

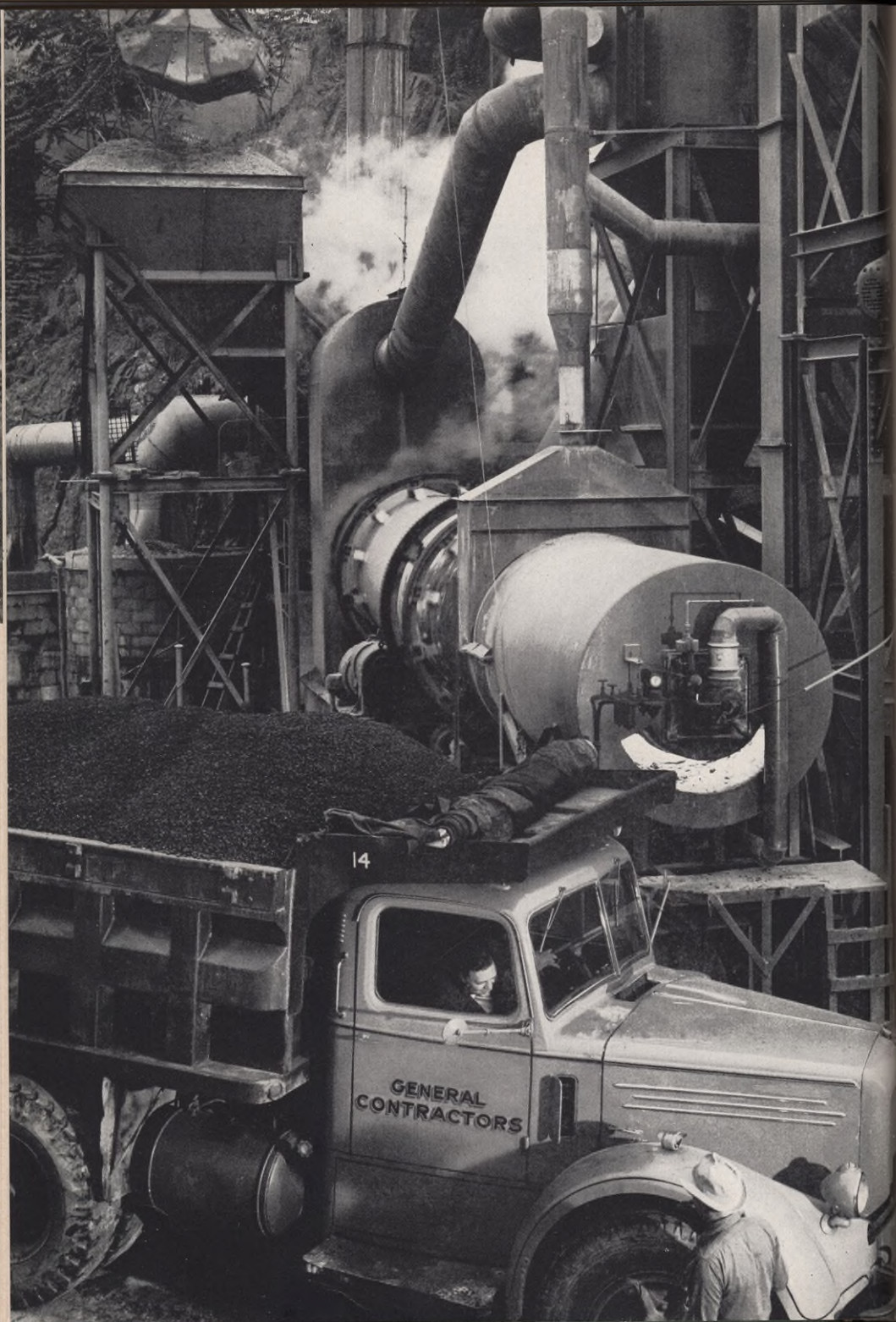
FALL 1951

THE TEXACO STAR



BETTER ROADS

FEWER
TRAFFIC JAMS



THE TEXACO STAR

FALL 1951

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The automobile made the horse get out of the way, created the need for roads that would carry two-way traffic. Since early 1900's, many roads like the one above have been widened and resurfaced with asphalt

TRAFFIC: A MAJOR COMMUNITY PROBLEM

There were traffic jams long before the last, faint echoes of "Get a horse!" were lost in the crescendo of horseless carriages whirling along the nation's highways. But it has taken the more than 50 million cars, trucks, and buses that now make up America's automotive rolling stock—in combination with roadways that in many instances were originally intended to carry far less of a traffic load—to produce the kind of snarl-up, for example, that is pictured on Page 10 of this issue. As the article beginning on Page 11 points out, better use of highway revenues will help solve traffic congestion.

Fortunately, there is a bright side of the picture. Earnest endeavors to find answers to the traffic problem are being made all over the country. THE TEXACO STAR takes this opportunity to commend communities such as Evansville, Indiana, that are resolutely striving to reduce the toll of traffic in terms of time, money, and lives.

Many communities have found that when solving the traffic problem calls for highway construction, resurfacing, or maintenance, it pays to put traffic on asphalt. The article beginning on Page 14 tells why.

A PUBLICATION OF THE TEXAS COMPANY FOR STOCKHOLDERS AND EMPLOYEES

W. S. S. RODGERS, Chairman of the Board of Directors; HARRY T. KLEIN, President; J. S. LEACH and A. C. LONG, Executive Vice Presidents; R. F. BAKER, G. R. BRYANT, M. HALPERN, L. H. LINDEMAN, R. L. SAUNDERS, TORREY H. WEBB, and J. T. WOOD, JR., Vice Presidents; OSCAR JOHN DORWIN, General Counsel; W. G. ELICKER, Secretary; ROBERT FISHER, Treasurer; ERNEST C. BREEDING, Comptroller, 135 East 42nd Street, New York 17, New York. . . . Published by the Industrial and Public Relations Department; Philip C. Humphrey, Manager, Public Relations; Wilfred B. Talmán, Editor, Company Publications Division; J. Lawrence Fishon, Assistant Editor; Ellis Prudden, Donald L. Tulsien, and Lawrence Heyl, Jr., Associate Editors.

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CREDITS: Covers—front, O. Winston Link, George Giusti; Inside, Link; back, Giusti. Pages—1, Culver Service; 2, Link; 3, 5, Continental Illinois Bank; 4, 6, 7, Link; 8-9, Tracy Sugarman, Texas Petroleum Company; 10, Ewing Galloway; 11, Philip Gendreau; 12-13, A. F. Sozio from Gendreau, Culver; 14-15, Link, David W. Corson from Devaney; 16-17, Link, J. J. Smith, Culver; 18, Freeport Sulphur Company, Bela Dankowsky; 19, Link (for Freeport Sulphur); 20, Richard Erdos; 22-23, American Petroleum Institute. This issue was designed by Tobias Moss and Ariosto Nardozzi.

THE COVER: The Delaware River Bridge, linking Philadelphia, Pa., and Camden, N. J., is the most heavily traveled Texaco Asphalt pavement in the country. Both Texaco Asphaltic Concrete and Texaco Sheet Asphalt have been constructed on different sections of the bridge. Week-end traffic on this bridge has exceeded 270,000 vehicles, many of them trucks and buses.

ONE FOR THE ROAD that will help, not hinder, driving. The 19 tons of asphalt pavement mix in this truck—filled at a Texaco-supplied plant—consist of 7 or 8 per cent of hot Texaco Asphalt Cement combined with stone and sand

BANKING

AROUND THE CLOCK, AROUND THE WORLD BANKING SERVES INDUSTRY AND HOME

by WALTER J. CUMMINGS

*Chairman, Continental Illinois National Bank and
Trust Company of Chicago
Director, The Texas Company*

In the early days of The Texas Company, I am told, cashiers were accustomed to carrying sums of \$50,000 or so through the streets, and cash pay rolls were often shipped by express.

Those methods of transferring the Company's funds seem as primitive now as the horse-drawn tank wagons that used to deliver Texaco products. Today, virtually all of Texaco's money is moved by means of bank checks.

