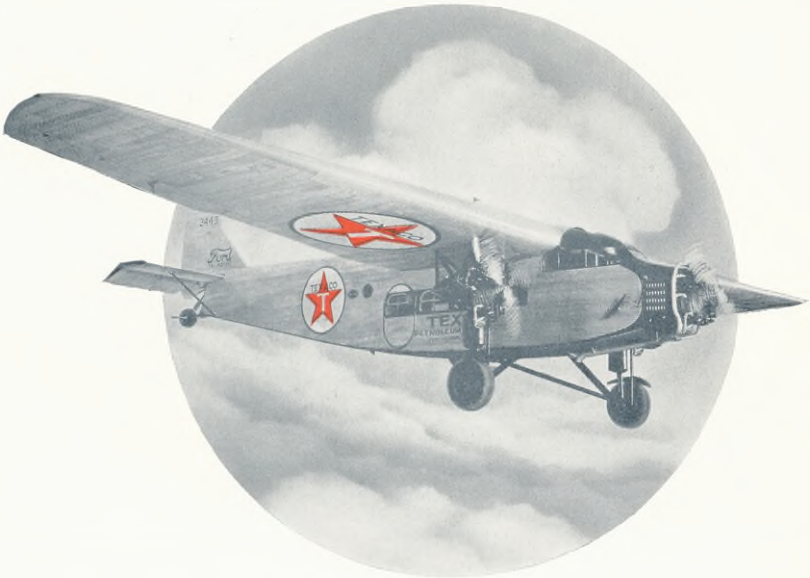
The TEXACO STAR

For Employes of The Texas Company



Vol. XV SEPTEMBER 1928 No. 9

NATURE's book is like any other book: you must open the covers; you must fix your eyes upon the text; you must get into the spirit of it. When you have read one sentence correctly you are so much the better prepared to read the next one.—*John Burroughs.*

The TEXACO STAR

PRINTED MONTHLY FOR DISTRIBUTION TO EMPLOYES OF THE TEXAS COMPANY

Vol. XV September 1928 No. 9

"All for Each—Each for All"

Address: The Texaco Star, The Texas Company
Houston, Texas

Expansion

Additional facilities and expansion of the Company's activities now under way consist of the construction of refineries at Cody, Wyoming; and Amarillo, San Antonio, and El Paso, Texas. The capacity of these plants will be governed by the quantity of refined product that can be supplied at freight rates and costs under present sources of supply. For the present, capacities will be approximately 3,000 barrels a day each for the first three plants and 1,500 barrels a day for the El Paso plant. Our present refinery at Lockport, Illinois, will be increased in capacity by 7,000 barrels. An 8-inch pipe line will be constructed from Tulsa to Lockport and branch lines laid from our present systems connecting the refineries at Amarillo and San Antonio.

R. C. HOLMES,
President.

The Constitution of the United States

Under the leadership of the American Bar Association, this is Constitution Week (September 16 to 22), and its purpose is to foster the study of the Constitution and thereby increase the affection of the American people for our fundamental principles. The Constitution is a very brief document, but millions of words have been written about it, and still there is much to be said. In this brief article, it is proposed merely to call attention to certain fundamentals with which every American citizen should be familiar.

The Revolutionary War was fought and won and peace was established before the Constitution was adopted. The treaty of peace recognized the thirteen Colonies as independent States, and while the Articles of Confederation were then in force, there was no compulsory national existence, but each State was jealous of its own authority and reluctant to surrender any part of it to the national government. The weakness of the Union resulted in the adoption of the Constitution, and the unique feature of the Constitution is the federal system which it set up.

A written Constitution was necessary in order to define and preserve this federal system. Every American citizen is a subject of two governments: one, the United States of America, and the other, the State of which he is a citizen. By the Constitution, the States created the United States of America and granted to this general government certain powers, reserving all others to themselves. Complete sovereignty does not rest either in the United States or in the respective States, but partially in both. The purpose of the Constitution was to define these two respective fields of power so that each government might function unmolested in its proper sphere.

The sphere of the general government called the United States of America is two-fold: (a) It is supreme in all matters of international

relations. This was necessary to its existence, as obviously, in such matters, the United States must be a unit, and each State could not act for itself in respect of international affairs. (b) In all interstate relations the general government was given exclusive power. This likewise was obviously necessary, as no State acting alone could regulate interstate relations. Each State might have a different idea of what its relations to the other States would be, and if these relations were left to the control of each State, it would have resulted in national disintegration. Therefore, the Constitution creates a sovereignty, complete and exclusive in its powers of dealing with other nations and of regulating intercourse between the several States.

Speaking broadly and without discussing details or exceptions, in international and interstate relations the Constitution made the general government supreme, and in other matters reserved supremacy to the respective States. In order to emphasize this fact, the States were not satisfied to delegate certain powers to the general government, but were particular to reserve all undelegated powers to themselves, and in order to emphasize and secure this result, provided by the Constitution that "the powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people."

The Constitution was not forced upon any of the original thirteen States. Each was left free to accept it or reject it, and each acted independently of the others by a constitutional convention called for the purpose of considering it. The Constitution, as proposed, expressly recognized this right of freedom of action by the respective States, and provided that if it should be ratified by as many as nine of the States, it should be established "between the States so ratifying the same."

The most powerful arguments against the adoption of the Constitution were made by Patrick Henry and other leaders in the Virginia constitutional convention, and the basis of their arguments was that there was not sufficient protection of the freedom and sovereignty of the respective States. In order to meet these objections, the first ten amendments were adopted immediately, and each of these amendments was a further assurance that the powers of the general government would be limited to those defined and that the respective States in all other matters would have freedom of action.

These were the fundamental principles underlying our Constitution at the time of its adoption, and the amendments adopted prior to the Civil War were in harmony with this principle and tended to define and limit the powers of the general government. Since the Civil War, there has been a tendency in the other direction. The 13th, 14th, and 15th amendments were the direct result of that war, and each of them diminished the power of the States and increased the power of the United States. All of the amendments since the 15th have gone in this same general direction of curtailing the powers of the State and increasing the powers of the general government, and, in principle, have been departures from the fundamental notion of the framers of our Constitution; and today there is a marked tendency towards concentrating power in Washington instead of diffusing it among the several States. Our country spreads over a vast extent of territory and is divided into 48 States, to say nothing of our insular possessions. Conditions differ more or less widely in different parts of the country, and it was the purpose of the framers of the Constitution to allow each State to regulate its internal affairs according to its own interests, and not to establish a universality in rules of action.

Opinions may differ as to whether this modern tendency is beneficial; as to whether it is wise or unwise; but reasonable opinions cannot disagree with the statement that the modern tendency is a pronounced departure from the fundamental principles of the framers of our Constitution.—*C. B. Ames.*

Instead of Gravity——

There still exists a tendency outside of scientific oil circles to gauge the merit and indeed the value of gasoline, kerosene, and fuel oil almost exclusively upon gravity.

The frequent explanation of the gasoline dealer that his gasoline "tests 66" or "64" is indicative of this attitude.

The really important factors, that of distillation in gasoline, distillation and viscosity in kerosene, and B.T.U.'s in fuel oil seem generally to be undervalued and attention focused on gravity.

Observe the typical, relatively small purchaser of fuel oil. Of what does he think first? Gravity first, and probably last, thereby revealing his belief that gravity is a conclusive

criterion of fuel oil, the "yardstick" of its quality, if he is to be taken at his word.

Fuel oil should, of course, be free from dirt or other foreign substance that may detract from its fuel value or that may clog or injure the burners, and the flash point should be well within the limits of safety. But assuming these, what is the real test of the value of a fuel oil?

A barrel of fuel oil is so much potential heat, however we may use the heat. Its value is in its ability to furnish heat. Therefore, the test of its value is the amount of potential heat contained. Simple enough. Now, what indicates its heat content? The heat content of fuel oil is generally specified as so many B.T.U.'s per gallon or per pound. Technically, a British Thermal Unit (B.T.U.) is 1/180th part of the amount of heat required to raise one pound of water from 32 to 212 degrees Fahrenheit; or, as generally used in practice, it is the amount of heat required to raise one pound of water one degree Fahrenheit. So that, knowing the potential heat content of a fuel oil, usually expressed as so many B.T.U.'s per pound or per gallon, it is possible to compare its value with any other fuel oil. We can readily make the comparison on the basis of heat. For instance, we may say that one fuel oil contains 150,000 B.T.U.'s per gallon, while another contains 160,000. The second, therefore, should be 1/15th, or say 7%, more valuable than the first in heat value. At this rate a plant burning 10,000 barrels of fuel oil per month at a cost of one dollar per barrel could save over $8,000 a year. Since the primary purpose for which fuel oil is purchased is its ability to produce heat, usually for the generation of steam, the heat content of the oil would therefore seem to be the most important consideration.

But here we find what, in the light of an understanding of the significance of gravity as applying to fuel oil, appears to be a peculiar heritage of the average purchaser of fuel oil. Does he say, "I want the most heat I can get in a fuel oil"? Does he say, "Forget about gravity, give me the B.T.U.'s"? Or does he say, "I want a high gravity fuel oil"? Usually we hear the latter. And probably because the buyer is following the practice of his predecessor or has heard of others making the same specification. Certainly it is not because the "high gravity" is more economical than a fuel oil of 8 gravity, or even 6 gravity. As a matter of fact, the buyer, by his specification of 18.0 —20.0 or whatever it may be, is limiting his purchase of B.T.U.'s or, what is practically the same thing, limiting the amount of heat he will acquire per barrel in his fuel oil purchase. Because, generally, the B.T.U. content of a given volume of fuel oil increases as the Beaume gravity decreases. The B.T.U. content of some representative samples of fuel oils of various gravities will illustrate:

Gravity (Beaume)	*B.T.U.'s per Gallon*
4.0	160,300
8.0	157,100
12.0	153,700
16.0	150,600
18.0	149,290
20.0	147,860

It will be seen from the foregoing table that while the variation is not constant, generally the lower the Beaume gravity of the oil the higher is its value in heat units per gallon. In purchasing fuel oil the B.T.U.'s in the gallon, and not in the pound, should be considered. In the United States fuel oil is purchased by the gallon or by the barrel of 42 gallons, and not by the pound, and, of course, comparison should be made upon the basis of the unit of purchase; i. e., per gallon and not per pound.

To get the most for your money when purchasing and burning fuel oil, these simple rules may be helpful:

1. Ignore gravity.

2. Have the seller tell you the proper temperature to which the oil must be heated to handle through your storage and burn most effectively.

3. Select the oil with the highest number of B.T.U.'s per gallon within such viscosity or flow range as can be used in your equipment or in equipment which you may find of advantage to install in order to obtain the highest and most economical fuel value.

4. Flash point, cold test, moisture, and other sediment should be kept within commercial limits.

5. Ask your supplier to send a fuel oil engineer to look at your equipment and see that you are burning the oil properly. Any reputable supplier will appreciate the opportunity to see that your plant is burning the oil with the greatest efficiency.

6. Finally, remember fuel oil is potential heat. Economy in fuel costs may be enormous. Waste may be equally enormous. When you buy fuel oil buy all the heat you can get for the price and then see that your equipment is operated to develop the maximum heat of the fuel oil.

The United States Government, one of the largest purchasers of oil in the whole world, knows what it wants. But does it say anything about gravity when purchasing an oil to burn? It makes very definite specifications but never mentions gravity. And this is true of Government specifications for gasoline, kerosene, and fuel oil, and is not accidental, but deliberate and the result of exhaustive scientific inquiry and study. All the fuel oil for the United States Navy is purchased without mention of gravity.

Why, therefore, should other users not take the modern view and think of fuel oil as a source of heat and measure its value accordingly?

Skill

Hard work or sustained effort is essential to all worthwhile accomplishment; but the real attribute, which makes success possible in any undertaking, is *skill*; and degrees of skill differentiate between men in like occupation, for "it is in little more than skill of drawing and modeling that the art of Raphael . . . surpasses that of Giotto."

Readiness and excellence in applying knowledge to practical ends, or expertness in mastering the technic of an art or science, guarantee adaptability or personal fitness for it. Also, by acquiring skill in whatever is undertaken, we add to our pleasure in doing that task. Golf to the uninitiate may appear a boresome pastime; but to those who have somewhat mastered the various strokes it is an exhilarating sport and healthful exercise. So in our work, as we master its problems and appreciate its possibilities, greater opportunities open before us and we tackle the day's work with renewed zest and fuller understanding. Perfection in the required skill eliminates wasted energy, which is a tremendous overhead expense.

Special training courses, which immeasurably add to their advantages, are sometimes available to certain individuals; but all of us by thought and study can realize efficiencies and improve proficiency in the work at hand. Of course it takes extra effort to do this—moreover, "it is resistance that puts us on our mettle; it is the conquest of the reluctant stuff that educates the worker." Keen interest in one's work removes the monotony and prevents it from becoming a tread-mill. Such interest creates an objective motive for the persistent and painstaking toil requisite to skillful workmanship. This achievement is indispensable to worthy craftsmanship and the true dignity of all labor.

