

**APRIL 1951** 

"One Town"



VOL. 13, NO. 4 APRIL 1951

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ON TOUR is published monthly by Union Oil Company of California for the purpose of keeping Union Oil people informed regarding their company's plans and operations. Reader participation is invited. Address communications to ON TOUR, 617 West 7th Street, Los Angeles 14, California.

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## A GOOD WORD

Spoken by The Mineral County Independent News of Hawthorne, Nevada

IT is always pleasant when a top government official has a good word to say for American industry. That happened the other day when Secretary of the Interior Chapman addressed a convention of oil men in Los Angeles.

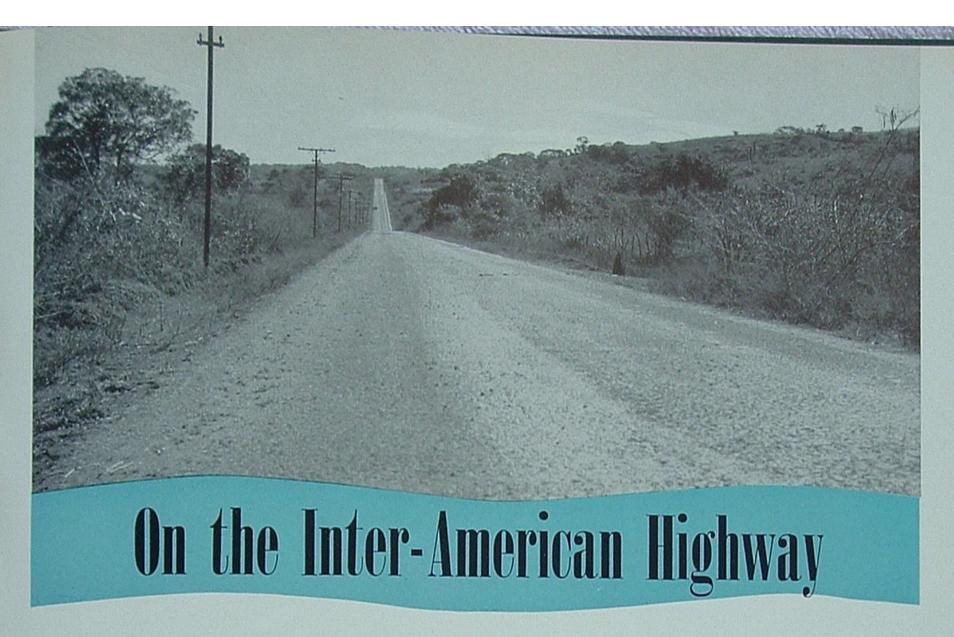
He observed that "belief in the virtues of expanding production has always been a characteristic of the oil industry," and that "the oil and gas fraternity has never been backward in its cooperation with government in developing new methods . . . for producing additional quantities of petroleum products." Later in the same speech the Secretary made this highly important statement "Competition is the basic reason for the productive vigor of the American oil industry."

What makes this particularly significant is that last May the antitrust division of the Department of Justice filed a suit against seven West Coast oil companies charging that they were "monopolists," "conspirators" and a number of other anti-social things. How can that action be squared with the statement of Mr. Chapman? And how can that action be squared with what every consumer knows—that no company has a monopoly of the oil business, that everyone has a wide choice of brands to select from, and that many thousands of concerns are engaged in producing, refining and otherwise handling oil and its products, and that these concerns are in constant, daily competition for business?

As a matter of fact, oil is one of the most competitive of all enterprises—which, as Mr. Chapman so truly said, is the main reason for its productive vigor. Perhaps—and for the sake of the nation, let's hope this is so—government officials are awakening to some of the economic facts of life.

## The Cover

Near the Inter-American Highway, at Chichicastenango in Guatemala, Indians have adopted a form of worship that is a compromise between their native beliefs and those of the Catholic church. The worshipers on this month's cover are seen chasing evil spirits from the church steps by waving small charcoal braziers back and forth.



By Thomas S. Ellis

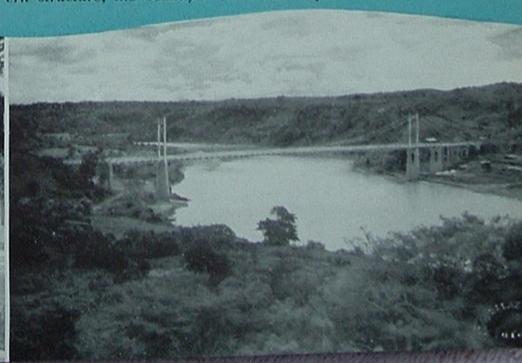
IN 1942, Union Oil Company was the successful bidder for supplying fuels and lubricants to an important military highway project in Costa Rica. The highway, planned by U. S. Army Engineers, was to follow approximately a proposed route of the Inter-American Highway and serve as an overland artery for military supplies to Panama in the event of a successful Japanese blockade. Construction was postponed late in 1943, when American naval power appeared to be regaining a safe advantage. But enough impetus had been given during those months of frantic construction to stimulate hope for a peacetime highway that certainly someday will link all of the Americas.

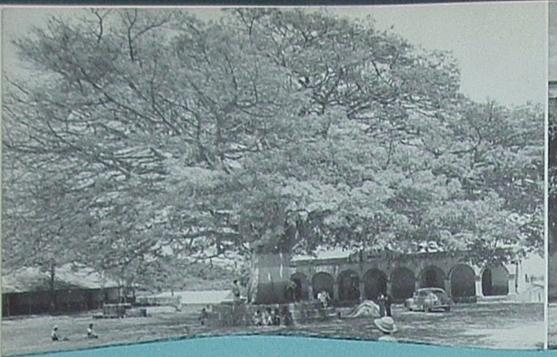
Company products performed remarkably well on this job under construction conditions that have been described as among the world's worst. Partly as a result of successful performance, Union Oil now has an excellent marine terminal at Puntarenas on the Pacific coast of Costa Rica. Through distributors, our products are reaching beyond Costa Rica to Nicaragua, Honduras, El Salvador and Guatemala. And, considering the good representation of "76" service stations already dotting the more populous areas of Central America, we can rest assured that well established Company service will greet the first through caravan of U. S. motorists bound for Panama.

A parked and divided thoroughfare in San Salvador represents the Inter-American Highway at its urban best.

The Lempa River in El Salvador is spanned by this modern structure, the beautiful Cuscatlan suspension bridge.



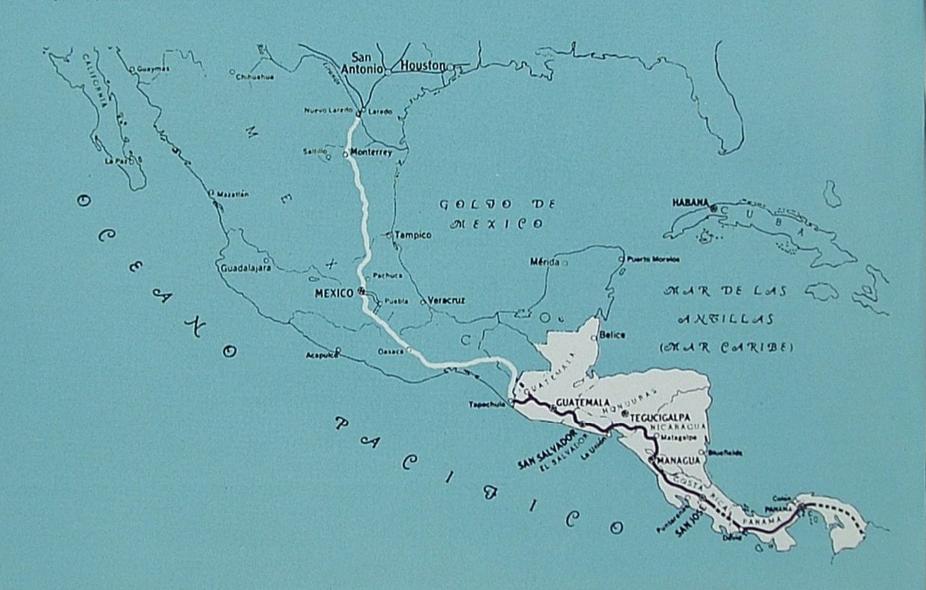




A magnificent tree in the central plaza of Palin, near Guatemala City, may soon awe motorists from the U.S.A.

