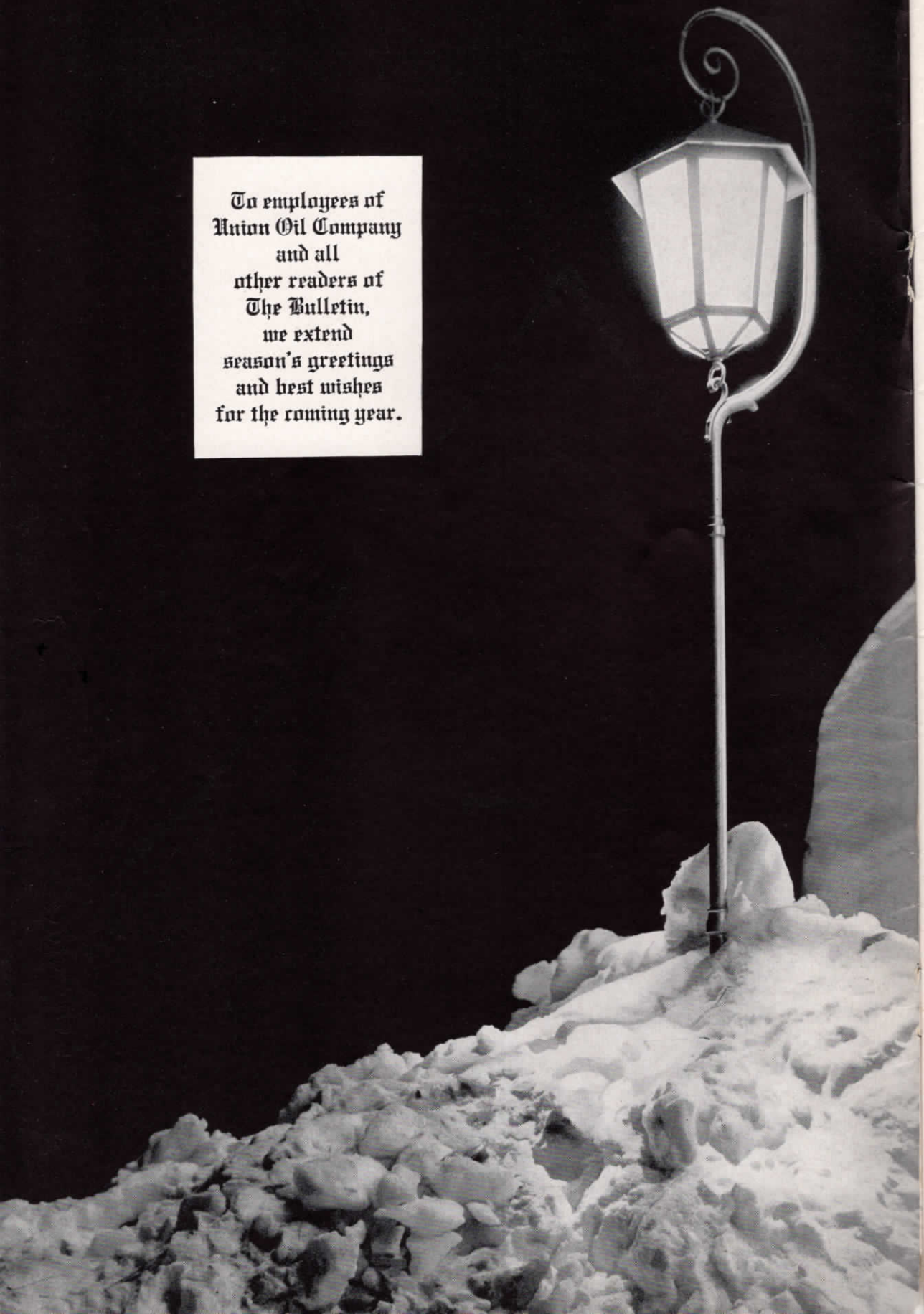


★ UNION OIL BULLETIN ★



December
1937

To employees of
Union Oil Company
and all
other readers of
The Bulletin,
we extend
season's greetings
and best wishes
for the coming year.



U N I O N O I L B U L L E T I N

VOLUME EIGHTEEN

DECEMBER, 1937

NUMBER TWELVE

ASPHALT BUILDS AN INDUSTRY

By W. H. LOWE, President The Paraffine Co's. Inc.

IT IS peculiar that in the best known of the earliest written records asphalt is mentioned as a building material in one of the opening chapters. With only a single prior reference to the habitations of men in the words, "Such as dwell in tents," the Bible takes up the construction of the Ark (Genesis VI, 14) and the second material mentioned in its building is asphalt (in the Latin Vulgate this appears as "bitumen"). Again asphalt was used in the construction of the Tower of Babel (Genesis XI, 13; erroneously termed "slime" in the English translations).

Asphalt has come down through the ages. The basket in which Moses was placed, when he was set afloat in the river, was waterproofed with asphalt. The Sargeon Wall of Babylon built in the Eighth Century B.C. had inscriptions that asphalt had been used on the burned brick placed as foundations in the depths of the water in the Euphrates. Nebuchadnezzar reconstructed the entire city of Babylon somewhat more than one hundred years later and

again asphalt was used. Queen Semiramis built a tunnel over half a mile long under the Euphrates at Babylon about 700 B.C. Asphalt was used as the mortar between the burned brick. Herodotus, Xenophon, Aristotle, Virgil, Pliny and Marco Polo all mention asphalt—some of it from deposits which can be identified today.

In coastal California the natural asphalt deposits are in a north and south line that practically coincides with the missions established a century and a half ago. The natural asphalt was used for waterproofing in and about these mission buildings, thus carrying out in the new world a function having an old world beginning. These asphalt deposits exist today, some of them having been worked even down to the present time.

The asphalt from all of these sources was "natural" asphalt. Natural asphalt is used in many parts of the earth today, in some places because it is produced from local sources and is used locally, but in a few instances certain

native asphalts are in demand because they possess or are believed to possess particular properties fitting them to specific uses. But the production of asphalt from these "natural deposits" is only about one-tenth of the production of asphalt from petroleum.

