JUNE 1950

"On Tour"

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In This Issue

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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.

THAT KNOCK

AS this issue of ON TOUR went to press the Federal Government, through its Department of Justice Anti-Trust Division, filed suit in the Federal District Court, Los Angeles, against Union Oil Company of California, six other so-called "major" Western oil companies, and the Conservation Committee of California Oil Producers, charging a conspiracy and combination to restrain and monopolize trade and commerce in the production, transportation, refining and marketing of crude oil and petroleum products in the Pacific States area in violation of the Sherman Anti-Trust Act.

By way of relief the Government seeks, among other things: To dissolve the Conservation Committee: To enjoin the defendant companies from using or following posted prices in purchasing crude oil and in selling gasoline and other petroleum products; from purchasing, without Government approval, the capital stock or assets of any producer or refiner of crude oil; and from contracting to purchase crude oil for a period in excess of one year: To require the defendant companies to make their pipe lines, tankers, barges, marine terminal and storage facilities available to all companies and persons in the industry: And finally, to require them to sell all wholesale and retail facilities for marketing gasoline and other refined petroleum products, except refinery and marine terminal wholesale facilities.

This lawsuit, of course, will be vigorously defended. And, needless to say, Union Oil denies these charges, which it will answer later on in full at the appropriate time and place. But the wide and sweeping nature of the remedies—or should we say disintegration—sought by the Government indicates that this is more than a mere

at Our Door

lawsuit and justifies now repeating here the following statement given the press by President Taylor:

"This type of suit is the reward that any industry that has served the people of this country honestly and well can expect from the radical and socialistic planners of the 'Fair Deal'. If there is any monopoly involved in this suit, it is a power-hungry, monopolistic government attacking a highly competitive industry simply because some of the companies in the industry have grown large by providing outstanding service to the people.

"Throughout the years, the oil industry has paid the highest wages, provided the best pension plans. It has constantly improved the quality of its products and at the same time reduced the prices in comparison to other commodities. And it has always been able to meet the petroleum demands of all of the people.

"The Fair Deal social planners don't seem to remember the outstanding job done by the industry fueling the recent war—just as they seem to have forgotten the outstanding job done by the veterans now living in Birmingham Hospital. The planners, it seems, have very short memories. They can only harass and endeavor to destroy those who contribute to our country, while they limit themselves to promises of cradle-to-grave security with poverty in between.

"There is no oil monopoly here in the West and the Government anti-trust division knows it. For eighteen months, a Federal Grand Jury investigated every phase of the oil industry to determine if there were grounds for anti-trust prosecution. Company records over the years were examined in detail; top company executives testified under oath regarding every phase of the industry's operations, and the Jury issued no indictments.

"A further example of the Government's harassing tactics is the infamous 'Mother Hubbard' suit which was filed by the anti-trust division against 319 oil companies prior to the war. After ten years, this suit is still gathering dust in some bureaucrat's archives.

"The social planners want to blacken successful industry so they can act as knights in shining armor. But they know, as we know and the people know, that high sounding promises do not provide jobs; that the destruction of successful industries does not provide payrolls, and that all the oil industry can honestly be charged with is having successfully served the people."

"76" Views of Refining

(Continued)

8. Field Processing

is the term applied to a number of preliminary refining operations to which oil is subjected in or near the oil fields. Crude oil as produced from the well is associated with natural gas, water, sediment, sulfur and other substances contained in the oil producing formation. With the exception of natural gas, all of these accompanying substances are undesirable. It is therefore necessary or economical to separate them as soon as possible from the crude stream.

The initial step in field processing usually takes place at or near the well head. It consists of separating the crude production into two streams, gas and liquid. The gas stream is frequently *wet*, meaning that the light gases are carrying with them a considerable quantity of liquid hydrocarbons. In a different sense the oil stream is wet also, for crude oil usually contains water in amounts varying from minor quantities in some wells to more than 95 per cent of gross production in other areas.

Since there are so many types of crude oil and such a variety of conditions under which it is produced, nearly every field requires processing facilities tailored to its individual needs. Such equipment may range from simple settling tanks for the removal of water and sediment to large plants costing hundreds of thousands of dollars.

Union Oil Company's Battles Plant, below, near Santa Maria is one of the largest multi-purpose processing plants. It contains probably the world's largest group of electric dehydrators for removing water from crude oil. Within the plant are facilities for removing salt from crude oil, hydrogen sulfide and carbon dioxide from natural gas, as well as recovering liquid hydrocarbons from the gas stream. A unit operating adjacent to the carbon dioxide removal facilities converts this formerly wasted gas into a useful by-product, dry ice.

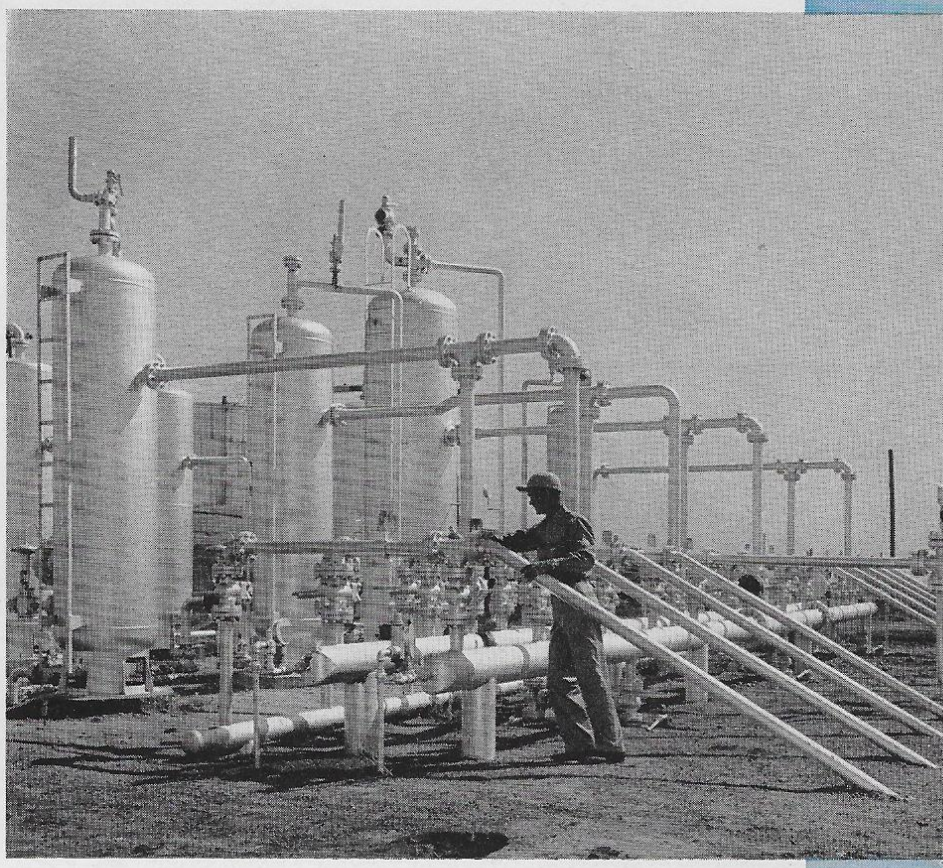
Come along and see how some of this field processing is accomplished.

9. Gas Traps,

such as these in our Coalinga Nose Field, are used to separate natural gas from crude oil. Frequently, when crude is produced under heavy pressure, a series of gas traps is used, the oil passing from one trap to another in succession, each successive trap operating at a lower pressure. The purpose of such an arrangement is to conserve hydrocarbon vapors, most of which would be lost if the crude were delivered directly into vented storage tanks.

As the mixed stream of oil and gas enters a trap, separation takes place. The wet gas, containing valuable liquid hydrocarbons in vapor form, rises and departs through a top exit pipe line, while the oil and its content of water flow through a bottom outlet. The two streams then proceed to separate facilities for further processing.

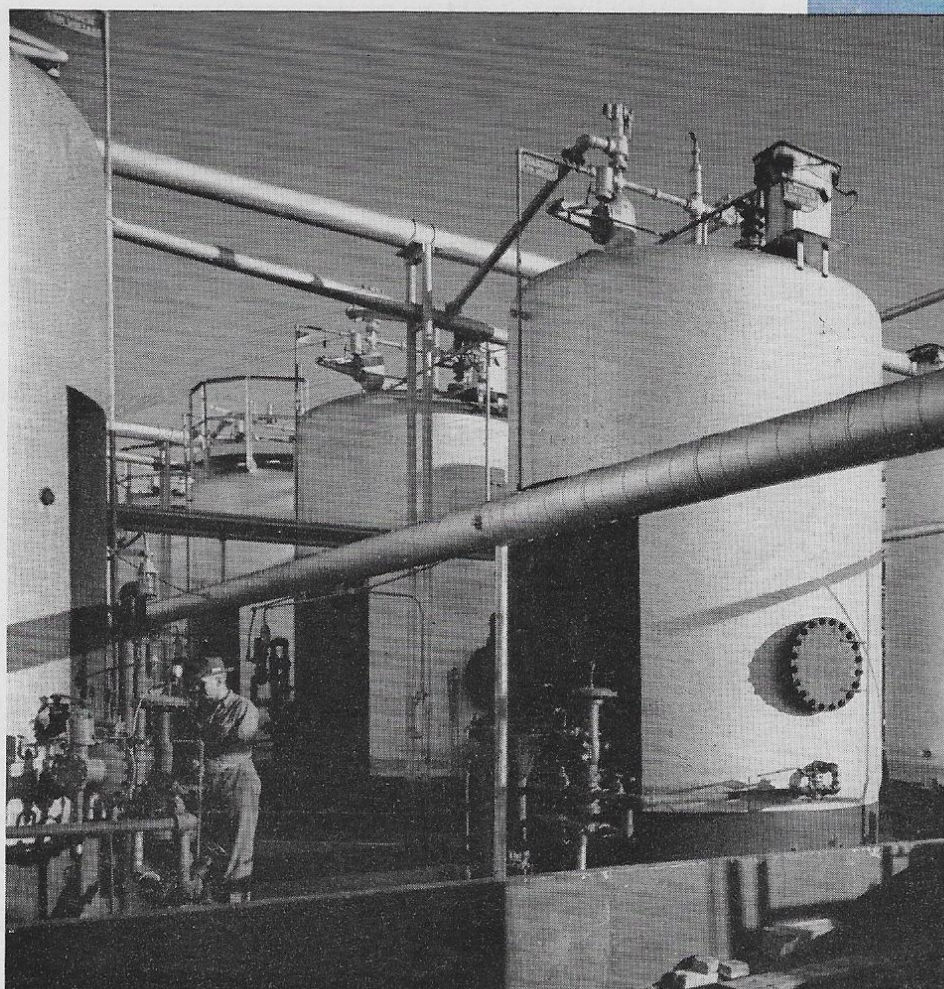
Let's follow the oil stream first and return later to see what happens to the gas.

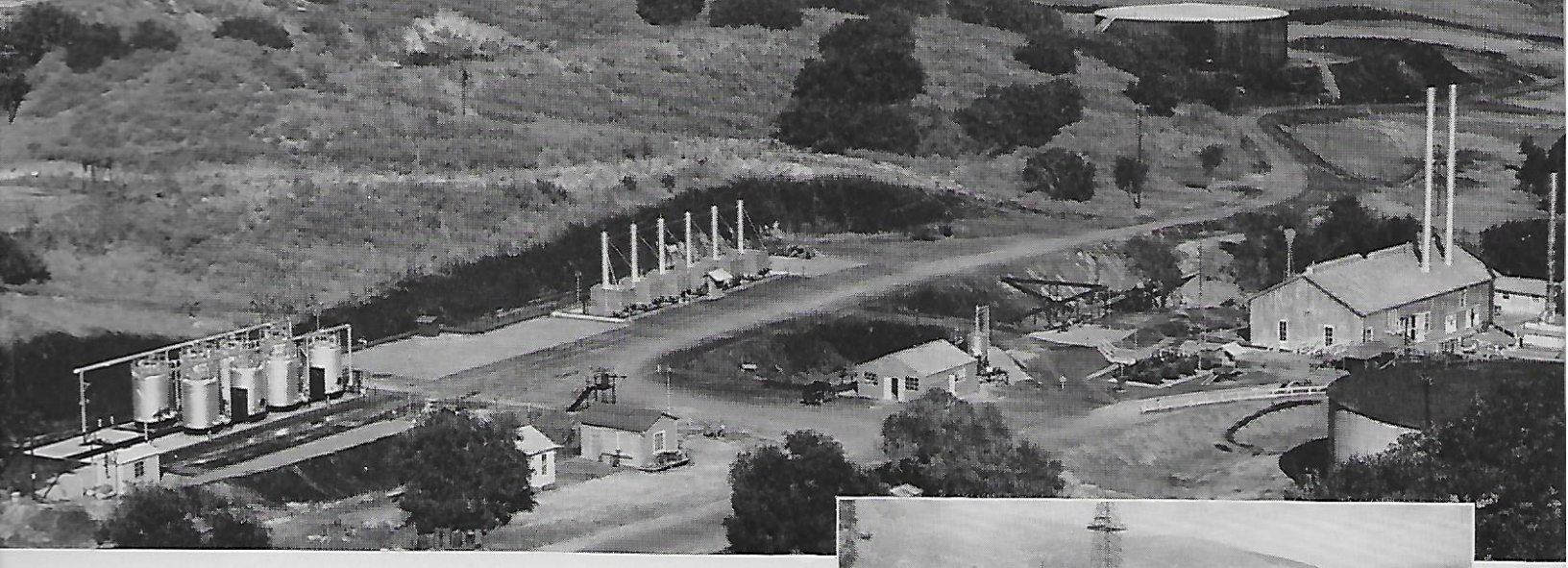


10. Electric Dehydrators

are one of several means used to remove water from oil and thereby reduce the cost of transporting oil to refineries. Of course, most of the water can be removed by letting the crude stand in a container or tank. Water and sediment settle to the bottom and can be drained off, leaving fairly *clean* oil. However, many times tiny droplets of water become competely enveloped in an oil film so tenacious that no separation takes place.

