



*The Lufkin Line*

FIRST QUARTER, 1936 » Vol. XV « No. 1

## » THE PENALTY OF LEADERSHIP «

*I*N EVERY FIELD OF HUMAN ENDEAVOR, he that is first must perpetually live in the white light of publicity. ¶ Whether the leadership be vested in a man or in a manufactured product, emulation and envy are ever at work. ¶ In art, in literature, in music, in industry, the reward and the punishment are always the same. ¶ The reward is widespread recognition; the punishment, fierce denial and detraction. ¶ When a man's work becomes a standard for the whole world, it also becomes a target for the shafts of the envious few. ¶ If his work be merely mediocre, he will be left severely alone—if he achieve a masterpiece, it will set a million tongues a-wagging. ¶ Jealousy does not protrude its forked tongue at the artist who produces a commonplace painting. ¶ Whatsoever you write, or paint, or play, or sing, or build, no one will strive to surpass or to slander you, unless your work be stamped with the seal of genius. ¶ Long, long after a great work or a good work has been done, those who are disappointed or envious continue to cry out that it cannot be done. ¶ Spiteful little voices in the domain of art were raised against our own Whistler as a mountebank, long after the big world had acclaimed him its greatest artistic genius. ¶ Multitudes flocked to Bayreuth to worship at the musical shrine of Wagner, while the little group of those whom he had dethroned and displaced argued angrily that he was no musician at all. ¶ The little world continued to protest that Fulton could never build a steamboat, while the big world flocked to the river banks to see his boat steam by. ¶ The leader is assailed because he is a leader, and the effort to equal him is merely added proof of that leadership. ¶ Failing to equal or to excel, the follower seeks to depreciate and to destroy—but only confirms once more the superiority of that which he strives to supplant. ¶ There is nothing new in this. ¶ It is as old as the world and as old as the human passions—envy, fear, greed, ambition, and the desire to surpass. ¶ And it all avails nothing. If the leader truly leads, he remains—the leader. ¶ Master-poet, master-painter, master-workman, each in his turn is assailed, and each holds his laurels through the ages. ¶ That which is good or great makes itself known, no matter how loud the clamor of denial. ¶ That which deserves to live—lives.



Picturesque market place on the river at Barranquilla, Colombia, where the natives bring in their produce from the farms to sell to the townspeople who come to buy food. The rivers are practically the only roads in Barranquilla and boats the only vehicle through which to market produce.—Ewing Galloway.

# Colombia!

EDITOR—We are particularly happy to present this story on the enchanting country of Colombia—for the oil fields of Colombia, Venezuela and other South American fields are among the largest users of Lufkin Pumping Units. Almost 25% of our production during 1935 went to South America!

## LAND OF ENCHANTMENT

. . . With Great Potentialities for  
Commerce and Trade

By C. F. GREEVES-CARPENTER



There is a thrill, even in the simplest event, for the stranger in a foreign land. The mere selection of an hotel with all its unknown possibilities; the choosing of a restaurant and the struggle with unfamiliar dishes; the sense of mystery at night in a strange street in an unfamiliar town, when every window would seem to hold some adventure, every portal its element of risk and allure. These things are almost unknown to advocates of "See America First." In these United States we have long stretches of beautiful country, wild

gorges, immense canyons, magnificent cities, lovely resorts, yet, because we are familiar with the life of our fellowmen these things lack a certain thrill and enchantment which only our imagination and senses can create in us when in a foreign land.

Colombia is a land of enchantment, a land whose seaports were visited by pirates and buccaneers and bloody massacres in the old days. It is a land in which one has a sense of the unexpected: a glance from flashing eyes and one responds

Above—Machacho in native dress. Below—Native outdoor kitchen. (Note how natives make use of old five gallon oil cans as cooking utensils.) The stove as you note is built of wood as a table, the top of which is covered with clay and charcoal fire built thereon. Only modern appliance is the grinding machine at left.—Underwood.





**PLAZA DE BOLIVAR**—the principle square on which face the Cathedral and other public buildings in the Capital of Colombia, Bogota. Bogota is situated on a lofty plateau, 8,863 feet above sea level, at the foot of two mountains. Its climate is like a continuous autumn.—Ewing Galloway.

to romance; a narrow street of historic buildings and one is filled with excitement partly reliving days long gone by; and every street, everything, every person offers the possibility of adventure.

Colombia is the northernmost of the South American republics as everyone knows, yet it is the only one which can boast of having shore lines on both the Pacific and Atlantic Oceans, the latter being the northern boundary. Bogota, its capital, is on an 3000 foot plateau located on the west side of the East Cordillera of the Andes, and receives most of its supplies from the Atlantic ports 600 miles away, rather than from the Pacific coast ports of Buenaventura or Tumaco which are only approximately 200 miles away.

Much of the traffic, both passenger and freight, proceeds up the Magdalena River on stern-wheel boats, reminiscent of the Mississippi River, from either Cartagena or from Barranquilla. The Magdalena is approximately 1020 miles long, but is only navigable for 600 miles from the Atlantic coast. It is a trip well

worth the taking, too, if one likes adventure and has enough spirit to suffer with good humor the many inconveniences which such a trip affords. Time, too, at least from July to September which is the very dry season, must not be a matter of importance for otherwise the travel-



**Sur Del Patio of the National Capitol in Bogota.** The National Capitol is an imposing edifice covering 2½ acres.

ler would be apt to develop a choleric disposition. Delays, then, are apt to be frequent for the river depths are always changing—a fact which makes it impossible to chart

the river—and men are kept posted in the bows of the vessel with long poles testing river depths. Much time is spent in loading wood for fuel, and while the river is a mile wide in some places and averages a depth of thirty feet, it is unsafe for navigation at night in some sections. Mosquitoes, too, are apt to be quite a source of irritation, no matter how perfect a mosquito net you may have brought along with which to cover your bunk at night. The food, too, will be unusual, being somewhat greasy—or possibly out of deference to the river boat chefs I should say rich in fats—and the menu will, long before the voyage ends (it may last

from six to fourteen days), become very monotonous. Despite this, if you have the travel spirit you will have a fascinating trip for the 600 miles between the Atlantic coast port and La Dorado from whence one is able to go by train to Bogota. An equally interesting trip from the scenic standpoint is

offered by an excellent air service between Barranquilla and the capital. It is well worth the trip as it is well known as the home of culture and intellectual tastes. The capital is quite a modern city. Its Capitol is a most imposing edifice covering 2½ acres, there is a magnificent Presidential Palace, a museum, public li-



**Famous old Prado Hotel at Barranquilla.** Photo United Fruit Co.



**"Plaza De Toros" (Bull Fight Arena) in the Capital City, Bogota.**—Ewing Galloway.



**The National Cathedral, Barranquilla.** Photo United Fruit Co.



Native bark of Balsa wood on the upper Magdalena River, Colombia, S. A.—Photo Courtesy Union Oil Co.

brary, cathedral, theatres and many other evidences of its progressive spirit, such as polo grounds, hippodrome, bull ring, telephones, electric lights, some 25 miles of electric tramways, and of course the never-failing plazas which are so familiar to every visitor no matter in what city of tropical America he may find himself.

The importance of the Atlantic ports is easily recognized when it is realized that there is a very much higher rate for the handling of freight from the Pacific ports to Bogota owing to the disconnected railroad service between the latter and the capital.

