



*"On Tour"*

# On Tour



MARCH 1950  
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R. C. Hagen..... Asst. Editor

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.

## What's the Score?

**D**URING the past three or four years, Newcomb & Sammons, industrial relations consultants of Chicago, have been subjecting company publications, similar to ON TOUR, to every measuring device in our American laboratory. Among many significant discoveries, they found—

That the really worthwhile goals and achievements of individuals and teams in industry were being slighted.

That what employees and their companies wanted and needed most was an honest, fair, unbiased, understandable, courageous, informative, attractive and hard-hitting instrument of *two-way* communication—employee to management as well as management to employee. They recognized that such a communications device would be most effective in replacing industrial strife with cooperation, distrust with loyalty, unawareness with understanding, mass floundering with individual progress, the untried philosophies of regimentation with proven opportunities of freedom.

We liked the Newcomb & Sammons analysis. It made sense. We didn't contract to have ON TOUR diagnosed by the fact-finders, but we did try to adopt some of the remedies these people freely distributed throughout the land. And in the mail the other day came this very welcome citation—

"In recognition of an outstanding contribution to the cause of employer-employee harmony, and in tribute to enlightening efforts in behalf of the profession of industrial journalism, the editors of THE SCORE hereby present to

*On Tour*  
1949

THE SCORE AWARD, and in recognition thereof, issue this citation."

(Signed) Robert Newcomb  
Marg Sammons  
Editors of THE SCORE

Which, as we know deep down, is less a recognition of good editing than a tribute to the good-will, interest and participation of Union Oilers everywhere. Your thanks and ours to Newcomb & Sammons!

And now let us help you make the magazine an even greater asset. Your thoughts, ideas, questions, suggestions and criticisms are the real editors of ON TOUR. Management not only invites but urges employee participation. Employee members of organized groups are invited to use the magazine freely to air union opinions. It is a two-way communication—no strings attached.



## The Bridge That Won't Stay Down

Photos courtesy of Seattle Times

When the Tacoma Narrows Bridge collapsed in November, 1940, a passerby luckily had his camera focused and thus recorded this dramatic disaster picture.

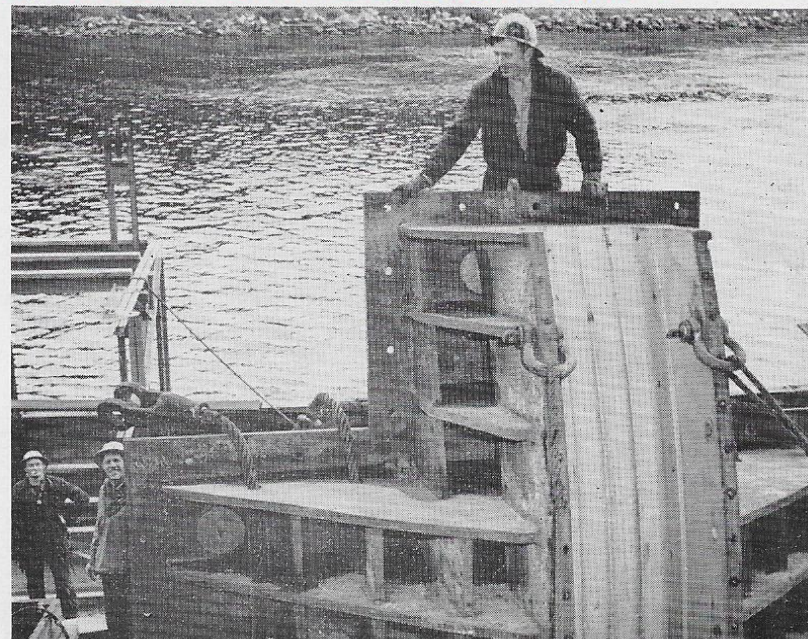
A SEVERE storm hit the Pacific Northwest on November 7, 1940. Icy rain fell and a 45 miles-per-hour wind whipped across Puget Sound. In the storm's path stood the new Tacoma Narrows Bridge, a graceful multi-million dollar structure which, though only four months in service, had already accommodated over 265 thousand automobiles traveling between Tacoma and the Olympic Peninsula. When the wind struck, the great cable-suspended roadway behaved more like a streamer of cloth than one of pavement and steel. It vibrated, swayed, twisted and whipped with such violence that a crossing motorist had to abandon his car and crawl to safety. Finally, with a tremendous twist and surge, the structure, having withstood all it could, ripped apart and fell into Puget Sound.

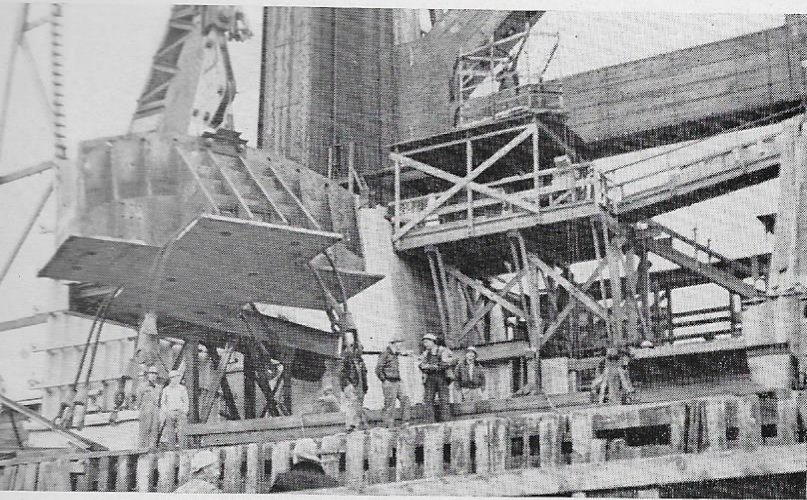
When the storm subsided, 90 per cent of the superstructure had fallen. Side spans had sagged about 70 feet at the center. Cables and towers were so badly damaged they were declared to be useless. Only the piers remained intact.

Yankee grit has endured greater tragedies and risen above them. So, despite an estimated 14 million dollars required to finance reconstruction, the people of Washington waited only for war shortages of steel to end

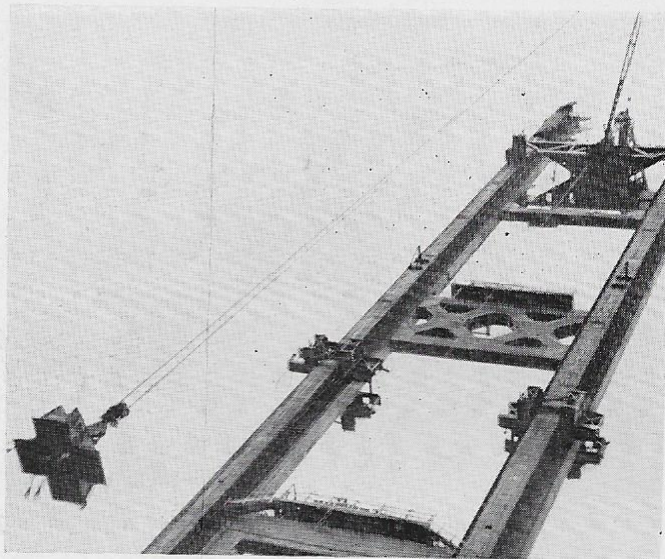


The jinx of Nature continued when an earthquake in 1949 toppled the steel saddle, below, from a tower top into Sound. Diver, above, helped to retrieve it.

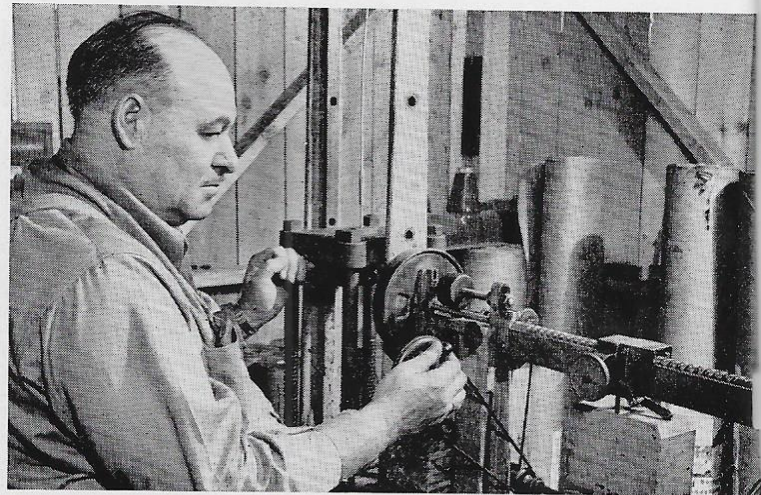
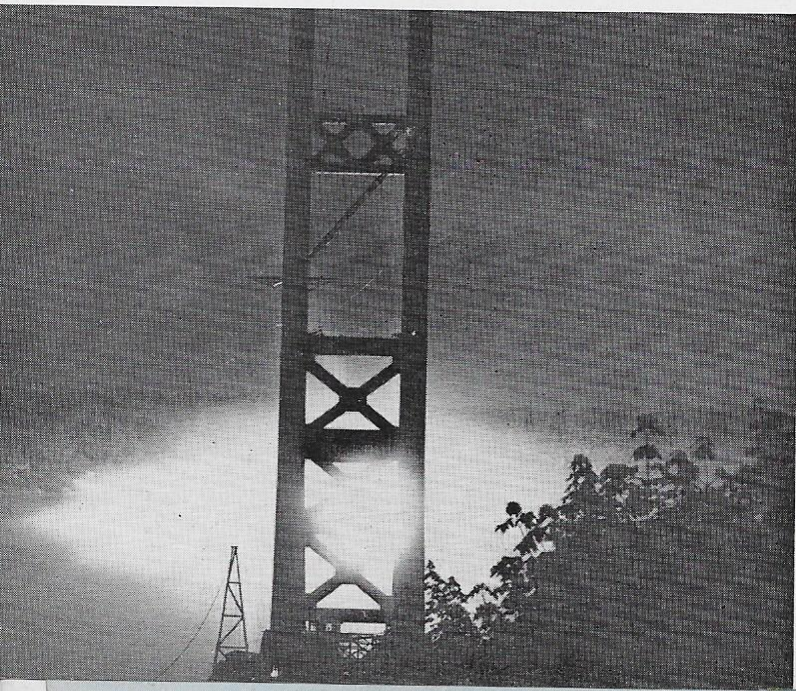




Finally raised from the mud and deep water of the Sound, the saddle paused, above, for inspection, then proceeded, below, on its 500-foot return to the tower.



Third in the series of bridge misfortunes was a fire, which started aboard a construction barge, burned a store of supplies, and barely missed damaging a tower.



Wire being used to spin the two main cables of the new bridge is tested by State Inspector Clyde Barrett. Each wire and connection will stand a pull of 7,000 pounds.

before beginning the job of rebuilding. In April of 1948 work was begun on a safer and larger bridge.

However, jealous Mother Nature was apparently still in a protesting mood. Early last summer, as the project was getting back into full swing again, the Northwest suffered its severest earthquake. A huge, steel saddle atop one of the bridge towers was dislodged by a violent tremor. It leaped 70 feet out into space and performed a 500-foot dive into deep water. To retrieve it, required special deep-sea diving personnel and equipment, precious additional days of lost time.

