The TEXACO STAR

The Great Torii at Miyajima, Japan

Vol. XIV JUNE 1927 No. 6

THE FRONT COVER this month, reproduced from a beautiful picture in the November 1911 issue of the *National Geographic Magazine*, shows the great torii at Miyajima, Japan, at high tide. Rising from the sea, a quarter of a mile from the shore, stands this old emblem. As the traveler sails into the beautiful harbor he will be impressed by this sight which will remind him that not only is the ground sacred upon which he will soon stand, but the sparkling waters of the beautiful bay as well.

The torii (pronounced to-re-ee, singular and plural) is one of the most picturesque objects peculiar to Japan. It is a Japanese arch commonly built as a gateway or gateways at the approach to a sacred place. It is a skeletonlike post-and-lintel construction designed with delicately curved lines.

In the *Geographic* article mentioned, the writer, William W. Chapin, says:

"Little is known of the origin of the torii. Some writers claim its form is a derivation of the Chinese character meaning heaven, and that it was introduced into Japan with the Shinto cult, while others state that it was originally a perch for the sacred birds. The torii marks the approach to both Shinto and Buddhist temples, those belonging to the former being sometimes distinguished by a piece of rope stretched along the cross-beam, which symbolizes purity. To this rope is also attributed the power of protection from evil spirits.

"A large and most picturesque torii is at Miyajima, the sacred island of Japan. Standing out in the sands a quarter of a mile from shore at high tide, it is a very conspicuous object in the beautiful bay."

If attractive in the daytime (see inside page of back cover), it is doubly so under the light of the moon—as shown on front cover.

The TEXACO STAR

PRINTED MONTHLY FOR DISTRIBUTION TO EMPLOYES OF THE TEXAS COMPANY

Vol. XIV June 1927 No. 6

"All for Each—Each for All"

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

The Courage of Convictions

We give first editorial place to an extract from a baccalaureate address delivered on May 31 at Austin College, Sherman, Texas, by Hon. T. W. Gregory, sometime Attorney General of the United States. Mr. Gregory said in part:

We live in the midst of the greatest material prosperity; but it requires no argument to show that our spiritual progress has not kept pace with our material advancement. There has been a perceptible slipping of moral standards, an unprecedented increase of murder, robbery, and other crimes of violence, and an utter inability to lessen and punish crime.

One man charges these conditions to prohibition, another to woman's suffrage, and still another to the proximity of the planet Mars. I am convinced that the most potent cause is the fact that we no longer maintain in its full force and purity a splendid quality which has come down to most of you from your ancestors. That quality is the courage of your convictions, and this courage of conviction is my theme.

I believe it is the greatest quality a human being can possess, and without it no man or woman can be a great or even valuable citizen. To possess this quality in perfection a person must have both dauntless courage and lofty convictions. In order that there may be no doubt as to exactly what I mean, I will put it this way—if you have the courage of your convictions you will habitually stand for the right because it is the right and not because of any selfish motive. . . .

I am no pessimist, but a firm believer in the ultimate triumph of good over evil; but no intelligent observer can fail to note that against our inherited idealism there is beating a wave of crass materialism which is testing the foundations of the ancestral faith of the South. On every side we see a more intense striving after the selfish and grosser things of life and a greater disposition to discount, if not ignore, spiritual values. The most conclusive evidence of this tendency is seen in the vastly increased respect for money and the disposition to value a man according to his bank account and not according to his culture, character, or integrity.

Men and women do not change in a day, but gradually, sometimes almost imperceptibly. I left this State fourteen years ago and was here only in a casual way during the years which followed; on my return I had a number of experiences which convinced me that some of our most cherished standards were being endangered. I have repeatedly come in contact with men whom I had seen little or nothing of during those years and in a number of instances I have been shocked by the fact that they referred laughingly, if not with approval, to instances of crookedness, overreaching, and chicanery which in former years they would have condemned in the bitterest terms. In almost every instance the man was one of those who had rather suddenly acquired

what we consider great wealth and with it had come a disintegration of the moral fiber and a cynical indifference to the finer things in life. Money is a great thing because with it much that is good can be accomplished. It will take you a long way, but it will not take you all the way. Some wise man said in substance that he who has withstood prosperity has nothing to fear from adversity.

Another evidence of decadence is seen in the indisposition of many of our people to hold public officials to a strict account. Not infrequently it is said of a corrupt public servant that he is no worse than the others, but that he has been so unlucky as to be caught up with.

These are illustrations of a cynicism which is the greatest evil of our age. Cynicism implies a sneering unbelief in sincerity and rectitude and a despising of virtues and pure and lofty motives. Above all things be not a cynic, for he who is a cynic in his youth is likely to develop into a suicide or a criminal in later years.

As an antidote to the tendencies of the hour I commend to you above all things loyalty. It is the finest word in any language. Be loyal to this college, to your State, to your party, to your church if you have any, above all to your principles. Be not a scoffer, but boldly do your part in rectifying that which you believe to be wrong.

The exercise of citizenship is the foundation of this Republic. There is no government by the people when the majority of men and women fail to exercise the right of suffrage. Within the last few years sometimes only a small minority of Southern voters have gone to the polls, which demonstrates not only a failure to perform a patriotic duty, but a cynical indifference to the result of elections and a heedlessness of who shall make, construe, and execute our laws.

By this I do not mean that you should take sides in every dog fight that comes up; you will confront enough large issues to exercise your energies. You may ask how are you to know which is the right side of these issues; your training in this institution and your inheritance of Scotch and Southern idealism should enable you to choose the right.

Idealism pays dividends never received by the materialist and the cynic. After all you must live with your conscience, and in later years with your memories, and it is well worth while to live with these in peace.

You are entering into a glorious adventure. As far as opportunity is concerned, there lies before you an era unequaled in the past. You are sent forth as trained men and women; with your ancestry and your training you should have the wisdom to know the right and the courage to do it; you should bring to the solution of the public questions open minds, not distorted or warped by personal interest. He who leads or follows the multitude to do evil is no less an enemy of popular government than he who wears the livery of the boldest oppressor.

It may be your fortune to win the prizes you strive for, or you may see them slip from your grasp. If your fate should be the latter, remember the defense of Demosthenes: "Lay not the blame on me, oh Athenians, that it was Philip's fortune to win the battle; the end depended on the gods, and not on me." And remember that when life's fitful dream is drawing to its close, happy is the man who is able to say with that greater than Demosthenes and that greater than Philip, "I have fought a good fight, I kept the faith."

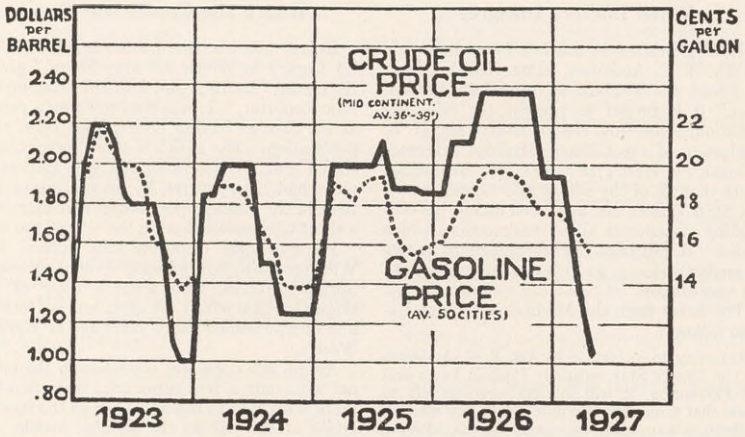
The Cheapest Commodity

In our March issue we gave the official figures of the Government's Department of Labor showing the increases since 1913 to October 1926 in the prices of all the principal commodities. Gasoline stood at the bottom of the list.

We now show a graph which gives the average prices of Mid-Continent crude oil and the corresponding averages of the tank wagon gasoline prices in 50 cities from the beginning of 1923 to the end of April 1927. The general parallelism is apparent.

When one considers the peculiar conditions under which crude oil is produced—conditions primarily fixed by nature but aggravated by legal and other obstacles—it seems that overproduction and the consequent falling of crude oil prices affects the price of gasoline more than it ought to; because the enormous expense of storage, when production much exceeds marketing possibilities, offsets the reduced cost of oil at the wells.

The facts simply prove the intensity of the competition that exists within the entire petroleum industry. The National City Bank of New York in its bulletin for last month says: "Clearly the difficulties from which the



oil industry is suffering are to a large extent the result of the intense and destructive competition that prevails within it. In the face of constant evidences of this competition it is hard to see how the notion can persist with so many people that oil companies have it much their own way in determining market conditions. As a matter of fact, in few industries are the workings of the law of supply and demand more uncontrollable than in oil."

The petroleum industry, however, should take pride and comfort in the knowledge that manufacturing skill and efficient operation have made it possible, in spite of all difficulties, to achieve the result of maintaining for its major product the position of being the cheapest of all staple commodities.

"The official figures show," says the American Petroleum Institute, "that the petroleum industry has been able, in the face of an enormously increasing demand, to maintain a price level far below other commodity groups. They prove the high efficiency of the industry and the constant betterment of its methods. They demonstrate, further, that the full benefit of efficiency and constant improvement, in spite of increasing labor costs, has been passed on to the consumer."

In reading the graph shown above, bear in mind that the city tank wagon prices given are much more than double the tank car prices at refineries. Truly, the cheapness of gasoline is marvelous. A gallon of drinking water brought from a mineral spring costs you more than a gallon of gasoline, though the cost of producing the water is next to nothing and the manufacturing equipment and operations necessary for making the gasoline are innumerable and very costly. A gallon of gasoline costs you much less than a shave,—and remember always that along with the gasoline purchased at a service station goes free air, free water, and other services, and that the price of the gasoline (in every State except New York, Massachusetts, and Illinois) includes a tax of from one to five cents. Think of all this, and wonder at the industrial triumph achieved in the price of gasoline.

The foregoing reflections are submitted by the editor of the *Star* as representing only such information as every one should have who writes upon the subject. In contrast, editorials have appeared in many newspapers in which a lack of such minimum information has been manifested.

Nothing is so rash as fear; and the counsels of pusilanimity very rarely put off, whilst they are always sure to aggravate, the evils from which they would fly.—*Edmund Burke.*

Cowardice among the people's representatives is a greater menace to this government than corruption.—*Joseph Weldon Bailey.*

His valour is the salt t' his other virtues,
They're all unseasoned without it.
—*Ben Jonson.*

When Doctors Disagree

Having printed in our last issue an article by Dr. J. C. Anderson, State Health Officer of Texas, on "Typhoid Fever and Its Prevention," it is proper to present the following communication from the Secretary, Mr. H. B. Anderson, of the Citizens Medical Reference Bureau, 226 West 47th Street, New York City. Note that all of the advice and suggestions of the State Officer are approved except his concluding statements about vaccination, which ended: "If you want the best safeguard known to medical science, go to your family physician for vaccination."

The letter from the Medical Reference Bureau follows:

Referring to an article by Dr. J. C. Anderson in The Texaco Star, entitled, Typhoid Fever and Its Prevention, it will interest your readers to know that a number of public health and medical authorities have gone on record against advising the public generally to be vaccinated against typhoid fever.

The American Journal of Public Health, which is the leading public health journal in the United States, in its issue for October 1926, editorially says: "In regard to typhoid fever we commend any drive which will teach the facts or insist on pure water supplies and other sanitary measures. We doubt that the time has come for vaccination of the general public against this disease."

Also Dr. John Dill Robertson, former Commissioner of Health of Chicago, in an address published in the Illinois Medical Journal, July 1926, says: "When the typhoid fever vaccine was first produced it was freely predicted that we would be able to conquer typhoid in our City through its use," and adds, "Sanitarians, with their pasteurization, their chlorination, their food coverings, their screenings, their elimination of toilets from back yards, the elimination of horses by the automobile, altogether did what it was hoped the typhoid immunizing agent would do."

With regard to typhoid innoculation in the army, official statistics show that in one company of 248 men, 98 of them contracted typhoid, showing that where sanitary conditions were completely broken down vaccination against typhoid did not prevent the disease.

Statistics from the Italian army, where vaccination against typhoid is made a requirement, show that during recent years the incidence of typhoid has been many times what it was in the civilian population of the United States.

Typhoid fever is rapidly being abolished throughout the United States as a result of improved sanitary and living conditions.

Everyone who does his best is a hero.