The electric dehydrators at our Battles Plant, right, are very effective in de-watering many crudes, including the Santa Maria type. After first being heated, the crude oil stream enters a lower section of these closed tanks or dehydrators. Inside each dehydrator, electrodes are spaced to set up a field of electric current with a voltage up to 16,000. As the oil stream rises through this electric field, the tough little oil envelopes are ruptured. Released water then settles to the bottom and is removed through a water disposal system. The clean oil continues upward through top exit.

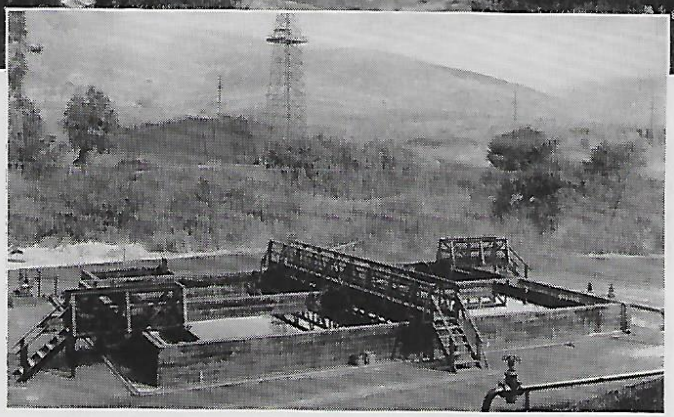




11. De-Watering Problems

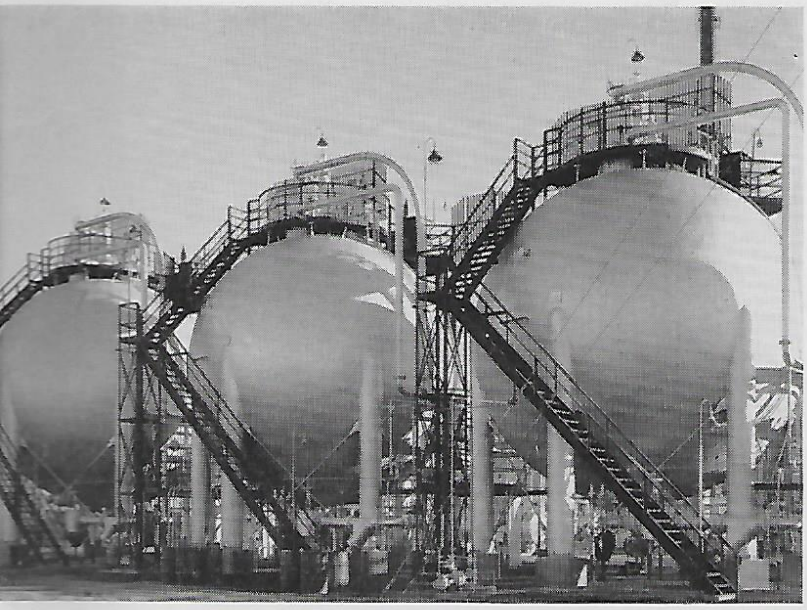
sometimes demand only the use of heat, or of a special chemical that is effective in breaking certain types of emulsion. But in other cases two or three of the various means are required in combination to produce best results.

Typical of dehydration plants in use throughout several Company fields is our Cat Canyon installation, above. Here the oil and water emulsions are gathered from many wells into a large storage tank. Six heaters, shown in the center of picture, next receive the oil and heat it to about 210 degrees F. Electric dehydrators, left, similar to those in use at Battles, then complete the de-watering process. Clean oil normally collects in a shipping tank prior to starting on its journey of several hundred miles to refineries. In the building at right is housed pipe line pumping equipment, by means of which most oil is transported.



12. A Skim Pond

is useful in field processing chiefly to complete the oil-water separation. Waste water emerging from the various tanks and dehydrators carries with it small amounts of entrained oil. Most of this can be recovered by permitting the water to remain relatively still in a pond. Oil rises to the top and is skimmed off automatically while the water drains away into a disposal system. The hydrocarbons thus saved have a measure of value and are prevented from contaminating the ocean or streams into which waste water often flows.



13. De-Salters

of which these three at our Battles Plant are good examples, are used only in processing crude oil having an objectionable salt content. In most cases the water produced with oil is salt water, which generally is removed in the dehydration process. However, some crudes are so extremely salty that dehydration fails to remove all of the salt crystals. This condition can cause the corrosion of refinery equipment and increase the ash residue of fuel oils made from salt-bearing crude. The de-salting process is similar to electric dehydration. For the crude is *washed* or contacted with fresh water, which has a great affinity for salt crystals and readily dissolves them out of the oil. Then the mixture of oil and water proceeds through an electric field, where dehydration takes place in a manner similar to that previously described.

(to be continued)

No Hits, No Runs, ALL ERRORS

SOCIALISM was put to one of its most revealing tests not in our generation, but about 100 years ago —not in Russia or England, but in the United States— not at the urging of exploited working people, but under the leadership of a successful capitalist.

Robert Owen, who lived from 1771 to 1858, is considered by many to have been one of the greatest Socialists. He was born in Wales, the son of a saddler and ironmonger. His formal education consisted of reading, writing and "the first four rules of arithmetic," all of which were absorbed before he was nine. Then, after the English custom, he began serving his apprenticeship first in a draper's shop and later in the establishment of a haberdasher near London. While still a very young man he became manager of an English cotton mill employing 500 people and, because of his executive ability, was eventually made a partner in the mill.

Around 1800 was the period of industrial history when manufacturing began moving from homes and small shops into large factories. Many of the newly invented machines were too costly and complicated to be used, as were the hand-loom and spinning wheel, in homes. They had to be housed in large buildings and near a village where enough people could be found to run them.

Home manufacturing, particularly textile weaving, had been the duty of women and children. So, the early factories had to depend upon these groups as a source of their labor supply. A number of abuses followed. Working conditions were more often bad than good. A work day of 13 or 14 hours was fairly common. Child apprentices were taken from city orphanages, and some of the unscrupulous employers were neglectful about seeing that the children were properly housed, disciplined and educated.

Robert Owen, who came face to face with these conditions during his first factory venture in Manchester, showed extraordinary zeal as a reformer. He was years ahead of his time in suggesting that working conditions and worker efficiency were closely related. When he and his partners purchased additional mills at New Lanark employing about 2,000 workers, 500 of whom were orphans, Owen immediately put his reforms into action. He campaigned against dishonesty, drunkenness and idleness. He established a village store to supply good merchandise at fair prices, and used the profits from this store to maintain a school. In addition to admitting all children between the ages of five and ten to his school free of charge, he fixed ten as the minimum age at which children might begin work in the mills. His rules went beyond the plant to include village streets and even private homes. It was forbidden to throw trash in the streets or keep dogs and swine in the houses. All rules, including a curfew at 10:30 p.m., were enforced through a representative form of village government run by appointed committeemen.

So successful was this man, both as a mill operator and reformer, that New Lanark soon attracted favorable notice throughout England and abroad. New Lanark cottons were good; working conditions were unexcelled; and Owen was firmly embarked on a lifetime of reform.

As so often happens, the man who made good locally now began to think in bigger terms. He wrote and lectured. He envisioned an orderly society, living together in peace and harmony, devoting their minds to education, art and music, their hands to honest and productive labor, their hearts to the golden rule. Owen lacked only the proper setting of natural resources and public sympathy to begin what he thought would be a most successful and peaceful social revolution.

Opportunity knocked in 1824 when the American Rappite Society decided to sell their settlement of Harmony on the Wabash River in Indiana and return to Pennsylvania. Here on the Wabash were 30,000 acres of fertile soil, beautiful forested hills, fine orchards and vineyards, comfortable homes and community buildings, a large stone granary, a church, silk factory, woolen mill, sawmill, brickyard, oil mill, dye works, and practically all else to make it an ideal self-sufficient community. Owen hesitated only over the purchase price, about $140,000, then hurried across the Atlantic to complete the purchase and get things started.

His plan, as he outlined it to the President and members of Congress during a stopover in Washington, was to use existing Rappite buildings at Harmony only until his own community structure could be built. A model

that he carried indicated how a quadangular wall of apartments was to be built round a public square, the latter to include community kitchens and dining halls, stores, an opera house, and all public buildings necessary to 19th Century living. There would be no private property other than furniture and personal effects each member was invited to bring with him upon becoming a Socialist. Everything would be publicly owned and managed by elected representatives. People would work at various assigned tasks under the kindly direction of elected Intendents and Superintendents. Each person would contribute his energy and talents unselfishly toward the advancement of all, and would receive from the community goods and services according to his needs. Such a high degree of prosperity was anticipated that nearly every communist would produce a surplus. Parents were to be responsible for their children to the age of three, at which age the children would become wards of their community, receiving food, clothing, education, discipline and vocational training under the most capable handlers. There would be time for gaiety, amusements, the arts, reading, music and conversation. Poverty and crime would be given no reason to exist. Unemployment would be banished forever.

The vision attracted so much favorable publicity that, upon arriving in Indiana, Owen found his New Harmony already peopled with several hundred volunteers. He was chagrined at the prospect of molding such varied material into a classless society, but made good his promise of welcoming all the world except "persons of colour."

Modifications of the plan were necessary at the outset. In April of 1825 Owen announced to this enthused hundreds of followers that elections of committees and superintendents would have to await a certain amount of adjustment and orientation. Also, in lieu of opening the community store to every person's needs, a temporary system of credits was to be established. Members would receive credit at the store only for work performed and should not expect to receive goods in excess of these earnings. Any balance remaining at the year's end would stand to the member's credit but could not be withdrawn in cash without committee consent.

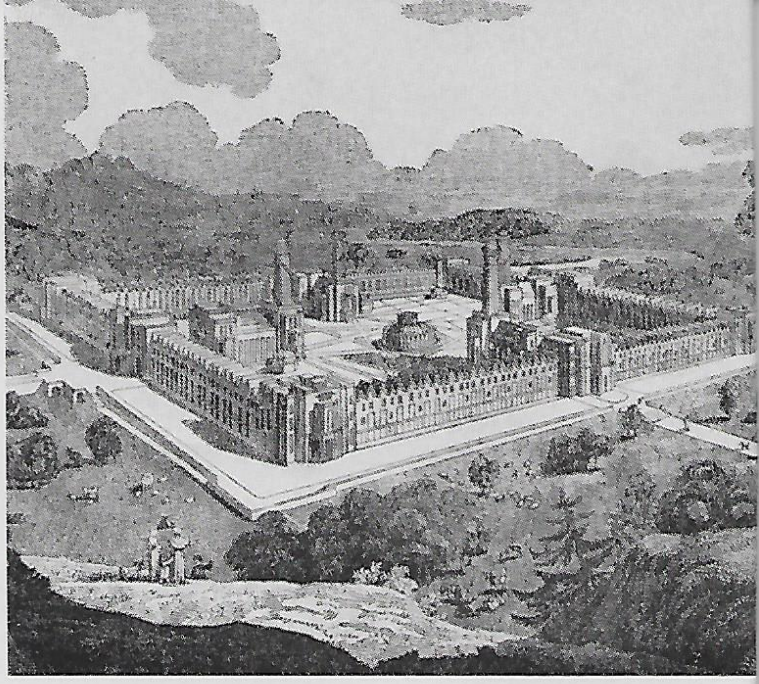
All such temporary modifications were cancelled in 1826 when Owen returned to New Harmony after a trip to his England mills and decided the time was ripe for adoption of a community constitution. Among the constitutional provisions, Article No. 2 was significant:

"All members of the community shall be considered as one family, and no one shall be held in higher or lower estimation on account of occupation.

