

The **TEXACO STAR**



Giancol

JANUARY 1931



THE LARGEST BUILDING IN THE WORLD
FROM THE STANDPOINT OF FLOOR SPACE:
CHICAGO'S NEW MERCHANDISE MART ON
THE HISTORIC CHICAGO RIVER: STREET
BETWEEN THE BUILDING AND THE RIVER
IS PAVED WITH 3900 SQUARE YARDS OF
TEXACO SHEET ASPHALT





The TEXACO STAR



THE PRESIDENT'S PAGE

December 22, 1930

To the Stockholders:

There are elements in the causes of the present world-wide depression which have made it extremely difficult to make comparisons with previous periods of industrial depression, and as a consequence, impossible at any time within the last year to forecast with confidence the extent and duration of the present one.

It has never been the policy or practice of the officers of this Company to predict what the Board of Directors may find it wise to do in regard to dividends or to give out to anyone information of the Company's activities except after the annual closing of the books, when a full and detailed statement of the Company's financial and operating conditions is published and distributed to every stockholder.

The apparent lack of confidence in the ability of industry to recover from this depressed state leads us to make an exception and to say to our stockholders that while our net earnings for 1930, after Federal taxes and all charges, will be small compared with 1929, probably not more than \$15,000,000, or \$1.52 per share, nevertheless our cash,

securities, and notes receivable as of December 31, 1930, will be about \$65,500,000. In accordance with our practice, inventories are adjusted to lower of cost or market, which today is market. The wholesale prices, both domestic and foreign, on gasoline and other petroleum products, average lower now than they have at any time in the history of this Company, 23 years.

Our unbroken dividend record from the first year of operation, 1902, has been a source of pride and satisfaction to stockholders and officers alike. Out of the bond issue of October, 1929, we have made investment expenditures of approximately \$54,000,000 during the year 1930. We have no bank loans.

Our forecast leads us to believe that even if market conditions should not improve, we would without any borrowing be able to continue the present dividend rate for at least another year and at the same time maintain ample cash reserves to meet all necessary construction requirements and maintain our business and facilities at our usual high standards. The Board must, however, in the best interests of the Company, decide from time to time what dividend payments shall be made.

—R. C. HOLMES

★ The action of the Association of Railway Executives, in recommending that burdens and restrictions be placed upon the oil industry and motor transportation, would seem to be ill advised, and particularly at this time when it is so important that there be coöperation in solving the many difficulties that confront all. Railroads are as much in need of intelligent and sympathetic consideration by shippers and consumers today as ever, and such support has been more and more in evidence, but it is much easier to lose than to secure and sustain.

It is to be regretted that there is in this country no organization or forum through which leaders of one major activity, whether industrial, transportation, banking, educational or other, can conveniently and advisedly consider the effect of their endeavors to secure reliefs or benefits when the

results may be merely shifting of burdens or placing unnecessary and unwarranted difficulties in the way of others.

NOTE—See letter from E. B. Reeser, President of the American Petroleum Institute, to R. H. Ashton, President of the Association of Railway Executives, Page 3 of this issue.

★ The fact that no one alone can cure the unemployment ills or solve other problems of the depression is no justification for failing to do what one can alone or in coöperation with others. Few of us are in agreement with those who advocate spending to the point of extravagance and waste as an aid, but surely those who are at all able can properly and helpfully avoid restricting proper expenditures which mean so much at this time to the less fortunate. There is about the same lack of respect for the miser as for the extravagant.

The TEXACO STAR

A PUBLICATION OF THE TEXAS COMPANY

VOL. XVIII, NO. 1



JANUARY, 1931

COPYRIGHT, 1931, THE TEXAS COMPANY

Brief and to the Point

★ The European corn borer has spread over about 200,000 square miles of the United States since it was first found near Boston thirteen years ago.



★ One family out of every eight moves each year, according to the removal records of the American Telephone and Telegraph Company.

★ The maintenance cost of 7,287,904 square yards of asphalt macadam in Massachusetts decreased from two cents per square yard in 1927 to one and four-tenths cents per square yard in 1929; and of 2,749,951 square yards of asphaltic concrete from one and three-tenths cents per yard in 1927 to nine-tenths of a cent in 1929.

★ A parachute has been invented which will open automatically, even if the jumper forgets to pull the release cord.

★ A pneumatic machine gun which will discharge lead pellets with such a velocity as to penetrate a quarter of an inch of wood at one hundred feet has been developed. The magazine of the gun holds about three hundred pellets, and the compressed air that propels them has a pressure of two hundred pounds per square inch.

★ The nearest thing to perpetual motion yet invented is a clock that is expected to run accurately for a few thousand years on the energy supplied by an invisible, glass-enclosed speck of radium valued at about \$300.

Mr. Rogers Expresses a Wish

BEVERLY HILLS, Cal., Dec. 24.

—Well, tomorrow is "wish" day. Everybody is "wishing" somebody something, and I guess it's just as well everybody don't know what they are being "wished."

But, generally speaking, we do have good cheer in our hearts on Xmas. 'Course, we can't hardly wait till the day is over and to get back to our devilment again.

I got a wish that I believe will have hearty cooperation. It's to leaders of industry, prominent men, and even dear old Charley Schwab. Please, on New Year's, don't predict prosperity (either early or late). Don't predict anything. Just say, "I pass." You have had one solid year of being 100 per cent wrong, and we just kinder lost our tastes for your predictions.

Good times are coming soon. We feel it, but if you guys say it, it's liable to crab it.

Yours,
WILL ROGERS.

Reproduced by Courtesy of the McNaught Syndicate, Inc.

★ If the sun were not refueled, it would burn out in about fifteen trillion years, according to Dr. W. D. McMillan, professor of astronomy at the University of Chicago. The theory is that energy from the sun moves through space, is condensed into atoms, and attracted back to the sun and stars.

★ Retail trade in the United States in 1929 amounted to about forty billion dollars, and estimates show that about nine per cent of this was done on the installment basis.

★ Dinosaur eggs have been found in Montana by the Scott Fund Expedition of Princeton University, and the discovery is said to be the first of its kind in this country. The only other authenticated find of a prehistoric reptilian "nest" was in Mongolia.



★ Traffic tieups, caused by traffic signals which have been built on an unsound engineering basis or without justification of auto traffic conditions, cost one hundred million dollars a year, an expert says. He further states that half of the traffic lights in this country are of no value.

★ Half the people in the United States are under 26 years of age.

★ Though the "economic value" of a boy at birth is \$9333, statisticians of the Metropolitan Life Insurance Company say, a girl is valued at only half of that amount.

CONTENTS

Cover by Giancola

The President's Page.....	1
Proposed Pipe Line Law.....	3
Speaking of Speed.....	5
Peanuts, Spices and Smoke.....	9
TEXACO and the Yankee Clipper.....	12
"There She Blows!".....	13
Editorials.....	18
Mr. Reeser Surveys the Outlook.....	19
The First American.....	21
TEXACO at Home—New London.....	24
Globe-Trotting—Jamaica.....	27

Sees No Advantage in Railroads' Proposed Pipe Line Law

*American Petroleum Institute President Declares Suggested Legislation Would
Benefit Neither Public Nor Roads Themselves*

LEGISLATION subjecting pipe lines transporting petroleum products to the same restrictions as railroads would not only increase costs to the public, but would be of no benefit to the railroads themselves, according to E. B. Reeser, President of the American Petroleum Institute. This statement was made in a recent letter from Mr. Reeser to R. H. Aishton, President of the Association of Railway Executives, following a proposal of the railway men that Congress enact such legislation. Mr. Reeser's letter follows:

"The decision by the Association of Railway Executives to appeal to Congress for legislation to compel oil companies to divest themselves of their investment in pipe lines appears to have been reached without benefit of a knowledge of the facts.

"The petroleum industry is conversant, as are the railway executives, with the extent of the business depression. It is sympathetic with any proper plan for increasing railroad earnings; it believes in co-operation for the common good; and is anxious to help remedy unsatisfactory conditions. The railroads' proposal does not point in this direction. It goes entirely outside of the question of helping the carriers, to indicate how another industry may be injured.

"In brief, it appears that the railroads are trying to derail progress, and to force through by legislation an uneconomic interruption in the movement of petroleum and allied products. No material gain will accrue to anyone if such legislation be obtained. It is granted that the enforced separation of pipe lines would injure the oil companies.

"The procedure followed when the Government compelled the separation of coal properties from the carriers owning them would be repeated. The pipe lines would not go to the railroads, which

cannot operate them, but would be handed over to stockholders of the oil companies, the business to be continued then by independent pipe line companies such as it is conducted today. But there is no parallel between the situation that existed when railroads owned coal mines along their right of way, and the relationship between the oil and gas companies and their pipe lines. The carriers were engaged primarily in the business of furnishing transportation, and an important source of revenue was the shipment of coal over their lines. Except for the relatively small amount used to fuel the locomotives, the rail-owned coal was sold in competition with that produced by other mines which had no railroad tie-up.

"In the case of the oil and gas companies, their business is the production, purchase, storage, processing, and sale of oil and natural gas. Despite the technical status of many pipe lines as common carriers, the oil companies are not in the transportation business, as such, but only so far as it has been necessary to lay underground lines. Gathering lines are laid into fields where oil and gas are produced and trunk lines to the point at which the owner of the raw material has facilities for its refining and sale. Essentially, all pipe lines are and always have been plant facilities—mere adjuncts of the primary business of their owners. To infer that it might be possible to compel abandonment of pipe lines, and to force the movement of oil and gas by tank car is as logical as to suggest legislation prohibiting automobiles and motor trucks from carrying passengers and freight which, but for this newer means of transportation, might move less conveniently and less cheaply by rail.

"The general public may think from the recommendation of railway executives that oil companies

The TEXACO STAR

do not employ railway services; or that the railroads fear the loss of petroleum business they now enjoy.

