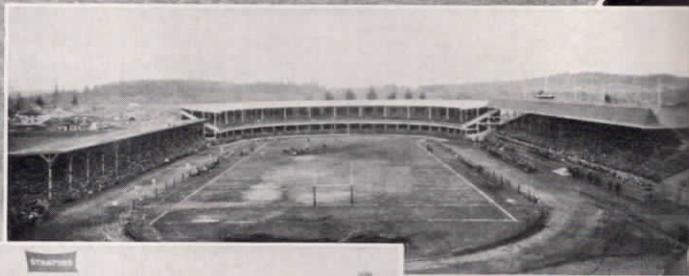
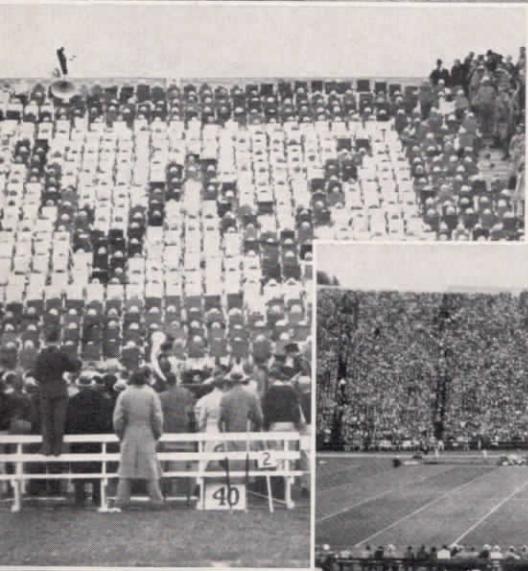


★ UNION OIL BULLETIN ★



October
1935



It's "Time In" for
College Football,
the Favorite Sport
of the Pacific
Coast.

UNION OIL BULLETIN



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VOLUME XVI

SEPTEMBER-OCTOBER

BULLETIN No. 5

Off-Duty Safety

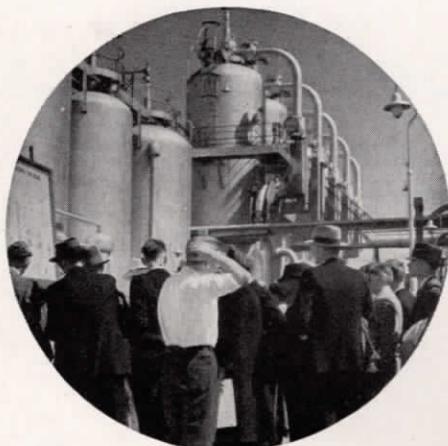
THE OIL industry grew up mighty fast, and in the first mad scramble for the big money there was little time to consider the incidental requirements of the situation. Thus the early history of the oil fields is clouded by frequent tales of fires and accidents that stole the life savings of investors, and, immeasurably worse, brought want and distress to many workers and their families. In the last thirty years, however, organized safety effort and training have wrought a complete change in the picture. Accident frequency has been tremendously reduced, and it is a peculiar circumstance that, whereas the oil worker's family used to sit at home and worry every minute he was on the job, now their worries don't begin until he leaves for home. The most hazardous moments in the life of the oil worker today are those he spends away from his work. Safe equipment, safety education, and first-aid training have made the lease, the shop, and the station places of comparative immunity from accident. But the minute the whistle blows, and the oil worker hops aboard the family chariot for home, he forgets all he ever heard about safety, and charges into the national fender-bending contest with a vigor that could well be expended in a more profit-

able direction. At least that would seem to be the truth, if we are to judge by the number of off-duty accidents that daily attest to the hazard of the highway.

There is no need to dwell on the fact. The daily newspapers carry a substantial list of casualties every morning, over which we moan, but do nothing.

Other accidents, too, occur in the homes and on the byways, that could never possibly happen were the victim as safety-conscious when at large as he is when at work.

There is an urgent need to carry safety beyond the job and into the home of the employee, and this the Union Oil Company proposes to do by employing, on a larger scale, the same methods which have been so successful in promoting safety on the job. In refinery, sales, and field operations, where organized meetings are being held regularly, special emphasis will be placed on off-duty safety, particularly in the matter of safe driving, and a special effort will be made to carry the practice of safety right into the home. In head office, where no organized safety program has yet been instituted, groups will immediately be formed for the study of accident prevention measures, and for general safety education.



Distinguished Scientists Inspect Propane-Solvent Plant

THE CONCLUDING event, and perhaps one of the most popular, in the program of the American Chemical Society convention at San Francisco, was an all-day sail around the Bay, on the S. S. "City of Sacramento." The ship's itinerary included stops at the California-Hawaiian Sugar refinery, and Union Oil Company's propane-solvent plant at Oleum, which were thrown open to the inspection of the visitors. Prior to the trip, Ulric B. Bray had presented, before the petroleum section of the Society, a paper outlining in detail the method employed in deasphalting lubricating oil stocks with liquid propane, which, of course, aroused further interest in the actual *modus operandi* of the Union plant. About 700 of the leading scientists of the country took advantage of the opportunity to witness the construction progress on the new bridges, to visit the plants, and to feast their eyes on the scenic beauties of the Bay shores.

The boat started promptly from the San Francisco Ferry Building about 8:45 in the morning, and sailed towards the Oakland-San Francisco Bay bridge. While the vessel cruised in a leisurely manner in the vicinity of the new structure, a competent lecturer described the method of construction, and pointed out many interesting details. Meantime the workers, high above on the catwalks, injected some amusement into the occasion by such facetious remarks as, "C'mup and see me some time," and, "Who's the little lady in red?"

After viewing this bridge from many

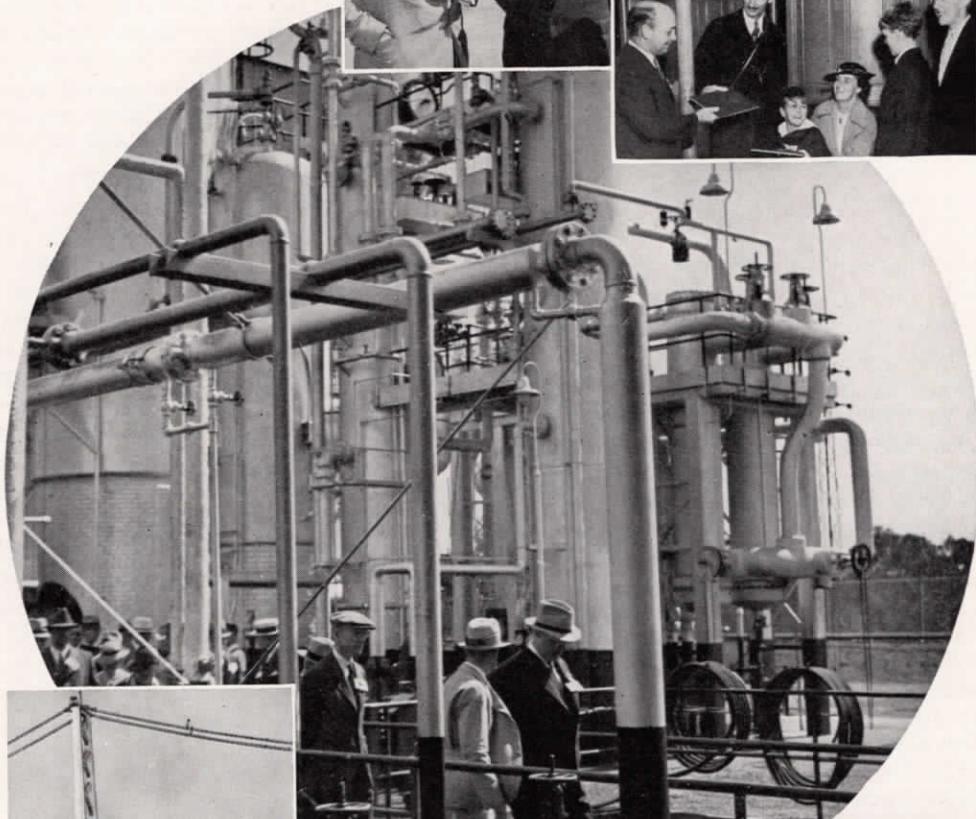
intriguing angles, the passengers were carried out in the direction of the Golden Gate, passing Alcatraz Island, the Golden Gate bridge, and Angel Island. Then, skirting the picturesque Marin shore for a time, the ship crossed San Pablo Bay, and entered the Mare Island Navy Yard. About this time the dinner bell rang, and it would seem from the hearty and immediate response, that the system of human metabolism is just as important to the scientists, as any other kind of chemical process. In any case, for the next hour or so the further discussions of the representatives of science were conducted in the presence of a copious food supply. By the time everybody was fully satisfied inwardly, the boat had docked at Crockett, where a goodly number of the delegates disembarked, and as guests of the California-Hawaiian Refining Company, stayed over for an hour or two to learn the secrets of the sugar manufacturer.

This group having been safely conducted ashore, and left to the care of their hosts, the ship then turned her prow towards Oleum, and 45 minutes or so later, approximately 280 delegates were being welcomed to the Union Oil Company's refinery by R. E. Haylett, L. C. Metcalf, A. Roy Heise, Tom Ott, and their corps of guides. Here they were divided into small groups, and taken to the propane-solvent plant, where by means of graphic flow charts, the functions of the various units were explained. The whole process was followed, from the vacuum fractionation of the lubricating oil

Right: L. C. Metcalf, Dr. Tom Midgley, Ethyl Corp., and R. E. Haylett, at Oleum Refinery.

Center: Group inspecting the propane solvent refining plant.

Below: Prof. Jean Piccard and family receive copies of Technical Facts from T. Ott.



Above: The party at Golden Gate Bridge.

Upper Right: Dr. M. Randall, U. C., A. Roy Heise, Dr. W. Bray, U. C., Dr. R. Shreve, Purdue, Dr. Tom Midgley, Dr. G. Robertson, U. C. L. A.

Lower Right: Group entering Oleum Refinery.



stock, to the final extraction of the pure paraffin base hydrocarbons that make up Triton.

The propane-solvent refining plant proved of peculiar interest to this group of scientists, for the very simple reason that it is fundamentally a scientific development, based on long years of field and laboratory research work. In addition, of course, it is the first plant of its kind ever to be erected, and accomplishes the first complete segregation of pure paraffin base lubricants by propane-solvent extraction. It involves

unique modifications of certain physical and chemical processes that are already widely used in the manufacturing world, and hence to the chemist marks another step in the march of scientific progress.

Before leaving the refinery, the guests were provided with souvenirs of the trip, in the form of cigarette lighters, and inscribed copies of the company's booklet, "Technical Facts About Motor Oils." The ship then returned to Crockett, picked up the sugar refinery visitors, and sailing direct to San Francisco, reached her berth about 5:30 in the evening.

