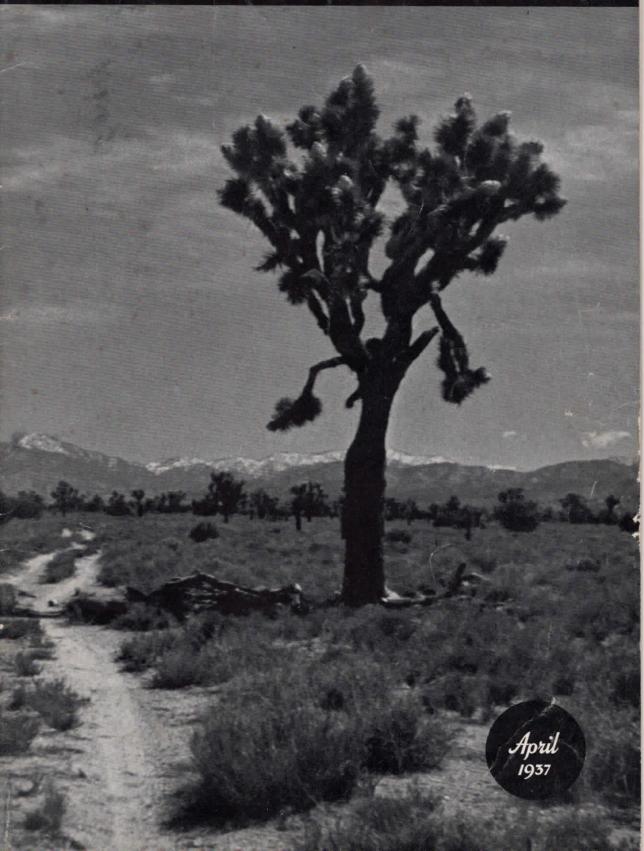
* UNION OIL BULLETIN *





UNION OIL BULLETIN

VOLUME EIGHTEEN

APRIL, 1937

NUMBER FOUR

BONNEVILLE DAM

THREE major problems — generation of electric power, extension of navigation, and conservation of that strange and important fish, the salmon—confronted the planners and builders of the Bonneville dam, which will govern the mighty Columbia river at Bradford Island and Bonneville, Oregon, about forty miles east of Portland, after its completion near the end of the present year. Of these three problems the newest and most interesting is that of saving the fish.

Time was when the needs of our ancient and lowly forbear, the fish, were ignored and scorned by the dam-building engineer. If the finny fellows could not leap over the fifty-foot wall of a power dam in Pennsylvania, what matter? Let them stay down stream, the builders said. What are a few fish, more or less, in the development of power or in the creation of inland waterways?

Eventually the conservationist secured his innings, and fish ladders, even fish elevators, began to appear in newly constructed dams. But it was that amazing rover, the salmon of the Pacific Coast, which made the dam builder sit back and take notice—and wrinkle his brow and scratch his head and rub his educated nose.

Here is a fish that knows (somehow!) exactly where it wants to go, and it will get there or die. When the salmon comes back from its fierce life in the ocean, where it is a terrific and ceaseless eater, it makes its way by some strange guidance toward the spawning grounds from which it came. It is finished with eating. It is through with everything except the necessity to reach the up-river spawning places and reproduce. Nature makes a final demand. Blindly the fish answers, as its kind have answered for thousands of years.

So many centuries ago that it does not matter, the bears discovered the incoming salmon. A bear knows a good bite when he sees it, and he is an intelligent, quick-striking fisherman. In many northern rivers he still gets his share of the salmon. Indians, probably following the lead of the bears, preyed on the salmon with their sharp and accurate spears. Then finally came the American with his more professional outlook and his canneries.

The American looks upon the salmon industry of the Columbia River alone as worth \$10,000,000 a year. (What value the Indians and bears put upon it does not show in the books.)

Thus, when the Bonneville power-navigation project was authorized September 30, 1933, by the administrator of public works as Federal Project No. 28 under N. I. R. A., and more than \$32,000,000 was allotted for its construction by the corps of engineers, United States Army, the fishing interests in the states of Washington and Oregon and the U. S. Bureau of Fisheries immediately began to study and solve the problem of "saving the salmon."

But even today, when the final word has been said and construction is well along toward completion, no man knows whether or not the salmon of 1938 will approve the \$3,550,000 facilities provided for their accommodation. If too many of the poor fish raise their brows in scorn and say "No, no!" the fish officials and the engineers will no doubt go into another huddle and come out with a better solution, for the salmon of the Columbia River, and the 10,000 people who make their living from the salmon, are to be served.

Early plans for helping the salmon over the Bonneville dam included but four conventional fish ladders to cost \$800,000. These plans have grown into an elaborate system of traps, locks, ladders and canals to cost more than four times that amount.

There are two salmon ladders, which are really long cascades with steps one foot high and 16 feet wide. Six salmon "lifts" or fish locks are provided. The locks are chambers into which the fish may swim in their up-river course. When enough fish are within the chamber a gate is closed; a grating rises, taking the salmon with it, and opens into the reservoir above the dam.

The salmon should go right on up stream to their appointed spawning places. The next problem, of course, is that of the fingerlings on their way to the ocean, where this migratory fish spends most of its life. Experts believe that the fingerlings can pass either through the spillway of the main dam or through the power turbines without great loss. The turbines are of the propeller type, 23 feet in diameter, and have an operating speed of only 75 revolutions per minute. No doubt the members of the Bureau of Fisheries would prefer not to go through these turbines themselves, but they feel that it is all right for salmon.

Bradford Island divides the channel of the

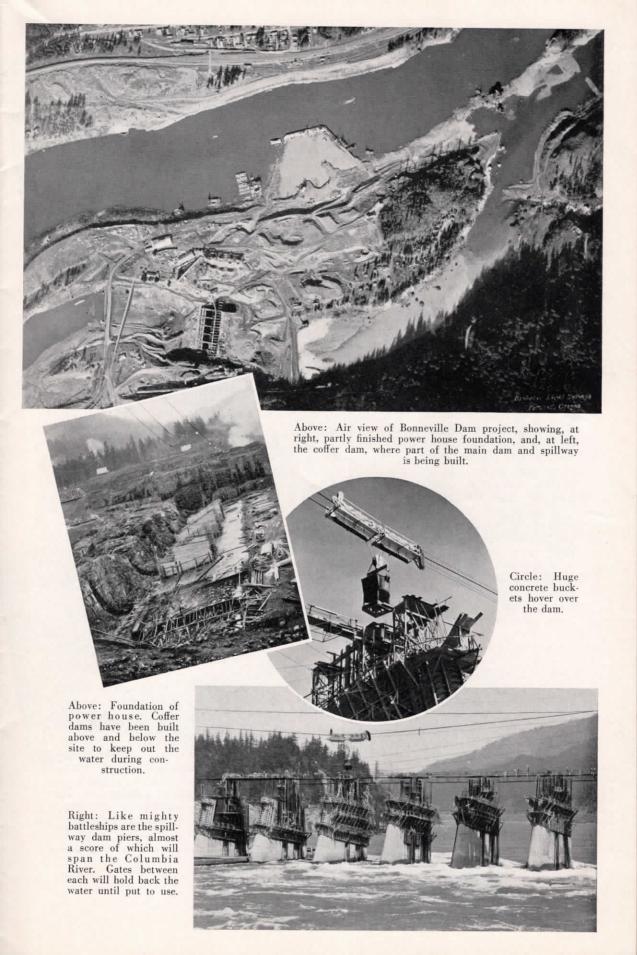
itself becomes a part of the new dam, which is being built in two sections. A spillway dam blocks the north or main channel, while the powerhouse and the navigation lock are located in the south channel, with the lock at the Oregon shore. A levee on Bradford Island connects the dam and powerhouse.

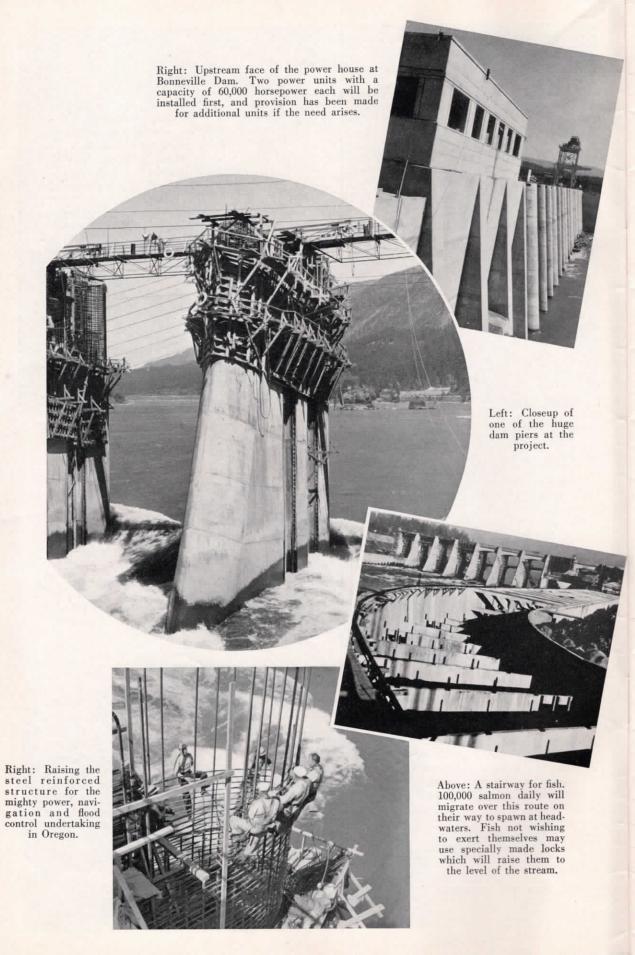
The dam is of concrete, gravity type, 1,250 feet long with 18 steel vertical lift gates, each 50 feet by 50 feet, giving a spillway crest of 900 feet. The completed powerhouse will be a concrete structure containing hydraulic turbines, electric generators, transformers and switches. In the initial construction are two hydro-electric units of 60,000 horsepower each, as well as the foundation for four additional units. Provision is made for an ultimate installation of ten units with a total of 600,000 horsepower. Since the two generating units which should begin functioning within a year will be able to produce something like half as much power as the Bonneville transmission area now consumes, the ultimate tenunit installation will doubtless await further development of the Northwest.

