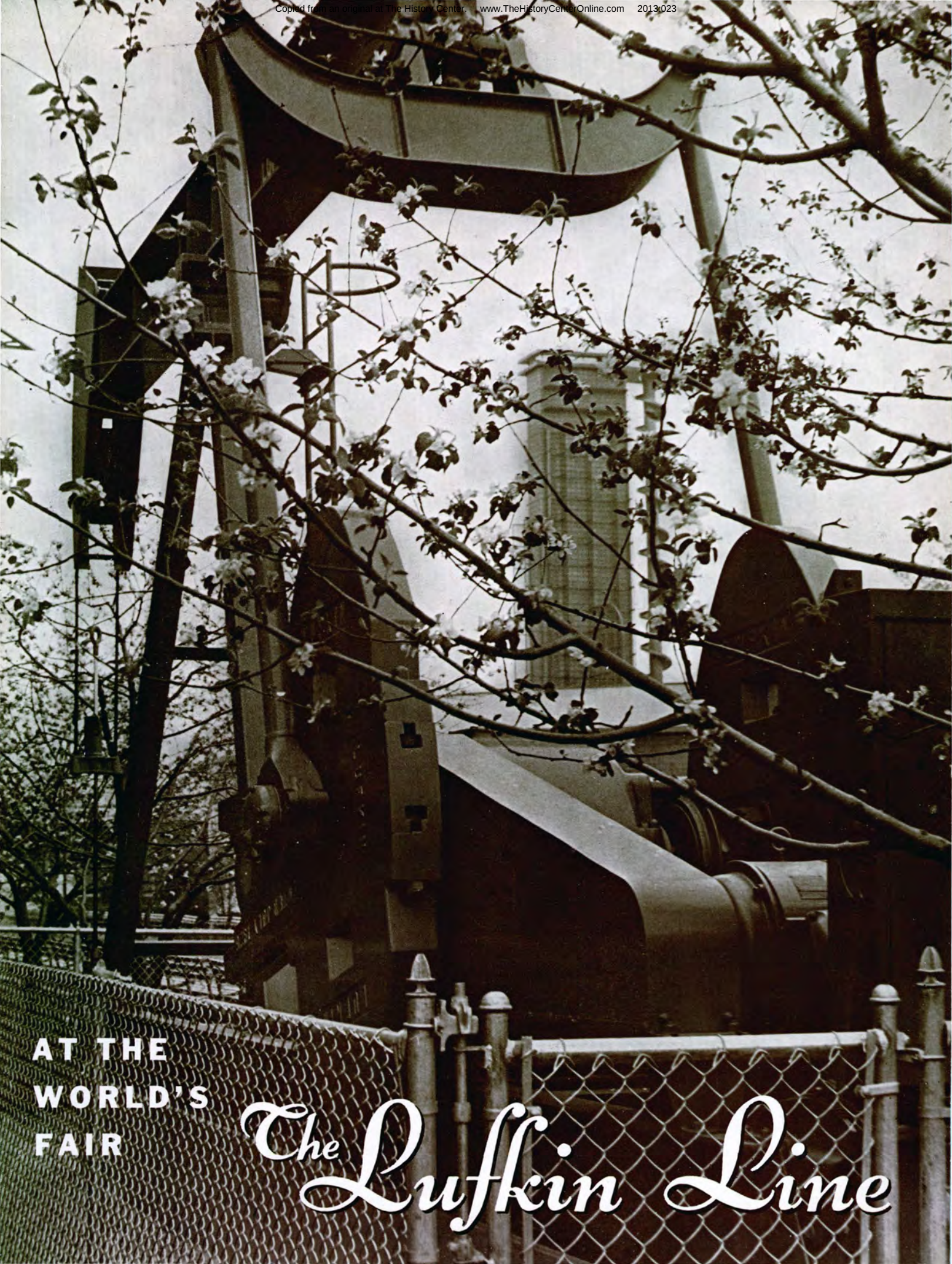


AT THE WORLD'S FAIR

The Luffkin Line

—Borden Photo Graphic Arts, Inc., Houston

WHAT IS THE AMERICAN WAY? . . .

EVERYBODY is inclined to consider that his own opinions and prejudices about customs and institutions, principles and practices, represent the "American Way." The term is used to justify the most contradictory ideas. Nevertheless there are some principles and practices that are distinctively American and that are believed in by most Americans; especially a fundamental conception of freedom which is a part of our heritage.

We have built up our civilization here, and drawn our social pattern, on a basis of individual freedom. It includes freedom of worship, of speech and press and assembly, of residence and movement; liberty to pursue an occupation of one's own choice, to acquire and own property, and to enter into voluntary association with others in enterprise; and the right to participate in government through representatives whose arbitrary power is restricted by basic and statutory law and who are periodically accountable to the people. These rights do not constitute the whole range of American freedom, but are among the most fundamental.

It is true that these are not regarded as absolute rights. We impose limits by custom and by public authority. But we try to adhere to the pattern and we recur to it whenever it is temporarily disregarded. The conviction persists that this individual freedom must be maintained —limited only in order to preserve the maximum of it for all. For in the freest possible exercise of individual initiative and energy we see the mainspring of our past achievement and the guaranty of a greater future—the fulfillment of the promises of American life.

There is no other plan of human relations we know of that has produced or is producing a like result. Certainly the totalitarian systems now spreading over Europe—and not without their advocates here—bear no fruit that we crave. We believe in hard work—but in occupations of our own choice; in discipline—but self-discipline; in individual duties and group duties—but not imposed by arbitrary power; in cooperation—but of a free people.

Free institutions, however, affording the maximum of individual opportunity are not an accident of nature, like the climate—nor do they persist like the sun, moon, and stars for whose existence and movements and continuance we feel no responsibility. Generations of vigorous, industrious, and adventurous people have established these institutions. Only people of the same sort can safeguard and maintain them. A corollary of individual freedom is individual responsibility; each generation must earn again, by hard work, devotion to duty, loyal cooperation, productive achievement, its right to be free.

Through all the changed conditions that our increasing mastery of nature creates, through all the adjustments and readjustments of human relations that such changes require, we are insistent on maintaining our heritage of freedom. Essentially, this ideal, interpreted in practice as well as our social experience and social intelligence permit, is the American way.

The Lufkin Line

Published to promote Friendship and Good Will with its customers and friends and to advance the interest of its products by the Lufkin Foundry & Machine Company, Lufkin, Texas.
AL. E. CUDLIPP, Editor

Volume XIV FALL, 1940 Number 2

In This Issue

THE COVER

An exceptionally fine view of the Lufkin unit at the New York World's Fair—Photo Courtesy "OUR SUN," publication of the Sun Oil Company.

TIME BRINGS CHANGES

Progress, real progress, is gradual. You can't really see it from month to month, or even, in most cases, from year to year. That's the only possible reason that some people can get away with accusing American industry of standing still.

But if you take a period of ten or fifteen years ago and compare it with the present, then you can really get an idea of the tremendous strides that have been made.

A recent news item is a case in point:

Recently an automobile was sold for only $40. It was a 1924 model car that had been driven only five miles—in other words, really "new" though it was fifteen years old—and when it had originally been purchased, it had cost its owner nearly $1,700. The man who had bought it had become ill, never recovered, and no one had used the car until its re-sale.

The difference between $1,700 and $40 represented the contributions made by research in turning out a better product and in lowering the price of more modern cars. No one would think of paying $1,700 for that car today, despite the fact that it was in virtually as good condition as fifteen years ago when it was really worth that price. Its fifty-five mile an hour top speed, its lack of shock absorbers, safety glass, and four-wheel brakes, would make it unattractive to the motorist today.

