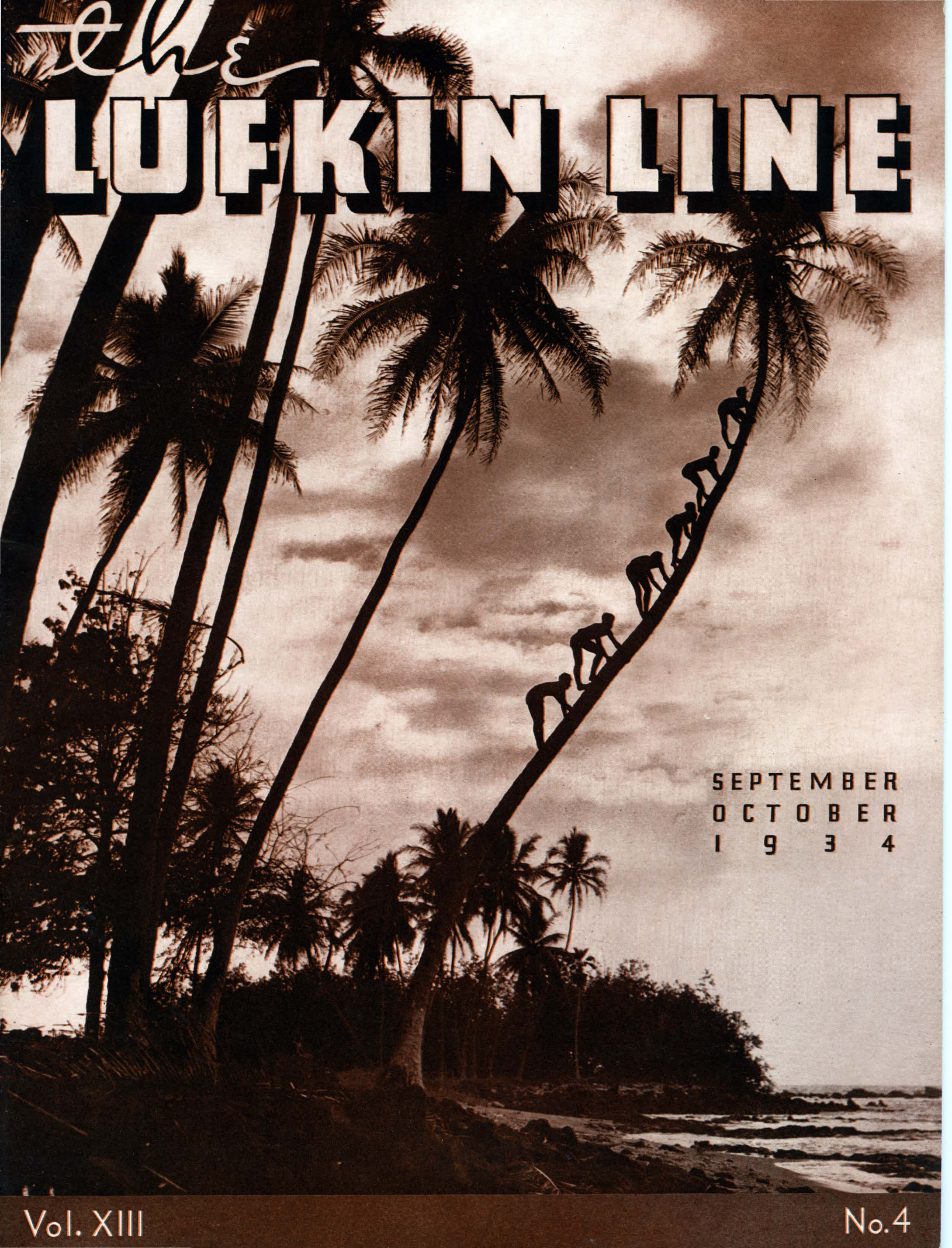


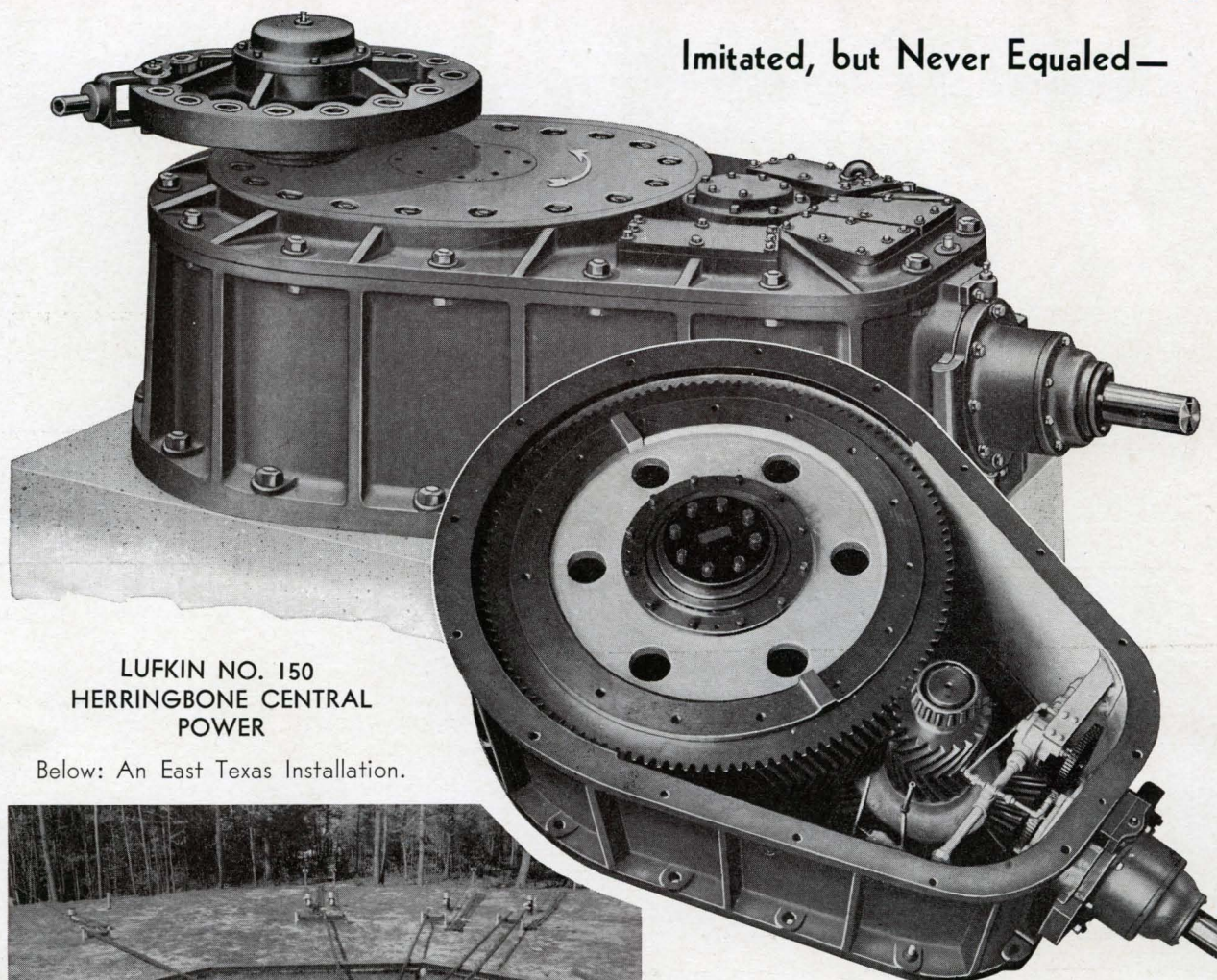
The background of the cover is a sepia-toned photograph of a tropical beach. Several tall palm trees are silhouetted against a cloudy sky. In the foreground, a line of people is walking along the shoreline, their figures also silhouetted. The overall mood is nostalgic and serene.

The **LUCKIN LINE**

SEPTEMBER
OCTOBER
1 9 3 4

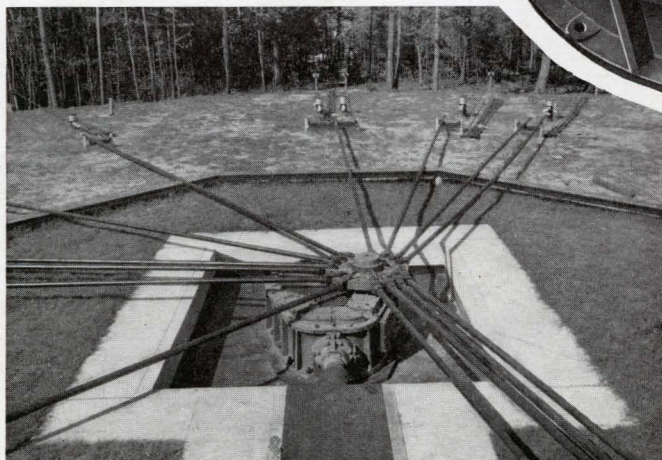
The World's Greatest Power

Imitated, but Never Equaled—



LUFKIN NO. 150
HERRINGBONE CENTRAL
POWER

Below: An East Texas Installation.



Greatest Horse Power Capacity
Greatest Strength
Greatest Stroke Length
Greatest Compactness

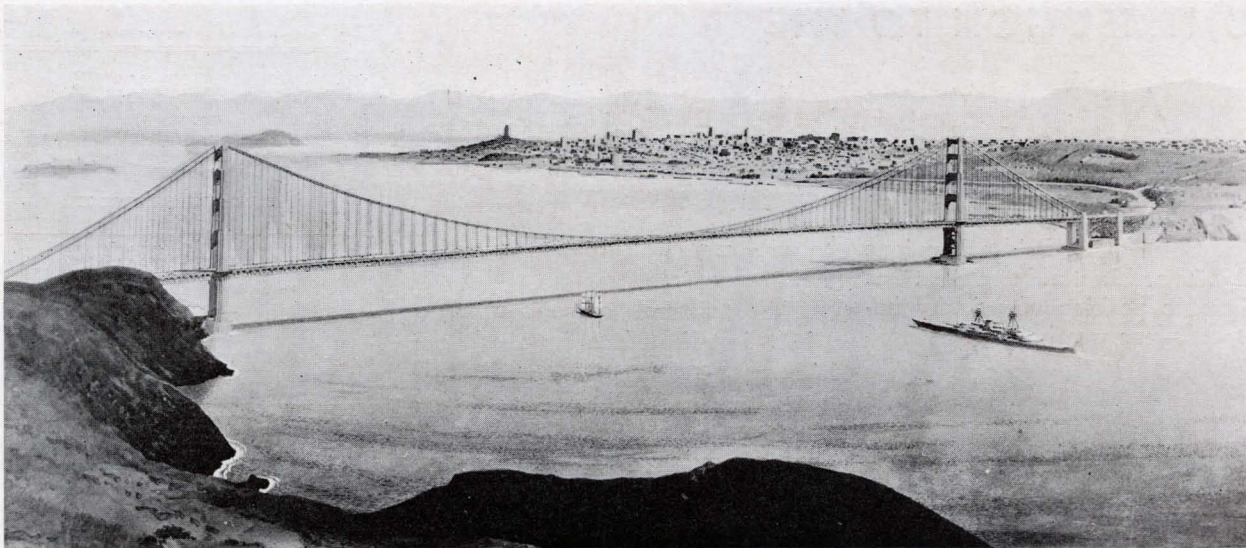
Brief Outstanding Characteristics of the Lufkin No. 150 HERRINGBONE CENTRAL POWER

1. 150-H.P. at 20-S.P.M.
2. 42-inch stroke.
3. Compactness—shortest possible lever arm to bearing and foundation.
4. Center Trunnion designed for shock absorption with no strain on cover or base.
5. Heavy Duty Timken Bearings throughout.
6. Herringbone Gears—all thrust eliminated.
7. Crank and Crank-pin cast integral, of Alloy Steel.
8. Crank disc equipped with large bronze bushed take-off bearings, Alemite lubricated.
9. Pressure pump lubrication.

