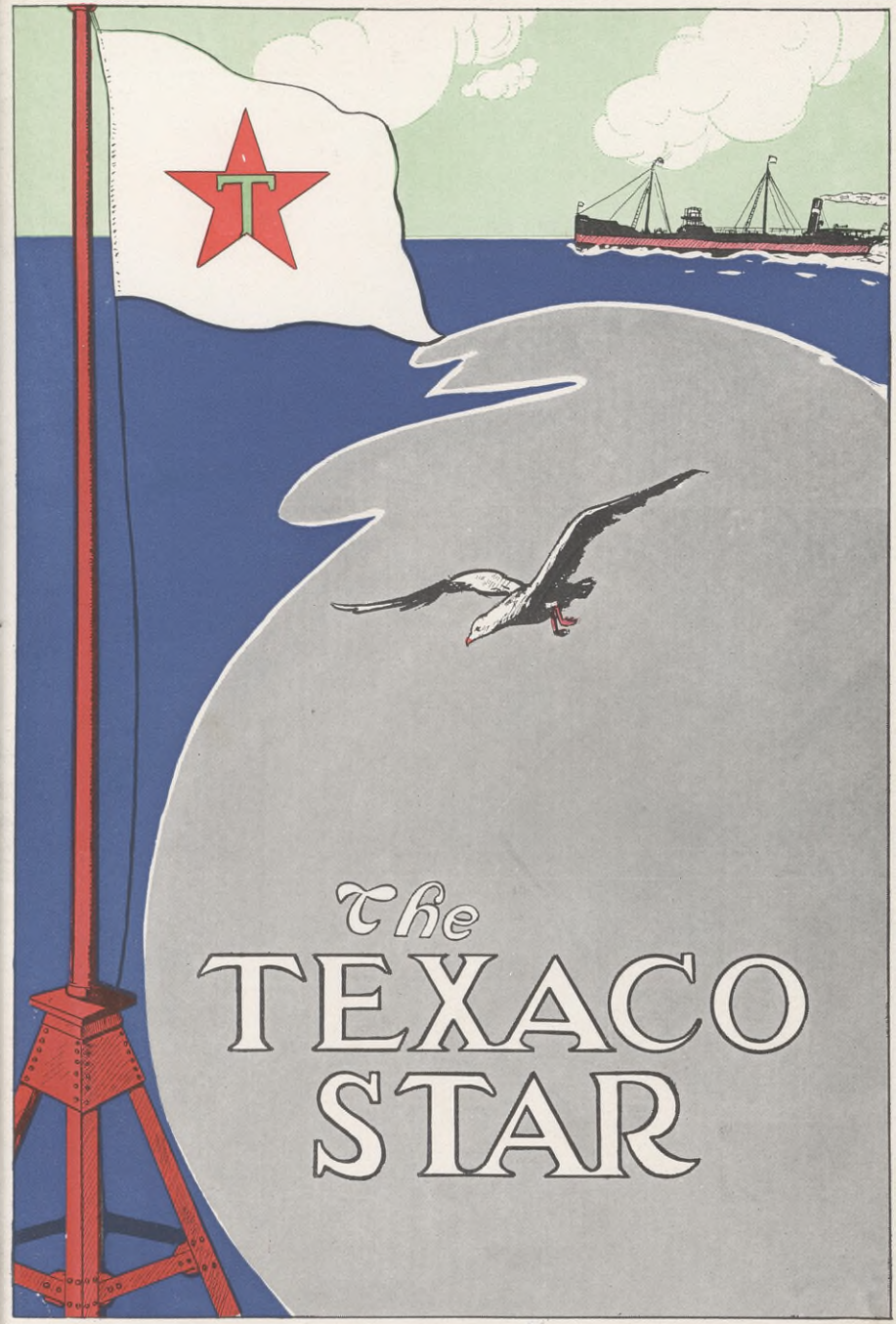
MARINE DEPARTMENT NUMBER



The TEXACO STAR

VOL. I JANUARY, 1914 NO. 3

Marine Department

Manager

W. A. Thompson, Jr., Vice-President, New York

G. C. Wagener, Jr., Secretary to Manager, New York

Geo. B. Drake, Assistant Manager, New York

A. Marshall, Assistant Manager, Houston, Texas

W. L. Conover, Chief Clerk, Houston, Texas

R. C. Butler, Agent, Port Arthur, Texas

S. E. McKee, Chief Clerk, Port Arthur, Texas

Divisions

Equipment

Charles Jackson, New York

Insurance and Claims

Cecil P. Stewart, New York

Charters, Rates and Routing

J. P. Roney, New York

Lighterage

W. M. Rhodes, New York

Accounting

F. L. Hanks, New York

1914

HUMAN PROGRESS is the New Year's watchword. Let it be intelligent, thoughtful progress—constructive, not destructive, and moving as the world moves, affirmatively.

This means a higher life, gentler impulses, loftier ideals, nobler aspirations, self-denial, thoughtful regard of the strong for the weak, the rich for the poor, the fortunate for the unfortunate, the faithful for the wavering, the successful for the failures, capital for labor and labor for capital.

Let us revive parental authority and responsibility, encourage self-dependence, and discourage the growing tendency to regard the state as an almoner for the shiftless, the indolent, improvident, and discontented. Let us stand for prosperity, fair play for business, the maintenance of the inventor's right to the fruits of his labor and of the producer's right to a fair fixed price for what he produces. Let us stand for a just recompense to capital, good wages and reasonable hours for men and women who labor, and for the right to work without restraint or compulsion.

Let us rejoice in our fellow-man's success, rebuke the fault-finder, hush the voice of envy, refuse fellowship with mischief-makers, spurn the call to unbelief, renew our faith in our courts of justice, in the fathers of our country, in our flag, and in our God.

Let us pay heed to every call of duty. Let us find the sweetest service in sacrifices for our fellow-men. Let us dedicate ourselves anew to the cause of humanity, to a higher patriotism, rendering always to Caesar the things that are Caesar's and to God the things that are God's.

—*Leslie's Weekly.*

MARINE DEPARTMENT STAFF

1. W. A. Thompson, Jr., V.-Pres., Mgr., New York
2. G. B. Drake, Asst. Mgr., New York
3. Angus Marshall, Asst. Mgr., Houston
4. R. C. Butler, Agent, Port Arthur
5. Charles Jackson, Equipment, New York
6. Cecil P. Stewart, Insurance and Claims, N. Y.
7. J. P. Roney, Charters, Rates, and Routing, N. Y.
8. W. H. Rhodes, Lighterage, New York
9. G. C. Wagener, Sec'y to Mgr., New York
10. F. L. Hanks, Chief Accountant, New York
11. W. L. Conover, Chief Clerk, Houston
12. S. E. McKee, Chief Clerk, Port Arthur

TEXACO STAR

VOL. I JANUARY, 1914 No. 3

PRINTED MONTHLY FOR DISTRIBUTION TO EMPLOYES OF
THE TEXAS COMPANY

"ALL FOR EACH—EACH FOR ALL"

ADDRESS: TEXACO STAR, 1101 CARTER BUILDING, HOUSTON, TEXAS

THE first and second issues of the *Texaco Star* were distributed to more than five thousand regular employes through department, division, and district offices. In December everyone desiring to receive following issues was requested to fill out a postal card enclosed with each copy of the second issue. The January issue is now mailed to all who returned cards. A similar card is sent again with each copy of this issue. *Please give this card* to some new employe, or to anyone connected with the Company who failed to make his request last month but now wishes to receive the *Texaco Star*.

Applications to receive the *Texaco Star* will be accepted at any time, and the names of such applicants will be added to the permanent mailing list; but all (from managers to bell boys) who wish to receive future issues must fill out the required card and return it by mail.

★ ★

If you did not receive the November or the December issue, and want a complete file, a few copies of those numbers are still on hand and will be sent on request until the small supply is exhausted. This purpose would be assisted, if every official to whom packages of those issues were expressed for distribution from his office will carefully return all surplus copies that may be remaining in his hands.

★ ★

The cover of last month's issue was made from a rarely successful moonlight photograph of The Texas Company's Refinery at Port Arthur, Texas. The excellent plates made from the photograph and the color work secured a result which many wished to possess in a form worthy of its artistic merit. The Advertising Division of the Sales Department has taken steps to satisfy such wishes as far as a small number of reproductions on art proof paper will go. We are glad to be able to make the following announcement from Mr. H. Tipper, who supervised all the work for the cover design and its reproduction:

"The Advertising Division has a few copies of the picture which formed the cover for the December issue. These copies have been printed on art proof paper by the duo-tone process, and instead of the words 'Texaco Star,' have the words 'Night Scene, Port Arthur,' in a panel in the upper corner of the picture. These copies are suitable for framing and will be mailed flat upon receipt of ten cents at the Advertising Division, 17 Battery Place, New York City. The ten cents must be sent in coin and not in stamps."

Requests for the picture should be addressed to Mr. H. Tipper, 17 Battery Place, New York City.

★ ★

A great many generous expressions of appreciation of the first and second issues of the *Texaco Star* have been received. We here thank most cordially all those correspondents. The following letter is printed not as an example of such kind expressions, but because of its specific suggestion. The impersonal signature is given with which the communication was signed, but it was not an anonymous

letter. The writer's name and address were written on the letter head and on the envelop:

"Texaco Star:

"I seldom if ever assume the role of commentator but if you will permit one of the lowest in rank of The Texaco organization to comment on the newborn 'Star of Texaco,' I wish to say that this first issue came as a pleasant surprise and I wish to congratulate the editorial staff on their successful launching, and to predict that you are entering a far more useful field than your modest announcement would indicate.

"I can only speak for myself, but I believe I voice the opinion of the entire field, having been thrown with the boys on the firing line in two different divisions, when I say that we are hungry for real information and that we are more ignorant of the oil subject than the heads of the various departments can realize.