Astonishing progress—yes! But it's progress of a sort familiar in most American industries, and progress that we can continue to expect in the case of products that form the basis of our infant industries of today!

SALES and SERVICE

Offices and Warehouses of the LUFKIN FOUNDRY & MACHINE COMPANY

ALICE, TEXAS
P. O. Box 1460, Phone 395
H. G. Walcott, Jr.

ATLANTA, TEXAS
437 W. Main Street
Phone 315
Chuck McLane

BAKERSFIELD, CALIFORNIA
30th and M Streets
Ed. Layton

DALLAS, TEXAS
1317 Magnolia Building
Phone 2-5834
L. A. Little
Ed Carroway

GREAT BEND, KANSAS
935 Washington
P. O. Box 82
Phone 1044
Cooper Richards

HOUSTON, TEXAS
706 Second Nat'l Bank Bldg.
Phone Preston 8610
A. B. Bennett

KILGORE, TEXAS
P. O. Box 871
Phone 875
Don Kerr
Taylor Hood

LOS ANGELES, CALIFORNIA
5959 South Alameda
Phone Lafayette 1201
E. P. Trout
Al McConville

NEW YORK, N. Y.
149 Broadway
Telephone Barclay 7-0562
A. V. Simonson

ODESSA, TEXAS
P. O. Box 83
Telephone 216
W. H. Miner

SALEM, ILLINOIS
P. O. Box 306
Phone 5571
Elvin Read

SEMINOLE, OKLAHOMA
312 8th Street
Newell Lynch

TULSA, OKLAHOMA
719 Thompson Building
Phone 3-0204
D. A. Reid

EXECUTIVE OFFICES AND FACTORY
Lufkin, Texas

The motor truck brought heavy hauling to isolated places and gave every one increased flexibility of transportation. Last year operators paid $432,000,000 in taxes

THE LATEST ADDITION TO THE Lufkin Line

WHEN THE FIRST all-steel van type trailer rolled off the assembly line of the new trailer division of the Lufkin Foundry and Machine Company recently, it marked the realization of an ambition of President W. C. Trout for a modern trailer plant for Lufkin—one in which the most modern stream-lined jobs could be handled, jobs with marked improvements in design and workmanship.

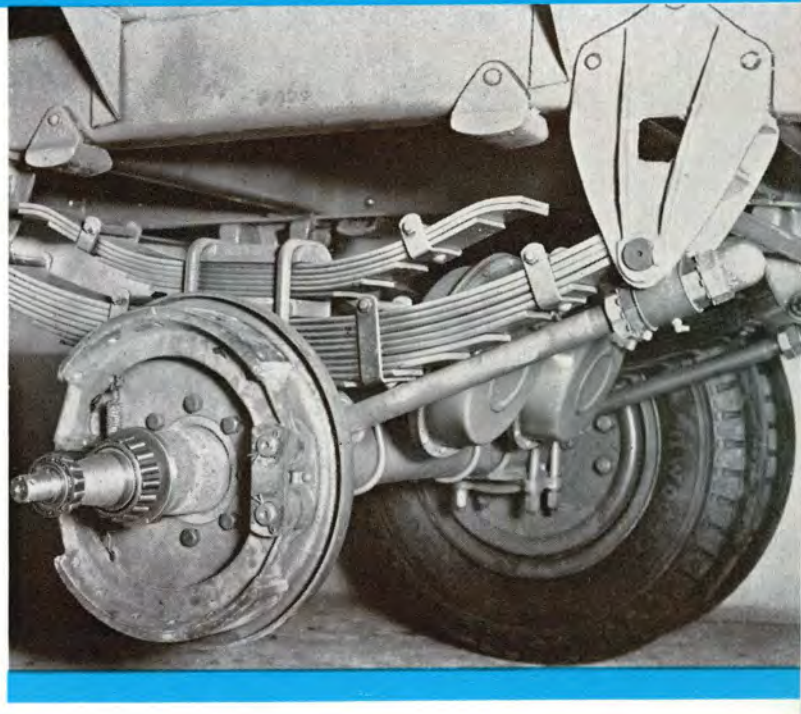
The trailer division of the Lufkin Foundry and Machine Company is the outgrowth of the purchase of the old Martin Wagon and Trailer Company. The Martin Company, then in its 40th year of incorporation, began in the wagon days and for a period of many years gained wide recognition for its famous Martin eight-wheel log wagons. It was quite natural that with improved highway facilities there followed the manufacture of pipe and pole trailers, floats, semi-vans and to some extent freight and moving vans, many of which are in use by some of the largest freight lines in the Southwest.

With the popular and ever increasing demand for mobile freight haulers the need for expansion and engineering facilities not available in the old plant, the Lufkin Foundry and Machine Company acquired the interests of the Martin Wagon and

Trailer Company and made it a division of the larger company.

Immediately, the Lufkin Foundry and Machine Company proceeded to build and equip a trailer plant and today boasts of one of the most modern trailer plants in the Southwest. Expert trailer engineers were brought into the organization and the entire line of trailers from pole trailers to freight liners were completely redesigned throughout. Not a thing remains of the old Martin trailers but a few repair parts for those now in use.

The new Lufkin trailers embody all latest improvements, which tend to strengthen and increase their load-carrying capacities and yet, conform to all conventional ideas of stream-lining. All trailers are of all-steel construction, both arc-welded and spot-welded, and in many instances riveted in addition. Another improvement over the conventional type trailer is the slip-spring radius rod assembly which has a tendency to allow the trailer to pull much lighter. All the pull, therefore, is on the radius rods which are a part of the new assembly. The new spring assembly eliminates costly maintenance of spring shackles, bolts, etc., and is much preferred by the practical operators.



The Lufkin Foundry and Machine Company is

■ CONTINUED ON PAGE 8

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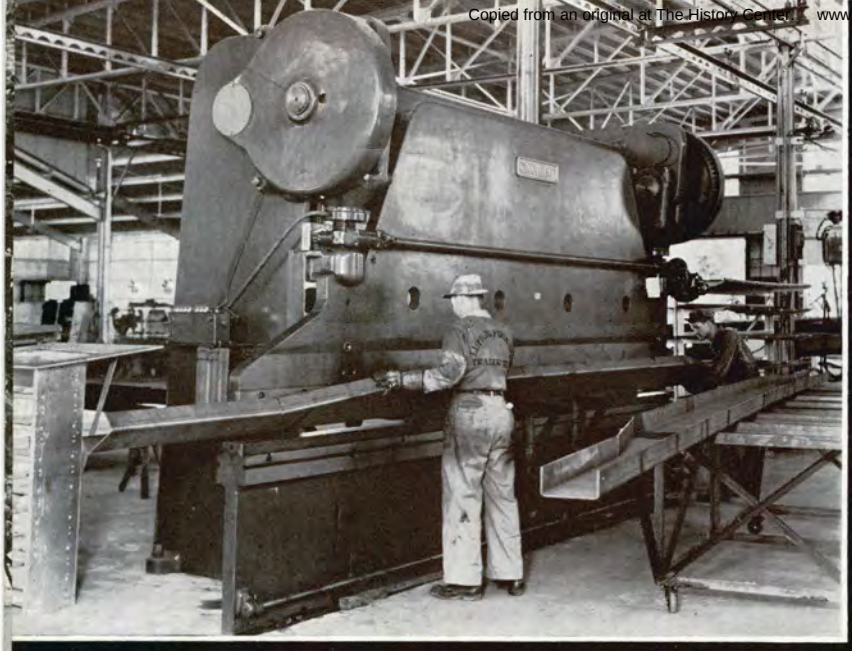
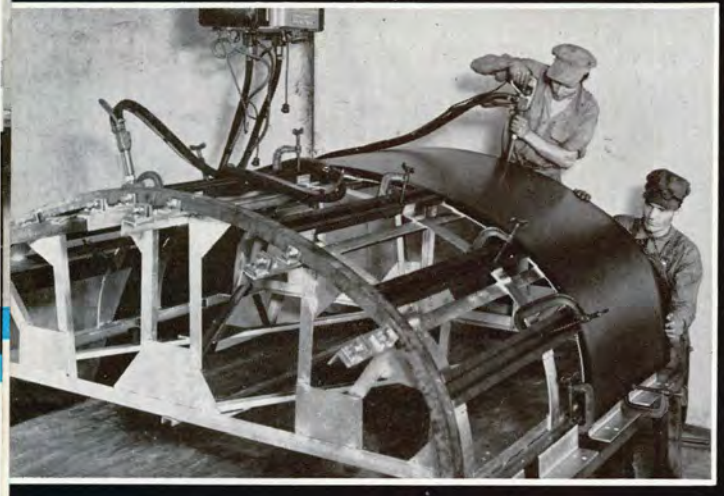
Top left: Typical oil field type float designed for popular oil field contractor.