The banking industry operates a money distribution system as modern, as far-reaching, and as efficient as the vast system of pipe lines, barges, trucks, and tank cars that deliver Texaco products across the nation.

Through the use of checks amounting to hundreds of millions of dollars a day, the 15,000 banks of the nation clear more than 90 per cent of all trade payments. Banks perform many other services for industry, as well. They lend money, they handle details of stock issues, they make investments in securities, they furnish credit information, they collect drafts, they administer pension plans, they issue letters of credit for foreign trade, they serve as trustees for bond issues. As administrators of estates and individual trust accounts, banks also have in their custody large amounts of shares of industrial stocks.

Not all banks provide all these services. But they all have facilities for moving funds from place to place—the one banking service above all others that is essential to the efficient day-to-day functioning of companies like The Texas Company that operate at thousands of points throughout America and overseas.

The money that is paid to The Texas Company for its products is just so much paper until it has been transferred by check from cities and towns all over the country into the Company's general cash funds. The banking industry provides the facilities that enable Texaco to transfer its sales receipts speedily and safely and to move those funds into the general cash accounts, from which they are subsequently paid out in the form of wages, dividends, royalties, rentals; Federal, state, and



BANKING'S "PROMISES ON PAPER"—processed on these check-proofing machines,—pay for everything from here to eternity

IN THE COMMERCIAL BANKING DEPARTMENT of a modern bank, customers discuss their banking requirements with well-informed officers

Touches the Lives of All of Us





THE CARE OF STOCKS IS AN IMPORTANT PART OF BANKING

Although The Texas Company in New York acts as its own transfer agent, the Continental Illinois Bank acts as a co-transfer agent. (Above) Girls at Continental Illinois Bank enter names of new shareholders on Texaco stock certificates following transaction on Midwest Stock Exchange. (Below) Texaco certificates are stored in the bank's vault.



municipal government taxes; exploration and drilling expenditures, research costs, transportation charges, and payments for all the other items in the Company budget.

Companies and banks are constantly working together to develop more efficient ways of converting sales receipts into usable funds. The Texas Company's own method is an excellent example of a banking plan that saves considerable time and money. In brief, this is the way the Texaco plan operates:

When a local consignee or agent receives payment for a shipment of Texaco products, he makes a deposit of the funds into an account that The Texas Company maintains at his local bank. He then writes a form of check known as a "transfer check," which he mails to one of 36 subconcentration centers or directly to one of the Company's 15 Division Office bank accounts. The transfer check is cleared back to the local bank by the subconcentration bank in two days or so and is paid out of the funds previously deposited by the consignee or agent. Excess funds, above required balances, are drawn from the subconcentration centers and are then transferred into 15 Division Office accounts for use by the Sales Department offices for operating expenses. Surplus funds in excess of these requirements are then sent to The Texas Company's General Bank Accounts located in New York, Chicago, Los Angeles, and Houston. The amount of Company funds handled in this manner exceeds \$3,000,000 per working day.

The Continental Illinois National Bank and Trust Company of Chicago furnishes an example of how large the job of handling checks can be. It processes more than half-a-million checks every 24 hours. Messengers go back and forth between bank and post office day and night, carrying shipments of checks.

In the bank, checks have to be balanced with the totals on the deposit tickets, sorted down to the bank on which they are drawn, and then collected before the funds can be used by the depositor. Checks drawn on out-of-town banks are photographed and returned to these banks by the fastest means of transportation available. Checks on banks in Chicago are sent to the Chicago clearing house for settling up. The Continental Illinois Bank, the same as other member banks of the Federal Reserve System, uses facilities offered by the Federal Reserve System to clear many checks of other member banks outside Chicago. This is done by clearing and collecting checks through the Reserve accounts of member banks.

Everything possible is done to convert checks quickly into usable cash. Money that is tied up in uncollected checks is of no more use than oil standing in a storage tank. It's the banking industry's job to keep it moving rapidly, safely, and in an orderly fashion.

The raw material of the banking industry consists

(Continued on Page 6)

ABOUT THE AUTHOR



WALTER J. CUMMINGS

Walter J. Cummings, author of the accompanying article, is one of five major banking officials who serve on Texaco's Board of Directors. Since 1934, Mr. Cummings has been Board Chairman of the Continental Illinois National Bank and Trust Company of Chicago. Under his guidance, the bank has grown until it now has one of the strongest capital structures of any of our major financial institutions.

The largest bank in the Midwest and one of the largest in the world, it employs a staff of 3,000, serves hundreds of thousands of customers in our 48 states and every financially important city abroad, and tallies resources of some \$2,500,000,000. Its Trust Department has substantial holdings of Texaco stock in various fiduciary capacities.

Though Mr. Cummings serves on the boards of several important companies, he contributes his time and ability to many civic affairs throughout the nation. During the depression and at the height of the banking crisis, he was called to Washington and served as executive assistant to the Secretary of the Treasury. He was first chairman of the Federal Deposit Insurance Corporation and was largely responsible for the reopening of many banks which had closed.

Texaco's other Board members who are also bank officials are:

G. N. Aldredge, Chairman, Executive Committee, First National Bank in Dallas; W. S. Gray, Board Chairman, The Hanover Bank, New York; C. L. McCune, President, The Union National Bank of Pittsburgh; and L. J. Norris, Board Chairman, State Bank of St. Charles, Illinois.

BANKS BOLSTER COMMUNITY WELFARE

(Continued from Page 5)

of deposits. These deposits come from business firms, from individuals, from the Federal, state, and municipal governments. Total bank deposits throughout the United States run to more than \$160,000,000,000.

Some deposit funds are held by the banks as cash to take care of daily transactions. A substantial portion of them is placed as a legally required reserve with other banks or with Federal Reserve Banks. These reserve funds produce no income. The remainder of the deposit funds are invested in loans, and in United States Government, state, and municipal securities. It is primarily the interest from these loans and securities that enables banks to make a fair profit for their stockholders, after paying salaries, interest, taxes, and other operating expenses.

Banks make loans of all amounts, from hundreds of dollars to millions. There are legal limits that each bank must observe for any one borrower. For national banks, it is the equivalent of 10 per cent of the bank's combined capital and surplus. Over the years, banks have lent hundreds of millions of dollars to oil companies to help them finance rehabilitation and expansion programs. Whatever the purpose of a loan, banks always try to see that it contributes to the welfare of the borrower and the community and that it conforms to

principles of prudent lending. As trustee of a depositor's money, a banker must exercise great care in safeguarding the money.

When a company issues stock, the trust department of a bank may play an important rôle as transfer agent, registrar, or, in the case of some companies, dividend disbursing agent. As transfer agent, the bank issues certificates for the shares of stock, and replaces old certificates with new ones whenever there is a change in ownership. As registrar, the bank determines that at no time is more stock issued than has been authorized.

Often, a company like The Texas Company will have funds that it wishes to invest in short-term securities. All the details of United States Government, or state, or municipal securities transactions can be handled for such a company directly and speedily by the experienced staff that supervises the bank's own investments. For those individuals and companies, moreover, that prefer not to hold the actual certificates for their securities, banks offer a safekeeping service that relieves them of all details and risk of loss of the certificates, and yet makes the securities subject to whatever action the owner wishes at any time.

Most banks offer the same basic services, and there is naturally a great deal of competition among them. Each bank is continually seeking ways to improve its present services or add new services to meet the changing needs of its customers. But, at the same time, the banking industry is a highly coöperative one. Through the correspondent banking system, small banks have accounts with larger banks. The larger bank—the city correspondent—helps the smaller one with the collection of checks, notes, and drafts. It also helps with investments in Government securities, and will safekeep these securities for the small bank to eliminate shipping and handling costs. It shares a loan with the small bank when the latter has a borrower who needs more money than the small bank can legally lend him.

In short, the small bank has at its command all the facilities of the larger bank. It is this close coordination through the correspondent banking system that has enabled our banking industry to care for the financial needs of people and business firms at any time and place. And it is perhaps significant of the banking industry's broad sense of responsibility to the public to note that banks provide the same services and facilities for any individual and any organization, small or large.