The change whereby petroleum asphalt displaced natural asphalt in the commercial world had its beginning in California. This was brought about in an interesting chain of events which not only signaled the birth of a petroleum production and refining industry in California but also a petroleum asphalt industry, and at the same time it gave to the world two sister corporations, Union Oil Company of California and The Paraffine Companies, Inc. The Union Oil Company, then the Mission Transfer Company, chose oil production, transportation, refining and sales as the field in which to operate, and The Paraffine Companies (then the Paraffine Paint Company) chose to develop the commercial possibilities of petroleum asphalt.

Asphalt dissolved in carbon bisulphide proved to be a well worth while waterproofing paint. It may seem strange that the early discoverers did not dissolve the asphalt in the gasoline or "benzine" of those days. But the benzene produced at that time would not dissolve the asphalt of that period. It has remained for the post World War period to produce not only more easily soluble asphalts but also to produce solvents from petroleum which have far higher solvent power than the benzene of the late eighties. These "high power solvents" are outstanding Union products today. But by a peculiar twist of fate, the insolubility of certain asphaltic components in the benzines of the Nineteenth Century is an example of the principle at the basis of the solvent refining of lubricating oils as carried out by the Union Oil Company today.

The carbon bisulphide paint of the Paraffine Paint Company proved popular. It was the only paint which would satisfactorily protect the equipment used in the cyanide and chlorination processes for gold and silver recovery. These processes were in widespread use at the time and thus the asphalt paint business flourished. But changes occur in every industry; the cyanide and chlorination processes gave way to other processes which made less use of the P & B Paint. But in the meantime new uses were found for the bisulphide type of paint; its manufacture and sale by The Paraffine Companies has never ceased over a period of nearly sixty years.

The application of petroleum asphalt to commercial purposes has always been practiced in the field of sheeted products. The first of these were P & B Roofing and P & B Building Paper. They were used to cover the roofs of industrial buildings, and to line the walls of houses and other buildings for dampproofing, cutting off ingress of outside air, proofing against vermin and even for heat insulation in cold storage plants.

Times change. The gasoline from the early refineries was run into sumps and burned. A crude petroleum had value or lacked value in proportion to the content of coal oil that could be obtained from it. The yield of coal oil could be increased by cracking but cracked coal oil was inferior in quality to straight run coal oil—compare this with straight run and cracked gasoline today.

As there were changes in the refined oil industry so there were changes in the business of making and selling asphaltic products. Asphaltic roofing it still sold, but now The Paraffine Companies, Inc., is putting a great deal of effort into the sale of floor coverings—it is significant that whereas a building has but one roof, it may have many floors, each a possible field for covering. It was the dream of the early discoverers of P & B Paint that asphalt could be bleached white, and with this as a base, white and other light colored paints could be made. But The Paraffine Companies discovered that asphalt need not have the "black taken out of it"—the black asphalt can be incorporated into paint, aluminum powder added and behold, a brilliant, light-colored, metallic paint results. This paint has been applied to thousands of "squares" of roofing, particularly in areas of the state where sun heat on roofs may make for decided discomfort below. Not only is the heat inside the building reduced but light from such roofs is reflected through saw tooth construction and lighting bills cut down due to savings in the early mornings and late afternoons.

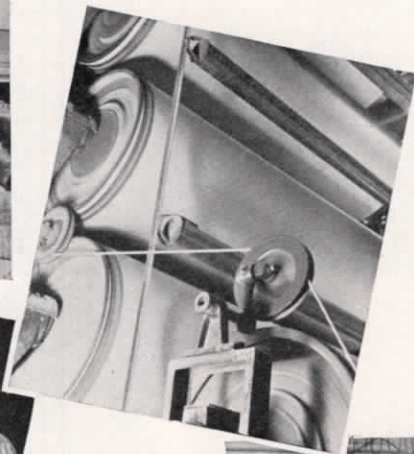
The sabre tooth tiger and his contemporaries down even to mice and birds would step on the asphalt of La Brea deposit (now within the city limits of Los Angeles) and they would be trapped. Today their bones may be dug out of the asphalt by the enterprising scientist.

But The Paraffine Companies set to work to investigate the question as to whether one may safely walk on a layer of asphalt.

Of course we have had asphalt mastic streets, roads, sidewalks and tennis courts for years without number but the mastic pavement was

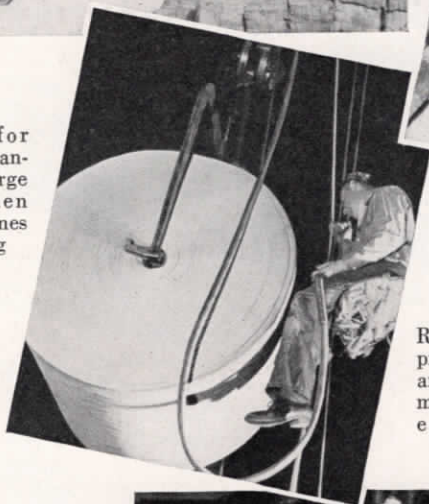


Left: Raw materials arrive at the PABCO plant, and are hoisted from dock to shore.



Left: This machine changes the fibre into felt, which is later water-proofed by soaking in asphalt.

Right: Dry felt, for convenience in handling, is stored in large rolls which are then carried by huge cranes to the seal coating machines.



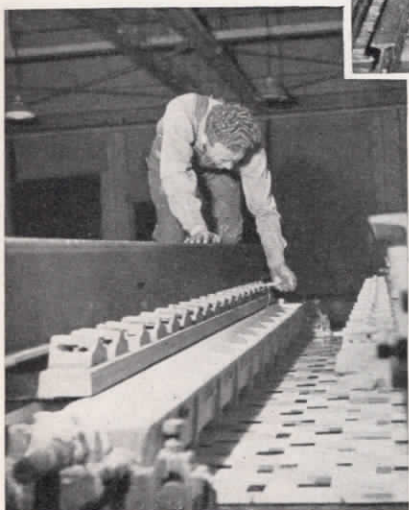
Right: The pattern printing machines are precision instruments which place each color in its proper position.