American Petroleum Institute

THE American Petroleum Institute's 16th annual meeting will be held at the Los Angeles Biltmore Hotel November 11 to 14 next, and California is thus given a second opportunity to welcome the nation's leading oil men, who last convened here in January, 1926.

A review of progress made by the American industry in the past 76 years will be one of the highlights on the program. It is just 76 years since Colonel Drake brought in the well that really started oil history in this country, and President Axtell J. Byles, at the opening general session on Tuesday, November 12, will recall the struggles of the industry in that time to cope with the multitudinous problems that had to be surmounted in order

to clear the path of progress. It is interesting to note that Union Oil Company coincidentally reaches her forty-fifth birthday, and this fact, coupled with an unusual interest in the number "76," opens a fine opportunity for a grand double celebration.

An unusually large delegation is expected at the Institute meeting, and an extensive program of papers and discussions has been arranged for the technical groups. The annual dinner will be held in the Biltmore Bowl on Wednesday evening, November 13, and an active committee is busily engaged in preparation for the exercise and entertainment of the members, who are now enroute here from all sections of the country.

Union Awarded Navy Contracts

EARLY IN OCTOBER, a contract calling for the delivery of 1,000,000 barrels of fuel oil to United States Navy ships at San Pedro, California, during the period from October 15, 1935, to March 31, 1936, was awarded the Union Oil Company of California.

The million-barrel award constitutes approximately 40 per cent of the 2,550,000 barrels contracted for by the navy with Pacific Coast oil companies for the above period. For the past several years, the company has been one of the major suppliers of fuel oil to

the navy, having delivered millions of barrels annually.

In September, the Union Oil Company was awarded a contract by the navy calling for the delivery of approximately 200,000 gallons of two new high quality lubricating oils.

The specifications of the new oils are higher than those under which contracts have been awarded for the regular run of lubricants purchased by the navy. The Union Oil Company was able to meet these new specifications by manufacturing the lubricants by the new propane-solvent process.

Employees' Benefit Plan

A CONSIDERABLE number of employees have recently become members, and others will shortly become eligible for membership in the Employees' Benefit Plan, and it is desirable to again briefly outline the nature of the plan and its function. As originally established in the year 1915, it was known as the Employees' Benefit Fund, the contributions were set at \$1.00 per month per member, with a maximum allowance for medical and hospital service of \$250.00 for any one illness, and the fund was administered by the Union Oil Company. It was found that the contributions were inadequate to keep the fund self-supporting and that the \$250.00 maximum benefit was not high enough to give the desired protection, so a survey was made to determine how the fund could be made both self-sustaining and more beneficial to its members.

Accordingly, in March, 1930, by authorization of its members, the contribution was raised to \$2.00 per month per employee and the maximum benefit for any one illness increased to \$500.00, and the administration of the fund was delegated to a Board of Administrators, consisting of and selected by its members, and the name changed to the Employees' Benefit Plan.

The reorganization has permitted operation of the plan on a more satisfactory basis. The old annual deficit has now given place to a small surplus, and the Board reports a reserve accumulation up to Dec. 31, 1934, of \$76,636.40, which is equivalent to \$11.78 per member. (There are approximately 6,500 members in the Benefit Plan.) This sum is held in reserve to provide for extraordinary demands such as would occur in the case of an epidemic. The Board feels, however, that it is not yet sufficient for such a purpose and hopes to be able to build it up to exceed \$100,000.

The reserve already built up may be entirely attributed to the fact that Union Oil Company assumes the cost of administration, which in other parallel institutions usually amounts to 12% or 15% of the total contributions.

During the past year the Administrators have devoted considerable time and thought to a study of the medical and hospital services available. As a result some changes have been instituted, notably in the Seattle and Southern California areas, which, it is believed, will result in better service to the members at a lower cost.

With the hope that it might later be found possible to broaden the field of benefits to the members, a dental survey was undertaken which is now under study by the Board in conjunction with Dr. Brownson of the U. S. C. Dental College.

During the first eight months of the year 1935, medical costs have increased, so that actual expenditures during this period have been slightly less than contributions. Thus, for the eight months' period, only \$1,700 has been added to the reserve of Dec. 31, 1934, an amount that should be increased if the members are to enjoy any extension of the present benefits.

Board of Administrators

A. C. STEWART, *Chairman*,
 L. G. METCALF, *Vice-Chairman*,
 A. C. RUBEL,
 G. G. BLUE,
 GEO. F. PRUSSING,
 W. W. HAY.

W. K. HOPKINS, *Secretary*.
 JOHN L. GREER, *Asst. Secretary*.

Legal Advice

L. A. GIBBONS, *Attorney*.

Boulder Dam Dedication

ON SEPTEMBER 30, approximately four and a half years from the time it was commenced, Boulder Dam was officially dedicated to the service of the Pacific Southwest by Franklin Delano Roosevelt. The impressive ceremony was conducted in the presence of thousands of visitors, among them governors and other dignitaries representing most of the western states, and marks the virtual completion of one of the greatest engineering achievements of all time.

"We are here," said the President in his opening remarks, "to celebrate the completion of the greatest dam in the world, rising 726 feet above the bedrock of the river, and altering the geography of a whole region; to see the creation of the largest artificial lake in the world—115 miles long, holding enough water to cover the state of Connecticut to a depth of ten feet; and to see nearing completion, power houses which will contain the largest generators and turbines yet installed in this country, machinery which can continuously supply 1,835,000 horse-power of electric energy. All these dimensions are superlative. They represent and embody the accumulated engineering knowledge and experience of centuries, and when we behold them, it is fitting we pay tribute to the genius of their designers.

"We recognize also the energy, resourcefulness and zeal of the builders, who, under the greatest physical obstacles, have pushed this work to completion two years in advance of the contract requirements, but especially we express our gratitude to the thousands of workers who gave brain and brawn to the work of construction.

"The gates of the diversion tunnels were closed here at Boulder Dam last February. In June a great flood came down the river. It came roaring down the canyons of the Colorado, through Grand Canyon, Iceberg and Boulder Canyons, but it was caught and safely held behind Boulder Dam.

"Last year a drouth of unprecedented severity was visited upon the West. The watershed of the Colorado River did not

escape. In July the canals of the Imperial Valley went dry. Crop losses in that valley alone totaled \$10,000,000.

"Had Boulder Dam been completed one year earlier, this loss could have been prevented, because the spring flood could have been stored to furnish a steady water supply for the long, dry summer and fall."

The President further stated that the cost of the project totaled \$108,000,000, all of which will be repaid with interest in fifty years under the already completed contracts for the sale of power.

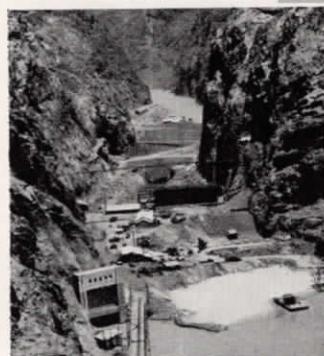
A vertical cross-section of the dam would form almost a right triangle, for it is 726 feet high, 650 feet thick at the bottom, and 45 feet thick at the top. It is 1,180 feet across and forms an arc bending upstream, and shaped somewhat parabolically. In January, 1936, motorists will be permitted to cross the top of the dam, which is to become part of Highway 66.

It took approximately two years to pour the three and a quarter million cubic yards of concrete—6,500,000 tons—and to lay the several hundred miles of steel reinforcement and pipe that went into the making of the dam. Prior to the actual commencement of work, almost two more years were spent in the preliminary details. At present the artificial lake at the upstream face of the dam is over 450 feet deep, and is now long enough to permit power boats to ply upstream as far as the Grand Canyon.

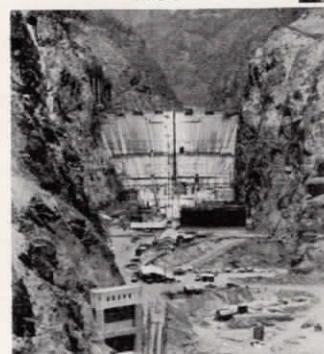
The power houses will be completed in the very near future, and installation of the machinery for generating electric energy will commence shortly after the forthcoming New Year. One unit is expected to be ready for service early in 1936, to supply Boulder Dam and Boulder City, while the first units for the City of Los Angeles are expected to be put in service about mid-year. Laying of the remaining 30-foot penstock pipe leading from the intake towers is continuing, as is the laying of the smaller 13-foot penstock pipe leading from the larger pipe to the turbines. The



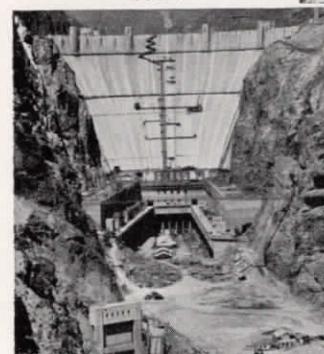
1931



1933



1934



1935

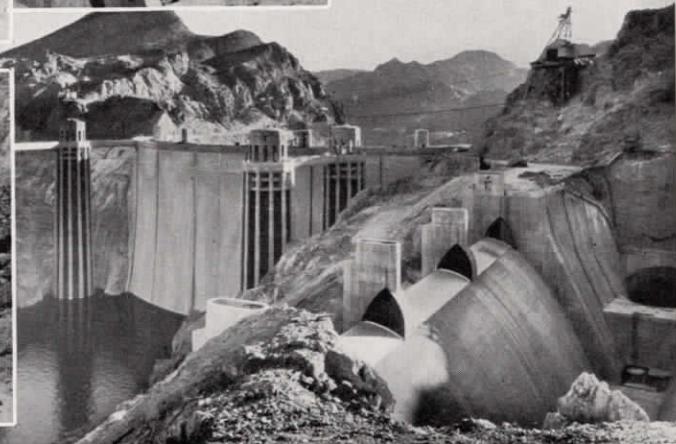


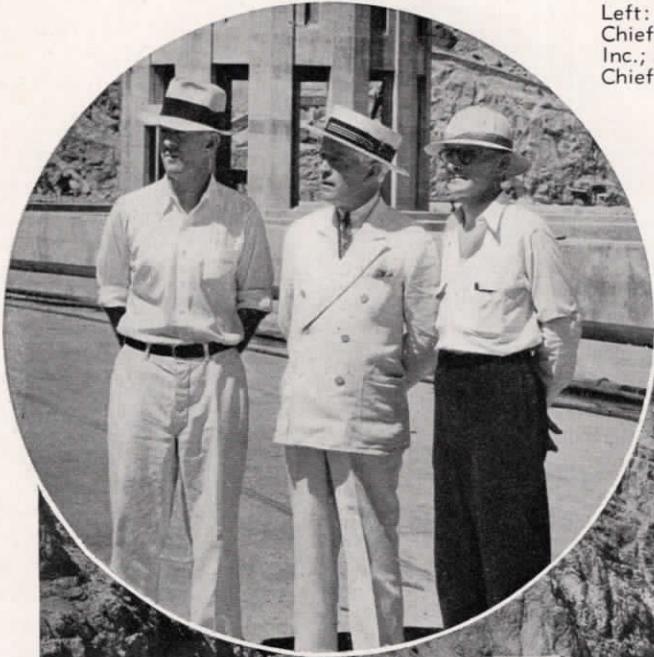
Above: President Roosevelt in dedicatory speech.