SEND FOR BULLETIN NO. 83

Lufkin Central Powers are manufactured in Lufkin, Texas, by

LUFKIN FOUNDRY and MACHINE COMPANY



The Golden Gate Bridge as it will look when completed in 1937 . . . San Francisco in the distance.

—Photo, courtesy the Golden Gate Bridge & Highway District.

Golden Gate Bridge » »

Breath-taking in its majestic beauty, the greatest single span conceived in the mind of man will very shortly and very gracefully soar over the mile wide portal of the Golden Gate. It will open a broad highway for delightful, educational travel and profitable commerce; promote the industrial growth of a great area; cement business relations and promote understanding and good will between San Francisco and the Coastal Counties of Northern California.

The hope and visualization of connecting San Francisco with the hinterland by a bridge crossing the Golden Gate first received its official inception on August 25, 1919, when Congressman Richard T. Welch, then a member of the Board of Supervisors of the City and County of San Francisco introduced a Resolution which was unanimously adopted, for the promotion of the necessary legislative action to make the dream of this bridge a feasible and material reality. In 1923 an enthusiastic group of citizens headed by Mr. Frank P. Doyle, President of the Santa Rosa Chamber of Commerce, called a Convention to consider ways and means of motivating action on this project

Six Lane, 6,450 foot bridge to be completed in 1937. Is 700 feet longer than George Washington Bridge which crosses the Hudson River



resulting in the organization of the "Bridging of the Golden Gate Association." There soon followed, after this meeting, legislation, applications, approvals, litigations and victory, after a five year contest in the courts by opposing interests, and on January 5th, 1933, actual construction was officially commenced. From this time on a steady schedule of operations has been kept up.

Marin Tower located on the North Shore of the Golden Gate. This tower is now 97½% complete. 22,200 tons of steel is required to complete this one unit. It is now 746 feet high (or above mean high water) and is today the tallest bridge tower in the world and higher than any structure west of New York City. The steel supports at its east leg for the roadway of the bridge is at the same height above water as the roof of a 22-story building above the sidewalks.

—Courtesy, Standard Oil Company of Calif.

Sept.-Oct., 1934

The Lufkin Line

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CONTRIBUTION TO THE

Art of Bridge Design

The Golden Gate Bridge is unique in that its architectural treatment was assigned a position of primary importance—nor was beauty sacrificed



Showing method of pouring premix concrete—south pier and fender wall construction, San Francisco side. In the background 4200 feet across the waters of the Golden Gate to the north can be seen, the Marin Tower construction.

—Photo courtesy Standard Oil Company of California.

Fender Wall construction. Note tide conditions—the tide run out at this point is as high as 7 knots an hour, and the rise and fall from 3 to 8 feet. Picture shows one of the large steel bents ready to be lowered into position. In this fender alone there will be 120,000 tons of steel and concrete. This construction is all done in open water.

—Standard Oil photo.

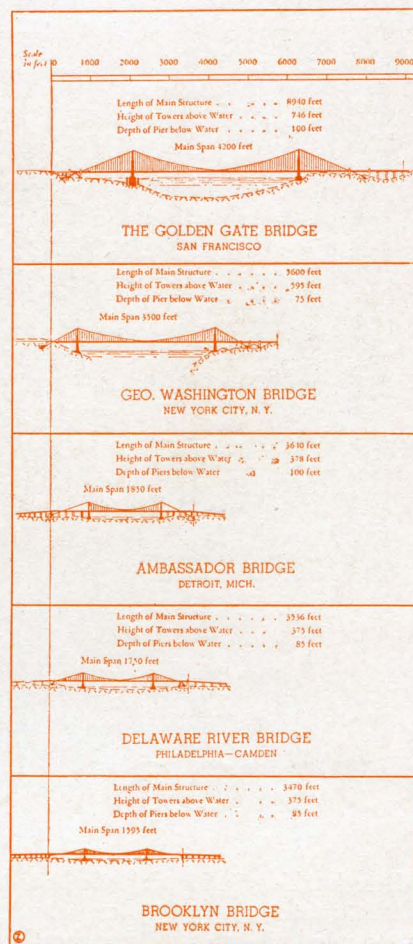
to arbitrary design standards and rigid economy.

The structural conception as a whole is adjusted to its scenic environment and is carried out in full symmetry longitudinally and transversely.

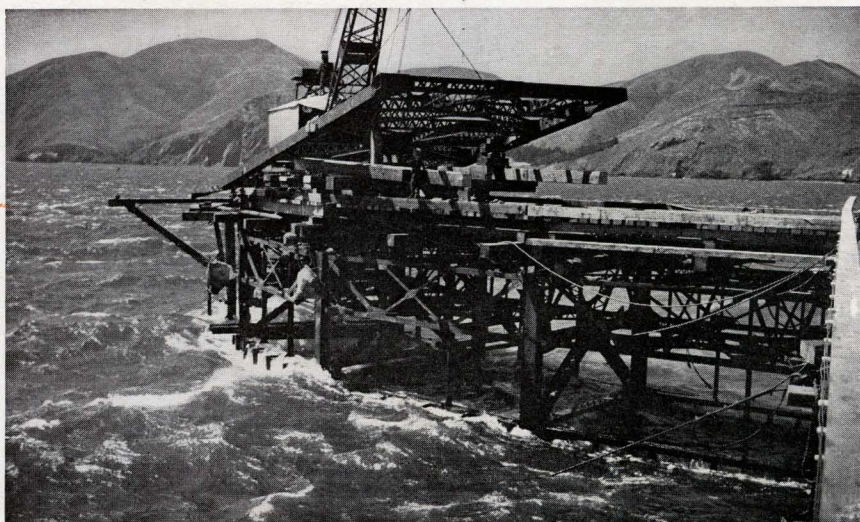
Modern lighting effects have been incorporated in the bridge as a major element in its design. The cables are to be outlined in lights their entire length and the towers are flood lighted, making the electrical display at night a brilliant and impressive spectacle. The bridge towers will be surmounted by aerial beacons and provision has been made for possible utilization of these towers for radio broadcasting.

Some idea of the physical characteristics of the bridge may be gained by reference to the chart showing comparative sizes of several world famous bridges, principally that of the George Washington Bridge which crosses the Hudson River and which is now attracting world wide attention.

The construction work is expected to be entirely finished and the Golden Gate Bridge opened for traffic in January, 1937.



Comparative size of the Golden Gate Bridge—the longest span bridge in the world.



The Lufkin Line

Sept.-Oct., 1934



Artist drawing of new home of the Humble Oil & Refining Company when completed.

Humble's New Home Well Under Construction

The new Humble Building, a 17-story addition to the present 9-story

structure, said to be one of the largest private projects under construction in the entire nation, is well under way in Houston, Texas, administration headquarters for the Company. The contract for the building calls for an expenditure of approximately \$750,000, making a definite and sizable contribution toward the hastening of general recovery by virtue of the fact that aside from the actual work created—which will support about 1200 people for a period of a year—the construction of a building of this size helps immeasurably to add to public confidence in the future. The new building is substantial evidence of the company's firm support of the President's Recovery Program.

The new building, like the present one, will be air conditioned throughout. Other modern details of construction includes electric light and telephone conduits in the floors (where they may be tapped for all desk locations); pneumatic tubes

connecting the waiting rooms on each floor; and acoustical treatment to diminish noise in all offices where there is such equipment as adding machines, bookkeeping machines, and the like. Completion of the building is expected in the Spring of 1935.

VISITOR » » » Returns to Venezuela



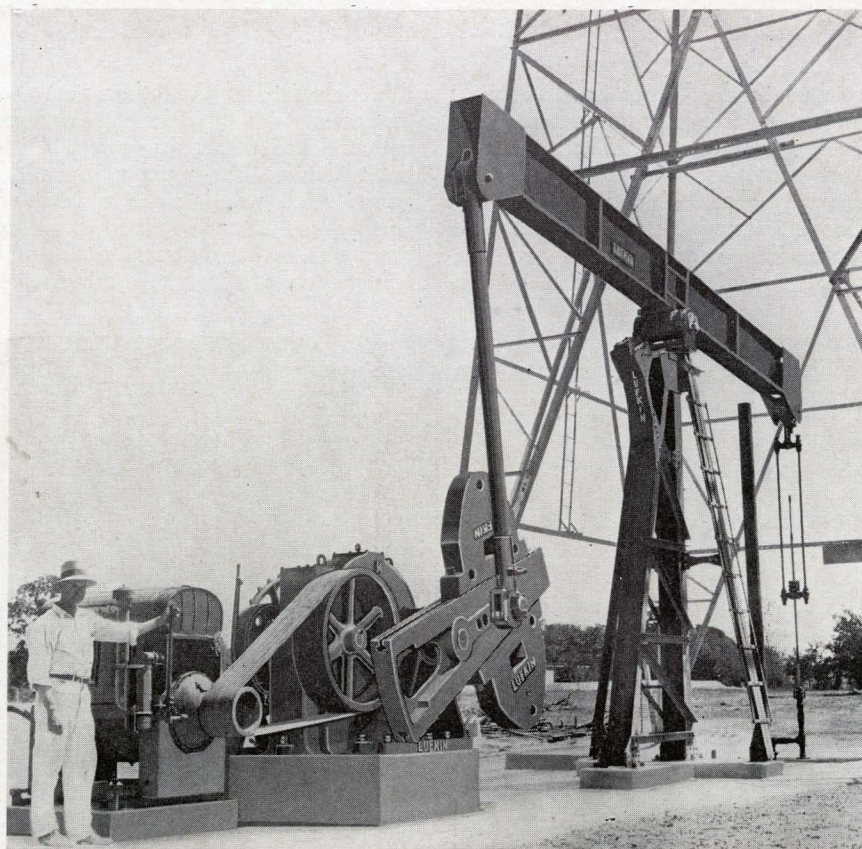
John G. Nation, Superintendent of the Eastern Venezuela Division of the Standard Oil Company of Venezuela. Mr. Nation has just returned to Venezuela after an inspection trip through the United States.



