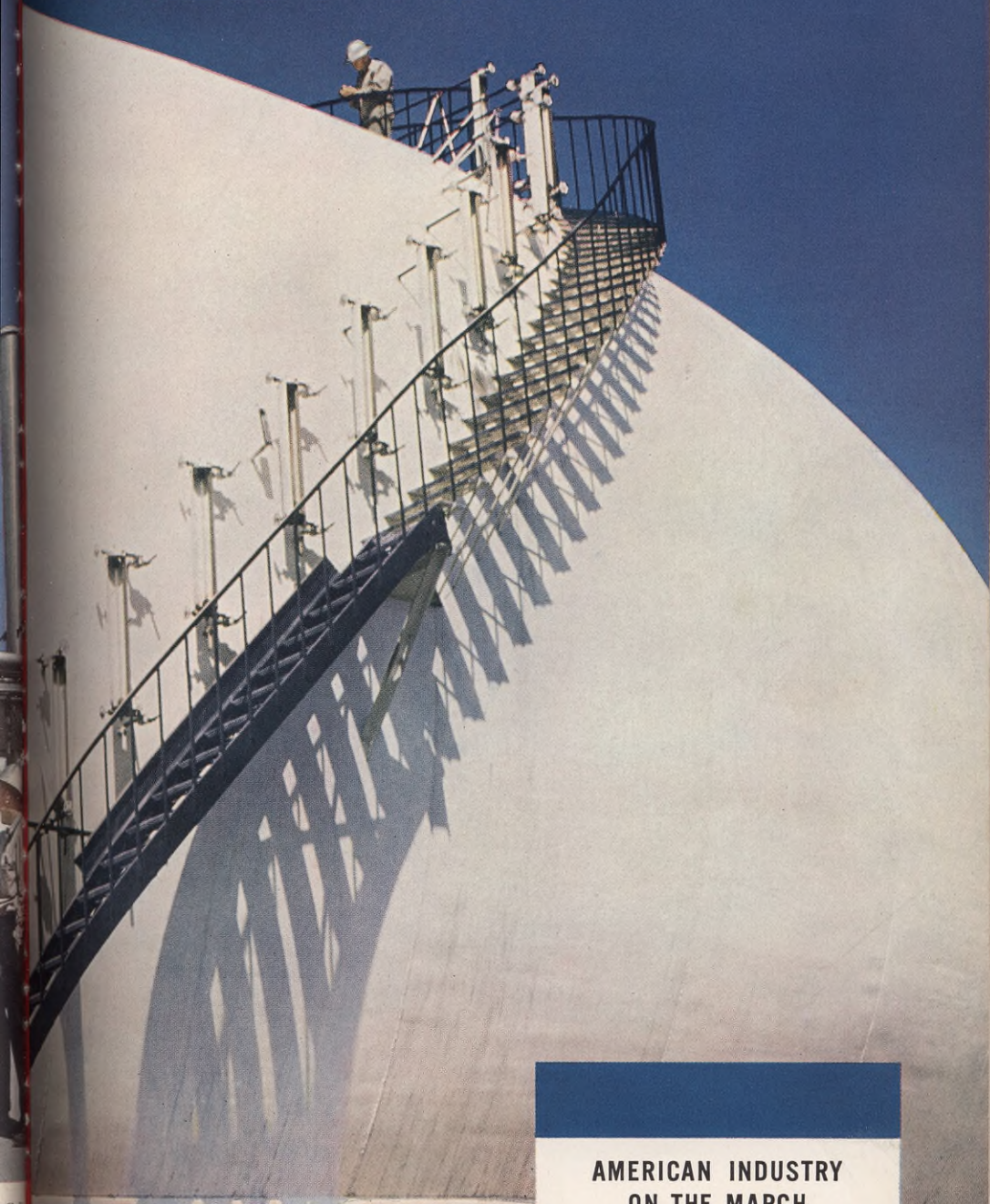


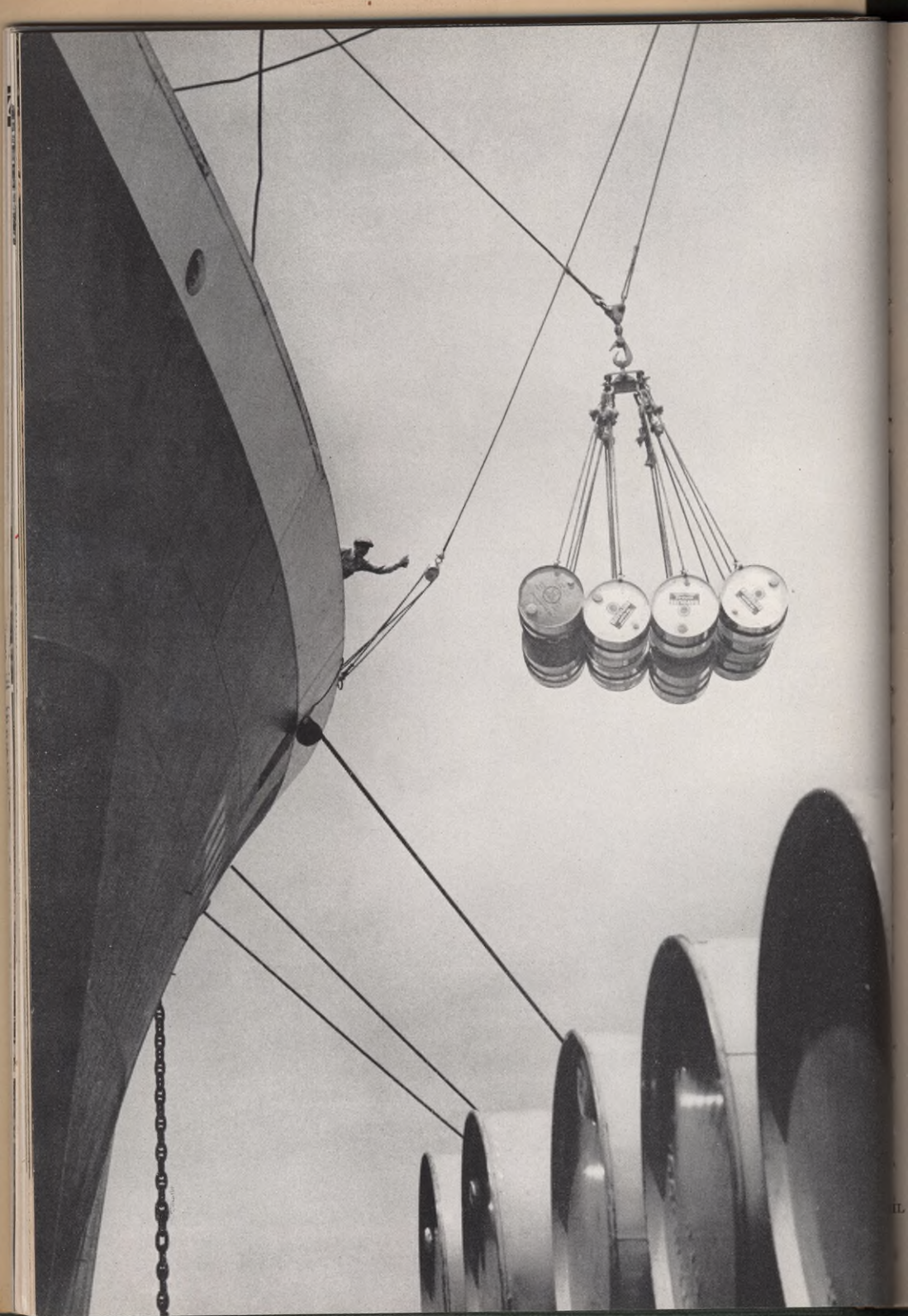
MIDSUMMER 1951

# THE TEXACO STAR



AMERICAN INDUSTRY  
ON THE MARCH







# THE TEXACO STAR

MIDSUMMER 1951 • AMERICAN INDUSTRY NUMBER

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A PUBLICATION OF THE TEXAS COMPANY  
FOR STOCKHOLDERS AND EMPLOYEES

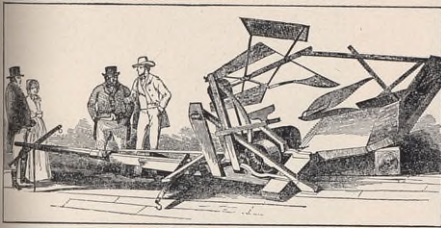
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THE COVER: The curving stairway leads to the top of one of the 100,000-barrel spheroid tanks in the South Tank Farm at Port Arthur Works.



McCormick's reaper, one of America's most important inventions, brought mass production to the farm and started a new manufacturing industry

## AMERICAN INDUSTRY ON THE MARCH

Sirloin steaks and apple pie, bathtubs and automobiles, a laborer's son receiving a college diploma, a teen-age girl trying on her first party dress—these are among the symbols that have been used to dramatize what we call the American way of life. Not everybody likes apple pie, of course, and college graduates are still in the minority. But each of these homespun symbols hints at some aspect of the basic quality that distinguishes life in the United States.

Ours is not the largest nation on earth, nor the richest in natural resources. Neither do we have the most agreeable climate or the largest population. Other nations are more advantageously located for trade, still others have enjoyed the blessings of peace while we were engaged in long and costly wars. Yet the United States has achieved a more abundant life for more people than has any other country in the history of the world.

This issue of THE TEXACO STAR is dedicated to American industry—that vast complex of large and small business enterprises that has generated and distributed the tremendous wealth on which our standard of living is based. We are saluting our country's industry not alone for its size, its initiative, and its productivity. The story of American industry on the march is also the story of industry's growing awareness of its responsibility to all of the people whose lives it affects.

Here, in these pages, the story of industry's growth is traced. Here also are examples of some of the ways in which our own Company discharges its responsibility—the annual meeting of the Company's stockholders, the Company's contributions to the nation's defense program, and, finally, the application of modern technology to producing and refining operations—proof that The Texas Company is working harder than ever to bring more and better products to more people.