Center: A bird's-eye view of the power houses.

Below: Dam and spillway on upstream side.

Extreme Left: Group of pictures showing progressive construction of the dam.

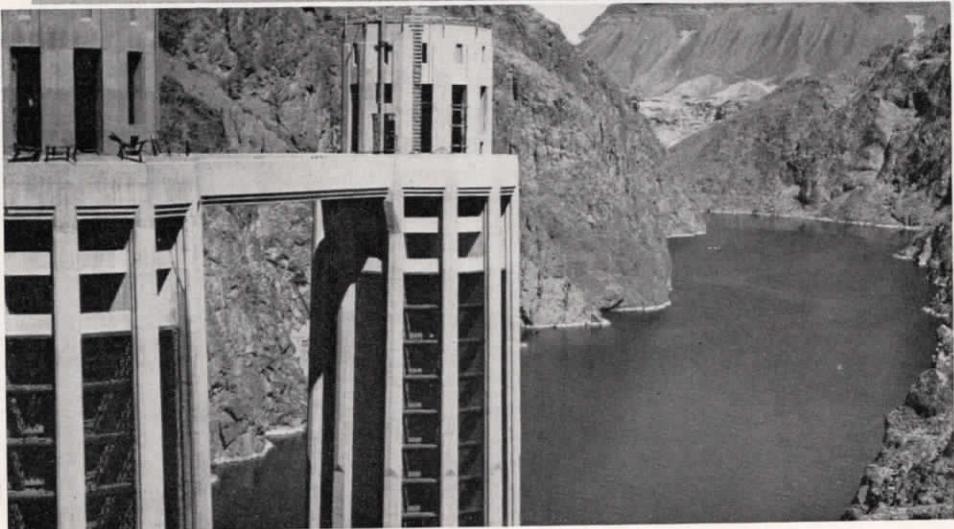




Left: B. M. Goodenough, Asst. Chief Engineer, Six Companies, Inc.; A. C. Galbraith, W. R. Young, Chief Engineer, Dept. of Interior.

Center: Union Oil Co. truck delivering gasoline.

Bottom: Looking upstream from top of dam on Arizona side.



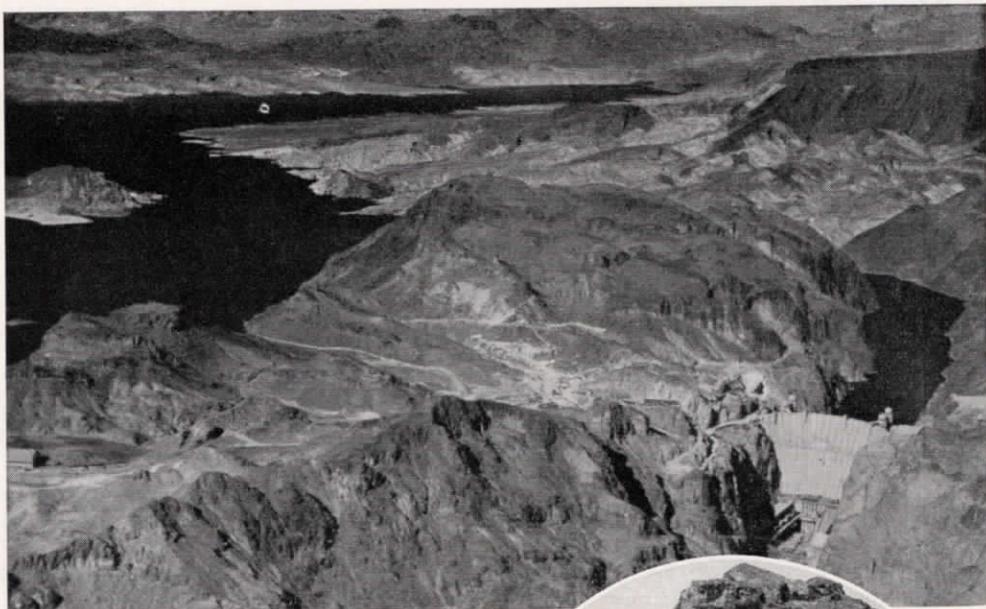


Photo by Warren E. Carey.

Upper photo shows water level Sept. 30, 1935. Lower shows level March 13, 1935. Note in the top, to the left, the small island that is being formed as the stream is backed up.

Inset: Union Oil truck on top of dam.



270-mile power transmission line to Southern California, embracing more than 2,400 towers, each 109 feet high, is being rushed to completion.

There are several potential sources by which water can be released downstream to the Parker Dam and the aqueduct leading to Southern California, and the All-American Canal. There will be, for instance, a steady supply from the sluice waters coming from the power houses, which, if insufficient in volume for the downstream requirements, can be augmented by a further release through the needle valves at the ends of the innermost penstock tunnels. In addition, water will ultimately overflow into the spillways and thence through the outermost diversion tunnels.

When viewed from any angle, Boulder Dam is an inspiring spectacle. In spite of the great size of the dam itself, it is completely dwarfed by the immensity of the surroundings. Nature builded on a grand scale here. Through long centuries, the torrent of the Colorado has sheared its way deep into the rocks, and has cut a tortuous trail in the rugged landscape. There is nothing of symmetry in this section of the country, but it is beautiful nevertheless, and the intrusion of the dam has in no way detracted from the view. The smooth whiteness of the concrete formations, and the adjoining power houses, wedged between the sheer rock walls of the canyon, merely serve to enhance the primitive beauty of the surroundings.

Boulder Dam is the key project in the development of the Colorado River, a program which in its entirety will ultimately include Parker Dam, to be built by Six Companies, Inc.; Colorado aqueduct, now under construction by the Metropolitan Water District of Southern California; and the All-American Canal, all at an aggregate cost in excess of \$400,000,000.

Just prior to the dedication, A. C. Galbraith, assistant vice-president of Union Oil Company, made a tour of inspection of the company's facilities at the dam, and at distribution points in Boulder City and Las Vegas. Union Oil Company has been delivering refined oil products to Six Companies, Inc., and sub-contractors of the project, since the dam was first started on April 20, 1931. This required the institution of a special organization, and the installation of special equipment, which has been devoted entirely to serving contractors and workmen on the job.

Upon returning from his tour of inspection, Mr. Galbraith pointed out that, to fulfill these requirements, it has taken more than just gasoline and lubricants. Aside from "76", gasoline for hundreds of trucks and automobiles, diesel for tractors and scrapers, fuel oil for locomotives, and cleaning solvent and stove oil for miscellaneous purposes, the company has supplied 40 different motor, engine, and compressor lubricating oils for all types of light and heavy equipment, and 23 greases for as many different jobs.

Six Companies, Inc., has established a remarkable record, having beaten the scheduled time of its contract by over two years. This has been due to a fine correlation of activities, in which purveyors of materials have played a highly important part.

As one executive of our company recently remarked, "The building of Boulder Dam has tested the skill and courage of men . . . and the merits of materials, and we can be proud of the fact that Union Oil Company products have been used on this greatest of all engineering projects ever since its inception."



The Cover

THE COVER of this issue of the Bulletin needs no elucidation. With the opening of the football season, we just naturally turned to the gridirons for material, and in the general composition we have striven merely to delineate football—not any particular team, or any particular stadium, just Pacific Coast football, with all its fanfare, its intriguing atmosphere, and its tremendous sporting appeal.



A Spell in San Francisco

THE FOLLOWING item appeared in a recent issue of a San Francisco newspaper:

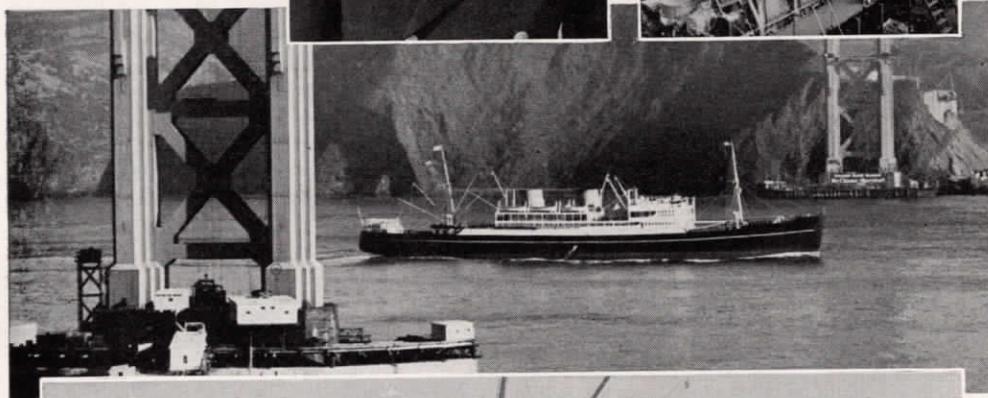
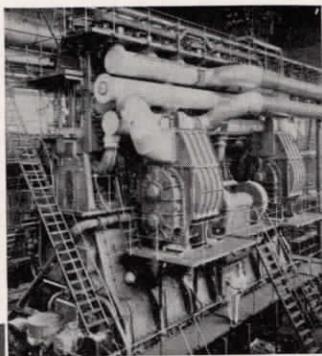
"From Gardiner Blackman, 79 New Montgomery, a note saying his elephant ears caught William Groundwater of the Union Oil Company trying to get a long distance operator to understand the name of his assistant, Mr. Kemp. 'Kemp is the name,' he shouted, 'not Camp—K, as in know'."

Top: Capt. Karl Knudsen
of M. S. "Canada."

Corner: View of engine
room.

Center: M. S. "Canada"
passing under Golden Gate
Bridge.

Bottom: "Canada" being
bunkered by Union Oil Co.
barge.



A Modern Transportation System

IT IS JUST twenty years since the Panama Canal was completed, and the western route to Asia, which Columbus had sought in vain almost five centuries before, was at last a reality. Since this epochal event in the trade history of the world, an enormous business has sprung up between Pacific Coast ports and Europe, through the Canal. In the

transport of western products such as lumber, wheat, barley, fruits, fresh, dried and canned, no fewer than 70 ocean-going vessels are now engaged, representing altogether twelve steamship companies, which are plying a species of trade that began with the opening of the canal, and prior to that time was virtually unknown.

