

THE
TEXACO
STAR



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P. C. Scullin, Secy. to Manager; C. K. Longaker, Department Agent

B. E. Hull, Department Engineer.

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Portland, Me.: J. W. Horan, in charge.

LABORATORY: K. G. Mackenzie, Consulting Chemist, Bayonne, N. J.; M. C. Van Gundy, Chief Chemist, Port Arthur, Texas.

CASE AND PACKAGE: R. L. Drake, Supt., Port Arthur, Texas; H. O. Preston, Asst. Supt., Port Arthur, Texas.

Refining Committee

Dr. G. W. Gray, Chairman F. C. Smith C. C. Blackman F. P. Dodge
T. Mullin C. C. Hawkins

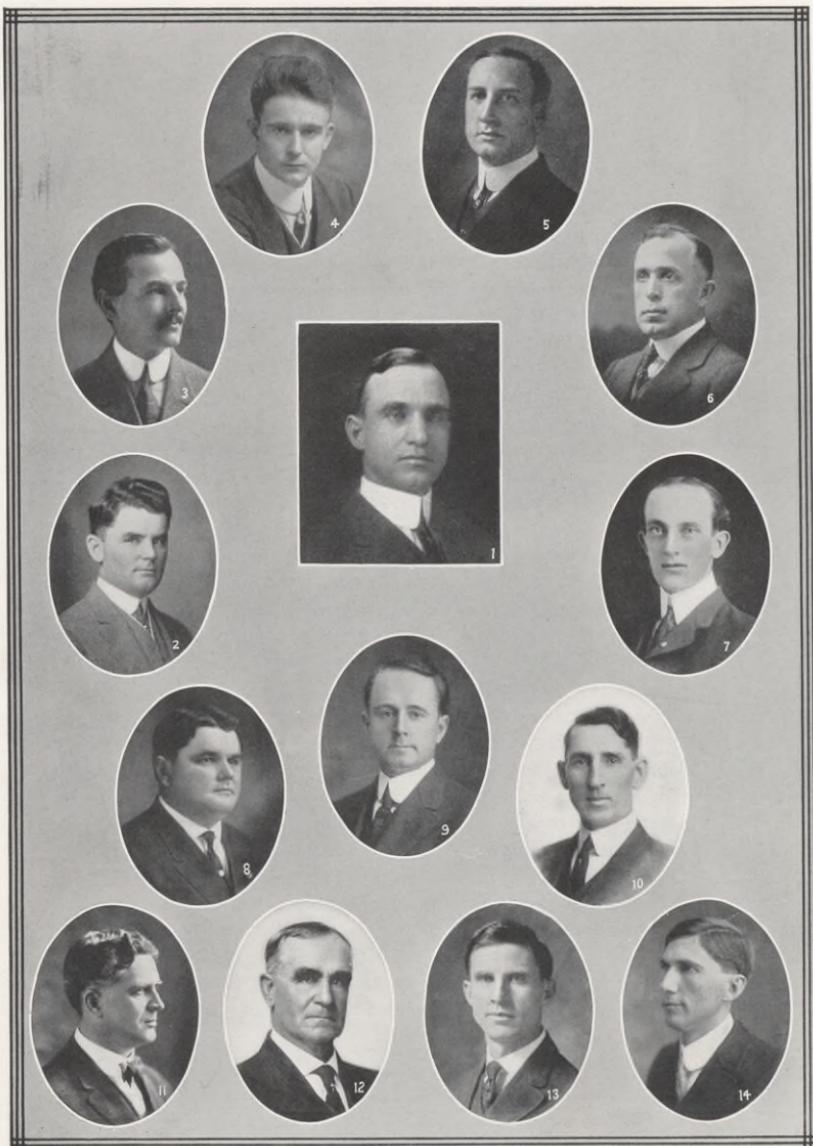
THE business problem in any undertaking is so to limit expenditure that a satisfactory margin of acquisition may be preserved. This requires the most effective team-work on the part of the individuals who constitute the officers of the enterprise, as well as those who form the rank and file. Organization is the art of so uniting and directing these working forces as to produce the most satisfactory composite result. The function of the officers is not only to operate plants and various undertakings economically, but also to anticipate business fluctuations, to measure up with care the prospective value and desirability of extensions, to check mere bigness of project.

The trend of much of our present publicity upon the subject of business management is one-sided. It lays too much stress on methods and too little on men. It exhibits too much faith in means and too little in manners. Both these factors require due consideration, but the human one should have precedence.

The primary object of organization is to bring brainy men together for work and action. A wise organization knows that success demands an aggregation of strong individualities, free to contribute their quota of wisdom, but loyally subordinating their individual preferences to the general policy once declared.

No amount of clever scheming with forms and regulations alone will ever secure this. Herein lies the task and the genius of the leader, the organizer of men as distinguished from the systematizer of things. Both are needed and it is always a happy circumstance when the qualities are combined in one man.

—John Calder.



1. R. C. Holmes, Vice-Pres., Houston, Texas. 2. T. J. Mullin, Genl. Supt., Houston, Texas. 3. Dr. G. W. Gray, Houston, Texas.
 4. L. R. Holmes, Genl. Supt., New York, N. Y. 5. C. K. Longaker, Dept. Agent, Houston, Texas. 6. Burt E. Hull, Dept. Engr., Houston, Tex.
 7. F. T. Manley, Asst. Genl. Supt., Port Arthur, Texas. 8. T. Mullin, Supt., Tulsa, Okla. 9. R. L. Drake, Supt., Port Arthur, Texas.
 10. F. P. Dodge, Supt., Lockport, Ill. 11. F. C. Smith, Genl. Supt., Port Arthur, Texas. 12. C. C. Blackman, Supt., Gates, Texas.
 13. P. C. Scullin, Sec. to Manager, Houston, Texas. 14. C. C. Hawkins, Supt., Pt. Neches, Texas.

TEXACO STAR

VOL. I

DECEMBER, 1913

No. 2

PRINTED MONTHLY FOR DISTRIBUTION TO EMPLOYEES OF
THE TEXAS COMPANY

"ALL FOR EACH—EACH FOR ALL"

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

THE good wishes of all, springing from deep affection and high esteem, follow J. S. Cullinan in his retirement from the presidency of The Texas Company. The industrial army he has captained through the splendid progress of the past loyally greets its new chief, Mr. E. C. Lufkin who has succeeded Mr. Cullinan as President. May continuous prosperity and fresh conquests be won under his leadership.

The following resolutions upon the resignation of President Cullinan and Judge Autry, general attorney for the Company since its origin, were adopted at the annual meeting of stockholders held in Houston November 25:

"Resolved, that the following be spread upon the minutes of the meeting:

"The stockholders of The Texas Company, in annual meeting assembled, deem it a privilege to express their appreciation of the long, faithful, and intelligent services of J. S. Cullinan, the retiring president of The Texas Company. We recognize that the splendid condition of the Company's affairs at the present time and its great success are due very largely to his efforts, and we hereby tender him our best wishes and kindest feelings in whatever field he may choose to engage in the future.