Where the Credit Was Due

In last month's issue was an article entitled, "A Legacy in Which All May Share," giving the credit, "Barbara Boyd, in the Washington Law Reporter." It was sent to us by a reader of the *Star* as having been copied from that publication. The article's short introduction stated that the following last will and testament had been written by an old insane patient in the Chicago poorhouse; and there was a short comment following the text of the will.

We now hear from the true author, Mr. Williston Fish, 191 Johnson Avenue, Western Springs, Illinois, who sends a copy of the original article which, he says, was written by him and published many years ago in *Harpers Weekly*.

As the will itself was copied from the original with only a few immaterial discrepancies, there is no need to repeat it; but as the fancied origin of the will in the genuine article was entirely different, we give—with apologies to Mr. Fish—the title and introductory paragraphs of the article as it was first published in *Harpers Weekly* signed by Williston Fish:

A LAST WILL

He was stronger and cleverer, no doubt, than other men, and in many broad lines of business he had grown rich until his wealth exceeded exaggeration. One morning, in his office, he directed a request to his confidential lawyer to come to him in the afternoon—he intended to have his will drawn. A will is a solemn matter, even with men whose life is given up to business, and who are by habit mindful of the future. After giving this direction he took up no other matter, but sat at his desk alone and in silence.

It was a day when summer was first new. The pale leaves upon the trees were starting forth upon the yet unbending branches. The grass in the parks had a freshness in its green like the freshness of the blue in the sky and of the yellow of the sun—a freshness to make one wish that life might renew its youth. The clear breezes from the south wantoned about, and then were still, as if loath to go finally away. Half idly, half thoughtfully, the rich man wrote upon the white paper before him, beginning what he wrote with capital letters, such as he had not made since, as a boy in school, he had taken pride in his skill with the pen.

Many men never discover the larger part of themselves; emergencies and heavy responsibilities should call out the hidden reserves of a man's nature, latent energies should spring forth.

Whom the Gods Love

From this dark portal I cry: "Farewell."
Heart of my Heart,
Springtime I have had, and rain,
And the song of the mounting lark.

In the gleam of your hair have I found
Adventurer's gold,
From your kisses have learned
The love of the world!

Grieve not my youth should have missed
Maturer desire,
Springtime I have known and you,
But never a dying fire!

—*Jacqueline Walters.*

The distinguished astronomer John A. Brashear, of Pittsburgh, when his wife preceded him in death made this epitaph for her: "Too often we've studied the stars together, to have any fear of the night."

"None but the brave deserve the fair."

The Wild Flowers

The *Cape Cod Magazine* (Hyannis, Massachusetts), in its issue of May 15, has an editorial entitled, "Is It Too Late to Save Our Mayflowers?" which we give here because it should be applied to local conditions all over the country. The *Cape Cod Magazine* always has had a peculiar charm which deserves for it a wide circulation.

All along the King's Highway one is saddened by the sight of children selling Mayflowers. They hold out the sweet enticing bouquets, tied into tight little bunches, for the passing motorist. One child reported sales amounting to $10 in one week. He had followed the usual custom, pulling the flowers up from the roots—the Mayflower has a tough stem, but uproots easily. The youngsters go out into the woods with market baskets and gather their booty wholesale.

Now of course one can't blame them—a child would hardly be a normal child if he had forethought enough to understand what he was doing to the future of our woods. It is for us grown-ups to step in and lay down the law. This year it was hard to find Mayflowers in many of their old haunts—haunts where last season they were plentiful enough. If landowners will enforce their rights to prevent trespass, it will do a lot to save these flowers, for probably few of the children pick on their own domains. Then if motorists will refuse to buy, in spite of the fragrant temptation of the posies, and explain why to an occasional child, it may help matters.

Mrs. Cyrus W. Merrell of the Lowthorpe School

Continued on page eight

Loyalty and Courage

Where is loyalty?
If it be banished from the frosty head,
Where shall it find a harbour in the Earth?

—*Shakespeare.*

Courage, the highest gift, that scorns to bend
To mean devices for a sordid end;
Courage, an independent spark from Heaven's bright throne,
By which the soul stands raised, triumphant, high, alone—
The spring of all brave acts is seated here,
As falsehoods draw their sordid birth from fear.

—*Farquhar.*

LIFE WISDOM

The wisdom of the wise and the experience of ages may be preserved by quotation.

—*Benjamin Disraeli.*

Have faithfulness and sincerity as first principles.—*Confucius.*

Nothing is more noble, nothing more venerable than fidelity.—*Cicero.*

Our fears do make us traitors.—*Shakespeare.*

He will never have true friends who is afraid of making enemies.—*Hazlitt.*

Courage is the greatest quality of the mind next to honor.—*James Lane Allen.*

Courage—unless a man has that virtue he has no security for preserving any other.

—*Samuel Johnson.*

Without courage there can be no truth, and without truth there can be no virtue.

To see what is right and not to do it is want of courage.—*Confucius.*

No great deed is done by falterers who ask for certainty.—*George Eliot.*

"Believe and venture; as for pledges, the gods give none."

And what he greatly thought, he nobly dared.—*Alexander Pope.*

Never mind the future. Be what you ought to be; the rest is God's affair.—*Amiel.*

A brave soul is a thing which all things serve.—*Alexander Smith.*

Courage conquers all things; it even gives strength to the body.—*Ovid.*

Be of good courage; that is the main thing.

—*Thoreau.*

Teach your son. It is the only remedy the world has ever known.

—*Josephine Daskam Bacon.*

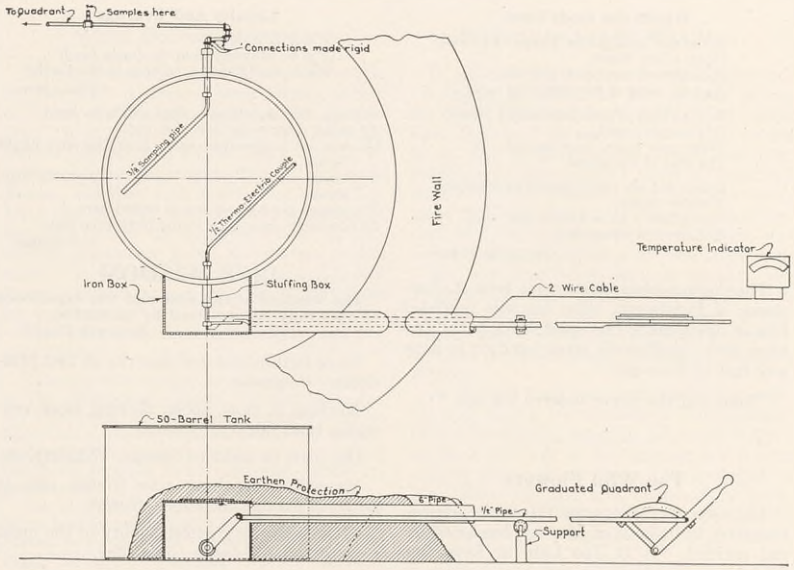


Fig. 1. A sketch showing method of determining temperatures under the burning surface, and the method of taking samples of oil under the burning surface during a tank fire.

Why Tanks Boil Over

L. E. BARROWS, Division Manager, North Central Texas Division, Producing Department

It was the writer's privilege during a portion of the years 1910-1911-1912, shortly after he joined The Texas Company's organization, to be engaged, as chairman of our Fire and Accident Committee, in a series of experiments and tests for the purpose of solving, if possible, some perplexing problems relating to tank fires. Incident to the work the question arose, "Why do tanks of oil boil over?" A questionnaire to a number of practical and scientific men yielded a variety of answers most of which had as a basis free water or entrained water in the oil, a few giving, as a parallel case, the well known "pukeing" of a still at a refinery when water comes in contact with the hot shell.

Because of the differences in opinion and because there seemed no logical or scientific explanation available it was decided to conduct some actual tests to solve the question. The conclusions reached are set out briefly, at this time, lest we forget, in our expanded organization with its many ramifications through research committees and others, the data which may be buried in our files.

The final report of the Fire and Accident Committee was made December 2, 1912, a preliminary report having been made December 21, 1910. These reports commented on:

(a) The density of petroleum gases with special reference to explosive mixtures inside of large oil storage tanks.

(b) Electrical conductivity of petroleum gases as compared with air.

(c) Evaporation losses from large tanks of petroleum products.

(d) Explosion hatches for large tanks; determining the initial pressures inside the tank when the explosion occurs; recommending the hatch-tank

Fig. 2

A—Oil Tank.

B—Burning oil.

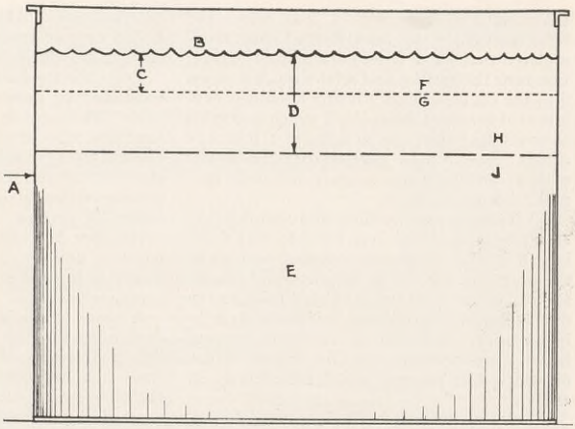
C—Hot oil zone prior to first boil.

D—Hot oil zone after first boil.

E—Crude oil.

F-G—Prior to the first boil there is a wide temperature difference between F and G, the latter being about the temperature of the oil E which is normal.

H-J—After the first boil the hot oil zone has increased in thickness indicated by D and there is a wide temperature difference between H and J, but not as sharply defined as between F and G.



Illustrating the temperature zones under the burning surface during a tank fire prior to and after the first boil over.

area ratio and weight of hatch per square inch.

(e) Experiments in connection with back-firing through long pipe lines, protected and unprotected, by fine mesh screens; also the use of fine mesh screen devices on the roofs of large storage tanks.

(f) Extinguishing tank fires by foam solutions and other means.

(g) The cause of "boiling over."

This article will set out the facts as determined in connection with Boiling Over.

The first step was to compile data on a large number of tank fires about which we had reliable information as to (a) the size of the tank (b) nature of the product (c) the amount of oil and free water in the tank (d) elapsed time of first and subsequent "boil overs," *etc., etc.*

It was found that some crudes boil over in less time than others. Gasoline does not boil over and for that reason is not such a dangerous fire. Heavy Mexican crude boils over quickly and often. A given crude in a given size tank has its first boil over in about the same elapsed time after it is fired. Oklahoma crude in 37,500-barrel tanks required about 6 hours for the first boil.

This information led to constructing a 50-barrel steel tank at our Port Arthur refinery, where all our experiments were conducted, equipped with devices for sampling the oil at any desired place under the burning surface and also a means (thermo electric couple) of ascertaining the temperature at any desired place—as illustrated in figure No. 1.

Successive fires in this tank yielded the following:

(1) After the tank of oil is fired and prior to the first boil over the temperature of oil below the burning surface is normal and the same as the temperature of the oil before firing except for a very thin zone close to the burning surface, and this zone of hot oil gradually becomes thicker as time elapses and at all times prior to the boil over there is quite a sharp line between very hot oil and comparatively cool oil.

(2) As the lighter fractions burn off, the heavier ones, which burn more slowly, remain near the burning surface due to their temperature which was clearly shown by means of the samples of oil taken during the fire. These samples showed oil of heavier gravity near the top, when corrected to 60° F, but the actual gravity at the high temperature near the burning surface was lighter than the main body of the oil in the tank.

(3) The extremely hot zone of oil near the surface gradually became thicker as time elapsed, but as stated there is a sharp line between very hot oil and cool oil until the first boil over occurs. Boiling is probably taking place at all times in the hot oil zone, at least a short time after the tank is fired, and this, coupled with the high temperature of the oil in this zone, maintains a state of equilibrium between the oil in that zone and the cool oil

below until so much hot oil, from which the light fractions have been burned, has accumulated that it can no longer maintain its position near the surface and settles quickly down into the cool oil below causing a sudden evolution of gas from the cool oil, which is normal as to its light fractions, and the first boil over occurs. This usually carries considerable oil with it into the space between fire walls and tank. See figure No. 2.

(4) Temperature readings and samples taken after the first boil over indicate that there is still a zone of very hot oil and cool oil in the tank, but the line of demarcation between the two is not as sharp as existed prior to the first boil over. Succeeding boil overs occur in like manner, but with a less time interval between them due to the thicker zone of hot oil which does not stay up in the oil body so easily.