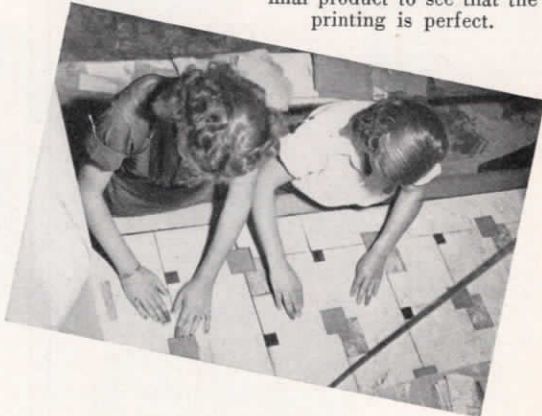
Right: Filling the nine-foot fountain of the pattern machine which transfers the enamel to the felt.

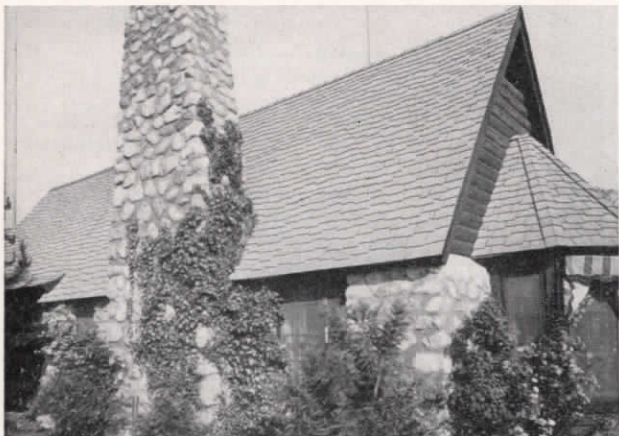


Below: Girls inspect the final product to see that the printing is perfect.

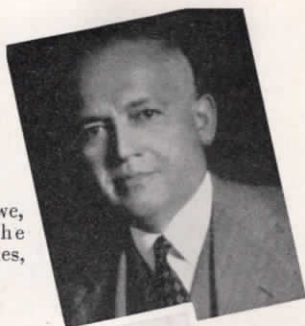


Left: Adjusting the flow of enamel in order to insure even distribution over the surface of the floor covering.

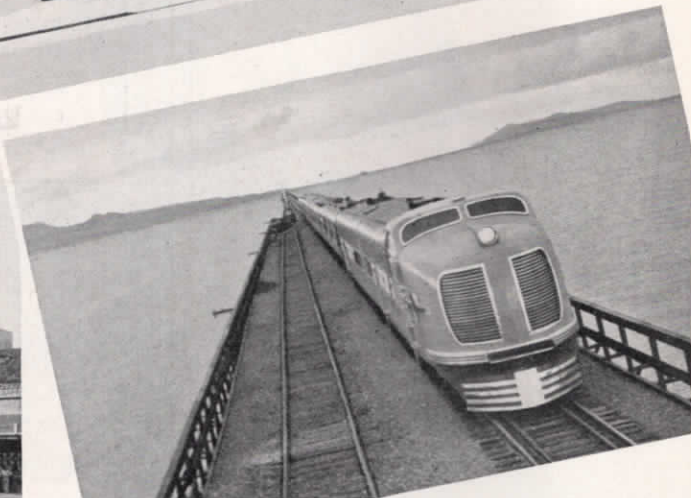




Right: W. H. Lowe,
 president of the
 Paraffine Companies,
 Inc.



Pabco Products go 'round the world. Above is the Permanite-shingled roof of a Los Angeles home; at right is a Union Service Station in San Francisco, painted with Permanite paints, and below is the Chartered Bank of India, Australia and China, at Colombo, Ceylon.



Above: The "City of San Francisco," one of the modern streamline trains runs over P. & B. roofing as it crosses the Salt Lake cut-off.

Right: in Honolulu, too, Pabco is a construction aid, as it is used both on the roof and in the basement of the Alexander and Baldwin building there.



felt to be only a partial answer to the question. The Paraffine Companies wanted to put asphaltic floors in railway cars, in busses, in grocery stores (imagine an asphalt mastic floor in a grocery store), in street cars, on decks of sea going ships and to use it as safety treads on stairways—in this way to employ it in a thousand places where some new type of floor covering was needed.

The result: Mastipave. There is not space to tell how this material was developed step by step but it is of interest to know that it contains from 60 to 75 per cent of asphalt, it is to be had in a range of colors, red, green, brown and, yes, black also, and the sheets are of little more than the thickness of a silver half dollar and it weighs one-half to three-quarters of a pound per square foot. Asphaltic mastic, on the other hand, contains only about 10% of asphalt, is always black and it ranges in thickness up to two inches, weighs about twenty-five pounds per square foot, and usually a steam roller is required to lay it—imagine bringing a steam roller into the X-ray room in a hospital. This is not a criticism of asphaltic mastic—everything has its place, and things only cease to be all right when they get out of place. Tin plates are admirable on a camping trip but we do not expect to see them used at home in place of fine china.

The sabre tooth tiger would not have been trapped by Mastipave. In the Key Terminal in San Francisco Bay it is estimated that between one and two billion steps have been taken on Mastipave. So many steps that if a thousand of them had been taken every day since Sargon laid the walls of Babylon in asphalt there would still be so many steps left over that they could be paced off three feet apart on a line extending from the earth to a point beyond the moon. They were steps made by shoes with nails in the heels and steps made by heels the size of a five cent piece and with one hundred and fifty pounds on them. As if this were not enough, lighted matches, cigarettes, and cigars have fallen on this material and it has been subjected to the twisting and racking strains of a pile-supported floor structure far out in a harbor seldom free from gusty winds and pounding waves. And yet the asphaltic Mastipave with a thickness a little over that of a silver half dollar and so yielding that the point of a lead pencil will indent it has stood this for six years.

There is also another story of asphalt. The Vice-President of The Paraffine Companies, Inc., in charge of manufacturing is George Prifold.

It was he who invented the printed felt base floor coverings which are more widely used today than all other forms of "hard surface" floor covering put together.