FOR THE FREE WORLD is loaded aboard a Texaco tanker at the Company's Port Arthur Terminal. The story of the petroleum industry's contribution to our defense program is told in "To Secure the Blessings of Liberty" (see Page 8)





AMERICAN ENTERPRISE BEGINS: JAMESTOWN, 1607



ELI WHITNEY'S CONNECTICUT ARMORY

# American Industry Bet on

BUT THE IDEA OF PROGRESS WAS NOT FULLY REALIZED  
UNTIL WE SAW THAT OPPORTUNITY IMPLIES RESPONSIBILITY

When President Washington visited Boston in 1789, the year of his inauguration, there were nearly 50 trades represented in the parade that was held in his honor. Ranging alphabetically from bakers to wheelwrights, the paraders included cabinetmakers, clockmakers, distillers, hatters, mathematical instrument makers, pewterers, sugar-boilers, and tin-plate workers. The artisans, manufacturers, and tradesmen who marched before their first President on that proud day were citizens of a newly constituted nation, but they already had behind them a century-old tradition of vigorous industrial enterprise—a tradition made all the more impressive by the hardships of colonial life and the restrictions on American trade enacted by the government in England.

Textile mills had appeared along the banks of New England streams even before 1700. They were modest-looking establishments to be sure, but it was not many years before American fabrics were successfully competing in the world market. Iron ore was discovered in most of the colonies, and forges were built in the early 18th Century to manufacture pig iron, nails, guns, hardware, kettles, and farm implements. By the middle of the 18th Century, our shipyards were launching as many as 150 ships a year. Before the American Revolution began, dozens of products were being turned out in colonial workshops—rope, starch, candles, earthenware, leather goods, glass, paper.

When the Revolution was won, our businessmen had been freed not only from political bondage to the King of England. They now had the right to do business in their own way, without paying tribute to a government on the other side of the ocean. For them, the laws of an unfriendly Parliament had given way to the law of supply and demand.

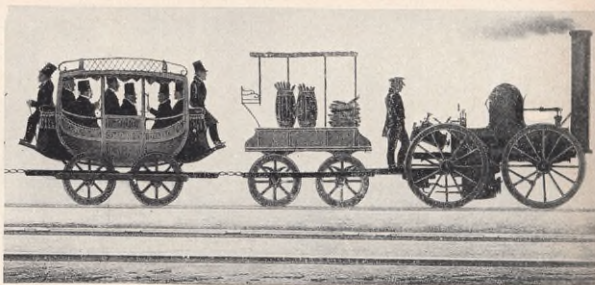
There was going to be no limit to the demand, in this rapidly expanding young republic. Nor was there any limit to the initiative that our early businessmen brought to the task of meeting the demand. When they saw an opportunity to make a profit by investing their money, their ingenuity, and their time in a new venture, they went ahead with it. If one venture failed, they could always try again. Their employees enjoyed freedom of opportunity as well. A laborer or an artisan who didn't like his job could easily find another boss who was eager to buy his services. Or, as often happened, he could go into business on his own.

There was, moreover, an inspiring new idea in the 18th Century air—the idea of progress. This concept, which we have come to take for granted in America, began to capture the western world's imagination at about the time our country was being born. For the first time in history, men started to think in terms of continually improving their way of life, by acquiring useful knowledge about the material world and putting the forces of nature to work for them. America, less





A PHILADELPHIA SHIPYARD IN 1800



RAILROADS EXTENDED THE FRONTIERS OF INDUSTRY

# Philosophical Idea and Won

hampered by tradition and class prejudices than Europe, was in a position to become, more than any other nation, a vivid embodiment of the idea of progress.

## THE PATTERN IS SET

Just four years after Washington's inauguration, Eli Whitney invented the cotton gin. This machine, the first important American invention, increased a man's seed-extracting output from one pound of cotton a day to 50. When the gin was powered with steam, the rate leaped to 1,000 pounds a day per man.

Whitney's invention had a revolutionary effect on cotton production. It caused the price of cotton goods to drop to a few cents a yard. Instead of knocking the bottom out of the cotton market, it led to a vastly increased demand. By 1860, America's output of cotton was to increase literally a thousandfold.

If Whitney's name is most closely associated with the cotton gin, his successful application of the principle of interchangeable parts in 1798 is far and away his most significant achievement. A gunmaker named LeBlanc had been experimenting with the idea in France in 1785, but he had been unable to follow through with it. In just one year, Whitney tooled up his Connecticut armory to enable comparatively unskilled workers to turn out precision-made army muskets by the thousands. Each man made one part of every gun, using a machine especially designed to process that part. Jigs were used for the first time to guide the tools, and gauges made it certain that each part would fit any musket in the armory.

A clockmaker named Eli Terry installed Whitney's method in his shop in 1807. Before this, he had been

making four clocks a year by hand, to sell at \$25 each. With the new system, he made 5,000 clocks in three years, at a selling price of \$5 each. The pattern of America's tremendous industrial growth was already established before the 19th Century had barely started.

Gradually, the small, individually owned workshops, where skilled craftsmen made things by hand, yielded to large, and ever larger, factories, each staffed by hundreds of relatively unskilled men and women who operated machinery that turned out products in large volume and at a low price. As factories became larger and more elaborate machinery was invented and put into use, the amount of capital needed to start a manufacturing venture also went up. American industry was beginning to play for high stakes.

As America expanded and as the great 19th Century flood of immigrants began to pour into the country, the demand for cloth, plows, firearms, tools, and other factory-made items increased in geometrical progression. For the enterprisers who had the vision, the initiative, and the skill to operate a business, the risk was high but it was well worth the taking.

## THE MEN WHO BET ON PROGRESS

Few names of American businessmen who were active in the years before the Civil War are familiar to us now. But they, more than any other group, were the leaders in the country's expansion and its rapid accumulation of wealth. It was they who saw the potentialities of Fulton's steamboat, McCormick's reaper, Howe's sewing machine. It was they who accumulated the capital, built the factories, and competed with each other to put products on the market at attractive





FACTORIES, LIKE THIS 1839 COTTON MILL, EMPLOYED LARGE NUMBERS OF SEMI-SKILLED WORKERS

## MASS PRODUCTION GAVE US STEEL AT A PENNY A POUND

prices. Had there not been businessmen in our country who were willing to take a risk, the inventions that we use today would have remained nothing more than curios on file in the United States Patent Office.

That these 19th Century businessmen were motivated chiefly by a desire to make a profit for themselves does not detract from their achievement. They furnished the tools that built America. And by plowing back a large part of their profits, they kept our industrial capacity growing.

By the time of Lincoln's inauguration, the capital invested in industry and urban property—more than a billion dollars—was greater than the value of all the agricultural land in the country. There were more

than a million-and-a-half industrial workers, and it was estimated that one-third of our population was dependent in some way on manufacturing.

Stimulated by the Civil War and by the greater opportunities that opened up after the war, industry expanded even more rapidly in the latter part of the 19th Century. Railroad lines had pushed as far as Chicago and St. Louis just before the war, and now the movement of settlers to the West was greater than ever. More immigrants arrived from Europe. The demand for manufactured products continued to rise. More labor-saving devices were invented, other products were improved.

The flood of new products led people to desire still more and better products. People on modest incomes could now buy factory-made furniture, rugs, and household fixtures that rivaled in ornateness the treasures owned by the very rich. The mass production concept was applied to industry after industry, to satisfy the country's appetite for goods. It looked as if the 18th Century dream of progress was coming true.

## THE DECLINE OF OPPORTUNITY

But where the 18th Century working man had had many opportunities to sell his skills or to go into business himself, his 19th Century successor was not always so fortunate. As small workshops were replaced by large factories, as the need for individual skills declined, as the opportunities for investing in small enterprises dried up, many men found that they had no choice but to work for someone else, whether they liked it or not. All through the 19th Century, of course, new lands were being opened up in the West. Men who were dissatisfied with their jobs, or who had failed in ventures of their own, could always head for the West, so long as they had enough courage to make the trip.

But this safety valve began to close toward the end of the century, the very time when many industries

*The riches of nature did not fall like ripe fruit into the laps of an indolent people. It came hard. But because what we have here was earned by fighting, risk-taking, and plain hard work, its taste is sweeter in our mouth. . . . An economy of abundance comes only from constant initiative, daring, and work. Those who desire ease at but little cost to themselves really want to live on the effort and toil of other people. They want to build a parasite state.*

—FROM AN ADDRESS COMMEMORATING THE 47TH ANNUAL MUSTER AT THE TEXAS AGRICULTURAL AND MECHANICAL COLLEGE; REPRINTED FROM THE *Texas Aggie*, OFFICIAL PUBLICATION OF TEXAS A. AND M. COLLEGE





ONE OF THE EARLY PENNSYLVANIA OIL FIELDS



REFINERIES SOON FOLLOWED DISCOVERIES

were being consolidated under the leadership of powerful industrialists. Although America's productive capacity was enormously increased by the accomplishments of these post-Civil War giants of industry, individual workers found fewer opportunities to better themselves.

Andrew Carnegie observed that his company transported various raw materials hundreds of miles and processed them to make steel that cost consumers only one cent a pound. Clearly, such a successful application of the mass production principle was a tremendous benefit to the country as a whole.

But for many of the employees who worked in the steel industry and the other industries that flourished late in the 19th Century, mass production was a mixed blessing at best. Most of them had little opportunity to advance by using skill and initiative, and they had to accept working conditions as they found them, since the supply of labor was beginning to exceed the demand.

Many other people began to have misgivings about the growth of industry too, when they saw whole valleys turned into roaring, smoking infernos, when they found that rivers were being polluted by factory waste, when they realized that free competition alone did not determine the prices of many of the goods and services they bought.