"The movement of natural gas must be through pipe lines. It cannot be handled by rail. There is only one reason which might have influenced the joinder of natural gas pipe lines, namely, the unpatriotic notion that it would help the railroads if there might be legislation of this kind to increase the burdens of transporting natural gas, and hence to increase the cost of natural gas to the consuming public, in order that the railroads may collect a freight on coal. In other words, natural gas, the best and cheapest household fuel nature has supplied, shall be made to cost so much that it will be kept out of any markets where coal is now used. It is unthinkable that the railroads can go that far in commercial selfishness.

"Let us see to what extent pipe lines have taken petroleum business from the railroads.

"From the Interstate Commerce Commission reports of Class 1 roads, we find that in 1924 there was a total movement of 52,226,703 tons of crude and refined petroleum and products. This tonnage increased in the following year, and in every year thereafter. The gain for 1929 over 1924 was 41.8%.

"How does that compare with the gain in total carload traffic, including petroleum? This business in 1924 was 1,147,605,218 tons, and like oil and its products, it too increased each year. However, the total gain in all carload traffic in 1929 over 1924 was but 13.5%, or slightly less than one-third of the percentage gain made in petroleum alone, and if the business be segregated so as to leave out the contribution made by oil, the gain in other carload traffic would be less than that shown. In 1924 petroleum supplied 4.5% of all rail freight; in 1929 it was 5.6%.

"How are the railroads faring in 1930? The movement of petroleum and its products in the first six months increased 3.5% over the corresponding period of 1929. In the same time, all carload

traffic, including this increase in petroleum, showed a decrease of 9%. It is apparent that the railroads' loss has occurred entirely in products other than those of the petroleum industry.

"How does the business supplied by the oil industry pay the railroads by comparison with that of other commodities based on tonnage originated and freight revenue received?

"The average rate per ton paid by agricultural products (which are perishable) in 1929 was \$6.26, whereas that paid by petroleum and products was \$5.32 per ton. Other leading industries paid much lower rates. For instance, timber and products averaged \$3.71; iron and its associated products, \$2.35; anthracite coal, \$2.26; gravel and sand 85 cents. The wholesale price of gasoline in 1929 was 2% less than in 1913, but freight rates on gasoline and other petroleum products increased 50% in this period.

"History shows that new products, more efficient machines, better and cheaper methods of transportation, become established without regard to incidental injury they cause individuals or companies operating on the old lines, and that the march of economic progress cannot be stayed. As for the two industries concerned in this discussion, it is only necessary to recall the bitter war conducted by teamsters against the operation of the first pipe lines; in the case of the railroads, we had the equally futile fight of the stage coach and express messenger.

"It is not likely that the railroads will benefit in any manner if the oil companies are ordered to divest themselves of the ownership of pipe lines. Such separation certainly would not result in any increase in tonnage moved by rail. Nor would it mean any gain to the investor in railroads, pipe lines, utilities or oil companies, but it would most surely put an increased burden eventually upon the consumer of petroleum products.

(Signed) E. B. REESER"



The TEXACO STAR



A Thoroughbred of the Air: The Texaco No. 13 Flying Over Los Angeles

Speaking of Speed—

More Rapid Transportation Will Solve the Aviation Industry's Problems

By FRANK M. HAWKS
Superintendent, Aviation Division

IN his article "What's Wrong with Aviation?" which appeared in the November 22 issue of *Liberty*, Bogart Rogers says: "What American air transport travel needs is faster and more frequent service. It seems obvious that air transportation is going to progress not by carrying more people at one time than the old forms of transportation, but by carrying people faster and further in a given time and offering them more frequent schedules."

It is gratifying to note that there is a sign that others are beginning to appreciate the matter of speed. Since I made my first cross-country flight in the *Texaco No. 13*, I have been thoroughly convinced of its value to the progress of aviation. It is easy to list the many advantages of speed, but I know of only one argument that can be used in rebuttal and that is the common saying: "High speed is all right, yes, but think of the dangers of the increased landing speed."

Before continuing on my favorite topic, I would like to answer the landing speed question briefly. The majority of those who are so critical of this factor have had little or no experience with the type of aircraft that supposedly lands so fast. They generally assume, largely because of time-worn theories concerning aerodynamics, that the landing speed increases relatively with the airplane's top

speed. Improvements in design have somewhat changed this ratio and I believe we are drawing nearer and nearer to the desired end. It is up to everybody to be open-minded on the subject.

The *Texaco No. 13* is what is definitely known as a high-speed airplane, traveling in excess of 240 miles an hour at full throttle. The general belief about this plane is that it must, obviously, land at between eighty and ninety miles an hour. I can prove that this general belief is erroneous. I do not find the landing speed in any way alarming.

The progress of high-speed aircraft has been tremendous in the past twenty years. The top speed attainable two decades ago was 45 miles an hour; now it is 345 miles an hour. Just what the limit is I do not believe we are qualified to state at the present time.

I feel quite certain that future developments along this line will necessarily have to be in closed-type monoplanes of the flying wing variety, with retractable landing gear and power plants placed in the wings, thus greatly reducing the head resistance. By minimizing this resistance, we can anticipate a high speed at sea level which will range from 200 to 250 miles an hour on serviceable commercial aircraft. Racing planes embodying these characteristics will probably increase these figures

The TEXACO STAR



Latest Model Ford Tri-Motor Passenger Speed Plane

COURTESY FORD MOTOR COMPANY

by another fifty miles an hour in the dense atmospheres.

Now let us consider the rarified atmospheres, altitudes of from 15,000 to 40,000 feet. There comes a report from Germany to the effect that the Junkers Company is building a plane capable of a speed of 500 miles an hour at an altitude of 40,000 feet. This may or may not be true, but I certainly do believe that in order to attain such a speed we must fly at these high altitudes. Unquestionably the plane must be a sealed cabin type with a highly efficient mechanism for supplying oxygen to the occupants. No human being can fly eight miles above sea level at the present time without cumbersome, though somewhat efficient mechanism for supplying air. Of course, it is readily understood and agreed that the motor must also be supplied with additional air for its operation. I believe, however, there are fewer obstacles to overcome in the motor problem than will be encountered in taking care of human beings, and, unquestionably the latter are entitled to first consideration.

The arguments which I present in favor of this speed factor come through actual experience and demonstration. I have not many theories to expound, but I have hopes and always welcome new developments which tend to loose the clutches of time. In my own experience, it was delightful and fascinating to be able to take off from Los Angeles in the morning and fly the *Texaco No. 13* to New York in time to make a dinner engagement there. The distance was 2510 miles, as I have laid the course, and it was negotiated in an elapsed time of twelve hours, twenty-five minutes and three seconds, with three

stops for service and a brief rest, which consumed forty-five minutes.

What a contrast that was to an automobile trip I made last summer to visit my good friend, Dick Mestres, captain of last year's Princeton football team. It took me ten hours to drive some three hundred miles and the only stop I made was to change a tire. It was necessary to keep plugging right along in the automobile to average thirty miles an hour; in the twelve-hour jaunt from coast to coast I averaged well over two hundred miles an hour and found the latter not only easier but less fatiguing.

Traveling through the air at two hundred miles an hour has additional thrills which cannot be explained with the pen. The change of scenery as viewed from a plane is just rapid enough to be pleasant. One gets away from the feeling of standing still, the feeling that many a layman has expressed as "not going anywhere." Hurling through space against time at such speeds is interesting; one actually takes into consideration the action of the solar system and what a thrill it is to realize that man is showing decided gains on the speed of the sun.

From Los Angeles to New York there is a loss of three hours of sunlight, but when one can travel from that coast to the eastern seaboard between the first morning glimpse of the sunrise on the Pacific and shake hands with his friends in New York before the setting of Old Sol, it is possible to look at the sun and smile and thank him for his assistance, even though he has apparently been trying to run away.

In going westward, we are chasing him all day long, looking into his face with a determination to

The TEXACO STAR



A Fast Cabin Ship of Comparatively Recent Design

AVIATION MAGAZINE

catch up enough of his valuable time to be able to play a round of golf on the West Coast before he sets. These, indeed, are thrills which are within one's self and can hardly be explained.

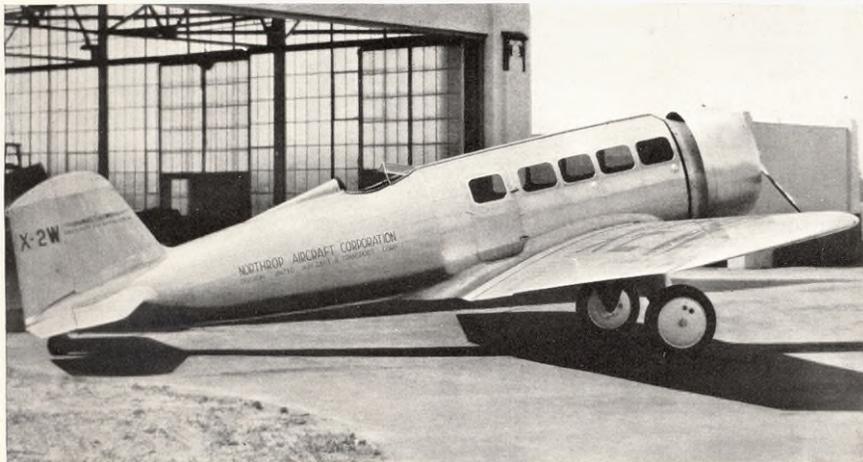
When clouds abound and storms threaten, the fast airplane is not subject to the dangers nor the pitfalls which confront the average plane traveling the air lanes today. It can run away and circle these obstacles. If the bad weather is more widespread and it is necessary to go through, the combating of "soupy" weather is not nearly so tedious for the pilot of a speed plane as for the ordinary airman.

