sheet measuring 8½ inches by 11 inches and prints his address in block letters on a panel at the foot. The completed sheet is then photographed on a considerably reduced scale—½ of an inch by ⅝ of an inch, to be precise—with a Recordak. The film is then dispatched by airplane, and upon arrival in England a 4-inch by 5-inch enlargement is made. It is then placed in a paneled envelope leaving only the address exposed.

Seventeen hundred letters can be photographed on a single 100-foot roll of micro-film, at the rate of 40 to 50 a minute. The film weighs only 1/100 as much as the 1700 letters.

The miniature film images are enlarged on a roll of continuous photographic paper and processed at the rate of 1200 letters an hour. An automatic chopper, actuated by a photoelectric cell, separates the letters.

Problem Solved

Behind the startling change in transit time and cost—as established in Middle East-to-England mailings—is the reduction in weight made possible by photography. Weight has always been a problem in sending freight by air, and that is why air mail from Tommy Atkins to the home folks was forced to make some of the journey by sea, causing much delay.

The first 50,000 Airgraph letters, however, weighed only 13 pounds, whereas a similar number of ordinary letters would have weighed over 1600 pounds. And the next 85,000 were only 20 pounds in weight, instead of an estimated 1½ tons!

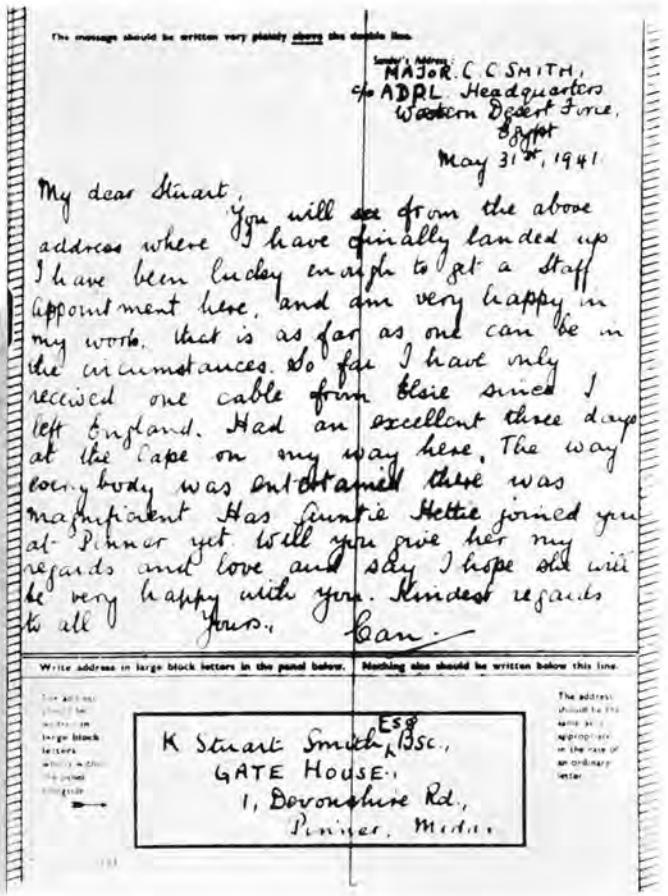
Appreciation

Typical of the letters received by Kodak Limited following establishment of the Airgraph service is this one:

"I wish to express my gratitude which I know also comes from thousands of wives and mothers, all over this England of ours, for the very great national work which you are doing in the service of the Airgraph letters. I received my first one this morning from my husband in the Middle East after a silence of 5 months. I realize that without the services of the R.A.F. this new service could not be made possible—but it's a great work you are co-operating in and I thank you."

(Mrs.) Peggy McA. Thompson

Right: reproduction of an Airgraph that was received by a member of the staff of Kodak Limited from his brother in the Middle East. It is shown here in reduced size, the actual enlargement made from the micro-film measuring 4 inches by 5 inches. Below: the specially designed, paneled envelope in which the Airgraph is mailed



"It is the answer to a problem that has been growing steadily ever since air mail became of importance," says an editorial in the *British Journal of Photography* of the new development. "The ever-increasing bulk and weight of a first-class mail required to be carried on the principal air lines of the world is a very real problem, nor does the enormous discrepancy which exists between the times required for air-borne as against sea-borne mail over long distances do more than aggravate the difficulty.

"Yet it is obvious that a plane carrying a ton of micro-film will be transporting a mass of communications equal to something of the order of between four and five million letters. This is only one aspect of what micro-film can do and, indeed, is doing. . . ."

When the micro-film arrives at its destination, 4-inch by 5-inch enlargements are printed from it onto a roll of continuous photographic paper and then processed at the rate of 1200 letters an hour

"Bulletins from Britain": Policewomen, St. Paul's

SINCE THE WAR the women of Britain have been donning uniforms of all kinds: the Navy blue of the W.R.N.S., Air Force blue of the W.A.A.F.S., the khaki of the A.T.S., the overalls of Nursing, the dungarees of Fire Fighting and A.R.P. Another uniform familiar in London, even in peacetime, is that of the Women Police.

For the last 20 years women have been admitted to the Metropolitan Police Force and have taken their part side by side with men in the policing of the thousands of miles of streets which make up "Greater London."

Their duties, even in peacetime, are varied and interesting. In war they have in addition the spice of danger.

The policewoman is concerned mainly with assistance to and the protection of women and children. She may deal with crime, its prevention and detection, as it affects children and young women. But the chief, and what must be to a woman the most attractive, part of her work is of a protective, helpful nature. She may have to trace a missing woman; arrange for the care of a young girl stranded in dangerous surroundings; she may be sent on escort duty with a woman prisoner; she keeps a kindly eye on the children playing in the city streets and in the public parks.

Since the war, conditions of training have, of course, been modified. The preliminary training period has been cut down to four weeks. The age limit for recruits is between 24 and 35. Maturity is an asset in this career instead of a disadvantage. Candidates have usually had some experience of another profession behind them and they are chosen for their experience in working with their fellow creatures and for the evidence they have already given of a desire to serve the community. Schoolteachers and nurses in particular have shown themselves to be well-suited to this job.