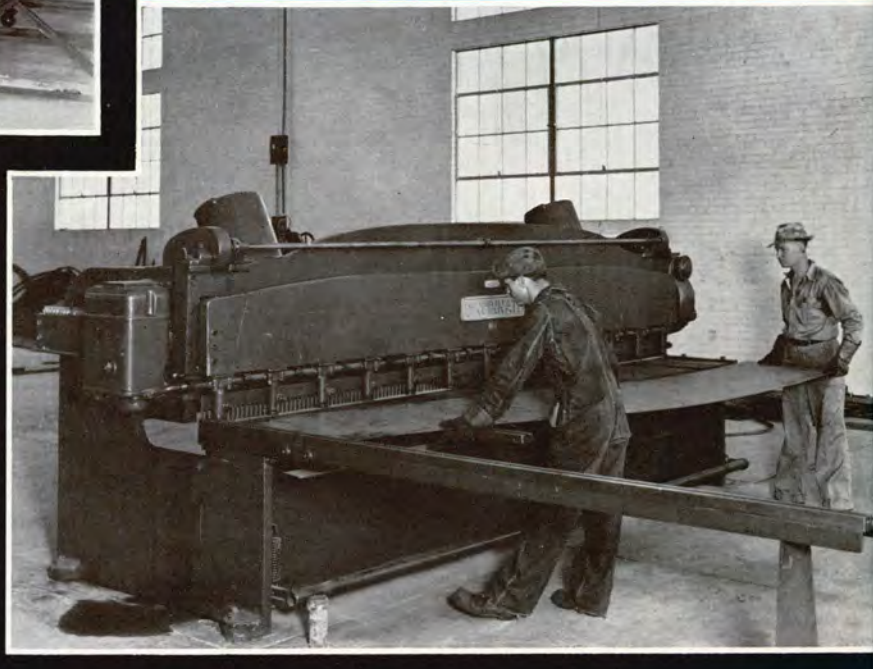
Center: The new Lufkin Spring Suspension assembly. This assembly, combining slip spring suspension with radius rods, permits easy adjustment of load on springs, eliminating costly shackle bolt maintenance and puts all the load on the rugged radius rod which is tied to the frame hanger with a universal joint connection.

Lower left: The new all-steel, riveted and welded pipe and pole trailer, designed for long lasting service and continuous operation on the tougher jobs where ability to "take it" is a prerequisite.



MODERN TOOLS have been installed in the new Trailer Plant of the Lufkin Foundry & Machine Company. Upper left: Cincinnati Brake on which all parts are formed—this is said to be the largest tool of its kind in the Southwest. Lower left: All parts are formed to jig and template—this jig forms the van "nose" during "spot-welding" process. Lower right: Cincinnati Shear. Bottom: Front view of the new Trailer Plant.





World's Largest

SEAL BEACH installation, Lufkin No. 71 Unit assembly having 750,000 in. lbs. torque gear rating.

THE WORLD'S LARGEST reduction gear pumping unit has recently been installed on a Seal Beach, California, lease by the Lufkin Foundry & Machine Company. This unit has a ten-foot stroke—a polish rod load rating of 35,000 pounds, and a torque gear rating of 750,000 in. lbs. This unit is truly Lufkin's answer to the ever increasing loads imposed upon reduction gear units due to greater depth of production and particularly where a large volume of fluid has to be handled.

In this new heavy duty, long stroke unit, Lufkin has met the demand for a gear capable of handling the heaviest loads that have thus far projected themselves into the pumping picture. Heretofore, a 430,000 in. lbs. torque unit has been the maximum size available, while loads in excess of 600,000 in. lbs. gear torque and 30,000 lbs. beam load have been encountered. In many instances the operator has met this situation by reducing the stroke and speed of operation to stay within the available gear ratings. This has, naturally, reduced production and increased operating costs. In the new Lufkin unit, the structural rating and gear capacity is based upon the maximum load that can be economically imposed upon 1⅛-inch sucker rods. A 35,000-lb. peak load on the top rod of a 1⅛-inch string would give a unit rod stress of approximately 35,000 lbs. per sq. in., the area of a 1⅛-inch rod being .988 per sq. in. From these calculations, one may appreciate why this unique unit is capable of meeting all sucker rod problems.

Likewise, it will be readily understood that a unit wth gear torque capacity of 750,000 in. lbs.

LUFKIN T. C.-OL-51B. Installation for major operator in the Montebello, California, field.

will meet all present day pumping problems, especially with the ultimate overload not exceeding ten per cent.

A new and distinct feature of the new Lufkin Long Stroke unit is found in the design of the horsehead, which is standard on this unit. To provide the necessary strength and insure long life of the horsehead sling, a double equalizer sheave with double wire lines socketed to the equalizer on carrier bars has been designed, which eliminates the twist in the carrier bar through each stroke, thereby preventing the possibility of such action being responsible for unscrewing of sucker rods.

The new Lufkin Long Stroke Pumping Unit provides slower and easier pumping motion, lessens rod fatigue and has reduced operating and maintenance expense to a minimum.

The unit complete weighs 64,500 lbs.

A note to any Lufkin District Office will bring complete details without obligation.

ORANGE GROVE installation. Lufkin T. C. 1-41 assembly for the PEDRO PETROLEUM CO., Santa Fe Springs, California. Note trees loaded with fruit.

The Latest Addition

■ CONTINUED FROM PAGE 5

in its 40th year of operation and is headed by W. C. Trout, long identified with manufacturing progress of the Southwest. This spacious plant, covering some five to six acres in ground space, was organized for the purpose of manufacturing saw mill machinery. For 25 years this was its principal work. Some of the largest saw mills of the Southwest are products of this plant. With the diminishing timber supply the company entered the manufacture of oil field fittings, engines and hoists and finally pioneered the manufacture of reduction gears for oil well pumping, which method has now become standard practice in the oil industry. It was in this latter field it received its greatest growth. Today it takes its place among the larger manufacturing plants of the South. Its plant is modern and is equipped with the finest precision tools to be found anywhere. In addition to the machine shop facilities, the plant is composed of a large Gray Iron Foundry boasting the world's largest moulding machine; pattern shop and storage; structural plant fabricating 1,000 tons of steel monthly, and welding plant. The trailer division is housed in a separate building with modern handling and fabricating too equipment.

Another division of the Lufkin Foundry and Machine Company is the Mill Supply Division, which handles a complete line of mill and industrial supplies and automotive equipment and accessories.

The plant and administrative offices are located in Lufkin, where it was organized in 1900. Branch offices are maintained in Houston, Dallas, Kilgore, Alice and Odessa in Texas; Tulsa and Seminole in Oklahoma; Wichita, Kansas; Salem, Illinois; Los Angeles and Bakersfield in California. Export offices are maintained at 149 Broadway, New York, N. Y.