On the Atlantic seaboard, first port in importance for the vessel proceeding from the Canal Zone is Cartagena. This city was once the treasure storehouse in the Americas of King Phillip of Spain and fascinating it is for the traveller today. There are many relics of its historic past which fire the imagination to fever pitch

and to the point where one catches oneself reliving the days of old in this port of the Spanish Main.

Cartagena de Indias, as it was once called, is now in its four hundred and third year. Prior to 1910 it was completely medieval in all its structures and up to that time all the inhabitants lived within the enclosure formed by its ancient walls. Cartagena was founded on January 20, 1533, by Pedro de Heredia, one of the most daring and cultured of the Spanish conquistadores; the city has, in its four hundred years, known much strife and bloodshed. History of the Spanish Main is rife with stories of galleys laden with precious stones and gold sailing away from Cartagena to the ports of Spain. There is every reason to believe the stories of fabulous mineral wealth



A typical thatched-roof home in picturesque Barranquilla, Colombia.—Keystone —Underwood photo.



River boat on Magdalena River. Much of the traffic, both passenger and freight, is moved up the Magdalena River on stern-wheel boats of this type. The Magdalena is approximately 1020 miles long but is only navigable for 600 miles from the Atlantic Coast—a very fascinating trip. Wood is used almost entirely for fuel.—Union Oil Co. photo.



for today platinum and gold mining are among the principal resources of the republic, and it leads in world production of emeralds. In the early days the Spanish founders are reported to have expended eighty million pesos, gold, to fortify and protect this city which they held of such vital importance. Great ramparts and castles were erected, and so splendid was the material used and the methods employed in construction that most of this early work is still in an excellent state of preservation. No matter from which direction one enters the city, one first sees the pine-covered hill, La Popa, (named after

Street scene in Cartagena, showing typical Spanish architecture, houses with balconies. The unimproved roads and poverty of the farmer make the burro a necessity for transportation.—Ewing Galloway.



A busy Cartagena street scene. Note the balconies across which one may, if lucky and fluent in Spanish, bandy words with some attractive Senorita.—Photo courtesy United Fruit Co.

of old. In 1544 the city was sacked by a French pirate; a Britisher, the famous Sir Francis Drake, bombarded the city with a fleet of 23 ships and as many thousand men; in 1679 another French pirate sacked the city once more; again came some Britishers, 12,000 strong, so history relates, in 1741 under Admiral Vernon and Cartagena was subjected to a terrific bombardment which lasted



One of the 27 Bastions and part of the historic wall surrounding Cartagena. It is 40 feet wide in places and many sections are in such good repair that a car may be driven along the top of the wall.—Photo courtesy United Fruit Co.

Below—Office and plant of the Tropical Oil Company, El Centro, Colombia.

for two months; and then in the beginning of the 19th Century warfare again held Cartagena in its grip.

The city of Cartagena has the distinction of being the first to declare its separation from Spain, November 11, 1811. Grim reminder of Spanish domination is the well-pre-



Pedagogical Institute in the city of Barranquilla, Colombia.

served Palace of the Inquisition, the first to be constructed in South America by a royal decree of Phillip III under authorization of Pope Paul V. Fresh paint and a change of occupants, for the Palace is now a private residence, has rehabilitated this relic of a tragic era in the history of mankind.

From Cartagena it is just a few hours by boat to Puerto Colombia, which was once the principal Atlantic port of the Republic. While tremendously important from the maritime angle, Puerto Colombia is in itself only a small hamlet with probably not more than five hundred inhabitants. Its geographic position is such that, with a mile long pier, it was the most accessible of the ports

[Continued on page 14]

its resemblance to a galley poop). Nearby is the ancient fortress of San Felipe, the Castillo de San Felipe de Barajos, but, alas, many of its walls are crumbling into ruins. Underground passages, though, may still be traversed by the traveller, but they are far different from the days when they were used for purposes of communication between the Cathedral, more than a mile away, and other important points. Prisoners, too, used to be kept chained in the dark, damp depths of these underground passageways, and one can imagine the tortures which were inflicted on them. Today the tunnels, which are open to the public, are lighted by electricity and cheery attendants, descendants probably of the surly jailors of old, guide one through.

That the fortifications were most necessary cannot be doubted for the city was the most coveted prize of the famous pirates and buccaneers



# The Lufkin Line

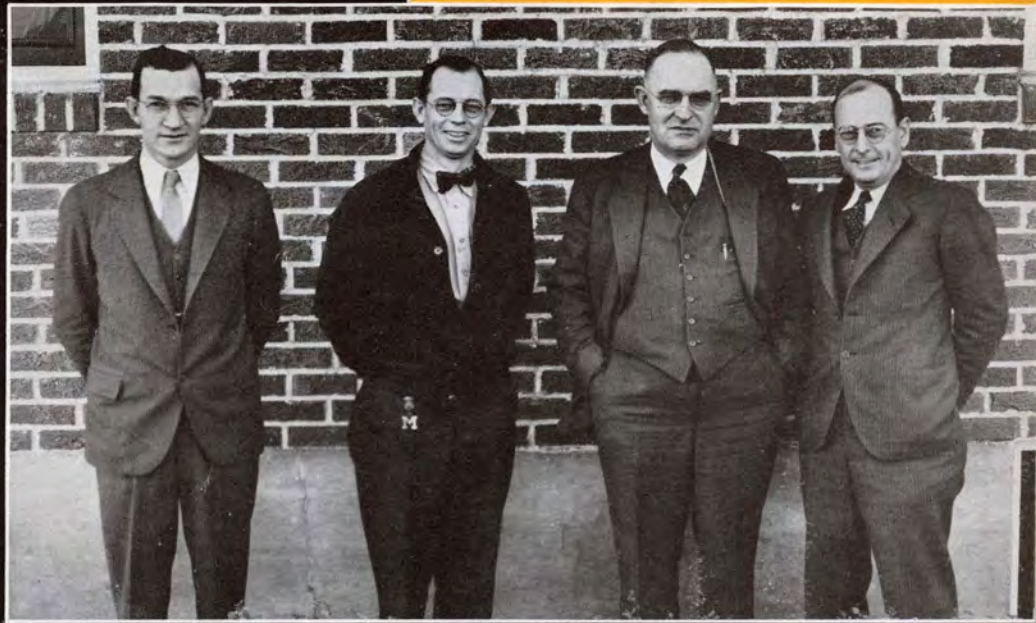
## THROUGH Lens AND Shutter



Stanolind Oil & Gas Company, Wichita, Kansas, left to right: Miss Gager, Miss Meaders, Ed. Wickhorst, Chief Clerk and J. L. Nicklos, District Superintendent.



H. O. Harder, District Superintendent, I. T. I. O. Company, Oklahoma City.



I. T. I. O. Co., Oklahoma City, Oklahoma, reading from left to right: Clif Wright, Petroleum Engineer, Fred Lichtenhead, Production Engineer; C. O. Rison, General Superintendent; D. B. Dow, Vice President.



Stanolind Oil & Gas Co., Ellenvood, Kansas; left to right front row: Rudolph Weiss, John Manning and Bill Benso. Back row: H. G. Nething, Superintendent and Bob Gaynor, Chief Clerk.



John Ritter, Superintendent of production, Sun Oil Company, Dallas, Texas.



M. L. Brown, Assistant Superintendent, Sun Oil Company, Dallas, Texas.



Division office of the Indian Territory Illuminating Oil Company, Oklahoma City, Oklahoma.