London's policewomen have taken the Blitz in their stride. All through the winter they have carried out their duties by day and night and accepted the added danger as a matter of course. Their coolness under fire and ready care of women and children have made the familiar blue uniform a welcome and reassuring sight among homeless, injured, and shelterers.

It Still Stands

TWICE-BOMBED St. Paul's Cathedral has been severely damaged. But the massive gilded dome, surmounted by the cross, a sight so familiar to Londoners and visitors to the city, still stands; firm, resolute, defiant, and symbolic of a nation's strength.

In an effort to prevent further destruction to the cathedral from fire bombs, a group of 80 men—among them distinguished architects, churchmen, and engineers—are keeping a vigil watch to insure that the cathedral will never fall victim to destruction by incendiary bombs.

Their task is not an easy one. St. Paul's is a complicated structure. These men have memorized virtually every corner, alcove, stairway. They have been provided with plans of every part of the building. They are on the alert to extinguish incendiaries that might land on a stone sill or an altar. By working in shifts, the cathedral is never left unguarded.

Sand buckets, shovels, water hoses, rakes are left at strategic places in St. Paul's. The system of alarm is co-ordinated from a control room in the crypt. For each specific part in the cathedral, a code word has been devised—a word that is easily heard over the telephone and above the din of a raid, a word that must not be confused. Through this system, men are shifted to parts of the building as they are needed. The work is tiring. When relieved, weary watchers may take "cat naps" in beds especially provided for them in the crypt.

The names of these men have not been released. Some of them are among the most famous in England.

Preparing Machines for Action

Special Tools Are Designed For The Exacting Job of Fashioning Parts for Many Kodak Products

The Toolmaking Department works from such drawings as this, prepared by the Tool Design Department. In laying out his work, the tool designer follows specifications prepared by the Engineering Department

PREVIOUS ARTICLES IN KODAK have shown how two types of machines are used at Camera Works to shape the metal parts for cameras and other photographic equipment. There are the punch presses which exert pressure to blank out, perforate, punch, emboss, or press flat sheets of metal into many shapes; and there are the automatic screw machines which cut or abrade long metal rods and tubes into shape.

This isn't, of course, the whole story—and many of us will realize that these machines can't just go ahead and turn out this part one minute and that part the next. Before it can fashion the spindle for a Kodascope or the back for a Kodak Vigilant, the machine must be prepared or set up in some way to do that specific job, and that alone.

Special Tools

So, before any of these machines start work on a new job, we find them being "set up" or "tooled up" with special tools—each tool being designed to do its part in forming one or another of the thousands of parts that go into Eastman products. Thus, the ability and versatility of these punch presses and automatic screw machines depend entirely on the tools with which they are equipped. But where, you may ask, do these tools come from?

"Tooling" a machine for making a specific part is the final step in a long series of developments originating in the Engineering Department. It is there that the preliminary designs for new products or changes in existing products are made. These designs indicate the parts that are going to be needed in the product. But before any new product is approved, its production costs must be determined; and since toolmaking is a very important part of this cost, an estimate of tool costs must be made at the very start.

Costs Are Determined

So we find that the Engineering Department sends its preliminary drawings of a new product to the Process Department where this cost estimate is made. The final figures are based on the number of hours required to make each tool. These figures will generally run well up into the thousands of dollars, and they have, in the case of some products, amounted to more than a hundred thousand dollars—a figure which illustrates the great expense of making precision tools for Eastman products.

Approval of tool costs is subject to many considerations. For one thing, the greater the expected production of a new product, the greater the amount that can be spent on tools to make it. The degree of precision required in the parts will also affect the cost; the higher the precision, the higher the tool costs.

Drawings Are Checked

If the estimates of tool and manufacturing costs are approved, final drawings completely dimensional to required tolerances are prepared by the Engineering Department and sent to the Process Department to see that they offer no serious problems in manufacturing procedure. After the Process Department approves them on this basis of "manufacturability," they are forwarded to the Tool Detail Department, which prepares orders for the designing of all

Calendar of Recreation Activities

August 9—Hawk-Eye Athletic Association golf tournament, at the Stafford Country Club, Batavia

—Kodak Camera Club picnic, at the cottage

August 14—Kodak Camera Club card party, at the cottage

Mid-August—Camera Works Recreation Club golf tournament, at Midvale

August 16—Kodak Park Athletic Association men's golf tournament, at Lake Shore

August 17—Hawk-Eye Camera Club trip to Cobourg, Ontario

August 23—Kodak Camera Club beach party, at the cottage

August 31—Kodak Camera Club week-end trip to Fourth Lake, Adirondacks

September 10—Kodak Park Softball Team returns to Detroit to defend its championship title in the National Softball Tournament

tools which will be required to make parts for the new product.

The first steps are now taken that lead to actual production. For each part that will be assembled in the finished product, one or more tools must now be designed for tooling the machines to be used in making those parts. These designs are laid out in detail by the Tool Design Department and sent to the Process Department for approval.

Here, the Tool Detail Department again takes up the thread of events by issuing orders calling for the making of these tools by the Toolmaking Department. These orders route the work through the necessary steps, list a description of the tool with an identifying number or symbol, and indicate the required date of delivery. The estimated cost of the tool is carefully budgeted, and this estimate later checked against the actual cost.

The final step. When a tool is being made ready for use, it is adjusted in the punch press or automatic screw machine with infinite care. Here a die is being accurately positioned in one of the punch presses

Tool Records

The great number of tools in active use at Camera Works at any one time renders the work of the Detail Department extremely important. Extensive files, indexed by tool number, are kept there and contain a "biography" of each tool. A card shows when the tool was ordered and when completed, its cost, where it was to be used, and the part or parts it was designed to make. Alterations, repairs, and replacements of the tool are also recorded.