Mailing List Duplications

In building up the mailing lists of *The Texaco Star*, two main sources were used—stockholders and employes. Duplications necessarily occur due to several conditions: An employe, who is also a stockholder, may receive two copies—one as an employe and one as a stockholder; several members of a family living at the same address may be stockholders and receive copies of each issue, *etc.*

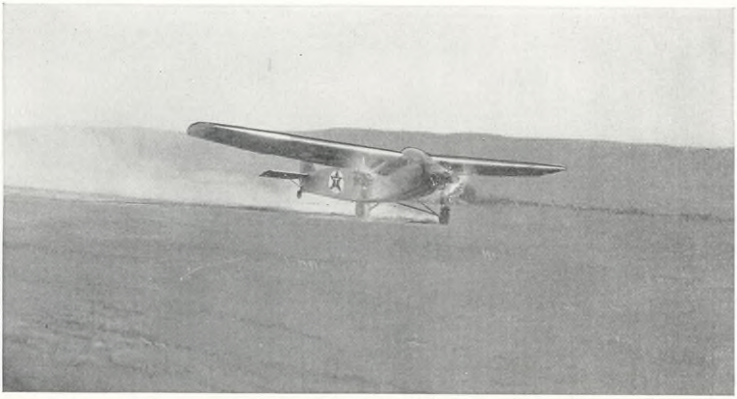
As far as possible, we have corrected our large mailing lists to prevent such duplication, but on account of the manner in which our employes' list must be arranged to facilitate the regular bi-monthly correction by the various Departments, and the fact that the names of several members of a family may be far removed from each other in the stockholders' list, it is evident that some duplication has occurred. Many of those receiving extra copies, however, may be putting them to good use. If so, we do not wish to deprive a household of more than one copy. On the other hand, where there is unnecessary duplication we earnestly request that we be notified of this fact so that our mailing lists can be corrected accordingly and undue waste eliminated.

A Correction

The cartoon entitled "Coöperation" appearing on page twenty-two of our July-August 1928 issue is copyrighted by Armour and Company, Chicago, Illinois, and the credit line should have read: "Copyright, Armour and Company."

Political freedom is, or ought to be, the best guaranty for the safety and continuance of spiritual, mental, and civil freedom. It is the combination of numbers to secure the liberty of each one.—*Bulwer-Lytton.*

Great men are they who see that spiritual is stronger than any material force, that thoughts rule the world.—*Emerson.*



The Texas Company's Ford Tri-motored Airplane which finished second in the National Air Tour of 1928

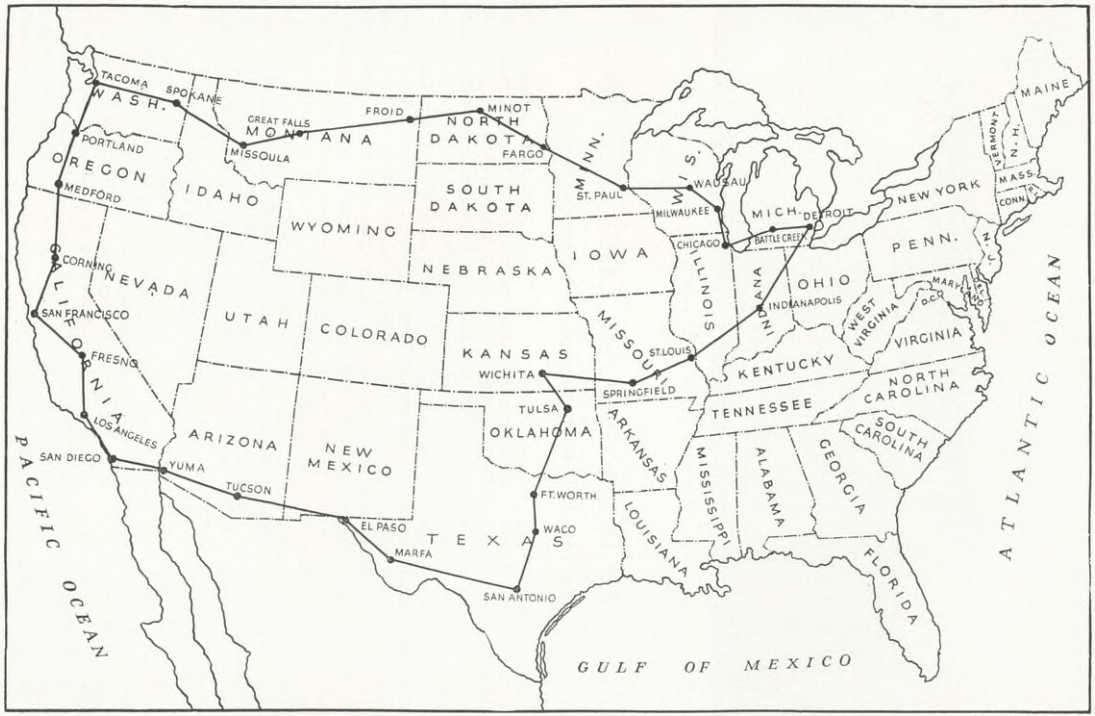
The National Air Tour of 1928

CAPTAIN F. M. HAWKS, Representative Aviation Division

On June 27 twenty-five airplanes of all sizes, types, and various ranges of speed were assembled at the Ford Airport in Detroit, Michigan, to make the preliminary tests prior to the start of the National Air Tour of 1928. This is not a race, as so many people are inclined to look upon it; but it is a contest for which the highest prize is given to the airplane that can carry the greatest load at the fastest speed, and land and take off in the shortest space, with the smallest engine displacement.

Tests are conducted at the Ford Airport to determine what is known as the "figure of merit"—that is, each plane is weighed empty, and then with full load, which is limited to the maximum for which it has been licensed by the Department of Commerce. The difference represents what is known as "the useful load," for which the contestant receives full credit. Any weight carried above that which is specified by the Department of Commerce is done so without any credit in points. The pilot then flies his airplane over a speed course four times to determine the airplane's maximum speed with full load. After this figure is determined the planes are then required to qualify for their stick and unstick time. To make this expression clearer to the layman, the term "stick" is known as the landing of the airplane which is timed in seconds from the moment the plane touches the ground until it comes to a dead stop. "Unstick" represents the time from the moment the plane commences to roll until it is off the ground, measured likewise in seconds. After determining these factors we now have all the figures with which to complete our formula and determine the "figure of merit" for each airplane. This "figure" in points represents what each plane can add to its score for each leg of the tour completed on time. This means that the pilot must maintain eighty per cent of his maximum speed throughout the contest. Falling below eighty per cent, he would receive credit only for his actual speed, which would be twenty per cent off the "figure of merit" or more, depending on how tardy he might be in arriving at the last control for the day. No credit is given for arriving ahead of time.

The *Texaco No. 1* (Ford Tri-motored) was supposed to weigh 6100 pounds empty, as specified by the Ford Motor Company. A few extras had been installed, such as additional fuel capacity, earth inductor compass, and some decorative oil sample racks. These extras increased the weight of the empty plane 228



Map showing route of the National Air Tour of 1928—beginning and ending at Detroit, Michigan

Airplanes entered in the National Air Tour of 1928 being serviced with Texaco at Tulsa, Oklahoma

pounds, and that 228 pounds cost the *Texaco No. 1* first place. In place of carrying a useful load of 3900 pounds, it was allowed to carry only 3672 pounds under the restrictions imposed by the Department of Commerce. This additional 228 pounds would have given it a "figure of merit" of 858 points instead of 798.3, which was 52.1 points under the winner.

On a very beautiful day, Saturday, June 30, before a crowd of nearly 100,000 people, the twenty-five airplanes took the air from the Ford Airport in Detroit, at one minute intervals, on the first leg of the long journey. Every plane arrived at Indianapolis without incident and on schedule. In the afternoon they all took off for St. Louis, and it was the misfortune of *Texaco No. 1* on this second lap to have a crankshaft break on the center motor about 100 miles outside of St. Louis. The switch was cut on this motor and the plane continued into St. Louis on the two outboard motors, arriving at destination two minutes late, but without incident other than the loss of the damaged motor. This cost 195 points and put *Texaco No. 1* down to fourth place, as all the other contestants made their perfect scores.

Having a spare crankshaft, upon arrival at St. Louis our most able mechanic, together with the assistance of two Wright Whirlwind representatives, immediately commenced the work of replacing the damaged shaft. By working until midnight, they had the center motor running for test before two o'clock the next afternoon, so that on Monday, the 2nd of July, *Texaco No. 1* was ready to take off on schedule with the rest of the contestants.

From St. Louis through Springfield, Missouri; Wichita, Kansas; Tulsa, Oklahoma; Fort Worth, Texas; Waco, Texas; to San Antonio, Texas, very strong head winds were encountered which made it most difficult to maintain the perfect score or to keep up the eighty per cent speed; and I made no great effort, not wanting to punish my equipment by running with all three throttles wide open. I did, however, gradually crawl out of fourth place to second upon arrival at San Antonio.

From San Antonio to the coast the participants in the tour had favorable winds and it was just a matter of piling up points each day for *Texaco No. 1* to entrench itself safely in second place. (From San Antonio, Texas, to Portland, Oregon, the itinerary included Marfa, Texas; El Paso, Texas; Tucson, Arizona; Yuma, Arizona; San Diego, California; Los Angeles, California; Fresno, California; San Francisco, California; Corning, California; Medford, Oregon.) The leader of the tour was doing the same, and by the time Portland, Oregon, was reached the only way either one of us could have possibly lost our place would have been through some motor trouble or accident from which we might lose several complete legs, which could not be regained during the balance of the distance to be traveled.

After touching the extreme northwest portion of our tour, which was Tacoma, Washington, we started east over the Cascades, touching at Spokane, Washington; Missoula,

Montana; Great Falls, Montana; Froid, Montana; Minot, North Dakota; Fargo, North Dakota; St. Paul, Minnesota; Wausau, Wisconsin; Milwaukee, Wisconsin; Chicago, Illinois; Battle Creek, Michigan; and back to Detroit and into the enormous protecting hangars of the Ford Motor Company.

There was only one incident in the entire journey which was unpleasant. Mrs. Phoebe Omlie, who was flying a small monocoupe, turned over while making a landing at Marfa, Texas. The damage was only slight, one wheel having collapsed and one wing-tip being slightly battered. Repairs were promptly made on the wing. Upon receipt of a new wheel she continued and finished with the balance of us. Another airplane had a forced landing out of Tulsa and not being able to promptly secure parts could not continue.

Twenty-five airplanes started this event and twenty-four finished, which is a pleasant augury of the safety of airplane travel. We were favored with beautiful weather and favorable winds during most of the tour. The entire journey was clipped off with such clock-like regularity that it became monotonous except for the enormous crowds at each control who were eager to inspect the airplanes. *Texaco No. 1* created considerable interest at every stop.

Among the flyers attracting attention of the audiences were three internationally famous pilots who had flown over the vast waters of the Atlantic. These were Messrs. Brock and Schlee, who flew around the world as far as Tokio, where they were prevailed upon to return home by boat; and George Haldeman, who piloted Ruth Elder on that famous flight which had such a fortunate ending close to a Dutch tanker in mid-Atlantic.

The Texas Company had the contracts to service all of the airplanes between Wichita, Kansas, and Yuma, Arizona, and our competitors were given the balance of the distance. Our own plane, however, was serviced with our own products at every point, and I wish to take this opportunity to sincerely express my appreciation for the admirable efforts of all those who aided us so materially in our success. A contest of this nature places the pilot somewhat under high pressure, and therefore it was not my good fortune to personally thank the agents and representatives at each control for their splendid efforts in rendering service, but I want them all to know that I fully realize that they gave their best, and I am sincerely grateful.

With the completion of the tour, *Texaco No. 1* has now traveled some 25,000 miles without accident. The motors have had over 350 hours, including the running time on the ground, and have had a thorough overhauling at the Wright factory preparatory to another tour of our own to continue spreading the gospel of good will for the benefit of aviation and The Texas Company.

Adventures in Service Stations

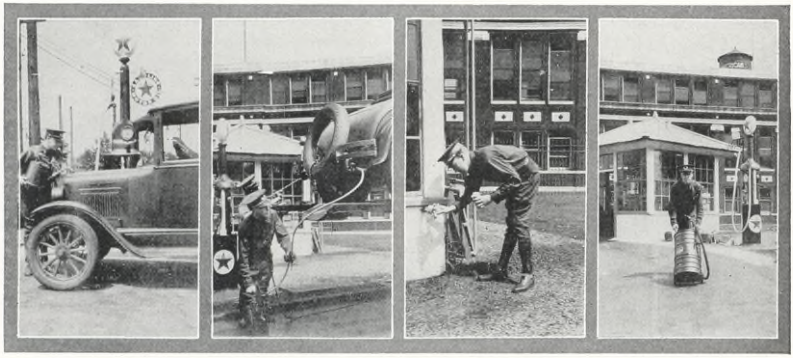
JAMES TANHAM, Assistant to W. W. Bruce, Vice President

We learn best by doing. When Mr. Tanham decided to learn more thoroughly the details of operating a service station, he applied this theory and devoted his spare time to servicing automobiles at a Texaco Service Station.—*Editor.*

Some one once suggested that if there existed a doubt as to whether or not clothes made any difference, the question could be settled very promptly by walking a block sans apparel.