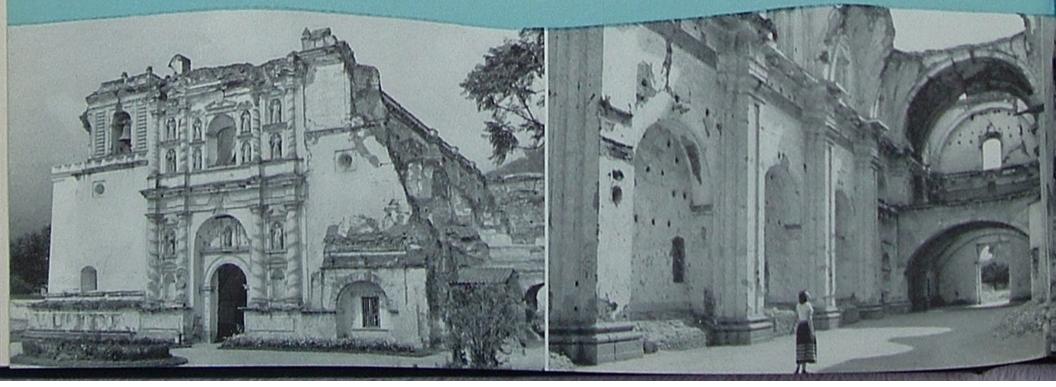


Captain Generalcy's classic palace in Antiqua, Guatemala, was once the headquarters of Spain's governing control.



Another fine example of Spanish architecture at its best is the San Francisco Cathedral in Antiqua, the former

capital of Guatemala. An interior view, below, shows damage inflicted by severe earthquakes in the  $1800^{\circ}\mathrm{s}.$ 



As for the Inter-American Highway itself, you might wisely take a raincheck on any proposed vacation trips over it during the next few seasons. In the course of a Foreign Sales assignment, I have traveled over a great deal of the highway at least once and over parts of it many times. From these firsthand experiences, I believe that a skillful Yankee driver, with a good car, lots of time, and more dollars than sense, could get pretty close to some Central American destination. But the trip isn't to be recommended as a Sunday picnic.

Here are some impressions of the Inter-American Highway today, gained behind the steering wheel of Company Chevrolet No. 9778 on my most recent trip back to headquarters in Panama.

To begin with, Mexico has completed her section of this international route and paved nearly all of it from Texas to the Guatemala border. But a large unfinished section in Guatemala makes it necessary to detour via a Mexican flatcar from Ixtepec to Tapachula. Border red tape and a generous greasing of palms are necessary in this area to keep the wheels of transportation moving.

From Tapachula you sense an increasing ache in the anatomy for those magnificent paved highways at home. Although classed as good, the highway is a dirt road all the way to Guatemala City. It is terribly dusty in the dry season from January to May and does not enjoy a standard of maintenance that is concerned with riding comfort. A choice of two routes takes you either through the highlands and mountains, at elevations up to 12,000 feet, or along the coastal lowlands and over a 5,000-foot plateau to Guatemala City.

This city, headquarters of Ingenieria Commercial Guatemalteca, Union Oil distributors, is one of the picturesque garden spots of Central America. Its delightful climate, turquoise-blue skies, colorful Indians and white, clean streets make it a mecca for tourists the year



An Indian woman of the colorful tribe living near Lake Atitlan would be even more handsome in an oil painting.

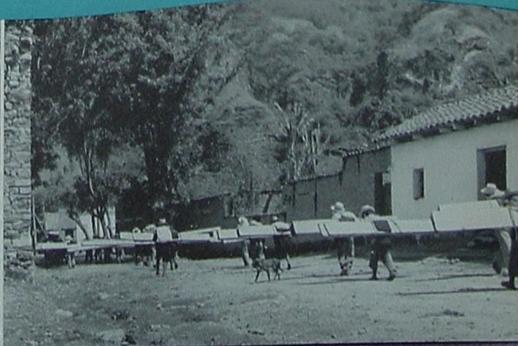
around. Hotels are numerous and excellent. The quetzal is the money medium; it is named after the beautifully plumed national bird and is equal in value to our dollar. The population exceeds 200,000. Days are generally warm and sunny, while nights are very cool or cold. Many wonderful side trips from here include ancient Antiqua, former national capital, which was destroyed in the early 1800's by erupting volcanoes that surround it; Lake Atitlan at Panajachel, where a lovely hotel perches above on the mountainside; and 7,000-foot high Chichicastenango, where an interesting church and Guatemala's most colorful Indians have inspired countless oil paintings.

From Guatemala City it is a 156-mile drive to El

This outdoor market in San Salvador offers a varied assortment of baskets, ropes and other Indian wares.

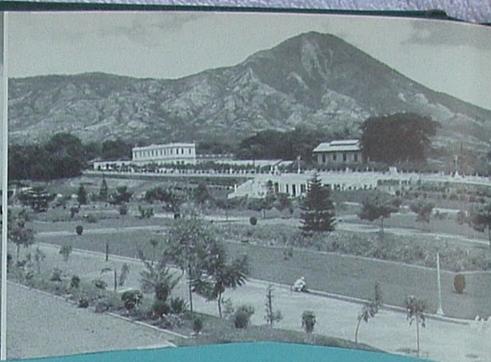
This method of transporting lumber to a building site in Guatemala may soon succumb to paving and good trucks.







At present, many visitors to Central America arrive by airplane at such airports as this fine one in San Salvador.



A beautiful park also borders the Pan-American Highway at San Salvador. A volcanic mountain looms nearby.

Salvador. At the start, good paving leads to a 7,000-foot summit 15 miles from the city. Then dirt road and macadam alternate all the way to the town of Cuilapa, giving motorists almost a striped affection for the Guatemalan Highway Department. Just below Cuilapa, we cross the Esclavos River over a cobblestone, paved bridge, built 450 years ago by the Spaniards. Engineers are always delighted with the remarkable beauty and construction of this bridge. Last year, when a severe storm washed out great sections of road and the river became a destructive torrent, not a single stone of the ancient bridge was washed out of place.

Two mountain ranges and several towns later, we check through Guatemalan customs on one side of a fence and through Salvadorean on the other. With a sigh of relief, we realize that pavement will carry us for several hours across nearly the entire length of El Salvador.

This tiny country, with its dense population of two million and every piece of land under cultivation, presents an abrupt contrast to Guatemala, where great uninhabited sections exist between towns. Guatemalans are predominantly Indian, while the people of El Salvador are largely of Spanish-Indian mixture. The latter are noted throughout Central America for their charm and friendliness. They are also highly progressive and shrewd in business.

Santa Ana, second largest city in El Salvador, is reached after a 50-minute drive from the border, and an hour later we enter San Salvador, the capital. In both cities many modern buildings are under construction, and residential sections are almost palatial, reminding one to a degree of prosperous California suburbs. The principal sources of wealth we see on many sides are coffee and cotton. El Salvador ranks behind only Brazil and Colombia as a world leader in coffee pro-

duction. The medium of exchange is the colon, named in honor of Cristobal Colon, or Christopher Columbus to us; the rate of exchange is 2.50 colones for one dollar. The Salvador Machinery Company, with offices and showrooms in the business heart of the capital city, are Union Oil distributors for the entire country.

A welcome night's rest at the Hotel Astoria in San Salvador prompts an early start next morning toward Honduras. Our good paving holds out across rich farmland and lovely valleys, over a fine suspension bridge across the Lempa River, past a 17-million-dollar hydroelectric project under construction, and across rich acreages of henequin, a cactus-like member of the Yucutan plant family, from which sisal bags are made for coffee. We learn that El Salvador is the only country producing and manufacturing its own coffee bags, other countries purchasing their supply mainly from India.

Then a sudden jolt summons all eyes to the road and all hands to the steering wheel, for we've run out of asphalt again. It's 40 rough-riding miles to the border.

Checking out of El Salvador and into Honduras, we look distrustfully at the gravel-covered highway ahead, but find it smooth enough to permit a few side-glances. In days gone by, we used to spend most of our Honduran time satisfying passport requirements in nearly every town. Fortunately, this tiresome requirement has been discontinued, although you still must give your name, destination and license number to the soldier on duty. Unless you are blessed with a Spanish name, you will save time and embarrassment by writing it down rather than trying to pronounce or spell it.

