THE TEXACO STAR

SUMMER 1944

MOTOR OIL PAILS SERVE THE FARM TWICE

THE TEXACO STAR

VOLUME XXXI NUMBER 2

SUMMER 1944

The cover, a Kodachrome by John Kabel, shows a wheat field near Loudonville, Ohio. Inside front cover by Robert I. Nesmith

A PUBLICATION OF THE TEXAS COMPANY

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MEMBER, THE HOUSE MAGAZINE INSTITUTE,
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★ Drake Well Memorial Park, established in 1934 by the American Petroleum Institute on the site at Titusville, Pennsylvania, where the petroleum industry began 85 years ago this Summer, is asking persons who have petroleum historical material to donate it to the park's museum and library in observance of the anniversary.

Brief AND TO THE POINT

★ Despite the merited prominence given to advances in other industries recently, a leading business observer says the strides made during the war in petroleum chemistry through competent research may outdistance all others.

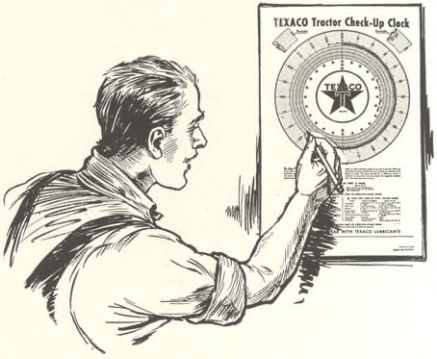
★ Because military planes landing on the hot sands of Africa and the sharp coral of Pacific islands wore out tires faster than had been calculated, causing an extra drain on the country's rubber stock pile, civilian motorists did not get new tires in the quantity and with the speed expected during the past two years.

★ The American petroleum industry has spent about one billion dollars of its own money thus far to construct and expand plants and facilities for war purposes, says the American Petroleum Institute.

★ Recent tests with a Texaco asphaltic product as a binding agent for a railroad roadbed were the first to employ asphalt for that purpose. They were to show that asphalt-bound road ballast would be more stable and impervious to water, hence more economical in maintenance. The tests are said to have been a pronounced success.

★ In peace or war, the Navy depends upon asphaltic paints to protect ships from the effects of sea water below their waterlines. Recently 1,000 tons of Texaco Asphalt for this purpose were requested by a single naval base.

GRANDDAD FARMED BY THE ALMANAC; GRANDSON DOES IT BY CLOCK



WHEN Granddad toiled on the farm, back toward the end of the past century, the almanac that hung from a nail in the window trim was all he needed to tell him when to plow and plant and how to get his hay in ahead of the Summer rains.

If Granddad was an exceptional farmer, he daubed his wagon axles with grease before they squeaked; if he wasn't, his rolling stock got a lube job when he couldn't stand the noise any longer.

Even today, the average passenger automobile is serviced generally on a calendar basis—crankcase drains and chassis lubrications should be about a month apart unless the driver covers more than 1,000 miles during 30 days.

Mechanized farming, however, has greatly accelerated the lubrication periods of farm vehicles. Dust and dirt can shorten the life of tractor engines if it is allowed to enter delicate moving parts, so some tractor lubrication points have to be checked *every 10 hours*. Many a farmer's grease gun rides with him on his tractor. Most farm machinery needs service on the basis of operating *hours*, rather than days, so Texaco provides the conscientious farmer with a Tractor Check-Up Clock to enable him to mark periods of service accurately. It is a handy reminder for the farmer—just as the familiar dash or doorpost sticker is for the average motorist—that the way to keep 'em rolling is to keep 'em lubricated.

The farm market for lubricants staggers the imagination of the farmer's white-shirted peers who sometimes look down their noses at him. The farm industry continually deals with astronomical figures. A billion-bushel wheat crop is spoken of casually in the agricultural world, and the annual harvest of corn is two to three times larger. Hay, cotton, tobacco, potatoes, oats, and barley are all measured by the millions of tons, bushels, bales, or pounds—some by the billions.

On more than six million farms in the United States there are about seven million motor vehicles, and the total value of farm equipment runs into 10 figures after the dollar sign. The total value of farm land and buildings alone could have paid the national debt shortly before the war.

To this colossal market the petroleum industry furnishes annually well more than four billion gal-

Texaco's farm meetings instruct the farmer while they entertain

Texaco's Farm Market Program is based on this substantial, informative farm manual

lons of products. The oil man is proud to be a partner of the American farmer, whose destiny for the next few years seems to be to feed the world.

"We need at least two more good years—this year and next—" says the Chamber of Commerce of the United States, "even to begin to replenish our food reserve after the tremendous drain of the past year. Even if the country is fortunate enough to have a billion-bushel wheat crop, the fact that this will be some 250 million bushels, or 20 per cent, short of the amount used for food, feed, and alcohol production during the year just closing is a sobering thought."

In the spirit of helping the farmer with his problems as much as possible, The Texas Company has for the past few years been cultivating this field intensively by means of its Farm Market Program, which not only provides the farmer with his basic needs for fuel and lubricants but helps create special products for his use and helps educate him in the care and efficient use of his machinery.

Texaco consignees have been sold on the fact that the average farm tractor must be fed 1,400 gallons of motor fuel, 40 gallons of motor oil, 40 pounds of transmission grease, and 20 pounds of special grease annually; that passenger cars, trucks, combines, harvesters, stationary engines, lighting systems, stoves, irrigation units, and refrigerators also require fuel and lubricants, making the bulk supplier's farm business equal to the volume of several service stations.

Improving the good will as well as the business of these bulk distributors of petroleum products, and also the faith in Texaco on the part of the distributor of farm machinery and on the part of the farmer himself, is The Texas Company's method of tilling the soil that will grow increased sales.

The Farm Market Program is built around a substantial, 130-page book, *Harvest Gold,* which takes the place, in a sense, of the almanac that once hung on the wall. It contains plentiful information for the farmer, from machinery care and lubrication to measurement data, first aid, and other useful facts. Included with it is a postcard by means of which the farmer can order free Farm Implement and Machinery Lubrication Charts.

Consignees receive *Harvest Gold* books for all their customers, and they coöperate in direct mail campaigns. Farm bulletins, other educational matter, and useful tools such as the Texaco Tractor Check-Up Clock, are furnished to the consignee for passing along to the farmer.

The Texas Company produces annually a motion picture to emphasize some definite phase of farm machinery maintenance. The most recent one, in full color, was entitled *The Tale of Two Thieves—Wear and Rust.* Texaco's district sales organizations twice each year hold hundreds of farm meetings or parties in the farm neighborhoods to which farmers are invited, and at which this motion picture is shown along with others that instruct at the same time they entertain.

Meetings such as these are greatly enjoyed by the farmers, who look forward to them from year to year. Not only are they instructive, in that they plant in the farmers' minds the seeds of proper conservation and care of machinery and efficiency in its operation, but they provide excellent means for personal contact. Texaco's sales personnel, representatives of implement manufacturers, and farmers all meet on a common ground and, while the farmer learns about lubricants and other farm petroleum specialties,

Harvest Gold is a textbook in agricultural schools

Texaco Consignee George Kilmer (above, with hat) demonstrates Texaco Rustproof Compound to Arthur Handley, Bridgeville, Del., customer

TOP PHOTO FROM EWING GALLOWAY

Every small farm (above) is a prospective customer for farm products. Vast 12,000-acre farms on the prairies (top) use quantities of petroleum

Texaco people learn about the farmer and his problems so as to be able to give him wider service.

In both the motion pictures and in *Harvest Gold* the commercial angle has been submerged. As a result much coöperation and good will have been secured from agricultural colleges in nearly every state, and also from the United States Department of Agriculture. The films and the book are used for class instruction in many agricultural schools.