When free water is in the bottom of a tank on fire it will cause a boil over after the hot oil zone has reached it, and it has been noted in some instances that such boils may not throw any oil out of the tank due to the distance from the burning surface to top of the tank.

It has also been reported that a tank has boiled over due to the top rings falling into the tank, and gas accumulation between these rings and the tank shell has forced the gas down into the oil and this sudden evolution of gas under the surface caused a boil over.

In order to satisfy ourselves as to entrained water in the oil causing a boil over we made up a crude oil with characteristics similar to Oklahoma crude by using residium—gas oils—kerosene—gasoline—*etc.*, all of which had been through a regular distillation process in the refinery and contained no trace of moisture or BS as determined by centrifuge and distillation tests. This manufactured crude oil boiled over in exactly the same way as did the natural Oklahoma crude.

From the foregoing it is evident that a Boil Over may be caused by one of several conditions. The most interesting and at the same time the one which is most frequently the cause is the very sudden evolution of gas below the burning surface due to hot heavy crude settling suddenly down into the volatile oil below the surface.

Gasoline does not boil over because its comparative uniform quality with practically no heavy ends causes it to burn uniformly and completely.

A heavy crude, such as that from Mexico, containing a very small percentage of the lighter fractions boils over quickly because those light fractions burn off quickly and for the same reason such a crude boils over many times during a fire.

Reading from some of the experimental data in connection with an Oklahoma crude fire we find a difference of 130° F. in a space of 2 inches just 3 minutes before the first boil over occurred. This difference in temperature was between 18½ inches and 20½ inches under the burning surface. At the same time at a distance of 18 inches below the burning surface the corrected (60° F.) gravity of the oil was 31° Be. or 3° Be. less than the original crude. Similarly, after the first boil over a difference of 440° F. in a space of 6 inches below the burning surface was indicated.

Later it is hoped there may be an opportunity to give some of the original data in connection with the "Foam" method of extinguishing tank fires, which is now so widely used, and also the data that led to the adoption of the explosion hatch for tank roofs.

Continued from page five

of Landscape Architecture sends us a set of rules for the picking of wild flowers which are worth remembering.

"Some of our flowers," she writes, "multiply so rapidly that they may be picked freely, such as our common blue violet, the buttercup, the daisy, and so forth, while to pick the trillium is almost certain death to the plant. The same is true of the pink lady's slipper or moccasin flower, and to pick the Mayflower (our exquisite trailing arbutus) with long stems is like cutting off the limbs of a fruit tree to obtain the fruit. . . . .

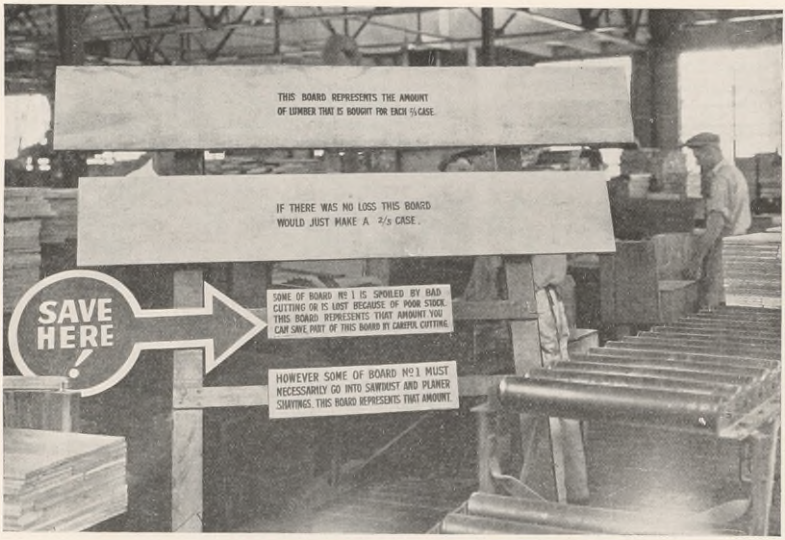
"If the public could be educated to follow certain rules there would be no need for legislation. Therefore, regard the following:

"Pick flowers sparingly, always leaving some to mature their seeds.

"Refrain from picking the Mayflower, the trillium, the pink lady's slipper, or moccasin flower, and all native orchids.

"Discourage all vendors of these flowers by refusing to buy any flowers whatever of those who sell these special varieties.

"Do not hesitate to speak to offenders. They may be innocent of the harm they are doing. Their education may depend upon a timely word from you."



"Silent Salesmanship"

P. W. GAUSS, Case and Package Division, Port Arthur, Texas

Some members of the Sales Department and others of the Texaco organization may be surprised to know that we have working for The Texas Company in the Case and Package Division a high-powered sales force. The display shown in the picture, with the assistance of the shook mill foreman, is one of the parties in a deal that gives excellent promise of an annual profit of $15,000 to our Company.

This display, or "Silent Salesman," consists of four boards mounted on an easel explaining in sequence what becomes of the lumber purchased for making box shooks. This salesman went to work March 1, 1927, in the Port Arthur Case and Package Division shook mill. A prominent place was allotted him, directly facing the men who saw the lumber into box shooks.

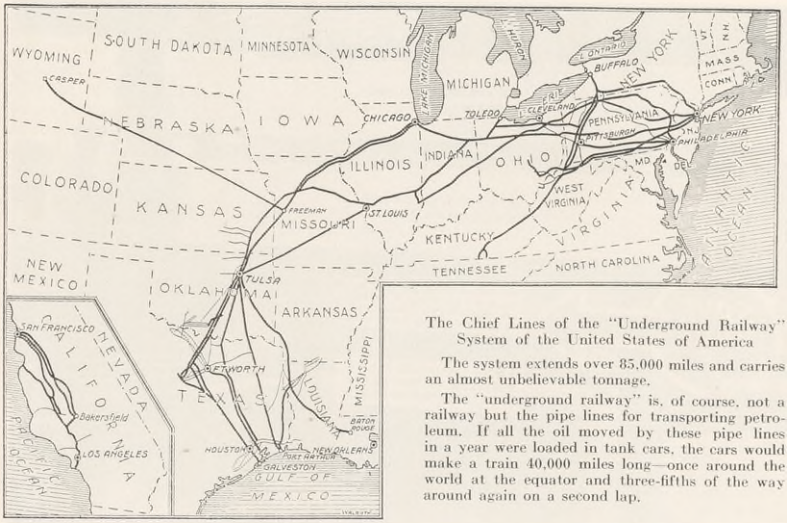
The top board measured 75½ inches long by 12 inches when it was first placed on exhibition. During the following thirty days this board was shortened two inches. The shortening process was accomplished by careful cutting by the sawyers, as requested on the third board, and resulted in a saving of $1,200 for the month of March and $1,200 for the month of April.

We present this idea through the columns of *The Texaco Star* as there may be others who can use "Silent Salesmen" to good advantage in making similar deals with employes of The Texas Company.

The average person is not thorough, and even a little thoroughness will surpass him.
—*W. P. Warren.*

Initiative, perseverance are secondary to thoroughness.—*John Hays Hammond.*

It is the sad fate of the automobile to be dusted to death when it's new and never touched when it's old and most sorely in need of any little attention that would make it look better.—*Am. Petroleum Institute.*



The Chief Lines of the "Underground Railway" System of the United States of America

The system extends over 85,000 miles and carries an almost unbelievable tonnage.

The "underground railway" is, of course, not a railway but the pipe lines for transporting petroleum. If all the oil moved by these pipe lines in a year were loaded in tank cars, the cars would make a train 40,000 miles long—once around the world at the equator and three-fifths of the way around again on a second lap.

Petroleum's Underground Transport System

From a bulletin of the American Petroleum Institute

The "underground railway" system of the United States gives the cheapest transportation in the world. This system, which, in fact, is not a railway at all, but the petroleum pipe line system, is one of the biggest of all transport organizations. To the general public, it is the least known—almost mysterious.

It is the most efficient of all devices to eliminate distance and cheapen transportation. It includes about 85,000 miles of line—about half trunk mains and half small feeders—over one-third of the country's railroad mileage. The pipe line cost of transporting oil ranges from 4 to 10 cents per mile per 100 barrels; that is, about 10 per cent of the cost of rail transportation. Nothing except the oil is moved —no dead weight in cars.

The pipe line system, like the railroads, has trunk lines, feeders, terminals, storage yards, switchings, stations, dispatchers, telegraph and telephone lines, *etc.* If pipe lines had never been built this country would not now have its 22,000,000 automobiles, and our expanding highway system and our most modern transportation facilities would have been impossible.

Building a pipe line, like constructing a railroad, involves first a survey of the route—for grades, stream crossings, *etc.* But a railroad seeks the cities to get their business, while the pipe line avoids towns to save expense. After a survey has been accepted, the right of way must be secured. Then gangs of men distribute the pipe and join it into continuous sections, the joining being done before the pipe is lowered into the trench which has meanwhile been dug for it. The trenches are largely dug by great ditching machines. Finally, the pipe is buried, usually about 18 inches but deeper in cold regions.

According to desired capacity, the pipe may be 4, 6, 8, 10, or 12 inches in diameter, or even larger. While the pipe is being laid, pumping stations are erected to push the petroleum along. Commonly these are about 40 miles apart, but in rough country, or for heavy and viscous oil, much closer. Pumping plants have engines and pumps powerful enough to shove the oil along to the next station. At each station storage tanks are provided of 10,000 to 55,000 barrels capacity, and oil is pumped

directly to and from these; that is, there is not a continuous stream, but a succession of pumpings from one storage tank to the next. A four-inch pipe line with 800 pounds per inch pressure will deliver about 3,800 barrels per day; a six-inch line, 10,000 barrels; eight-inch line, 21,000 barrels.

No train wrecks,—but pressure gauges at each pumping station immediately register any stoppages of flow or leakages. When a break is indicated, the engineer instantly telephones the next station ahead, and telegraphs the superintendent. Then the engines are reversed so as to draw the oil, by suction, away from the break. Line walkers, corresponding to the railroad's track walkers, hurry out to locate the break, and gangs are always at hand to make repairs. Because of the storage tanks at pumping stations a break does not necessitate suspension of pumping except in the section where the break occurs; all other sections go right on pumping from and to the storage tanks.

Once in commission, a pipe line's operations are practically automatic and continuous. They proceed 24 hours daily throughout the year. In proportion to tonnage and distances, a very small force is required to operate a pipe line.

Free Fantasia

CHARLES J. FINGER, in "All's Well"

Messires! I am going to South America! I am going to the valleys where the rose-flush of dawn is on the white-tipped Andes; where, at the time of the coming of the stars, flamingoes red as blood are like flying flames in a velvet sky.

I am going to ride a thousand miles over pampas where swift-moving herds of huanacos pass over the moveless billows of a sage-green sea. And there I shall know once more the joy of early morning chill, and the thin blue of camp-fire smoke, and the screaming of a million morning sea-birds. In spirit I shall be with the impatient horses as they snort and blow and toss their manes. Again I shall be thrilled at the music of beating hoofs, and the champing of bits as we ride and ride and ride. I shall know, once more, the ecstasy of a blustering day; the leaning against a burly bully of a wind, the shouldering of it while our ponchos lash the horses' flanks, when the taste of salt is on our lips, and the sting of the polar cold is in our nostrils, and hearts of flame are in the breasts of companions. For all that was, and all that shall be again!

For I have seen ships and at the sight of them this longing came. Down on the Gulf of Mexico we stood on a tower, my friend and I, and there heard the murmur of the sea. And far away, at the touch of sea and sky, stood a leaning ship, a tower of ivory beauty facing blue deeps. So I was ablaze with a desire that things which had been, might be again. . . .

This is the gate of that dream. Recently I went to Port Arthur and saw many things belonging to the pageantry of commercial life. But most wonderful was when I went to the great warehouses standing by the sea and saw the making of certain oblong shaped cans in which oil is carried to far places. For, years ago, I used that kind of carrier in South America. We all used them variously. I have fastened them to a pack horse for use hundreds of miles away. I have loaded them on ship board what time I owned part of a cutter in which three of us tried to cross the Atlantic. I have seen them in Tierra del Fuego, sometimes on the sea beach where they had been cast, once part of some cargo. I have seen such cans flattened out and made to serve as roofings; used as buckets, as food containers, as life-buoys, as sea-markers, as seats, as mediums of exchange. I, myself, have given one to an Indian for a seal skin. We used them at the gold diggings, on estancias; as banana carriers, as lanterns, as wash-bowls, as cooking utensils. So those five-gallon cans became a very part of our lives, years ago. But leaving that mode of life and joining myself to civilization, I saw the oil cans no more. They dropped out of the scheme of things as did mate drinking, and La Danza tobacco (which I hope some day to rediscover), and Jamaica rum, and demijohns, and charqui, and thigh high boots, and silver spurs, and open-handed hospitality, and cribbage, and Danish butter, and Nestle's milk, and bagpipe music, and

guachos who were centaurs, and all the trappings of a life full and free.