Strangely, Honduras appears to be a dry, sparsely covered country. Tegucigalpa, the capital and head-quarters of Walter Brothers, our distributors, is four hours' drive from the Inter-American route. It has so

little rainfall that surrounding hills barely support a sagebrush-like growth. However, the climate is one of the most pleasant to be found in Central America. Buildings and streets are constructed with an unusual stone, which is sawed like wood out of deep mountain caverns. The blocks harden when brought out in the open and are then shaped and polished.

It is from the north coast of Honduras that the United Fruit Company ships a lush harvest of bananas. In fact, the country's economy depends to a large extent upon this export. But great mineral wealth is known to lie under Honduran soil, one large gold mine having produced steadily since 1894. The U. S. half-dollar circulates here as a medium of exchange and is called the *lempira*. We were unable to obtain more than two for a dollar.

Beyond the Choluteca River, the road climbs upward through country not unlike parts of Arizona and Texas. Possibly the best constructed part of the Inter-American here passes through beautiful forests of pine trees and up to a wind-swept point where, in one immense panorama, can be seen the Gulf of Fonseca, the shoreline of El Salvador, and the mountains of Nicaragua. Three countries lie before you like a massive contour map done in greens and deep blues.

On reaching the Nicaraguan border at 12:30 p.m., siesta time, we find it necessary to pay the officials overtime or wait until two o'clock. Twelve miles on, there is another stop to have the baggage checked. A third stop is made later for the benefit of Army authorities. But all such annoyances are easily forgotten in the presence of smooth sailing and beautiful mountain scenery.

At Managua, on the shores of Lake Managua, we pay a business call on the Nicaragua Machinery Company, Union Oil jobbers, and in the evening enjoy a cool drink with our good friend Luis Palazios, owner-manager of the Lido Palace Hotel. He is impressed with our having made the 350-mile drive from San Salvador in 11 hours, averaging better than 40 miles an hour. And when he hears the Chevrolet motor running smoothly after 18,000 miles of such travel, he becomes an interested listener to the story of Triton Motor Oil.

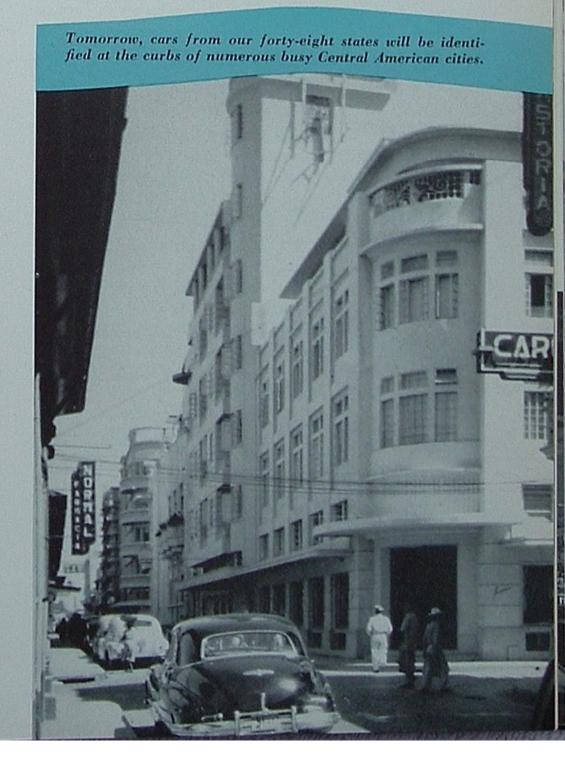
A short distance southeast of Managua is Lake Nicaragua, oftentimes proposed as the route for a second Atlantic-Pacific canal. Years ago the San Juan River was navigable from this lake to the Caribbean Sea. Sharks in great number swam from salt water into the lake to feed. Silt and sand finally closed the river, forcing the trapped sharks to adjust themselves to life in fresh water. Most probably the man-eating sharks found in Lake Nicaragua today are the world's only fresh water species.

Twenty minutes out of Managua next morning brings us to a cool 3,000-foot height overlooking the shimmering Pacific. Here pavement again gives way to dirt as far as Pena Blanca, and from there the road deteriorates into a rarely passable trail all the way to Puntarenas, Costa Rica. Cars that brave this trail even in dry season are generally towed to the nearest junkyard. However, road construction along this section was scheduled for commencement early in 1951.

From Puntarenas southeastward, a good road proceeds to San Jose, capital of Costa Rica, and on to San Isidro del General. Beyond that point few if any motorists, including oil men, have ventured by automobile. Nevertheless, funds have been provided with which to push through a Costa Rica-Panama link.

This writer has little doubt but what the first men to wade across unfinished portions of the Inter-American Highway, order pad in hand, will be Union Oil representatives. And behind them will come Union Oil trucks.

In a future issue, ON TOUR will describe the Company's marketing activities in CostaRica and Panama.





## WAGES ARE RAISED TO GOVERNMENT CEILING

Effective March 1, 1951, rates of pay for employees whose services had not been terminated prior to March 15, 1951, were increased to the 10 percent allowable (based on January 15, 1950, wage and salary rates) under Stabilization Regulations. Individual increases, therefore, ranged from 0 per cent up to 3.77 per cent, depending upon the individual increase granted on September 16, 1950.

Employees represented by an authorized bargaining agent, marine seagoing personnel, employees in foreign service, and employees receiving a salary in excess of \$1,060 per month were not included in this authorization.

For some time it has become increasingly apparent that it would be of mutual advantage to all concerned if every employee would supply the Company with evidence of his or her birth date. This would establish each employee's correct age and would assist the Company in administering its various benefit plans. Such evidence would be beneficial to the employee because it would assure his having established satisfactory proof of his age prior to the time he is obliged to do so in order to obtain Social Security or Retirement Plan benefits. Birth certificates and similar forms of evidence are usually much easier to obtain at younger ages when memories and records are fresh.

Accordingly, there is being prepared a program requesting submission by employees to the Company of birth certificates, or other satisfactory evidence of age where birth certificates are not available. Details of the program will be worked out by this department, in cooperation with the Comptroller's Department, and an announcement of procedures will be made in the near future.

from W. C. Stevenson

• MANUFACTURING

Production of lubricating oil at Oleum Refinery is at a record high as a result of minor equipment changes and improved operating techniques.

The complexity of large production units in a modern refinery, coupled with high operating temperatures and pressures, requires periodic shutdowns of these units for inspection, repairs and replacement of worn equipment. Based on experience and inspection reports, the shutdown date of a unit for maintenance can be predicted with reasonable accuracy. These scheduled shutdowns are carefully planned many months ahead to permit the purchase and delivery of materials, to coordinate the work schedules of many craftsmen, to estimate the costs involved, and to coordinate the production schedules of other producing units.

The importance of carefully planned maintenance shutdowns of these multi-million-dollar units is fully realized. Unnecessary delays in putting a unit in operation reduces availability of products and in most cases affects the operation of other integrated production units within the refinery.

from K. E. Kingman

• FIELD The drilling of wildcat wells on new prospects is one means, if the venture is successful, of adding to reserves of crude oil. Another means of exploration to add to reserves of crude oil is that of extending the limits of production in proven fields or exploring for deeper horizons.

In the West White Lake Field in Vermilion Parish, Louisiana, Union-State 540 No. 7-A, an old well with a total depth of 7,354 feet, was deepened recently and is now drilling below 11,000 feet. This is one of the nine wells drilled at West White Lake, which have developed only small production. Subsurface data have shown that No. 7-A crossed a fault at 9,400 feet, and, in various sands below 9,500 feet, 170 feet net of gas-condensate

sands have developed. This is the greatest thickness of pay sand that has yet been found in any well at West White Lake, and may be the forerunner of a productive area of considerable magnitude on the southwest side of the West White Lake Field.

#### from Sam Grinsfelder

RESEARCH

Tests have been completed which indicate that natural gas can be employed to remove oxygen from oil field brine used in waterflood injection wells. The oxygen removal process is both efficient and inexpensive. Since oxygen is often the cause of costly corrosion of casing and tubing, its removal from the brine should minimize expensive well repair.