Through Erwin, Wasey and Company, the advertising agency assisting with the Texaco Farm Market program, The Texas Company has established the Texaco Farm Board, which is made up of some 35 outstanding agricultural engineers throughout the country and 150 large farmers in every state of the United States. This board is consulted and gives advice on farm advertising and promotion. It renders a worthwhile service in making the farm marketing program timely and convincing, since it enables the Company and the advertising agency to know how the farmer thinks and what he likes and dislikes.

Texaco Rustproof Compound, a boon to the farmer in war time particularly, was promoted by sending samples to 2,900 county agricultural agents with a pamphlet telling them what it was for, what it would do, and asking them to test it. Thanks to the good will built up in this fashion, the county agents became aware of the quality and usefulness of the product and indirectly stimulated farmers to use it, thus giving their tools and equipment longer life. Many of these county agents have participated in Texaco's farm market meetings. They have served to tie together the efforts toward more efficient farming of the agricultural departments of the states and the nation with those of The Texas Company and its consignees and the implement manufacturers and their dealers.

Farming is big business, and petroleum is connected with it from beginning to end.

MAKING HAY
IN FARM MARKETS

In every corner of the United States there are Texaco distributors, independent business men, who are making hay in the light of Texaco's Farm Market Program. Take two for example—one veteran distributor and one fairly new one.

Back in 1919, when the horse was still king and all the petroleum the farmer wanted was kerosine and axle grease, William F. Codori became a Texaco distributor in Gettysburg, Pennsylvania. He had been a garage man there since 1911, when motoring was strictly a Summer pastime and automobiles were laid up for the Winter. With two horse-drawn tank wagons he started distributing Texaco products from a bulk plant consisting of a 22,000-gallon tank with a pump house.

Every day the wagons went through the Adams County countryside, and some days they never sold a gallon. They did show the farmers, however, that the tank wagons could be expected to pass regularly. In 1922 Codori's firm, the Citizens Oil Company, began expanding and has been expanding ever since. Codori himself died in 1933, but his seven children are now all partners in the business he founded. Two sons are in the Navy, but four other sons and a brother-in-law are actively operating a company which has no salesmen that merely sell. All of them go out with the trucks and deliver and solicit business at the same time.

One of the Citizens Oil Company trucks drives into an Adams County, Pennsylvania, farmyard to make a delivery

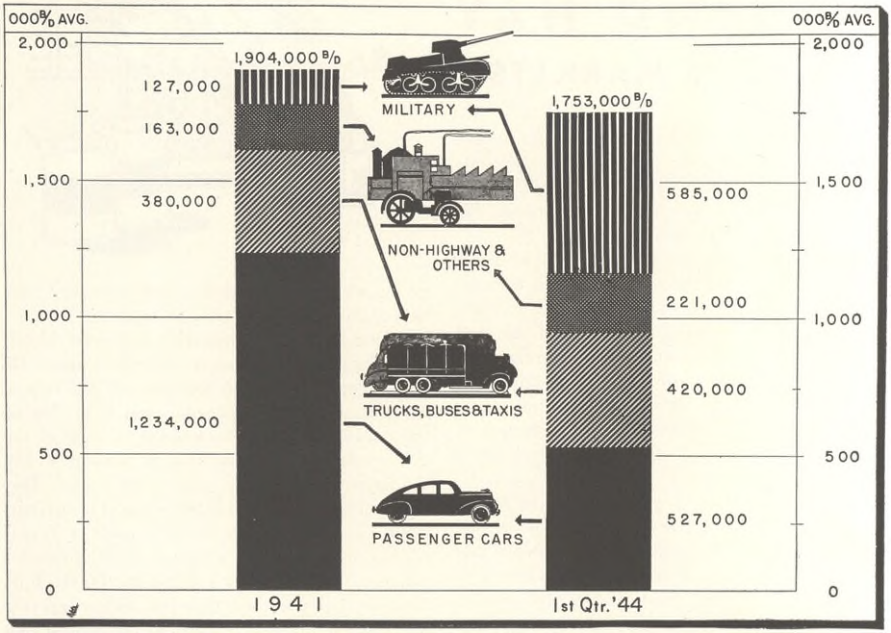
Adams County's farm market is devoted largely to apple, cherry, and peach orchards. Citizens Oil lays claim to selling 16 and one-half per cent of the county's gasoline potential, and at present 65 per cent of this total goes to farmers, with oil and grease sales in proportion. They sell kerosine to half the farmers and country stores in the county. They have lent farmers about $50,000 worth of farm equipment. Last year the sale of 30 carloads of Texaco roofing products helped offset the effects of gasoline rationing. Citizens Oil is a distributor for the B. F. Goodrich Company, and their tire dealers expect to sell $50,000 worth of Goodrich merchandise this year. The firm has a particular flair for sales promotion, and for a number of years has sponsored the largest Texaco farm meetings in the Sales Department's New York District.

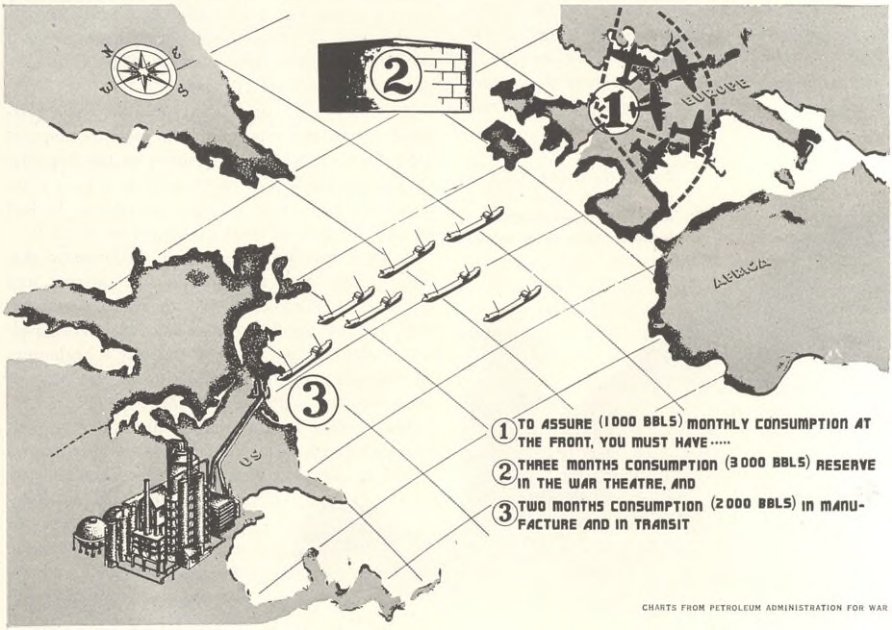
Another one who makes hay from the Farm Market Program, and especially from farm meetings, is John Kozelka, who does business as the Republic Oil Company in Willimantic, Connecticut. Four years ago, when he became a Texaco distributor, he had no farm business to speak of, but set out to get it.

A farm meeting was held in Willimantic this Spring. There were about 400 farmers present, and Kozelka put on a good show with Texaco's coöperation. He made about two dozen sales of various products at the meeting, but that was only a beginning. By following up his prospects he gained 51 new farm accounts in the next 20 days.

The average non-farming public is not so well acquainted with Texaco consignees and distributors as with the Texaco service station located on a handy corner, but from the independent merchants who operate the big delivery trucks, the service stations and the farmers get the oil and gasoline they need.

WAR USE OF GASOLINE INCREASES





CHARTS FROM PETROLEUM ADMINISTRATION FOR WAR

Still More 100-Octane Pledged to Air Chiefs

ACME

Among officials who met to discuss war problems of high-octane gasoline were (seated, left to right): British Air Marshal William L. Welch, Petroleum Administrator Harold L. Ickes, Lieut. Gen. H. H. Arnold. (Standing) H. Wilkinson, British petroleum representative; Deputy Petroleum Administrator Ralph K. Davies; Harry G. Burks, Jr., Petroleum Administration for War, and Adm. DeWitt Ramsey, U. S. Navy aeronautics chief

THE petroleum industry practically "squeezed 100-octane gasoline out of a hat," according to Government officials, when America entered the war. By early Summer of this year they were asked to wring the hat a little harder.