Even then, the jinx was not ended. A few weeks later fire broke out on a barge tied to one of the piers. Although the tower itself was not seriously damaged, the losses in materials and equipment were enough to make all but the most resolute builders turn away in defeat. However, the contractors stoutly hitched up their belts and stayed on the job.

The Tacoma Narrows Bridge just won't stay down!

In the long history of bridge construction, engineers could not recall another such structure that was so sensitive to the least air current and so panic-stricken by high wind. Shortly after the stiffening girders and floor steel were erected on the first bridge, vertical vibrations were observed. When the roadway was finished, these vibrations increased in severity rather than diminishing as ordinarily would be expected. When set upon by a strong wind, the bridge would undulate to such a degree that its motion was plainly visible and many motorists refused to venture across it.

After close watch and energetic study of the span's



Here is part of nearly 20,000 miles of wire which, when spun into cables, will support the bridge roadway. It was shipped from New Jersey to the West Coast by boat.

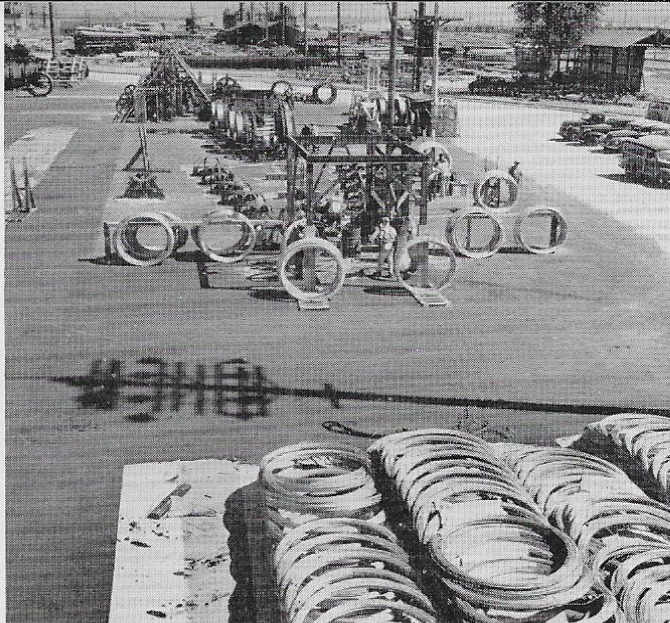
phenomenal actions, a scale model was constructed and sent to the University of Washington for wind tunnel tests. Through these tests it was determined that, if a few structural changes were made in time, the vibrations could be stopped and the bridge would escape damage. The necessary materials were ordered at once. But before the corrections could be made the catastrophe of November 7th came along and made mockery of all plans.

To make sure that the new bridge meets no similar fate, models of it and the former span have undergone comparative and separate tests in wind tunnels at both the University of Washington and California Institute of Technology. In tunnels where wind velocities equivalent to 118 miles an hour were generated, the improved model demonstrated its ability to weather the most severe blow either head-on or from any angle the wind might approach.

Construction contracts for the new span were awarded to Bethlehem Steel and John A. Roebling's Sons Company by the Washington Toll Bridge Authority, of which Charles E. Andrew is chairman and principal engineer. E. L. Watson is the painting contractor.

Since all three of these firms are served their petroleum requirements by Jerry Tooley, Union Oil consignee at South Tacoma, it was through Tooley and Union Oiler James McGee that the writer obtained an intimate view of bridge building at its best.

Construction of the towers on enlarged foundations was undertaken first by Bethlehem Steel, under the supervision of Thomas M. Martinson, resident engineer. Then Roeblings took over the equally fascinating job of in-

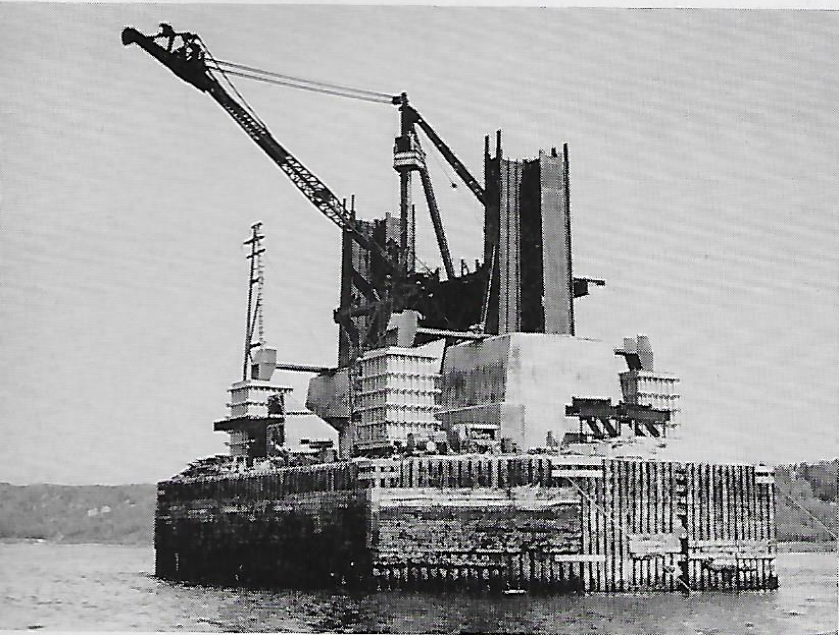


Reeling operations, above and below, consist of connecting the ends of separate coils and winding the wire evenly on spools, each having capacity of 10 tons.



Equipment used in unreeling and spinning at the job site includes a telephone system and several "walkie-talkies", as the mile-long job requires coordination.





This mid-water base of the original Narrows Bridge was enlarged to accommodate a heavier bridge and insure that no "huff and puff" will ever blow it down again.

stalling catwalks across the Sound and over the tops of the two 500-foot towers.

These catwalks, supported by many miles of one-inch rope, provide a foot-bridge for the men during cable-spinning operations. Men are stationed every 500 feet along the catwalk when spinning begins. As the spinning carriage passes, they pull the wire down to the strand being spun and tie it every five feet with material similar to friction tape. The job calls for plenty of nerve and physical strength, and 200 men are thus employed when cable construction reaches its peak. Construction of the catwalk is quite an engineering feat in itself, requiring impressive mountains of material and acts of human daring that are breathtaking to watch. Getting the first line, called a messenger rope, across the mile gap is a tricky operation, done either by towing the rope across with a tug boat or using the current to float it across on empty drums. Heavy shipping in the channel has to be reckoned with until the line is raised in place high above water.

Undoubtedly the most fascinating part of a great suspension bridge are the two large cables that seem to rest across the towers in such a relaxed manner. Actually, these sinews of steel, often appearing as delicate as cobwebs from a distance, are strong and taut beyond belief. Most of the roadway's immense weight plus hundreds of heavy vehicles at a time depend upon these comparatively slender threads for sustenance.



A suspension bridge calls for strong anchor blocks on each bank to grip the main cables. This base on the east shore is shown in the early stages of construction.

Basically, each cable is a compact bundle of spun wires. The material used in the Tacoma bridge is described as .196 wire and was manufactured in New Jersey. In lots of 250 tons it was shipped by boat to the West Coast, thence by rail to the reeling site in East Tacoma. Here, individual coils weighing some 380 pounds are wound on large spools of approximately three tons capacity. Ends of separate coils are connected and tested to withstand a pulling force of 7,000 pounds, which is the minimum breaking strength of each wire. From the three-ton spools the wire is then wound with utmost care on a spool of 10 tons capacity to assure that it will unreel smoothly during spinning operations at the bridge site.

From an anchor block on the east shore a master wire is stretched over the towers and across the Sound to a western anchor block. The master wire is carefully surveyed to see that it has the proper curvature or sag. Then by means of an endless tramway "running rope" and a triangular spinning carriage additional lengths of wire are drawn two at a time from east to west anchor blocks and secured at both ends to an eye-bar imbedded in concrete.

Spinning is done at a rate of about 700 feet a minute, meaning that synchronized unreeling equipment must pay out the wire at exactly 1,400 feet a minute. After about 44 hours of steady labor, this spinning operation has simultaneously woven two strands of cable, each containing 460 individual wires. But it takes 19 strands to

make each finished cable, so the spinning continues until 8,702 individual wires have been spun into 19 strands and the 19 strands have been spun into a cable 20 $\frac{1}{8}$  inches in diameter.

Now if you have checked our mathematics and find that 460 (the number of wires in each strand) multiplied by 19 (the number of strands) does not exactly equal 8,702 (the total number of wires in the finished cable), then here is an explanation that will possibly interest you. The Roebling's Sons Company has found that the final cable compacts nearer to a perfect circle when 17 strands contain 460 wires but the top and bottom strands contain a lesser number.

The distance from anchor block to anchor block of the Tacoma Narrows Bridge is 5,000 feet. Sag increases the cable length to 6,014 feet, plus or minus one foot depending upon factors of tension and temperature. Therefore, the completed bridge roadway will be supported by 104,667,656 feet of wire in the main cables. That amount of wire would nearly girdle the earth.

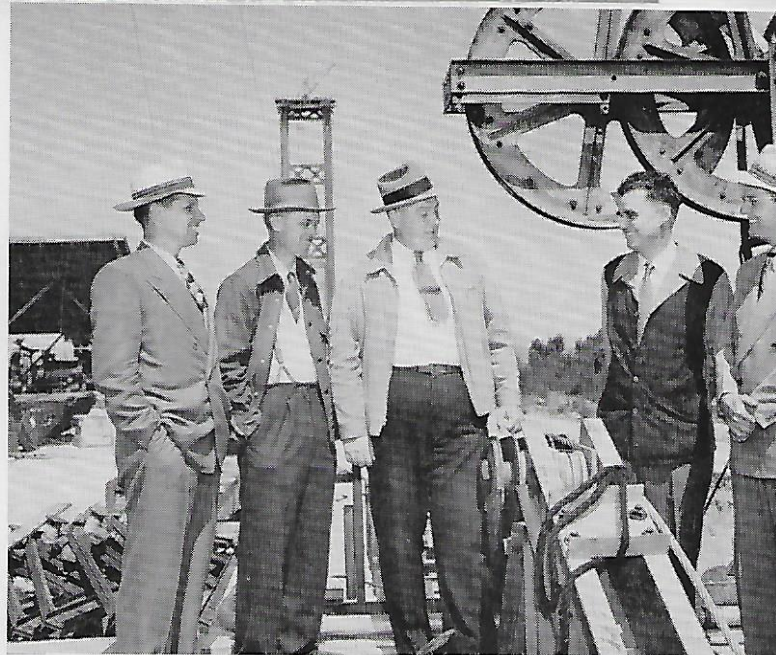
Completion of the bridge is scheduled to take place during July, 1950. Among the compelling reasons for believing that it will not open later than expected is one to be found in the building contract. It provides that a penalty will be charged against the contractors for every day over 700 that it takes to complete the structure.