Bonneville dam earns an interesting superlative when it offers the highest single-lift lock in the world for ocean-going vessels; this lock, 500 feet long and 76 feet wide, with a lower gate 102 feet high, will lift a big ship 66 feet and send it on its way in 15 minutes. Original plans called for installation of locks permitting the passage of barges, but as the dam will make the Columbia River navigable as far as the Snake River, it was decided that heavier shipping should be handled.

Ocean-going vessels now use the Columbia from its mouth to Vancouver, Washington, 40 miles below Bonneville. The channel between Bonneville and Vancouver now has an available depth of at least 9 feet at low water, and experts say that it can be deepened where necessary to provide deep draft navigation to the Bonneville dam. When this improvement is made and the dam is finished, it will be possible for ocean vessels to go to The Dalles, 187 miles from the Pacific.

One very modern element in the Bonneville project was the elimination of guesswork in its construction. To rid themselves of the old bugaboo of guesswork and consequent loss through errors and changes, the engineers constructed one of the largest and most complete hydraulic models of a riverbed ever





attempted. The model was built on the bank of the Willamette near Linnton, Oregon, and was the scene of many painstaking experiments.

Representing a five-mile stretch of the Columbia River, from the head of Cascade Rapids above the dam to Tanner Creek below, the model was built on a scale of 1 to 100. Including its reservoir and headworks it was 325 feet long. As nearly as possible it was an exact duplicate of the riverbed which the

engineers intended to conquer.

Experiments with the models determined: Important points concerning the building of cofferdams necessary to the construction of the main spillway dam; the probable scouring action below the spillway and the design of proper baffles to prevent undermining of the spillway aprons and serious damage to the dam; available heads at various stages of the river; adequate fishways or lifts for salmon. To determine one of these matters alone, that of the final profile and type of baffle, 140 experiments were made on as many combinations of deck, apron and baffle.

The raising of the water level above the dam will, of course, cause flooding and damage to property near the river. Highways and railways affected are relocated by the United States, and other properties are purchased, or damages are paid to owners. On the Washington side of the river the Spokane, Portland and Seattle Railway and the Evergreen Highway are affected. On the Oregon side, the Columbia Highway and the tracks of the Oregon-Washington Railroad and Navigation Company had to be moved.

Since the earliest days of exploration in the Northwest, the Columbia River has fascinated the imaginations of men. Before California gold turned the tide, adventurous men of the Eastern states set their eyes and their feet toward the land "where rolls the Oregon." Now at last the Columbia is in a fair way to be conquered by man, if any such natural power is ever so conquered.

The Bonneville dam is one of series of ten dams which may eventually be built on this waterway. One of the ten was built in 1930 at Rock Island, Washington, by private interests. At Grand Coulee, Washington, the United States government dam is even more widely known than that at Bonneville.

It is said that the Columbia River has sufficient potential power to supply one-third of the United States. Of course such statements mean very little, because of such important matters as transmission costs and

changing power needs.

Nevertheless, it is said that the total power available is approximately 10,000,000 kilowatts, or 13,400,000 horsepower (if you care to know). The development costs, according to the same estimators, would be about three-

quarters of a billion dollars.

For the most part, this development is something that may happen or may not happen some day. Today is the day of the Bonneville dam. The Bonneville defeats the Cascade Rapids, which have whipped the white man's boats for many years. It assures the surrounding territory of all the electric power it is likely to want for a long time. And in addition, perhaps most important of all, it endeavors to maintain for the age-old, nature-driven salmon a clear and easy channel to the upper spawning waters.

Cover Design

Spring time in Southern California, especially after such a wet winter as the one just past, brings desert flowers of the widest variety in the greatest profusion. The fact provides the theme for this month's cover illustrations—desert flowers. The Joshua tree on the front cover is another fine example of the work of Paul Michels of the comptroller's department in Los Angeles. On the inside front is a striking close-up of a bloom from the same tree, taken by the same photographer. The back cover is by Dorman, Bakersfield commercial

photographer, and is a characteristic blanket of wild flowers in Kern County, considerably enhanced by a gorgeous sky effect.

This year's display of wild flowers has been one of the finest in history, and Kern County and the adjacent territories have been the mecca of countless visitors, among them many artists and camera enthusiasts. Adding to the beauty of the flowering plants are the blossoms of shrubs and trees, of which latter the Joshua bloom on the inside cover is an entrancing example.



Meeting of the Board of Administrators, Employees' Benefit Plan. Left to right: W. K. Hopkins, L. A. Gibbons, W. W. Hay, M. W. McAfee, L. G. Metcalf, Chairman, W. H. Steele, V. E. Washbon and J. L. Greer.

EMPLOYEES' BENEFIT PLAN Annual Report of Board of Administrators

THE Board of Administrators of the Employees' Benefit Plan submits to its participating members through the pages of the Bulletin the following report on the condition and affairs of the Plan for the year 1936. It is our sincere desire that employee members be entirely conversant with the function of the Plan and its administration, and we hope, therefore, that they will carefully read the brief financial statement and the explanatory detail.

The essentials of financial progress during the year, and the status at the end of 1936, are indicated in the following generalized statement:

Balance in Fund at December

31, 1935\$ 89,008.98 Add:

Employees' Contributions 168,456.00 Deduct:

Payments for Medical

Attention 169,935.18

Add:

Interest Income (1936) 2,114.38

Balance.....\$ 89.644.18

Although in 1936 payments for medical attention were greater than for the preceding year, it is to be noted that the balance or reserve was increased at the close of the fiscal period to the extent of \$635.20, such increase being due, however, entirely to interest earnings of \$2,114.38 which were added to the fund.

Medical expenditures for 1936 were higher than those for 1935 for two reasons: (1) The privileges of the Plan were extended on June 1, 1936, to include certain dental benefits, and payments therefore for the succeeding seven months of 1936 amounted to \$5,808.66; (2) Cases handled during 1935 were in general of lesser severity than those developed in 1936, and as a consequence the average cost per case rose from \$18.06 to \$20.33.

The average total membership in the Plan during 1936 was 7,021 so that the balance of \$89,644.18, shown above, held in reserve for contingencies, is equivalent to only \$12.76 per employee. This membership, incidentally, is an increase of 197 over the year 1935.

Authorizations for medical attention dropped from 8,436 in 1935 to 8,355 in 1936, but due to the severity of the cases, as above stated, the average cost per month per employee treated rose from \$1.96 to \$2.02.

At the end of December last, 761 doctors were listed on the medical panel to serve employees in 451 towns, located in California. Oregon, Washington, Arizona, Nevada, Alaska, the Hawaiian Islands, the Canal Zone, and Canada.

The Board is now preparing in booklet form a revised issue of the Rules and Regulations of the Plan, including therein a detailed outline of the Dental Provisions and other changes and amendments which have been made since the booklet was last revised and issued. Copies of the revised booklet will be distributed to all employee members as soon as it has been completed.

W. K. Hopkins, Secretary. J. L. Greer, Asst. Secretary. L. A. Gibbons, Attorney.

In submitting this report we would emphasize the fact that the Board of Administrators is deeply conscious of its duty to employee members, and will appreciate and earnestly consider all suggestions and comments.

BOARD OF ADMINISTRATORS, E. B. P.



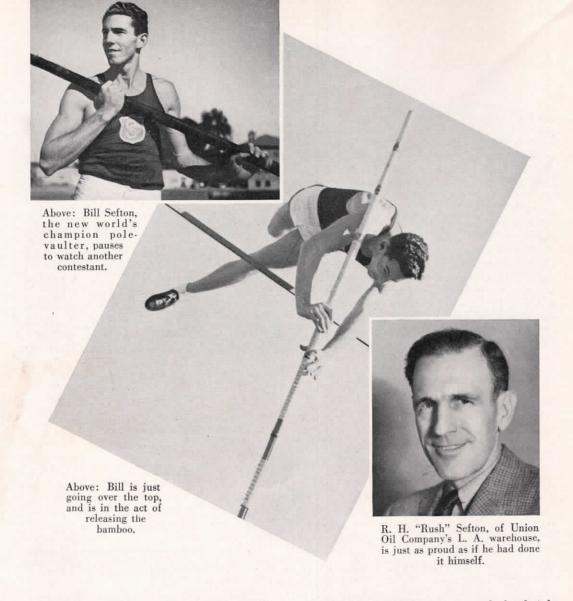
SEFTON SETS NEW WORLD RECORD

OME time when you have nothing better to do, measure off 14 feet 73% inches on a high wall, then stand underneath it and try to imagine yourself soaring over a bar at that height with nothing to aid you but some good shoulder muscles, a lot of co-ordination, and a tall, slim bamboo pole. The feat looks utterly impossible, but it has been done-before 7,500 witnesses, who forgot everything that had gone before in a highly eventful day of sports to cheer themselves hoarse over the world-beating exploit of young Bill Sefton, senior at the University of Southern California. There is no need to go into the details of the track meet between U. S. C. and the California Bears. It is already history, but the pole vault episode is still news. The battle was over so far as points were concerned, before this particular event was finished, but the crowd refused to leave the stadium. They seemed to sense that something

unusual was about to take place-and they

were right.