#### OUR 20TH CENTURY EVOLUTION

In many countries, such resentment against industry on the part of employees and public might cause a revolution. It is perhaps the most significant fact in America's industrial history that we did not have a revolution here.

Instead, industry has gone through a process of gradual evolution in the first half of the 20th Century—a process that has brought benefits to every one in our society.

Many forces have brought this process about. Pub-

*There are approximately half a million corporations in the United States, and each of these is owned exclusively by its stockholders. Not one of those stockholders, however, possesses any "privilege" that is not available to every man, woman, and child in the nation. Anyone who possesses a few dollars and who is willing to invest them in the plants and tools and furnaces and machines that make production possible can become one of the owners of a corporation and can participate in its profits by merely purchasing a single share of the listed capital stock of that corporation. His share of stock will earn him exactly the same dividend that is paid on every other share of the same stock—no matter who owns it; and it carries with it exactly the same voting powers—the same right to register approval or disapproval of management and its policies. . . . In short, stock ownership is one of the most completely democratic institutions to be found anywhere in this democracy of ours.*

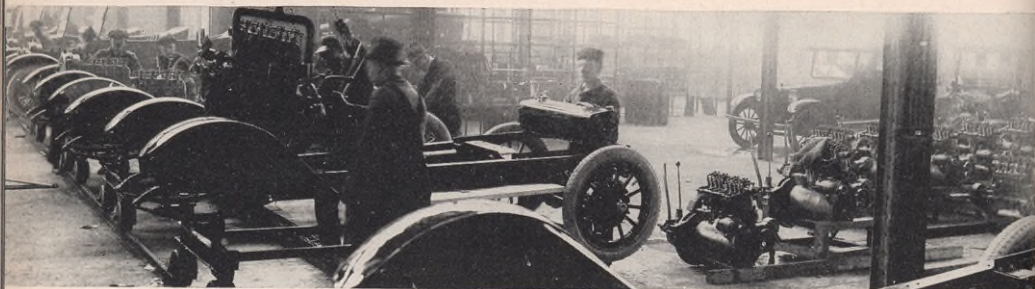
—IRVING S. OLDS, CHAIRMAN OF THE BOARD, UNITED STATES STEEL CORPORATION

lic dissatisfaction around the turn of the century brought about changes in corporate structures, while redistribution of the nation's wealth caused industry to turn to the small investor for its capital.

The experience of the automobile industry proved that by increasing output, raising wages, and lowering prices, industry can broaden its markets to the benefit of everyone, including industry.

But one of the most significant elements in the recent evolution of American industry has been the realization by industry that it holds a position of great





IT WAS THE AUTOMOBILE INDUSTRY THAT DEVELOPED MASS PRODUCTION AS WE KNOW IT TODAY

## IN THE 20TH CENTURY, AMERICAN INDUSTRY HAS COME OF AGE

responsibility in our society—responsibility that embraces stockholders, employees, dealers, suppliers, consumers, and the public at large. This change in attitude has not lessened the importance of making a profit. In fact, industry's new responsibilities have made the need during the past 50 years.

### PETROLEUM SETS AN EXAMPLE

The petroleum industry today offers an ideal example of an American industry that has achieved a mature, responsible position in the country's social structure during the past 50 years.

*Our economy has the tremendous advantage of being made up of about six million separate enterprises in agriculture and about three and a half million more that are not in agriculture. This means that in our American industry and business there are nearly 10 million places...where experiments may be tried, where no further authority is needed to authorize an experiment. Our business and industry operate under about 10 million separate, private, business budgets. No state-controlled economy can hope to compete in dynamic drive with an economy that possesses nearly 10 million independent centers of initiative.*

—SUMNER H. SLICHTER, LAMONT UNIVERSITY  
PROFESSOR AT HARVARD

Through free, vigorous competitive enterprise, our industry delivers high quality products at low cost to a mass market, making people's lives easier, safer, and more comfortable, and enabling the man on a modest income to enjoy the same convenience and pleasure as his wealthy neighbor.

It shares its ownership with hundreds of thousands of people in all income groups, giving them the opportunity to invest their money in order to make a profit, just as their 18th Century forebears were able to do. It distributes the largest part of its income to hundreds of thousands of employees in the form of wages that set high standards for all of industry.

The petroleum industry, with its complicated and diverse operations, allows wide room for individual initiative in the development of new and better methods, and it rewards such initiative. It uses automatic equipment to achieve greater efficiency and to make work less arduous. It has developed scientific methods of operation, and, in the process, has contributed to the advance of scientific research.

The petroleum industry has a long-range sense of community responsibility, which takes the form of such good works as conservation of the nation's oil resources; gifts to schools, colleges, and community activities; and prevention of air and water pollution. The industry provides job, health, and old-age security for employees. It pays taxes that help pay for services performed by the Government. It buys its supplies from thousands of small and large business firms, and enables hundreds of thousands of other small businessmen to own their own marketing outlets. It helps support the media of entertainment and information that enrich our lives. It works to bring the benefits of American enterprise and skill to less fortunate areas of the world.

In the 18th Century, progress was a philosophical concept. In the 19th Century, it was an illusion for many people in our country. Today, it is a reality. American industry has come of age. **END**





THE OIL INDUSTRY EMPLOYEE TODAY HAS BROAD OPPORTUNITIES TO USE SKILL AND INITIATIVE





OIL IS DOING ITS SHARE in the nation's build-up of defensive strength. Demand for oil and oil products is a third greater than at World War II peak

# To Secure the Blessings of Liberty

AMERICA'S OIL INDUSTRY  
IS ON ITS TOES READY TO MEET  
ANY EMERGENCY DEMANDS

**T**he invasion of South Korea proved beyond doubt to the free world that Communist powers would risk the waste and agony of another war to gain world-wide domination. The United Nations met this threat promptly with armed resistance, and the United States assumed leadership in the fight for freedom by embarking on a long-range defense program. Today, after more than a year of conflict, a thorough program of defense is under way. Once again, oil is fighting for freedom.

The importance of oil to armed defense cannot be overstated. At the end of World War I, Lord Curzon said that "the Allies floated to victory on a sea of oil." Yet, during World War II, the Air Forces needed for a

single day's operation 14 times as much gasoline as was shipped to Europe during the First World War. A single battleship's tanks held enough fuel to heat an average home for five centuries. It is not surprising that petroleum made up 65 per cent of all tonnage carried to the various war theaters, including personnel and equipment. "Not a single operation was delayed or impeded because of a lack of petroleum products," the Army-Navy Petroleum Board reported at the close of the war.

As in the last war, gasoline is needed today for weapon carriers, tanks, trucks, and other combat vehicles. Submarines and landing craft require Diesel fuel. And lubricants of all kinds are needed for this equipment.

From oil comes toluene for TNT, jellied gasoline for flame throwers, butadiene for synthetic rubber, and asphalt paving for air runways. Petroleum supplies protective smoke screens for troops as they move forward in the field. The rations these men eat are protected from spoilage by cartons sealed with wax manufactured from petroleum.

The industries that turn out armaments need fuel and lubricants to keep going around the clock. Each machine that expedites production is kept in motion by oil. Agriculture has been greatly mechanized since the end of the last war. Production of tractors, for example, has climbed 47 per cent since 1946.

Civilian needs have risen sharply within the same period. There are nearly 50,000,000 motor vehicles using our streets and highways. Five and one-half million American homes use oil burners.

In all, the total demand for petroleum now amounts to about 7,500,000 barrels a day—a third again more than the peak of World War II. There can be little doubt, too, that this figure will increase as industry and the growing body of men under arms fulfill their purpose and make America strong enough to defend the peace.

## OIL MEETS THE CHALLENGE

To fill the requirements of our defense program as they occur and to prepare for emergencies, American industry is stepping up production to a new high level. Oil is doing its share. The oil industry has a record of remarkable achievement in supplying America's petroleum needs since V-J Day. To meet today's challenge, it is making another all-out effort. The goal is to increase supply 1,000,000 barrels a day by 1953.

Oil and gas companies and trade groups are aiding the national defense effort by working through voluntary advisory organizations similar to the Petroleum Industry War Council (PIWC), which received many citations for its outstanding job in the last conflict. Studies are being made to determine how much additional storage capacity will be needed to avert the danger of bottlenecks. The men who handle the transportation problems in each of the private companies within the industry are also seeking to prepare in advance for such emergencies as may arise.

The minimum cost of contemplated industry-wide ex-



pansion is estimated at \$3,000,000,000. Some experts have run the figure as high as \$5,000,000,000. In addition, inflation has pushed the industry's yearly replacement costs to \$1,000,000,000. Because the companies within the industry are independent, competing enterprises that depend for their economic survival on operating efficiently, care must be taken that new facilities are economically sound.

The problem of expansion is further complicated by shortages of material and manpower. Steel, a priority material in our plan of defense, is needed throughout the industry. To increase drilling activity, for instance, will require additional steel for drill pipe, casing, and tubing. The trained men needed for completion of specific expansion plans are hard to find and may be hard to hold as military manpower needs increase. The industry is confident, however, that the job will be done.

There are more than four times as many refineries today producing 100-octane gasoline or its components as there were in 1942. Thousands of miles of crude oil and products pipe lines have been completed since the end of World War II. Moreover, the industry gained experience in filling the country's needs during the last war which will help it again to meet emergency situations.

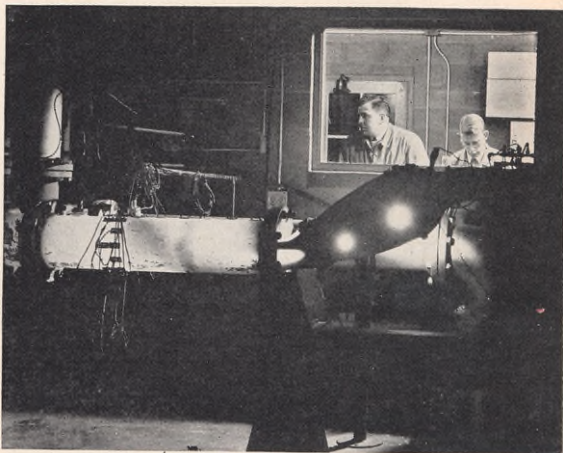
#### WHAT TEXACO IS DOING

Along with other members of the oil industry, Texaco is actively engaged in meeting crucial defense needs. Our crude oil reserves are substantially larger now than ever before. Our production has increased. We are bending every effort to fill military commitments.