The Research Department has set up a so-called "hotlaboratory" where radioactive isotopes are used to solve various problems of interest to the oil industry. One of our current projects is the use of a radioactive tracer, in conjunction with other new techniques, to study flow problems related to the production of crude oil. Studies of this type are expected to yield data of considerable value to the reservoir engineer in his efforts to realize maximum production from a field.

from C. E. Swift

- PIPE LINES

  Modernization of Antelope Station was completed and the new station placed in operation during February. The new crude oil burning diesel engines and quintuplex pumps are operating very satisfactorily on the main line. Old steam powered mainline pumps are being dismantled and will be used as spare parts. Other facilities will be removed for disposal.
- MARINE

  Preliminary work in connection with the construction of our new tankship at Sparrows Point, Maryland, is now in full progress. Meanwhile the procuring of steel and sub-assembly of certain sections is progressing according to plan. Actual laying of the keel is not expected prior to June, at which time construction of the ship will be at a relatively advanced stage.

from R. D. Gibbs

PURCHASING Continuing shortages and higher prices make it necessary that we review our operations in connection with reclamation and substitution, and elimination of waste.

Under normal conditions, repairs and reclamation are often more expensive and less satisfactory than the purchase of new items. With scarcities and governmental restrictions, the use of a repaired valve or a reclaimed fitting may be the only recourse. Valves, fittings, pipe, containers, pumping units and well-head equipment are only a few of the items which can be repaired or reclaimed and reused.

from E. H. Weaver

MARKETING Key representatives of Refinery Sales conferred at Head Office during the week of March 5 for the purpose of reviewing the Eastern marketing program and projecting plans for the future. These plans contemplate the employment of 50 new salesmen to assist in accelerating Eastern market penetration through our entry into 24 large cities within the forthcoming four months. There are now about 3,000 dealers in the East and Middle West marketing our lubricating products, and it is expected that this number will be materially increased under this new concentrated program.

Military petroleum requirements have reached gigantic proportions with a sizable percentage of the total coming from West Coast oil companies and Union has supplied its share of the military needs. Of the products supplied by all West Coast oil companies during 1950, Union contributed 18 per cent of the lubricants, 29 per cent of the fuel oil and 10 per cent of the Navy diesel fuel. 1951 sales are running in excess of the 1950 rate.

Sales in the foreign market likewise continue to grow. Through the efforts of our distributor, Chadwick, Weir & Company, Ltd., an associate of the famous Bank Line shipping organization, a shipment of approximately a quarter of a million pounds of Unoba grease was made to Uruguay last month. Our distributor in Japan has recently taken large shipments of United oils and has also been instrumental in securing for us bunkerings and lubricant requirements of Japanese dry cargo steamers calling at Pacific Northwestern points.

During the week of March 19 a training program prepared by Head Office Sales Services was instituted in each territory and in the Glacier Division. The purpose of the program is to afford personnel the opportunity to review specifications and applications of lubricating greases and to provide stimulation to the end that we may acquire additional grease business.

Our growing penetration into the domestic wax market is, in part, attributable to the development of new grades of wax which have promoted diversified utilization. Among types recently developed is one for use in the paper processing industry in connection with bread wrappers and waxed paper.

"Scotch-light" signs have proved to be so eye-arresting that arrangements have now been made to participate with dealers along highways in remote areas in the erection of 200 such signs, advising travelers that they are approaching locations at which Union Oil products may be obtained.

from Roy Linden





## Driver Milford Smith of Anaheim introduces one of our most remarkable customers . . . .

# KNOTTS





Narrator Milford Smith, top photo, points toward picture of roadside stand where Knotts sold first berries.

Refusing to see his guests wait idly in line for chicken and pie, Walter Knott built an entire village of attractions to entertain them, from left: The Main Street of Ghost Town, authentic reproduction of an early western mining town: The Gold Mine, where visitors can borrow a stake of tools and pan real gold: A Chapel by the Lake, containing Paul V. Kleiben's excellent painting, "The Transfiguration: The General Store, selling everything from horseshoes to licorice and sarsaparilla.

The Silver Dollar Saloon, whose hardest stock is boysenbery punch; and the Indian Room, steak headquarters. 66 HERE WE ARE," says Smitty as he brings his tanktruck to a halt among the surprising structures now known as Knott's Berry Farm. "This is what has happened to the little 10-acre berry patch Walter Knott started cultivating back in 1920. Hard to believe, isn't it?"

It is hard to believe. The original berry patch has disappeared completely. In its place is a unique village—a sort of California Gold Rush ghost town, but certainly not deserted. Adobe walls and weather-beaten frame seem bent on hiding the modern interiors of a flower stand, a fruit market and several shops containing dress, gift and handicraft merchandise. Right in the heart of everything are, of all things, a volcano and

an equally unprofitable gold mine. Round about are a spacious horse show arena, 20 acress of parking area, warehouses and maintenance shops and, beyond these finally, the farm. Actually it takes a bit of inquiry and exploration to find what most people come here looking for—a place to eat, incidentally one of America's best and most renowned eating places.

Walter Knott's biography is typically an American one, meaning that it is the story of an ordinary man who used the opportunities of this blessed land to achieve extraordinary success. Forty-three years ago, at the age of 19, he invested mostly strength, ambition and a high school education in 20 acres of leased vegetable land at Coachella, California. Two years later, he was back home in Pomona, probably to court and marry his high school favorite, Cordelia Hornaday, but the soil continued to beckon Walter; within three years he and his wife were homesteading a tract near Barstow, which turned out to be productive mostly of children, experi-

# SBERRY FARM







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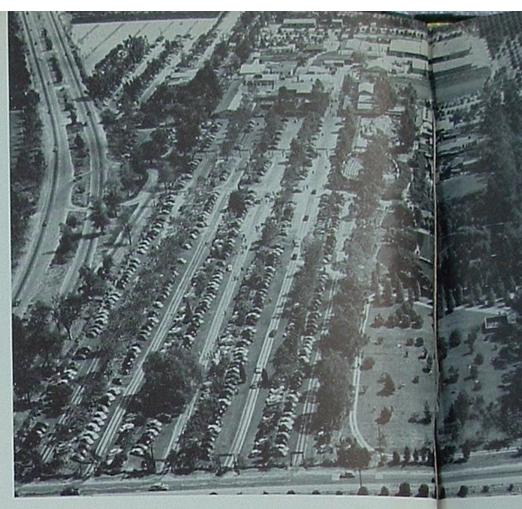
ence, hope and courage. With little else saved, they moved at the end of another three years to better vegetable-growing land near Paso Robles. Here from 7½ acres were wrested, through sheer hard work and thrift, savings of \$2,500 before Walter started looking beyond for greater opportunities. It was 1920 when the Knott family moved to the 10-acre berry farm in Orange County.

Walter apparently liked everything about berries except their small size. So, when a Department of Agriculture representative came inquiring at Mrs. Knott's roadside fruit stand one day about a certain Rudolph Boysen who had reportedly developed a new and larger berry, Walter became all ears. He may even have been the first to find Rudolph Boysen, then superintendent of parks in Anaheim. At least it was Walter who rescued remnants of a few plants from Boysen's experimental orchard and obtained the latter's permission to do what he could with them. The originator had long since abandoned his experiments; he couldn't remember for certain but believed that the boysenberry was a cross between loganberry, blackberry and raspberry.

At the first picking in 1933, the Knott family plucked, not only the finest and largest berries they had ever seen, but seeds of a new ambition. Sixty of the new boysenberries filled a one-pound basket, as contrasted with up to 160 blackberries required to equal the same weight. Walter envisioned a boysenberry yield of 5\(^3\)4 tons per acre—nearly twice their best previous production of blackberries and youngberries—and soon saw his estimates come true. Mrs. Knott, wondering if passing motorists might not buy a few three-pound, home-baked boysenberry pies at 50 cents apiece, was obliged to call on her neighbors a few weeks later to help her bake several hundred pies a day. Even the world's unfortu-

Mr. and Mrs. Knott, still hard at work, now devote their green thumbs and limited spare time to inside farming.





Knott's Berry Farm as it appears today to flying patrons, fined Arabian

nates who lived outside this boysenberry Eden were not denied the privilege of partaking, for in due time Walter was shipping the new plant stocks to 48 states and a score of foreign lands. The world had started beating a path to Knott's Berry Farm.