The invention of Goodyear made possible vulcanized rubber tile floor covering. But rubber tile has generally been handicapped by widely fluctuating costs of rubber and at best the rubber tile flooring has always been high in first cost. Another objection to rubber tiles has been their persistent odor which would not go away for years and could not be sealed in by varnish coats. "Oil cloth" flooring followed next in order, but oil cloths were merely painted cloths with an ornamental design. They quickly wore through. Then followed linoleum, the invention of Frederick Walton in England. Linoleum has a composition of ground cork and a highly oxidized oil-resin binder frictioned onto a burlap back by heavy calenders and the product is heat-treated—or "cured"—for a long period at an elevated temperature in closed chambers—or "stoves." But linoleum in the early days was heavy in weight and was plain in color. To give it a decorative appearance, figures were printed on it—conventionalized designs of flowers and imitations of wood graining, but sometimes the design seemed to represent just something the designer thought he was seeing when he was feeling terribly bad. The print paint was not properly compounded and generally was sloppily applied. The design wore off after a few months and the undecorated base attached to the burlap was all that remained.

George Prifold believed that if felt saturated with a resilient asphalt could be printed with a print paint highly resistant to abrasion, an improved floor covering could be made. One of the major problems was to seal the asphalt into the felt so thoroughly that the print paint would not "cut" it and become discolored. One of the early patents issued to Mr. Prifold is for a sealing coat to dam back the asphalt. It was with this beginning that the printed felt base floor covering began. Mr. Prifold built plants for the making of the material. He perfected processes for its manufacture and devised new methods of printing and new printing machines. At Emeryville, California, and Somerville, New Jersey, under his direction, a substantial part of the nation's output of printed felt base floor covering is made. This material finds its way around the world. If it were anything but a floor covering used interiorally, it could be said the sun never sets on Pabco Felt Base Floor Covering.

However, that very thing can be said of Pabco Roofings. The recent undeclared war in China has brought onto the front pages of our newspapers many pictures of the Shanghai Bund—it appears that in many parts of the world the finest buildings of the city are on the “waterfront” where we are accustomed to see cheap chop houses, liquor shops, small ship chandlers’ stores, and maybe a ten cent motion picture theatre or so—“open all night.” All of the fine modern buildings—many of them the finest in the Orient—on the Shanghai Bund are roofed with Malthoid (Pabco). Further to the eastward there is Malthoid Roofing on the royal palace buildings at Bangkok (Siam) and Malthoid Roofing is in common use in Calcutta. Still further to the east, Malthoid appears in South Africa and in a hop across the water, it reappears in South America. Thus we have followed the sun around the earth from California for the full distance of a day’s solar journey. We have also indicated a north and south spread—from Argentina to Alaska.

Malthoid is made in Japan and in Australia by locally operated Pabco plants. The same is true of Pabco paints which find a wide use over the same range of territory.

Speaking of paints the earliest paint made by the Paraffine Paint Company was P & B Paint—on which a patent was issued on March 30, 1886. This paint was found to be the best paint ever produced for painting cyanide and chlorination equipment in the gold and silver reduction processes. This paint is still the best in this field. It is being made today on almost exactly the same formula fifty years after its early manufacture, and the demand for it is undiminished. Times change, but apparently the original P & B paints have never heard of a calender or a modernization program. The endeavor has been made to change it at times in the past but each time the “improved” product was not so good as the original.

It has not been possible here to take up the subject of linoleum, which was added to the products of The Paraffine Companies plant in 1930, or to cover such subjects as lacquers, varnishes, enamels—in fact, the whole paint line made at the Emeryville plant. While these clear varnishes and pigmented paints do not contain asphalt they do contain petroleum thinners, thus linking them to the petroleum industry. These products also go around the world. And thus it is true also that the sun never sets on Pabco paints. On linoleum—well, linoleum is used inside—the sun will hit

it through open or unshaded windows in Alaska, Europe, Asia, Africa and Australia and throughout South America. It is also carried around the world as floor coverings on United States cruisers. It is no small amount of linoleum that is required for a ten thousand ton cruiser. Some 17,000 yards or so—as far as her guns will fire if the linoleum is stretched out in a strip three feet wide.

There are further stories of The Paraffine Companies products. The Plant Rubber and Asbestos Works is 100% owned by Paraffine—it is the only plant on the Coast making braided packings for pumps, stuffing boxes on rods and the like. Plant Rubber also makes large quantities of 85% magnesia pipe covering. As a raw material for this product, magnesium carbonate is precipitated from the bittern remaining after salt has been crystallized out of sea water by solar evaporation.

The Vitrefrax Corporation, partly owned by The Paraffine Companies, makes fire brick and other refractories so necessary in petroleum still settings, in boiler plants and the like.

The largest corporation in the group owned or partly owned by Paraffine is Fibreboard Products Inc. Fibreboard (over 50% Paraffine owned) makes fibre shipping containers, cartons, paper boxes, paper wallboards and hundreds of individual items, down even to the “berry boxes” each of which brings a few ounces of fresh berries to the consumer. Fibreboard containers also go all over the earth. Fibreboard was the leader in showing the marine shippers of the world that fibreboard containers are better and more economical than wooden cases, until now they are the preferred type of packages for overseas shipments—Times Change!

It should be a source of satisfaction to Union Oil Company to know that her once little sister, Paraffine, now grown big and able to fend for herself, is also keeping well in the forefront in this march with time which takes Pabco around the world with many products and nearly from pole to pole.

Cover Design

Cover designs this month are the work of Orville Logan Snider, photographer, of Universal City, California. They depict typical snow scenes at Lake Arrowhead, one of the more popular winter resorts within easy reach of Los Angeles.

THE BROAD HIGHWAY

MAN is inherently a nomadic individual, and in California he finds a unique opportunity to indulge his wandering propensities. In many other sections of the country his outside occupation and entertainment is curtailed to a great extent by the severity of the winter weather, but here the constant clemency and agreeableness of atmospheric conditions, more impressively termed "climate," enable him to spend practically all of his play time in the great outdoors. It is thus a well-established fact that there is no other place in the United States (hope there are no Floridans listening in) where homes are so gloriously beautiful and people so seldom in them. It is a trite but pertinent saying that the Californian lives in his car.

If there is any logic in building for this wandering Californian, an economical, enduring, comfortable and convenient home, merely to be used as a parking place between motor trips, surely we can find ample justification for an equal anxiety on his behalf when it comes to constructing the roads on which he spends practically all of his waking hours. That anxiety has been manifested, if we may judge from the excellent roads that now reach into every remotest corner of the state.