As the dimensions and variety of exports have grown, so also has been the corresponding development of the transportation units. Faster, larger, more luxurious and more modern liners have been added to the trading fleets, and a classic example of this trend is to be found in the Danish East Asiatic Company's latest ship, "Canada," which recently completed her maiden voyage to San Francisco. The "Canada" is more than just a new liner. This vessel represents the last word in nautical engineering and travel comfort. She was built at the East Asiatic Company's own shipyards at Nakskov, near Copenhagen, Denmark, has a displacement of 17,700 tons, and equipped with an 8,000 horsepower Burmeister and Wain diesel motor, is capable of a speed of 17 knots an hour. Four auxiliary motors take care of such incidental needs as ventilation, refrigeration of perishable cargo, electricity for lighting and driving power units. The vessel is 465 feet long and has a modified Maier form bow, which not only gives her an unusually trim appearance, but also enables her to sail speedily and smoothly.

Twenty-five double cabins, and five single cabins, provide accommodations for about 55 passengers who may, during the voyage, disport themselves in the manner of up-to-date club members in the luxuriantly furnished lounges, the dance salon, or the latest thing in cocktail bars. A special dining-room is furnished for the children, and the "Canada" is the only liner operating between the Pacific Coast and Europe in which a built-in swimming pool offers relaxation for its passengers.

In addition to the regular cargo space, there is sufficient refrigerated capacity aboard to accommodate 75,000 boxes of fresh fruit, ordinarily apples, pears, and oranges, which are in great demand in northern Europe.

The "Canada" joins her well-known sister ships, the "Europa" and the "Amerika," in the East Asiatic Company's schedule of monthly sailings from Pacific Coast ports direct to London, Rotterdam, Gothenburg and Copenhagen, via the canal and West Indian ports.

It is interesting to note that ever since the East Asiatic Company ship, the "Siam," made her initial trip through the canal in 1914, and incidentally this was the first large motorship to make the passage, every one of the company's vessels on this route has been bunkered with Union Oil Company Diesol. Knowing the exacting fuel requirements of an

ocean-going liner, the fact that the Union Oil Company product has proved highly satisfactory through twenty-one years of severe trial is a splendid recommendation of its quality.

Operations of the East Asiatic Company are not limited to the Pacific Coast trade. From a small beginning in which one vessel was chartered to carry the much-prized teakwood from Siam to Europe about forty years ago, the shipping and merchandising activities of this organization have gradually been extended into every corner of the world.

The company early recognized the possibilities of motor-driven ships, and its "Selandia" and "Jutlandia" were the first large motorships ever built.

In addition to the "Amerika," "Europa," and "Canada," there are 27 more Asiatic Company motorships plying their wares regularly between Europe and the Far East and occasionally making a complete round-the-world circuit. In every corner of the globe the company buys, sells, and transports—apples from Seattle to London, wheat from Portland to Shanghai, soya bean oil from Dairen to Copenhagen, peanuts from Madras to Genoa, lumber from Vancouver to Natal, copra from Singapore to Rotterdam, and teakwood from Bangkok to Barcelona. The enterprise of the concern is not confined to transportation. It was responsible for the pioneering and development of rubber and cocoanut cultivation in the Malay Straits, owns vast teakwood forests, and mining properties in Siam, and its trading posts in many cases are the sole connecting links between Oriental ports and vast unexplored territories that lie far inland from the sea.



Hair Today, Gone Tomorrow

ON OCT. 26, Union Oil Company southern division operating departments will stage a grand picnic and barbecue at Orange County Park, and just by way of explanation we might mention that the word barbecue is derived from the French "barbe," meaning whiskers. The main event at this congregation is to be a whisker-raising contest, and from what we have already seen, there are going to be some barbarous exhibits.

Union Oil Company in Mexico

OPERATIONS of Union Oil Company in Mexican territories have been greatly extended through the building up of a fine association between the San Diego sales division representatives and the industrialists across the border. The activities of the company on the Mexican side are more or less concentrated in three distinct centres—Mexicali, Tia Juana, and Ensenada.

The Mexicali and Paredones districts are presided over by Mr. J. M. Rodriguez, Union Oil Company distributor, and his efforts have been responsible for the use of Union Oil Company products in a great many important projects in the Mexicali Valley. This valley lies just over the line, adjacent to the Imperial Valley, and is devoted largely to agricultural interests. The main crops are cotton, alfalfa, wheat, barley and oats, but considerable acreage is planted also to vegetables, milo maize, and other small crops. Large tracts of land are still available for ranching, and it is expected that with the assurance of a sufficient flow of water from Boulder Dam, much of this additional territory will be opened up.

The farms are gradually being broken up into small parcels, and cultivated by Mexicans, whereas in previous years they were held in large tracts mostly by Orientals. All cultivation is done by machinery, and the annual imports of agricultural implements from the United States has now reached considerable dimensions. Several large agencies in Mexicali make a business of financing the essential investments of the farmers, such as water and seed costs, and equipment rental. The water for the irrigation of the Valley is brought in from California, carried through the Alamo Canal, and distributed over the country by a separate system of canals owned by two companies—Compania de Terrenos y Aguas de la Baja California, and the Colorado River Land Co.

The Compania Industrial Jabonera del

Pacifico, besides being one of the financing agents already mentioned, owns the largest cotton gin in the world. This company, under the direction and management of a young engineer by the name of James W. Stone, owns a \$3,000,000 plant, and manufactures soap, cottonseed oil, and cottonseed meal on a large scale. Altogether the Mexicali Valley is rapidly taking its place as a real industrial locality, and is gaining wide recognition for its well organized system of co-operative farming.

In the Tia Juana territory Union Oil Company operates through an energetic and enthusiastic native distributor, Mr. Francisco Rubio, and makes all deliveries from the Chula Vista sub-station. As is well known to Americans, Tia Juana is the weekly mecca of thousands of tourists, and through the efforts of Mr. Rubio, a great many of these tourists are carried back home by the power of "76". There is little or no farming in the Tia Juana district at the present time, but when the Mexican Government completes the Rodriguez Dam in the next two years, the event will undoubtedly open up for cultivation several thousand acres of bottom land in the Tia Juana Valley. This gigantic dam, incidentally, is being built by the Ambursen Dam Company, and is part of a commendable scheme, launched by the Mexican Government, to develop its own natural resources.

Ensenada, originally built by English colonists, and for a time the capital of Baja California, lies about 85 miles south of the International Border, in a beautiful setting. Here Mr. Manuel Ezroj acts capably in the capacity of distributor for Union Oil Company. Mr. Ezroj came to Mexico from Lithuania, just about ten years ago, unable to speak a word of Spanish or English, and it is a splendid tribute to his ability that now, he not only speaks both languages fluently, but has become a man of distinc-



J. M. Rodriguez, U. O. distributor, Mexicali.



A. V. Vierhus, Gen. Mgr., River Land Co.



J. L. Vierhus, contractor, and one of his caterpillars.

U. O. Co. plant in Mexicali. Above: J. L. Vierhus equipment plowing in Mexicali Valley.



Wheat field, Mexicali Valley.



Floating land in Mexicali Valley.

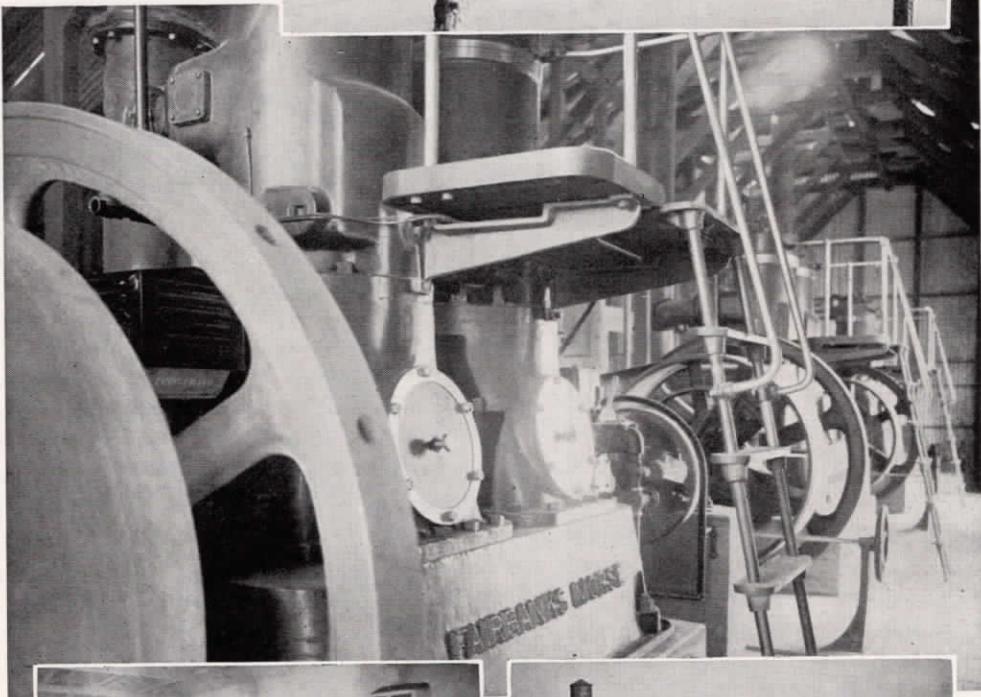


Clearing land with heavy rail.

Right: Administration Building, Colorado River Land Co., Mexicali.



Center: Part of Woo Soo pumping plant, Mexicali.



Cotton sampling room, Colorado River Land Company.



Cotton gin, Mexicali.



Manuel Ezroj, Union Oil Co.
Distributor, Ensenada.

Group of employees at Ensenada plant
of Manuel Ezroj.



Equipment and employees at Ensenada plant.

tion in the border districts. His elevation in industrial circles is attributed by his friends to real hard work, and an unusual share of that fine quality that is known as business acumen. At the present time he has seventeen employees, operates five trucks between San Diego and Ensenada, is part-owner of a flour mill, and is wholesaler and retailer of

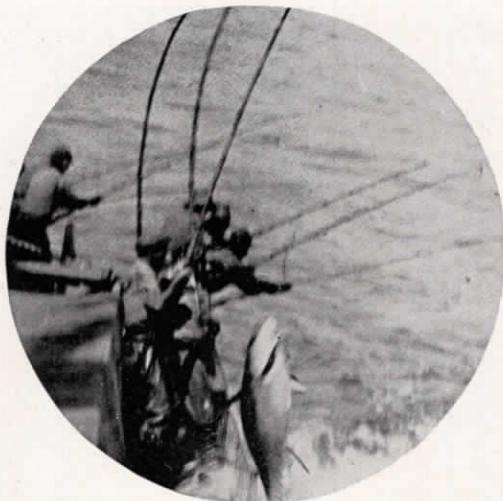
the wide variety of goods he hauls into Mexico. Last year just by way of variety he sold the season's lobster catch for the local fishermen. Mr. Ezroj has been very successful in the marketing of Union Oil Company products in the district, and in doing so has built up a modicum of goodwill that is a fine asset to the company.