From that time on, things really began to roll. Mrs. Knott and her family and neighbors built a small dining room and added fried chicken to the roadside temptations. Southern Californians loved it and told their neighbors. Adjoining land was added, five or more acres at a time. Dining rooms and kitchens were doubled,

The main kitchen, supervised by Mrs. Knott, is a model of organized efficiency when 11,000 guests come to dine.



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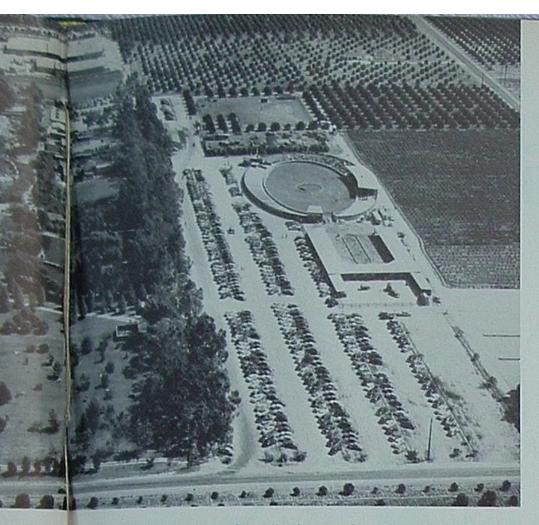
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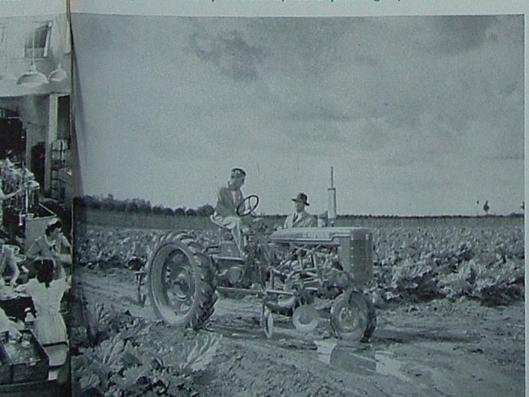
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then redoubled in size. Nearby colleges, farms and towns were solicited to furnish a small army of helpers. Still there was a waiting line of people, their mouths watering for fried chicken and boysenberry pie.

Then Walter's innate gratitude and consideration for his guests inspired something entirely different. Instead of obliging folks to wait in line, he asked, why not invite them to wander through a pleasant garden among beautiful rocks and flowers? Or show them how gold was panned back in '49. Or let them step back through the pages of history into a genuine old western ghost

In addition to boysenberries, Walter Knott has developed a cherry rhubarb, here photographed in February.



town. Give the city kids a glimpse of real buffalo and wonderfully trained Arabian horses. Maybe even rig up a volcano for their entertainment. And it all came to pass just as Walter had imagined—or perhaps a trifle more so.

Today, the hosts of the berry patch can glance at a calendar, hold a moistened finger to the early morning breeze, and tell in advance how many guests to expect for dinner. On a busy holiday, the cooks are advised to prepare 2,500 chickens, 1,800 steaks, 2,000 boysen-berry pies, 1,000 gallons of coffee, plus all of the soups, appetizers, bread, vegetables and trimmings needed. As many as 500 employees gather from miles around to feed the multitude.

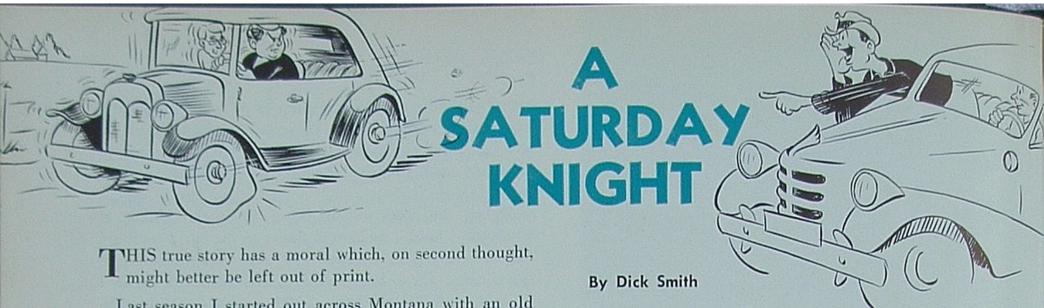
But sometimes even these enormous preparations prove inadequate, for every year new attendance records are being set. Last year, Father's Day unexpectedly slipped one over on Mother's Day, always the record breaker in previous years, and chalked up 11,346 dining guests between noon and shortly after sundown. Back in 1935, Cordelia Knott would have swooned at the thought of such a cooking chore.

"I guess most of us," concludes Smitty, "would count up our savings after so many years of hard work and settle down to retirement. Not these folks, however. Mrs. Knott and her five children, all now married, are still on the job day after day, catering pleasantly to the thousands of people who are privileged to enjoy the bounteous fruits of a free land.

"As for Walter Knott, his next ambition is to restore a real old mining town out on the California desert, so that America will remember the foundations of hard work and common sense that made our modern way of life possible. He's already purchased the site and started rebuilding."

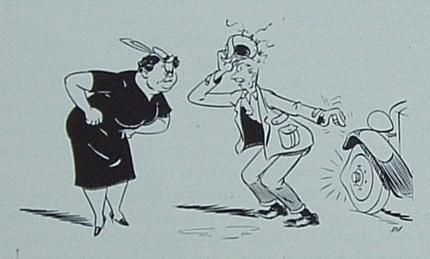
Self-sufficient to the Nth degree, the Knott farm is fully mechanized and boasts a "7600"-powered fire engine.





Last season I started out across Montana with an old school friend of mine on a sorely needed fishing trip. A few miles before reaching Augusta, we passed a rather ancient car, one of whose tires appeared dangerously near the blowout stage. We slowed down and waved the driver to a stop.

Hardly had the old car stopped before its weak tire was blasted into junk by the expected blowout. We had undoubtedly prevented a wreck; but the driver, a very portly lady, appeared a trifle indignant and demanded to know why she had been stopped.



It took some explaining to convince her that we had prevented rather than caused a catastrophy. However, at length she thanked us graciously and returned to her car, where waited another lady, too old to be of any assistance in changing the flat tire.

Of course, despite the fishing time involved, we courteously offered our services together with a jack and tools, all of which she lacked. And I soon found myself with an almost made-to-order sales opportunity. Between struggles with the infernal lugs on that left front wheel, I introduced myself as "Smith of Union Oil Company" and glowingly described the merits of our house brand oils and gasolines.

"Now isn't that a coincidence, Mr. Brown," the lady once interrupted. "I have a dear relative by that same name who works for Phillips Petroleum Company. Could it be that . . . "

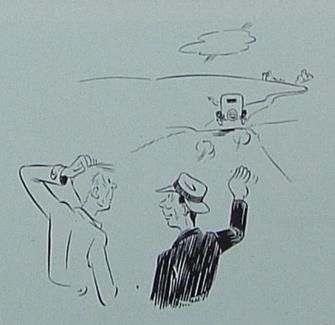
"No, ma'm," I corrected, "my name is Smith and I work for Union Oil Company, marketers of '76' Gasoline. Phillips sells another brand called '66'"

"Of course, how absent-minded of me! But I just can't keep numbers straight and there are so many Smiths and Browns and Joneses."



After a dozen exchanges and oilings of lugs and a difficult time getting the worthless tire secured in its proper place, I arose from my labors with a feeling of warm if not pleasant satisfaction. After all, being fishers of men or women has its compensations, and surely I had done a bang-up job of bagging another customer for Union Oil Company.

Believe me, the lady was most appreciative and kind. She shook hands, smiled and thanked me again and again very graciously. And her words, as she took off down the road with my best wishes, still resound: "Goodbye, Mr. Jones. You can bet that from now on I'll always use Phillips '66' products."



# "76" Views of Refining

69. Administration With our refining job now completed, we would be overlooking a most important factor by failing to mention the role played by skilled men and women in this great industry.

The Administration Building, right, is headquarters of Los Angeles Refinery. Here, managers and supervisors, with many years of technical education and refining experience, are given monthly quotas of refined products to meet. It becomes their responsibility to see that each commodity is produced in the quality and quantity specified, that surpluses and deficiencies are held within rather narrow bounds, and that loss and waste are kept to a minimum. Each supervisor, besides having



complete technical mastery of the unit in his charge, must understand the work and problems of other departments to which his activities are geared. Besides the numerous operating units we have described previously, are others concerned with such non-operating responsibilities as new construction, maintenance, personnel, Fire and Safety, and warehousing. Greatest coordination is necessary.

