



## TO THE BOATS!

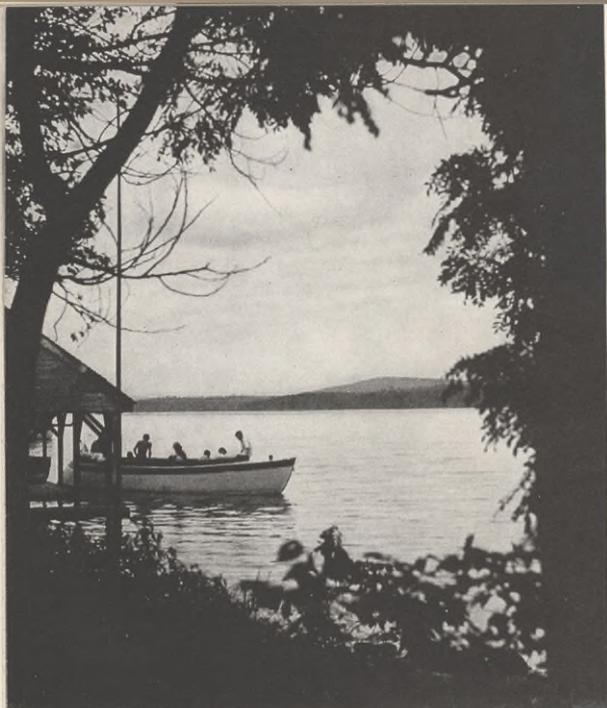
★ **MOTOR** boating is one of America's fastest growing major sports. It is no longer a rich man's pastime; you do not need a mahogany-trimmed yacht or a luxurious "inboard" cruiser to enjoy the thrill of going where you please, viewing new scenes, unhampered by highways, traffic lights, congestion and dust. Today even the humble "putt-putt" outboard engine is a sturdy, dependable, yet inexpensive piece of equipment.

With better marine engines has gone a steady improvement in fuel and lubricants. The Texaco Company, one of the first to recognize the growing popularity of motor boating, is today, through its Marine Sales Division, one of the most active units in the industry in promoting interest in boating. In addition to quality products, many courtesy services have been inaugurated to aid yachtsmen. Texaco Waterways Service, a cruising information bureau, provides boat owners with data and advice about waterways of the country. Texaco Cruising Charts of the Atlantic Coast and Great Lakes have been published to help them plan vacations and week-end cruises. Selected Texaco Waterfront Stations, known as "Texaco Mailports," have been placed at the disposal of boat owners as mailing addresses. The Refining Department's Technical Division freely offers engineering and lubrication information.

A chain of Texaco Waterfront Service Stations on the East and West Coasts and on principal inland waterways supplies products and services of the same uniform excellence which characterizes the Company's land service stations.

At every major regatta, Texaco Marine Products are on hand to service the racing craft. Many of the most important races in recent years have been won by Texaco-fueled and lubricated boats.

"Texaco" is a word that ranks high in the mariner's vocabulary.



NESMITH

(Above) Off for a quiet cruise in the beautiful Sebago Lake section of Maine. (Below) *Madoshumi V*, fastest boat of her class in the country, at the start of the race in which, using Texaco Marine Products, she won the Wanamaker Trophy in the recent Biscayne Bay Regatta in Florida.—From the humblest outboard to the roaring racer, Texaco delivers a dependable, economical job

MORRIS ROSENFELD



# THE TEXACO STAR

June-July, 1935

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NUMBER 2

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Cover illustration, *Baiting hooks in Gloucester Harbor, Gloucester, Mass.*

PHOTO BY JOHN KABEL

## A PUBLICATION OF THE TEXAS COMPANY

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★ About seven million dollars is spent yearly in blowing the whistles of locomotives on railroads of the United States. It takes about 8,000 pounds of steam to blow a locomotive whistle for one hour. It is estimated that the nation's locomotives put in a grand total of 11,200 hours of blowing each day, requiring about two million tons of coal a year for the purpose.

*Brief*

## AND TO THE POINT

★ The skin of an elephant weighs more than one ton.

★ Chimney swifts are the most restless of birds. They are in flight about 19 out of every 24 hours.

★ The Texas Company enjoys more of the lubricating business of American railroads than any other oil company in the country. This estimate is based on reports from railroads operating 92 per cent of the mileage and earning 94 per cent of the revenue in the United States.

★ A good cow produces her own weight in milk every 21 days.

★ The Federal gasoline tax costs American motorists about \$200,000,000 yearly. Adopted as an "emergency measure," the revenue from this tax has naturally been used entirely for other than highway purposes.

★ Wholesale prices of petroleum products were less than 50 per cent of normal at the end of last year.

★ *Prospective car buyer*—I understand that next year's cars will have seven and nine cylinders.

*Salesman*—That's news to me. What's the idea?

*Prospective buyer*—They say they are going to have six and eight cylinders to carry the car and the extra cylinder to carry the automobile taxes.

—*Wall Street Journal*

★ At Minturno, Italy, remains of paved streets are found, indicating that the Romans laid street pavings as early as the fifth century B.C.

UNIVERSITY OF HOUSTON



# Possibilities and Limitations of CODE REGULATION

By C. B. AMES\*

Chairman of the Board, The Texas Corporation

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IN a radio address last September, the President, after referring to the reorganization of the National Recovery Administration, said, "We shall watch carefully the working of this new machinery for the second phase of N.R.A., modifying it where it needs modification and finally making recommendations to the Congress in order that the functions of N.R.A. which have proved their worth may be made a part of the permanent machinery of government. Let me call your attention to the fact that the National Industrial Recovery Act gave business men the opportunity they had sought for years to improve business conditions through what has been called self-government in industry."

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**T**HIS was an encouraging statement. If only the functions of N.R.A. which had proved their worth were to be continued, and if industry was to be permitted a reasonable degree of self-government, business might have viewed the future with renewed hope and courage. The country waited with interest for the concrete draft of legislation to definitely apply these excellent principles. Finally, on March 13 last, S. 2445 was introduced by Senator Harrison, although he is not charged with being its author. It is assumed (I hope erroneously) that this is the Administration's bill. Business, however, has not rallied to the support of this measure. It does not discover in it that "self-government" which was referred to, nor does it find therein a continuation only of those functions of N.R.A. which have proved their worth.

I believe I have had an unusual opportunity of ascertaining the opinion of industry on N.I.R.A. for the following reasons:

In May, 1934, the Chamber of Commerce of the United States created a committee to make a study of N.I.R.A. and to prepare a questionnaire to be submitted to a referendum vote, pursuant to the

procedure of the Chamber. I was a member of that committee. In August, 1934, the National Association of Manufacturers appointed a committee to make a study of this subject, and I was a member of that committee. In December, 1934, under the auspices of the National Association of Manufacturers, there was held in New York a Congress of American Industry, attended by about one thousand industrialists from all parts of the United States. I was a member of the Resolutions Committee of this Congress and this committee, likewise, dealt with N.R.A. Last December there was a conference of industrialists held at White Sulphur Springs, which again dealt with the subject of N.R.A. I was chairman of this conference. The White Sulphur Conference created a Business Conference Committee, and since December this committee has enlarged its membership by securing representatives of some 25 or 30 industrial groups, organized in trade associations. I was made chairman of this committee, and it, in turn, has devoted much study to N.I.R.A.

## Business Opinion

As a result of these varying contacts with thoughtful business men who are anxious, in the President's words, to ascertain, "... the functions of N.R.A.

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\*Address delivered at Twenty-third Annual Meeting of the Chamber of Commerce of the United States - May, 1935

which have proved their worth," I believe I am in a somewhat favorable position to express the consensus of opinion—and I wish to say at the outset that in my judgment there is a distinct consensus of opinion. I do not mean by this that there are no differences of opinion, but I do believe that there is a distinct weight of opinion and I believe that the decided preponderance of opinion amongst those with whom I have come in contact is as follows:

First: They believe the present National Industrial Recovery Act should be allowed to expire in June, according to its terms.

Second: They believe that prior to its expiration there should be enacted by Congress a substitute for a period of one or two years.

Third: They believe that the new Act should permit voluntary codes of fair competition by industries which are actually engaged in interstate commerce.

Fourth: They believe that there should be no provision in the new Act permitting codes to be imposed, or amended, by any executive or administrative agency, although such agency should have the right to terminate codes which have been approved.

Fifth: They believe that the new Act should contain suitable provisions permitting agreements between competitors which, when approved by an appropriate tribunal, would be free from the penalties of the Anti-Trust Laws.

Sixth: They believe that those industries which submit voluntary codes should be required to agree to minimum wages, maximum hours and the abolition of child labor.

Seventh: They believe that wages and hours, except as agreed to by an industry, are definitely beyond the scope of Federal legislation and are subject only to the police power of the states.

Eighth: They believe that code approval and administration should be under the general jurisdiction of a quasi-judicial body.

Ninth: They believe that the provision for collective bargaining has been abused by organized labor, has encouraged promoters of strikes, and has definitely disproved its worth.

Tenth: They believe that the effort to force obedience to codes by extra-judicial methods such

as the Blue Eagle and withholding Government contracts and appeals to the public prejudice are contrary to the traditions of an independent people.

These views have been communicated to the Government in Washington and published in the press, but they have obviously had very little influence upon the author of S. 2445.

### A Proposed Program

Having stated what I believe to be this consensus of opinion, I now add a few comments on some portions of the subject.

*First: Codes should be voluntary. That is to say, they should be prepared and proposed by the industry affected.*

If, to use the phrase of the President, there is to be self-government in industry, it is obvious that we should not have compulsory codes imposed by an executive agency. If the law provides for imposed codes, then industry is operating under a threat. It is not moving of its own free will. If codes are imposed by an administrative agency, industry resents the imposition, and feels no moral obligation. Even when industry consents under the threat of having a code imposed, it still feels that its consent has been extorted and it feels only a slight moral obligation. On the other hand, if an industry is perfectly free to propose a code, or not, as it sees fit, when it does so it has a definite moral obligation and will feel the compulsion of compliance and the desire to comply, which is a more powerful influence than fear of punishment. Any valid law is, of course, binding upon all the people and should be enacted by the Congress. The power to make law should not be delegated either to the President or to an industry, or to both acting jointly. The voluntary code, therefore, should not be law-making but should be a method of clarifying a general rule of law which has been enacted by Congress, in its application to a particular industry.