So, almost I forgot the cans. Then, the other day, going through The Texas Company plant with Mr. R. L. Drake—it is a place where Texaco petroleum products are prepared—I saw those same cans in the making. And seeing them, memory took me back to the far-off days. Incidents and scenes and forgotten faces crowded upon me with strange poignancy . . . .

All the while before my eyes there went on that swift and systematic conversion of sheets of shining tin into cases of oil and gasoline. As in the Ford plant, it struck me that there were very few workers. They were, for the most part, necessary where the machine lacked eyes; for the detection of a leak, for the detection of a faulty nail, for the rearrangement of tops and bottoms of cans to facilitate matters. . . .

Imagine an endless procession; sheets of tin bent to make two sides, creased and clamped to make the four sides, soldered by being run through a canal of molten metal, carried to a confluence the tributary of which was tops and bottoms; tops and bottoms clamped and soldered, an addition of handles and of caps. Then a sight of another tributary of boxes without lids. Again without waste or confusion, the filling of the cans by a machine invented by the gentleman who was my guide and host. And after that a coming together of filled five gallon cans, two at a time; then the thrusting of them into wooden cases, so neatly, so accurately, so well fitting that a dime could not be inserted between can and can, or between can and case.

Nor did the process end there. Cases were lifted, inspected, conveyed on an endless slide to different warehouses where they were piled —here millions of cases destined for the Boers and bearing suitable legends comprehensible and interesting—there other millions which would be used in China—again, huge warehouses with boxes for shipment to Brazil, to the Argentine, to Chili, to Venezuela, to Alaska. And on each box were instructions in Chinese, in Spanish, in Portuguese, in English, in French, in Dutch. So every sale was an advertisement, every advertisement a sale. Sagacity went so far indeed that there were certain designs on boxes destined for illiterate countries to the end that goods almost necessarily had to be handled right side up.

But there was more. A steamer lay alongside the dock, bright painted and clean, her funnels showing no trace of smoke, her hatches removed. We approached her from the bow end and I noted, with a secret joy, all the things I used to note—the depth of water she drew, her name, the hawsers, the black and red of her hull, the derricks. She was loading, but without the turmoil I had always associated with that job. There was no delightful master of stevedores cursing and threatening and raising hell. There were no hulking dock laborers, no longshoremen loafing, no old shellbacks smoking, no boys sitting about on bollards. Instead, out from the warehouses came on an overhead carrier cases of oil, continuously. And each case was mechanically delivered to a spiral conveyor which carried the cases down and down into the gloom of the hold. Hour after hour that steady delivery went on, never ceasing, never a hitch, never a slowing or a hastening. Doubtless down in the hold men kept pace with the machine, but I did not see more than one, and he seemed to be supervising.

And has the romance gone out of things? I do not think so. True the old picturesqueness of dirty narrow alleys, and rat infested docks, and a littered deck, and the whipping into line of irresponsible men—all that and much more has gone. But there is a new romance and it is like the romance of the stars and the order of them. Somehow, there seems to be in the thing I saw at Port Arthur and in Dearborn, the promise of a finer life. . . . But the order has come about through capitalism and not through democracy—through evolution and not revolution—through direction and not through individual effort. It is social progress with the hope of gain as incentive. . . . Instead of capitalism having outlived its usefulness, it is, I think, just finding its legs. Instead of railing at corporations for their anarchy in production and distribution, we shall more justly rail at the anarchy in government brought about by the stupidity of elected persons.

The annual number of divorces per 1,000 marriages in the United States, according to census statistics, was 35 in 1870, 81 in 1900, and 145 in 1924. Nevada has the highest rate —1,037 divorces a year and only 1,079 marriages; the lowest rate is in the District of Columbia where there are only 26 divorces annually per 100,000 of population.

—*Dearborn Independent.*

A view of the Rio Grande border line between this country and Mexico, taken from top of El Jardin Hotel, Brownsville, Texas, U. S. A. Matamoras, Tamaulipas, U. S. of Mexico, is seen in the distant background.

The Lower Rio Grande Valley

For photographs and data we are indebted to the Chamber of Commerce of Brownsville

The Lower Rio Grande Valley embraces part of Starr and Willacy Counties and all of Hidalgo and Cameron Counties. There are approximately 1,000,000 acres subject to irrigation and an equal amount of good land suitable for dry farming.

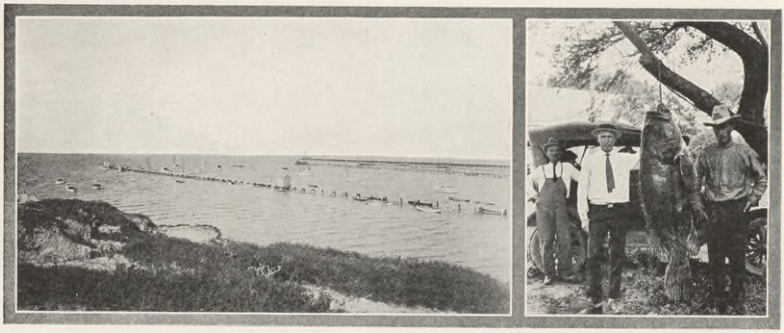
Of the irrigated section about 400,000 acres are cultivated at the present time. Many thousands of acres of dry farming land are in use, and the cultivated section is expanding rapidly.

This Valley last season produced $26,000,000 worth of crops, which included 166,000 bales of cotton and 15,611 cars of citrus fruit and

1. The largest natural palm grove in the United States—at the southernmost point of the Lower Valley. In the center is a jungle which has been compared with the wilds of Africa. These palms make a picture of indescribable beauty.

2 The main street of the Lower Rio Grande Valley. More than 90 miles of concrete highway link the towns of this section into one large community. The section of palm bordered highway shown is near Brownsville.

1. Two rows of five years old citrus trees in orchard of Claude Macy, El Jardin community, near Brownsville These trees each yielded nearly ten boxes of grape fruit their fifth year (1926), and in their fourth year made a profit of almost $600 an acre, according to a statement made by Mr. Macy.
2. Picking citrus fruit in an orchard in the Lower Rio Grande Valley.
3. Why it is called "grape fruit"—a cluster of the Valley variety.
4. Part of the fairways of the Brownsville golf course—clubhouse in background.
5. A country home in a setting of citrus trees and palms.
6. Cantaloupes grown in the Valley—which are helping to spread the fame of this agricultural empire.



1. The bay at Point Isabel, where government engineers are constructing a deepwater harbor.
2. June fish caught at the mouth of the Rio Grande.

Mercedes, Texas, Service Station No. 1.

McAllen, Texas, Service Station No. 1.

vegetables. There are about 60,000 acres in the Lower Valley planted with nearly 4,000,000 citrus trees, and it is estimated that their fruit crop will amount to 15,000 cars in 1930.

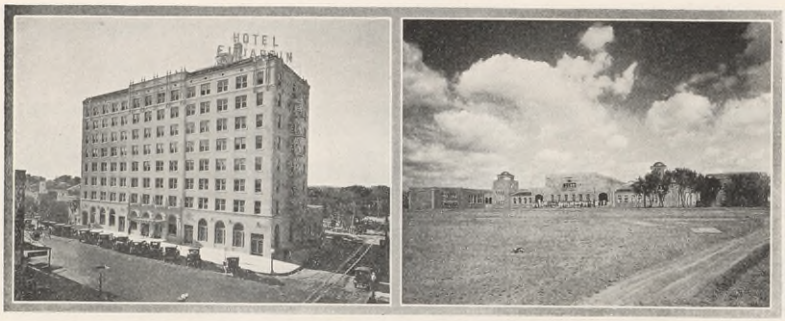
Vegetables grown in the Valley are cabbages, carrots, beets, turnips, lettuce, parsley, spinach, tomatoes, green corn, green beans, potatoes, celery, asparagus, and many smaller crops.

There are 17 thriving towns in the Lower Rio Grande Valley and many prosperous smaller communities. Brownsville is the center of the industrial, commercial, and financial activities of this section, and a recent enrollment made for a city directory indicates a population of 20,000. The other towns range from 8,000 to a few hundred. These towns include San Benito, Harlingen, La Feria, Mercedes, Weslaco, Donna, Alamo, San Juan, Pharr, McAllen, Mission, Raymondville, Sebastian, Lyford, Rio Hondo, and Santa Maria.

The Brownsville Golf and Country Club owns a beautiful tract of land three miles from the city on which is one of the sportiest nine-hole courses in the South. This course is being enlarged to eighteen holes. The clubhouse has a splendid swimming pool, tennis court, and playground for children. All of these facilities are available to tourists.

The Lower Rio Grande Valley is a sportsman's paradise. Fishermen and hunters find thrilling experiences here the year round. In the Gulf of Mexico near Point Isabel and at the mouth of the Rio Grande is the finest of tarpon fishing and many other salt water fish are caught in great numbers. Wild deer, wild turkeys, plover, quail, white wings, ducks, geese, Mexican lions, and many other kinds of wild game are plentiful.

The year 1926 brought greater prosperity for the Valley and greater development in all of the towns than had been experienced in any previous year.



1. The El Jardin Hotel, finest in the Lower Valley, costing over $600,000, with 176 rooms. Radio Station KWWG, which has been heard in every State of the Union, operated by the Brownsville Chamber of Commerce, is being removed to a new studio on top of this new hotel.

2. The El Jardin School in the farming community near Brownsville, built at a cost of $100,000 and having all conveniences usually found in the larger cities.

1. Church of the Immaculate Conception, one of the finest structures for religious worship on this side of the border, built by the Oblate Fathers about 80 years ago.

2. Cathedral del Refugio and Customhouse on the east side of the Plaza de Armas, Matamoras, one of the show places of the city. This cathedral is nearly a century old and carries battle scars gained in many revolutions. The towers have been shot away and rebuilt at least two or three times.

1. Calle Sexta in Matamoras, the historical old Mexican city just across the river from Brownsville. This is the main thoroughfare of the city of 10,000, leading from the international bridge to the main plaza.
2. Entrance to the city market in Matamoras—showing the town clock.

Chicken Raising

FRANK S. REID, The Texas Pipe Line Company, Electra, Texas

Gauger John R. Wright of Electra District No. 13, long in the employ of The Texas Pipe Line Company, decided a year ago that living in the city of Electra was not quite suited to his liking. Accordingly he and his wife purchased a four acres tract about three miles north of the city on the concrete road leading to Red River, with the idea of establishing a chicken farm. He paid a choice price for this tract, constructed thereon a pleasing little bungalow, and after about 9 months' residence there has made a splendid showing in chickens.

Practically all of the labor expended upon the place was done by Mr. Wright and his wife without any outside assistance, and the only time Mr. Wright spent upon it was after

Gauger John R. Wright feeding his White Leghorns, Electra, Texas

his day's work in the field. The house, erected in an imposing place near the concrete road, has all modern conveniences, electric lights, city water, *etc.* His little farm has been well fenced for his chickens by the use of second-hand pipe for posts and seven-foot chicken wire. Divisional lines of fencing have been constructed for the various runways for the chickens.

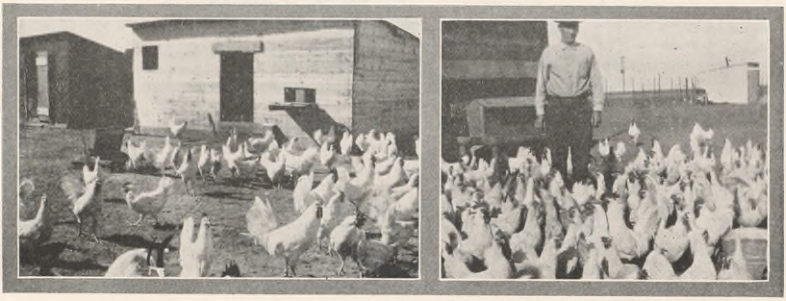
Mr. and Mrs. Wright decided that nothing was too good as to the strain of chicken to be raised. They purchased several lots of the famous Johnson Poultry Ranch strain of White Leghorns, paying as high as a dollar apiece for the day old chicks. The others were bought at thirty-five cents apiece. Ordinary day old chicks can be purchased for from ten to fifteen cents.