From an amply-supplied peace-time demand in America for 5,000 barrels of 100-octane gasoline a day, output increased to about 40,000 barrels under threat of war just before Pearl Harbor. When war itself came, that output was doubled immediately and the industry started to squeeze its hat so as to be producing 200,000 barrels a day before the end of 1942.

By June of this year the Allied well-springs of 100-octane gasoline were flowing at the announced rate of 500,000 barrels a day. Most of the superfuel, obviously, was being made in America.

Still the Allied air chiefs, meeting in Washington in June, wanted more. Commanding generals in active theaters of war were quoted as saying: "The all-out war effort has resulted in serious reductions in combat theater stocks of 100-octane gasoline."

Promptly the industry set in motion plans that would enable the armed forces to get what they needed, although it meant pinching the home front's farm, industrial, bus, truck, and passenger car needs hard.

Oil wildcatters' drills began to bite into the earth in places where oil had scarcely flowed before. The rhythm of pumping wells quickened. In June, as compared with the month previous, 50,000 more barrels of petroleum came from the ground. Daily average crude runs to refineries in June were 200,000 barrels a day greater than in May. In June, for the first time in history, domestic gasoline production passed the two-million-barrels-a-day mark. That was nearly half a million barrels better than June, 1943—and more of it than ever before was high-octane fuel.

How much 100-octane beyond the present half-million barrels a day the air chiefs demanded was not revealed, but the quantity was described as "staggering." Refiners who were present—including Texaco's President H. T. Klein and Vice President M. Halpern, General Manager of the Refining Department—took the request in full stride. William R. Boyd, Jr., chairman of the Petroleum Industry War Council, said the industry would "make good any check drawn upon it." Petroleum Administrator Harold L. Ickes said: "The oil industry has never failed to deliver in this war and it will not fail to do even the impossible—again."

The industry's program of plant expansion to make the superfuel, planned soon after Pearl Harbor, was then 80 per cent complete. Of the 189 new plants in the program, estimated to cost about $900,000,000, The Texas Company's ninth and last one was to go "on stream" late in August.

Before the situation could level off, civilians began to feel the bite of a fuel famine and again found "no gas" signs on their favorite service station pumps. The Petroleum Administration for War announced that in the 30 days ending July 20, the nation's stock pile of civilian-grade gasoline had been reduced by more than 1,500,000 barrels. This was partly because of the new superfuel production, and partly because a shortage of truck tires became acute late in July. Trucks and gasoline transports were dropping out of service hourly for want of rubber on which to roll.

SERVICE TO THE ENEMY GUARANTEED!

YOU KNOW what the answer would be if you drove up to a service station's pumps and ordered seriously, "Fill it up!"

The dealer would look at you queerly a moment and say, "Don't you know there's a war on?"

If you grinned then, to show you really didn't mean it, the dealer soon would grin too, and you might both guffaw. Good-humored America, which sometimes looks too much on the bright side of things, treats such an expression—which seems to have come, with variations, from the mists of ancient history—as a gag.

The situation that makes goods, especially gasoline, scarce in war time is deadly serious, however. Some are thoughtless about it, some people just plain selfish. They say, "This is a free country; I got a right to ride on Sunday afternoon if I want to."

This is indeed a free country, dedicated to the principles of liberty. But to regain our national liberty, once we have lost some of it by failure to be vigilant, we must temporarily forego personal rights and preferences for the common good. The rights of man in time of war are pooled in the vast marshalling of national resources. To exercise personal liberty then is to insist upon license.

It is a fact that there is not enough gasoline to go around, in this war, to our armed forces, our allies, and our civilians. Early in the present conflict, when the vision of our military experts had not yet grasped the demands of global war, our fuel shortages were measured in terms of transportation alone. The pinch was scarcely felt. We had not yet begun to think of 3,000-plane raids over Europe, or of several millions of men overseas.

In 1918, with only 2,000,000 men in the armed forces, there was one automobile to every 90 men. In 1944 there are about 10,000,000 in uniform, and for every nine of them a motor vehicle.

There is toluene to be made from petroleum for explosives, butadiene for synthetic rubber. There are planes, tanks, merchant vessels, war vessels to be fueled and lubricated. As fast as we can produce oil, as rapidly as we can build refining capacity, there is a need for petroleum on the fighting front. On the production front there is need for quantities, too.

Each man in uniform overseas needs 50 gallons of petroleum products a week to keep him on the job, according to estimates. Last Summer there were 1,700,000 abroad. This Summer the number is nearer to 5,000,000. Simple arithmetic shows what a staggering quantity of petroleum it takes to fill that need. The demand for 100-octane gasoline alone has multiplied many fold since June, 1942.

Obviously, with new oil resources five times as difficult and expensive to discover as before 1938, with manpower and materials at a premium, we can't give the fighting men what they need without someone's sharing the sacrifice. There just isn't enough for all, so it is likewise obvious that those who should sacrifice are those on whom the burden falls lightest—those who can sleep o'nights undisturbed by the scream of a bomb, the whine of a shell, the dull reverberation of a torpedo exploding.

It is the people's own government that is asking for this sacrifice. The people themselves, through their own representatives, make the rules for rationing. It is the people, and their sons, their daughters, and their neighbors, who will benefit.

There are ways—a few of them through legal loopholes, most of them just plain crooked—that illegal gasoline gets on the market. That there is a black market in gasoline cannot be denied, or that supposedly patriotic Americans buy without ration stamps.

The black market exists in such proportions, furthermore, that ironic slogans have arisen: "Gas—all you want at sucker prices. . . . Service to the enemy fully guaranteed." Or, "Buy a gallon and take a gallon away from a fighting man."

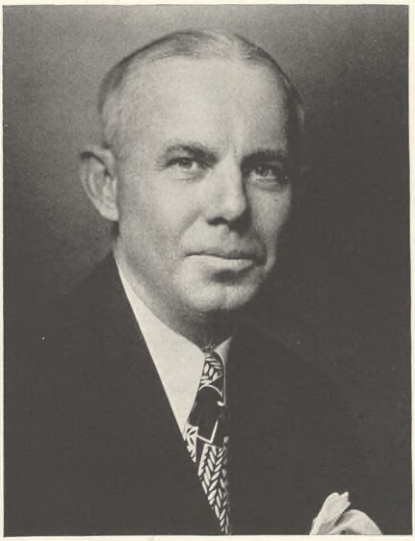
The petroleum industry is earnest about it. It wants the boys abroad back home—soon. It is turning out fuel and lubricants for victory, not for defeat; not to have them drained away by the thoughtless and the greedy.

There are some nameless persons mentioned in the school books in the same class as Benedict Arnold. They are the ones who kept shoes from American soldiers at Valley Forge. Some of them were in high places; some were obscure.

Their counterparts exist today. They ask gasoline dealers for fuel without offering ration coupons, and if the dealer dares to "be a good fellow" he has to make up his stocks from black market sources. They think it is blessed to give and to receive ration coupons. Some of them brag about it. Even Benedict Arnold didn't boast. The enemy he befriended despised him to his death-bed.

"I'm helping win the war and I got a right to ride all I want! Give me liberty—they can't tell me what to do!" Gas—at traitors' prices. Buy a gallon and cripple a soldier. Service to the enemy fully guaranteed.

IRA MCFARLAND



ERNEST C. BREEDING

McFARLAND RETIRES, BREEDING SUCCEEDS HIM AS COMPTROLLER

ERNEST C. BREEDING, Assistant Comptroller of The Texas Company since 1939, has been elected Comptroller. He succeeds Ira McFarland, who retired September 1 after serving as Comptroller for 31 years. R. G. Rankin succeeds Mr. Breeding as Assistant Comptroller.