In the Toolmaking Department, costly machines are used to fashion the tools for Eastman production. This precision jig borer—a truly exquisite instrument—can drill holes through steel with amazing accuracy

Precision tools can only be made with precision tools and equipment, so it is no surprise to find the Toolmaking Department equipped with lathes, drills, jig borers, and other equipment used to fashion the tools. These, we find, fall into four classifications: tools for the automatic and hand screw machines; punches and dies to be used on the punch presses; fixtures and jigs for holding the work in accurate position for machining; and special gauges for inspecting the completed parts.

Since the quality of Eastman-made photographic equipment rests largely on the accuracy of these tools, they are made with the greatest precision. When completed, they and trial parts made by them are inspected under optical projectors, supermicrometers, and other inspection instruments which can measure accurately to 1/100,000 of an inch.

Special Metals

Because these tools are to be used in shaping metal, they must themselves be very hard to withstand the pressure and friction to which they will be subjected. Special steels and alloys are needed to make them, these metals being checked by the Metallurgical Department on specifications for formulas and heat treatment. In many operations, a stream of oil plays on the tool while it works, greatly lengthening its useful life.

It might be mentioned that Camera Works does not make all the tools used on the automatic screw machines and punch presses. There are certain standard tools, produced commercially, which may be ordered from outside the Company. Requisitions for these tools are sent to the Purchasing Department by the Tool Detail Department, and the tools are listed in a special commercial file. Even the common hand tools such as we use at home—screw drivers, hammers, saws, and so on—are requisitioned in this way and carefully kept track of in special files. These commonly used tools are ordered in lots so that an adequate stock may be maintained for the use of all departments.

When a tool is completed by the Toolmaking Department, it is sent to one of the "tool cribs" or stock rooms to await the time when some punch press or automatic screw machine is scheduled to turn out the part which the tool has been designed to shape from metal. A "setup" man skillfully adjusts the tool in place on the machine and an operating test is made to see that it is performing properly. When the tool setup is approved, work begins and one more part for a precision-made Eastman product has gone into production.

THE EDITOR'S PAGE

As We Were

In 1891, the same year that production began at Kodak Park (see the story on page 1), an article was published in "Harper's Magazine Advertiser" under the heading, "At the Home of the Kodak." Excerpts follow:

THE CLICK OF THE KODAK BUTTON is now heard around the world. It has not only brought photography within reach of the general public, but has done more to deepen the popular interest in the science of photography than any other discovery in the art. Photography is no longer the secret of the darkened laboratory. Through the Kodak, thousands of persons have now more or less acquaintance with the chemicals and processes employed in making photographs, though not one of them knew more at first than to press the button. . . . Who knows but that it remains for a Kodaker to make the first successful print in colors? That is only one of the coming things in photography. . . .

A few words, therefore, about the home of the Kodak may not be without interest. . . . Like the Telegraph, Telephone, and Electric Light, it is exclusively an American invention, and largely the product of one man's efforts, Mr. George Eastman, founder of the company which now bears his name.

Mr. Eastman's career is typical of this country, and is a striking illustration of what energy, industry, and perseverance can accomplish in the face of all obstacles. Mr. Eastman's first start was in an experimental laboratory in his own house. From that insignificant beginning he has seen a business grow till his company has become of international reputation, with important business connections in all parts of the world. . . .

Seldom indeed has an advertising phrase so caught the popular fancy as "You press the button; we do the rest." It is heard on the street, in the cars, in the theater, in the clubs, and, in fact, wherever men and women most do congregate. . . .

The word Kodak itself has often been ascribed to Greek origin. As a matter of fact the word is an arbitrary coinage, used to identify the manufactures of the Eastman Company, and until used in this connection had no existence, and meant nothing.

The future of photography is alluring in its possibilities. No other science holds out such inducements to the searcher after the secrets locked in the heart of chemistry. When the first successful photograph was made, all the art centers were shaken to their foundation, and the prejudice against it among the artists in Paris was formidable. Painting they said, was doomed. But the camera has become the ally of the palette, and the two work in harmony for the good of all mankind.

Mr. Blair Retires

A VETERAN of almost forty-two years' service with the Company, and forty-five in the photographic industry, George A. Blair, of the Motion Picture Film Department, retired on July 11th.

Mr. Blair entered the employ of the American Aristotype Company in November, 1896, as a demonstrator covering territory in New York and New Jersey. Aristotype was acquired by Kodak in August, 1899, and four years later Mr. Blair went to Kodak Limited. He demonstrated plates and papers throughout Great Britain until November, 1908, when he returned to New York.

George A. Blair, who retired last month after more than forty years' service with the Company

In 1911, Mr. Blair was called to Rochester to join the Motion Picture Film Department, where he has been in charge of sales in both the domestic and export fields.

Widely known throughout the motion-picture industry, which he had seen expand from the experimental stage to a great enterprise, Mr. Blair was the recipient of numerous messages of greeting and good wishes following news of his retirement.

FOR DEFENSE

BUY UNITED STATES SAVINGS BONDS

(On sale now at the Eastman Savings and Loan office; the Cashier's office, Kodak Park; and the Employment offices, Camera Works and Hawk-Eye.)

Grandfather Never Dreamed of It

Broad Scope of Medical Service In Industry Today Typified By Facilities Available at Kodak

AN ACCIDENT—or, more properly accidents—started it all: The rise and growth of medical service in industry. When it was demonstrated, a quarter of a century or so ago, that prompt attention to injuries saves time and money both for employer and employee, the doctor was introduced to the plant.

That was the beginning of a service our grandfathers of "the good old days" never dreamed of. For, naturally, the next step made was in the direction of accident prevention—the launching of the broad industrial-safety program we benefit from today.

And along with accident-prevention measures came an ever-increasing emphasis on the prevention of ailments of all kinds.

And Now

Such, in brief, was the origin and development of medical service in industry. Its goal: the preservation of health. Today, there is scarcely a single large plant in the United States in which this service is not available.