"There shall be similar food, clothing and education, as near as can be, furnished for all according to their ages and, as soon as practicable, all shall live in similar houses, and in all respects be accommodated alike.

"Every member shall render his or her best service for the good of the whole."

The community was to be divided into six departments—Agriculture; Manufactures; Literature, Science and Education; Domestic Economy; General Economy; Commerce. The departments were to be further subdivided into occupations. Each occupation would choose an Intendent, and the Intendents would choose four Superintendents. These officers, together with the Secretary, would constitute the Executive Council.



An early indication that New Harmony was not living up to its name was contained in letters written by Owen's two sons, who were dispatched from England to take leading parts in the experiment. One wrote in 1825 when the work was only several months advanced, "We have been much puzzled to know what to do with those who profess to do anything and everything. They are perfect drones and can never be satisfied here. We have got rid of a good many such, although we still have a few left." Later, the other son described New Harmony socialists as a "heterogeneous collection of radicals, and enthusiastic devotees to principle, honest latitudinarians and lazy theorists, with a sprinkling of unprincipled sharpers thrown in."

Several tangible needs were listed in a report dated December 16, 1825, and directed to the community's founder, then in New Lanark. There was urgent need for "masons, bricklayers, wheelwrights, carpenters, machine makers, and, above all, good cooks, washerwomen and laundresses. But, the letter went on "Although I have said we want these people to make our workshops full and perfect, we have no room for them . . . all the brick and frame houses are filled except one, which we reserved for those you bring with you. As for building houses, that is out of the question. We have no lime, no rocks blasted, no brick, no timber, no boards, no shingles—nothing requisite for building—and they are

not to be had in the whole country. . . . If you can bring with you some stoves from Louisville, we should want perhaps 20. We have no feathers, no ticking, no sheets, no blanklets, no bedding for anybody. The sugar is quite gone and we can get none till the river rises. The store will be empty in six weeks. We are all in good spirits and the gentlemen of the Committee desire best remembrances."

In non-productive activities, however, New Harmony appeared to be successful. The tavern was constantly filled with visitors. The military was well organized. About 130 children were being boarded and educated. A good band played for dancing each Tuesday evening and gave a concert every Friday. Discussions at the Wednesday public meetings were lively and well-attended. The Town Hall was thrown open for Sunday meetings and ministers of all denominations came to preach.

On returning to the community in 1826, Owen brought with him, in addition to needed supplies, several distinguished men of science. Enthusiasm mounted again, at least until it was discovered that scientists had very little to offer in the form of labor-saving devices. Shortages returned and travelers who wrote of their visit to this Utopia described the schools and music in glowing terms but were disappointed with the frugal meals and rude housing.

A European duke who visited New Harmony about this time saw indications of social unrest. Several Superintendents, including one who helped frame the constitution and edit the "Gazette", expressed an intention of leaving to seek greener pastures. A few people of manners resented eating at the same table with backwoodsmen. In the public ballroom people divided into different social cliques. Cultured young ladies turned up their noses at run-of-the-mill democrats. The style of garments worn by all presented a good appearance, "But," the duke commented, "Hermann's a German." A young and beautiful woman from Philadelphia was brought to tears when told to leave the piano and go milk her cows. While some danced on Sundays, others complained about such Sabbath-breaking. The Methodists couldn't abide the Baptists, and the English couldn't understand the Dutch.

Breakup began surprisingly soon after the more than one thousand Socialists had vowed to put aside selfish interests and love their neighbor. Within less than two years the community had divided into three segments—the parent body, a group of English country folk who "wanted off to themselves," and a third group who desired more religion than Owen's original plan had to offer.

Once under way, the division grew rapidly. Within a few months there were four groups, then ten—all operating independently, but making small weekly contributions to New Harmony's general expenses. Next it was decided that a division into departments, crafts and trades might overcome the fault-finding and incompetance that kept increasing. And finally on June 22, 1828, Robert Owen drew the inhabitants of New Harmony together only to bid them farewell. He had spent a fortune and had nothing to show for it except bitter experience.

A preceding editorial in the "Gazette", written by Owen's two sons, offers some evidence of why the experiment failed:

"The experiment to ascertain whether a mixed and unassorted population could successfully govern their own affairs as a Community was a bold and a hazardous and, as we think, a premature one.

"Our own opinion is that Robert Owen ascribed too little influence to the early anti-social circumstances that had surrounded many of the quickly collected inhabitants of New Harmony before their arrival there, and too much to those circumstances which his experience might enable them to create round themselves in future.

"It appears that the whole population, numerous as they are, are too various in their feelings and too dissimilar in their habits to unite and govern themselves harmoniously in one Community.

"The deficiency of production appears immediately attributable to carelessness in many members as regards Community property; in part to their want of interest in the experiment itself—the only true incitement to Community industry; in part to a want of confidence in each other, not perhaps unfounded, and which was increased by the unequal industry and by the discordant variety of habits existing among them."

The founder in one of his concluding lectures said: "This experiment has made it evident that families trained in the individual system, founded as it is upon superstition, have not acquired those moral qualities of forbearance and charity for each other which are necessary to promote full confidence and harmony among all members, and without which Communities cannot exist. . . . Some have breached their engagements by establishing monopolies and carrying on petty stores and whiskey shops. . . . My intention now is to enable those who desire to live in separate families, and yet to unite their general labour, or to exchange labour for labour on the most beneficial terms for all, or to do both or neither as their feelings and apparent interests may influence them. . . . Other arrangements shall be formed to enable them to have their children trained from infancy in a knowledge of the principles of human nature and of the laws which govern it. . . . By these measures I hope there will be brought around us by degrees an honest and industrious and also a well-educated population, with right feelings and views, who will earnestly endeavour to promote the happiness of each other, and unite in bringing up their children as one family with simple manners, temperate habits and useful knowledge, both in principle and practice. . . . Farewell."

By no means was Owen the only socialist who tried and failed to make this persistently attractive plan of government work:

FOURIERISM

Francois Fourier, a contemporary Socialist of France, had theorized that individualism and competition were immoral. He proposed the substitution of a condition called "natural optimism," which meant simply that people would seek happiness through utmost freedom in regard to work, education, art, amusements, virtues and even some of the so-called vices. Most social rules and customs—those pertaining to marriage, for example—were to be ignored so that people might live under a minimum of regulation and restraint.

To provide the proper environment for "natural optimism," Fourier proposed a community or "phalanx" of 1,600 persons. They would inhabit a common building or series of apartments adjoining an adequate tract of fertile soil. Agriculture was to be the predominant enterprise in the community, but members could devote their time to other types of work if they felt inclined. Marriage was abolished in favor of a simple licensing arrangement. The major rule of the community was that people must not segregate themselves into classes according to their wealth, culture, religion or nationality, but must perpetuate a classless society. True, there could be three classes of lodgings, three classes of meals and three classes of seats in the community opera house; but no person should be looked down upon because he preferred third-class to working longer hours in the field.

Everyone in the *phalanx* would be induced to work by the simple expedient of making every job attractive and appealing. Groups of congenial neighbors and friends would go together into the fields, transforming work into a picnic. Children, because they have "a madness for dirt," would happily make a game of doing all the repugnant work such as rising at 3 o'clock every morning, attending the animals, working in the slaughter-houses, killing reptiles, mending the roads, etc. There would be an end to the "sight of 300 women, in 300 little houses, lighting 300 fires, and cooking 300 dinners in 300 little pots for 300 little men returning from their work." Three or four women with the help of one large pot and one large fire would produce better results.

Economically, the *phalanx* was to be a sort of corporation, with every member being persuaded to buy at least one share of stock. The economies and enthusiasm brought about by community life were certain to produce unheard of prosperity and surpluses. From earnings Labor would receive five-twelfths, Talent three-twelfths, and Capital four-twelfths. However to encourage thrift and discourage greed, Capital earnings were to be divided on a sliding scale. Poor shareholders might receive as much as 40 per cent on their investment; the moderately wealthy would get a moderate 15 per cent; the rich might expect only 5 per cent dividends.

But in no case would poverty be permitted to exist. Fourier insisted that society owes an individual a living, whether he earns it or not. His guaranteed minimum consisted of a job for every person desiring work and assistance in case of infirmity. Even the village deadbeat could be assured of "five third-class meals a day, a decent suit, a uniform for parades, a room with cabinet, and free admission to third-class seats in the opera house."

Fourier did not live to see his plan tried, for his list of potential capitalist benefactors included not one who was enthusiastic about financing a *phalanx*.

It was in America that this form of Socialism received its greatest tests. Albert Brisbane is said to have introduced "natural optimism" with such success that at least 41 *phalanxes* were founded in the United States between 1840 and 1850.

The most ambitious and successful of these was Brook Farm, founded at West Roxbury, Massachusetts, by Reverend George Ripley and his wife in 1841. Included among the farm's patrons were such prominent Americans as Nathaniel Hawthorne, Charles A. Dana, Ralph Waldo Emerson and several other acknowledged intellectuals.

Begun as a place where "thinkers" might be taught and permitted to work with their hands rather than "live as parasites on the working classes," Brook Farm finally adopted the entire Fourier program. An attempt was made to form a complete *phalanx* of 1,600 members. But, in addition to falling far short of qualified recruits, the intellectuals soon ran into financial troubles. Needing $30,000 to keep the venture alive, they suceeded in borrowing only $8,000. Then, while celebrating the completion of their fourth community house in 1846, they endured an extremely bitter loss; the new building was completely destroyed by fire.

From the date of this tragedy, Brook Farm began its steady decline. By 1849, eight years after its beginning, the project had expired. Land and buildings were sold at auction—no doubt to a competitive-minded individualist.

And there were others:

Etienne Cabet, a French lawyer and politician who while in exile in England became an ardent disciple of Robert Owen, bought a tract of land on Red River in Texas and came with 1,500 Europeans to settle it between 1848 and 1849. Benefiting from Owen's failure, Cabet advocated a division of earnings according to individual merit, also compulsory labor, progressive taxation and old age pensions.

(*Continued on Page 22*)

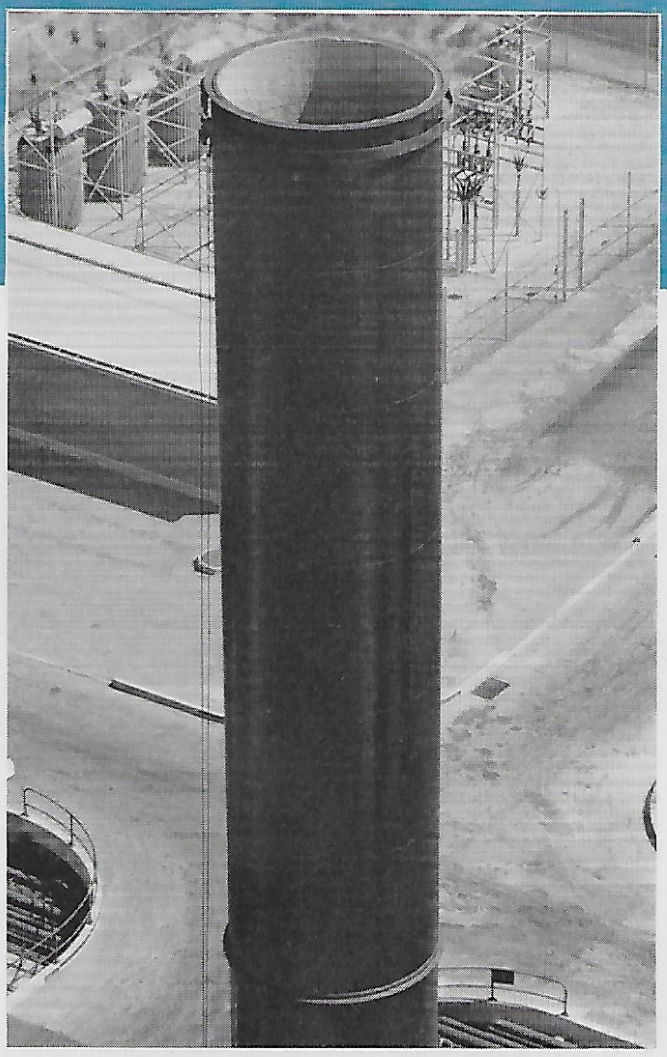
CLEAN BILL OF HEALTH

As Told by Tom Gaines

LOOKING into the throats of heater stacks at Los Angeles Refinery today, an observer sees practically no evidence of smoke. Mostly clean, inoffensive gases emerge. Such a high degree of combustion efficiency and cleanliness has been achieved that exhaust plumes are almost perfectly invisible. Only heat waves and a few jets of harmless steam give any visible indication that the plant is in full operation.