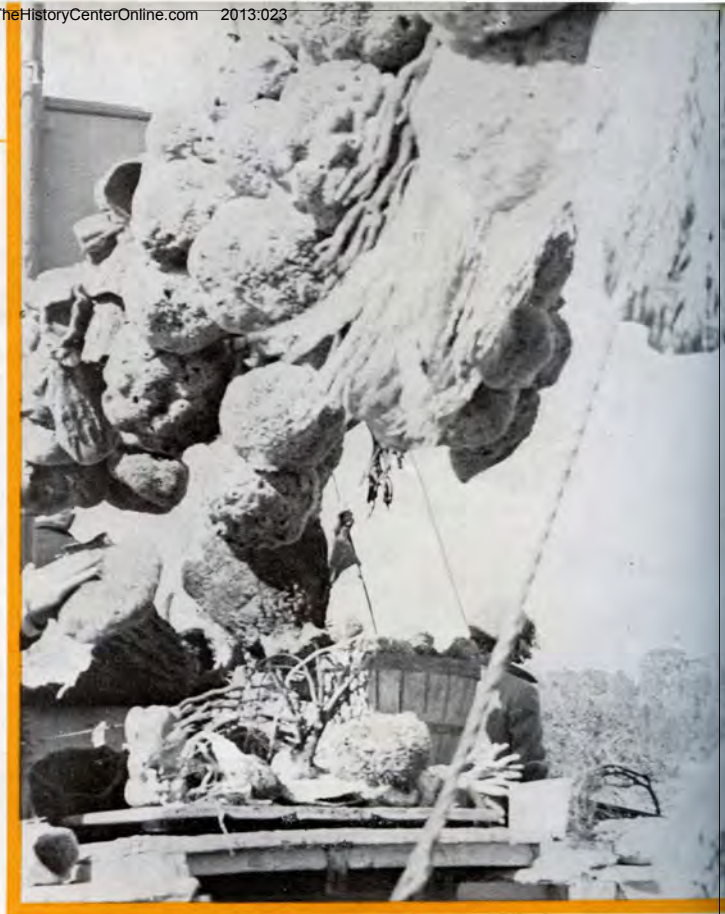
*The Lufkin Line*

**SHADES OF SATURDAY NIGHT!**—Scene on board sponge boat showing different types of sponge hanging to dry after salt water treatment. The commercial product bears no resemblance to the sponge brought from the Gulf's bed. The sponge is not a vegetable, but an animal—popular opinion to the contrary, and when brought up by divers it is slimy and repulsive to the touch—the finished product is simply the skeleton of the living organism.—Photos by Author.

# Sponges

A Little Known Industry of . . .  
**FLORIDA**

By JACK BAGNALL



Although the sponge has been practically an institution in American homes for many years, even though it only made its appearance in some for the regular Saturday night rituals, we wonder how many of our readers know just where our sponges are obtained. Undoubtedly they believe, that is if the matter was ever given any thought, that they were probably imported from some distant country, or out-of-the-way group of islands. Such is not the case, however, as the little town of Tarpon Springs, Florida, furnishes

95% of the sponges sold in this country, and 50% of the world's supply.

Originally sponges were procured from the tides of the Mediterranean, being washed up on the shores, around the year 350 B. C. They were used, at that time, by the Greek warriors as padding for their helmets and shields, according to Aristotle, ancient Greek philosopher. From that time, until the world became commercially aware of sponges, there is little or no record of the industry. However, that it was an

important Greek industry there is no doubt, as in this country alone there are over 150 of the old type Greek sponge boats in use, manned by descendants of the first Mediterranean spongers.

In our own country the sponge industry got its start in Key West, the first sponges being taken from the shallow waters along the southern half of the Florida peninsula, in the keys and Ten Thousand Islands of the Gulf side. Key West, at that time, became the center of the industry and shipped the first cargo of sponges to New York in 1849, where they found a ready sale. After these fisheries were depleted the spongers moved on to the Gulf of Mexico, and in 1905 the little town of Tarpon Springs, Florida, wrested the center of the industry from Key West, and now conducts the largest active sponge exchange in the world.

Tarpon Springs is situated on the Gulf of Mexico, about 30 miles north of St. Petersburg, Florida, and closely resembles a small Mediterranean fishing port, with its narrow streets and its fleet of old type Greek sponge boats with high bows and sterns,



**VIEW OF SPONGE MARKET IN BAHAMAS—NASSAU, New Providence.** One of the immense sponge markets. This is a scene typical of the Bahamas; one of their chief exports being sponges.—Underwood.

suggestive of the ancient Greek Galliot. Sitting high in the water they are seaworthy in any kind of weather. They are sprit-sail rigged, 32 feet in length with an 11-foot beam on deck. Lined up at their mooring they present a colorful spectacle, due to the varied and somewhat gaudy colors used in painting their hulls.

There are three classes of sponge boats: shallow, medium and deep water. The shallow boats operate in 30 to 60 feet of water, the divers on these boats remaining under water for about two hours at one time. The medium diving boats operate in 60



Divers aboard sponge boat. Note 3-pronged hook used in pulling sponges from their anchorages. Small net baskets are used to store the sponges in bringing them to the surface. Sponge divers jump overboard instead of using ladders as is usually the custom.

to 90 feet of water and have three or four divers. The deep sea boats have as many as five divers and operate in waters ranging from 80 to 120 feet in depth, their divers remaining under water for only 20 to 30 minutes at a time.

The sponge diver's equipment is similar to that used by the majority of commercial divers, with the addition of a three-pronged fork or hook with which he tears the sponges from their rock anchorages, and also a bag of coarse cotton netting in which he places the sponges he has gathered. Instead of using the customary

method of descending a ladder on the boat's side to go underwater, the Greek sponge diver jumps overboard. Long years of practice have taught him how to use his air valves so that he does not come popping back to the surface, feet foremost.

Contrary to usual belief the sponge is not a vegetable but an animal. The commercial product bears no resemblance to the sponge that is brought up from the Gulf's bed, as the sponge with which you wash your back (if you can reach it) is simply the skeleton of the living organism. In appearance the sponge, when brought up by the diver, resembles a piece of raw beef liver and varies in color from a grayish yellow to a dark brown or black. It is slimy and repulsive to the touch. The curing process consists of removing the soft gelatinous tissues of the living animal and the skin that envelops it.

## THE COVER

BOGOTA RIVER (known as lazy river) near the Capital City, Bogota, Colombia. Eucalyptus trees line both sides of this very picturesque stream.

## IDEALS

- To live in the affections; not to dwell in pride.
- To cultivate courtesy, which fosters brotherhood and is the manner of the heart.
- To be gentle with those who serve, since they are not free to resent.
- To avoid arrogance, which corrodes the man and estranges his fellows.
- To mingle freely with all classes, and thus to know mankind.
- To be mastered by no habit or prejudice, no triumph or misfortune.
- To promise rarely, and perform faithfully.
- To choose hobbies with care, and pursue them with diligence.
- To value people above thoughts, and thoughts above things.
- To curb the personal wants, which expand easily but shrink with difficulty.

—Robert McMurdy.

The skill and thoroughness with which this is done determines the marketable value of the product.