However, it is not necessary to resort to such an extreme. If you are accustomed to wearing the much discussed "white collar" during most of your waking hours, try putting on a Texaco service station uniform. The effect upon the ego is immediate and overwhelming. And if, ordinarily on your "white collar" job, you happen to have one or more assistants at your disposal, the sharp request of a customer, "Boy, check the air in my tires," is quite sufficient to leave with you, temporarily at least, the impression that your white collar status is a mythical illusion or the recollection of a very vague dream.

At any rate, that was substantially my feeling as I stepped out at our Newark, N. J. Service Station No. 1 to meet my first customer. My uniform was green and new, and so was I. I both knew it and felt it, and what was worse, the customer soon knew it and I



Views of Mr. Tanham in action

1. "I did remember to fill the radiator." 2. "We pumped grease and sprayed springs." 3. "We polished brass." 4. "A hurry call for Thuban."

knew that he knew it. So, since it was no secret, I confessed it and immediately won the coöperation of my customer who took great pride in showing me how to turn the pump handle. And if you think you know how to turn a pump handle, just try the next pump you see and surprise yourself. It probably will not turn at all, or only in the opposite direction.

Now, don't get the impression that I made a mistake in attempting to serve a customer until I knew how. I was the victim of circumstances and good intentions. The rest of the force were taking care of other customers. I had just managed to get the puttees on the proper legs and adjust my black bow tie. I stood in the doorway of the station as this car rolled in and stopped a few feet away. I had been seen standing there; to the customer I was on duty and he expected prompt service. I could not ignore him, so I ventured out, and I have been glad ever since that I did. It was my first contact with a service station customer. When he left we were both smiling, and so was the young lady on the seat beside the customer, probably at my awkwardness. But I did remember to fill the radiator, which upon reflection gave me great satisfaction.

This was a busy evening that I had selected for my service station debut. There was hardly any opportunity for me to ask questions before I confronted a Ford coupe; not the Lincoln type, but the pre-transformation type, of the age before Henry made a lady out of Lizzie. I got the gasoline in all right, but, having read the book of instructions, I inquired, "May I look at the oil?" and the customer said, "Yes." I proceeded to raise the hood and look for the oil gauge when the customer inquired, "Hey! What are you looking for?" "The oil gauge," I responded, trying to be cheerful. He smiled and said, "You don't look there, look under the car." That gave me a jolt. "Under the car,"—that was a new one.

And so I learned what a peculiar animal the old Ford is. But I sold a quart of Texaco Golden Motor Oil.

The remainder of my first evening passed quietly. I returned on Saturday afternoon and faced two cars waiting to be greased. I will admit my feeling of trepidation as I first ventured under the rack with a car overhead. I knew that only air held that rack up. I momentarily expected the whole thing to crash to the ground and I wondered if in the crash I could get sufficient of my body outside the rack and limit the mutilation to my lower limbs. And wondering thus, I proceeded to hunt Alemite cups and to pump grease. The job was done, then another followed. We drained oil, cleaned differentials, sprayed springs, and soon I was enjoying it all. I was grease all over. Thuban Compound had drained into my ear, my hair was greasy, my hands grimy. Heavy lines of black were under my finger nails. And I was due to play bridge that evening! How could I ever get clean? But I was happy. I had taken the hardest service station job in hand, and completed it.

I said I was happy. It was the happiness of being through after doing a hard job well. You see, I thought I was through, but I had really only started. This I soon learned, however, when, looking around for a seat to rest my groaning back, I heard the cheerful voice of Jim Savage, the boss, "Well, boys, guess we better start cleaning up now." And we did. We cleaned off the greasing rack, polished brass all over the station, cleaned cars, washed, swept, polished, and finally finished by painting the station floor. I thought maybe some of this was for my special benefit and if so, my aching arms reminded me, the joke seemed to be going too far. But it was all regular routine, I have since learned through repeated and disillusioning experience. The idea at a service station is to clean up while there are few or no customers, so it will be clean when customers come in and get it all dirty, so you can clean it up again when they leave, so that it will be clean for the next customers; and so on, ad infinitum, also ad libitum—the ad libitum being at the option of the customer, not you.

But, like liberty, cleanliness is bought by constant vigilance, plus "elbow grease."

And as you meditate, in drives the boy with the new and sparkling roadster, so new that as you recall the statistics on the cars bought on instalments, you know by the law of averages that this one just got out on a "down" payment. "Fill her up, boy," he calls out nonchalantly, as he flips a cigarette out of his silver case. Somehow you feel he doesn't mean it. You are sure he doesn't mean it when you notice his arm outside the car on your side and two fingers held out warningly toward you. You realize the two fingers are for you, and the "Fill her up" for the benefit of the girl beside him. So you put in the two gallons and don't mention the amount of the bill in front of the girl, taking the small change which he has ready for you with a "Thank you, sir!" at the same time tipping your cap. (See Instruction Book, Part I, Section 17.)

Then there was our so-called "padlock" customer. Every fine night he came in. It looked like one of the Paris taxis that carried the boys out to Meaux and around there, only it was twice as high and twice as long. I always hoped he would get out before the car fell apart on the station property. We had enough cleaning to do without having to collect car parts.

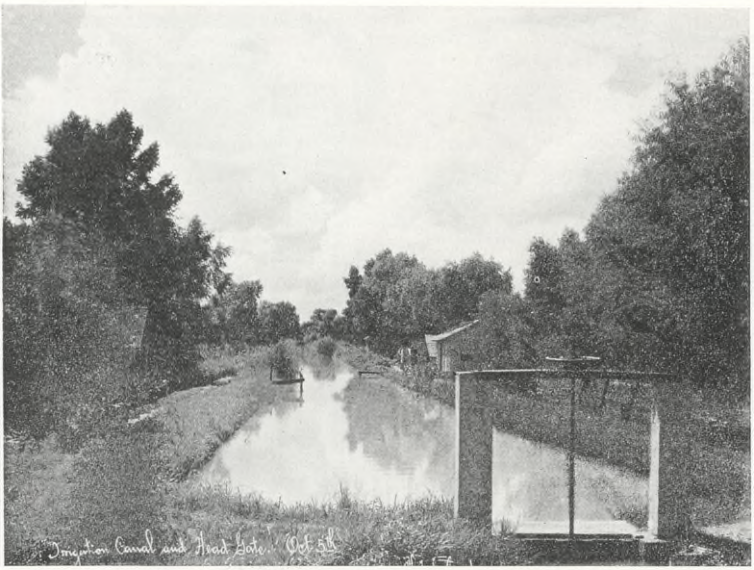
So for weeks I spent my spare hours servicing cars with Texaco. And now, looking back, I am more than glad I did just what I did. It all looks so simple when you drive into a service station, but so different when you stand there in uniform waiting for the car to stop and ready to put the gasoline in the tank and oil in the crankcase.

But here I am impressed with the truth that in so many instances the intangible things are of more importance than the tangible. True, that I learned to pump gasoline, where to look for oil in a Ford, and how properly to grease a car. Those were the tangibles. But the intangibles have left the strongest impression. Pumping gasoline is now merely a mechanical operation. Looking for oil on a Ford is not even a variation in routine. But working with men who do these things all day, week after week, and month after month—that was the real experience. Of these impressions I mention only a few.

You cannot work with men in the close, intimate contact and in the common purpose of rendering Texaco service without seeing the best side of the men. And so I came to know these men and to see their work and their problems as they see them. Stupid as I was, they never complained, but were always willing to teach me. They got the same thrill out of selling Texaco as you or I do out of any job we do well. And they deserved it, too.

Another thing that impressed me was the fact that the uniform identified me. If you have ever worn a military uniform you recall the feeling that you definitely belong to Uncle Sam, and that he is some Uncle. Well, the Texaco uniform gives a similar feeling. You know, and everybody knows that you are a part of the Texaco organization, and it is then that you are impressed with the fact that you may be proud of the identification because back of your uniform is the mammoth organization, all parts working together in closest coöperation for one purpose: to produce the best products possible, the New and Better Texaco Gasoline and Texaco Golden Motor Oil, the products that you are selling, and which you are proud to sell because you know they are best.

And I think that this was the thing that impressed me most: the fact that my uniform definitely identified me with Texaco and the consciousness that back of my uniform was the Texaco organization. And I was glad that I knew the organization well enough to be proud to wear its uniform.



Irrigation canal and head gate in the Lower Rio Grande Valley

The Lower Rio Grande Valley

S. E. MONROE, Manager Houston District

The name of that section of the State of Texas known as the Lower Rio Grande Valley, to my mind, carries a tang of romance; but this romantic Magic Valley has now become an important factor in the economic progress of the Lone Star State, and in fact of the entire country. Its continuing progress is nothing short of marvelous.

The Lower Rio Grande Valley, which is the most southerly agricultural area of the mainland of the United States, comprises the three counties of Hidalgo, Cameron, and Willacy, and part of Starr County. The area is fan-shaped and widens from a point about 100 miles above the mouth of the Rio Grande to a width of 50 miles at the coast, Brownsville being at the southeast corner of the "fan," Rio Grande City to the west, and Raymondville to the north.

The history of this section of the country teems with stirring stories of pioneer endeavor. Originally conquered by the Spaniards, it was taken over by the Mexicans after attaining their independence in 1821; and from the time of Mexico's independence from Spain, Texas was a part of Mexico. About the year 1821, Moses Austin, an American, was granted a large tract of land in Texas under the condition that he should colonize it with not less than three hundred families. This he attempted to do, but the policy of Mexico towards the colonists was one of oppression to which the Americans would not submit, and during the year 1832 they revolted against Mexico. This was the opening round in the Texas pioneers' struggle for liberty, and their valiant endeavors, defeats, victories, and trials are open for anyone to read from authentic historical publications on the State of Texas. The point is that of such hardy stock sprang the settlers of

1. View of a citrus farm near Mercedes, Texas. 2. Twenty-four hundred grapefruit on this twelve years old tree grown at Mercedes, Texas. 3. Park scene in the Lower Rio Grande Valley. 4. Three years old citrus orchard in the "Magic Valley."

the Rio Grande Valley. Even after General Sam Houston defeated the Mexican forces under Santa Anna at the Battle of San Jacinto, near Houston, on April 21, 1836, the Mexicans continued to hold the territory between the Nueces River and the Rio Grande. The Treaty of 1848 between Mexico and the United States, recognized the Rio Grande as the boundary line and immediately thereafter Americans began to flock to the border, and the border was garrisoned by American troops.

A wonderful climate is enjoyed in this section of the country. Government statistics show that the army post, Fort Brown, at Brownsville, and named, by the way, after Major Jacob Brown, who lost his life in its defense against the Mexicans, has the best health record in the entire United States. In spite of its proximity to the tropics, summer temperatures, tempered by the Gulf breeze, never reach the maximum attained in the more northerly sections. The mean August temperature, the hottest month, is around 86 degrees, while the mean January temperature, the coldest month, is around 50 degrees.

To the equable temperature of the Valley must be added, as a factor mainly contributing to its prosperity, the fertile, silty soil, which is largely formed from the alluvial deposits of river silt—deep, rich, and easy to handle. In fact the water and silt of the Rio Grande, under test, are much better from an agricultural standpoint than the water and silt of the River Nile in Egypt. There is another advantage of the Rio Grande water, which is used for all irrigation in the Magic Valley, and that is that the equivalent of over a ton of average commercial fertilizer is deposited as silt on the land to which the water is applied for every acre foot of water used on this land. Thus we have a soil ready for fructification beyond compare. The Valley is situated over 400 miles further south than the southern boundary of California, 300 miles

further south than El Paso, Texas, and is approximately 100 miles from the tropics.

As is rather usual in the United States, the early settlers in the Valley worked hard without adequate return for their labors, the main drawback being lack of sufficient water for their crops. At that time, of course, irrigation had not solved the problem and the pioneers struggled along with a veritable stream of "liquid gold" flowing past them in the form of the Rio Grande waters. Small truck farms dotted the Valley at the beginning of the present century and about that time irrigation projects were started which lifted the Valley to the position rightfully hers. There are now twelve large irrigation projects in operation in the Valley and a number of smaller ones. The larger systems involve 500,000 acres of which about 430,000 acres are under cultivation. There are about 350,000 acres more which are capable of cultivation, and judging from real estate activities these will soon be developed. Ten of these large irrigation systems are owned by the growers, by virtue of the Texas laws, and have, in a sense, a government within a government. The remaining two projects are privately owned.

The fruit and vegetable crops are grown largely in the irrigated sections of Cameron and Hidalgo Counties, but both are grown to some extent in the unirrigated sections. The unirrigated sections, however, are principally devoted to the raising of cotton and feed crops which can be produced prolifically without irrigation. Citrus fruit plantings on an extensive scale have been made in the unirrigated areas during the last two years.

The Valley citrus fruit, especially the grapefruit, has already established itself in the markets and, I understand, is marketed in 28 states besides shipments to European countries. The foreign trade has merely been scratched on the surface and opens up an attractive vista for the fruit growers.