Many members of the Texaco family are taking part in the civilian defense plans organized in their home communities. Texaco employees are lending their skill and training to the Government. For example, W. S. S. Rodgers, Chairman of Texaco's Board of Directors, is serving as a member of the National Petroleum Council, a group of more than 90 leaders in the oil and gas business that acts as adviser to the Interior Department. Executive Vice President A. C. Long is representative

of the Texas Company on the Foreign Petroleum Supply Committee under the "Voluntary Agreement Relating to the Supply of Petroleum to Friendly Foreign Nations," and also is Texaco's representative on the Executive Committee of the Foreign Petroleum Supply Committee. He has been appointed vice chairman of both of these committees. These men are just two of the many Texaco employees who are serving their country.

The Texas Company, with other oil companies, has



EXHAUST GASES from gas turbine combustor turn exhaust pipe (above) "red hot" in jet fuel research work under way at Texaco's Beacon Laboratories

supplied millions of gallons of high-octane gasoline for military aircraft in this country and abroad, as well as the special fuels needed by jet-powered planes, the combat fuels used by tanks and other mechanized equipment, and the lubricants that all such equipment requires. As an example of the part it is playing in the nation's defense program, Texaco is currently supplying a substantial portion of the petroleum requirements of the United States Navy.

Whenever emergency calls occur—and they occur often enough to be considered routine by the Texaco men who handle them—the Company's resources are strained to the limit, if necessary, to fill military requirements. Texaco will continue to face these emergencies as they occur and answer each new call to the best of its ability. Such coöperation between Government and independent industry is freedom's greatest safeguard. **END**



MILITARY DEMAND for some oil products has nearly doubled since Korean war began. Amphibious truck carried gasoline drums across Han River





STOCKHOLDERS GATHER IN AN ATMOSPHERE REMINISCENT OF NEW ENGLAND TOWN MEETINGS

The annual corporate meeting is the one occasion during the year when the stockholders who own a business officially meet with the men they have elected to direct the company's affairs.

In a sense, the annual corporate meeting stems directly from the tradition of the New England town meeting. There is the same respect for opinion which is democracy's great power. Just as townsmen assembled to hear reports from their elected officials and vote on proposals affecting their common welfare, so stockholders today have the privilege of learning directly from the board of directors of their company the varied problems of management and of deciding by ballot what course is to be followed on matters that require the consent of shareholders.

There are an estimated 15,000,000 stockholders in the United States. Statistics have been gathered which indicate that 96 per cent of all capital stocks are owned by individuals. In no other country do so many people own an interest in private enterprise. Shareholders in almost any one of the nation's many corporations represent a cross section of America—its people and its way of life.

Besides the many individuals who directly own capital stocks, other men and women have placed their funds with investment trusts which, in turn, have investments in corporation stocks. Mutual insurance companies, in which every policyholder is a stockholder, own shares of

corporation stocks. Many institutions, such as hospitals, colleges and universities, charitable organizations, and museums, help defer the cost of their services by the dividends they receive from stock investments.

#### PUT IT TO A VOTE

The stockholder's responsibility no more ends with his purchase of stock than does a citizen's duty when his tax is paid. In any enterprise, questions of policy—increasing the company's capital stock, for example, or establishing a pension plan—arise to be solved by common consent. The vote is the yardstick of democracy, and one purpose of the annual meeting is to give each of the stockholders an opportunity to approve such measures as will serve to strengthen the company.

It is seldom, if ever, possible for all stockholders to attend a corporation's annual meeting. However, companies provide means whereby each stockholder may register his vote by proxy if he is unable to attend the meeting in person.

More than 91,000 of Texaco's nearly 110,000 stockholders are individual men and women. Some of the men and women shareholders who attended the Company's last annual meeting are pictured on these pages. For those shareholders who were unable to attend, these scenes will show what went on at the meeting.



# Meeting Time for Texaco Stockholders

IT GIVES THEM A CHANCE TO  
LET THE DIRECTORS KNOW  
WHAT'S ON THEIR MINDS

AT TEXACO'S GET-TOGETHER

When W. S. S. Rodgers, Chairman of the Board of The Texas Company, called the annual meeting to order on Tuesday, April 24, at 11 a.m., more than 175 stockholders were on hand in the Company's conference room on the 16th floor of the Chrysler Building. Shares represented in person totaled 1,678 and by proxy, 9,467,417.

Mr. Rodgers commented on a number of matters of interest to stockholders. The Company added more to its domestic crude oil reserves during 1950, he reported, than during any year except 1938. Of the estimated 29,500,000,000 barrels of proved domestic reserves of crude oil and natural gas liquids for the entire country, Texaco's share is 1,781,000,000 barrels. Foreign crude oil reserves of the Company's subsidiaries and its proportionate share of the reserves of its affiliated companies also increased substantially, and are estimated at 3,210,000,000 barrels. Texaco's proved domestic reserves of natural gas are estimated at more than nine trillion cubic feet.

Commenting on the Government's current antitrust suit in California (see "‘Bigness’ Isn't ‘Badness’" in THE TEXACO STAR, Fall, 1950), Mr. Rodgers said that he feared the proposed disintegration of the petroleum industry "would seriously impair the industry's ability



CANDIDATES FOR DIRECTORS are introduced at the meeting before their election. This is Colonel J. H. Lapham, a Texaco Director since 1926



FRIENDLY GIVE-AND-TAKE makes for a lively and informative discussion period. (Below) Chairman W. S. S. Rodgers and President Harry T. Klein chat with stockholders at the end of the meeting







to supply the enormous quantities of products needed by our expanding economy in time of peace and the additional large volume of products needed by our military forces in time of war . . .

"If you believe as I do," Mr. Rodgers added, "that the strength and greatness of America are due in large part to its free enterprise system and that this system is endangered by attempts to break up successful companies because they are large or integrated, you should make known to your Senators and Representatives your views as to the desirability of clarifying our Antitrust Laws."

Before the election of Directors, Mr. Rodgers introduced the nominees, and the Company was complimented from the floor on the "very excellent turnout of Directors." Besides the unanimous re-election of Texaco's 16 Directors, the resolution to increase the authorized

**MORE THAN 60 TEMPORARY EMPLOYEES** joined our staff to help handle details of the stock split that Texaco Directors authorized after stockholders had voted to increase the Company's authorized capital stock. The Stock Transfer Division worked for four weeks, preparing the additional stock certificates, and recording, verifying, and mailing them to Texaco stockholders

## THEY DETERMINE OUR POLICIES

These are the Directors of The Texas Company, the elected representatives of our nearly 110,000 stockholders. *W. H. Mitchell* is a Member, Mitchell, Hutchins & Co., Chicago; *J. H. Lapham* is a Texas industrialist; *R. L. Saunders* and *R. F. Baker* are Texaco Vice Presidents; *G. N. Aldredge* is Chairman, Executive Committee, First National Bank in Dallas; *C. L. McCune* is President, The Union National Bank of Pittsburgh; *M. Halpern* is a Texaco Vice President; *L. J. Norris* is Chairman, State Bank of St. Charles, Illinois; *W. G. Elicker* (not a Director) is Secretary of the Company; *Henry U. Harris* is a Member, Harris, Upham & Co., New York; *W. J. Cummings* is Chairman, Continental Illinois National Bank and Trust Company of Chicago; *Harry T. Klein* is President of The Texas Company, *W. S. S. Rodgers* is Chairman of the Board, and *J. S. Leach* and *A. C. Long* are Executive Vice Presidents; *R. C. Shields* is Director and Officer, Fisher & Company, Detroit; *W. S. Gray* is Chairman, Central Hanover Bank and Trust Company, New York.



W. S. GRAY

W. H. MITCHELL

J. H. LAPHAM

R. L. SAUNDERS

HENRY U. HARRIS

W. J. CUMMINGS

HARRY T. KLEIN





capital stock of the Company from 20,000,000 to 40,000,000 shares, and the resolution to approve the appointment of auditors for the year 1951, were also carried.

As the meeting progressed, a feeling of friendly interest grew far beyond the dry courtesy of parliamentary procedure. As one stockholder said, "... these meetings are more like family meetings. The gentlemen you look at are the friendly type of executive. ... I feel very friendly toward them."

The liveliest discussion centered on the need for American enterprise to tell the full story of its contribution to the nation's social and economic well-being. One stockholder, however, pointed out that no one corporation can "carry the load alone."

One of the many women who attended the meeting found it "very reassuring to sense the willingness of management and of the stockholders to further educational effort ... with the public. ... Naturally, the alien influences wish to cripple our capitalistic system. ... You stockholders today have no realization of your power as individuals and as good Americans. ...

"Let's ... save this country and our private enterprise," she said in concluding her remarks, "and let's stand shoulder to shoulder with management, which has done so well." **END**



A RETIRED TEXACO EMPLOYEE, Frederick W. Kruger, is welcomed by Chairman Rodgers. Kruger has attended stockholders' meetings for years

RS  
EIN

G. N. ALDREDGE	M. HALPERN	L. J. NORRIS	W. G. ELICKER
F. BAKER	C. L. McCUNE		
W. S. S. RODGERS	J. S. LEACH	A. C. LONG	R. C. SHIELDS





## HOW THE COMPANY IS DEFENDING ITSELF AGAINST ATTEMPTS TO LIMIT ITS FREEDOM



## We Hold These Truths

"Instead of saying how many millions they made, the large corporations should emphasize the fact that they are paying millions and billions of dollars to the American Government, that they are contributing a great many jobs to society, and doing a good job," declared one of the women who attended this year's meeting of Texaco stockholders.