Just as the oil industry is constantly developing faster, more efficient ways to distribute its products, the banking industry is finding new and better ways to transfer funds. Recently, a private teleprinter network was set up to link nearly 200 banks in 54 cities across the



IN THE WIRE ROOM, these employees send and receive messages on a special "Bank Wire"

country. Fast, accurate, and confidential, this network, known as the "Bank Wire," enables funds to be transferred from city to city within a matter of minutes, or merely as long as it takes the teleprinter operator at one bank to type out a message to the operator at another bank hundreds or thousands of miles away. The Bank Wire also is used for making reports on payment or non-payment of notes and drafts; for transmitting credit information and stop-payment orders; for making adjustments of irregularities in documents presented for payment; and for sending many other items of information necessary to speedy, efficient banking operations. It is the largest and most modern private wire system of its kind in the world, and the latest in the long series of services that have been instituted by banks to keep the lifeblood of our economy in constant motion.

Recently, I was interested to read a letter that illustrates how The Texas Company pioneered in making use of banking services. Written in March, 1908, by George M. Craig, president of The First National Bank of Port Arthur, Texas, the letter, which was addressed to one of the Company's officers, said in part: "I am pleased to inform you that since the adoption of the check system by your Company . . . in meeting your pay roll twice a month . . . the result has been far greater than anticipated. Where it formerly required from twenty to thirty thousand dollars semi-monthly, the amount now required is insignificant. . . . We have only

shipped in currency once since October. Your employees are learning to pay their bills by check, and a large number of them have opened bank accounts for the first time. We believe it is helping them to save money. We believe this explanation is due you from the fact that we were so persistent in urging this system. . . . We have heard no complaint, but on the contrary many of them have praised the new order of things. We believe that corporations have heretofore made a mistake by thinking they were meeting the wishes of their employees by paying them cash. . . . We, therefore, desire to thank you for the part your Company did in helping us bring around the present condition of affairs."

Texaco pay rolls have increased many times since that letter was written. And as The Texas Company has grown, the banking industry has provided it with more and more services that enable the Company to handle its funds efficiently, speedily, and economically.

Industry and the banking fraternity have worked hand and hand in this country since its beginning and both have grown and provided jobs for more and more people. So long as both continue to contribute sound ideas which will help all of us, so long will our system of free enterprise—on which our tremendous progress has been built—continue to survive. **END**

TEXACO'S J. M. DOSS, Assistant Manager of the Central Territory, Domestic Sales, obtains credit information from Fred W. Naber, vice president in charge of the group at the Continental Illinois Bank that handles The Texas Company account



Foreign Petroleum Operations:

WHAT THEY MEAN TO THE U.S.A.

by A. C. LONG

Executive Vice President, The Texas Company

Although Americans have traditionally been isolationists at heart, most people in this country have come to realize in the last 10 years that we cannot enjoy a secure and lasting peace unless we have strong friends abroad. The billions that we are now spending on foreign military and economic aid offer vivid proof of America's growing awareness of the soundness of this principle.

But good foreign relations go far beyond supplying arms and granting economic aid to countries that we wish to keep on our side. A nation cannot buy friends any more than a person can. Nor can America win friends abroad merely by talking about the benefits of the American way of life.

The true basis for a sound foreign relations policy, as many Americans are fast beginning to realize, is profitable foreign trade—trade that helps our friends abroad make the most of their natural resources and special skills, exchanges our products for theirs, brings them the benefits of our technological and managerial skills, shows the other nations of the world that we are decent people.

The oil industry has the most extensive foreign operations of any American industry. At the end of last year, American oil companies were operating in virtually every country outside the Iron Curtain, with a total investment of nearly four billion dollars. The oil industry



has long experience abroad. Its operations are diverse, with activities that include not only exploration, drilling, producing, refining, transportation, and marketing, but also the building of houses, roads, railroads, communications networks, hospitals, water and sewage systems, schools, and churches.

Oil wins friends abroad

In short, the oil industry is in a unique position to make friends abroad for our country. In recent years, American oil companies have achieved an outstanding record of good relations with the peoples of many foreign countries, and we can do even better in the crucial years ahead.

Not many years ago, Americans who did business abroad were too apt to take the attitude expressed by

American oil companies operate extensively in South America. Well at right is one drilled in Colombia by the Texas Petroleum Company, a subsidiary wholly owned by Texaco

such a remark as, "Well, this is the way we do it back home. There's no reason why you people can't do it that way here." There are not many American oilmen abroad who use that approach now. We've learned, often through painful experience, that what works at home might not be at all acceptable abroad. We've learned that we can't live with people and expect them to cooperate with us if we ignore the customs, traditions, and ideas that are important to them—strange and illogical as those customs might sometimes appear to us. American employees who are going to work in Saudi Arabia, for example, are now given a six-week course in Arab language and culture before they even enter the country.

Instead of trying to impose American ideas on foreign peoples, we have realized that it is essential to see their point of view and to take it into consideration. Sometimes, we even find that their ways of doing certain things are better than our own.

... improves standard of living

This mature attitude on the part of American oil companies is one of the chief reasons why our industry has made, and will continue to make, friends for the United States. Of course, the greatest contribution that American oil companies have made to our foreign relations has been to enable people in certain foreign countries to achieve a higher standard of living.

Probably the most significant recent example of this has occurred in Saudi Arabia. Eighteen years ago, when Americans began operations there, the country had made little industrial progress in literally hundreds of years. Today, Saudi Arabia has water development projects, agricultural projects, a railroad, airfields, roads, port facilities—all made possible by the increased revenue that the Saudi Arab government receives from oil royalties. This ancient country now also has a new kind of citizen—the middle-class businessman who operates



Desert sands that cover oil riches yield a bounty of food when irrigated and tilled with machinery introduced by oil companies

such enterprises as ice plants, taxi companies, service stations, power plants, construction companies, and brick factories. Arab employees of the Arabian American Oil Company, moreover, have been given broad opportunities to learn every phase of petroleum operations.

To prevent the spread of disease in Saudi Arabia, American technical experts, working in close cooperation with the local government, have achieved remarkable results. In two years, the number of malaria cases annually reported in Eastern Saudi Arabia dropped from over 2,000 to only 94.

In addition to the foreign countries that have oil-producing areas, there are many countries in Western Europe that have also benefited materially from American oil operations. Refineries, terminals, and transportation facilities built in France, Holland, and elsewhere in Europe by American oil companies have played a significant part in the recovery of those countries since World War II.

It is by such means as these that the American oil industry contributes to the development of friendly relations between the free nations of the world.

... and returns benefits to America

Apart from the good will that oil companies have earned for America, our foreign operations have brought this country many tangible, measurable benefits. The countries where we operate have become important markets for American machinery, building materials, clothing, food, and countless other items. Foreign oil produced by American companies was a pivotal factor in winning World War II. It has helped us conserve our domestic reserves, and, in the last three years, it has made up the deficiency between our domestic supply and our growing demand. During the first half of this year, our imports averaged 900,000 barrels a day of the

(Continued on Page 24)





We're
in

a
JAM!

BETTER USE OF HIGHWAY REVENUES WILL HELP SOLVE TRAFFIC CONGESTION

America's highway system daily bears 80 per cent of all interstate passenger travel. It rushes 90 per cent of all food to market. It conveys more than 50 per cent of all workers to their jobs. And it delivers 75 per cent of all general freight.

It is vital to the worker, the farmer, the consumer, the merchant, the traveler, and the family. It is imperative for education, public health, recreation, and the United States Postal Service. No other system of transportation has ever paralleled the 30 billion dollar annual business that rides America's highways.

To carry this nation's great traffic load of more than 50 million automobiles, trucks, and buses without disastrous congestion, an adequate system of highways is of vital importance. However, despite all of the taxes which have been collected and spent for highway purposes, the nation's highway system is far from perfect.

No one who is familiar with the congestion which frequently occurs, particularly on week ends, on many of our principal highways and streets can be unaware of the need for additional through highways and highway approaches to our larger cities.