"The article in your issue entitled 'Petroleum Products,' by Vice-President R. C. Holmes, cannot fail to produce results which should more than compensate the organization for the time, the pains, and the money necessary for your first issue, and I hope the next issue will contain a similar article and that every issue will tell us more and more on the petroleum subject. Let us begin with our primers.

"If you will pardon the suggestion, I hope to see the day, and real soon, that this will lead to a kind of correspondence school, which can be entered by any of the organization so as to be permitted to stand regular graded examinations, showing that we are acquainted with our Texaco organization and the manufacture and uses of its products.

"Thanking you for a copy of your first issue and promising a prolonged silence, I am a very

Obscure Agent."

★ ★

Whether or not the examinations suggested by our correspondent be practicable, it cannot be doubted that everyone in the employ of the Company should understand the main outlines of its organization. Even a messenger boy ought to know the name of the Department in which he is working. The cards distributed with the last issue upon which requests to be put on the mailing list have been made, show that hundreds of our comrades do not know the name of either the Department or the Division in which they are working. Many more evidently do not understand the distinction between "Department" and "Division" in the organization of The Texas Company. It is as if a military man did not know to what branch of the service or to what regiment he belonged.

Besides name and address the cards called for the following information:

In.....Division of.....Department.
Position.....

The mailing lists must be made up by Departments, and in most cases also by Divisions of a Department, in order to get the respective lists corrected each month by Department or Division accountants, so as to drop from mailing lists names dropped from payrolls.

Space will not be consumed by curious examples of the cards which could not be entered in mailing lists until we learned from fresh cards, sent to the names and addresses given, the Department and Division in which to list the applicant. In some cases the correct data could be surmised. For instance, if one reported

"In *Chicago District* Division of *Mailing* Dept.,"

we might infer from the word "district" that he was

In Central Div. of Sales Dept. N. Territory.

Position *Mailing Clerk* (?) *in Chicago District;*

but various Departments have Chicago offices, and each might have a mailing "department."

Cards were received stating that the senders were in some Division of a "Lubricating" Department. The Texas Company has no "Lubricating Department," and it has a Lubricating Division in more than one Department.

In giving the Staff of the Refining Department in previous issues the Divisions and subdivisions of that Department were shown, and the present issue gives in the same way the Divisions of the Marine Department. In course of time the whole organization would thus be shown; but it should be serviceable to print now the following outline. It will certainly be of service if everyone who is in doubt of his place and position in the Company's service takes the trouble to locate himself in the scheme of organization. Each of the "hall boys" who have reported from many different post offices that they are "In (blank) Division of *Hall* Department," could easily discover where he belongs, if he will ask the man from whom he receives his pay, what Department of the Company has been paying him.

Except for a few persons connected with the general Executive offices, everyone in the service of The Texas Company (from Managers to hall boys) may locate himself in the following outline of Departments and Divisions of Departments:

LEGAL DEPARTMENT: *General*

Divisions:

Land and Claims
Insurance
Securities

TREASURY DEPARTMENT: *General*

Divisions:

Current Collections
Disbursements
Credit and Delinquent Collections

COMPTROLLER'S DEPARTMENT: *General*

Divisions:

Accounting and Auditing
Statistical
Stationary and Supplies

PIPE LINE DEPARTMENT: *General*

Divisions:

Texas and Louisiana
Oklahoma
Engineering
Telegraph and Telephone

REFINING DEPARTMENT: *General*

Divisions:

Port Arthur Works
Port Neches Works
West Dallas Works
West Tulsa Works
Lockport Works
Case and Package
Laboratory
Terminals—Southern: *General*
Port Arthur Terminal *Charleston Terminal*
Amesville Terminal *Galveston Terminal*
Mobile Terminal *Corpus Christi Terminal*
Jacksonville Terminal
Terminals—Northern: *General*
Norfolk Terminal *Bayonne Terminal*
Baltimore Terminal *Providence Terminal*
Delaware R. Terminal *Portland Terminal*

EXPORT DEPARTMENT: *General*

Divisions:

Sales:
Asiatic territory
Australasian territory
Newfoundland district
African territory
South American territory
European territory
Lubricating
Charters, Rates, and Routing
Statistics and Records

SALES DEPARTMENT—S. TERRITORY: *General*

Divisions:

Southern:
Houston District *Dallas District*
Tulsa District
Southeastern:
Atlanta District
Southwestern:
El Paso District
Mississippi River (T. O. Co.):
New Orleans District
Rocky Mountain:
Pueblo District
Central America
Paving and Roads
Roofing
Lubricating
Station Equipment and Construction

SALES DEPARTMENT—N. TERRITORY: *General*

Divisions:

Eastern:
Boston District *Philadelphia District*
New York District *Norfolk District*
Central:
Chicago District
Paving and Roads
Lubricating
Station Equipment and Construction
Advertising

FUEL OIL DEPARTMENT: *General*

Divisions:

Railway
Oil Purchases
Fuel Oil
Mississippi River

MARINE DEPARTMENT: *General*

Divisions:

Equipment
Insurance and Claims
Charters, Rates, and Routing
Lighterage

RAILWAY TRAFFIC DEPARTMENT: *General*

Divisions:

Equipment
Claims
Rates and Routing

PURCHASING DEPARTMENT: *General*

Divisions:

Southern
Western
Eastern

NATURAL GAS DEPARTMENT
PRODUCERS OIL COMPANY

★ ★

The personal note in business is struck in an effective way in one of the advertisements of Rogers Peet and Company: "Not the least of our business assets are the 'men behind the counter.' For the most part they've grown up with us and consequently know the business from A to Z." The best asset for the firm, however, is the *fact*,—its advertisement yielding a merited additional advantage.

★ ★

EFFICIENCYGRAMS

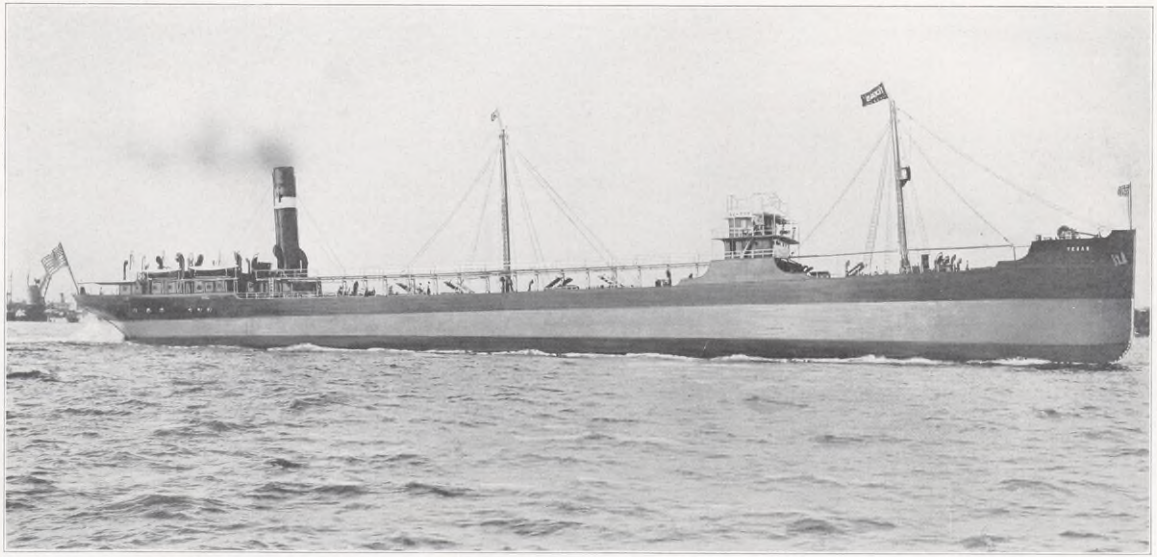
Not to know, is no crime—the crime is not being willing to learn.

Reading is to the mind what exercise is for the body.

"What is the hardest thing in the world to do—think!"—Emerson.

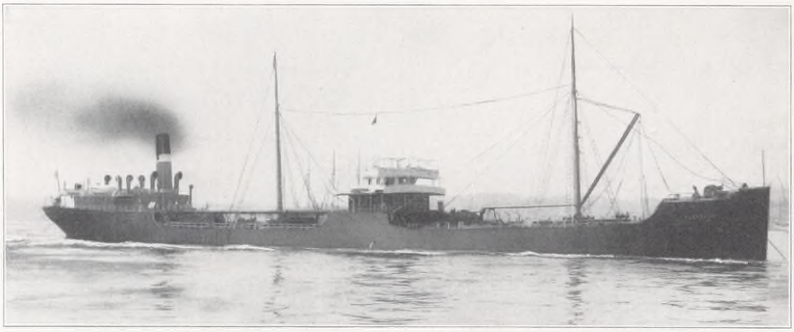
It is always easier to expend than to acquire, to dissipate wealth than to add to it by savings.

Work is the only master-key which you can trust to open all doors of success.



SS. "TEXAS"

Length, 397; Breadth, 52; Depth, 30; Horse-power, 3,000; Speed, 12 knots; Gross Tonnage, 5,106; Net Tonnage, 3,746; Carrying Capacity in Bulk Barrels, 56,500; In Gross Tons, 7,243. An oil-burning, tank steamer of the most modern design. Fitted with seven main compartments with pumps and lines arranged for the loading or discharging of four grades of bulk oil at one time.



SS. "ILLINOIS"

Length 390; Breadth 52.1; Depth 30.8; Horse Power 3,000; Speed 12 knots; Gross Tonnage 5,225; Net Tonnage 3,275; Carrying Capacity in Bulk Bbls. 60,000; In Gross Tons 7,696.

An oil-burning tank steamer of the most modern design. Fitted with eight main compartments each equipped with separate pumps and lines for the handling of oil in bulk. No tank vessel ever built has as complete provision for the separation of various grades of bulk oil as the *Illinois*. Eight different grades of oil can be loaded or discharged from the main compartments at one time.