Other stockholders at the meeting shared this woman's feelings. They were concerned about the criticisms that are directed at Texaco and other large corporations. They were aware, too, that, from time to time, attempts are made to restrict the Company's freedom to operate at maximum efficiency and in the best interests of stockholders, employees, and customers. What, they wanted to know, is Texaco doing to defend itself against such attacks on its freedom? Let's look at the record.

In California, attorneys for The Texas Company are defending the Company against the charges made by the Justice Department in its suit to break up the integrated oil companies operating on the West Coast.

Last year, and again this year, hearings were held in Washington to consider the Treasury Department's proposal to lower the depletion allowance for oil producers. The Texas Company called the attention of its thousands of royalty owners to this proposal.

Many stockholders have complained of the unfairness of double taxation, under which profits are taxed, first, in the form of corporation earnings, and, second, in the form of dividends paid to stockholders. Texaco has distributed information on this subject to stockholders.

### TELLING OUR STORY

The Company uses many means to disseminate the economic truths by which it is guided. THE TEXACO STAR, which goes to employees and to influential people outside the Company as well as to stockholders, publishes articles on economics that receive wide attention. A recent STAR article, "How Do Gasoline Prices Do It?" by Don Herold, was ordered reprinted in the Congressional Record by Representative Leon H. Gavin of Pennsylvania. At the request of the State Department, THE STAR is being sent abroad to United States Information Centers. Our employe magazine, *Texaco Topics*, has for one of its main purposes the explanation of the economic facts of American life.

During the past few years, Texaco has distributed several pamphlets, like those illustrated here, giving the Company's point of view on matters affecting the Company's freedom of enterprise.

Besides speaking up for itself, The Texas Company is also a member of the American Petroleum Institute, the spokesman for all the leading oil companies on problems that concern the welfare of the industry. We also contribute to various independent organizations that publish information about economics.

In short, Texaco is defending itself against unfair attacks and letting people know about the economic truths underlying the Company's policies. **END**



# Producing Begins in the Lab



CONFERENCE AT BELLAIRE, TEXAS—The author (center) confers in the Geophysical Research Laboratory with B. D. Lee (left), Assistant Director of Geophysical Research, and K. C. ten Brink, Assistant Director of Producing Research

## RESEARCH SETS THE PACE OF PROGRESS IN OIL EXPLORATION AND PRODUCTION WORK

by Gerhard Herzog

*Director of Research, Domestic Producing Department*

The importance of research in producing department activities is perhaps less well known than it is in refining department operations.

A producing department's exploration division locates new petroleum reservoirs. The department's operating division "produces" their content, that is, brings the crude oil and hydrocarbon gases to the surface of the earth. In each activity, research leads the way to improved techniques and equipment for the men who perform these tasks.

The most important exploration research project is

to improve existing, and develop new, methods of locating oil.

A great deal of information about subsurface geology is obtained by taking measurements at the surface of the ground. During the past 10 or 15 years, the seismograph method of studying subsurface geology has yielded the greatest success.

In seismic exploration, an explosive is detonated at the surface or in a shallow hole in the ground. The explosion creates a shock wave that travels through the ground at varying speeds, depending on the physical characteristics of the earth's formation.

Reflections and refractions of the wave occur when it passes formations having different velocities. Thereby some of the energy returns to the surface, where it is detected by geophones. The detector output is fed through an amplifier to a recorder where it is written down as a function of time.

"Shooting" is repeated continuously along a gridwork laid out at the surface. By computing depths of reflecting horizons for various shot points, a profile can be drawn which depicts their position. It is customary to



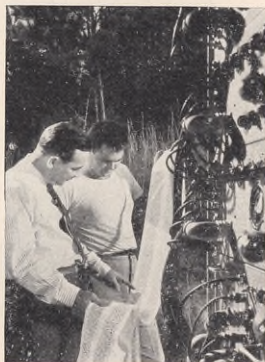
## SCIENCE AIDS IN HUNT FOR OIL



BEHIND THESE DOORS of the Geophysical Research Laboratory at Bellaire, scientists seek ways to improve the technique of geophysical prospecting



CUTTING SUBSURFACE cores is another method of learning as much as possible about underground formations. Core samples will be sent to a core laboratory to be analyzed for fluid content



use this information to draw contour maps by connecting points below which the reflection occurred at a given depth. Contour maps and profiles are of great help to the geologist in piecing together knowledge of the subsurface.

In certain areas, this "shooting" procedure gives excellent results; in other places, the records are utterly confused and no distinct reflections can be "picked." Considerable research effort is being made to improve the situation and to develop more highly sensitive detectors and suitable amplifiers.

Refraction shooting—which involves following the energy of the primary wave when it is refracted into a second formation, travels along the boundary between the two formations, and eventually is refracted back to the surface, where it is measured—is another version of seismic exploration.

The gravimetric method—in which gravitational pull is measured at various points along the earth's surface—is of much less importance in exploration work than the seismic method. The results of such surveys usually are expressed by a contour map in which points of equal gravity values are connected. Because a small body of a given density contrast at a shallow depth produces the same change in gravity as a larger body with the same density at a greater depth, the results of gravimetric measurements must be closely scrutinized and interpreted in a way that is compatible with other geological knowledge of the area.

Interesting subsurface information is also obtained by mapping the strength of the earth's magnetic field. Great progress was achieved during the war years in the

SHOCK WAVE created by shot-hole explosion has been recorded as function of time on seismogram held by members of a Texaco reflection seismograph party

WELL LOGGING TECHNIQUES are being improved through research. (Below) Testing well logging electrode in simulated oil well formation in lab





construction of such magnetometers. An instrument has been developed that automatically records magnetic field strength while it is flown over an area.

During and after the drilling of a well, research plays important rôles. In order to produce drilling muds with more desirable properties, for instance, studies of the behavior of clays and mixtures of various chemicals are constantly being made.

After a well bore has been completed, it is of the utmost importance to learn as much as possible about the subsurface layers or formations. One method is to use "well logging" tools—instruments which are lowered into the bore holes and measure certain physical characteristics of the surrounding formations. Another method is to cut subsurface samples or cores for study in core laboratories.

In the most widely applied logging method, the electrical resistivity of the formations is measured.

Research has disclosed that all formations contain a certain amount of radioactive contaminations due to their radium, thorium, and potassium contents. These substances emit gamma rays, which may be measured by passing detectors through the bore hole. In general, it has been found that shales show high radioactive content whereas sands and limestones have low radioactivity. In another arrangement, a measurement of the hydrogen concentration in the formation is obtained by lowering a source of neutrons, usually a mixture of beryllium and radium, into the hole together with a detector for gamma rays. A neutron-gamma ray log is of great help in evaluating the amount of fluid in the formation.

Cores brought to the surface are carefully analyzed for fluid content. By a process called "restored state" technique, the core is resaturated in the laboratory under conditions equivalent to those at the particular depth from which the core was taken. In this way, the original proportions of oil and water in the reservoir rock can be determined.

Since most formations contain both oil and water in varying amounts, investigations are undertaken to learn the laws of simultaneous flow of such fluids through porous media. These flow studies will eventually yield information which will make possible more effective recovery of the hydrocarbons contained in the pores.

It is hoped that research will find ways of calculating many of the physical properties—which must now be established experimentally—of the oils and gases in underground reservoirs, thereby making possible more accurate estimates of marketable reserves and the selection of the most desirable producing techniques.

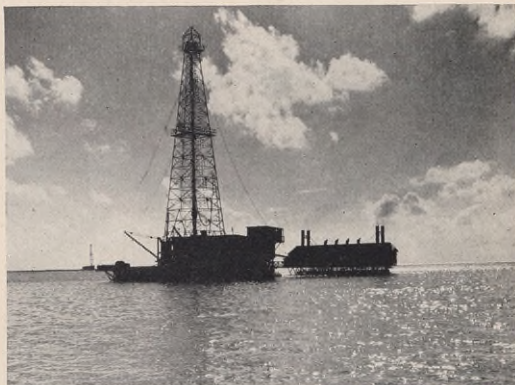
Corrosion of metal equipment has always been a problem in oil field operations. Much research effort has been directed toward a better understanding of the corrosion process, and these studies are leading to many successful techniques which may be employed.

The Texas Company has long recognized the importance of using scientific methods to search for, and produce, oil. The Company was among the first to use geophysical methods of prospecting for oil. Its own seismic exploration apparatus was developed in the early 1920's.

## RESEARCH BACKS UP FIELD WORK



**SURVEY TEAM** plots site of next shot-hole a reflection seismograph party will make. Shooting is repeated along a gridwork laid out at the surface



**IMPROVEMENTS OVER THE YEARS** in exploration techniques have directed the search for oil to deserts, mountains, and (above) water-covered areas

Today, Texaco maintains exploration and production research facilities at Bellaire, Texas, and Signal Hill, California.

At Bellaire, the Geophysical Research Laboratory designs geophysical apparatus and seeks to improve the technique of geophysical prospecting. The Producing Research Laboratory seeks ways to make more efficient recovery of oil and gas reserves.

At Signal Hill, research is being conducted on the control of drilling muds and related problems.

In the research laboratories of The Texas Company's Producing Department, as well as in research laboratories throughout the oil industry, problems in the field of physics, chemistry, and physical chemistry are being pursued with one aim in mind: to enable oil companies to make more efficient use of the nation's resources of oil and natural gas. **END**



# “Cat” Trick

## THE MAGIC OF MASS PRODUCTION APPLIED TO HIGH-OCTANE FUEL

Fluid catalytic cracking has been called as important to the oil industry as the assembly line is to the manufacture of automobiles.