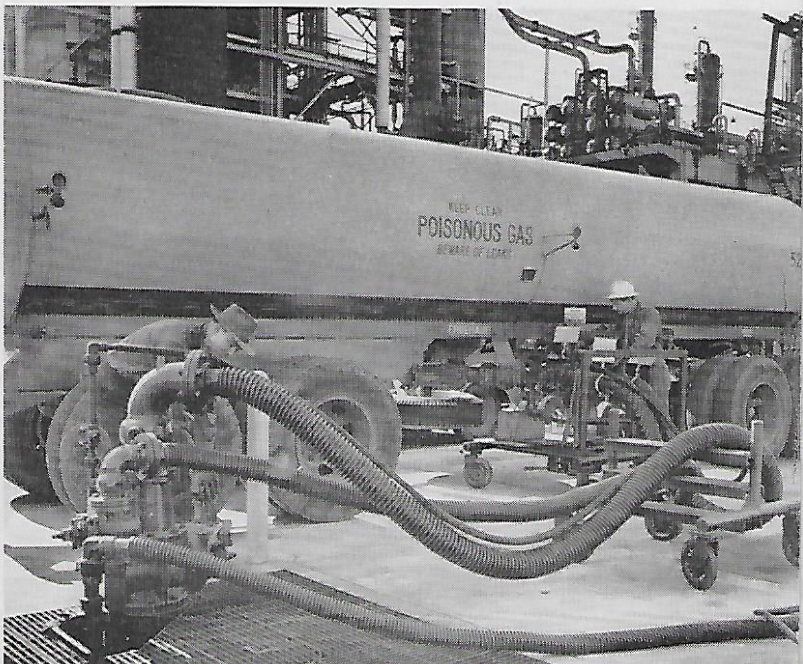
When the Girbotol plant was constructed adjacent to the refinery's Thermofor Catalytic Cracking unit in 1945 as a means of removing hydrogen sulfide from the production streams, it was foreseen that someday we might salvage this sulfur-yielding waste as a useful by-product. Accordingly, the original Girbotol plant was designed to meet possible future expansion of the sulfur removal process.

Meantime, all gases containing hydrogen sulfide were disposed of by burning them with fuel gas in the refinery heaters. The daily disposal of hydrogen sulfide amounted to between 20 and 30 tons. In the process of burning, this amount of hydrogen sulfide was converted into approximately double the quantity of sulfur dioxide.

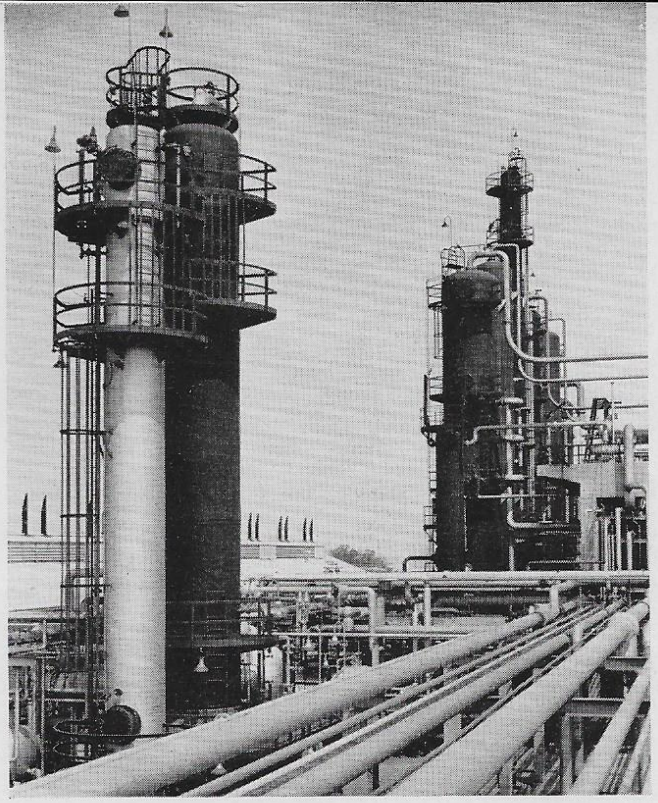


Smoke that formerly issued from Los Angeles Refinery stacks in visible plumes now leaves via transport to serve rather than offend society. Special loading facilities, below, are designed to prevent deterioration of the carrying solution (monoethanolamine) by keeping it air-free under a permanent cover of natural gas.

This refinery, from the ground up, is an example of excellent housekeeping, has few equals in the industry.



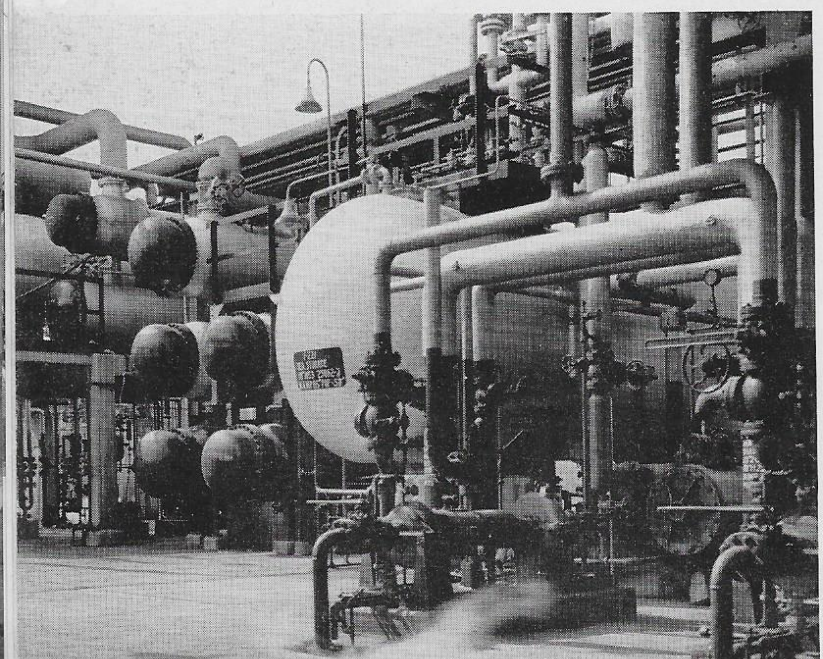
Hydrogen sulfide is first absorbed from fuel gases by DEA solution in the Unit 110 absorption tower, left . . .



Black tower of two at left, part of the Girbotol Plant, next strips the hydrogen sulfide from DEA solution . . .

City and county smog authorities had no fault to find with our Los Angeles Refinery from the standpoint of air pollution. In fact, they considered it to be one of the least offenders among refineries of comparable size and could establish no evidence that sulfur dioxide polluted the atmosphere to any considerable extent. But Union Oil officials, sensing that public smog abatement measures might eventually go to great extremes, were not content; they felt that the last wisp of smoke could and ought to be eliminated, if only as a public service. Union Oilers have therefore established a standard of atmospheric housekeeping rarely if ever exceeded in industry. This is how it is being done:

Other DEA system facilities include, from left, heat exchangers, surge tank and charging pumps . . . . . .

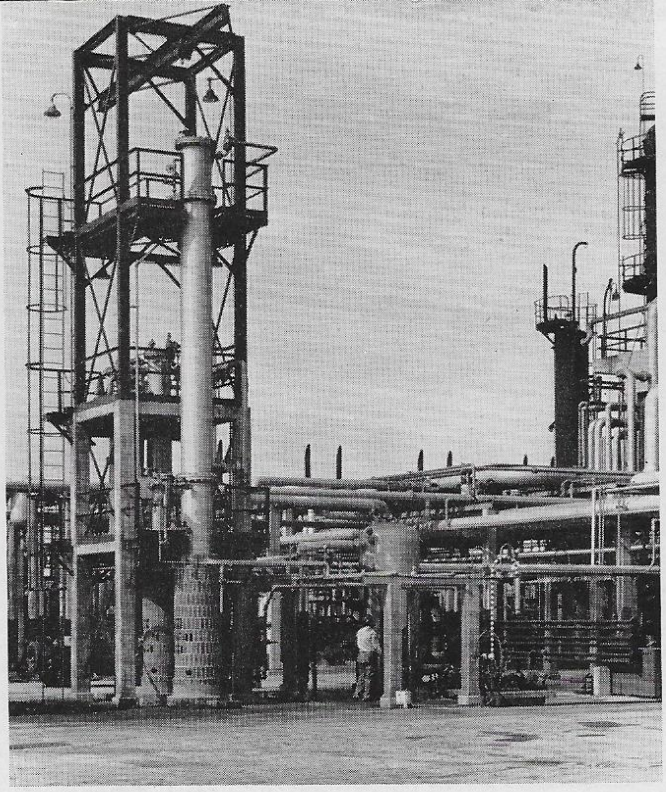


The Process

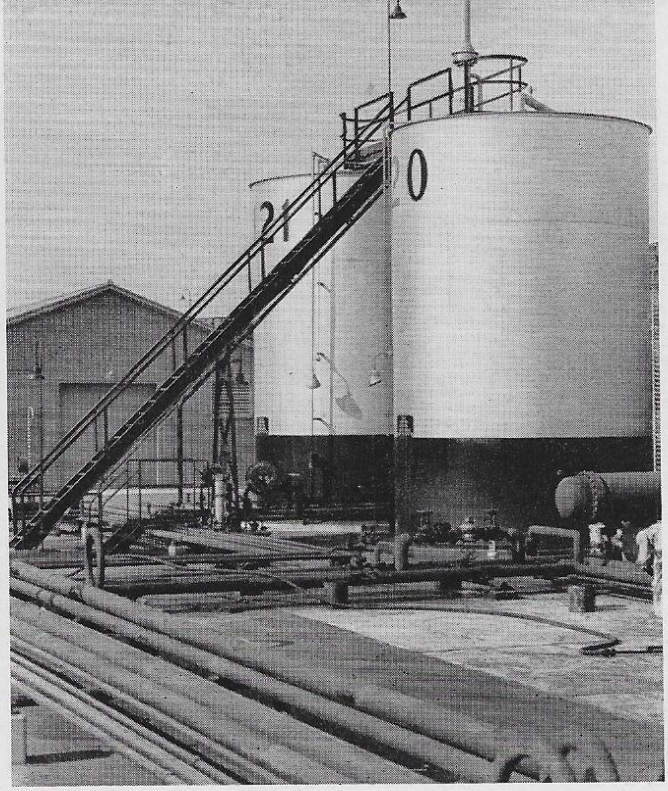
Today, practically all waste and fuel gases containing hydrogen sulfide are piped to a centrally located absorption tower within Unit 110. Forced under pressure into the bottom of this tower, the gases contact a downward stream of diethanolamine, a liquid compound referred to as D-E-A by refinery men. The DEA solution reacts with hydrogen sulfide, absorbing most of it from the gas stream and holding the hydrogen sulfide in solution. The fuel gas, minus its sulfur compounds, then proceeds to refinery heaters.

An interesting problem in economics arose. The Company was not justified in refining and marketing sulfur products because of the limited quantity and processing expense involved. A better plan was to sell the hydrogen sulfide to someone already established in the chemical manufacturing field—in our vicinity, the General Chemical Company

But how to transport it? The safest and most convenient method of shipping this gaseous by-product is to leave it in solution. However, the DEA solution, made up of 20 per cent diethanolamine and 80 per cent water, will absorb only a relatively small quantity of gas. Another compound, monoethanolamine (hereafter called M-E-A), has twice the absorption power of DEA and, in a solution made up of 75 per cent MEA and 25 per cent water, could hold six times as much hydro-



Hydrogen sulfide gas then enters this new installation where it is re-absorbed by an MEA solution . . . . .



Storage facilities for the smoke-eating chemical include a tank each for rich out-going and lean incoming MEA.

gen sulfide as an equal amount of the above DEA-water mixture normally absorbs. In other words, MEA, which is greatly inferior to DEA in the first absorption step, is a much more economical agent in which to transport hydrogen sulfide.

So, in order to reduce hauling costs, our Process engineers worked out several additional steps. The DEA solution, enriched with its content of hydrogen sufide, is sent through a *regenerator*—refining equipment which, through the application of heat, strips all hydrogen sulfide out of solution, leaving the lean DEA ready for re-use in the first absorption tower. The gaseous hydrogen sulfide then enters a second absorption tower, where it is re-absorbed by a downward stream of MEA solution.

The MEA solution, when enriched to its capacity, contains from 20 to 24 per cent hydrogen sulfide. In this proportion the two materials proceed by tank-truck to the General Chemical plant, where they are separated and the MEA solution is stored for re-use in the transportation cycle. Incidentally, much of the sulfur also returns to our manufacturing processes in the serviceable form of sulfuric acid.

