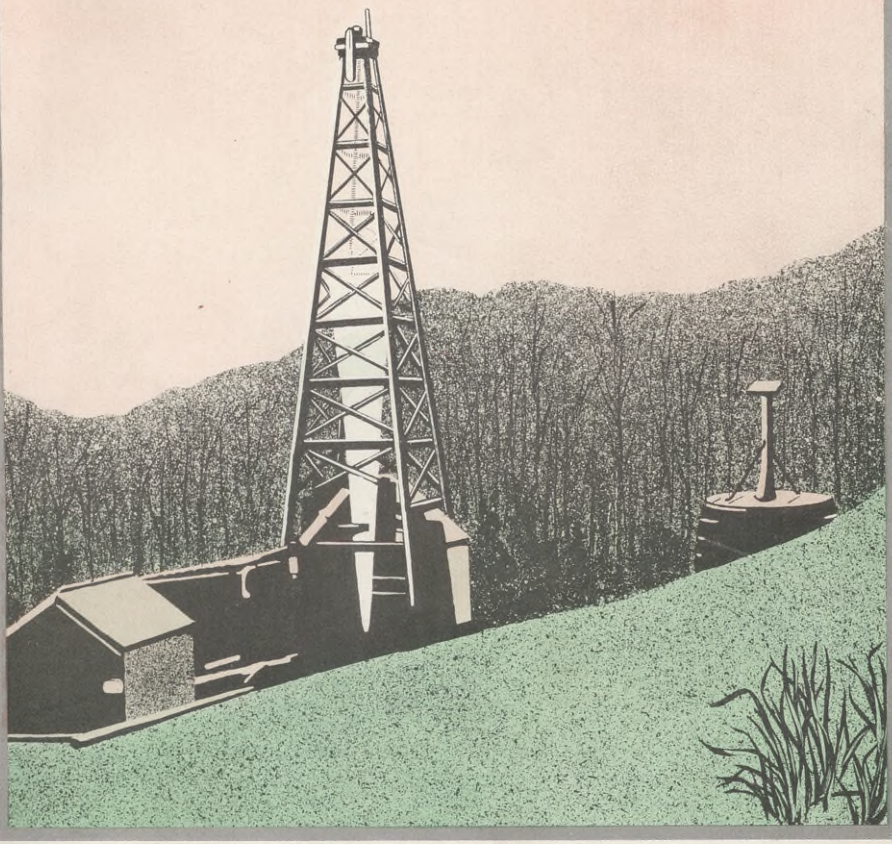
NATURAL GAS DEPARTMENT NUMBER

THE TEXACO STAR



Vol. II NOVEMBER 1914 No. 1

NATURAL GAS DEPARTMENT STAFF

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T. F. O'BRIEN, Sup't Shreveport District, - SHREVEPORT

JOSEPH MERKT, Sup't West Texas District, - MORAN

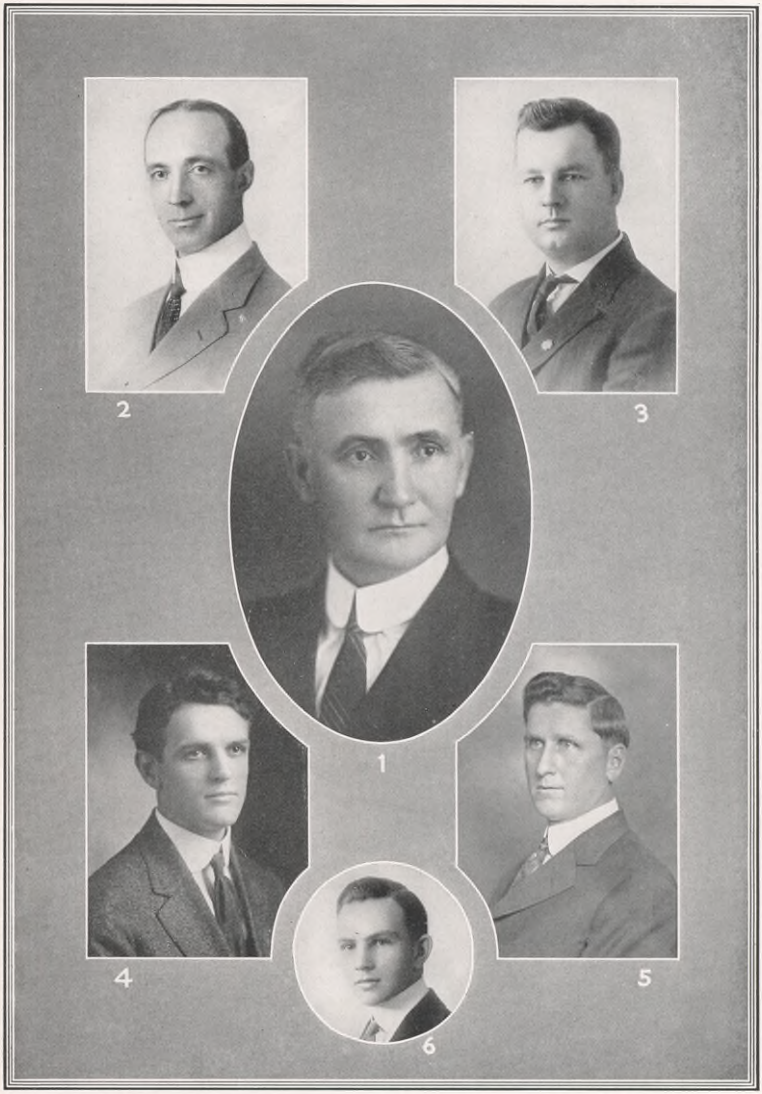
PROFIT CHOKERS

Stagnating Business by being "Satisfied"
Antagonism to Improvements
Failure to *Understudy* important positions
Authority without responsibility
Responsibility without authority
Costly Experiments
Statistical Indigestion
Misleading "Costs"
No proof of "Costs"
Hasty dictation of important letters
Crying for *more help* instead of for *more method*
Handicapping brain workers by handwork
Expensive teaching of Floaters
Reckless delivery promises
Too many Rush Orders
"Shorts" and "Outs" on good sellers
Lack of initiative
Time-killers and chronic Strollers
Waiting for work
Disloyalty

Every condition noted here is real. Some are specific, some are broad. They are the Dry-Rot of Business. They clog Production, burden Overhead, lower Efficiency of Labor and Equipment, cut down the Margin of Profit. They sap the money that should fight Competition, pay the increased cost of Labor and Raw Materials, and permit Expansion.

—*Stephen T. Williams*

NATURAL GAS DEPARTMENT STAFF



1. M. W. Bahan, General Superintendent, Fort Worth 2. D. P. Harrington, Assistant to Gen'l Sup't, Fort Worth 3. T. F. O'Brien, Sup't Shreveport District, Shreveport 4. L. E. Barrows, Engineer, Fort Worth 5. Joseph Merkt, Sup't West Texas District, Moran 6. C. M. Griffith, Office Clerk, Fort Worth.

TEXACO STAR

VOL. II NOVEMBER 1914 No. 1

PRINTED MONTHLY FOR DISTRIBUTION TO EMPLOYES OF
THE TEXAS COMPANY
"ALL FOR EACH—EACH FOR ALL"

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

THANKSGIVING Day means *thought*-giving day, the words *thank*, *thought*, *think* being from the same stem—Old English *thenken*, German *denken*. The instinct or genius of language in this instance pays a high tribute to the general goodness of human nature,—in assuming, as it does, that to think of a benefit is to feel gratitude for it. It is thus proved that men of Teutonic race, at least, have believed that to be mindful of, to remember, was to be thankful; that thankfulness and thoughtfulness are substantially the same.

It may be interesting to compare with this fact of our mother tongue the earliest description of a thanksgiving festival in world-literature—as far as I am aware. Greek mythology and Teutonic language teach the same lesson on this point. The Greek myth relates that King Oeneus of Calydon proclaimed a Thanksgiving Day for the bounties and protection the gods had vouchsafed to the people for many years. Altars were erected to both greater and lesser gods, none were to be forgotten; but by thoughtlessness no altar was set for Artemis (Diana, of the Latins). When the smoke of sacrifices went up on the appointed day, no incense arose to the goddess who had restrained the wild beasts of the vast Calydonian Forest from depredating on flocks and herds and crops. The thoughtless omission brought woeful punishment. The neglected deity sent forth out of the forest an enormous boar, before whom the people could but flee in helpless terror. The great brute ravaged the fields and vineyards far and wide, driving men and cattle before him, slaying with his mighty tusks all who opposed. At last, Meleager, the king's son summoned the heroes of Greece—the sires of the heroes of the Trojan War, and organized the far-famed Calydonian Hunt in which the Wild Boar was slain.

No slight to the unthanked Artemis had been intended; the people of Calydon just did not *think*. But they remembered long the awful lesson of their first Thanksgiving Day, and in following times the custom grew up in some parts of Greece of taking the boys before the altars of Artemis and there flogging them to make them remember—think and thank—more carefully than their forefathers on that bygone day.

Is there a dark Calydonian Forest within the borders of this country, the wild beasts whereof have not yet been let loose upon us,—to be *thought* of? In the Forest of misgovernment and reckless law-making, there are tusked boars and wolves and panthers, besides the mere corn-devouring animals, who might lay waste the land, if we forget their existence and do not *think* enough to recognize them and protect ourselves against them.

Thoughtless good intentions never protect against the consequences of folly. I have found in my experience of life a hundred good hearts to one good head. There is evil affection and perverse intention in this world, but far more faulty thought and weak will. The poet is right:—

> The poor inhabitant below
> Was quick to learn and wise to know
> And keenly felt the friendly glow,
> And softer flame,
> But thoughtless follies laid him low,
> And stained his name.

Among the papers of the late Gen. S. C. Armstrong was found this memorandum:

"Now when all is bright, the family together, and there is nothing to alarm and very much to be thankful for, it is well to look ahead and, perhaps, to say the things that I should wish known should I suddenly die."

★ ★

A good intention may be so well satisfied with itself that it forgets to go further.

★ ★

If you tell your employer you'll do more work if he will pay you more money, your pay envelop will hardly grow heavier; but if you do more and better work first, you will probably before long be able to increase your deposits in the savings bank.

★ ★

Although the *Texaco Star* is sent without money and without price to every employe who wants it, yet it must be *subscribed* for in the sense that the only way to get on the mailing list is to make request for it—giving name and mailing address and position in the Company. This applies to everyone, from managers to bell boys. Our mailing list numbers now nearly *five thousand*; but there are still some of us who, it appears, wish to read the Company journal but do not take the step necessary to get it. We sometimes receive complaints that so-and-so is not getting the *Star*, when no request for it had ever been made either by him or on his behalf. We do not mean to be pressing the *Texaco Star* upon anyone; but if you know a fellow employe who does not receive it, you might ask him to decipher the following charade, by means of which the *Atlantic Monthly* some years ago delicately conveyed a gentle hint:

My first upon a bench doth sit,
And frets the hours away,
While others bear the burden
And the battle of the day.

My second is in holy writ,
And you will often see
Him mentioned as a comrade
To the Faithless Pharisee.

My third the comic Englishman,
Upon the burlesque stage,
Has used to punctuate his speech
Since Moses came of age.

My whole is what you ought to be,
If you would live aright,
So guess the riddle if you can,
And sit you down and write.

We intend to make the December issue a "Christmas Number." Individual interests of life and character and interests of the Home will guide the selection of the contents. The children will have their place. Even those blossoms of our race too young to share the stories and thoughts and fancies of a printed page, ought, it seems to us, to be represented—for the admiration of their elders. We suggest, accordingly, that their fair faces would be no less inspiring to the fellowship of The Texas Company, than the portraits of the members of Departmental Staffs shown in previous issues. Among other evils against which The Texas Company is bravely standing, is, evidently, the evil of "race suicide." Those who are proving the faith that is in them may "encourage the others" if they will send us (not later than Nov. 28) photographs of Texaco babies of the crop of 1914. The photographs will be returned after use by the engraver. Give name and address of parents, Department of the Company, and name and age of the infant. Send within the required time—before November 29.

★ ★

Comparative philology has been applied by a French professor to the discovery of oil fields. M. Durandin knows nothing of field geology or engineering; but by studying the etymology of ancient local names, especially in Asia and Africa, he finds some names which record the fact that in bygone and forgotten ages springs or wells of oil existed at the place or in the region. In this way he has discovered several important petroleum deposits in Africa and in Indo-China and Upper Tonkon. For instance the name of the district *Louang-Prabang* signifies something like *wax oil*. Professor Durandin calls his method *typonomie*. It is new only in the application to petroleum, having been long used by gold seekers. The names of various districts in France, such as Auriere, St. Sulpice-Lauriere, etc. recall the fact that gold (*aurum*) was found in those regions when the country was a Roman province.