70. Tankship One of the swiftest and most economical means of transporting petroleum products from refinery to market is the tankship. Union Oil's WALLACE L. HARDISON, a wooden sailing schooner built in 1888, was the first tanker to be built and operated on the Pacific Coast. She was followed by a long list of larger and more efficient vessels that have carried petroleum products in peace and war to every quarter of the globe.

The L. P. ST, CLAIR, below, is one of seven large vessels comprising Union Oil's present tankship fleet. These ships, with cargo capacities up to 140,000 barrels each, carry refined products regularly to the Hawaiian Islands and coastwise to many ports between Alaska and Chile in South America. It is the great economy of transportation provided by these ocean-going carriers that keeps gasoline prices in remote areas fairly equal to those paid near refineries or in the oil fields.





## 71. Products Pipeline

siderations also influence petroleum transportation men who are responsible for moving large quantities of refined products across land. An installation that has proved most successful in transporting natural gas and is proving adaptable to refined liquids is the products pipe line. Installation costs are high, but low operation and maintenance costs compensate for the investment.

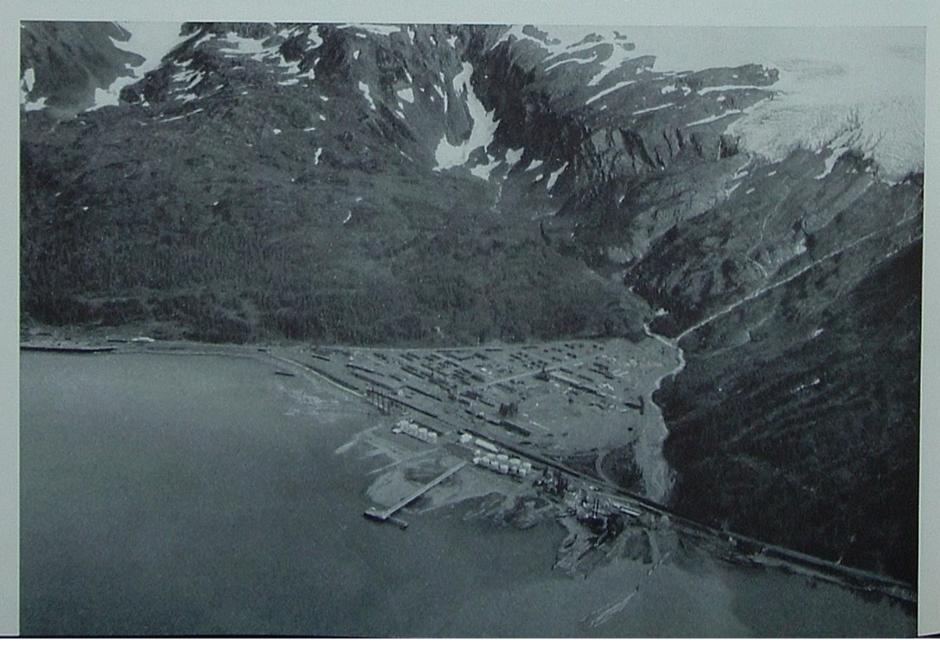
Econom-

At left is seen a gasoline pipe line emerging from the ground at Roscrans Terminal, at the end of a 15-mile journey from Los Angeles Refinery. Equipment in the foreground checks the gasoline for possible contamination before it continues on into terminal storage.

## 72. Distribution Terminal

At the end of each products pipe line or near centers of population served by water-borne transportation are located blocks of storage tanks where relatively large quantities of refined products can be accumulated. From these, gasoline and other bulk commodities, sufficient for the needs of all Company-supplied consumers in surrounding areas, are distributed. A loading rack where transportation vehicles are filled, a warehouse for packaged commodities, an office and a garage usually comprise the other installations, collectively known as a distribution terminal.

Below is an airview of Union Oil Company's distribution terminal at Whittier, Alaska, where enough refined oil must be stored to supply dependent areas until the next tankship arrives. This terminal employs tankcars in transferring bulk products to nearby Anchorage and to the busy Alaskan city of Fairbanks, many miles inland to the north. Similar terminals dot the Pacific Coast nearly to the tip of South America.



73. Tankear A veteran transportation servant that is still success-bidding for its share of the oil business is the railway tankear, right. In addition to being favored for long gasoline hauls in a number of localities, tankears serve most satisfactorily in moving hot asphalt from refineries to highway hot-mix plants or construction sites. Insulated tanks and steam coils keep the asphalt from hardening in transit. Union Oil owns over 600 tankears and leases many more.





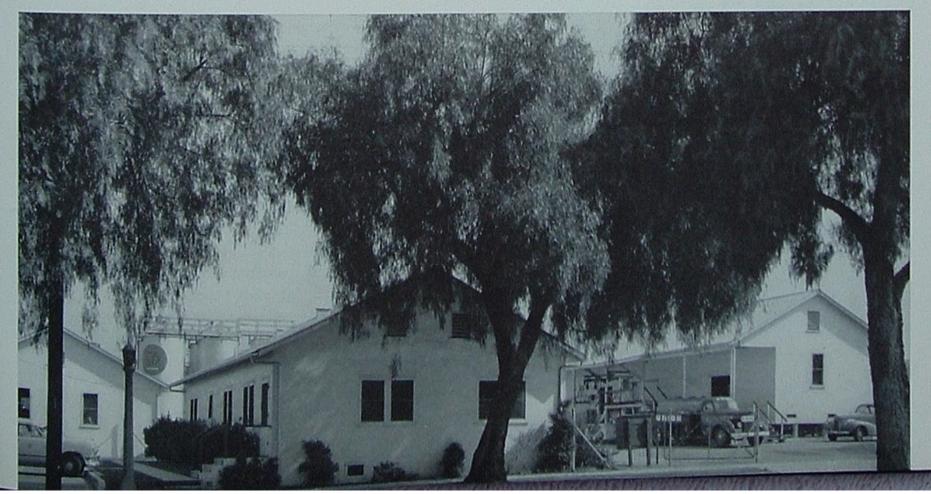
## 74. Motor Transport is the mean

by which most bulk petroleum products find their way from distribution terminals, over our vast system of roads and highways, to within convenient reach of all consumers. Carrying up to 8,000 gallons per load, these vehicles move night and day, summer and winter, and across all types of terrain, delivering petroleum products as far as several hundred miles from the terminal supply point.

At left are some of the transport units assigned to our Rosecrans Distribution Terminal. They serve the Los Angeles area, wherein is located the world's largest concentration of automobiles and service stations. The Company's fleet of 50 motor transports is augmented by an even larger number of common-carrier units.

75. Marketing Station Adjaton to nearly every western town or city is a neatly fenced enclosure normally containing several storage tanks

to nearly every western town or city is a neatly fenced enclosure, normally containing several storage tanks, an office, a warehouse and garage. Located on a railway spur or highway or both, these installations, called marketing stations, receive their petroleum supplies either by rail or motor transport. The function of such plants—Riverside Marketing Station, below—is first to find markets for all types of petroleum products, and then to keep every customer adequately served and supplied.





76 UNION Service Station functions of course require no elaboration on our part. Every-

body is familiar with their operations, products and services. However, in concluding these "76 Views of Refining," we should like to call attention, by way of summary, to a modern industrial miracle.

This series has intimated how, after costly exploration and drilling, oil is pumped from thousands of feet underground how it is cleaned and processed at gas plants or by means of other oil field equipment—how it is transported via pipe line

and tankship hundreds of miles to refineries—how it is refined, blended and tested in scores of the largest and most expensive units men have ever designed—and how it is shipped and trans-shipped across additional hundreds of miles to market.

Yet, whether bought by the barrel, pound or gallon, oil products are among the least expensive we can buy, varying ex-tax from ½ cent a pound for fuel oil to about 3 cents a pound for gasoline. In contrast, bread costs about 20, milk about 15, lumber about 12, and an automobile about 80 cents a pound. Gasoline costs less even than bottled distilled water in many cities. But, when we ask for five gallons of gasoline at the Santa Barbara and Crenshaw service station, above, in Los Angeles or at others bearing the familiar "76," the courteous salesman is anxious to offer many other services without extra charge. Only our priceless American freedoms and competition could have made such an economic miracle possible.