When finished, the Narrows span will be not only a thing of beauty but a very practical asset to the West. Population in the State of Washington had increased 24 per cent from 1940 to 1946, and motor vehicle registrations increased 18.8 per cent during the same period. In Pierce and Kitsap Counties, the areas most benefited by the bridge, this increase has been even greater—27 per cent in population and 31.6 per cent in car registrations. Bremerton, on the west side of Puget Sound, grew in population from 15,000 to 72,000 during the war and, despite heavy cuts of Navy Yards personnel, is expected to be the home town of 60,000 or more Americans. The bridge will serve to connect the larger cities by a direct auto route and will eliminate dependence on ferries. Tourists and local residents are certain to use this route in ever growing numbers to visit the Federal park recently enlarged on Olympic Peninsula. It is estimated that the four-lane, toll bridge will accommodate a million or more cars during its first year of operation.

Here in Northwest Territory we Union Oilers are especially proud of this building achievement, knowing that our products and services have played an important part in breaking the bronco to ride.

By Gudrun Larsen

ON TOUR



(L-R) Jerry Tooley, Union Oil consignee at South Tacoma; Thomas M. Martinson, resident engineer for Bethlehem Steel; R. J. Cole, project manager; Harold Hills, field engineer; and Union Oiler J. H. McGee.



At the unreeling controls, above, is Union Oiler Gudrun Larsen, author of this and many other ON TOUR articles. Below, Driver Maxfield helps keep the project rolling.



# *Ground Broken For New Research Center*

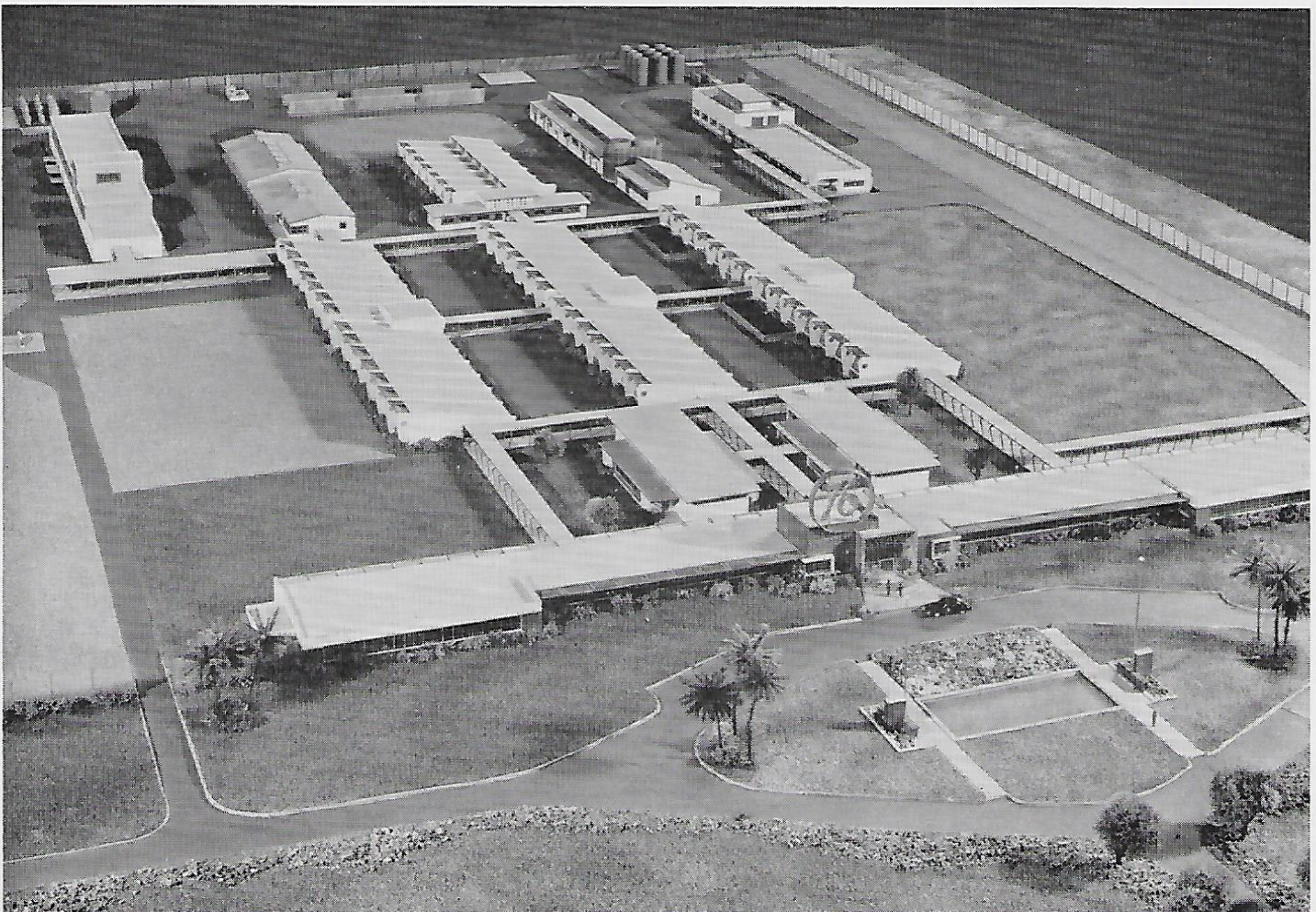


**A** SURPRISINGLY large crowd of business and civic leaders—estimated to number 1,000 or more—joined with Union Oilers on January 17th to witness ground-breaking ceremonies for the Company's new \$5,000,000 research center near Brea, California. All were favorably impressed with the 22½-acre site, upon which 12 ultra-modern research buildings will be erected by July, 1951.

The center was designed by the architectural firm of Austin, Field and Fry. P. J. Walker and Company have contracted to handle the construction.

The ground-breaking ceremony was opened by C. E. Swift, vice president in charge of Research and Patents. He briefly defined the Company's research objectives, enumerated our accomplishments of the past, and indi-

**W. L. Stewart, Jr., above, used old and modern types of shovels to good advantage in officially breaking ground for the Company's \$5,000,000 research center, below, which is scheduled for completion in about July of 1951.**







(L-R) Vice President C. E. Swift, President Reese H. Taylor, Chairman W. H. Warner of the Orange County Board of Supervisors, and Executive Vice President W. L. Stewart, Jr., took part in the January 17th Union Oil program.

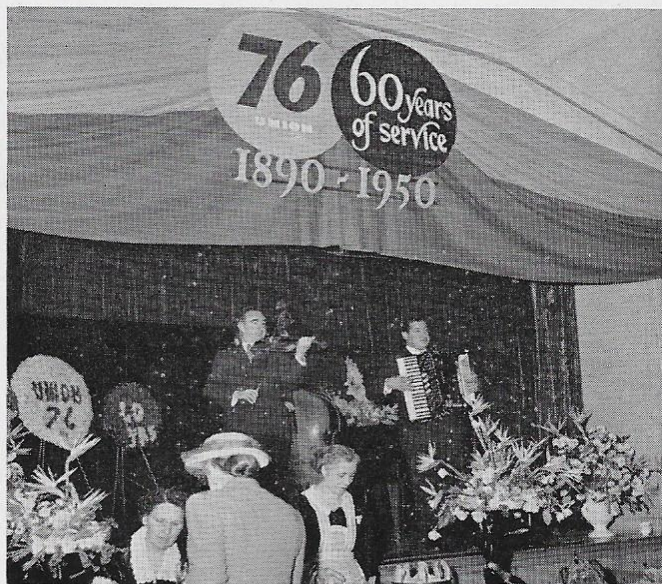
cated that Union Oil plans to invest some \$2,000,000 a year in a continued effort to improve our techniques, products and services.

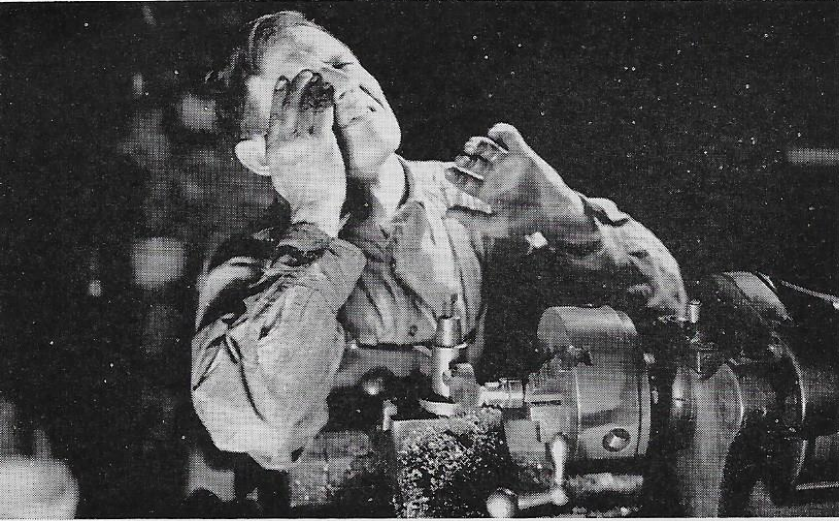
Willis H. Warner, chairman of Orange County's Board of Supervisors, mentioned the mutually pleasant association the people of Orange County and Union Oil have enjoyed during our long program of drilling and production in that area. He predicted an even greater unity of interests when the center is completed and some 280 additional Company employees come there to work and make their homes.

W. L. Stewart, Jr., executive vice president, was introduced as the official ground breaker. He responded with a message of gratitude for all factors that make such progress possible; then significantly picked up a shovel and started the project on its upward way.



A crowd of businessmen, civic leaders and Union Oilers, estimated to exceed 1,000, witnessed the event. Later, most of the guests convened at a club house in Brea, where music and a buffet lunch strengthened ties of good will.





## Fewer But Worse Accidents in 1949

By John T. King

UNION OIL people won a partial victory over accidents in 1949. Only 134 employees suffered preventable lost-time injuries during 1949—a sizeable decrease from the 154 lost-time accidents suffered during 1948.

This represents another step in the right direction and heightens a favorable trend that began five years ago. In 1945 Company employees met with lost-time accidents at the rate of one a day for a one-year total of 365. Each subsequent year has marked a welcome improvement over the year before.

However, the 1949 experience gives us one note of real concern. Our accidents last year, while less numerous, were more serious. That is, the 134 injuries of 1949 resulted in 3,445 actual days of lost time, whereas in 1948 there were only 3,144 days lost because of that year's 154 injuries. Worse still, we had four on-the-job fatalities in 1949 compared with two in 1948.

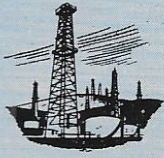
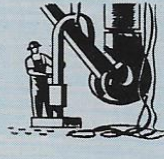


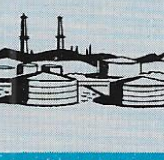


Thus, the need is emphasized for every employee to renew his alertness in preventing unsafe acts and eliminating hazards. The fact that an unsafe habit has never gotten us into trouble, is no reason to condone it.

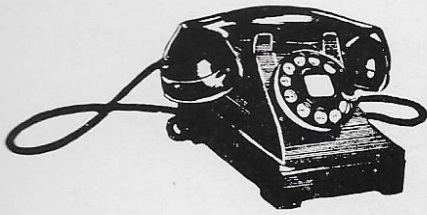
The chart at right can be understood readily if you are familiar with these definitions:

By "Frequency" is meant the number of lost-time accidents per 1,000,000 man-hours worked.