The pole-vaulters had been jumping all afternoon, but as the bar rose gradually, one by one the competitors dropped out of the contest. The last Californian was out at 13 feet, and Irving Howe, Trojan sophomore, managed to wriggle over at 13 feet 6 inches for a wellearned third place, leaving the race to his teammates, Earle Meadows and Bill Sefton. These two stalwarts took the 14-foot jump like a pair of frightened deer, and up went the bar to 14 feet 41/2 inches. Over this sailed Bill on the first try with the same consummate ease as he had negotiated the 14-foot mark, but Earle had a little difficulty, although he went over nicely at the third try. Then came the grand finale: With the bar set at 14 feet 8 inches, each of the boys had made two attempts without success, and there was only one chance left. Sefton was

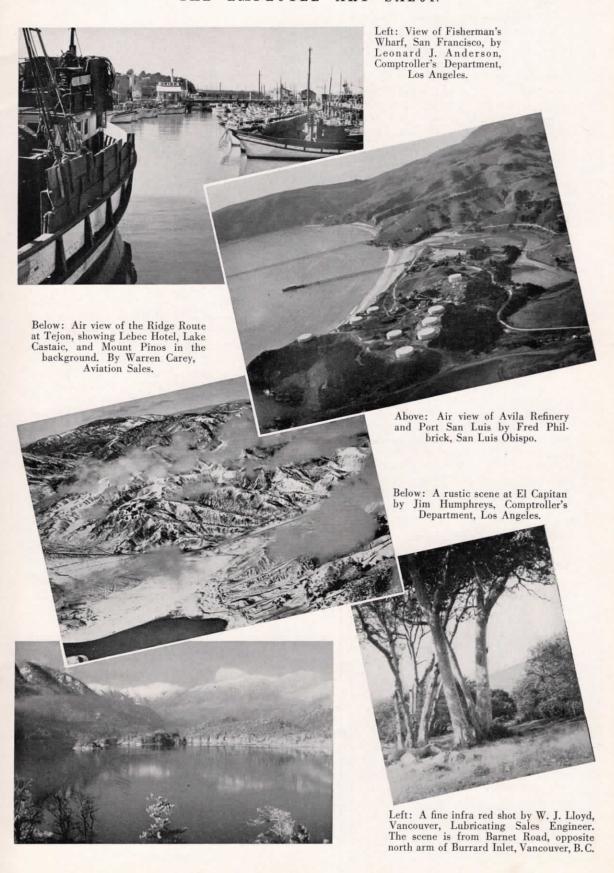


first. Leisurely removing his red sweatsuit, he grasped the bamboo, faced the vaulting pit, and started down the runway. Slowly at first, but faster and faster as he approached the take-off, he finally jammed the end of the pole into the slot, and jumped high in the air. As he rose, the shoulder muscles heaved his body well above the bar, where it seemed to hover, long enough at least for the judges to see plenty of daylight between his horizontal frame and the 14-foot, 8-inch hurdle. Finally a dexterous little squirm, the pole released fell away, and Bill dropped safely to the ground—champion pole-vaulter of the entire world.

Out onto the field swarmed the cheering fans, and in no time at all young Bill Sefton, the newly-crowned hero, was the center of an enthusiastic admiring throng, not the least conspicuous of whom was his teammate, Earle Meadows. The judges measured the height accurately at 14 feet 73% inches, and then Earle made his final try. Distinctly at a disadvantage after the long wait, he failed, but was obviously happy, nevertheless, over his buddy's success.

Bill Sefton is a modest sort of a young chap who is simply amazed at his own popularity and fame, although he had already acquired considerable recognition through his participation in the Olympic Games. This latest exploit, however, he frankly admits has given him the biggest thrill he ever expects to experience, and yet it is doubtful if even at its peak the thrill was one-half as potent as that still being enjoyed by Rush Sefton down at Union Oil Company's Los Angeles warehouse, who is the proud daddy of the new world champion.

THE EMPLOYEE ART SALON



THE WILDFLOWER FESTIVAL

The Southern California motorist or the out-of-state tourist, no experience could be more thoroughly enjoyable at this time of the year than a journey to Kern County, near Bakersfield, where the wild flowers are now blooming in profusion. One of the most beautiful and inspiring sights in Southern California, the riot of color knits a closely-woven blanket of flowers over the entire southern end of the San Joaquin Valley, that daily attracts thousands of visitors to the scene.

A beneficent nature has enriched the Valley with a record fall of rain this year, and in the places where the flowers even under normal conditions are abundant, enough rain has fallen to make the "flower show" this spring more bountiful and beautiful than ever before. Sunshine is doing its part, too, and desert floor, foothill, roadside and canyon present a sweeping vista of fragrant and colorful blooms that is not equaled anywhere else in all the world. Every species of wild flower known to Californians, including some that are native to this state alone, appear acre after acre, and their variegated hues blend together into such a harmonious color pattern as only nature can produce. Covering hundreds of square miles, and extending as far as the eye can see, the picture is one that is indeed difficult to forget.

Just a few of the blossoms that carpet the plains and slopes of the Valley with indescribable loveliness are cream cups, coreopsis, poppies, lupine, brodiaea, jewel flowers, white daisies, fiddlenecks, baby-blue-eyes, phacelias, ground primroses, evening snow, yellow daisies, and owl's clover, all of which contribute to an orgy of color that simply must be seen to be believed.

One might expect the lavishness of this particular floral display to completely obscure the effect of other typical growths in the area, but such is not the case. Bushes and trees, particularly in the mountains and foothills, dot the landscape luxuriantly. A cactus in full bloom is something to be remembered. Joshua trees in flower, and isolated yucca sentinels putting forth their creamy blossoms,

have an allure that is distinctly their own. Late in the spring fleshy cushions of cacti, shrubs such as the bush poppy, creosote bush, purple sage, red bud, and wild lilac greet and please the eye, and long after the last of the wild flowers has withered under a summer sun, the desert still abounds with all manner of interesting shrubs and trees.

Inspiration received from this beauteous setting prompted the formulation of plans by the Kern County Chamber of Commerce, with headquarters in Bakersfield, for an Annual Kern County Wild Flower Festival. This idea blossomed several years ago and each succeeding year the "Flower Show" has attracted an increased number of visitors. This year the spring festival was estimated to have had in attendance approximately 125,000 persons who paid homage to "The Flowers Which Ruled for the Day." The "Wild Flower Festival" this year was held on Easter Sunday, March 28th, and it can be truly said the wild flowers were "On Easter Parade" with their fresh gowns of varied hues and colors and the blush of youth and spring on their faces. On this particular Sunday, Mother Nature was exceedingly considerate and generous with an abundant supply of warm sunshine which made the setting for this outdoor festival doubly inspiring and pleasing to admirers of the flowers. Visitors from all parts of the state strolled among the four o'clocks, yarrow, violets, monkey flowers, globe tulips, tiger lilies, cat's ears, etc.

An old Indian legend still told by some of the surviving "First Americans" who inhabit the slopes of the Tehachapi Mountains in Kern County, is to the effect that the Great Manitou in an endeavor to keep secret the "Black Gold" hidden in the bosom of Mother Nature in the lower San Joaquin Valley from the White man's plundering, so beautified the area with wild flowers as to blind onrushing civilization to the possibilities under the flowers. Manitou, however, has been kind and today civilization not only enjoys possibilities of the "Black Gold" from the world-famous Kern County oil fields, but is still permitted



to revel in the wonderful beauty of Nature.

To attend a festival, or to visit the scene at any time, is to be reminded of the Valley's colorful history. Such a visit brings back memories of the half-forgotten Indians, now almost extinct, but once a flourishing race roaming these very mountains and plains with complete freedom. It recalls the coming of Spanish explorers, padres, Mexican traders and trappers, gold seekers, soldiers of Fort

Tejon, and people who came to the great West by land and sea, from every country in the world. It revives memories of the sheep and cattle raising, the opening of great petroleum industries, and the starting of a now-worldfamous agriculture. A sweeping glance over the wide field impresses one with the fact that here, perhaps, is the last stand of nature's artistry against man's industrialism, man's unrelenting conquest of all things wild.



A STRANGE PARALLEL

WE ARE all familiar with the life cycle of the salmon that is spawned in the upper reaches of some inland stream, swims down to the open sea, lives its life, and finally fights back upstream to spawn and die in the precise spot from whence it started. It's a thrilling story of a wonderful natural process that goes on and on indefinitely, but like most repetitive processes is now accepted as rather a casual occurrence, at which we have ceased to be amazed.

Here, however, is a yarn of the sea that is similar in many respects, is not repetitive, and involves such a remarkable series of coincidences that it is entirely worthy of a premier place in Robert Ripley's famous collection of oddities.

It all started in the year 1914 when there emerged from the Bethlehem Shipyards in San Francisco two tankers—the Lyman Stewart and the Frank H. Buck. These two vessels were sisters in every sense of the word. They were built to exactly the same specifications, were identical in all details, and they came off the ways to ply their respective routes in the same business—petroleum transportation.

Without mishap, at least of any major consequence, they engaged in this trade until October 7, 1922, when the Lyman Stewart collided with the S. S. Walter A. Luckenbach off Point Lobos, San Francisco, and finally piled up on the rocks just below the Cliffhouse at Mile Rock. The crew were safely removed, but the ship was almost a complete loss. Thus the first of the sisters returned to her home port to perish at the Golden Gate, the very portals from which she had so proudly set out just eight years before.

Now comes the astonishing part of the story: The Frank H. Buck, owned by Associated Oil Company, continued serenely on her way, mostly transporting petroleum and petroleum products to and from Pacific Coast ports, but occasionally venturing on more extended trips to Honolulu, South America, and the East. With little interruption, her schedule was carried on until March 3 last, when, without warning, she collided with the S. S. President Coolidge, strangely enough almost at the identical spot where her sister ship, the Lyman Stewart, met disaster in October, 1922. The crew escaped in the lifeboats without mishap, and an effort was made to tow the vessel to port. It was of no avail, however, and she finally grounded, broke amidships, and settled down within fifty feet of the Lyman Stewart, part of whose engines are still visible above the water at low tide.

There they now lie—these twin sisters. Built in the same yard in the same year they went their diverse ways, one for eight years, the other for twenty-three, each to meet an exactly similar fate, fifteen years apart, in almost the identical spot, and both at last to find surcease in the same watery plot in the shadow of their birthplace.