Kodak was among the pioneers in the introduction of medical service to industry, beginning with Mr. Eastman's appointment, 30 years ago, of a physician to give full-time medical care to employees in case of injury. Soon, the service was broadened to the treatment of all ailing employees while at work, and, in 1914, the Medical Department was established.

Health First

What's the greatest asset of each one of us? The answer suggests itself without any recourse to mental gymnastics—our health. And that is true both from our own viewpoint and from that of our company.

Quoting from the *Employees' Guidebook:* "Because good health is an essential factor in success and happiness, the Company has provided, for a number of years, a fully equipped Medical Department through which medical service is available to all employees while they are at work."

Dr. William A. Sawyer, medical director of the Eastman Kodak Company

The well-rounded medical program built up by our own company is typical, in broad outline at least, of medical service throughout industry as a whole. This program includes: Physical examination of all prospective employees; complete medical treatment for all employees injured at work; emergency dispensary and hospital facilities; education of employees in accident prevention and hygiene; supervision of plant and office sanitation; eye and dental service; visiting nurses; and x-ray laboratories.

Benefits of Medical Service

1. Physical examinations
2. Care of injuries
3. Minor medical treatments and advice regarding medical care
4. Visiting-nurse service
5. Eye examinations and glasses at discount
6. X-rays
7. Electrocardiograms
8. Laboratory studies (blood counts, etc.)
9. Physiotherapy treatments
10. Vaccine treatments at request of family doctor
11. Consultations regarding problems
12. Health Education

Before Employment

Purpose of the pre-employment examination by the Medical Department is to determine the physical status of the prospective employee and to facilitate his placement in the type of work for which he appears best fitted. Applicants found to be suffering from contagious or infectious diseases are not, of course, employed. If the examination shows that an otherwise suitable applicant is suffering from a remediable defect—unsound teeth, or hernia, or diseased tonsils, for example—he is advised to seek medical treatment for it, and to apply again when the condition is remedied. Most of the physical defects that are uncovered by the pre-employment examination can be corrected. In the case of minor defects, the applicant may be hired and followed up for treatment while at work.

Since its establishment, the Medical Department has, through its preventive-medicine program, as well as in many other ways, made important contributions to the Company's safety program. When an accident occurs, complete medical treatment is speedily available—including hospitalization and home care, if necessary. Further, since the neglect of even a minor injury may lead to infection or other complications, employees are urged to seek immediate medical aid for even the slightest injury.

Worst Menace

Health-Enemy Number 1 is not accidents, however, but the common cold. Single greatest cause of loss of productive working time, it is under constant attack—and results at Kodak over a ten-year period have been marked, not alone in fewer and less-severe colds being reported, but also better health in general.

Free eye and dental examinations are a routine part of the Company's

(Continued on page 15)

OUT OF THE HAT

Reminiscer

John W. Newton: he was invited

"I OFTEN THINK about those brave old days when I was attending Lincoln Cathedral School back in England. One experience remains more vivid than all the rest. The Dean of the Cathedral was a son-in-law of Gladstone, the Grand Old Man of English politics. Mr. Gladstone visited Lincoln frequently, and on one occasion he invited the choristers of the cathedral to spend a week end at his home, Hawarden Castle."

John W. Newton, of the Kodak Office, leaned back in his chair and smiled. "I was one of those fortunate lads, so I had a pretty intimate look at the old man. He was a striking figure, very dignified, with strongly chisled features and the resonant voice of the seasoned orator. And as well as being the outstanding political figure of his day—he was prime minister four different times—he was a great classical and biblical scholar."

Justly proud of his native city, Mr. Newton likes to tell of Lincoln's historic past. It was on the site of the present city that the Roman invaders founded the important town of Lindum, and many interesting examples of early architecture still remain. Most venerable relic is the Roman Gate, now called Newport Arch, which is said to date from 104 B.C.

"The cathedral is one of the finest in England," Mr. Newton states, flourishing one of his many pictures of that noble edifice to add emphasis to his well-merited claim. "It has three towers, the central one being fifty feet square and three hundred feet high. The famous bell, Great Tom of Lincoln, which was cast more than three hundred years ago and weighs more than five tons, hangs in the central tower.

Mr. Newton left England for Canada in 1907 and later came to Rochester, where he joined the Company in 1912.

"It's hard to conceive of the great improvements which have been made in the methods of doing office work since that time," he declares. "There were no adding or bookkeeping machines in those days and we had to do all the figuring in our heads. Under such conditions, you can imagine the jobs we had when the wage dividend was first distributed and all those complex calculations had to be done mentally."

Active in church and fraternal organizations around Rochester, Mr. Newton confesses that his greatest love, as with so many Englishmen, is "gardening and pipe smoking."

Did You Know?

THAT SINCE THE TIME that the Wright brothers made their first successful flight, the airplane industry in the United States has built about 60,000 planes of all types? The present defense program, by contrast, calls for the completion of 40,000 planes by the end of the next eighteen months.

• • •

That the United States, with only about 6 per cent of the world's population, has nearly 19,500,000 telephones, or about half of all those in existence? And, incidentally, a telephone in New York City will reach 93 per cent of the phones in the world.

Visitor

KODAK CUBANA, LIMITED, was established in 1927. Ivo Moneda joined the new company in that year, and he has been its manager for the past six years.

"We have a Ciné-Kodak processing station at our headquarters, and of course we carry the full line of Kodak goods, selling to some sixty dealers throughout the island," Mr. Moneda reported.

"In Cuba, you don't buy film in a drugstore—our drugstores stick to drugs—but in a regular photographic store, a department store, or at the cigar counter in a general store. Cameras are sold in photographic stores, of course, and in department stores."

Centuries-old castles and fortresses, churches and palaces, come to mind when one thinks of Havana, but it is also an up-to-the-minute city, with one of the world's finest harbors.