By "Severity" is meant the number of days lost (non-fatal accidents) per 1,000 man-hours worked.

Example: Most of us work about 2,000 hours per year (50 weeks x 40 hours). The Company severity total of .23 for 1949 indicates that the average worker lost .23 of a day for each 1,000 hours worked, or twice that amount of time (roughly one-half day per year) lost during the entire year due to accident.

FREQUENCY			SEVERITY	
1948	1949		1948	1949
13.2	8.8		.25	.42
		<b>FIELD</b>		
7.5	6.7		.10	.30
		<b>PIPELINE</b>		
25.0	24.1		.37	.64
		<b>MARINE</b>		
8.0	8.8		.33	.22
		<b>REFINING</b>		
7.8	5.0		.08	.04
		<b>WHOLESALE</b>		
9.2	15.3		.07	.31
		<b>RETAIL</b>		
9.7	8.9		.20	.23
		<b>COMPANY TOTAL</b>		



# Wanted or Wanting On The Phone ?

**H**OW would you like to be responsible for telephone bills each year amounting to a total of \$500,000? That's approximately what it costs to communicate over the 2,500 instruments now used directly by Union Oil Company. If we were to include hundreds of additional telephones paid for by dealers, consignees and other people closely associated with the Company, our annual bill would run much higher.

It isn't the cost in dollars, though, that concerns us most in this instance. Rather, we're interested in telephone dividends.

What are the reactions of those several million people we call or who call us annually? Because of thoughtless slights or discourtesies, do many of them hang up with a resolve never to call again—even at Union Oil service stations? Or do our average voices leave them about where we found them—on the middle of the fence? Or are we doing an outstanding selling job every time we pick up a receiver—selling ourselves to each other, and our company to an industrial world that is placing increasingly greater emphasis on good telephone manners?

There are, of course, nearly as many answers to these questions as there are Union Oilers. No two of us are alike in tone of voice or audible mannerisms. We are individuals, which is a good thing, and we ought to retain our individualities. But, unless we have made conscious efforts to measure and improve our vocal abilities, it is safe to conclude that the Company's general telephone effectiveness is about *average*. And *average* is woefully lacking, according to a number of nationwide studies by people who know their "phone-etiquette".

The telephone, great as it is, is a mechanical instrument with mechanical limitations. It can carry the human voice thousands of miles, but not so effectively as if the parties were conversing in the same room. It cannot transmit one's personal appearance, smiles and meaningful expressions of the face and eyes. As a result, our voices alone are apt to convey wrong and unintended impressions.

The trick is to know how to compensate for all such shortcomings. You can catch a caller's eye, by using his name frequently in the conversation. Polite ex-

pressions like "Thank you" and "You're welcome" help to produce the voice with a smile. Identifying your company, your department and yourself is a gesture of helpfulness that immediately puts the caller in the right office. You can be well-liked if you will *phone as you would be phoned to*.

A group of Union Oil people from Head Office graciously portray on the following two pages several of the important *wrongs* and *rights* of modern telephone usage. If all of us adopt the obviously good habits they recommend, we are certain to be wanted individually by Union Oil on the telephone. And don't think that it won't make a wonderful impression on the *boss*—our customers. In the order of their appearance, our employee cast includes: Doris Patterson, Marguerite Bridgland, C. H. Miller, Bonnie Bilney, R. E. Osborne, Louise Ware, Linda Romer, Josephine Sagal, R. L. Thompson and Pauline Runyan.

**Head Office operators (L-R) Virginia Fisher, Jewell Schmidt, Helen Richards, Juanita Lavis, Ruby Janssen, Virginia Powell and Chief Operator Lea Keeler handle up to 4,000 calls a day. Their courtesy bears imitation.**



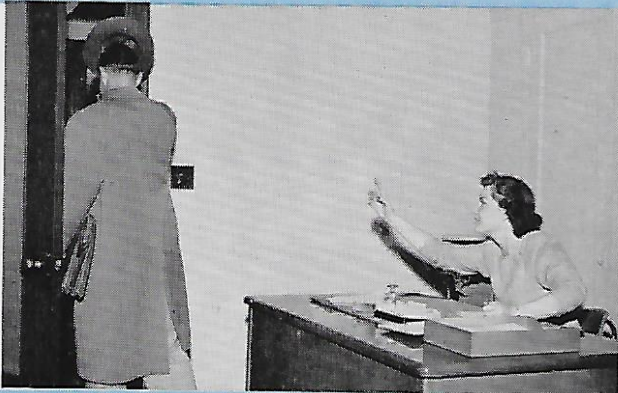


or



Keep an important office line so busy with trivial social chatter that there's hardly time enough left to powder your nose before the whistle blows?

Tend strictly to business—go out of your way to be attentive, courteous and helpful to every caller—but try to keep the conversation businesslike, brief?



or



Place a dozen local and long distance telephone calls, then suddenly disappear into the unknown without canceling the calls or naming your destination.

Always leave information—preferably in written form—with your secretary or assistant, so that you may be easily contacted at other locations? . . . . .



or



Habitually terminate every call with a heavy, ear-splitting bang of the receiver and without even so much as offering a forewarning "Goodbye"?

Phone as you would be phoned to? Say "Thank you" and "You're welcome" and polite things like that? Conclude with a "Goodbye"? Hang up gently?



or



Attempt the impossible by trying to carry on an intelligible conversation while smoking a cigar, eating your daily apple or reading the morning's mail?

While holding the transmitter about one inch from your lips, speak slowly, naturally—sans tobacco, gum and groceries—and with undivided attention?

# You



or



Entrust important names, addresses, numbers, statistics and messages to memory, then promptly forget part or all of what you just had to remember?

Always keep a pad and pencil handy by the telephone? Use it throughout the conversation to record evasive data? And tell the boss in writing?



or



Play your hunches when dialing and needlessly disturb several busy people because you guessed the wrong numbers? Remember time is important! . . .

Obtain a directory; keep it up-to-date and handy? When the least bit in doubt about a number, always consult the directory or dial for information? . . .



or



Make every caller repeat his business to a secretary or corps of assistants before reaching the authoritative person—you—he called in the first place?

Whenever possible, try to conserve on the time and patience of other people by answering incoming calls yourself? Dialing your own out calls also saves time.



or



Figure that every call is either a wrong number or less important than your own work unless the phone persists in ringing five or more times?

Handle every call as soon as possible? Identify your company, your department, you? Handle the call if you can? If you can't, follow through on a transfer?



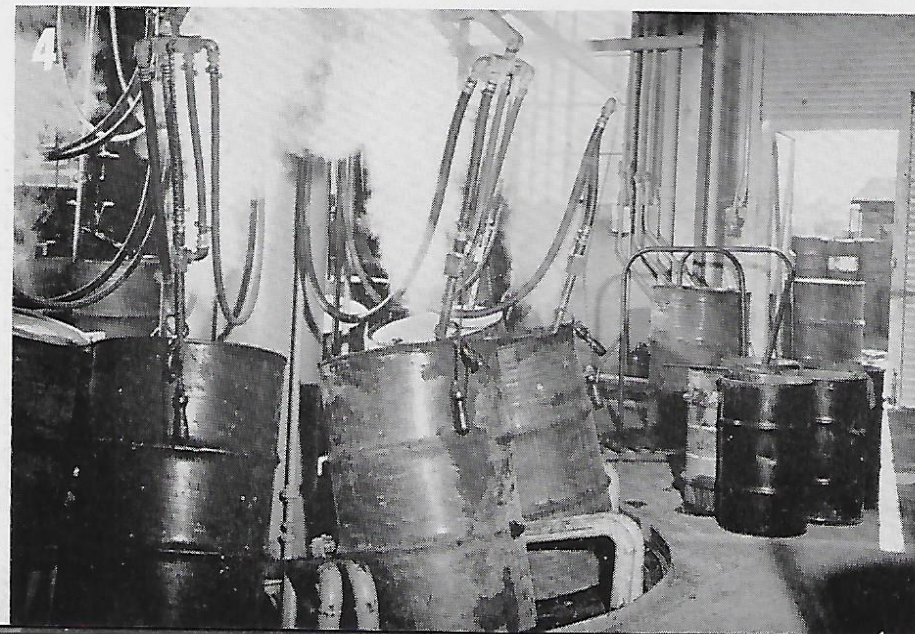
# UTOPIA FOR BARRELS

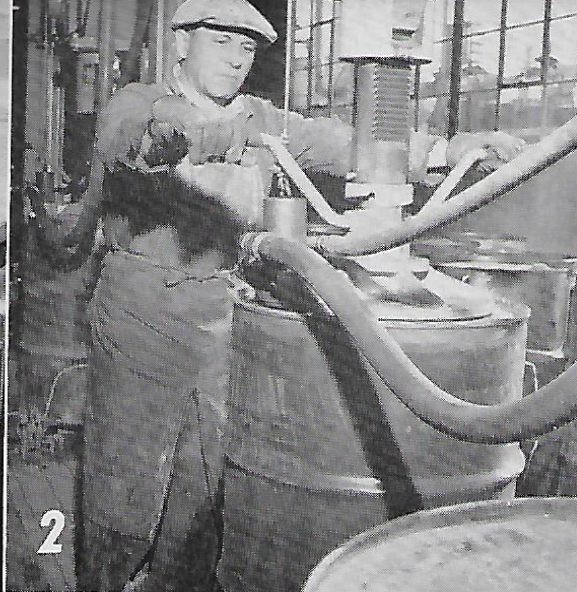
**M**Y very first afternoon of work for Union Oil amounted to receiving a truck-and-trailer load of barreled stock at the Bakersfield marketing station on August 17, 1937. I was replacing a homesick lad by the name of Pat, with the result that Ed Coopman and his boys promptly rechristened me Mike—a name that somehow mellowed those first few hours of barrel-handling in 110 official degrees of heat as no other name could. I felt like quitting that \$120-a-month job and

following Pat back to the cool fog of San Francisco. But Mike isn't exactly a quitting name. Largely because of it, the truck got rid of its load and headed back toward Oleum with a towering burden of empty barrels.

Ever since that day, barrels have rather intrigued me. I've loaded, unloaded, rolled, trucked, up-ended, filled, painted, stenciled, emptied, cleaned, warehoused, measured, weighed, counted and accounted for, cursed and discussed millions of 'em. I've even been "over" one

(4) This "decontaminator," employing jets of hot air and steam, eliminates explosive vapors, dislodges dirt and oil, and removes contaminants by vacuum. (5) Julius Wennerholm depends upon laboratory methods and equipment to test the cleansing potency of a caustic soda solution next used in the elaborate cleaning process. . . .





(1) Here we are in Oleum Refinery's "raw drum" storage area where thousands of used company barrels have returned from all points of the compass for re-use. (2) John Souza, with drum under press and full of water, will use 80 pounds of water-pressure to remove dents. (3) Seen welding a damaged bung is Joseph Horvat. . . .

a few times, so to speak. I can stand on a farmer's porch and tell you whether the barrel by his barn is a "GIB", an "ST", an "RST" or an "NRB". I like barrels. They about conform with my technical level of understanding.