The highway problem has always been a matter of great concern to the oil industry. The oil industry has always recognized that highway improvements must keep pace with the constant increase in the number of automotive vehicles in the country. It has always been

a vigorous advocate of what it believes to be the right approach to the solution of the highway problem and has vigorously opposed moves which it believes inimical to the best interest of the public.


For example, the oil industry has always taken a strong stand in opposition to the diversion of highway revenues to non-highway purposes and the dispersion of those revenues to the less traveled local streets and roads. It has endeavored to improve the administration of highway funds and eliminate waste. It has urged that factual and reliable surveys of our highways be made. At the same time, it has advocated that gasoline taxes and other special taxes on highway users not be increased beyond the point necessary to provide adequate highway systems.

The petroleum industry believes that the chief emphasis in any highway building program should be placed upon those roads which carry the great bulk of the highway traffic. It believes the trend toward the dispersion of highway user revenues from arterial highways, where the traffic is heaviest and improvements needed most, to local rural roads and streets, where traffic is lightest and improvements needed least, is unsound.

The mere expenditure of money—however large the

PARKING IN THE SKY and centralized bus-drome at New York City's new terminal relieve business district of 15.2 miles of creeping traffic-snarl. More off-street parking space is needed in cities





MODERN ENGINEERING ELIMINATES TIE-UPS

amount—will not of itself produce adequate road values. Sound policies of planning, engineering, and administration must be assured before the motor-taxpayers' contributions can begin to produce a proportionate return in better roads.

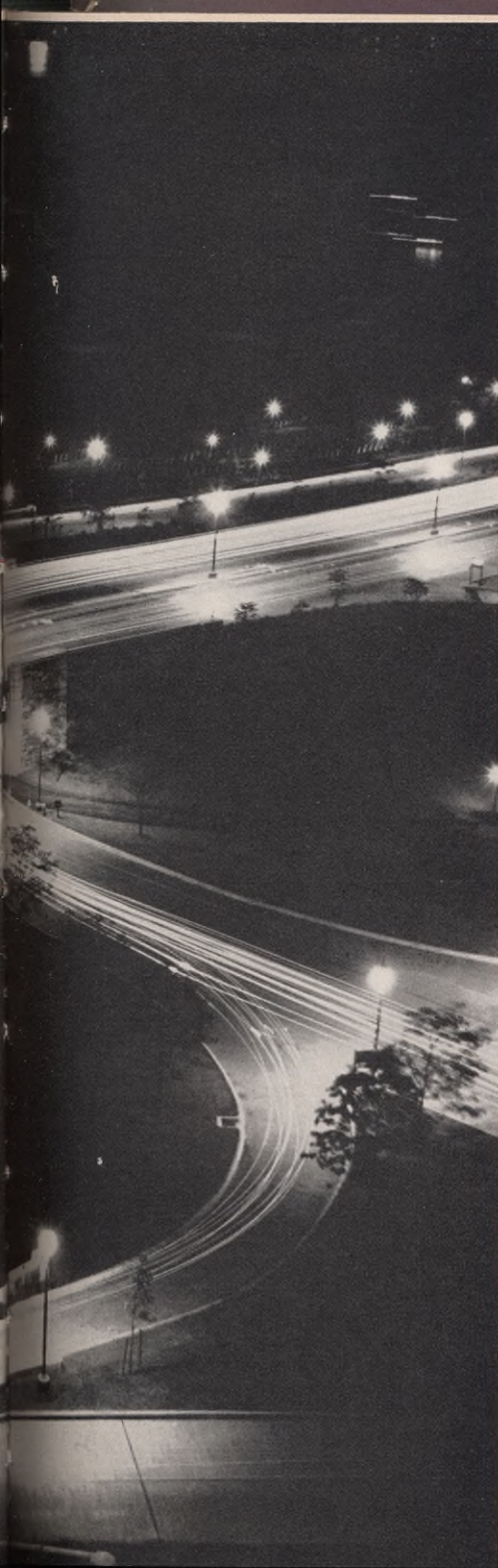
How the automotive tax payments are spent is a matter of concern to every citizen. This year highway users will probably hand over to the states a record payment

of three billion dollars in taxes for the ownership and use of their motor vehicles. This is almost as much as the states derived from all taxes only a decade ago.

Today, the states have more funds than ever before with which to maintain and improve their highway systems. However, it is essential that these funds be wisely spent and concentrated primarily on those roads of major traffic importance. Only in this way will motor vehicle owners derive the benefits in improved highway facilities to which they are entitled by virtue of their substantial automotive tax payments.

At the community level, intelligent action can do much to reduce traffic congestion. In many cities, engineers are making scientific studies of the traffic situation and planning methods to break up bottlenecks. They've found partial remedies in improved traffic control, one-way streets, parallel routes, and by-passes. Parking meters, angle parking, and parking bans have eased congestion in many instances.

In Evansville, Indiana, the local citizens found the answer to a traffic problem in unity. They got together and mapped out a 10-point program (*see right*). They pitched in with other civic leaders, got the ball rolling until public support was stimulated, then stripped for action and gave the boot to traffic plague. **END**



IN ST. PAUL, MINN., before turn of century, this suburban road was built to accommodate increasing traffic

EVANSVILLE STOPS ITS TRAFFIC JAM BY GROUP PLANNING AND ACTION

The citizens of Evansville, Indiana, have tossed traffic tie-ups for a loss with a 10-point program. The effective steps were:

1. Getting a factual measurement of traffic efficiency and safety in the city, including parking requirements.
2. Adapting modern engineering practices to problems of congestion, delay, accidents, traffic control, and parking.
3. Expanding the Evansville schools' traffic safety education program, including the training of high school students in driving.
4. Revising city traffic ordinances, where they were not up to date.
5. Improving the adequacy and use of accident records.
6. Improving traffic law enforcement.
7. Refining traffic court procedure.
8. Developing a pedestrian protection program.
9. Broadening and correlating public information activities in the traffic safety field.
10. Developing an effective organization of public officials, civic leaders, and representatives of leading groups.

ACROSS THE RIVER and into the trees—dirt roads (circa 1920's) kept traffic in the country at slow pace

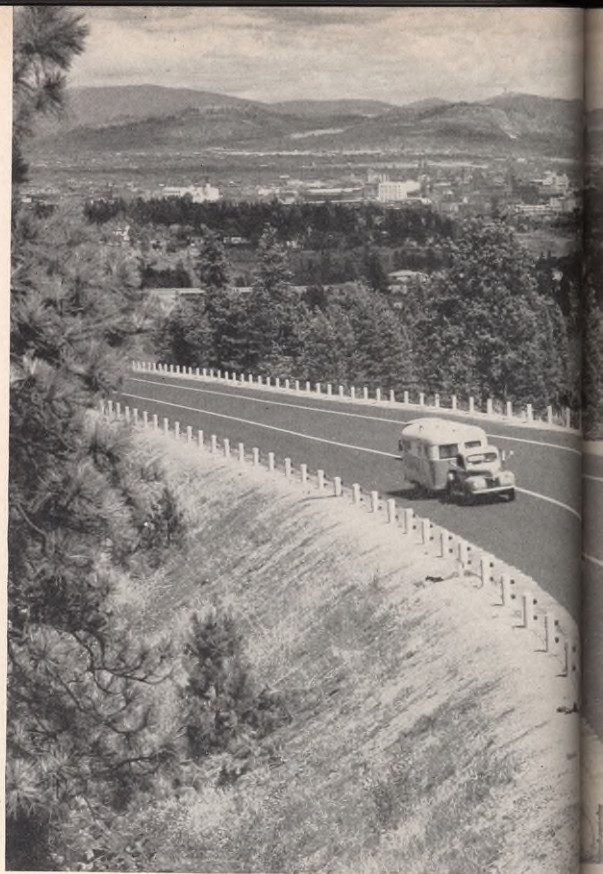


Putting
Traffic
on

A

sphalt

ASPHALT SALESMAN A. J. SCHADE (*right*)
talks Texaco with the superintendent
of an asphalt pavement-mixing plant



In an age of mechanized vehicles and more mechanized vehicles, traffic and more traffic, asphalt has proven itself another of petroleum's diversified contributions to the nation's needs. The durable, resilient, low-cost petroleum product has been used in the construction of most of the hard-surface streets and highways in this country.