Mr. Charles Witshott, geologist and oil and gas expert for the Standard Oil Company, on his return from Egypt some months ago, is reported to have stated in an address at Wooster, Ohio, that the verse in the Bible telling how the mother of the infant Moses, when she could no longer

conceal him, exposed the babe at the river's edge, had given a hint to the Chief Geologist of his Company, upon which he had been sent to the country of the Nile. The verse referred to is *Exodus*, II, 3: "And when she could no longer hide him, she took for him an ark of bulrushes, and daubed it with slime and with pitch, and put the child therein; and she laid it in the flags by the river's brink." Chief Geologist Alphant of the Standard reasoned that where there was pitch there was oil. "I was sent to investigate," said Mr. Witshott, "and three wells now in operation, with more being developed, is the result."

★ ★

The manly spirit of a recent trade circular concerning the present difficulties about imports deserves to be commended and imitated by all truly patriotic citizens of this country. This circular was issued by E. S. Jackman and Co., Agents for the Firth-Sterling Steel Company, McKeesport, Pa., to buyers heretofore satisfactorily served by foreign tool makers, whose supply has been interrupted by the European war. The circular states that Firth-Sterling competition with the steels of the world has been a friendly rivalry of quality and an inspiration to advance the Company's products to the highest standards; and adds: "If during this period, when business connections of long standing have been forced apart, we can help such shops to continue their work and usefulness, we shall be glad to respond with our best efforts and in the true American spirit wishing that the misfortunes of others will be of short duration."

★ ★

The Lincoln Highway is one year old, having been dedicated Oct. 31, 1913. More than 2,500 miles are now plainly marked for the guidance of the tourist. The Highway has been traversed from New York to San Francisco in less than thirty days. Hundreds are taking the trip. Thousands will take it next year. Hundreds of miles have been highly improved by States and communities; and the Association has built in Ohio, Illinois, Iowa, and Nebraska many "seedling miles" of Lincoln Highway—sections of perfect road, models for each locality to extend with connecting improvement.

★ ★

It may be interesting to compare a statement by President Andrew D. White, made in 1872, with another statement on the same subject made today in an editorial in a Chicago newspaper—*The Advance*. The first occurs in a report by the great president of Cornell University on Mr. Sage's proposal to build and endow Sage College, a residence hall for women, provided Cornell would adopt coeducation. One of the benefits of coeducation anticipated by President White (who had studied in France, been attache to the U. S. Legation at St. Petersburg, and U. S. Minister at Berlin) has not been realized. With all his wisdom and experience he forgot that the colleges are by no means a dominant factor in making the customs and manners of a people. His hope—doomed to disappointment—was expressed as follows:

Among the curiosities of recent civilization perhaps the most absurd is the vast tax laid upon all nations at a whim of a knot of the least respectable women in the most debauched capital in the world. Young men in vast numbers, especially in our cities and large towns, are harnessed to work as otherwise they would not be, their best aspirations thwarted, their noblest ambitions sacrificed, to enable the partners of their joys and sorrows to vie with each other in reproducing the last grotesque absurdity issued from the precincts of Notre Dame de Lorette, or to satisfy caprices not less ignoble. The main hope for the abatement of this nuisance, which is fast assuming the proportions of a curse, is not in any church, for, despite the pleadings of the most devoted pastors, the church edifices are the chosen theaters of this display; it would seem rather to be the infusion, by a more worthy education, of ideas which would enable women to wield religion, morality, and common sense against this burdensome perversion of her love for the beautiful. This would not be to lower the sense of beauty and appropriateness in costume; thereby would come an esthetic sense which would lift our best women into a sphere of beauty where the Parisian grotesque would not be tolerated; thereby, too, would come, if at all, the strength of character which would cause woman to cultivate her own taste for simple beauty in form and color, and to rely on that, rather than on the latest whim of any foolish woman who happens to be not yet driven out of the Tuilleries or the Breda quarter.

Mr. E. E. Slosson, commenting on the Cornell report of 1872, says:

I refer to the debating societies of Sage College the question why educated women as a class have in this particular completely failed to justify the confidence which President White placed in them. The financial burden which was then "fast assuming the proportions of a curse," has enormously increased. We cannot to-day share President White's hope for relief through the women's colleges. Even the specific training in this department which has been recently introduced seems inclined to intensify the evil rather than to remedy it. In Teachers College of Columbia University there is a thriving department. I visited the exhibition of the best work of the advanced students last commence-

ment [1910], and I must say that I saw there more grotesque, ugly, and ungainly hats than I have ever seen at large on the streets of New York.

The editorial statement referred to offers the suggestion that what has been beyond the power of the arts of peace and education, may be accomplished by the sterner discipline of war:

One good result of the war has already been announced. It is that American dressmakers are ready to declare their independence of Paris dressmakers and strike out on new lines in fashions for American women. If this shall be and the result shall bring us sensible, attractive, hygienic and modest apparel, men will not have died in vain. For not a few men have killed themselves dressing their wives in abominable fashions from Paris. It has been killing the women, too; and destroying modesty and good taste. Give us American fashions for American women; and let them be pretty as the American woman is pretty, modest as the American woman is modest. Let them be designed with a view to utility, beauty, reasonable, economy and simple good taste. Maybe in future the historian will look back and say, "The war of 1914 was a blessing to the world; for it liberated the women of Christendom from the tyranny and indecency of the Paris fashions."

★ ★

Staggering figures for the annual cost of crime in the United States, recently compiled by Prof. C. G. Bushnell, Washington, D. C., make a total of $6,000,000,000, which has been pronounced a close approximation by other experts. It includes the money spent in arresting, trying, feeding, and punishing, and direct losses caused by incendiarism, etc. The immensity of the sum total may be suggested by saying that it exceeds all expenditures by the governments of the United States, Great Britain, Germany, and France combined during the year 1912, a year marked by exceptional outlays for battleships.

Also, during 1912 there were over 6,000 murders (followed by a few convictions) in the U. S. The probably more numerous near-murders in which the attacked persons recovered from wounds are not counted. If the latter were included, these casualties of our peace would compare with the fatalities of the biggest of the battles we are reading about. If too many laws are made, none will be rightly obeyed, and, if many laws that do not deserve respect are made, none will be properly respected or enforced.

★ ★

Enthusiasm is the greatest asset in the world. It beats money and power and influence. Single-handed the enthusiast convinces and dominates. Enthusiasm is nothing more nor less than faith in action. Faith and initiative rightly combined remove mountainous barriers and achieve the unheard-of and miraculous. Set the germ of enthusiasm afloat in your plant, in your office, or on your farm; carry it in your attitude and manner; it spreads like contagion and influences every fibre of your industry before you realize it; it begets and inspires effects you did not dream of; it means increase in production and decrease in costs; it means joy, and pleasure, and satisfaction to your workers; it means life, real, virile; it means spontaneous bed-rock results—the vital things that pay dividends.—*Henry Chester.*

THE PESSIMIST

Nothing to do but work,
Nothing to eat but food;
Nothing to wear but clothes
To keep one from going nude.

Nothing to breathe but air,
Quick as a flash 'tis gone;
Nowhere to fall but off,
Nowhere to stand but on.

Nothing to comb but hair,
Nowhere to sleep but in bed;
Nothing to weep but tears;
Nothing to bury but dead.

Nothing to sing but songs,
Ah, well, alas! alack!
Nowhere to go but out!
Nowhere to come but back.

Nothing to see but sights;
Nothing to quench but thirst;
Nothing to have but what we've got,—
Thus through life we're cursed.

Nothing to strike but a gait;
Everything moves that goes;—
Nothing at all but common sense
Can ever withstand these woes.

—Ben King.

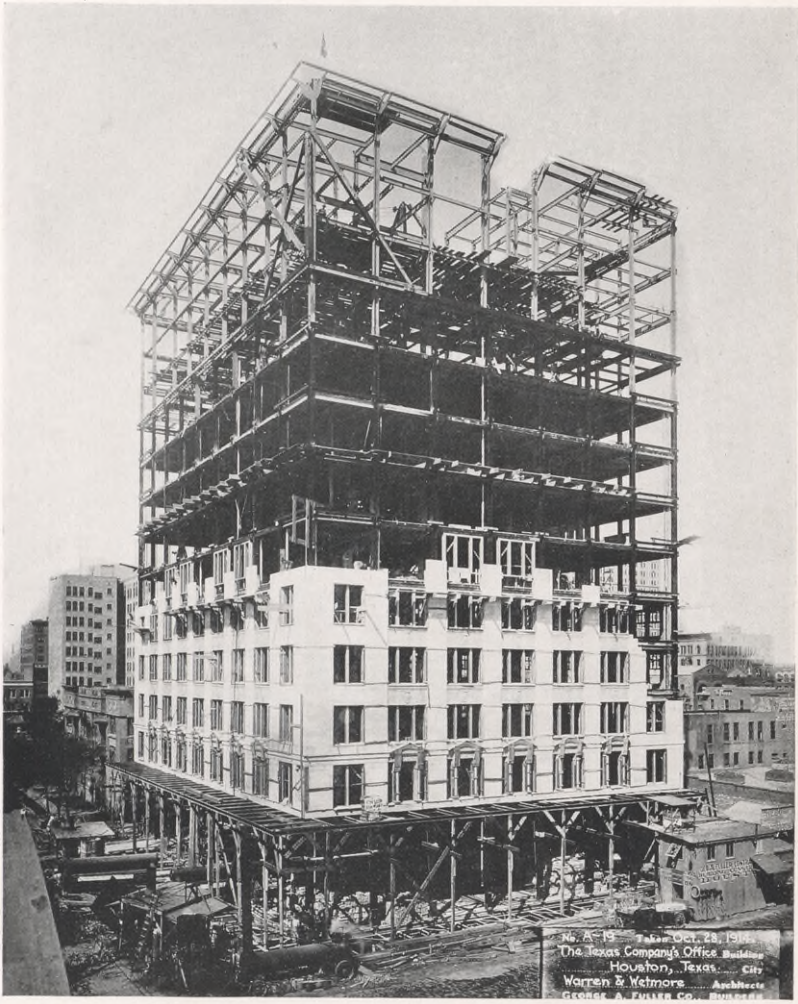
EFFICIENCYGRAMS

The great thing is to pull all together; to refrain from hasty, unwise words and actions; to unselfishly and wisely seek the best good of all; and to get rid of workers whose temperaments are unfortunate—whose heads are not level, no matter how much knowledge they may have.—*Genl. S. C. Armstrong.*

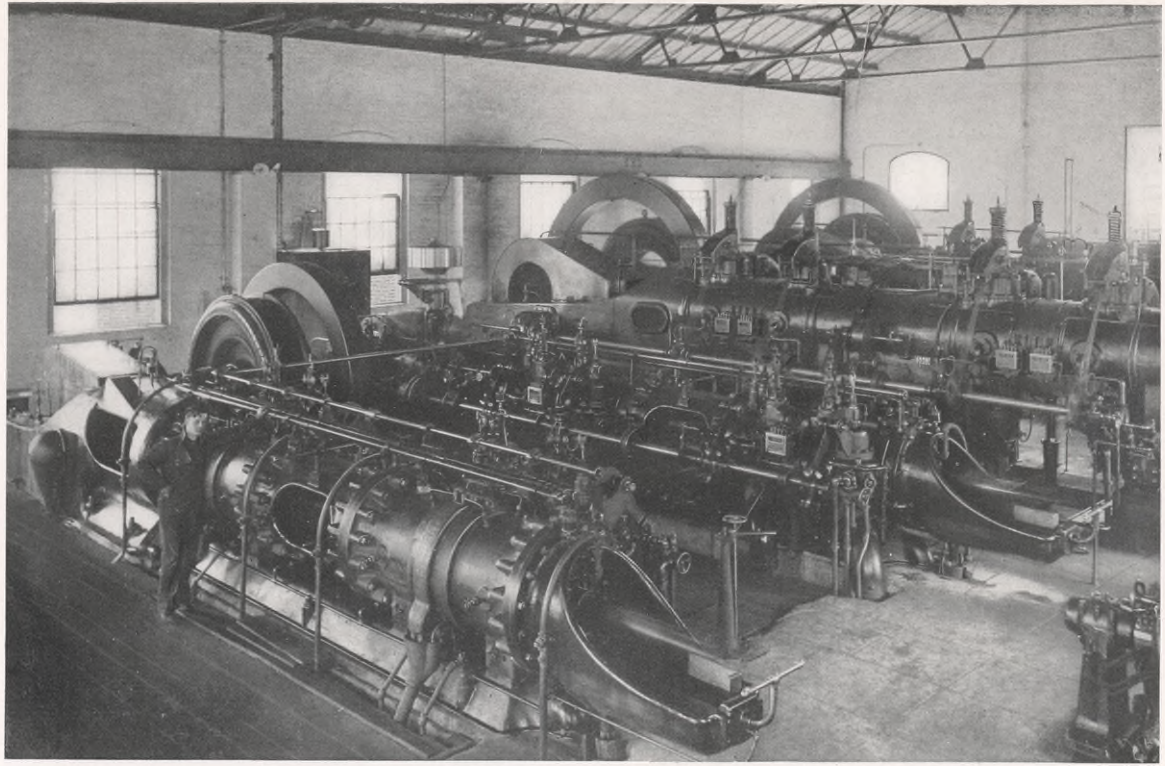
Efficiency can be gained by the co-operative spirit more successfully than in any other way; because to make the most humble worker feel humanly his responsibility in his labor, gives him inspiration to make of himself a man rather than a machine.—*Indianapolis Star.*

Success does not consist in never making mistakes, but in not making the same mistake twice.