Mr. Breeding, a native of McGregor, Texas, was born May 10, 1893. He attended schools of accountancy and business administration at Waco, Texas, and Washington, D. C., and from 1912 to 1916 held clerical and bookkeeping jobs with several retail and wholesale firms. From 1916 to 1920 he was employed by the Federal Government in Washington in clerical and auditing positions. He entered the service of The Texas Company in May, 1921, as an accountant in the general offices at Houston. From 1922 to 1931 he was a Traveling Auditor, and in February, 1931, was appointed Auditor of Indian Refining Company. He returned to The Texas Company in 1932 as a Traveling Auditor, remaining in that capacity until April, 1939, when he was appointed Assistant Comptroller. Mr. Breeding lives in Houston. He is a member of the American Petroleum Institute and the Controllers Institute of America.

Mr. McFarland ("Mr. Mac" to his host of friends in the Texaco organization) was the oldest Texaco employe in point of service at the time of his retirement. Born at Johnstown, Pennsylvania, August 13, 1879, he attended the public schools and business college in Bradford, Pennsylvania. From 1893 to 1902 he worked for the National Transit Company, first as a messenger boy and later as a telegrapher, gauger, and stenographer-clerk. In 1902, having recovered from an attack of pneumonia, Mr. McFarland was considering moving to a milder climate to build up his health. T. J. Donoghue, then Treasurer of The Texas Company, was vacationing in Bradford and offered him a job with Texaco. Mr. McFarland reported for work at Beaumont, Texas, November 1, 1902. For the next two years he worked as a stenographer, telegraph operator, bookkeeper, and paymaster. In December, 1904, he was made Auditor of the Company, and in January, 1911, became General Auditor. On January 1, 1913, he was made Comptroller. At the time of his retirement, in addition to his duties as Comptroller, he was a member of the Budgetary Control and Planning Committee, Vice Chairman of the Houston Committee, Director of The Texas Pipe Line Company, and Vice Presi-

dent and Director of Texas-New Mexico Pipe Line Company.

A recent survey of Mr. McFarland's long and distinguished career with the Company said, in part, "Under his administration there has been formulated, and executed with care and vision, a code of accounting principles and practices of the highest order. This pattern has been rigidly followed and maintained on a parallel with the topmost professional standards and progressively has admirably met the ever-increasing perplexing problems of the present day, clarifying and affording adequate corporate, financial, and statistical information when and as required."

Mr. Mac wanted no "fuss and feathers" about his retirement. He simply announced that he was going on a vacation and quietly took his leave. His friends and fellow-workers wish for him many happy years in which to enjoy his retirement.

Robert G. Rankin, the new Assistant Comptroller, was born November 1, 1899, at Chicago, Illinois, was graduated from the International Accountants' Society, and attended St. Louis University, majoring in accounting, commercial law, business management, and economics. Later he took a post-graduate course at Washington University. From 1917 to 1918 he served with the United States Navy, and after the war he worked as a traveling auditor, bookkeeper, and accountant for various organizations, including The B. F. Goodrich Company and General Motors Corporation.

ROBERT G. RANKIN

He was employed by Indian Refining Company in 1924 as a Bookkeeper, and subsequently became Accountant, Chief Accountant, Assistant to the Auditor, Assistant Auditor, and Auditor. In May, 1939, he was appointed Department Agent, Producing Department—Foreign, for The Texas Company, and in September, 1942, he was made Special Auditor in the Comptroller's Department. Mr. Rankin lives in Pelham, New York.

TEXACO ANNOUNCES PLAN FOR WAR VETERANS

THE Texas Company intends to go "far beyond its legal obligation" in placing men and women who return to Company service from military leaves of absence, President Harry T. Klein said in a recent letter to heads of departments and subsidiary companies. Moreover, in placing physically handicapped war veterans, the Company's policy will be to endeavor "in all possible ways to find positions in which they can work and feel a sense of worthwhile responsibility."

"Many of our employes," said Col. Klein, "will return with newly-acquired skills and with greater educational accomplishments . . . and will have developed greater ability to assume responsibility and to exercise supervision." Such employes, he said, "should be offered an opportunity to use their education and skill to the fullest." Each department will endeavor to place its own returning employes, but when an appropriate position is not available in that department, or the veteran indicates a preference for work in some other department, the department head will contact other department heads in an effort to place the returning veteran most advantageously.

Each returning employe will fill out a form giving a review of his military record so that his education, his abilities, and his employment preference can be available and aid in an advantageous placement for him. To help department heads, the Company is setting up an Employe Counsellor Plan to acquaint the employe with the opportunities for educational and vocational training available through Federal and other agencies and to assist him generally in making a "smooth and constructive transition from military to civilian life."

For more than a year a sub-committee of the Industrial Relations Policy Committee has been giving details of the problem very close study, and it was this committee's recommendation that the placement of returning veterans be the responsibility of department heads and not the task of any one department, or even of a committee. Some of the more than 5,000 in service are now returning, having been released because of age or for other reasons.

Average American farms are in the Midwest, with neither broad Western prairies nor rocky Eastern hills. This is H. F. Kreimendahl's, Celina, O.

STAR CLOSE-UPS

TEXACO R. F. D.

Typical Midwestern farm customer is Henry W. Kleman, Ottawa, O.

Texaco Salesman L. S. Carmean (right) catches farm owner Edwin Howick, Celina, O., with truck in farmyard, drives home a few petroleum pointers

Farmer Harold Howick greets Tank Truck Operator E. E. Fisher as he rolls up with product in his big Texaco truck

The gasoline and oil that Fisher brings helped grow this trailer load of corn and now helps haul it off to market

Every farmer's goal: Fertile fields, well-kept barns, an ample harvest

Tank Truck Operator C. J. Kimpling and Warehouseman Frank E. Koenig load truck at the Lima, O., bulk plant

PHOTOS IN STAR CLOSE-UPS ARE BY ROBERT I. NESMITH

(Above) Farmer Kleman gets a complete line of Texaco farm products from his distant cousin, Frank Kleman, Texaco distributor in Ottawa, O.

To keep posthole diggers and other small tools in condition, Harold Howick paints the metal parts with Texaco Rustproof Compound

Texaco's tank trucks will be found all along the network of farm roads that interlace America from corner to corner

Tank Truck Operator E. E. Fisher delivers bulk oil into Harold Howick's containers, conveniently kept in garage corner

(Below) Henry W. Kleman, like many farmers, has a gasoline pump in his yard

STAR CLOSE-UPS

TEXACO R. F. D.

(Below) Equipment is scarce and planting time is short. Lawrence Best borrows neighbor Herman Hermiller's tractors to disc and plant his corn

STAR CLOSE-UPS

TEXACO R. F. D.

While Henry Kleman studies pamphlet on Texaco Rustproof Compound, Representative M. H. J. Knoll explains its use

(Above, right) Distributor Frank Kleman shows Herman Hermiller of Columbus Grove, O., a bearing needing Crater

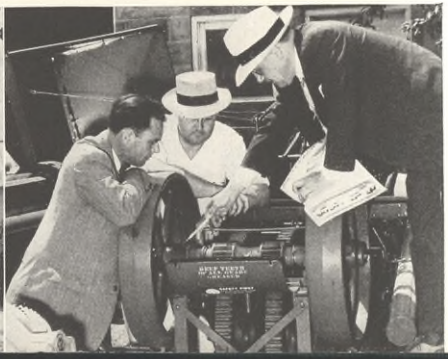
Texaco's Farm Market Program is educational in nature. Letters, bulletins, leaflets, movies, and personal contact teach farmers what lubricants to use, where and when to use them. Assistant District Managers (Sales Promotion) carry out the program locally

Subject: Farm sales. Conferees: Indianapolis Dist. Mgr. S. C. Bartlett and Assistants Dixon Guy, G. C. Pfahler

Movie film is checked by Assistant District Mgr. (Sales Promotion) G. C. Pfahler with Clerk Arthur Quinn

Farmer William H. Ruhe gets Texaco Farm Market promotion material from box in town of Maria Stein, O.