Past issues of THE TEXACO STAR have often printed pictures of fluid catalytic cracking units such as the one you see at the bottom of the diagram to the right. Their giant size is representative of the impressive part these “cat crackers” play in modern refining.

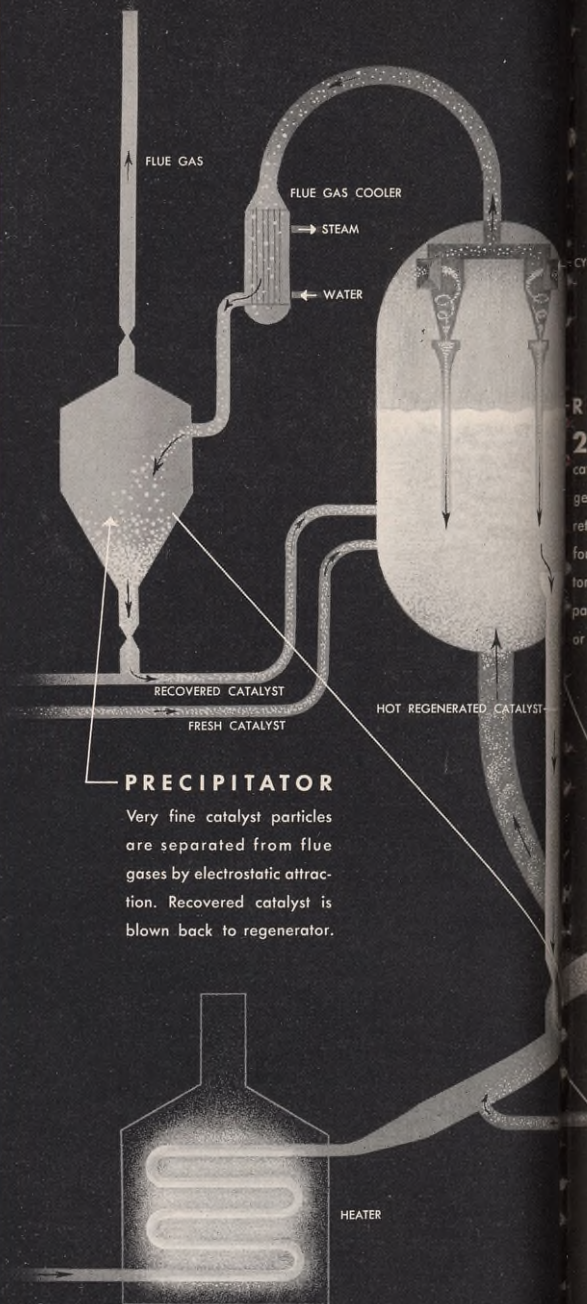
Without the base stock provided by a catalytic cracking process, it might have proved impossible to meet Air Force needs for high-octane aviation fuel during the last war. It might have proved impossible to do what the American petroleum industry did do: boost 100-octane aviation gasoline production, for example, from around 40,000 barrels a day in 1940 to a peak of 533,000 barrels a day of 100-octane or better by May of 1945.

Catalytic cracking has provided motorists with gasolines that possess better performance characteristics than ever before. A greater use of petroleum derivatives is now possible in the manufacture of such products as plastics, medicines, paints, and detergents.

Since an initial investment of \$50,000,000 in 1939, the oil industry has spent hundreds of millions of dollars on catalytic cracking equipment. During the war and the uneasy peace that has followed, the record has been one of dramatic progress.

To understand how catalytic cracking revolutionized refining technology, you have to remember that the thermal method was the customary cracking process in the middle 1930's.

Heat and pressure alone were relied on to break down or “crack” the molecules of the heavy hydrocarbon feed stock. This thermal cracking



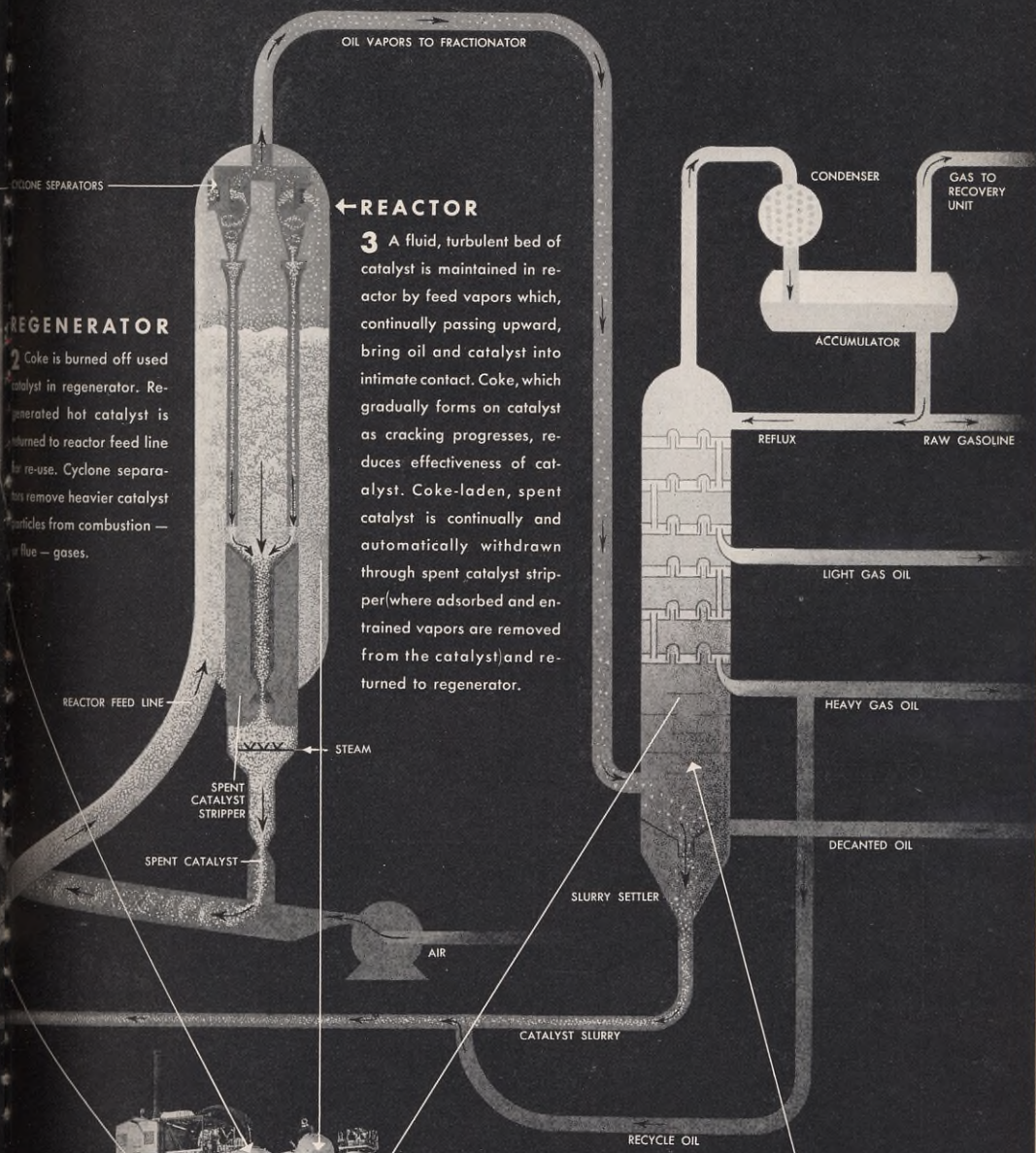
### PRECIPITATOR

Very fine catalyst particles are separated from flue gases by electrostatic attraction. Recovered catalyst is blown back to regenerator.

### OIL FEED

1 Preheated oil is charged to the reactor feed line where it picks up regenerated catalyst on way to the reactor.





## REGENERATOR

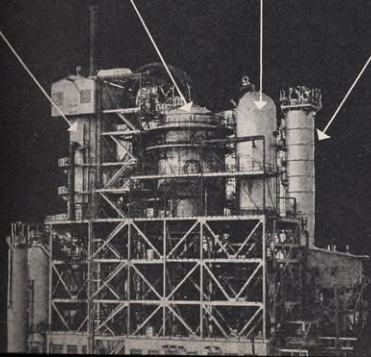
2 Coke is burned off used catalyst in regenerator. Regenerated hot catalyst is returned to reactor feed line for re-use. Cyclone separators remove heavier catalyst particles from combustion — flue — gases.