The men who most surely succeed in business are those who study most intelligently and closely the industry and the market.



The Home of The Texas Company.—Photograph taken October 28, 1914. All steel except pent house and smoke stack is now (Nov. 1) in place. Riveting is not yet finished, but it is expected that all steel work will be completed by Nov. 7. The two 150 H. P. Heine boilers have arrived and are being set on their foundations. The terra cotta fireproofing and partitions are being placed on the 4th and 5th floors.



Two Types of Large Natural Gas Engines

Burning Gas Well. Drilled west of Oil City, Caddo Parish, La., in 1908. Gas blew out around casing, caught fire, and burned continuously for five years until September 29, 1913, when the well was killed by drilling an off-set well and flooding the sand with water.

NATURAL GAS

M. W. BAHAN

General Superintendent of Natural Gas Department

Natural gas, the most valuable form of fuel known, is a very old substance, and is widely distributed, though not always in commercial quantities, throughout the world. It is found in the greatest abundance in the vicinity of oil fields.

Gas from the "fire wells" of China was used for boiling brine thousands of years ago, and in a crude way it was employed in domestic heating. It was also used in remote antiquity in the fire temples of Tibet and Northern India. Travelers in Persia and India from the fourteenth to the first half of the nineteenth century describe the burning springs of Asia Minor and the fires of Baku, the "eternal fires" as they have been called. Marco Polo, the great traveler, described the oil springs of Baku in the thirteenth century. Petroleum, usually intimately associated with natural gas, was known as "burning water" in Japan in the seventh century. Thomas Shirley called the attention of the Royal Society of England to the natural gas of Wigan in Shropshire, and a Russian traveler, Peter Kahn, in a work published in 1749, showed on a map, the oil springs of Pennsylvania.

Beyond knowing that it came through fissures in the earth and produced heat and light, very little was known of natural gas in ancient times. In the United States, the burning springs, common in the valleys of the western slopes of the Appalachian chain from the St. Lawrence to Alabama, attracted attention long before there was

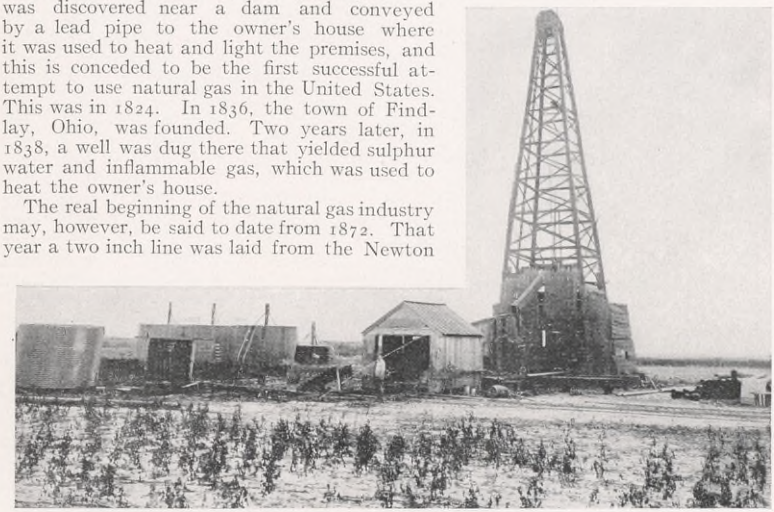
The well that opened up the Moran, Texas Gas Field.

any development of oil or gas. Nearly a century ago, in Fredonia, New York, gas was discovered near a dam and conveyed by a lead pipe to the owner's house where it was used to heat and light the premises, and this is conceded to be the first successful attempt to use natural gas in the United States. This was in 1824. In 1836, the town of Findlay, Ohio, was founded. Two years later, in 1838, a well was dug there that yielded sulphur water and inflammable gas, which was used to heat the owner's house.

The real beginning of the natural gas industry may, however, be said to date from 1872. That year a two inch line was laid from the Newton well five and one-half miles to Titusville, Pennsylvania, to supply gas for domestic use, and from that small start it has grown by leaps and bounds to its present magnitude. In 1882-3 the first large gas main, an eight inch line, was built into Bradford, Pennsylvania, from wells at Halsey, near Kane, Pennsylvania, for the carrying of natural gas a distance of between thirty and forty miles.

In 1887, the Central Ohio gas field was opened, and gas was piped to Lancaster. About 100 cities and towns in Ohio, in territory embracing an area covering about three fourths of the state, are now supplied with gas, the maximum consumption there approximating 150,000,000 cubic feet per day.

The development which began in the Ohio and Indiana field, near Findlay, Ohio, had reached, by 1900, an annual amount in excess of $10,000,000 with about 200,000 consumers. The field covered an area of nearly 3,000 square miles. Since then, the production has fallen to less than one-tenth of the maximum. This is the only section of large extent ever supplied with natural gas, which is not satisfactorily supplied at present.



Gas well, Moran, Texas—"In the Cotton Field"

Construction Camp—Abliene Gas Line

The magnitude of the natural gas deposits of the United States is of commanding importance. The territory embraces portions of the States of New York, Pennsylvania, Ohio, West Virginia, and Kentucky, besides the more recently developed sections known as the mid-continent field including Kansas, Oklahoma, Arkansas, and taking in, by a stretch of fancy, Louisiana and Texas and, still later, California.

It has been found that the annual consumption of natural gas in the United States and Canada, for the year 1908, was equivalent to 9,000,000 tons of coal and yielded a gross income of about $55,000,000.

At the present time, over 40,000 miles of natural gas mains are in use distributing the product of 22,000 gas wells. The capital invested is over $210,000,000, and the industry is growing at the rate of $20,000,000 a year. The daily consumption today is 1,400,000,000 cubic feet, about one-third of which is used in the Pittsburg district alone. In 1884 and 1885 natural gas superseded coal in practically every industrial in Pittsburg.

Prof. I. C. White, state geologist of West Virginia, in an address delivered in Washington. said,

"The tonnage originating in the Pittsburg District and passing through it now exceeds that of four of the greatest seaport cities of the world, London, Liverpool, Hamburg, and New York combined, so that not only Pennsylvania, but every state in the Nation, is interested in perpetuating as long as possible this empire of industry which our wonderful natural resources and the genius of the American people have conquered."

The writer who cites this says, "The Pittsburg District undoubtedly owes its industrial supremacy to the impetus given to it and now largely maintained by natural gas."

Under the impetus of modern methods, the business of discovering natural gas, developing it, and transporting and delivering it to the consumer, has grown to very large proportions in recent years; and the growing demand for it from consumers throughout the country makes the question of supply a matter of vast importance. Today the United States have approximately one-eighth of their population interested in the use of natural gas. It has been estimated recently that nearly 12,000,000 of our people are benefited by the use of gas in this country.

Natural gas varies greatly, not only in different wells but in the same wells at different times. For this reason it is measured by cubic feet instead of by weight, although its value lies almost wholly in its ability to produce heat and this quality is directly proportional to its weight. Gas is expansive and fills every vessel in which it is contained.

Under conditions which permit it, gas is migratory, always seeking escape from the place of its origin through strata of the least resistance; hence it is found that natural gas, in greater or less quantities, is more generally distributed and occupies a larger area than pools of oil, both of which have a common origin. Productive oil fields, however, are more numerous than commercial gas fields. There are known areas producing natural gas that are isolated from petroleum production.

The gasoline produced from natural gas,

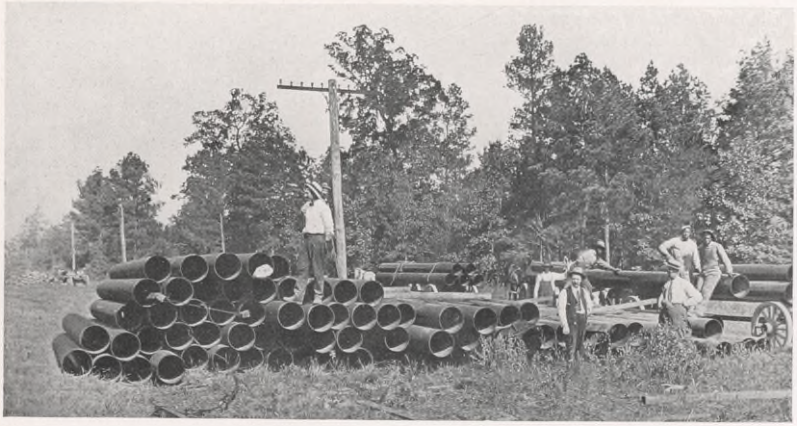
Ditching through woods for gas pipe line

which commenced to assume commercial importance in Pennsylvania in 1909, amounted to nearly 30,000,000 gallons in 1913.

In the marketing of gas, many things are to be taken into consideration and carefully passed upon:

1st—The quantity of gas developed in a field, the probable additional quantity that may be developed, and the life of such a field.

2nd—The objective point at which it seeks a market; the probable number of domestic consumers of gas to be found there; the character of such consumers, and the number of industrial consumers, based on



Tallying and stringing 16-inch pipe

Pipe strung, with couplers in place, ready to be laid

the horse power in use. With this data one can figure very closely what the year's consumption in cubic feet would be, as well as the maximum and minimum day's consumption.

3rd—The distance in miles between the gas field and the market must be considered in order to determine the size of the carrying line required, and its cost. It may be discovered that the objective in view, considering its population and probable gas consumption, is too great a distance from the gas field to be accessible, owing to the cost of the investment. It is, therefore necessary to carefully investigate the feasibility of such projects. For instance a city of 15,000 inhabitants located one hundred miles away from a gas field, could hardly be expected to pay a fair return on an investment in a carrying line of such length.

Lowering line into ditch

Sixteen-inch Gate

Filling in ditch on 16-inch line

Constructing gas line across lake

The conservation of natural gas and its application are important features. In the conservation, effort is made to stop all needless waste in the field, as well as at other points, and for these purposes, the use of the most modern appliances is recommended. Many oil producers, in their eagerness to secure large oil production, pay no attention to the conservation of gas, knowing that for oil there is always a ready market, while for gas, in many instances, there is no market at the well, especially where gas is produced in limited quantities. However, when a considerable quantity of gas is developed, a market is usually found which will take care of the smaller as well as the larger gas wells. Where an oil well of moderate capacity also produces a considerable quantity of gas, a separator may be devised to save both the oil and gas, the entire volume of the gas from the well being taken away. Such conservation of gas will not retard the oil production.

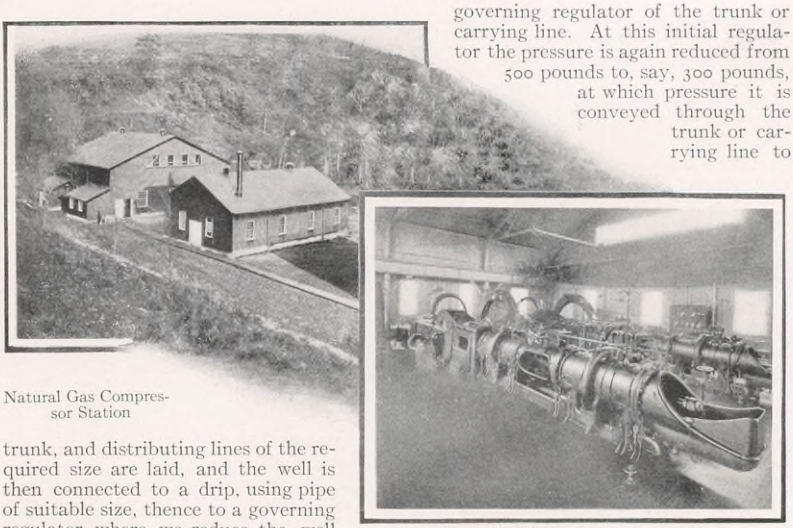
The economic use of gas, made possible by modern appliances with proper air mixture and draft, is one of the important matters to which time and attention are given; for it is always to the interest of the gas company, as well as the consumer, that gas be used economically. The results thus obtained prove natural gas to be a cheap and satisfactory fuel.