Salesman Carmean, Promoter Pfahler show implement dealer O. M. Bomholt, Maria Stein, O., a lubrication point



Pvt. W. J. Jones, Genl. Acctg. Office, honorably discharged. (Right) Sgt. C. S. Leggett, La.-Ark. Division

IN THE SERVICE

SOUTHERN PRODUCERS

Lt. Wm. C. Rump, Army Engineer from La.-Ark. Division. (Left) S.Sgt. C. A. Bozeman, La.-Ark. Divn., Houma

La.-Ark.'s Lt. (j.g.) R. F. Hodgman

Lt. F. K. Moyer, La.-Ark. Division

Cpl. V. A. Guatreaux, La.-Ark.

BM 1c C. J. Perrin from La.-Ark.

2nd Lt. W. E. Rice of La.-Ark.

La.-Ark.'s L. R. Haley, Air Forces

PORT ARTHURITES IN THE ARMY

F. J. Pillitere, Case & Pkg. Divn.

Ira A. Church of Case & Package

Case & Package's C. C. Thornblom

Sgt. D. Domingue, Case & Pkg. Divn.

Pvt. M. J. Hebert, Case & Pkg. Divn.

W. H. King, Jr., Pt. Arthur Term.

KAW PIPE LINE COMPANY

J. A. Fournier was an Engineer

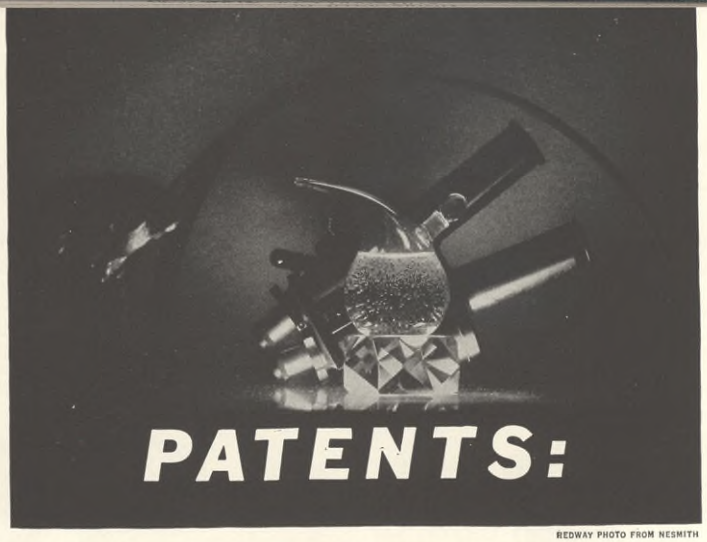
John Gebetsberger, in the Army

E. C. Ruebhausen, now a sergeant

Cpl. A. D. Pegg, former Kaw man

Pvt. R. R. Krug of Russell, Kan.

Sgt. Tyrus Oakes is a bombardier



REDWAY PHOTO FROM NESMITH

. . . They Insure Technological Progress and Gain for the Millions

By R. J. DEARBORN

President, Texaco Development Corporation

If it were possible to eliminate all the technological improvements made since the United States patent laws were enacted and turn the clock back 100 years, we would find that every man, woman, and half-grown child would be required to toil from sunrise to setting sun and on into the night in order that everyone in this country might have the bare necessities of life according to modern standards—food, rough clothing, and a place to live.

Some have argued in the past that labor-saving devices create unemployment, but this concept has long been exploded. It is now generally recognized that technological improvements and discoveries not only have improved the standard of living by providing thousands of desirable although not necessarily essential things, but also have provided gainful employment for millions to release other millions from the drudgery of hand labor.

What we once regarded as luxuries are now found in possession of every resourceful and progressive workman in this country. The farmer of today is a business man equipped with tractors, reapers, harvesters, and an endless variety of other tools and equipment. Cows are milked by machinery and the cream separated mechanically. Under these conditions it is not remarkable that the United States can feed the world.

The workman of today has his automobile, radio, automatic refrigerator, and vacuum cleaner; many already have in their homes automatic heat regu-

R. J. Dearborn

MR. DEARBORN, born in Manchester, New Hampshire, in 1881, pursued studies fitting him for electrical engineering which later led to patent practice in law. He entered the employ of The Texas Company in 1919 as Patent Attorney in charge of all patent and trade mark matters, and in 1932 became Vice President of the newly-organized Texaco Development Corporation. Since 1933 he has been continuously President of this corporation, which is engaged in the development and licensing to the industry of inventions, processes, and improvements originated in the research laboratories of The Texas Company.

Since 1931 he has served as a chief officer or as a director of a number of patent licensing companies in which The Texas Company holds an interest. He is also chairman of the Committee on Patents of the National Association of Manufacturers.

lators, oil burners, or coal stokers. The automobile has encouraged hundreds of thousands to live beyond urban areas. A few years hence the airplane will greatly widen the limits of suburban life.

The President has recognized the importance and value of technological improvements by establishing recently the National Patent Planning Commission headed by Dr. Charles Kettering and comprising Owen D. Young, Chester C. Davis, Edward F. McGrady, and Dr. Francis P. Gaines. To them he has propounded the question: "What methods and plans might be devised to promote inventions and discoveries which will increase commerce, provide employment, and fully utilize expanded defense industrial facilities during normal times?"

The founders of this country recognized the value of technological improvements and delegated to Congress through the Constitution the power "to promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."

Abraham Lincoln said that the patent grant adds the fuel of interest to the flame of genius. The advantage of the American patent system for promoting technological improvements, developments, and inventions has never been seriously questioned until recent years, and then only for the following reasons:

(1) Defects and weaknesses in the procedure for prosecuting patent applications, which should be and are being corrected. The present commissioner of patents, Conway P. Coe, has courageously fostered constructive legislation which has already done much good.

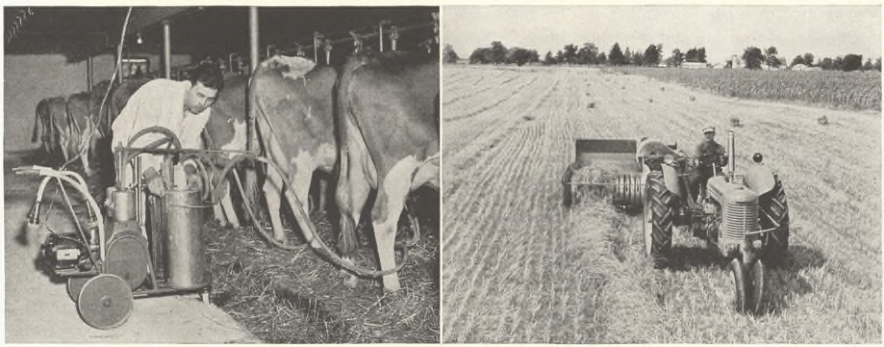
(2) Failure on the part of certain industrial groups and also on the part of the Department of Justice to differentiate fairly and properly between the patent grant and its proper sphere on the one hand, and illegal monopolies which violate the anti-trust laws on the other. Occasionally the patent grant has been made the excuse for an illegal monopoly. At other times *proper* patent agreements have been unjustly condemned from the anti-trust point of view. The former assistant attorney general, Thurman Arnold, in vigorously and successfully attacking illegal monopolies, clearly overshot the mark and threatened to kill the goose that lays the golden eggs of technological advance.

Some who concede the value of inventions and improvements have argued that the patent system has been outgrown and that modern developments would proceed without it. There seems little reason to accept this view as correct even though, to a certain degree, inventions and discoveries have always come from individuals with creative minds.