The raw sponges are first spread over the boat's deck and are beaten with sticks and trampled with the bare feet of the crew. This is followed by repeated washings on deck and in the sea, after which they are strung on rope yarns about six feet in length, the strings tied together in bunches and then trailed over the vessel's side for the finishing action of the sea water. After this they are tied on the rails and masts of the boat to dry in the sun before being taken to their "cell" in the sponge exchange for sale.

The sponge market at Tarpon Springs is controlled by the principal sponge dealers of the United States and Europe. Auctions are held each Tuesday and Friday. Each boat's catch has its individual pile, on which bids are handed to the exchange manager written on slips of paper and he announces the highest bid and the sale is consummated. The sponges are usually sold in strings of from 4½ to 6 feet in length, by weight, at so much per pound, but the better varieties, however, are figured separately.

From this exchange sponges are shipped to all parts of the world for distribution and sale to the consumer.

Sponge boats moored at dock, Tarpon Springs, Florida. These boats are of the old Greek type with high bows and sterns, suggestive of the ancient Greek Galliot.





### Typical Lufkin Installations

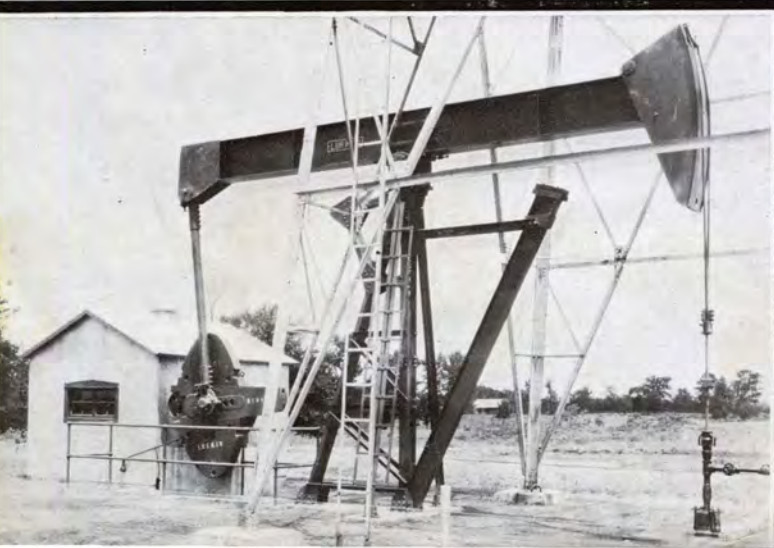
Continental Oil Company, C. C. Crews No. 4, L. Perkins Survey, Gregg County, East Texas — LUFKIN Unit Assembly T.C. No. 3-18, with Clark multi-cylinder gas engine drive.



Stanolind Oil & Gas Co., Wooley Lease, Hooper Survey, East Texas — LUFKIN Unit Assembly T.C. No. 3-22 with long base for electric motor drive.



Stanolind Oil & Gas Co., Siler Lease, White and Walker Surveys in Carlisle District, East Texas installation — LUFKIN Unit Assembly T.C. No. 4-11 with McCormick-Deering multi-cylinder gas engine drive.



Devonian Oil Co., Overton, Texas — LUFKIN Unit Assembly SC No. 26 with multi-cylinder gas engine drive.

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Magnolia Petroleum Company, Loma Novia pool, Government Wells field, Duval County,  
LUFKIN Unit Assembly T.C. No. 3-18 with gas engine drive.

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**LUFKIN**  
PUMPING EQUIPMENT



The \$1,000,000 TEXAS HALL OF STATE at the Texas Centennial Exposition, now under construction. When completed it will house historical exhibits and pioneer relics. Along its majestic colonnades, cast in native Texas stone, will be likenesses of Sam Houston, David Crockett, James Bowie, William B. Travis and other men whose names are indelibly identified with Texas' struggle for independence.



## PREPARES TO CELEBRATE CENTENNIAL MANY FETES PLANNED THROUGHOUT STATE OIL INDUSTRY TO HAVE PROMINENT PART

By JIM JEFFERS

At its World's Fair in 1936, Texas' six million citizens will be prepared to exhibit to world visitors the accomplishments of a short 100 years of political independence.

In Dallas, the one hundredth anniversary of Texas' Independence will be observed with a Centennial

Exposition, to run for a period of more than six months and opening June 6. In other Texas cities, appropriate historical celebrations will be held.

The Exposition in Dallas, Texas, historic shrines and scenic wonders, are expected to attract 10,000,000 visitors. It will be one of the great world's fairs of history.

The Exposition plant is rapidly taking form. Grounds and buildings and surrounding property which has been acquired will give the fair nearly 200 acres for an exhibit area.

Already completed is a huge auditorium, seating 4,400 persons, and one of the largest and finest theatres

in America. Outstanding stage productions of 1936 will be booked for it.

In the Exposition grounds also, one of America's most beautiful athletic fields, the Exposition Stadium has a sunken playing field, and its design permits perfect vision from every one of its 46,000 seats. Brilliant lights illuminate it for night events. Sports attractions of international importance will be held there during the Exposition.

The Exposition area includes a completed six-furlong race track with a huge grandstand in an attractively landscaped setting. The world's finest thoroughbreds will race there for Exposition visitors.

Plans already have been approved for scores of huge buildings to house exhibits and entertainment features. Construction work is being pushed



A view of the front of the Hall of Administration of Texas Centennial Exposition, the first of the World's Fair Buildings to near completion.

rapidly to have the plant ready for the opening on June 6 of this year. It will run through November 29.

President Roosevelt and other international dignitaries will be guests of honor. Statesmen, industrial magnates, actors and athletes of foreign countries will be participants. One building will be devoted exclusively to electrical exhibits and communications devices. It will contain the dramatized scientific exhibit of the American Telephone and Telegraph Company, which attracted so much attention at the Chicago Fair.

Mankind's progress in the use of electricity to spare human labor will be vividly told in the operation of thousands of devices powered by electric current.

The petroleum building will be one of the most colorful attractions. Oil has become Texas' largest single source of income, and oil itself one of the most useful servants of humanity. Visitors not familiar with the oil business will learn how men have probed into the earth, exploring unplumbed subterranean depths to attract the magic liquid which is so necessary to their daily life.

The Texas Hall of State building will depict the story of the state's glorious history. Along its majestic colonnades, cast in native Texas stone, will be likenesses of Sam Houston, David Crockett, James Bowie, William B. Travis and other men whose names are indelibly identified with Texas' struggle for independence. Exhibits in one end of the hall will be given over to its heroes; in the other to its present-day greatness. The Federal Government has appropriated \$1,200,000 for a Federal Building in the Exposition Park, which will be another feature attraction.



A view of the HALL of PETROLEUM of the Texas Centennial Exposition, fronting on the Esplanade of State, as it will appear at night during the World's Fair of 1936 in Dallas. Oil has become Texas' largest single source of income. Visitors not familiar with the oil business, will learn how men have probed into the earth, exploring unplumbed subterranean depths to attract the magic liquid which is so necessary to our daily life.