Gasoline taxes cost American users of motor vehicles \$700,000,000 last year. Gasoline tax evasion is costing the States from \$25,000,000 to \$100,000,000 a year. The average tax on gasoline is now estimated at more than 43 per cent and the excessive rate of the tax encourages the gasoline racketeer and the bootlegger. The oil industry now pays a tax bill of more than \$1,000,000,000 a year, or the equivalent of more than 8 per cent on its total investment.

Stanolind Oil & Gas Company, W. L. Tubbs lease, well No. 1, Samuel Edmonson Survey—first well in the Cayuga field to be equipped for pumping. Equipment is Lufkin's throughout, including No. 58 Herringbone Unit; centerline post and beam assembly and driven by McCormick-Deering gas engine. On extreme left is A. M. Redmond, Division Supt. for Stanolind in the Cayuga field.

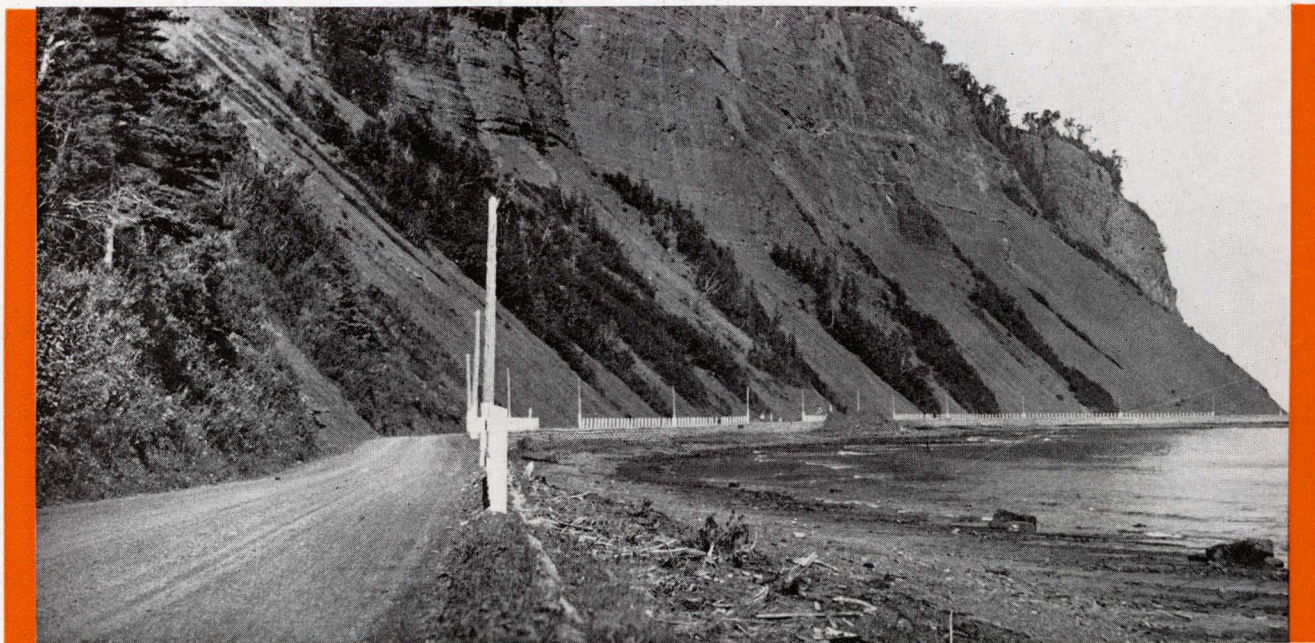
FIRST EQUIPPED PUMPING WELL IN CAYUGA FIELD Northern Anderson County » » » East Texas



Sept.-Oct., 1934

The Lufkin Line

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*Picturesque road at Mont-St.-Pierre, Gaspé.*

The Gaspé Road

PERRON HIGHWAY ACQUAINTS TOURISTS WITH THE "HOLIDAY WONDERLAND OF AMERICA"

Gaspé, though the very oldest-known part of Canada, was also, down to the last decade, perhaps the least known of the Dominion's various regions. Gaspé dropped out of the picture very early in the country's development and remained virtually *terra incognita* for centuries, as far as the rest of America was concerned.

Jacques Cartier, the first of the Europeans known to have seen Gaspé, did little more with it than use a point at its eastern end for the site of a cross and the scene of a picturesque ceremony incident to his taking possession of the land in the name of the King of France. To find the fabled passage to the East was the idea which had most other things crowded out of his mind at that time, and he left the rugged peninsula far behind in exploring the great body of water stretching west from Gaspé. A century later, furs and more inviting lands took the early French

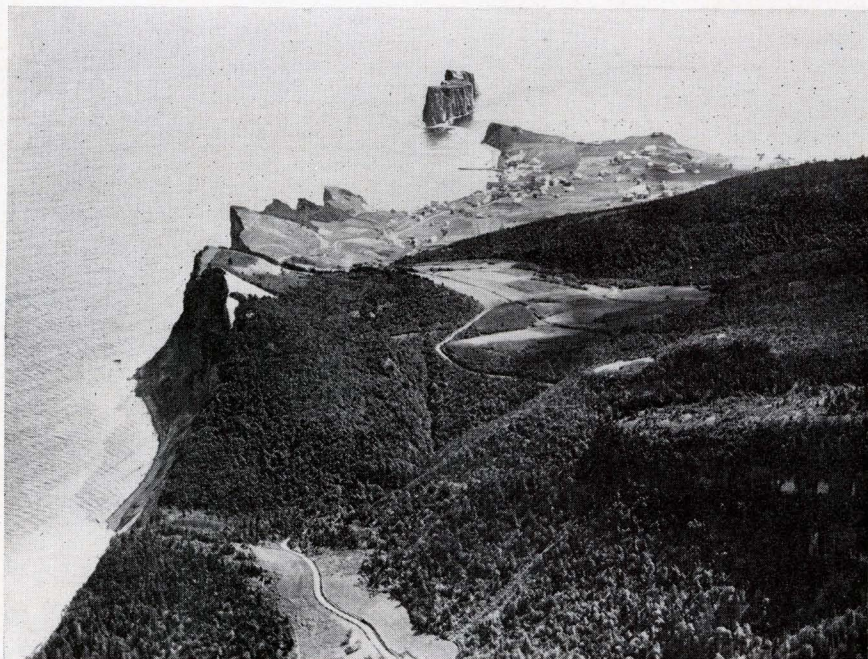
settlers to the Upper St. Lawrence; and it came to pass that when colonization expanded it did so almost entirely in directions south and west from Quebec, with the result that Gaspé entered not at all into the main scheme for the settling and development of New France. The bona-

fide colonists of the other parts of the country had little in common with the fisher-folk who came to inhabit Gaspé. Their ways lay wide apart. And, wanting the motive of furtherance of a common interest, there was no attempt made to establish communications across the wide

*View from highway at Marsauins, Gaspé.*

The Lusk Line

Sept.-Oct., 1934



Impressive Perce rock and Village.

stretch of rough territory that intervened. Gaspé therefore remained a closed book to the other peoples of America, although Europe knew it as the base of big deep-sea fishing operations in the bountiful Gulf of St. Lawrence and the Atlantic.

Well on into the present century roads on the Peninsula were mere wagon tracks, in disjointed fragments between fishing stations along the coast. No one ever thought of using them for pleasure. Then, the Perron highway came into being, and all of a sudden the "Holiday Wonderland of America" was thrown open to the motoring tourist.

The Gaspé Peninsula is a riot of

picturesqueness. It has over four hundred miles of coastline which shows about everything a coastline can from starkly rugged headland and wild ravine to the soft, gentle strand. All along the North Shore washed by the waters of the Gulf, there is an almost continuous alternation of capes and coves and river gorges, and many a reef-bound lagoon, while the South Shore, on the Baie des Chaleurs, has some of the finest beaches on the continent.

The Shickshocks mountain range, running lengthwise down the middle of the Peninsula, almost to its eastern tip, exhibits unusual grandeur and beauty in its peculiar terrace for-

mation, and has often been called the most picturesque part of the long Appalachian chain.

Added to a treat of scenic beauty which would in itself set Gaspé in the foreground of touring and holiday lands of the continent, there is a quaintness arising out of its long period of isolation which absolutely entralls the visitor. Fishing villages and hamlets, and small farming communities where the ways of life today are little changed from what they were in the romantic Seventeenth Century, when fishing stations along this glamorous coast were founded; hospitality an inherited virtue with the people; fantastic legends still told by the fireside and implicitly believed in. This is what the astonished visitor finds today in Gaspé.

And the highway! It is a belt-line, five hundred and fifty-three miles long, running round the shore and up through the Matapédia valley to completely enclose the Peninsula. A splendid motor way, providing the traveller with an unbelievably smooth surface the whole way along and keeping him always in sight of the sea, whose salt tang mingles with the odor of pine and balsam to his infinite delight.

Gaspé, though not changing its ways of life appreciably, is yet committed wholeheartedly to tourism, according to the visitor a welcome so warm and so general that he thoroughly forgets that he is a tourist. Delightful accommodations are offered all along the way at rates which serve to confirm the visitor's impression of being a guest to be given hospitality—not a newcomer expected to keep his purse-strings loose.

The Gaspé road is an integral part of the unofficial North American good roads system. A member of the Province of Quebec network, it is thereby directly connected with the main travel arteries of the United States and the other provinces of Canada. To take the Gaspé road adds little in time and expense to an eastern American tour, but contributes much to its enjoyment.



Photos by Courtesy "The Provincial Tourist Bureau," Quebec.

View from Bell-Amse, Gaspé, showing fishing fleet at anchor. In the distance Bonaventure Island and Perce Rock.

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The Luffkin Line

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PRESIDENTIAL HULA—Hawaii's prettiest hula girls are shown here at Waikiki Beach, performing a special hula composed in honor of their President's visit to the Territory of Hawaii. Many of Hawaii's prettiest hulas are those which were danced for prominent personages or composed to mark great occasions in the Islands' history such as the President's visit.

—News of Hawaii Photo.

When In Hawaii DO AS THE HAWAIIANS DO!