To the question "Is there some other more effective way to promote and encourage technological inventions and improvements?" I believe the answer is "No."

Since the beginning of the patent system, practically everyone has conceded that the grant of a patent encourages invention on the part of individual thinkers. Without patent protection, the inventor is helpless. He cannot safely disclose his invention to a prospective buyer. He cannot, with confidence, attempt to interest capital in backing his invention, *even if it is assumed to be complete in a commercial form.* As a matter of fact, his broad inventive concept may require the expenditure of hundreds of thousands of dollars in development and research before it can be marketed in economical and commercial form.

Some inventions actually are merely broad concepts; they are the seeds from which commercially important developments may grow. For every one of this type, there are a large number of improve-



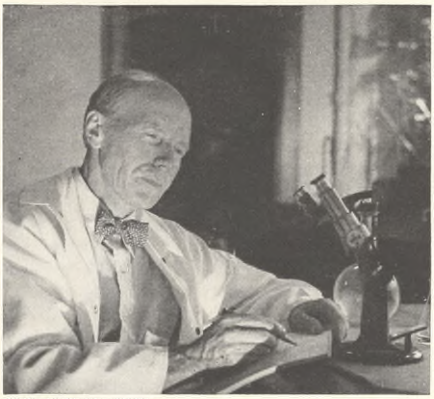
LAMBERT FROM FREDERIC LEWIS

Inventions and improvements made the farmer a business man and gave him machinery to till his fields and milk his cows

ment and development inventions which result from painstaking work in research laboratories, shops, and refineries in endeavoring to make the broad concept of immediate and economic commercial value.

If technological improvements are of value and are to be encouraged, it is equally important not only to encourage the broad concept but also to encourage the development and outgrowth of the innumerable improvements which produce the most desirable commercial developments—those developments which put men to work by the thousands in the production of the desired article or in carrying out a modernized process whereby better results are obtained.

The modern automobile has several thousand parts. Who can measure the hundreds of thousands



VONDELL PHOTO FROM NESMITH

Should a scientist who invents a device by "plodding" research be refused a patent?

of men and their families who are directly or indirectly connected with, and supported by, the manufacture and supply of all these parts and in assembling the finished machine; also the thousands more engaged in using and servicing automobiles in trade? It is important to encourage the production of the best and most efficient spark plug for the engine as well as to provide the simplest and most reliable starter.

If the grant of patent protection to promote broad inventive concepts is important, it is clearly even more important to promote all such new improvements and developments as are essential to commercial success. Patent protection must therefore cover novel and useful inventions of all classes—whether they fall into the category of broadly new concepts or of newly-developed improvements.

The protection the grant of a United States patent is intended to give is the justification for the employment of several thousand men in the oil industry on research, and for the annual expenditure of millions of dollars. Without the patent system, a large part of this expense would not be warranted. What work was necessary would be done behind closed doors, and secrecy would be the only possible protection.

Secrecy, unsuccessfully maintained, destroys incentive and removes the justification for research expenditures. If successfully maintained it is contrary to the best interests of the nation and defeats the aim of the patent system by preventing the disclosure of the invention for an indefinite period of time instead of its being added to the public domain upon the expiration of the patent.

A high percentage of the inventions and discoveries made every year in this country are *based on the foundation of issued, and even expired, patents or grow out of the disclosures contained therein.* Issuance of a patent to cover a valuable process encourages other workers in the same industry to devise a competitive process. Thus the patent grant serves not only as an encouragement to the inventor to whom the patent is granted, but also greatly stimulates inventions and developments on the part of others.

Those who believe that the American patent system has been the very backbone and foundation of the wonderful technological advances made in this country are greatly concerned by decisions recently rendered by the Supreme Court of the United States and certain other Federal Courts. These show a tendency to overlook entirely the value of the patent system in promoting technological advance and improvement by calling for a new and unreasonable test for the determination of patentable invention.

In a comparatively recent case decided by the United States Supreme Court, Justice William O. Douglas said of a thermostatically-controlled cigar lighter for automobiles that ". . . The new device, however useful it may be, must reveal *the flash of creative genius*, not merely the skill of a calling. If it fails, it has not established its right to a private grant on the public domain." (Italics mine)

Justice Learned Hand of the Second District Court of Appeals has said ". . . We cannot, moreover, ignore the fact that the Supreme Court, whose word is final, has for more than a decade or more shown an increasing disposition to raise the standard of originality necessary for a patent. In this we recognize *'a pronounced new doctrinal trend'* which it is our 'duty, cautiously to be sure, to follow, not to resist.' " (Italics mine)

For years before the advent of the modern iconoclasts, our law had developed along a different line

marked by numerous well-tested precedents. We find a summary of these earlier decisions in the standard textbook known as *Walker on Patents* (Del. Ed.), page 114, which states: "The law draws no distinction between those operations of the creative faculties which may result from long consideration, study, and experiment, and those which reach their end by sudden intuition, accident, or from a flash of thought."

The fact that an invention may flow from steady experimental work as well as from a sudden inspiration was recognized in a Federal Court decision as early as 1863, and a number of specific decisions since that time have specifically reaffirmed that fact.

Federal Judge Mortimer L. Byers, in following the "pronounced new doctrinal trend" when rendering a decision in one case nevertheless added: "The approved approach to most unsolved problems is the studious and often plodding one, and no reliable substitute has been suggested, even though a solution thereby accomplished is not judicially deemed to attain to the status of a patentable invention. Such is the minimizing lens supplied to a district judge for scrutinizing a patent submitted for adjudication."

As late as 1923 the basic principle stated in *Walker on Patents* still held good and was applied in a Federal Court decision.

It would appear from the "new doctrinal trend" that any scientist who reaches his goal after a lifetime of experimental work on a recondite problem may be refused a patent as a penalty for his alleged "plodding"—especially so if he has been laboring from day to day in the bad company of other researchers who are, of course, likewise "plodders" upon the supposedly smooth and well-paved high road of advanced science. On the other hand, anyone who has a bright idea out of the ethereal blue (i.e., a flash of genius) while in the detached attitude of a morning shave must be recognized as an inventor entitled to a patent, since his thought sprang full-blown and full-grown from his mind, like Minerva from the forehead of Jupiter, or Venus from the foam of the waves.

Even Judge Learned Hand, who played an important part in turning the law upon this strange tangent, seems to have suffered mental qualms on certain occasions when he faced the full import of the new departure from old precedents. In deciding a case in 1935 he apparently grudgingly conceded that *some* research (working by trial and error in the time-honored fashion) may result in inventions which are entitled to the protection of the patent law. At that time he said: ". . . It seems to us that the patent does not rest upon an authentic invention, but upon one of those steps in an art which demand only patient experiment. Especially in chemistry it is possible to proceed by a system of trial and error, varying formulas by permutation and combination, and recording the results of each. *Much that is valuable has been so discovered,* and we will not say that the profitable survivals from such elimination *can never be inventions;* salvarsan for example, as its other name, '606,' indicates, was hit upon by this method." (Italics mine)

KEYSTONE PHOTO

Inventions interest young people; they offer new avenues of employment and of opportunity

But some of our courts have not stopped to look and listen in the wild pursuit of their predilections on this subject. A good example will be found in the recent decision by Judges Thurman Arnold, Miller, and Edgerton of the Court of Appeals for the District of Columbia where (stripping the case to its bare frame) a scientist was refused a patent because his invention was made in the large research laboratories of The Bell Telephone System in which planned experimentation had been conducted in the modern way. The net conclusions were very well summarized as follows:

"The corporate research laboratory of today has given us the greatest invention of modern times, the knowledge of how to invent. Under a disorganized system of invention a hundred men would hunt for a needle in the haystack, the prize going to the successful finder while the efforts of the others served only to scatter the hay in all directions. Organized

invention has changed the entire process. Each man is given a section of the hay to search. The man who finds the needle shows no more 'genius' and no more ability than the others who are searching different portions of the haystack."