Headwinds are of small concern to the plane traveling at two hundred miles an hour. They are, of course, troublesome and reduce the speed, but the proportion of speed lost is not so great as that of a small plane with less speed. With tail winds and a fast ship the expression "riding on air" is certainly accentuated to the *n*th degree.

Let us now consider motors: Without commenting too much in detail, it may be pointed out that obviously with a cruising speed of about two hundred miles an hour, there is much less labor for the motor which, of course, spells economy. More miles

The Low-Winged Models are Capable of High Speeds

AVIATION MAGAZINE



The TEXACO STAR

per hour with the same number of revolutions per minute to gain the distance is a safety factor, you will note. I have pushed the *Texaco No. 13* nearly two hundred hours, at an average speed of 195 miles an hour. This includes flying of every description, but figured on a mileage basis, it represents travel in a straight line 39,500 miles long. This is almost twice as much distance as the average plane covers in the same number of hours. In addition, this amounts to one-half the motor labor and time that they require and I am, therefore, able to operate at almost one-half the cost per mile.

Some may argue that these figures prove nothing because the *Texaco No. 13* is a single-seater ship, which is considered by some as purely a racing plane. My interpretation of a racing plane is one which is limited to closed or straight-away courses or restricted areas where landing facilities are available at all times. Such an airplane is a laboratory for the engineers to utilize results and apply them to military or commercial aircraft for practical use over air lines. The *Texaco No. 13* can hardly be classed with such planes, as it is capable of going wherever any other land plane may go. It carries a sufficient load to satisfy me and carry me about the country so that I may handle more rapidly my

duties as Superintendent of The Texas Company's Aviation Division.

There are some commendable designs of airplanes which travel between 175 and 190 miles an hour at full throttle and carry from four to five passengers. It is to be regretted that they have not been so popularly patronized by the industry itself. The principal objection to them is what I mentioned at the beginning of this article, namely, the belief that such a plane has an excess landing speed, a belief which I am thoroughly convinced has been overstressed and misunderstood.

The one great thing which the airplane has to offer is rapid transportation. Without it, I do not see where aerial transportation of air mail, express or freight has much to offer in competition with well-established and recognized forms of transportation on the ground. When business men, and especially men from the big metropolitan centers, where the greatest amount of revenue can be expected, can be shown that there is actually a saving of time on the air routes, then I believe that the aviation industry will be on a firm footing with some definite prospects for sound financial development. Obviously these increased speeds must be realized without any (Continued on last page)

Another Modern High-Speed Passenger Cabin Plane

AVIATION MAGAZINE





Main St., Smithfield, Virginia,
Home of Smithfield Hams

TEXACO STAR PHOTOS

Peanuts, Spices and Smoke

Smithfield Hams Have Been Famous For Three Hundred Years

IT is twenty miles from the nearest railroad, this town of Smithfield, Virginia, and if you drove your car very fast you would probably pass right through it without stopping. Yet for the last three hundred years this quiet little Virginia settlement has been the home of one of America's most famous dishes, Smithfield ham.

Smithfield has a population of about 1400, much less than its population a hundred years ago. It is located on the south side of the James River, thirty miles from Norfolk and quite near Jamestown, site of the first English settlement in America. By truck and steamer thousands of juicy hams, cured by a process two thousand years old, from hogs raised in the famous peanut belt of Virginia, are shipped from this point to ports the world over.

In 1652 a cousin of the Captain John Smith, whose life, it will be recalled, was spared at the suit of one Pocahontas, and several associates laid the foundations of this early American export business. In addition to their fine manners and good wines these gay cavaliers of the Old Dominion brought with them from England some fine little pigs. These were bred for food and, when increase

warranted, for the gentle sport of wild boar hunting.

With the abundant pasturage, mild climate and rich natural foods of Virginia, the little pigs flourished and it was not long before there were more pigs than people. Many of the pigs disappeared into the swamps to appear years later as "razor back" hogs, a breed now extinct. The colonists rounded up several others, and placed them on a large island five miles below Jamestown. Here the citizenry repaired when in need of fresh meat and the locality became known as Hog Island.

It is not true that Smithfield hams originated with the American Indian. Prior to their being brought to the United States by the colonists, there were no domestic pigs in America. Soon after the first settlers arrived they began to raise peanuts and since there were no refrigerating plants at the time, some method of preserving food, particularly meats, had to be developed. The curing of ham had been known for centuries, but it was soon discovered that ham cured near Smithfield, Virginia, had a distinctive flavor. Whether it was caused by the oily nuts on which the hogs fed or by the smoke of the hickory, oak and apple wood used in curing the hams, or by



*The Town of
Smithfield Boasts
This Attractive
TEXACO Service
Station*



a combination of both, was not known, but some of the hams which were shipped to England soon found favor in the mother country and dealers there began instructing their Norfolk agents to send more Smithfield hams.

Within a short time peanuts and hams were the principal exports of the American colonies to England. During the seventeenth century these hams were shipped from Battery Park, a small settlement on the James River, about three miles from Smithfield.

Although these early pioneer meat packers have long since passed away, the five companies now carrying on business at Smithfield are using practically the same methods which were used hundreds of years ago. The hams are choice cuts from stock of a certain type. The hogs are raised by the farmers in the vicinity of Smithfield and during the first nine months of their lives they are allowed to roam at will through the woods. "Root hog or die" is

more than a catchword to these young porkers and those who survive are sturdy, lean and active.

After this initiatory period, the hogs are turned into freshly harvested peanut fields where they root among the plants and nuts remaining in the ground. In addition to peanuts they find quantities of acorns, hickory nuts and beechnuts. A few weeks of this diet are followed by a very heavy feeding on corn, after which the hogs are killed, dressed and brought to the Smithfield plants. Some hogs are shipped in from the Georgia peanut belt.

The curing process at the plant of the Smithfield Company, Incorporated, which may be said to be typical of the processes used in that vicinity, consists of dry salting, spicing with black pepper and a heavy smoking with hickory, apple and oak woods. Thereupon the smoked hams are hung up to age for six months. During the aging process they shrink considerably, concentrating the natural flavors of the meat, spices and smoke. When cured by this



*Feasting on Rich
Virginia Peanuts
This Smithfield
Porker is Happy*





A Virginia Peanut Field Just After Harvesting—Plants are Tied Around Poles



process, the meat may be kept almost indefinitely.

Some 200,000 hams are cured annually at the plant of the Smithfield Company. This output, while small compared to that of the large commercial packing plants, is distributed to hotels, restaurants and private consumers the world over. A large portion of the company's business is by mail order. The Kings and Queens of England have eaten Smithfield hams since 1800.

About 25 per cent of the hog is made into ham. The balance is manufactured into sausage, smoked and fresh, smoked shoulders, sides and jowls, all delicious by-products. Breakfast bacon is manufactured on a small scale but is not widely shipped except in the winter months.

It is a legend of the American Revolution that General Nelson, one of George Washington's aides, seized the entire output of hams from Smithfield, Virginia, during the struggle for independence. The good General, it is said, was convinced that a liberal

supply of such delicious and wholesome food would give added strength to the American troops. First families of the South have served Smithfield hams at their hospitable tables for more than two hundred years.

Officials of the Smithfield Company contend that very few people know the proper way to cook a ham. For that reason a large percentage of the output from this plant is cooked and sent out ready to eat. A new product, Amber Brand Deviled Smithfield Ham, is popular with city apartment dwellers whose habitations would not accommodate a full-sized ham.

Shipments of ham, as was noted above, are made by steamer and truck. Trucks of the Smithfield Company are fueled and lubricated with TEXACO products and private citizens of Smithfield obtain their gasoline and motor oil from an attractive TEXACO Service Station located on the main street of the town.

—P. C. H.



*"Eat, Drink and Be Merry, for Tomorrow we Die,"
—Smithfield Ham on the Hoof*





© ALBERT D. STREET, 1939

The Yankee Clipper Makes the 229 Miles Between Boston and New York in 4¾ Hours

TEXACO and the Yankee Clipper

New Haven Crack Train Provides Fast Boston-New York Service

MOST of the glamour of America's maritime days—the golden age of sailing ships in the middle of the nineteenth century—has centered around the clipper ship, that type of ocean greyhound which made fortunes for Yankee merchant princes by dashes around the Horn with cargoes of silk and tea from the Orient. With these vessels, whose hulls were built along lines to offer the least resistance to the water and whose masts carried an area of canvas hitherto unheard of, America established records that left the other commercial powers of the world gasping.

Not long ago the New York, New Haven and Hartford Railroad commemorated these clipper days by christening its new crack train between Boston and New York, "The Yankee Clipper." This train, which is one hundred per cent lubricated by TEXACO, cuts the time between the two points, 229 miles apart, to four hours and three-quarters. Bostonians can leave their city in mid-afternoon and reach New York in time for the theater. They ride between two ports that were famous in the days of clipper ships along the shores of Narragansett Bay and Long Island Sound, past many other ports where clippers

spread their sails in days past, bound for the Horn.

One of the most noted naval architects of that time was Donald McKay who, though he did not originate the clipper design, built many of the noted clippers. The type of hull, modeled with the greatest breadth of beam more amidships than forward, distinguished the clipper, primarily a cargo ship, from the sturdy packet which was used largely for carrying passengers and mail. The heavier sparring, enabling the vessel to carry at times seventeen thousand square yards of canvas on masts nearly two hundred feet high and on spars that sometimes extended 35 feet beyond the ship on each side, came as a later result of the hull design. So expert were the masters of these ships that nothing short of half a gale made them reef their sails.

As an example of the speed of these vessels,

McKay's *Surprise* broke the record on her maiden voyage from the Atlantic Coast to "Frisco" by making the trip in 96 days and 15 hours. She crossed to Hong Kong in 46 days, reloaded, and reached London just 107 days later.