Not only have countless miles of new wide, smooth roads been added to existing highways through the efforts of the California Highway Commission, but old roads are being overhauled, resurfaced, and straightened, so that the restless Californian and his visiting friends may ride with the greatest degree of enjoyment. Modern methods and modern materials are rapidly eliminating the last vestige of riding discomfort, and nothing, in fact, is being overlooked that might make the beauty spots of the Golden State more easily accessible to its multitudinous travelers.

One of the greatest contributions to the ease and welfare of the fastidious motorist has been the introduction of the asphaltic surface. Aside from the savings in initial and maintenance costs, there are many other advantages to be derived from the asphaltic-concrete type of highway. Some of these are more or less aesthetic, but are very tangible to the highway patron nevertheless. When properly constructed, such roads are skidproof, and being

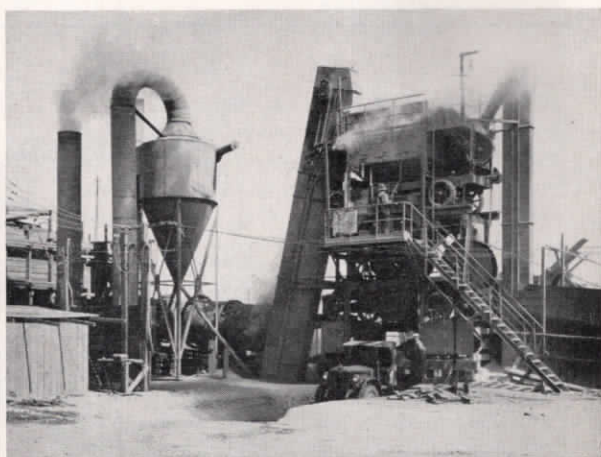
of a resilient nature, they absorb the vibrations and minor shocks that would normally be absorbed by the aforesaid fastidious motorist. The dark color does not reflect the sun's rays, and our friends' eyes are protected accordingly. Such roads are smooth, dustless, promote silent travel, and have no protruding joints to jar the motorist out of his reveries. They do not wear tires as do harder, more abrasive surfaces, and in fact they have so many advantages and so few disadvantages that it is difficult to see how the veriest skeptic could fail to be impressed.

So far as the economics of road building are concerned, it is a fact that asphalt roads can be more quickly constructed than the cement type. They can be much more cheaply and conveniently repaired, and have a durability beyond question. The asphaltic bonding of the road materials imparts elasticity and resilience to the entire mix, thus enabling it to recover promptly from shocks that would crack or permanently injure more rigid structures. And asphaltic type highways can be patched when necessary with such facility and so little ostentation that their increasing adoption in California is rapidly reducing the holdings of that acquisitive Frenchman, "De Tour."

A classic example of the fine work that has been done on behalf of the motorist in California by the State Highway Commission is the renewal and resurfacing of a six-mile stretch of road in San Mateo County between San Mateo and Redwood City. This work, just completed, was performed by Basich Brothers of Torrance, California, and consisted of widening the existing roadbed and resurfacing old paving with asphalt. To the layman such an assignment merely means another detour for a while, but to the contractor it is a period of intense activity.

On this particular job Basich Brothers used the finest modern methods and equipment, as may be seen from the illustrations accompanying the story. The work consisted first of widening the existing highway, and building it up with a base of crushed rock. The base, having been firmly bound and leveled by watering and rolling, a surfacing course of asphaltic-concrete was then added to complete the roadway. Oiled shoulders were extended to a width

Below: Rolling of slurry coat, prior to laying asphaltic-concrete base course. One of the essentials of modern road building is the laying of a substantial foundation before the surface is applied.



Above: Hot plant in which the asphaltic-concrete is produced.

Below: Dumping hot asphaltic-concrete for leveling course preparatory to spreading and rolling.

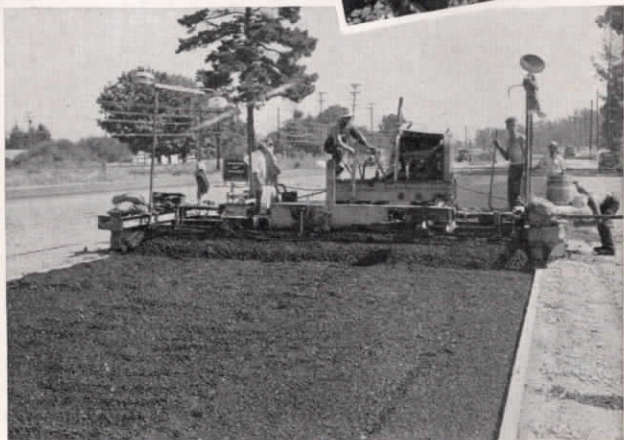


Left: F. E. Montell, resident engineer, California Division of Highways, studies plans during construction of San Mateo-Redwood City project.

Right: F. C. Williams, office manager, Basich Brothers, contractors



Below: Finishing machine applying leveling or surface course.



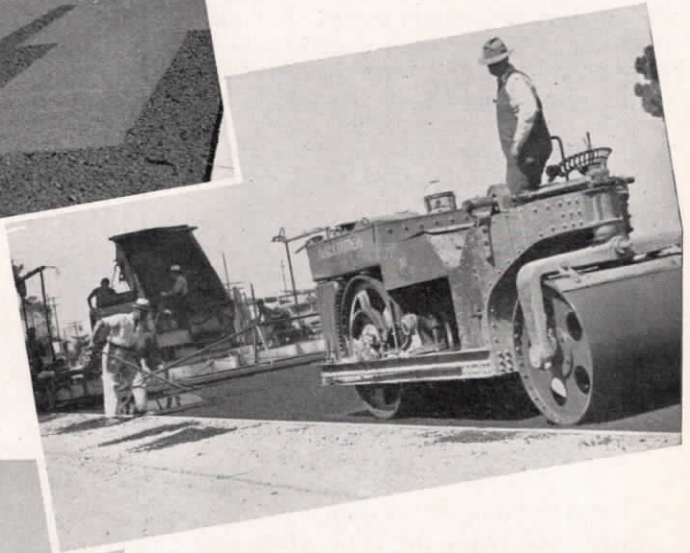
Right: J. R. Weaver, superintendent in charge of construction for Basich Brothers.





Above: Rolling the leveling course—the actual riding surface.