By careful feeding, good housing, and the general good care given them, these small day old chicks grew remarkably fast; and last winter, when eggs were selling for 60 cents a dozen, they were getting 200 eggs a day from their start.

At the time of this writing (April 6, 1927) two incubator hatches have been taken off of 400 chicks, with another 800 hatch to come off shortly. With 1,000 chickens in prospect and feeding for winter laying when eggs are at their best price, the chicken business looks encouraging to Mr. and Mrs. Wright.

Work supplies the daily food, but it is cheerfulness that gives it relish.—*Souvestre.*

When one gets to love work, his life is a happy one.—*Ruskin.*



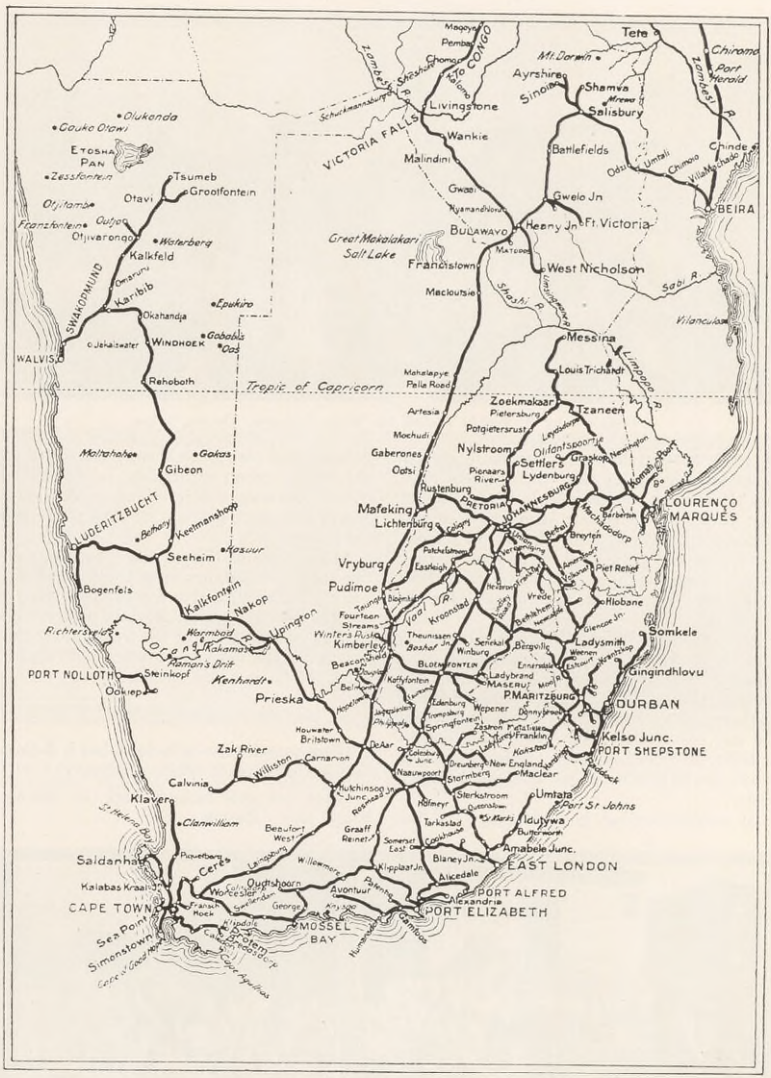


DIAGRAM SHOWING RAILWAYS IN SOUTH AFRICA.

Part of British South Africa

Showing the British Isles on the same scale, and giving the distances by rail between the principal towns.

South African Railways and Harbours

South Africa a century ago was a wild country, harborless and roadless. The network of rails which today takes modern trains not only to all of the larger centers of the Union of South Africa, but also to almost every important village in the country, had a very modest beginning about 70 years ago.

The history of the development of railways and harbors from very small beginnings to their present magnitude and excellence is told in a handsome memoir (158 pages richly illustrated) prepared by the Union of South Africa Railways and Harbours for their exhibit in the Wembley Exposition. It is a story of splendid achievements.

This study of South Africa's transport facilities shows what the railways have done and are doing toward the development of the immeasurable resources of that great country. Also the harbors of South Africa are steadily growing in importance.

Between the eastern (Natal) and the western (Cape) colonies there was close competition for the pioneer of South African railways; but

The Cape has the advantage by a slight difference in time. In 1854 a company was formed at Capetown for the purpose of building a railway from that place to Wellington, a distance of 57 miles; but it was not until April 4, 1859, that construction was actually started.

On the other hand the credit for opening the first completed (although very short, only two miles) railway on the continent of Africa goes to Natal; for on June 26, 1860, a railway in that province, running from the wharf—commonly known as the Point—to the town of Durban, was opened to traffic. In 1867 this railway, built by a joint-stock company, was extended 4 miles further. In 8 years only 6 miles of railway were built in Natal.

Thus it will be seen that, although the Cape was the first colony of Africa to embark upon railway construction, Natal was not far behind; and that in fact, for all practical purposes, the two branches of railways, destined to link up at Heidelberg in the Transvaal (on October 10, 1895), were commenced almost simultaneously on opposite sides of the subcontinent.

From that commencement, through many vicissitudes, including much destruction during various wars, the Union railways have grown to the far flung extent and excellent equipment of their present organization.

In the words of the General Manager of South African Railways and Harbours, "the Union railways have played an important part in the advancement of the African continent. Their steel roads have spread over the land, opening up attractive agricultural, industrial, and mineral areas, and, for the tourist, making an open book of this dominion of scenic wealth, romantic past, progressive present, and future aglow with promise."

Note.—If any reader should be especially interested in this subject, it may be that he could obtain a copy of the memoir cited by applying to Mr. George S. Oettle, Resident Representative, American Offices of South African Railways and Harbours, 11 Broadway, New York.—*Ed.*

Simple Summer Salads

KATHERINE FERGUSON CHALKLEY, State College, Pennsylvania

There is nothing more tempting, perhaps, than a cool savory salad served on curly crisp lettuce leaves when the thermometer is hovering somewhere in the nineties. There is nothing more refreshing, excepting the various "ades" served in frosty glasses, than succulent and tart salads made from the abundance of summer fruits and berries and vegetables.

Instead of spending your time over the stove, whip up a few jars of mayonnaise, lay in a supply of lettuce, cabbage, tomatoes, cucumbers, onions, beans, peaches, pears, and pineapples, a few cans of tuna fish and salmon, two or three packages of gelatine,—and let the refrigerator be the center of your culinary occupations.

You might have this easy salad for lunch today:

C. P. R. Salad

2 C. peas	½ C. sweet pickle relish
1 C. cheese	Mayonnaise

Cut cheese into cubes and mix with the peas. Add the pickle and a little salt, moisten with mayonnaise. Serve on crisp lettuce.

Tomorrow you will have had time to plan, and might serve for dinner:

Veal Salad

2 C. cold cooked veal	1 tbs. lemon juice
1 C. chopped celery	1 tsp. salt
8 stuffed olives	Mayonnaise

Cut veal into cubes and celery into small pieces. Add lemon juice, and olives cut fine. Moisten with mayonnaise and turn into bowl lined with crisp lettuce leaves.

The lowly potato is capable of making most delicious salads. Try this old German recipe:

German Potato Salad

2 C. potatoes	¼ C. chopped pimentoes
1 C. celery	¼ C. chopped olives
1 small onion	¼ C. chopped pickles
2 hard cooked eggs	½ tsp. salt
1 C. boiled salad dressing	½ C. sour cream

Dice the potatoes which have been boiled (before measuring) with their jackets on. Add diced celery and minced onion. Chop the eggs and add them together with the pimentoes, olives, and pickles. Mix sour cream and salad dressing, add salt. Pour on potatoes and mix thoroughly. Chill and garnish with chopped pickled beets.

Physicians, dietitians, and experts in foods and health are urging us to eat more and more and then more tomatoes. There are dozens of ways of serving fresh tomatoes, but the stuffed tomato salads head the list.

Pineapple Stuffed Tomatoes

Select medium sized and firm tomatoes (this holds for all stuffed tomato salads), peel them, and remove a thin slice from the top. Scoop out the center, sprinkle with a little salt, turn upside down in the colander and let drain for half hour. Mix cubes of pineapple with one-half as many chopped nut meats and fill tomato centers. Chill thoroughly. Just before serving top with salad dressing and arrange on bed of lettuce leaves.

Cucumbers and celery, separately or together, make an excellent stuffing for tomatoes. Dice vegetables and moisten with mayonnaise before filling tomatoes.

Savoury Stuffed Tomatoes

Use equal amounts of chopped apples and celery and shredded cabbage. Moisten with mayonnaise and season with salt and pepper. Stuff the tomatoes and garnish with rings of green pepper and walnut meats.

All of the canned fishes, salmon, tuna, crab, or lobster, as well as freshly cooked fish, are splendid to combine with tomatoes. Use this basic recipe and substitute any fish you choose.

Tuna and Tomato Salad

1 C. tuna fish
1 C. celery
6 small tomatoes
Mayonnaise

Break the fish into flakes. Add celery, cut in small pieces, and the tomatoes, which should be thoroughly chilled, peeled and cut into quarters. Moisten with mayonnaise to which a little lemon juice has been added. Serve on lettuce leaves garnished with mayonnaise, celery curls, and queen olives.

Did you ever try tuna and apple salad?

Tuna and Apple Salad

1 C. tuna fish
2 C. diced tart apple
2 C. chopped celery
Juice of one lemon
½ tsp. paprika
¾ C. mayonnaise

Pare the apples and cut into small cubes, cover with the lemon juice to prevent discoloring. Add celery and tuna, broken into small pieces, and mix well. Chill. Just before serving add the mayonnaise. Serve on bed of crisp lettuce leaves.

Lima beans and kidney beans, in fact the whole Bean family, are just coming into their own in the world of salads.

Fresh Lima Bean Salad

2 C. lima beans
½ C. celery
¼ C. minced onion
¼ C. chopped pimento
¼ tsp. salt
½ C. boiled salad dresssing

The beans should be cooked until tender. If you would give them added flavor, put a bit of bacon with them while they are cooking. Drain and chill. Add celery, cut into small pieces, minced onion, and pimento. Add salt and moisten with salad dressing.

Kidney beans may be substituted for limas, but kidney beans need a little something spicy to give them zest. To improve them, add ¼ cup of sliced sweet pickles and ½ cup of diced beet pickles.

Before making a salad of green string or wax beans, cover the cold cooked beans with a little French dressing and let stand in refrigerator for ½ hour or more.

Piquante Bean Salad

2 C. small string beans
1 C. chopped celery
½ C. shredded radishes
¼ C. minced onions
¼ tsp. salt
½ C. French dressing
Mayonnaise

Cover the cold cooked beans, celery, and radishes with the French dressing and let stand in a cold place for ½ hour. Drain thoroughly and add onions and salt. Moisten with mayonnaise and serve on crisp lettuce, or (better) water cress and garnish with mayonnaise and whole radishes.

Tongue, ham, crisp bacon, or any of the ready to serve sausages may be cut into small pieces and added to a bean salad with amazingly good results. Use equal amounts of beans and meat.

Cucumbers can so easily be combined with other vegetables that one seldom considers making a salad with cucumbers alone. But here is something that will make you reconsider the cucumber.

Jellied Cucumber Salad

1 tbs. gelatine
2 chicken bouillon cubes
1½ C. boiling water
½ C. cold water
1 slice onion
2 cucumbers
Mayonnaise
Salted almonds

Soak the gelatine in cold water for 5 minutes. Dissolve the bouillon cubes in half of the boiling water and pour over gelatine and stir until it is dissolved. Grate the onion and one cucumber and cover with remaining boiling water. Let stand until cold, then strain into gelatine mixture. Slice the other cucumber thin. Rinse a mold in cold water. Pour in a layer of gelatine. Add a layer of cucumber slices—gelatine, cucumber, and so on—gelatine layers on top and bottom. Chill thoroughly. Turn onto bed of lettuce and garnish with mayonnaise and salted almonds.

Rice and vegetables, rice and fish, rice and meat, can be combined into hearty, yet refreshing, main dish salads for sultry days.