The Yankee Clipper's Locomotive and Engine Crew



NOTE: This is the first of a series of articles dealing with important users of TEXACO lubricants in the field of railroading

“THERE SHE BLOWS!”

*Whaling is a Never to be
Forgotten Chapter in the
History of America*



WHEN Colonel Edwin L. Drake drilled the first oil well near Titusville, Pennsylvania, in 1859, he unintentionally but none the less effectively struck the first blow at America's whaling industry. Other factors contributed to the decline of the business of gathering sperm oil but it was almost immediately afterward that American homes, hitherto lighted by lamps containing whale oil, and candles made from whale products, began to use kerosene and natural gas for illuminants.

The average person of today who has read stories of the early days of the New England whaling ports, sees in the pursuit of the sperm whale an occupation tinged with the picturesque and fraught with romance. But to the officers and the motley crew of a Yankee whaler the chase of the leviathan was a difficult and hazardous job. Withal it was man's work, albeit the sea and the prey they sought were their deadly enemies.

The motto of the New Bedford whalers, "A dead whale or a stove boat," indicates that the odds were by no means always on the side of the pursuers. At Sag Harbor, Long Island, a minor whaling village, compared to New Bedford or Nantucket, Massachusetts, there is a monument erected to the memory of six whaling captains, not one of whom lived to be thirty years old. All met their deaths facing the onslaughts of enraged whales.

Whale products still play a considerable part in present-day life, but America has allowed the su-



The Last American Whaler—The Wanderer

KEYSTONE

premacy in the whaling industry to revert to the foreign interests whence she wrested it at the beginning of the nineteenth century. The sturdy Scandinavian sailors, from whose ancestors some of the Yankee whalers were indirectly descended, now prey on the whale with fast steamships and explosive harpoons propelled by a type of machine-driven spring gear.

Whales have existed from time immemorial, having been featured in legend and myth as far back as the earliest chronicles of man. Mention of whales is made in Biblical writings, and by the thirteenth century whaling was an important industry. Herman Melville's "Moby Dick" is, of course, a profound treatise on the history of whales as well as a remarkable literary achievement.

Early in the 1800's nearly every New England port with a good harbor had its wharves lined with scores of broad-beamed, seaworthy vessels whose masts and spars, carrying close-reefed canvas, swayed with the tide in what would seem to the sailor of today a meaningless tangle of rigging. New Bedford alone had sixty vessels at the beginning of the nineteenth century and by 1859 there were six hundred whaling ships, manned by more than twelve thousand seamen, who called New Bedford their home port. In 1846 there were 722 American whaling vessels on the seas and they gathered \$21,000,000 worth of oil in that year alone,

The TEXACO STAR

to say nothing of valuable whalebone and other products.

The War of 1812 served merely to halt the industry that was thoroughly under way by that time, but during the Civil War many a Yankee whaler was burned at sea, contributing to the downfall of a business that had already received a mortal blow.

Although the master of a Yankee whaler was generally a Yankee himself, founding a fortune which passed down through the family to contribute to the upkeep of many a stately mansion on a hillside overlooking a New England port, the members of the crew were not all Yankees by any means. Indians, Lascars, Frenchmen, Hindoos, Norwegians, Negroes and even South Sea Islanders, recruited during the chase, were shipped on at the lowest possible figure and fed on salt pork and hardtack. In most cases there were no salaries paid, but each man received a certain percentage of the profits. Even the cabin boy was included, although his share was generally not more than a six hundredth part of the spoils.

A New England whaling vessel often left port amid the cheers and good-byes of the townspeople

to be gone for three or four years, during which time the families of those aboard, left at home to rush down to the wharves in anxiety every time a ship entered the harbor, heard nothing from them except perhaps the report of another skipper that he had "seen the *Nancy B.* headin' for home down near the Horn."

Many New England houses still have on their roofs the "widow's walk," the platform from which lonely wives and anxious mothers and sweethearts watched for the ships whose sails and spars they knew so well. Every garret had a spy-glass resting on a handy beam and it was part of the day's routine for someone in the household to scan the horizon for a vessel due, perhaps, months before. Later would come the cry through the village streets, "Ship in the bay!" and everyone would rush down to the wharves.

When the whaler appeared, the owners, dressed in long-tailed coats and beaver hats, would embark in a small sloop to meet their returning prize. With the ship warped alongside the dock, wives and sweethearts would welcome those for whom they had waited so long, and soon the village streets would resound with the rumble of carts laden with barrels of sperm oil until the waterline of the whaler lifted high out of the sea.

After a short time in port—time in which the skipper and his mates had been rounding up a crew for the next voyage and in which spars, rigging, sails and hull were repaired and supplies shipped aboard—the whaler again spread her canvas, which filled gracefully to the breeze when she got beyond the mouth of the harbor.

Months later, somewhere down in the South Atlantic, in the Indian Ocean or even near the cold waters of the Arctic, came a cry from the crow's nest, "Whale ho!" or "Thar she blows!" The ship was brought about, boats were lowered and muscles on broad backs strained at the oars. Poised in the bow stood the harpoonier, balancing his double-barbed weapon. Everything depended on his skill. Behind him



KEYSTONE

The Whaleman's Motto, Preserved For All Time: New Bedford, Mass.

Ready to Lower Away:
John Barrymore as Captain
Ahab in the Whaling
Epic "Moby Dick"

★

The Whaleman of To-
day Shoots His Harpoon
From a Powerful Gun
in the Ship's Bow



WARNER BROS.



EWING GALLOWAY

stood one of the mates, ready to cut the line free with his knife, while painstakingly coiled in a tub in the bottom of the boat was the line itself.

Cautiously they approached their quarry; the harpooner drew back his arm and hurled the shaft, straight and true. If he hit the mark there was little need of oars for a time and the line was paid out rapidly as the whale sank until its slack indicated that he would soon come up and blow. Then a mighty body broke the crest of the waves, the whale was on the surface, the line tautened and twanged like a banjo string and the "Nantucket sleigh ride" began.

No roller coaster ever invented can approximate the thrills of that mad race up and down the trough of the waves in a small open boat, towed by an infuriated whale. Mile after mile it continued until the whale gradually tired, the line was slowly taken up and the boat drew closer and closer. This time

a man with a lance was poised on the prow, ready to deliver the death stroke. But the capture was not always as easy as this; many a boat was overturned far away from the ship by a whale that turned in his wild flight and came up beneath it, and many a boat was splintered to kindling by a single flip of the monster's tail.

Once the whale was killed it was marked by a buoy or flag and after the boats had returned to the whaler the mother vessel bore down on the kill and lashed it to her side. Next came the task of firing the brick furnace on the whaler's deck, cutting up the whale and throwing the blubber into huge copper cauldrons in the furnace. Blubber "cracklings," from which the oil had been extracted, were used to feed the flames and the oil was poured into casks and stored in the hold. Much of this work was done at night and the flames from the try works of a Yankee whaler could be seen from other ships miles away.

Day after day, month after month the hunt went on, until the hold of the whaler was filled with casks of oil and stacked with piles of clean, white whalebone which, in those days, had a hundred uses. Then it was time to go home, settle up with the owners and go a-whaling again, trusting that some mishap would not cut the (Continued on Last Page)

—AND SPERM

Before the lo

*Then he killed the old, u
To my aye, aye, blowin' a
And soon with sperm ha
Give me some time to he*



The Niger, a Famous Old New Bedford Whaler, Spreads Her Canvas to the Breeze



(Right) "Thar She Blows!" Cries the Lookout from His Perch as He Sights the Sperm Whale



The Harpooner Delivers the Death Blow with a Lance (Left): From a Rare Old Whaling Print



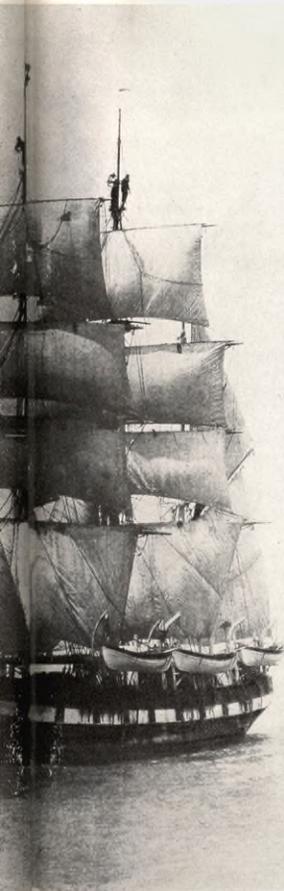
A Om o Whaler W. M. b. Now ed a Whaler

ARM AT THAT!

Disasters of Petroleum

*...the man down,
...the an down;
...oile had filled up each cask.
...ble the man down.*

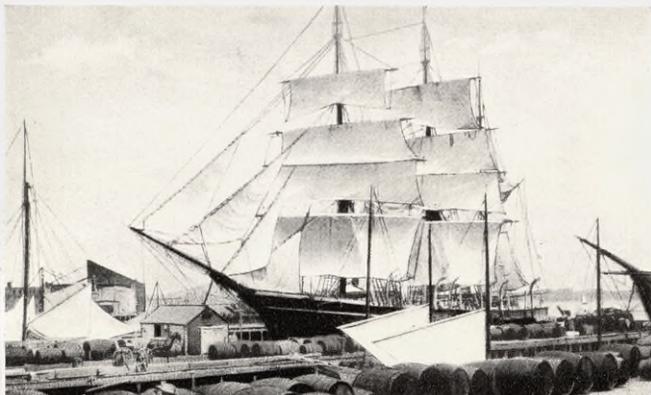
—Old Sea Chantey



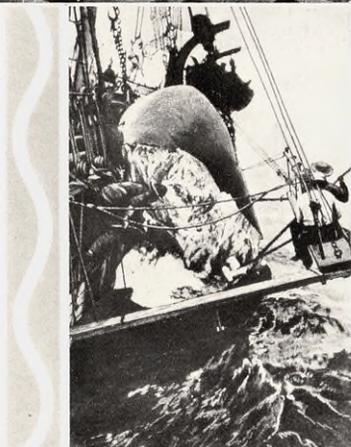
Once a famous whaling bark, the *Charles Morse* (above) is now preserved as a museum.