"And don't forget," Mr. Moneda reminded with a smile, "that Havana is also the gateway to a very beautiful country, with very many historic sights. It's a great country for the photographer.

"We have sugar plantations all over the island, naturally, since that's our chief industry. Tobacco's next."

Ivo Moneda: he tells of Cuba

The Department of Assessments

In Its Extensive Files, Facts And Figures for Every Piece Of Property Within the City Lines

CITY GOVERNMENT performs many functions that are vitally important to the welfare of each and every citizen. It builds and maintains streets and roads, for instance. It provides schools and playgrounds, health and recreational facilities, fire and police protection. . . .

Impressive indeed would be a complete listing of the services that are needed to keep a city livable. The money that it takes—to the tune of some $30,000,000 a year in Rochester—to provide these various services is derived chiefly from real-estate taxes on residential and business properties.

In Rochester, the valuation of property for the purpose of taxation is the duty of the Department of Assessments. The assessor's office has on file an itemized description of every building and parcel of land within the city limits.

Handy Manual

A valuation manual, prepared in conjunction with the Bureau of Municipal Research, explains fully the methods of arriving at the assessed valuations and carries photographs of typical homes and business structures. This manual, which is used by the Department of Assessments in its daily work, is available free of charge to every citizen.

"Our work has to do merely with the distribution of the tax and not with the amount of the tax," a department official stresses. "We do not create the taxes, or the public-works charges, that you, as taxpayers, have to pay."

Revaluation Job

Three years ago, the Department of Assessments made a complete revaluation of the more than 79,000 taxable properties—from vacant lots to residences, stores, warehouses, office buildings, and factories—that lie within the boundaries of Rochester. When the final tally was made, the total valuation of the city had dropped from $616,956,740 to $529,961,622—representing a reduction of approximately $80,000,000.

"The system employed in the revaluation job was technically the most modern and scientific available in assessment practice," the department reports. "After assessment of the value of each parcel of land on the basis of location and other pertinent factors, the real-estate experts figured the new value of any improvements on the property, such as houses or other buildings. These valuations were reached on a basis of 'replacement less depreciation.' The replacement value of a house was determined on the basis of costs as shown by a survey of the construction index for 1938. Six different classes of improvements were recognized and different useful lives and different rates of depreciation were assigned to each of them."

The Method

In revaluing homes, the department determined the cost of replacing the residence on the basis of 1938 costs. Then they subtracted 2 per cent for depreciation for each year for the first 15 years since the house was built; 1½ per cent for each year for the next 15 years; and 1 per cent for each year thereafter until the reduction reached 70 per cent of the replacement value. No reduction for depreciation was allowed beyond that point.

Since low assessments mean high tax-rates and high assessments mean low tax-rates, the amount of the assessment is really not so important if all property is assessed on the same equitable basis.

Repairs, Upkeep

"Repairs and upkeep to real estate are not, and will not be, added to the assessment on that property," a Department of Assessments official observes. "A coat of paint or a new roof is merely a necessary repair to maintain the usefulness and value of the property.

"Increases in assessments are made only when the property undergoes some physical change, such as an additional porch, enclosed porch, garage, the addition of bays, or completion of a third floor. In brief, assessments are increased only when the property is changed from its present physical nature through additions or improvements."

Property owned by the nation, state, county, city, schools, churches and clergymen, character-building agencies, clubs and associations, cemeteries, government pensioners, and charitable organizations is tax exempt.

High Is Passed at Heights

Objective set by employees of the Canadian Kodak Company in Canada's victory-loan drive was $75,000, but when this picture was taken at Kodak Heights some weeks ago, the mark had been passed by more than eleven thousand dollars, with a grand total of $86,150 reported. At the foot of the indicator are Miss Fay Wray, popular stage star, and Stephen B. Cornell, the president and general manager of the Canadian Kodak Company, Limited

ACTIVITIES

CAMERA WORKS NOTES: The Tennis Team, playing in the Rochester Industrial Tennis League, was installed in second place. Captained by Ted Mosher, the team includes Ike Shynook, Elmer Booth, Hal Kent, Roger Cash, Hi Berg, Howard Allen, Dick Welch, and Con Schultz. . . . Favored with a warm sunny day, the Recreation Club's family picnic brought out a banner attendance of six thousand on Saturday afternoon, June 28th. Merrymakers of all ages participated in stunts, games, and races. A clown band brought down the house with its comic performance. . . . The Softball Team, managed by Mert Fahy and coached by Jack Messmer, finished the first half of the Major League schedule in third place, having lost several close decisions. The Industrial Softball League entry, managed by Al Pelcher, was doing exceedingly well with a line-up of youngsters and new players. . . . The Plant Softball League, under the guidance of Norman Robinson, was playing every Wednesday on the Charlotte High Field, with the Sixth Floor team in the lead as we go to press. . . . Eighty divot diggers played through the Summer Golf Tournament, with Carroll Johnston's score of 81 good for top prize. Harold Webber came in second with an 82, and John Rutan and Joseph Siplo, with cards of 83, tied for third place. Harold Eckert won the first of fifteen blind bogey prizes, while Bob McIntyre had the questionable distinction of copping the consolation prize for the highest score.

KODAK OFFICE ITEMS: Reviewing the scores for the second golf tournament of the summer, we find Ken Stuart winning low gross in Class A with an 83. Hod Schumaker and Jim Smith were tied for low-net honors with 73's, closely followed by Don Spitale, George Gillette, and George Bauman with 74's. John McCarthy won low gross among the Class B swatters with a 92. Walt Bull and Arch Robinson were tops in the low-net scoring with 71's, while Don Stewart and George Blair came in with 73 and 75, respectively. In Class C, Guy Farnham won low gross with 102, and Harold Jensen took low net with a 65. Lionel McNeil and Jack Hardwick were tied for second place with 68's. . . . Department summer picnics were in full swing. Finishing held its annual affair at Churchville Park on July 12th. The Patent Department cavorted on the 15th, while Shipping and Stock were making plans for an affair at Irondequoit Bay on the 26th.