*Second: Codes should be drafted with the greatest care so as to prescribe a rule of action which is clear, consistent and understandable.*

Some of the codes we have today are the result of compromises, of confusing language and of hasty preparation. The code authorities have assumed the

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THIS ADDRESS was delivered prior to the decision of the Supreme Court in the Schechter Case holding that the National Industrial Recovery Act is unconstitutional. Nevertheless, it is reprinted here without change because in the main the opinions expressed are in harmony with that decision.

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power to alter by interpretation and even actually to amend these codes. This careless and confusing method is in sharp contrast with the proposal which has been made by the French Government to the Chamber of Deputies for the creation of something similar to our code system, and in order to contrast our slipshod method with the carefully prepared recommendation of the French Government, I quote the following description of their proposal from the March, 1935, issue of *World Petroleum*:

"When, therefore, any specific branch of industry as defined by the law finds its interests gravely affected by reason of the peculiar circumstances growing out of the depression, a majority of its members, provided they are able to agree, may establish an accord, or as it is more commonly called in France, a cartel, embracing such provisions as may be considered requisite for their protection. Once signed, the accord is transmitted to the Ministry of Commerce with the demand that it be decreed obligatory for all of the members of the branch in question. The Ministry of Commerce then submits the accord to a Committee of Arbitration, created by the law, for its study and recommendation to the Cabinet in which resides the authority for final decision. The Committee is composed of the following members whose position and standing offer a safe guarantee of neutrality:

A President, nominated by the Prime Minister.

The President of the Confederation of French Industry.

The Secretary-General of the Federation of Labor. The Governor of the Bank of France.

The President of the Conference of the Tribunals of Commerce.

The Secretary-General of the National Economic Council, who acts as Commissary for the government.

"The duty of the Committee of Arbitration is to determine first, whether the application is one which it can properly receive; next, whether the applicants represent an industry of sufficient importance to invoke the aid of the state; and, if so, whether the accord has obtained the adhesion of a majority within the meaning of the law. If the view of the Committee on these points is affirmative, its duty is then to consider the accord from the standpoint of the public's interest. Is the character of the accord one which may reasonably be expected to meet the difficulties that have been encountered? If it is transformed into an obligatory code, will it be prejudicial to other general interests entitled to consideration such as those of the consumer, or of labor? Does it work an injustice to the minority which has refused to give its sanction to the accord?

"When the application has been fully considered and a conclusion reached by the Committee, it is then transmitted to the Council of Ministers (the Cabinet) for final action either by way of granting or refusing the decree applied for. Since the fundamental idea of the law is the establishment of codes conceived through a process of private, and not governmental, initiative, the Cabinet has no power to modify, in however minor a particular it may be, any code submitted to its approval. It may refuse to render the decree sought and return the accord to the proponents with its suggestions as to changes. Beyond this it cannot go. And, therein lies the inherent difference between the American and the French conception regarding codes."

When one reads this carefully devised French plan, the question arises whether individual liberty is more carefully safeguarded in France than in the United States.

*Third: Codes should be limited to a clarification of methods of unfair competition within a particular industry.*

The Federal Trade Commission Act in 1914 prohibited unfair methods of competition and imposed upon the Commission the duty of preventing such methods. The Act did not define unfair methods of competition but permitted the Commission, subject to judicial review, to issue cease and desist orders. This permitted a gradual development of the law of unfair competition by a process of inclusion and exclusion. After several years and beginning in 1919, the Commission encouraged individual industries to present voluntary codes of fair competition, and if the Commission approved the rules prescribed in such codes, they were promulgated. This method expedited the development of the law of unfair competition and in many cases, by voluntary agreement, methods of competition were agreed upon which resulted in the dismissal of many complaints and in relieving the Commission from the duty of rendering cease and desist orders. It is, perhaps, impossible for Congress, by general law, to enumerate every act of unfair competition. It is easy to say that rebating, for example, is an unfair method of competition, but in some industries it is difficult to tell whether a practice is, or is not, rebating. Between those methods of competition which are obviously unfair and those which are obviously fair, there is a twilight zone within which a particular method in a given industry may or may not be unfair, depending on the facts and the methods of doing business within that industry. The codes of fair competition should be designed to illuminate this twilight zone. The rules, if accepted by the units in an industry, remove the elements of unfair-

ness. If disobeyed, cease and desist orders should be used and the question reviewed by the Commission and in the courts to determine whether the act is, or is not, an unfair method of competition.

The experience of 15 years under the Federal Trade Commission Act and the two years under N.I.R.A., I submit, has proved the worth of codes of fair competition, and that this phase of the law should be continued. I emphasize the belief, however, that codes should be limited to methods of competition.

*Fourth: Labor provisions in such codes should be limited to minimum wages and maximum hours, and the prohibition of child labor.*

Such provisions may be justified in a code of fair competition on the theory that it is unfair competition to underpay labor, to overwork labor, or to employ children. There is, however, no possible excuse for treating collective bargaining as a matter of unfair competition, and in my judgment, there is no place in such an Act of Congress for a requirement relative to collective bargaining. If, however, Congress, in its wisdom, is going to insist upon a provision for collective bargaining, it should make it very clear that the worker should not only be free from the coercion of management, which in the main is imaginary, but should likewise be free from the coercion, the threat, and the intimidation of the labor organization.

*Fifth: Such codes of fair competition should be approved by a quasi-judicial body and not by an executive agency.*

The Federal Trade Commission has been charged with the administration of the law prohibiting unfair methods of competition for 20 years, and it would seem logical that it should be the agency authorized to approve such codes.

*Sixth: The enforcement of such codes should be by judicial process.*

Bear in mind that up to this point I am dealing exclusively with voluntary codes, and that these voluntary codes are limited to rules prescribing fair methods of competition and prohibiting unfair methods of competition. It seems clear to me that there should be no administrative enforcement and, likewise, that there should be no enforcement by code authority. If such a code is properly prepared, it is the law of the industry. Not a law made by the industry. Not a law made by the administrative agency. But a law enacted by Congress which the industry is undertaking to obey. Such a code, therefore, should be enforced as any other law is enforced. As the Federal Trade Commission is the body created by Congress charged with the duty of preventing unfair methods of competition, it would

seem that that is the appropriate body to enforce the rules in the exercise of its prescribed procedure. A complaint of a violation should be made to that body and a cease and desist method of procedure should be encouraged with the final decision in the courts, both on the law and the facts. Enforcement by the scream of the Blue Eagle, or the threat of an aroused public opinion, or refusing a citizen the right to bid on government contracts is a denial of due process of law and subjects the citizen to the dictation or attack of an irresponsible bureaucrat. A free people will not willingly submit to this outrage.

*Seventh: In addition to codes of fair competition, the law should permit agreements in restraint of trade when approved by a proper Federal agency.*

We have had the Sherman Anti-Trust Act for 45 years. It was supplemented by the Federal Trade Commission Act and the Clayton Act 20 years ago. There have been numerous decisions in the courts arising under these Anti-Trust Laws. The net result of all the decisions is that an agreement restraining trade is lawful or unlawful, depending on whether or not under all the surrounding facts it is reasonable or unreasonable. Whether a thing is reasonable or unreasonable is a matter of opinion. It is not susceptible to mathematical proof. Therefore, there still remains, and must remain, under these statutes, a great many cases which cannot be certainly determined in advance of a decision of the courts, and when such decisions are rendered they either hold that the agreement is valid or that it never had any validity but was void from the beginning. The parties even may be subjected to criminal punishment for entering into a contract which they thought was permitted by the law.

As early as the administration of Theodore Roosevelt there has been a recognition of this difficulty and an effort to correct it, and the suggestion has been frequently made that there should be some Federal agency authorized to give approval in advance to such agreements. In the National Industrial Recovery Act, for the first time, such provision was made and this provision should be continued. If Congress is unwilling to confer absolute authority on any Federal agency to approve such agreements, then it might at least provide that such approved agreements, if finally held invalid by the courts, should only be invalid after the date of the decision and not invalid from the beginning. It seems clear, however, that such agreements are entirely separate and distinct from codes of fair competition and that, therefore, they should never be placed in codes. A code of fair competition should be binding upon the entire industry, even though a minority dissent, the dissenting minority, of course, having the right

to test the validity of the rule. By no stretch of the imagination, however, can it be said that a contract between parties is binding on those who are not parties to the contract. This vital distinction has not been observed under N.R.A. and it is doubtless one of the reasons for the complete breakdown of public sentiment concerning N.R.A. The codes have been attacked by many because of alleged monopolistic tendencies, or alleged violations of the Anti-Trust Laws. Such foundation as supports these attacks rests upon this failure to distinguish between codes of fair competition and agreements in restraint of trade. If this distinction is clearly kept in mind, it follows that the enforcement of such agreements is like the enforcement of any other contract and, therefore, purely a matter for the courts.

#### Duration of N. I. R. A.

If this analysis of the possibilities and limitations of code regulation is correct, then there is no reason for the statute being limited to one year, or two years, but it should be made permanent. If, however, we are to have a re-enactment of the confused jumble of Title I of N.I.R.A., it should be limited to one year so that Congress may substitute

for it reasonable legislation at the next session.

In conclusion, I venture to express the opinion that the best thing about N.I.R.A., N.R.A., the Blue Eagle, and the administration of them, is the fact that public sentiment has repudiated them. The people have tired of the bungling effort of Washington bureaucracy to regiment American business. The effort to impair the rights of the states, the effort to concentrate power in Washington, the effort to enlarge the authority of the President, the effort to by-pass the Constitution have challenged the foundation of our Constitutional system. I close with the following words of Thomas Jefferson—at one time regarded as the leader of the Democratic Party:

"I am for preserving to the states the powers not yielded by them to the Union, and to the legislature of the Union its constitutional share in the division of these powers; and I am not for transferring all the powers of the states to the general government, and all those of that government to the executive branch. I am for a government rigorously frugal and simple, applying all possible savings of public revenue to the discharge of the public debt; and not a multiplication of officers and salaries merely to make partisans."