Bowling League Opens

TWELVE TEAMS of bowlers, representing as many departments in the southern division, hied out to the Studio Bowling alleys on the evening of Monday, Oct. 7, and started to knock over the ten pins, with an abandon that augurs well for the success of the league. The highlight of the first night's play was a perfect "76" turned in by Granville Jones of the

Burbank squad. Commenting on this neat performance, Ralph Martin's son, "Buzz," the outstanding left-handed score-keeper of the league, remarked, "You sure bowl a swell gasoline, Granville." The teams will bowl three times around, if the pin boys can hold out that long, and there is every indication of some real close competition.



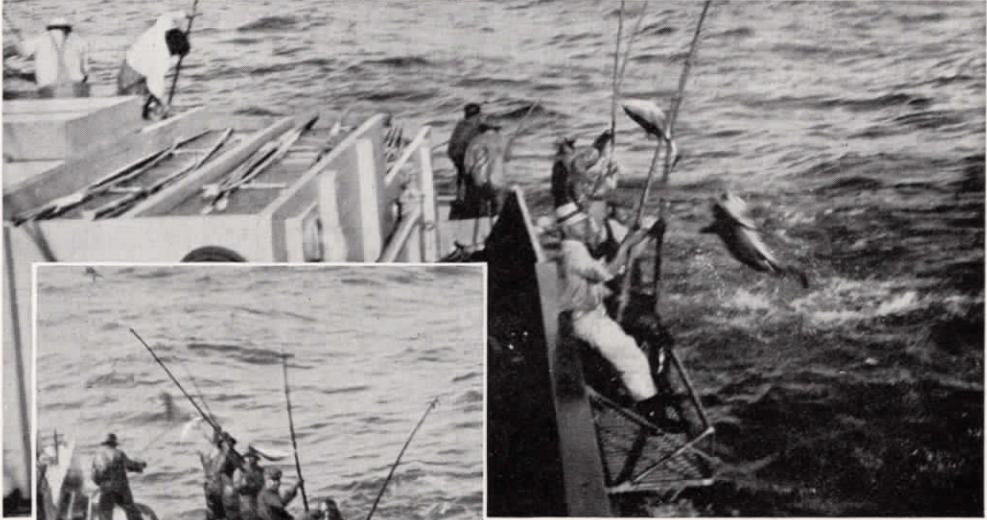
San Diego's Tuna Industry

IN SPITE of its tremendous popularity at the present time, the tuna, just a few years ago, was a sort of piscatorial outcast, if you will pardon the highbrow expression. Fishermen used to refer to it disdainfully as "Horse Mackerel," and if a mackerel accidentally got into the catch, it was either thrown back into the sea, or given away with a hearty sigh of relief. A few epicurean adventurers, however, began to slice out the best cuts and cook them, and they promptly found out that a well cooked piece of tuna meat was really a choice addition to the diet of any man's family. The news spread around, and in no time at all, quite a demand was built up for this formerly despised denizen of the deep. Now, if you please, the annual tuna pack in San Diego alone, is valued in excess of \$5,000,000.

In early fishing days, boats were very unseaworthy and didn't venture very far out, in fact the San Diego boys used to heave the anchor just off Point Loma, and keep an anxious eye open for an unusually high ripple on the water's surface. Today, however, the tuna clippers are fine, sturdy vessels, with the very finest machinery for propelling, and powerful auxiliary engines for pumping water to the bait tanks, keeping the refrigerators active, and performing all sorts of incidental operations.

The principal builder of tuna boats in San Diego is the Campbell Machine Company, owned by Dave and George Campbell, who, by the way, have been Union Oil Company customers for well over 20 years. The Campbell business was initiated in 1906, and the early activities of the firm were confined to the repair, overhauling, and rebuilding of old type fishing boats. In 1924, they laid the keel of the first new boat they ever constructed, the "Oceania," built for M. O. Medina. This boat was 65 feet long, was equipped with a 90 H.P. 4-cylinder diesel engine, and, at that time, was the flagship of the San Diego tuna fleet. Up to the present, the Campbell brothers have built, in all, some 28 fishing boats, varying in length from 65 to 135 feet, and carrying engines rating anywhere from 75 to 500 H.P. Their latest creations, the "Cabrillo" and "Cape San Vincent," are the last word in tuna clippers, having a cruising radius of 7500 miles, and being equipped with the finest and most modern machinery. The larger vessel of the two, the "Cabrillo," has a carrying capacity of 350 tons of fish, and, to stimulate the interest of Bulletin readers still further, we might mention that the owners of these two fine ships are confirmed believers in the quality of Union 4A Diesol, and Triton motor oil.

To give some idea of the growth of this



Tuna fishing crew in action.

Two beauties on their way to the hold.

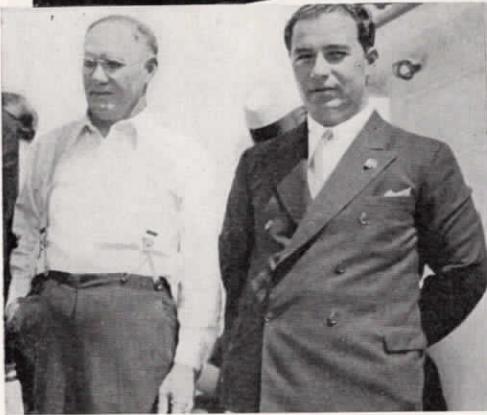
Here is an inkling as to the very interesting manner in which these delectable fish are decoyed into the tins. In the first place, contrary to the general belief, tuna are not caught with nets, they are caught with hook and line; but this kind of fishing is no small boy's game, as will be immediately conceded when we state that the larger ones weigh as high as 400 or even 500 pounds.

The gear that is used is a good husky pole equipped with a short stout line, and a barbless hook. To begin with, it is customary when a school of tuna is overtaken to entice them to stick around by throwing live sardines over the side. This practice is known as "chumming," and it pleases the tuna so much that they keep close to the surface, and jump and play with the greatest abandon. Into the seething mass, the fishermen throw their lines. The hooks are hidden by a little tuft of feathers, which the tuna short sightedly mistakes for another sardine, and promptly grabs. Before he realizes his error, he is yanked over the fisherman's shoulder into the boat, and since, as we have already explained, the hook is barbless, it is not necessary to take him off, he usually flies off. The remarkable speed with which the men haul these heavy fish aboard, and the endurance that they exhibit in doing so, is always tremendously embarrassing to the angler who is given to boasting that he once caught a four-pound trout. When the real big fish come along three men get on a line,

industry, we will perhaps be excused if we introduce a few San Diego statistics:

Number of tuna clippers operating from San Diego	40
Quantity of tuna canned in 1934	34,387 tons
Investment in plants and facilities	\$1,535,000
Investment in boats	\$2,640,000
Employees at local plants, and fishermen	2,400
Payroll, 1934	\$ 491,750
Raw Fish valuation	\$2,550,000
Fish Packed valuation (1,015,000 cases)	\$5,138,000

It is estimated that the tuna industry in the San Diego community, and its affiliated interests, is sufficiently extensive to employ and support a city of 12,000 population.



Dave Campbell, builder of the "Cabrillo," and Joe Medina, captain and part owner.

"Cape San Vincent," another Campbell product, with Claude Corum, captain and part owner, and F. Bettencourt, Union Oil Co.

but sometimes the 300 and 400 pounders heave-to before they are expected, then rods get broken, and a man or two has the reverse experience of being caught by a tuna, and pulled into the ocean. During heavy weather the men stand in water up to their waists, but that is merely part of the game, and they never cease their efforts.

Tuna fishing is a game that belongs to real men, men of strength and endurance, and, in spite of all the improvements in the way of equipment and conveniences in the fishing boats, the fisherman's life is still a hazardous, strenuous affair, but a life that strong men love, nevertheless.

A large portion of the fishing is done, especially during our winter season, off the coast of Central America, and particularly around the Galapagos Islands. The boats are

often out at sea for 90 days at a stretch, so it is obvious that it takes real boats as well as real men to tackle this kind of work.

When the fish are caught, they are put in the hold of the boat and packed in ice, where they may be kept fresh for months, thanks to the up-to-date refrigerating systems that are now an essential item in the equipment of the modern clipper.

To conclude, the tuna industry is perhaps the most important single factor in the commercial upbuilding of San Diego. With its incidental phases, such as boatbuilding and packing, it has developed, in a comparatively short time, from a small haphazard occupation, into a highly specialized business of major dimensions, whose marketing facilities now reach out into every corner of the globe.

Girls' Club Sponsors Charity Show

ELABORATE plans have been completed by the Union Oil Girls' Club for an evening of diversified entertainment on Friday evening, November 1, at the Masonic Hall, Glendale, California. It is to be given in the interest of charity, in which social work the club has been extremely active during the past several years.

Beginning at 7 o'clock, two and a half hours of what portends to be very interesting entertainment will be offered by Union Oil Company employees from many parts of Southern California. There will be group specialties and individual performances in music, light drama and dancing. Due to the talent available, undoubtedly much of the program will have a professional quality. Cash prizes will be awarded on the basis of popular applause from the audience. First prize will be \$15, to be followed by at least five cash and merchandise awards.

A. C. Rubel, manager of field operations, will officiate as master of ceremonies, and the five judges to decide the winners of the entertainment are to be A. C. Galbraith, assistant vice-president; J. H. Dasteel, manager of Union Service Stations; L. G. Metcalf, manager of refineries; J. B. Williams, manager of operations, sales department; and M. G. Kerr, an assistant comptroller.

One outstanding feature of the evening will be a three-act play, "The Unionville Social Club." The cast of twelve will enact the staging of a benefit for the poor but worthy cattle-herders of Madagascar, and will be directed by Ann Pomeroy, who is general chairman of the program.

It is planned to ring down the curtain at about 10 o'clock, after which the entire audience is invited to dance to the strains of Scotty Matraw's ten-piece orchestra until one in the morning.

From the time you enter the doors, which will cost only fifty cents a person for every-



Mildred Radanovich, Pres. Girls' Club, A. C. Rubel, and Ann Pomeroy, Program Chairman.

thing that takes place during the evening, something will happen every minute until you depart for home. Tickets will have numbered stubs which will enable someone to win a valuable merchandise prize, and, after the entertainment on the stage, attractive booths where beautiful prizes may be won, and other attractions will add to the enjoyment of the evening.

The Masonic Hall, in which the event is to take place, has a capacity of 1,000. Tickets are on sale at company offices and stations throughout Southern California. Also, they may be had by telephoning Estella Goeser, at the Head Office.