HAWK-EYE HIGHLIGHTS: Playing in the Industrial League, the Softball Team had compiled a splendid record of 5 victories and only 1 defeat. . . . Play in the Departmental Baseball League was beginning to assume the aspect of a runaway with Time Clerks, sparked by Len McMartin, Don Foley, and Don McOmber, far in the lead with 7 wins and no losses. . . . With Phil Michlin undefeated in singles competition, the Tennis Team was making a strong bid for high honors in the Industrial Tennis League.

KODAK PARK ACTIVITIES: With one game washed out by rain, the Softball Team played an even dozen games in its swing through the Midwest. The record with Kodak scores at the left:

Danville	21–6	
Peoria	0–4	
Kenosha	1–3	
Ann Arbor	8–3	
Midland	0–2	
Saginaw	5–2	
South Bend	2–1	13 innings
	1–2	13 innings
Fort Wayne	2–3	
	1–3	
Indianapolis	8–0	
Evansville	3–6	

The team was planning a trip to Quaker Hill, Lowell Thomas' home near Pawling, New York, to play a team to be chosen by the famous newscaster. . . . The annual City Softball Tournament was to get under way August 11th on Kodak Field. . . . The Kodak Park Team won

A packed grandstand of Kodak grownups and children watch the aerialists and stage performers at matinee performance of K.P.A.A. outdoor entertainment

the first half of play in the Rochester Major Softball League with a record of 8 wins and 2 losses. . . . Ridge Construction took top honors in the first half of the season's play in the Lake Avenue Noon-Hour League, while the Indians were on top at the Ridge Road Field. Building 30 was leading the Trickworkers' League. In the Twilight Leagues, Film Developing was ahead at Lake Avenue, and Ridge Construction was tied with Roll Coating at Ridge Road. . . . With one game left to play, the Tennis Team was leading the pack in the Industrial Tennis League. . . . Jack Johnson took low-gross honors in the second golf tournament with a sparkling 71. Frank Weis scored a 75—7, 68 for low net. With 140 participating, Doctor Dearing of Building 6 captured the spotlight with an eagle 2 on the second hole. The third tournament will be held at Lake Shore on the 16th. . . . Thirty-eight entrants were competing in the Singles Elimination Tennis Tournament which started July 11th. The Doubles Tournament started one week later.

Never Dreamed

(*Continued from page 11*)

comprehensive medical service. An oculist is available to employees who may wish to have their eyes examined; and employees may have their teeth examined and extracted free of charge by special arrangement with the Eastman Dental Dispensary. Each spring, dental hygienists from the dispensary visit the plant to clean teeth. The dispensary provides treatment for children under especially favorable conditions.

To aid in both dental and chest examinations, fully equipped x-ray laboratories are maintained in connection with the Medical Department. Indeed, x-ray examination of the chest and lungs is a routine test in the physical examination of every prospective employee. The x-ray service is available to any employee upon the recommendation of his doctor or dentist.

Yes, medical service in our modern industrial plants is no longer concerned with the treatment of injuries alone. It places even greater emphasis on sound health and safety measures, on sickness and accident prevention.

Song for Men of Freedom

It was during the bombardment of Fort McHenry, now a national shrine, that Francis Scott Key wrote his immortal lines. At the left is the original flagpole from which the "Star-Spangled Banner" waved that night

FATE SEEMS SOMETIMES to take a whimsical pleasure in shaping great events out of the most commonplace material. Consider the circumstances of a quiet evening in August, 1814. A Doctor Beanes of Upper Marlborough, near Washington, was entertaining two friends in his summer garden. The conversation, undoubtedly, had turned to the capture and burning of Washington that week by a British force. Suddenly, a commotion in the village, set up by straggling British soldiers from the army which had sacked the Capitol, disturbed the good doctor and his guests. Seizing pistols and gathering a body of citizens to assist them, the three men arrested the stragglers and threw them into jail.

That night a detachment of British soldiers entered Doctor Beanes' home, compelled him to dress and accompany them to Benedict, off which the fleet was at anchor in the Potomac.

Efforts were immediately made to obtain the doctor's release. When these failed, a young Georgetown lawyer, Francis Scott Key, was urged to seek out the British admiral and intercede for the doctor. Key immediately agreed to do what he could, and with the personal sanction of President Madison, hurried to Baltimore where he boarded a cartel boat which had been used for the exchanging of prisoners. The little vessel, with sails set to a light wind, pointed down Chesapeake Bay in search of the British fleet.

Several days later, Key found the fleet. But Admiral Cockburn was curt in his refusal to give up his prisoner. Key, however, by presenting letters from wounded British officers who had been cared for by Doctor Beanes, moved the crusty sea-fighter to give up his man. But the young lawyer was not yet in the clear. Already the British fleet was preparing to attack Baltimore and the English, fearing that Key might reveal their plans, refused to allow him and his party to leave.

The attack opened furiously against Fort McHenry on Tuesday morning, September 13th. All day long, while the guns of the British fleet blasted away, Key anxiously watched the action from the cartel boat, held in the lee of the *Surprise*, Admiral Cockburn's flagship.

Through the Night

As night came on, Key watched anxiously from his position in the bay. The huge 15-star banner was still flying above the fort as darkness fell. From time to time, "the rocket's red glare" showed him that the banner still flew. Toward morning, the fleet evaded the guns of Fort McHenry and prepared to land troops in the city. But a withering fire from Fort Covington drove them back with heavy losses. The battle was won.

Throughout the night, Key had observed these developments in an agony of apprehension. As he paced the deck, his anxiety resolved itself into verse—lines that traced the mingled emotions of that frightful night, to end on a triumphant note when morning came and the British were turned back.

Francis Scott Key lived until 1843, but he did not live to see his song win more than average popularity. But as the years went by, it grew in favor. A particular favorite with the Army and Navy, it became closely identified with official and patriotic sentiments. In 1931, by act of Congress, it was formally adopted as our national anthem.