## Annual Meeting

AT THE recent annual meeting of stockholders of The Texas Corporation held in New York City, the following were elected Directors: C. B. Ames, G. N. Aldredge, W. J. Cummings, W. G. Dunnington, W. S. Gray, Jr., W. G. Horton, H. T. Klein, J. H. Lapham, C. A. McCulloch, W. H. Mitchell, L. J. Norris, R. Ogarrio, T. Rieber, W. S. S. Rodgers, and R. C. Shields.

Harry T. Klein, whose election to the Board fills a vacancy created by the resignation of P. H. O'Neill, is a native of Bellevue, Campbell County, Kentucky.\* He began business life as a lawyer, and in May, 1921, after distinguished service in the World War, entered the service of



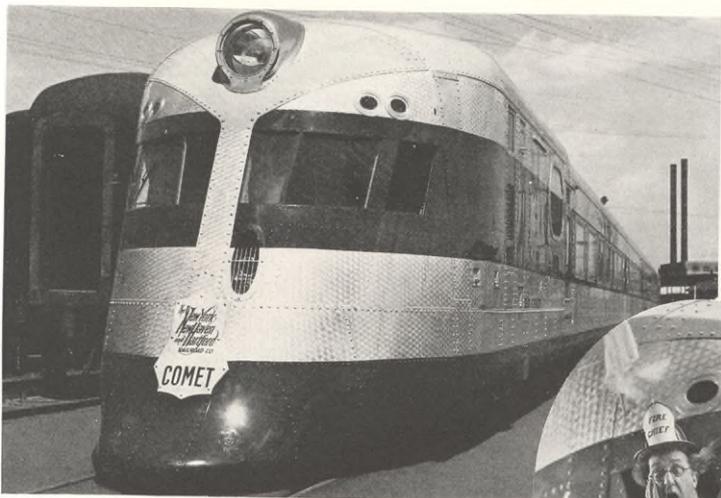
Harry T. Klein

The Texas Company as a member of its Legal Department. Later he became Assistant General Counsel and was appointed General Counsel in December, 1925. He was made Vice President and General Counsel in 1933.

At the Directors' meeting immediately following the stockholders' meeting, the following were elected to the offices designated: C. B. Ames, Chairman of the Board of Directors; W. S. S. Rodgers, President; H. W. Dodge, Vice President; T. J. Donoghue, Vice President; H. T. Klein, Vice President and General Counsel; F. T. Manley, Vice President; G. L. Noble, Vice President; R. Ogarrio, Vice President; T. Rieber, Vice President; E. M. Crone, Secretary; C. E. Woodbridge, Treasurer; Ira McFarland, Comptroller.

The annual meeting of stockholders and a directors' meeting of The Texas Company were also held. The same directors and officers were elected as for The Texas Corporation.

\*A more complete biographical sketch of Col. Klein appeared in the July-August, 1933, issue of THE TEXACO STAR—EDITOR.



R. I. NESMITH &amp; ASSOCS.

On a trial run *The Comet* attained a speed of more than 100 miles an hour



Ed Wynn kissed his son goodbye and got a return smack from a cow 50 miles away



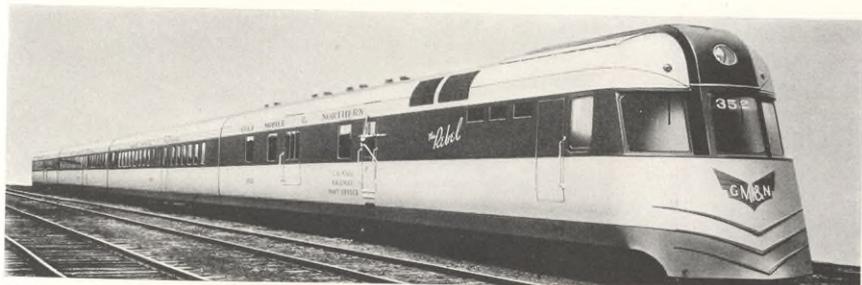
## NEW SPEED QUEENS TAKE TO THE RAILS

**T**WO NEW streamlined super-speed trains took to the rails early last month, one in New England, the other in the South. Both are powered by diesel engines and have been designed for maximum passenger comfort as well as speed.

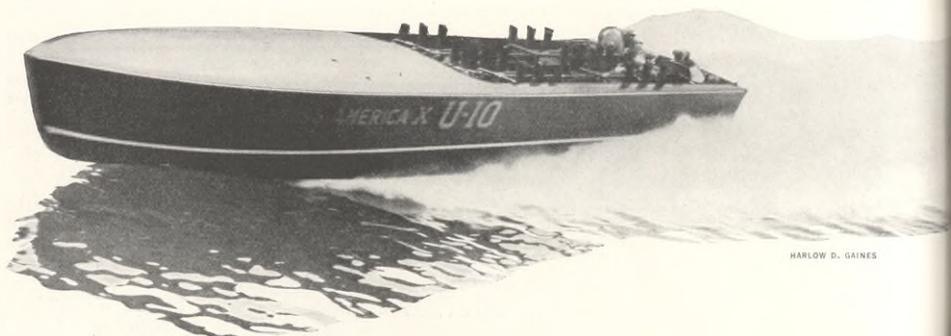
*The Comet*, of the New York, New Haven & Hartford Railroad, is now in regular service between Providence, Rhode Island, and Boston. On her initial trip, she attained a speed of 109 miles an hour. Ed Wynn, with a group of Texaco officials, was a passenger on this run.

The Gulf, Mobile and Northern Railroad's train, *The Rebel*, will operate between New Orleans and Jackson, Tennessee. Air-conditioned throughout, she represents the latest in passenger transportation in the South. *The Rebel* is designed for day and night travel over a 500-mile route, carries a diner, observation car, sleepers, and coaches. She can easily run at a speed of more than 100 miles an hour.

For many years The Texas Company has enjoyed the equipment lubricating contracts of both of these roads.



*The Rebel* of the Gulf, Mobile and Northern is the South's latest bid for speed and comfort in passenger travel by rail



HARLOW D. GAINES

## Breaking **ONE HUNDRED** on Water

BY  
COMMODORE  
GAR WOOD

JUST ABOUT 50 years ago I received my first taste of boat racing. I was two years old then, and the Wood family had moved to Lake Osakis, Minnesota, where my father operated a clumsy old wood-burning steamboat, the *Manitoba*, as a ferry across the lake. There was another ferry on the lake owned by a Wesley Mann, and named for him, and considerable rivalry existed between the two boats. Whenever we met, an informal race took place; the speeds were low but the excitement was terrific.

When I was eight, the race to end all races and decide for all time the championship of Lake Osakis was held. One day, when the *Manitoba* was plying over the lake in the course of her daily duties, the *Mann* appeared from behind going full speed. My father was at the wheel of the *Manitoba* and my brother and I (the entire crew) were looking after the fires and doing odd jobs around the deck. As soon as the *Mann* came abreast of us, we crowded on all steam and the race of the century began. Our old boat slowly but surely drew ahead, then, when we still had a mile or more to go, we discovered we didn't have enough fuel to finish at top speed.

"Break up the furniture," yelled my father, so we set to with axes smashing every available piece of wood-work and feeding it to the furnace. We won the race but there wasn't a table or chair left on board when we got to shore. As nearly as I can remember we averaged eight miles per hour.

Some years later, after father had moved the family to Duluth, Minnesota, when I was nearly out of high school, three motor boats were bought and put in service in the harbor by the Government Engineering Department. I was intensely interested in them and when an expert from the boat factory came down to put the engines in shape I tagged him all around and succeeded in landing a part-time job working around the boats.

My first real job, which influenced my whole life, was partly due to a red-headed girl. The army major in charge of the boats was in love with the girl and wanted to take her on picnics across the lake. He needed someone to run the engine for him so I was appointed, after demonstrating I could run the engines. The picnics were a decided success. The major made marvelous headway, and I learned a lot about marine engines and boats.



MORRIS ROSENFELD

The author as he looked in 1918 at the Gold Cup Races in Detroit

I worked on those boats several years, at a salary of 45 dollars a month. The boats were used principally to carry engineering inspectors from one job to another. In the day's travel they often met and invariably a race would be on from which we got almost as much thrill as we do now from a major race. In those days there was no carburetion system in gasoline engines. We used high-test gasoline and air valves. The power would drop as the engines were used and usually after a few hours they were pretty weak. You would have to keep the air valve closed; if you opened it, there was a back-

fire. I decided that if I could get gasoline into the engine in conjunction with the air I could keep up power, so I experimented with a squirt can. I would open the air valves and squirt in gasoline; thus I had the crude equivalent of a modern carburetor. Those old-type engines had their spark device fixed. Advanced spark had not yet been invented, but by a system of trial and error I discovered that sticking a screw-driver between the spark cam and the roller advanced the spark and increased the power of the engine and made the boat run faster. With a squirt can and a screw-driver our engine was speeded up and we invariably won. We kept the secret.

As we cruised over those Minnesota waters at eight or ten miles an hour I used to dream of myself building and driving the fastest boat in the world and winning important trophies. Little did I know that this ambition would be realized. But later events made them possible, and I humbly thank the red-headed girl, and hope that she and the major lived happily ever after.

When I stopped running the Government motor boats, automobiles were coming into general use and I decided to work as an automobile mechanic. Later I moved to St. Paul, Minnesota, where I was married, and started selling the new automobiles Henry Ford was putting on the market. While I was in St. Paul a friend asked me if I would like to go on a cruise down the Mississippi with him in a new boat he had built. He wanted me to do the navigating and I was delighted to go on a vacation.

We took our wives along and arrived in Dubuque on the morning some motor boat races were being held. As we were going alongside the dock, I saw a man tinkering with the engine of a racing boat called the *Leading Lady*. When we ran past her I asked the man in the boat if I could be of any help. He asked me aboard and, after



HARLOW D. GAINES

*Miss America X* takes aboard a load of Texaco Marine Products before stepping out for another speed trial on Biscayne Bay

a little while, we had the engine running nicely and took her down the river in a race. The banks of the river seemed to fly past me; I had never gone so fast in my life. When we got back, whistles were blowing and people were cheering and we suddenly found ourselves in the middle of an excited crowd. "You did that ten-mile run at 30 miles an hour," someone said. "You've broken the world's record!" The thrill of breaking a world's record has never left me.