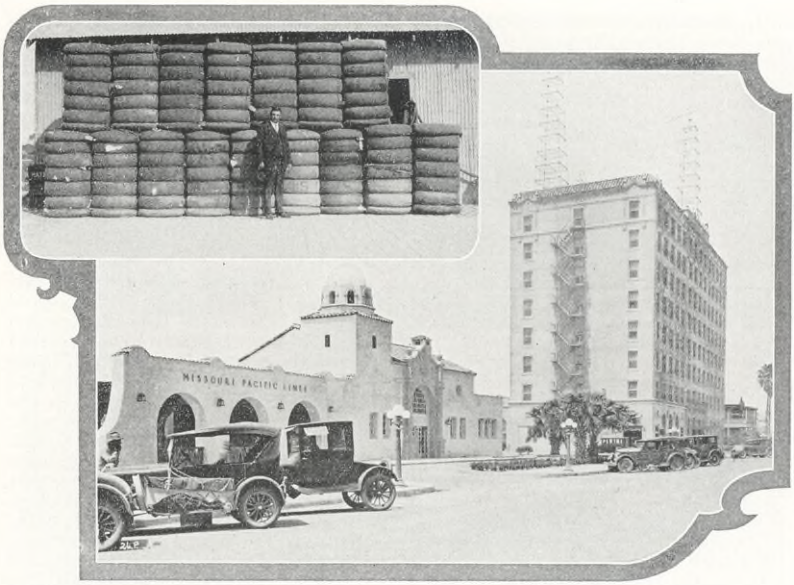
Valley-grown vegetables have also secured an enviable place in the markets. Last year cabbage, carrots, beets, potatoes, tomatoes, green beans, green corn, spinach, celery, asparagus, parsley, peppers, and other varieties of vegetables were grown during the late fall and winter and found markets in 44 of the 48 states. Farmers in the Valley know they have "a good thing."

Until about 1908 the shipments moving out of the Valley might be termed negligible. This, in a measure, was due to farmers concentrating on cabbages and failing to apply scientific methods and study to the needs of the country. The first big season in vegetables moving out of the Valley was the season of 1919-1920. It was the beginning of the industry on its present scale; the Valley awakened to the fact that it had a Golconda, and began to tell the world about it. During that season 6,307 carloads of vegetables moved 'up country.' As a comparison, 18,000 cars of vegetables and fruit were shipped during the past season, and during the 1927-1928 season the Valley people are most sanguine of shipping 20,000 to 25,000 carloads.

As the numerous veins and arteries are necessary to carry the life-giving stream of blood through the human frame, so are the highways and arterial roads necessary for the healthful progress of a country. Traversing this Lower Rio Grande Valley are 150 miles of paved roads, and $10,000,000 to $15,000,000 is to be spent for road building in the next two years; a wonderful, farsighted program and a credit to the country. The feeder road program in Cameron County is the most extensive ever undertaken by any county in the United States, the county having voted $6,000,000 for paved feeder roads. It has often struck me upon my many trips to the Valley that an organized and effective highway commission have seen to it, and are seeing to it, that their investment in feeder roads and highways is protected by road maintenance gangs constantly on the job.

Added to the means of transportation by road, and an important factor in the progress of the Valley, is the Missouri Pacific Railroad, which entered the Valley as far back as 1904 and has encouraged to a material extent the endeavor of the farmers to find speedy and helpful outlets. Facile handling of shipments and refrigeration has meant much to the Valley. Last year the Southern Pacific Railroad also entered this territory, and it was a matter for much rejoicing on the part of the inhabitants, for railroads as a rule do not push their tracks into unprofitable sections of the country. No farm in the irrigated area is more than five miles from a loading station on one of these lines, thus assuring excellent marketing facilities for perishable products. The Valley has a greater railroad mileage than any other similar area in Texas.

Crops can be grown the whole year round, and conditions permit of five different harvests. This I know must sound almost unbelievable to some people, yet it is a fact. Furthermore, the farmers of the Valley are being educated along the lines of diversified



1. Sixteen bales of staple cotton on platform at Alamo, Texas. This cotton was grown on fifteen acres planted with six bushels of Greer pedigreed seed.
2. Missouri Pacific Railroad Depot and new El Jardin Hotel in Brownsville, Texas.

farming, so that a failure of one crop will not necessarily mean ruin, as might result from a one crop condition. In many cases where citrus orchards are planted, vegetables are planted between the citrus trees, and poultry is also raised—diversification, if you like! Time has brought many changes for the better in the handling of produce for shipment. In earlier days the farmer carted his produce to the loading station where it was merely 'dumped' into cars. The farmer is now educated along better lines, and packing and grading is making for increased prosperity. The standard method of shipping cabbages is still in bulk, but many shippers now ship in crates and get a higher price; and, on the whole, shipments going forward attractively packed and graded obtain proper credit for their excellence. The citrus fruits are properly graded and crated, and established brands from the Valley are continually becoming better known. The Valley has also advanced along the lines of canning and is constantly studying this aspect of marketing with a view to promoting and at the same time advertising its exports. There are canning plants located at Olmito, San Benito, Pharr, Donna, and McAllen. When I was last in Brownsville, Mr. Richardson, manager of the local Chamber of Commerce, showed me some very fine sliced Valley grapefruit preserved, which, due to its excellent quality, could be at once served without the addition of any sugar.

Another feature of the Valley is the enthusiasm and industry of their local Chambers of Commerce. "Coöperation" is their shibboleth. Let anyone visit their town and they present him with the keys, extending the most cordial welcome. Point Isabel, on the coast about 20 miles from Brownsville, is the scene of much development. The U. S. Government is now building a port there by dredging approximately an 18-foot channel. Of special interest to the Texaco family is the fact that we have placed Texaco oils on the dredging units. Thanks to the untiring efforts of our field force and representative in the Valley, Texaco is following very closely along any new

trails blazed, and our own service stations and bulk plants are models of cleanliness, efficiency, and attractiveness.

At the foot of the Valley sits Brownsville, like a mother hen brooding over her chicks in the form of the smaller Valley towns. Brownsville is the metropolis of this rich agricultural section and has a population of about 25,000. Rich in historical lore, it is thoroughly modern in its administration; subtly it combines an historical past and recollections of its Latin origin with a pride of present achievements and a faith in its future. Its buildings are a credit to any city, embodying the Spanish type of architecture, and as one drives up the Valley through San Benito, Harlingen, La Feria, Mercedes, Weslaco, Donna, San Juan, Pharr, McAllen, Mission, Edinburg, *etc.*, there seems to be a quiet air of prosperity which is in keeping with the country. Real beauty is to be seen all along the highways, bordered to a great extent by stately palms, or citrus groves, while the balmy air is pleasantly flavored with the scent of orange blossoms, and the homesteads nestle among the fruits of the soil's productiveness and the owner's toil.

A story of the Valley would be incomplete without mention of the historic old Mexican town of Matamoros, just across the international bridge which spans the Rio Grande to Brownsville. Florida may have its West Indies, California its Tia Juana, but Brownsville is proud of its Matamoros. Matamoros was formerly a thriving town of about 60,000 population. It is now only a ghost of its former glory, but has many business and sentimental associations with Brownsville. Matamoros has its own Rotary Club and civic organizations and greets with deference and courtesy foreign visitors to the city and holds many attractions for the tourist. The city is named after the priest Mariano Matamoros, martyred in the Mexican struggle for independence, and was first designated as a village in the year 1821. No visit to the Valley is complete without a trip across the Rio Grande to Matamoros.

A Difficult Construction Job

The construction and maintenance force of any organization is essential. The men in this department are the ones who construct the plant, keep the plant in repair, and contribute largely to the success of manufacturing operations. They have many and varied problems to face in the construction work about a refinery. The areas they work in are hazardous because of the products handled. Poor construction will not only cause a large loss as far as equipment value is concerned, but frequently may mean a great loss of life.

One of the most difficult pieces of construction work handled in recent years at our Port Arthur Works was the erection of a fifty-ton steel tower at the gas plant. This tower is ten feet in diameter and fifty-six feet in height, and in order to erect it a special derrick was constructed to support its immense weight. This derrick was placed over the foundation upon which the tower was to be erected, and was made of structural members so that one side could be removed.

Because of the gassy area and the fire hazard involved it was impossible to weld the tower at the point of erection. Therefore, it was deemed advisable to weld the tower in two parts. Bringing these two parts as near as possible to the gas plant without danger of fire from welding, they were then welded together. The tower was then brought in on skids and the wire ropes used for erecting it were attached.

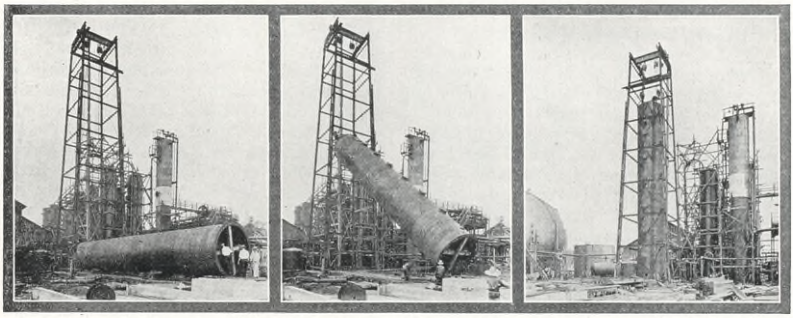
A picked gang of eight men under the direction of Roy Murphy, Steel Construction Foreman, began work at 8 a.m. These men used twenty-six lines, which were attached to four 3¼-inch "I" bars welded to the top of the tower. By fast and expert work the tower was swinging clear in the derrick at 1 p.m. of the same day. At 1:15 p.m., after an elapsed time of five hours and fifteen minutes, the fifty-ton tower was lowered to the concrete foundation.

W. H. Elliott, at that time Third Assistant General Superintendent of Port Arthur Works, was in charge of the construction. He worked out the details of handling this job, and credit is due to him, Mr. Murphy, and his gang for the efficient manner in which this tower was erected.

The hazards on this job were great. Any miscalculation of strength, any failure of equipment, or any error of omission or commission would have caused a disaster of major proportions. Should this fifty-ton tower have fallen because of mechanical or human failure

Group: Steel gang who performed the work. Left to right: John Messina, E. L. Ganey, Joe Chimera, Henry Castille, F. Quintela, B. Barbin, J. D. Hebert.
Left inset: W. H. Elliott, Third Assistant General Superintendent, who was in charge of the construction.
Right inset: Roy Murphy, Steel Construction Foreman, who directed the gang of picked men.

it might have demolished the building to the rear in which are our weathering tanks for compression gasoline; it could have crushed the pump house, had it fallen in another direction; and at the right is another weathering tower and back of that our absorption equipment. Working in such hazardous surroundings, it is to the credit of the men involved that the work was done safely and in such a remarkably short time.



Difficult construction at Port Arthur Works
1. Starting erection of tower. 2. Tower partly up. 3. Fifty-ton steel tower in place.

At left from top to bottom—Top: Dumping and spreading hot asphaltic concrete mixture. Center: Asphaltic concrete mixture between rails ready for roller. Bottom: Applying asphaltic oil on fill to bind surface and eliminate dust nuisance. Middle: Pouring asphalt into joints of granite block pavement. Top at right: Spraying sides of cut with asphaltic oil. Bottom at right: Preparing for emergency work—using surface heater to remove snow and ice after storm.

Use of Asphaltic Materials

Asphaltic Materials Have Numerous Uses in Track Construction, for Floor and Roof Coverings, and for Waterproofing and General Protective Purposes on Electric Railways

W. L. HEMPELMANN, Engineer Asphalt Sales Department

(This article appeared in a recent issue of *Electric Traction*)

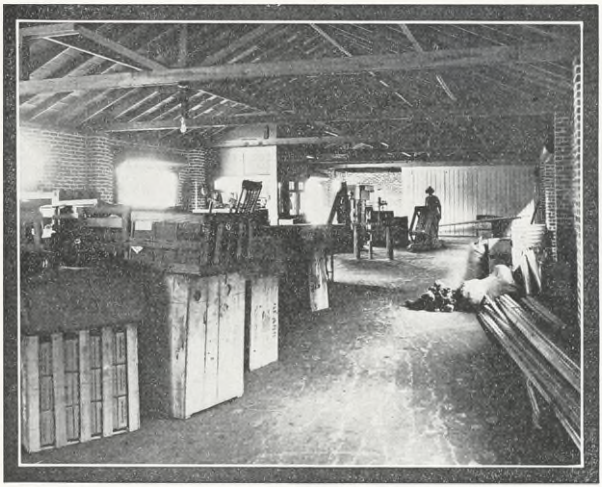
Latest statistics recently published by the Government indicate that of the 3,292,000 tons of asphalt produced and imported into the United States for the year 1925, more than 3,178,000 tons were produced from petroleum. The paving and roofing industries consume by far the greater part of this amount, but other uses, such as waterproofing, insulating, paint and varnish trades, to say nothing of many smaller users, consume a substantial tonnage. It is not strange therefore that asphaltic materials for one purpose or another should be extensively used by electric railway systems.

Different uses require asphaltic materials of different characteristics.