But, do you know, throughout all of those appetizing, barrel-hustling years, there was one thing that perplexed me. Why did some departments—Oleum, for example—always insist on calling 'em drums?

The boys at Oleum are very clever about never leading with their chin. Bud Fitzgerald sort of hedged when I put the drum question to him several weeks ago. So did Gregg Stone and a couple of others who, I am sure, knew the answer. Instead, they relayed me along to Jerry Dunkelberger, evidently the paramount Oleum authority on drums.

Said Jerry in his precise manner: "Mike, if you were working here and received an order to ship 100 barrels of cleaning solvent, how much would you ship?"

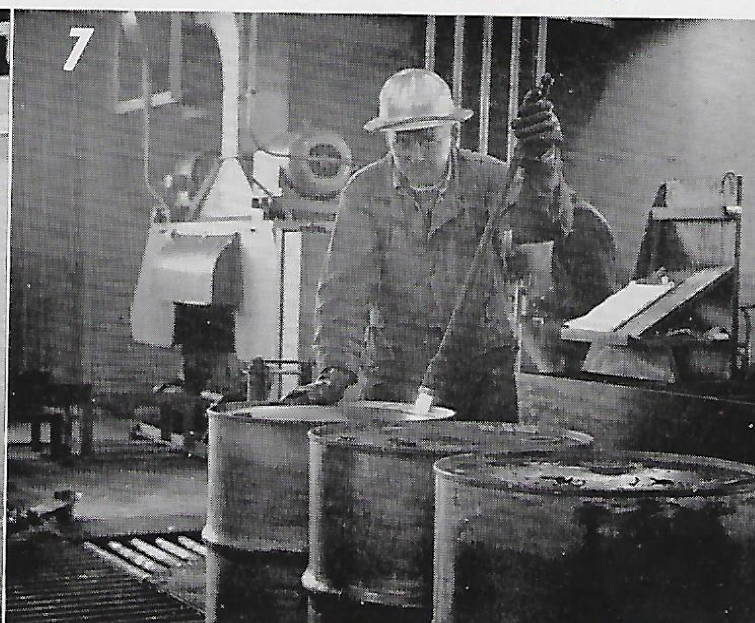
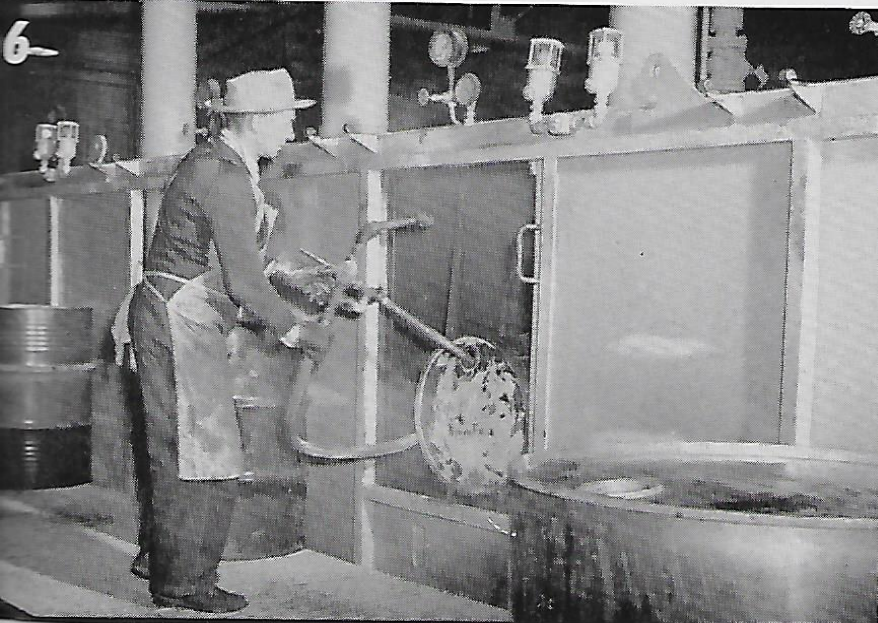
"That's easy. I'd ship 5,300 gallons in 100 nice, clean galvanized barrels."

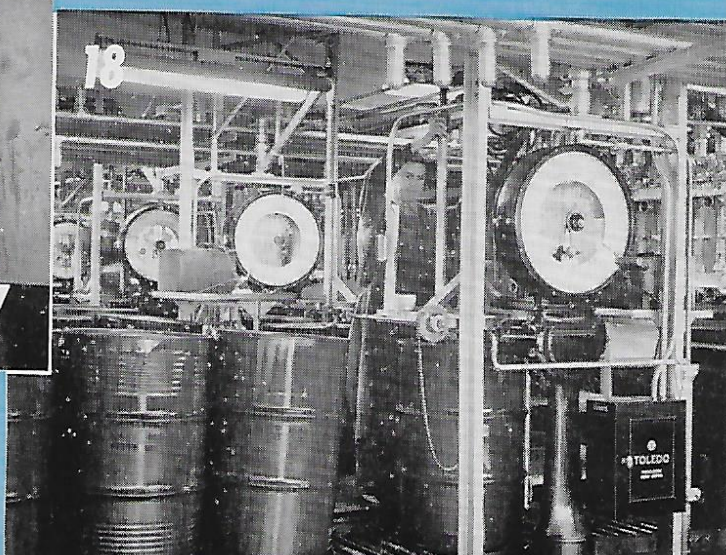
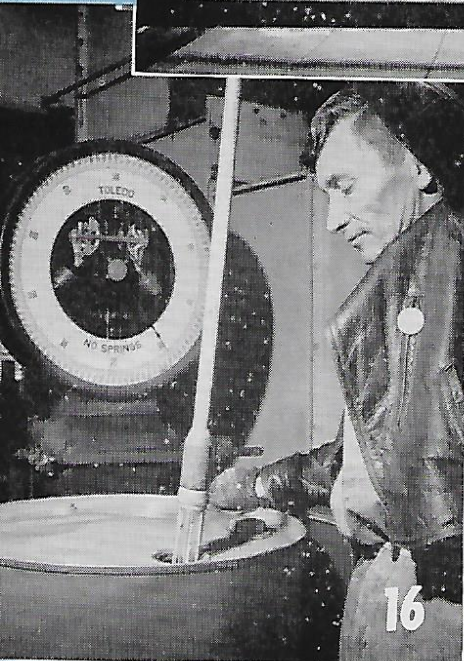
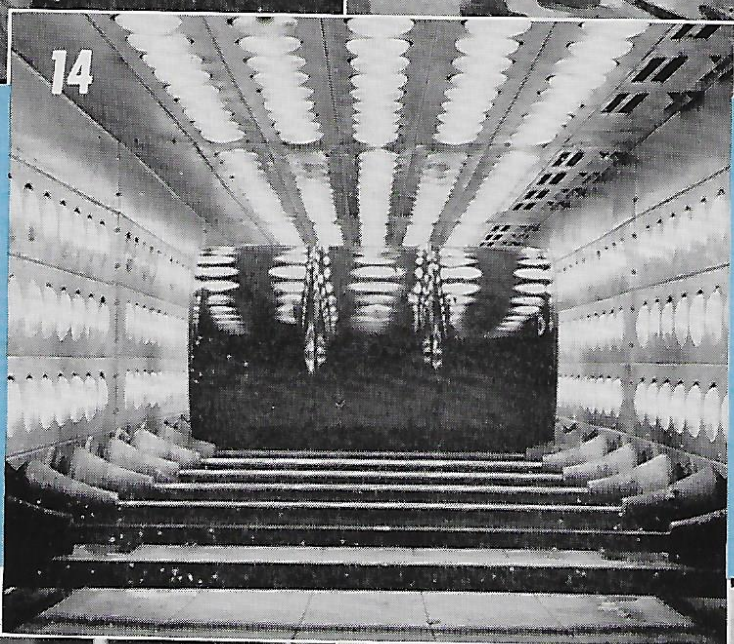
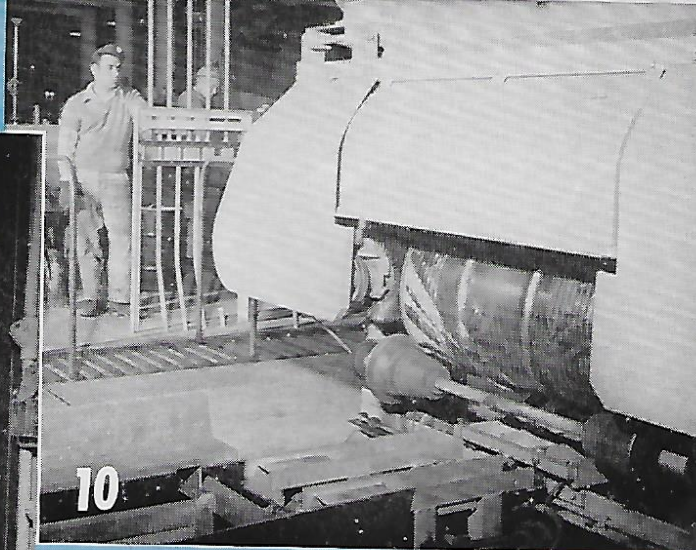
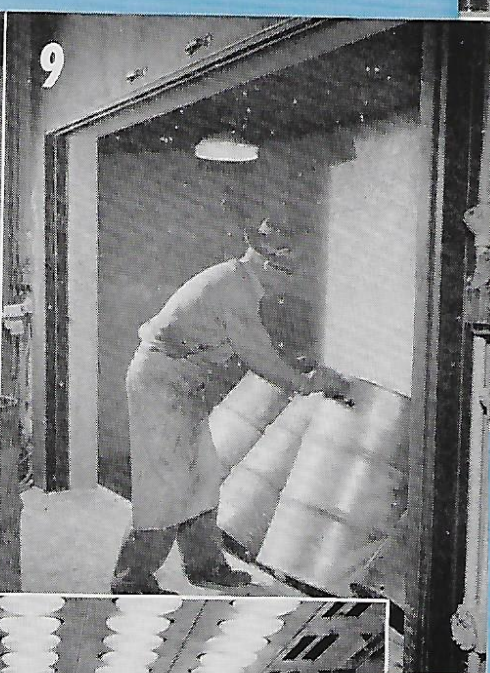
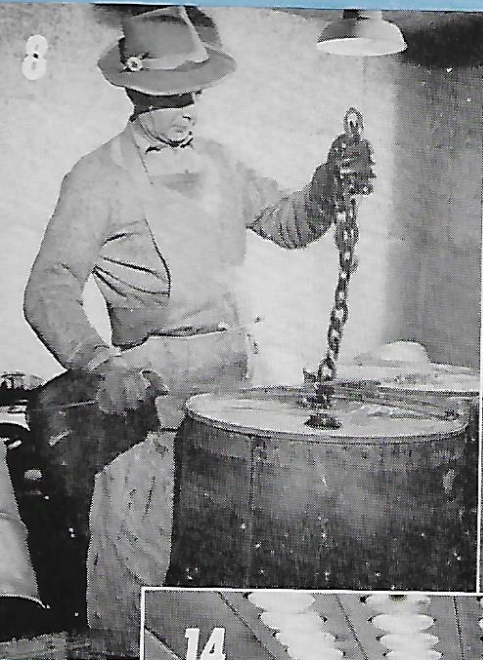
"Well, we wouldn't," Jerry snaps back with a solid right. "We'd ship 4,200 gallons by the most economical method. To us and a lot of other folks in the oil business, a barrel means a quantity of 42 gallons. To avoid any confusion, we usually speak of a 53-gallon container as a drum."