When I returned to St. Paul, I built my first real speed boat. She was a single-step hydroplane similar to our present *Miss America*, but crude and small, the *Little Leading Lady*. Her hull cost me 40 dollars and the engine was the same one used in the *Leading Lady* which had made 30 miles an hour. The *Little Leading Lady* made 34 miles an hour and won every race in which she was entered.

One day I saw a truck driver dumping a five-ton load of coal by hand and got the idea which supplied me with money to do the things I had always wanted to do—boat racing and building. It took that truck driver nearly half an hour of hard work to tip the coal body to dump the coal. Why, I thought, isn't there some mechanical contrivance operated by the engine to do all that work for him? I studied this problem for a time—in fact, I thought of little else. What I needed was something simple and fool-proof that could be operated by simply pulling a lever or pushing a button. Then I remembered the hydraulic cylinder on the old *Manitoba* which my father had used in reversing his engines. It was built on the general lines that I wanted, but I had to have something to pump high oil pressure with.

I sent for details and catalogues of every gear pump made. None seemed to answer the exact purpose—the pressure and power were too low—but I tried one out and found the manufacturer had underestimated the qualities of his own product. The first hoist I made cost me every cent I had, 200 dollars, and I sold it for the same amount. The idea was accepted by truck manufacturers; my business prospered and ran into millions.

After the hoist—a definite time mark in my life—



MORRIS ROSENFELD

Commodore Wood at the wheel of *Miss America II*. The year is 1921

I built boat after boat and drove them in every available race. *Miss Detroit II* won the Gold Cup in 1916 and the one mile trials at a speed of 54 miles an hour; next year she raised the world's record to 61.7. *Miss Detroit III* came next. Powered with a Curtiss airplane engine, the first aircraft engine to be put in a boat, she succeeded

in attaining a speed of 73 miles an hour.

The war stopped motorboat racing all over the world. We were busy turning out truck hoists and dump bodies for the Government and it kept me well occupied, but I managed to devote my spare time to the development of faster boats. The end of the war seemed the proper time to attempt to bring the Harmsworth Trophy, then held by England, back to the United States. Two boats were built for the purpose, *Miss America I* and *Miss Detroit IV*, the latter a big, heavy boat for use in rough water. These two boats really started my boat-building factory. Both boats were powered with Liberty engines. *Miss America* developed a speed of 79 miles an hour and *Miss Detroit IV*, 70 miles an hour. Both boats were taken to England in 1920 and *Miss America* won the Harmsworth Trophy from Sir Mackay Edgar's *Maple Leaf VI*. In 1921 Sir Mackay challenged, but his boat sank during the race. From then on the series of *Miss Americas* turned back all contenders.

During all this time the British were developing faster and faster boats and produced really serious opposition for water speed supremacy. Major H. O. D. Seagrave and Miss Marion Carstairs built boats which started knocking records into the discard. A speed of 100 miles an hour seemed an imminent possibility and I was determined to be the first man to do it.

When England challenged in 1928, we built *Miss America VI*. She cost around 75 thousand dollars, and carried engines of 2,200 horsepower. On her second trial she suddenly broke into pieces and sank, carrying her crew down with her. We immediately designed and built *Miss America VII* and had her ready for the race in exactly 14 days—and successfully defended the Harmsworth Trophy

against the British, raising the world mark to 92.3 miles per hour. In March, 1929, we were beaten in the Biscayne Bay Regatta by Major Seagrave on account of a steering gear giving way, but a few days later we went out and boosted the world mark again, this time to 93.1 miles per hour. In 1930, Major Seagrave drove his big *Miss England II* over Lake Windemere, England, at a speed of 98.7 miles an hour, but struck a log just after finishing the course and was fatally injured.

In 1931, I realized my dream and drove *Miss America IX* at 102 miles an hour. This record didn't last long, however. Kaye Don, in Major Seagrave's old boat, which had been raised and rebuilt, pushed the speed mark up by degrees to 110.2. Then followed the 1931 Harmsworth Race. Don took the first heat but next day he cracked up on a turn and the trophy remained in America.

In 1931 and 1932, *Miss England III*, built for Lord Northcliffe and driven by Kaye Don, raised the mile record to 119.3 and a challenge was again made for the Harmsworth Trophy. *Miss America IX* was too slow for that kind of competition; so in 1932 we built the tenth of the series, a 33-foot boat with 6,400 horsepower. In the Harmsworth Race, *Miss England* ran into bad luck when her engines failed in both heats; so the trophy was retained in the United States without any great trouble. Following the Harmsworth races that year, with *Miss America X* we again brought the world's record on water back to the United States, averaging 124.36 miles an hour, which still stands at the time of writing.

In 1933, Hubert Scott-Paine brought over his radically designed *Miss Britain III* for another British attempt to raise the trophy. She was a sweet little boat but didn't have enough

speed to worry *Miss America X*. However, she finished both heats in good order, something no other British challenger had been able to do, and we knew we had been in a race.

Although no Harmsworth Races were held last year or will be this year, we have not been idle and have kept experimenting with *Miss America X*. By the use of extra super-chargers and new fuels the horsepower has been raised to 7,600 and we are seeking to increase the world's speed mark once again.

Many people have asked me what, in my opinion, is the maximum speed obtainable on water. That is a hard question to answer, but I think I am safe in saying that 150 miles an hour is highly probable within the next few years and that 200 miles an hour is not beyond the realm of possibility in the future. Of course, engines will have to be much more powerful and we'll need further perfection in hull design before that day dawns.

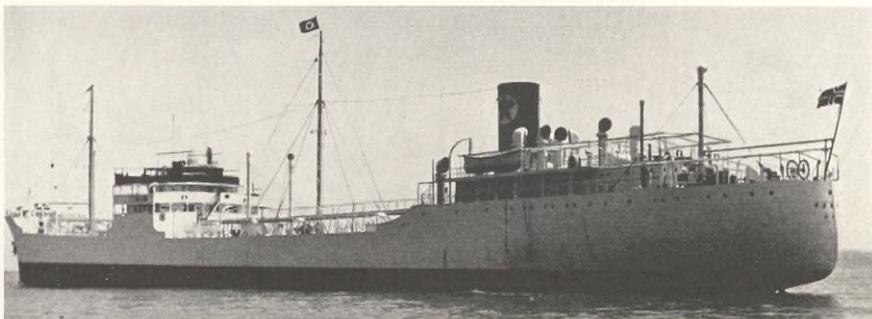
One thing I will say is that when the speeds do go higher, we hope a *Miss America* will register this honor for the United States. Whether Gar Wood, Jr., will carry on in an attempt to maintain the tradition of boat racing set by his father remains for his best judgment.

NOTE—As far back as 1916, Commodore Wood used Texaco fuels and lubricants. In all tests and experiments with the engines of the *Miss Americas*, Texaco experts have cooperated very closely with Commodore Wood in the selection of the proper grades of fuels and lubricants. *Miss America X* used Texaco Marine Motor Oil "K" in her crankcase and a half-dozen other Texaco Products in other parts of her engines and auxiliary gear.—EDITOR



The Commodore greets J. G. van Santvoord, Texaco's Manager of Marine Sales





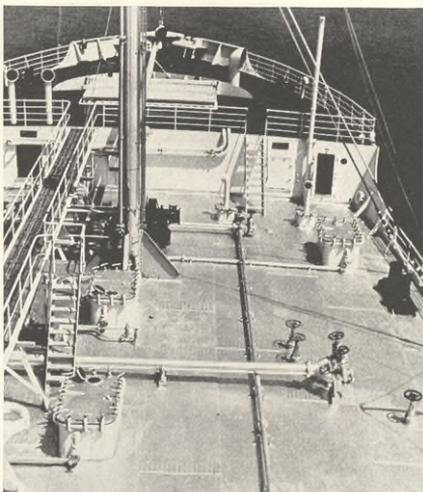
TEXACO STAR STAFF PHOTOS

The newest Texaco tankship as she lay at anchor off Stapleton, Staten Island

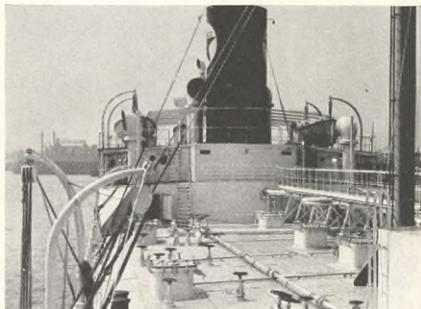
## M.S. BRASIL Completes Her Maiden Voyage



This photo gives some idea of the trim, yacht-like lines of the *Brasil's* stern. Recently launched, she was built at the yards of Nakskov Skibsvaerft A/S in Denmark



The *Brasil's* spacious decks gleam with aluminum paint. The vessel is 477 feet long, with a beam of 59 feet, 6 inches, and a moulded depth of 34 feet



The ship is of 12,400 deadweight tons and has a capacity of 100,100 barrels of oil, with an additional 34,500 cubic feet of dry cargo space in her hull



The *Brasil* carries a crew of 31 and her twin diesel engines will propel her at an average speed of 11½ knots from Port Arthur, Texas, to South American ports

## A FEW DATES You Shouldn't Miss

THIS SUMMER hundreds of events are being held in various parts of the United States which will attract tourists from all over the Union. Chief among these is the California Pacific International Exposition, at San Diego, California, which opened May 29 and as yet has no definite closing date.