Below: Another view of construction operations, showing finishing machine and roller in action.



Left: Looking for high spots during rolling operations. The machine in left foreground detects irregularities in the surface.



Above and left: Two views of the completed highway. This is the type of road that lures tourists to California, and makes travel a pleasure.

of about eight feet on either side, and the edge of the road graded beyond that.

Adequate shoulders are an important essential of present day road building. They are more than a mere convenience, established for the motorist who wishes to pause by the wayside. They are a valuable contribution to the elimination of travel hazard. In these days of fast travel, when every motorist is in a tremendous hurry to get somewhere so that he can hurry back again, the thoughtless individual who stops on the main highway is merely asking for trouble. The shoulders are the only safe refuge for crippled, tired, or rest-seeking

motorists, and one would be just as safe sitting on the railroad track in an automobile, as on any main thoroughfare in these times, when speed seems so essential.

To return to our main topic, however, the new highway from San Mateo to Redwood City is a credit to the California Highway Commission, and to Basich Brothers, its builders. Finally, it adds one more inducement to the wandering Californian, to step into his latest model, and under the smooth impelling influence of winter '76, roll along comfortably and enjoyably over a mighty interesting section of a mighty interesting state.

Colusa Agent Wins Award

M. B. Lewis, agent at Colusa, last month won first prize for the most original display at the Colusa County Fair with a miniature Union Oil Company derrick, with pumping equipment which threw a continuous stream of Triton motor oil.

Hundreds of visitors to the fair visited the booth and watched the display in actual operation, and much favorable press notice was

given the miniature well during the fair.

Lewis, besides being Union Oil Company agent at Colusa, is an official of the Colusa County Chamber of Commerce, which sponsors the annual event. Since the close of the fair he has received numerous requests from merchants to display the exhibit in their show windows, and at present it is in the Colusa Chamber of Commerce building.



M. B. Lewis, agent at Colusa, won first prize for the most original display at the Colusa County Fair recently with the above exhibit.



EXECUTIVE COMMITTEE* AND OFFICIALS

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FOR the American petroleum industry, 1937 was a year of new records. It was outstanding also in that a high degree of orderliness prevailed despite unprecedented activity. Once again the industry's traditional ability successfully to meet the tests of changing conditions functioned to provide for its customers quality products and efficient service at reasonable prices.

The nation's approximately 30,000,000 motorists used their vehicles to a greater extent than ever before, consuming more than 22,000,000,000 gallons of motor fuel. This volume is sufficient to propel their vehicles an aggregate distance of 330,000,000 miles, or about 80,000,000 miles farther than estimated travel in 1931, the pre-depression peak year for highway transportation.

Prices of petroleum products continued low, government indices indicating a level of nearly 40 per cent below normal, as against an advance in the general commodity price level to within 11 per cent of normal. Due to reductions in gasoline prices totaling 50 per cent since 1920, some \$3,000,000,000 was saved to motorist customers in 1937 alone. However, nearly a third of these savings was taken from them in federal and state gasoline sales taxes which, estimated at close to \$1,000,000,000, also established a new record.

Employment and pay rolls improved. Generally speaking, the industry's employes continued to be among the highest-paid industrial workers.

Relatively stable crude-oil prices and con-

tinuing large production brought a measure of prosperity to the oil-producing areas. Domestic crude-oil production for 1937 is estimated at 1,280,000,000 barrels as against 1,098,516,000 barrels in 1936, until now the all-time peak year. Approximately 7,000 more wells were drilled in 1937 than in 1936. Total completions, estimated at 32,500 wells, were only slightly fewer than in the record year, 1920. Of these wells, 26,200 were productive either of oil or natural gas.

Production, discoveries, and completions were such during the year that reserves of petroleum in the United States remain at a satisfactory level. Improvements in drilling and production technique, the restoration of older fields and prolongation of the productive life of newer oil areas, plus the functioning of state conservation laws under the guidance of the state officials aided by the Interstate Compact Commission, augur well for the future.

Additional confidence may be found in progress in the science of refining, with more and better refined products being obtained from given quantities of crude. During 1937, with demands at new peaks, refiners ran to stills 1,180,000,000 barrels of crude oil, or only slightly more than 100,000,000 barrels above 1936. Crude oil stocks, as of December 31, 1937, are estimated at 302,000,000 barrels, up about 10 per cent from 1936, and some 107,000,000 barrels below the all-time peak, October 31, 1929.—Axtell J. Byles, president, American Petroleum Institute.

TWELVE SAFE WORKING YEARS

TWO flags hung limply on the pole in front of the Rosecrans Absorption Plant office. The top one was the American flag; the bottom one a green and white Union Oil Company safety flag.

A slight breeze passed across the Los Angeles Basin; lifted the folds of the bunting, and the number 12 came into view on the pennant.

Over 12 years of operation without a lost time accident—that is the record at Rosecrans! And next June, even though to the superstitious the number is a bad omen, the men at Rosecrans expect to see this number replaced by a "13."

Twelve-and-a-half years without a lost time accident, even in the safety-conscious Union Oil Company, is some record. There are some who would attribute it to luck—luck that in all

that time no one has been injured. But take a trip to Rosecrans and talk to the men there. They'll take that idea out of your mind—simply by watching their work, and constantly practicing safety. They are proud of their record, and don't intend to let anything spoil it.

H. L. McCarty, superintendent of gas operations in the Dominguez field, has recently taken over supervision of the Rosecrans plant. Under him, and in more intimate contact with the plant, is R. H. Day, his assistant. But behind these two is a long line of superintendents. The record began back in 1925 when R. D. Gibbs, now manager of gas operations, was in charge of the plant. After Gibbs came L. C. Johnson, and following him Reg. Keans, only recently transferred to the head office. But under these men, who are always conscious of the need for

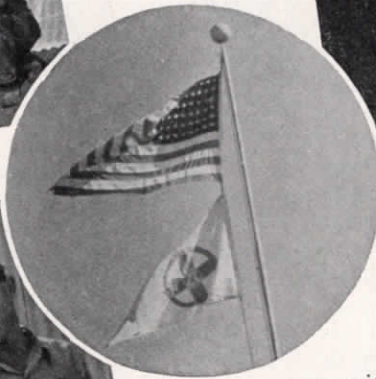


Above: T. R. Coveny, Jr., mechanic's helper.