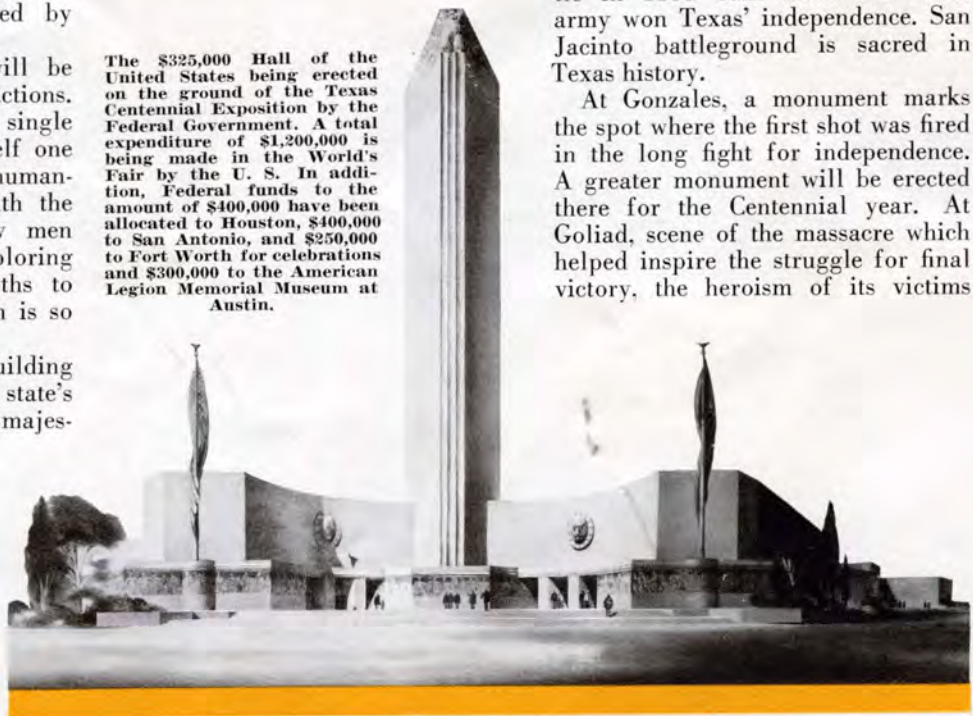
There will be other buildings for cotton, foods, transportation, poultry, domestic arts, fine arts, horticulture, agriculture, livestock, natural history and varied industries. An aquarium and an open air amphitheatre are to

have not visited, and the country along all incoming routes is rich in scenic beauty.

Near Houston is a park to be improved with large appropriations made by the state and federal governments. Here in a 15-minute battle in 1836 Sam Houston's small army won Texas' independence. San Jacinto battleground is sacred in Texas history.

At Gonzales, a monument marks the spot where the first shot was fired in the long fight for independence. A greater monument will be erected there for the Centennial year. At Goliad, scene of the massacre which helped inspire the struggle for final victory, the heroism of its victims

The \$325,000 Hall of the United States being erected on the ground of the Texas Centennial Exposition by the Federal Government. A total expenditure of \$1,200,000 is being made in the World's Fair by the U. S. In addition, Federal funds to the amount of \$400,000 have been allocated to Houston, \$400,000 to San Antonio, and \$250,000 to Fort Worth for celebrations and \$300,000 to the American Legion Memorial Museum at Austin.



be provided for the World's Fair by the City of Dallas.

Regional Centennial celebrations in other cities will inspire travel to historic spots that Texans themselves

will be appropriately recognized. State and federal appropriations have been made for perpetual maintenance of the Alamo and enlargement of the Plaza surrounding it. Here in the heart of San Antonio is the shrine where Travis and his men laid down their lives rather than to surrender or retreat.

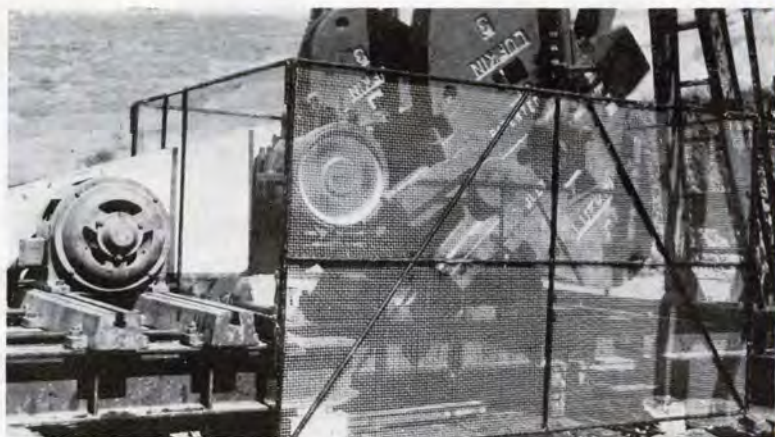
In Austin, a \$2,000,000 historical museum will offer much of interest to Centennial visitors.

In Fort Worth, a huge building is to be devoted to development of the livestock industry in Texas.

Attractions gathered from throughout the world will assure the prospective visitor of ample exhibits and entertainment features.



Workmen pouring concrete into forms for the 30-foot reinforced concrete piles being driven into the ground for the foundation of the \$1,000,000 Texas Hall of State.  
—All photos by courtesy Texas Centennial Exposition.



## PROTECTIVE SAFETY SCREEN

This protective screen is a safety feature required under some State laws. It not only protects "human carelessness" but the live stock as well, and often saves building a fence around the property. Each section is hinged, and the sides or ends may be readily opened. The entire guard is mounted on two angle irons that set on top of the unit bed plate. These guards can be easily applied.

# Colombia!

## THE LAND OF ENCHANTMENT

[Continued from page 6]

being near to the large city of Barranquilla and to the Magdalena River. Before the world depression, when shipping was most active, it was nothing for a ship to have to anchor off Puerto Colombia for as many as fifteen days awaiting its turn to unload cargo. The pier accommodated six vessels at a time, but with only a single railway track unloading operations were considerably retarded. At one time about 70% of the national budget was derived from the customs and port dues.

Barranquilla, the city with which Puerto Colombia is connected by both railroad and highway, lies seventeen miles away. It has a population of 130,000, and is a thriving up-to-date city with many of the conveniences of our large cities in the United States — even to overhead traffic signals. It boasts a large "foreign" settlement which is laid out in blocks, and among beautiful residences the famous Prado Hotel caters to the discriminating traveller.

From its port, Puerto Colombia, to the third Atlantic port of Santa Marta is only a few hours run by steamer. Santa Marta possesses a charming rock-bound bay. In the center of it nestles a rock island on which the lighthouse flashes its signal regularly throughout the night. Back of the town rises majestically the Eastern Cordillera of the Andes, making a suitably impressive background for the Cathedral, the towers of which dominate the town. Found-

ed in 1525, Santa Marta is older than Cartagena, but it lacks the charming, rambling, narrow streets of the latter and neither is its history as exciting, although three miles outside the city, at San Pedro Alejandrino, the most famous and brilliant character in the history of South America, *El Libertador*, Simon Bolivar died.

Santa Marta had practically fallen into desuetude as a port but with the advent of the United Fruit Company's agricultural interests it began a new lease on life and is now a flourishing, busy center of trade. Practically all the bananas grown in Colombia are shipped through Santa Marta, together with hides, coffee and cacao, etc.

Colombia, among other things, is noted for its fine mellow coffee, and a trip to a coffee finca is extremely fascinating for it gives one a close-up of the growing of the coffee beans, and the early treatment given them prior to shipment to the coffee roaster in America or Europe.