That seems to be the watchword for Hawaii's 1934 brand of vacation-

lulu's beach hotels says that Hawaiian dancing and singing entertain-



SERENADED PRESIDENT AT WAIKIKI—One of the special troupes selected to serenade President Roosevelt on his recent Hawaiian visit, is shown here just as they appeared from the Presidential suite of the Royal Hawaiian hotel at Waikiki beach.

ists. The Islands are enjoying their liveliest tourist year since 1929, and most of the visitors are turning to things distinctively Hawaiian for entertainment and activities.

Keoki P. Mossman who operates a model old-time Hawaiian village within an ukulele's-throw of Hono-

WELCOMED PRESIDENT—When the USS Houston neared Hawaiian shores on the President's trip to the Islands, close to a hundred Hawaiian outrigger canoes like these pushed off from Oahu's shores to give the Chief Executive a typical Hawaiian greeting.



ments are better patronized by tourists this season than ever before and that many of the visitors, not content to watch the dancing, are enrolling in hula instruction classes.

The 1934 globe-trotter is true to Hawaiian traditions, at least in an experimental way, in his eating and drinking habits. At the feasts he boldly sticks his fist into the two-finger poi, an Island delicacy that looks like paste; and there are very few travelers who sail from Aloha Tower without having sampled the native brew—okolehao.

In the old days this was made from the root of the ti plant, but now most of it is distilled from rice. It is very potable—tasting like a good rye whisky—and visitors say that it is also extremely potent. Since repeal two companies have been organized in Honolulu to distill and market "oke"—as it is called.

This "going native" urge on the part of visitors has also been noticed by music stores, reporting heavy sales in ukuleles and guitars; and curio dealers. David Kahanamoku—brother of the famous Duke—has recognized this demand for Hawaiian souvenirs by opening a Hawaiian exchange on Kalakaua avenue where

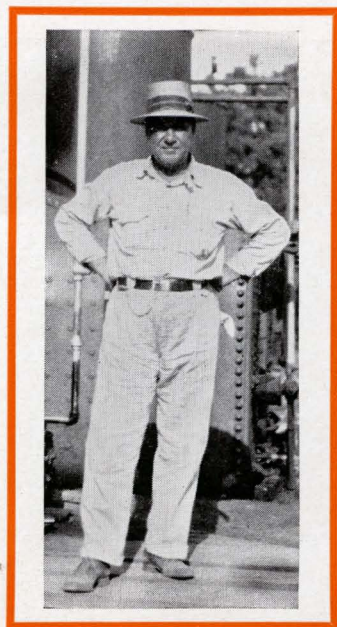
THEY REALLY GET THE JOB DONE



Construction crew on the Woodley-Thompson lease, Kilgore area, for the Woodley Petroleum Corporation. Back row left to right: George Matson, Early Wilkins, Jerry Blackburn, Pete Little (Lufkin's Representative) Ed Batton, Dutch Murphy. Front row: John Fuller, Frank Carmical. This installation consisted of a Lufkin No. 56 Herringbone Unit driven by 40-H.P. single cylinder gas engine, Lufkin Center Line, Post and Beam Assembly and a Lufkin No. 6 Rod and Tubing Hoist. These installations, twelve in all, are very attractive ones and were accomplished in record breaking time.

Hawaiian craftsmen work and travelers buy.

Waikiki's beach boys say that many of this season's tourists are not content to do their surfing vicariously from the beach, and that



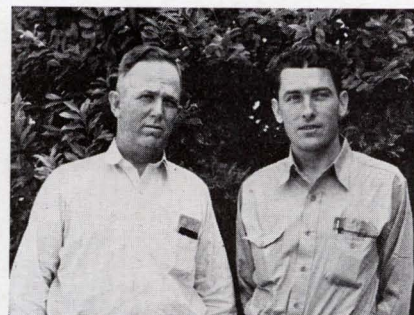
KNOWS THE OIL BUSINESS—Jack Archer, Superintendent in East Texas for Johnson & Olsen Brothers.

more and more members of the vacation colony are deserting outrigger canoes for the more strenuous surfboard.

And those who find the surfboard too much of a good thing, at least are emulating the diving boys of Honolulu harbor by "living in the

water." One man, a visitor from New York, declared that he hadn't had his bathing suit off for three days with the exception of a few hours every night when he discarded it for pajamas. Some of the hotels even supply a catering service at the water's edge so that meals are served to guests in bathing suits.

At dances and formal parties in Hawaii, the lei or flower garland has



HANDSOME GENTLEMEN — Well one anyway—the other is Charlie Hardin, one of "Lufkin's," East Texas Representatives—the gentleman on the right is Wilbur Thompson, of the W. L. and Will Thompson Company, East Texas operators.

entirely supplanted the corsage bouquet.

This desire on the part of vacationists to "find Hawaii in the Hawaiian Islands" was expressed by a visitor from San Francisco talking to the Honolulu Ad Club.

"Let Hawaii continue in modern enterprise but hold fast to its ancient customs and wisdoms," he said. "In so doing she has something unique to offer the tourist, something that cannot be found or experienced anywhere else. Don't run with the herd—don't standardize, as have so many Mainland communities."



NIGHT SCENE AT "A CENTURY OF PROGRESS"—Federal Building, electrical group and the east tower of the Sky Ride as they look at night. The Sky Ride towers and cables are brightly illuminated for the first time this year. Gleaming and bright is the World's Fair for 1934.

—Photo by Kaufman & Fabry

Mechanically

CORRECT !

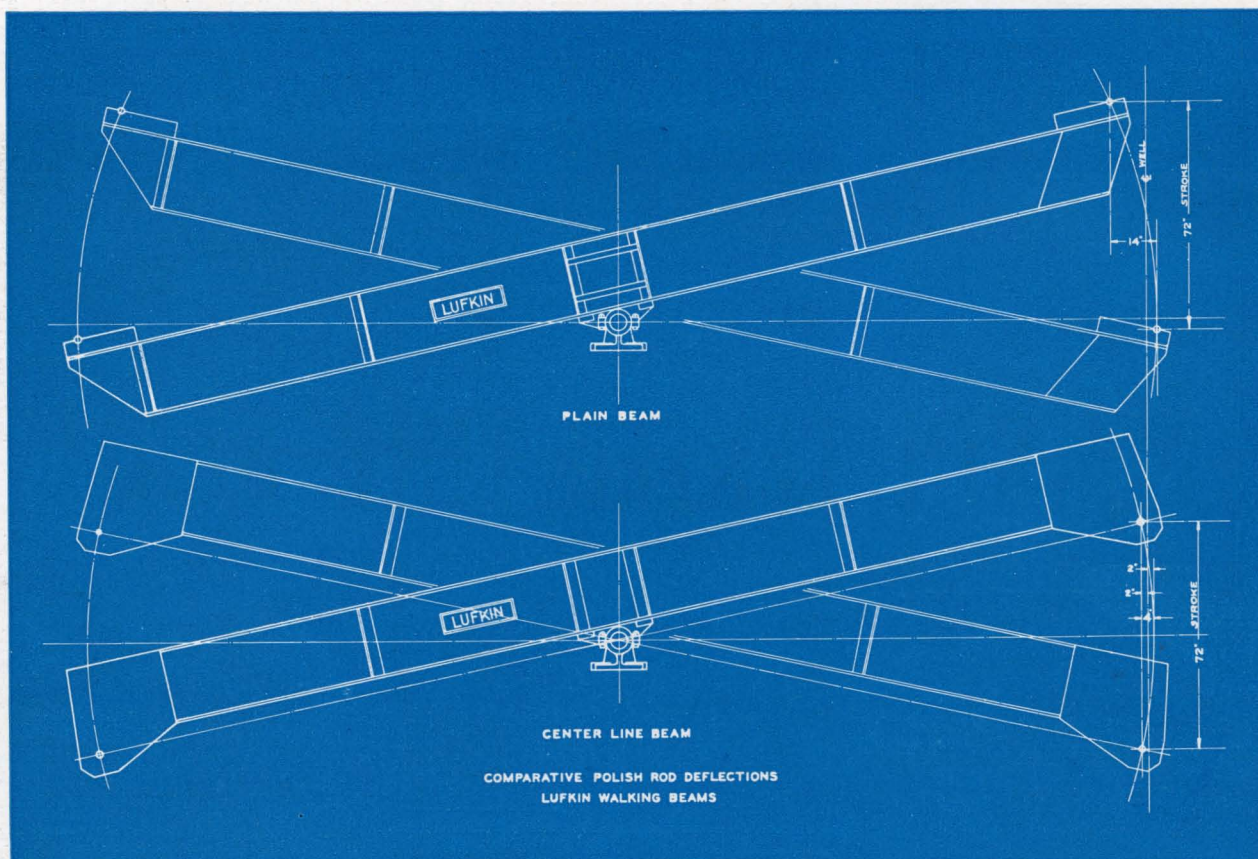
The highest efficiency in walking beam operation is obtained in the LUFKIN CENTER LINE ASSEMBLY. In this new Assembly, the old, inefficient, friction-producing stirrup, and regular head connections have been eliminated and into their design has been built, efficient, self-lubricating, oil-tight bearings that require a minimum of care.

The Center Iron, with its renewable bronze bearing 5" x 24", is self-oiling, oil-tight and dust-proof, and designed for years of service.