The engine of the Lyman Stewart is still visible above the water at low tide, as shown on the illustration on the opposite page, and just around the point immediately adjacent lies the wreck of the Ohioan which perished in the same place about a year ago.

The sea has been the source of many strange tales, but none stranger than the peculiar series of coincidental experiences that befell the Frank H. Buck and the Lyman Stewart.



Photo by Gabriel Moulin.

RECORD DRILLING AT EL SEGUNDO

EING a regular recipient of the daily drilling report we noted that Union Oil Company had spudded in Well No. 2 on the El Segundo lease on March 24. Ordinarily the spud-in is first news for the publicity man, and then he simply waits for the completion of the well for another story. So having caught the beginning of this particular project, we didn't pay much attention to its progress for the next few days, for the next six days in fact, and then happening to glance down the report our good eye stopped at the El Segundo depth figure. Our immediate impulse was to call up Ralph Atherton and tell him somebody had pulled a boner-3,269 feet was the figure recorded, in six days, five actually, because we were sure that they must have cemented in a surface string and that means that the drill has to stop for one day at least, so the whole thing looked mighty fishy.

Before doing anything quite so drastic, however, we hauled out the few reports we had missed, and there it was as large as life. The well was started on March 24, and on March 25 Jack Maddox and his crew of Dominguez huskies were preparing to set casing at 999 feet. After a day's delay to cement and complete the casing job, drilling was resumed and on March 27 down went the drill another 561 feet. Then came an astonishing piece of work: On March 28 the record shows a penetration of 1,363 feet for the twenty-four-hour shift, and if that isn't a speed record we'll be more astonished than ever.

The whole project presents an interesting study of the development of drilling methods, in which Frank Boyd, Union Oil Company's general superintendent of drilling, and his aides have played conspicuous and important parts. As we write, the well has been in the hands of the drilling crew for 21 days, and the recorded depth is 7,412 feet, indicating an average of 353 feet of penetration per day. Contrast that with some of the old-time exploits that took months to drill to half the depths.

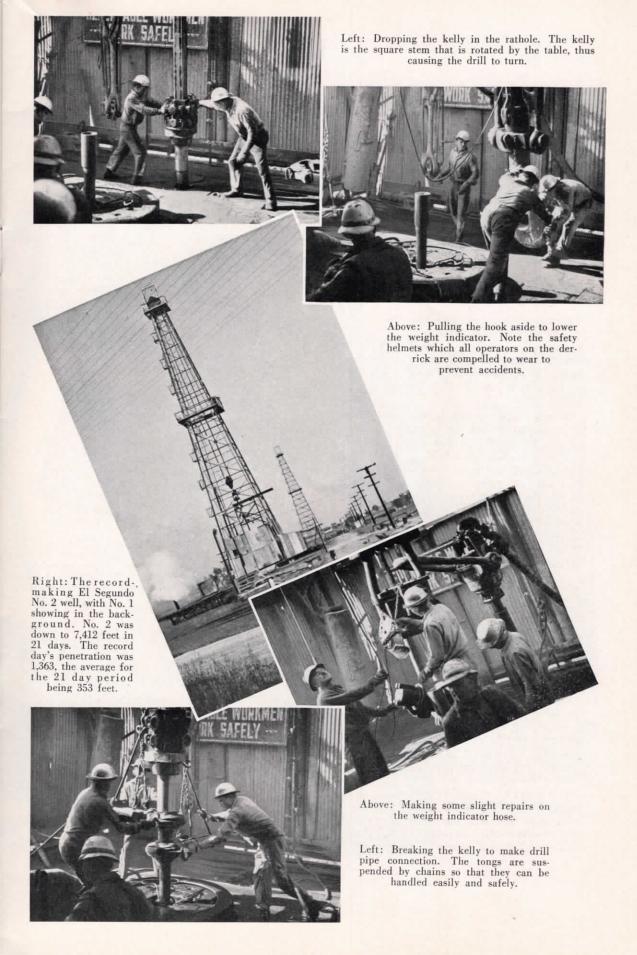
Coring was started at 7,350 feet which, of course, will slow up progress tremendously from there on, but it is a significant fact, and a fine commendation for our drilling department, that in spite of the extraordinary speed with which this well has been drilled so far, deviation from the true perpendicular averages less than half of a degree.

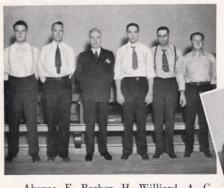
Some time ago we wrote the story of a similar piece of outstanding work by Jack Maddox and his boys at Playa del Rey, and we would emphasize now, as we did then, that these results are only possible through the finest co-ordination of effort and the greatest co-operation between the various departments concerned. Each of the units having to do with drilling, production, petroleum engineering, transportation, and construction, have well defined and carefully timed duties to perform before such efficiency can be attained, and the celerity, facility, and speed with which this project has been advanced are evidence that the value of coordinated and co-operative effort are fully appreciated.

The whole process of drilling during the past ten years has been the subject of intensive research, and the development of direction finders, weight indicators, continuous core samplers, and other mechanical devices has elevated drilling from a more or less haphazard adventure into an extremely exact, and decidedly interesting science. Nothing that might lead to progress has been overlooked in the whole gamut of the business. Constant studies of mud requirements and effects have been conducted, and the widely diversified equipment is being continuously revised and improved, until it would almost seem that there is nothing left to improve.

It is perhaps true, however, that the speed and accuracy of present day drilling may be attributed also in a large measure to improvement in technique. Long experience has pointed the way to many time-saving, and otherwise economical changes in procedure, and with men like Frank Boyd and Jack Maddox to direct operations, a competent drilling crew is now capable of accomplishment that a few years ago would have been deemed impossible.

The El Segundo well is a classic example of the combined effect of all these advances. An average penetration of 350 feet per day in any kind of formation not so long ago was a pipe dream, and as for drilling 1363 feet in one day, well that just wasn't in the cards. To do these things even in this advanced day, and contrive them with a deviation of less than half a degree in 7400 feet is an achievement of which the drilling department should be, and no doubt is, justly proud.





Above: E. Barber, H. Williard, A. C. Galbraith, Assistant Vice-President, N. Malstrom, W. Rebella and L. E. Keahey, San Jose.

Right: E. R. Broadbent, P. Bowen, T. H. Luckham, E. F. Mondon, R. O. Jones, Los Angeles No. 1. These boys just missed the championship by seven pins.

> Above: L. E. Keahey of San Jose, holders of the Burnham trophy for the last two years, turns it over to G. C. Root, captain of the winning team.

Left: The H. Schack

Above: J. E. Green, F. H. Billington, S.Paulson, R.F. Judy, W. McIntosh and C. M. Huarte, Dominguez.

Right (standing): R. Anderson, A. L. Whitlock, H. Mahnken, A. Erickson; (kneeling) W. R. Tonkin, A. C. Crooks, Seattle, K. M. Crist, the old standby of this team, underwent an operation and missed the contest for the first time in six years.

Above: W. J. Mc-Creery, R.V. Martin, C. B. Miller, G. J. Eisenzopf, H. Applebaum, San Francisco.

> J. Chokae, C. Wind, and M. Wanlass, Oleu No. 1.

The winners: M. Varner, A. H. Laemmel, acht, L. Cannon, and G. C. Root, Santa Fe Springs.

UNION OIL COMPANY BOWLING CHAMPIONSHIP

FTER a terrific battle with the Los Angeles No. I team, the Santa Fe Springs quintette No. I team, the Santa re Springs quantum Trophy for the year captured the Burnham Trophy for the year of 2.747 winning out captured the burnnam 1ropny for me year out 1937 with a final score of 2,747, winning boys in the home stretch over the Los. It was a well by the scant margin of six points. Glenn Root earned victory. oy me scant margin of six points. It was a well-earned victory, however, and Glenn every captain of the Santa Fe Springs team, has every right to be proud of a first-class aggregation right to be proud of a first-class aggregation,

San Francisco, Oleum Refinery's No. 2 team, old Spattle rolled on their care allows and telegraphic states and Spattle rolled on their care allows and telegraphic states are supplied to their care allows and telegraphic states are supplied to their care allows and telegraphic states are supplied to their care allows and telegraphic states are supplied to the suppl and a first-class performance. and Seattle rolled on their own alleys and telegraphed scores to the Los Angeles headquarters graphed scores to the Los Angeles neadquarters
the Studio Bowling Alleys. San Jose, winners for the past two years, and Oleum Refinery
No. 1 team winners in 1024. were invited to No. 1 team, winners in 1934, were invited to Los Angeles, and competed against the local squads on their home ground. Neither of these teams, however, seemed to be able to accommodate, themselves to the strange alleys, and

couldn't quite get in stride.

Seattle, with an initial page and finished lead but couldn't hold the page and finished. Seattle, with an initial 951, took an early lead, but couldn't hold the pace and finished fourth. The first three places No. 1, and Los Santa Fe Springs, with scores of 2.747. 2.741.

Angeles Refinery, with scores of 2.747. 2.741. Angeles Refinery, with scores of 2,747, 2,741,

Angeles Refinery, with scores Angeles Kennery, with scores of 2,141, 2,141, and 2,701, respectively. The bowling ball, and 2,701, respectively. Jr., to the individual donated by W. L. Stewart, Jr., to the individual rolling the highest series of games went to donated by W. L. Stewart, Jr., to me marvious to rolling the highest series of games went to Ralph Smith of the Los Angeles Refinery Who, with a total of 649 just noted out T. H. Luckwith a total of 642, just nosed out T. H. Luck-ham of Los Angeles No. 1 by four size with a total of 642, just nosed out T. H. Luck-The The ham of Los Angeles No. 1 by four pins. If the ham of Los Angeles Hours are howling shoes donated by A. C. Galbraith for bowling shoes donated by highest game are the individual rolling the highest game the individual rolling the highest move how being worn by E. F. Mondon, who turned now being worn by E. F. Mondon, inning in a nice total of 243 for a single inning.