## ← REACTOR

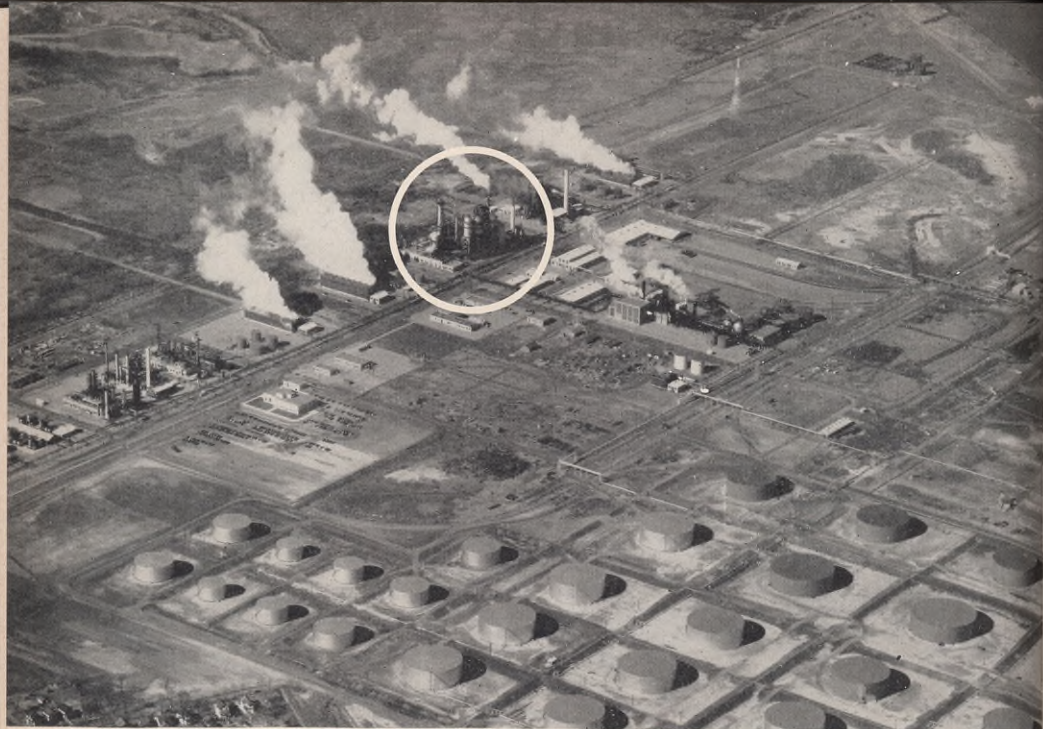
3 A fluid, turbulent bed of catalyst is maintained in reactor by feed vapors which, continually passing upward, bring oil and catalyst into intimate contact. Coke, which gradually forms on catalyst as cracking progresses, reduces effectiveness of catalyst. Coke-laden, spent catalyst is continually and automatically withdrawn through spent catalyst stripper (where adsorbed and entrained vapors are removed from the catalyst) and returned to regenerator.

## FRACTIONATOR

4 The vapor stream entering the fractionator passes upward through bubble plates of fractionator and is separated into different fractions.







THE CRACKING UNIT IS THE HEART of a modern refinery's "assembly line." This view shows position of the cat cracker (in circle) in single line of operating equipment at Eagle Point Works, our East Coast refinery

## CATALYTIC CRACKING HAS REVOLUTIONIZED REFINING TECHNOLOGY



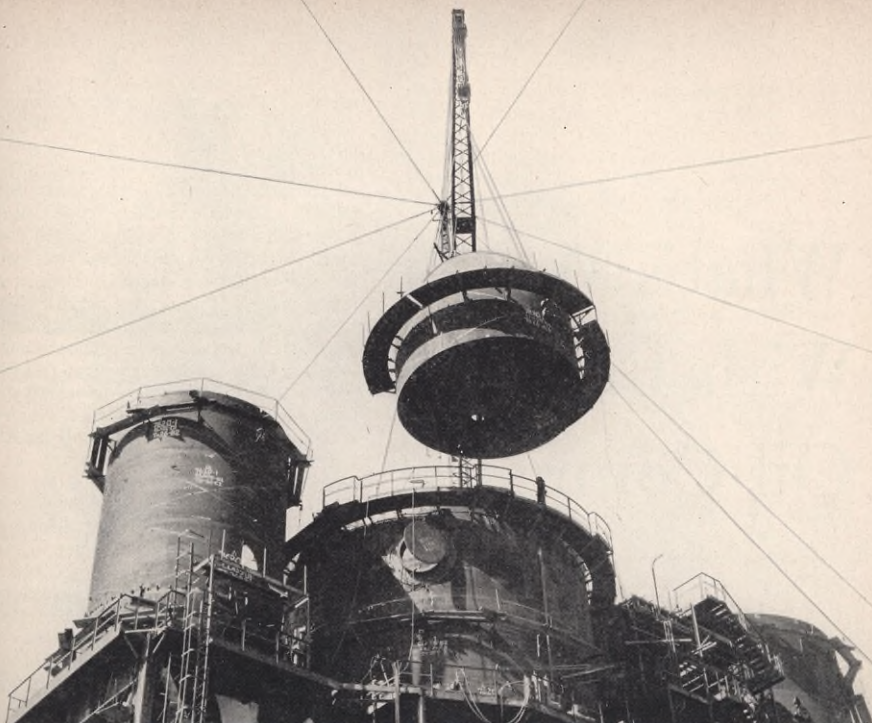
INSIDE THE CONTROL ROOM, dozens of automatic indicators keep the controlmen posted on how the unit is doing

process ran continuously for weeks at a time in contrast to the catalytic cracking process which runs continuously for many months at a time.

Catalytic cracking also relies on heat to break down heavier hydrocarbons into lighter fractions. The big difference lies in the use of a catalytic agent which accelerates the chemical change caused by temperature without itself being changed. It is possible through use of a catalyst to control the cracking and produce an increased yield of higher octane gasoline than from thermal cracking.

Houdrillow, Thermoform, and the Fluid processes are the three main types of catalytic cracking. Both the Houdrillow and Thermoform systems use a moving bed of catalyst pellets. In the Fluid process, catalyst is carried by feed vapor to the reactor and from the reactor to the regenerator by air.





GIANT "CRACKER BARREL," the reactor of the new unit at Lawrenceville Works, takes shape as the top head is hoisted into place. This fluid catalytic cracking unit, the eighth built by The Texas Company, is now on stream

Texaco has built Fluid process cat crackers at its Casper, Lockport, West Tulsa, Eagle Point, Los Angeles, and Port Arthur Works. A new unit recently started operation at Lawrenceville Works.

Daily charging capacity ranges from 6,000 barrels at Casper Works to 40,000 barrels to each of the two units at Port Arthur Works, the Company's oldest and largest refinery. Our units run continuously for about 11 months of the year. One month is usually reserved for testing and inspecting the equipment.

By looking at that diagram again you'll see that the catalyst's path is a continual cycle from reactor to regenerator to reactor. Throughout the cracking, the catalytic agent—a manufactured microsphere or ground particle so fine a fistful looks like chalk dust—is handled like a liquid. Texaco's cat crackers contain up to 700 tons of catalyst, and catalyst dust whirls through the pipes of Texaco units at a rate of up to 35 tons a minute.

Distillate oil is the feed stock used. After preheating, the feed stock enters a feed line where it mixes with red hot regenerated catalyst.

In the reactor, where temperature ranges from 870°F. to 970°F., the catalyst is kept turbulent by close contact with the feed stock vapor. This contact accelerates the action of the temperature in cracking feed stock molecules. Vapor continually rises to the top of the reactor where it passes to the fractionator.

During the cracking, the catalyst gradually becomes coke-laden. This reduces its effectiveness. Spent catalyst is continually and automatically withdrawn through a stripper where the hydrocarbon vapors are removed. Air then sweeps the catalyst to the regenerator.

Here the coke is burned from spent catalyst by a temperature controlled at about 1,100°F. Cyclone separators at the top of the regenerator catch heavier catalyst particles as flue gases pass to the precipitator. Very fine

particles are removed by electrostatic attraction in the precipitator and returned to the regenerator. Recovered catalyst and any amount of fresh catalyst that may be required are swept to the reactor feed line to begin another cycle.

Despite the size and complexity of equipment, relatively few men are required to operate a catalytic cracking unit.

In the control room, nerve center of the unit, the men on duty check dials, twist knobs, and channel the catalyst storm. Only a gentle, steady hum indicates the turmoil they create and confine.

Certainly catalytic cracking changed the tempo of the industry, and research may find other applications for the fluid technique in petroleum refining. The cat crackers at Texaco refineries, the same as those at other refineries throughout the industry, symbolize the industrial skill that is ever on guard to aid our country in time of peril and increase our comfort during peace. **END**



# What's Wrong With Being an Oil Company?

by Ernestine Adams

*Managing Editor, The Petroleum Engineer*

I'm getting tired of hearing about those "rich oil companies." I'm getting tired of hearing former Secretary of the Interior Harold Ickes talk about rich oil companies growing "merrily wealthier out of oil belonging to the whole people," and tired of Columnist Drew Pearson shuddering piously every time he mentions an oil company or an oil man. I'm getting tired of the implication that for an oil company to exist is an affront, and for one to be rich is sinful.

Will someone tell me what is wrong with being an oil company or with an oil company's being rich? How long do you think an oil company would last if it didn't handle a lot of money? It takes barrels of the stuff just to keep a company going.

And who is going to find and produce and process oil if not the oil companies? The Socialist answer is—the Government, but no government yet has been able to build a successful oil industry although lots of them have tried. The Soviet government, for instance, has the greatest potential oil resources in the world, and it runs its own industry as you have probably heard. Do you know how much gasoline you would get for your car if all our cars were in Russia and you got a full share of all that was made? You would get less than five gallons a year! That's a *year*—not a week or a month. Now how would you like that? Actually you wouldn't get a gallon because it is all reserved for government and the war machine. In the United States you buy on the average nearly 700 gallons of gas a year for your car and there is no shortage to stop you.

Where do the oil companies get their money? Out of the earth? Oh, no. That's where a lot of people make a

mistake. Oil brings wealth only as it is transformed into useful goods. The oil companies get their money right out of your pockets. They coax it out of you with the biggest bargains on the face of the earth. You can have all the gasoline you want and at the world's lowest prices. You can have varnish and insect spray, synthetic rubber and machine oil, nail polish and floor wax. You can have gas in your house and your factory, and if the pipe line doesn't connect you can have liquid gas in tins to hook on your stove or refrigerator.

You get some products you didn't even know had petroleum in them. It is in your soap and detergents (oh, wonderful oil companies that thought up detergents!). It is in your nylons to prevent runs, in your lipstick to keep it moist, in covers of your books to prevent cracking, in your raincoat, your shoes, your medicine, your paper lamp shade, your roof—on and on and on you can go.

In fact, let's face it—you pay the oil companies billions of dollars a year—about \$7 billion last year—for all kinds of things that make it easier to live.