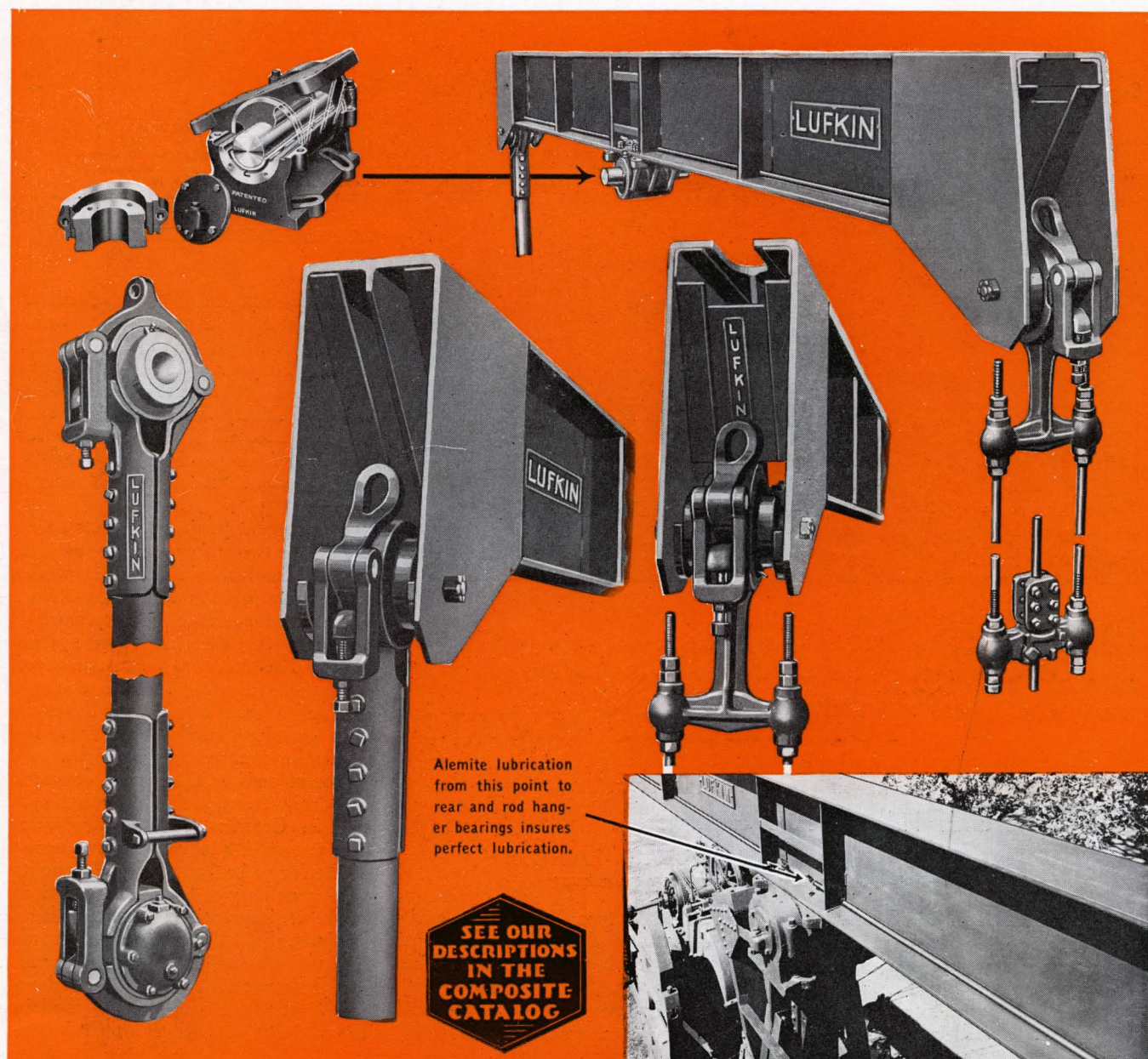
The Tail or Rear Bearings and the beam hanger

bearings (3-7/16" x 9") are designed after the fashion of the Lufkin-Trout Pitman in that they have renewable bronze bushings and are built with shackle connections for automatic alignment and for easy disconnecting. The bearing boxes stay on the pin and are lubricated by means of Alemite connections from the center of the beam (see next page). The rear bearing and rod hanger bearing are of steel and designed for life-time service.

Ball and socket connections between strap and bearing automatically adjust any possible misalignment.



PLAIN BEAM AND CENTER LINE BEAM—Note what plain beam does to polish rod—14" bend. The Center Line of the new beam is only 2" each way from center of well at greatest bend. Polish rod deflection is practically eliminated.



LUFKIN BEAM BEARINGS—This "close-up" gives a very good picture of the working parts of the Lufkin Center Line Beam. All working parts have renewable bronze bearings—Alemite and oil-bath lubrication. Ball and socket connections between strap and bearing automatically adjust any possible mis-alignment.

The LUFKIN CENTER LINE BEAM

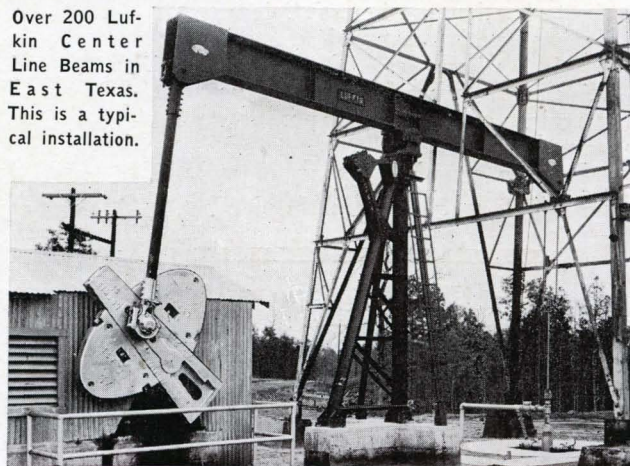
COMPARE THESE ADVANTAGES:

- Renewable Bronze Bearings at all wearing parts
- Oil-tight—dust proof
- Alemite and oil-bath lubrication.
- Lubrication to end bearings from center beam via Alemite connections
- 5" x 24" bronze center bearing
- 3-7/16" x 9" rear and rod hanger bearings
- Efficient, reliable, and built for years of long service
- Adaptable to Standard Rigs.

Lufkin Foundry & Machine Company
Lufkin, Texas

Houston, Dallas, Tulsa, Los Angeles, New York, Henderson

Over 200 Lufkin Center Line Beams in East Texas. This is a typical installation.



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The Luffkin Line

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The natural reservoir, called Twin Lakes, is on the eastern side of the mountains, about ten miles below the tunnel. The arrow head points to Lincoln Gulch.

Piercing the Rockies FOR IRRIGATION WATER

Du Pont products are helping to drive the Twin Lakes Tunnel under Independence Pass, Colorado

By J. L. LOVELL and W. J. RAINGER

Reprinted by Special Permission the "DU PONT MAGAZINE"

In the early days of the West, when the railroads were pushing their steel highways across the plains and over the Continental Divide into the wild and rugged territory beyond, the workmen had a refrain which they sang to the tune of sledge hammers ringing out on spike and rail—

*"Then drill, ye tarriers, drill;
Drill, ye tarriers, drill;
Oh, its work all day with no sugar
in your tay,
When ye work beyant on the rail-
way . . ."*

Today, the Westward stampede towards the gold-laden mountains is over, and mining has settled down to be a comparatively prosaic industry. Similarly, that portion of Colorado sloping gently eastward from the Rockies, where once the railroad builders worked so feverishly, is now a region of quiet and productive farms.

But the sound of hammers and drills is now being heard once more,

and it recalls to old-timers the exciting days when the "iron horse" was preparing to invade the land. This time, however, the job means plenty of sugar for everybody's "tay"—and cantaloupes for breakfast, too.



View at West Portal, showing a rock train on its way to the dumping ground. Driving a tunnel through the Continental Divide means moving plenty of rock to make room for water.

The Lufkin Line

Sept.-Oct., 1934

steps to secure a supplementary supply of water.

Although the entire watershed of the Arkansas River, which supplies the irrigation projects along its course, lies on the eastern slope of the Continental Divide, the Twin Lakes Reservoir and Canal Company some time ago "went over the mountains" and actually bought the water rights to a large acreage on the western slope of the Divide, more than 225 miles away. A huge rocky barrier separates the two regions, but that is now yielding to the engineering genius of man.

The work of diverting water from Lincoln Creek and New York Creek, roaring tributaries of the Colorado River on the Pacific slope, to the Crowley County irrigation project along the Arkansas River is now well along. The contract to drive a horse-shoe-shaped tunnel, 9 feet 5½ inches in diameter and 20,000 feet long, through the Continental Divide, was awarded last September to Platt Rogers, Inc., of Pueblo, Colorado.

Actual construction was started on December 5, 1933, when a power line was completed and the electric current turned on so that the work could progress without interruption through the winter months.

The job is located nearly two miles above sea level and the tunnel is being bored through solid rock some 2,000 feet underneath Independence Pass, which is the loftiest highway pass in America. Unless one has experienced conditions at this altitude it is difficult to visualize the howling sub-zero blizzards that rage around these mountains during the winter. The pass is often blocked with more than fifteen feet of snow and it is then necessary to travel almost 200

Inside the tunnel there is not much of interest to see except the twenty-inch "Ventube" carrying fresh air to the drillers and blasters, but you will notice that the wall on the left side is generously coated with ice.

miles to get from one entrance of the tunnel to the other. This territory, however, provides some of the finest scenery in the Rockies, and in the summer it is a popular vacation spot for tourists.

As might be expected, the construction camps for this project had to be built to withstand the ravages of the severest storms. At this altitude, winter usually starts in September and continues until the last of May, and the camps had to be erected during this period.

The East Portal of the tunnel, which is at an elevation of 10,450 feet, and the camp from which the operations on that side are conducted are both located just off an old stage-coach road between Everett Stage Station and Brumley Stage Station, so that it was not particularly difficult to install living facilities there. However, West Portal and camp, having an elevation of 10,500 feet, are seven miles off the main Independent Pass Highway, up Lincoln Gulch, and a road had to be built to the site before the contractor could move in any machinery or camp equipment. Fortunately for the workmen, the past winter was a very mild one and it was possible to provide warm and comfortable bunk-houses with electric lights and shower baths. Each camp furnishes accommodations for seventy-five men.

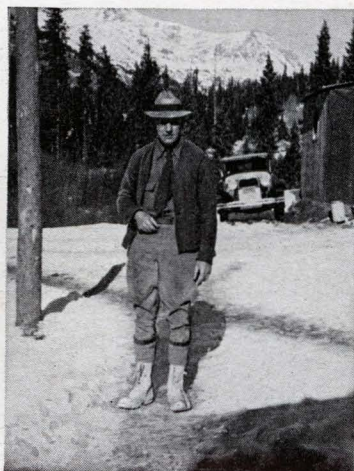
The entire project, when completed, calls for 55,000 acre feet of water



per year. The present work will provide 30,000 acre feet, which is enough to irrigate about 50,000 acres of additional land. Besides the underground work already described, the contract includes the construction of some four miles of canals to run from Lincoln Gulch to the portal of the tunnel.

When the bore through the mountain is completed the water that flows through it will be stored just below the East Portal in the natural reservoir provided by Twin Lakes. It will be measured when it is released into the Arkansas River and again when it is taken out at a diversion dam about 225 miles down stream.

Below—The workmen's camp occupies a scenic spot near the east portal of the tunnel. Center—Mr. Platt Rogers, Jr., president and general manager of the contracting firm.