CALIFORNIA PERSONALITIES

Coastal Highway North of Ventura

BUT IT WASN'T A MISTAKE—Judith King, shapely beauty, came to the studio to sell a song and received an acting contract

Pedro Petroleum's Roy Dungen and M. K. Doumani

Richfield's City B-Lease atop Signal Hill

Joe Lewis, Supt., King Oil Co., Bakersfield

Paul Massey

Lufkin's E. N. Layton . . . use of magnifying glass inadvisable

Clyde Kofahl, Bob Robison, Harley Towles—Texas Co.; Ed. Layton—Lufkin; George Curyea, production foreman, Texas Co.

The Champion — Tommy Long, Balboa, National Sailboat Races

Al Kubler, Jack Bourdeau, L. R. Nuzum, C. E. Lofstrand—Vedder Petroleum Co., Bakersfield

Seen on the shore at Huntington Beach—Suggested title: "What Oil Men See After an API Meeting"

Oil Umpire Joe Bloat, any similarity to a Lufkin representative is purely coincidental

Fred Maloney, Texas Co.

AN EYEFUL OF GORGEOUS GRABLE — Miss Grable has been acclaimed the owner of the most beautiful figure in Hollywood

J. P. Ratigan's Frank Durell

Dinosauers in a clinch—15,000 years B.C.—Beach formations

Bill Wildman, independent operator

Caminol's Ira Rodgers

Lufkin's Ed Trout at the jumping off point

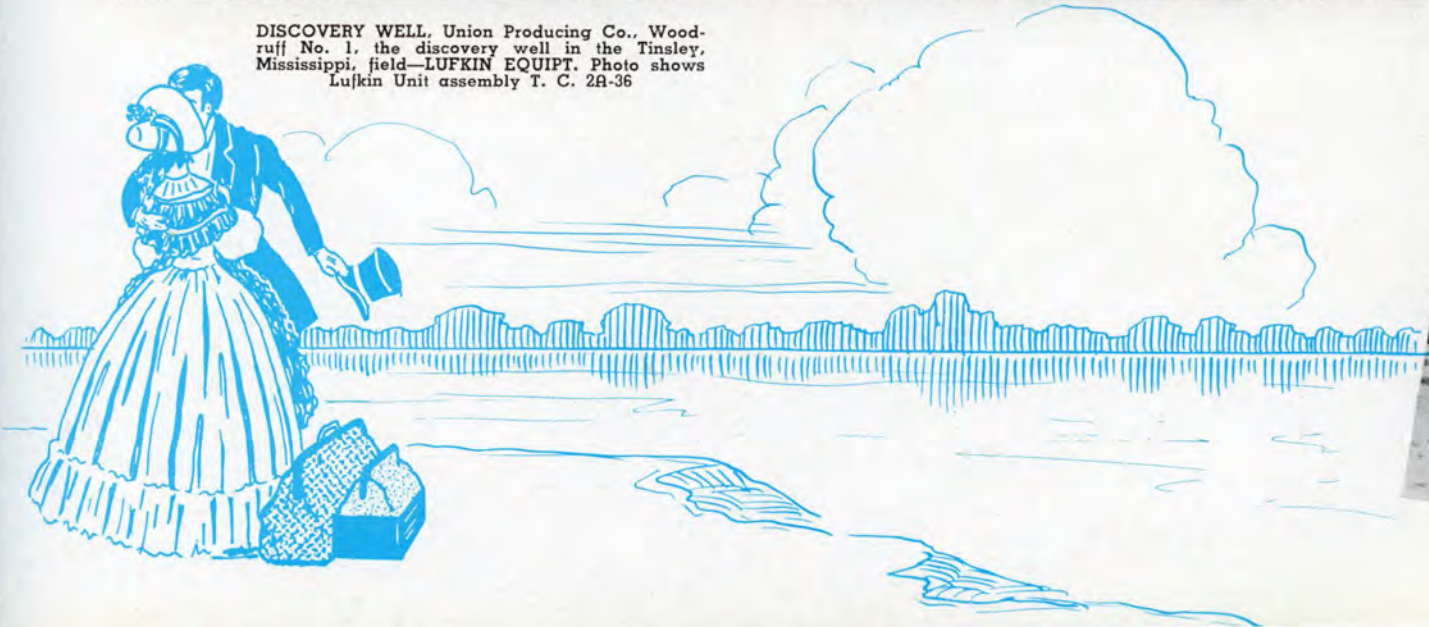
"IN 'OLE' MISSISSIP"

ROMANTIC "Ole Mississippi" comes into her own with the discovery of oil in the Tinsley field. The discovery late in August, 1939, climaxed a 30-year search, during which more than 400 wells were drilled. Prior to the discovery of the first commercial oil field, many wells were drilled with little or no geological or geophysical background.

The state soon found itself in the midst of a real oil boom. Dozens of operators rushed into the state, and the play soon generated into an intensive leasing and talking campaign that rivaled those of North Texas and Oklahoma. Hotels in Jackson and Yazoo City were crowded, restaurants were overtaxed, farmers were trying to obtain drilling clauses with leases, and geophysical crews were seen slipping through the woods to hide their identity.

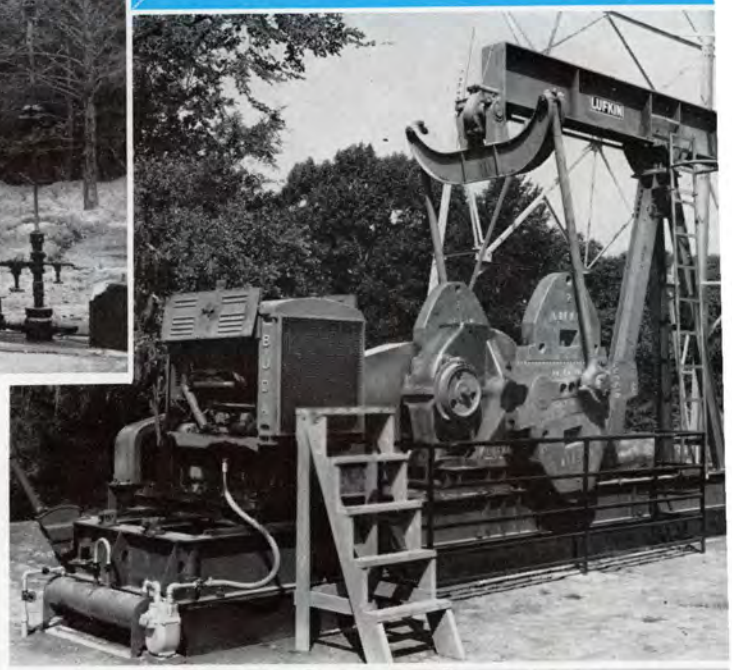
The discovery well, Union Producing Company's Woodruff 1, was completed at 4560 feet as a good flowing producer in the Woodruff sand immediately below the top of the Selma chalk. Subsequently other producing wells were completed in the same zone, and subsequently four additional producing zones have been found below the discovery sand. About 80 producing wells have been completed in the field and daily pro-

DISCOVERY WELL. Union Producing Co., Woodruff No. 1, the discovery well in the Tinsley, Mississippi, field—LUFKIN EQUIPT. Photo shows Lufkin Unit assembly T. C. 2A-36



LUFKIN INSTALLATIONS IN THE TINSLEY, MISSISSIPPI FIELD

—Photos by the Lufkin Cameraman



duction has run as high as 28,000 barrels. Although most of the wells came in flowing, pressures were low and most of the wells now are on the pump.