In view of the cause for which this evening has been dedicated, undoubtedly there will be a capacity crowd, so employees and their friends are urged to purchase their tickets at an early date.

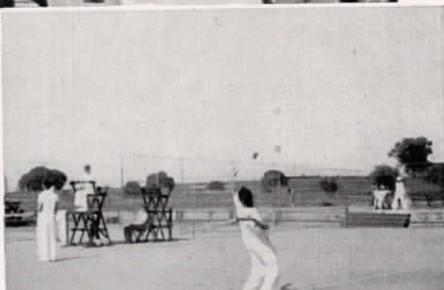


Sid Morgan and Carl Madsen, champion golfers. Below: Tossing the rolling pin.

Right: Mrs. S. Krogsrud and runner-up in rolling pin contest. Below: Baseball—Refinery vs. S. F. Springs.



The hundred-yard dash.



Action on the tennis court.

Los Angeles Refinery Picnic

MORE THAN 500 Union Oil Company Los Angeles Refinery employees, their families and friends, gathered on a recent Sunday at Recreation Park, Long Beach, where a full day picnic was enjoyed. The affair was sponsored by the Los Angeles Refinery girls' social club, and John Salmond, manager of the company's Los Angeles Refinery at

Wilmington, was chairman of the general committee.

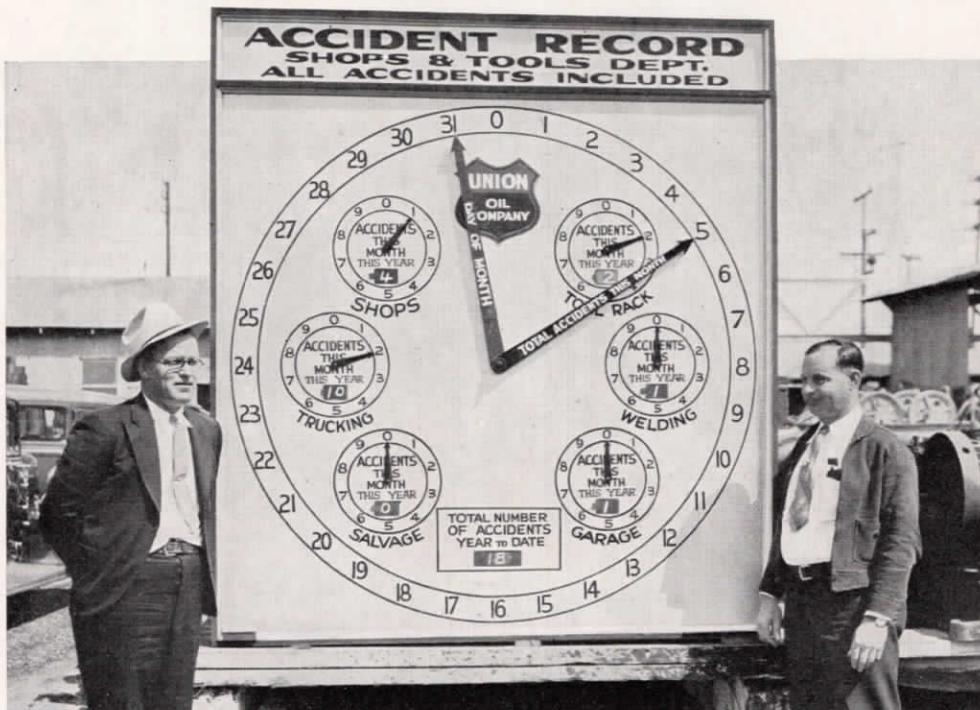
The spacious Recreation Park in Long Beach, where almost any type of sports may be played, was particularly adapted to the program of such a large gathering, making possible one of the finest picnics ever to be enjoyed by Union Oil Company employees.

George Prussing Receives Special Appointment

IN A BULLETIN released early in the month of August, W. J. Braunschweiger, President of the Los Angeles Chamber of Commerce, announced the appointment of George Prussing, Union Oil Company safety engineer, as chairman of the Chamber's newly formed Fire Prevention Committee. This body may be termed the fire chiefs' civilian cabinet, since it is constituted of the outstanding fire authorities of the district, and will be responsible in no small measure for the policies that will in future govern the fire fighting activities of the city. It is the outgrowth of a for-



mer organization, known as the Safety and Fire Prevention Committee, also sponsored by the Chamber, which was recently split into two sections, the safety work being delegated to an industrial group, and fire prevention becoming the responsibility of Mr. Prussing and his newly appointed committee. The members of this committee are all well known fire-fighters and industrial engineers, and the success of their combined effort is reflected in the extremely low fire loss ratio, and the correspondingly low basic insurance rates that prevail in Los Angeles.



Here is an ingenious method of maintaining safety consciousness in the mind of the employee. The large clock was built in the Santa Fe Springs shops, and is kept continuously on display at a location where it is always under the observation of a large proportion of the workmen. Clarence Froome believes that this constant reminder has already had an appreciable effect in reducing accidents, and will show further results when it has been displayed a little longer. The board is kept up to date at all times, and furnishes a complete story of the accident record, in a readily understandable form.



Girls Organize Treble Clef Club

"WHY CAN'T we do that?" mused Ann Pomeroy, as she listened to some fine vocalizing by a female choir over the radio; and there you have the inspiration that finally developed the Union Oil Treble Clef Club. Ideas never lie very long dormant in the mind of the energetic Miss Pomeroy, and without further parley, she promptly set about crystallizing this particular one. As chairman of the music committee of the Girls Club, she had an unlimited supply of recruits available, and her enthusiasm soon enlisted a large number of girls to the new endeavor. Now the Treble Clef Club has an active member-

ship of forty-five, and has been practicing religiously for some months under the sponsorship of W. K. Hopkins, and the immediate direction of A. C. Marshall, who handles the leader's baton, as capably as he cares for the Company's treasury. The girls are making fine headway, and will make their first public appearance in the very near future, when lovers of good music have a real treat in store for them. This is a type of enterprise that should be encouraged and, after all, there is nothing more encouraging to a girls' glee club than a good big audience.



Thorpe Made Asphalt Supervisor

EFFECTIVE September 15, 1935, R. E. Thorpe was appointed Division Asphalt Supervisor in the central division, replacing Francis P. Smith, Jr., resigned. Mr. Thorpe entered the service of Union Oil Company in March, 1929, in the Los Angeles asphalt de-

partment. In October, 1931, he was transferred to Oakland as district asphalt representative, and was elevated to the post of division asphalt representative in December, 1933, which position he held until he received this latest promotion.



OLE BERG
Northern Division Sales Manager

Promotion for Ole Berg

EFFECTIVE September 1, 1935, Ole Berg was appointed Division Sales Manager of the Oregon territory in the northern division. Starting as an office boy in the San Francisco district in 1921, Berg has remained in the sales organization since that time, and has a wide experience in the various phases of sales

work. For the past year he has held the position of district sales manager in Spokane.

Heretofore the company's northern division sales territory has included Oregon, Washington, and Idaho, with headquarters at Seattle, but the expansion of sales activity during the past year has necessitated an additional control point at Portland.



E. B. Giese and M. C. Forsyth.

I See You're Using Triton

ERWIN GIESE of Union Oil Company Station 950 at Whittier merely needs to look at the oil gauge to determine whether or not his customer is using Triton. "It has an unusual

clarity of appearance, even after 1,000 miles of use," he says, "that immediately distinguishes it from any other oil." When he pulls the gauge, and recognizes the characteristic film, his accompanying remark, "I see you're using Triton," emphasizes to the customer his enduring belief in the enduring quality of the propane-solvent extracted oil.

Tennis Tournament

THE ANNUAL Union Oil Company tennis tournament is again under way at the Los Angeles Club courts on Melrose Avenue, with a total of seventy entries, one of the largest in the history of the event. Play started Saturday morning, Oct. 12, and will continue on successive Saturdays until completed. The program includes women's singles (seven entries), men's singles and doubles (55 entries in singles, and 20 teams in doubles).



Service Emblem Awards

Thirty



Years

C. L. TOSTEVIN
No. Div. Fuel Oil Supervisor

THE LIST of long-term employees of Union Oil Company is gradually extending. For the months of August and September, 120 were scheduled for new or additional service awards. Heading the list is Charles L. Tostevin, Northern Division Fuel Oil Supervisor, with thirty years to his credit, and the distinction of being the oldest member, in terms of service, in the Sales Department. He came to the organization in 1905, as a bookkeeper at Portland, and since that time has acquired a broad experience in almost every phase of sales work. He has made a host of friends in the Northwest, and his efforts on behalf of Union Oil Company have been an inspiration to the large group of younger workers with whom he has been associated. The only man in the Sales organization whose term of office closely approaches that of Mr. Tostevin is J. M. Geary, who came to work for the Company in 1907.

In the same two months' period, nine employees completed twenty-five years of service. Leading this group is Clyde G. Bussey, formerly in charge of the Los Angeles Garage, who has retired, and will henceforth devote his time to the pursuit of just those things he has a particular desire to pursue, in which

endeavor his many friends in the Union Oil Company wish him the best of happiness. Next comes M. G. Kerr, Assistant Comptroller, whose responsibilities through the years of his employment have brought him into actual contact with almost every phase of Union Oil Company activity, and whose genial personality is known and admired by employees in every corner of the system. John Hartman and his red car are a familiar daily sight around the Orcutt fields, and when he is not on duty the boys know that he is doing one of two things, either deer hunting, or sitting in a secluded corner with a dismantled radio, trying to solve the intricacies of some new hook-up. Up in the Montebello production department all the little extra conveniences and gadgets around the leases are usually traceable back to Pat Frize, who has an insatiable genius for making his fellow workers comfortable. M. F. "Bo" Robertson, out at Santa Fe Springs, has undoubtedly already celebrated his acquisition of the 25-year pin, by doing an extra 36 holes of his favorite pastime out at the Rio Hondo Country Club. Charles Botkin, of Wilmington Refinery, finds his relaxation in horticulture, and vegetable raising, and we understand that his

Twenty-five Years



C. G. BUSSEY
Retired



M. G. KERR
Asst. Comptroller



J. H. HARTMAN
Electrician, Orcutt



P. FRIZE
Prod., Montebello



M. F. ROBERTSON
General Stores
S. F. Springs



C. W. BOTKIN
Refinery, L. A.



J. E. SCHMIDT
Oakland Sales



H. O. BUTLER
Prod., Montebello



A. CUNHA
Refinery, Oleum

home-grown cantaloupes have often been mistaken for watermelons. Johnny Schmidt, of the infectious chuckle, is believed to be the best known man in Alameda County, and certainly his winning ways have won a lot of customers for Union Oil Company up in the Oakland district. "Tommy" Butler, as H. O. is better known to his friends, is also in the Montebello production department. He is one of the town's most enthusiastic exponents of

the horse-shoe game, and it is expected that he may throw a ringer any day now. The last man on the 25-year list is Tony Cunha, from Oleum Refinery. Tony is a fine, capable workman who has endeared himself to everyone in the plant, and whose leisure moments are devoted to a mighty nice family.