A contemporary artist depicts a stove boat (right): many a life was lost in this way.



Drying sails and unloading her cargo: whaling bark *Josephine* at New Bedford, Mass.



(Left) A source of Yankee fuel oil: stripping the oily blubber from the whale's carcass.



The TEXACO STAR

Printed monthly for distribution to employees and stockholders

Address: The TEXACO STAR, The Texas Company
135 East 42nd Street New York City

EDITORIAL BOARD

E. F. JOHNSON, Director of Company Publications
PHILIP C. HUMPHREY, Assistant Director



Advertising

A high school student recently wrote to the New York Offices of The Texas Company requesting information which would be of assistance to him in preparing a debate on whether or not the consumer benefits from advertising. George W. Vos, Superintendent of our Advertising Division, made reply to him in what we feel is an excellent summary:

"Advertising has had a vast educational influence on this country. Its effect on health, sanitation and the like is almost beyond belief. Advertising has made possible publications as we know them today, and these publications have taught the people as a whole the way to a greater enjoyment of life, a better use of leisure and better and more healthful diets, to say nothing of the widespread use of sanitary measures and devices. To sum it up, advertising has played a real part in making work for more people and in enabling them better to enjoy the fruits of their labor.

"The statement is made, frequently by street corner vendors, that goods can be sold more cheaply if they are not advertised. A quick survey will convince one that this cannot be true because advertising cuts down the cost by repeat sales to such an extent that advertising is not a charge, but more often earns a profit. On some of the widely-advertised commodities, the advertising cost is so small as to be almost negligible.

"Summing it up: The value to the producer is that advertising gives him a balanced, steady sale which enables him to stabilize his production. To the consumer it represents a guarantee of quality and in many proved instances a reduction in cost because he shares in the benefits of lowered production costs through increased distribution."

Prophecy

Forecasts and prophecies are always difficult to make and in this day and age to attempt to foretell what stage civilization will have advanced to or dropped back upon within the next fifty or one hundred years is a task which not many of us would care to undertake.

On the other hand, by noticing a

certain trend and applying a reasonable amount of thought to a definite subject, we are able to discuss with a fair expectation of being right, what the future holds for us.

Elsewhere in this issue of THE TEXACO STAR, Captain Frank M. Hawks, Superintendent of our Aviation Division, discusses the future of aviation. Flying at high speeds and on more frequent schedules, he maintains, cannot only be made safe but is the only way in which aviation can hope to compete with the older forms of transportation.

Even a casual study of Captain Hawks' article will convince the reader of the soundness of his argument. Safety in aviation has increased by leaps and bounds. Speed has also increased but full advantage has not been taken of the knowledge of high-speed flying which exists at the present time. Until airplanes can fly swiftly and through any kind of weather to their goal, they will be in the category of the early locomotive which, it was announced, in case of stormy weather would "be kept in the barn and the horses will be used to draw the train."

Public Relations

The relationship which obtains between a large corporation and the consumers of its products, of recent years referred to as "good will," is one of the most intangible yet valuable assets of a business. The indistinctness of the outline should not deceive the observer into dismissing the picture as unimportant.

"How to get good public relations cannot be charted, blueprinted or otherwise reduced to a formula," according to Eernard J. Mullaney, president of the American Gas Association. "It includes too many intangibles. But the basis of it is having our business better understood—by ourselves and by the general public.

"There is a woeful amount of ignorance of its functions, its structure and its simplest operations," Mr. Mullaney goes on to say. "Too many of us have a subconscious impression that every business but our own is some kind of shell game. We need to realize that my business is quite as honest as yours and vice-versa, and that both of them are quite as honest as selling groceries or driving a milk wagon.

"Some of you are going to say that your business is not geared for public relations work because it has so little direct contact with the public. My answer is: forget what you lack and use what you have.

"Your business, like others, has officers and department heads and agents



Not a mushroom or a cotton ball, but an aerial view of the eruption of a submarine volcano. This picture, sent in by R. S. D'Oyly-John, Representative of The Texas Company for Java and the Straits Settlements, shows an eruption that took place not long ago near Krakatan Island (Java), which is in the background. Smoke, ashes and stones rose eight hundred feet above the surface of the sea, and the water boiled for nearly a half mile around. Bubbles rose through an oily film for a long time after the eruption.

A PITTSBURGH stockholder has written us of an incident which makes us feel very proud indeed. He took his copy of THE TEXACO STAR home from the office one night and his mother picked the magazine up and began to read it.

"How much does this magazine cost?" she asked.

"You can't buy it," was the reply, "but it is distributed free of charge to stockholders of The Texas Corporation."

"Well," ordered the lady, "buy me some stock right away. That's a good magazine."

and employes and customers—a multitude and all a part of what we call the public. And each one has family connections and friends and neighbors. Put your pencils at work on that . . . and you will be surprised by the 'public' you can reach if you want to. "The place to start public relations work is among your own people. Why shouldn't every last one of them, from highest to humblest, be an evangelist for the business they make a living by? They will be, too, if you give them a chance. This is not theory. It has been done."

Mr. Reeser Surveys the Outlook

Address delivered by E. B. Reeser, President of the American Petroleum Institute, at the Eleventh Annual Meeting of the Institute, in Chicago, November 11, 1930

WHAT is the outlook for the petroleum industry? Millions of stockholders and owners of petroleum securities are tremendously interested in the correct answer to this question.

Whether the world's basic industries are to operate profitably or not is always of vital concern. The recent record of most of our industries—coal, lumber, agriculture, metals, textiles, rubber, for example—has not been encouraging. In common with the rest of them, the petroleum industry lately has been dissipating its capital investment by disposing of its products either at or below cost.

In general, the cause of the difficulty may be stated as due to excess production either of raw material or of manufactured products, or both. Some economists prefer to call it under-consumption; that is, a decline in the demand for the particular commodity below the normal rate of production and without any increase in the quantity produced. In other cases, it has been due to abnormal increases in the quantity produced. It is of the utmost significance that concurrently with the fall in price levels we have witnessed stock accumulations of such commodities as rubber, wheat, wool, coal, cotton, silk, leather and hides, tin, zinc, lead, copper, and petroleum.

In the case of petroleum it is undoubtedly true that our instrumentalities of production have been geared high. In truth, in recent years all of our physical instruments, whether in crude production, refining or distribution, have been—from an industrial point of view—unduly multiplied. Continual technical progress in percentage output has accompanied this physical expansion. With a capacity output largely in excess of normal increases in consumption, it is easy for the informed to understand how an unexpected decline in percentage increase of demand could rapidly throw the equilibrium between supply and demand off balance.

The entire world is in the throes of an economic upheaval. The depression is confined to no country nor to any single industry. Business, agriculture,



E. B. REESER

and labor alike suffer severely. Agriculture was stricken first. It is a striking illustration of the economic interdependence of nations and of industries.

The answer to the question "What is the immediate outlook for the petroleum industry?" would depend upon two things: namely, the rapidity with which general business conditions improve and the ability of the producers, refiners, and marketers who compose our industry, to adapt their mental operations and company policies to the changed conditions under which we must

operate. In my judgment, the latter is the more important of the two. I believe the common sense of the men engaged in the petroleum industry is equal to the test.

The general restraint upon crude production which the industry has exercised is indicative of what producers can, and will, do to meet an emergency. Our methods of capturing oil have been, and broadly speaking still are, such as to permit the continued existence of that overhanging shadow "overproduction." Stability, the removal of that shadow, requires that we speedily seek and find a permanent solution. We must find an answer that will dispose permanently of the age-long methods we have employed in the competitive development of single pools. The method must be one which we may rely upon to yield economy in development and operation, to obtain greater recoveries from the sands, and to provide for stability of output as related to market demands. Without going further into the long and familiar detailed story, may I say, in brief, that I believe the answer is to be found in the application of some practicable form of unitization or unit operation. Two important sessions of this meeting are to be devoted exclusively to a discussion of this subject.

Since the organization of the three divisions, production, refining, and marketing, the need on this occasion for a detailed presidential review of the status of the industry has largely disappeared. Detailed comment upon conditions prevailing in

The TEXACO STAR

the three principal branches of the industry will be made by the Vice-Presidents for Production, Refining, and Marketing in their respective reports which will be made to business meetings of the divisional members on Thursday afternoon.

Critics may analyze the petroleum situation to their heart's content, and find what they may seek; but, as I see it, these three factors in the oil situation are important for oil company ownership and management to note and to remember:

1. The petroleum industry at this moment faces a condition that it has faced only once before in its history, namely, the almost certain prospect that during the coming six months' period there will be a very small, if indeed any, percentage increase in the demand for its principal money product, gasoline.

2. The excess of all liquid petroleum products at any given time is the difference between the aggregate of all stocks actually on hand and the aggregate working stocks necessary to meet current demand. The same definition will apply to stocks of crude or of any particular refined product. It, therefore, follows that the economic lesson is to dispose of, or to reduce, the excess until a balance is reached.

3. The necessity for quickening effort to find as promptly as possible the effective and permanent

solution of the industry's major problem of how to prevent recurrent periods of overproduction of crude oil, which remains the root of the evil.

As suggested before, the world is staggering under the weight of surpluses of all kinds of raw material. The petroleum industry is taking the lead in restricting its output to meet the demand. It is perhaps unwise to mention increased costs at a time of great overproduction, and yet we must face the facts. Conservation, or proration, under the present plan does increase the cost of production, and it will continue to increase until competitive operations are displaced by unit operations. Present prices for crude petroleum and its products are not remunerative.