THE TEXAS COMPANY MARINE

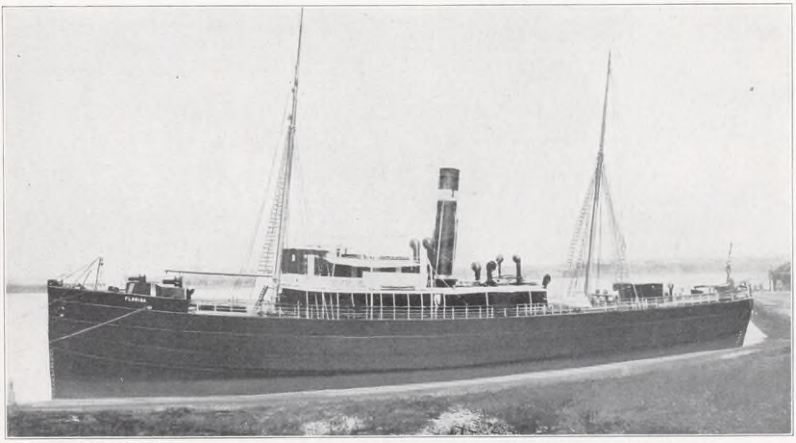
W. A. THOMPSON, Jr.
Vice-President and Manager of the Marine Department

When oil was first discovered in Southeastern Texas, the oil industry in the United States took on a new aspect. During the early development and early production periods, the discovery of crude oil in volume in Southeastern Texas was generally regarded as the discovery of an additional fuel supply. The product was generally regarded as a competitor of coal for use as fuel and gas making purposes, and, except for its being a liquid, occupied about the same position in the commercial world as the opening of large coal mines.

Fuel oil depots were established, either in the coal consuming regions, or at points from which the product could be shipped to coal consuming regions. The oil business as a business, or as it had been regarded as a business, was less affected by this discovery than was the coal business, for the following reasons: 1st. Because the character of the crude did not readily lend itself to the known methods of refining. 2nd. Because the principal development was being conducted by people not prominently identified with the manufacturing and marketing of refined petroleum products.

In certain sections of the country, especially those sections readily reachable from the oil fields, coal was driven out almost entirely. The whole development looked more like competition for the coal fields, than like competition for the previously discovered oil fields. The price of oil was, therefore, to a very considerable extent, regulated by the price of coal, and not by the price of oil for refinery use.

All products seek the cheapest means of transportation. Water transportation, or tank vessel tonnage, the recognized economical means of handling oil in bulk, was entirely inadequate to meet the demands of the new conditions. Vastly increased facilities were required. The rush of oil came as of over night, whereas it takes about one year to build a modern tank vessel of dimensions suitable for the trade which was open to the new product. Since the new product was replacing coal, it was natural that the first water trans-

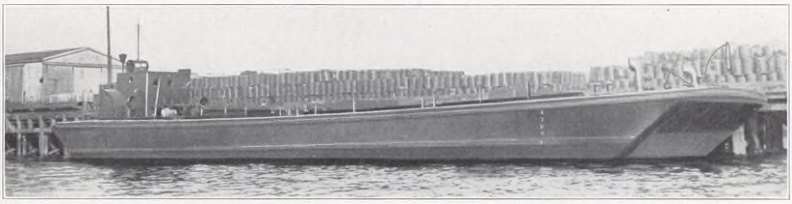


SS. "FLORIDA"

Length 230; Breadth 36.5; Depth 18.5; Horse Power 1,600; Speed 10 knots; Gross Tonnage 1,596; Net Tonnage 1,052; Carrying Capacity in Bulk Bbls. 11,500; In Gross Tons 1,647.
The first of the Texas Company's fleet of steamers. She is an oil-burner, like the rest

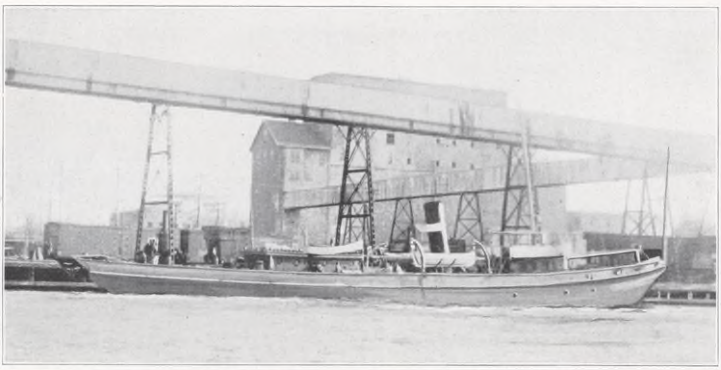
portation to move the oil in volume consisted of vessels whose previous occupation had, in whole or in part, been the carrying of coal. Barges built of wood or of steel; sailing vessels built of wood or of steel, some dismantled before or during the conversion, others with their full sailing power; steamers, old and new, were bulkheaded and arranged with piping and pumping facilities to become engaged in this new trade. Bulk oil tonnage was so scarce, and the oil was of such comparatively little value, that almost anything that would lend itself to some kind of conversion, was pushed into the trade to move the flush production. Most of this equipment was owned and operated by the so-called shipping interests—those whose business it is to own and operate ships for the carrying of someone else's product. Except for the ships converted at large expense and according to the approved methods of Naval Architecture, most of these early creations have either been lost, abandoned, or rearranged to engage again in the trade they were originally intended for.

In the meantime the producers were converting their product into money. The same nerve and confidence that gathered



BARGE "FIFTY NINE"

Typical bulk and deck lighter for the distribution of bulk and package freight from our Terminal Points to the consuming trade.



STEAMER "HORNET"—Before Alterations

First a yacht, then a gunboat, then a filibuster, but now a self-respecting, law-abiding, deep-sea towing vessel. Used principally between Mexico and United States Gulf Ports.

the development stake prevailed after the strike, and, instead of paying out, these same interests reinvested their proceeds in all that goes to make up complete oil organizations.

While the means of transportation were passing through the stage of propagation, so was the oil development itself. New refining methods were applied and new oil fields were discovered and developed, and now we find the oil from the fields of Texas, Louisiana, and Oklahoma going to the markets of the world, not as a competitor of coal alone, but as a competitor of all products produced by any and all of the refineries of the world. Thus it is easy to understand why, during the comparatively short period of our existence, the Marine Department of The Texas Company has grown, since 1903, from one wooden barge 130 feet long, to 94 pieces aggregating a total length of 11,225 feet; from a deadweight carrying capacity of 400 gross tons to a deadweight carrying capacity of 63,724 gross tons; from a total of 2 seamen to a total of 436 seamen; from a force ashore of one, to a force ashore of 73.

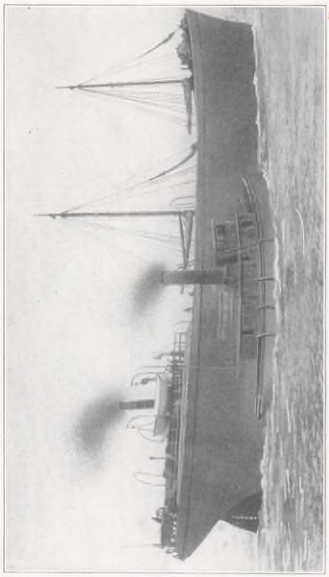
TUG "NORTH AMERICA"

Length 91.9; Breadth 21.6; Depth 10.6; Horse Power 438; Speed 10½ knots; Gross Tonnage 134; Net Tonnage 14

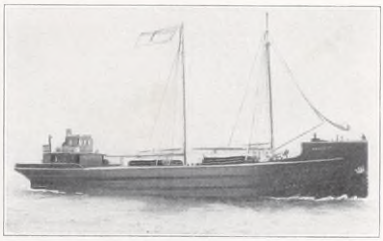
An oil-burning tugboat built especially for harbor work at Port Arthur and for coast towing. Fitted with the latest approved fire-fighting apparatus.

Unlike the original fleet that belonged to whoever happened to have a craft suitable for conversion to carry crude oil in bulk, the fleet now required for our trade must be suitable for carrying all of the various kinds of products we produce, be they in bulk or in packages, and for delivering them with safety and dispatch in good order and condition to the world's markets. We have such a fleet, and to more thoroughly familiarize the readers of the *Texaco Star* with our marine equipment, I have requested the Editor* to reproduce some typical photographs, believing these will give to the marine layman

*Cuts were made from all the photographs of vessels received, but the following were crowded out by matter for other sections which could not be postponed: *SS. Louisiana*, the sister ships *Northwestern* and *Northtown*, the barges *Hobson*, *City of San Antonio* and *Harry Morse*. A partial view of the *Harry Morse* is given in the scene of loading refugees at Tampico. None designated as being particularly desirable for illustrating this instructive article are omitted, and the omitted cuts will be shown in the next issue.—Ed.



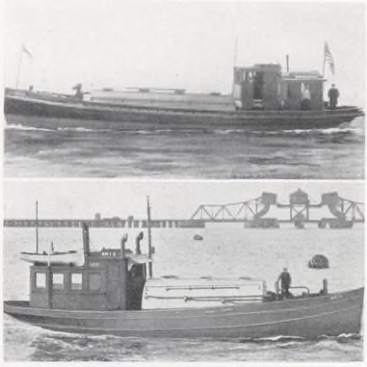
"FRANCE MARIE" and "GLENLUI"
Typical bulk oil ocean-going barges.



Barge "MAGNOLIA"

a more graphic and interesting conception of our fleet than a technical description would, and believing a technical description to those technically informed is unnecessary.