Mock Chicken and Rice Salad

3 C. cold roast pork
½ C. cold boiled rice
1 green pepper
1 tbs. minced onion
Mayonnaise

Cut the cold roast pork into small cubes and cover with the green pepper which has been cut into tiny strips. The rice should have been cooked rapidly in boiling water until tender, and then rinsed thoroughly with cold water so that the kernels are separated. Sprinkle over meat and peppers. Mix the minced onion into the mayonnaise and blend into the other ingredients. Mound on a bed of crisp lettuce, and garnish with rings of green pepper, into the centers of which mayonnaise is put, and queen olives.

Simple summer salads accompanied by dainty sandwiches and clinking glasses of iced coffee or tea or cocoa or lemonade are the happiest sort of hot weather meals. Try them, and see if you don't agree.

LAW CURRENT

Rob't A. John

MUNICIPAL ORDINANCES–REASONABLENESS.—A city ordinance prohibiting the erection of gasoline service stations in a residential district under a zoning ordinance was held not to be unreasonable, and therefore valid, in the case of *Priscell v. City of East Orange*, 136 Atl. (N. J.), 803.

ATTRACTIVE NUISANCE—DAMAGES.—An unlocked gasoline drip on a natural gas pipe line, near a children's playground, held to be an "attractive nuisance," and where evidence showed that children could, and did, open valve of drip, causing gasoline to escape and saturate their clothing, and the clothing of one becoming ignited, and he being badly injured, it is sufficient basis for damages. *Shaffer Oil and Refining Co. v. Thomas*, 252 Pac. (Okla.), 41.

MINERAL DEEDS—TAXATION.—Mineral rights in the subsoil are subject to horizontal severance, and are taxable, when so separated, against the separate owners of the same. Vigo *County v. Hale*, 156 N. E. (Ind.), 172.

CORPORATION CHARTER—ULTRA VIRES.—A lumber company executed as surety an indemnity bond guaranteeing a contract, expecting to furnish and thereafter did furnish, to contractor the lumber and material with which he was to construct a building. In an action to enforce the bond, the lumber company plead *ultra vires*, in that it was not authorized by its charter to execute indemnity bonds; but the court held that having received and accepted benefits under said contract of suretyship, it could not now claim exemption by virtue of lack of charter power. *Lena Lumber Co. v. Brickhouse*, 292 S. W. (Ark.), 1007.

CONTRACT OF PURCHASE—GAS.—A correction: In the April issue of *The Texaco Star*, under "Law Current," the following was given as an epitome of the case of *Godfrey L. Cabot, Inc., v. Clarksburg Light and Heat Co.*, 135 S. E. 666, to-wit:

> "A contract to purchase all the gas produced from wells located on certain premises, does not include gas wells subsequently drilled, but only those in existence at the time of the contract."

A reading of the opinion forces the conclusion that the above epitome was too broad, and should not be deemed of general application. It should be considered only as governing this particular case which was decided.

CORPORATIONS—DISSOLUTION.—Citing the case of *Lakeside Irrigation Co. v. Buffington*, 168 S. W. (Tex.), 21, the holding of said case is reiterated in the case of *Simmons v. Zimmerman Land and Irrigation Co.*, 292 S. W. (Tex.), 973, wherein it was held that creditors of corporation, after dissolution, are authorized to bring an action against said corporation, citing the directors as trustees, and that the stockholders are not necessary parties.

ROYALTY—SITUS OF TAXATION.—The Supreme Court of Texas, in the case of *Lee Hager v. D. W. Stakes, Tax Collector* (not yet reported), in answering certified questions propounded by the Court of Civil Appeals, has held that the royalty interest retained in all oil or mineral leases by the landowner is realty, and the interest in the minerals *in situ* is subject to a separate ownership, and is taxable as against the separate owners, and that the place of taxation is the *situs* of the land, instead of the residence of the owner.

MINERAL LEASES—ROYALTIES RESERVED.—The reservation of royalty in the usual and customary mineral lease is an interest in real estate as long as the oil remains *in situ*, and an assignment of the same must have all the attributes of a conveyance of realty. Judge Stanford, in the case of *Sabens v. Cochrum*, 292 S. W. (Tex.), 281, used the language:

> "If said contract (conveyance of royalty) was intended to convey, and undertook to convey, an interest in the minerals in place, *as we think it did*, then it undertook to convey an interest in realty," and is void unless under privy acknowledgment.

SLANDER OF TITLE—MINES AND MINERALS.—The Supreme Court of Wyoming is expressly *contra* to the Commission of Appeals, in the case of *Martel v. Hall Oil Co.*, 253 Pac. (Wyo.), 862, the Wyoming court using the language:

> "We are cited to the case of *Humble Oil and Refining Co. v. Kishi*, 276 S. W. (Tex.), 190, decided in 1925. The case is exactly in point, but, with all due respect to the eminent court that decided that case, we cannot agree with its reasoning, and we think that the court overlooked some of the fundamental principles, here pointed out, that should govern a case of this kind."

The question in the two cases was one of damages for libeling title to real estate, the Wyoming court holding that the truth of an alleged libelous statement was a complete defense.

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.	C. K. Longaker, 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	L. C. Oakley, New York
Sales Dept. S. Territory	D. L. Lindsay, Houston
Sales Dept. N. Territory	H. J. Rodiguez, New York
Asphalt Sales Dept.	J. J. Smith, New York
Export Dept.	J. B. Nielsen, New York
Purchasing Dept.	E. B. Middlekauf, New York
	J. E. McHale, Houston
	J. T. Rankin, Denver
Producing Dept.	Otto Hartung, Houston
Pipe Lines	Fred Carroll, Houston

REFINING DEPT. The Twenty-Sixth Annual Meeting of the Efficiency Committee of the Refining Department was held in Houston May 2 to 5 inclusive, the members present being:

L. R. Holmes, Chairman	B. J. Pendergrass
W. H. Elliott	J. P. Tomberlin
C. E. Lauer	A. E. Manley
V. B. Pevoto	H. M. Snyder
H. O. Preston	C. K. Longaker
F. S. Dengler	R. Amundsen
R. G. Collins	F. A. Stivers
J. S. Worden	G. T. Haltom
J. R. Reed	V. R. Currie
R. E. Mossman	A. A. Nichoson
E. L. McLaren	S. R. Bumann

The first two days were devoted to detailed discussions by the different sub-committees, and the last two days to meeting of the full membership. Many subjects were covered and much good was derived from the meeting.

On the evening of May 3 the Efficiency Committee and visiting lubricating engineers of the Sales Department, Southern Territory, were guests of the Sales Department at a banquet at the Rice Hotel. Interesting talks were made by Ira McFarland, Ernest Carroll, F. T. Manley, B. E. Hull, R. Ogarrio, A. A. Nichoson, and B. J. Pendergrass. G. M. Worthington capably served as toastmaster, and D. L. Lindsay as master of ceremonies. The evening was very enjoyably spent and the members of the Efficiency Committee very much appreciated the hospitality of the Sales Department.

Case and Package.—The product of the Case and Package Division goes to all parts of the world and occasionally brings to us representatives from far off lands, who are

At Port Arthur Works in 1913

This photograph is contributed by L. E. Barrows, now Division Manager, North Central Texas Division, Producing Department, who in 1913 was Chief Engineer of Port Arthur Works. The photo was taken by him.

Left to right: J. S. Suttles, Carpenter Foreman; E. Davis, Boiler Shop Foreman; Joe Gillon, Lubricating Stills; Johnson, Painter Foreman; C. O. Lorenz, Electrician; Murray Titus, Yard Foreman; S. C. Fox, Pipe Foreman; C. S. Withrup, Machine Shop Foreman; F. C. Smith, General Superintendent; F. T. Manley, Ass't General Superintendent; J. S. Deady, Bricklayer Foreman.

always interesting and whom we are glad to entertain. Among recent visitors were Messrs. H. Kishi and Taro Kishi of Terry, Texas, and H. Horie, S. Katoh, and R. Hori of Tokio, Japan.

Mr. H. Kishi is an oil operator and farmer on an extensive scale in Orange Country, Texas. Mr. Taro Kishi, his son, may be remembered as a star halfback on the football team of Texas A. & M. College. Mr. H. Horie is manager of the sales department of the Nippon Oil Company, and Messrs. S. Katoh and R. Hori are oil dealers.

WATER SHIPMENTS BY THE TEXAS COMPANY FROM PORT ARTHUR, TEXAS, MONTH OF MAY 1927

Refined—Coastwise	1,264,774 bbls.
Refined—Foreign	452,727 bbls.
	1,717,501 bbls.
Crude—Foreign	24,351 bbls.
Total	1,741,852 bbls.

Terminal Div.—The 28th meeting of the Northern Terminal Safety and Sanitation Committee was held recently in New York City, attended by the following: A. A. Nichoson, Chairman; V. J. Romeo, Secretary; R. S. Mutch, G. W. Woertz, and E. C. Tower of Baltimore; C. D. Hoffecker and L. M. Landreth of Norfolk; W. E. Curtis and C. B. Northam of Delaware River Terminal; J. F. Sheeran and F. P. Seth of Bayonne; H. H. Wagner and A. G. Price of Providence.

Statistics of accident records for the last year were reviewed and program of activities for this year was discussed. The enthusiastic interest of those attending encourages the hope for a record safety year at Northern Terminals.

W. K. Holmes and M. Halpern of Port Arthur Works and A. E. Manley of New York were visitors at the meeting and accepted invitations to address the committee. Their remarks outlining the scope of safety work in our activities were inspirational as well as educational.

Shreveport Works.—Wednesday evening, May 11, Shreveport Works turned out 100% in their Sunday clothes to a chicken dinner at Eureka Park Inn. Mr. McLaren gave a splendid talk, taking for his subject "Organization." It gave us a comprehensive idea of our Plant and the Company as a whole. The relationship of everyone, whatever his duties, to the success of The Texas Company was clearly outlined and it gave all a new impetus to give the best in them each day to the manufacture of the best oil products on the market at the lowest cost. Several of the men gave their fellow employes new angles of thought that materially helped.

Entertainment was furnished by talented members of our force. Floyd Fowler, our able stillman, performed at the piano. A solo by Macy Dennis took the boys off their feet. The Shreveport Works Quartet, Joe Clewis, Jake Damron, Tom Hollifield, and John Raus, surprised us with the latest song hits and they would be singing yet if ruled by the applause.

This was the first get together party Shreveport Works have had and all expressed enjoyment of social contact and recreation with one another, the mental stimulus, and the dinner.

Fire Fighters

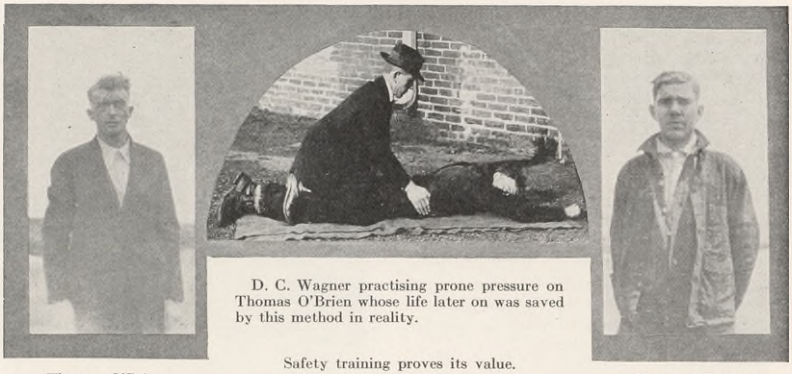
These are most of the employes who participated in the fire fighting on April 14 when tank No. 411 was struck by lightning at the Shreveport Works.

Left to right—

Standing: A. E. Vascocu, G. W. Adams, Clifford Jeter, Pat Breen, S. E. Godfrey.

Kneeling: G. H. Miller, W. G. Anderson, Joe Clewis, J. B. Raus, C. W. Fowler, W. L. Collins.

Sitting: T. R. Hollifield, A. E. Elder, R. L. Hollifield, Floyd Fowler, D. B. White, I. J. Kelly, M. D. Dennis.



Thomas O'Brien

D. C. Wagner practising prone pressure on Thomas O'Brien whose life later on was saved by this method in reality.

Safety training proves its value.

Thomas Whitby

RAILWAY TRAFFIC AND SALES DEPT.

Intimate knowledge of the Schaefer or prone pressure method of artificial respiration was the means, on February 23, 1927, of saving the life of Thomas O'Brien, an employe of Delaware River Terminal.