Fourteen employees were presented with 20-year awards during August and September. The complete list follows:

Twenty

Years



H. D. JOHNSON
Chief Dispatcher
P. P. L., San Luis Obispo



P. CLEVENER
Gauger, Orcutt
P. P. L.



R. R. HENSLER
Chief Clerk, Disburse-
ments Div., L. A.



A. DICKINSON
Refinery, Oleum



J. D. STEEL
Gauger, Richfield
Production



W. O. STEWART
Refinery, Oleum



J. H. FULLER
Gas Department
Orcutt



CAPT. C. FULTON
Master, M. S. "Redline"



E. GREGORY
Refinery, L. A.



D. L. MOYNIER
Driller, Bakersfield



CAPT. J. SANTOS
Master, M. S. "Kern"



L. A. TUNE
Sales, Oakland



A. B. MCKENZIE
Chief Engineer
F. O. Sales, Vancouver

Thirty Years—August

Tostevin, C. L., Sales, Northern Division.

Twenty-five Years—August

Bussey, C. G., L. A. Garage.

Frize, P., Field, S. Division.

Hartman, J. H., Field, N. Division.

Kerr, M. G., Compt., Head Office.

Robertson, M. F., Purch., Head Office.

Schmidt, J. E., Sales, Cent. Division.

Twenty Years—August

Boggeman, C. M., Stat., Head Office.

Clevenger, P. S., Transp., P. P. L.

Dickinson, A. S., Mfg., Oleum.

Johnson, H. D., P. P. L., Northern Division.

Steele, J. D., Field, S. Division.

Stewart, W. O., Mfg., Oleum.

Fifteen Years—August

Bartscherer, H. S., Tel., Head Office.

Bissett, G. C., Field, S. Division.

Blair, L. H., Field, S. Division.

Davies, J. W., Gas, S. Division.

Davis, R. S., Field, S. Division.

DeGroot, J. V., Sales, S. Division.

Dysinger, R. V., Field, S. Division.

Farnsworth, F. M., Field, S. Division.

Hallam, J. E., Field, S. Division.

Hanmore, G. S., Field, S. Division.

Havely, C. G., Mfg., Oleum.

Henderson, L. W., Transp., P. P. L.

Hesser, A. W., Land, Head Office.

Layton, C. K., Sales, Cent. Division.

McCall, P. F., Field, S. Division.

Mauerhan, R. W., Transp., L. A. P. L.

Melton, W. E., Field, S. Division.

Mentzer, D. L., Transp., P. P. L.

Messenger, J. E., Transp., P. P. L.

Moore, H. B., Mfg., Oleum.

Mullen, G. H., Field, S. Division.

Neylon, I., Mfg., Oleum.

Nordquist, V. O., Sales, N. Division.

Olmsted, P. M., Field, S. Division.

Rabello, A., Mfg., Oleum.

Sala, W. H., Field, S. Division.

Samuelson, C. J., Const., Northern Sales.

Spaulding, G. E., Mfg., Oleum.

Stoffel, E. H., Field, S. Division.

Trimble, G. A., Auto., Cent. Division.

Ten Years—August

Anderson, K. C. M., Gas, Head Office.

Arnold, W. D., Transp., L. A. P. L.

Bishop, P. McC., Sales, N. Division.

Boone, J. L., Jr., Sales, Cent. Division.

Fraser, J. K., Mfg., Los Angeles.

Fulton, J. G., Sales, N. Division.

Graves, D. C., Jr., Mfg., Oleum.

Hainke, E. M., U. S. S., N. Region.

Harms, T. F., Sales, Head Office.

Hinders, E. J., Mfg., Los Angeles.

Hoeck, J. L., Mfg., Oleum.

Hoke, G. E., U. S. S., N. Region.

Kauffman, R. C., Sales, Cent. Division.

Kihlstrom, W. G., Field, S. Division.

Longnecker, O. J., Sales, N. Division.

Lutz, K. J., Mfg., Oleum.

Miles, T., Field, N. Division.

Miller, A. W., Sales, S. Division.

Passmore, R. T., Transp., P. P. L.

Peters, R. Shadle, Sales, N. Division.

Rose, J., Mfg., Oleum.

Savage, J. T., Field, N. Division.

Smiley, A. F., Sales, Cent. Division.

Stene, J. B., Marine, "Deroche."

Turner, M., Mfg., Oleum.

Wessels, G. A., Sales, S. Division.

Wood, B., Mfg., Los Angeles.

Twenty-five Years—September

Botkin, C. W., Mfg., Los Angeles.

Butler, H. O., Field, S. Division.

Cunha, A., Mfg., Oleum.

Twenty Years—September

Fuller, J. H., Gas, N. Division.

Fulton, C., Marine, M. S. "Redline."

Gregory, E. D., Mfg., Los Angeles.

Hensler, R. R., Compt., Head Office.

Moynier, D. L., Field, N. Division.

Santos, J., Sales, Cent. Division.

Tune, L. A., Sales, Cent. Division.

McKenzie, A. B., Sales, Vancouver.

Fifteen Years—September

Engelke, W. A., Field, S. Division.

Erb, C. R., Compt., Head Office.

Huckaby, J. L., Field, S. Division.

Keithley, S., Transp., P. P. L.

Lane, R. G., Field, S. Division.

Lewis, R. S., Field, S. Division-Ventura.

Lucas, J. F., Field, S. Division.

Ono, T., Sales, Honolulu.

Oster, F. J., Transp., P. P. L.

Paes, J. A., Mfg., Oleum.

Riordan, A. E., Transp., P. P. L.

Rostain, E. F., Sales, Cent. Division.

Schmidt, A., Transp., P. P. L.

Spensley, R. M., Field, S. Division.

Stone, E. E., Field, S. Division.

Wilcox, G. C., Sales, N. Division.

Ten Years—September

Anderson, S., Mfg., Maltha.

Biley, A. J., Mfg., Los Angeles.

Billington, L. A., Field, N. Division-Orcutt.

Bradshaw, J. A., Mfg., Oleum.

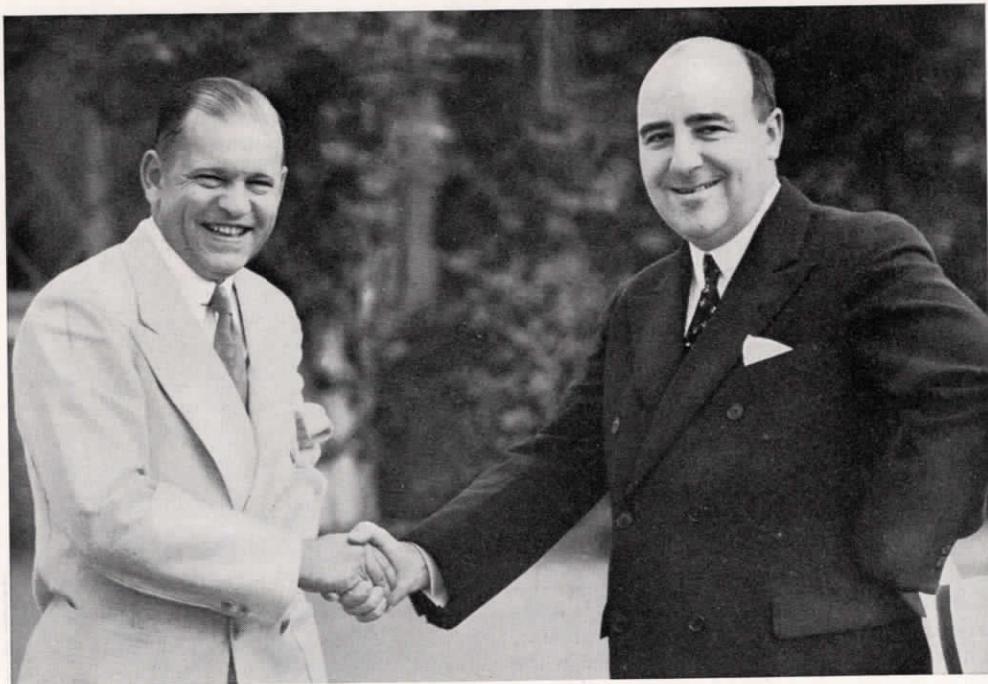
Daniel, R. E., Mfg., Los Angeles.

Dock, F. L., Gas, Head Office.

Fink, D. B., Mfg., Oleum.
 Fritz, I. E., Sales, N. Division.
 Gale, R. W., Mfg., Los Angeles.
 Gray, S. V., Field, S. Division.
 Holstein, W., Sales, Cent. Division.
 Hostetter, H. H., U. S. S., Southern Region.
 Knoll, Mary A., Ind. Rel., Head Office.
 Lowrey, H. W., Mfg., Oleum.
 Ocheltree, M. P., Sales, N. Division.

Schacht, H. A., Sales, S. Division.
 Stockton, L. L., Transp., S. Division-P. L.
 Talley, D. E., Field, N. Division.
 Tanaka, S., Exp. Sales, Head Office.
 Tomooka, M., Sales, Honolulu.
 Travis, M. M., Mfg., Los Angeles.
 Truesdale, C., Transp., P. P. L.
 Wanlass, M. L., Mfg., Oleum.

A Meeting of Old Friends



Left to Right: R. E. Haylett and R. E. Wilson.

STARTING OFF as college chums in Massachusetts Institute of Technology, the ways of R. E. Haylett and R. E. Wilson have curiously intertwined down through the years. Since graduation, both have been engaged in exactly the same type of work, research, development, and manufacturing, and they have constantly been thrown together through the similarity of their business interests. By a remarkable coincidence, when Union Oil Company began a study of the processes and patents relating to solvent re-

fining, it was found that the Standard Oil Company of Indiana held certain involving rights, and out of this fact developed one more enjoyable association for these two friends, in which, incidentally, all complications were very agreeably ironed out. Since that time, Dr. Wilson has been elevated to the vice-chairmanship of the Board for Pan American Petroleum & Transport Co. The photograph here shown was taken during a recent visit of the Pan American executive to California.



Triton Lubricates Borden Fleet

THE HISTORY of the Borden Company goes back to that eventful day, August 19, 1856, when Gail Borden, its founder, was issued U. S. Patent No. 15553, "for the concentration of milk." The inspiration for this development is believed to have been the result of a trip to London Fair in 1851, during which the inventor was moved by the sight of undernourished immigrant children, to seek some means of restoring health and enjoyment to these unfortunates, and to provide adequate nutrition for future generations of children. The wide-spread use of Borden's "Eagle Brand," is sufficient to indicate the success of this search.