Texaco National Road Reports will gladly send you a complete routing from your home city or town to any of the events listed below. As reported by the various state authorities, these events (occurring during July, August, and the early part of September) are:

- July 1 Opening of the new \$10,000,000 development at Saratoga Springs, New York.
- July 1-6 Tourists' Summer Frolic, Daytona Beach, Florida.
- July 2, 3, 4 Reno Rodeo, Reno, Nevada.  
Cody Stampede, Cody, Wyoming.  
Fiftieth Anniversary Jubilee Celebration, Albuquerque, New Mexico.
- July 4 Foster Song Festival, Bardstown, Ky.
- July 4, 5, 6, 7 Black Hills Roundup, Belle Fourche, South Dakota.
- July 4-September 4 Pageant of America, Mount Rushmore, in the Black Hills of South Dakota.
- July 17, 18, 19 Sheridan Rodeo, Sheridan, Wyoming.  
National Cherry Festival, Transverse City, Michigan.
- July 18-20 Portland Roundup, Portland, Michigan.
- July 18-21 California Rodeo, Salinas, California.
- July 21-24 Covered Wagon Days Celebration, Salt Lake City and Ogden, Utah.
- July 23-August 17 Mohawk Drama Festival, Union College, Schenectady, New York.
- July 24-27 Frontier Days Celebration ("The Daddy of 'Em All"), Cheyenne, Wyo.
- July 27 Gold Cup Motor Boat Races, Lake George, New York.
- July 29-August 3 Public Links Section, United States Golf Association, Fourteenth Annual Tournament, Indianapolis, Ind.
- July-Oct. (inclusive) Three Hundredth Anniversary of the Settlement of Connecticut. Celebrations will be held in various cities and towns in the Nutmeg State.
- July-August (inclusive) Chautauqua (music, lectures, drama, and the like), Chautauqua, New York.

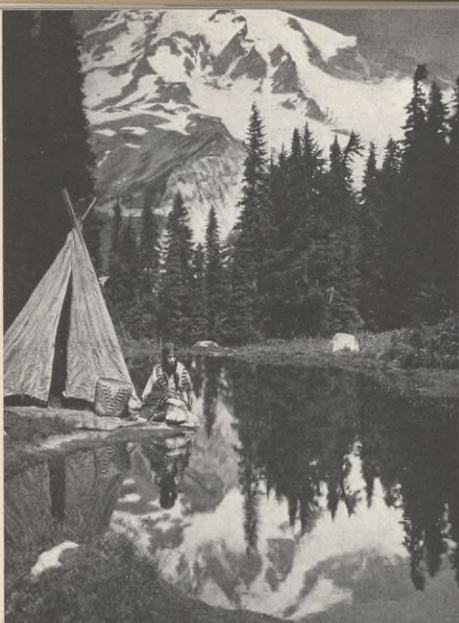


- Other July Events (dates not definite) White Top Musical Festival, Marion, Virginia.  
Mountain Lake Folk Music Festival, Mountain Lake, Virginia.
- August 11-17 Old Home Week, Cape Cod, Mass.
- August 15-17 Old Spanish Days Fiesta, Santa Barbara, California.
- August 16 Bennington Battle Day, Bennington, Vermont.
- August 23-Sept. 7 Canadian National Exposition, Toronto, Canada.
- August 28, 29, 30 Inter-tribal Indian Ceremonial, Gallup, New Mexico.
- August 31, Sept. 1, 2, 3 Santa Fé Fiesta, Santa Fé, N. M.
- August 31-Sept. 2 Ellensburg Rodeo, Ellensburg, Washington.

The editors of THE TEXACO STAR regret that a few states were not heard from in time to be included in the foregoing list of events. It may be possible to chronicle late Summer and Fall events in a forthcoming issue of THE STAR.

Remember that a complete routing—either a scenic route, taking in points of interest along the way, or a "quick" route to get you to your destination in the shortest possible time—will be sent to you if you will address Texaco National Road Reports, 135 East Forty-second Street, New York City.

# "JUST FOLLOW

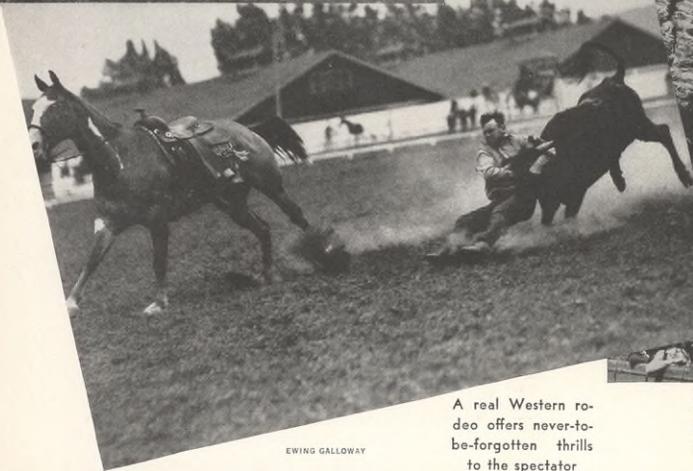


In many sections of the Northwest, Indians will reenact stirring pioneer-day sagas



EWING GALLOWAY

George Washington's face takes form in the Black Hills of South Dakota



EWING GALLOWAY

A real Western rodeo offers never-to-be-forgotten thrills to the spectator

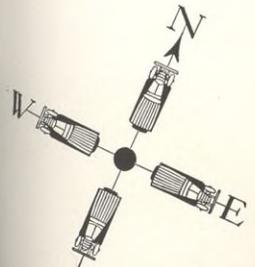


(Left) Of course you plan to visit the California International Exposition at San Diego



The well-known "sport of kings" is an all-year pastime in many parts of the Sunny Southland

# HE DIRECTIONS"



Old New England has a charm and flavor all its own, and points of interest are easily reached by splendid highways



A gateway to Gotham: George Washington Bridge across the mighty Hudson



(Below) America's oldest house at St. Augustine, Florida, built in 1565

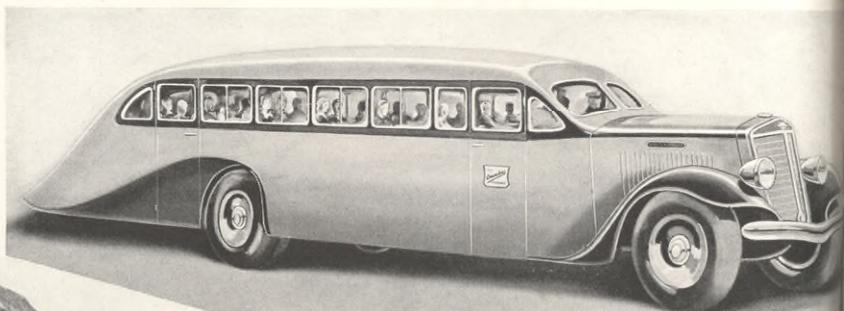


A day or a month in Washington is time well spent



PHOTOS NOT OTHERWISE CREDITED ARE FROM R. I. NESMITH & ASSOCIATES

One of the new de luxe coaches of the "college on wheels" which takes to the road soon



(Left, and on opposite page) A group of Omnibusters stop at Yellowstone National Park to absorb knowledge

## Rolling Along TO AN EDUCATION

By JOSEPH THALHEIMER

**WITH ALL** America for its classroom, Omnibus College will take to the road about the first of next month. Unique among American institutions of learning, this college on wheels travels in huge fleets of specially built buses and sedans, offering the student an opportunity to pursue his studies right on the field.

More than 6,000 have enrolled in the Omnibus College since its inauguration in 1922 by Dr. William A. Goldsmith, head of the biology department at the University of Wichita, Kansas. The first expedition consisted of a few biology students who, under Dr. Goldsmith's direction, visited the eastern seaboard to study plants and animals in their native habitat. Last Summer more than 1,000 students from 42 states traveled in the two seven-week expeditions conducted by the college.

All courses are arranged to take advantage of the peculiar facilities of the "college on wheels." History students study the battle of Shenandoah while on that famous battlefield. Sociology students visit famous welfare institutions and penitentiaries; geology students lay aside text books to study rock formations in the Rockies or the Appalachians.

Naturally it isn't all work and no play for the Omnibusters. Sightseeing trips, theater parties, deep-sea fishing, swimming and popular lectures are arranged to fill in the busy program.

The student body of this unique institution is made up largely of teachers and college students on Summer vacation. They quickly become acquainted with one another as the college rolls along over the highways, and many lasting friendships are built. The teaching staff is made up of instructors from

the faculties of 12 colleges and universities; the institution with which the instructor is affiliated grants credit for work taken under him.

Of the two expeditions, one covers the eastern part of the United States; the other, the western. Both originate at Wichita. The western expedition swings southward to visit the Indian pueblos of New Mexico, the Petrified Forest, Grand Canyon, San Diego and Old Mexico, then north to Los Angeles, San Francisco, Seattle, Victoria, Spokane, Yellowstone, and Denver. The eastern expedition goes to Memphis, Knoxville, the Great Smokies, Washington, D. C., Atlantic City, New York, Boston, Salem, Quebec, Ottawa, Niagara Falls, Detroit, and Chicago. Each expedition is organized into units of from 75 to 100 students, traveling one day apart.

How do the students live? Rather well. Ahead

of each group moves a fleet of baggage trucks, a mobile cafeteria, and camping equipment. Arriving at their night's destination, the Omnibusters find their little town already set up and ready for occupancy. There are no floppy, leaky tents. These gypsies de luxe have autocade homes made of airplane fuselage material, equipped with floors, wardrobes, heaters, radios, and writing tables.

Naturally the rolling stock of Omnibus College needs quality fuel and lubricants to avoid breakdowns and delays. Charles Milham, Secretary of the college, says, "We have used the products of The Texas Company and have found them very satisfactory. We have found particularly pleasing the splendid, clean facilities that are always found at their service stations. To us, this is one of the most important items in the selection of a service station."

Last year more than 1,000 students from 42 states traveled in the two seven-week expeditions conducted by Omnibus College



(Left) Ready for a day of deep-sea fishing off Marblehead, Mass. The curriculum includes plenty of play as well as hard work

## HELP YOURSELF!

PERHAPS you believe in the old saying about "death and taxes."

But that's no reason why you should be *doubly* taxed.

As a motorist, you probably pay about one-fourth the value of your car *every year* in automotive taxes.

But you are taxed *twice* on the gasoline you use—once by the state, and again by the Federal government. Some motorists, in addition, pay county and city taxes.

Right now there is a good chance to rid yourself of part of this unjust burden. (American motorists are the nation's heaviest tax payers.)