O'Brien was engaged in cleaning gasoline cars and was wearing a standard gas mask, but while performing this work the face piece was moved. The man on top of the car noticed that O'Brien was acting peculiarly and immediately started pulling him out, at the same time calling for help. His call was responded to by D. C. Wagner and Thomas Whitby, of the Railway Traffic Department, who effected the rescue of the unconscious form from the car, and the Schaefer method of artificial respiration was successfully applied by Mr. Wagner who revived O'Brien in less than fifteen minutes time.

Merely knowing of the Schaefer method is not sufficient for saving a life; it is just as important to be drilled, so as to apply it with the correct rhythm.

A peculiar coincidence is shown in one of the photographs, which was a snap shot taken of Mr. Wagner practising the prone pressure method on the same Thomas O'Brien at one of the gang meetings.

It is needless to say that O'Brien is now an ardent Prone Pressure enthusiast.

There is an average of 209 accidental deaths daily in the United States.

SALES DEPT. S. TERRITORY

Houston District.—The Stone and Webster interests, with whom we have pleasant business relations in this District held their Engineers' Meeting at Galveston on May 21. The lubrication of their various types of machinery was discussed at length and M. C. Van Gundy delivered a very interesting technical paper on Texaco lubrication. Mr. Van Gundy was assisted by Lubricating Engineer Gohlman. Superintendent (Sales) J. H. Glass was also present at the meeting.

It was with a feeling of genuine regret that our D. O. bade farewell to R. M. Griffin, who resigned to enter into partnership with our Donna, Texas, agent. Mr. Griffin is still within the Texaco fold and we all wish for him the greatest success in his new sphere of endeavors.

As these notes are being written we receive the sad news that our former agent at Cotulla, Texas, Mr. Charles Neal, passed away on May 21. Charlie was a sterling type of man who had our highest admiration, and we sympathize sincerely with his bereaved relatives.

We also just learn of the death of the father of Agent E. A. Manford of Laredo Station. To him and his we tender our condolences.

Dallas District.—Our goal being to lead the field in collections each and every month during the year 1927, we are well on our way—again leading in April.

A fire at our Snyder Station on May 5 completely destroyed the warehouse, filling shed, pump house, and pump, and damaged the storage tanks. The Volunteer Fire De-

partment of Snyder are to be congratulated on the good work done. They risked their lives keeping water playing on the tanks to cool them off to stop their boiling over, and putting out the blaze underneath with fire extinguishers. But for their good work the tanks also would have been completely destroyed and the fire might have spread over adjoining property.

The following notice has been received from Fort Sumner: "Mr. and Mrs. Byron C. Withers announce the arrival of Betty Jean on May 19th—Eight pounds." Congratulations.

W. W. Clanton, Assistant Creditman, and Miss Lorena Payne were married on May 27. Congratulations and best wishes for a long life of happiness and contentment.

Oklahoma District.—District Manager L. H. Daniel and Superintendent (Sales) H. F. Faerber have returned from Oklahoma City's Goodwill Trip which covered a portion of northwestern Texas. Their train was met by a number of The Texas Company agents at stations in Dallas territory and they were royally received. We wish to thank especially Messrs. Kipp and Scott for the wonderful entertainment extended them while in the good city of Wichita Falls.

New Orleans District.—We welcome Agent E. P. Kelly of our newly opened station at Tupelo, Miss. Mr. Kelly was formerly connected with a service station handling various products and while there noticed such a demand for Texaco that he secured a filling station of his own and climbed in the band wagon, getting his Texaco from Booneville, Miss., 50 miles away. Then when the agency was available he lost no time in seizing the golden opportunity. He's off to a flying start, for the combination of Texaco and Kelly is irresistible.

"Denver Jack" Harville is with us again as Superintendent of Service Stations, and the results of his contagious smile and engaging personality are already beginning to show. Before leaving us for the far west some years ago, Jack sold much gasoline and oil for export to Central America, but he is now applying his talents to home territory. We understand a good many competitive filling stations are seriously considering moving to other locations rather than operate under such a handicap.

Fred Sintes, Jr., has joined the sales force in New Orleans and, in addition to actually soliciting city trade, spends his spare moments in studying truck farming so as to lose no time in "knowing his onions."

Belize, British Honduras
Office and staff of Victor L. Bryant, distributor of Texaco products in Belize, British Honduras.

"The Gold Dust Twins," none other than our good Agents W. E. Graham, Kosciusko, Miss., and H. G. Graham, Walnut Grove, Miss., recently favored the D. O. with their scintillating presence.

Agent H. T. ("Doc") Rogers, Grenada, Miss., made a trip to ascertain whether New Orleans was still "high and dry." From Doc's remarks, New Orleans is undoubtedly dry.

Representative W. H. McClain has the distinction of presiding over the "wettest" (H_2O) zone in New Orleans District. Rumors are to the effect that "Mc" is perfecting himself along aquatic lines.

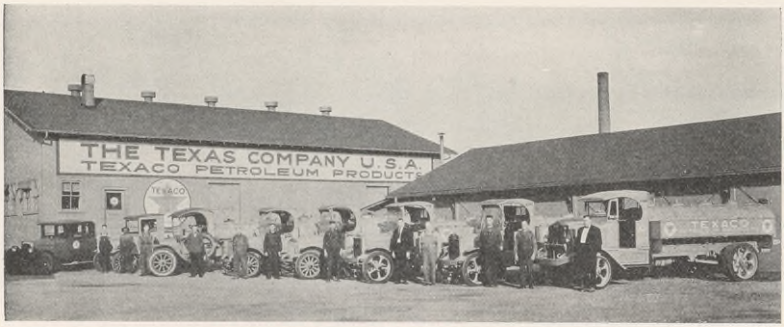
While representatives, agents, and salesmen of New Orleans District are swimming from stations to customers and *vice versa*, A. I. Roth (Chief Clerk, Sup't of Sales), 2nd Lieutenant, 141st Field Artillery, Louisiana National Guard, with the assistance of a Colonel, a few Captains, and corporals and rank privates, is endeavoring to keep New Orleans dry. Much prominence is attained these days by "Shave-Tails," such as aides-de-camps, *etc.*

Beautiful flowers made of Texaco Texwax

Miss Alice Klingmann, daughter of E. F. Klingmann, Cashier, Memphis, Tennessee Station, although not officially a member of the Texaco family, is much interested in us and in Texaco products. The beautiful flowers in the picture are not presents from admirers but are products of Miss Klingmann's skill and Texwax. We knew Texaco gives perfect motor operation. smooth and lasting highways, attractive and durable roofs, and is of unlimited value to mankind in many other uses; but this is the first time we have seen flowers that you could "almost smell" extracted from our products. We congratulate Miss Klingmann on her artistic skill and are prouder of Texwax than ever.

Atlanta District.—H. W. Barbour, stenographer in D. O. and Miss Leone Maness, of Atlanta, were married on April 23. Mr. and Mrs. Barbour have our very best wishes.

We extend our sympathy to Agent J. T. Herring, Pelham, Ga., for the loss of his father on April 25; also to H. E. Christian, stenographer in D. O., for loss of his sister on May 1.



Greenville, S. C. Station and its hard working force

The gallonage this station is doing and the appearance of the station and grounds show that Agent S. L. Styles —the big fellow on the end—and his boys are on the job at all times.

Combining business with sport on a visit to Palm Beach Station. Left to right: E. E. Dattner and C. P. Dodge.

Florida District.—During the week May 16-21 E. E. Dattner, Superintendent of Equipment and Construction, Houston, and C. P. Dodge, District Manager, Florida District, visited a large number of our stations and service stations. Leaving Jacksonville, they visited stations down the East Coast and on return trip visited stations along the West Coast and in the central part of the State.

While they were in Palm Beach the boys there arranged a fishing trip, and one of the accompanying photographs shows part of the catch—indicating that these gentlemen possessed considerable skill in deep sea angling. The other photograph shows the same gentlemen in the yard of our West Palm Beach Station and gives some idea of how this station is kept. The beautiful hibiscus hedge and cocoanut palms would do credit to any community.

SALES DEPT. N. TERRITORY

A meeting of all District Managers in the Northern Territory was held in New York beginning April 25, 1927. The meeting lasted five days and was divided into two sections, three days being devoted to General Sales and Operating matters, and two days to the service station end of the business. During the latter session the Service Station Superin-

The Texas Company's Bulk Plant at New Rochelle, N. Y.

This new plant, which serves New Rochelle and vicinity, was placed in operation April 1, 1927. It has storage for 250,000 gallons of gasoline and kerosene, bulk storage for lubricating oil in the filling room, six-car garage (shown at the extreme left), and warehouse with capacity of 288 barrels. This station represents one of the best layouts and most completely equipped plants in the Northern Territory.

tendents of the Boston, New York, and Chicago Districts were present. Vice-President W. W. Bruce attended most of the sessions, and Treasurer C. E. Woodbridge gave an interesting talk on Collections and Losses.

The subject of Expenses received careful and thorough consideration, and every one present became imbued with determination to sell more product during 1927 at less expense than last year.

During the noon hour of the second and third days those present sat in at the regular weekly meeting of the Petroleum Round Table organization. A most interesting and instructive talk by H. R. Gates, Secretary of the Manufacturing and Marketing Committee, gave a lucid explanation of the production and refining of lubricating oils.

New York District.—District Manager C. R. McCarthy is convalescing in the balmy sunshine at Jacksonville, Florida. He writes he is putting on weight and feels fine. The entire New York District is hoping that he will be able to return soon.

Boston District.—Announcement is made of the addition of two new zones in the Boston District: No. 11 and No. 12, effective May 1, 1927.

Zone No. 11 comprises the following Connecticut stations: Hartford, New Britain, Torrington, Waterbury, Winsted. J. H. Cosgrove, formerly Salesman at New Haven, Conn., has been appointed Representative, Zone No. 11.

Zone No. 12 comprises the stations: New London, Conn., Norwich, Conn., Putnam, Conn., Westerly, R. I., Willimantic, Conn. A. F. Ward, formerly Salesman at New London, Conn., has been appointed Representative, Zone No. 12.

The Salesmen and Agents gathered for the Zone 6 meeting at Providence, R. I., on April 22, were invited by Superintendent Thomas Wall of Providence Terminal to make a trip through that plant. Accordingly at 1 p. m. the party, which in addition to the salesmen and agents included Messrs. J. K. Skillings, C. Worley, R. G. Hill, and M. M. Johnson, gathered at the Terminal and were met by Mr. Wall and his assistant, Mr. Wagner. After introductions, we were conducted first to the laboratory and listened to a careful explanation of the various tests employed to assure that products leaving the Terminal are up to specifications. Mr. Keefe in the laboratory demonstrated the manner in which the viscosity test is made, and explained very carefully fire and flash tests, *etc.* No doubt was left in the minds of those present that every shipment made from our Terminal is carefully tested and examined, and can not leave the Terminal in other than perfect condition.

We next visited the boiler room where all were impressed by the bright and shining condition of the plant. The floor was spotless.

Next we viewed the compounding room and covered storage, and here the spotlessness of the white paint covering all walls and tanks was impressive indeed. Floors, doorways, stairways, and every inch of space appeared to be newly painted. Here again we saw additional evidence of the great care that is taken to thoroughly test all products before they leave the Terminal. We saw racks of tested samples awaiting the allotted six months before being disposed of. We witnessed the cleansing of iron barrels and drums, their drying and painting, all of which was accomplished in a particularly careful although rapid manner. All agreed that it was next to an impossibility for products to leave this Terminal in other than perfect condition.

We wish to acknowledge the courtesy of Messrs. Wall and Wagner in personally conducting the trip and to thank them for the cordial welcome they extended.

Norfolk District.—As we read the daily papers we are inclined to believe that every one is seeking to establish or break a record of some sort. We read the facts and pass them up without a second thought; but when a man unknowingly establishes a record in his daily routine work it is well that we stop and consider.

Down at Oxford, North Carolina, L. F. Swain is serving in the capacities of Agent, Clerk-Cashier, and Tank Truck Operator. As reflected from the S-3 Record of Truck Deliveries for the month ot April, we gather that Mr. Swain accomplished the following: With a tank truck of 465 gallons capacity, in 26 working days he delivered 22,545 gallons of gasoline, 1,075 gallons of Crystalite and 865 gallons of lubricating oil, a total of 24,485 gallons. To accomplish this he traveled a distance of 1,149 miles. It was necessary for him to travel an average of 44.19 miles a day to deliver 941.73 gallons.

Taking into consideration the capacity of the tank truck, and the time required to load and

unload the truck and to maintain the office records, we believe Mr. Swain has established an enviable record. It is one that other station employes should strive to attain. We offer Mr. Swain our hearty congratulations.