## MEET THE AUTHORS

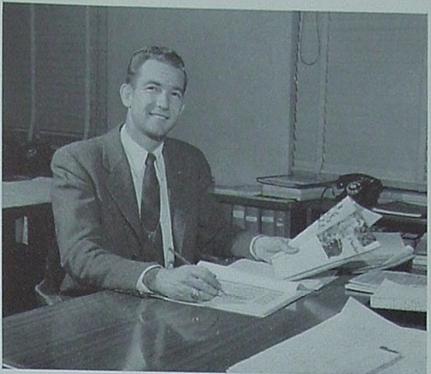
WITH our "76 Views of Refining" now completed, it seems an appropriate time to introduce three of the Union Oil people whose talents were largely responsible for its preparation.

Roy M. Barnes handled all journalistic research work in connection with refining processes and prepared the original text from which ON TOUR's abbreviated and more simplified descriptions were taken. He is a graduate of the University of California at Los Angeles and holds a Master's degree in chemical engineering from Columbia University. During World War II, he served for three years in the United States Navy. Since coming to work for Union Oil in 1948, he has served in several engineering capacities at Los Angeles Refinery and Head Office. Most recently he was appointed an engineer with the Process Group at Oleum Refinery.

Dr. Orville L. Polly assisted in an advisory capacity in the preparation of material having to do with atoms and hydrocarbon molecules. He received his Bachelor's and Master's degrees from Brigham Young University and his Doctoral degree from Johns Hopkins University. Joining the Company in 1938 as an assistant chemist at Wilmington, he progressed through a number of Research assignments to his present responsibilities as a Group Leader. The interesting THINGS on his desk at right are atom models of his own design and workmanship, which have engaged the interest of many scientists.

Robert C. Hagen, assistant editor of ON TOUR, created all of the atom and hydrocarbon drawings that appeared in this series, modified all sketches and cross-sectional drawings of equipment portrayed, and prepared the photographic layout. He studied at the Chicago Academy of Fine Arts; was employed for four years as an artist at the Walt Disney Studios in Burbank; and spent two years in photo engraving work before joining Union Oil in 1948. His military service record to date includes four World War II years in the U. S. Navy.

Most photographs used were products of Will Connell and Rod Daley, topnotchers in their photographic fields.



Roy M. Barnes



Dr. Orville L. Polly



Robert C. Hagen



## **Union Oilers**

90 YEARS OF PIPE LINE

is the combined service record of, left to right, William M. St. Clair, oil accountant at San Luis Obispo, Ernest J. Smith, senior engineer at Summit Pump Station, and Walter M. Evans, senior engineer at Antelope Pump Station. The three men, with 32, 33 and 25 years' service respectively, along with Hugh B. Denio of Buttonwillow Pump Station, reach retirement age this year.

from N. T. Ugrin

SPUDDING IN

Union Oilers nearly dominated ground-breaking ceremonies for the new Thomas B. Moffitt Elementary School in Norwalk, California. Earle Moffitt, extreme right, a Company salesman in that area, and his two brothers, appearing with him, were honored in memory of their late father, for whom the school will be named. Thomas Moffitt was superintendent of schools in Norwalk for 23 years and was regarded as one of the community's outstanding citizens.

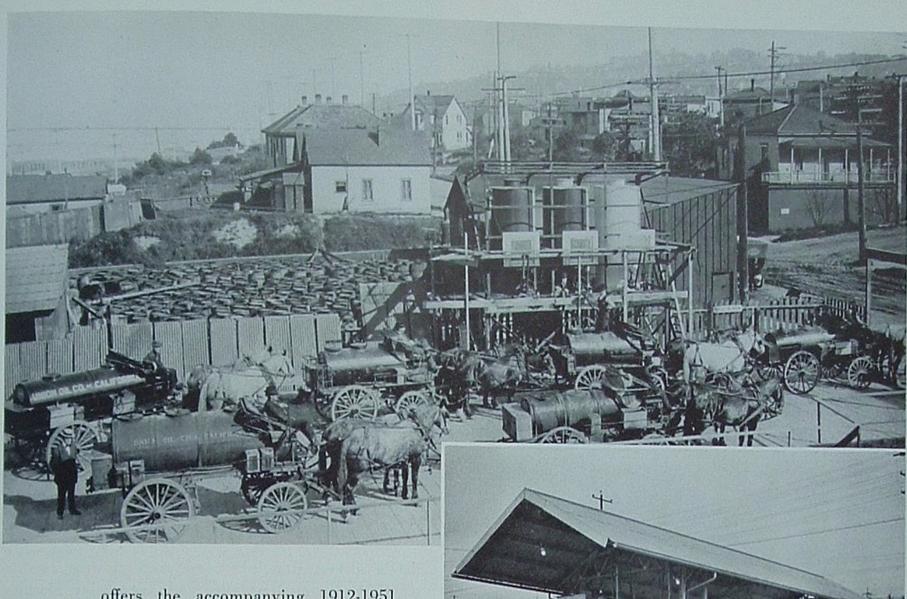
Another Company man who participated in the ceremonies was James H. Garrison, retail representative, shown below lifting the first shoveful of earth as construction of the \$650,000 school began. He devotes much of his spare time to public service and is serving this year as president of the Norwalk School Board. His



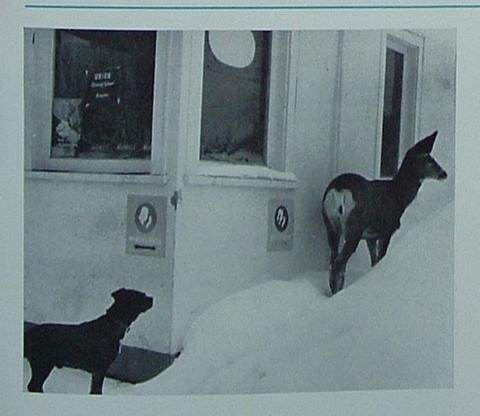
"spudding in" gesture is actually the beginning of a \$6,500,000 project that will result in the addition of 14 new schools to this rapidly growing community.

from Dave Colville





SEATTLE offers the accompanying 1912-1951 photo contrast. Six teams and tankwagons found it a full day's job to deliver 2500 gallons of oil. Then, a trip to West Seattle with 100 gallons of kerosene and 200 gallons of distillate took 12 hours. Today's modern semi, carrying more than 6,000 gallons, can make the same run in 20 minutes, traffic permitting. Seattle may hit close to 30 million units in 1951.



#### "FIRST DOOR TO YOUR LEFT,"

quoth the dog as a graceful

lady visited one of our service stations in Republic, Washington. Our consignee at that point is Mrs. Pauline Thompson—which feminine clue might explain the exceptionally high preference there for Union Oil services.

Early this winter, the deer wandered down from the hills with ideas of becoming a permanent resident. There were a few arguments to settle with the dogs, but now they have learned to keep at a respectful distance.

The uninvited guest is rarely a problem at mealtime. She cats nearly everything offered, not excluding any known brands of lighted cigarettes. Likely as not in the spring, she'll fill up with "76" and really take off.

from Gudrun Larsen

## Last But Not Least



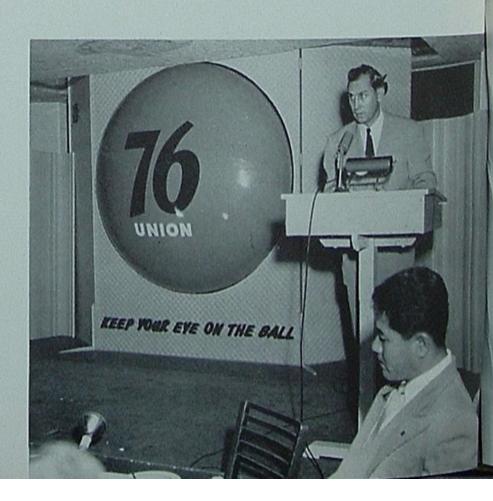


Guests, above, at Honolulu's 1951 Sales and Advertising Meeting, were welcomed in the traditional HULA fashion before District Sales Manager Robert H. Rath, right, brought the meeting to its business climax. Awaiting his turn at the speaker's rostrum was Ben Ono, right, former member of the most widely decorated U. S. infantry division in World War II, now our retail representative.