Where previously the dust lay thicker than the nap on a buffalo's shaggy coat and the rain-soaked mud was as sticky as glue, asphalt is now one of the principal factors in keeping America moving smoothly. From Smalltown, USA, to Bigtown, USA, the use of asphalt paving since World War II has exceeded concrete and other types of hard-surfacing to a large degree.



WIDE RIBBONS OF ASPHALT BEDECK AMERICA AND HELP UNRAVEL THE TRAFFIC TANGLE

DURABLE, VERSATILE, SKID-RESISTANT, ASPHALT PAVES THE WAY TO—GO!

Asphalt got America out of the mud away back when Grandma donned her duster and Grandpa cranked his Tin Lizzie. Now its job is to help keep America out of a traffic jam.

Putting traffic on asphalt began long before the coming of the horseless carriage. In fact, the story of asphalt runs parallel to the history of man. One of Nature's most versatile products, it dates back to prehistoric times when pools of natural asphalt engulfed unwary beasts that roamed the earth.

Man's use of the black substance can be traced back to the earliest days of recorded history. Early civilizations in the Biblical lands employed asphalt as a cement in the construction of the enduring temples and pal-

aces, the wondrous irrigation systems, and the time-proof highways that still amaze engineers.

It is believed that Noah waterproofed the Ark with asphalt, and that the basket that carried Moses into the bulrushes was coated with the dark residue. More certain is its use in the foundation of the Pyramids and the Hanging Gardens of Babylon. Asphalt has hundreds of centuries' proof of its durability.

However, it was not until the middle of the last century that its big rôle in road-building was fully realized. In 1876, asphalt from Trinidad's remarkable asphalt lake was used in Washington, D.C., to lay the first sheet asphalt pavement.

Though the Nineties were naughty, they were also

ASPHALT IS A FIRM FRIEND ON ROADS

destined to produce one of the country's most widely used products. While Lillian Russell was warming up New York Winters, oil men down in Texas were studying the black, sticky base that remained after the refining of some crude oils. At first, they considered it waste. When they recognized it as asphalt, "lake asphalt" was already well established as paving material. The oil companies, still unaware of petroleum asphalt's true value, sold it to companies producing "lake asphalt," who mixed the petroleum derivative with their own product.

Soon after, engineers, who had been using the compound of "lake asphalt" and petroleum asphalt, discovered that the oil derivative needed no counterpart. It was cheaper to use because it was another product of oil operations. It was as durable as "lake asphalt," was impervious to water, immune to acids and alkalis, and was 99 per cent pure bitumen, whereas "lake asphalt" had a high content of sandy matter. Petroleum asphalt could be just as readily combined with different aggregates—stone, sand, or gravel—and only six to 10 per cent of it need be added to the aggregate to produce a resilient pavement capable of absorbing impact and paying off in longer life and lower upkeep. Today, virtually all asphalt used in the United States is derived from petroleum.

Since 1900, the production of asphalt from petroleum has progressed rapidly. From 1925 to 1941, consumption doubled, and from 1941 to 1950 it almost doubled again when users called for 11,900,000 tons last year.

The Texas Company has been a leader in the manufacture and sale of asphalt for many years, being the first to develop an asphalt which, because of its excellent resistance to hardening or softening under temperature changes, was outstandingly suitable for street paving. Proof of the durability of Texaco Asphalts is an asphalt pavement laid in Newark, New Jersey, in 1908 that continues to give satisfactory service after 43 years of use.

Many asphalt roads have been gradually built over a period of years. Inexpensive surface treatment (such as with Texaco Cutback Asphalt) is used on secondary roads where traffic is light. As traffic increases in volume, more durable types of asphaltic surfacing are added. Each step forms part of the ultimate paving. There is no waste and the cost is distributed over the years.

The newest use of asphalt in road-paving is the un-



ON THE HIGHWAY, workmen lay a thick surface of heavy-duty Texaco Asphaltic Concrete, one of the most durable pavements today

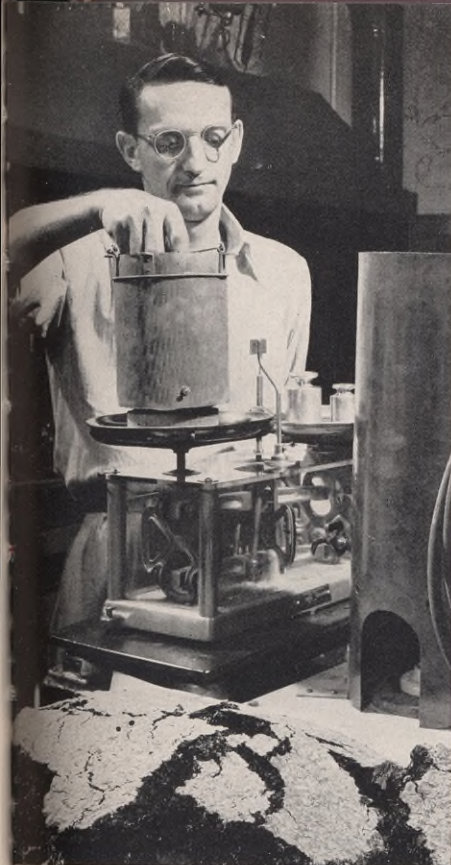


IN THE CITY, this pressure distributor sprays on a surface treatment of Texaco Cutback Asphalt to form a waterproof, dustless mat

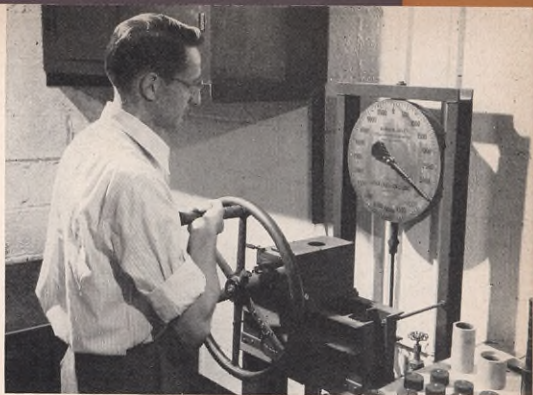
dersealing of old concrete pavements. Frequently, cavities form under the concrete, due to subgrade settlement and pumping at joints. If neglected, they would shorten the life of the pavement. Road builders now bore holes through the concrete slabs and pump millions of gallons of asphalt annually into such cavities.

Texaco's Asphalt Sales Department and Texaco's laboratories have been a valuable aid to many contractors and to many communities. The Company's asphalt specialists have a comprehensive knowledge of the product and the variety of ways it may be employed in road construction and maintenance.

Versatile asphalt is also used in paving airfields, racing courses, tennis courts, playgrounds, parking lots, and river revetments; in the manufacture of telephone cables and roofing shingles; in the manufacture of coal briquettes; for waterproofing; in molding compounds and paints, enamels and japons; and in the composition of battery boxes and asphalt tile. But above all, the dark mass is the bright hope of America on the road. **END**



AT BEACON LABORATORIES, a sample of asphalt pavement is analyzed to determine whether too much or too little asphalt was used



RUGGEDNESS of various asphalt mixes used in paving is carefully tested with a Hubbard-Field stability machine by a lab technician



ASPHALT SALES DEPARTMENT receives analyses prepared by Beacon's Asphalt Group under leadership of D. W. Hurlburt (right)

McADAM HAD



A GOOD IDEA

Many paved roads sink deep into the mud because highway builders laid them without regard for the sound principles advocated by John Loudon McAdam.

The Scotch road builder, who gave his name to the system of road-making known as macadamizing, told the London Board of Agriculture some 125 years ago that the subgrade of a road really carried the load and that the subgrade had to be kept free from dampness and water.