FROM THE FIELD TO THE CONSUMER

The first step necessary in the work of getting gas from the field to the consumer, is the securing of leases on the territory to to be prospected. The form of lease used is a matter of importance. A great deal of time and money is spent in securing proper leases, which should provide for a yearly flat royalty and not a percentage of the gas of producing wells. The leases having been secured, wells must be drilled to the number necessary to supply the quantity of gas required for the prospective consumption. The initial number of wells drilled depends, of course, on the volume of the wells developed and the quantity of gas required. In order to maintain the required supply additional wells are drilled from year to year.

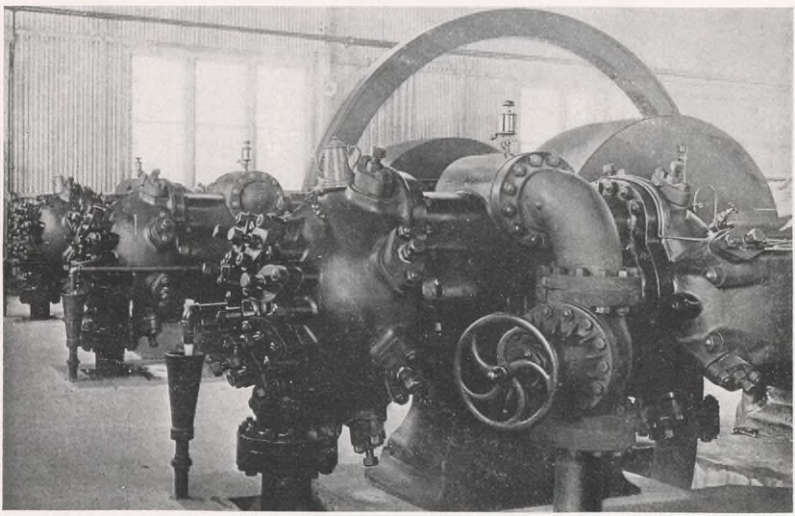
In the drilling and completing of a gas well particular attention is given to the casing, packing, and tubing of the well, in order, as far as possible, to shut off all salt and fresh water from the gas producing formation. The value of a gas well is determined by its rock pressure and its volume of gas in cubic feet per day, as well as on the character of the gas producing formation. Its rock pressure enters largely into the basis upon which we figure the quantity of gas stored in the gas producing formation, as of course the greater the pressure, the greater the number of cubic feet compressed in a given space.

The well completed, a survey is made of the route for a pipe line to take the gas from the field to the consumer. This line is a direct one, and as straight as possible from the field to the city to be supplied with gas. Rights of way from property owners are taken along this route and a franchise is obtained from the City for the distribution and sale of natural gas. Field,

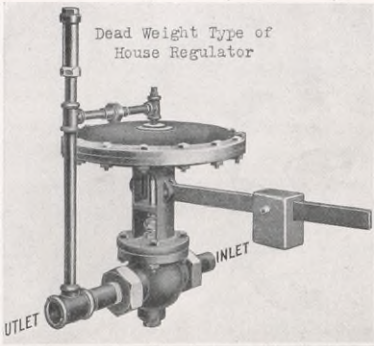


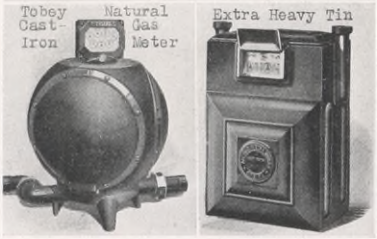
Natural Gas Compressor Station

governing regulator of the trunk or carrying line. At this initial regulator the pressure is again reduced from 500 pounds to, say, 300 pounds, at which pressure it is conveyed through the trunk or carrying line to the city limits, where the pressure is again reduced to, say, 30 pounds, at which pressure it is conveyed through a trunk, and distributing lines of the required size are laid, and the well is then connected to a drip, using pipe of suitable size, thence to a governing regulator where we reduce the well pressure, say, from 900 pounds to 500 pounds, at which pressure it is conveyed through a field line to the initial

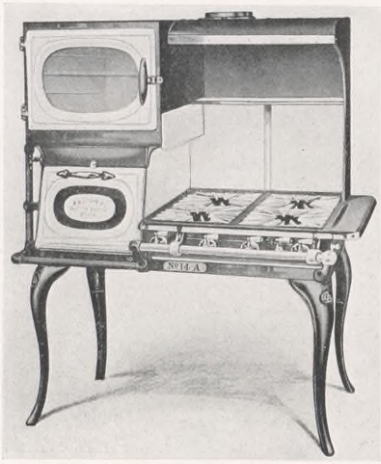


Natural Gas Compressor Cylinders





Domestic Meters



Modern Domestic Gas Stove

belt line around and through the city. To this belt line are connected a number of reducing regulators, reducing the pressure from 30 pounds to from 4 to 8 ounces, at which pressure it is delivered to the consumer through a system of low pressure lines. It is sold to the consumer at a price per thousand cubic feet, measured by meters which are furnished by the company. Line construction ends at the curb, or at the property line, the consumer taking up the connection at either point and piping his premises as may be desired.

The various duties herein mentioned call for the employment of men, specially trained, alert, and ever ready to suggest and supply improvements in all departments, from the taking of a lease, to the consumption of the gas.

Fire insurance companies are trying to impress on the public the need of taking especial care to prevent fire losses. They state that losses have been unusually heavy this year, and that if many serious fires were to occur now, financial conditions would compel the companies to sell their securities at enormous sacrifice. With the stock exchanges closed, it might be impossible, at whatever sacrifice, to meet the obligations, and an attempt to do so would cause grave financial disturbance. Many large industrial concerns are instituting rigid measures to guard against fire. If the present situation should lead to a general reform of the careless habits of the American people, a vast saving of life and property would be effected.

★ ★

Roofs made of wooden shingles are a constant menace to safety. Their continual use is a striking example of how thoughtlessly habits persist, in building construction as in everything else. A recent fire in Montgomery, Alabama, spread to eleven houses through their shingle roofs, and the next day there appeared in the newspaper immediately below an account of the fire this advertisement: "If you contemplate reshingling your house, see us.—Building Supply Company." The conflagration which nearly destroyed Salem, Massachusetts ought to have taught its people the needed lesson; but throughout the time of rebuilding, wooden shingles were being delivered all over the town to set up again the same old menace to safety.

★ ★

Oil soaked wood, oily waste, loose paper, wood-cased steam pipes, shavings, are a few of the easily discovered and removed fire starters.—*Practical Engineer.*

★ ★

There had been an explosion in a powder mill. The superintendent hurried to the place. Breathlessly he asked the foreman: "How did it happen? Who was to blame?" "Well, Sir," answered the foreman, "Jake went into the mixing room, and I don't know what he could have been thinking of, but he struck a match, and—." "Struck a match!" interrupted the superintendent, "I should have thought that would be the last thing on earth he would do!" "It was, Sir," replied the foreman.

BY THE WAY

A PARABLE FROM THE TREASURY DEPT.

A customer whose account is overdue is like a patient whom the Chief Surgeons[1] in charge of the Delinquents Hospital are trying to cure. The Surgeons need hearty co-operation and assistance from other Doctors[2] interested in the case, if the sick man is to get well. Treatment of the various cases coming into the Hospital differs in many particulars, although there is no variation in the result desired, namely, health. The Nurses[3] are supposed to have nursed the patient along from the beginning of the sickness, and to have made every reasonable effort within their power to prevent an operation. Operations by the Surgeons are supposed to be only the last resort, because in too many instances such operations result in the patient's early demise. Also, when operations are necessary other Surgeons are frequently called in, making the whole matter serious and complicated. In some cases the patient gets into a delirous condition, and then great self-control is required on the part of Surgeons, Doctors, and Nurses alike. The temperature must be quickly reduced by sedatives, and the patient must be allowed to believe temporarily that no medicine is to be given, and that his condition is satisfactory. Medicine given constantly in small homeopathic doses is better than large doses at infrequent intervals. The latter only upsets the patient when he is unprepared. All patients should be led to expect some medicine, and if soothingly given they will learn to like it. They should never be allowed to refuse it if their condition requires its use. Drafts are bad for some patients, although they seem to have a beneficial effect on others, contrary to certain medical opinions. The atmosphere in the hospital should be kept moving always, and some drafts, therefore, are necessary. The Surgeons often experience bad checks in the treatment of their cases, and at such times radical action should be taken if the case is to be saved. The efforts of the Internes[4], as well as the Nurses, should be to keep close watch upon the condition of all patients at all times to see that such checks are avoided. Surgeons, Doctors, and Nurses should obtain the confidence of their patients, or very little success will attend any of their efforts.—*D. B. T.*

1 General Credit Men
2 District Credit Clerks
3 Salesmen and Agents
4 District Superintendents and Chief Accountants.

Decorated for parade of Mercedes, Texas Stock Show. It took third place. D. C. Regan, Agent Mercedes Station, Marshall of the Day, on horseback; his son J. A. Regan, on the wagon.

Palestine, Texas Station. Photograph contributed by J. M. Heard, Tank Wagon Driver.

When wood is examined under a microscope it is seen to be made up of minute units or cells open at both ends, forming continuous channels for the sap. The walls of these cells form spindle shaped elements which serve to support the tree. It is from the substance of these cell walls that most paper is made. This substance is called *cellulose*. It consists of carbon, oxygen, and hydrogen. There is another substance called *lignin* which makes a considerable part of wood; it consists of the same elements as cellulose, but combined in slightly different proportions. It is deposited on the inner surface of the cell wall, which it stiffens and strengthens. Cotton, starch, gum, and sugars have almost exactly the same chemical composition as cellulose, and alcohols differ very little. It may seem wonderful that substances having such different properties should be comopsed of the same elements combined in the same or nearly the same proportions. According to the atomic theory of chemistry, the differing properties are the results of different ways in which the atoms are arranged or grouped in the molecules of the respective substa nces.

* *

A Phophecy of a Cellulose Age.—On your next homeward voyage you may go on board your steamer in a cellulose suit, with a cellulose hat and cellulose boots. You may dine in a cellulose panelled saloon floored with cellulose mosaics at a cellulose table on a cellulose chair. You may eat with cellulose plated teeth and cellulose handled knives and forks off a cellulose plate laid on a cellulose cloth and flanked with a cellulose napkin. You may drink cellulose whiskey from a cellulose tumbler and coffee sweetened with cellulose sugar out of a cellulose cup. Should those familiar elements, air and water, be unruly (unfortunately they are not cellulose and are therefore unmanageable), and call you to the seclusion which the cabin grants, you may rest your spasm-racked frame on a cellulose couch behind a cellulose curtain.—*Wm. Raitt, F. C. S., in a paper read before the Forest Conference.*

* *

When a duck lays an egg, she just waddles off as if nothing had happened. When a hen lays an egg, there is a world of noise. The hen advertises, hence the demand for hen's eggs instead of duck's.—*Contributed.*

Communist orator—"Tell me why it is you have to work from morning until night?"

Auditor—"It is the only time we get. We sleep from night till morning."—*Judge.*

EFFICIENCY

R. C. HOLMES, Manager Refining Department

The publication of the *Texaco Star* as a house journal, or employes' magazine, is but a preliminary step in a general efficiency campaign throughout the Company, the idea being to give all employes a better general knowledge of the Company's operations and affairs, believing that this would tend to stimulate individual interest.

Efficiency is the watchword of the present day. On every hand in every department of life the call is heard; the demand is made for men who are efficient—that is to say, physically active, mentally alert and keenly alive to the requirements of modern life, equal to meeting the demands of the most stirring and strenuous times the world has ever known. A great deal has been written on this subject, and sufficient has been said in the *Texaco Star* to make it plain to every employe that the results we are aiming at can only be secured through the economical and effective efforts of all.

We are satisfied that the failure on the part of the majority of the employes to evidence their interest in the way of suggestions, as requested in Mr. Lufkin's circular letter of Feb. 27, 1914, is not due to the fact that no opportunities for improvement are visible.

In the Refining Department I have appointed a permanent Efficiency Committee, composed of the Superintendents of each of the five refineries, the Superintendent of the Case & Package Division, General Superintendent of the Northern Terminals and General Superintendent of the Southern Terminals, the Department Agent, and the Department Engineer, with P. C. Scullin Chairman and V. R. Currie Secretary. Regular meetings are to be held in Houston on the third Monday of April and the third Monday of October of each year. The general efforts of this committee are to be directed along the following lines:

First—To establish and maintain the most satisfactory and uniform methods of operation.

Second—The consideration of efficient devices in operation at one of the Works which may possibly be applicable to some or all of the others.