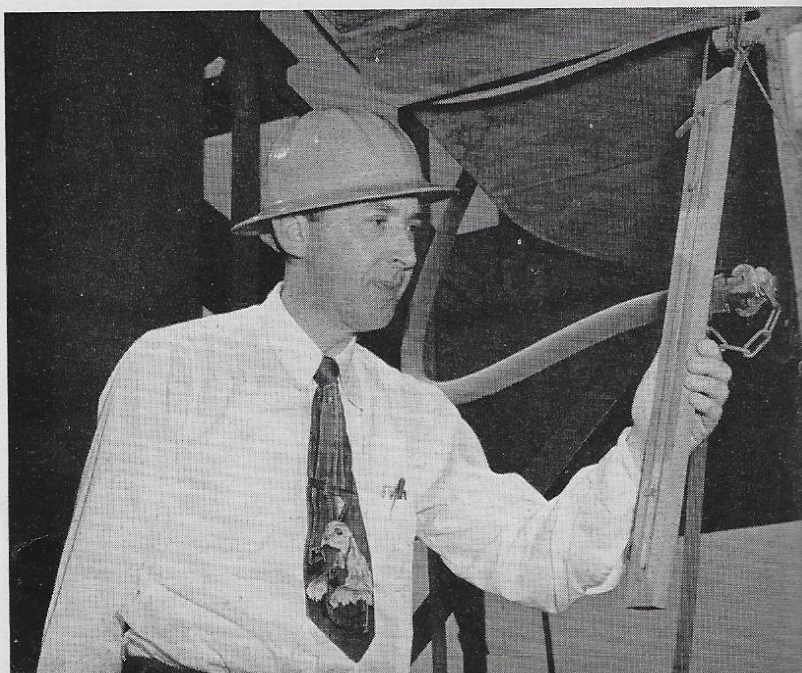
Dust Removal

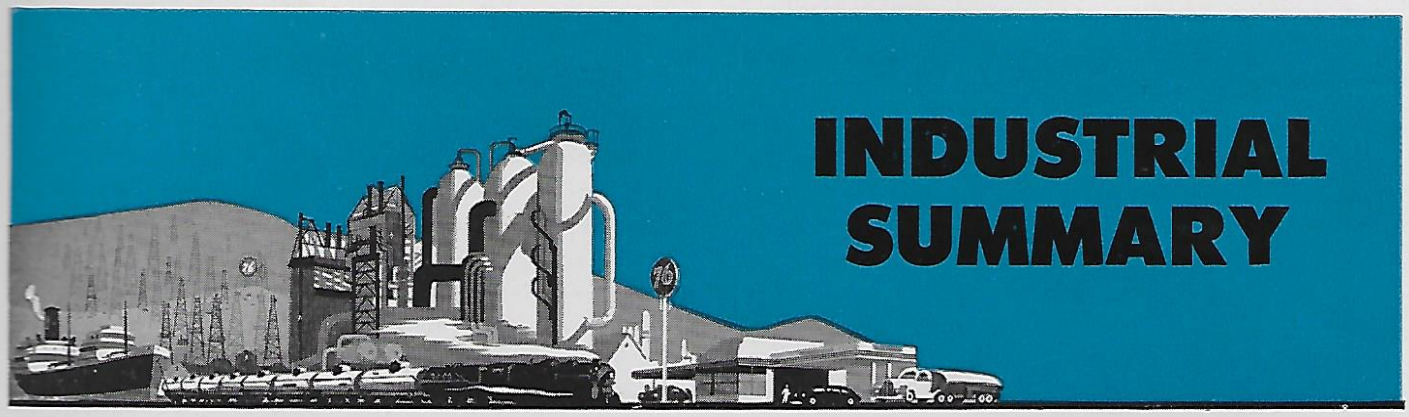
Making the refinery's smog abatement program efficient to the greatest extreme, new equipment has also been installed to remove dust from four elevator stacks of the TCC unit. This dust develops through circulation of catalyst inside the unit.

At present, dust from these stacks enters a cone shaped precleaner where it is deflected to water-wetted surfaces. Any dust particles that escape these moist surfaces are further subjected to a rotoclone, a water-wetted fan operating at 1650 rpm's. In this manner an estimated 95 per cent of all catalyst dust is prevented from reaching the atmosphere.

Possibly few industrial plants in the world have gone to greater lengths in successfully abating smoke, dust and odors.

Tom Gaines, Cracking Department engineer, here checks the operation of equipment used to remove catalyst dust.





INDUSTRIAL SUMMARY

Union Oil Purchases United Geophysical Companies

Union Oil Company of California has purchased from Herbert Hoover, Jr. and his associates all of the stock in United Geophysical Company, Inc. and the United Geophysical Company, S. A. (Costa Rica). One of these geophysical companies operates in the United States and, through a subsidiary, in Canada, whereas the latter operates in foreign countries.

There will be no change in the management of United Geophysical as a result of the sale. Herbert Hoover, Jr. will remain as president and active manager and United Geophysical will continue to do contract work.

As a result of this acquisition, Union Oil will be able to work out a closer and more effective cooperation between its geological department and geophysical crews used in its own work.

United Geophysical will be able to increase its operations particularly in the development of new and improved methods and techniques of prospecting. The new subsidiary will continue to maintain its offices in Pasadena.

from A. C. Rubel

• COMPTROLLER'S W. H. Steele, assistant comptroller for the past four years, retired after 37 years of Company service.

Present assistant comptrollers are H. A. Lapham, Max Lorimore and E. C. Rogers, the latter two recently having been elected to office. A reassignment of responsibilities within the Comptroller's Department has been made as follows:

Lapham is in charge of auditing staffs, disbursements and payrolls. Head Office payroll, and office services.

Lorimore is in charge of financial accounts and economics.

Rogers is in charge of accounting for Production and Transportation, Manufacturing, Marketing and Head Office I.B.M. installation.

A. L. Reed is appointed supervisor financial accounts; C. F. Parker, supervisor economics; and G. H. Anderson, supervisor marketing accounts.

from Irving J. Hancock

• INDUSTRIAL RELATIONS The California Oil Museum, established by Union Oil Company as the first show-place for materials used in California's oil industry throughout the past 80 years, will be formally opened to the public on Saturday, June 3. The museum occupies the ground floor of our well preserved Union Oil Building in Santa Paula, California, which was the Company's birthplace in 1890. Employees and their friends will be most welcome and should find the display both interesting and worthwhile.

Results of elections conducted by the National Labor Relations Board on May 9 and 12 are as follows:

Research Department: Of 104 eligible voters, 102 voted

50 for No Union
37 for Oil Workers International Union
15 for International Union of Petroleum Workers

Since "No Union" did not receive a majority of the ballots cast, it will be necessary for a run-off election to be held in which Research employees will have a choice between "No Union" and the Oil Workers' International Union.

Refineries: Of 1310 eligible voters, 1244 voted

782 for Oil Workers' International Union
450 for Internationl Union of Petroleum Workers
12 for No Union

Oleum Cafeteria: The six eligible voters cast ballots for Oil Workers International Union.

Sixth & Mateo Terminal: Previously, on April 14, an election was held to resolve the question of decertifying the Oil Workers' International Union as representing certain employees at this terminal. Of 66 eligible voters, 43 voted for this union and 21 voted "No Union."

from W. C. Stevenson

• RESEARCH

Recent tentative revisions by the Military of heavy-duty motor oil specifications are being followed closely by our Research Department. New specifications soon to be announced by Army Ordnance will be more severe than the 2-104B specifications issued during World War II. Work has been in progress for some time to assure that Union Oil Company will be in a position immediately to furnish products satisfying the more stringent requirements.

Two Research supervisors have been accorded national honors in their respective fields. V. N. Jenkins was installed as president of the National Association of Corrosion Engineers at an April meeting in St. Louis, Missouri. L. W. McLennan, who is a recognized authority on grease, was elected a director of the National Lubricating Grease Institute in January.

from C. E. Swift

• FIELD

Currently the Field Department is conducting 19 drilling operations in all divisions. Ten of these are wildcat wells being drilled on exploratory prospects. This prospecting is the result of recommendations by the Exploration Department.

With the emphasis on wildcat drilling, it follows that all phases of an exploration program dealing with this type of drilling require cooperative study and scrutiny. Accordingly, managers and division geologists from each of our out-of-state divisions, together with representatives of the Pacific Coast Division, were called into conference at Head Office May 9 through 12. The Gulf, West Texas, Rocky Mountain and Western Canada Divisions convened from out of state.

from Sam Grinsfelder

• MANUFACTURING

To meet increasing demand for petroleum products, the crude oil run to stills has been increased by 11 per cent over April, 1950.

Methyl mercaptan, a sulfur-containing chemical produced as a by-product from the cracking of petroleum, is now being shipped from Los Angeles Refinery in specially constructed steel cylinders holding about 1,400 pounds. Formerly shipments were restricted to containers holding 180 pounds. Methyl mercaptan is used principally in the manufacture of medicinal products.

At Oleum Refinery the recently completed modernization of packaging and shipping facilities now permits the shipping of products in drums and packages within seven days after receipt of order, whereas the former schedule required two weeks.

Vice President and Treasurer Harold W. Sanders was the principal speaker at an Oleum Refinery Foremen's Association meeting on April 20.

from K. E. Kingman

• PIPE LINE

The Pipe Line Department's program for replacing wood roofs with steel in the Northern Division is practically completed. Some of the old roofs had been in service since their installation in 1909. The new installations reduce both evaporation losses and fire hazards incident to the storage of crude oil. Wood roof tanks remaining in service will be used for heavy crude storage exclusively.

During April the Pipe Line marine terminal at Port San Luis loaded 1,955,000 barrels of crude, consisting of eight different types of oil, aboard 23 ships, for an average of 84,100 barrels per cargo. During the month our record time for loading a ship was established when

Upon the shoulders of these Field managers and geologists rests the responsibility of finding more oil, not only in large amounts but in desirable quality. They are, left to right (seated) Sam Grinsfelder, A. C. Rubel, E. B. Noble, S. G. Wissler; (standing) John Hazzard, S. C. Giesey, Chester Cassel, A. P. Loskamp, John R. Sloat, R. G. Greene, B. P. Kantzer, H. N. Goodell, L. D. Cartwright, Jr., Dudley Tower, W. Z. Burkhead, J. J. Bryan, E. R. Atwill and R. W. Burns.

89,431 barrels of 35-gravity crude oil were loaded on the S.S. ST. CLAIR in four hours and thirty-five minutes through three lines. The average loading rate was 19,256 barrels per hour; however, during one hour 22,600 barrels were delivered aboard the vessel.

• MARINE Shortly after his return from the Panama Canal Zone, where he recently carried out a comprehensive survey of marine equipment and terminals of the Central American Division, Captain Darrell L. Povey was transferred from Seattle to the San Francisco area where he has assumed the duties of port captain. Captain Otto Weidmann, who has held the position of port captain at San Francisco for several years, has been appointed port captain at Seattle.

from Ronald D. Gibbs

• PURCHASING Several Purchasing Department members enrolled in the Purchasing Institute recently, held under auspices of the University of California at Los Angeles in cooperation with various purchasing agents' associations.

Purpose of the Institute was to explore the implications of research in purchasing as they apply in practical situations—another way of saying, "How can a purchasing department secure greater value for each dollar expended and how can it be of greater service to all departments of a company?" Among subjects that our staff found valuable to Company purchasing activities were "Public Relations," "Law of Contracts," "Changing Sources of Supply," "Scope of the Purchasing Function," "Measures of Effectiveness of Purchasing" and "Advancing in Purchasing."

Among the top-flight men of this profession participating were Dr. Howard T. Lewis of Harvard Graduate School of Business, Dr. Thurston Ross, formerly with University of Southern California, H. W. Christensen, director of purchases of Columbia Steel, and George Aljian, director of purchasing and packaging of California and Hawaiian Sugar Company.

from E. H. Weaver

• MARKETING On May 15 the first of a series of 36 meetings was held for the two-fold purpose of acquainting all wholesale marketing employees with new compounded engine oils recently announced and creating among sales representatives an aggressive selling attitude in the present buyer's market. A meeting was conducted in each district by personnel from the Lubricating Oil and Grease section of Head Office Marketing. In attendance were district managers, resident managers, district representatives, salesmen, tank truck salesmen, consignees and their employees. A film was shown stressing the importance of proper selling attitude and technique, followed by discussions on effective salesmanship and an outline of outstanding characteristics of the available new industrial oils. There were semi-technical demonstrations showing the resistance of these products to oxidation, their dispersive detergent ability and alkalinity. Following the meetings a 16-page pamphlet was distributed to those in attendance, summarizing the discussions and demonstrations.