Above: L. G. Metcalf, J. A. Sleeth, R. H. Sefton, W. Kolar, O. J. Oswald, Los Angeles No. 2.

Above (left): E. F. Mondon, Los Angeles No. 1, winner of high game.



Above: J. Robertson, C. McCreary, C. Pollock, R. Smith, C. Rozelle, Los Angeles Refinery. This team took third.



Above: R. R. Grisham, S. P. Briggs, R. Le Beuf, C. C. Costa, A. A. Smith, Oleum Refinery No. 2.

Left: Ralph Smith, Los Angeles Refinery, winner of high series.

L. Olivotti, A. Micoli um Refinery



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VOLUME EIGHTEEN

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BULLETIN No. 4

HERE'S nothing new under the sun, but it's funny nevertheless how easy it is for us to lose track of prior knowledge in the glare of present discovery. We were just browsing through some old Bulletins the other day, and in one dated October, 1921, we found an intensely interesting article by R. E. Haylett entitled "The Fallacy of the Gasoline Gravity Test." We were immediately astonished to find that even in those early days the problem of motor knock had already been pretty thoroughly analyzed, and was already pretty well understood.

In this article, which incidentally was the second and concluding chapter, on the same subject, Mr. Haylett quotes from the speeches of two General Motors engineers-Thomas Midgley, Jr., and C. F. Kettering. The former had conducted an experiment in which observations of operating conditions inside the combustion chamber of a motor were observed through a small window in the cylinder head. Here in part is what he had to say: "When the engine knocked, the flame in the window was vellow. When it did not knock, the flame was blue, running on the same gasoline. We analyzed this yellow flame with a spectroscope, and found that when an engine knocked we had blue carbon bands. When it did not knock they were absent. When the engine knocks you can see the fine carbon coming out of the exhaust pipe, and when it does not knock the same exhaust flame will be clear.

C. F. Kettering said in his speech at Wash-

ington, D. C., "Each particular fuel has its characteristics. The paraffins have theirs. The napthene compounds like you get out in California have theirs.

"A motor car builder in Detroit built a new motor car last year, an experimental car, and sent his boys across the continent with it, and in going across the continent the engine pounded its head off. When they got to Denver they wired back that the machine was in terrible shape, that it would never do; it had pounded, pounded, pounded. So he (Mr. Kettering) hopped on a train and met them in California, and they couldn't get it to pound out there at all, so he said, 'You fellows have been drinking!' He got on the train and came back, and the boys drove the car back across the country, and after they got it past the Rocky Mountains, coming back, the engine just pounded its head off again."

Mr. Haylett recites these remarks to illustrate the difference in characteristics of various types of gasoline, and we repeat them here merely to show that our research department was always on its toes, and that a lot of the things we think are new are really much older than we think they are.

This story, in spite of sixteen years subsequent development, is still entirely up-to-date, and should be read by every employee of Union Oil Company. Mr. Haylett concludes with the significant phrase: "Truly, the California motorist has much to be thankful for in addition to the climate."



GIRLS' CLUB VISITS TORREY LEASE

N SATURDAY, April 10, at eight o'clock in the morning, seventy Union Oil Company girls from the southern district climbed aboard a pair of special buses and started on a most entertaining journey. The occasion was the annual all-day outing of the Girls' Club, and the group had been invited by George Reiley, George Gosline, and other members of the field department to spend the day on the steep slopes of Torrey hills, in Ventura County, and to enjoy to the full the beauties of a California spring day, and the hospitality of the residents on the historic Torrey lease.

Traveling over the picturesque Santa Susanna Pass to the foot of the Torrey grade, the girls were met by their hosts and transported by automobile up the mountain trail to the barbecue pit. There they were greeted by the local ladies, and a feast was promptly set before them that alone would have made the adventure well worth while. "Pete" Conner,

whose prowess as a barbecuist is known to every picnicker in Union Oil Company, with his usual dexterity dished up ample portions of the kind of meat for which he is justly famous, and all the additional trimmings were there to make an irresistible combination.

Following the feast, the party was taxied by automobile to the very top of Torrey hill, where the afternoon was spent in gathering poppies, lupin and other varieties of wild flowers that grow in profusion on the slopes. After a good romp around in the hills, and a great deal of ohing and ahing about the beauties of nature and the graciousness of their hosts and hostesses, the girls said their farewells, once more boarded the buses, and returned home via the coast highway.

The affair was a real novelty, and the girls are loud in their praise of the field men who arranged the details of one of the most enjoyable outings ever experienced by the Club.

COMPTROLLER'S DEPARTMENT HONORS HEARLE

THE University Club of Los Angeles was the scene of an interesting luncheon party on Friday, March 19, when a group of about fifty employees gathered to pay their respects



G. H. Forster, Comptroller, and R. D. Matthews, Executive Vice-President, pose with J. R. Hearle after presentation.

to J. R. Hearle, former auditor of taxes. Following a fine lunch George H. Forster, comptroller, as chairman of the meeting, asked R. D. Matthews, executive vice-president, to present Mr. Hearle with his twenty-five-year pin. Mr.

Matthews, in response, gave an interesting account of the development of Union Oil Company's tax affairs, particularly stressing the sterling part played, and the fine aid given, by Mr. Hearle in the early process of the development. He told many interesting episodes of the growth of this once rather incidental business into its present substantial and important dimensions, and in presenting the service emblem voiced an enthusiastic eulogy of Mr. Hearle's outstanding courtesy and generally admirable character.

George H. Forster then resumed command of the floor and after recounting, in his usual inimitable manner, a highly amusing and appropriate story of an unusual luck charm, proceeded to present Mr. Hearle, on behalf of his friends and fellow employees of the comptroller's department, with a more useful luck charm—a handsome engraved gold watch. In handing over the gift Mr. Forster commended the recipient warmly for his fine efforts over the past twenty-five years, and expressed the gratitude of himself and staff for the contributions Mr. Hearle had made to the efficiency, and through his kindly influence, to the morale of the department.

Mr. Hearle replied very feelingly to these expressions, thanked everybody profusely for their goodness, and then in typical altruistic manner paid glowing tribute to his associates, and asked on behalf of his successor for continuance of the same degree of co-operation that he himself had enjoyed.



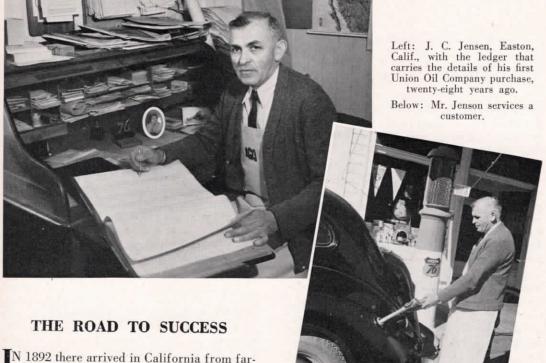
Treble Clef Club

Featuring Dorothy Eckhard as soloist, and Daisy Sinclair as accompanist, the Treble Clef Club presented an interesting program at the auditorium of the Southern California Edison Company in Los Angeles on the evening of March 30.

The chorus of forty voices, under the direction of A. C. Marshall, gave a series of beautifully rendered numbers, chosen in conformity

with the theme of the program-spring.

Over 250 Union Oil Company employees and friends availed themselves of the opportunity to attend this, the second spring presentation of the Club, and they were treated to an artistic choral exposition that indicated fully the thoroughness and intensity with which this fine effort is being developed under Mr. Marshall's capable tutelage.



N 1892 there arrived in California from faroff Denmark a young immigrant by the name of Jensen. Just thirteen years old, none too strong physically, and alone in a strange land among strange people, this young lad was faced with the prodigious task, for one of his years, of providing his own livelihood. He wasn't the least dismayed by the prospect, however, and started in with an ambition and a determination that finally, in spite of many obstacles, carried him safely over the reef of uncertainty into the haven of comfort and success.

In order to equip himself as fully as possible for his battle in the business world, young Jensen took a commercial course in high school. and although the training only lasted three months it seemed to give him just what he needed. In any case, he secured a job in a small grocery store in Easton, California, which netted him a princely monthly emolument of twenty-five dollars and his room and board. Inside of four years, by hard work and native thrift he had saved enough money to acquire a third interest in the store. This was in 1901, and while it seemed to mark a decided step towards his dream of proprietorship, it was by no means the culmination of his plans. Twelve years later, however, he did feel that he was really making progress when, through diligent application of his training, experience, and thrift, he purchased the remaining interest and became the sole proprietor of the business.

Today, J. C. Jensen is a prosperous American citizen, owner of a large modern grocery at the same original site in Easton, California,

and still takes a real pleasure and pride in the records and accounts of his concern. He has, in fact, at the present time a complete record of every transaction he has made in connection with the business for a period in excess of twenty-eight years.

J. C. Jensen has another distinction to his credit: He was the first person, outside of the Fresno main station, to retail Union Oil Company products in the San Joaquin Valley, and he has been a one hundred per cent dealer of and booster for these products for twenty-eight

His business is his hobby, and quality merchandise and personality are his stock-in-trade. Away from the store he is an active member of the Dania Lodge of Fresno, one of the oldest Danish organizations in the United States, and he is a real contributor to the social enjoyment and uplift of his community. Reading is his great obsession. It has been almost his entire source of education, and he has profited greatly by judicious application.

Mr. Jensen is justly proud of the fine business he has built up, and Union Oil Company is equally proud to be represented by a man of such integrity and generally estimable

character.

ANNUAL GOLF TOURNAMENT

TNION OIL COMPANY employees' eleventh annual golf tournament will be staged this year at the Lakewood Country Club at Long Beach on Saturday, May 22. Yearly this affair has developed and expanded until now it is unquestionably one of the greatest sports tournaments sponsored by the Company. There are three main contests on the program; first, the 36-hole championship round, in which the President's and Vice-President's cups are awarded to the low gross player and runner-up respectively; second, the 18-hole medal play for those who don't care to go the full distance, and, third, the blind bogey in which everybody has an equal chance.