The organization first became a part of the California dairy industry in 1904, when a condensory was established in Humboldt County. From this point the California operations branched out, until at the present time, one out of every seven dairy farmers in the State receives his milk and cream check from this Company.

Borden's pasteurizing plant in San Francisco was completed in 1933, and is recognized as one of the finest milk plants in the world. Over \$4,000,000 has been spent in California alone during the last three years, for modernizing the various units.

It is a peculiar fact that of all foodstuffs, milk is about the only one left that is still delivered direct to the door of the consumer. This is due to the necessity of extreme cleanliness in handling the commodity. The dairy insists on making delivery so that there is no possibility of contamination en route. This calls for the use of large fleets of trucks, and

in the efficient and economical operation of the Borden fleet, Triton and other Union Oil Company products play an important part.

A Study in Evolution



FROM 2 HORSEPOWER to 56 in sixteen years! That seems to express the growth of sales transportation methods, if we are to judge by the two pictures shown here. They were both taken at the Willbridge Plant in Oregon, one in 1917, and the other in 1933. The same driver, A. D. Gassner, is in charge of the equipment in both cases, and he states that he was once just as proud of his horse-drawn vehicle as he now is of his up-to-date motor truck.

Applied First Aid Training

SOME TIME early in the month of July, Leonard E. Parker was spending his vacation in Yosemite National Park. Upon rounding a turn on the Glacier Point road, about seven miles south of the Wawona tunnel, he found a number of cars drawn up on the side of the road, and the occupants in a state of evident excitement. Stopping to inquire the cause of the commotion, he learned that a car containing three persons had just run off the highway, dropped over a steep cliff, and landed about 100 yards below. Proceeding to the spot he found one passenger, a lady, who was suffering badly from shock, and a back injury. After treating her for shock, and ascertaining that her back was not broken, he then went to the assistance of the driver of the vehicle, who was stumbling around in a dazed manner, bleeding profusely from numerous wounds, and a nasty head contusion. Persuading him to lie down, he checked the most severe bleeding, using his handkerchief for a tourniquet. Farther down the cliff, he then found the third member of the party, also



LEONARD E. PARKER

a lady, surrounded by a group of people who were evidently unfamiliar with first aid, and were consequently unable to render any assistance. Mr. Parker took charge of this victim and, improvising splints from tree limbs, padding from car roof insulation, and bandages from torn clothing, proceeded, with the aid of forest ranger Duane Jacobs, to splint fractures, and generally render the injured party as comfortable as possible. Under the direction of Parker, some of the spectators carried the injured lady up the cliff while others cut footholds in the rock. Then, with the help of forest rangers, he placed her in his car, and made a fast run to the hospital in Yosemite valley, thereby, the doctor declared, undoubtedly saving the woman's life.

The interesting feature of this story is that Leonard E. Parker is an employee of Union Oil Company at Oleum refinery, and the incident merely proves once again the inestimable value of the first aid training that is an essential part of the routine of every workman in the employ of the company.

In Memoriam—Julia T. Campbell

WE REGRET very much to announce the passing of Julia T. Campbell, who for many years was the capable and genial secretary of Wm. Groundwater, director of transportation. Miss Campbell died October 12, after a comparatively short illness, and her death came as a distinct shock to a host of friends both in and outside of the company. She was first employed by the traffic department as a stenographer and bookkeeper on Feb. 16, 1915, so that she just acquired a 20-year service emblem in the beginning of this year. Early in her career, she was transferred to the transportation department, and it is an interesting fact that she has occupied the position of secretary to Mr. Groundwater ever since he first came to the Los Angeles office in 1922. For 13 years she had greeted affably

and pleasantly the endless trail of visitors that have found their way into the transportation offices, and a fine cheerfulness and tact always marked her efforts.

Miss Campbell had long been an active and enthusiastic member of the Union Oil Company Girls' Club, and gave generously of her time and talents to the many charitable works of this institution. Her intimate friends know, also, that her sympathies and material aid were quietly and unselfishly directed in many other channels.

Efficient, but ever friendly and unassuming, her passing is a distinct loss, and her associates in Union Oil Company tender their deepest sympathy to her immediate family and to her relatives.

Yarns of Yesterday

IN THE YEAR 1861 was made the first recorded attempt to transport petroleum by steamship, when the S. S. Elizabeth Watts was chartered to load a full cargo of "rock oil" in barrels for London, England. Loading vessels at that time was a very slow process, and it took several weeks to get the cargo aboard. Having completed this task the skipper found it impossible to hire a crew to man the ship. No sailors could be found who were willing to share the decks with the highly dangerous load. "So," says the *Oil Derrick*, "it was found necessary to ship the men while under the influence of liquor." The inebriated crew, however, apparently sobered up eventually, because the vessel arrived in London in due course, and discharged her cargo in good condition.

The first tanker built on the Pacific Coast was to the order, and under the supervision of Hardison & Stewart in 1888, to carry oil from Ventura to San Francisco. It had a capacity of 6,500 barrels, and although it had a very short life, being burned to the water's edge shortly after it was put in service, it demonstrated completely the feasibility of this form of transportation, and pioneered a phase of the petroleum industry that has since grown to gigantic proportions. Union Oil Company's tanker fleet alone has today a carrying capacity of about 800,000 barrels.

On the subject of transportation, it is interesting to note that in the early days of the Pennsylvania oil industry, the production of the wells had to be hauled to Oil Creek by team, and there loaded on barges for subsequent shipment to terminals or refineries. A Boston newspaper, dated Oct. 25, 1865, makes the following illuminating estimate: "It is estimated that 600,000 barrels of oil will be shipped from Oil City this season. Fifteen hundred two-horse teams are now engaged in hauling oil from the wells to the

creek, and the number employed in teaming and boating is 3,500."

Teaming was then a decidedly lucrative profession, and we are told by the historians that the transportation charge for hauling a barrel of oil five miles was often as high as four dollars. (The crude price was then about \$11.00 per barrel.) But all good things come to an end. In 1864, Samuel Van Syckel went to Oil Creek, bought some producing oil land, and proceeded to lay what is believed to be the first successful pipe line. The teamsters were highly incensed over this threat to their affluent existence, and promptly tore up the lines and set fire to the tanks. Samuel, however, like most of the old pioneers, was not to be deterred from his purpose, and just as promptly laid the lines down again. Here is an interesting account from the *Oil Derrick* Oct. 16, 1865: "One of the most wonderful of the many wonders produced at Pithole is the oil pipe running from the United States well to the Miller farm, on the Oil Creek Railroad, a distance on an air line of about five miles. The pipe is two inches in diameter, and lies most of the way on the top of the ground. Three pumping engines are stationed along the route, forcing the oil through the pipe at a rate of about 80 barrels an hour, doing the work of about 300 teams, working ten hours a day. This machine can work all day and all night. This was considered experimental, but proves a decided success."

One of the first pipe lines in the state of California was built by Hardison & Stewart in 1884 from the Little Sespe and Adams Canyon to Santa Paula, and their line from Santa Paula to Ventura, completed in the next year, was the first pipe line carrying oil to tidewater on the Pacific Coast. This line was taken up about five years ago, but a considerable quantity of it was found to be in such good condition that it has since been used in other locations.

REFINED AND CRUDE

By Richard Sneddon

There is nothing quite so exasperating as misplaced trust, and we can well imagine the spirit that prompted the following outburst from a struggling service station proprietor: "Mr. I. B. Black, Dear Sir: Who bought five gallons of gasoline from my station a month ago? Who promised to pay for it within seven days? Who is a liar, a cheat, and a scoundrel? Yours truly, Wilberforce Schmidt."

Junior was responsible for another faux pas last week, that almost caused international complications. A neighbor brought her new baby in for inspection, and we were all indulging in the usual ecstasies. "Don't you think he looks like his daddy?" enquired the proud mother, and the offshoot enthused, "Boy, I'll say he does. The resemblance is something awful."

Junior, by the way, must be studying mythology now. We heard him tell one of his buddies the other day that if he was as rich as Creosote he wouldn't give him a cent.

Incidentally, the fellow with the Tennessee accent, who has been hailed around town as a southern planter, turned out to be just an undertaker from Memphis.

Also please note that the majority of stenographers cease to take dictation after they get married.

And nothing spoils the appetite so quickly as a good meal.

The Los Angeles Girls' Club are putting on a big charity show November 1, at Glendale, and we understand they have discovered some excellent talent for the occasion. This will probably mark the first and last American appearance of the Veil sisters, Nettie and Dotty.

A brand new soprano has been training assiduously at home for the event, and we understand her husband always goes out on the sidewalk while she is practicing, so that the neighbors will see he isn't abusing her.

At a dress rehearsal the other night, this lady's voice just filled the entire hall. In fact, quite a number of the listeners went outside to make room for it.

A rather disconcerting interlude occurred the same night, when the master of ceremonies commanded one of the male performers to remove his mask, and the poor fellow wasn't wearing any.

Also, the best tap dance number will now have to be omitted, because the young lady involved, very foolishly ruined her feet breaking in a pair of new shoes for a friend.

There was some possibility at first that the engagement of a noted lecturer would have to be cancelled, as the girls refused to pay his hotel expenses. However, he has agreed to bring his own bunk, so the show will go on.

In addition to the vaudeville performance, there will be sideshows and barkers, and a collection of curios from all over the world, that should make Ripley green with envy. For instance, the Eskimo who never heard about Triton; Crystal, the little lady who is always on the watch; and a perfect specimen of that unusual article, the ambush scale, that lies in weight for fishermen.

That isn't all folks. For those who come hungry, there is a woodshed, where anyone can go and take a few chops.

And although the girls haven't been able to secure the services of a wild animal trainer, there are some dandy lions on the lawn. All this, mark you, for the one small price of admission.

The grand finale will be a terpsichorean festival at which the world's most able exponents of the rhumba, the charleston, and other uncatalogued movements will sway to the seductive strains of Scotty's orchestra, an aggregation that contains more first-class musicians than the conductor can shake a stick at.

But to return to our knittin', remember, the crooked nail is usually driven to it by a woman.

And, of course, you have heard of the Irishman who shaves three times a week every day, and every day on Sunday.

It has also been definitely determined that when a boy washes a girl's car they are engaged, and when a girl washes a boy's car they are married.

On the other hand, the fellow who lies easily doesn't always sleep soundly.

And, says the Bingville jury, "We find the man who stole the horse not guilty."

Nor is a man's hand writing ever so bad that you can't read his name on a check.

"Do I bore you?" enquired the mosquito. "Not at all," replied the guy who squashed him. "How do I strike you?"

With which few remarks we again leave you to your own devices. Remember, even if the spoon does hit you in the nose, etiquette demands that you drink your coffee from the cup.