The Barge *Magnolia*—here shown from a small photograph—came out in 1906. She is the first modern tank vessel built by The Texas Company. Her 7,000-barrel capacity was intended to handle the refinery output available for points reachable by water. Our output and trade was, at that time, so limited that she more than accomplished this. Note the difference between the *Magnolia* and the *Louisiana* of 30,000 barrels capacity, the *Texas* of 55,000 barrels, and the *Illinois* of 55,000 barrels capacity, together with

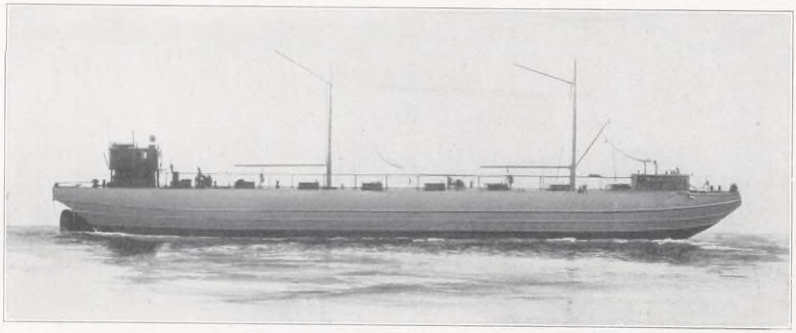


"SYLVIA" and "AMY B"
Typical motor-delivery boats—This class of craft is used principally for the distribution of Texaco Kerosene, Gasoline, and Lubricants to the consuming trade on isolated inland waters.

A Snapshot Taken While Loading 108 Refugees on Barge "Harry Morse" at Tampico, June 2, 1913

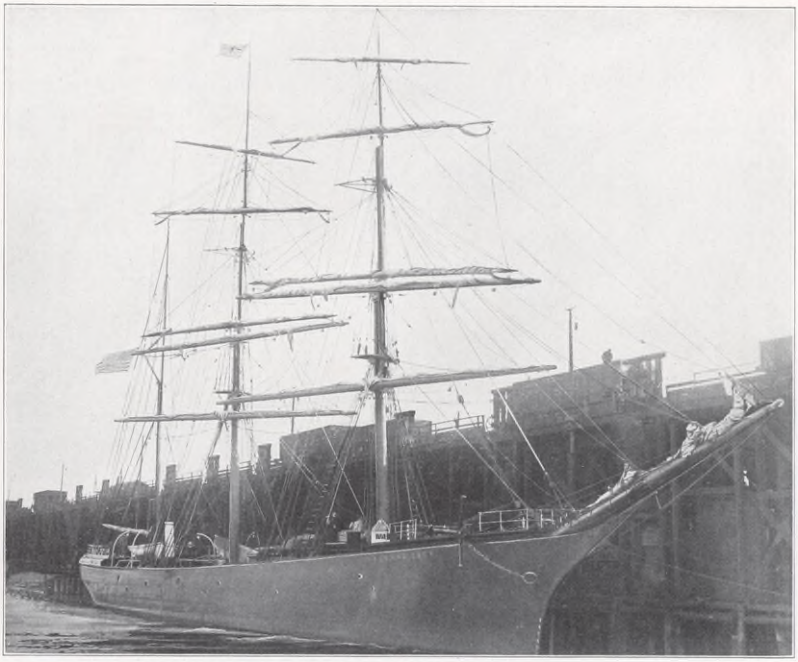
numerous other smaller units subsequently added for the bulk refined oil trade; and consider, at the same time, the millions of gallons moving for fuel and gas making purposes, and the millions of gallons moving in packages yearly, and you will get some conception of the growth of our industry.

Our Barge *Harry Morse* received considerable notoriety because of the service she rendered American refugees from Mexico. The picture given is a snapshot taken while 108 refugees, men, women, and children, most of them destitute, were being loaded on the *Harry Morse*, on the second day of June, 1913, for passage to Galveston. These refugees were furnished with passage free of charge and were all safely landed at Galveston, where they were handsomely



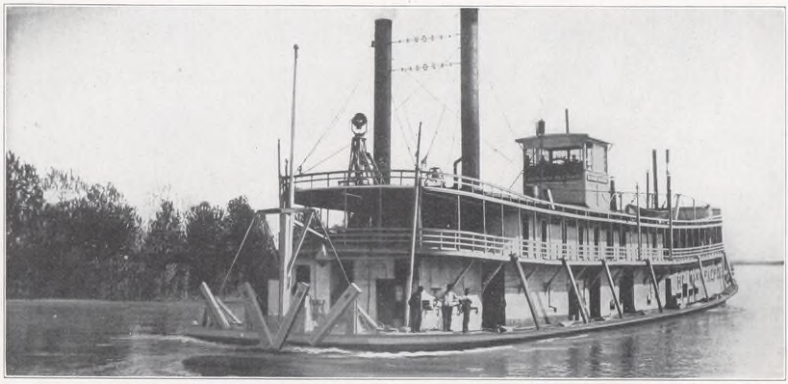
BARGE "DALLAS"

The first vessel ever fitted to handle asphalt in bulk through pipe lines and pumps. Melted asphalt is delivered into this barge. It is kept in liquid form by a system of steam coils and delivered ashore by pumps.

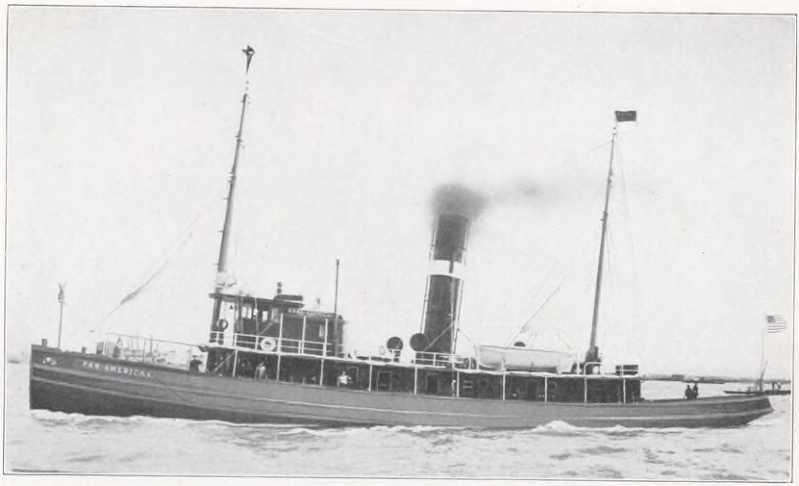


BARK "FOOHNG SUEY"

An American Bark with a Chinese name. The *Foohng Suey* is engaged principally in carrying Texaco products in packages from Port Arthur to Atlantic Coast and West Indies ports.



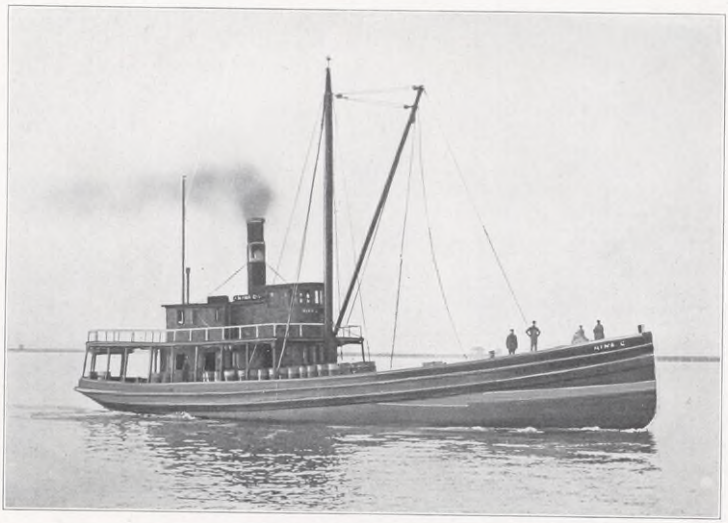
One of our sternwheel boats for operating in shallow, inland waters



TUG "PAN-AMERICAN"

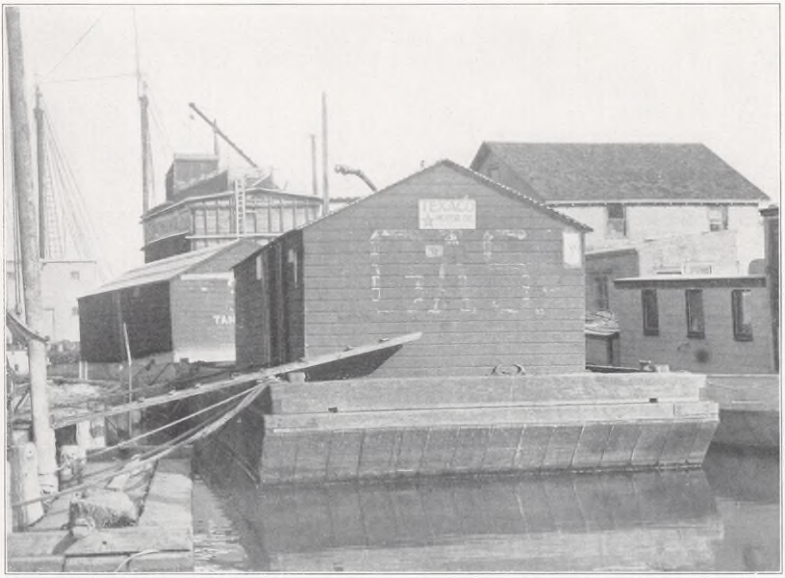
Length, 133.3; Breadth, 27; Depth, 16; Horse-power, 1,150; Speed, 12 knots; Gross Tonnage, 344; Net Tonnage, 234.

An oil-burning Tugboat built especially for towing purposes between Mexico and United States Ports.



STEAM LIGHTER "NINA C"

Used for carrying package freight between our Bayonne Terminal and New York Harbor distributing points. The only coal burner of the fleet, but she uses Texaco Lubricants. The *Nina C* was named for Miss Nina Cullinan.