This year the championship event is being limited to players with a handicap of 18 or less, a procedure which has been rendered necessary by the growing roster of entries, and the consequent difficulty of finishing the entire program in daylight. Anyone may play in the 18-hole event, but only players with handicaps of 19 or over are eligible for the new perpetual cup-the Triton Trophy-that goes to the low gross winner of this event. In addition to the blind bogey there will be a wide variety of contests, educational, entertaining, and just contests, open to golfers of

greatly diversified ability. Nobody, however, can win more than one prize, and entries posi-

tively close on Tuesday, May 11.

Ron Gibbs, Roy Hornidge, John Howell, and their committee are taking care of the details, and already have everything well under control. Entries are pouring in fast, and indications are that this tournament is going to be bigger and better than ever.

The contest will be followed by the usual dinner and entertainment at the club house, and W. L. Stewart, Jr., Vice-President, will be there to award the trophies to the winners. This is a tournament for every Union Oil employee who plays golf, regardless of the type. Even those who have never shot in the vicinity of a hundred will find lots of congenial souls in the same category, so there is no reason to hold back that entry. Get it in now, and help the committee make the eleventh annual golf tournament a real success.



Stanley Wissler Receives Important Appointment



At the recent convention of the American Association of Petroleum Geologists, held in Los Angeles, Stanley Wissler, Union Oil Company's chief paleontologist was elected president of the Society of Economic Paleontologists and Mineralogists. Stanley is recognized as one of the outstanding micro-paleontologists in the United States, and the appointment is a recognition of the splendid contributions he has made to the development of the science, which in a comparatively few years has become an important factor in petroleum exploration work. Wissler was first employed by Union Oil Company as a micro-paleontologist in the research laboratory on January 1, 1925, and was later transferred to the geological department.



Left: Tuna clipper "West-gate," latest addition to San Diego's tuna fleet, built by San Diego Marine Construction Company, and launched March 18.

Below: Left to right, H. W. Hartin, agent, Chula Vista; M. Horaka, co-owner of the "Westgate", and Bert Smith, lubrication engineer, Union Oil Company, Southern

Division.

NEW VESSEL ADDED TO SAN DIEGO TUNA FLEET

AILY decorated with American and Japanese flags and bedecked with flowers, the ninety-foot tuna clipper, "Westgate," was launched March 18 from the ways of the San Diego Marine Construction Company, its builders. Modern in every detail, the "Westgate" slid gracefully into the waters of San Diego bay to become the latest addition to the border city's rapidly growing fleet of tuna boats.

Several hundred spectators, including four of the full owners and various officials of San Diego's fishing interests, gathered to witness the colorful ceremony. Master of ceremonies was W. V. Ambrose, president of the Westgate Sea Products Company, for which the ship was named and to which her tuna hauls will be delivered. He introduced prominent cannery officials and others interested in building up the city's fleet, including the co-owners T. Tsumagri, M. Morishita, M. Horaka, and M. Fujimote, and D. B. Johnson, shipyard manager and designer of the clipper. Sponsors of the clipper were three Japanese girls in native costume, daughters of the new owners, and the launching ceremony was carried out in characteristic manner, a bottle of Oriental wine being used for the christening. Captain Tsuida, who will command the new ship, was aboard the clipper, "Defender," on an expedition to the southern fishing banks, so was unable to be present.

When completed early this summer, the ship will have a capacity of 120 tons of tuna, preserved by the latest methods of refrigeration, including ice storage and the innovation of seawater cooling in large tanks. Carrying a crew of fourteen men, the "Westgate" will have a short wave radio and the latest aids to navigation.

She will be powered with a 300-horsepower Washington Diesel, and storage space for Diesol will be sufficient for a round trip to Central American tuna banks without refueling. Two other large Diesels, connected to dynamos, will constitute the auxiliary machinery. The galley, equal to that of a small modern hotel, will be furnished with every modern convenience.

San Diego, because of its adequate port facilities and its nearness to the fishing banks, has become one of the most important cities in the fishing industry on the Pacific Coast, and the launching of the new tuna clipper marks the addition of another unit to one of the finest tuna fishing fleets in the world.



SEELYE AND 76

Joe Seelve of the southern division sales is such an ardent booster for 76 that he even advertises it through the medium of his golf score. We understand that on three or four occasions Joe has turned in a card with a large 76 for a total of eighteen holes, which besides being a plug for his favorite gasoline is a mighty fine golf score.



Mandarin Matier

Above is an intimate glimpse of Hugh "Mandarin" Matier, all dressed up for a trip to the joss house, which, of course, is joss as it should be. Hugh not only wears the Chinese habiliments becomingly, but speaks the language fluently, and is an authority on the history of this highly interesting race.



"Joe Penner" Ramsay

The regular Stop-Wear meeting at Long Beach, March 8, was turned into a surprise party for H. H. "Pete" Ramsay on the eve of his departure for Portland to assume his new responsibility as division manager for the Oregon territory. Pete's old buddies felt that the Joe Penner outfit would stand him in good stead in the moister climate up yonder, but considering the kind of weather we have had in California during the past season, we hardly think any special preparation was necessary.

Famous Dog Team

24



This is a dog team that traveled overland from Alaska to Chicago during the World's Fair in that city. The photograph was taken in Savona, B. C., in front of the Edwards' store. Note that the sleigh is jacked up on wheels and the dogs are wearing moccasins to keep their feet from being torn to pieces on the hard roads.



Transferred

According to a recent announcement by W. K. Hopkins, manager of industrial and personnel relations, E. L. "Ernie" Dalany, senior clerk in the northern division office at Bakersfield has been appointed personnel representative for the valley division, reporting to Ted Miles, valley division production superintendent.

"Ernie" has been with Union Oil Company for eight years during which he has exhibited in a decided measure the characteristics and traits that seem to fit him ideally for the type of work in which he is henceforth to be engaged. He has made many friends during these first eight years, largely through his keen and active interest in employee affairs, and his generally co-operative attitude. He was first engaged as a clerk in the Comptroller's department, crude oil division, on April 1, 1929, and has since spent three years in the Santa Fe Springs district, and three more in the northern division at Bakersfield, experiences which have added substantially to an already large circle of employee acquaintances.

Ernie is very much pleased over his new assignment, and he starts off with a vim and enthusiasm that we are sure will carry him well along the path to success. He has all the desirable qualifications and with the requisite co-operation will undoubtedly go over the top.



SPOKANE DOCTOR LOS ANGELES VISITOR



A recent visitor in Los Angeles was Dr. T. Maurice Ahlquist, for fifteen years in charge of Union Oil Company's medical panel in the Inland Empire, with headquarters at Spokane. The doctor had planned a trip through the Panama to the east coast, but due to the unfortunate illness of Mrs. Ahlquist, was obliged to disembark at Mazatlan, Mexico, and return. Dr. Ahlquist has appointed every doctor on the panel in the Spokane district, and is known to all Union Oil Company employees in the Inland Empire, where he has spent the entire fifteen years of his association with the Company. These fifteen years, he states, have been most enjoyable, and he has developed a real regard for the fine spirit and general demeanor of the large group of employees with whom, through his work, he has become so well acquainted. At the left is shown the doctor's home in Spokane on a typical northwestern winter's day.

Thirty Years



C. Hudson Field, Orcutt



In THE month of April, 1917, America entered the Great War, and perhaps in this fact may be found the explanation for the sudden increase of employment. Undoubtedly the exodus of young men that followed the call to arms required industry generally to make immediate and substantial replacements. In any case, fifteen employees of Union Oil Company earned their twenty-year service emblems in the month of April, 1937, while only nine received similar awards in each of the preceding two months.

For the first time in three months a thirtyyear pin was awarded, the recipient being Clarence Hudson, field pumper No. 1 in the coast division at Orcutt. Clarence has been thirty-six years altogether in the oil business, six of which were spent in the fields around his home town of Marion, Indiana. After a varied experience in the East, he finally came to California in 1907, and immediately secured employment with Union Oil Company as a roustabout in the Orcutt district. Some time later he was delegated to the well-pulling crew, and thence graduated to the job of tool dressing. Clarence has worked in the same district for thirty years, has covered every section of the Orcutt fields, and is as familiar with the topography of the area as he is with the routine of the field worker. Being an inveterate hunter, he is ideally situated in this section of the country to indulge his hobby; for quail, duck and dove are plentiful locally during the open season. In fact, it is reported that on several occasions he has brought a good dinner down from the sky without leav-

ing his own doorstep.

Three employees were presented with twenty-five-year emblems during April, the first being Thomas Sheehan of the northern division sales department at Seattle. As his name would indicate, he is a son of Old Erin, and before coming to this country lived rather an eventful life in the land of his birth. He was born in Queenstown, Ireland, and when he reached the enlistment age joined the British Navy, in the service of which he remained for twelve years. During the time he was so engaged, the Boer War broke out and Tom played an active part in helping Britannia rule the waves while it lasted. Receiving his discharge in 1906 he accepted a position in the post office at London, England, but finally gave that up and sailed for Seattle where he has remained ever since. His employment with Union Oil Company dates from April 2, 1912, when he was signed up in the northwestern city as a member of the warehouse staff.

During his twenty-five years of service with the Company, Tom has spent most of his time packaging oils, and the celerity with which he accomplishes this has resulted in the establishment of several records that still remain unbeaten. He has three fine children, is an enthusiastic sportsman, and his mode of living and general ethics have been an inspiration to many of the younger employees who have had the good fortune to start in the Seattle district.

Jesse B. Thompson originally came to California in April, 1912, from West Virginia, where he had been employed in the oil fields for a number of years. Soon after his arrival here he was engaged by Union Oil Company as pumper on the Stearns lease. At that time looking after one well and one gas engine was the extent of the pumper's responsibility, but as any pumper will tell you, things have changed a trifle in the meantime. Since these early days, Jesse has been pumper on almost all of the wells in the Brea Olinda section. For a few years he acted as operator at the Naranjal compressor plant, and later was operator of the absorption plant, but finally again returned to the position of pumper, in which capacity he has been employed for the past several years.