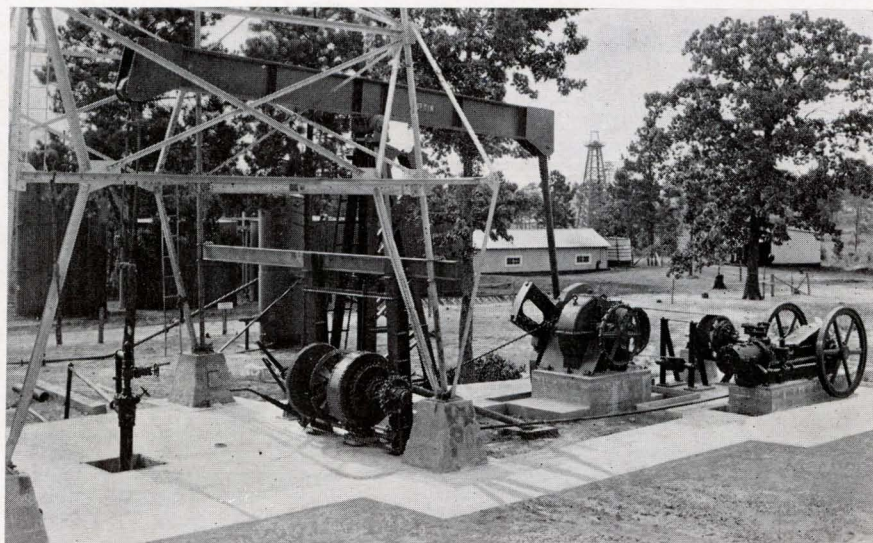
Below—The camp at the west portal of the tunnel. At this elevation provision had to be made for deep snows and bitter weather, but the 1933-34 winter was an unusually mild one.



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The Lufkin Line

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One of twelve such installations for Woodley Petroleum Company, Woodley Thompson lease, Kilgore area. Lufkin No. 56 unit with center Line Post, Beam and Pitman Assembly. Lufkin No. 6 rod and tubing hoist driven by 40-H.P. single cylinder gas engine.

handled by the hoist and the bailing operation performed by derrick floor sand reel which utilizes the Lufkin Hoist as a countershaft during the bailing operation.

Lufkin's Center-line Post-Beam-Pitman Assembly, as described on pages 11-12 of this issue, is also part of the equipment to be furnished.

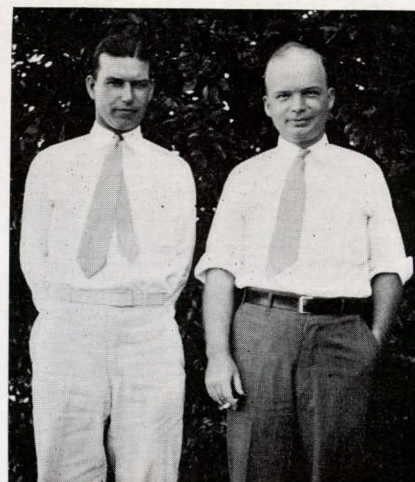
Good will is the disposition of the customer to return to the place where he has been well served. *From a Decision of the UNITED STATES SUPREME COURT.*

Woodley Wanted Everything PRODUCTION - SERVICING - ADAPTATION

Requiring geared units to handle large quantities of fluid; equipment for handling rods and tubing; desiring to use single cylinder gas engine drives, and above all things wanting equipment that would insure life-time service; the Woodley Petroleum Company, one of the largest Independent Operators in East Texas, have standardized on LUFKIN EQUIPMENT throughout and installation is well under way on twelve of their leases in this field.

Answering all the requirements as set forth by Howard Davenport, General Superintendent for the Woodley Company, Lufkin is furnishing their No. 56 Herringbone Unit which is capable, at its normal rated load, of producing 1000 barrels of fluid per day from a level of 3600 feet and give life-time service. This unit is most readily adaptable to single cylinder engine drive using a Lufkin

clutch and tightener with "V"-belts. This Unit is also equipped with sprocket for driving the Lufkin No. 6 hoist for handling rods and tubing. The installation is so arranged that a sand reel may be tied down on the derrick floor and be driven from the hoist by 1030 chain. During the cleanout operation, tools would be



VISITS LUFKIN PLANT—Harry McCobb (left), Production Superintendent, Tropical Oil Co., Colombia, S. A.—Right: L. A. (Pete) Little, Sales Engineer for "Lufkin."



Typical installation Lufkin Double Reduction Gear Unit in California on lease of one of the largest producers on the West Coast. Lufkin Post, Beam, Pitman Assembly included.

New—IN GERMANY—JAPAN—ENGLAND



Keystone

A WOOD BURNING Automobile

The Japanese army feels that it is on the track of a solution of the Empire's acute problem concerning gasoline and oil supplies, having assisted the building of a small experimental fleet of these trucks. They burn ordinary firewood.

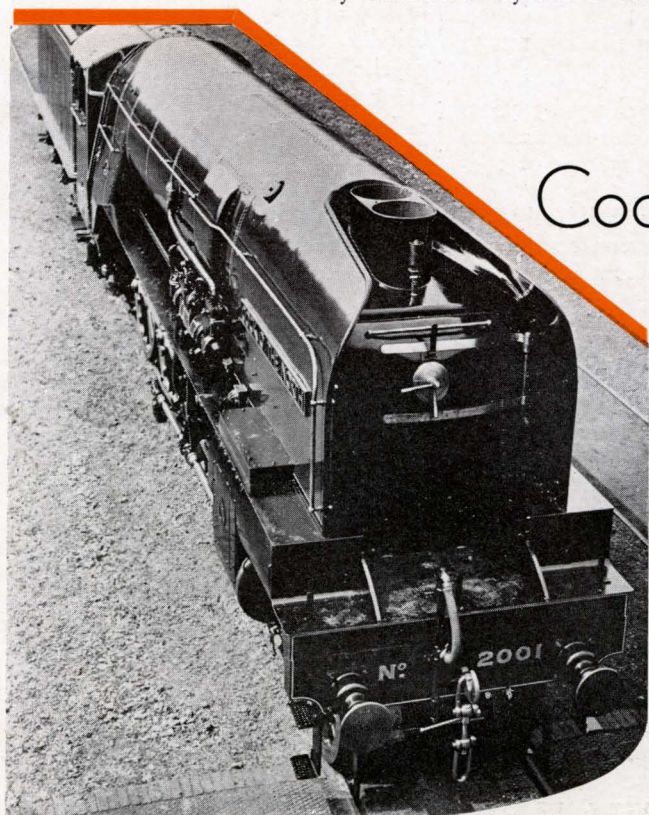
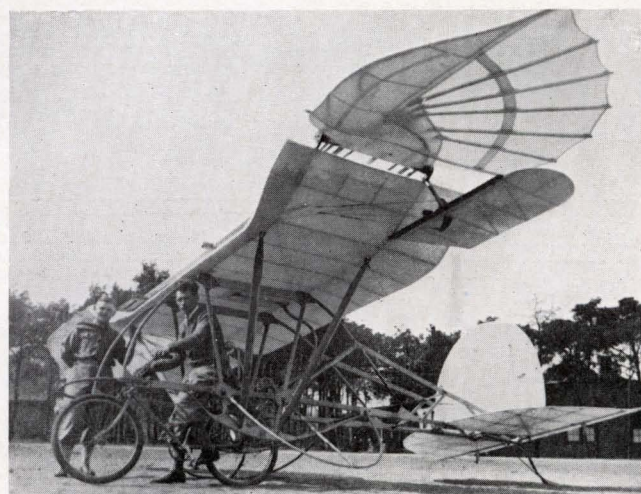


Photo Courtesy Associated British Railways, Inc.

"The Flying Bicycle"

APPEARS IN GERMANY

This new air machine, actually a flying bicycle, is the invention of Karl Lindemann, a former policeman, and Willy Sonne, mechanic, and has been accepted by the German Airways. It is shown during demonstration at Berlin-Aldershof.



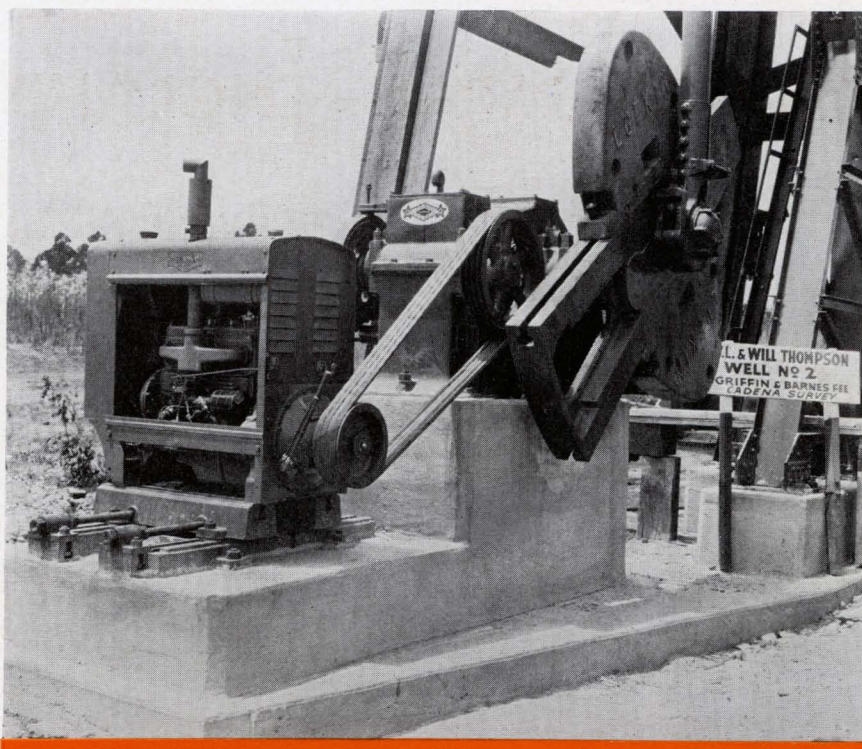
Keystone

Cock o' the North



First of a new series of new type locomotives built by the London and Northern railway to be used to haul the East Coast day and night expresses over the heavily graded lines with their many curves between Edinburgh and Aberdeen.

This engine is the most powerful express passenger engine yet built in England and is another European example of steam locomotive streamlining engine and tender. The engine and tender weigh 165 tons. The tender carries 8 tons of coal and 5,000 gallons of water and the coal space is so designed that the coal feeds itself forward automatically whilst the engine is running. Electric welding of tender tanks saved $2\frac{1}{2}$ tons of weight.



Lufkin installation for W. L. and Will Thompson Company, well No. 2, Griffin and Barnes Lease, East Texas. Equipment furnished includes Lufkin Double Reduction Herringbone gear Unit No. 21 with No. 2 Post-Beam-Pitman Assembly and Buda gas engine drive.

"Yes" MEN

"Next to the disloyal or the dishonest employee, probably the least valuable element in a business organization is the confirmed 'yes' man. He thinks that he can ingratiate himself with the boss by agreeing with him always. While insubordination cannot be permitted, the executive who so intimidates his associates that they are afraid to think, is destroying one of his greatest assets", so writes Hubert Harrison, General Manager of the East Texas Chamber of Commerce in "*East Texas*", Chamber publication.

"Courteous, sincere suggestions are welcomed by the big, broad-minded leader. The small man wants no ideas except his own. The great leader weighs the views of his associates and then decides—loyalty and initiative, cannot be bought. You pray for them and give thanks when you find them."