Third—Careful selection and consideration of the training and qualifications of employes in all lines, with a view to transfers or other changes which would result in betterment of the organization and encouragement of the men.

Fourth—Careful study and consideration of the cost records which are prepared on all items of construction and operation; the reports which each member of the committee is expected to prepare, outlining clearly all economies which he has been able to accomplish in the six months preceeding each general meeting; and his recommendations for efficiency equipment, which must include estimates of the cost and of the saving.

Fifth—An effort to standardize so far as possible the purchases of all construction material and operating supplies.

Through this committee each superintendent will be enabled to see for himself how his efforts and results compare with those of other superintendents, and we are going to judge and estimate the value of all employes on the basis of efficiency.

Efficiency does not necessarily mean less men or lower wages, but usually means better equipment, greater capacity, and increased business.

No superintendent can build up and maintain an efficient organization, if men are retained who are not capable of development, or who are not interested in the growth and success of the company. Neither can he afford to overlook the value of experience, which has been the instructor of practically every successful leader of commerce and industry.

It is reported that Lord Kitchener, in preparing English soldiers for war, puts the new recruits in training camps where they are furnished good plain food and are required to drill and march, regardless of weather, at least eight hours a day, carrying full service kit, across country and over rough roads. No time is wasted on those who do not show signs of development and improvement under these severe conditions, and before these men are sent to the front it is required that they not only march like soldiers and look like soldiers, but that they think like soldiers.

It is required of our men, particularly those on whom responsibility is placed, that they think efficiency and act efficiently.

An efficiency campaign is not new in this Department. We have endeavored to apply it as thoroughly as possible from the beginning, and out of our investments in construction of over $700,000.00 during the last fiscal year, $104,676.19 covered what we term "Efficiency Equipment" on which we estimate that a saving in operation for the year was made of $209,655.03.

As Mr. Julius Kruttschnitt, Chairman of the Executive Board Southern-Pacific, has said in connection with a similar movement—"We are not dissatisfied, but we are *un*satisfied."

SAFETY AND SANITATION

Considerable interest and activity has been displayed by the sub-committees of Safety appointed at the different refineries, effective October 1. The personnel of these committees follows:

Port Arthur Works:
D. J. Moran, Ch'rman
S. C. Fox
C. J. Witherup
E. R. Davis
Chauncey King

West Dallas Works:
W. K. Holmes, Ch'rman
J. L. Bostian
J. P. Jones
W. O. Hutsell
D. Sutter

Lockport Works:
E. Casey, Ch'rman
M. E. Pence
M. C. Peck
C. S. Bruce
G. Sandstrom

Port Neches Works:
J. E. Trussell, Ch'rman
J. O. Merriman
J. T. Connell
M. V. Ray
W. H. Markle

West Tulsa Works:
L. L. Newton, Chr'man
R. G. Collins
F. W. Mundt
J. C. McCabe
Guy Linton

Case and Package Div.:
H. O. Preston, Ch'rman
C. S. Beard
R. T. Morton
E. Shropshire
H. K. McCullough

The committees have been in existence only thirty days, yet they have submitted and acted on upward of one hundred suggestions for the elimination of unsafe or unsanitary conditions and practices. They have erected forty-five bulletin boards, on which are displayed several hundred notices and bulletins of special interest. Employes throughout the plants are beginning to show an interest in the Safety movement, and the committees have already received several valuable suggestions from them.

★ ★

Results in accident prevention cannot be achieved over night. Eternal vigilance, and constant and concentrated efforts by experts co-operating with employers and employes, is the price of safety. Only a limited number of industrial accidents can be prevented through mechanical safeguards. The vast majority of accidents are due to recklessness in the individual workmen. The solution lies in educating the rank and file out of instinctive recklessness into intuitive caution. This is a big task, and the longer we wait the larger will it become.

Success comes to those who take advantage of experience and seize opportunities, building upon a solid foundation of service rendered in conserving assets and promoting efficiency.

★ ★

V. R. Currie, Chairman of the Refining Department Central Committee of Safety, attended the Third Annual Congress of the National Council for Industrial Safety, held in Chicago, October 13-16. He returned to Houston, Oct. 28, after having visited the Lockport, West Tulsa, West Dallas, Port Neches, and Port Arthur plants, and the Bayonne and Delaware River terminals.

PRELIMINARY REPORT

Soon after being assigned the task of directing the accident prevention work in our Department I began to realize the greatness and importance of the work, and the longer I studied the subject or delved into it, the more enthusiastic I became as I saw the possibilities for good work and unquestionably good results, providing the proper co-operation was secured and interest shown by the management on down to the humblest employe.

It was only natural, therefore, that on arriving in New York City my first step was to visit and register at the headquarters of the American Museum of Safety. This Museum was organized and is maintained for the prevention of accidents, the elimination or lessening of occupational diseases, and the promotion of industrial welfare through health, efficiency, and co-operation. There are now twenty-five museums of safety and institutes for the study of industrial hygiene in the world. The American Museum of Safety—twelfth in the world series of museums—was incorporated by special charter from the Legislature of the State of New York. It is the only institution of its kind in the United States. This Museum occupies the entire sixth floor of the Engineering Societies' Building. Its collections include not only devices and models of safety and sanitary appliances, but also a highly specialized library of books, pamphlets, reports, and photographs and lantern slides illustrating the simplest and most practical methods of protecting dangerous machines and processes. The Museum is in charge of a very efficient corps of attendants, and one of these courteously guided me through the various departments and explained the uses of several hundred safety devices, not failing, of course, to fill my pockets with safety literature when I departed.

It has been my good fortune to attend quite a few conventions, but never have I seen more interest and enthusiasm displayed than at the Annual Congress of the

National Council for Industrial Safety, in Chicago, October 13th to 16th inclusive. It was work, work, work, speeches, discussions, experience meetings, and demonstrations, from the time the gavel sounded until pie was served at the banquet. Outside of one theatre party and the arrangements provided for the lady visitors, most of the entertainment features comprised trips to industrial plants in and around Chicago, thereby affording us the opportunity of seeing for ourselves the great work being accomplished by well organized safety and welfare departments.

The National Council for Industrial Safety has been the outgrowth of an apparent need for some agency under which could be coordinated the Accident Prevention work going on in this country. The object of the National Council is to promote accident prevention by establishing conveniently located headquarters for the maintenance of a clearing house of information; to encourage the organization of those interested into local councils under the auspices of the National Council; and to hold annual safety Congresses, giving the widest publicity through its publications and other channels to all matters pertaining to Safety work. At the conclusion of the Second Safety Congress in New York, in 1913, there were about forty members enrolled. Today there are enrolled 829 members, with 2769 representatives.

Approximately twelve hundred and fifty persons attended the Congress. Six hundred to seven hundred were present at the Round Table meetings. Moving pictures and lantern slides were shown each afternoon and First Aid demonstrations conducted by Government experts. The Mine Rescue Car of the United States Bureau of Mines, and the New York Central Lines Safety Exhibit Car, were stationed at the LaSalle Street Station, and were well patronized. Two floors of the LaSalle Hotel were entirely occupied by the National Council exhibits containing upward of 1400 photographs of safety devices, and by manufacturers of devices and articles used in safety work.

I find it impossible to summarize the work accomplished at this convention, but there were one or two questions brought up which I wish to speak of at this time, and which, to my mind, have an important bearing in accident prevention work.

The first is the education of the "boss." Safety work, to be carried on successfully in any plant, no matter what its size, must have the enthusiastic support of the management. This support must be apparent to all in the Works' organization, and in large organizations it is no small problem to accomplish this. In such cases the various department superintendents must necessarily represent the management. Therefore, these are the men who must first fall in line with the Safety movement. The problem is one of education from the top of the organization all the way to the bottom, and each step in the educational work must be accomplished surely, even though slowly. It is a mistake for any management starting this work, to expect to get the enthusiastic support of the men down the line if there are department superintendents and foremen here and there about the plant not in sympathy with the work.

The second question brought up was the liquor problem. Statistics show that over sixty percent of industrial accidents are charged to liquor. The delegates at this Convention voted unanimously on the following resolution:

"Whereas, It is recognized that drinking of alcoholic stimulants is productive of a heavy per cent of the accidents and diseases affecting the safety and efficiency of workingmen; be it

Resolved, That it is the sense of this organization to go on record in favor of eliminating the use of intoxicants in the industries of the Nation."

I don't believe I can close better than by quoting from an editorial appearing in one of the Chicago papers during our session:

"The industrial safety movement has passed through several stages. It has entered on a stage that promises remarkable results. The large and small employers of labor are sitting up and taking notice. Accidents are no longer regarded as 'acts of God.' The safety movement is no longer a reform 'fad.' It is a movement that saves and conserves life, health, time, and dollars. It is a movement that yields benefits here and now, that pays weekly and daily dividends.

"A country that largely depends on immigrants and aliens for its unskilled labor, a country where many tongues are spoken in one mill, mine, or factory, is a country that particularly needs systematic study of safety. Employers of alien labor themselves have reached this conclusion. Accidents vary with the intelligence and efficiency of labor, with the spirit of the management, with the amount of thought given to the subject. Slackness, friction, short-sighted economy, mental laziness, inertia are among the causes of accidents. To think of accident prevention, to believe in it, is half the victory. A hundred ways and means of prevention suggest themselves where not one was suspected at the outset."

DEPARTMENTAL NEWS

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

Pipe Line Dept.	A. M. Donoghue, Houston.
Natural Gas Dept.	D. P. Harrington, Fort Worth.
Fuel Oil Dept.	E. B. Joyner, Houston.
Refining Dept.	C. K. Longaker, Houston.
Marine Dept.	W. L. Conover, Port Arthur. A. R. Weber, New York.
Legal Dept.	J. S. Ballard, Houston.
Treasury Dept.	Lee Dawson, Houston.
Comptrollers' Dept.	B. E. Emerson, Houston. J. R. Pouncey, New York.
Sales Dept., S. Territory	D. A. Vann, Houston.
Sales Dept., N. Territory	S. Slattery, New York.
Export Dept.	J. B. Nielsen, New York.
Purchasing Dept.	J. E. Byrne, Chicago.
Railway Traffic Dept.	J. W. Painter, Houston.
Producers	P. C. Harvey, Houston.

PIPE LINE DEPT.

Wm. Rinkard has been appointed Connection Foreman in the Glenn Pool District, with headquarters at Keifer, Okla., succeeding H. C. Bungard, resigned.

F. P. Soliday, gauger in the Glenn Pool District for the past seven years, has resigned and accepted a position with the Producers Oil Company in Cushing Field.

Jas. J. Griffin, who has been superintendent in Oklahoma Division, has severed his connection with The Texas Company, effective October 1.

Carl D. Ruff, of the Tulsa Office, is spending his vacation in his Ford touring car, visiting numerous points of interest in Oklahoma.

Miss Daisy Miller, of the Tulsa Office, has been seriously ill as result of inoculation with typhoid serum, which had been improperly prepared.

I. P. Chidsey of Tampico, who has been quite ill, has been in Houston the latter half of October recuperating. G. H. Speary of Beaumont, has gone to Tampico to take up duties of Mr. Chidsey during his absence.

H. E. Barton, formerly Connection Foreman at Humble, has severed his connection with this Company, and is succeeded by R. E. Doty, late of Concord Station.

C. W. Wise, formerly connected with our Sour Lake Warehouse, has departed for Mexico to fill a similar position with the Tampico Company.

W. I. Derden, of the Houston Office, is receiving congratulations from his numerous friends on the advent of a new son at his residence, who appeared Sept. 30.

J. H. McCaleb, Jr., in charge of The Texas Company's engineering department in Louisiana, died on October 21 at his home in Shreveport after several weeks illness with typhoid fever. He leaves a wife and two small children to mourn his loss. Among those who attended his funeral, which took place at Monroe, La., were J. L. Dowling, E. H. Catlin, and W. H. Mead.

Ben. R. Davis, Chief Clerk to Gen'l Supt. J. L. Dowling, was married to Miss Margaret Bosworth on October 24 at residence of the bride.

J. E. Considine and Miss Mamie Carroll were married at Houston on October 7. The ceremony was performed at 5:30 in the morning. The reason given by Mr. Considine in explanation of such an early hour was on account of postponing *his* marriage until late in life. His many friends are congratulating him on his charming and accomplished wife. Among the many wedding gifts was a handsome chest of silver from his Houston friends of The Texas Company.

A business proposition which has been under way for some time was finally consummated during the past week—the sale of a 5-passenger Ford car, owned by R. J. Daniel, to W. R. Mayer. Consideration confidential.

REFINING DEPT.

With extreme sorrow we announce the death of Superintendent Crawford's father. We extend our deep sympathy.