Simple, isn't it? And it all goes to show that a refinery has a pretty good reason for everything.

And, by the way, if you haven't seen Oleum's new drum reconditioning and filling departments, just follow our escort, Bill Page, through the accompany sequence of pictures. At the cost of a quarter-million, the Company has just about knocked all the sweat and tears and injuries out of refinery drum handling. Too bad Pat quit. He wouldn't half mind truckin' a load of barrels from here to yonder with a set of push-buttons.

(6) Floyd Ladwig is preparing a drum for its five-minute stay in one of the "Portco" washers. Here the drum is automatically washed with the caustic soda solution, rinsed and dried. (7) Andrew Henry next examines the interior of every drum with an inspection light, and either installs bungs or sends rusty containers to the "chainer." . . .



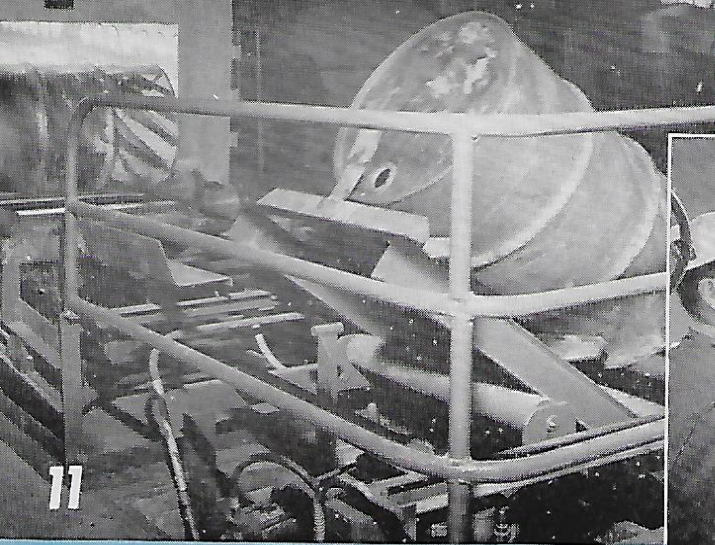


The "chainer" gets its name from lengths of chain Martin Hallissy (8) is removing from a drum after all rust has been dislodged by a mechanical tumbling operation (9). De-rusted drums are then re-washed, dried, inspected and sealed before rejoining those passing first inspection. (10) Barrel exteriors undergo a thorough scrubbing with steel brushes as Manuel Nursement pushes the button. . .

(14) Paint drying is completed in three to six minutes by use of infra-red lamps in this oven. . . .

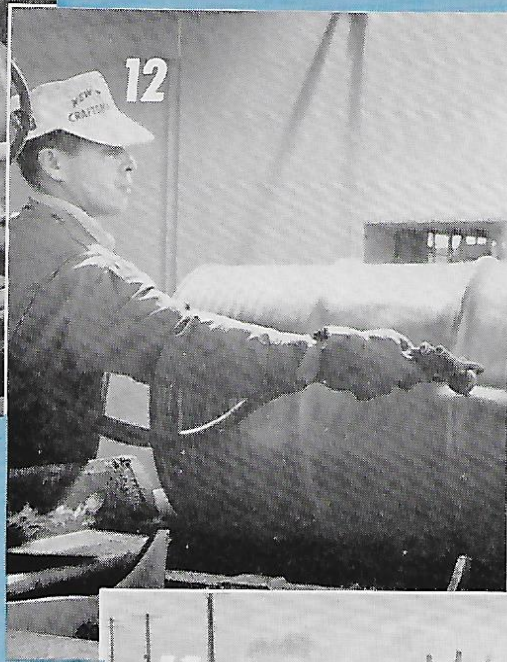
(16) Just prior to filling, the container undergoes a final inspection by Roy Rowlett. (17) Robert Whorton, using a stencil and spray gun, quickly applies the familiar Union Oil identifications and printed data showing brands, gallons, weights, etc. (18) Filler L. Bateman operates two filling scales alternately and can handle about two barrels a minute. . . .



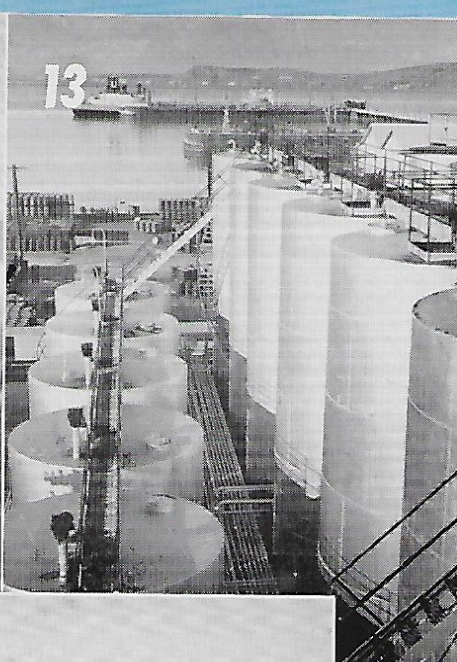


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(11) Tipped over by a mechanical "down-ender," the drum enters an oven of infra-red lamps for thorough drying. (12) Next, it helps paint itself by spinning swiftly as Joseph Avilez holds the spray gun in a paint booth boasting down-draft, water-washed ventilation. (13) The drum is now ready to be refilled with one of many refined products stored in these tanks. . . .



12



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(15) Drums, just as good as new, now go via covered conveyor to one of several filling stations.

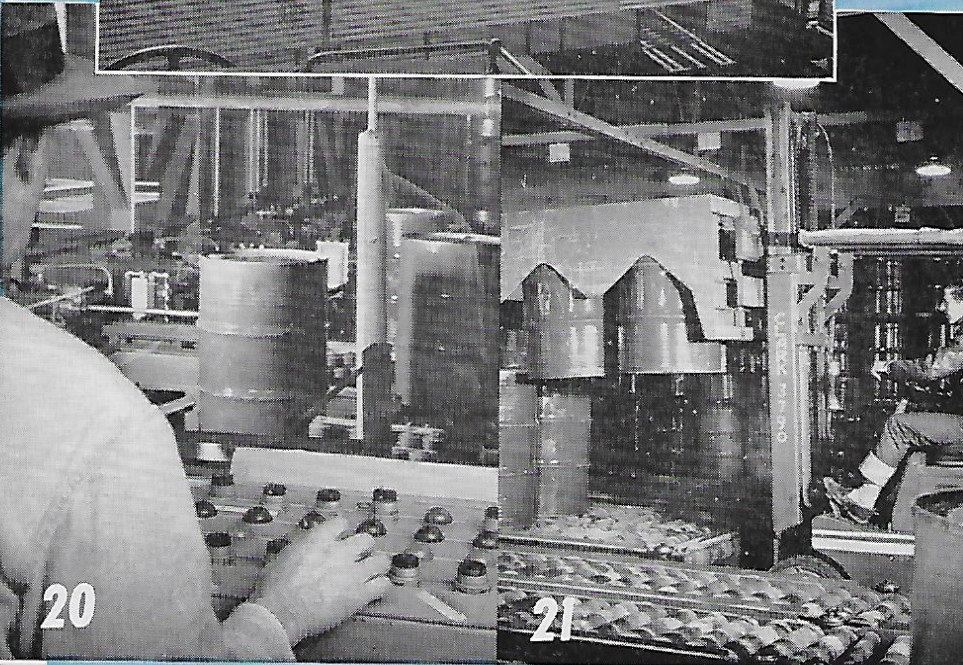


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(19) At a "light products" filling station George Neil compensates for varying barrel weights by always adjusting scale to "0", which then automatically "weighs in" 53 gallons. (20) Full drums move to warehouses by roller conveyor and are sorted into commodity classifications by push-button. (21) Finally, Frank Mathos, lifting four barrels at once, climaxes our tour of Barrel Utopia.

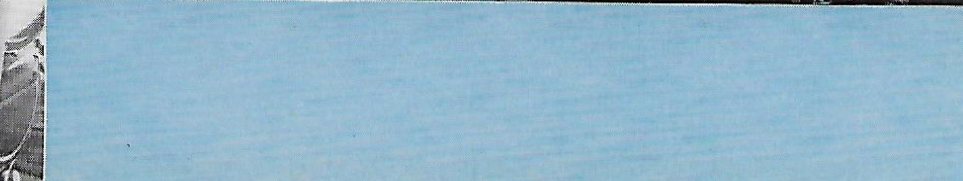


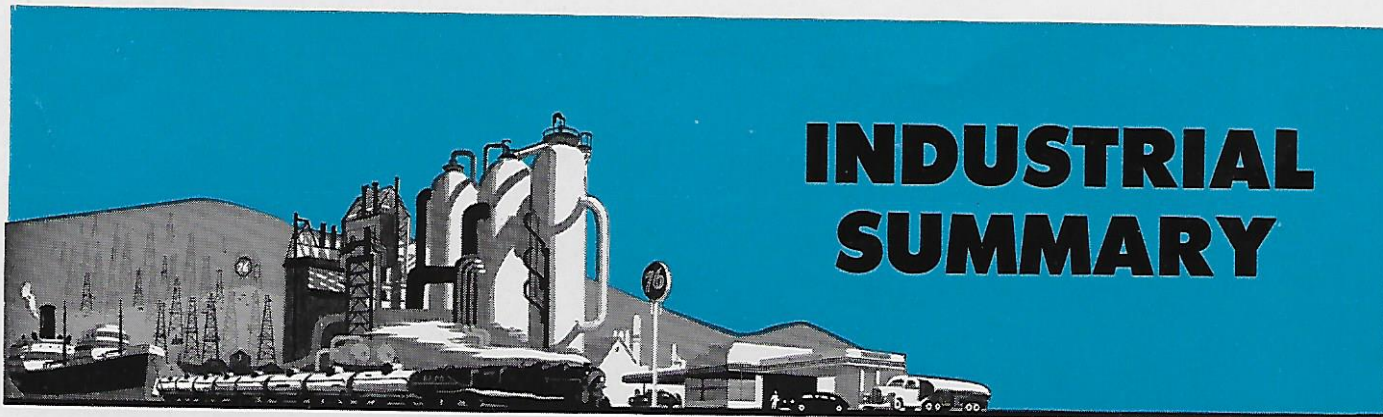
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# INDUSTRIAL SUMMARY

## ● MANUFACTURING

Los Angeles Refinery has designated each Tuesday as visitors' day, when small groups of visitors will be admitted to the grounds and conducted on a tour of the most interesting units. Other weekdays, except Saturday, may be used for similar tours by special arrangement. This refinery was recently host to Vogue Magazine and a group of models, who used the spic and span installations as background for fashion photographs.

Shipments of fuel oil from Los Angeles Refinery during January were unusually large, totaling approximately 1,500,000 barrels.