Floating Station at Rockaway Beach—Typical of Stations Anchored to Catch Motor Boat Trade.

cared for by the charitable societies of Houston and Galveston, who not only clothed and fed the needy, but furnished them with rail transportation to the homes of their relatives or friends.

Our sea-faring men have been largely educated in our own employ. They are advanced as rapidly as their own ability, and the positions open permit of. Seniority is recognized not only in the appointment of Captains and Chief Engineers, but in the advancement of men in the deck, engine, and stewards departments. A great many sea-faring men are so afflicted with the wanderlust that even the diversified travel of a ship does not satisfy their roving dispositions. A trip or two on any ship is all they can stand, then, after a few days ashore, they embark for they don't care where, just so long as it is different. Eliminate this class and almost to a man, those on our ships can tell with accuracy under just what conditions they will be promoted. We of the Marine Department believe this policy has built up around us the highest type of good and loyal seamen. We have followed the same policy afloat and ashore. We have few unfamiliar faces.

Our casualties have been few. We have never lost a man at sea. We have lost one by fire, one by injury, one by asphyxiation, and two by drowning; but all in port under conditions that might have applied if they were not followers of the water.

We have crafts suitable for the deepest and shoalest navigable waters. They were designed to take care of their particular part of the whole proposition. Relatively, one is as important as the other. The little "one-man" bulk or package delivery motor boat occupies to its trade the same important position that the majestic ship, that baffles the winds and storms of the sea, occupies to hers. Matters of much importance to the community or communities may depend upon the success or failure of the voyage in either case, forgetting, for the time being, the importance to owners.

The untiring work of a whole organization from the field, through the refinery and sales organizations, can be brought to maximum or minimum results by the success or failure of the voyages. This fact is kept prominently before all members of the Marine Department organization. Their full cooperation and best endeavors for the general good are expected by the management, and are cheerfully and untiringly extended by the organization.

Paved With Texaco Asphalt

TEXACO ASPHALTS

C. C. HAWKINS
Superintendent Port Neches Works

Texaco Asphalt is a product of evolution, scientifically made with a view to grouping together in one asphalt a number of the more desirable properties of the commercially important asphalts without the accompanying features which are generally acknowledged as objectionable. Therefore, it will not be out of place to present a few historical facts showing the development of the asphalt industry which led up to the manufacture of the various modifications of Texaco Asphalt.

Asphalt has been a paving material of rapidly increasing importance in this country since 1880, consequently more effort has been spent in eliminating the undesirable features and improving all asphalt for this purpose. On account of the noticeable difference in the composition or the physical properties, these asphalts may be divided into four general classes, A, B, C, and D, and their modifications in the order of discovery or production, are as follows:

A. Refined Natural Asphalt Cements—Produced by refining and fluxing the naturally recurring hardened bitumens, chief among these being Trinidad, Bermudez, Venezuelan, and Cuban asphalts. Natural asphalts as they occur are not suitable for paving and other purposes, as they contain sand, dirt, water, and other foreign material. These are partially removed along with the lighter oily constituents by a process of refining, where there is as much possibility for

abusive treatment as there might be in the scientific refining of other raw products, for instance crude petroleum.

Refined Trinidad asphalt consists of about 37 per cent, and Refined Cuban asphalts of about 20 to 30 per cent foreign matter, while Bermudez and similar bitumens are more nearly pure. These refined or manufactured products, sometimes referred to as a natural bitumen, are not, as a rule, in this state suitable for paving and are of necessity further reduced to the proper consistency with flux, that is, a residuum from petroleum.

After a number of years of experimenting, it was found that good, durable pavements could be laid with these asphalts. The objection to the Trinidad and Cuban asphalts was that they contained so much mineral matter, making them very expensive and inconvenient to handle in the kettles, while the Bermudez might not run uniform in quality, was not so stable as shown by comparatively high evaporating loss and hardening, and was so easily affected by climatic changes. Such fluxed materials, known as asphalt cement, were produced and used almost exclusively and quite extensively for paving, etc., to about 1898, when a second class appeared on the market.

B. Residual Asphalts—Separated by processes of refining from California, Texas, and similar asphaltic crudes, consisting of almost pure bitumen. There being many sources of supply and being free from mineral matter, many new uses for this asphalt were developed. The bulk of it, however, went for paving and roofing. Although very ductile, it was very brittle at winter temperatures and very soft under a summer sun; that is, far too easily affected by changes of temperature. To overcome this feature, the production of a third class began about 1904.

C. Blown Asphalt—Produced chiefly from mid-continent and Texas Crudes by removing some of the hydrogen from liquid hydrocarbons with sulphur or the oxygen of the air, leaving solid asphalite hydrocarbon behind. That from asphaltic or semi-asphaltic crudes was usually a finished product; that from mid-continent paraffine crudes usually required the addition of Gilsonite, or similar bitumen, to combine with part of the greasy-like flux remaining in the product. This was more rubbery than the previously mentioned asphalts and in some brands was a greasy product; but all of the Blown asphalts were characterized by the slight change in consistency occuring as they were subjected to the great range of climatic temperatures. It was soon realized that this was a most desirable property, as pavements laid with such asphalt were not brittle in winter nor too soft in summer. These asphalts were further noted for their stability, showing minimum hardening upon long service. However, they were nearly all characterized by their extreme shortness; that is, they *lacked the ductility and cementitiousness* to make them cohesive and prevent cracking as they expanded and contracted.

The oil asphalts as originally made were susceptible of much improvement in quality, and this occurred simultaneously as successful means or methods of using them developed. Experience covering a period of many years had taught paving and road engineers that certain properties, which were not all possessed by any one of the above mentioned asphalts, were essential. This led to the production of the next class of asphalt.

D. Texaco Asphalt — The primary product of the Port Neches Works is produced by the skilful and scientific treatment of the various asphalt bearing crudes available. There are several modifications and consistencies to comply with the different trade requirements and specifications.

The process of refining these crudes consists of removing all the accompanying oils as distillates from the asphaltic constituents, employing special methods to secure and preserve all of the essential and desirable characteristics in proper proportion. Being nearly pure bitumen, Texaco Asphalt possesses a decided advantage to contractors in cost and handling over such natural asphalts as Trinidad and Cuban which are accompanied by so high a percentage of mineral matter. It is a properly balanced material, as paving engineers have learned that asphalts of low ductility are too short and those of higher ductility too brittle to obtain the best results, and at the present time most cities of this country specify a ductility

within certain limits known to give satisfactory service.

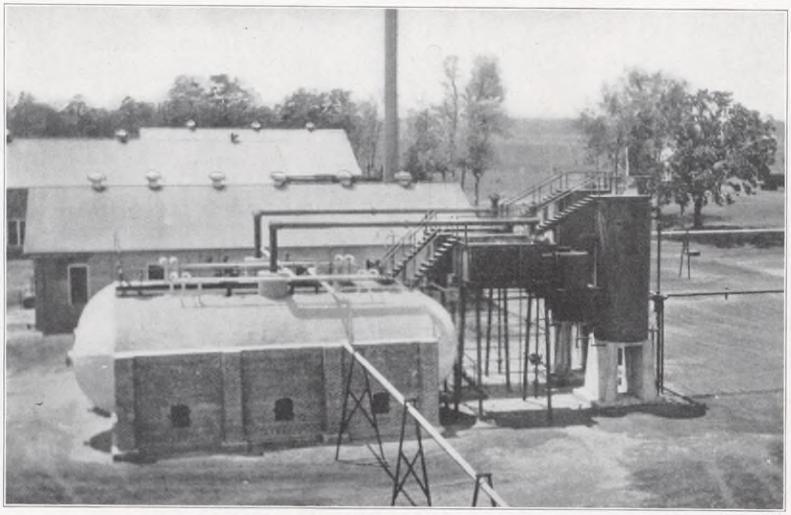
Special consistencies of Texaco Asphalt are made for roofing and waterproofing purposes; that is, for saturating, cement binder, and waterproofing coat in connection with built-up roofs, and for coating or surfacing a prepared asphalt or rubber type of felt roofing.

Texaco Saturating Material needs no further compounding and is made of varying consistency depending upon the wishes of the customer: Its special points being, that it is a rich black bitumen, affected little by climatic changes, and entirely different from the many greasy and flux-like materials on market for this purpose.

Texaco Asphalts are prepared and used in small quantities for the lining of tanks. Waterproofing cement in concrete construction, for insulating purposes, for pipe coating, and in a specially prepared modification as a rubber substitute.

Our instructions from the beginning have been to develop and maintain those qualities in our asphalt products which are essential in accomplishing in the greatest degree the purpose for which they are used, and while other products than asphalt result from the manufacturing in this plant, asphalt is given the preference where quality figures. Thorough and careful laboratory tests are made continuously night and day throughout the manufacture to insure the desired results.

It is comparatively easy for any manufacturer to come within the majority of the physical requirements usually outlined by municipal corporations, but it is not so easy to manufacture a product which will not under exposure (particularly in paving and roofing) change its form or consistency, or otherwise deteriorate, and particular attention has been given to this important feature in the manufacture of Texaco Asphalts.



Typical Intermittent Steam Stills

This cut should have been shown on page nine of the November issue over the title: "Typical Intermittent Steam Stills," in place of the view of laboratory instruments which was substituted by mistake. The proper cut was used in a supplementary edition printed to supply a deficiency of more than a thousand copies, but the error appeared in the greater part of the issue.

BY THE WAY

THE bark *Foohng Suey* an American vessel with a Chinese name, which is owned and operated under the flag of The Texas Company, was among the arrivals in port Friday afternoon. The *Foohng Suey* is a bark with an interesting history. Despite her name, she is of American build and is about eighteen years old. She was constructed by a Boston skipper for foreign trade, particularly for Honolulu. She gets her name from the fact that there was associated with her builders as a business partner a Chinaman, owner of a large sugar plantation in the Hawaiian Islands. The name was suggested by this Chinaman, which translated means "Fair wind, good water."