There are large petroleum interests throughout different sections of the Republic. The principal oil belt is along the border of the Magdalena Valley, centering in El Centro in the Santander Department. An outstanding feat in the history of oil had its inception in Colombia when, in 1923, the government granted a 50-year renewable concession to the Andian National Corporation Limited permitting the construction of a main

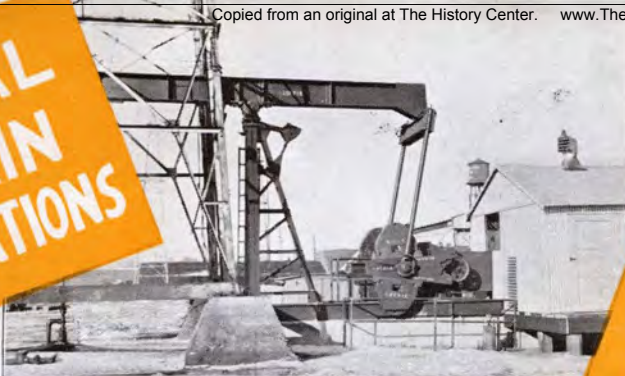
pipe line (with connecting lines and storage facilities) from the refineries of the Tropical Oil Company located at Barranca Bermeja to Mamonal on Cartagena Bay, a distance of 335 miles. A 10" pipe line connecting the refineries with the port was completed in 1926. The importance of this unique undertaking may be estimated by a comparison of before and after production figures: in 1923 Colombian oilfields produced 426,000 barrels, while, ten years later, in excess of 116,000,000 barrels were exported.

Other important oil producing regions are the Caribbean and the Maracaibo. The former extends along the coast line from Riohacha to the Gulf of Uraba, and covers an area of approximately three hundred square miles; the latter is a continuation of the oilfields of the Maracaibo Basin in Venezuela.

Mr. Tom Gill, who two or three years ago made a survey of tropical forests under the auspices of the Tropical Plant Research Foundation in cooperation with the Charles Lathrop Park Forestry Trust, estimates that there are at least one hundred and forty-five million acres of hardwood forests within the boundaries of the Colombian Republic.

Within its 442,000 square miles of territory live eight million people. What possibilities in commerce and trade, in exploration and development lie within this great Republic so little known to the traveller!

**TYPICAL  
LUFKIN  
INSTALLATIONS**



Lufkin installation in the Oklahoma City Field;  
Lufkin TC-0-56 Unit with 130-lb. Beam.

**No Gear  
FAILURES**  
*~ a Lufkin Record*



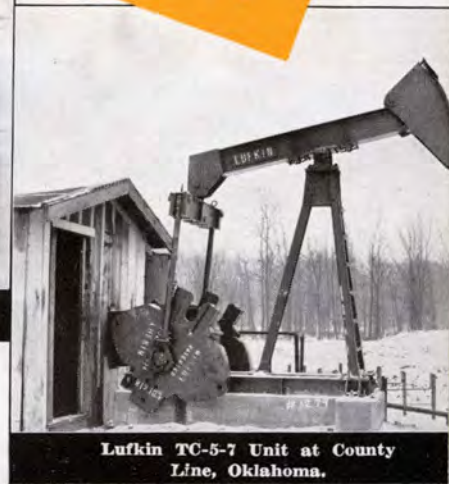
Lufkin TC-1A-58-1028-C Unit with 130-lb. Beam.  
Hercules engine. I. T. I. O. Corp., South Glendale  
No. 2, Oklahoma City.



T. C. Johnson Oil Co., Wichita, Kansas. Lufkin  
TC-3-22 Unit with G. E. enclosed motor.



Lufkin TC-2-26 Unit, Lorraine, Kansas. This  
photo not retouched—being entirely covered with  
ice gives retouching appearance.



Lufkin TC-5-7 Unit at County  
Line, Oklahoma.

Illustrated above are typical LUFKIN installations in the Kansas and Oklahoma City fields. For compact, heavy-duty pumping jobs, LUFKIN Units are prime favorites. Our Tulsa office is handy, 1305 Philtower Building, with an experienced field representative and service man in Oklahoma City.

The LUFKIN Record is—*No LUFKIN Herringbone Gear has ever failed in service.* This is a record we are proud of. And why shouldn't we be. It attests the fine workmanship and materials that go into the manufacture of LUFKIN Pumping Units, and is the reward of years of specialization in this particular branch of the oil industry. Close co-operation with oil company engineers and practical men in the field has resulted in a time-tested, trouble-free product of which we are justly proud. It is no unusual thing to hear oil men say "You can't beat a LUFKIN."

Lufkin Pumping Units are manufactured in Lufkin, Texas, by the LUFKIN FOUNDRY & MACHINE COMPANY. Sales offices in Houston, Tulsa, Dallas, Henderson, Odessa, Los Angeles, Bakersfield and New York City, N. Y.



LUFKIN CATALOG 36—Lufkin's NEW No. 36 Catalog (reprinted in full in the Composite Catalog) contains complete specifications and blue print setting plans for all types of equipment manufactured by the Lufkin Foundry & Machine Company. This catalog will be gladly mailed to oil men anywhere, without obligation to buy. Write for your copy today!

*Lufkin*



A tale of a little-known annual epic where snow bars the way to tropical sunshine—in which men risk—and often give their lives.

**Left**—Snow and plenty of it—Close up of a railroad rotary plow in action.

**Below**—Shovellers cleaning up an open cut after the machines have driven through. Notice the snow depth.



# “Snow Men”

KEEP CALIFORNIA'S TROPIC OPEN IN WINTER

By KYBER FORRESTER

An Army, all the men of which are valiant, which cares for its smooth-running equipment as critically as a war-time army in the field; which possesses a superb intelligence system in its weather information and scientific data on snow; and which boasts an esprit de corps equal to that of an Old Guard or a crack air force—is all that keeps America connected with its southwestern sea front during the month of high winter. Without this Army, only the air routes would remain open.

That this Army—composed of liv-

ing snow men—must function without error and without defeat, whatever the cost in human life and effort, is evident enough when we know that some 5,000,000 people in Southern California, and more than a hundred million east of the Rockies are vitally inter-dependent on each other's products, a cessation in the flow of which would not only bring inconvenience, but actual suffering.

**Below**—The old way. Here are shown 25 locomotives being used to ram an old snow plow into the drifts of snow on the tracks of the Southern Pacific Railroad.



Tourists who bask on golden beaches in the winter time are an incidental, but they could not get there unless they journed prior to the big snows, over highways and railroads, or made long round-about trips, were it not for men of most gallant stature who risk their lives in high altitudes boring channels through the deep white blankets that suzerain Winter lays down.

Sometimes these men perish in gigantic snowslides which sweep down the mountain precipices, to be found by their comrades still facing the snow in silent equipment, snow plows and massive rotary machines which when in action throw snow in huge billows scores of feet into the air.

There were times in earlier days when the snows did cut off Southern California from direct east-west connection, for months of the year, but conditions are now such that a cut-off would spell tragedy, and “the mountain men” of the Highway Division and of the Southern Pacific Railroad go into action every year to prevent such a catastrophe.

Their mechanical equipment is not only kept up all year round, but is often junked when an improvement is developed; hundreds of units are incorporated in the machine divisions

of this army, always strategically disposed to be ready for action against snow in quick time.

Even the design of highways which cross the snow belts is modified to make their work safer and, if possible, easier. Some 90,000 feet of portable "snow fence" to force snow to bank up off the highways are kept in readiness in critical locations just as barbed wire and other impedimenta are maintained by a field army.