Dan Cupid has been playing havoc with the Refining Department force during the past few months, and the list of eligible bachelors is growing quite small. This month we take pleasure in announcing the marriage of Emmett Bernard McGeever to Miss Mary Joseph Garland which took place at Birmingham, Alabama, October 21. Mr. and Mrs. McGeever will make their home in "Heavenly Houston."

We take pleasure in announcing the approaching marriage of J. W. Harmon to Miss Ora McCartney. The event will be solemnized in Houston, November 17.

R. D. Cottingham has been transferred from Port Arthur Works to the Houston Office.

D. F. Casey has been transferred from the Houston Office to Port Arthur Terminal.

A. D. Walker, Chief Clerk at West Dallas Works, was a Houston visitor during the past month.

B. G. Willeford has resigned his position as stenographer at Port Neches Works. J. S. Brown has been appointed to fill the vacancy.

P. E. Hastings spent several days in Dallas visiting the West Dallas Works, also getting a glimpse of the Dallas Fair.

Mr. and Mrs. B. E. Hull and Mr. and Mrs. Ward B. Williams were the recipients of sets of silver from the boys in the Department.

A game of baseball was played at Delaware River Terminal on Saturday afternoon, October 10, between the married men and the single men, which resulted in the single men being defeated by a score of 12 to 5. The married men were captained by C. R. Raup of the Traffic Department and the single men were captained by Ben Halloran of the Terminal. The batteries for the married men were E. A. Talbot, pitcher, and C. R. Raup, catcher. The batteries for the single men were too numerous to mention. However, the single men are after blood and another game has been arranged for and Mr. A. E. Manley has put up a wager of $10.00 that the single men can not beat.

In July the Bayonne Terminal loaded the bark *Parknook* with a full cargo of 4,467 wood barrels of our Water White kerosene. It was a trial order from Sweden. The report on the outturn of the cargo made to Supt. Rieber by the Captain of the Bark is cause for just pride. The following is a literal translation of Captain Christensen's letter which is written in Swedish:

Sundsval, Sweden, 28th September, 1914.

Mr. T. Rieber,
The Texas Company,
Bayonne, N. J.

Dear Sir:

Allow me to thank you for your courtesies extended us when we loaded at Bayonne.

I arrived here on the 11th of September and was entirely unloaded on the 23rd of the same month.

With respect to the cargo it is supposed to be the finest shipment of Petroleum that ever arrived in Sundsval. The barrels were all in the finest of condition and the quality of the Petroleum is considered the very best ever received here.

With regard to leakage, there was, so to say, none at all.

Of the entire cargo there were only found two or three leaky barrels, so the stowing must also have been excellent.

The tally came out to the dot.

The consignee was immensely pleased with the outturn of the shipment and presented me with a fine New Year's hat.

With best regards, I remain,

Most respectfully yours,
K. A. Christensen,
Master of the Bark "Parknook."

The Export Department has already been requested to quote on two more cargoes for the same consignee.

MARINE DEPT.

The SS. *Brabant* and Barges *France Marie*, *Glenlui*, *Tuxpam*, and *Panuco* have been purchased by The Texas Company from the Continental Petroleum Company, and transferred from Belgian to American Registry under the new law.

The Marine Department has purchased for The Tampico Company, and is sending to Tampico on the SS. *Brabant*, a fine 20-mile speed launch, which will be used on

the Panuco River, and will be a great convenience in enabling the officers and employes of that Company to go from point to point with dispatch.

We were favored with a visit from J. M. Thompson, Jr., of the Dredging and Dock Department of the Panuco Transportation Co., who came North on a vacation.

If anyone has a job lot of baby spoons (sterling, of course) or teething rings, he might offer them to the Accounting office of the Marine Department. They are a fore-handed crowd, and when called upon to make many presents at one time like to be stocked up with ammunition.

TREASURY DEPT.

Treasurer Green made a short business trip to Birmingham recently.

Creditman Symms recently slipped away for a day's outing. He says he spent it fishing, but it is rumored that he spent a

part of it at least "Cutting" down trees to avoid the mud; anyway, no one has seen any fish.

EXPORT DEPT.

W. G. Moore is now on a business trip through the West Indies.

E. R. Phillips is in Cuba.

M. A. Horrigan has sailed for Cape Town, South Africa, via England. He will substitute for J. E. Murphy who has been called in to do military service.

The Export Bowling team opened the season Oct. 7 by winning two games from Funch, Edye & Co., and losing two with the Railway Steel Spring Co. C. H. Hobart of The Texas Company rolled the high score of 234.

TEXACO MAKES A RECORD IN AUSTRALIA

The *South Australian Register* published the following account of a record-breaking automobile run, on Texaco products, from Adelaide to Broken Hill, Australia, made by Murray Aunger, on June 26, 1914:

Murray Aunger registered a new record when on Friday he drove from Adelaide to Broken Hill in a motor car. He was accompanied by Frank Beasley, who was the record-maker's companion on the Melbourne-Adelaide trip. The motorists left Adelaide at 6:30 o'clock on Friday morning, and throughout were ahead of the 30-mile per hour schedule set them. The Burra was passed at 9:25, 16 minutes ahead, and the lead was gradually increased to 33 minutes at Braemar, which was reached at 11:10 A. M. The next report came through from Faraway Hills, where five minutes of the lead was lost. At 4:18 the car was stopped at the Broken Hill Post Office, and thus S. A. Cheney's record of 13 hours 55 minutes was beaten by 4 hours 17 minutes.

Aunger's performance is a splendid one. The total distance to the Barrier by the route he took is 325 1-4 miles, and his average speed for the journey works out at well over 35 miles per hour. Between 70 and 80 gates had to be opened, and but for this there is little doubt that the record-breaker would have covered the distance in nine hours or less. It is even a better record than his Melbourne-Adelaide one, as, although in the latter the Coorong had to be crossed, in this latest trip the roads were bad for the major portion of the journey, and in some places were merely bush tracks and very sandy at that. The car was a 35 H. P. Overland, with a "Speedster" body. United States "Nobby tread" tires were fitted, and "Texaco," a new motor spirit, manufactured in Texas, was used.

THE TEXAS COMPANY (SOUTH AFRICA) LIMITED

"DON'T MOTTOS"

1. Don't ask too many questions—use your brains.
2. Don't forget to check all documents sent out of this office.
3. Don't forget to jolly along all customers and prospective customers. Make them buy something "Texaco" if possible.
4. Don't forget the Stock Book when in doubt.
5. Don't forget *any* orders—execute them *at once*, if possible.
6. Don't waste *anything* belonging to The Texas Company. Everything you use has to be paid for.
7. Don't forget to be careful with the Stamps—they have to be purchased with coin of the Realm.
8. Don't leave *any* documents lying about on the tables; other people have a habit of reading them.
9. Don't forget to keep your eyes and ears open, and your mouth shut.
10. Don't forget you represent The Texas Company of South Africa.—NUF SED.

SALES DEPT. S. TERRITORY

A Blue Ribbon

STATE OF OKLAHOMA
OKLAHOMA GEOLOGICAL SURVEY.—NORMAN.
October 10, 1914.

The Texas Company,
Port Arthur, Texas.
Gentlemen:

The Eighth Annual State Fair and Exposition has closed, and not least among the attractions was the exhibit of Oklahoma's mineral wealth at the Mineral Building. I wish to thank you for your hearty cooperation which helped to make our exhibit such a success.

It gives me much pleasure, too, to mail you a Blue Ribbon for having the best exhibit of Southern oil products. I have asked that a diploma be mailed to you directly from the State Fair Association office.

I hope that in the future we may have your further assistance and cooperation in such work.

Yours very truly,
(Signed) L. E. Trout
Field Geologist.

In our July issue we printed an interesting letter addressed to the Mayor of Shreveport by Mr. A. C. Cronan, General Superintendent of the Municipal Repair Plant of New Orleans, together with a front view of the said plant. The following is another letter from Superintendent Cronan dated October 16, 1914, addressed to Mr. F. W. Simpson of Jackson, Miss.:

Answering your favor of the 12th inst in which you inquire about our method of treating shell streets to waterproof them and make them dustless:

Beg to advise that after a severe test of two years duration, this City has found "Texaco" Liquid Asphalt to be eminently satisfactory, as is shown by an extract from the "New Orleans Item" of October 6th, which I give below:—

"The New Basin Shell Road is now being treated with Liquid Asphalt. Two years ago a section was

similarly covered and about six months ago an adjoining strip was treated with a tar preparation. The latter section proved a failure, while the results obtained from the former were so satisfactory that Superintendent U. J. Burke, of the Canal Basin and City Commissioner E. E. Lafaye decided to continue the work from the Metarie Cemetery to the Yacht Club Bridge.

The State is furnishing the laborers; the Texas Oil Company, from whom the Liquid Asphalt was purchased, is furnishing an expert superintendent, while the City is paying for the Liquid Asphalt and having it heated at the Municipal Repair Plant. The section treated in September, 1912, is in perfect condition now, and when the whole road is completed the City will have a dustless road to the West End."

After the liquid Asphalt had remained in perfect condition for eighteen (18) months, a ——— representative asked for and was given permission to connect it with a demonstration of ———. This section went to pieces within a few months, being a complete failure.

Before adopting any oil or tar for the extensive work we contemplate doing, we experimented with various products, generally requesting the competing companies to furnish experts to superintend the construction. Of all the demonstrations made we consider the "Texaco" by far the best.

Yours truly,
(Signed) A. G. Cronan,
General Superintendent,
Municipal Repair Plant.

H. T. Wood and S. E. Monroe recently had the pleasure of landing one of the largest lubricating contracts in the South with the Southern Cotton Oil Company. The contract covers all plants controlled by this Company throughout the Southern States. Engineer Wm. G. Harvey took part in thus putting the Atlanta District into the "Limelight," as it was largely through him that the contract was secured. The Southern Cotton Oil people wanted to be "shown" what Texaco products would do, and Harvey showed 'em.

M. A. Dyer of New Orleans District has spent a few days in Atlanta renewing old acquaintances. Salesman O. L. Wilson of Charleston, Agent C. E. Jones of Live Oak, Fla. and Salesman M. C. Sanders of Spartanburg, S. C. paid a visit to the District Office; they were full of enthusiasm and look for big business in their fields.

Two new men have been added to our list of Travelling Salesmen: J. G. Moffett, in Northwest Georgia, headquarters Atlanta; G. H. Seawell in Northeast Georgia, headquarters Atlanta. S. E. Monroe has been out with these men, coaching them, and it looks like The Texas Company will be well represented in North Georgia.

We welcome into our ranks J. A. White, Agent Pelham, Ga., C. T. Hammond, Agent Albany, Ga., and D. W. Maneval, Agent Savannah, Ga. J. H. Sherrill, Agent Pensacola, Fla. is also included in this welcome. Mr. Sherrill has heretofore been acting as Sub-Agent, but he is now a regular commission Agent at Pensacola, reporting to Atlanta Office.

F. W. Silva and H. T. Wood are back in their old territories, headquarters Savannah and Valdosta, respectively.

Some of our men will have to look to their laurels to keep the pace set by Agent R. M. Cooke, Spartanburg, S. C.

S. E. Monroe, B. F. Johns, and G. H. Seawell were in a wreck on the Georgia Railroad near Madison, Ga., Oct. 13. We are glad to state that none of them suffered serious injuries, although Mr. Johns was in bed for a few days.

Among those who helped to make September a banner month for Atlanta District, both in sales and collections, were Agent E. R. Williams and Salesmen M. B. Hammond and J. C. Meintzer. Mr. Williams set the high-water mark for Charleston Agency business; Mr. Hammond succeeded in carrying off the Efficiency Prize for the month; and Mr. Meintzer ran so close that it was hard to select the winner.

Tank Wagon Drivers Kanady and Esterling at Columbia, S. C. deserve special mention for doing the best average tank wagon business throughout the District. Agent Keely Cook is proud of their efforts and is wearing a broad smile.

J. A. Morson is a recent addition to the Accounting force. As Mr. Morson was with the Company for two or three years in New Orleans, he is not a new recruit.

In checking over Cotton Oil Mill business in the Oklahoma District, it is gratifying to note that the fifty-two plants operating this season are divided as follows: Competitor No. 1 serving seven mills; Competitor No. 2, six mills; Competitor No. 3, four mills; three small Competitors serving seven mills; and The Texas Company serving twenty-eight mills. Ninety per cent of the Gin business in Oklahoma is controlled by these mills.

S. C. (Hiney) Hyndman, Stock Clerk, Oklahoma District Office, put one over on the boys by slipping quietly out Saturday October 31, to be married to Miss Hazel Tattershal, an Oklahoma City girl. We wish to congratulate both the bride and

bridegroom; our best wishes for a long and happy wedded life to "Hiney."

Agent Thrower and wife of Tulsa, announce the arrival of a fine baby girl.