And what do these bloated capitalists do with those buckets of greenbacks, you'd like to know. First they have almost 2,000,000 employees who get the biggest dip into the kitty. Employees get paid better than most, which is as it should be because a lot of them have to have a technical or scientific education and years of specialized training. There aren't many strikes, you'll notice, and the rare ones they have are in the refining industry. In the drilling end things are free and easy. If you go broke drilling dry holes, you may be working for your driller next year. Plenty of roughnecks or roustabouts think they'll have a rig of their own one day, and a good many of the high moguls in the industry who look as though they never saw a shovel have dug many a slush pit in their day.

These big wheels get big pay—about on the level with other industries, except that there are more of them. There aren't many automobile companies, for instance, but there are a bunch of big oil companies and thousands of little ones. The Oil Industry Information Committee says there are 36,000 companies in the industry.

Well, to get on with it, they've got some billions left after paying the help, so they give Uncle Sam his—which means a few more billions. The oil industry pays the biggest tax bill of any industry. In fact, some \$3½ billion a year goes for Federal, state, and local taxes levied on the oil industry and its products. This is about seven per cent of all taxes paid.

Yet President Truman calls this "gross under-taxation" and all the "gimmie" boys chime in. What do they want? A crippled industry that has to be propped up by Government subsidies?

If a profit is made—it isn't always—the stockholders get theirs. Since you customers are so steady now, the dividends over the years average up about like preferred bonds. This takes care of several millions more people who have their hands—or money, that is—in the oil business.



## THEY DRILL ANY PLACE

With the billions that are left the oil company does as fast a job of getting ahead as you're likely to find. The companies drill holes any place that looks as if it might have oil. They drill as deep as four miles, they drill in the desert, in the jungle, in the ocean; the derrick may be standing in sticky waves of heat or may be covered with thick ice. They drill where savage tribes

## THE OIL INDUSTRY HAS BEEN A SILENT WHIP- PING BOY FOR IMAGINED ILLS LONG ENOUGH

have wrecked the rig, and where a plane has to bring in the machinery. They got no sense at all. Oil is where you find it, they say. They spend buckets of money. They spend a million and a half sometimes for one hole and get no oil, either. They spend millions just to find out where to put the drill down. They pay some more millions to a million or so other people for the privilege of using their land to drill on. If the drill hits an oil sand, they give the owner of the land a proportionate share of the oil they find.

And what if the oil is next door to the end of the world with no customers in sight? They build a pipe line to the sea or to a refinery, which they also have to build, then build a harbor so the tankers they build or buy can take the oil to you customers. They have to put up a lot of cash before you drive into a filling station and say, "Fill 'er up." It may be a year or two before the money begins coming back. It may be 10 years. It may be never.

## THEY MAKE ANYTHING

Of course, you have no use for that black crude oil, and so the refining comes in. This process takes tons of crude oil and separates the molecules, then pieces them together to give them a new look. There are plants that do one thing—like separate gasoline from gas, and plants that do dozens of things. There are plants that make powdered sulphur out of gas and plants that only process materials for other plants that make dyes, plastics, explosives, or drugs. There are plants that take out certain wanted hydrocarbons and put the dry gas back in the oil formation to bring up more hydrocarbons, like a dumbwaiter.

A refinery is always expanding, renovating, adding,

experimenting, and revising. It has to keep ahead of you customers—it has to provide more gasoline in the Summer and more fuel in Winter from the same spot and with the same crude oil. The inventions in this line come so fast and furious that you stay in there pitching or go broke. So the oil companies part with a few more billions because they have to keep up. They have to make the best petroleum products possible and make them at such low cost that you can't resist putting out your money.

The companies also hire some of the top scientists to study how methods in the industry can be improved and how better products can be made. They have to have big laboratories and smart technical staffs. They have laboratories that work only on agricultural uses of petroleum and laboratories that test a hundred uses of petroleum in everything from paints to pavements. *They spend about one fourth what all United States industry spends on research.*

Since the war, the oil industry has spent \$12 billion making improvements and expanding facilities. In the United States, the oil industry now has an investment of \$32 billion, or \$200 for each man, woman, and child in the nation.

Do they expect to make this towering investment pay? In time, yes. And then what will they do with the buckets of dough they will make, these rich oil companies?

## WHAT THEY'LL DO

What they've been doing all along.

*Drill more wells and find more oil so we won't run short in peace or war.*

*Build bigger and longer pipe lines from fields to refineries and from refineries to customers so the supply is always available.*

*Construct better refineries to make fancier products that will fill more needs in your life.*

So you see why I'm tired of hearing about rich oil companies. The people are getting the people's oil and gas resources—more people are getting more than under any other plan ever devised. Several millions of persons are getting benefits from oil and gas operations in wages and salaries, dividends and royalties, pensions and contracts, profits on sales and commissions.

Everyone in the United States benefits from the use of low-cost petroleum products—a use that has launched and shaped our modern life.

The whole world benefits from the fact that oil resources grow in the hands of free enterprise and stagnate under the thumb of government monopoly. The whole huge Communist world has about nine per cent of the world's production of oil—the free world has 91 per cent, all developed by individual capitalist oil companies, which spend to good effect the riches we pay them for their goods.

So let's give the oil companies their due and admit they provide us the best service ever given on developing oil and gas reserves and transforming them into useful and vital products. Their service cost is low, too, come to think of it. **END**





## NEARLY HALF A CENTURY OF SERVICE

After 46 years of service to The Texas Company, Burt E. Hull has retired. Mr. Hull (above), the Vice President who was with the Company longer than any other employee, came to work in 1905 as a Junior Engineer on the extension of the original Texaco pipe line from Sour Lake to Humble. In the years since then, his brilliant record of achievement, his wit, and his colorful personality have earned Burt Hull the warm friendship and respect of people throughout the entire industry.

His most recent and most spectacular achievement was the building of the 1,068-mile trans-Arabian pipe line (see *THE TEXACO STAR*, Winter, 1951), which began pumping crude oil from Saudi Arabia to the Mediterranean last Fall. During World War II, as vice president and general manager of War Emergency Pipe Lines, Inc., Mr. Hull supervised construction of the "Big Inch" and "Little Inch" lines from Texas to the East Coast.

Although Burt Hull's career is so closely identified with pipe lines that he is sometimes called "Mr. Pipeline," his Texaco service also embraced almost every phase of Company operations. In 1907, he was an Engineer at West Dallas Works. Later, he worked at Port Arthur as Junior Construction Engineer. He became Chief Engineer of the Refining Department in 1909 in Houston, and supervised the design and construction of various refineries and many of our Gulf Coast and Atlantic Coast terminals.

In 1922, Mr. Hull went to Tampico as Vice President and General Manager of The Texas Company of Mexico, in charge of producing, refining, pipe line, marine, and sales operations. He

returned to Houston four years later to become President and Manager of The Texas Pipe Line Company and of three of our associated pipe line companies.

He was elected Director and President of the Trans-Arabian Pipe Line Company in 1946, and, the following year, he became a Vice President of The Texas Company.

One of Burt Hull's outstanding characteristics is his vivid memory for people and facts. His memoirs would make a fascinating story, spanning almost the entire existence of The Texas Company. But whether he writes them or not, people in the oil industry will be remembering Burt Hull's achievements for a long time to come.

### TEXACO AND THE ECA

A Certificate of Cooperation "for furnishing technical assistance to the peoples of the Marshall Plan countries to aid them in maintaining individual liberty, free institutions, and peace" has been awarded to The Texas Company by the Economic Cooperation Administration. Without the assistance of The Texas Company and other companies, ECA Administrator William C. Foster has stated, the Marshall Plan Technical Assistance Program could never have been carried out.

### IN THE TOP TEN

A survey of the portfolios of over 160 investment trusts and mutual funds has revealed that Texaco stock is one of the ten most numerous stocks among those held by such groups. Four other oil companies are also in the first ten.

### IN BRIEF

In 1947, The Texas Company became a billion-dollar corporation. This year, we have passed the billion-and-a-half mark. Total assets of the Company on June 1 were \$1,538,897,132.00.... Texaco has signed contracts to sponsor the Metropolitan Opera broadcasts again during the coming season. This will be our 12th year as sponsor of these Saturday afternoon broadcasts.

THERE'S NO CASH REGISTER at a G. I. service station. Army mechanics, like Texaco dealers, know that it pays to take good care of a vehicle. Here, at Aberdeen Proving Grounds in Maryland, mechanics are servicing tanks under conditions similar to those encountered in combat zones. The two mechanics in the foreground are about to use motorized pressure greasing outfits on an M-46. In the distance, an armored tank retriever tows in a disabled tank.



When the International Council of Industrial Editors made its annual awards to house magazines this year, Texaco was the only oil company that received five awards for five separate publications. *THE TEXACO STAR* received a "Highest Award" (above), as did *The Texaco Dealer* and *Texaco Town Talk*, a customer magazine. *Texaco Topics*, the employee magazine, and *Lubrication*, edited by our Technical and Research Division, received "Honorable Mention"



These are some of the employees who gave blood several weeks ago when an American Red Cross Bloodmobile Unit was set up in a room in our New York offices. A total of 450 employees made contributions to Texaco's New York Blood Bank, in order to supply blood for our troops in Korea and to build up a reserve for local use. The recruiting drive for donors was made by The Texaco Circle, an organization of employees in the New York Offices, which was formed 15 years ago







## ANOTHER SHOT HEARD ROUND THE WORLD

This is a shot-hole explosion, set off by one of our seismograph crews in their search for oil-bearing formations. It's not a very big explosion in these days of blockbusters and atomic bombs. But its reverberations will be felt in many places far away from this lonely field.

The Government has asked the petroleum industry to increase domestic productive capacity by hundreds of thousands of barrels a day. Texaco is responding to that request by carrying on more exploration work than it has ever done before. Our Producing Department budget is nearly half again as high as it was last year. Already this year, our rate of domestic production has broken all records in the Company's history.

This shot-hole explosion may help us find another source of oil—or it may lead to nothing. But it's dynamic proof that we're using every possible means to increase our supplies of the precious fuel that America and the free nations of the world must have in order to defend themselves against aggression.