In closing, may I quote from the address delivered by Mr. Charles Schwab a few days ago before the American steel industry, substituting the word "petroleum" for "steel":

"There are two factors entirely in the control of the petroleum industry itself, which—regardless of fluctuations in general business—largely determine our success as an industry. One of these is price stability; the other is stability of production. We cannot afford to squander our resources either by price cutting below the profit line or by overproduction beyond the demand line."





Grand Review of All Tribes in the Pageant of the First American

Albuquerque Honors The First American

Each Year the Plains Indians Gather for a Pageant in New Mexico

By MRS. W. H. NOBLE

MANY of you can remember when a conclave of Indian tribes would have spelled trouble to the white man; old Geronimo on the war path, massacre, skirmishing, blanched faces of women on lonely ranches.

Not so today. For three years now, half a hundred tribes from the plains, the mesas and the mountains have left their reservations and gathered in Albuquerque, New Mexico, for a meeting unique in the annals of the Indian. Tribes that not so many moons ago lay in ambush for each other and let their arrows fly with deadly effect, warriors whose fathers would not dare come within hailing distance of each other now sleep peacefully in adjoining tents. How is this done?

Just Mike Kirk, is the answer.

This dynamo of human energy was able, through his friendship with the numerous tribes and their respect and confidence in him, to bring together these original Americans of the great Southwest and let the world glimpse some of the arts these aborigines had when European civilization was still in its cradle.

These plains Indians show us a culture as old as the hills, a knowl-

edge of arts and crafts, music and dance, traditions handed down from father to son, things that men live by and die for.

Here in the old Spanish town of Albuquerque, with its air of first traders and the cowboys, yet modern withal, is held the only production in existence today which is devoted and dedicated solely to our first American—the Indian. The performance takes place before a massive four-tiered adobe pueblo, which seems to nestle at the foot of the great, soft, sooty Sandios Mountains. This pueblo is a replica of the one at Taos, which, by the way, is the largest in the world. The audience sits in an open air grandstand, some distance in front of the pueblo.

When you enter the grounds you feel the carnival spirit of the old roundup; men with brilliantly colored shirts, and even gayer handkerchiefs, tied cowboy fashion around their necks, with ten gallon

hats perched rakishly on their heads, walk around in high-heeled boots and clicking spurs. Moccasin clad, long-haired Indians, some in blankets, some in a mixture of American and Indian clothes, and the squaws with their papooses, stand in silent and dig-

Horse Tail Dance of the Taos Indians





Participants in the Pageant with Gov. Dillon of New Mexico (third from left)

(Left) Haske Naswood, Navajo Baritone, Star of the Latest performance

nified groups. Brown-eyed señors and coquettish señoritas add their bit to the colorful crowd. Back of the pueblo one sees the tepees where the Indians live during the week's performance and hears the stamping and occasional neigh of horses in the corrals.

Suddenly there is an awed silence. A light like the rising sun touches the topmost point of the pueblo where a bronze figure, with upstretched arms, starts to sing "The Sunrise Call," the Indian tribal supplication to the Sun-God. It is Haske Naswood, Navajo baritone. Chief Yowlache, in the distance, sings the echo.

Over fifty tribes participate in the performance, which begins by picturing the Indian from the time when runners came to announce that men white as snow had been seen far to the southward. Then comes the council of the tribe and the arrival of the Spanish, the proclamation of the Conquistadores declaring the new province a part of Spain.



The Spanish influence is shown. General Kearney arrives and takes over the reins of government for the United States. This is the theme, interspersed with Indian and Spanish songs and dances.

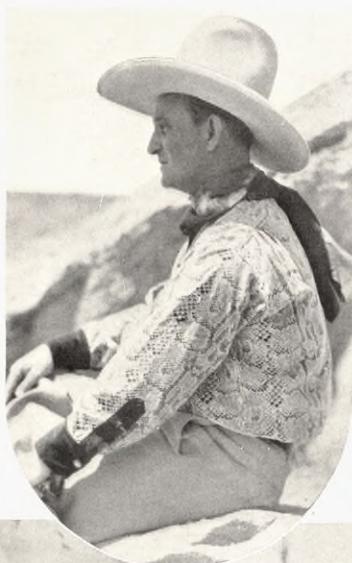
The dances of the Indians are really ceremonial and are as sacred as church services to the "palefaces". There are dances for healing, dances of thanksgiving, dances of war and of the hunt—a dance for every great event of their lives. For instance, the spectacular "night chant" of the Navajos has never been given off their reservation, and men of science, educators and writers have traveled across the continent to catch a glimpse or get an echo of its weird and pagan rites.

No one who has heard the rhythmic beat of the tom-toms and watched the Rain Dance of the Pueblos; no one who has seen the grace of the Taos Hoop Dance, or thrilled to the exotic beauty of the Navajo Fire Dance, the threat of war dances or the

The TEXACO STAR

mystery of the sinewy Carlos Apache's Devil Dance, or the Ute's Corn Dance, can ever forget them. Amazing and intensely dramatic and inspiring are these age-old dances. Many are led by medicine men, whose rituals have been handed down for centuries. A mixed chorus of one hundred Zunis dance and chant so effectively that, although one understands no word, one feels that it is a real thanksgiving dance to their gods for a bounteous crop.

The Hopi, in the Butterfly dance, are able to make a twentieth century audience roar with laughter. Possibly



ants of these early Spanish pioneers, and one evening's performance is given over almost entirely to a presentation of their songs and dances.

An interesting number, given by the Taos Indians, is a "Moonlight Song", played on primitive flutes. These crude musical tools, fashioned hundreds of years before the landing of the Spanish, have a quality in them to inspire even a gathering accustomed to better instruments.

Music is intimately bound up with the daily life of the Indian. Every important act of the tribe has its special



Chief White Horse,
a Typical Apache



(Above) Mike Kirk
Pageant Director

An Apache Brave
in Tribal Costume

the Indian dance that shows most the Spanish influence is the Matachina's Dance presented by the Cochitis, which imitates a sixteenth century Spanish miracle play, and shows the Spanish influence in the music and costumes.

It is to the early Spaniards that the Indians owe their knowledge of the adobe brick, used so extensively in their pueblos, and the use of silver in making jewelry. New Mexico is full of the descend-

song. Every ceremonial, religious or otherwise, is accompanied by music. The sound of the tom-tom is seldom missing from any gathering. The last night's performance is usually climaxed by a grand review of the old West, made memorable by Buffalo Bill, Kit Carson, and the Forty-Niners, with Indians and cowboys and Spaniards side by side in one vast ensemble.

"Suzanna", sung by the (Continued on last page)



Aerial View of New London, Connecticut, and the Thames River

TEXACO at Home

IV—NEW LONDON

THE Pequot, Nameug and Mohican Indians were still using the site of New London, Connecticut, as a hunting ground when John Winthrop the younger and a band of Puritans came to settle there in 1646. For many years the white man and the Indian struggled, but eventually the Puritans made permanent a settlement on a hill above the Thames River where it empties into the Atlantic near the mouth of Long Island Sound.

The quaint, winding streets of the pioneer still survive. As in many a Colonial town, thoroughfares were not laid out, but followed the paths made by the settlers on their way to church or by the cows of the villagers in search of greener pastures.

New London is built on one of those New England hillsides that seemed to be so popular for town sites, especially near the sea. A hill, in the first place, was the safest place from attack by Indians, for the redskins had much less chance to make a surprise attack upon a village when the sentries could look down upon their canoes gliding along the shadows of a river bank or their bodies stealing

silently through the dense growth of underbrush.

A few decades later the seafaring people of New London found the hillside location admirable, for from their windows they could see sun-silvered topsails long before the vessel came within hailing distance of land. The New London merchant found it a comforting sight to look from his breakfast table down upon the masts and spars towering above the wharves. In the 1300's New London was second only to New Bedford, Massachusetts as a base for the whaling industry.

Still standing within the city limits, one of the few buildings that survived the burning of New London during the Revolution, is Ye Olde Towne Mill on Mill Street, built just four years after the founding of New London. Also of interest to the historian and sightseer is the schoolhouse where Nathan Hale taught, on Huntington Street, and the Huguenot House, Truman and Jay Streets. Both of these survived the fire. A cemetery known as Ye Ancientest Burial Grounde is on Hempstead Street. Fort Griswold, a relic of the Revolutionary period,



Texaco Bulk Installation at Groton, as Seen from the Wharf

is in Groton, just across the Thames River. When the townspeople of New London were forced to flee from the British, they fortified themselves at Groton, and a monument there calls to memory incidents of their final surrender.

Benedict Arnold, who later turned traitor to his country, was born and lived at Norwich, fifteen miles north of New London, and it is said that he had much to do with the capture and burning of the town.

Many of the old Indian names survive around New London, and the city's traditions are cherished by all of its residents. Important manufacturing plants are nearby, and TEXACO lubricants are standard in a large number of these. The Connecticut State College for Women is located at New London, and each year the famous crew races between Harvard and Yale take place on the Thames River.

New London is on the main route between Boston and New York either by rail, automobile or boat. The city covers an area of about five and one-quarter square miles and its population in 1929 was estimated at more than 33,000.

A bulk installation of The Texas Company at Groton, Connecticut, receives TEXACO products from the Company's terminal at Providence, Rhode Island, and distributes TEXACO lubricants to textile mills, fisheries, quarries and manufacturers of machinery in the vicinity. TEXACO Gasoline and TEXACO Motor Oil are largely used in New London and many of the city's streets are paved with TEXACO Asphalt.