The field has produced more than two million barrels of oil since its discovery, and it is regarded as an important oil reserve. Spacing is one well to 40 acres and average life of wells will be long.

The Tinsley field is located about eight miles south and slightly west of Yazoo City and about 38 miles northwest of Jackson. The structure was located by a W. P. A. geologist, Frederic F. Mellen, who noticed that the Moody's Branch marl was exposed, where it should have been found 200 feet underground. He made a favorable report on the discovery and a flowing field resulted from the first well drilled. The displacement indicated that some force had raised the marl upward, possibly a salt plug.

The Tinsley discovery was followed by a great rush

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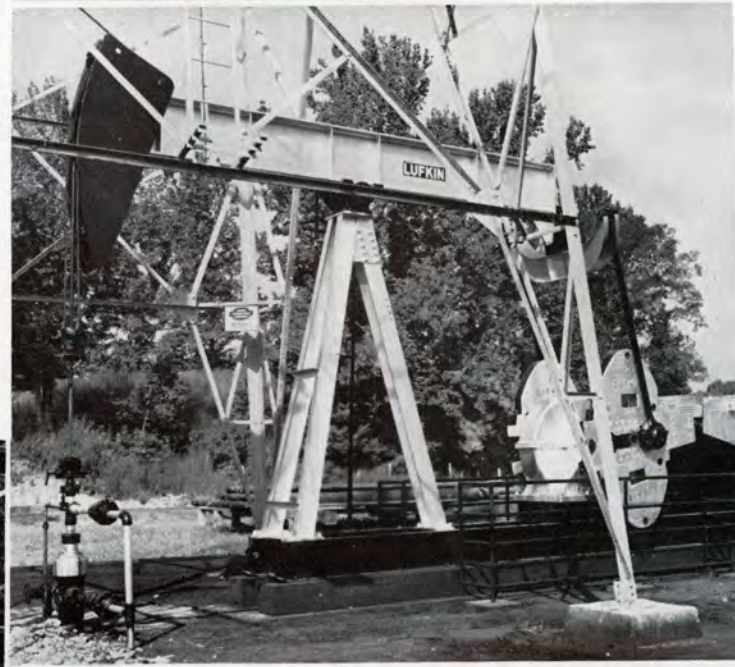

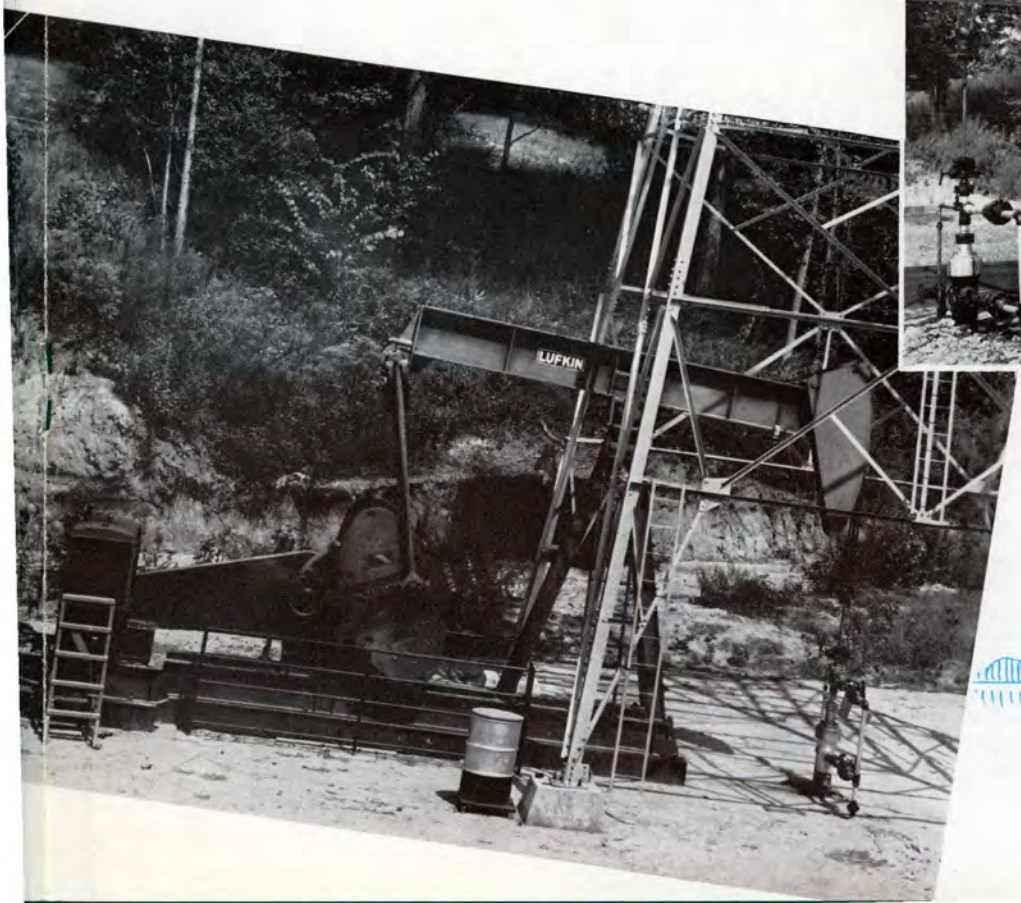

LUFKIN SNAPSHOTS

1. Humble officials visit Lufkin Plant.
2. Directors T. M. T. A. visit Lufkin's Trailer Division.
3. Steve Redfern, Lario Oil & Gas, Wichita, Kansas. Lufkin's Walter Trout. C. D. Kerr, Stanolind, Ellinwood, Kansas.
4. '40 Senior Petroleum Engineering Class, Colorado School of Mines, visits Lufkin.
5. Shell Corporation officials, Tulsa and Panhandle Division, attend a dinner February 7, at which time 32 ten-year; 16 fifteen-year; 2 twenty-year awards were made.
6. Harry Jones, Blackwell Oil & Gas Company.
7. Visitors G. W. van Hillo, Caribbean Petroleum Company, Maracaibo, Venezuela, S. A. (Shell Subsidiary.)
8. Employees, Union Production Company, Tinsley field, Yazoo City, Mississippi.
9. Carl Blackwell, Gen'l Supt., McMurrey Petroleum Corporation.
10. Ed Ruse, Sells Petroleum Company.
11. Visitors A. J. deJager, A. H. J. Van Goch, Shell Co., Tjepoe, D. E. I.; Joe L. Bruns, Kilgore.
12. Lee Brown, Prod. Supt., of J. K. Hughes Oil Co.
13. Humble's Buck Buchan, Bob Lemex.
14. Sam Wolfson, Goldenstern & Wolfson, Wichita Falls.
15. Smith Pennington and son, Charley, "Co-superintendents" of McClanahan & Venable.

A.P.I. PARTY

Snapshots taken at the big party given at Amon Carter's Shady Nook Lodge by Fort Worth Oil & Supply Company at Spring Meeting of the A. P. I.

1. Arkansas' Chas. Hughes and Humble's Mercer Parks.
2. Humble's General Purchasing Agent, Frank Watts.
3. Gulf's General Pyron.
4. Phillips' Clyde Oden and Atlantic's W. W. Scott.
5. Buck Morris, of East Texas Engineering Association, and Paul Hubbard of Gulf.
6. Humble's Vice President, John Suman.
7. Dyck Oil Company's Carl B. King and F. W. Dye.
8. Humble's Stuart Buckley and Bob Dewey.
9. Atlantic's O. K. McIlhaney.
10. Humble's Dewey, Bridges, Teague, Harris, and Thomas.
11. British-American's Vice President, W. K. Whiteford.
12. Texas Company's Bill Herbert.
13. Tide Water's Vice President, Ed Salrin.