Kodak Bulletins

EASTMAN KODAK COMPANY • ROCHESTER, N. Y.

IT didn't take you users of roll and pack cameras long to find out for yourselves just what Kodak Plus-X would do for your all-round "pan" work. Within a few days of the time dealers first had stocks of the popular sizes, letters began coming in to Rochester. Enthusiastic first-time users wrote: "Used my first roll within an hour—developed it immediately—and the results were marvelous" . . . "just what I want" . . . "I like the quality I get" . . . "used four packs already and like its high speed" . . . "since I enlarge all of my shots, the fine grain is important to me" . . . "it's *my* film" . . . and so on. Plus-X is really a great film and its combination of high speed, fine grain, excellent gradation, and general photographic quality makes it particularly useful when you don't know just what's going to turn up next. For, unless the situation calls for the extreme speed of Kodak Super-XX—or you intend to make heroic enlargements, and need the microscopic grain of Kodak Panatomic-X—you are all set with Plus-X—it's "the film for your next picture."

IF you haven't a range finder—either on your camera or as an accessory—here's the convenient, accurate answer to focusing . . . the new Kodak Service Range Finder. It operates on the precise split-field triangulation principle of military finders and produces two clearly separated, brilliant images—easy to see, even when the illumination is not bright, and to bring into coincidence by turning the knurled knob. Its range is from 2 feet to infinity and there are two distance scales—one on the outside of the finder and the other inside, and appearing directly above the images as you look through the finder. Both scales show the distance to those parts of your subject that are in sharp focus. The two small illustrations show the subject as it appears through the finder—at left, when the subject is out of focus (in this case, the focus is beyond the subject) and at right, when the subject is in focus. The finder is finished in satin chrome, and is flanged on one end to fit into the universal accessory bracket of your camera. Complete with carrying pouch.

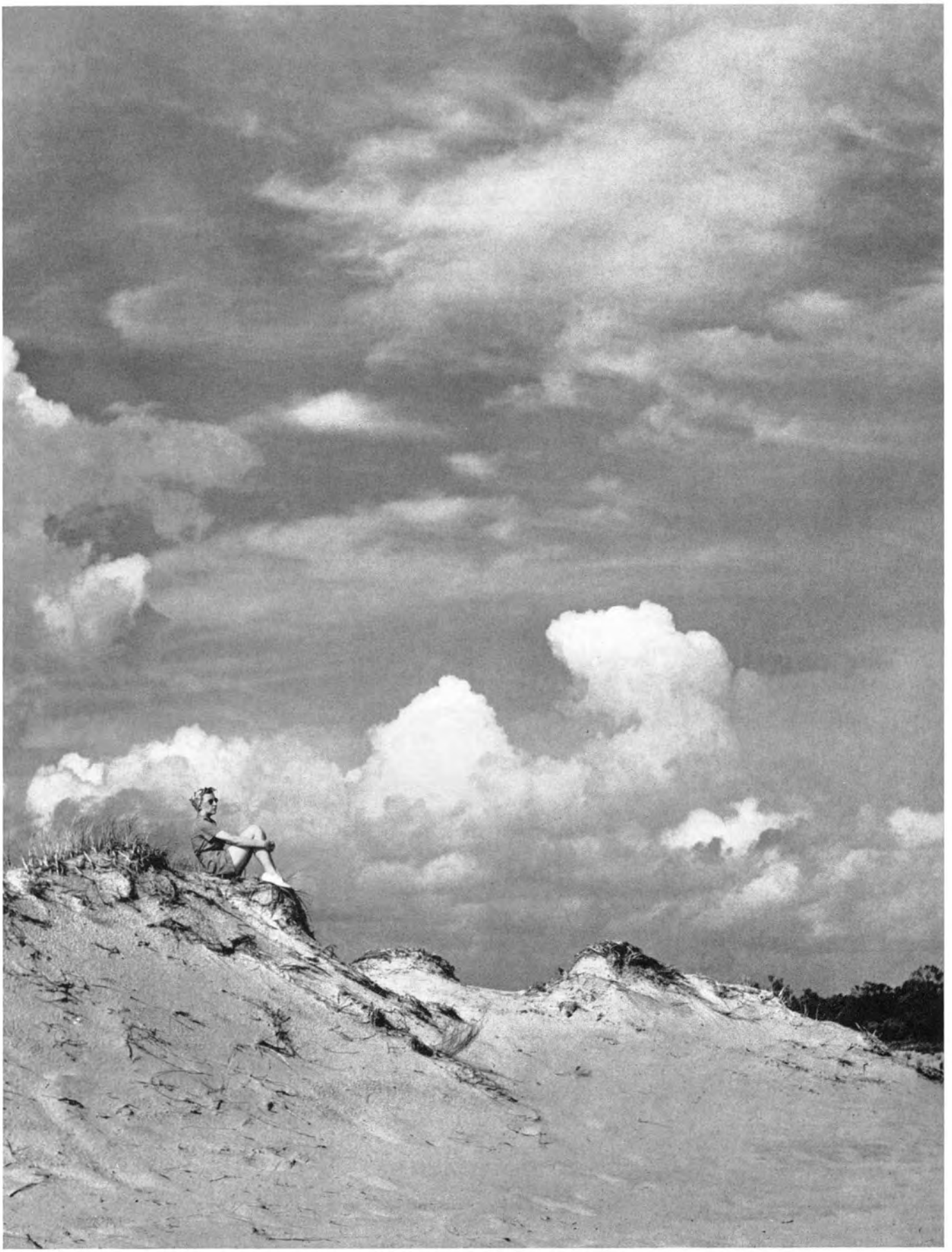
GOING from picture taking into your darkroom, here are several useful new products. First, the Brownie Darkroom Lamp, Model B. As shown in the illustration, it consists of a molded base which screws directly into any ordinary lamp socket, and into which are screwed three interchangeable threaded filter cups made of molded Tenite—Eastman's famous tough and durable plastic. The filter cups are Safelights Series 2, red, for handling orthochromatic films or plates; Series 3, green, for panchromatic materials; and Series 0, yellow, for papers. The cup-like design throws illumination over a wide field. Supplied complete with 7-watt bulb and any one of the three filter cups. Additional Safelight cups, available separately . . . set of all three with lamp and bulb in Brownie Darkroom Lamp Kit.