Chief Accountant J. R. Walker, assisted by Assistant Chief Accountant R. J. Kelley, has been conducting a school of instruction every Tuesday night since March 15, 1927. These classes were instituted to go over all Accounting Instructions with Group Heads, but soon invitations to attend were extended to clerks in the Accounting Division and also to clerks in the Operating and Sales Office.

The attendance at these classes has held up remarkably well, showing that the employes appreciate the opportunity offered and are taking advantage of it. The interest shown by those attending has been very gratifying, and in order to create further interest Superintendent (Sales) J. W. Thompson addressed the class on the importance of proper accounting with regard to its ultimate effect upon sales. The talk was so much enjoyed that Mr. Thompson was requested to put on a Hot Plate Demonstration, which he did at the meeting on May 3; and everyone present left with a determination to convince his friends that they were missing a 'big bet' if they did not use Texaco Golden Motor Oils, Texaco New and Better Gasoline, and Texaco Thuban Compound in their cars.

On March 22 the class had the pleasure of the company of Department Agent R. L. Saunders, who gave an interesting and inspiring talk.

Since these classes were started the attendance has been as follows: March 15,—35; March 22,—39; March 29,—42; April 5,—34; April 12,—29 April 19,—36; April 26,—35; May 3,—36.

Norfolk District Basket-ball Team

They made a very good showing during the season, winning the cup in the City League and securing good advertising for Texaco.

Left to right: W. P. Brennan, Mgr.; S. C. Weinberg, Forward; W. T. Stephens, Forward; H. M. Sutton, Capt. and Guard; Ambrose McNeal, Guard; H. H. Harrison, Center.

Chicago District.—We welcome to our midst W. H. Carr who has joined our forces as Engineer. Mr. Carr comes to us with an enviable record in the oil industry.

Stake Truck Operator C. P. McDonald, St. Louis Barton Street Station, unloaded a box car of 65 barrels of oil and hauled it from the siding to the Station, one block away, with a 2-ton truck in one hour. That's what we call efficient handling.

On April 30 the Texaco Athletic Association gave a card party and dance at the Great Northern Hotel, Chicago. It was a most enjoyable evening for about 150 couples.

Minneapolis District.—Two crews of tank builders are now working overtime in this District trying to give us enough storage for gasoline. Representative Nickles at Milwaukee and Representative Imes at Des Moines say the tank builders will be back next year also. We hope so, boys!

Service Station No. 1 at Jamestown, N. Dakota, and Service Station No. 1 at Wessington Springs, S. Dakota, opened with a bang—this month. Look out, Milwaukee and Twin Cities, these boys are after your scalp.

We enjoyed immensely the visit of E. A. Rulfs of New York, and we appreciated his remarks after the inspection of our Twin Cities bulk station and service stations.

Representative Meeting was held May 9. All snow plows, sleighs, snow shoes, ear muffs, and overcoats were stored away in the D. O., and all Representatives went back to their territory in their shirt sleeves. Look out, you Golden Oil Prospects, they are going to get you.

Denver District.—We wish to compliment Agent B. W. Laws, Riverton, Wyoming, Zone No. 1, on sales and operating matters generally, particularly on the fine appearance of his station and equipment.

News comes to us that our aggressive agent, W. F. Paul, at Colorado Springs, Colorado, has taken unto himself a wife. Heartiest congratulations!

Our representation at the Animated Ad Ball, an international affair held at the Denver Auditorium on the evening of April 21, attended by 20,000.

Left to right: Miss Texaco (Miss Muriel Friend, dictaphone department); Daniel Bowles, Ass't Agent, Denver S. S. No. 3; Miss Golden Stream (Miss Bertha McDonald, accounting department); J. A. Dunavant, Agent, Denver S. S. No. 8.

The Texaco trademarks on the costume of Miss Texaco were all of rhinestones in the Texaco colors, and the headdress worn by Miss Golden Stream was done in colors as nearly true as possible. Both costumes showed well in the review before the spotlight.

Spokane District.—A. M. Ripley has been assigned the Commission Agency on the re-opening of Deer Lodge, Montana Station; and J. R. Horsfall is now Commission Agent at Anaconda, Montana Station, which was recently re-opened. Good luck to both!

The Spokane District Bowling Team, representing The Texas Company in the Northwestern International Bowling Congress Tournament, were crowned "Kings of the Maple Smashers" when they rolled up a score of 3,023 at Seattle on April 14 and thereby took first place. In this match they set two new Northwestern records by marking up 1,044 for a single game and then smashing this record with a mark 1,079. At Spokane they captured the City Title with a total of 3,121 pins.

The team consisted of A. Sartor, Fred Converse, C. Guter, Barney Kjose, and S. Erby, and their winning of the tournament is considered a remarkable feat. In the contest were entered 120 5-men teams, numbering among their members some of the greatest bowlers in the Northwest. It was only by teamwork of a superior character that the Texaco Quintet were able to come out on top. The tournament resulted in cousiderable attention being directed to the "Texaco Oils," and the press were lavish in the publicity which they accorded the successful efforts of our team.

ASPHALT SALES DEPT.

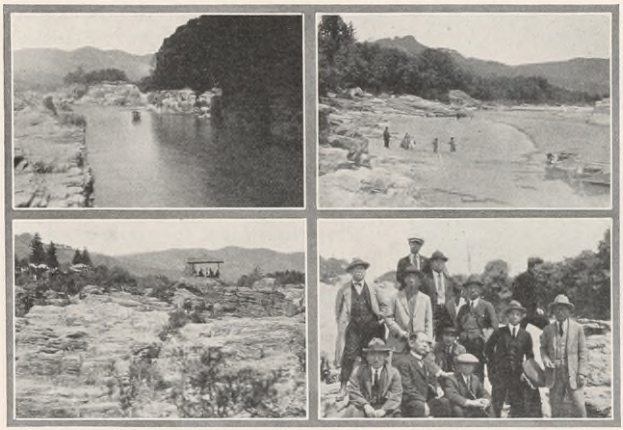
Residents on Comstock Avenue, Buffalo, New York, recently put up such a strenuous fight against paving their street with cement concrete that the City Council changed its mind and awarded the work on asphalt. Texaco asphalt will be used by the contractor, the H. P. Burgard Company. Representative L. W. Gay in reporting this matter, adds that the Burgard Company uses Texaco exclusively in its asphalt construction.

What percentage of the paving constructed in American cities is asphalt? The answer to that question became known when 474 cities having a population of 10,000 and over recently reported on their paving. Asphalt streets in these cities were 45% of the total. The other hard-surfacing types, brick, cement concrete,

With the speedometer sticking close to forty, a car will spin along for three-quarters of an hour on this road without leaving Texaco asphalt. It is the 32-mile stretch of Texaco Asphaltic Concrete on State Highway No. 83, Jones County, Texas. There is so little curve throughout this 32-mile span of Texaco that a person standing at one end can almost see the other.

The foundation of Route No. 83 is a local material known as Caliche gravel. Soft when taken from the pit, this gravel sets into a hard waterproof surface. This is probably the first time Caliche gravel has been employed as a foundation for asphaltic concrete.

There is probably more Texaco paving of various types on the Texas State Highway System than on any other State Highway System.



Picnicking
in
beautiful Japan

These snapshots were taken May 16, 1926, on an outing of our Tokio office staff to the Arakawa River about forty miles from Tokio. They had a very enjoyable time.

stone block, and wood block, *combined*, amounted to 33%. The remaining 22% in the 474 cities is macadam and gravel. Asphalt leads the field by a very substantial margin.

Another example of Texaco asphalt paving durability has been brought to our attention. For a pavement, seventeen years of service is highly commendable. The Texaco pavement on Main Street, Lexington, Ky., is now in its 17th year and promises much longer service.

At last our suspicions have been justified. Members of the Asphalt Department have long listened dubiously to the reports circulated by Colonel A. D. Stivers, Southwestern Division Superintendent, of his golf ability. In the May issue of *The Elks' Magazine* is a story entitled "Old Man Par," which gives us the real facts. In spite of all the strings which he desperately strove to pull, the Colonel was unable to "kill" this story. Picture a golf champion going over the course in a wheel-chair propelled by a perspiring negro! That's the only way the Colonel could complete the course! The story begins on page 32 of the May issue of *The Elks' Magazine*.

Local fans of Philadelphia, the Quaker city, are looking forward expectantly to some big league baseball this season on the part of the West Phillies team. An important reason for this is the fact that one William H. Quigley has taken over the managerial reins. We too are rooting for "Bill," who is right hand man to Representative W. J. King of the Philadelphia District of the Asphalt Department.

EXPORT DEPT.

M. L. Coleman, District Manager of The Texas Company in Mukden, Manchuria, is now in America on home leave.

J. B. Nielsen, Superintendent of our Coding and Mailing Division, and Secretary of the Export Marketing Committee, has left for a visit to his old home in Denmark. He will also call upon our several offices in Europe. In years of service Mr. Nielsen is one of the oldest members of the Export Department, his connection therewith dating back to July 1910.

CRUDE OIL PRICES AT WELL

May 31, 1927

Penna., Bradford	$2.90	Gray Co.	$ .80 to 1.12
Other Penna.	2.80	Reagan Co.	1.12 to 1.60
Indiana	1.42	Tex. Panhandle,	
Canada	2.11	Hutchinson	
Ragland	.95	& Carson Cos.	.95
California	.85 to 1.36	Gulf Coast	1.15 to 1.47
Okla., Kas., N.-N.C.-		Markham	1.00
C. Texas., N. La.,		Luling	1.00
& Eldorado	1.12 to 1.60	Mirando	1.00
Smackover	1.00 to 1.25	Wyoming	.95 to 1.33
Hurdle, Tex.	.70 to .92	Colorado	.72 to .85

Wash away summer worries, fatigue, and irritation. Besides the morning bath, take a shower every afternoon and go home to your wife and little ones cool, clean, and in good temper, or, as may be more convenient, take the shower as soon as you get home.

SUGGESTIVE INDEX OF CURRENT ARTICLES

Journals cited are gladly loaned, if in our library, to persons connected with the Company. The journal or journals called for will be sent by return mail, unless in the hands of some one who has made a previous request—and in the latter case, as promptly as possible. Please give full and exact mailing address.

REFINING. How Efficient Lighting Affects Production and Profit. H. J. Littlefield (of the Engineering Staff of General Electric Company.)—*Industrial Management*, May 1927.

Getting Away from the Handicap of Climate—Air Conditioning in Industrial Buildings. F. R. Ellis.—*Industrial Management*, May 1927.

LABORATORIES. Amyl Acetate from Natural Gasoline. Koch and Burrell.—*Oil and Gas*, 25, 46, 170 (1927); *Ind. and Eng. Chem.*, 1927, 442.

Copper Corrosion Test of Gasoline. H. T. Bennett.—*Oil and Gas*, 25, 47, 138 (1927).

Contact Filtration of Lubricating Oils. George Reid.—*Refiner*, April 1927, page 57.

Microanalysis of Lubricating Oils. Meyerheim and Frank.—*Refiner*, April 1927, page 78.

Separation of Individual Saturated and Unsaturated Hydrocarbons in Coal Gas by Fractional Distillation. F. E. Frey and W. P. Yant.—*Ind. and Eng. Chem.*, 1927, 492.

Study of Petroleum Lubricants. C. F. Mabery.—*Ind. and Eng. Chem.*, 1927, page 526.

FUEL OIL. Expansion of Sound Fuel Oil Market Offered as Relief Measure.—*National Petroleum News*, May 4, 1927. (From *The Lamp.*)

SALES. What Factors Should Enter Into Cost of Marketing Gasoline from Siding to Final Consumer. C. B. Fehr.—*Petroleum Age*, May 15, 1927.

How to Sell Lubricating Oil?—Display It!—*Petroleum Age*, May 1, 1927.

GENERAL. American Business Goes on Record—Resolutions Adopted by the Fifteenth Annual Meeting of the Chamber of Commerce of the United States.—*Nation's Business*, May 20, 1927, *Extra.*

What Will Europe Renewed Mean to Us? Thomas W. Lamont.—*Nation's Business*, May 20, *Extra.*

Modern Comfort. Katharine Fullerton Gerould.—*Harpers Magazine*, May 1927.

The New American Bar. Charles Merz.—*Harpers Magazine*, May 1927.

The Great Torii at Miyajima, the sacred island of Japan, at low tide

See front cover and inside page of front cover. Note how the lapping of the waves for centuries has worn into the old logs where they rise above the sand.