Our Groton bulk installation is built in the eastern slope of the Thames River, opposite the southern end of New London and almost directly west of old Fort Griswold, of Revolutionary fame. The property

Our Groton Bulk Installation Looking Toward the Waterfront





The Huguenot House (Left) Which Survived Revolutionary Fire, and the County Court House

itself extends from Eastern Point Road down to the shore line, a distance of approximately 750 feet. An installation of this nature necessitates water deliveries to the station and this in turn calls for a wharf for barges to tie up to and pipe lines and a walkway between the wharf and the shore.

Due to the fact that up to one hundred feet off the shore the river bottom is bare rock and even at a distance of 170 feet off shore the mud over the rock bottom is only eight feet deep, the usual design of pile wharf and pipe trestle could not be used. Furthermore, on account of the unbroken exposure to storm winds and waves and to the rock ribbed condition of the shore, it was necessary to place the wharf at least two hundred feet from shore in order to make the landing attractive for marine sales and safe for The Texas Company's barges.

Several designs were contemplated but at length M. H. Korn, Assistant Superintendent of the Equipment and Construction Division, Northern Territory Sales, devised a bridge and wharf which was both unique and economical. This consisted of a concrete wharf with a suspension bridge from the wharf to the shore. The out shore wharf was placed on piles cut off four feet above the mud bottom because

at that point the mud bottom dips quite steeply and is therefore overlain with a considerable thickness of mud and silt. This made the computations and stress diagrams a little more difficult.

The wharf, therefore, is a solid block of rubble concrete 14' by 22' by 26' deep. It weighs 435 tons and sets on thirty vertical and four inclined oak piles. Each of the two bridge towers consists of two braced steel columns. The main cables are one and five-eighths inches in diameter and are made up of seven strands of seven wires each. The suspender rods are one-half an inch in diameter and the floor beams are eight-inch steel channels. The bridge carries two six-inch and one two and one-half inch pipe lines, placed on each side of the walkway, which itself is thirty inches wide. All of the stresses are computed for a snow and ice load of 25 pounds to the square foot and a load of ten men on the bridge at once.

Four miles north is the United States Navy's submarine base, headquarters of the Atlantic Submarine fleet. The coast guard base is located on the State Pier at New London and Coast Guard vessels obtain TEXACO Gasoline at the wharf of The Texas Company's bulk plant at Groton.

PHOTOS OTHER THAN THOSE SHOWING COMPANY FACILITIES BY COURTESY OF THE NEW LONDON CHAMBER OF COMMERCE



Part of Groton Bulk Plant as Seen from One of the Tanks



A View of the Blue Hole, Port Antonio, Jamaica

Globe-Trotting with TEXACO

XVII—JAMAICA

By E. C. BATTERSBY

Local Manager, The Texas Company (Caribbean) Limited, Kingston, Jamaica

IT is very probable that Jamaica affords as much lure to the traveler of varied interest as any spot in the world.

To the lover of romance, there is the thought of the thrilling and adventurous life which the pirates of old led in these waters of the Caribbean—the buccaners, of whom the chief was Henry Morgan, in his regenerate days Lieutenant Governor of Jamaica. Morgan himself lies buried on the “Palisadoes”, the neck of land connecting the mainland with Port Royal, and which forms the harbor of Kingston. The convicts of Monmouth’s and of Argyll’s rebellion, who came out as slaves in 1685, bound to serve for ten years, have been made familiar to us in the “Captain Blood” of recent fiction.

To the historian, there is a wealth of interest to be found in the romantic history of Jamaica and its colonization, which is closely allied to the same

period of our own history. We find that as early as 1656 Cromwell, with a desire to have Jamaica colonized by a God-fearing people, offered special facilities for those who would go from New England and settle in the new colony. Some few came, but reports of its unhealthiness, and fear of Spanish invasion and of the hostile negroes, kept many away. The care that was taken, however, to send provisions from New England for the new settlers paved the way for the subsequent trade between the northern colonies and the West Indies.

The “hostile negroes” referred to above were the negroes belonging to the Spaniards when Jamaica was taken by the British. These negroes retreated to the secluded spots in the interior, and became the forerunners of the Maroons, who, for years, gave much trouble to the authorities. There are Maroons still inhabiting a small portion of Jamaica,



"Tom Cringle's Cotton Tree," the Scene of Many Slave Hangings in the Old Days

and they are looked upon as the wild and lawless men of the island.

The Northern Colonies and the West Indies are linked by many interesting incidents besides those developed from inter-colonial trade. Henry Moore, Governor of Jamaica from 1756 to 1762, was, from 1765 to 1769, Governor of New York, while William Henry Lyttleton (Baron Lyttleton), who was here from 1762 to 1765, relinquished the governorship of South Carolina to come to Jamaica.

In 1779 the South Carolina Regiment was raised, and is first mentioned as taking part in action at Briar Creek in March of that year, the Corps then numbering about one hundred strong. This subsequently became the first branch of the since famous West India Regiment, which continued in existence and eventually grew to number thirteen battalions. These battalions formed the First and Second West India Regiments and served with distinction all through the World War. This splendid old West India Regiment was finally disbanded by King George at a

touching ceremony at Buckingham Palace in 1926. The only unit remaining at present is the Band, made up entirely of black Jamaicans, trained and led by a British officer, and they play magnificently. They still retain their picturesque old uniforms, with the old Carolina laurel borne on the Regimental Crest. The local government supports this band.

In 1692 Port Royal, then the finest town in the West Indies and one of the richest places in the world by reason of treasures brought in by the buccaneers, was almost totally destroyed by an earthquake, which led to the development of the town of Kingston. This town supplanted the headquarters of the buccaneers, where there was always much debauchery. A part of Port Royal was en-



Entrance to The Texas Company's Terminal Property, Kingston



Bamboo Avenue, Lacovia, is Like a Gothic Cathedral

gulfed by the sea during this earthquake, and it is said that to this day one may sometimes see the old city under a calm and clear sea, and some go so far as to declare that on very still nights the tolling of the inundated Cathedral bell may be heard. It makes an interesting story.

A sequel to tales of the calamity is the story of a man named Galdy, who was actually swallowed up by the opening of the earth and literally buried alive for a time. He was later thrown up during the course of the earthquake. He lived for many years after and lies buried in the Helshire Hills, with an inscription on his tomb testifying to the occurrence.

The present tiny town of Port Royal is situated at the western extremity of the "Palisadoes," which

partially encloses Kingston Harbor. It is now a military station, with very interesting historical associations. During a recent visit of the American Fleet to Kingston, the writer was a guest at a dinner given one of the commanding officers. During the conversation the guest of honor was asked if he had made his usual pilgrimage to Port Royal, and he answered in the affirmative. It seems that each time this distinguished sailor visits these waters he takes a "day off," packs a lunch and goes to Port Royal, to drink in the atmosphere of its great past, where so many famous sailors of old lived and fought and made history. At Port Royal can be seen Nelson's quarters, his coat of arms being painted over the door.

To the pleasure seeker and beauty lover of the present day, Jamaica is fast taking a leading place among the winter resorts of the world. Rising out of the blue depths of the Caribbean Sea to an elevation, in the Blue Mountain Peak, of 7333 feet, it is not without justification that Jamaica has been described by a well



View of The Texas Company's Terminal from the Waterfront



Clifton Rapids, One of the Sights of Beauty in Jamaica

known traveler as "the loveliest isle in the world." It is truly a land of green hills and plains streaked with many rivers and fertile valleys.

The climate during the winter season is ideal, but the summers are continuous reminders that one is living in the Tropics.

Although mountainous, Jamaica is well suited to the use of motor cars. As a matter of fact, they are actual necessities to the greater part of the inhabitants, both in the country and in the city.

The women of the peasant class still pour into the busy centers on foot, carrying their heavy produce to market in large baskets miraculously balanced on their heads, many leading heavily laden donkeys as well. These women walk miles daily, to and from the markets, but it is no uncommon sight to see motor buses packed to their utmost capacity with the very picturesque red-turbaned (bandanas) women bringing their wares to market in this modern manner. These buses and trucks, with their human loads, dash most recklessly through country roads and city streets at a terrific pace—about the only thing that hurries in Jamaica, so far as the natives are concerned.

The Jamaica Government Railway connects the Capital, Kingston, on the south side, with the northeast and north-west of the island, but it is safe to say that most of the traveling from town to town

is accomplished largely by means of motor cars.

One of the most important functions of the Railway in Jamaica is the conveying of the enormous shipment of bananas to the sea ports for foreign shipment. An average carriage for the three busiest days of the week (and this goes on throughout the year) is one hundred thousand stems of bananas per day. Besides this great number of bananas handled by rail, thousands of stems are brought in from the nearer estates by motor trucks.

The roads laid down and maintained by the Government, and known as "main roads" (2337 miles in extent) are as a rule in good order. The highest road passes over a gap at an elevation of a little over four thousand feet.

Motor cars are a necessity in the cities and towns, where distances are great, and only in Kingston are street cars known. The city corporation of Kingston and Saint Andrew covers an area of about 25 square miles, Saint Andrew extending through the Liguanea Plain and up into the hills, forming the residential portion of Kingston. Streets here are for the most part paved and in good condition, and the city corporation is extending the work of paving.

Montego Bay and Port Antonio are the two cities next in size to Kingston, the latter, with its very modern and beautifully situated Titchfield Hotel, being very popular as a winter resort with foreign



Native Women on Their Way to Market

visitors and the tourists.

Mandeville, the largest of the mountain towns, is a delightful old place, 61 miles from Kingston and two thousand feet above sea level.

Spanish Town, the old capital of Jamaica, is thirteen miles from Kingston, but its glory is of the past and interesting only to tourists on account of its history.