The Federal gasoline tax of one cent a gallon is due to expire on June 30.

Congress proposes to renew this tax for another year or two. (It was originally enacted in 1932 as an "emergency" measure.) In fact, the question of making this tax a permanent one is now being agitated in Washington.

Congress will do just that—*unless* enough motorists (voters) express themselves regarding the matter.

Why not tell your representative in Washington how you feel about it?



### Deep-Sea Doctor

ONE trait which must of necessity be part of a seaman's makeup is the ability to recognize an emergency, meet it squarely, decide what must be done, then do it. In the broad wastes of the whole seven seas, there is no room for a buck-passer.

This is particularly true of a man who holds a master's ticket. Responsible not only for a valuable ship and cargo, but also for the well-being, if not the very lives, of his men, the "old man" doesn't spend much time in a swivel chair. When a crisis comes, as it inevitably does if you stay at sea long enough, you must decide what to do and then do it, quickly, for right or wrong, you must decide.

Such a crisis came recently in the career of Captain George Andersen, master of the Texaco tank-ship *Solitaire*. When the *Solitaire* cleared Port Arthur, Texas, on January 14 last, bound for Europe, the Chief Engineer, Olaf Eikeland, was in poor health, but by no means seriously ill. He remained on board as he believed his condition would improve in a short while.

During the night of January 23, when the ship was about 400 miles off the coast of Nova Scotia, Eikeland suddenly collapsed and took to his bunk. The usual shipboard remedies were first applied, but Captain Andersen soon recognized that he had a very sick Chief Engineer on his hands, and that there was a very good chance of the man's dying

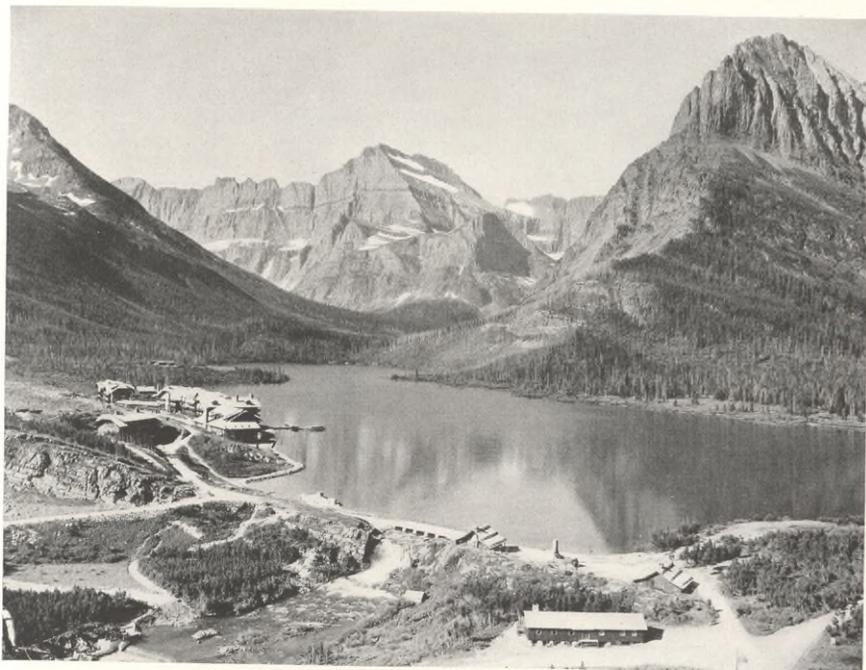
before he could be landed ashore. Radio contact was established between the ship and the New York Office of the Company's Marine Department.

Now, the Marine Department's men are trained in principles of first aid and elementary surgery, but a major operation isn't exactly in the line of duty. Nevertheless, Andersen consulted all the medical books on board, set up an operating room in the Chief's cabin, and went to work. Novocaine, the only available anaesthetic, partially deadened the pain. Meanwhile Halifax had been advised by telegraph from the New York Office, and subsequently by radio from Captain Andersen, that the *Solitaire* was proceeding to port with a hospital patient.

Captain Andersen took a last look at his medical books, then made an abdominal incision, working slowly, patiently, and with infinite care. Eikeland, realizing the seriousness of his plight, met his ordeal with grim courage. The operation relieved him immediately, and he was transferred from the ship during the night of January 26 to a Halifax hospital. There he underwent a thorough examination by the chief surgeon, who reported that Captain Andersen's work had probably saved Eikeland's life.

Eikeland later recovered sufficiently to be placed aboard a passenger ship bound from Halifax to his native Norway. As for "Doctor" Andersen, he is still on the job, probably at this very moment pacing the bridge of the *Solitaire* as she ploughs along over the waters of the North Atlantic.

—P. C. H.



In the Many Glacier region of Glacier National Park

COURTESY NATIONAL PARK SERVICE

## OIL in the Land of Shining Mountains

By OSCAR WOLF

Engineering Division, Refining Department

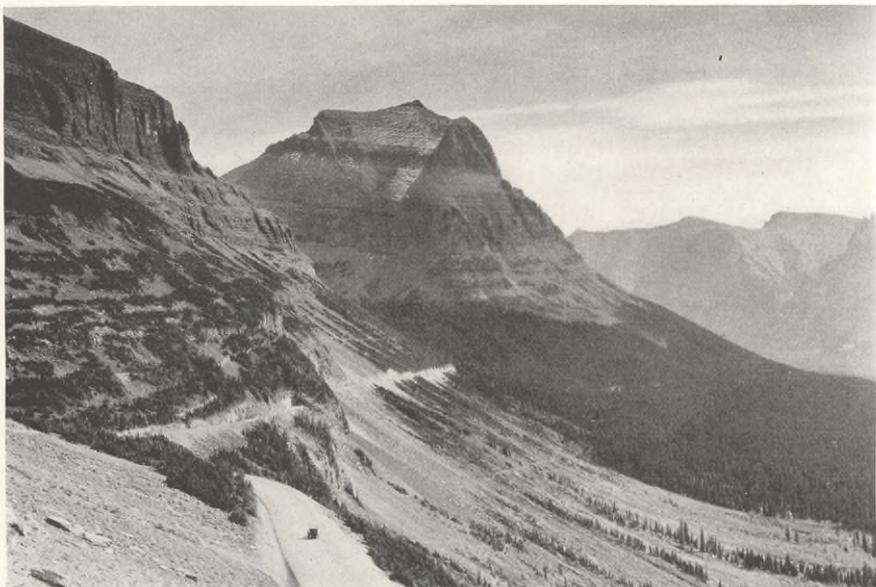
**C**APTAIN MERIWETHER LEWIS, camping with his companion, William Clark, along the upper reaches of the "true" Missouri in 1806, felt that a part of his explorations, at least, had been unsuccessful. The site where they pitched their tent became "Camp Disappointment." But could Lewis have looked ahead to days when other pioneers piercing these regions would bring "black gold" to the surface not far away, the location might have been less mournfully named.

Today the motorist, approaching Glacier National Park from Shelby, Montana, follows in part the route taken by Lewis along Maria's River. About an hour before reaching the site of Camp Disappointment, now marked by a simple monument, one will no doubt be attracted by the many oil derricks which dot the plains to the north for nearly 12 miles. This is the site of Montana's latest and perhaps most important oil strike—the Cut Bank Field.

The Texas Company had a large share in the discovery of this field, which lies in a slightly crescent-shaped strip to the north and south of the town of Cut Bank. Pioneer exploration work was done by the Company's geologists, with the result that many leases in the most productive section of the field are now being operated by The Texas Company.

Productive sands have been defined over an area of approximately 45,000 acres, and reserves, eventually to be recovered, will, in the aggregate, be large.

In these days, when the oil industry is paying so much attention to the potential threat of the gigantic East Texas Field, smaller developments such as the Cut Bank Pool have escaped general notice. Operations here are performed on a much smaller scale, but are carried on, therefore, in a more orderly manner. There is no wild boom, reminiscent of the days of Ranger or Wink, and much of the so-



Looking east from Logan Pass on the Going-to-the-Sun Highway

COURTESY NATIONAL PARK SERVICE

called "romance" of the industry is lacking. In its place there is orderly exploitation, encouraged by all of the responsible and experienced operators.

The producing "horizon" lies at an average depth of 2,850 feet, and the "pay" sand is about 25 feet thick. Most of the drilling operations are carried on by means of cable tool equipment. The crude is paraffine base oil of an excellent quality and light in gravity. Because of low gas pressure, there are no "gushers;" the wells are pumped.

Lewis and Clark were struck by the majestic beauty of the Rocky Mountain ranges, which stretched out before them as far as they could see.

This sight moved Lewis to write in his journal that this land, known to the Indians as "The Land of Shining Mountains," was one of the most beautiful he had ever seen.

Lewis' opinion has since been confirmed many times by the thousands of tourists who annually visit the section of Montana, now known as Glacier National Park. This part of the Rockies, abounding in scenic wonders, has now been opened to comfortable automobile travel, and a trip over the new Going-to-the-Sun Highway is an experience not likely to be forgotten.

This opportunity to travel through territory that



Oil operations within the city limits of Cut Bank, Montana

until recently was forbidding to an automobile, makes every motorist an explorer in his own right. Some of these roads never felt the impact of rubber tires until a few months ago, and many of the majestic peaks have only recently looked down upon a motor car.

It was natural for Lewis to suspect that this region, where Nature had been so prolific in creating her scenic designs, would be rich in minerals, gold and silver. Little did he dream that riches of another sort, unknown to him, would one day be taken out of the earth not far from where he stood.

The latest activity to come into the Cut Bank Field is the International Pipe Line Company, which gathers and transports to refineries at Sunburst, Montana, and Coutts, Alberta, a substantial portion of the total oil produced. This pipe-line system does not compare, of course, with the immense network of Texaco pipe lines which are operated in Texas and Oklahoma. It is the Company's endeavor, however, to render the same efficient transportation service to shippers in the Cut Bank Field which has characterized Texaco's transportation activities elsewhere.