"Resolved, That the sincere thanks of the stockholders of The Texas Company are hereby tendered to Judge James L. Autry, the retiring general attorney of the Company, for the able and faithful service rendered to the Company from the time of its incorporation to the present time."

★ ★

The first and second issues of the TEXACO STAR have been distributed to more

than four thousand regular employees through department, division, and district offices. If you desire to receive following issues, please sign the post card enclosed in this issue and return it by mail. The journal will be regularly mailed to the home addresses of all who return cards. Hereafter applications to receive the TEXACO STAR will be accepted at any time, and the names of such applicants will be added to the mailing list; but all who wish to receive the next issue must send their names and addresses as here requested.

★ ★

The comprehensive article in the preceding issue describing the various products manufactured in our refineries, and the article in this issue, describing the plants and equipment, have put the Refining Department very clearly before all readers of the TEXACO STAR. This vital subject, however, is not to be dropped. Follow-up articles have been arranged for, which will explain the various uses of fuels of the different grades, the Texaco motor oils, burning oil from different crudes, Texaco asphalts, Texaco roofing, and other products and processes. All will serve (1) to impress the employees in the manufacturing department with the value of the products they are making and with the importance of the fact that each product is made for a definite purpose and that any deviation from specifications or instructions lowers the quality of the product and its value to our customers; and (2) Sales Managers and salesmen may get the knowledge of and confidence in the products they are to sell, which is absolutely necessary for success at the marketing end of the business. It has been truly said that you must first sell to your salesmen before you can sell to the trade. That is, the sales-

TEXACO STAR

man must understand and believe in the quality of the article he is to sell successfully in any permanent business enterprise. If our own people are not instructed in and do not understand and believe in the merits of our products as compared with competitive products, their lack of knowledge and confidence must cause small volume of sales, confusion of prices, wasteful expense in introducing, less remuneration to themselves, and diminished profits to the Company. The plan of the Refining Department for utilizing the TEXACO STAR for such truly organizing purposes represents farsighted executive ability. Every other Department will doubtless adopt a similar plan for follow-up articles after a first explanation of its special part in the joint enterprise of all, in order to develop and strengthen its own internal forces and at the same time contribute to the common good.

The leading article of the next issue will describe the Marine Department.



The man who confines his interest and thought to one department of a complex business fails to develop a rich source of power and usefulness. Only by observing and by reading and reflecting about other departments, and by regarding the business as a whole, can he learn how the department in which he is working affects every other branch and how each of them affects his own. Intelligent sympathy—that is, both sympathy and knowledge—is required for proper co-operation.

In genuine organization it is not sufficient that there should be a separate agency for discharging every essential function, nor is the right idea completed by adding the thought of the proper self-government of each part. Genuine organization requires, besides both of those characteristics, that every vital part should understand its relation to the unified whole and sympathize and co-operate with every other part. The administrative organ of the entire body of organized parts cannot fully or rightly discharge its function unless that condition exists. If disorganization has occurred in any part, the administrative function strives to restore the local responsibility and harmonious co-operation with all other parts. In the wise order of nature administration is not regarded as established for a de-ranged part until both its local responsibility and the general harmony have been restored—that is to say, until it has been organized again.

As a man's knowledge broadens to under-

stand the relations between his own special work and the work of other departments, he tends to become inventive. He will probably see means of improving a method or process, some economy that could be effected, some difficulty in inter-departmental relations that could be smoothed away. Every time he succeeds in securing any such advantage, his interest in his work and his self-confidence are increased. He grows. As soon as he begins to accept or to gather information beyond the special task entrusted to him, such growth begins in him. And when such growth begins, a man always wants more and more knowledge. He becomes absorbed in a satisfying pursuit. His part in the business will never be monotonous. Both that part and the entire business will be alive with interest.



Only the student of biology knows what a miracle it is that an oak from an acorn grows. Others take the marvel as a matter of course, or see no mystery at all. In like manner, a great organized industrial enterprise is often regarded as a simple inert thing that may be tinkered at without injury to its vital forces, according to the whims or accidental notions of internal authorities or of legislatures or even of popular majorities. There seems to be a strange disposition in many men to direct matters the most about which they know the least. No one is able without thoughtful study to understand anything that *grows* or any process that is a result of organization.



Failure to exercise, if it be possessed, a genuine talent for influence through personal contact, is wasteful of one of the prime elements of success in the leadership and management of men. About a year ago, a critical observer of business practice and student of business philosophy, a man of first rate ability, wrote to one of his closest personal friends a stimulating letter which well illustrates an important psychological side of business method and organization. The man to whom this letter was addressed had controlling management of a group of industrial plants. We print the letter in part, as follows:

Expressing the substance of talk we had some weeks ago, this letter arises from an affectionate appreciation of your natural endowment of brains and character, and from an earnest desire to see you sympathetically diffuse some of your personality for the encouragement, development, and stimulation of your company employees.

TEXACO STAR

If you will determine to apply some such plan during a period of twelve months as I shall outline in this letter, I believe you will become so thrilled by the educational value of your work that you will never entirely abandon the plan, and you certainly will have done a graceful act of kindness, which will show material results in favor of your company.

The business of your company is an aggregation of about nine places of production and operation, integral companies, as it were. These nine places of operation are managed by nine individuals each largely on his own initiative and responsibility. Under each of these men are from ten to two hundred and fifty highly paid employees.

The method of regular committee meetings for discussion and consultation has been demonstrated to make for higher efficiency and to be of intense human value in large business organizations. Fortunately you have a magnetic personality and a certain charm for all the men who work under you, and I believe it is your moral obligation to develop those men by encouraging and broadening them by some positive and well directed personal aggression on your part. The plan I propose will require only one day in the month of your time.

After proper meditation and reflection on the ethics involved, if you agree to adopt this plan, I suggest that you address a letter to each of your managers by which you advise them that, looking for growth in individual efficiency and worthy spirit, you are going to apply the method of committee meetings for consultation and discussion in the conduct of your business.

After three or four meetings, if you perceive a lack of sympathy and good accord in the spirit of any of your men at the meetings, you should need no better evidence of that man's incapacity and unworthiness for his position. If the character of your men as you know them is such that you do not deem it worth while to convene them in meetings for such purposes, there is something wrong in your mental attitude, or you have an ill-chosen supply of human material.

★ ★

During the past year a remarkable range of uses has been demonstrated for Texaco Crater Compound. Conditions for which effective lubrication has hitherto been despised of, have been fully met by this admirable compound. In many instances where lubrication had been abandoned or not attempted at all because of the extreme radiated heat, and where it has been a matter of frequently renewing the unlubricated bearings of the machinery, Texaco Crater Compound has proved perfectly available. It will endure any radiated heat conditions that metal will withstand, and neither fresh nor salt water nor acid fumes have any effect upon it. The lubricants heretofore commonly used for chains and cables have merely got a coating on the outer surfaces and given little or no protection to the strands; whereas Texaco Crater Compound works its way between the strands lubricating each one

separately. The rubbing together of the inner strands is more detrimental to the life of a cable than the friction between its outer surface and the carriage drums, etc. Experienced users testify that the working of chains and cables under salt water does not seem to have any effect whatever on the Crater Compound.