Certainly such decisions fail entirely to recognize that the public welfare demands that the patent grant encourage and promote the production of new and useful technological improvements which create employment and expand commerce, regardless of whether they result from a flash of genius or from persistent effort. We find no word in the Constitution or in the patent statutes to warrant such discrimination.

Patents properly granted to cover technological improvements provide the necessary safeguards to enable exchange of technical data and information between inventors in the same art. The tremendous value of such exchanges has been demonstrated during recent months in the extremely rapid development and perfection of processes for the production of synthetic rubber by an exchange of information among all those who have done any creative work in the field.

If such exchanges are desirable in time of war, they are also desirable in time of peace, and industry should be encouraged to proceed with such arrangements. Such exchanges are certainly not encouraged by criminal indictments for alleged violation of the anti-trust law. In order to encourage all proper exchanges and agreements which tend to promote trade and competition instead of to create monopoly, I favor a clarification of the law to remove the present uncertainty, and favor a statutory provision for the recording of all agreements pertaining to patents and inventions.

Every American workman has a real interest to see the United States patent system maintained, because technological improvements have given him the power to earn a living on the high American standard by short hours of labor.

Every American youth is interested in developing new technological improvements, because they add fields of activity in which he may rise to new heights of success and satisfaction.

Every ingenious American is interested in obtaining patent protection on his inventive ideas so he can put them to use for the country and for himself.

Every American corporation and business, both large and small, is interested in technological advances which help produce better products, permit wider sales at lower prices—which, in short, insure continued existence and profitable growth.

The United States patent system is the backbone and justification of research and development expenditures to accomplish these ends. Surely it is worthy of protection and preservation in this day of rampant and unreasoned change.

Approximately 100 years ago, our then incumbent commissioner of patents resigned his office saying that he felt all possible inventions and discoveries of real importance had already been made and patented, and that he wished to turn his efforts to some other endeavor. Alexander the Great, too, lamented because there were no more worlds to conquer.

Modern technologists will never have cause to emulate these persons of short foresight. Each new advance opens new vistas. There will always be new worlds to conquer. Let us not destroy the incentive to conquer them or remove the time-honored rewards for such conquest, all of which are represented in the American Patent System.

KEYSTONE

The search room of the U. S. Patent Office in Washington. Many inventions and discoveries every year are based on disclosures in issued and expired patents which are recorded in Patent Office files

IN ★ ★ ★ ★
THE ★ ★ ★
SERVICE ★ ★

THESE ARE LOCKPORT WORKSMEN

S. Sgt. John J. Jackson, former Laborer

Pvt. Chas. W. Varley was a Loader

W. R. Schumann (Top) W. N. Martin

Cpl. P. Wierschem was once a Laborer

Pvt. J. J. Kupina, in Field Artillery

Pvt. Louis J. Kelm was once a Laborer

Pvt. Earl Finefeld from Roofing Plant

Cpl. F. P. Olha was a Warehouseman

Army Technician R. Cleary was a Tester

Lieut. J. W. Atkins saw African service

Pvt. Theodore Chuk was sent to Alaska

Pvt. Leo J. Kelm once made toluene

Pfc. Jos. F. Brakovich was a Laborer

W. J. Swenson was Yard Timekeeper

Darius Skeldon, a Seabee painter 3/c

IN THE SERVICE

THESE ARE SALES PEOPLE

Wave Eva D'Alessandro, New York Dist., trained in radio

Wac Cpl. Hilda R. Iverson came from New Orleans Dist.

★

Geo. R. Hartmann, New York

Pfc. Geo. Hamlin, Genl. Dom. Sales

R. T. Homestead, New York District

Frank Gratzer of Fgn. Operations

Lieut. A. E. Walker, L. A. Dist.

Seabee J. M. McDaniel, Norfolk

TERMINALEERS IN UNIFORM

1st Lt. Paul H. Sindo, Providence

Cpl. W. B. Jones, Norfolk Terminal

Horace E. Small, Norfolk Terminal

Sgt. J. W. Burden, Norfolk Terminal

Lt. Dan'l Lindsey, Norfolk Terminal

Sgt. H. W. Marshall of Bayonne

MEN FROM THE WORKS

John J. Swartz, Los Angeles Wks.

Pvt. J. M. Clatton, Pt. Neches

Sgt. J. Highsmith of Lawrenceville

Pvt. U. W. Riggs, Pt. Neches Wks.

Lt. W. B. Pierce, West Dallas Wks.

MM 2c C. E. York, West Dallas Wks.

WILLIAM H. O'HAVER

GORDON W. HAMSIDGE

THOMAS A. LAWSON

JAMES D. WHITE

STAR PATRIOTS

THE newest gold stars on The Texas Company's combined service flag (see back cover) represent these men who have given their lives for their country:

SGT. WALLACE COX, JR., waist gunner on a B-17 bomber and a former employe of the Refining Department, Lockport Works, where his father is employed at present, was killed in flight over Italy June 14, 1944. Sgt. Cox entered Texaco service at Lockport early in 1942, and late in the year was granted a military leave of absence to serve with the United States Army Air Forces.

1ST LIEUT. JOHN H. GREEN, who before leaving to join the Army Air Forces in November, 1941, was a Clerk in the Wichita Falls Office of the Producing Department's West Texas Division, was killed while in military service June 4, 1943. He lost his life in an operational mission against Milo Airdrome in Sicily. While his plane was weaving to avoid dense anti-aircraft fire sent up by the enemy, it collided in mid-air with another plane of his own group. He had been employed by The Texas Company since May 29, 1939.

SC 2C JOHNNY A. NORWOOD, who had been overseas 18 months and had served in the Aleutians, died May 8, 1944, in the South Pacific from injuries received in the line of duty. Norwood was employed by The Texas Company at Port Arthur Works in August, 1942, and was a Laborer and Barrel Filler in the Refining Department there until he joined the Navy August 20, 1942. His father, Ira Norwood, is an employe in the Pipe Department at Port Arthur Works.

WALLACE COX, JR.

F.O. WILLIAM H. O'HAVER was killed in action June 7, 1944. A Laborer in the Refining Department at Lawrenceville Works, he was granted a military leave of absence February 4, 1942. The glider troop carrier of which he was flight officer was shot down before landing on the coast of Normandy the day following D-Day.

LIEUT. JOHN WALTER STRICKLAND was killed in an airplane accident at New Smyrna, Tennessee, May 2, 1944, while flying a Liberator bomber with five other men. He was serving as a Clerk in the Sales Department, Atlanta District, when he was granted a military leave of absence to join the Army Air Forces, in which he had served as an instructor for two years.

LIEUT. HUGH LOVE WALLACE, a former employe of the Refining Department, San Antonio Works, was killed May 28, 1944, in an airplane crash at his base in India, where he was serving with the Army Air Forces. He had been employed at San Antonio Works since 1936, had been a member of the National Guard, and November 25, 1940, was granted a military leave of absence to become an aviation cadet. His picture, with his father who is an employe at San Antonio Works and a brother in the Navy, appeared in the Second Section of THE TEXACO STAR's War Service Number as a member of one of Texaco's notable "Families at War."

(Please turn to page 24)

☆ ☆ ☆ ☆ ☆

SINCE the cover of this issue of THE TEXACO STAR went to press, five more deaths of Texaco's employes in the armed forces have been confirmed, making a total of 47 gold stars on the combined service flag. These casualties are:

S. SGT. WILLIAM CURRY, former Recorder's helper in the Producing Department's Geophysical Division, was killed in England July 9, 1944. He was a tail gunner on a Marauder bomber and had been awarded the Air Medal.