A good, but rather condensed, description of Jamaica is found in "A Briefe Journall", an interesting impression written by an English traveler in 1642, which applies as well to the present day:

"Ye Temperature of ye Climent, and Salubrite of ye Ayre, may be very well deserned in ye good complection and



A 100 Per Cent TEXACO Dealer

long life of ye inhabitants, who here attain to greater age than those in many of ye neighboring islands. It is likewise watered with pleasant Springs and fresh Rivers, and wanteth noe store of safe convenient Harbours for Ships, both on the South and North sides thereof. For brieft, it affords, or can produce, whatsoever, or most things, affected by man, either for pleasure or profit."

The Texas Company has been operating in this market for a good many years. Originally, the business was handled through an agency, but in April, 1919, an office was opened in Kingston and our own organization established, with
(Continued on last page)

SPEAKING OF SPEED

(Continued from page 8)

increase in rates; in fact, the present rates must show a decided tendency toward reduction. I do believe, however, that by fixing the attention upon the former requirement, the latter factor will more readily take care of itself.

The Texas Company, a pioneer oil company in the field of aeronautics, has always been identified with the latest developments in aviation. Not only have they been manufacturing for some time special fuels and lubricants for airplanes, in TEXACO Aviation Gasoline, TEXACO Aerodiesel Fuel and TEXACO Airplane Oil, but they have sponsored such events as the transcontinental non-stop speed flights of the *Texaco 5*, the transcontinental flight of the glider *Texaco Eaglet*, and the numerous flights of the *Texaco No. 13*.

If any of the cross-country speed records which I have made offer an incentive for others to excel them, I shall always feel that my efforts have not been in vain. There is no object in flying from city to city for the mere purpose of establishing records unless it can be pointed out as a definite mark toward which all other commercial aviation enterprises can aim at as a goal for logical, daily operation.

FIRST AMERICAN

(Continued from page 23)

Forty-Niner chorus, brings vividly to mind the rollicking, hard-living days of the gold rush, the spirit of the times, and its effect on the red men.

The world's greatest Indian singers, Chief Yowlache, Princess Lon-Schanya, Haske Naswood, Taptuka, Leon Soldani, arrayed in their picturesque native clothing, feathers and all, sing native and classic songs with an ease and finish that would do justice to many metropolitan artists.

When they all sing Seeber's theme song, "Hail the First American", as a finale, grouped en masse before the grand stand, a never-to-be-forgotten thrill comes from these joyous voices singing as if their hearts were in every word.

The First American is presented yearly without financial gain. It is helping the Indian to hold high the best that is in him, to keep his traditions, and to retain his arts and crafts. It is to be a common meeting ground where Indian may get to know Indian better, as well as to encourage a more sympathetic understanding between him and his white brother.

The First American is not only a good show—it's a great one.

GLOBE-TROTTING

(Continued from page 31)

consignment agents at the principal outposts. The market at first was largely for lighting kerosene, and, to some extent, industrial lubricants used by the sugar mills, but the rapid increase in the use of motor cars and trucks has resulted in an average increase of more than 20 per cent in gasoline imports, with the result that this product, with motor oils and greases, now constitutes the most important part of the business. In 1929 it was decided to distribute gasoline in bulk throughout the West Indies, and in June work was commenced on a small terminal, consisting of warehouse and drum-cleaning shed, garage, tankage, wharf, pump-house and loading rack.

This terminal is supplied with gasoline in bulk and Diesel oil in packages by the Power Boat TEXACO 145, operating out of the Guayanilla, Porto Rico, Ocean Terminal. Other products are received in original packages from Port Arthur, Texas, or New York, and distributed to the trade through our own organization under the familiar TEXACO trade mark, the Red Star with the Green T, which in Jamaica, as elsewhere, stands for quality products, fair dealing and prompt, courteous and efficient service.

From the export field comes the news that copies of *Around the World with Texaco*, published several years ago by The Texas Company, are being used as geography textbooks in the smaller schools of many foreign countries.

"THERE SHE BLOWS"

(Continued from page 15)

voyage short. Whales have been known to attack a big ship and sink her, and there were other dangers from fire, storms and mutiny.

It was fitting that the last American whaler should have cleared from New Bedford. She was the bark "Wanderer" and she put out of the harbor in August 1924. She had gone only a short distance before she was wrecked, and with her sank an industry in which America once ranked far and above other nations.

The foreign whaling fleets that now sail the seas furnish oil that goes into soap, and a wax product from sperm oil is used in cold creams and cosmetics. Charcoal made from whalebone is sometimes used to bleach sugar.

The grandsons and granddaughters of the Yankee whalers have found

LOG OF THE No. 13

Captain Frank M. Hawks' *Texaco No. 13* has flown 25,000 miles in various cross-country trips at an average speed of 191 miles per hour, Captain Hawks said in a recent report to George W. Vos, Superintendent of the Advertising Division of The Texas Company. This amounts to a flight around the world in about five days.

The outstanding flights of the *Texaco No. 13*, a Travel Air Mystery Ship with a high speed of 240 miles per hour have been: from New York to Los Angeles in fourteen hours, fifty minutes with five stops for fuel; Los Angeles to New York in twelve hours, twenty-five minutes with three stops for fuel; New York to Havana in nine hours, fifteen minutes with two stops, and Havana to New York in eight hours and forty minutes with two stops for fuel. Other outstanding flights made by Captain Hawks in the *Texaco No. 13* have been from Philadelphia to New York in twenty minutes at an average speed of 270 miles per hour and from Detroit to New York, 640 miles, in two hours and forty-one minutes at an average speed of 253 miles per hour.

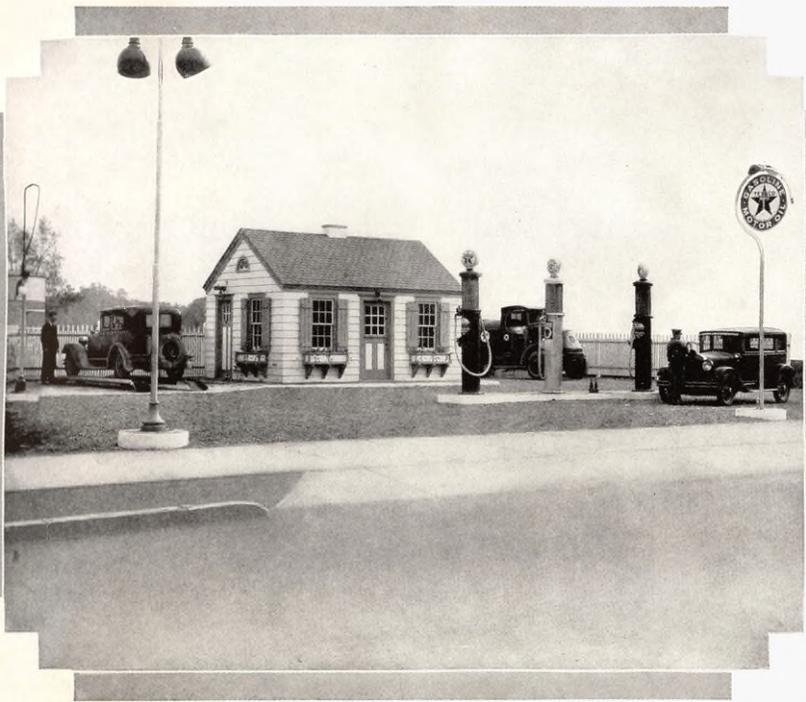
With his former plane, the *Texaco No. 5*, Captain Hawks made a non-stop flight from Los Angeles to New York in eighteen hours, twenty-one minutes, and a one-stop round trip flight, New York to the West Coast and return, in thirty-six hours, thirty-eight minutes flying time.

Exploring beneath the earth for oil has brought a need for new instruments and new technique. This subsurface exploring has been termed geophysics, and the instruments for carrying it out measure variations and differences from point to point in gravity, density, conductivity and magnetic susceptibility of the rocks which make up the earth's crust. From the results of geophysical fact-finding the depth of deeply-buried beds of rock is computed.

The seismograph, the torsion balance and the magneto meter assist in determining the structure of layers of rocks and help to locate the most likely places to drill for oil.

other employment. In the towns where masts and spars once towered above the housetops, tall factory chimneys now pierce the horizon and beneath the clouds of billowing smoke turn the wheels of machinery which is lubricated by the very oil which displaced the clear, white sperm of the whale.

—W. B. T.



AN ATTRACTIVE YET ECONOMICAL DESIGN:
THE NEW HIGHWAY TYPE SERVICE STATION



EVEN IF YOUR CAR WERE FROZEN IN ICE



TEXACO
would flow*

*In the average engine there are twenty or more fine oil channels no wider than the "waist" of the "hour-glass" shown here. Through these channels, oil must flow.

THE "HOUR-GLASS" TEST

An "hour-glass" partly filled with the new crack-proof Texaco Motor Oil was frozen in ice. When the cork was pulled, the pure golden Texaco flowed.



IN winter, many oils not specifically refined to resist cold, thicken hard as grease. They will not flow through the narrow lubrication channels of your car until thawed out by the very engine heat and friction they are supposed to prevent. With such oils in your crankcase, every cold start means engine wear—scored cylinder walls and roughened bearings.

The new Texaco Motor Oil flows instantly, even when water freezes, because it is free from paraffin wax. At the first thrust of cold pistons the new crack-

proof Texaco surges through every lubrication channel—through bearing clearances of a few thousandths of an inch!

Texaco is not only "crack-proof" but "frost-proof." It is as immune to the heat of an all-day drive as it is to the cold of an all-night stand. To protect your car from winter wear—to protect yourself from winter troubles—fill with the new Texaco today. Available in all our 48 States.

THE TEXAS COMPANY

Refiners of a complete line of Texaco Petroleum Products, including Gasoline, Motor Oil, Industrial, Railroad, Marine and Farm Lubricants, Road Asphalts and Asphalt Roofing.



THE NEW

© 1931, The Texas Company

TEXACO MOTOR OIL

"CRACK-PROOF" . . . LONGER-LASTING