The "snow men" study the highway until they know every inch of it, for often they must bore through areas where every trace of a high-



Open road through cut at the Donner Summit in a mild winter after meltage has begun. The picture shows how snow drifts at The Donner, though the scene here shown is a pleasant one after storm has passed and melting begun.



The snow surveyor determines moisture content of snow by filling the tube shown and weighing it. Moisture content is a guide to the heaviness of the job of snow removal and sometimes dictates types of machine equipment to be used.

way has been obliterated by the snow.

Roads are often closed in critical areas while these men work; they go through first. They sand and salt the highway after the bigger job of snow removal has been accomplished, and finally you pass through in your car, in comparative safety; in fact, one can say in perfect safety.

The job is a prodigious one, and must be accomplished quickly. The

men are so skilled they cannot be considered in any temporary status, and are kept on enlistment, and paid, the year round.

"Front line men" is a frequent appellation given them in California, and they are considered as on a firing line. They prove annually—but never more than in the past two winters—that what King Winter can dish out, they can take away.

Men working on snow removal virtually live on the job during the winter, sleeping and eating in barracks which are constantly being improved and enlarged.

It costs California some \$350,000 to keep this field army in action through a single winter.

During the winter of last year the snowfall at Donner Summit was *forty feet with a snow pack of ten to twelve feet*. This heavy fall covered only a few of the 4500 miles of mountain roads which the snow men must keep open.

At the Donner—a much more dramatic place than anything the European Alps have to offer—the most spectacular snow removal operations occur. This is on U. S. Highway No. 40 at an elevation of about 7000 feet. Here, during the winter, snow falls at a rate of one foot per hour and wind velocities of 80 miles an

hour with the temperature well below zero are recorded.

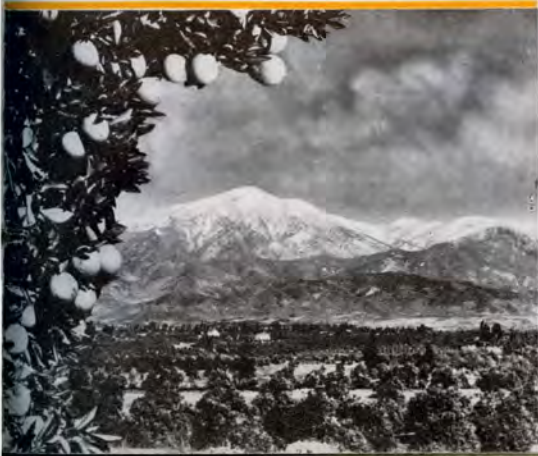
During the storm period, the state keeps more than 300 pieces of heavy equipment in action, ranging from "V" push plow motor graders to large auger-blower type rotaries, continuously.

The light motor grader "V" plows, straight blade speed plows, the big "V" plows attached to 5-ton four-wheel driven trucks equipped with side wings and capable of bucking hard compacted drifts four feet in depth, have a serious enough job, but when it gets worse, then appear the auger type and railroad type rotaries with digger arms and sloping blades, as well as rotary widening units, making it possible to cope with any kind of snow removal.

The railroad type rotary consists of a large diameter wheel with fixed blades. The wheel is mounted vertically on the rear of a truck which operates backward into the snow drift. The rear and top of the wheel is covered and chutes provided so the snow may be thrown either to right or left. Considerable work has been done under the direction of the State Equipment Engineer in improving this piece of equipment. The "V" type plows are especially heavy and the truck and entire unit is designed for heavy bucking work.

The state endeavors to so organize the operations that there will be a minimum hazard to the men engaged on the work, as well as the travelling public. It endeavors to keep the public out of areas where

**HERE'S THE ANOMALY!** "Summer" and orange groves resting on one side of the Rockies. Winter which rages to the eastward has its van showing in the mountains. Through that snow proceed the passages to the east which must be kept clear by the snow battalions.





Though the snow here shown at The Donner is mild, the use of drift fence is shown. It forces snow to drift at a point off the highway, easing the work of the snow removal forces. It is interesting to know that much of this snow fence is manufactured in the "Sunny South" and particularly in LUFKIN, TEXAS.

hazard exists during the height of a storm, and operates controls to that end whenever it seems advisable.

These snow forces are equipped with all the "behind the lines" paraphernalia of an army; repair shops, storage shops, barracks, supply service, everything, including, of course, medical equipment and first aid.

Dramatic problems are faced on other lines than the Donner Summit mentioned above. The Crest Route in the San Bernardino Mountains between San Bernardino and Big Bear Lake, and between Bishop and the Nevada state line above Coleville, both territories lying at the 7,000-foot elevation, are others. In the latter case the snowfall is not so heavy but the dryness of the snow and the heavy winds make drifting a serious problem.

On these routes, and on all the others where variations of the snow problem exist, the state now endeavors to control the movements of the snow, in order to ease the strain on the snow forces.

In many cases during construction it is possible to raise the grade of the road so that the fill portions will be kept clear by wind action. Likewise the ditch section is widened and the slopes flattened in cuts to

provide storage space for the snow. In yet other areas, clearing of brush and trimming lower branches of trees reduces the eddying action of the wind and consequently reduces the deposit of snow at such points.

In open areas, snow fence made of lath pickets is installed on the windward side at sufficient distance from the road to insure formation of the drift at the desired point off the highway. In some cases planting of trees and shrubbery serves the same purpose.

Sand mixed with salt in the proportion of about 100 pounds of salt



Augur type rotary plow on Myers Grade U.S. 50.

to each cubic yard is stockpiled in shelters at convenient locations prior to the winter season. This is in constant use, and the state paid some \$15,000 just for sand and salt last winter.

On the Southern Pacific railroad lines, the railroad believes its complete modernization of snow-fighting

equipment insures that the rail lines can be kept open regardless of any conceivable fall of snow.

This, naturally, has not always been true. One of the gravest problems faced by the old Central Pacific, predecessor of Southern Pacific, was the heavy snow encountered the first winter of operation in 1866-67. In those days the roadbed was kept clear by hand labor. Men shoveled the snow off the tracks. In the spring of 1868, construction of snowsheds was started and by the fall of 1869



Heaving snow with an Augur type rotary plow on the Susanville lateral of California.

a crew of 2500 men had constructed 37 miles of sheds at a cost of \$2,000,000. Sixty-five million feet of lumber was required and, since there were not sawmills enough to supply it, round and hand-hewn timbers were used for part.

In later years, snow plows were brought into use but proved ineffective in keeping the roadbed clear when unusually heavy storms struck.

It was not unusual to attach as many as 25 locomotives to one of the bucker plows. They bucked into the drifts, ramming the plow into the snow until it stalled. They then backed up and made another run at it. However, snows were frequently encountered which resisted even such gigantic tactics.

With the development of the modern rotary plow, however, the bucking became obsolete. Even snow sheds began to go out of use.

As to relative peril, however, the railroad has much the better of it as compared to the motor highway. At least, a heavy locomotive cannot skid off its "highway." Railroad snow operatives, moreover, work in a comparative comfort unknown to the highway snow men.



Ohio Oil Company's (left to right) Tony Tokash, construction foreman; Fred Smith, Bakersfield superintendent; E. C. Bolton, general manager; Al Rosenlieb, manager of field operations. Picture taken at Midway—Premier Well No. 1. Note Lusk Unit in background.