2ND LIEUT. GORDON W. HAMBIDGE, former Office Boy in the Sales Department, Norfolk District, was killed while flying over Czechoslovakia June 17, 1944. His late father was a Sales Department employe for 23 years. Lieut. Hambidge had been in the Company's employ less than six months before he left for military service.

P.F.C. THOMAS ANDREW LAWSON, formerly an Addressograph Operator with the Treasury Department, Stock Transfer Division, was killed in action during the invasion of France. He had been with Texaco from 1939 until he left for military service in 1941.

1ST LIEUT. JAMES M. MILLER, formerly a Junior Salesman of the Sales Department's New Orleans District at Nashville, Tennessee, died June 19, 1944, of septicemia, in a hospital in the Asiatic area. He had been employed by the Company since 1936, and entered the armed forces in 1942.

S. SGT. JAMES DEWEY WHITE, who was a Draftsman at Salem, Illinois, in the Producing Department, Oklahoma-Kansas Division, was killed April 5, 1944, when the B-24 bomber in which he was a waist gunner was taking off for a combat mission near Manduria, Italy. He was awarded the Purple Heart posthumously. Four of his brothers and two brothers-in-law are in the armed services. He was employed by The Texas Company in 1941 and received a military leave of absence in 1942.

EDITOR'S NOTE: Although THE TEXACO STAR will continue to publish the combined service flag of The Texas Company and its subsidiaries and affiliates for the duration, and will publish the most outstanding stories of employes' exploits on world battle fronts, pictures of employes in the service and the material that has been appearing under the headline "Star Patriots" will appear hereafter in the employe news bulletin, *Texaco Topics*.

Service Stars and Stripes

IN addition to information disclosed on the back cover of this issue, The Texas Company as of mid-July had officially listed 16 men as missing in action and 17 as prisoners of war from its own ranks or those of wholly-owned subsidiaries.

One of those known to be a prisoner of the Germans is Lieut. John C. Morgan, holder of the Congressional Medal of Honor and hero of the story, *Four-Hour Flight Through Hell*, in the Fall, 1943, Number of THE TEXACO STAR. News agencies published an account of his plane's being shot down over enemy-occupied territory, but considerable time elapsed before his capture was confirmed.

Besides the five employes of Nederlandsche Pacific Petroleum Maatschippij serving with the United States armed forces, 52 employes of that company joined the Dutch Army in the Netherlands East Indies at the outbreak of the war there, and to the best of the company's knowledge are all prisoners of the Japanese. Three others are in the Netherlands' armed forces.

By mid-July 210 Texaco employes were serving the United States in civilian capacities with Government agencies, and 275 were serving on Government committees to further the war effort.

New Company Will Manage Texaco-Standard Interests

FORMATION of American Eastern Petroleum Company, jointly owned by The Texas Company and Standard Oil Company of California, has been announced by W. S. S. Rodgers, Chairman of the Board of The Texas Company, and Harry D. Collier, President of Standard.

The new company will manage foreign exploration and development activities of companies jointly owned by Texaco and Standard, with the exception of their Arabian and Bahrein interests. Mainly, it will direct exploration and development of properties in Egypt, New Zealand, and Australia, and also in the Netherlands East Indies after their liberation from Japan.

Officers of American Eastern are E. A. Skinner, President and Director; E. M. Butterworth, Vice President and Director; F. C. Sealey, Vice President and Director; J. H. MacGaregill, Director; C. E. Olmsted, Director; H. G. Parker, Secretary-Treasurer, and H. J. Hawley, Manager of Exploration. Headquarters will be in San Francisco.

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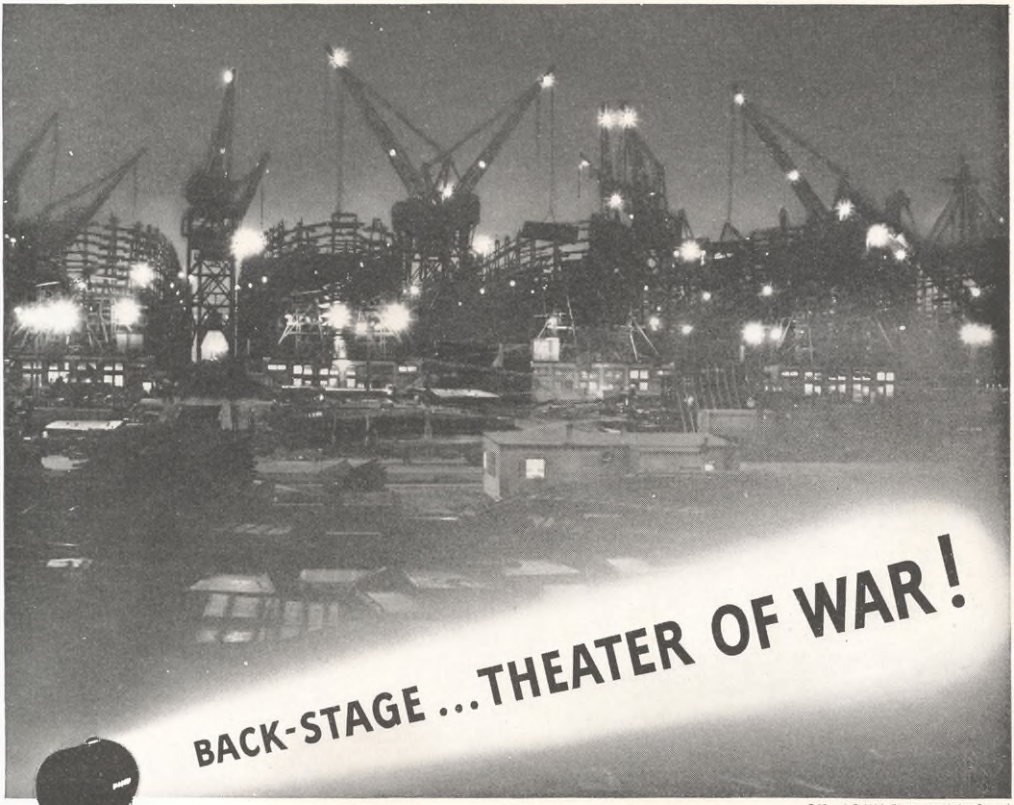

Official O.W.I. Photograph by Siegel

UP and down America's coastlines this scene is being enacted 24 hours a day. A keel is laid and in an incredibly short time another ship is off the ways, in war service.

Today the speed of shipbuilding is another of our great war-born miracles. Much of it is accomplished by skilled manpower, much by machinery that produces the millions of pieces and parts that are assembled into our modern ships. And much by quality lubricants, cutting oils and coolants.

Texaco literally covers all the waterfronts, not only up and down our two coasts but also inland, making its fine industrial products available, wherever and whenever needed... *from more than 2300 wholesale supply points.*

From these same sources, shipbuilding as well as all other industry may obtain the services of qualified Texaco engineers—to help in securing full operating efficiency and economy with Texaco quality lubricants.

THE TEXAS COMPANY

The Texas Company (including wholly owned subsidiaries operating in the United States)	5,201
Foreign Subsidiaries (operating outside the United States)	54

Affiliated Companies—Domestic

Texas-New Mexico Pipe Line Company	60
The Texas Empire Pipe Line Company	33
Kaw Pipe Line Company	73

Affiliated Companies—Foreign

The Bahrein Petroleum Company Limited, and California Texas Oil Company, Limited	127
Arabian American Oil Company	13
N. V. Nederlandsche Pacific Petroleum Maatschappij	5
Colombian Petroleum Company and South American Gulf Oil Company	18

THIS SERVICE FLAG of The Texas Company combined with its subsidiaries and affiliates shows employes on military leave of absence, in the United States armed forces only, as of early July. Those in the armed forces of other Allied nations number 692 additional, and 39 more, including some civilians, are known to have been killed under the flags of Allied nations other than the United States