Right: H. L. McCarty, gas foreman at Dominguez and Rosecrans fields.



Below: H. J. Boardman, mechanic's helper.



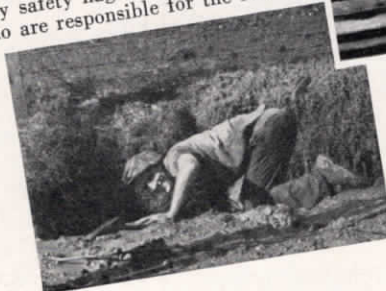
Circle: Under the American flag at Rosecrans absorption plant flies a Union Oil Company safety flag—around it are the men who are responsible for the record.



Above: Royal H. Day, assistant to McCarty at Rosecrans, and Ford Pyle, senior plant mechanic.



Left: C. O. Katzenberger, mechanic's helper.



safe working conditions, are others who are perhaps more important to the making and keeping of records because it is their job to be in actual contact with those things that might cause accidents.

One of these is Ford Pyle, senior plant mechanic at Rosecrans, and to him go words of praise from all the superintendents. Ford has been thoroughly safety-minded since he started to work and to him the record is almost an obsession. And he is the one who can tell you just what is responsible for that record.

In the first place, and most important, Ford says, you must plan every move of every job ahead of time, then you aren't bothered by situations that arise during the progress of the work at hand. A second consideration is to have a clean and well arranged plant, and to know the plant thoroughly. Thirdly, it is necessary to have a staff of well-chosen and capable

men, and he points to his own crew, composed of H. J. Boardman, T. R. Coveney, Jr., and C. O. Katzenberger, all mechanics' helpers, as a model example of just what he means in this regard.

"Of course," he said, stooping to pick up a hoe and stand it carefully against the wall, "you have to be careful all the time—and think about what might happen if you don't watch yourself. But if everybody works together and tries to eliminate accident hazards it's easy to keep a safety record."

Pyle's summary covers practically everything that might be said on the subject. So there you have a formula for safe working conditions, and the next time you pass the Rosecrans plant notice the safety flag—not for itself, but for the record that stands behind it. And inwardly you will compliment the men who have made that record possible.

Crow Meets Dog for Oil Field Title



Bill Giltwedt presents the champion and the challenger with a bar of candy—and all is quiet on the Santa Fe Springs front.

Early last month a crow flew into the yards at Santa Fe Springs and perched boldly on the radiator of Frank Boyd's car. Attempts to scare the bird into flight again failed. Insolently climbing to the radiator cap the crow ignored its tormentors.

That is, until Suzy the pup passed by. At first the two played together, then Suzy got rough. That started things. The crow opened a whirlwind attack that soon had Suzy dizzy

dodging dynamic thrusts of the bill. To pacify the two Bill Giltwedt bought a candy bar which apparently put them on good terms again and all was well until the crow entered Clarence Froome's office.

Some time after Pete Irwin managed to capture the bird it was found that it belonged to a resident of Los Nietos, who revealed that the crow frequently went on oscine toots peculiar to the genus *Corvus* and its allies.

PATTULLO BRIDGE OPENED

By S. G. HORTON

Sales Promotion Supervisor, Vancouver

ONE of the outstanding spans of the Pacific Northwest, designed to handle more adequately the ever-increasing stream of motoring vacationists to and from the south, the Pattullo Bridge at New Westminster, British Columbia, was dedicated November 15 with dignitaries from all parts of the Dominion participating in the ceremonies.

The new bridge provides four traffic lanes, and is of rugged construction so that it can carry safely heavy trucks and stages weighing as much as twenty tons, and includes a six-foot sidewalk along one edge for the convenience of pedestrians.

Interruption of the flow of traffic, caused by the raising and lowering of a drawbridge on the old structure, has been eliminated in the new span, which towers 146 feet above the Fraser river, high enough to allow for passage of river vessels without "breaking" the bridge. The steel framework stretches 2,450 feet in crossing the river, and the removal of existing buildings along the approaches has provided for an attractive bridgehead park area.

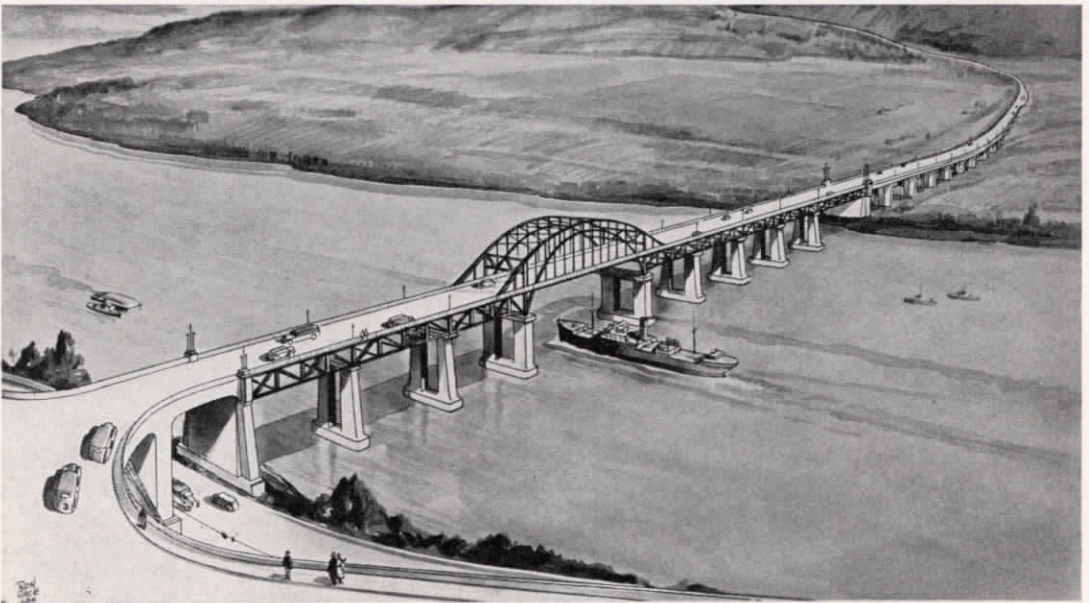
The main steel spans are supported on twin piers of reinforced concrete which in turn rest on concrete caissons sunk into the bed of the

river to depths of from 35 to 65 feet. The lighter sections are carried by twin piers on pile foundations carried well below river bottom.