★ ★

Seek knowledge wherever it can be found throughout the world. This wise injunction was one of the favorite maxims of Mutsuhito, late Emperor of Japan. His people dutifully adopted it. It was not only often on their lips but they made it a guiding principle in all their rapid advances in the arts and sciences of peace and war.

★ ★

"I believe the very best things can be given to people in the very best way, not by writing down, but simply by using standard language instead of technical language."—*Hamilton W. Mabie.*

★ ★

One broad consequence of the reduced tariffs on manufactured products will be a general pressure upon manufacturers in this country to get the utmost out of every ton of raw material. Production has undoubtedly been wasteful at many points. There is room for much saving. A quickened attention to the points where savings can be secured will result. This will be one of the compensations for the troubles attending the necessary readjustment of margins of profits. It is not until men must save that they will learn where and how much they might have been saving all along. While profits are easy and large, an exulting carelessness leads to wasteful methods or to wasteful lack of method. In hard times it has always been discovered that good use may be made of much that has been thrown away and profits are found in what was formerly waste. This principle applies to domestic economy as well as to industrial enterprises. It is one of the disguised blessings to be found in difficulties. The prevention of waste is always an unmixed good. And thrifty habits are always a valuable asset.

★ ★

In 1882, 42 per cent. of the population of Germany were engaged in agriculture; in 1907 only 28.5 per cent. The actual number of

TEXACO STAR

persons working and living on farms has remained the same, but the average yield per acre of wheat, rye, oats, barley, potatoes, and hay has increased 77.7 per cent. in twenty-five years. The aggregate yield of those crops increased 87.7 per cent. while the acreage increased only 5.8 per cent. These statistics are official and reliable. The simple explanation is, that the government has provided access to the needed knowledge, and the individual farmer has taken the trouble to learn and apply it. The facts afford a striking proof of what farmers (or any other sort of workers) can accomplish, if each man studies individually how to perform in the most skillful way every thing he undertakes to do.

★ ★

Every one should read the literature of his special business diligently; but thought and interest should not be confined altogether to any one sphere. Man shall not live by bread alone. At least occasionally, the most practical of men should read some book of first rate quality of strength and fineness, which deals with things of universal human importance. Many would find such a book in Arthur Christopher Benson's recently published book of essays, entitled "Joyous Guard." "Joyous Guard" was Sir Lancelot's castle, and the book of essays is called by that name, because it "speaks of a stronghold we can win with our own hands," a stronghold of beauty and joy and strength and peace. Perhaps the keynote of the essays may be given in this one sentence from "Joyous Guard": "We must say to ourselves that whatever happens the soul shall not be atrophied, and we should be as anxious about it, if we find it is losing its zest and freedom, as we should be if we found the body were losing its appetite."

★ ★

The average workman has little opportunity to go to a bank; he is employed during banking hours. He could use the postal savings system later in the day, but at the end of his work the temptation is rest or seek amusement. Unless promptly deposited in the bank, money is apt to fritter away. A competence for a man who is working by the day can only come with systematic saving; but with many persons it seems a practical impossibility to get ahead of current expenditures, and the evil days of sickness or idleness find no reserve. It is quite likely that if workmen could make

the first withdrawal from their week's wages immediately, to add to their savings account, many of them would embrace the opportunity.

A large manufacturer of machinery is planning the experiment of establishing at his works a branch of some institution for savings with the purpose of encouraging thrift in the workmen. The idea is to receive the deposit, but never to disburse money. Easy opportunity would be given the men to increase their savings, immediately upon opening their pay envelopes. The branch may be operated by a savings bank or by the local post office in connection with the postal savings system.—*The Iron Age*.

★ ★

"Trust is the father of confidence," declares *Leslie's Weekly*. Indeed it is. And confidence is the father of trust. And shyness is the father of timorousness. And timorousness is the father of shyness. And dwellings are the father of houses. And houses are the father of dwellings. And running brooks are the father of purling streamlets. And purling streamlets are the father of running brooks. And all synonyms are very closely related to each other, especially in meaning. And the solemn assertion of this relationship often passes for wisdom and originality.—*Life*.

Efficiencygrams

Thine own friend and thy father's friend forsake not.—*Solomon*.

A propensity to hope and joy is real riches; one to fear and sorrow, real poverty.—*Hume*.

Let your purpose be crystal clear.

Patience is activity enduring. Don't confuse it with apathy.

Do your work—not just your work and no more, but a little more for the lavishing's sake, that little more which is worth all the rest.—*Dean Briggs*.

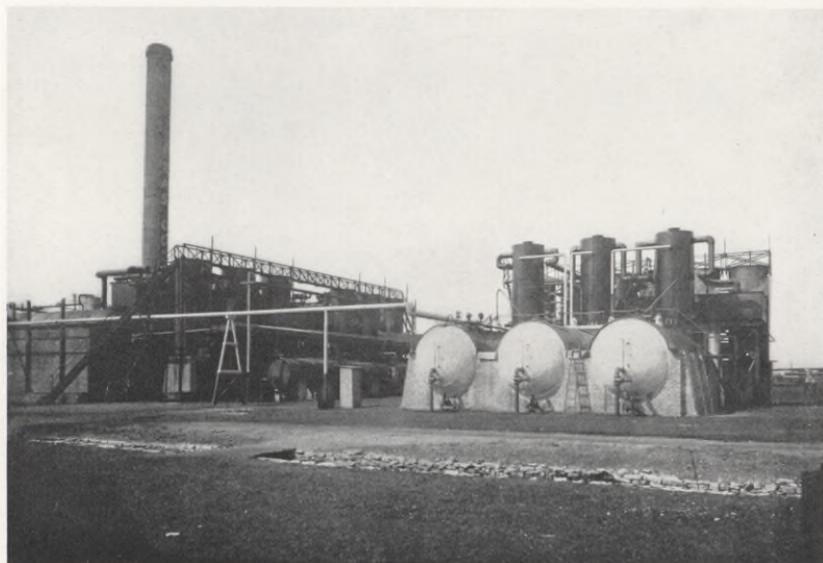
We judge ourselves by what we feel capable of doing, while others judge us by what we have already done.—*Longfellow*.

There are in the capacities of men three varieties: one man will understand a thing by himself; another so far as it is explained to him; a third, neither of himself nor when it is put clearly before him.—*Machiavelli*.

REFINING DEPARTMENT EQUIPMENT

R. C. HOLMES

Vice-President and Manager of Refining Department



Stills, Lockport Works

THE Refining Department installations include all equipment required in receiving, from the Pipe Line Department, and storing working supplies of crude oil, and the manufacture, storage, and delivery, of refined products to the Sales Department at Refinery and Terminal points, in bulk and in such variety of packages as trade requirements demand.

The Refineries are located at

Port Arthur, Texas,
Port Neches, Texas,
Dallas, Texas,
Tulsa, Oklahoma,
Lockport, Illinois.

and have a combined normal capacity of over 1,000,000 barrels per month.