—Too true—too true. Many an ambitious young Executive has been robbed of all initiative—with all incentive stifled—and heart deadened to loyalty, by a bellicose "Boss" blind to the value, if only from the psychological standpoint, of having his associates working "with" him, rather than "for" him. On the other hand many of our larger Institutions have grown to giants in the field of commerce because of an understanding loyalty between employer and employees.

Adaptability

NO MERE BY-WORD WITH LUFKIN!

The installation above, for the W. L. & Will Thompson Company, East Texas operators, is one of the many drive adaptations to Lufkin Units. Ease of adaptability has been an outstanding Lufkin characteristic since the first installation. Lufkin Units are now operating with all sorts of drives including: electric motor; single and multi-cylinder gas engines and in some instances with steam engines.

Adaptability — as regards prime mover or field conditions, is no mere by-word with *Lufkin*—but is a meaningful description of a Lufkin prime

characteristics—backed up by years of practical and successful experience in the field under every type of condition.

Lufkin will gladly and freely furnish complete details concerning any type installation, without obligation, upon request.

JUST AN OLD Chinese Custom

A Chinese woman, while not adverse to exposing her person, is especially "modest" as to who may see her feet. Of course, she should be ashamed, although not to blame.

The old Chinese custom of breaking the arch in babyhood is passing, but still persisted in, especially in interior China—to the end that the female will be unable to travel. She cannot run away from her husband, or what have you!

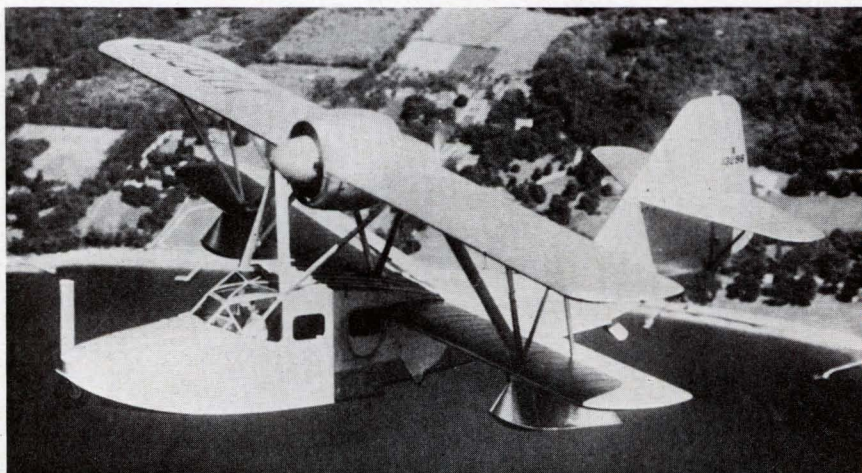
This woman, however, walks six



miles to and from her work every day for twenty cents in wages.

★ ★ ★ ★ ★ ★ ★

THE COVER—The Kona section (largest Hawaiian Isle) along the West Coast of Hawaii in the heart of "Old Hawaii." The President fished off this Coast on his recent visit to the Hawaiian Islands. For this very interesting photograph of native life on the Island and others used in the article "*When in Hawaii*"—we are indebted to the Hawaii Tourist Bureau.



New Curtiss-Wright Amphibian UNDERGOES TEST FLIGHT

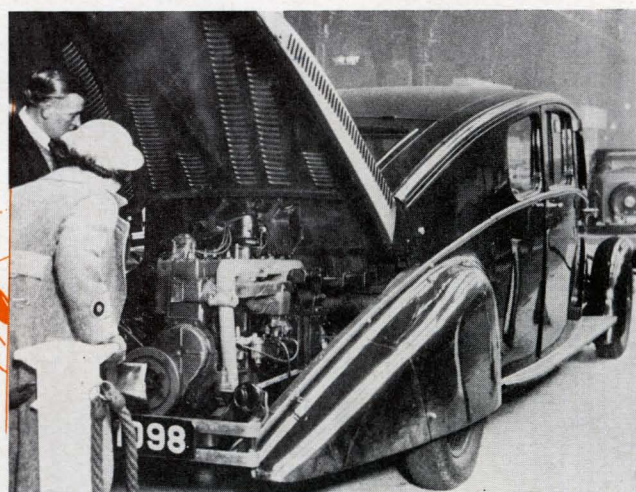
The new Curtiss-Wright Amphibian designed by and built under the supervision of Captain Frank Courtney, noted aeronautical engineer, on one of its test flights over Long Island Sound.

Novel features of this new amphibian which has a top speed of 151 miles per hour, include three landing gears with one wheel in the nose of the ship rather than under the tail. Thus the ship lands in the same position on land as when landing on water. Another very interesting feature is the location of the motor and the propeller. The 330 H.P. Wright Whirlwind motor is mounted in the center of the upper wing; some dis-

tance away is the propeller, which is driven by means of an extension shaft connecting the motor crankshaft to the propeller. This amphib-

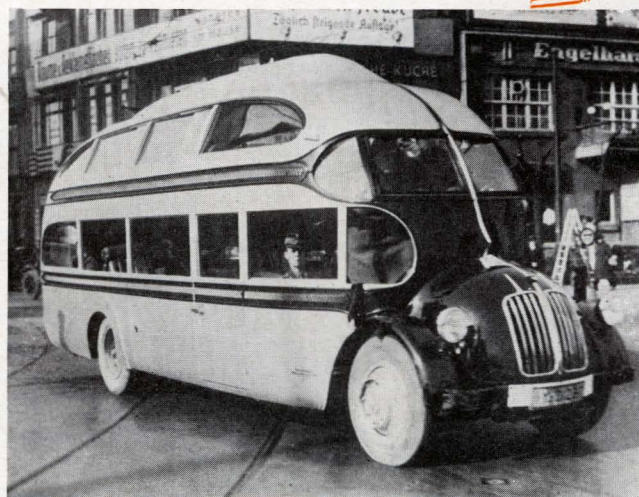
ian, which carries 4 passengers and a pilot, has a cruising speed of 125 miles an hour, and a cruising range of 550 miles. In addition to passengers, the plane carries 240 pounds of baggage. Visibility is excellent for passengers, due to the large stagger of the biplane wings, which provides an unobstructed view.

This novel mounting of the propeller and engine has proved very successful in providing excellent cooling for the air cooled engine and very high propeller efficiency.



Prince of Wales' Car ... FOR SALE

This beautiful ultra-streamlined car, property of H. R. H. the Prince of Wales, which attracted considerable attention when it made its appearance, is for sale. It is shown on exhibition at the Used Motor Show at the Royal Agricultural Hall, Islington, as visitors inspect it.



NEW STREAMLINED BUS—This new streamlined bus has made its appearance on Berlin streets. It seats 45 passengers and is equipped for long trips.

Sept.-Oct., 1934

The Lufkin Line

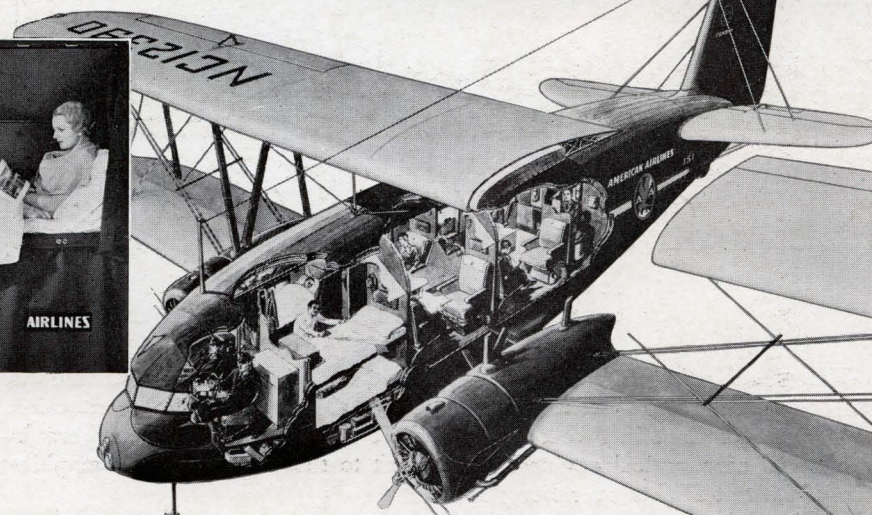
18

American Air Lines, Inc.

**BEGINS NEW "SLEEPER"
SERVICE USING CURTISS-
WRIGHT CONDOR PLANES**



All comforts, demanded by seasoned passengers in night travel by rail, are to be found in American Airlines, Inc., sleeper service.



This cut-away illustration, of passenger and pilot compartments of the Curtiss-Wright Condor sleeper plane, shows how berths are made up.

The new Curtiss-Wright Condor sleeping planes, recently completed by the Curtiss-Wright Airplane Company at Lambert-St. Louis Municipal Airport for American Airlines, Inc., are the first standard all sleeping planes to be placed in airline service. Powered by two 735 h.p. Wright Cyclone engines, the new Condors fly at 190 miles an hour top speed, have a cruising speed of 160 miles an hour, and carry 12 passengers, 2 pilots and an attendant.

American Airlines, Inc., operates fleets of these sleeper-planes regularly on over-night runs, in each direction, between Dallas, Fort Worth and Los Angeles, and has recently inaugurated the overnight sleeper-plane service, in each direction, be-

tween Chicago, Detroit, Buffalo and New York City. The planes have late departure and early arrival times on both sleeper routes.

The two Cyclone engines are equipped with controllable pitch propellers which increase the speed and operating performance of the giant airliner while in flight. The Condor takes off with a full load in 16 seconds.

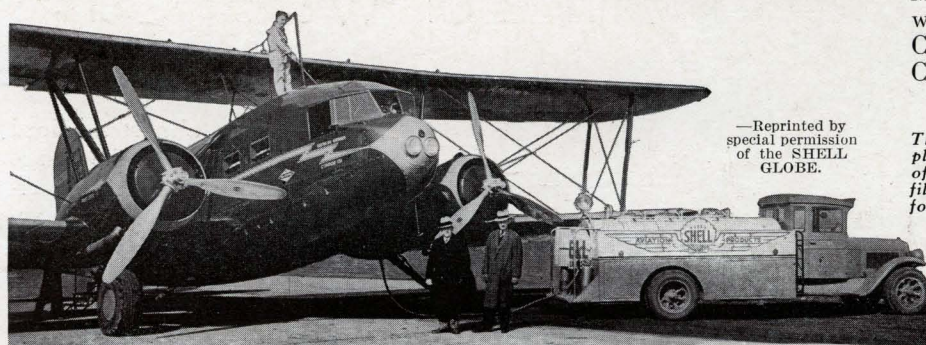
The spacious cabin, having a height of 6'2", a width of 6'3", and a length of over 19', is divided with transverse partitions into three compartments, each containing two sections of two berths, making a total of twelve berths.