Asphaltic materials are naturally water and moisture resistant. The roofs of the traction companies' buildings, and those of the cars themselves, are very often waterproofed with an asphalt-impregnated fabric of some kind, mopped and held in place with asphalt. In this connection, several added years of service can be obtained from old roofs showing signs of distress by mopping or coating with hot or cold-applied asphaltic roof coatings.

Asphalt mastic is used very extensively as a floor covering in coaches of all kinds. As applied, such mastic consists of hot mixtures of fine stone chips or screenings, sand, limestone dust or other fine mineral filler bonded together with asphaltic cement. Such hot preparations are "floated" into place, permit of easy application and adjustment of the finished surface to effect a smooth, sanitary, water-tight floor. Although dense and tough, such floors are not as rigid and unyielding as cement mortars or fine aggregate concretes of similar thickness.

Mastic floors will not check and crack due to torsional stresses to which car-floors are subjected. Because of its semi-malleability such wearing surface is easy under foot, resists impact, and hence makes an ideal shop floor.



Asphaltic mastic floor undergoing rough usage in railway freight house

Many station platforms, loading platforms, *etc.* are surfaced with the same mixture.

In the matter of track construction and pavement maintenance, particularly within the corporate limits of cities and villages, various types of asphaltic materials serve a very necessary and useful purpose. Particularly where the subgrade is liable to be wet or hold moisture it would seem that before depositing any ballast or other material in the track right-of-way trench it might be well to consider the advisability of waterproofing such subgrade, when dry, by liberal treatment with a penetrating asphaltic material. Such waterproof surface would interrupt capillary moisture from below and at the same time serve as a roof over the subgrade, to retard absorption of water from above. Similarly, asphaltic products of various consistencies are widely used to waterproof structures of all kinds, such as backs of abutments, retaining walls, viaducts, *etc.* Cracks in concrete pavements are most satisfactorily filled and sealed by applying properly prepared hot or cold asphaltic materials. Coarse asphaltic concrete or black base has been used in a number of instances instead of stone or concrete base, such construction requiring a period of non-use only sufficient to permit of cooling to atmospheric temperature.

As usually prepared black base consists of definite proportions of hot, coarse, hard stone from 2½ in. or 2 in. down to dust in size, hot sand and hot asphaltic cement intimately mixed in an asphalt plant, from which it is delivered to the point of use by trucks. Its preparation is in every way similar to the process used in making sheet asphalt or asphaltic concrete pavement mixtures.

As a wearing surface sheet asphalt, asphaltic concrete penetration, or asphaltic macadam pavements are all used in paving between the rails, with or without a header course of brick or stone block along the rails.

In general, the asphalt paving mixture between the rails is the same as that used for the pavement proper. In laying sheet asphalt and asphaltic concrete in the track zone without a brick or block header course next to the rail, one ingenious Michigan contractor moved a set of car-trucks equipped with a flange-rim over the rails, and by this means grooved the hot asphalt mixture adjacent to the rails. This insures a uniform groove, and makes a neat, workmanlike finish to the asphalt wearing surface.

Because the track area is usually subject to considerable vibration, asphalt fillers are being used more and more in the construction of brick and stone block pavement wearing surfaces between the rails. Such construction is waterproof, can be used immediately after cooling, and will yield without cracking.

For the stone block construction a mixture of equal parts of sand and asphalt called an "asphalt mastic filler" is usually used, but whether mixed with sand or not, such asphalt filler serves as an expansion joint around each brick or block and as such amply provides for expansion stresses set up in the wearing surface due to climatic temperature changes. As stated above, such construction is less rigid and much less noisy than cement-grouted pavement.

Uses on Interurbans

One other use for asphaltic materials on interurban and urban rights-of-way is to eliminate dust and at the same time retard the rusting of the web and base of the rail by coating same with a moisture-resisting film of asphalt, very similar to what has been and is being done by some of the railroads. In one instance a spray-car has been devised, the sprays of which are so arranged that both sides of the web and exposed part of the base are coated at the time the road bed proper is oiled. An asphaltic surfacing material consisting of a heavy asphaltic base material liquefied by compounding same with a light volatile distillate, so that the resulting product can be applied without being heated, has given very satisfactory results. One railroad alone uses over a million gallons of road oil per year to reduce corrosion, lay the dust, and to protect the ties.

Other Uses

Another constantly increasing use of asphaltic materials is in the construction of station platforms, new crossings, and replacement of plank crossings. Cold patch mixtures consisting in the main of cold intimate mixtures of graded clean stone and cut-back asphaltic cement are being used very extensively for all of the above purposes. By a cut-back asphaltic cement is meant an asphaltic cement as used in preparation of sheet asphalt or asphaltic concrete mixtures, liquefied by mixing or dissolving same in a high-grade volatile solvent such as petroleum naphtha. Such mixtures have the advantage that no heating of the ingredients is required, but they must be stored and turned at intervals for a period, to permit most of the solvent to evaporate before use.

Before the advent of motor vehicles, water-bound macadam crossings served the traffic very satisfactorily. Where such crossings are constructed today, it has been found to be economical to surface-treat or bind the surface with asphaltic surfacing materials or binders prepared for the purpose. Such asphaltic materials consist of a heavy, sticky asphaltic base liquefied with a volatile component to insure application at relatively low temperatures, and at the same time effect proper penetration of the stone surface.

As referred to above, asphaltic products of various kinds are extensively used in the maintenance of all kinds of roofs and floors. Similarly and largely to minimize checking, ends of timbers used in construction may be waterproofed with an application of an adhesive moisture protecting coat of asphaltic material. Butt ends of poles, posts, *etc.* may be treated with asphaltic materials to prevent absorption of moisture and hence retard decay of such timber at the ground level.

In certain preservation treatments of ties, asphalt coatings are employed to retard the leaching out of certain ingredients of the preservative proper. All water-pipes, conduits, *etc.* should be coated with asphalt before placing underground. That this detail is important is evidenced by the fact that all oil pipe lines are now asphalt-coated to prevent corrosion and electrolysis of the metal.

Wires for signal and communicating systems are laid in wood troughs above ground. The life of the wire is prolonged by filling the trough with the proper grade of asphalt, thereby both insulating and waterproofing such cables. Fabric-covered wire cables are often waterproofed and additionally insulated by passing same through a bath of hot asphalt. A considerable amount of specially prepared asphalt is used as a seal for storage batteries.

Heavy asphaltic base curve grease has been found very satisfactory on most electric as well as steam railways. Such specially prepared product by its very nature sticks to the rail and is not readily wiped off nor washed off by rain.

Commendation

The gospel of commendation is a wonderful gospel to preach, for three important reasons: First, there are so many who like to hear it —indeed, most of us frail mortals like it. Second, it evidences a magnanimous nature on the part of the one who expresses it. Third, it generally assures a functioning coöperation that cements men together with links of steel. There is a mental attitude that waddles around with the silly idea that to commend another for work done, or a worth-while service rendered, is an evidence of effeminacy on the part of the bestower. There is also sometimes expressed the thought that it should not be necessary to commend a man for doing his duty, and the further thought that to do so may make him swell up with egotism.

It requires a bigger, a more unselfish man to express a commendation than it does to receive one. Nor is it any evidence of stupidity or

effeminacy either to do so or to desire it. If some fellow wants to swell up and "bust" because some one speaks well of his work to him, let it be even so, since the man of the first part has only done his duty. I say "has done his duty" advisedly, for I cite the Master of men who one day said, "Well done, thou good and faithful servant."

Have you ever stopped to consider that all the real satisfaction most people receive for their fidelity is a word of commendation? Have you ever pondered what it means to the humble toiler in the hundreds of out-of-way places to say "Thank you" to him? Did it not sweeten his cup and lighten his load to have you express your appreciation to him for the thing he did or tried to do? There are hearts that are hungry to hear us tell them they are doing well. I like to hear it sometimes myself. I like to practice it in my family and among my associates. Suppose we all try it out on a larger scale in our homes, in our social relations, and in our business activities for the next thirty days. It surely will not cost us any spiritual impoverishment or humiliation of soul, except that which is always the precursor of exaltation. To be able to appreciate the work and worth of another is a fine mental balance, and to bestow that appreciation is normal to the unfolding of a magnanimous and generous spirit.—*J. C. Penney, in the Christian Herald.*

Twenty-five Years Ago

A fire at Sour Lake consumed 75,000 barrels of oil. This largest fire experienced by Sour Lake occurred when waste oil from a salt marsh became ignited and spread to the J. W. Swayne earthen reservoirs.

On account of increased business and added activities it was necessary that the Over and Short and Oil Accounting books in the Beaumont office be given over to two employes, one handling the Over and Short and the other the Oil Accounting. Before this, one man had been sufficient for this work.

Opportunity was given to employes to purchase stock in the Company at par and pay for it on the installment plan.

The docks of The Texas Company at Port Arthur, Texas, were destroyed by flames on the night of September 7, 1903, when the Standard Oil Company whaleback tanker *City of Everett* caught fire from an exposed electric light wire. The docks were completely destroyed, and the Company temporarily used the docks of The National Oil and Pipe Line Company. Only 3,000 barrels of oil were burned; the remainder of the cargo was pumped into The Texas Company's tanks. The fire burned 36 hours and was finally subdued by steam lines.

Whaleback tanker "City of Everett," which caught fire on September 7, 1903, and destroyed the docks of The Texas Company at Port Arthur, Texas.

A tank gauging engineer was engaged by The Texas Company to compute and make tank tables. Before this time, it had been necessary to send tank strappings to Lima, Ohio, to have tables made and then returned to Beaumont.

Messrs. Guy Carroll, Ira McFarland, and A. M. Donoghue spent July Fourth in Houston and Galveston. At the latter place they enjoyed their first salt-water bathing.

J. C. Colligan was transferred from Garrison (Beaumont) Pipe Line Station to Sour Lake, where he acted in the capacity of District Foreman.

Clarence Porter Dodge, who had been Purchasing Agent for the State of Texas, entered the employ of The Texas Company in the capacity of Purchasing Agent. (At the time of Mr. Dodge's death, brought about by injuries received in an automobile accident at Memphis, Tenn., he was a director and Secretary of the Company, and Manager of the Sales Department, Southern Territory.)

The men whom I have seen succeed best in life have always been cheerful and hopeful men, who went about their business with a smile on their faces, and took the changes and chances of this mortal life like men, facing rough and smooth alike as it came.

—*Charles Kingsley.*

DEPARTMENTAL NEWS

The managers of the respective Departments have assigned to the persons whose names are here given the duty of sending to *The Texaco Star*, so as to be received by it before the 25th day of each month, departmental news, photographs, and other items of general interest. Material for this purpose should be sent to *them* before the 20th of the month. All are invited to coöperate.

Refining Dept.	P. C. Scullin, Houston
Ry. Traffic & Sales Dept.	J. A. Brownell, New York
Marine Dept.	H. Hassell, Port Arthur
	H. Norris, New York
Legal Dept.	H. Tomfohrde, Houston
Treasury Dept.	H. G. Symms, Houston
	R. Fisher, New York
Comptroller's Dept.	B. E. Emerson, Houston
	P. A. Masterson, New York
Insurance Dept.	C. M. Hayward, New York
Governmental Reports Dept.	L. C. Oakley, New York
Employment & Service Office	Carl A. Foss, New York
Sales Dept. S. Territory	D. L. Lindsay, Houston
Sales Dept. N. Territory	S. Slattery, New York
Asphalt Sales Dept.	J. J. Smith, New York
Purchasing Dept.	E. B. Middlekauf, New York
	J. E. McHale, Houston
	J. T. Rankin, Denver
Export Dept.	I. B. Nielsen, New York
Producing Dept.	Otto Hartung, Houston
Pipe Lines	Fred Carroll, Houston
The Texas Company (Calif.)	J. E. Asher, Los Angeles

REFINING DEPARTMENT

WATER SHIPMENTS BY THE TEXAS COMPANY FROM PORT ARTHUR, TEXAS, MONTH OF JULY 1928

Refined—Coastwise	1,069,951 bbls.
Refined—Foreign	475,231 bbls.
	1,545,182 bbls.
Crude—Foreign	24,420 bbls.
Total	1,569,602 bbls.

WATER SHIPMENTS BY THE TEXAS COMPANY FROM PORT ARTHUR, TEXAS, MONTH OF AUGUST 1928

Refined—Coastwise	1,466,804 bbls.
Refined—Foreign	303,211 bbls.
	1,770,015 bbls.
Crude—Coastwise	71,842 bbls.
Total	1,841,857 bbls.

Port Arthur Works.—At 9 a.m. on Wednesday, August 8, Clifford E. Baker, employed at Port Arthur Works, in making his rounds stopped to observe F. L. Vickers at work on electrical equipment. At practically that instant Mr. Vickers evidently received a shock, as he appeared to be knotted up the same as a person would be in contact with a high tension wire. Mr. Baker immediately threw a rag which he was carrying about Mr. Vickers' head and jerked him free from a 2300-volt wire.