The Terminals are located at

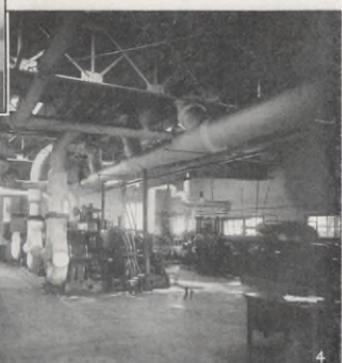
Port Aransas, Texas,
Galveston, Texas,
Amesville, Louisiana,
Mobile, Alabama,
Jacksonville, Florida,
Charleston, South Carolina,
Norfolk, Virginia,

Baltimore, Maryland,
Delaware River, Marcus Hook, Pennsylvania,
Bayonne, New Jersey,
Providence, Rhode Island,
Portland, Maine.

These Terminals have been installed from time to time, as trade has developed, to insure quick and economical delivery either to the Sales Department Stations or direct to customers. They are stocked by the Marine Department from Port Arthur and Port Neches, and, exclusive of the Port Arthur Terminal, have a total storage capacity for bulk oil of 1,603,000 barrels. The smallest Terminal (Portland, Maine) having capacity of 43,000 barrels, and the largest one (Delaware River) 325,000 barrels.

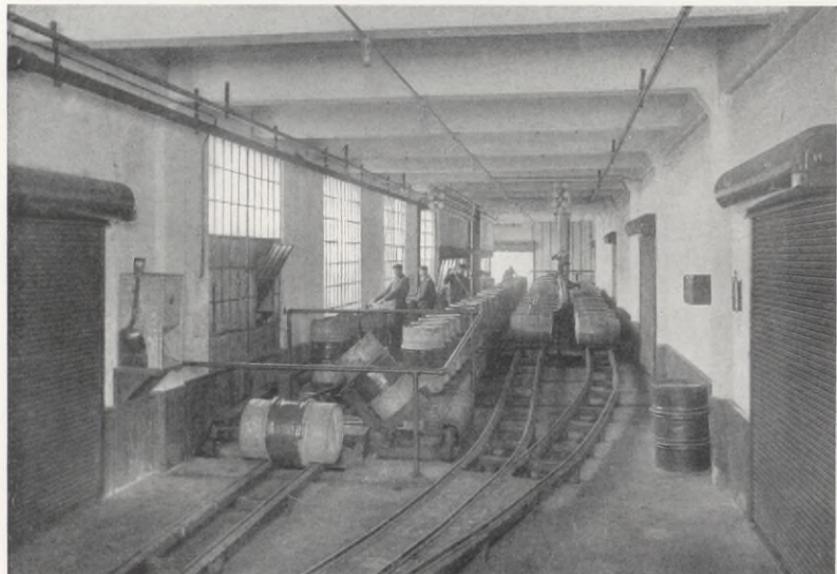
With the exception of Port Aransas, Galveston, and Jacksonville, they are all equipped with tankage for lubricating oils and ample warehouses for a full line of package products, and—wherever the quantities and economy of operation justify—with compounding plants for the preparation of specialty products.

TEXACO STAR



1. Grease Plant, Port Arthur Works 2. Pumping Plant, Bayonne 3. Research Laboratory, Bayonne
4. Power Plant, Port Arthur Works 5. No. 3 Boilerhouse, Port Arthur Works

TEXACO STAR



Filling 1500 barrels per day, Bayonne Terminal

In refining petroleum there are three general operations:

Distilling,
Treating,
Packing and Shipping.

Incident to these operations and to the manufacture of our line of refined products, are additional and to a certain extent separate installations as follows:

Steam Plants,
Pumping Plants,
Water Supply Equipment,
Electric Light Plants,
Acid Recovery Plants,
Paraffine Plants,
Filter Plants,
Grease Plants,
Can Manufacturing Plants,
Case Manufacturing Plants,
Barrel Manufacturing Plants,
Roofing Factory,
Laboratories.

DISTILLING The Russians were the first to use continuous distillation in a practical way. We have been the first in this country to apply this system generally to fire-stilling, although others have employed the method in steam-stilling for probably more than twenty years. Our conditions have been such that the continuous system has been particularly applicable, not only for crude

running and steam-stilling, but lubricating oils as well. Some refiners make the argument that continuous operations do not permit of sufficient cracking to secure the highest yields of light products, but there are few instances in oil refining where cracking is a quality argument, and those handling large quantities of oil are adopting more generally the continuous system, this method having practically all the advantages of economy, better quality, and much greater capacity, and lends itself to a much better regulation of condensing equipment and uniform separation of the distillates.

TREATING Treating is the term applied to a cleansing and purifying process conducted with chemicals. Gasolines and Naphthas, Illuminating Oils, Lubricating Oils, Waxes, and sometimes other special products, are subjected to this treatment. This for the improvement in color as well as for the removal of sulphur and other foreign matters which detract from the commercial quality and value of the product.

Various chemicals are used, but as a rule sulphuric acid is the cleansing agent, and being much heavier than oil and tending to separate readily, the mixture is maintained by a thorough agitation by the use of compressed

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1. Employees' Cottages, West Tulsa Works. 2. Acid Plant, West Tulsa Works. 3. Lubricating Oil Compounding Plant, Lockport Works. 4. Warehouses, West Tulsa Works. 5. Pumping Plant, West Tulsa Works.

TEXACO STAR



Packing Refined Wax, Port Arthur Works

air forced into the bottom of vertical receptacles or tanks termed "Agitators." After the agitation ceases, any acid not settled out, washed out with water, or otherwise removed, is neutralized by a treatment with a solution of caustic soda or some other neutralizing agent, and before leaving the treating equipment the oil is freed from all traces of chemicals. There is probably no other operation in refining where lack of experience, skill, and good judgment, can be so disastrous to a satisfactory output.

PACKING AND SHIPPING Realizing that prompt delivery and packages of good quality and appearance are essential in developing and maintaining a satisfactory market, special thought and care have been given to this feature of the manufacturing, and whenever it has been found impossible to purchase packages of such quality and in such quantities as necessary to meet our requirements we have installed our own equipment.

Aside from the facilities at other Terminals, we have at the Port Arthur Terminal a case oil manufacturing plant consisting of the necessary equipment for manufacturing 10,000 2-5 cases and 20,000 5-gal cans per day, in

addition to equipment for the manufacture of a large portion of the smaller specialty packages, and at the Port Arthur Works a similar casing plant with capacity of 5,000 5-gal. cans per day. These capacities are based on nine hours, but the works are equipped to operate both night and day when necessary in order to take care of urgent orders.

The Port Neches Works is equipped especially for the manufacture of asphalt products and has capacity of about 80,000 tons per annum, and includes a barrel factory with capacity of 1,500 wood barrels and 600 steel barrels per day; also a roofing plant with a capacity of 2,000 squares per day.

GENERAL The Port Neches Works is located on the Neches River and is connected with Port Arthur by rail and by a 9-ft. barge canal. This canal is now being dredged to a depth of 25 feet and will be completed within six months, putting Port Neches on the line of ocean-going vessels.