She has to her credit eighteen voyages around Cape Horn and has twice been entirely around the world. She has been exceedingly fortunate since she was launched, which suggests that there might be something in a name after all.

At the time she was built the owners had in view ideas of comfort and elegance, for her furnishings and woodwork are all of the finest material and she is fitted up more like a yacht than a freight ship.

Since she was purchased by the Texas Company about two years ago she has made frequent trips to gulf ports.—*Galveston News.*

★ ★

The arrival of the ship *Wotan* in New York harbor was of especial interest because she is propelled by one of the largest Diesel engines in marine service,—a single-screw, six-cylinder, 2,000-horsepower Carels-Diesel engine. The excellent record of the vessel on her maiden voyage proved the reliability—as well as the economy—of her engine.

★ ★

The battleship *Warspite*, the second of the British heavier type of war vessels to be equipped with the fuel oil system, was launched November 25 at Devonport. The vessel has tanks to hold 4,000 tons of oil, enough to provide her for a trip around the world, or 500 tons more than the *Queen Elizabeth*, the first dreadnought to depend upon oil as her motive power. The bunkers are entirely done away with, the fuel being stored in double bottom and in various odd places where coal could not be put. This makes a saving in stokehold weights of 25 per cent and also cuts down the number of men required in the engine room department. The *Queen Mary* a 75,000 horse-power turbine vessel, has a crew of 1,000, about 400 of whom are in the engine room. The *Queen Elizabeth*, however, requires only about 150 men in this department.

★ ★

The British navy is now using about 200,000 tons of oil a year and its requirements are rapidly increasing. The United States navy is now using 30,000 tons a year, but will require 125,000 tons annually for the supply of vessels within a short time. The same tendency is being shown by Germany and other nations with large navies.—*Oil and Gas*

★ ★

The great increase in the number of lifeboats since the *Titanic* disaster is shown not to have solved the problem. Even with the most improved davits, boats cannot be launched in a high sea. The use of oil has often been shown in such cases. Every tug with barges in tow should be compelled to take a supply. If oil were used freely the tugs could take the men off the barges in any weather; whereas now they are compelled to let them drift to destruction. Life savers along the coast could throw oil, in rockets or projectiles, to windward of a stranded vessel and greatly increase the chances of saving the crew. The Patent Office records are full of such devices, and no doubt the simplest would be found the most effectual. The ordnance department of the army would be well employed in co-operating with the life saving service in perfecting such a projectile. The device is an old one, but its use should be modernized and made effective. No ship should be allowed to sail without proper equipment for the use of oil for the safety of its own passengers or saving the lives of others found in danger.—*Oil and Gas.*

★ ★

A pipe line 100 miles long to tap Oklahoma fields will be constructed immediately by the Magnolia Pipe Line Company, recently chartered under the laws of Okla-

homa. The line will connect with the Magnolia Petroleum Company's line from Sabine Pass to the Electra field in North Texas and will extend to the Tulsa and Cushing fields in Oklahoma with a branch to the new Ardmore field.—*Associated Press*, December 27.

★ ★

Were it possible to transport natural gas as coal, petroleum, or other fuels now in use are transported it would be the leading fuel of the world and its value would probably exceed that of any other commodity.—*Oil and Gas.*

★ ★

The *Annalist* for November 17 concludes an extended account of the economic and other disadvantages of sky-scraper buildings with the following statement: "A few days ago it was announced that the old Tower building on Broadway, owned by the Standard Oil interests, was to be torn down. It had ceased to earn enough to pay taxes. The land is for sale. That was the first 'steel building' and, therefore, the first skyscraper in the world. It was built only twenty-four years ago."

★ ★

When you were a kid working possibly for three seeds a week, do you recollect how self-satisfied you felt when the boss complimented you on having done your work well? It sort of swelled you with pride and made you tell yourself that after all you were of some use around the place—an asset, rather than a horrible liability. It had another effect on you, too; it caused you to strive still harder to please. The appreciation appealed to your sensitiveness—you wanted more. And it's just that way with the grown-ups, too. A compliment here and there when deserved spurs the deserving one on to better deeds. On the contrary, if you sit back in a frigid frame of mind and assume a "Missouri" attitude to the folks you come in contact with, nine times out of ten you fail to get all life had in store for you. People in general thrive on approbation or wither and grow stale for want of it. Don't be afraid to extend the glad hand or voice an encomium—get your money's worth and joy, too, as you go through life.—(*A clipping contributed without naming the source.*)

Steam Up.—Before water generates steam, it must register 212 degrees of heat. Two hundred degrees will not do it; 210 degrees will not do it. The water must boil before it will generate enough steam to move an engine, to run a train. Luke-warm water will not run anything. A great many people are trying to move their life trains with lukewarm water—or water that is almost boiling—and they are wondering why they are stalled, why they cannot get ahead. They are trying to run a boiler with 200 to 210 degrees of heat, and they can't understand why they do not get anywhere. Lukewarmness in his work stands in the same relation to man's achievements as lukewarm water does to the locomotive boiler. It is not enough simply to have a general desire to accomplish something. There is but one way to do that; and that is, to try to be somebody with all the concentrated energy we can muster.—O. S. Marden in *Success.*

★ ★

Neither Governor Foss nor the newspapers will let Charles S. Mellen rest in peace with his goat industry at Stockbridge. When Mr. Mellen left the New York, New Haven and Hartford Railroad the Boston *News Bureau* asked him concerning his future plans, and he replied:

"I am going back to Stockbridge to raise goats; there seems to be a growing demand for goats."

One of the most noticeable faults of Charles S. Mellen is his wit—so keen as not to be popularly appreciated. At Stockbridge Mr. Mellen is receiving letters from all over the country inquiring as to the size of his farm, the number of his goats, their breed, cost of raising, how many he has for sale, and the terms.—*Boston News Bureau.*

★ ★

A farmer, in great need of extra hands at haying time, finally asked Si Warren, who was accounted the town fool, if he could help him out.

"What'll ye pay?" asked Si.

"I'll pay what you're worth," answered the farmer.

Si scratched his head a minute, then announced decisively: "I'll be darned if I'll work for that!"—Selected.

DEPARTMENTAL NEWS

The Managers of the respective Departments have assigned to the gentlemen whose names and addresses are here given the duty of sendng to the *Texaco Star*, on or before the twenty-fifth day of each month, reports of new appointments, transfers, removals, resignations, promotions, and other items of departmental news of general interest. Suggestions and information for this purpose should be sent to them before the twentieth day of the month. All are invited to cooperate.

Pipe Line Dept.	
Natural Gas Dept.	
Fuel Oil Dept.	E. B. Joyner, Houston.
Refining Dept.	C. K. Longaker, Houston.
Marine Dept.	W. S. Conover, Houston. A. R. Weber, New York.
Legal Dept.	F. C. Pannill, Houston.
Treasury Dept.	Lee Dawson, Houston.
Comptrollers' Dept.	B. E. Emerson, Houston.
Sales Dept., S. Territory	D. A. Vann, Houston.
Sales Dept., N. Territory	S. Slattery, New York.
Export Dept.	J. B. Nielsen, New York.
Purchasing Dept.	J. E. Byrne, Chicago.
Railway Traffic Dept.	C. S Young, Houston.
Producers	P. C. Harvey, Houston

FUEL OIL DEPT. D. F. McMahan, Assistant Manager Fuel Oil Department, is the proud father of a ten-pound boy who arrived Thanksgiving morning. We understand the young gentleman will be named "Denny," Jr.

S. J. Lones and W. D. Baissat spent Thanksgiving on a hunting trip down the Brownsville Road. We understand Baissat killed eight turkeys, five deer, and quail too numerous to mention.

R. J. Golding, stenographer for V.-Pres. Noble, having resigned, T. N. Dawson, Jr., takes his place, and J. I. Davern from Southern Pacific General Offices takes the place of Dawson.

REFINING DEPT. Mr. M. T. Jacobs resigned as Chief Clerk at Port Arthur Terminal. Mr. H. M. Herron, Chief Clerk of Southern Terminals, assumes the duties of Chief Clerk at Port Arthur Terminal; and Mr. H. M. Snyder has been assigned to the position of Chief Clerk of Southern Terminals.

Mr. R. H. Waldron spent the holidays at Canal Dover, Ohio, visiting his parents.

Miss Gleness F. Cates has resigned her position as stenographer at Portland Terminal. Miss Cates has been with the Company for nearly three years, and we are sorry to lose her services. She did not divulge her plans for the future, but probably some of the boys around Portland could give us this information.

Mr. R. T. Richardson has joined the Telegraph force at Port Arthur Works.

Mr. O. C. Butcher has been transferred from Bayonne to Delaware River Terminal.

Mr. Henry Grimm has been transferred from Amesville to Port Arthur Terminal.

Since Tom Mullin and Dan Moran are unable to decide which has the best machine, we suggest a race between Dan's new Oakland and Tom's new Overland.

Mr. W. B. Williams, Chief Clerk at Mobile Terminal, spent Christmas in New Orleans. Mr. Williams was formerly at Amesville, and his many friends were glad to see him.

Dr. H. O. Eyssell, formerly with the American Smelting and Refining Company, Kingston, Ontario, has been engaged as chemist at Port Neches Works. We extend Dr. Eyssell a hearty welcome.

Mr. William Kneisler, Superintendent Providence Terminal, is spending his vacation in Texas visiting his friends and relatives. Mr. Kneisler made the trip from Bayonne to Port Arthur via *SS. Texas*.

The boys in the Refining Department were surprised upon learning that Miss Hattie Duke and Mr. C. Baylor Hull were quietly married, December 17. Mr. and Mrs. Hull are receiving congratulations from their many friends.