FROM distant Honolulu come such glowing reports of 1951's concluding Sales and Advertising Meeting that ON TOUR is pleased to add this postscript to our last month's description of mainland meetings.

Union Oil dealers and employees of Hawaii, 225 strong, gathered in Honolulu at the Kewalo Inn the evening of February 23rd. They dined regally on some of the island's most palatable fare and, going the Pacific Coast meetings one better, enlisted Renny Brooks and his entire Hawaiian comedy troupe as entertainers. No less a beauty than Elsa Edsman, Miss Honolulu of 1949 and 1950, added glamour to the now famous "76" advertising ball.





Official host of the evening was District Sales Manager Robert H. Rath. He was assisted on the speaking platform by two capable retail representatives, Ben Ono and Jack Kummer. As evidence of the perfection they attained after only a few rehearsals, a visiting guest described the meeting as being even better than the one he had attended in Los Angeles. The hilarious Renny Brooks and his singers and dancers, currently the rage of Hawaii, proved so popular that encore performances were demanded before the guests would leave.



Comedian Renny Brooks, above left, entertained with a skit that is currently tickling the ribs of Honolulu cafe society.

Above, Jack Kummer, with the aid of Miss Honolulu, gave dealers a glimpse of the Company's 1951 advertising plans.



### ERVICE BIRTHDAY AWARDS

#### Forty Years

Czarnicki, John, Northwest Territory

#### Thirty-Five Years

Frampton, Fred F., So. Div. Pipeline

#### **Thirty Years**

Davis, Wallace R., So. Div. Field McCarty, Harold L., Valley Div. Field Meade, Clark S., H. O. Purch. Page, Thomas J., So. Div. Field Russell, Earl L., So. Div. Field Stewart, Cameron C., So. Div. Field Stine, Ray F., H. O. Comptroller's

#### **Twenty-Five Years**

Abernathy, C. H., L. A. Refinery Mfg. Anderson, C. H., Valley Div. Field Barton, Eustace K., So. Div. Field Buskirk, Tom E., So. Div. Pipeline Cantril, Frank A., So. Div. Pipeline Carpenter, F. T., Maltha Refinery Mfg. Collier, Frank B., Oleum Refinery Mfg. Crawford, C. W., Maltha Refinery Mfg. Devlin, Thomas, No. Div. Pipeline Dickerson, G. W., Oleum Refinery Mfg. Drake, Walter L., So. Div. Pipeline Evans, Walter M., No. Div. Pipeline Foster, Vernon B., L. A. Refinery Mfg. Francis, Antonio, Oleum Refinery Mfg. Glenn, Arthur E., No. Div. Pipeline Hulbert, Vivian D., Northwest Territory

#### APRIL, 1951

Ingram, Evert T., So. Div. Field
Jones, Fred S., So. Div. Field
Keegan, Hugh, So. Div. Field
Krogsrud, Sverre, So. Div. Field
Kunkel, Joseph M., H. O. Credit
Lauenstein, Robt. L., Coast Div. Field
Mitts, Howard K., L. A. Refinery Mfg.
Phillips, Geo. F., No. Div. Pipeline
Quintel, Eugene, Oleum Refinery Mfg.
Rude, Clarence A., Sr., No. Div. Pipeline
Sanders, Harold W., H. O. Treasury
Shepard, Chas. J., So. Div. Field
Smith, Fred M., So. Div. Field
Tomasini, William, No. Div. Pipeline
Westcott, Ralph M., No. Div. Pipeline
Young, Squire B., So. Div. Pipeline

#### **Twenty Years**

Austin, Stanley R., Oleum Refinery Mfg. Bradley, Wm. E., Research—Wilmington Dalbeck, Robt. E., Comptroller's Texas Keller, Walter E., L. A. Refinery Mfg. Morehead, W. P., Maltha Refinery Mfg. Morse, Hilda C., Oleum Refinery Mfg. O'Connell, R. D., Research—Wilmington Paget, Alfred, H. O. Purchasing Penhale, Harold H., L. A. Refinery Mfg. Rosenga, John D., Southwest Territory Ticehurst, B. V., Maltha Refinery Mfg. Webster, Jonathan C., Coast Div. Field

#### Fifteen Years

De la Guardia, R. J., Central America

Dreyer, F. E. Exploration—Bakersfield Golisch, Ervin H., H. O. Comptroller's Holeman, Chas. D., Southwest Territory Hunt, Joseph W., Northwest Territory MacKenzie, C. R., Southwest Territory Reader, Fred S., Northwest Territory Robertson, I. L., Oleum Refinery Mfg. Skinner, Horace A., H.O. Comptroller's Thomas, Mervyn L., Cut Bank, Mont. Wamsley, James T., Great Falls, Mont.

#### Ten Years

Barulich, M. B., Oleum Refinery Mfg. Bodzin, Sam, Southwest Territory Bohannan, G. R., Southwest Territory Bowman, Clawson C., H. O. Purch. Bradshaw, D. C., Oleum Refinery Mfg. Bryson, David A., H. O. Purch. Butt, Berkeley K., Oleum Refinery Mfg. Deichler, H. R., Oleum Refinery Mfg. Hendren, Ray A., Southwest Territory Johanson, H. A., Oleum Refinery Mfg. Malkin, Louis, Southwest Territory Pollen, John H., Oleum Refinery Mfg. Von Der Heide, W. A., Oleum Ref. Mfg. Wright, David C., L. A. Refinery Mfg.

Through a regrettable oversight, "ON TOUR" failed to honor W. E. Clark, Automotive—Northern Division, on the occasion of his 10th Service Anniversary, Oct. 6, 1950.



## Union Oil 1950 profits 8% of total sales



32% for Raw Materials

1. In 1950 Union Oil Company took in \$217¼ million from the sale of its products.\$68¾ millionwentright back out in payment for raw materials.



#### 16% for Wages and Salaries

2. \$35½ million\* went to our 7,826 employees in wages, salaries and benefits.

\*Salaries of company officers constituted about 11/4% of this.



#### 17% for Supplies; 8% for Transportation

3.\$37 million went for supplies, rent, tools, utility bills and other costs of doing business. \$17 million went for transportation.



#### 12% for Depletion and Depreciation

4.\$27 million went for depletion and depreciation—to find new oil to replace the crude used during the year and to replace worn-out and obsolete equipment.



#### 6% for Taxes; 1% for Interest

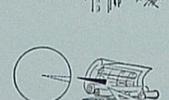
5. Federal, state and municipal taxes took \$12½ million.\* (This does not include gasoline taxes.) Interest on borrowed money amounted to \$2¼ million.

\*These taxes amount to 11% more than all dividends paid to our stockholders and equal more than ½ of our total payroll.



54% for Dividends

6. This left a net profit of \$17¼ million (8%). \$11½ million of this profit was paid out in dividends to our 38,095 preferred and common stockholders. Payments averaged \$292 per common stockholder.



#### 24% for Expansion

7. The remaining \$5\% million of profit was set aside to replace and expand our oil fields and facilities in 1951.

But here's the rub: In order to meet the requirements of the present national emergency, we estimate that we should spend \$25 million drilling during 1951. We should spend \$20 million on new refining facilities. We need \$5 million for a new tanker. And we need about \$3 million for pipe lines, storage facilities, etc. This totals \$53 million.

Our estimated 1951 reserve for depletion and depreciation totals \$30 million. This, plus our \$5\frac{3}{4}\$ million plowed back from 1950 profits, totals only \$35\frac{3}{4}\$ million. Therefore we're going to have to earn and retain about \$17\frac{1}{4}\$ million more this year than we did in 1950—assuming there is no increase in dividend requirements. That's why tax policies that don't permit corporations to retain earnings earmarked for needed expansion can have such far-reaching effects on the productivity and economic growth of the nation.



OF CALIFORNIA

INCORPORATED IN CALIFORNIA, OCTOBER 17, 1890

This series, sponsored by the people of Union Oil Company, is dedicated to a discussion of how and why American business functions. We hope you'll feel free to send in any suggestions or criticisms you have to offer. Write: The President, Union Oil Company, Union Oil Bldg., Los Angeles 17, Calif.

Manufacturers of Royal Triton, the amazing purple motor oil.