Each Refinery and Terminal is equipped with its own fire-fighting apparatus, including pumps, hydrant lines, hose, chemical extinguishers, etc., and all employees are impressed with the fact that the most serious

TEXACO STAR



West Dallas



Port Neches



Lockport



Port Arthur

TEXACO STAR



TEXACO STAR



Making 1500 Asphalt and Wax barrels per day

consequences of fires would be the loss of trade and inconvenience to customers in the event serious delays were occasioned by repairing or rebuilding manufacturing equipment. Practically all buildings are of fire-proof construction.

In the operation of refineries it is not so essential that every one in the organization shall know all the operations, as that each shall know and properly conduct the particular operation assigned to him. The success of one operation depends largely on the successful operation or co-operation of the other plants or installations.

Steam is used for generating all the power, and very largely in distilling, and it is particularly important that the supply be ample and the pressure uniform.

Until the oil is finally put in packages, it is handled through the various storage and manufacturing processes by pumps and lines, and any errors or delays in the operation of the pumping stations may seriously affect other departments.

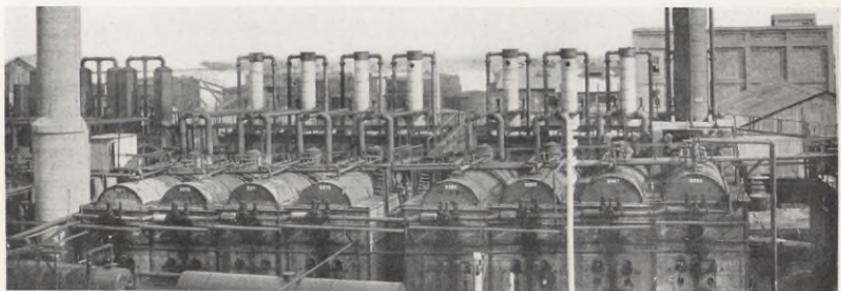
The operations of the steam plant, stills, condensers and agitators, are dependent upon the water supply system. The paraffine plant

cannot turn out good wax and other products unless furnished with proper distillates from the stills; the filter plant can only filter the oils and cannot make them. The success of the grease plant depends upon the quality of the oils and other ingredients entering into the manufacture, and the compounding plants are in the same position.

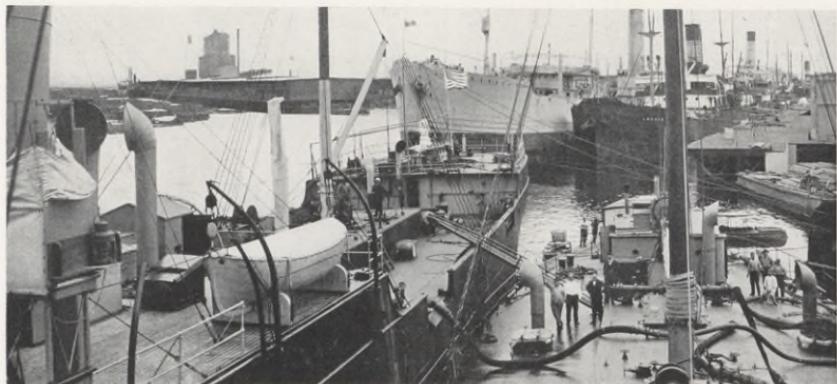
In the development of every new product in any considerable quantity, additional tankage (if not other equipment) is required, and the greatest capacity and highest efficiency can only be obtained by avoiding unnecessary or unprofitable products and adhering as strictly as possible to fixed grades and policies.

In ten years our manufacturing capacity has increased from about 60,000 barrels of crude per month producing Gasoline, Burning Oils, and Fuel Oil, to a capacity of over 1,000,000 barrels per month producing over 200 petroleum products, and the fact that no orders have ever been seriously delayed and that these plants have never been shut down, operating continuously day and night considerably over normal capacity, indicates the efficiency of the equipment and the operatives.

TEXACO STAR



Continuous Lubricating Stills, Port Arthur Works



Loading Bulk Oil and Case Oil, Port Arthur Terminal
Twenty-six Cargoes loaded in November, including Shipments to England, Belgium, Italy, China, Cuba, Porto Rico



Acid Plant, Port Arthur Works

TEXACO STAR



Port Arthur Terminal and Casing Plant



Bayonne Terminal

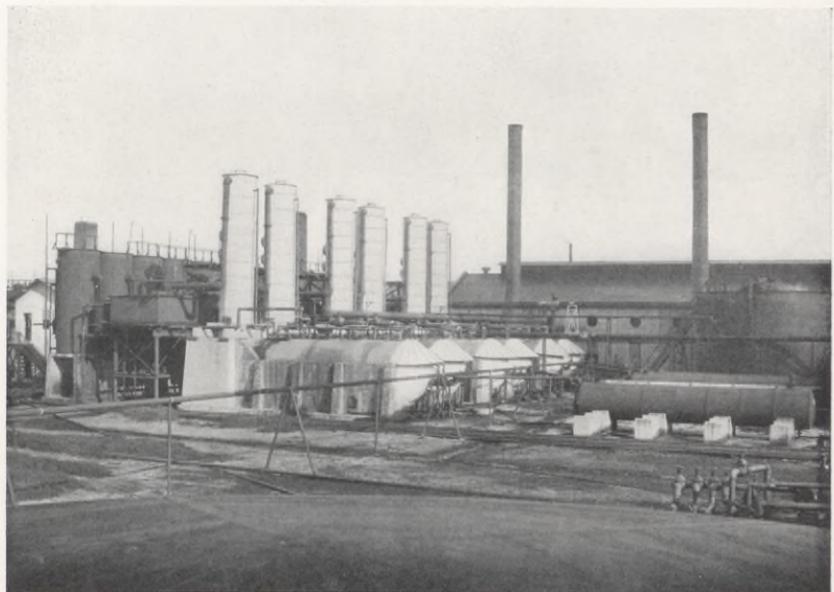


Paraffine Plant, Port Arthur Works



Office, Port Arthur Works

TEXACO STAR



Continuous Steam Stills, Port Arthur Works



Filling, Testing and Casing 12,000 cans in nine hours at one filler. Three fillers are operated simultaneously when necessary

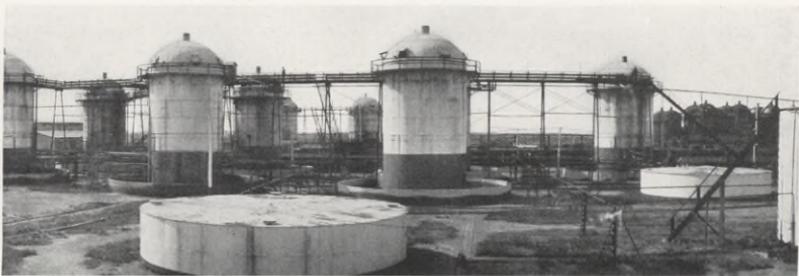
TEXACO STAR



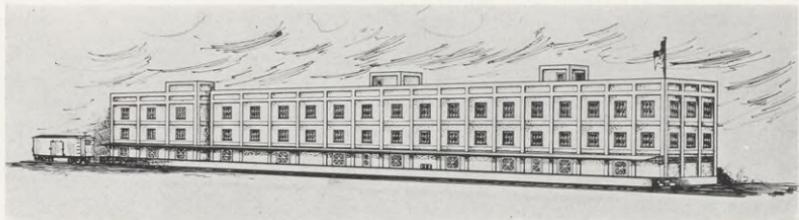
Filtering Plant for Texaco Motor Oils, Port Arthur Works



Delaware River Terminal



Agitators, Port Arthur Works



Grease Plant, New Warehouse and Compounding Plant for Lubricating Oils, Port Arthur Works

BY THE WAY

MR. THEODORE MORGAN, advertising manager of Henry Morgan and Company of Montreal, in telling of profitable studies and investigations in his own department, speaks hopefully, of a general tendency: "In the betterment of industry generally men are approaching their tasks with an open mind, recognizing that the more art, the more knowledge, and the more service that can be brought into play, the more likely will they be to achieve permanent success."