Mr. R. Amundsen, Chief Clerk Bayonne Terminal, is spending the Christmas holidays in Mobile, visiting his parents.

Mr. Frank A. Nice of the Houston Office spent Christmas with his parents at Lake Charles, La.

Mr. W. N. Long, Chief Clerk at Port Arthur Works, enjoyed a hunting trip to West Texas. Mr. Long had the luck of bringing down a fine buck. He sent it to Port Arthur, so the boys had venison as an entree for Christmas dinner.

Mr. A. B. Cox, Chief Clerk of the Northern Terminals, spent a few days at Baltimore Terminal.

Mr. L. L. Haddock of the Houston Office accompanied Mr. W. E. O'Niell and the Roofing salesmen on their trip to Port Neches Roofing Plant.

On the night of November 10th a 37,500 barrel tank at Humble, Texas, owned by The Sun Company, burst open and all of the contents, except a small portion retained by the fire levee, overflowed upon a large area of the adjacent prairie. Immediately afterward a number of small ditches were very hastily constructed to recover as much of the waste as possible, but apparently only a very small portion was saved.

The shell of the tank appeared to have split open on one side only, was entirely detached from the bottom along its circumference, and lay out practically flat on the ground. Portions of the

wooden roof floated as far as five or six hundred feet from the tank site.

An investigation of the accident was conducted by Messrs. E. H. Catlin, T. J. Hannon, and Burt E. Hull, of Houston, and E. R. Davis, of Port Arthur. It was ascertained that the tank had been erected on its present site in the year 1905. Practically all of the plate in the bottom and first and second rings of the shell was second-hand material and was the remainder of a tank damaged by fire at Spindle Top in the early days. It was also learned that shortly after the tank was erected on its present site, a sheet in the second ring cracked and a large quantity of oil was lost. The sheet was repaired and afterward the tank gave satisfactory service for several years. For some time previous to the recent failure, the tank had been empty and was being filled at the time of bursting. The sketch plates in the bottom and near the bottom angle had been corroded until they were very thin; in some places they were less than one-sixteenth of an inch thick. The rivet heads in the bottom were badly corroded and some of the inside heads were entirely eaten off the bottom angle rivets. Some of the plates in the first and second rings were crystallized until they were as brittle as cast iron, and could be readily broken along the edges with a machinist's hammer. The bottom angle was also very much crystallized and broken or split throughout its entire length. The cause of the failure of the tank appears to have been due, primarily, to the weakened condition of the joint between the bottom and the shell. The rupture of the shell and bottom angle must have been almost instantaneous to have caused the shell to be thrown out flat on the ground.

MARINE DEPT.

Mr. J. S. Moss, Auditor from the General Office, is now going over the books of the Marine Department. So far Mr. F. L. Hanks, our genial chief accountant, looks serene, but as Mr. Moss has only been here a few days it is a little early to state whether congratulations or condolences are in order.

Later:—However, Hanks is offering odds that no horses, blankets, etc., have been charged to Office Expense instead of Investment on the Marine Dept. books. Sales Department, N. T., please note.

TREASURY DEPT.

We are pleased to announce the marriage of Miss Alva Reynolds and Mr. Charles F. Regan, in the latter part of November. Mr. Regan is in Creditman Symms' office. Their many friends predict for them a happy and prosperous married life.

Creditman Symms made a business trip to the Eagle Lake section recently.

Treasurer Green is a familiar figure on the Houston Country Club golf links these days. His record qualified him to participate in the Jesse Jones cup match; however, we are sorry to report that in this match he failed to "bring home the bacon," though he made a noble effort. It was not only his "off-day," but he had for his opponent one of the best golfers in this section, Mr. C. C. Lewis, Commercial Agent of the Frisco Lines.

Mr. Ernest Carroll safely returned from his sojourn in the big game country. His party report lots of fun, shooting rattlesnakes and wild hogs.

SALES DEPT. N. TERRITORY

Mr. Percy E. Gerard has become connected with the Company as New York Salesman.

Mr. A. J. T. Jalbert has recently been appointed Agent at the Lewiston, Me., Refined Station, succeeding Mr. U. A. Marcotte resigned.

We have added Stoughton, Mass., to our list of Refined Stations with Mr. Donald J. McEachran as Agent.

Mr. E. L. Ketcham, formerly Salesman in Chicago, has been transferred to Milwaukee.

Richmond, Va., was recently added to the list of the Norfolk District Refined Stations.

Philadelphia District opened its first Gasoline Filling Station on December 1.

Mr. Kenneth Campbell, a new member of the New York District Selling Staff, will solicit New York City Trade.

Mr. Frank A. Wolfington entered the service as a general lubricating salesman in the Philadelphia District on Nov. 20, and will cover the territory south of Market Street in Philadelphia. Mr. Wolfington was with the Atlantic Refining Company for about five years covering special territories in Pennsylvania.

Mr. W. H. Kershaw, Manager of the Paving and Roads Division, Northern Territory, has been appointed Non-Resident Lecturer in Highway Engineering at Columbia University for 1913-1914.

Mr. L. O'Malley has recently returned from a successful trip through New York and Ohio. He appears very optimistic regarding business conditions in this District and the results obtained would indicate that his belief is well founded.

It has been arranged with the Boston District to annex the County of Fairfield, Conn., to the New York District.

Mr. Frank H. Knight, of the New York Office, is closing up contracts for our Motor Oils with some very good Motor

manufacturers. Several will recommend our oil to all owners and purchasers of their trucks and cars. These connections are made after prolonged testing of our Motor Oils against the best competitive oils on the market.

At a recent Army and Navy football game in New York City, where the Navy lost 22 to 9, it is confidently stated by those who should know that the Navy would have won if the Navy mascot goat had carried a sign reading "Texaco Ursa," or if each of the players had been given Ursa just before the game,—*and all of this is suggested by some of the Navy men themselves.*

Mr. Frank J. Shipman, formerly connected with The Texas Company, who left to take up some other work, has returned to our service. He has charge of the Government and Shipyard work. "Ship," as he is familiarly known, can't decide whether he will officially answer to the name of "Ursa" or accept his former title, "Little Cupid," both names being used by his Navy friends.

Mr. P. G. Elliott, Superintendent of the Far East Division of the Export Department, has been traveling with our various Lubricating Engineers, learning some of the fine points about our oils. He spent a week in overalls in one large plant. When Mr. Elliott gets to China he will introduce Crater Compound for nearly everything in that country.

Mr. E. R. Phillips, who was until recently connected with one of the large Mexican oil companies, has been in Mr. G. R. Rowland's department, under instructions for Export work.

Mr. A. J. Keller, Export Department Engineer, attached to Mr. Rowland's office for general instruction, has just returned from a seven weeks' test at a big manufacturing plant, where he did good work getting our oils working properly.

When our good friends from the South visited us the first of October they did not make any remarks upon the bright and clean appearance of all of our offices, probably supposing that everything was always shined up like a furniture exhibit in the Northern offices. The change from ordinary good office appearance to the exhibition kind was caused by an office boy competition which started in September and which ends on December 15. A full report will be furnished upon completion, giving the winner's name. It is only necessary to state now that in order to own the prize for efficiency every boy vied with the others, and that there never was such a cleaning and polishing. All samples of Automobile Soap and Floor and Furniture Polishes were confiscated, and although some of us had clothes spoiled by the profuse application of Liquid Wax to our desks, we all pitched in to help our particular boys win that prize. Since starting some of our boys have fallen way behind; none are 100 per cent, but the good ones are finishing in fine shape.

Mr. H. S. Crocker, representative from the Tank and Pump department of the Boston Office, left the first of the month for an extensive visit to Norfolk, Philadelphia, and New York Districts, to instruct the salesmen in those Districts relative to handling pumps and tanks. His confreres in the Boston Office are all very glad he can take this trip.

Mr. R. C. Hayes, Agent at Boston Station, has a new coat. Mr. VanBibber says this coat covers a multitude of *shins*. Mr. Hayes and his coat should be seen to be appreciated.

The Boston District sends a detailed account of the prowess of members of the Texaco Tandem Bowling League for which space is lacking. The team standing was as follows:

	Won	*Lost*	*Pinfall*
Miller-Moran	13	7	2704
Davis-Flanagan	13	7	2632
Cook-Cooney	9	11	2556
Fuller-Boland	5	15	2523

Mr. C. E. VanBibber, of the Boston Office, made a trip in the U.S.S. Submarine "K-2," from Quincy to Provincetown, Mass. Texaco Cetus Oil was the lubricant used for the Diesel Engines, which did fine work, running at 420 to 440 revolutions per minute. The average speed of the boat was 13½ knots per hour, the highest speed being 14 knots per hour. Accompanying Lieut. Moses, the naval commanding officer, and his crew of twenty men, on this trip were the following representatives of concerns interested in the vessel's performance: Mr. Gardner, Resident Engineer, of the Electric Boat Company, and his assistant, Mr. Forrester; Mr. Hooper, Assistant Engineer, of the New London Ship and Engine Company; Mr. MacEntee, Naval Inspector; Capt. Glenn, of the Fore River Shipbuilding Company, acting as Sailing Master.

The lubrication, during the entire run, was reported as being perfect, the engineers stating that in their opinion Texaco Cetus Oil was the best lubricant for this type of engine that they had ever used. Mr. Forrester, who was in charge of the Engine Room, made the further statement that Cetus Oil seemed to have more body, more adhesiveness, and did not throw off from bearings as in the case of competitive oil, and that the general lubrication was much better than with the oils formerly used. He advised the engineers, in a meeting at the close of the day's trip, that he noticed that the Cetus Oil in mixing with salt water, which is apt to occur during the operation of these boats, separated from the emulsion very quickly, and after being used for several hours, was in a more normal condition than the oil used heretofore. As soon as Mr. F. J. Shipman completes his threatened trip in a Government Aeroplane (to test out the engine lubricated with Texaco Ursa Oil), we will feel that we have covered everything in the "heavens above, the earth beneath, and the waters under the earth."