Agent Edwards and wife of Ada, Okla., announce the arrival of a ten pound baby boy. Bill says he will take the Stake-wagon next month.

Agent Slate of Hobart, Okla., has the right idea of The Texas Company's share of the business. In Hobart territory our four large competitors are serving one Oil Mill and nineteen gins; The Texas Company is serving four Oil Mills and thirty-eight Gins.

Agent Roberts and Salesman Rinaman, Altus territory, can almost duplicate the record held by Hobart.

Although a Competitor closed a good Lubricating Contract by offering cheap engine oils, the customer, after a sixty days trial, signed up with Agent Finch, of Guthrie, for enough Zenith Valve to cover his annual consumption of Cylinder Oil.

Although Claude Neal, clerk at Ada Station, has been in the service only three months, he has the Texaco Spirit when it comes to keeping a neat warehouse, and is setting a good example for some of the older men.

On June 26 the Oklahoma District held a meeting of Salesmen, and Agents. As it was strictly a meeting on Collections and the extending of credit, L. A. Smith, Dept. Agent, was the only guest. Each salesman and agent recited the conditions of his territory, together with suggestions that would assist in bringing in the money. Mr. Smith impressed upon all the necessity of collecting accounts, emphasizing that, after the delivery,we were still responsible until the collection was made, and that greater caution should be used in extending credit; for the sale is not complete until the money comes in. Every minute of the meeting was interesting and instructive, and the slogan "Get the money" was adopted.

Chief Accountant Daniel, of the El Paso District, reports the arrival of a nine-pound boy at his house on October 4. He writes:

This is the most important thing that has happened in the El Paso District in years; also, between That boy of mine and office duties, I expect to be the busiest man in the world from now on.

LUBRICATING DIVISION HONOR ROLL, SEPTEMBER 1914.

SOUTHERN TERRITORY

J. A. McADAMS, Dallas District.

DALLAS DISTRICT

J. McAdams	1st	W. R. Scott
W. M. Brown		O. S. Calloway
W. H. Gray		L. M. Fitzgerald
Will Carroll		W. E. McGilvery
E. H. Browder		

HOUSTON DISTRICT

T. E. Meece	1st	B. L. Kawalski

NEW ORLEANS DISTRICT

F. E. Castleberry	1st	A. F. Renaud
V. L. Seddon		

ATLANTA DISTRICT

R. T. Hanna	1st	O. F. Taylor

EL PASO DISTRICT

H. B. Roeder

PUEBLO DISTRICT

J. D. Barton

September leaders on classes of Lubricating Products are:

Motor Oils	Dallas District
Harness Oil	Atlanta District
Harvester Oil	El Paso District
Home Lubricant	Houston District
Liquid Wax Floor Dressing	Houston District
Gen'l Lube Oils	New Orleans District
Axle Grease	New Orleans District
Cup Grease	Dallas District
Transmission Lubricant	Pueblo District

Dallas Dist. jumps to first place for September, based on the best average showing on all the products named, with Houston Dist. but one point behind, and Atlanta Dist. coming up third only two points behind the leader.

Atlanta Dist. shows largest net increase on Motor Oil Sales for September, compared with September 1913; Pueblo Dist. largest increase on Transmission Lubricant sales. Birmingham Dist. leads in net number of Motor Oil Contracts secured.

Houston District's total Lubricating Deliveries for September range higher over minimum contract specifications than any other District.

Opposite each trade mark brand listed below, is shown the name and District of the Salesman making the largest September sales:

Mot. Oil, L, H, EH	W. M. Brown	Dallas
Trans. Lube, 1 and 2	B. L. Kawalski	Houston
Cup Grease	E. H. Browder	Dallas
Liq. Wax Fl'r Dress.	B. L. Kawalski	Houston
Home Lubricant	F. H. Sullivan	Houston
Harness Oils	W. L. McCamley	Houston
Castor Axle Oils	R. T. Hubbard	Atlanta
Axle Grease-Graph.	J. A. Gallager	Atlanta
Separator Oil	C. S. Meece	Ex Paso
Harvester Oil	H. B. Roeder	El Paso
Belt Dressing	O. S. Calloway	Dallas
Zenith Valve Oil	J. McAdams	Dallas
Vanguard Cyl. Oil	R. T. Hanna	Atlanta
Leader Cyl. Oil	W. E. McGilvery	Dallas
Pinnacle Cyl. Oil	C. F. Shipp	Dallas
Alcaid Oil	F. C. Smithson	Birm'ham
Cetus Oil	W. H. Gray	Dallas
Honor Oil	W. R. Scott	Dallas
Altair Oil	O. S. Calloway	Dallas

Aleph Oil	W. H. Gray	Dallas
Valor Oil	R. T. Hanna	Atlanta
Canopus Oil	W. Carroll	Dallas
Gas Engine Oil	W. C. Arnett	Houston
Winner Oil	W. M. Brown	Dallas
Thread Cut. Oils	H. W. Bryan	Houston
Transformer Oil	J. N. Rea	Pueblo
Ammonia Oil	J. F. McConnell	N. Orleans
Crater Compound	E. H. Browder	Dallas

September leaders on classes of Lubricating Products sold by Tank Wagon Drivers, are:

Motor Oils	Dallas District
Misc. Auto and Gas Eng. Oils	Dallas District
Steam Cylinder Oils	Birm'ham District
Engine and Machine Oils	Dallas District
Specialties	Houston District
Black Oil	Dallas District
Transmission Lube	Atlanta District
Cup Grease	Dallas District
Axle Grease	Birm'ham District

Dallas Dist. still holds first place in best average showing on all products, Birmingham Dist. moving forward to second place.

Dallas Dist. shows largest net gains in sales of all products compared with Sept. 1913, with Houston Dist. second in this respect, while Birmingham, making second on September sales, shows a loss compared with Sept. 1913. Under these conditions interesting developments are being looked for.

Meridian, Miss. Motor Oil sales show an increase of over 600% since Agent Trahan took charge in July. Who has this record beaten?

Salesman P. R. Woods, Oklahoma District, came out victor in a recent hot competitive fight for municipal business. Mr. Woods (who is a comparatively new salesman) based his fight on the Superior Quality of Texaco Motor Oil over lower priced competitive brands. A three-barrel initial order rewarded his efforts.

With products that will carry us off victors in the most crucial tests, is it not true that Texaco Salesmen and Agents are beyond competition? Every man is looking for the most for his money. He gets it in the extra quality of Texaco Products, grade for grade, compared with any competitive brand on the market.

F. H. Sullivan, Houston District, again "stirred up the animals" with Specialty Sales. Beaumont was the place. It was thought this town was kept well supplied by the Agent. Mr. Sullivan, however, who was preparing to go after a big sawmill contract, in order to keep "fit" while waiting, called on thirty merchants, who were found to be in need of Texaco Home Lubricant, Liquid Wax Floor Dressing, Graphite Axle Grease, etc.

M. A. Dyer has recently been assigned to Specialty Sales in New Orleans District, and his success so far indicates that from now on there will be worthwhile results between him and F. H. Sullivan.

Salesman B. L. Kawalski, of Brownsville, Texas, territory, is having splendid success selling the "Whole Line." His success with Liquid Wax Floor Dressing to stores and schools is particularly noteworthy. He takes first place on this product for September in the entire Southern Territory. Mr. Kawalski has travelled only a few months (Agent at Brownsville several years) and has been on the Honor Roll twice.

A report has just been received from Mr. Kawalski sending a rush order for 42 barrels, 7 half barrels, and 17 cases of lubricants, with notation: "Considering the war in Europe, this is not so bad." This sale is accompanied by other orders for future delivery, and does indeed prove that the cause is not so much in conditions, "Dear Brutus, but in ourselves that we are underlings." Adverse conditions always present attractive opportunities to men of metal to forge ahead. While others are complaining of conditions and idling, your man of metal redoubles his efforts and hews closer to the line than ever before. Now is the best time for every man in the Sales Organization to prove his real ability. At no time will ability stand out in bolder relief than right now. *Now's the time.*

Salesman Geo. Gray, Houston District, has done fine work recently on Axle Grease and Specialties.

Dallas City Salesman, E. H. Browder, is congratulated on a contract closed early in October. He says: "Our prices on Cylinder and Engine Oils were higher than other quotations. However, talking quality, service, and satisfactory lubrication won the fight."

Salesmen King, Barton, Trimp, and Porter are reporting excellent results on Future Order solicitation. Mr. Porter, especially is showing ability to "bring home the bacon."

Of the Pueblo District representatives, Salesman Trimp is showing exceptionally good results on Crater Compound. Watch for Mr. Trimp's name in the Honor Roll.

Speaking of the Honor Roll, J. C. Potts, of Oklahoma has been so near it for the past four months that this "tip" cannot be restrained. Another barrel or two of Liquid Wax Floor Dressing, Harness Oil, or Axle Grease a month will turn the trick.

B. L. Sweat, Agent, Hugo, Okla., has closed a contract for 175 barrels lubricating products, minimum. He was previously selling all other concerns in town. A full Texaco Slate. That's fine.

It is gratifying to see H. B. Roeder's name again on the Honor Roll.

A few days ago H. T. Wood, Atlanta District, closed the largest cotton oil mill lubricating contract The Texas Company has ever enjoyed. Superintendent Cook and Mr. Wood are heartily congratulated.

Through the valued assistance of H. J. Lockhart, of the Producers Oil Company, the Dallas, Houston, Oklahoma, and New Orleans Districts have secured valuable new lubricating business.

In selling our package goods through the stores, it is well to remember that the well displayed package helps the sale, and with this in mind, to see to it that the packages containing Motor Oils, Transmission Lubricant, Qckwork Polishes, Home Lubricant, Harness Oils, Castor Axle Oil, Axle Greases, Harvester Oil, Separator Oil, Belt Dressing, Texwax, etc. are clean and well arranged in the display windows, counters, and lower front shelves, so they can be readily seen both inside and outside of the store. Texaco Lithographed Packages are Silent Salesmen; being distinct, clear cut, attractive, they always create a favorable impression and help sell the goods. The high quality of the product will please the customer and brings him back to the merchant for more Texaco, resulting in the merchant paying his bills promptly and repeating orders.

SALES DEPT.
N. TERRITORY

We have recently been awarded a contract for furnishing the Panama Canal with 71,000 gallons of Lubricating Oils. The concerns submitting proposals were

required to furnish samples of the various brands on which they bid, and the fact that some of the awards made us were at prices higher than those quoted by competitors would indicate that Texaco quality again asserted itself. These awards are additional to other Government Contracts recently mentioned in the *Star*.

The New York District during the months of September and October exhibited at county fairs at

Hudson Falls, N. Y.	Mineola, L. I.
Ogdensburg, N. Y.	Riverhead, L. I.
Red Bank, N. J.	Danbury, Conn.

This was our first attempt to secure business at county fairs, and our efforts met with wonderful success. At the Red Bank Fair we were awarded a blue ribbon and diploma for the most artistically arranged exhibit. We have had these framed and they now grace the walls of our office.

Balloon with Texaco Advertisement at Ogdensburg, N. Y. Fair—Also at Wheeling, W. Va. Fair

L. O'Malley of the New York District has just returned from the Convention of the National Paint, Oil, and Varnish Association, held at Louisville, Ky., where he made many new friends. Mr. Ketcham of the Chicago office also attended with his charming wife. Mr. O'Malley could not figure out how it was Ketcham and wifey were so inseparable, but Ketcham writes O'Malley that his trip was a honeymoon trip. Now O'Malley understands.

On Saturday, October 17, a meeting of the salesmen in the New York District was held to organize a club. The purpose of this club is to promote sales in the District, with a little sociability on the side. It was decided to call the organization "Texaco Greasers," and to adopt the motto "It can be done." As the members are all working hard to sell grease, the name is as appropriate as the motto.

Officers:

President	W. F. Woodill
Vice President	E. J. Quirk
Secretary	E. P. Snyder
Treasurer	S. C. Eberhardt

Board of Moderators:

J. M. LaFrance, Chairman	F. K. Woodruff
B. Steiert	J. M. Williamson
D. A. Consalus	

Entertaining Committee:

K. Campbell, Chairman	Percy Guard
F. E. Smith	

Active Membership:

J. P. Gruet, Jr., Supt. New York Dist.	
J. M. LaFrance	A. Perine
W. F. Woodill	F. K. Woodruff
E. J. Quirk	F. D. Shields
K. Campbell	D. A. Consalus
B. Steiert	B. A. Sheridan
E. O. Woodruff	C. Hottum
C. B. Leggett	S. B. Howard
F. E. Smith	J. M. Williamson
W. D. Youmans	L. O'Malley
S. C. Eberhardt	N. Campbell
E. P. Snyder	T. M. Magness
P. E. Guard	

Associate Members:

Proctor Vail	T. A. Bridges
F. W. Steadman	W. G. Jenkin
F. D. Shields.	