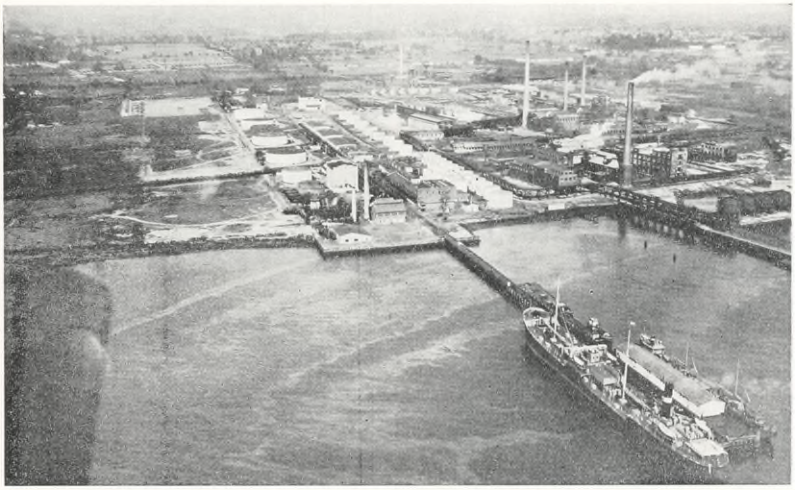
This prompt and thoughtful act undoubtedly saved Mr. Vickers' life and proved to be the right thing done at the right time. If Mr. Baker had become confused or possibly left the vicinity to secure help the ultimate result might have been quite different; or if he had attempted to free the victim by grabbing him or the wire a double tragedy might have occurred.

Clifford E. Baker F. L. Vickers

Mr. Baker is receiving the congratulations of the management and fellow employes for his presence of mind and courage on this occasion. The incident furnishes additional proof of the value of first-aid training which has been conducted and encouraged at our plants during the last several years.

W. J. Deady, inspector of masonry at Port Arthur Works, who has been in the service since May 13, 1905, and his grandson, Bill Deady St. Paul of Houston, Texas.

Delaware River Terminal.—It seems that the public in general has been under the impression that Delaware River Terminal is located in the State of Pennsylvania, whereas it is situated in the State of Delaware. The property is 982 feet west of the Pennsylvania state line, being one mile from Marcus Hook, Pa., and only one-half mile east of Claymont, Del., which is the postoffice now used by Delaware River Terminal, although Marcus Hook, Pa., was used for our mail service for many years prior to 1925. Marcus Hook, Pa., however, is still being used as our shipping point,



Airplane view of Delaware River Terminal

as the freight stations of both the Pennsylvania and Reading Railroad companies are located there and consider deliveries to this plant as a Marcus Hook delivery. The fact that the shipping point and the mailing point are at different addresses might cause confusion, and this matter is being brought to the attention of all readers of *The Texaco Star* in order that they may be correctly informed regarding the proper location and address of Delaware River Terminal.

The present site of the Delaware River Terminal was selected in 1904. It was originally a farm on the main road from Philadelphia, Pa., to Wilmington, Del. The work on the plant was delayed to allow harvesting of the corn on the property. It is about four miles from Chester, Pa., and eight miles from Wilmington, Del., being situated in the State of Delaware, almost on the line between the States of Delaware and Pennsylvania, on the north bank of the historic Delaware River.

The first tank, No. 821, was built by the Petroleum Iron Works, followed by pumphouse, boilerhouse containing two 30 h.p. locomotive type boilers, warehouse, and dock. Work was finished in 1906 and the first cargo was received by the S. S. *Northtown*. The dock was practically destroyed by fire in June 1919 and immediately rebuilt.

During the year 1911 about 20 large lubricating oil storage tanks, asphalt shed, and extension to warehouse were constructed. This was followed in 1912 with additional asphalt sheds, four cottages, and additional buildings, including a compounding plant. In 1914 and 1915 a number of additional tanks were built for lubricating oil, gasoline, fuel oil, and water, also boilerhouse and two 175 h.p. boilers. In 1916 and 1917 an addition was made to the compounding plant and to the car shop.

In 1916 a complete asphalt plant was erected, consisting of a battery of six stills, three 250 h.p. boilers, concrete stacks, additional tankage and lines, and an asphalt tankhouse housing six 2400-barrel tanks. In 1917 an additional 64,000-barrel gasoline tank was erected. In 1921 an asphalt mould shed was constructed for the manufacture of cake asphalt. Additional tanks were built in 1921 and 1922 and in the latter year 19½ acres of adjacent property were added to the plant.

The first Superintendent of Delaware River Terminal was Tim Mullin, who was succeeded by G. B. Smith in 1910. In 1911 G. B. Smith was succeeded by Frank Nester, who remained as Superintendent of the plant until October 1920, when he was sent abroad, and was succeeded by H. M. Herron. In January 1921 Mr. Herron was transferred to New York as

Assistant General Superintendent of Northern Terminals and S. Hallager was appointed Superintendent. On March 1, 1922, S. Hallager was transferred to Providence Terminal as Superintendent and M. Halpern, formerly Assistant Superintendent at Providence, was appointed Superintendent at Delaware River Terminal. Mr. Halpern remained at Delaware River Terminal until June 1925, when he was sent to Port Neches, being relieved by J. R. Alexander, who in turn was succeeded by our present Superintendent, R. H. Donaldson, on April 1, 1927.

Technical Div., N. Y. Off.—On Saturday, July 14, the many friends of C. E. Emmons gathered together to bid him farewell before his departure to take up his new abode in Los Angeles, he being assigned to the Technical Division's office at that point.

Mr. Emmons was presented with some beautiful gifts, the presentation being made by G. R. Rowland. Mr. Rowland's address was enthusiastically received, and Mr. Emmons, not being entirely subdued, was able to defend himself meekly but nobly. Mr. Rowland's remarks, in part, were as follows:

The words appearing on the back cover of the June issue of *The Texaco Star*, "One of the rewards for work well done is a capacity to do greater things," are very applicable to this occasion. It is very evident that the executives of our Company and the immediate superiors of this young man have the same appreciation of his services as have we of the Sales Department, and they are amplifying their appreciation by a promotion, which is certain to be an incentive for other young men to emulate the efforts of our friend.

Mr. Emmons, it affords me unbounded pleasure to present to you some little tokens from your friends and associates in the Refining and Sales Departments, which I trust you will not value for their intrinsic worth, but in the spirit in which they are given, and that in the future, when you have occasion to use any of these tokens, your thoughts will cross the broad expanse that divides us, and be assured that we, too, will not fail to have many, many pleasant thoughts of you, and nothing but best wishes for you and your good wife, for happiness and success in your new undertaking.

RAILWAY TRAFFIC AND SALES DEPT.

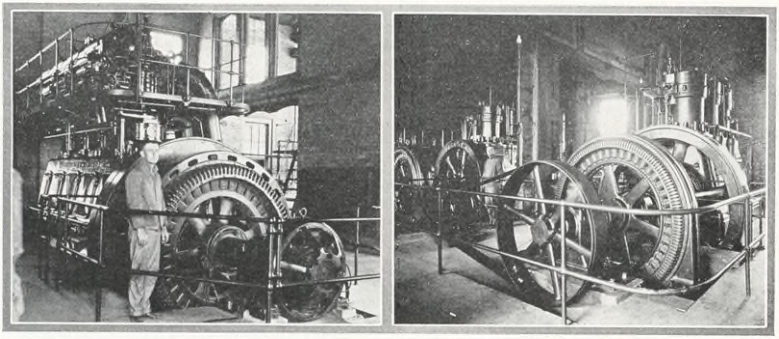
Effective July 15, J. L. Lavallee was appointed Assistant Manager of the Railway Sales Division, with headquarters in New York. Mr. Lavallee is a native Texan and has been connected with the Company since 1922.

Effective August 1, Charles Ervin was appointed Assistant Manager of the Railway Traffic Division, with headquarters in New York.

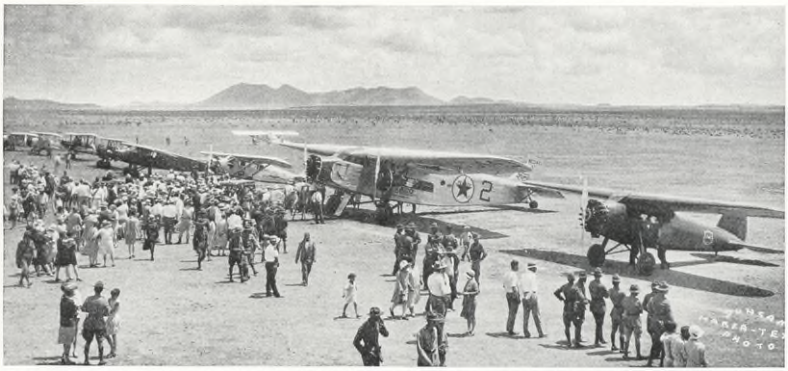
We welcome the following new employes to the fold: C. M. Buckely, Lubricating Engineer, San Francisco, Calif., and H. C. Huston, Lubricating Engineer, Cleveland, Ohio.

SALES DEPT. S. TERRITORY

Houston District.—We extend heartfelt sympathy to the family of L. C. Terry of Lockhart, Texas. Mr. Terry, who was our loyal agent at that point for many



Interior views of the electric light plant of the city of Bryan, Texas, containing five Busch-Sulzer engines which are being lubricated 100% Texaco. According to statistics kept by City Manager Bryan Miller, since using Texaco products exclusively on these units, they have shown an increase in their K. W. load of 15% and a decrease of 11.8% in their lubrication cost, as against competitive oils previously in use. Chief Engineer Charles Ramsey, who appears in the pictures, says he has never used any oils as satisfactory as Texaco.



Airplanes entered in the recent National Air Tour resting at Marfa, Texas, on July 9

The "Texaco No. 1" can easily be seen in the center of the picture, and Agent B. H. Davis states that the people of Marfa are still talking about the wonderful Texaco plane.

years, died August 11 as the result of an automobile accident.

The new Yacht Club being reconstructed by the Point Isabel Development Company is rapidly nearing completion at Point Isabel, Texas, and will be a lovely and useful adjunct to that section of the country. Texaco is well in evidence there, as we have been furnishing gasoline and motor oils for a number of years.

Dallas District.—An Agents' meeting was recently held in San Angelo with District Manager Noble presiding. The original purpose of this meeting was to entertain with a banquet all agents in Zone 18 who made a 100% audit report, the offer having been made by Representative M. E. Moore. The agents were all on the job and the results were that when Auditor T. J. Hester made his visits he found that all stations in Zone 18 had made the 100% audit. Mr. Noble was invited to attend and it was decided to have a get-together meeting and discuss results being obtained at each station and plans for the future in an effort to obtain the desired increase over last year. After the meeting a four-course dinner was served at the St. Angelus Hotel to W. H. Noble, Dallas; C. W. Geiger, San Angelo; R. P. Brown, Sterling City; J. F. Neff, Ballinger; W. H. Miller, Paint Rock; W. E. Morton, McCamey; A. G. Beach, Coleman; G. E. Adams, Santa Anna; W. A. Heard, San Angelo; Walter Pratt, San Angelo; and M. E. Moore, San Angelo. It was regretted that Agent J. G. Key, Winters, could not be present; however, he made his 100% audit.

Mr. and Mrs. T. E. Finch are happy over the arrival on July 12 of a beautiful baby girl. All join in best wishes.

The zone meeting held at the Hilton Hotel in Abilene was a great success. Out of town visitors included District Manager W. H. Noble, F. B. Byrnes, I. B. Elliot, H. J. Flake, of Dallas D. O.; Auditor T. J. Hester; Agents John Brown of Colorado, F. L. Walker of Baird, Guy E. Morris of Sweetwater, William Reagan of Cisco, Jack Hazeltine of Midland, J. T. Long of Odessa, Gay McGlaun of Snyder. Hosts at the luncheon served after the meeting were Representative E. L. Crawford, Sr., and Agents H. G. Castle, T. A. Hooker, and E. L. Crawford, Jr., all of Abilene. It was indeed a profitable and enjoyable meeting.

Oklahoma District.—Service Station Supervisor Art Williams has issued a challenge to the South for gallonage. During the last two or three months there has been a contest between Tulsa, Seminole, and Oklahoma City service stations as to who could sell the most oil in one day. Oklahoma City S. S. No. 7 started the ball rolling. On June 30 this station sold 916 gallons of gasoline and 80 gallons of oil. Any station trying to beat this record is going to have to hit the 100-gallon mark on oil. Any takers? Keep on climbing, No. 7, and accept our congratulations!

Our District baseball team having lost to

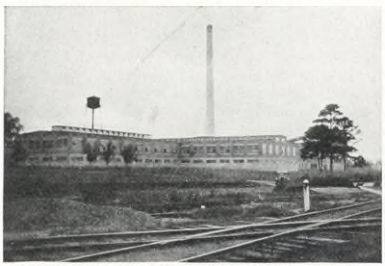
the Dallas District in 1927, Manager Noble of Dallas was inveigled into bringing a crowd of twenty-five employes, including his baseball team, one-half dozen lusty male rooters and eight of the State's most charming young ladies, to Oklahoma City on July 28, where in a most exciting ten-inning game at Western League Park the Oklahoma Indians nosed out the Dallas Steers by a score of 4 to 3. Rooting from the grandstand was fairly even despite Oklahoma's larger representation.