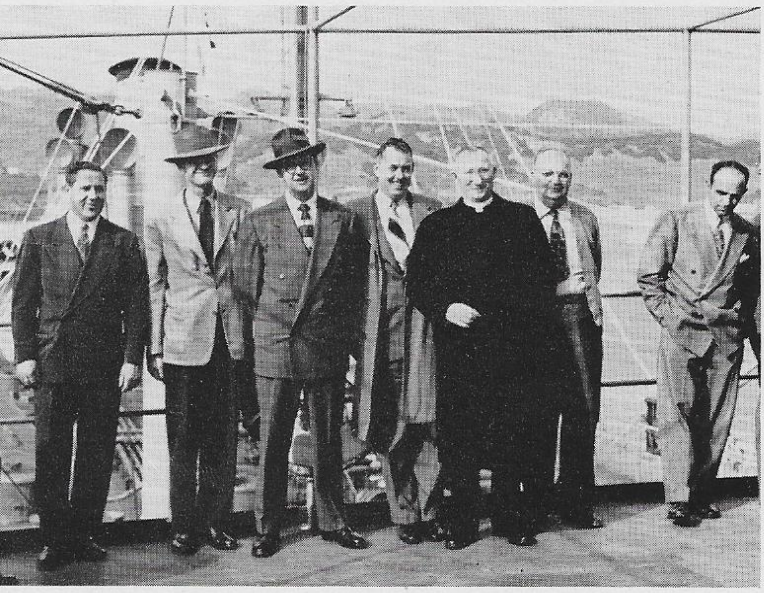
Inaugurated on May 1 and continuing through August, a Triton sales contest is alerting dealers to check the oil of each customer's car. The dipsticks of selected cars known as "Triton Phantoms" have been marked, and the dealer needs only identify one of the marked dipsticks to be eligible for cash prizes ranging from $2.50 to $10, depending upon the color of the marker he examines. If a "Phantom" needing an oil drain is asked, "How long has it been since your oil has been changed?" the dealer receives a prize of $10 regardless of the marking's color. If he misses identifying a "Phantom" through this dipstick clue, he will receive a postcard reading:

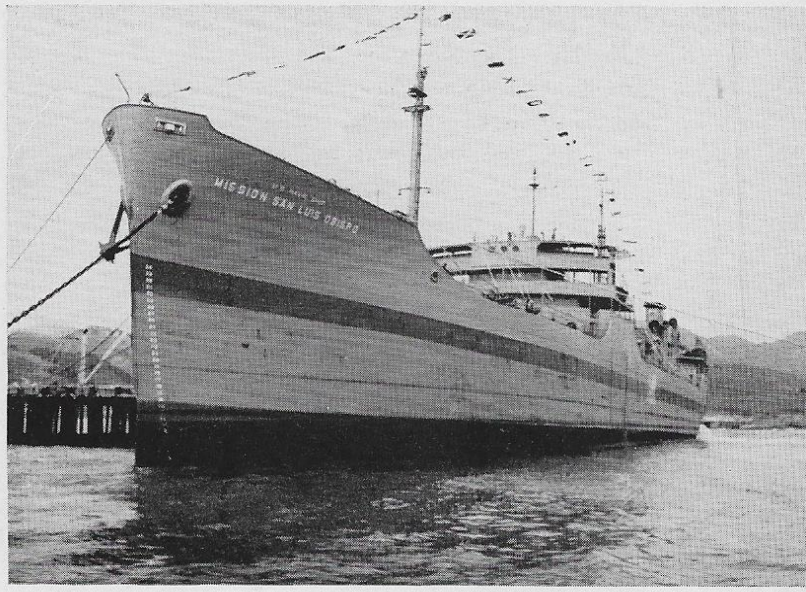
"I was drippin' with dollars today,
But, my friend, I'm so sorry to say,
Though my dipstick was hot,
You completely forgot,
And the rule is 'No catchee, no pay!' "

from Roy Linden

"Strictly new and modern," is the decision of Dr. Glenn Cecil Leisure and Hoyt Leisure, at left of this picture, as they break ground for a handsome new Union Oil station through the paved yard of an older one at Crecent Drive and Burton Way in Beverly Hills. Many new facilities and attractive landscaping will feature this corner which, the Leisures recall, was an unprofitable bean field back in 1919.

Others assisting in the ceremony with appropriate tools are, continuing from left, D. D. Cargyle, chief building inspector of Beverly Hills; C. A. Myers, building contractor, Union Oilers L. D. Leeper, R. H. Rockwell and H. M. Schafer; and Andy F. Brown, vice president of California Cornice, Steel and Supply Corporation.



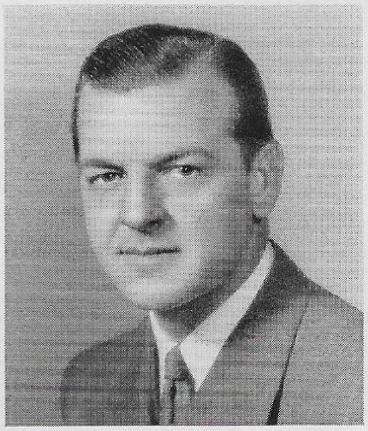


What's in a Name

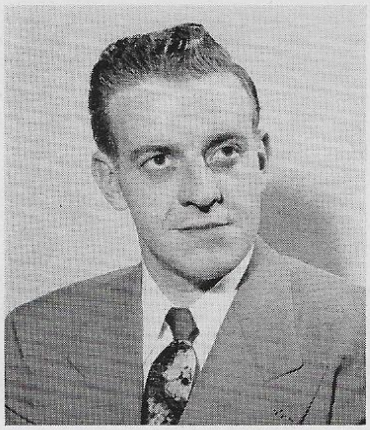
During March the Tanker SS MISSION SAN LUIS OBISPO (above, right), built at Sausalito in 1944, made her first call on San Luis Obispo County, after whose famous mission she was named. While taking aboard a cargo of Union crude oil at our Port San Luis wharf, she was boarded and honored by a delegation of prominent leaders from nearby towns and industries.

Included among those who participated in festivities aboard were (above, left to right) Union Oilers Nick Ugrin and C. P. Johnson; Captain R. E. Rindge, the host; Editor Bob Goodell; Monsignor Patrick Daly of the Mission; Union Oiler Jim McMillan; and Chamber of Commerce President Fred Waters—all boosters of everything bearing the good name San Luis Obispo.

ELECTED ADMINISTRATORS OF EMPLOYEES' BENEFIT PLAN



J. S. Foster



M. S. Thomson

L. A. Billington

Selected through means of a Company-wide election, J. S. Foster, M. S. Thomson and L. A. Billington have been chosen to fill vacancies on the Employees' Benefit Plan Board of Administrators.

Foster, who joined the Company as a service station attendant in 1932, is now district manager at Riverside.

Thomson started work as a laborer and technical trainee at Los Angeles Refinery in 1940. He is now superintendent of cracking at the same refinery.

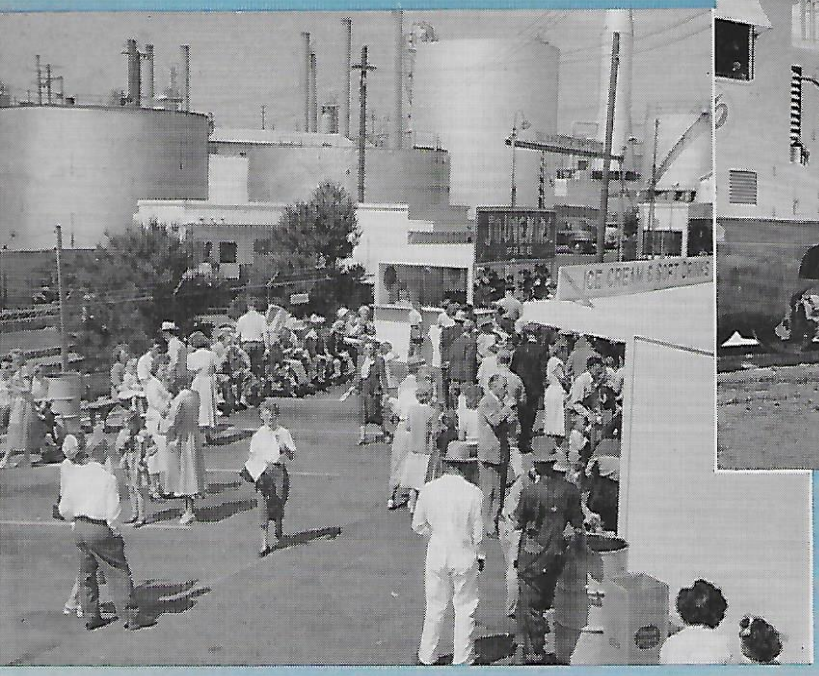
Billington, at present general foreman of the automotive department at Santa Fe Springs, has moved up to that responsibility from his initial assignment in 1925 as absorption plant fireman at Orcutt. He fills the unexpired term of G. A. Trimble, now in Portland.

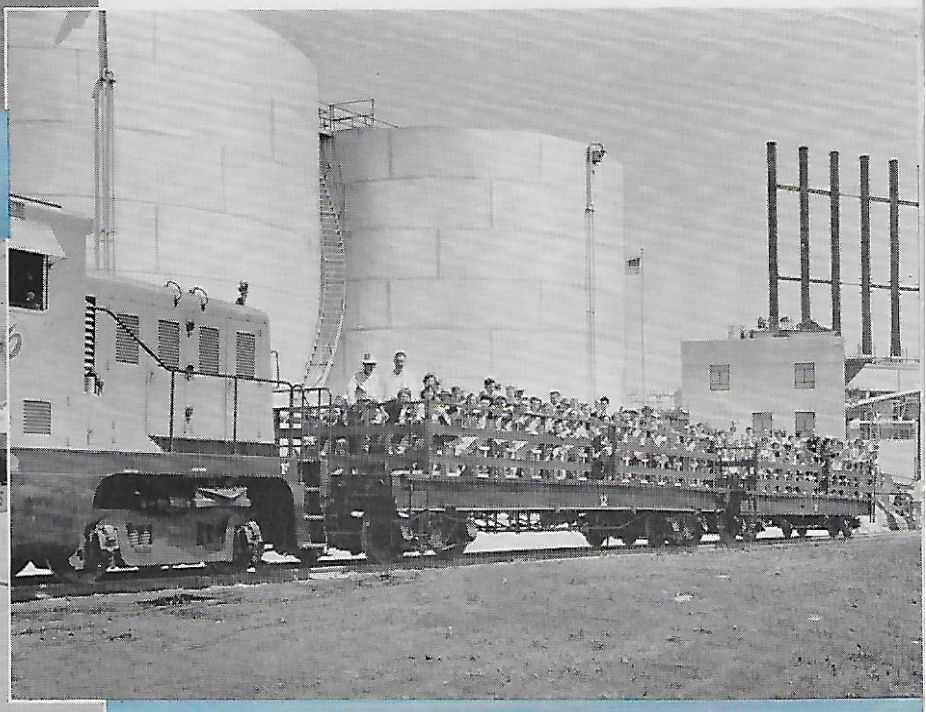
WELCOMED

EVEN THE weather cooperated in making Oleum Refinery's first "Open House" on April 29 successful to a superlative degree. Bay Area employees and their families, numbering up to an estimated 3,600, took advantage of sparkling sunshine and gave the patiently working refinery a festive atmosphere from dawn to dusk.

Quite as if they had experienced years of training as professional showmen, the Oleum hosts made everybody welcome and kept events moving at a comfortable and interesting pace. Registration and the securing of lapel identification badges served to make folks acquainted. Toddlers were put to bed or at play in special nurseries rigged for the purpose. The movie fans of tender years found some super comedies and cartoons unreeling on the second floor and stayed for at least two

Above, with Dad along as guide, bread-winners of tomorrow toured the Triton-making facilities.





Oleum's dieselized Limited transported visitors to the wharf and proved to be a stellar attraction of the day.

The "Gay-Way," offering free pop, ice cream and rides to every youngster, ages 1 to 100, did big business.

AT OLEUM

shows. Meanwhile, Mom, Dad and the teen-agers slipped away to see what makes a refinery click.