A meeting of Salesmen of the Paving and Roads Division presided over by Manager W. H. Kershaw, was held in the New York meeting rooms Dec. 4-5. The following subjects were discussed:

1. Object of Meetings.
2. Conventions.
3. History of the Texas Company.
4. Story of Our Oils from Field to Terminal or Refinery.
5. Miscellaneous Views.
6. Story of Road Oil from Refinery to Application.
7. Storage Tanks.
8. Asphalt from Refinery to Customer.
9. Selling Points.
10. Contracts.
11. Credits.
12. Order Blanks.
13. Complaints.
14. Quotations.
15. Freight Rates.
16. Barrel Charges.
17. Reports.
18. Road Building Machinery.
19. List of Streets.
20. Amiesite.
21. Alden Speare's Sons Company.

Subjects 3-4-5-6-7-8 were illustrated with pictures thrown on the screen by a lantern. Mr. Duggan attended the meeting and explained the design and handling of tank cars. On December 6, all of the salesmen visited the Bayonne Terminal. After inspecting the Terminal, Asphalt Sheds, Laboratory, etc., Mr. Duggan and his Chief Inspector, Mr. Raup, gave a demonstration of loading and unloading cars, explaining in detail how to handle cars of Asphalt and Binder containing moisture. On December 8, the salesmen visited the Terminal at Marcus Hook, returning to Philadelphia to attend the convention of the American Road Builders' Association, held in Philadelphia, Dec. 9-12.

RY. TRAFFIC DEPT.

Mr. Patrick Henry Egan, an old-time railroad man, has been appointed Car Inspector at Lockport, Ill. The increased number of our cars in service at Lockport necessitated this appointment.

Mr. William Kehoe, formerly of the Traffic Department, paid us a visit shortly after the first of the month.

Mr. G. A. Linsday, better known as "Abe," in charge of Freight Claims in the Chicago Office, recently became the proud father of a bouncing girl. Abe would appreciate suggestions as to an appropriate name for his daughter, who, he indicates, closely resembles him.

Division Traffic Agent Ervin, at New Orleans, advises that Mr. C. J. D. Gerrets, Chief Clerk in the New Orleans Traffic Office, has been elected "Clerk" of Orange Camp No. 6, Woodmen of the World, of Algiers, La.

PRODUCER'S OIL COMPANY

T. B. Hoffer was transferred on December 1, from the Engineering Division of the Pipe Line Department of The Texas Company to the Engineering Department of the Producers Oil Company, his headquarters remaining at Wichita Falls.

Geo. Pruter, who for the past six months has been employed by the Tampico Company in Mexico, was on the first of December made Traveling Auditor for the Producers Oil Company.

So long as we love we serve; so long as we are loved by others I would almost say that we are indispensable; and no man is useless while he has a friend.

—Robert Louis Stevenson.

No fame, were the best less brittle,
No praise, were it wide as earth,
Is worth so much as a little
Child's love may be worth.

—Swinburne.

SUGGESTIVE INDEX OF ARTICLES IN CURRENT PERIODICALS

THE MAIN INTEREST IS INDICATED BY
DEPARTMENTAL CLASSIFICATION OR BRIEF COMMENT

EXECUTIVES Selling Costs, Wages and Expenses, by Edward T. Runge—*American Machinist*, October 23, 1913.

Building a Cost System—*The Engineering Magazine*, December, 1913.
The fourth of the articles by Benj. A. Franklin under the serial title Experiences in Efficiency.

Testing the New Employe—*Business*, December, 1913.
"As a rule you can trace labor troubles to the influence of one man. The time to find that one man is when he first starts. It is enough to justify our New-Man-Committee system, when I say there has been only one small strike affecting only a part of the plant in the last twenty years."

NATURAL GAS The Condensation of Gasoline from Natural Gas, by George A. Burrell and Frank M. Siebert—*Chemical Engineer*, September, 1913.
Gives results of work by Bureau of Mines.

FUEL OIL Oil Fuel for Steam Boilers, by R. T. Strohm—*Electrical World*, Oct. 4, 1913.
Considers the factors that determine whether oil should be used for fuel in preference to coal.

REFINING Asphalt Plant—*Municipal Engineering*, October, 1913.
Description and costs of operation of Municipal Asphalt Plants of St. Louis.

4,000,000 Metal Paint Pails and Drums a Year—*Am. Machinist*, Oct. 23, 1913.
By H. J. Hinde, Manager of Toledo Machine and Tool Co. Illustrations of all operations,—all done by machinery,—in a fine plant at Granite City, Ill. The increasing scarcity and cost of wood renders important all improvements and development in the manufacture of sheet-metal pails, drums, etc.

Kinks in a Bill of Lading, by George H. Tower—*System*, December, 1913.

SALES—ADVERTISING Who Hungers for Your Goods?—*System*, Dec., 1913.

How a Sales Manager Puts New Heart into his Men through "Home" Enthusiasm, by Daniel Louis Hanson—*System*, December, 1913.

Contact with Salesmen—*Business*, December, 1913.

Sales Ideas That Win—*Business*, December, 1913.
"A half-dozen personal selling secrets that help to close deals."

Gasoline Pumps—*Automobile*, October 9, 1913.
Sidewalk gasoline pumps draw trade. Types of pumps for curb selling.

EXPORT Planning for Commerce via Panama Canal—*The Iron Age*, October 16, 1913.
Article by Charles M. Pepper, recently foreign trade expert of the U. S. Department of State.

The Fuel Question as Seen Abroad—*The Motor Truck*, November, 1913.
Address by J. S. Critchley, President of the Institution of Mechanical Engineers, London.

Export Fakes and Fakers, by Walter F. Wyman—*Business*, December, 1913.

PURCHASING The Purchasing Department of a Manufacturing Organization, by A. C. Ward—*The Engineering Magazine*, December, 1913.

Getting What You Buy, by Carroll D. Murphy—*System*, December, 1913.

GENERAL Keeping Ahead of Rising Costs, by W. Sammons—*System*, Dec., 1913.
The first of a series of articles which will cover a wide investigation.

Ultimate Militancy—*The Engineering Magazine*, December, 1913.
Strong editorial in which conditions in Mexico are used to illustrate the "consequences of the theory and practice of direct action to enforce party purposes," and the philosophy is applied to the opposing tendencies shown "in our industrial philosophies." "On one hand is the school of personal free will and initiative, fearful of suppressing any workman's individuality by defining standards or studying tasks. On the other is the absolutism which prescribes every detail and repels suggestions from any worker." "Salvation lies in the proper balance between the two."

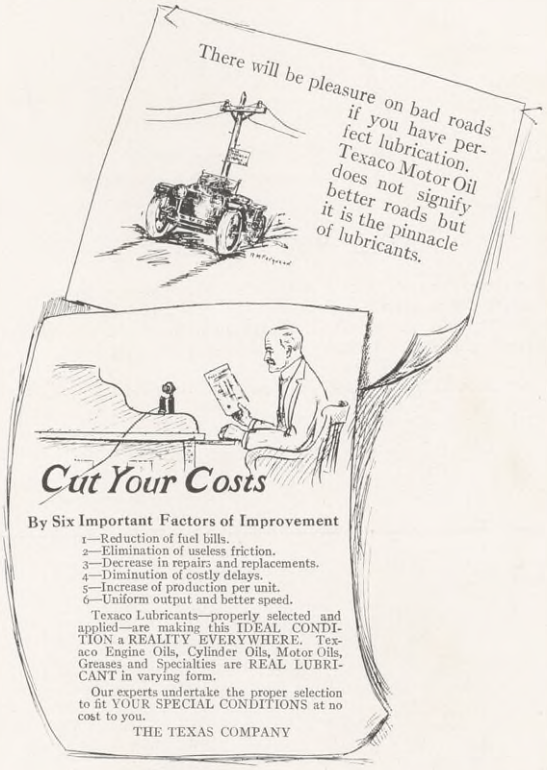
Labor and Not the Man a Commodity, by T. E. Durban—*Annalist*, Dec. 22, 1913.

Fireproof Buildings,—*Sibley Journal of Mechanical Engineering*, Oct. 1913.

Fire Protection—*Industrial Engineering*, October, 1913.

The Sulzer-Diesel Locomotive, *Engineering News—The Eng'ng Mag.*, Dec., 1913.

Denatured Alcohol as a Carbon Remover and Engine Cleaner, by Joseph A. Anglada, M.E.—*Cyclecar Age*, November, 1913.
Paper read before National Gas Engine Association. Experiments and tests explained. Engines showed marked increase in operating efficiency when cleansed with denatured alcohol in the ways noted in the experiments.



Here They Are

We are showing two suggested "ads" chosen from the first batch that came in.

The upper one is by Mr. R. M. Ferguson, barrel clerk at the Dallas office.

The lower one was submitted by Mr. R. C. Galbraith, superintendent at Tulsa.

We have not changed Mr. Ferguson's advertisement, printing the original sketch as sent in by him.

In Mr. Galbraith's advertisement we have not changed the text matter, but our artist has drawn a rough sketch according to his suggestion at the head of the ad.

While this is being printed more advertisements are coming into this office.

But we can't get enough of them.

We want an idea from everybody.

So sit down, spare us a few minutes of your time, and send in a suggestion to the Advertising Division, New York office.

See if your's can't be printed in the next issue of THE TEXACO STAR.


Men are four:—
He who knows, and
Knows he knows,—
He is wise—follow him.
He who knows, and
Knows not he knows,—
He is asleep—wake
him.
He who knows not, and
Knows not he knows
not,—
He is a fool—shun
him.
He who knows not, and
Knows he knows not,—
He is a child—teach
him.