The American Institute of Mining Engineers has appointed a special committee on oil and gas, for the purpose of making a broad review of the entire subject of petroleum and natural gas in the United States. Dr. Wm. B. Phillips, Director of the Bureau of Economic Geology and Technology, University of Texas, has been asked by the committee to prepare an article on the origin of petroleum.

Dr. Phillips will also present a paper on Southern iron ores at the Atlanta meeting (Dec. 29 to Jan. 3) of the American Association for the Advancement of Science.



"The Fuels Used in Texas" is the title of a bulletin of the Bureau of Economic Geology and Technology of the University of Texas, now in press. It should be ready for distribution before the end of the year.



A flour manufacturer has found one answer to the question of how to get the best possible position after a dealer has consented to the placing of a flange sign on the front of his store. The secret of this particular manufacturer lies in the fact that little hooks, one for each of the more commonly used sizes of paper bags, protrude from the bottom of the signs. On bright days, when grocers and other dealers with outside displays of vegetables, fruits, etc., serve customers in the open, the sign from which bags are hung is a real help to the dealer. All the rest of the year the sign is working for the manufacturer.

A cordage company has insured good position for its signs by adding to the advertising message which they bear a small table giving the various sizes in which rope comes. Clerks

find it hard to keep rope sizes in mind. As a result the rope signs are placed in the most satisfactory position for the manufacturer, i.e., close to where the rope sales are made.

These are but two samples of real results. Let the manufacturer mix a pinch of utility into the booklet, hanger, sign or the like, and many of the retailers will come back for more of the helps.—*Printers' Ink*.



In the reports of the "World Series" were recorded two incidents that go to the very heart of human relations. One is McGraw lavishing sarcasm on Marquard when he foolishly pitched the wrong sort of curve to Baker. The other is Mack sitting between innings by his boy pitcher, Bush, and putting into him the heart and confidence that enabled the kid to hold the Giants helpless. The contrast is absolute. Criticism in the wrong sense of the word, sarcasm and all other forms of abuse, may stir and rouse a man so that he will fight like a cornered rat—i.e., desperately. Method, discipline, authority, are all fine things and will accomplish much in the long run, but in the now-or-never time it is fatal to force a man's soul against itself. You must lead a man up and out of his own limitations to the heights of victory; you cannot curse him to that miracle. The supreme achievement is to inspire a man so that he will surpass his best when more than his best is needed. Homer knew the secret of it; so did Garibaldi; so did Mike Murphy.—*Colliers*.



His Weak Point.—A quaint story is told to exemplify the pride that every man should take in the work by which he makes a living.

Two street-sweepers, seated on a curbstone, were discussing a comrade who died the day before.

"Bill certainly was a good sweeper," said one.

"Y-e-s," conceded the other, thoughtfully. "But—don't you think he was a little weak around the lamp-posts?"—*Youth's Companion*.



"I sometimes wonder if my life is worth living."

"So do I."

"Ah, then you have found your life a disappointment."

"Not at all; it is your life we were speaking of."

TEXACO STAR

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 tenth 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 tenth day of the month. All are invited to cooperate.

Pipe Line Dept.
Natural Gas Dept.

Fuel Oil Dept.
Refining Dept.

Marine Dept.

Legal Dept.

Treasury Dept.

Comptroller's Dept.

Sales Dept., S. Territory

Sales Dept., N. Territory

Export Dept.

Purchasing Dept.

Railway Traffic Dept.

E. B. Joyner, Houston.
C. K. Longaker, Houston.
W. S. Conover, Houston.
A. R. Weber, New York.

Lee Dawson, Houston.
R. E. Emerson, Houston.
D. A. Vann, Houston.
S. Slattery, New York.
J. E. Byrne, Chicago.
C. S. Young, Houston.

ANNUAL
MEETING OF
STOCKHOLDERS

At the annual meeting of stockholders, held at Houston, Nov. 25, 1913, the following Board of

Directors was elected:

E. C. Lufkin, New York
Arnold Schlaet, New York
T. J. Donoghue, Houston
L. H. Lapham, New York
J. J. Mitchell, Chicago
A. B. Hepburn, New York
R. C. Holmes, Houston
C. P. Dodge, Houston
G. L. Noble, Houston
W. A. Thompson, Jr., New York
John H. Lapham, New York
J. N. Hill, Chicago
A. L. Beatty, New York

The following Executive Committee and officers were elected by the Board:

Executive Committee: E. C. Lufkin, Arnold Schlaet, L. H. Lapham, J. J. Mitchell, A. B. Hepburn, J. N. Hill, A. L. Beatty.
E. C. Lufkin, President
Arnold Schlaet, 1st Vice-President
T. J. Donoghue, 2d Vice-President
R. C. Holmes, Vice-President
G. L. Noble, Vice-President
W. A. Thompson, Jr., Vice-President
A. L. Beatty, General Counsel
W. A. Green, Treasurer
C. P. Dodge, Secretary
A. C. Miglietta, Asst. Secy. and Asst. Treas.
S. J. Payne, Asst. Secretary
F. C. Pannill, Asst. Secretary
W. W. Bruce, Asst. Secretary
V. R. Currie, Asst. Secretary
Ernest Carroll, Asst. Treasurer
Guy Carroll, Asst. Treasurer
D. B. Tobey, Asst. Treasurer

FUEL OIL
DEPARTMENT

I. P. Chidsey has been transferred from Fuel Oil Department and has left for Tampico to look after affairs of The Tampico Company in Mexico.

REFINING DEPARTMENT

Mr. L. A. Taft, Chief Clerk of the Amesville Terminal, spent several days visiting Port Arthur and Houston.

Mr. J. A. Barlow, Chief Clerk of the West Tulsa Works, is spending his vacation at Plainfield, N. J.

Mr. P. C. Scullin and Mr. C. K. Longaker spent several days visiting the West Dallas and West Tulsa Works.

Mr. E. H. Daniel accompanied the General Office "Nimrods" on their Annual Gunning Trip. The boys at Port Neches are anticipating a change of diet.

Mr. A. E. Sandford has joined the Company's forces at the Bayonne Terminal.