Oleum Refinery experienced a fire in the filter house of the Triton Dewaxing Plant in January. Employee fire fighting crews did an excellent job in controlling and extinguishing the blaze. There were no injuries. Triton inventories are adequate to take care of customers' requirements until the plant resumes operation.

A recent inspection of Oleum's waste water disposal system was made by the Industrial Waste Disposal Committee of Western Oil and Gas Association. The system was given a good rating by this committee.

*from K. E. Kingman*

## ● MARKETING

At present, 88 service stations and garages in the Greater Chicago area are selling Royal Triton and Triton Motor Oils. Plans are being completed to enter the New York City area, Houston, Denver and other major cities outside of our regular marketing territory.

During February the Company's 1950 advertising and sales promotion program was outlined at meetings held in Los Angeles, San Francisco, Seattle and Great Falls, Montana. These meetings were conducted by Head Office staff personnel for key supervisors in the Marketing Department. Two films were shown, one covering the advertising and sales promotion program, the other featuring Union Automatic Transmission Fluid. Representatives attending these meetings will relay the information to all of our dealers and consignees.

A film library has been set up for use throughout the

Marketing Department. Films, both of an educational and entertainment nature, will be loaned as a goodwill gesture to service groups, fraternal organizations, schools and churches. The film prints have been purchased outright and contain no advertising other than a statement crediting sponsorship to Union Oil Company. Occasionally the library will be augmented by a sound movie made especially for us, such as the one showing the 1950 Tournament of Roses Parade at Pasadena. This film shows, not only the highlights of the parade, but a sequence of shots showing designing and actual preparation of the floats.

*from Roy Linden*

## ● FIELD

Exploration activity of Union Oil Company was being highlighted during January by two wildcat tests at extreme geographical ends of our exploration map. The first, a test of our Breton Sound Prospect, is in the Gulf of Mexico, south of New Orleans. The second, a test of our Tangent Prospect in Canada, is 200 miles northwest of Edmonton.

The Breton Sound Prospect was originally found by a gravity survey made with Union Oil Company's submersible diving bell. It was later checked by seismograph and found to consist of two adjacent domal structures. A lease block of 17,911 acres was purchased from the State of Louisiana. A deal has been made with Kerr-McGee Oil Company, an operating and contracting company which already has producing properties in the Gulf of Mexico, to drill a 10,000-foot test on one of these domes. The location is five miles from nearest land and at a water depth of about 25 feet.

The Tangent Prospect in Alberta, Canada, was discovered during the latter part of 1949 by core drilling and seismic surveys, conducted as a part of the joint exploration program of Union Oil Company and Hudson's Bay Oil lands and partly on lands held by Imperial Oil Company of Canada. The test well, to be started immediately, is to be drilled by Imperial and supported by Union-Hudson's Bay. Particular interest is felt in this prospect because it is only eight miles from

the recently discovered Normandville Field of Imperial Oil Company, on a structure regarded as equally good. Union-Hudson's Bay hold several very large exploration blocks in this general area. The Tangent exploration block represents 277,000 acres.

*from Sam Grinsfelder*

## OIL'S VIEW OF DEPLETION ALLOWANCES

WHEN an individual or corporation realizes profit from the sale of property, a tax, called the capital gains tax, is not levied on the full amount of that net profit. Rather, because of the frequent losses to which property owners are liable, the government has seen fit to recognize only 50 per cent of each capital gain as taxable.

Prior to 1918, the mining industry, of which oil exploration and production is considered a part, was given no special tax consideration. Minerals and oil produced were taxed like ordinary income, no allowance being made other than for actual money invested in the individual mining property or oil well being taxed.

The unfairness of this taxing arrangement soon became evident, particularly in the oil business. Oftentimes 20 or more wildcat wells were drilled before a producing property was found. Costs of drilling the first 19 dry holes were not deductible from profits of the 20th and successful well. Therefore, few men were willing to risk money in search of new oil fields.

Recognizing this fact and realizing that the United States would have a constant and growing need for new mineral resources, Congress in 1918 placed the "discovery depletion" clause in the Internal Revenue Laws. This gave the discoverer of a mining property substantially the same profit realization whether he sold the property to another and paid a capital gains tax on 50 per cent of net profit, or mined the property himself and took advantage of the 50 per cent depletion allowance.

To simplify administration of the provision, changes in the law were made in 1926. Allowances were granted, ranging from 5 per cent to 27½ per cent of gross income, depending upon the relative risks involved in finding and producing various minerals. Oil exploration and production, being one of the costliest risks, was given the maximum depletion allowance of 27½ per cent. According to the United States Circuit Court of Appeals, "The depletion allowance was intended to encourage production, and may be regarded as a substitute for the capital gains allowance where the taxpayer, instead of selling, leases or operates his own mineral holdings."

In arriving at these percentage figures, Congress made a long and detailed study of oil production operations from 1918 to 1925. Their survey revealed that the annual

average depletion of capital invested in finding and producing oil amounted to between 32 and 33 per cent. However, the House of Representatives bill of 1926 called for a depletion allowance of 30 per cent; the Senate bill allowed 25 per cent; and the compromise bill accepted by both houses allowed 27½ per cent of gross income from an oil property, but in no event more than 50 per cent of the net income.

Today, President Truman is asking Congress to eliminate or decrease the depletion allowance. His stated reason is that "In the case of oil . . . the depletion exemption goes on and on, year after year, even though the original capital investment in the property has already been recovered tax free, not once, but many times over."

What Mr. Truman fails to mention is that people in practically all other lines of business sometimes receive their original capital investment back several times over—even from relatively safe investments in established businesses or in real estate. Without such possible returns there would be little or no incentive to risk capital in any investment.

Of all oil wells drilled last year, 37 per cent were dry holes, 7 per cent produced gas, and 56 per cent were oil producers. To the oil man this raises a question as to whether even the 27½ per cent depletion allowance is enough to attract risk capital in the hazardous and costly search for oil. Certainly anything less than 27½ per cent will be another tax discrimination against the oil industry.

Observers predict the following serious trends if the depletion allowance is modified downward:

1. The search for new oil fields in the United States will be greatly diminished.
2. Oil imports from abroad will increase and the country will become increasingly dependent on foreign crude.
3. Individual operators and small corporations will be obliged to realize the advantages of the capital gains tax by selling their properties to larger companies.
4. In the long run, the government will receive less petroleum tax revenue than at present.

### ATTENTION EMPLOYEE SHAREHOLDERS

The Annual Shareholders' Meeting is scheduled for April 11th. If you do not plan to attend this meeting personally, please sign and return the proxy that has been mailed to you. No employee should regard his or her holdings as being too small for representation at this meeting.



# Beside The Iron Curtain

*with*

**Blythe E. Foote, Jr.**



**D**URING two-and-one-half years of life on the Iron Curtain's rim, it is easy to forget the comforts of American living. Returning to the United States brings, even to the native Californian, a sense of astonishment that such plenty and contentment can be possible. Contrary to our easy way of life, the Central Europeans must labor unceasingly in order merely to eat and have a place to sleep. Pleasures are few and hardships are many.

In Central Europe six million Germans, Czechs, Slovaks, Magyars, Croats and Italians are gathered in the country of Austria. On three sides are unfriendly neighbors—Yugoslavia, Hungary and Czechoslovakia; on two sides are friendly neighbors—Germany and Switzerland. Austria, although self-governed, is advised by the four occupying powers, Great Britain, France, Russia and the United States, through the Allied Control Council in Vienna.

One-third of the Austrian nationals are farmers and two-thirds are factory laborers, office workers or small businessmen. The former landed nobility, counts, princes and barons have been assimilated into these categories. For these people homes and food represent the necessary comforts of life. Very few can afford to own automobiles. Education ends for the more fortunate ones at high school or gymnasium levels. They have no streamlined trains or streetcars. They have no golf courses, no beach or desert resorts, no private airplanes. Most of the people no longer own their own homes. They have no drive-ins either in which to buy a snack or have their shoes repaired.

Thirty-five years of dislocated homes, families and businesses, frequent land redistribution, heavy taxation, periodic devaluation of money, displaced persons and the destruction of two world wars have regimented Central Europeans to a standard of mere survival. In the home, in the school, on the job, in the factory, in the mountain villages and in the government there are

constant reminders of lack of progress, no clear goals, and increasing fear.

## **Housing**

Baroque or Gothic-styled homes and buildings in Central Europe were built hundreds of years ago to withstand hard weather and frequent wars. There are few modern architectural trends. Many of the old palaces and 25-room homes with their antiques, tapestries, crystal chandeliers, hand-carved wood, and Meissen china have been converted to small apartments to accommodate displaced persons and bombed-out families. Every person must register with a Rent Control Office. A three-room home must have five residents. If not, Rent Control moves in strangers to fill the gap. Such crowding is advantageous only to those who live in roofless or glassless houses.

## **Food**

Post-war starvation inspired the theory that to eat a little bit of bread or potato all day long is better than eating three unsatisfactory meals a day; you do not get so hungry when you always have something in your mouth. For three years, in the concert hall, in the shops, on the streets, people chewed constantly.

From this practice, as soon as more food became available, was revived an old custom of eating five meals a day. Upon waking in the morning, a breakfast (Frustuch) of coffee and roll is consumed. The second breakfast of a sandwich is taken at 10 a.m. The big meal of the day (Mittagessen) is served at 1 p.m. At 4 o'clock comes the coffee or tea hour, with perhaps a pastry for the few who can afford it. Supper (Abendessen) at 7 or 8 p.m. consists of left-overs from the main meal at noon.

Food is expensive and still rationed in large part. The favorite dishes are pork, potatoes, cabbage, sauerkraut, cauliflower, because they are abundant and available. About once a month an average family can afford the luxury of some goody filled with whipped cream.

## **Clothing**

As is the case in purchasing food, the barter system or black market remains the source of cheap clothing supplies. Shoes are about the only item bought these days because wools, silks and cottons are too expensive for the small income. Austrians have only two outfits a year, one for summer and one to give protection against cold winters. The men wear lederhosen or leather shorts, with suspenders, cotton shirt and knee-length knit socks in summer. A dirndl in varied colors with white cotton blouse is the summer fashion for women. Handbags are scarce and most people carry their personal belongings and groceries in a knapsack on the back. In winter, men and women dress alike. A black or gray wool suit, usually more than 10 years old, with green felt stripes on jacket sleeves, skirt and trousers, is accompanied by a wide-brimmed hat with green cord band and a large brush sticking up in back taken from the neck of a mountain goat.

These ensembles are decorated with carved white wood buttons or pins in the shape of deer or other alpine animals. Overcoats are often fur-lined to withstand the cold. A new dress or a new coat is rare and hems on old garments are repeatedly shortened or lengthened according to the latest fashion reports from Paris or New York. A city street thus appears rather drab except for occasional colorful uniforms worn by members of the occupying powers.

## **Wages**

A factory worker brings home monthly a salary in schillings or Deutschmarks comparable to \$27 in American currency. His rent takes approximately \$5 of this amount. His food for a family of four runs around \$10 a month. The remainder is put into a savings account, and is too often devalued by two-thirds through frequent currency changes. Less often the extra money goes for essential wearing apparel or minor entertainments.