McAdam said the "native soil must

previously be made quite dry, and the covering, impenetrable to rain, must then be placed over it, to preserve it in that dry state."

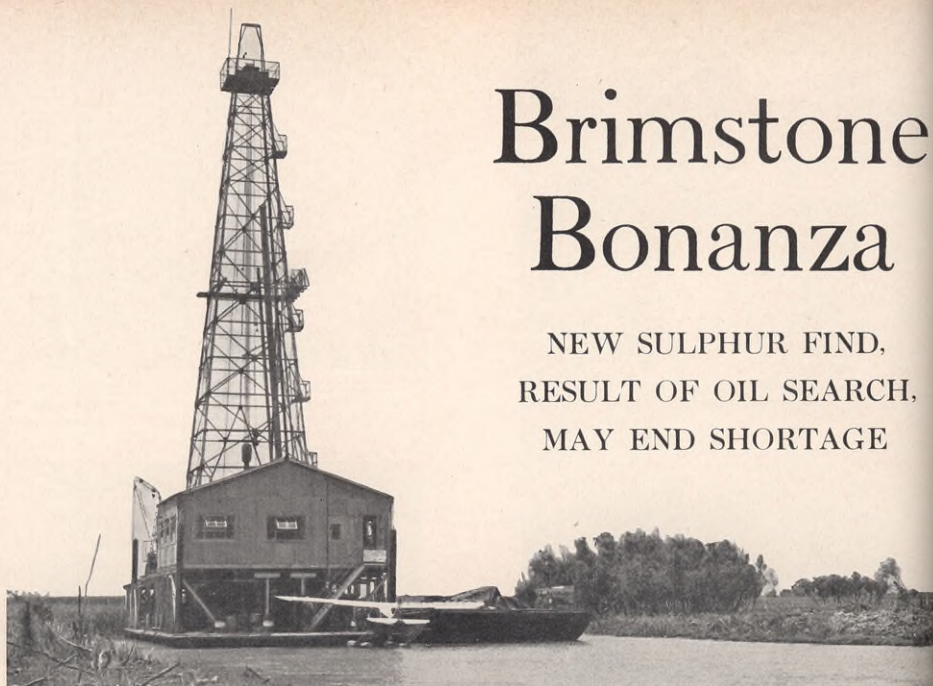
An ideal waterproofing material, asphalt has proved to be the best way to provide a "covering, impenetrable

to rain" that McAdam, more than a century ago, recognized as being of primary importance in road construction.

Asphalt, which is now the material most widely used in paving streets and highways in the nation, won a major victory over other types of paving when it was selected for the new 118-mile New Jersey Turnpike. Authorities found it to be cheaper by \$50,000 a mile. They emphasized that it would give a better driving surface, cheaper maintenance, and longer life.

Brimstone Bonanza

NEW SULPHUR FIND,
RESULT OF OIL SEARCH,
MAY END SHORTAGE



AT GARDEN ISLAND BAY, LA., A DRILLING BARGE IS USED TO DRILL A TEST ON THE BIG SULPHUR SITE

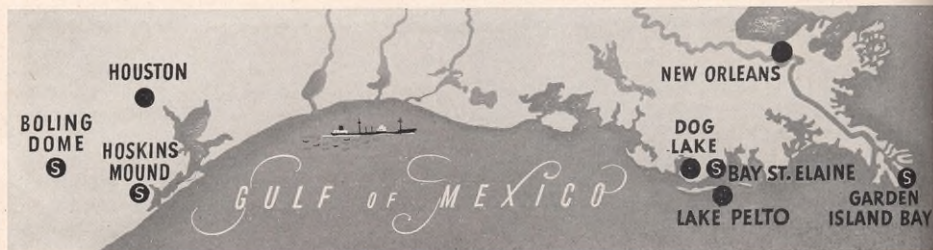
The present acute international sulphur shortage is expected to be averted by the discovery of the largest single sulphur deposit found anywhere in the world in nearly two decades. The new find—at Garden Island Bay dome, 100 miles southeast of New Orleans in the Louisiana marshes—was recently announced by the Freeport Sulphur Company, with whom The Texas Company has entered into an agreement.

Under the terms of this agreement, The Texas Company will receive a share of the net profits from sulphur produced there. Present estimations are that the deposit should yield an annual production of 500,000 long tons when Freeport completes its anticipated 10 to 15 million dollar plant in 1953. This substantial addition

to sulphur reserves has received wide publicity in the press. The new production, plus other increases already arranged, is expected to make up the gap between the current supply and the needs of the free world, according to the United States Bureau of Mines.

The events leading up to the present announcement of the big sulphur find began in the Fall of 1928. After conducting a seismograph exploration survey, The Texas Company acquired, by assignment from others, a State of Louisiana mineral lease on an area which includes Garden Island Bay dome.

Evidences of sulphur were discovered by The Texas Company at Garden Island Bay. The Freeport Sulphur Company leased the sulphur rights to the land



in 1951 from The Texas Company and subsequently discovered the sulphur deposit.

Most Sulphur Produced in United States

Sulphur is familiar to all of us as one of the combustible elements on the head of a matchstick and as the other half of that old-time Spring tonic sweetened up with an equal part of molasses. Far more important, though, sulphur and its derivatives are used in making such products as aviation gasoline, steel, paper, newsprint, varnishes, food preservatives, dyes, rubber, fertilizer, rayon, and explosives.

Although the United States, which produces approximately 90 per cent of the world's current annual production of about 6,200,000 long tons of elemental sulphur, is producing at a rate several times greater than pre-war levels, the present shortage is estimated at nearly 14 per cent or 1,000,000 tons a year.

Our domestic output would more than meet our national requirements, but our allies depend upon us to fulfill their civilian and military needs. The International Materials Conference, in the interest of world welfare, has made large commitments of our sulphur supply to foreign countries. As a result of the increasing demands, the sulphur industry is making a determined effort to discover new sulphur reserves.

Native sulphur produced in the United States through 1950 totaled more than 88,000,000 long tons; virtually the entire quantity has been mined since 1900. The principal source of sulphur production has been from Frasch-process mining operations conducted on shallow piercement type salt dome structures in the Texas-Louisiana Gulf Coast region. Minor production of sulphur is obtained from pyrites, waste refinery gases, heavy sulphur-laden natural gases, and other sources.

The oil industry, in its constant search for oil, has made a substantial contribution to the search for sulphur. For instance, the discovery of every domal sulphur deposit worked to date has been a by-product of exploratory efforts in the search for oil.

The Texas Company has been an integral part of this vital operation. In its constant search for new reserves of petroleum, the Company has drilled a large number of exploratory tests on many Gulf Coast salt domes, and in the course of such drilling has encountered sulphur deposits in some of the tests drilled on the top of these domes. It first discovered a large sulphur deposit more than 30 years ago at Hoskins Mound, about 45 miles south of Houston in the vicinity of Freeport.

In 1922, the Company entered into an operating agreement with the Freeport Sulphur Company. Under the terms of the contract, Freeport agreed to develop the property for sulphur and pay The Texas Company a share of the net profits.

During the years that followed, Texaco made notable

contributions to the sulphur supply. In March, 1929, The Texas Company assigned to Texas Gulf Sulphur Company the sulphur rights on certain of its leased properties on the Boling dome, 50 odd miles southwest of Houston. Despite 22 years of record production, Boling dome still produces more sulphur than any other mine in the United States. Substantial royalties have resulted for The Texas Company.

The Company early this year entered into two agreements with the Freeport Sulphur Company. One of the agreements covered the acquisition of the sulphur rights on three prospective areas—Bay St. Elaine, Dog Lake, and Lake Peltó domes in Terrebonne Parish, Louisiana. These three prospective areas are included in Texaco's basic agreement with the Louisiana Land and Exploration Company. Consequently, the two companies will participate in returns from sulphur operations on the three areas.

Freeport Sulphur Company is currently proceeding with the necessary installations to mine sulphur at the Bay St. Elaine dome, located in remote marshes. When the installations are completed about Fall of 1952, it will be the first "floating" mine in history.