THE new Kodak 8 x 10 Metal Paper Board has several new features. It has a rigid, all-metal construction . . . fixed mask frames 8 x 10 paper to print size of 7½ x 9½ inches, with ¼-inch margin all around . . . two knob-locked, removable masking blades slide on calibrated scales . . . hinged masking frame has new toggle assembly which holds it in the raised position, shown, for positioning paper . . . and the paper stops

are adjustable for top and left margins of from ¼ to ½ inch. The board is attractively finished in gray and has padded bottom to prevent scratching and movement.

BELOW—the new Kodak Auto-focus Enlarger, Model C, the simplest method of making fine enlargements from larger sizes of amateur negatives—up to 4 x 5 and 3¼ x 5½. There are two settings—one is auto-focus; a cam-and-lever arrangement keeps it in sharp focus throughout its range of from 1½ to 3½ diameters . . . the other is for manual focusing and makes possible greater magnification. The enlarger is illustrated below clamped on the accessory Kodak Enlarger Base (extra) which acts as a base and also provides convenient lighttight compartments for your papers. It can also be used clamped on the edge of a table or shelf—or on the accessory Kodak Wall Bracket (extra). Its illumination is a No. 213 Opal Photo-Enlarger Lamp, with elliptical section reflector. Special "dim-bright" switches, with ventilated resistor, are built into the upright. Supplied with Kodak Anastigmat lens, negative holder with set of 7 flexible metal masks, Kodak Masking Paper Board and lamp.

Helping to keep Kodak "out front": this advertisement appears in this month's issues of "U. S. Camera" and "Popular Photography"

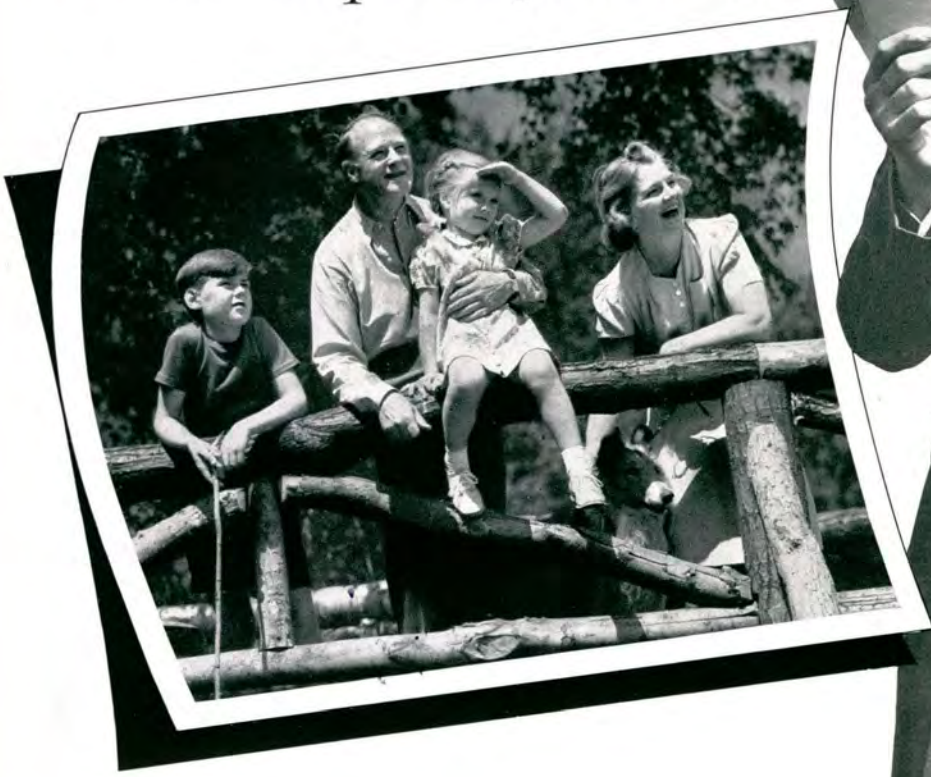


"AUGUST AFTERNOON"

By Charles A. Hurlburt, Kodak Park

PRINTED IN U.S.A.
AT KODAK PARK

There are times when he needs —more than anything else —*some snapshots from home*



SEND THEM EVERY WEEK

If, away from home, you've opened a letter with snapshots—you know what they mean. The letter alone can't do it all. That boy of yours wants to see your smiles. The changes around home. His pets. His friends. Only snapshots can bring him the very feeling of home.

So don't let him be the one "left out" when the mail comes in, and new snapshots are passed around. Once a week won't be too often to send snapshots from home. Shoot them on dependable Kodak Film—it makes your camera a better camera. Experienced picture takers use Kodak Film always—secure in the knowledge that their pictures will "turn out."

And be sure that your boy has a handy, modern camera—so he can share with you his new life at camp. It needn't be expensive—it will pay for itself, many times, in the comfort it brings you . . . Eastman Kodak Company, Rochester, N. Y.

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HERE'S THE CAMERA FOR CAMP— KODAK BANTAM WITH f/8 LENS

Carries in his uniform pocket like a pack of cigarettes. Yet through modern photofinishing methods, Kodak Bantam leads to big 2¼ x 4-inch pictures. Low in price—you can easily afford it. Loads with always dependable Kodak Film—send him several rolls along with the Bantam.

SEE YOUR KODAK DEALER

THE GREAT SNAPSHOTS ARE MADE ON KODAK FILM

This Eastman advertisement appears in "Collier's" for August 16th