1. Emory Cook, Amerada.
2. (1) Clyde Oden, Division Supt., Smackover.
   (2) John Etheidge, Supt., Corpus Christi.
   (3) Chas. White, Supt., Smackover, Phillips Petroleum.
3. J. S. Ewing, Supt.; Jake Hamon.
4. E. P. Hayes, Texas Co.; C. F. Bedford, Stanolind; L. T. Tighe, Texas Co.
5. Carl Reistle, chief engineer, Humble.
6. J. W. Crittenden, Atlantic.
7. "Pete" Peters, Frank Watts (Humble—Houston).
8. Geo. Seidoff, Broadway Oil Co.; E. D. Doley, Doley Oil Co.; Cooper Richards, Lufkin.
9. Ralph Allshouse, Joe Lugar (Deep Rock Oil Corp.).
10. Gulf's Clyde Robinson.
11. Young Doc and D. B. Dow, Sr., I. T. I. O.
12. The Girls.
13. L. F. Cox, R. O. Harvey (Wichita Falls).
14. L. O'Donnell, Shell.
15. W. R. Bingham, H. F. Wilcox Co.; Doug Reid, Lufkin.
16. Larry Ogden, Pure Oil Co.

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A FINE LABOR SAVING DEVICE ALSO INTRODUCED WAS THE GEOLOGIST

Oil People

THAT ON EARTH DO DWELL

By R. SNEDDON

IT IS a peculiar circumstance that no budding George Ade has ever thought it worth while to dig out the obscure folk lore of the oil people, that strange race of beings who lurk in the density of the derrick forests, and never come out in the open for anything less important than an A. P. I. convention, or a wrestling match. Yet the annals of oildom are rich with the type of humor and pathos that constitutes the basis of all good literature.

Most writers date the actual beginning of the American petroleum industry from the completion of the Drake well in 1859, and in doing so they are quite correct. From this point on, however,

they blunder along through the woods like so many sheep, following the same old path that was laid by the tread of a thousand prior scribes, and never realizing the fact that some mighty interesting things are to be learned up the little side trails.

It has been our good fortune to know these kindly oil people in their native haunts, and to mingle with them—in fact, to be one of them, and being subject to that dread disease known as "animus scribende," or "writer's itch," we have made record as well as we are able of their quaint characteristics, and of many amusing events that might otherwise easily have passed into oblivion. In addition, we have examined, minutely, magazines in dental reception rooms in all parts of the country, so that we now feel we are speaking with some authority. Without further parley, therefore, if our readers will gather in a little closer, we shall proceed to exhibit the results of our researches.

On this auspicious occasion we are going to establish a precedent and pass the Drake well, which in any case is all worn smooth at the corners from excessive handling, and with the unusual agility we have developed from dodging efficiency experts, we are going to jump clear into the year 1866. About this time in the progress of things production had begun to sag in some of the early wells, and the owners were already puckering their brows in an effort to find something with which to alleviate the distressing situation. Presently a bright individual by the name of Roberts invented a depth bomb, known as the Robert's torpedo, which seemed to have the effect of curing hardening of the arteries in the oil sands. As soon as this apparatus was proved to be successful about twenty guys bobbed up and claimed the patent, so you see, in some respects things haven't changed a bit in sixty years.

In these days safety engineers had not yet been invented, although several manufacturers were working on the idea, and the transportation of Robert's torpedoes was consequently somewhat of a hazardous venture. The old horse wagon was sorely in need of knee action, and roads were still being made by cows instead of construction engineers. The result was that the torpedoes often got tired waiting to be delivered, and went off by themselves. Which brings us to the sad story of poor old Jim Douglas and his dog, Towser.

Jim had been delegated to carry a torpedo to the Crux No. 1 well at Barnaby Farm, which had contracted a bad case of chronic torpidity. The well was situated just a few miles from the torpedo company's warehouse in Titusville, and with Jim and Towser in the front seat, and the torpedo in the back, the cavalcade started on its way. It hadn't gone far 'til the buggy developed a very human weakness and fell into a rut. With a roar loud enough to be heard at a republican convention, the torpedo exploded, and the whole caboodle was blown into fragments no bigger than the conscience of a hit-and-run driver.

Sympathetic passers-by collected such portions of the victims as could be found within a reasonable area, put them in a basket, and preliminary arrangements were eventually made for the funeral, but Jim's folks were very much averse to burying him all mixed up with a dog, and a high powered chemist was consequently engaged to segregate the remains. He demanded plenty of money for the job, but the distraught relatives were agreeable, and so he started to work. With his telescopes, test-tubes, and beakers, he labored long and painstakingly, and in due course had divided the carnage into two distinct but pathetic little heaps. Payment was made, the relatives were in the front room again discussing the long postponed funeral arrangements, when the door opened, and—you could have knocked any one of them over with a pair of pipe tongs—*in walked Towser.*

One of the best known men in the thing they facetiously called the oil industry about this time was a Swede by the name of McAllister. He had become interested in petroleum back in 1870 in West Virginia, when a rich uncle died and left

IN WALKED TOWSER

"AGREED NOT TO DO IT AGAIN FOR THREE OR FOUR WEEKS"

him two bits. (One was a fishtail bit.) McAllister still retains the honor of having drilled the driest hole in Plum Centre, and undoubtedly would have been a power in the oil world, but unfortunately one night when the whistle blew at quitting time, he closed his roll-top desk with such a bang that he amputated both feet. He was, of course, no longer able to stomp out oil fires, and was thenceforth regarded as a decided hazard.

Early statistics disclose the astonishing fact that in the year 1884 precisely one-half of the married people living in the oil towns of Pennsylvania were women. Eating houses were very scare then, and it was customary for the ladies to prepare lunch boxes for their men folks, but apparently all efforts to stack a lunch with no apple pie in it were dismal failures, just as they are today. It is interesting to note, however, that at this time ham sandwiches actually had ham in them, the price of red flannel being at a ridicuously high figure.

These trifling facts are merely incidental, but it is well to have some conception of domestic conditions so that we may the better understand subsequent developments.

We are now approaching the black year of 1890, one of the bitterest periods in oil history. In this year a new type of oil man made his appearance—the technician. Prior to this time a petroleum engineer was simply a man who had seen a drilling rig, but now into the peaceful derrick groves there came swarms of young college men, with more degrees than a centigrade thermometer. In no time at all the insidious word "viscosity" had crept into the vernacular of the oil people, and the overproduction ogre had reared its ugly head. Curtailment was suggested, and was strongly favored by all those who had no wells of their own. Prices went down and down until many producers were forced to cut up dry wells and sell them for post holes in order to keep in the game.

Then to cap everything a gas war broke out. Fine, handsome, stalwart young men kissed their weeping wives, mothers, and sweethearts goodbye, and went out to their stations. The tide of battle surged now up, now down, and sometimes just for variety it surged a tiny bit sideways, but no impression could be made, excepting by the members of the dental corps. At last the oil chiefs began to see the futility of this bloody strife, so they gathered together in a sort of conference and agreed not to do it again for three or four weeks.

Fortunately for the industry, a gadget called the safety valve was invented in 1900, and operators were immediately enabled to cut down expanses. A fine labor-saving device, also introduced in this era was the geologist. It had formerly been necessary to call meetings of all the executives in order to designate locations for new wells, but these geologists had learned in college to use the words "gneiss," "schist," and "strata" freely, and so equipped, they were able to select sites in which dry holes were assured. They are still used for this purpose, and are variously known as mining engineers, mud smellers, and we'll tell you the other name the first time we see you by yourself.