An office worker above the clerical class, such as

a statistician, bank clerk, etc., makes a salary of about 1200 schillings a month, equivalent to about \$40 at the current dollar exchange rate. As this amount would buy only three good meals for two persons in the better restaurants of Austria today, only members of the occupying forces and black marketeers are ever seen in such places.

## **Entertainment**

Entertainment facilities in Austria and Central Europe consist largely of mountains, lakes and vineyards. Hiking is the cheapest and most popular form of recreation. Snow sports on home-made skis is also popular in the winter season. Stream and lake fishing with home-made tackle is both fun and lucrative when the trout are biting. Hunters enjoy stalking such wild game as deer, grouse and chamois. Wine-drinking, another relatively inexpensive pastime, attracts many to gardens in the Vienna woods or on the banks of the Blue (Brown!) Danube. There are many beer and wine houses in the villages.

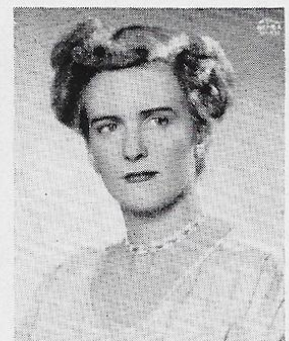
Children start to school at the age of six. From a grammar school they go to the middle school, then to the "gymnasium" or high school if funds hold out. Few go to college now unless they show aptitude for medicine or law. Liberal arts study is principally confined to preparation for the operatic or concert stage, which offers the largest professional opportunities outside of industry and medicine.

On the rim of the Iron Curtain there is still a semblance of free speech and free choice of work, education, entertainment, food, rentals, savings, etc. But all too evident is the strain of low wages, high prices, ration cards, suspicion of the neighbors, fear of the political situation, and traitors from within.

Austria is a small nation whose semblance of a normal life has been brought back largely through ERP dollars. Her proximity to the restless Curtain affords a disquieting intimation of the stifled way of life being followed on the opposite side.

BLYTHE FOOTE, author of the accompanying sketch, was born in Sierra Madre, California. Upon graduating from University of California, Berkeley, with a major in political science, she joined Union Oil Company in 1942 as a secretary in our Industrial Relations Department. Later, as an employee of the United States Department of State, she joined the political and press section of

the American Legation in Vienna, Austria. During her following two-and-one-half years of service abroad, she traveled extensively throughout Europe and gained a particularly intimate knowledge of living conditions in Austria. Her recent return to California prompted a renewal of Head Office friendships and occasioned this article, written expressly for Union Oil people. ON TOUR is most grateful.



## NEW CHIEF MEDICAL DIRECTOR

DR. EDWARD RICHMOND WARE, right, was appointed chief medical director for Union Oil effective January 19, 1950. In this capacity he will serve, not only the Company, but the Employees' Benefit Plan as well.

After graduating from the College of Physicians and Surgeons at Columbia University, Dr. Ware served his internship at Presbyterian Hospital in New York City. Entering private practice in Los Angeles in 1920, he has served as senior attending physician at Los Angeles County General Hospital; senior consultant in medicine at Wadsworth General Hospital, U. S. Veterans Administration; attending physician and chief of staff at the Hospital of the Good Samaritan; and attending physician at the Barlow Sanatorium. He was retired with the rank of Colonel after serving in World Wars I and II.

As our chief medical director, he is expected to attend all monthly meetings of the Board of Administrators, Employees' Benefit Plan, and render medical opinions and advice on all cases that come before the Board for final determination. It is his responsibility to analyze and make recommendations to the supervisor of Compensation and Benefits concerning cases which are not progressing satisfactorily. This responsibility applies to non-industrial cases as well as Workmen's Compensation claims.

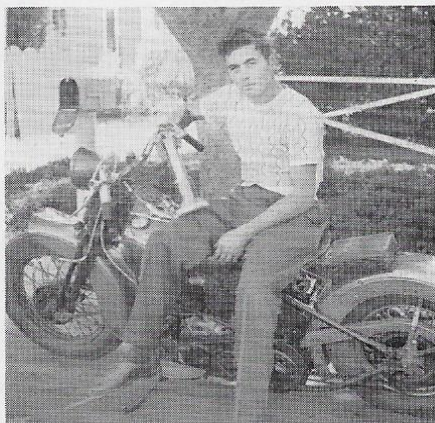
At the request of a Company supervisor, he will consult upon any unusual medical problem with the panel physician. When problems arise concerning panel doc-



Dr. Edward Richmond Ware

tors, the Company leans upon his experience and recommendations. He will assist in the formulation of medical policy as it pertains to our industrial needs, and will establish and supervise pre-employment physical examination reports and employment standards.

In addition to his regular office located at 1930 Wilshire Boulevard, Dr. Ware will maintain an alternate office in Room 309, Union Oil Building, Los Angeles.



## SCOTCHMEN'S DERBY

Any praise that we can heap upon the annual Scotchmen's Derby sponsored by Pasadena Motorcycle Club will be conservative, to say the least. These boys care nothing about speed, but they can coax more miles out of a gallon of "76" than there are burrs in a Highland sermon. For instance, at their most recent competition, held in the Rose Bowl, R. W. Baugh (picture at left) won by achieving 162.66 miles to the gallon on his 74-inch Harley-Davidson. Another chap on a lighter machine made 201.07 miles per gallon, but was far down the list in the "pound miles" column, which determines the winner.

The contestants were most grateful for our donation of gasoline, which Driver James H. Rose plans delivering afoot come the next derby.





## LONG PIG ON TRITON, TOASTED

That's about

how a New Guinea cannibal might describe the picture above, which includes a delicious college boy (long pig), sandwiched between two Triton ads and being toasted by a couple of his ablest competitors.

The sandwich-board man is Elliott S. Rose, student at University of Southern California, whose well-oiled advertising campaign lasted three days and brought him recognition from at least two national magazines. The competition is held annually in connection with pledging activities to Alpha Delta Sigma, national advertising fraternity. To Mr. Rose we lift Four Roses!

## MARDI GRAS QUEEN

Ida Mae Alexander, the eternally smiling and

gracious elevator supervisor at Head Office, was crowned Queen Ida in a recent Los Angeles newspaper contest. Her coronation took place at the Lincoln Theatre, where it was announced that she had won by a decisive margin of 3,000 votes.

As a further reward, Mrs. Alexander and her husband received a two-weeks' expense-paid trip to the Mardi Gras in New Orleans, where they were scheduled to take prominent part in the festivities and parades. Stop-overs at the Grand Canyon and Kansas City were included among the spoils of this popularity contest.



## SERVICE BIRTHDAY AWARDS

### MARCH 1950

#### Forty Years

Harrington, Jack E., No. Div. Pipe Line

#### Thirty Years

Beck, Erwin C., So. Div. Pipe Line

Brace, Geo. F., So. Div. Field

Kirkham, Clyde L., So. Div. Field

Paul, Walter E., H. O. Traffic

#### Twenty-Five Years

Bard, Joe R., Research-Wilmington

Bergstrom, John, L. A. Refinery Mfg.

Cannon, Lawrence H., Southwest Terr.

Catrino, John Jr., Oleum Refinery Mfg.

Henderson, Alonzo C., S. Div. Pipe Line

Klem, Anthony J., Oleum Refinery Mfg.

McIntosh, Wallace, So. Div. Field

Melton, Marvin, So. Div. Pipe Line

Moellering, J. L., Oleum Refinery Mfg.

Olson, Jens L., So. Div. Field

Sadler, William E. Maltha Refinery Mfg.

Smith, Harry F., So. Div. Field

Spragg, Donald J., So. Div. Field

Workman, William W. Central Terr.

#### Twenty Years

Busi, Bert, No. Div. Pipe Line

Carter, Malcolm K., Southwest Terr.

Crabtree, George, L. A. Refinery Mfg.

Geissinger, Wm. P., Valley Div. Field

Houdek, Jean G., So. Div. Pipe Line

Larimer, Raymond D., Central Territory

Livasy, Fred L., Northwest Territory

Thomas, Frank A., Oleum Refinery Mfg.

Turk, Albert, Southwest Territory

#### Fifteen Years

Bailey, Kingman B., Northwest Territory

Bortner, Arthur Earl, Northwest Terr.

Burgett, Wm. T., Southwest Territory

Cheatham, Ernest C., So. Div. Pipe Line

Cramer, John G., Coast Div. Field

Dubetz, Henry, Oleum Refinery Mfg.

Hillenbrand, John C., Central Territory

Holliday, Lindsay, H. O. Field

Mann, Eldon M., Coast Div. Field

Morton, Clyde H., Oleum Refinery Mfg.

Nelson, Martin J., Cut Bank-Montana

Norris, Francis K., Oleum Refinery Mfg.

Nultemeier, Wm., Oleum Refinery Mfg.

O'Grady, Patrick, Oleum Refinery Mfg.

Sanders, Ralph E., So. Div. Field

Stanton, W. L. Jr., Northwest Terr.-Exp.

Watson, James H., So. Div. Field

#### Ten Years

Crocker, Arthur G., Southwest Territory

Green, Robert L., Oleum Refinery Mfg.

Pool, Harlin W., Oleum Refinery Mfg.

# It takes 5 stockholders to make 1 Union Oil job



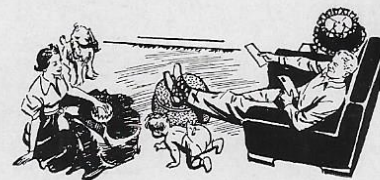
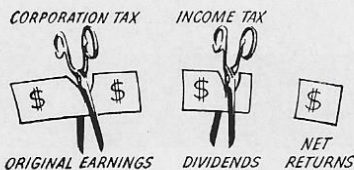
**1. We think the people** who make up Union Oil Company are as good as they come. In fact, we'll back their technical skills and "know-how" against any group of oil men in the country. But with all their skills and knowledge, they couldn't make a gallon of petroleum products without "tools."



**2. It takes skill and knowledge PLUS** drilling rigs, oil wells, refineries, laboratories, pipe lines, service stations and several thousand other kinds of "tools" before you can make and distribute modern petroleum products. At Union Oil the investment in these "tools" amounts to \$68,400 per employee. This is several times larger than the national average of all manufacturing industries—(about \$6,000 per employee)—for the oil industry requires far more heavy and complex equipment.



**3. Consequently** where many large companies have 1 or 2 stockholders for each employee, Union needs the investments of 5 average stockholders in order to put 1 employee to work. To provide "tools" for 7,238 Union Oil employees, we have had to enlist the savings of 37,220 preferred and common stockholders.



**4. It's not hard to see** that unless we give these thirty-seven thousand stockholders a reasonable return on their investment, we can't stay in business very long, or keep our seven thousand Union Oil people employed. Yet the American stockholder, during the last 20 years, has taken more punishment—verbally and tax-wise—than any other group in the nation.

**5. Actually,** stockholder returns in this country are moderate in the extreme. At Union Oil our dividends have averaged 4% over the last 20 years on the net capital invested in the company. So we feel that the responsibilities of management should be threefold—to see that Union Oil customers are well served; to see that the people who do the work get a square deal, and to see that the people who provide the "tools" are fairly compensated.

## UNION OIL COMPANY 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 Building, Los Angeles 14, Calif.*