The other agreement with Freeport Sulphur was the transfer of sulphur rights on the Garden Island Bay area, source of the rich new find.

In the course of its extensive exploratory drilling at Garden Island Bay dome, The Texas Company discovered first oil production on the flanks of this salt dome in September, 1935. This dome has proven to be a good producer since oil was discovered there.

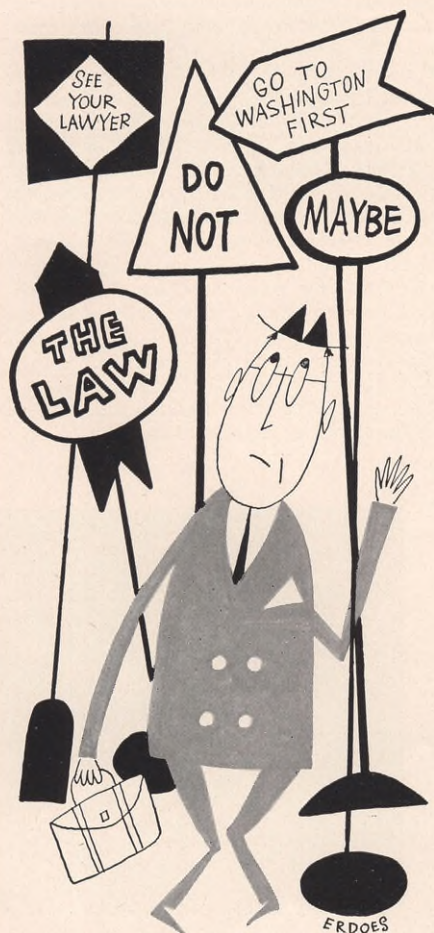
All that glitters is definitely not gold, for there is a distinct treasure in the yellow crystals of native sulphur as well as the shining flow of oil. **END**



LIKE THE ENORMOUS JAW of some prehistoric mammal, a power shovel bites into a huge vat of Louisiana sulphur preparatory to loading for shipment

A NEW BOOK, REVIEWED HERE, SURVEYS THE ANTITRUST LAWS AND LABELS THEM Ten Thousand Commandments

a review by O. J. DORWIN
General Counsel, The Texas Company



BUSINESS IS "UNDER A LEGAL CLOUD"

The recent State Department slogan, "America Means Business," is as true an axiom as ever made a point. The world over, America is synonymous with "Business." No other nation in all of history has ever equaled the productive power of our industry.

But this amazing productivity that propelled us to the foremost position in international output is increasingly threatened by conflicting interpretations of the ambiguous and indefinite antitrust laws.

Ever since the Sherman Antitrust Act was enacted in 1890 and supplemented by the Clayton Antitrust Act in 1914, business has had a difficult time figuring out what it legally can and cannot do to conduct its affairs. Baffling court decisions have stymied both businessmen and their lawyers. Federal Government suits, brought about by lawyers of the Antitrust Division, the Federal Power Commission, the Securities and Exchange Commission, and the Federal Trade Commission, have attempted to break up integrated corporations and have charged numerous violations of laws that are frequently too obscure to be followed with ironclad, to-the-letter obedience. No magician's audience was ever more perplexed by now-you-see-it, now-you-don't techniques than business is today.

Harold Fleming, widely read business reporter on the *Christian Science Monitor* whose authoritative articles have appeared in the *Harvard Business Review* and *Harper's* magazine, tells the story of this dangerous confusion in his enlightening commentary on the antitrust laws, entitled *Ten Thousand Commandments**. In choosing his title and annotating it, Mr. Fleming draws a parallel between the 10 commandments that Moses handed down and the innumerable "don'ts" that the courts and the Antitrust Division lawyers are handing out to business. Moreover, he corroborates his parable by dramatic dialogues, pertinent transcriptions, and apt references from court and Congress.

His intent—and he has succeeded completely—was to write a book for laymen in concise, comprehensible language without any of the ju-jitsu terminology of

*TEN THOUSAND COMMANDMENTS. BY HAROLD FLEMING. 206 PAGES. PRENTICE-HALL, INC. CLOTHBOUND, \$3; PAPERBOUND \$2.25.

legal linguistics. In fact, the semantics of the antitrust laws is a problem which Mr. Fleming believes to be of primary concern.

His point is clearly this: "... in the antitrust laws, a few little words can change, not only the disposition of huge sums and the location of huge plants, but eventually, the very structure of American industry." These "few little words" are inadequate symbols, both vague and open to a variety of interpretations. They have frequently been used to label American business "criminal." Mr. Fleming takes exception.

As he so clearly sees it, the trouble is not merely that practically every businessman in the country could be summoned into court, indicted, and fined or imprisoned for what heretofore has been customary procedure, but "that the policies and practices by which American business has grown so phenomenally productive have one and all in recent years been damned, discouraged, and suppressed."

What Mr. Fleming, who is fortunately not alone, finds difficult to believe is that all of the potency of American industry both in times of peace and times of war could possibly have been built "on error and by criminals." It hardly seems possible to the author that what was once pure economic energy is now crime and "full of original sin." It would seem far more plausible that the sin lay elsewhere.

If We Had No Big Business . . .

When he proposed the Federal Trade Commission Act to Congress, Woodrow Wilson said: "Nothing hampers business like uncertainty. Nothing daunts or discourages it like the necessity to take chances, to run the risk of falling under the condemnation of the law before it can make sure just what the law is." Not only is business now confused by the laws, but the Government lawyers and the courts seem equally at sea. Many Government suits against business drag on for years at a great cost to both Government and industry. Mr. Fleming foresees a catastrophic result from this procedure; it could easily endanger the individual American home and its defense, both of which depend upon the productivity of American industry.

The author points out that our industry "has developed its muscles in a business community that daily operates with quantity discounts, matched prices, freight absorption, horizontal and vertical integration, and the rapid-fire development of new, unheard-of products. Every one of these practices, if not an outright crime under Federal law, is now under a legal cloud." These policies which business follows today under the direction of its legal advisors may be interpreted as illegal tomorrow.

Among the more important issues that Mr. Fleming discusses is bigness. Though the officials of the Department of Justice have repeatedly stated that mere cor-

porate size is not an offense against the Sherman Antitrust Act, the laws are such that the courts and Government lawyers can (and appear to) apply them for the purpose of restricting size alone. Mr. Fleming thinks this attack against bigness has its basis in an emotion, *fear*—fear that serious economic and social changes will occur which will cause small business to be crowded out. To him the inconsistency seems to lie in the fact that little business depends upon big business and that under the American scheme of things every little business has, by virtue of our democratic form of government, the opportunity to become big. It *has* happened and it should continue to happen.

Economic and social changes are inevitable. Throughout history, progress has meant change. Power tools, the railroad, the automobile—all have altered the social and economic pattern. Big corporations, indeed, are becoming social as well as economic institutions; millions of dollars are being spent on programs to give employees greater security.

Those firms which offer superior products and services will, in accordance with the true spirit and purpose of competition, rise to, and remain at, the top of the heap. These same corporations are vitally needed and work hand in hand with the Government during time of national emergency but are in danger of being broken up by a Government suit when the emergency is over. For example, there are the current Government suits against such companies as the American Telephone and Telegraph Company, the General Electric Company, the Great Atlantic & Pacific Tea Company, and seven leading oil companies (including The Texas Company) which operate on the Pacific Coast. The aim of the oil suit appears to be to separate the marketing branch of these companies from their refining and producing branches. Similar dangers threaten the other companies.

All of these firms have been integrated to produce better products at lower cost to consumers. Disintegration would discourage the expansion and new developments which have enabled such corporations to provide the public with more and better things for better living.

"If we had no big business," Mr. Fleming says, "we would have to invent it. And if we are not willing to have privately operated big business, we shall have to have business operated by the Government. When President Truman said that he would rather see 100 steel companies than one United States Steel Corporation, he was merely being nostalgic for the 'good old days.' But the President himself heads the largest business in the world, the United States Government."