That brings us right up to 1900, and really it wouldn't make any difference if we skipped the rest. We should, however, mention that just within recent years a splendid device, known as the casing perforator has been developed. It has proved very effective in opening the button holes in new shirts, and is an excellent mechanism with which to ventilate Swedish cheese.

It might also be pointed out that despite his tremendous bulk and ferocious appearance, the oil worker is really a very docile animal. He will, of course, at the approach of an efficiency expert, or upon mention of the term "graveyard tour," fly into an ungovernable rage, and in such circumstances has even been known to snatch an ice cream cone from an infant.

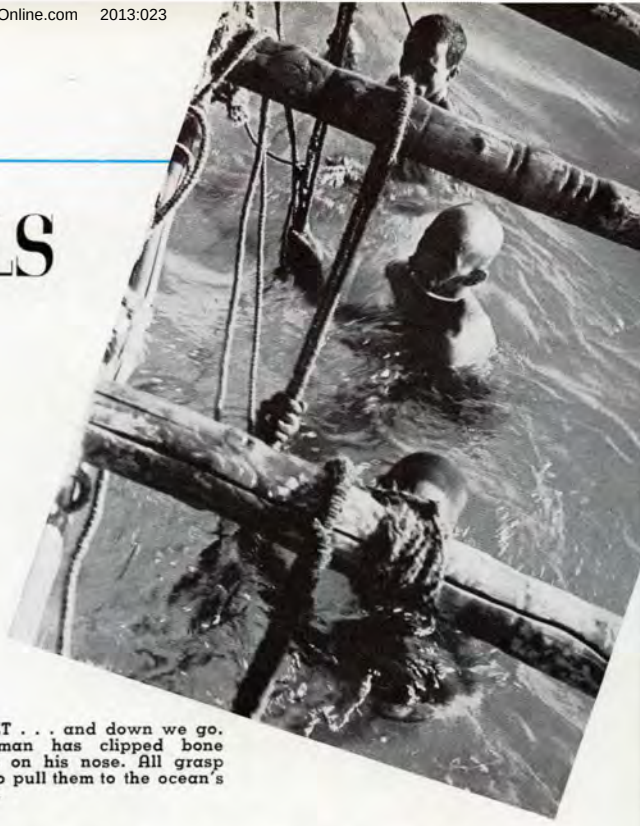
We conclude with rather a sad note: having begun in 1859, the oil industry would have been just eighty-one years old today, if it hadn't died in 1940.

PLUNGING FOR PEARLS

By HARRIET GEITHMANN

ONE OF THE most picturesque as well as strenuous toilers in the world is the plunger for pearls, a human amphibian in search of iridescent gems. Be he Arab, Malayan, Japanese, Chinese or Filipino, brown or yellow, black or white, when his lithe, coppery body dives from 25 to 30 fathoms into the sea in quest of that most elusive of jewels, he becomes an alluring actor on the stage of life.

With or without a bone-clip on his nose, goggles, a spike or a dagger in his belt, a basket for oysters and a brilliant breech-cloth, he is a daring figure. If he be an Arab, perhaps he straps a verse of the Koran to his arm, neck or wrist as a protection against the sharks. In some pearling waters he refuses the nose-clip and holds his nose with his thumb and finger while he descends to the bottom of the sea. He may or he may not, depending on his own weight and location around the globe, put his foot in a rope-stirrup attached to a 20- to 30-pound stone and a 150-foot rope, all of which aid him in sinking rapidly to the floor of the ocean where the pearl-bearing mollusks are living. When he reaches bottom he can forget his nose and devote 35 to 75 seconds to the work of filling his basket with oyster shells. The time he spends under water depends on his endurance and the depth of water. Then up he goes. This performance he repeats from 40 to 50 times in a diving day. After the day's thrilling adventures are over the diver wraps his shining body of bronze in a brilliant blanket and rests and feasts.



ALL SET . . . and down we go. Each man has clipped bone pincers on his nose. All grasp rocks to pull them to the ocean's bottom.

Though the pearler usually dives in smooth water and within sight of palm-fringed shores with eager crowds of pearl buyers, sometimes he finds more excitement than he bargains for. Especially is this true when he meets a man-eating shark face to face. Many pearl fishermen have sharks to contend with but rarely do they meet death in this way. There are also other sea monsters, among which is the sword fish which travels at high speed and is capable of cutting a man in two pieces at a single clip. He is an enemy worthy of consideration. In this regard it is comforting to know that divers usually work in pairs.

The oysters, too, have their enemies. Though they prefer a quiet, undisturbed life yet are they

SIXTY YEARS . . . This beautiful collection, all ready to be drilled and strung, represents 60 years of research by Mikimoto and ten years of actual labor by the oysters and the men and women who work on the pearl "farms." The collection is appraised at more than $10,000.00. Photographs by Benn R. Reyes from International News Photos

preyed on by greedy turtles, sea-urchins, starfish and all their kith and kin.

The reward which waits the pearl diver's daily risks is the discovery of a single pearl in a thousand oyster shells. In addition to this precious reward he must be content with the harvesting of literally tons of oysters for their mother-of-pearl which is used in the markets of the world for the handles of knives, forks, buttons, novelties of all kinds and many articles in milady's jewel-box.

Pearling grounds or pearl-bearing oyster beds or banks are to be found in shallow seas around the globe. Especially are they found along the shores of Australia, the South Pacific Islands, Ceylon, the Red Sea, the Persian Gulf, India and they also exist in abundance in certain quarters of Oriental waters. In French Oceania, many a sheltered lagoon surrounded by a coral reef yields a harvest for six months every five years. The pearling industry of these coral isles is controlled by the natives who live mainly on a diet of raw fish and cocoanut. These atolls, six to eight feet above sea level, are innumerable and few white men visit them, simply because one cannot engage passage for love or money. If one must go adventuring in these waters one must travel on a trading schooner and take pot luck with the cattle and pigs on board.

The pearl fishing season varies in different parts of the world and so does the yield. The market price fluctuates according to the whims and caprices of fashion. The annual yield amounts to millions of dollars and in some countries including India and Arabia the buyer of pearls stands in the same position as the buyer of government bonds in America. As the capitalist hoards bonds so he hoards pearls. In many instances the oysters are sold on the hoof, as it were, or as soon as the divers reach the shore, after which the buyers take their own chances.

It is anything but easy to locate a pearl embedded in the flesh of an oyster, therefore the oysters are left to decompose in the sun. When sufficient maggots have sufficiently finished what the sun began, then the natives turn on streams of water to wash away the slime, after which they search diligently for the precious pearls. If it took courage for the first man to eat his first oyster so must it take courage for men to hunt for iridescent globules in a mass of putrid oysters. After this odoriferous chore is over then comes the sorting for all the colors of the rainbow as well as size, weight and shape.

Ever since and even long before Cleopatra dissolved a beautiful pearl in vinegar and drank it at a draught, "the ransom of a kingdom" to the health of her lover, Mark Anthony, the world has paid homage to the pearl of great price, this gem of the sea that men have risked their lives to garner.

Many have wondered about the origin of this radiant gem which outshines any substitute that man has ever been able to create and both the Chinese and Japanese have been propagating pearl-bearing mollusks for centuries. Some maintain that a pearl is a "drop of rain in the oyster's mouth," others the tomb of a parasite, a vault covered with layer after layer of nacre or it may be a grain of sand thus encased. One of America's most eminent divines, Dr. Harry Emerson Fosdick, once made this remark, "We should treat an annoyance like the oyster treats a bit of grit, surround it with mother-of-pearl."

Because the plunger for pearls has more risks with which to cope than the average man in his search for treasure, his vocation is one that never grows monotonous. Every day it is a gamble that would make even the sharks of Wall Street shudder. While tomorrow's rising sun may find him a picturesque beggar indeed, plunging for pearls, tomorrow's setting sun is quite as likely to find him a prince with a pearl worth a fortune in the palm of his hand.