Mr. D. J. Moran, who has been stationed at Anco, has returned to Port Arthur. Dan's account of the Canal Zone in the *Houston Chronicle* has given him world-wide reputation.

Tim Mullin was kept busy entertaining the South Texas visitors during the Dry Farming Congress held at Tulsa.

Mr. and Mrs. A. S. Alston were the recipients of a fine set of silver, the gift of the boys in the Refining Department.

Mr. F. C. Smith came to Houston from Port Arthur in the new Studebaker. Mr. Smith is an annual Carnival visitor.

Mr. W. J. Deady was a Houston Carnival visitor.

Mr. W. T. Leman and Mr. C. C. Daniel of the Chicago Office, accompanied by Mr. T. J. Mullin, spent several days at Port Arthur and Port Neches.

Our new steel towboat NORTH MARINE AMERICA, built at the yard of John H. Dialogue & Son, Camden, N. J., is of steel throughout. She is 91' 9" in length overall, 21' 6" beam, 10' 6" depth. Has fore and aft compound engine, 15" and 32" cylinders x 24" stroke; one Scotch marine boiler 12' 0" diameter x 10' 6" long, 160 lbs. pressure per square inch, and burns oil fuel, using the White Mechanical Atomizing System. The tug carries about six days' fuel supply.



TEXACO STAR

After a successful trip on the Delaware River October 28th, during which the tug developed 440 horsepower and steamed 10.6 knots per hour, the boat proceeded to Norfolk and made a trial tow from Norfolk to Baltimore with the Texas Company's Barge FIFTY-EIGHT, making the distance in 31 hours, barge fully loaded with 5400 barrels of refined oil and gasoline. The tug is now on her way, alone, to Port Arthur, where she will be used for harbor towing and occasional Gulf towing.

TREASURY DEPARTMENT Harrold Ferrell, formerly with the Producers Oil Company, has been appointed bank messenger vice Ramon Schneider, promoted to clerk in Creditman Symms's office.

H. G. Symms, General Creditman for the Southern Territory, spent a week recently enjoying the Dallas Fair. He reports the Texaco Exhibit there as surpassing anything in that line at the Fair.

Mr. Ernest Carroll, Assistant Treasurer, left Saturday, Nov. 8th, with a party of six or eight Texas Company boys, intending to spend two weeks in the big game country of West Texas. Ernest is confident he will bag the limit and it is hoped he does, for in that event it is understood the Treasury Department boys will eat venison for several days.

Treasurer Green has returned from New York where he went to attend the funeral of the late Charles G. Gates.

SALES DEPT. S. TERRITORY The meeting of the Houston, Dallas, and Tulsa District Superintendents, Salesmen, and agents at Dallas on Oct. 23-25, was one of the best meetings, in results accomplished for The Texas Company, we have had. Attendance about sixty.

On Nov. 5-7 Mr. L. E. Thorp held a meeting of salesmen and agents in the Atlanta District. Supt. Cook reports a very enjoyable and profitable meeting. He says the results obtained the first week after the meeting more than justified the expense. The men in the Atlanta District are all enthusiastic, and everybody is working.

Advertising Manager Tipper of New York spent ten days in the latter part of November in the South. By special invitation he delivered addresses before the Dallas Ad. Men's Club, the Fort Worth Ad. Men's Club in conjunction with the Rotary and Automobile Clubs of Fort Worth, the University of Texas School of Business Training, State Convention of Ad. Men's Clubs at Beaumont, the Waco Ad.

Men's Club, and the Houston Ad. Men's Club. Our field representatives who attended these lectures advise that they have been of much service to The Texas Company, though, of course, Mr. Tipper was not boosting our game directly. His lectures created much favorable comment. If his services along this line continue to be in as much demand as they have been on this last trip, we shall have to arrange to bring him down here every few months. We are always glad to have him with us.

SALES DEPT. N. TERRITORY Mr. T. J. Fitzgerald, agent at the Boston Refined Station has been transferred to salesman operating from the Boston office. Mr. Fitzgerald will devote his energies principally to the sale of Texaco Spirits and Texene.

Mr. R. C. Hayes has been transferred from Operating Inspector of the Boston District to Agent at the Boston Refined Station.

Mr. Bernard Steirert who has recently become connected with the Company, will solicit Lubricating business in the City of Newark, N. J.

Mr. E. O. Woodruff has been engaged as salesman and will cover Northern New Jersey succeeding Mr. A. A. Stagg, resigned.

Mr. E. C. Conkling is a new member of the New York District selling staff, looking after the territory formerly covered by Mr. E. L. Halloway, now Agent at the Brooklyn Clinton Street Station.

Mr. D. Arthur Consalus was appointed Salesman at Albany, N. Y., and adjacent territory effective November 1st.

Mr. Albert B. Hart formerly Salesman with the R. M. Hollingshead Company of Camden, N. J., has entered our service in the Philadelphia District and will cover Pennsylvania Territory west of the Susquehanna River.

Mr. Charles B. O'Hare has lately been engaged as salesman in the Chicago District.

Mr. C. S. Klingler who has been Agent at the West St. Louis Station since June has been transferred to Salesman at the St. Louis Station. Mr. G. A. Waffensmith will succeed Mr. Klingler as Agent at West St. Louis.

The Philadelphia District has a salesmen, Mr. M. A. Clymer, traveling in Eastern Pennsylvania, who has established a remarkable record. He entered the service at Philadelphia, on November 4, 1912, and for twenty working days of that month sold \$461.76 of Refined Oil, \$172.08 of Gasoline, \$1022.16 of Lubricating Oil, \$18.36 miscellaneous, \$14.13 of Roofing, \$242.24 Cup Grease, and \$18.68 of Asphalt, making a total of \$1949.41. This

TEXACO STAR

man had never seen any Texaco products before entering the service. In addition to his sales, his 902 and 901 reports and every one of his orders were correct as to price and every other detail, except in a single instance where he overcharged a customer 50 cents on a case of Axle Grease. Up to and including the month of September, 1913, this salesman's total sales have amounted to approximately sixteen thousand dollars, over fourteen thousand of which covered lubricating products. He has sold every item on the schedule and has placed over four hundred new accounts on our books, at least sixty per cent. of which have repeated. From all of these accounts, which have included every product on the schedule, only two very minor complaints have come. These facts demonstrate thoroughly not alone the quality of Texaco products, but that the marketing of our lubricants is a matter of salesmanship. The secret of this Salesman's success is that he is completely absorbed in his work; all that he thinks of is The Texas Company. He works hard and the result is a performance in selling that is an object lesson.

Mr. C. E. Van Bibber, Engineer of the New England District, reported recently on a call upon a large shipbuilding yard, where they had made many successful trials of our Texaco Ursa Oil in various battleships and destroyers built for the United States and other Governments. The Chief Engineer told him that he had been hearing a great many "knocks" on asphaltic base lubricating oils, but that no one had been able to tell him why Texaco oils do such good work, and especially why they adhere so tenaciously to the surfaces of the bearings, also, why they can be used with such very great success on difficult lubricating propositions such as in the turbines and forced feed systems of all sizes of warships.