But, big or small, business is entitled to clearer laws to guide its executives and advisors, and freedom from the destructive activities of zealots who—with no real comprehension of the business machine with which they are dealing—read into our statutes prohibitions which were never intended by Congress. **END**

MAN ON THE LAND

A FILM-STORY OF MAN'S PROGRESS . . . AND OIL'S



Premiered during Oil Progress Week (see Page 24), the new animated, color film, *Man on the Land*—which was produced by the Oil Industry Information Committee of the American Petroleum Institute—tells the amazing and dramatic story of man's increasing

ability to get a higher standard of living from Nature and the earth. The film was made for the Committee by the Academy Award-winning United Productions of America.

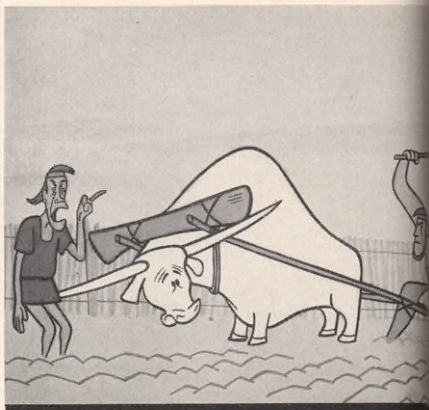
In 16 entertaining, action-packed minutes, *Man on the Land* traces the close association and leaps-and-bounds progress of two great industries—agriculture and petroleum. In place of the conventional narration, a ballad singer intones the story while graphic illustrations show man's ability to progress and prosper in those periods and places where he has been free to work, think, and produce in a competitive atmosphere.

Designed for both youthful and adult audiences in rural and urban areas, the new film is available to oil, agricultural, and other interested groups in both 35 millimeter and 16 millimeter prints. Free bookings of two previously filmed OIIC motion pictures are also available throughout the country.

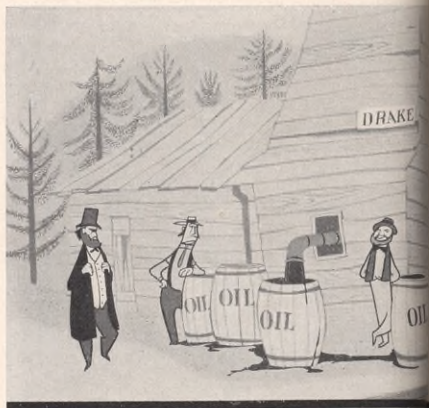
Arrangements may be made through Sales Department Division Offices of The Texas Company at New York, Boston, Buffalo, Norfolk, Chicago, Denver, Indianapolis, Minneapolis, Houston, Dallas, Atlanta, New Orleans, Los Angeles, Butte, and Seattle.



1 Man first trapped his food by luring animals into murky pits of sticky black substance. Because animals often refused to cooperate, he



4 produce. He needed more power, and he found it in the bulky ox. In the centuries that followed, his ingenuity carried him much further and much



7 multiplied his horse teams. But he still needed more power. In 1859, some men in Pennsylvania punched a hole in the ground and got oil . . .



2 learned to be a hunter. He became so skilled that the hunted fled before him until he conceived the idea of taming wild life. Feeding his stock taught



3 him to become a farmer. When Nature revealed to him the secret of plant life, he devised the hand-plow. But his physical strength limited his



5 faster. Civilization advanced to the glory of Greece, the grandeur of Rome. But the Dark Ages robbed man of his freedom and made him a serf.



6 Long in bondage, he finally threw off the yoke and came to the New World, where he fought to keep his independence. He worked the land and



8 oil for new, superior power: producing products; oil for lubricating farm and industrial machines; oil to revolutionize man's way of life. For the



9 farmer it meant greater power than he had ever known or imagined. Together, man on the land and American industry are partners in progress.

FOREIGN OIL WILL AID IN EMERGENCIES

(Continued from Page 9)

total United States demand of 7,398,000 barrels a day.

Foreign oil will also help us to meet future emergencies, but only if American companies can operate their foreign concessions without fear of abrogation of contracts, excessive tariffs, and other attempts to limit their operations. Our foreign reserves, now totaling upwards of 25 billion barrels, will be available to us only as long as there is continuous production, with importation into the United States of reasonable quantities. You cannot prohibit imports one year and expect to bring in large quantities the next year.

American oilmen have run great risks and experienced almost inconceivable hardships in their foreign opera-

tions. Disease, physical danger, language differences, currency problems, restrictive local laws, extremes of climate, lack of transportation and living facilities—all of these have made the task of finding, producing, refining, and marketing oil abroad many times more difficult than at home.

No matter what the hardships and risks have been, the petroleum industry has accepted them without complaint. The industry asks for no sympathy on that score. But America cannot afford to forget what our oilmen abroad have achieved for this country. They have made us many valuable friends, and they have contributed to our national security by bringing us an additional supply of oil at a time when we greatly need it. **END**

NEW SOURCES

Texaco's search for oil in southwestern Canada has been rewarded at Wizard Lake, some 40 miles south of Edmonton in the flat grainlands of Alberta. In association with McColl-Frontenac Oil Company Limited, the Texaco Exploration Company has discovered the Wizard Lake field.

To date, five wells have been completed in the area, where production is being obtained from about 625 feet of oil-saturated Devonian D3 reef formation. The thickness and porosity of the producing reef section are comparable to the best that have been encountered in the Dominion.

The discovery was another link in the chain of oil finds that began in 1947 when Alberta's oil boomed as one of the largest prospects on the North American continent. Over 300 million American dollars have kept operators drilling more than two new wells a day. Already the producing formations below the golden prairie have indicated substantial reserves, but experts believe that further reserves of great magnitude may be discovered in the future.

Now under construction and soon to be completed, a 45-mile pipe line will transport crude oil from Wizard Lake to the McColl-Frontenac refinery and the Interprovincial Pipe Line terminal at Edmonton.

Texaco is also drilling a Devonian

D3 exploratory test at Bonnie Glen, six miles south of Wizard Lake. Gas shows have been encountered in upper formations.

In the area including eastern Montana and North Dakota, where a recent wildcat well established the first commercial oil production in the Williston Basin, The Texas Company holds substantial acreage under lease. Test wells at several points are currently in progress.

The Texas Company is currently drilling one test and has an interest in a joint test being drilled in northeastern Montana and in the Williston Basin.

TEXACO ENTERTAINMENT

For distinguished musical service in presenting the Metropolitan Opera broadcasts, The Texas Company has been awarded a certificate by the 500,000 members of the National Federation of Music Clubs. The 1951-52 series will mark Texaco's 12th season as sponsor of the Saturday afternoon broadcasts.

The Texaco Star Theater, starring Milton Berle, was also honored when

it was selected as one of several television presentations to be kinescoped for distribution and showing at military bases overseas.

OIL PROGRESS WEEK

The oil industry recently celebrated Oil Progress Week for the fourth consecutive year. From October 14 through October 20, oil men from coast to coast told the story of their industry and brought public attention to oil's progress by special presentations on film, television, and radio. One of the highlights of the celebration was the premiere of the new animated, color film, *Man on the Land*, which is reviewed and illustrated on Pages 22 and 23 of this issue.

POPULAR STOCKS

A survey based on an analysis of 53 closed-end trusts and more than 100 mutual funds revealed that the most popular types of stocks with investment management are the oil and gas issues, which lead their nearest rivals by a substantial margin.

TRAFFIC'S PACE WILL QUICKEN between Atlantic City and Philadelphia, where Texaco Asphalt is being used to convert the White Horse Pike into a dual highway with separate, divided lanes for east- and westbound traffic.





PAVEMENTS UNLIMITED

When you drive along a road paved with asphalt, it may be one of the types of asphaltic surfaces shown above. . . . For nearly half a century, The Texas Company has been a leading supplier of asphaltic products for the nation's highways. . . . Texaco Asphalts have been used to pave the streets of 1,500 representative cities in the United States; every year Texaco Asphalts are used to construct, resurface, and maintain thousands of miles of roads and streets. . . . Texaco Asphalts are available to suit any traffic situation and at the same time will give taxpayers the most for their money