Carbon Canyon, near Brea, affords Jesse all the recreation he needs on his days off, and he spends most of his spare time there following his fox hounds over hills and dales in pursuit of the sly old fox and the elusive bobcat. The deep, plaintive notes of the hounds chasing their prey is music to a Virginian's ear, and the excitement of the chase has brought many a pleasant adventure to

Jesse and his pack.

Third of the twenty-five-year trio is Captain Andreas Morland of the S. S. "Los Angeles," first employed by Union Oil Company on April 30, 1912, as an A. B. seaman aboard the "Lansing." He continued in this rating until September, 1917, when he was assigned to the "Washtenaw" as third mate. He then served in various licensed capacities aboard vessels comprising Union's major fleet, and on January 4, 1932, took over his first command as Master of the "Santa Maria." His present command, as already indicated, is the S. S. "Los Angeles."

Captain Morland is the only Master in our present marine service who has never entered the ranks of the benedicts. Although he is reasonably susceptible to the charms of the fairer sex, it seems that he has thus far successfully avoided being initiated into the matrimonial club. In regard to his hobbies, we might add that he is interested somewhat in music, for at one time in the past the Captain considered himself an authority on the saxophone. Captain Morland is keenly interested in farming, and owns some thirty acres of land in Grass Valley, California. He has made two trips to Norway, his birthplace, within the past few years, apparently for a visit only, but there is a suspicion in certain quarters that there may have been an ulterior motive in these journeys.

First of the twenty-year group for April is C. Fred Godfrey, who came to work for Union Oil Company April 1, 1917, as a fireman at Summit station (now in process of reconstruction, following several years of disuse). Prior to his affiliation with this company, Fred had been engaged in the laundry business at San Luis Obispo. There he solicited the trade of the tanker crews touching Port San Luis, and thus he became acquainted with many Union Oil Company employees. When he sold his laundry interests, a friend urged him to apply for work with the Producers Pipe Line, and his application being successful, he took up his duties at Summit soon after. Following two weeks at that location, Fred was transferred to Orcutt pump station, where under the tutelage of "Fergie," he learned to figure run tickets, cut samples, and do all the other things required of a first-class gauger, and became so competent at the business he was finally given a gauger's post first at Taft, and later at Santa Paula. In 1921, he changed his occupation to tooldresser in the drilling department, and in 1934 was transferred to Long Beach production department as well puller, his present occupation. Fred is a proficient bowler, and when in form can keep a pin-boy busier than a woodpecker on a steel derrick. Much of his spare time is spent on a 3,000-acre ranch owned by a member of the family, and it's a poor day when he fails to flush a covey of quail or at least scare a rabbit out of its skin. His other two hobbies are a son, who is a member of Uncle Sam's sea forces, and a daughter, now attending school in Long Beach.

John Epson of the southern division field department is a native of Missouri, and came to California to be shown at the age of

Twenty-Five Years



seventeen. The family located in Placentia, and after some years' occupation as a teamster, during which he freighted much rig timber to Union Oil Company, he decided to cast in his lot with his best customer. John actually joined the staff of Union Oil Company as a teamster on the Stearns lease several years prior to the date indicated in his service record, but resigned for a time to do teaming work for the County, and officially started for Union two years later. He resumed his activities with the company as a pumper on the Hole lease, and remained in that capacity for ten years. Activity on the Hole property ceased about 1927, and he was then transferred to the Richfield production department where he has continued up to the present time. He still resides with his family on the Syndicate lease in the vicinity of Brea, in a home he purchased when he first started work for the company, and finds his greatest happiness in a fine family-three girls and boy, who, along with his trees and flowers, keep his spare moments thoroughly entertaining and enjoyable.

Harold H. Ramsay, newly appointed division sales manager for the Oregon territory, was initially engaged by Union Oil Company April 4, 1917, as agent at Gilroy, California. The following year he left to engage in World War service with the 2nd U. S. Engineers, returning to this company as agent at Chico. He served as special sales representative in the Sacramento district until 1924, when he was transferred to Redding in the same capacity. In 1928, Ramsay was made assistant district sales manager in Sacramento, and was eventually promoted to the Portland area in the same capacity. In 1932 he was made assistant manager at Los Angeles, and a year later was appointed district sales manager for Long Beach area, the post he held for four years prior to his latest promotion.

"Pete," as he is known to his friends, is a man with a fine sense of humor, an ingratiating smile, and a pair of blooded Scotties, that altogether make his life pretty much worth while. The deep ridge at the ocean's edge in Long Beach is said to have been worn by the pounding of his feet last summer when he sprinted up and down the strand daily in an effort to crop off a few pounds. He makes friends easily, keeps them long, and in the vernacular of the trade is "okay."

Mary Kelly, of the southern division sales department, Los Angeles, was first employed April 5, 1917, as a stenographer at El Centro, where for ten years she carried on a wide variety of activities that would indicate the

business of a stenographer in those days was slightly more complicated than it is at the present time. Checking equipment, such as drums and barrels, and other incidental tasks that now fall to the warehouse employees, were part of her regular assignment, and only the modesty of the times prevented her from shocking the natives by introducing overalls for women long in advance of the prevailing acceptance. Mary is thoroughly Irish, is a capable, conscientious worker; and has carried on her duties efficiently and well, only stopping at long intervals to take relaxation in the form of some worth-while journey. Even when far off in some foreign country, she never fails to endear herself further to her friends by sending the little mementos and greetings that prove it takes more than the excitement of travel to make Mary forget her pals.

Nash Daugherty has spent all of his twenty years' service as a member of Union Oil Company's sales department. He was first engaged as a tank truck salesman on the Folsom route, working out of Sacramento, on April 7, 1917, and after some time on this route was transferred to the Roseville district, where he held the post of truck salesman for ten years. With the expansion of Union Oil Company's activities in the district, and the subsequent construction of a plant at Roseville, Nash was given the position of tank truck salesman there, and has continued in this capacity up to the present time. Nash has always maintained a fatherly interest in the Roseville plant, and still refers to it as his "baby."

Outside of his work, his greatest interest is raising chickens on a small farm outside of Sacramento, but he is also justly proud of a collection of very valuable purebred peacocks and pheasants which he raised on the rancho.

Joseph H. S. Seelye came to Union Oil Company April 9, 1917, from the Gulf Refining Company in Pennsylvania. He was first assigned to the disbursement division of the comptroller's office, and in September of the same year was transferred to the head office sales department, where he later took over the newly-created post of equipment clerk, Los Angeles branch of the sales department. In 1920, he was promoted to the position of chief of the statistical department, four years afterward was appointed chief clerk in the sales office, and later became assistant to the southern division manager. At one time he was transferred from head office to the northern division as sales promotion supervisor,

and then was made assistant manager of operations at San Francisco. He returned to Los Angeles, however, in 1932 and was assigned to special work in the equipment division. After co-ordinating the work of the division delivery supervisors, he resumed his work in the sales department as chief clerk of operations, the post he holds at the present time.

Joe, like a great many other Union Oilers, is a confirmed addict of golf, which, of course, is no disgrace. You will remember that even Samson couldn't break away from the links. He is also a lover of good music, and his rich baritone voice has been heard and enjoyed in many of the churches of Southern California.

John M. O'Leary must be Irish or there is absolutely no significance in names. In any case he exhibits all the characteristics of the race and gives a cheery shake of the hand from the bottom of his heart to everybody who is fortunate enough to come in contact with him. John was first employed by Union Oil Company twenty years ago as a laborer at Orcutt, and after a short spell as a teamster was transferred to the drilling department as pumper. Some time later he was made well puller, and is somewhat proud of the fact that he has pulled almost every well that has required to be so treated in the Orcutt district for the past few years. When not pulling wells John may be found on some nearby golf green putting balls, at which he has become somewhat of an artist. There may be no truth to the story, but it is reported that the first time he played the game he lost sixteen strokes trying to get the pill out of No. 1 cup with a mashie.

The activities of a large oil company are widely varied, and not the least important of the occupations involved is the repair and upkeep of the thousands of metal barrels, used for shipping and storing petroleum products. Paul Nightengale entered the service of Union Oil Company April 13, 1917, in the cooper shop at the L. A. lube plant, at a time when all greases and most lubricating oil were sold in wooden barrels, and the resultant breakage necessitated a great deal of repair, in which he took an active part. In a few years, the use of iron barrels replaced the old wooden receptacles, and his occupation gradually changed to the upkeep of the newer type. When it was seen that the metal barrels, like the horseless carriage, had come to stay, machinery was installed to facilitate the washing

Twenty Years



and repairing of the modern containers, and about 1930, soon after the new equipment was set up, Paul was put in charge of operations.

He is a quiet, industrious sort of a fellow, and has an unusual flair for solving complicated puzzles of all types. At the present time he is working on a scheme to open the windows of railway cars, and it has been suggested that his love of puzzles explains why, with a nice new car in his garage, he still

prefers the old Model T.

John G. Rojas was born in Santa Maria, and became a member of the field department in that area on April 16, 1927. Some time later he was transferred to the gas engine repair crew; following which he was designated as a pumper on the Coast lease. After a series of changes during which he was mostly active in the field shops, he was moved to the Orcutt warehouse, where he remained until 1930. With the reduction of activity in the Orcutt district he was finally sent to the warehouse at Santa Fe Springs where he is still employed.

John might very easily have been wielding a baton for a national broadcast today if he hadn't displayed his talent so early. His Pismo Beach orchestra was organized just too soon to crash the radio, and he had to be content to provide lilting measures for the steppers at the Beach pavilion for three seasons. He also plays golf on the slightest provocation, and thinks there is nothing more delectable

than a Pismo clam.