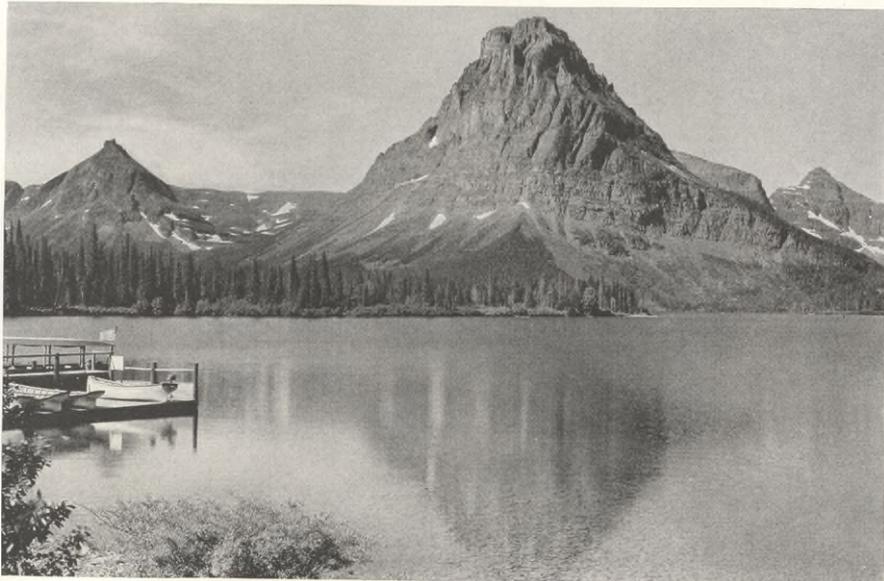
The Texas Company's operations in the Cut Bank Field are completely integrated, as through its own as well as subsidiary operations, it is engaged in producing, pipe-line transportation, refining and marketing.

Drilling and producing activities in the entire Rocky Mountain district, including also the Company's Montana activities, are carried on by the Producing Department of The Texas Company, with managerial headquarters at Denver. Field operating staffs are located, of course, near the scene of activities.

The crude oil produced and transported by the foregoing companies is refined in the plant of the International Refining Company at Sunburst, Montana. This refinery is equipped with modern "topping" and "cracking" units, which convert the crude into gasoline and heavy fuel oil. The gasoline produced by these units is then treated and blended to the exacting specifications for Texaco Fire-Chief Gasoline.

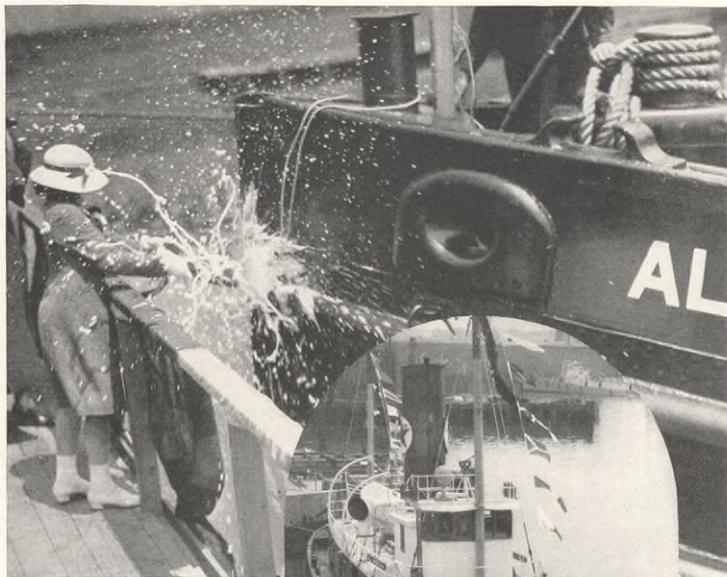
With vacation time at hand, nature lovers by the thousands will seek the wonders of Glacier National Park in the next few months. Perhaps it is the romance of the West which attracts some of us—the desire to see the land of the Indian and the scenes of glamorous pioneer achievements of the past. You can always find someone who remembers stories of "road agents" holding up stage coaches, of bands of vigilantes bringing swift justice to those guilty of theft. Or perhaps some Blackfoot Indian brave will tell you of the great buffalo hunts.

The Land of Shining Mountains beckons—let's follow the trail!



Lewis and Clark were struck by the majestic beauty of the Rockies

COURTESY NATIONAL PARK SERVICE



(Left) No doubt about this christening! Miss Ana Ogario, daughter of Vice President R. Ogario, performs her duties as a sponsor with a right good will. The new steam tug is 95 feet, 6 inches long, with a beam of 23 feet, 5 inches, and a depth of 12 feet

## Texaco Makes the "ALL AMERICAN"



(Center) A view of the *All American* a few minutes after she was christened

(Right) A few of those who attended the christening. Miss Ogario, sponsor of the vessel, is in the center and behind her stands Mr. T. Rieber, Vice President in Charge of the Export and Marine Departments. The new vessel was built in Brooklyn, New York, by the Robins Drydock & Repair Company





Pumping a load of Texaco Aviation Gasoline into the tanks of the DC-1 just before the takeoff

ASSOCIATED PRESS PHOTO

## TWA PLANE Brings New Records Home

It WAS a busy scene at Floyd Bennett Airport, New York City, on the morning of May 16 when a giant TWA Douglas transport plane, manned by Tommy Tomlinson and Joe Bartles, prepared to take off for five laps around an official triangular course between Floyd Bennett Airport, Bolling Field, Washington, and Willoughby Spit, Norfolk, Virginia—a distance of 621 miles.

A short time previously, Senator William G. McAdoo, as president of the National Aeronautic Association, had announced a program to bring the United States to a leading position in aeronautics. This program included the bringing of several official world records, then held by various foreign countries, to the United States.

First to respond to this appeal was Transcontinental & Western Air, which placed at the disposal of the National Aeronautic Association its sleek Douglas transport, the DC-1. A week before, this plane had established a new transcontinental record,



Pilots D. W. (Tommy) Tomlinson, at right, and Joseph Bartles

RUDY ARNOLD

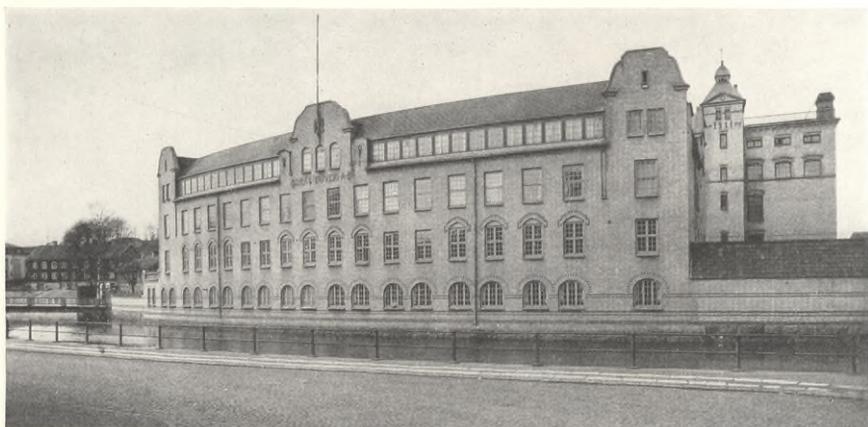
Los Angeles to New York, in 11 hours, five minutes.

Official N. A. A. observers and timers were at all control points. The weather bureau cooperated, and the Army lent a helping hand by making possible 100-per-cent radio contact between the ship and the ground at all times.

During the first day, the DC-1 set five new world records and nine new American records for speed with load. Two days later, Tomlinson and Bartles added three new world records for speed with load for land planes. The net result was the return to America of eight world records and the

establishment or breaking of 11 American records. The "score" in world aviation records now stands: France, 40; United States, 39; Italy, 21; Germany, 8; Poland and Austria, one each.

As are all other planes of Transcontinental & Western Air on all regular transport flights, the DC-1 was powered with Texaco Aviation Gasoline and lubricated with Texaco Airplane Oil.



Main office of Borås Wäfveri Aktiebolag, one of the largest textile mills in Sweden. This plant is Texaco-lubricated throughout

## Sweden's TEXTILE INDUSTRY

By E. AHNELL

The Texas Company A. B. (Sweden)

**T**HE so-called industrial revolution first made itself felt in the textile industry. Since then, the industry has made steady progress, and today its technique is one of the most difficult to master.

Inventors, sponsored by far-sighted manufacturers, have given to the world textile machines of all kinds, making possible the production of fabrics formerly undreamed of as to quality and low price. So sensitive are many of these machines that the slightest change of pressure, thickness of thread, or the like, will stop them—a sensitiveness far superior to human skill, and one that is necessary to assure absolute uniformity in the prod-



COURTESY NORRKÖPINGS BOMULLSVÄFVERI A.B.

The people turned their industrious hands to work other than that of plow and harrow

uct to be manufactured.

Obviously, the lubrication of textile machinery is of utmost importance to the industry. In Sweden—as in other leading countries of the world—Texaco products have successfully protected textile machines, and the mills using these products have been able to work unhampered by doubts as to the perfect functioning of their machinery.

The Swedish textile industry is situated principally in and around the city of Borås, a place not far from Gothenburg, the lively, west-coast harbor.

An industry usually settles in a certain locality because of the presence there of favorable

physical conditions. It may be that there is a good supply of raw material close at hand, or an abundance of the necessary power supply, or easy accessibility to good markets. These factors were especially important before modern means of transportation were developed. But the rich industrial development in the vicinity of Borås had none of these factors to rely upon. On the other hand, the development was not by mere chance, but must be attributed to reasons other than the foregoing.

These reasons are not difficult to find. One natural resource, the personal characteristics of the people themselves, has brought about the growth of this great textile center. These sturdy folk possessed a strong, enduring will to remain in the district, even when its agriculture proved insufficient for an increasing population. They turned their industrious, docile hands to work other than that of plow and harrow, and they journeyed to far-away markets to

sell their products. They loved travel, but their hearts were firmly rooted in their native place.

This combination of progressiveness, founded on firm tradition, promises a more undisturbed development than the spirit one encounters in places where capital and labor have been brought together by chance.

Of course these personal qualities are not limited to the Borås district. On the other hand, the results achieved bear witness that a large part of the population there possesses these characteristics of diligence and thrift.