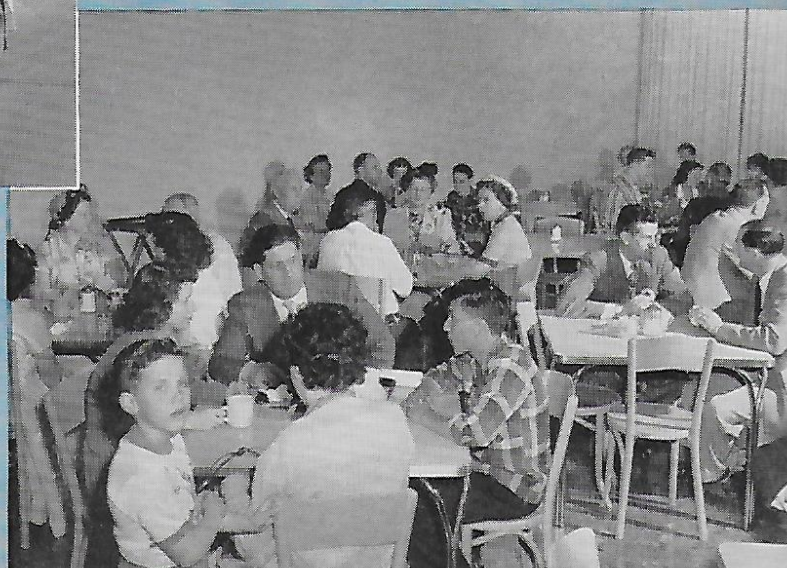
After seeing the Administration Building's "county-fair" display of products and processes, everyone climbed aboard buses or the Oleum Limited for a close-up view of refining units and shops. They saw not only the thingum-a-bobs that refine but also the Compound, the wharf, a tanker and, by no means least, a thrilling fire demonstration. No wonder free refreshments tasted so good after two or three hours of interesting information and good fun.

Unbelievably soon the sun threatened to go down. Kids gave up their seats reluctantly on the carnival rides. Stillmen concessionaires-for-the-day scraped bottom for the last pop, ice cream and souvenirs. And 3,600 tired guests departed for home—with a new appreciation of Dad and the important job he's doing.

Here's how an audience of Union Oil children and chaperons look to "Buggs Bunny," hero of the screen.

Above, drama of a more realistic nature was created, directed and acted in this Jr. parking lot.

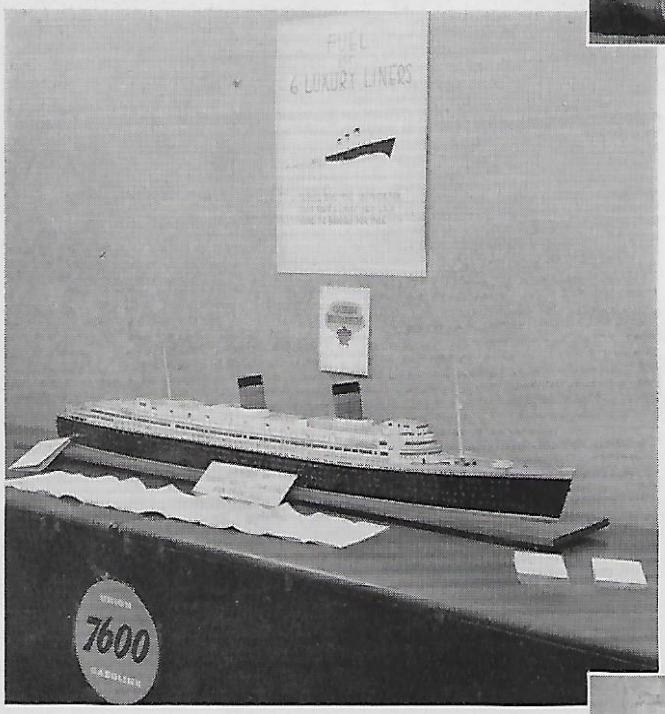
A fleet of chartered buses cut shoe-leather costs to a minimum; gave many their first inside view of refining.



Right, lunch hour was extended round-the-clock as a means of staving off mischievous hunger gremlins.

The Marketing Department got in a good advertising plug by means of an Administration Building information booth.

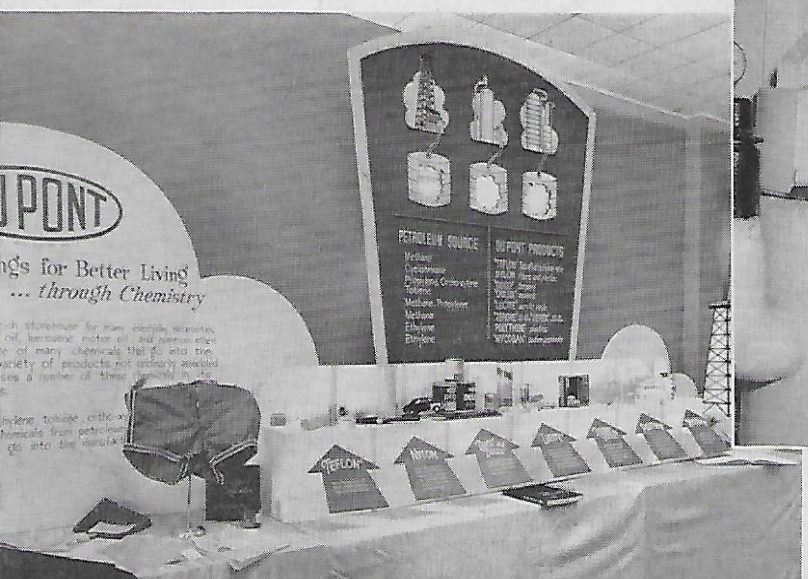
"Now, if you'll stay safely out of harm's way, the boys will show how to douse three fires in three jiffies."



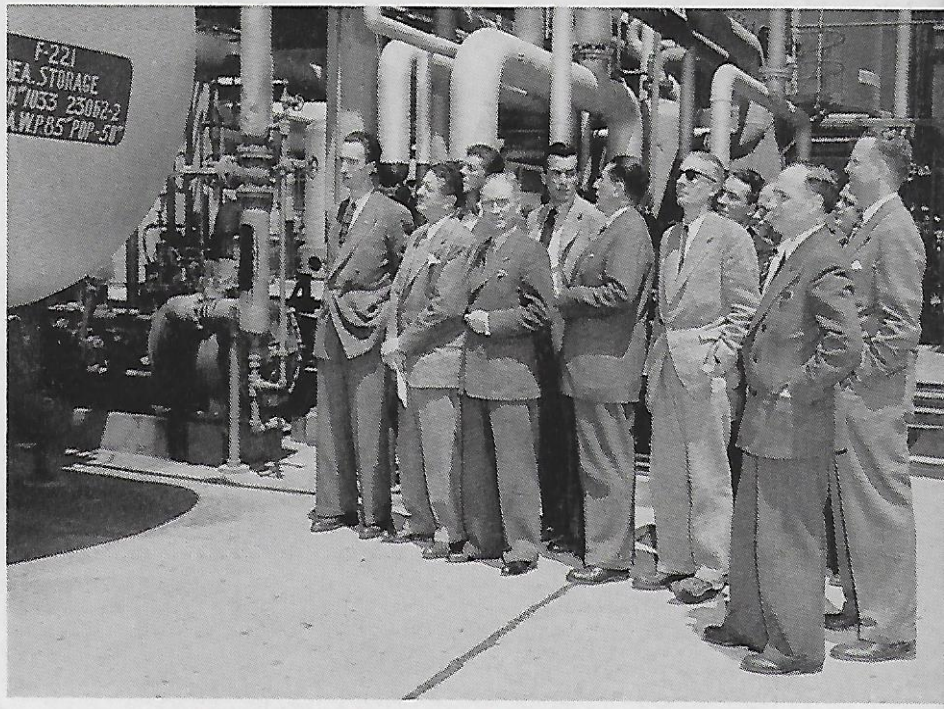
Cunard White Star Line of San Francisco kindly loaned the QUEEN ELIZABETH to demonstrate that Oleum's fuel oil production could keep six such liners operating.

Always of interest are the Du Pont exhibits, telling how chemistry is helping to alleviate many world shortages of necessary goods.

Research entertained with a fresh batch of Unoba Grease cooked to "specs" in one of their kettles.



Vistors from Abroad



Our hydrogen sulfide removal system was one of several installations that intrigued visitors from France.

France

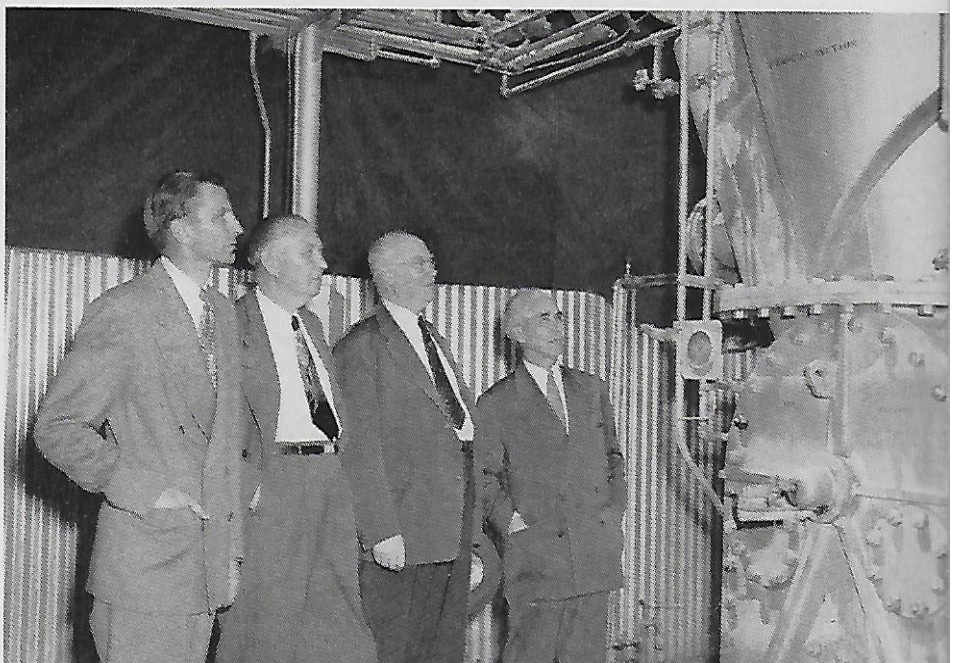
ADDING to the impressive list of people from many nations who have beaten a path to our Los Angeles Refinery, two groups of specialists from Sweden and France headed the visitors during May.

David Dalin, president of the AB Svenska Mashenverkin Company of Sweden, was interested principally in our continuous shale retort. Sweden long has been a pioneer in exploring the commercial possibilities of shale oil. The company Mr. Dalin represents operates a 12,000 ton per day shale plant, which is probably the largest of its kind now in operation. It is possible that the processes developed by Union Oilers will be of great value in improving Swedish methods. Dr. Dalin was accompanied by his brother, Alex J. Dalin, district chief engineer of the York Corporation, and by Ira Milton Jones, patent attorney.

The French group included Andre Thiria, chief chemical engineer in the French Government's Ministry of Industry and Commerce, and seven prominent engineers and specialists from that country. They were seeking up-to-date information on latest developments in oil refining, primarily in the petro-chemical field. It was through the Economic Cooperation Administration (ECA) that Union Oil facilities were placed on their itinerary.

Both visiting groups were shown every courtesy by members of our Research and Process Development staff.

Sweden



Union Oil's continuous shale retort has attracted attention even in Sweden, bringing two of their foremost shale oil authorities, the Dalin brothers (center), across the Atlantic for a first-hand inspection of the experimental unit at Wilmington.

In my opinion...

Dear Editor:

I think, after much doubt, that the editor and publishers of ON TOUR really do want communications from employees of Union Oil. The editorial entitled "What's the Score" convinced me. I am so whole-heartedly in agreement with the principles set forth therein that I am writing this, and may write more.

I thoroughly enjoy ON TOUR each month, and find only one point for criticism—its brevity.

As for suggestions, I think the matter of "participation" is very, very well written up in the April READER'S DIGEST under the title "Enterprise for Everyman," a condensation from FORTUNE . . . am curious to know what Management thinks of such a plan . . . and am almost positive that some sort of employees' suggestion plan would immeasurably benefit both the Company and employees.

Eugene C. Foster
Oleum Refinery

. . . We too enjoyed reading about Lapointe Machine Tool Company's union-management productivity plan as reported in FORTUNE and the READER'S DIGEST.

As to Management's thinking on this subject, we were given access to the Company's "Suggestion System" file of correspondence dating back more than 15 years. Throughout these years numerous suggestion plans have been proposed and considered. In 1944 Management appointed a "suggestion plan" committee to make studies and submit their recommendations. Again in 1949 a great deal of research work was done along these lines. In both instances, due to the nature of our industry and its many ramifications, it was recommended that no such program be started. This file, however, is not closed and may sometime contain the blueprint of a workable experiment.

Did you know that many companies have abandoned suggestion plans after a few months or years of earnest trial? Apparently employee enthusiasm wanes after a brisk start, and administration costs of the scheme sometimes outweigh its advantages.

Meanwhile, Union Oil, along with most American companies, uses a sort of informal suggestion system. Without either a name or a letter-drop, it nevertheless solicits all the industrial suggestions Union Oilers have to offer. And rarely does a good idea or thoughtful employee go unrewarded. Until a better plan comes along, let's make good use of the tools at hand. . . . EDITOR

Dear Editor:

A great controversy has arisen in our office concerning the proper pronunciation of ON TOUR. . . . The older employees contend it is "On Tower," but can give us no logical explanation. . . . Another group contends the name is derived from an oil field expression "on tower" which is synonymous to "on shift." But if the spelling has been derived from the French verb *tourner* and means "a turn of duty" or "a shift," it should be pronounced "toor."