The visitors, who exhibited the finest spirit of sportsmanship, were entertained in the evening at the Skirvin Hotel with a banquet, seventy-five plates being served. Mr. Gruet's "Collection Goat," having generously been brought along by Manager Noble and Creditman Flake, was on display and so inspired our crowd that friendly wagers were placed as to his future abode. As a result of late July efforts, the Goat now adorns the Oklahoma District Office.

The baseball standing for the last two years now being tied, and our boys and girls having so thoroughly enjoyed the visit of our Dallas neighbors, we are looking forward to an invitation for a playoff during 1929.

Our utmost sympathy is extended to Engineer J. N. Prewitt for the death of his father, who passed away August 9 at his home in Oklahoma City.

New Orleans District.—Our annual outing this year was held at Mandeville on Lake Pontchartrain. The steamship *Susquehanna* was chartered and the party consisting of about 150 employes and their friends, enjoyed the two-hour boat ride to Mandeville and back, special music being engaged for the occasion, and all danced to their hearts' content. All enjoyed the good eats, ice cream, lemonade, *etc.*; bathing in the surf of Lake Pontchartrain;



Advance Bag & Paper Co., Hodge, La.—lubricated 100% Texaco.

Clarksdale, Miss. Bulk Station—F. B. Moore, Agent

and dancing at a private pavilion in Jackson Park. We were especially pleased to have with us Mr. and Mrs. B. L. Hansen and family; Salesman Castagnos and Agent Dupont of Baton Rouge; Mr. and Mrs. J. C. Green, Jr., and little daughter; Mrs. J. C. Green, Sr.; "King" Herrod and wife; Mrs. Madden and Price Davis, co-workers from Mississippi. We all missed Charlie Lipscomb, who has always taken an active part in all Texaco outings but is now convalescing after being confined to his home for some time with a broken limb. The same committee was unanimously re-elected to make arrangements for our next outing.

G. D. Bentley, who is now Assistant General Manager of the Export Department at Rio de Janeiro, Brazil, although now absent from New Orleans District for three months, did not forget the prizes offered his sales force at New Orleans Station, and sent his check for $10 in favor of S. A. Vicari, truck driver, whose percentage of increase in lubricating oil sales for the month of March 1928 over February 1928 was 257%, and a check for $5 in favor of J. L. Nunez, Agent at Service Station No. 10, whose percentage of increase was 42% on lubricating oils and 100% on grease. All employes of our District wish to thank Mr. Bentley for his interest and thoughtfulness.

J. C. Green, Sr., who is associated with J. C. Green, Jr., our Commission Agent in Laurel, Miss., spent several days in New Orleans renewing old acquaintances. Mr. Green was on the Lubricating Engineers' staff of New Orleans District for many years and recently was Commission Agent at Belmont, Miss.

Atlanta District.—A meeting of Lubricating Engineers was held in District Manager Jones' office on July 21. We had with us Territorial Engineer F. R. Splawn of Houston.

The object of the meeting was to discuss lubricating sales and to place the engineers in line to go after more of this class of business.

A meeting of Representatives was held in District Manager Jones' office on June 25. A general discussion of our marketing policies was had; the program for additional bulk stations was thoroughly gone into; and the need of greater lubricating oil sales for the remainder of this year thoroughly impressed on all Representatives. We believe that the meeting was beneficial to all present and feel that the men departed with a determination to show an increase in oil sales at the end of 1928.

We had with us for a few days beginning August 13 Sales Manager J. P. Gruet of Houston and Assistant District Manager J. K. Skillings of Boston District. This being the first visit paid us by Mr. Gruet, we were more than delighted to have him with us and hope that in the future his visits will be more frequent. We also hope Mr. Skillings will pay us another visit whenever possible. We were also pleased to have with us from July 26 to 28 Superintendent Roofing Sales J. W. Royall of Houston.

In his hour of sad bereavement we extend to Creditman Ramey our deepest condolence for the loss of his father on July 16. We also extend our sympathy to Miss Mann, Bookkeeping Operator Atlanta D. O., for the loss of her sister on July 18; and to the bereaved family of Agent D. D. McCaskill, Tifton, Ga., who passed away on July 4.

SALES DEPT. N. TERRITORY

New York District.—District Manager W. L. Kallman, in joining Territorial Manager H. W. Dodge on his western inspection tour, speeded up his arrival at Minneapolis by flying with Captain Hawks in the *Texaco No. 1* monoplane from New York:

With Frank Zuber, President of the Z. & M. Independent Oil Company, distributors of Texaco products at Norwich and seven other points in New York State, and W. F. Wilson, Chief Accountant Northern Territory, Mr. Kallman took off from Garden City, Long Island, at 10 a.m., piloted by Captain Hawks. Fifteen minutes brought the plane to the Whitehall Building where a thrilling exhibition was given. At 10:40 a.m. the plane was off for Norwich, N. Y., over a straight line course. Norwich was reached at 12:20 p.m. A large number of prominent citizens awaited our arrival and a trip was then extended to a party of twelve. Mr. Zuber entertained the party with an elaborate luncheon at the Norwich Country Club, where Captain Hawks gave a very interesting talk on commercial aviation and The Texas Company's part in furthering it.

Wilmington, Del. S. S. No. 1, known as Mac's Service Station. Mr. McBridge, our licensee, is a former employe of the Delaware River Terminal and is one of the best known service station operators in Wilmington. He operates two service cars continuously and has a very clever device for servicing cars on the road that have run out of gasoline. The gasoline is delivered by air pressure from a drum mounted on the rear of the coupe shown in the picture. This road service car also carries a compressed air tank for tire service. Mac and his men are known all over the county. During the month of June they had an unheard of ratio of one gallon of motor oil to five gallons of gasoline.

Mrs. Frank Zuber and F. J. Shipman joined the party when the plane took off for Buffalo at 3:15 p.m., arriving there at 5:15 p.m. A large party were there awaiting our arrival, including Mrs. Albert Rockwell of Warren, Pa., and friends, together with guests of the Goodyear-Wende Oil Corporation, distributors of Texaco products in Buffalo. Five flights were made that afternoon. A delightful dinner was served in the evening by the Goodyear-Wende Oil Corporation to its salesmen and the airplane party. Captain Hawks again gave a talk on commercial aviation.

The plane was on view all day Tuesday and five flights were made that afternoon. The takeoff for Minneapolis was made in total darkness at 2:45 a.m. A straight course was laid over Canada, Lake Huron, Cadillac, Mich., Lake Michigan, and Green Bay, Wis., to Minneapolis. Lake Huron was crossed at a width of 40 miles and Lake Michigan at 75 miles. Owing to Captain Hawks' splendid ability as a navigator, when dawn came the ship was less than a mile off the course although he had been unable to make any ground observations for over three hours. Mr. Kallman took some interesting motion pictures from the ship which will be exhibited wherever possible.

Captain Hawks took off after an hour's rest at Minneapolis for Bismarck, N. D.

It will be of interest to know that the S. S. *President Roosevelt* carrying the American athletes to the Olympic Games was 100% Texaco lubricated.

Chambersburg, Pa.

John H. Moyer, licensee of this attractive lessor built service station on the Molly Pitcher Highway, is standing on the pump island. H. B. Slaughenhaup, the lessor, will complete another lessor built station shortly.

Representative W. G. Marsden of Zone 10 reports that up to and including July 10, Zone 10 had secured nine full-page Texaco Coöperative Ads. In addition they have secured 14 which are to be published one every two weeks for the next 28 weeks.

The employes in Zone 4, New York District, held an outing at Babylon on August 9 which included a Long Island duck dinner. An hour's sail on a chartered boat to Fire Island Beach on the Atlantic Coast was greatly enjoyed. A baseball game was played and the east end boys defeated those from the west. Following the game a large number went for a swim in the surf. The boat was again boarded and water sports were enjoyed en route. All were again in Babylon at dark, and the big day was over.

Boston District.—The Hartford, Conn., newspaper *Courant* reports Roger M. Spencer of Hartford as triumphing with his *Spencer Spree* in the season's first outboard motor races on the Connecticut River. By capturing the Classes B and C two-mile events and the six-mile free-for-all, he won the three silver cups offered in these races by the Hartford Yacht Club. No wonder! He used Texaco products.

Norfolk District.—Congratulations to Representative R. B. Allen on his promotion to Superintendent of Service Stations in this District. We regret to see A. M. Grier leave our midst for a "Bigger and Better" position in the Far North, Calgary, Alberta.

Congratulations also go forward to Messrs. W. B. Burroughs, T. S. Collier, R. V. Cunningham, and H. M. Sutton, who have stepped up another rung of the ladder of success through their promotion to Representatives.

The following letter appeared in the August 6 issue of the Norfolk, Va., *Ledger-Dispatch*:

Editor, *Ledger-Dispatch:*

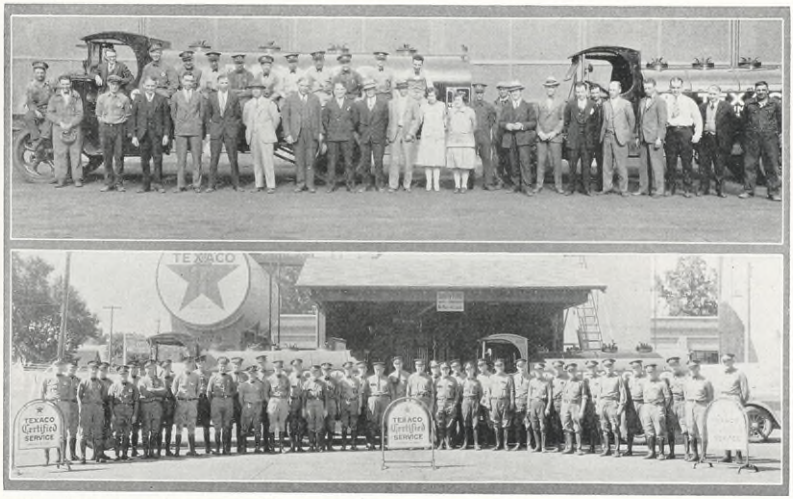
While the T. A. A. representative is looking over Norfolk for courteous motorists I would like to use your columns to give credit to the driver of a Texas Company tank truck that operates on State Highway No. 27. In turning around I backed in a road ditch; the driver of the above truck came, stopped, and pulled me out.

M. E. Jones.

The driver in question was Tank Truck Operator L. R. Davidson of our Berkley, Va. Station, and he is to be congratulated for this courteous act.

Truck R-2721 which took part in the Fourth of July Parade in Sanford, N. C. This truck was decorated by the Sanford Station force, who received a number of favorable comments on its attractive appearance. Agent L. P. Gunter is standing in front of the truck and Tank Truck Operator J. C. Thomas is sitting on the running board.

Chicago District.—We are pleased to have with us as Assistant District Manager (Sales) H. F. Woodyatt, formerly Representative Zone 14. Mr. Woodyatt's appointment became effective August 1.



Above: The Twin Cities organization after they had reached the 1,000,000-gallon mark during the month of May. The gentleman at the left of the young ladies is Assistant District Manager C. D. Meltabarger. The girls, the only two at Twin Cities Station, are Miss C. J. O'Dea (left) and Miss G. Murphy. Miss O'Dea has been in the employ of The Texas Company for 14 years and is third senior of Minneapolis District there being only two others in the District who have served longer.

Below: Minneapolis and St. Paul service station operators lined up at Twin Cities Station. We believe these to be the best service station operators in the entire organization of The Texas Company.

Minneapolis District.—Sales Manager H. W. Dodge and Sherman Ford, Special Representative of the Company in Washington, D. C., were our honored guests at a sales meeting of Representatives and Salesmen of this District held August 16-18. Engineers N. M. Aycock of New York, W. P. Ross of Chicago, R. C. Lockwood of Denver, and Lloyd of Spokane also attended the meeting, and Leonard O'Malley of New York gave a very splendid and instructive sales talk. We are sure the boys will now go out and put Texaco all over the map.

Distributor Salesman C. M. Steinford, headquarters Madison, Wisconsin, came to the Minneapolis District sales meeting by airplane, bringing with him a carload order, which is the first carload order we have received in this manner. Fine work, Carl!

Denver District.—Our District was recently favored with a visit from Vice President D. J. Moran.

We greatly enjoyed a visit from L. R. Holmes, Assistant Manager Refining Department.

Fred W. Freeman awards cup to winners

During the Texaco Club Picnic held at the Motor Club of Colorado on July 25, the single men won the indoor baseball game from the married men. General Western Manager Fred W. Freeman is holding the loving cup behind the winning team. Back row, left to right: T. W. Bradley, Walter Brown, S. R. Knox, Herb Hall, William L. Habenicht, Rudolph Inama. Front row: A. J. Doll, John O'Brien, Eddie Walsh, Ted Conway, L. E. Tucker, Fred Cordes, Bill O'Brien, Frank Dill.