In daytime, equipment for the berths is stored above the seats with-

out interfering in any way with the passengers' comfort. One section of two seats can be changed into one section of two berths in flight in four minutes.

The berths are one inch longer than those in American railroad sleeping cars, and have the distinct advantage of a window in both upper and lower berths.

The new Curtiss-Wright Condor sleeper-planes were flight-tested with Shell Aviation Gasoline at the Curtiss-Wright plant, Lambert-St. Louis Municipal Airport, and are refueled with Shell Aviation Gasoline at the Chicago and Detroit airports on the Chicago-New York flights.



—Reprinted by special permission of the SHELL GLOBE.

The original Curtiss-Wright Condor sleeper plane, which is the first plane in the world offering deluxe sleeper service, is shown filling her tanks with Shell Aviation Gasoline for test-flying prior to her acceptance by American Airlines, Inc.

The Lufkin Line

Sept.-Oct., 1934

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 and Machine Co.

AL. E. CUDLIPP, Editor

Vol. XIII SEPT.-OCT., 1934 No. 4

Government of the people, by the people and for the people gets along fine these days provided the militia stays on the job.

Teacher: "Spell straight."

Willie: "S-T-R-A-I-G-H-T."

Teacher: "Correct. What does it mean?"

Willie: "Without ginger ale."

THE LATEST ONE

A young man wishing to purchase a present for his sweetheart, after much meditation, decided on a pair of gloves.

He accompanied his sister to a ladies' furnishing store to make his purchase, he buying gloves and she buying bloomers. In delivering the packages they were mixed up, his sister sending the gloves and he sending the bloomers along with the following letter.

My dearest sweetheart:

This little token is sent to remind you that I am keeping tab on your birthday. I choose them more because I thought you needed some.

The lady I bought them from showed me some that she had been wearing for three weeks and they were hardly soiled at all.

How I wish I could put them on you for the first time.

No doubt many other gentlemen's hands will come in contact with them before I see them again but I had the clerk try them on and they looked very neat on her. I don't know the exact size but I think I should be more capable of judging them than any other person.

After you have put them on once they will slip on easily and when you pull them off blow in them as they will naturally be a little damp from wearing.

Be sure and keep them on while cleaning for if you don't they will shrink.

I hope you will accept them in the spirit in which they were given, and be sure and wear them to the dance Friday.

Lovingly yours,
"JOHN."

P.S.—Note the number of times I will kiss the back of them this coming year. The clerk says the latest style is to wear them unbuttoned and hanging down.

Pastor—This morning I will have for my topic "The Great Flood in Genesis."

Prominent Member of Congregation (rising)—I've got an engagement to play golf, so I can't stay; but I'll head the subscription list with \$1,000 to relieve the suffering of the Genesians.

General Grant: Now that you've diagnosed my case, do you know what caused my illness?

Doctor: Things in general.

Joan had been rather a naughty girl nearly all the day. When her mother was putting her to bed at night, she said: "When you say your prayers, Joan, ask God to make you a good girl tomorrow."

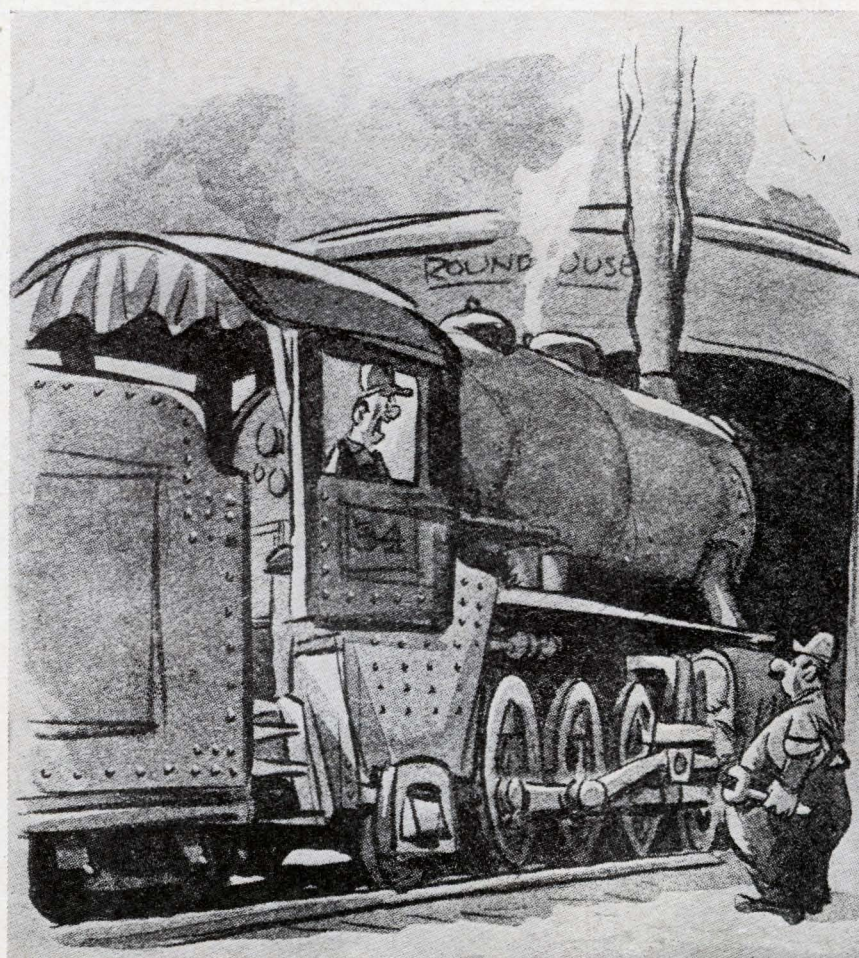
With an inquiring glance into her mother's face, Joan replied: "Why, what's on tomorrow?"

Did you ever hear of the New Haven trapper who skinned a racoon and found a Yale man inside?

Don't you always pity a girl who is frightened in the dark?

Yeah, I can't help feeling for her.

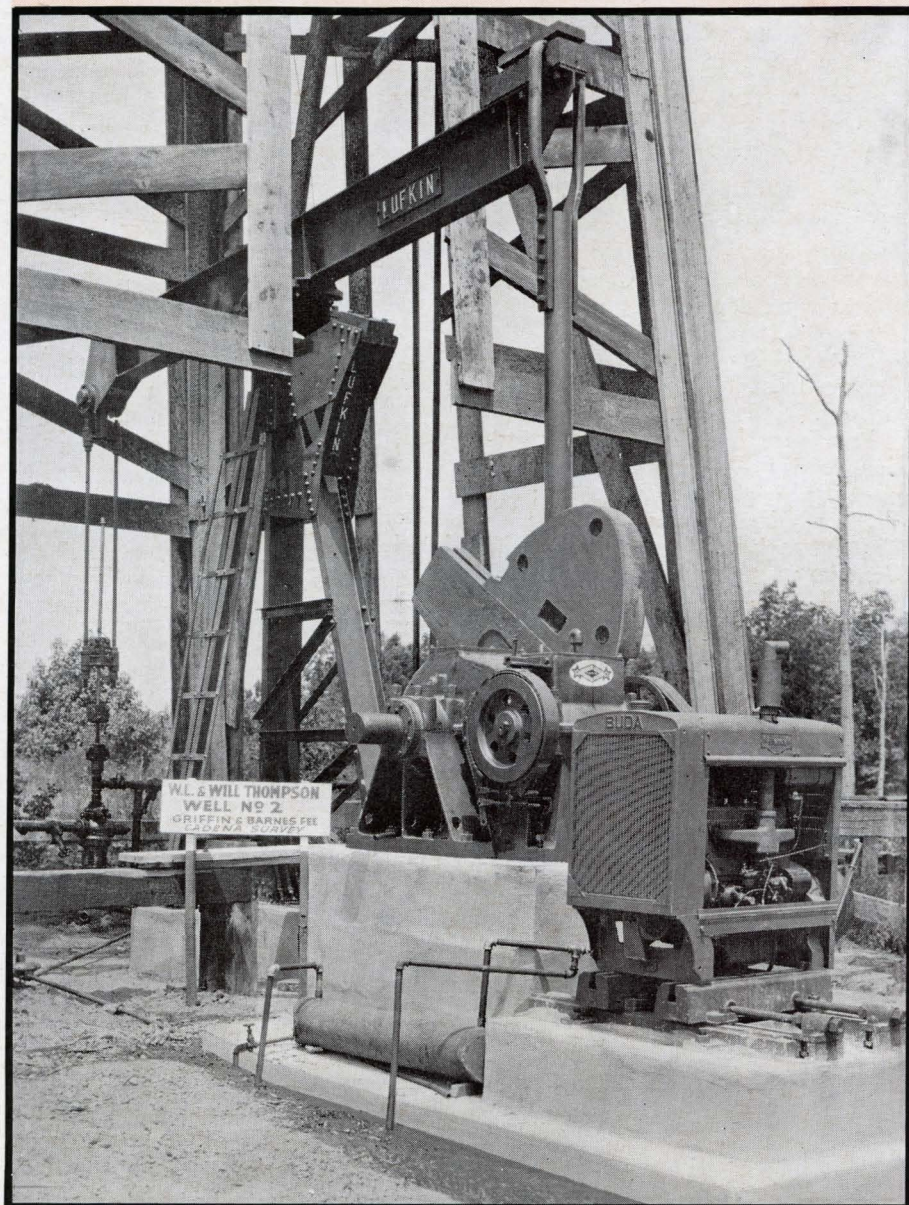
THE MARKET OPENS FOR CHOO CHOOS



"The boss said to fix 'er up . . . it goes phut phut instead of choo choo."

—Chicago Sunday Times.

ADAPTABILITY



W. L. and Will Thompson Company, Well No. 2, Griffin and Barnes lease, East Texas. Lufkin No. 21 Double Reduction H. B. Unit No. 2 Post Assembly, Buda gas engine.

The Lufkin Line

Are you getting your copy at the correct address? Do you have friends who would care to receive this magazine regularly? You have only to drop us a card and this bi-monthly publication will be sent regularly—to any address and without obligation.



ADAPTABILITY IS A MERE DETAIL FOR LUFKIN

Universal adaptability to any type prime mover has been a contributing factor in making **Lufkin** the favored unit. This very desirable Lufkin characteristic, coupled with an enviable record of performance—year in—year out **service**—is the thing that makes Lufkin the **dependable** equipment.

Conservative gear ratings—rugged, well designed units—factory trained field men—the "extra something" in a **Lufkin** purchase.

Lufkin Units are manufactured in Lufkin, Texas, by the Lufkin Foundry & Machine Company. Branches in Houston, Dallas, Tulsa, Los Angeles, New York, and Henderson, Texas.

LUFKIN *Pumping Units*

PRINTED IN THE U. S. A.