The undersigned employees are relatively new with the Company, but are avid readers of ON TOUR and feel that we should be pronouncing the name correctly.

Angie Whitaker
Shirley Campbell
Jeanne Temple
of Oleum Refinery

. . . . Happily you're both right. ON TOUR is pronounced "On Tower" and it means "on shift." Just how the early oil field workers got hold of the right French word and the wrong pronunciation nobody seems to remember. But both are commonly used and thoroughly understood among all men who drill for oil and produce it. And, knowing roughnecks, far be it from us to suggest that 50 million Frenchmen can't be wrong. . . . EDITOR

ALL ERRORS (continued from page 10)

These people found the virgin soil of Texas too forbidding, so moved on to Nauvoo, Illinois, where a completely planned and constructed city awaited them. Nauvoo, then the largest and most beautiful city in Illinois, not even excepting Chicago, had been built by the Mormons. Due to conditions of intolerance and injustice existing on America's frontiers during that era, the Mormons had been invited through the governor's expulsion notice to move on. Their hastily abandoned farms and city, including a new temple, presented Cabet and his followers with a ready-made opportunity.

Nevertheless, Socialism again failed. Within a few months dissensions arose; the members split into factions and moved away. Cabet died in 1856 but outlived his social experiment by several years.

The Mormons themselves later tried their "United Order" in Utah; soon concluded that even people closely joined by strong religious bonds were not unselfish enough to live it; and today are among the nation's strongest advocates of free enterprise.

As a matter of fact, Socialism has had hundreds of trials—most of them right here in our own country where the doors have been kept open to advancement and

reform. There is hardly a shred of evidence that any social organization based on "collective or governmental ownership and management of the essential means for the production and distribution of goods" ever succeeded. Russia's revolution of the masses quickly disintegrated into a military dictatorship—more tyrannical and ruthless, less free and democratic than the czarist regimes that preceded it. England's semi-Socialism is already showing signs of weakness and eventually may have to choose between autocratic control by a strong central government or a return to free institutions.

America should have learned its lesson from the experiments of Owen, Fourier, Cabet and others. But today the same old socialistic schemes are being dusted off and sold to the bargain hunters for new merchandise. Intellectuals of the type who delve deeply into theory but seldom soil their hands in practical experience are especially prone to forget New Harmony and Brook Farm. Many of them, unfortunately, know how to write well, speak well and get into public office.

As a result, America is farther along the road to Socialism than many of us realize. Our always indebted postal system has been socialized from the beginning. So also have been our armed forces and educational system. Government power monopolies have pushed private business out of several markets and are threatening to invade others. Every time one of our traditionally independent farmers accepts a subsidy allowance for something he didn't grow or couldn't sell at a profit, he takes another step toward becoming one of Uncle Sam's hired hands. Too many state's rights have been sold for Federal grants. Thousands of dead-beats are getting their something-for-nothing daily in the form of undeserved pensions and unemployment insurance. Vital incentives are being choked off through Cabet's system of progressive taxation.

And the end is not yet. Despite the heaviest tax burden in our history, our government is spending its entire income and borrowing more. Statisticians estimate that more than one-third of the national income is thus being spent for non-productive purposes. Not only do our elected representatives wink at the deficit, they persistently do nothing to decrease it.

Certainly there is room for improvement in America and always will be. We can use more co-operation and social service. Some profit seekers are too greedy. Some income and social opportunity could be more equitably distributed.

But why put such a weak hitter as Socialism into the game? Hasn't our present system gradually eliminated child labor, human slavery, sweatshops and hundreds of other social abuses? Haven't we far exceeded the educational objectives, working conditions, cultural advantages and standards of living Owen aspired to reach?

And isn't it quite possible that free men, if permitted to keep their American incentives, will find a solution to our more modern problems of depressions, industrial disputes, unemployment, public health, etc?

Let governement control, Socialism, succeed if it can at least once before abandoning a way of life that has produced so much good. And let's not be misled into supposing that Socialism by any other name would be more sweet.

SERVICE BIRTHDAY AWARDS

JUNE 1950

Thirty Years

Ahern, William P., Oleum Refinery Mfg.
Black, Ray L., Coast Div. Field
Bongard, Hubert W., Coast Div. Field
Estrada, Rudolph P., No. Div. Pipe Line
Moran, Sam, H. O. Comptroller's
Mitbo, Minnie, Northwest Territory
Ruoff, Rudolph E., So. Div. Field
Thompson, R. W., So. Div. Automotive

Twenty-five Years

Clark, George W., So. Div. Field
Everson, Theodore H., So. Div. Field
Kelly, Thomas J., L.A. Refinery Mfg.
Lowery, Mansfield B., Oleum Ref. Mfg.
McCreary, C. L., Research—Wilmington
Norgaard, Edward, Central Territory
Smith, Frank E. Jr., Oleum Ref. Mfg.

Twenty Years

Brown, Olga M., Southwest Territory
Bryant, Margaret, Southwest Territory
Cole, John H. Jr., Southwest Territory
Emerson, H. D., Research—Wilmington
Gualdoni, W. E., Oleum Refinery Mfg.
Hansen, Louie, Oleum Refinery Mfg.
Harding, Wayne G., L.A. Refinery Mfg.
Jack, Alfred B., Central Territory
Martin, Ralph V., Central Territory
Paul, Peter F., L.A. Refinery Mfg.
Pictor, Angela, Head Office Tax
Scott, F. S., Research—Wilmington
Woolway, George G., So. Div. Pipe Line

Fifteen Years

Best, Walter J., Coast Div. Field
Bowman, W. K., Southwest Territory
Carson, Wilbur, Southwest Territory
Clark, Major Paul, So. Div. Automotive
Eliason, Helen M., Southwest Territory
Falk, Clarence R., Oleum Refinery Mfg.
Fujii, Masami H., Central Territory
Hall, Clarence E., Oleum Refinery Mfg.
Hamilton, Violet J., Southwest Territory
Hughes, Aden W., Exploration—Pacific Coast Area
Jensen, Sam, Coast Div. Field
Kaye, Everett B., So. Div. Expl.
Murray, Hilda E., Central Territory
Peterson, Oliver E., Southwest Territory
Smith, Ray Wm. Jr., Northwest Terr'ry
Spaan, Richard, L.A. Refinery Mfg.
Spooner, Robert G., Northwest Territory
Tompkins, A. A., S. Div. Automotive
Wark, John J., H. O. Comptroller's
Woodworth, Theo. J., Central Territory
Zanzot, Harold C., H. O. Comptroller's

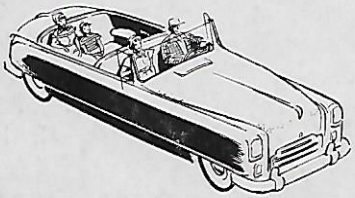
Ten Years

Backlund, P. S., Research—Wilmington
Ballard, Robert I., Texas Gulf
Doyle, Paul K., L.A. Refinery Mfg.
Fischer, P. W., Research—Wilmington
Herrman, George F., Central Territory
Huffman, H. C., Research—Wilmington
Jameson, W. T., Oleum Refinery Mfg.
McKinnis, A. C., Research—Wilmington
Pohl, William F., Southwest Territory
Thomson, M. S., L.A. Refinery Mfg.

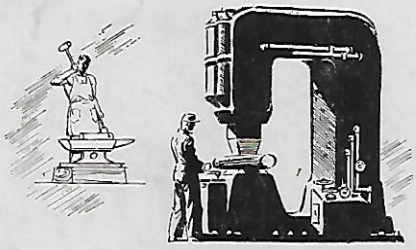
Gasoline costs you ⅕ as much today as it did in 1914

1. In 1914 a gallon of gasoline cost the average U. S. factory worker 42 minutes of work. By 1929 the average U.S. factory worker had to work only 18 minutes to earn enough to buy 1 gallon of gasoline. Today he can buy 1 gallon of gasoline with 12 minutes' work. And at least 3 minutes of that 12 goes for gasoline taxes.

Source: National Industrial Conference Board *Studies in Labor Statistics, No. 3, 1950.*

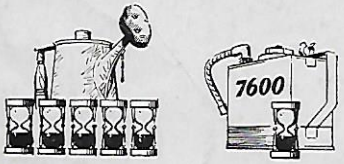


2. In other words, if you eliminate the gasoline taxes (which didn't exist in 1914) and compare the true cost of the product, you find that gasoline costs the U. S. worker just about 1/5 as much today as it did in 1914 (9 minutes' work vs. 42 minutes' work). What's the reason for this?

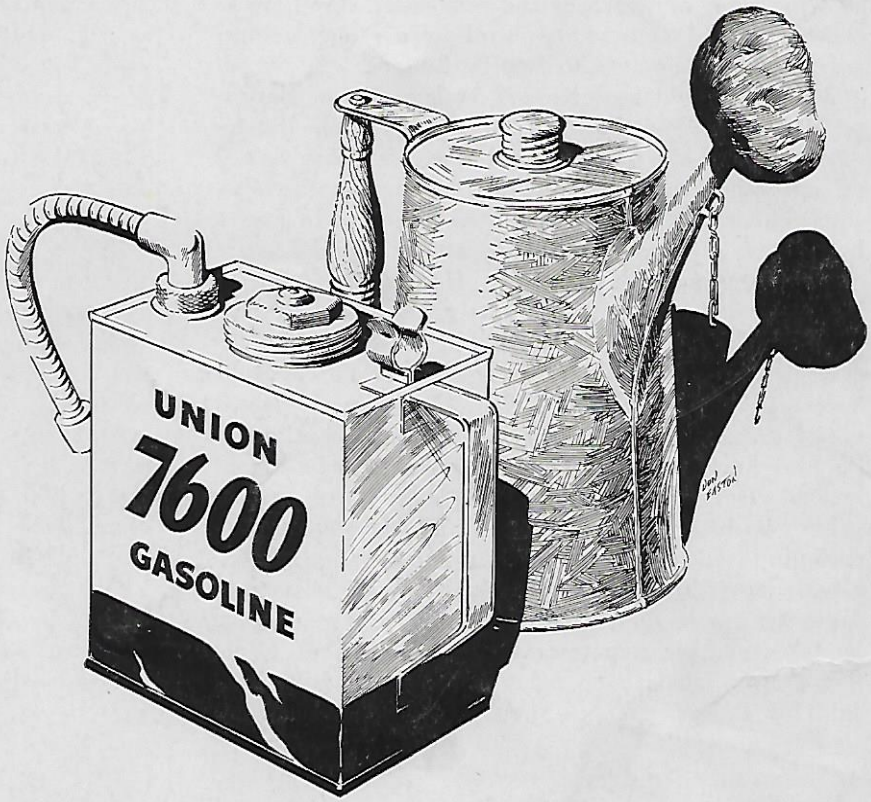


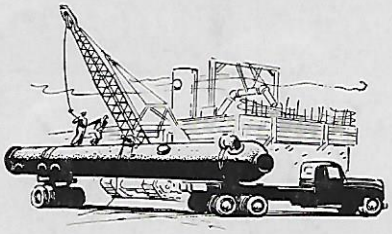
3. To begin with, the U. S. worker can produce 3 times as much goods with an hour's labor today as he could in 1914.* So he has to work only 1/3 as long. In the second place, gasoline costs less. In spite of the fact that today's gasoline is infinitely superior to the 1914 variety, improved efficiency in our operations enables us to make it for just about 1/2 the 1914 cost.

*Source: Tables 187 & 192, *America's Needs and Resources*, Twentieth Century Fund, 1947.



4. These savings in our operating costs, combined with the U. S. worker's increased productivity, have reduced the total cost of gasoline to about 1/5 of what it was in 1914. This remarkable progress is largely due to one thing—*tools*. The 1914 U. S. worker had an average of $1600 in tools at his disposal. Today's worker has $6000 worth. Consequently he can earn far more with an hour's labor because he can produce far more.





5. A similar change has taken place in our own operations. Oil is no more plentiful today — in relation to the demand — than it was in 1914. But in the last 36 years Union Oil Company has invested about $525,000,000 in "tools" and productive facilities. This mechanization of our drilling, refining and distribution operations has enabled us to cut costs tremendously.

6. The money to buy all those "tools"—both for the U. S. factory worker and Union Oil Company—could come from only two sources: people's savings, and profits plowed back into the business. So the thing to remember is this: Unless we preserve people's incentive to save, and allow American business to make an adequate profit, we will never make the progress in the future that we have made in the past.

UNION OIL COMPANY

OF CALIFORNIA

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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 Building, Los Angeles 17, Calif.