Since only the best manufacturing methods will, in the long run, help to maintain such a record of achievement, it is proof of the outstanding qualities of Texaco products that they have been able to win the confidence and trust of technical men throughout the district who are responsible for the application of such methods.

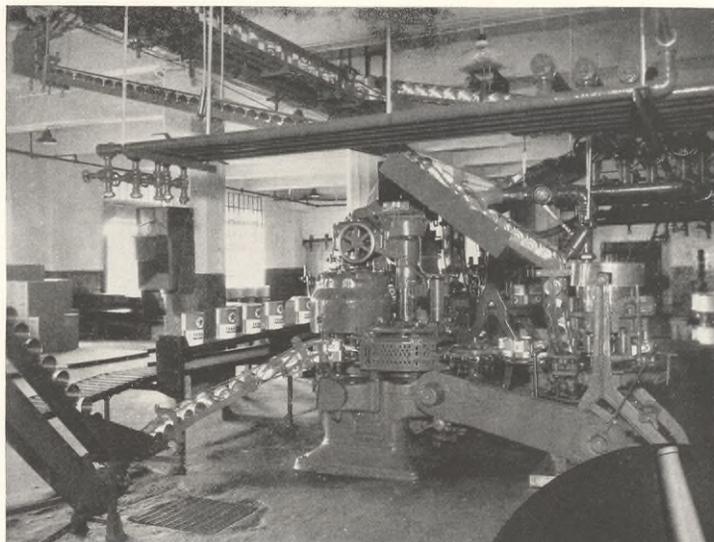
(Right) Printing machines applying designs to cloth in a Swedish textile mill

COURTESY NORRKPINGES  
BOMULLSVÄVERI A. B.



(Below) The 18 factories of Svenska Förenade Tricofabriker all use Texaco products





"Signed and sealed" by giant machines which work so rapidly that it is difficult for the eye to follow them



At the service station, the attendant pierces the can with a patent opener that destroys it beyond any further use

## MODERN MOTOR OIL Takes the Wrap

NOT so many years ago, a "brand" was something a cowboy did to cattle, and the saying, "You have to eat a peck of dirt before you die," kept a placid public content to buy its staples, particularly foods, in bulk. Most of us can remember when the neighborhood grocer scooped sugar from a barrel and weighed it out on a crude balance. The same white(?)-aproned gentleman would claw a handful of prunes or apricots from a box (after shooting the store cat from her favorite perch in their midst), plop them into a paper bag and hand them to the customer.

Nowadays practically everything we buy is either wrapped in that gleaming product of our streamlined age—cellophane—or packaged in some distinctive manner by the manufacturer. Thus we have learned to ask for individual brands of such prosaic articles as prunes, sugar, bread, and even potatoes and coal.

One of the latest to join the package parade is the oil industry. Certain petroleum products have long been sold in containers. For many years motor



oil was available in cans, but was practically never purchased that way except as a reserve supply. Up to within the past two or three years, service station men pumped motor oil from a "lubester" into refillable bottles, whence it was poured into the crankcase of your car. Sometimes you got the brand and grade of oil you asked for. A lot of the time you didn't.

The introduction of motor oil in refinery-sealed cans has changed this situation completely. Today the leading brands of lubricants are packaged and handled like tins of tomatoes or corn or peas. From the time it leaves the refinery until the service station attendant pierces the attractively lithographed can with a patent opener (which destroys the can in the process) good motor oil never sees the light of day.

The advantages are obvious: protection from con-

On this production line at the Texaco Can Company's plant five-gallon cans for export use are being manufactured



Nowadays when you ask for oil, you can be sure of getting the correct grade, uncontaminated by dirt or inferior oil



tamination, assurance that the grade of oil recommended by the manufacturer is put into your engine, and freedom from substitution. Today you can be certain, when you ask for a quart of Texaco Motor Oil or of Havoline Motor Oil—WaXfree, that the proper grade, uncontaminated by dirt or other foreign substances, flows into your crankcase to fulfill its duty of giving you a quieter, smoother-running engine.

Just how many millions of cans The Texas Company uses in a year for Texaco Motor Oil and Havoline Motor Oil—WaXfree would be hard to say. A great many of them, however, are manufactured by the Texaco Can Company, formerly the Case and Package Division of The Texas Company.

About three miles from the city of Port Arthur, Texas, home of Texaco's largest refinery, is a 50-acre plot of land known as Terminal Island. Here

is located the Texaco Can Company's plant, as well as storage and loading facilities for the Company's deep-sea fleet of tank ships.

This plant has been in operation for many years. Formerly it manufactured cans and cases for the export trade and for such packaged products as there was a demand for in the United States. With the advent of motor oil in refinery-sealed cans, the activities of this branch of the Company's business have increased considerably. Not only are cans for Texaco Motor Oil and Havoline Motor Oil—WaXfree made there, but cans for other companies are being turned out in large quantities.

Let us trace the development of the distinctive Texaco and Havoline cans. In the offices of the Company's Advertising Division in New York, an artist is putting the finishing touches on a drawing. This is the original design for the can—a design which, in competition with the work of some of the country's leading package designers, meets with enthusiastic approval.

The artist's original drawings are sent to Port Arthur, and at the can factory on Terminal Island skilled lithographers transfer the design to zinc plates, one plate for each color. These plates are used to print the sheets of tin which go into the manufacture of cans.

The tin is shipped to Port Arthur in 2,000-pound bundles, and is fed into the lithograph presses, where the design is printed and then baked on. A finishing coat of varnish and another baking pro-

tests the design and brings out the colors, whereupon the lithographed flat sheets pass to the stamping room. There they are cut to exact size. Automatically fed stamping machines turn out 40,000 to 50,000 pieces, ready to be made into cans, in a working day.

A forming machine now gobbles up each tin rectangle, rolls it over a cylindrical shaper and at the same time forms a lock seam where the two ends join. The can shell then passes through a solder bath, where the seam is firmly sealed. Another machine flares the ends of the shell, preparatory to "crimping on" the bottom and top.

Can tops and bottoms are stamped from tin plate in a similar way. The shell of the can and the bottom are brought together, and each can is automatically tested under pressure.

The cans are filled by gigantic machines that automatically fill, weigh, and "top" the cans so rapidly that it is difficult for the eye to follow the various operations.

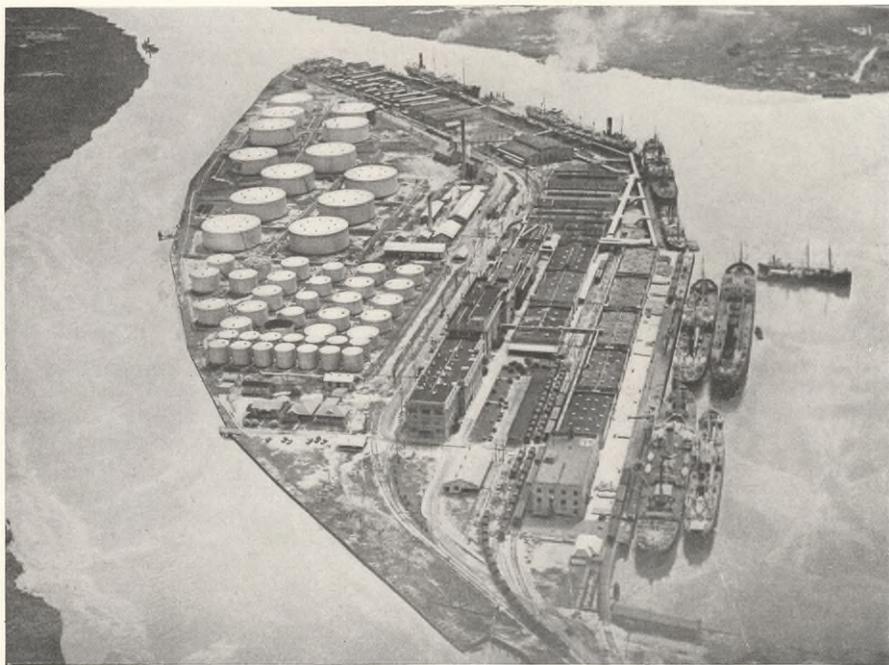
Until recently, all cans and cases for products shipped abroad were made at Terminal Island. With the completion of can-manufacturing facilities in Shanghai, China, and the Philippines, these

products are now shipped in bulk to the Orient and packaged there.

For a time this meant less work for the Case and Package plant at Port Arthur, and the suggestion was made that cans be manufactured for concerns other than The Texas Company. A trade survey of the neighboring territory revealed that other oil companies were willing to buy cans manufactured at the Texaco plant and that there was a market for 40 million cans a year at shrimp and fish canneries within an 80-mile radius of Port Arthur.

The Texaco Can Company began operations November 1, 1932. The second month found sales more than doubled. After that they multiplied rapidly. The marketing of cans now takes in the whole of Texas. A nationally known coffee company is being supplied. Half-gallon and gallon syrup pails are being made, and egg cans for a plant in Lubbock, Texas. Eggs are broken into the cans, frozen and sent to hotels and restaurants—an improvement over the old-style "cold-storage" eggs.

Company officials are watching the growth of this new Texaco activity with pride. Port Arthur has reasons for pride, too, for new industrial possibilities have been discovered for the city.



"The Island," otherwise known as The Texas Company's Port Arthur Terminal—home of the Texaco Can Company, and Texaco's largest deep-water shipping point



The independent but coordinated expeditions known as the Second Leila Roosevelt Expedition and the Armand Denis Belgian Congo Expedition stock up with Texaco Gasoline and Motor Oil before their departure for Africa

Photo above shows the equipment at a service station of The Texas Company S. A. B. in Brussels, Belgium. In circle, Leila Roosevelt (who is Mrs. Denis in private life) with Mr. Denis and their pet cat, which will be their mascot



*Signed*

by Texaco . . . a name that makes the United States *united* in its coast-to-coast demand.



*Sealed*

in these bright new red and white cans which faithfully guard its refinery-quality against dirt, water . . . anything or anybody.



*and Delivered*

to your crankcase in the right grade for your car . . . at Texaco stations and dealers. Opened only for you . . . At no extra cost.

**A QUART FOR A QUARTER**