The arguments of our competitors against our oils float away into thin air when confronted with the excellent service which these oils are giving in all classes of mechanical work.

Every member of our organization should know in a general way, of the remarkable work being done by various of our products. Our Ursa Oil, for instance, has actually saved the reputation of several big warships. The warship is built under specifications, and must develop certain speed at her builder's trials in order for the Government for whom she is built to accept the ship.

In the case of a Destroyer last year, the shipyard had several preliminary trials at high speed. On every one of these trials considerable trouble with hot bearings was developed. The oil was furnished by one of our competitors. This oil was taken out, and another competitive oil used. During the second trials, the same trouble again developed, several of the bearings being ruined, while a section of the shaft was spoiled so that it had to be replaced. As a final resort, our Ursa Oil was put into the ship, and all of the trials were successfully made with cool bearings.

We have authentic records of four other ships where practically the same series of events took place. The best competitive oils for this class of work fell down entirely, and as soon as the Ursa Oil was placed aboard the ship, all of the trials were successfully made without any difficulty whatever.

This particular "Ursa Oil" is fast becoming a standby among the shipbuilders and throughout all of the ships of the Navy. Its wonderful record is making a fine reputation for our Company.

PURCHASING
DEPARTMENT

"There have been no changes
in the Purchasing Department."

SUGGESTIVE INDEX OF ARTICLES IN CURRENT PERIODICALS

THE MAIN INTEREST IS INDICATED BY
DEPARTMENTAL CLASSIFICATION OR BRIEF COMMENT

EXECUTIVES Bonus Systems and the Expense Burden, by A. Hamilton Church—*The Engineering Magazine*, Nov., 1913.

The second article in the comparison of wage systems. The preceding article in October issue on Premium Piece Work, and the Expense Burden was noted last month.

The Oil Outlook Today, by David T. Day, U. S. Geol. Survey—*Oil and Gas*, Oct., 1913.

Finding the Hidden Cause, by Marshall J. Bailey—*Business*, Nov., 1913.

Getting Money from the Scrap Heap, by J. L. Cleary—*Business*, Oct., 1913.

Government Brief in Pipe Line Case—*Oil and Gas*, Oct., 1913.

Fields for Future Expansion of Efficiency in Engineering, by Francis W. Collins—*Engineering Magazine*, Nov., 1913.

PIPE LINE New Process to Cheapen Pipe—*Oil and Gas*, Oct., 1913.

PIPE LINE Manufacture of Pipe for Oil and Gas, by F. N. Speller—*Natural Gas Journal*, Sept., 1913.

NATURAL GAS Mid-Continent Field, by Charles N. Gould—*Natural Gas Journal*, Sept., 1913.

NATURAL GAS Mid-Continent Gas—*Oil and Gas Journal*, Nov. 6, 1913.

Natural Gas in 1912—*Oil and Gas*, Nov., 1913.

REFINING Oil Testing—*Autocar*, Sept. 6, 1913.

REFINING Illustrated description of a machine for recording the behavior of lubricants under working conditions.

Hislops Oil-Testing Machine—*Autocar*, Sept., 1913.

Illustrated description of machine for testing lubricating qualities of oils and greases.

Pumping and Heating of Oil Fuel, by R. T. Strohm—*Electrical World*, Sept. 27, 1913.

Describes method of obtaining uniform oil pressure, and object of the heater.

MARINE Tank Ships—*Int. Marine Engineering*, Sept., 1913.

Plans and description of a vessel now under construction at Quincy, Mass.

COMPTROLLERS' Keeping 840,000 Names Shipshape—*Printers' Ink*, Sept. 4, 1913.

Features of system recently installed in U. S. Pension Bureau. One feature is employment of addressing machines to fill in checks. Such machines have long been used in many business offices for making out bills and statements, but the Government is the first institution to use them on large scale for checks. Handling of almost equally as large lists in Government Printing Office.

Controlling Branch House Credits, by W. L. Betz—*Business*, October, 1913.

Keeping Accounts in the Coal Business, by A. S. Benthuyzen—*Business*, Nov., 1913.

SALES Training of Salesmen and District Managers, by J. C. Asplet—*Printers' Ink*, Oct. 2; *Ibid.*, Oct. 9, 1913.

ADVERTISING Nine Instances Where Spectacular Evidence of Quality Secured the Business, by Richard W. Proctor—*Business*, Nov., 1913.

T E X A C O S T A R

Advertisers Turn News to Account—*Printers' Ink*, Oct. 9, 1913.

Pitfalls to Guard Against, by Wesley A. Stanger—*Business*, Oct., 1913.

Getting More Out of Motor Trucks, by Homer B. Vanderblue—*System*, Sept., 1913.

Efficiency in Buying and Operating Motor Trucks, by W. A. McDermid—*Review of Reviews*, Nov., 1913.

EXPORT Foreign Opportunity in Oil—*Oil and Gas*, Oct., 1913.
"Ask the Bureau of Foreign and Domestic Commerce at Washington about it."

Oil Burning Locomotives in India—*Oil and Gas*, Oct., 1913.

The Credit End of Export Sales, by J. K. Clifford—*Business*, Nov., 1913.

RAILWAY TRAFFIC The Making of a Traffic Manager, by H. A. C. Taylor—*Business*, Nov., 1913.

PRODUCING Oklahoma and Kansas Booming—*Oil and Gas*, Nov., 1913.

GENERAL Foreign Investments in Oklahoma, by H. G. James—*Oil and Gas Journal*, Nov. 6, 1913.

GENERAL Patents and Modern Industrial Conditions, by F. P. Fish—*The Iron Age*, Oct. 2, 1913.
"Our patent system should not be weakened. Invention should be encouraged."

How the Clipping Bureaus are Rendering Valuable Service to All Kinds of Business Enterprises, by E. S. Hanson—*Business*, November, 1913.

Waste of Wealth by Competition, by President Charles R. Van Hise—*Annalist*, October 27, 1913.
"The Sherman Anti-Trust Law makes co-operation impossible and so causes appalling losses." "My proposal to remedy these conditions is neither regulated competition nor regulated monopoly; but retention of competition, prohibition of monopoly, permission for co-operation, and regulation of the latter."

The Motor Truck in Contracting and Construction Work, by Rollin W. Hutchinson, Jr.—*The Engineering Magazine*, Nov., 1913.

Experiences in Efficiency, by Benj. A. Franklin—*The Engineering Magazine*, Nov., 1913.
"A Problem of Quality of Workmanship," the third of the series of articles noted in our last issue.



Now Don't be Bashful!

Send in your ideas for ads. We have already received a number—don't *you* hang back.

We don't expect any "fine" writing—just put it down as you would tell it to us.

And as for drawing—

Why just a few strokes like this—



and we will know just what you mean.

In the next month's issue of the **TEXACO STAR** we will print the best suggestion and the name of the one sending it to us.

Come now, and **YOUR** suggestion. We don't care whether you are high or low in the Company, we want to hear from

Everybody

ADVERTISING DIVISION
NEW YORK OFFICE