This Club will meet at the New York Office every Saturday morning at 9 a. m. The result of the first meeting was very satisfactory, and indications are that the members will all derive considerable benefit.

T. A. D. Hildenberger joined the Philadelphia District Sales Force October 1. He has been assigned to Eastern Pennsylvania where he will cover the trade on Lubricants and specialize on Cutting Oils.

J. R. Bacon, who for the past two years has been covering Philadelphia City trade on General Lubricants, has resigned, effective Oct. 1. Mr. Bacon has accepted a position as local manager for Pratt & Washburn Company.

D. C. McAllister will enter the service Oct. 1 as a Lubricating Salesman in Northeastern Pennsylvania. He is well acquainted in the Anthracite Coal region, and will specialize on Crater Compound. We are expecting Mr. McAllister to capture some very nice business.

Albert C. Scrafford, who has been covering Chester County, Pa. on all products, headquarters at Coatesville, left the service Oct. 1. He is going into business for himself and will handle motorists supplies.

The Philadelphia District held its second Semi-Annual Meeting of Salesmen and Agents, September 28-29. Everyone present seemed satisfied that much progress was made for increased sales. A lengthy programme covered important subjects, which were discussed thoroughly. The Correspondence School was reviewed and it was noted that Philadelphia leads in the course. It was shown also how the correspondence course had become a sales barometer. Entertainment was provided for the evening of the 28th. It was an interesting and busy two days, and all started back to the firing line feeling benefitted.

Card—Mr. and Mrs. William Grimshaw (the latter formerly telephone operator at the Philadelphia Office) wish to thank the employes of that office for their kind wedding gift.

L. Austin of the Norfolk District Accounting office reported for work October 19. All were glad to see Buck back at his little desk in the corner, as the old boy has had a hard time holding down his cot in St. Christopher Hospital.

We understand through *very reliable* sources that Mr. Ellwood, Department Agent in the New York Office, is under a severe mental strain, due to trying to locate an employe to fill the anticipated vacancy for a Private Secretary in his office, as the present occupant of that position contemplates locating in the Norfork District after the ceremony.

Bluefield, W. Va. Station has just been opened with C. E. Scruggs as Acting Agent. We anticipate big business at that point.

Manager C. P. Dodge, of the Sales Department, Southern Territory, was recently a welcome visitor at the Norfolk Office.

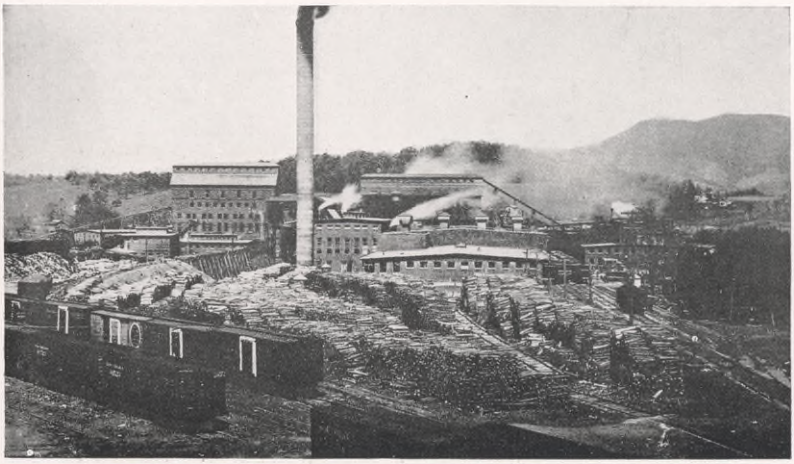
W. S. Slater, Clerk at the Newport News Station, has been transferred to Raleigh, N. C. Station, as Acting Agent.

We have opened Danville, Va. Station with T. F. Mangum as Acting Agent.

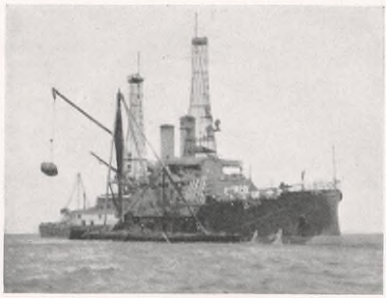
The accompanying picture of the Greek Battleship "Kilkis" was taken by Salesman W. B. Cope while the vessel was taking on board a supply of Texaco Dolphin Oil, bought by the Greek Government.

E. L. Ketcham, soliciting the paint and varnish trade in the Chicago District, was married October 9. The happy couple left immediately for a trip to Louisville, Cleveland, and Detroit. Mr. Ketcham is now back at work, and is receiving many hearty congratulations.

C. J. Frederickson has joined the Chicago Accounting force.



The Champion Fibre Company Mill, Cannon, N. C., the largest Paper Pulp Mill in the U. S., uses Texaco Lubricants exclusively.



Greek Battleship *Kilkis*

Representative Cook, of the New York Office, was a visitor at Chicago for several days.

The Three C Club, Chicago District, is running a series of tests on Texaco Oils at the Armour Institute. The tests are conducted two nights a week under the supervision of O. J. May and C. M. Larson. Besides proving the quality of our products, the students are shown just how the oil works in the different classes of machinery.

The following letter from the Berger Aviation Company speaks for itself:

Youngstown, Ohio, Aug. 22, 1914.

The Texas Company,
Youngstown, Ohio.
Attention of Mr. L. V. Hoagland, Agent.

Gentlemen:

On Sunday, August 16th, we gave our first exhibition with our flying machine, which is four-cycle, 30 H. P. Wright Engine, and used your Texaco Extra Heavy Motor Oil and Texaco Auto Gasoline and we wish to offer you our congratulations on the quality of your products.

We have made flights at Idora Park, each afternoon and evening from Sunday, August 16th, to and including August 23rd, and we can assure you that we never received any better lubrication than we have from your Texaco Extra Heavy Motor Oil. We are also convinced of the superior quality of your Texaco Auto Gasoline, as we received considerable more power from its use and it has shown a considerable decrease in consumption.

Thanking you very much for your prompt delivery of our orders, we remain,

Yours very truly,
(signed) Eugene Heth,
Aviator.

Lubricating the winners is nothing new to The Texas Company. The latest speed marvel to come through under Texaco products is Commodore Joseph D. Swoyer's hydroplane *Jay Dee Ess*, champion of the South Jersey Racing Association. The *Jay Dee Ess* has made a clean sweep during the racing season, with TEXACO Motor Oil EH in her engine. She not only finished every race she entered, but also crossed the line a winner. Her engines have worked perfectly and at no time has she been in dry dock for repairs. The performance of this hydroplane has been truly remarkable,—the best being at Cape May August 15, when she attained the speed of 47 miles per hour, defeating the famous *Tech Junior*, Colonel Du Pont's hydroplane, which made such a great showing at the Huntington races last season. The *Jay Dee Ess* was designed and built by Adolf Apel of Ventnor, N. J. She is twenty feet long and is equipped with a Van Blerck Engine, 47 H. P. which develops about 75 H. P. when running high speed. The engine turns about 1700 revolutions a minute. Texaco Motor Oil was widely used by the speed boats racing under the South Jersey Racing Association at the various races held at the Yacht Clubs along the Jersey Coast. H. W. Shaner, of the Philadelphia District, has been very successful in placing our Motor Oils among the Racing Motor Boat men this season.

Hydroplane *Jay Dee Ess*, Champion of South Jersey Racing Association—Wins with Texaco

SUGGESTIVE INDEX OF CURRENT ARTICLES

THE MAIN INTEREST IS INDICATED BY CLASSIFICATION OR BRIEF COMMENT

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.

EXECUTIVES Bureaucracy and Business—*Oil* and *Gas*, Oct. 1914.

A Definition Which Failed—*The Annalist*, Oct. 26, 1914.

Graphic Methods of Presenting Data. III, by Willard C. Brinton—*The Engineering Magazine* Oct. 1914.

PIPE LINE Massachusetts Boiler Law and Rules—*Power*, Aug. 25; *Ibid.* Sept. 1; Sept. 8, 1914.
Critical analysis of the Law and Rules.

Proposed Changes in Massachusetts Boiler Rules—*Power*, Sept. 15, 1914.

NATURAL GAS Liquifying Natural Gas—*Petroleum Age*, Sept. 1914.

Gas Investigations of the Bureau of Standards, by R. S. McBride, Assistant Chemist, Bureau of Standards—*The Chemical Engineer*, May 1914.

FUEL OIL Surface Combustion for Boiler Heating, by William A. Bone (Jour. Royal Soc. of Arts)—*The Engineering Magazine*, Oct. 1914.

MARINE Oil Carrying Steamers—*Engineering*, Aug. 7, 1914.
Illustrated description of the *San Isidoro* as an example of best practice.

REFINING Viscosity Measurement and a New Viscosimeter, by Alan E. Flowers—*Am. Soc. for Test. Mat.*, July 1914.

Research Work in the Laboratory and Mill, Warren F. Bleecker—*Metallurgical and Chemical Engineering*, Aug. 1914.

Progress of the Asphalt Industry—*Municipal Engineering*, June 1914.
From annual report of the General Asphalt Company.

Ohio Experience in the Use of Road Oils—*Engineering News*, Sept. 3, 1914.

COMPTROLLER'S Depreciation Accounting, by Halford Erickson—*Gas Age*, Aug. 1, 1914.

Depreciation, by Ralph U. Fitting, *Electric Ry Journal*, Sept. 26, 1914.
An extended analysis. Various methods—merits and demerits.

SALES Basing the Salesman's Salary on What he Earns, by H. F. Raymond—*System*, Sept. 1914.

The Stimulus of Breaking Records—*System*, Sept. 1914.

"Quality Unsung," by B. C. Bean—*System*, Oct. 1914.

LUBRICATION Some Remarkable Oil Tests—*The Popular Engineer*, July 1914.

The Carey Oil Transmission System—*Engineer* (London), Aug. 1914.
Describes a series of machines for the transmission of power by oil under pressure.

EXPORT Your Trade-Mark in Foreign Markets, by Edward S. Rogers—*System*, Oct. 1914.

PRODUCERS Science to Aid Wildcatting—*Petroleum Age*, Sept. 1914.
Reports of an electrical device for locating oil pools,—interesting if true.

GENERAL Practical Introduction of Efficiency Principles. X. Standardizing the Operations, by C. E. Knoeppel—*The Engineering Magazine*, Oct. 1914.

The Administrator as Diplomat. III. The Ideals of the Gentleman Administrator, by Edw. D. Jones—*The Engineering Magazine*, Oct. 1914.

Mineral Oil as Medicine, by L. K. Hirshberg, M. D. (Johns Hopkins)—*Oildom*, July 1914.
A perfect medicine for proper uses.

Safe Contracts, by Frank C. McKinney—*System*, Sept. 1914.
Simple elements that business men often overlook.

Danger in Clayton Bill—*Automobile Topics*, Sept. 5, 1914.
Concerning effect of the new law on commercial dealing in patented articles.

What Might Have Happened to the Talents, by L. R. Nash—*Electric Ry Journal*, Oct. 10, 1914.
A parable of a parable.

Preliminary Report on "Efficiency in the Administration of Justice," for the National Economic League.
The Editor (as member of the National Council of the League) has some copies of this striking report for free distribution, which he will send on request.

With the cutting off of importations of many mineral products, the United States Geological Survey's list of mineral producers becomes an important source of public information. In response to specific inquiries addressed to the director of the survey at Washington, concerning the location of mines of any kind tributary to any particular market, extracts can be furnished from this list. The list is not a published one, as it includes about 90,000 names and addresses of producers and is constantly being revised, the changes each year amounting to 25 per cent. of the list. It can be utilized, however, in reply to inquiries, by consumers of mineral products.—*Science.*

Two books have been published dealing with the Fifth National Conservation Congress held in Washington, D. C., nearly a year ago. One of them treats of water power subjects and is a contribution to constructive literature on that subject. The other book contains the forestry reports and addresses which were regarded as the most valuable ever presented in this country. The books may be obtained through N. C. McLoud, treasurer and recording secretary of the Congress, 1201 Swetland building, Cleveland, Ohio. Price of each $1.

WE are printing herewith a cartoon sent to this office by Mr. A. E. Seals, who is connected with The Texas Company, Ltd., South Africa.

Mr. Seals has previously submitted some beautiful advertising sketches, but as these required some small changes before they could be reproduced, we were obliged to forego printing them.

As next month will be the Christmas Number of The Texaco Star, and Editor Lefevre is expected to give us an especially fine number, we think that EVERYBODY should make a special effort to get in on the Advertising Division's page.

Now let us have that idea you have been saving up.

ADVERTISING DIVISION


HIS FIRST
BIRTHDAY
THE
TEXACO STAR