Chicago to Denver

E. J. Sullivan and his Whippet Four which he drove from Chicago to Denver using the New and Better Texaco Gasoline and Texaco Motor Oil Heavy. The distance of 1167 miles was covered in 24 hours and 17 minutes, using 45 gallons of gasoline. Two gallons of Motor Oil Heavy was put in the crankcase at start of trip and one-half gallon added. This picture was taken at Denver S. S. No. 1. The car was driven about town for two days and then proceeded to Iowa with the Texaco trade-marks in evidence.

It certainly seemed like old times to have F. C. Kerns, Superintendent Lubricating Sales, with us again even for a day or two, and we believe he enjoyed the old Rockies and other familiar western scenes as well as his old friends who always wish him well.

Spokane District.—The most enthusiastic representatives, salesmen, and agents meeting ever held in Spokane District was held at Butte, Montana, on July 16 in the Banquet Hall of the Finland Hotel. District Manager R. I. Kerr discussed with each representative the possibilities and the necessity of securing a 100% increase in Golden Motor Oil sales for every station in his respective zone. Motor Oil Demonstrator P. B. Loy gave an interesting and instructive demonstration which was beneficial to all present.

Superintendent of Lubricating Sales F. C. Kerns, when recently paying a visit to this office, was invited to ride in our big Ford airplane from Spokane, Wn., to Butte, Mont. Mr. Kerns, realizing the future lubricating problems of our airplanes, was more than pleased to accept and had a most enjoyable trip due to Captain Hawks' skillful handling of the big ship.

Engineer J. E. Lackner has been transferred to The Texas Company of California, headquarters Seattle, Washington. Jack is one of the most capable engineers we have ever met and we all know that he will be very successful.

ASPHALT SALES DEPT.

On August 4 M. J. Fitzgerald of our Boston District sales force exhibited the two Texaco asphalt motion pictures before a body of selectmen and road superintendents of southern Worcester County, Massachusetts. The films were very favorably received. To add variety to the program, Mr. Fitzgerald borrowed from a U. S. Navy recruiting station a government film entitled "Our Navy in the Near East" which was shown after the Texaco pictures.

On August 6 the mother of Representative W. J. King of our Philadelphia office died at her home in Philadelphia. The father of R. G. Hayes, Chief Accountant of our Jacksonville, Fla., District, passed away on July 27 at his home in North Yarmouth, Me. The friends of Mr. King and Mr. Hayes in the Asphalt Sales Department sincerely sympathize with them in their great loss.

EXPORT DEPT.

A TEXACO SUCCESS.—The newspapers *La Depeche Algerienne* and *L'Echo d'Alger*, in their publications of July 24, related the magnificent performance of Messrs. Lavaysse and Tissier who, in a 7/9 h.p. series Peugeot, covered the course Algiers-Chardaia and back in the record time of 23 hours, 27 minutes, 10-2/5 seconds, beating a previous record by more than 2½ hours. This record was made in the torrid heat of July and on the pebbly track of South Algeria.

At a banquet to celebrate this achievement, Mr. Marotzki, Director and Manager of Messrs. Vinson (the most important garages in Algiers and Oran, and the official Peugeot agents in Algeria), when congratulating the two drivers on their endurance and their technical qualities, emphasized the part in the success which was due to Texaco Oils. In spite of every kind of risk encountered in the desert in the realization of such an exploit, the purity and the quality of our Texaco Motor Oil Demi-Epaisse, golden colored, was in no way impaired.

The two drivers expressed great satisfaction in being able to "push to a finish" their automobile during this long run without having any sort of trouble at all from the lubrication.

Harris T. Dodge, formerly Assistant District Manager (Operations) Boston District, was appointed General Manager of The Texas Company Societe Anonyme Belge with headquarters at Antwerp, Belgium, effective July 1, 1928. Mr. Dodge sailed from New York on the S. S. *Belgenland* on August 3 to assume the duties of his new assignment.

E. L. Kaula, Assistant General Manager of The Texas Company (Australasia) Ltd., recently returned to Sydney, Australia, after spending his home leave in the United States.

Franz von Schilling, formerly Manager of our Jamaica District Office, with headquarters at Kingston, Jamaica, has been appointed Supervisor of the West Indies Territories, effective August 1. Mr. von Schilling will have his headquarters at San Juan, Porto Rico.

PRODUCING DEPT.

The Oklahoma-Kansas Division goes on the theory that the most effective way to boost Texaco Airplane Oil and Airplane Gasoline is to boost and encourage aviation in general. An evidence of their "air mindedness" is presented by the accompanying view of the vacuum plant on the J. Archilla Lease, located a short distance northeast of Tulsa in the Bird Creek District.

On account of the location of this lease, the "airman's sign" on the roof directs the flyer not only to the Municipal Airport, but also in the general direction of the largest privately owned flying field around Tulsa and to the newly erected plant of the Spartan Aircraft Corporation.

Vacuum Plant on the J. Archilla Lease in the Bird Creek District—a short distance northeast of Tulsa, Oklahoma.

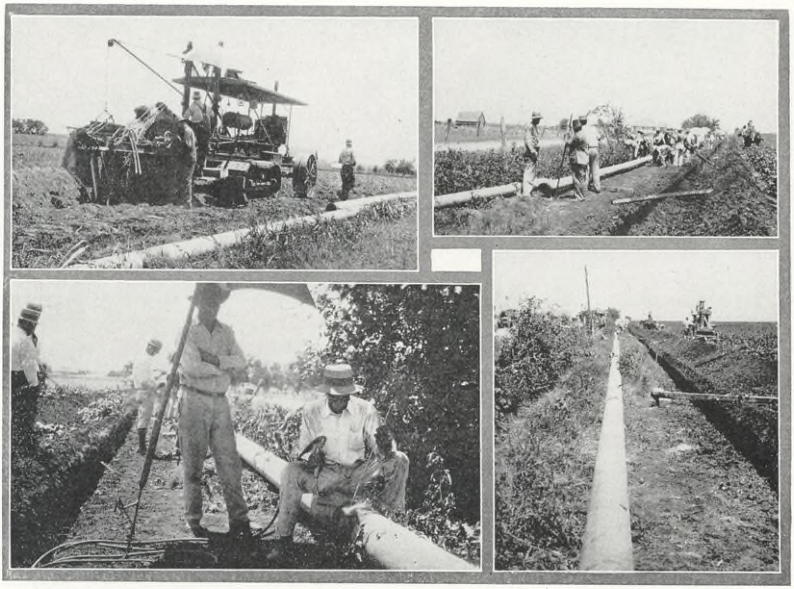
Tulsa is fast becoming an air center of major importance, having three first-class landing fields, a large airplane factory, approximately 35 licensed pilots and 40 student pilots. There are 60 privately owned airplanes housed at the Tulsa airports, and regular passenger service is maintained in all directions by the use of palatial cabin planes. Tulsa is also situated on the Chicago-Dallas airmail line of the National Air Transport, and has 24-hour mail service to New York City.

The many friends and associates of Massie Beavens will be grieved to hear of his death on July 18 after an illness of several weeks caused by an ailment of the heart.

Massie Beavens

Mr. Beavens was born on August 24, 1872, at Houston, Texas, and was educated in the public schools of that city. He entered the service of The Texas Company on September 1, 1917, as a scout and lease man in the Producing Department, South Texas Division, and served in that capacity up to the time of his death.

Mr. Beavens is survived by his wife and three children, to whom we extend our deepest sympathy.



Views showing progress of work on West Dallas (Reagor Springs)-Corsicana 8-inch line No. 3

1. Trenching for the line. 2. Lining up 60-foot joints for welding. 3. Welding. 4. Section of 60-foot joints with Texaco asphalt and saturated felt jacket applied.

PIPE LINES The Texas Pipe Line Company is now making good progress on several major projects, including the installation of engines and pumps, erection of tankage and pumping stations, and construction of pipe lines, which are as follows:

Project "A"

	Size Pipe	*Length Miles*
1—Electra Station to Lefors, Texas Panhandle	8″	154
2—Olney Station to South Bend Station	8″	30
3—West Dallas Station No. 3 line to Reagor Springs Junction	8″	34
4—Corsicana Station to San Augustine Station	8″	147
Total		365

No. 1 connects our system with the Texas Panhandle and should be ready for oil by December 1.

No. 2 will go into oil service September 20 and will relieve present congestion in North Texas by way of Ranger to West Dallas.

No. 3 will relieve congestion at West Dallas and northern points to the extent of 10,000 barrels daily after September 15.

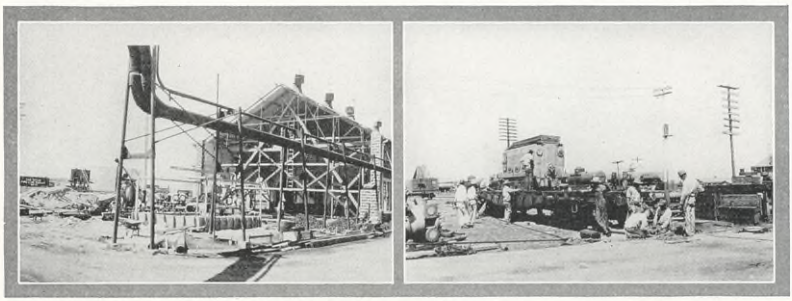
No. 4 will be ready for oil service on December 1, and will deliver 11,000 barrels daily to our Shreveport-Port Arthur system at San Augustine in which there is surplus capacity at present.

Project "B"

West Texas Trunk Line System—Port Arthur to Monahans:

	Size Pipe	*Length Miles*
Port Arthur to Humble	10″	80
Humble via San Marcos, Junction, Ozona, Yates Pool, to Crane	12″	470
Crane to Monahans	10″	40
Total		590

At Monahans we will connect to existing pipe line facilities serving Winkler County Pool. This system will connect large oil pools in Pecos, Crane, Upton, and Winkler Counties and will have an initial capacity of 35,000 bar-



Progress of work on West Dallas Pump Station

1. Construction work in connection with installation of three 340 h.p. 3-cylinder Worthington engines direct connected to Goulds duplex pumps 6¾" x 24", each unit of 18,000 barrels daily capacity. Extension of building and foundations therein are placed for these units. 2. Unloading engine block for unit No. 1.

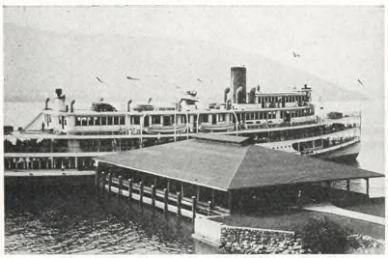
rels daily, requiring pumping stations to be erected at Monahans, Crane, Yates Pool, Roosevelt, and Smithville. Additional capacity may be effected by the erection of additional booster stations.

Delivery of pipe from the mills is scheduled at the rate of approximately 6 miles per day beginning September 17. The entire system will probably be ready for oil service before March 1, 1929.

Private telephone communication is being established in advance.

Texaco Association Outing

Shortly after 9 a.m. on July 28, 900 members and friends of the Texaco Association of New York were aboard the Steamer *Peter Stuyvesant*. And then whistles blew and bells clanged and *Peter* headed up the Hudson River towards Indian Point. For a day, Texaco had another ship in its fleet, for the Red Star and Green T flew at the peak.



Steamer "Peter Stuyvesant" used for Texaco Association's Outing at Indian Point on the Hudson River.

Everyone discovered that Indian Point was about the best place within easy distance of New York City to have a picnic. On the way up the river, George Butcher's Orchestra played and the younger set danced, although we saw some older ones on the floor. Balloons and horns were distributed to the youngsters.

At 12:30 p.m. the steamer reached Indian Point and everyone headed for the place that seemed most likely to offer a diversion. However, the greater part of the crowd went to the athletic field and either participated in or applauded the athletic events. There were prizes for the winners of the various events.

After the athletic events a baseball game was played between the Texaco Juniors and a team furnished by the Bayonne Terminal. The Juniors won the game 10 to 6.

At five o'clock the whistle blew and the bells clanged again and the *Peter Stuyvesant* headed up the river—past Bear Mountain Park and Bridge, West Point, Storm King and its famous highway, and then the steamer turned around. Those who were not looking at the scenery were entertained by boxing matches.

It was undoubtedly a great outing for the Texaco Association. Much credit for the success of the affair is due Oscar Lasse, chairman of the Entertainment Committee, C. O. Strahley, president of the Association, and D. E. Sharpe, chairman of the Committee on Athletics. They worked hard and were rewarded by the success of the outing.—*Carl A. Foss.*

The **NEW** *and* **BETTER**

TEXACO

GASOLINE

THERE is nothing like it — nothing quite so thrilling as the instant obedience of a seasoned polo pony — unless it is the smooth, unfaltering power response of the *new* and *better* Texaco. A *different* gasoline — that forms a *dry gas.*

[Wherever you see the Texaco Red Star with the Green T drive in for the *new* and *better* Texaco Gasoline and the full-bodied Texaco Golden Motor Oil.]

THE TEXAS COMPANY

TEXACO PETROLEUM PRODUCTS

A MAN WITHOUT MIRTH IS LIKE A WAGON WITHOUT SPRINGS, IN WHICH ONE IS CAUSED DISAGREEABLY TO JOLT BY EVERY PEBBLE OVER WHICH IT RUNS.

HENRY WARD BEECHER