IN "OLE' MISSISSIP'"

■ CONTINUED FROM PAGE 10

of leasing and drilling activity. Geophysical work has been carried out with difficulty, and no true basis for interpretation of data has been developed. More time will be required to establish geophysics as a positive exploratory medium in Mississippi.

A second oil field was found near Pickens early this year, but this field apparently is potentially smaller than Tinsley. Four oil wells have been completed, but dry holes have been drilled nearby.

Mississippi is generally divided into three provinces: the northeastern, central, and southern districts. Production now is confined to the central province, but it is believed that both the northeastern (Paleozoics) and the coastal (salt dome) areas will eventually produce oil and gas in commercial quantities.

More than ten million acres of land are now held under lease and option in the state, as compared with a third as much prior to the Tinsley discovery. Many large companies are firmly established in the state, and wells will be drilled to test promising structures in widely separated districts.

Lease prices range from a few cents to $100 per acre, but cheap prices largely predominate. One company has almost a million acres of land under lease in all parts of the state.

Let's Laugh!

Three Englishmen, all slightly deaf, were motoring to dear old London. As they were nearing the metropolis, one asked, "I pray, old chappie, is this Wembley?"

"No, old thing," replied the second gentleman, "this is Thursday."

"By jove, so am I," chirped the third gentleman. "Let's stop and have one."

★

A young woman and a handsome farm lad were walking along a country road together in the evening. The farm lad was carrying a large pail on his back, holding a chicken in one hand, a cane in the other, and leading a goat. They came to a dark lane.

Said the girl: "I'm afraid to walk here with you. You might try to kiss me."

Said the farm lad: "How could I with all these things I'm carrying?"

"Well, you might stick the cane in the ground, tie the goat to it, and put the chicken under the pail?"

★

Here's to the road hog
  Who ran me in the ditch—
May his bristles fall out
  With the seven-year itch;
May his hams be walloped
  With a twelve-pound hammer
'Til his porkchops whistle
  The Star-Spangled Banner!
—*Kablegram*

★

Saw Manufacturer: "Our saws go to all parts of the world. We have a saw for every purpose."

Sweet Young Thing: "How interesting! How about Apple Sauce?"

When little Benjamin, the youngest son, was just this side of second grade he was presented with a very nice, frisky fox terrier. In honor of himself, he modestly named the dog "Ben." However, after a year "Ben" mothered a very lusty litter of puppies, which made it seem possible that the terrier had been misnamed. Without a second thought Benjamin, Jr., renamed his dog "Ben Hur."

★

What's become of the old-fashioned advertiser who used to paint this message on all the barns in the county: "Beware of Imitations"?

A charitable woman much interested in a poor neighborhood noticed that whenever she went through the street a down-and-out man stood at the corner. One morning, feeling sorry for him, she slipped a dollar into his hand and whispered, "Never despair."

Next time she saw him he stopped her and handed her nine dollars.

"What does this mean?" she asked.

"It means, mum, that Never Despair won 8 to 1."

★

Breathes there a man with soul so dead, who never hath turned his head and said, "Hmmm, not bad!"

★

"Hey, what's the idea," called the manager of a tavern to a Scotsman, "ordering a glass of water and then walking out."

"What did ye expect me tae do?" replied the Scot, "stagger oot?"

WANTED . . . A SALESMAN

Must Have the Following Qualifications:

MUST be a man of vision and ambition, an after-dinner speaker, night owl—work all day, drive all night and appear fresh the next day. Must learn to sleep on the floor and eat two meals a day to economize on traveling expenses. Inhale dust, drive through snow 12 feet deep at 10 below zero and work all summer without perspiring or acquiring B. O.

MUST be a man's man, a ladies' man, model husband, a father, a devoted son-in-law, a good provider . . . a plutocrat, Democrat, Republican, New Dealer, an old dealer and a fast dealer . . . a technician, electrician, politician, machinist, mechanic, and ambidextrous.

MUST be a sales promotion expert, create a demand for obsolete merchandise, be a good credit manager, correspondent, attend all jobber clinics, dealer meetings, labor union meetings, tournaments, funerals and births . . . visit customers in hospitals and jails, contact all accounts every two weeks and in SPARE time look for new business, collect delinquent accounts and attend factory sales conferences.

MUST have a good car, attractive home, belong to all clubs and pay expenses at home and stay on the road. *MUST* be an expert driver, talker, liar, dancer, traveler, bridge player, poker nound, toreador, golf-player, diplomat, financier, capitalist and philanthropist . . . an authority on palmistry, chemistry, archeology, psychology, meteorology . . . dogs, cats, horses, blondes, brunettes, redheads and lingerie.

None other need apply. —Anonymous.

LUFKIN SNAP SHOTS

■ CONTINUED FROM PAGE 13

17. H. V. Mathews, C. W. Oleson (Stanolind).
18. Earl Davis, vice president, Oliver Davis Oil Co., Tulsa.
19. G. F. Isley, Shell; Richards, Lufkin; C. H. Keplinger, Shell.
20. Lee Carson, chief engineer (Phillips).
21. Jim Clark, Lago; W. C. Trout, Lufkin; Hal Hill, G. E.
22. Oscar Noneweiler, Standard of Louisiana.
23. (1) J. L. Lenamon, lease foreman, East Texas.
    (2) Harold D. Berg, district engineer, Atlanta, Arkansas.
    (3) Jess Springer, Tide Water. (All Tide Water.)
24. L. J. Van Dijk, chief engineer; H. M. A. Meyer, Supt. (Caribbean Petroleum Co., Lagunillas.)
25. W. F. Parker; Verne Weger, Supt. Prod., Wink, Texas (Sinclair).
26. Mr. Stout, Drumright; Clyde Stout, Arkansas F. O. Co., Shreveport.
27. O. K. McElheney, Dallas; Jack Stewart, Tulsa (Atlantic).
28. (1) J. L. Lenaman, Tidewater, East Texas.
    (2) Berg, Tidal Seaboard, Arkansas.
    (3) Jess Springer, Tidewater.
29. C. F. Bedford, Stanolind; Art Bennett, Lufkin; J. Evans, Stanolind.
30. Tide Water's Supts. J. W. Clark and Tom Wade.
31. L. O'Donell, Houston; J. L. Bruns, Kilgore (Shell Co.).
32. Van Hook, Stanolind, Tulsa.
33. Taylor Hood, Lufkin; C. C. Sloan, Ohio; Don Kerr, Lufkin.
34. (1) F. L. Gehr, (2) Ira Page, (3) Colvin, Stanolind.
35. Carl Hoenig, Apco; A. V. Hoenig, Vice-President I. T. I. O. Co.; J. A. Deffeyes, I. T. I. O., Odessa.
36. Page, Drumright; Less Smith, Seminole; Ralph Allshouse, Seminole (Deep Rock).
37. Ed. Kloppenstein, I. T. I. O. Co.
38. (1) Spencer, (2) W. H. Wigeinton (Atlantic).
39. (1) A. S. Carruthers, (2) J. W. Crittenden, (3) Rogers, (4) P. E. Fletcher, Atlantic.

A WINNER ALWAYS! . . . this dramatic picturization of the International Petroleum Exposition's main theme—the center of oil men's interest in the field of technical engineering, equipment, supply and production development involving two of the Lufkin Units on exhibition, won first prize in the Tulsa World's Oil Show Photographic Contest. This snapshot was made by Forrest Borden and took the judge's eye "because of the definite silhouette of the massive pumping unit and the variety of equipment in the background."

LUFKIN UNITS ALWAYS TAKE FIRST PLACE—whether in picture contests or in the field of operation.