Stewart N. Clemons, one of California's most enthusiastic native sons, is at the present time a well puller in the coast division at Orcutt. His initial employment took place twenty years ago when he was given a job on the Orcutt road-building crew, and he has remained in that vicinity ever since, acting for some time in the capacity of tool dresser. and later diverting his efforts to the business of well pulling. As a well puller Stewart has become more proficient in the operation of the draw works than any dentist of our acquaintance. His two stalwart sons were a power on the Santa Maria High School football squad, and watching their respective performances has developed dad into a rabid football fan. When football is not in season, however, he hies to the local arena to find his excitement in exhibitions of the manly art of boxing and "rassling."

Henry V. Reddick came to Union Oil Company via the Pinal Dome Oil Company route,

and has also had a wide experience in field activities in the Orcutt district. When the Pinal was first absorbed by this company he was retained as a well puller in the Orcutt district, was later delegated to the job of pumping, and finally became a rig repairman. Henry has a pronounced weakness for Pismo clams, and when the occasion demands, can dig up his own dinner as expertly as any clam digger in the business. By the same token, when the deer season rolls around he never fails to bring home something to prove that he has been out on a hunting trip.

Carl E. Hinton first entered the oil business as a pumper for Union Oil Company at Orcutt on April 21, 1917, and has also remained in the Orcutt district for the full term of his twenty years' service. Carl is a small game hunter and fisherman of no mean order, and on his days off is invariably to be found on the pier at Pismo or Avila trying to tempt some delectable member of the finny tribe into the family frying pan. He keeps close track of submarine transportation, however, and if the halibut are abundant at Morro Bay, he wastes no time in getting up there. Carl thus believes devoutly in the old proverb, "If you don't go to Morro today, you may be too

late to go to Morro tomorrow."

W. H. Chandler, cashier, was first employed in the disbursements division of the comptroller's department on April 28, 1917, but two months later was transferred to the cashier's office, where previous experience and a general aptitude for financial affairs brought him in 1921 the appointment of assistant cashier. About three years later he was appointed cashier of Union Oil Company of California, in which capacity he has performed ably and efficiently up to the present time. Mr. Chandler is a great lover of books, and an extensive reading career has given him a repertoire of information on a wide variety of subjects that makes him an exceedingly good conversationalist. His hobby is contract bridge, and he plays a scientific type of game that has humbled many a self-styled champion. Before coming to Union Oil Company, Mr. Chandler had acquired a thorough business training in England and Canada, which has been of immeasurable value to him in his present work.

Robert F. Pearcy came to California from Missouri and settled down in Brea in the days when the latter was the center of oil activity in the southern part of the state. He started to work for Union on the Hole lease when he was just sixteen years old. After a thorough initiation into the highly intricate business of hoeing weeds, he was transferred to the well-pulling crew, and later was successively tool dresser, derrickman, and driller. Bob was an important member of the record-making crews that drilled the Del Rey and Vidor wells, and has played an active part in the change of drilling method from the days of the old "one-lung" engine to the highly modernized procedure of the present day. Deer hunting is his hobby, and he keeps his sighting eye in good shape between seasons, by constant practice at the rifle range.

Bert E. Rico, Jr., also started on the Hole lease in 1917, as a member of the production crew, but after two years was transferred to the drilling department at Richfield. Here he has remained for the balance of his employment term, being active in various phases of drilling and production work. For the past few years he has been driller in the Richfield district. Bert has had some narrow escapes in his day, but feels that the development of safety practices has largely eliminated any possibility of a repetition of his early accidents. Bert is a first-class exponent of the art of self defense, and is a one-time champion of the Ninth Street School in Los Angeles. He later became one of the first pupils of De Witt Van Court, athletic instructor, and for a number of years boxed under the name of Jimmy Nevell.

The complete list follows:

Thirty Years—April, 1937 Hudson, C., Field, Orcutt.

Twenty-five Years—April, 1937 Moreland, A., Marine, SS. Los Angeles. Sheehan, T., Sales, No. Div. Thompson, J. B., Field, So. Div.

Twenty Years—April, 1937
Chandler, W. H., Cashier, Head Office.
Clemens, S. N., Field, Orcutt.
Daugherty, N., Sales, Cent. Div.
Epson, J., Field, So. Div.
Godfrey, C. F., Field, So. Div.
Hinton, C. E., Field, Orcutt.
Kelly, M., Sales, So. Div.
Nightengale, P., Sales, So. Div.
O'Leary, J. M., Field, Orcutt.
Pearcy, R., Field, So. Div.
Ramsay, H. H., Sales, So. Div.
Reddick, H. V., Field, Orcutt.

Rico, Bert E., Jr., Field, So. Div. Rojas, J. G., Field, So. Div. Seelye, J. H. S., Sales, So. Div.

Fifteen Years—April, 1937 Battisfore, H. E., Field, So. Div. Boyle, J. E., Sales, No. Div. Chambers, E. C., Sales, So. Div. Faria, F. A., Mfg., Oleum Refy. Fellows, T. R., Sales, So. Div. Forsman, T. W., Const., No. Sales. Hodgskins, G. H., Mfg., Santa Paula Refy. Juri, M., Mfg., Oleum Refy. Kennedy, C. L., Field, So. Div. Mallory, C. B., Sales, No. Div. Miller, E., Sales, So. Div. Oglesby, W. T., Sales, So. Div. Pereira, A. R., Mfg., Oleum Refy. Peterman, K. O., Mfg., Oleum Refy. Reynolds, C. B., Sales, So. Div. Smith, Z. F., Sales, So. Div. Tate, G., Field, So. Div., Ventura.

Ten Years—April, 1937 Arthur, H. B., Sales, So. Div. Artman, L. E., USS, So. Reg. Blount, A. L., Research, Head Office. Bode, C. J., Sales, No. Div. Canfield, G. W., Sales, No. Div. Clark, G., Mfg., Oleum Refy. Correll, W. P., Jr., Transp., Prod. P. L. Dees, R. M., Sales, So. Div. Dimond, C. H., Sales, So. Div. Dyer, R. W., Sales, So. Div. Evans, L. E., Sales, No. Div. Fowler, E. F., Mfg., L. A. Refy. Gailey, B. B., Mfg., Oleum Refy. Hale, A. W., Sales, Cent. Div. Hamilton, R. J., Mfg., Research. Hopkins, H. H., Field, So. Div. Jones, C. F. W., Mfg., Research. Knowles, T. D., Field, So. Div. Leavenworth, C. R., Mfg., L. A. Refy. Luard, R. A., Mfg., L. A. Refy. Luckham, T. H., Sales, So. Div. McHugh, B., Sales, No. Div. Marusick, J. A., Sales, No. Div. Muir, S. A., Jr., Sales, So. Div. Parker, A. R., Sales, Vancouver. Penny, C. C., Mfg., Oleum Refy. Peterson, E. T., Sales, Cent. Div. Scott, J., Mfg., Oleum Refy. Sellock, M. G., Mfg., Oleum Refy. Sheets, G. L., Sales, Cent. Div. Spurbeck, I., Mfg., L. A. Refy. Valentine, A. B., Mfg., Oleum Refy. Young, J. R., Sales, Cent. Div.

REFINED AND CRUDE

By Richard Sneddon

What a great many people mistake for ambition is really nothing but inflammation of the wishbone.

And the world is still eagerly awaiting the publication of a good book to put under the leg of the card table.

Also, the pressing need of big business at the moment is not so much better filing systems as bigger waste baskets.

On the other hand, if all the old tires actually go where motorists consign them, there's going to be a terrific smell of burning rubber in the hereafter.

And says the insurance investigator to the victim of an automobile accident, "Could you swear to the driver?" To which the victim replied, "Yeah, I did."

By the way, if you can't stop your car, for goodness sake hit something cheap.

Then picture the predicament of the motorcycle cop who caught a young lady speeding, gave her a ticket, and found out later that her father was the mayor, her brother was the chief of police, and he was going with her sister.

And, of course, you've heard of the tourist who thought the white line in the middle of the road was for bicycles.

Minister at baptism: "What is the baby's name, please?"

Proud father: "Robert William Montgomery Morgan Maxwell."

Minister to assistant: "More water please."

Stenographers as a class are really more than ordinarily bright, but it is exasperating, after you've dictated a long letter, to have your young lady declare: "I can't read some of my notes. What was it you said between 'Dear Sir' and 'Yours truly'?"

Or have one who is a trifle weak on punctuation hand you several pages of continuity and announce triumphantly, "There it is, sir. Just put in decimal points to suit yourself."

The snow shoes, at least in the south, have been put away, and we are now into the season of balls—golf, tennis, moth, and base.

In this connection did we ever tell you about the golfer who thought he had made a 250-yard drive until he looked down and saw that the ball was still there and his wrist watch was gone?

And we don't know the author of the following couplets, but they are quite apropos in view of the approaching golf tournament, so we pass them along:

In days of old When knights were bold They fought with spears and lances. But now the dubs Use spoons and clubs And try the weirdest stances.

Father driving from the stoop, Knocked the rooster for a loop, Saying as he made the shot, "That's a birdie, is it not?"

When a brick dropped from the top of a high building and landed on the head of a colored gentleman, he looked up and growled, "Be a little mo' careful up theah. You'all made me bite mah tongue."

And we are told that in the Kentucky mountains the small farmers have an ingenious method of weighing hogs. They place a board across a fence, stand the hog on one end, and pile stones on the other until it is just balanced. Then they guess the weight of the stones.

After eating a cake baked by his girl friend, Junior now believes that tunneling from France to England is quite feasible.

We have often wondered, by the way, why it is that a boy can sit quietly in the crotch of a tree for a whole day, and can't sit still for three minutes on a chair in the front room.

And the irate Irishman roared, "If I didn't know you, and somebody described you to me, I wouldn't believe it."

There is a suspicion in certain quarters that the sit-down strike was first suggested by a manufacturer of two pants suits.

"You sent me one black shoe and a brown one," said the customer, and the new salesman replied, "That's funny. You're the second guy to make that complaint today."

All of which shows very definitely that business is simply getting dizzy turning the corner.

In conclusion, please remember that the faster you drive the less certain your destination.

Times-Mirror Printing and Binding House, Los Angeles