The Lufkin Line

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AL E. CUDLIPP, Editor

Vol. XV 1st QUARTER, 1936 No. 1

... AND SUDDEN DEATH

I had to quit reading "And Sudden Death" at the end of the third paragraph. The gory details of automobile smashups are too much for my tender nature. First published in the *Readers' Digest* "... And Sudden Death", by J. C. Furnas, has achieved the largest circulation of any pamphlet since Hubbard's "Message to Garcia" appeared.

The net result of Mr. Furnas' efforts will probably be to make drivers a little more careful. Reckless drivers will continue to be reckless. Judges may put more of them in jail and take the licenses away from still more. At least we hope so.

Common courtesy may do more than fear to curb death on the highway. A mild man whom I met in a barber shop, one day, told me that the Handbook of the Automobile Association of Great Britain contains a paragraph which he thought was important. At a great deal of trouble to himself he obtained the paragraph and here it is:

"With good manners, particularly, as with life itself, it's the little things that count. Every unimportant moment we concede to fellow travelers is an investment in the Bank of Good Nature, returning interest a hundredfold. We must school ourselves readily to concede that unimportant moment—to allow others their right and proper share of the Road. Courtesy begets Courtesy."

The foregoing has appeared on the flyleaf of the British Handbook, which goes to half a million members, annually for ten years. It was extracted from a broadcast talk given by Sir Stenson Cooke, in 1925.

Read it again. Ask your children to read it. Paste it on the dashboard.

Concede that unimportant moment. Let the other fellow have his share of the road. Refuse to compete with ill-mannered drivers. You

may not be able to boast of doing 500 miles in ten hours, but you will have the satisfaction of knowing that you can be a gentleman even when you have a hundred horsepower at your command. And you'll probably live until you die a natural death.

—By William Feathers and reprinted by special permission of the William Feathers Company.

The difference between an automobile and a woman is that no matter how old and rickety an automobile may get, there is always someone anxious to cherish it and listen to its heart-throbs with keenest interest.

Women and automobiles are alike in one respect, however: no matter how good the paint job, they don't attract the public nowadays unless they're properly streamlined.

"I hear the Sultan is introducing the honor system in the harem."

"Yes, he caught the doctor cheating on his examinations."—*Lyre.*

Officer (to groom who has been whipping horse): Don't whip him, man—talk to him.

Darky (to horse, by way of opening conversation): Ah comes from N'Awleans; wheah does you-all come frum?

"Where'd you-all git that derby hat?"

"Hits a surprise fum mah wife."

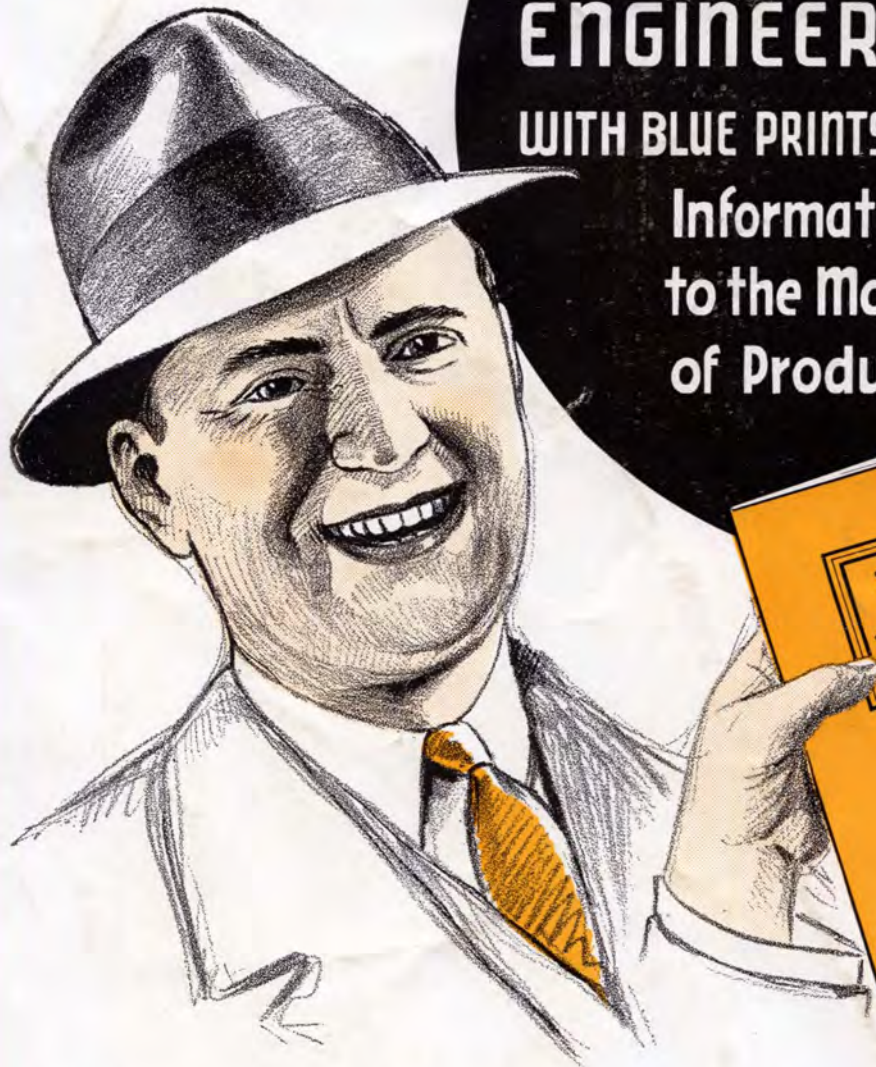
"A surprise?"

"Ah cums home de other night unexpected an' found hit on de table."

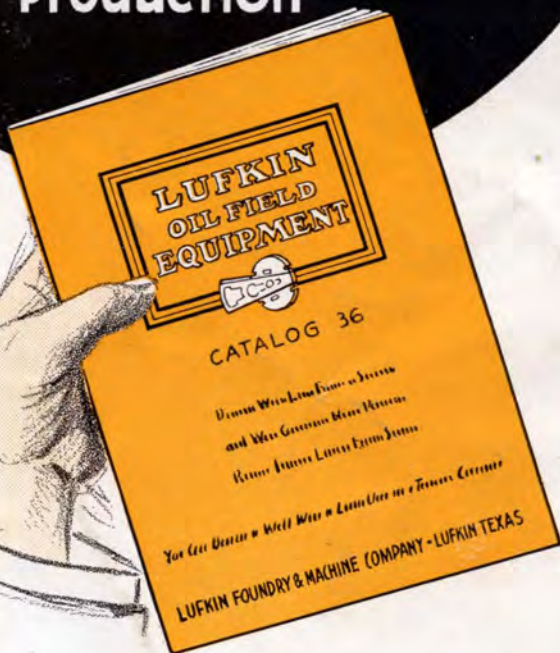
A girl may wear a golf outfit when she can't play golf, a bathing suit when she can't swim, and a riding habit when she goes hiking, but when she puts on a wedding gown, she means business.—*Pensacola News.*



The smaller tiny tot piped up in its childlike treble, asking: "Mamma, where are all the (a bad word) and (another bad word) today?" Mamma replied at once: "Hush, dear, they are only out when papa is driving."—Copyright Bell Syndicate, Inc., reproduced by special permission of the Fort Worth Star Telegram.



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