Some idea of the magnitude of the project may be obtained from the quantities of materials used. Some 53,000 tons of structural steel, 1,815 tons of reinforcing steel, 62,000 cubic yards of concrete, 96,000 barrels of cement, and 1,046,000 board feet of timber helped to make up the bridge, the estimated cost of which was close to \$4,000,000.

The new bridge is named in honor of the premier of British Columbia, the Honorable T. D. Pattullo, who delivered the main address at the dedication ceremonies, opening the span by severing a silver chain with a blow-torch.

Construction of the Northwest's newest bridge was carried out by the Dominion Bridge Company, Limited, under the direct supervision of the Chief Engineer of the Provincial Department of Public Works, and W. G. Swan, C.E., M.E.I.C., who was also the designing engineer. The Northern Construction Company and J. W. Stewart, Limited, were sub-contractors for the foundations, piers, and all onshore work.



The recently completed Pattullo Bridge at New Westminster, B. C., is one of the most beautiful spans in the west.



Left: Jack Bradshaw, of the Oleum Refinery, displays one of his prize "diurnal lepidoptera" butterflies to you. Below: Putting the finishing touches on a display.

ANOTHER OLOGIST

OLEUM is apparently a veritable hot bed of hobbyism. Recently we featured a day in the life of a refinery horologist; now, without warning, there pops into the lime-light an entomologist. Well, if these things do nothing more for us, they at least teach us how to spell the words.

Jack Bradshaw is our latest discovery, and his particular interest in the entomological world is that group of insects which goes by the exceedingly simple name, "diurnal lepidopterous." Don't be scared, however, they are just butterflies to you and me.

Jack has been chasing them for five years, and now has an exceptionally fine collection, including species from Oregon, Nevada, and California, all neatly cased and classified. He has gathered over a hundred different specimens, some of them very rare, and others that are not so scarce but can only be caught during very short intervals at certain seasons of the year. All of them have been dried and mounted with the delicate care that is necessary in handling these fragile insects, and Jack is now equipped to tour around and lecture on his highly interesting hobby, which he does, incidentally, when properly persuaded.

Side by side in cotton-filled, glass-covered frames, he has arranged a colorful and highly educational display of lepidoptera (see how quickly we become familiar), that would be worthy of the study of any aviator, and constitutes a real data source for the student of this particular phase of entomology.

Jack is not too highbrow, by the way, to indulge in less aesthetic forms of amusement, and when the butterflies have all gone to bed, he is frequently to be found umpiring a game

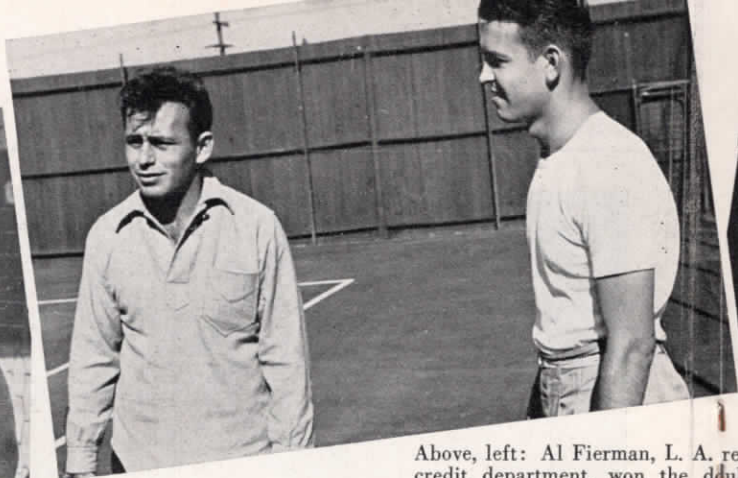


in the Oleum softball league. He is also secretary of the Oleum Employees Workmen's Council.

Whifflepoofs Squelch Whizbangs

The Oleum Refinery Whifflepoofs smashed out a terrific 7-2 victory over the San Francisco Office Whizbangs last month to retain their record of never having lost to the city slickers. The grueling battle was the last of the 1937 baseball season.

Following the battle the players and rooters retired to the south lawn of Norval Myers' residence, where, in disposing of a Dutch lunch, a perfect performance completely atoned for the baseball boners.



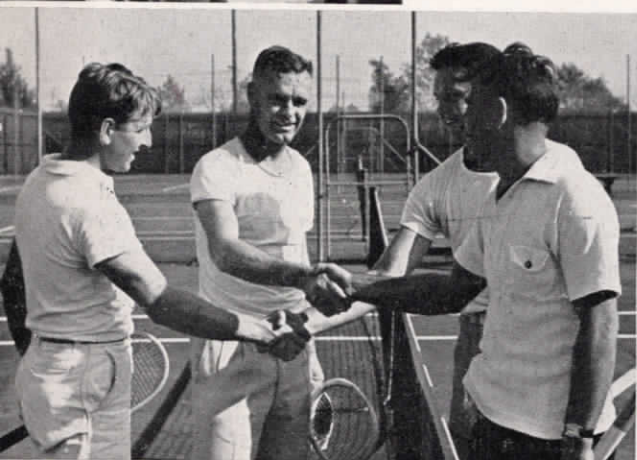
Above, left: Al Fierman, L. A. re-
credit department, won the doubles
title here about one year ago.

Above, right: W. K. Hopkins and
Fierman discuss the technique of the game with
Purinton.



Above: W. K. Hop-
kins, manager of in-
dustrial relations
and personnel, pre-
sents the trophies.
Cash Belden is en-
titled to the expres-
sion of satisfaction
—the tournament,
under his direction,
was a distinct
success.

Left: George Pur-
ington, Union Ser-
vice Stations, was
runner-up in both
singles and doubles,
but seems to be well
satisfied with his
“take” as one of the
company’s outstand-
ing “racquetees.”



Above: George Purington and R. D. Gibbs congrat-
ulate Fierman and Pivaroff, winners of
the doubles finals.

Right: K. S. Pattison, winner of the consolation
tournament, receives the congratulations of
T. L. Stromberger, runner-up.

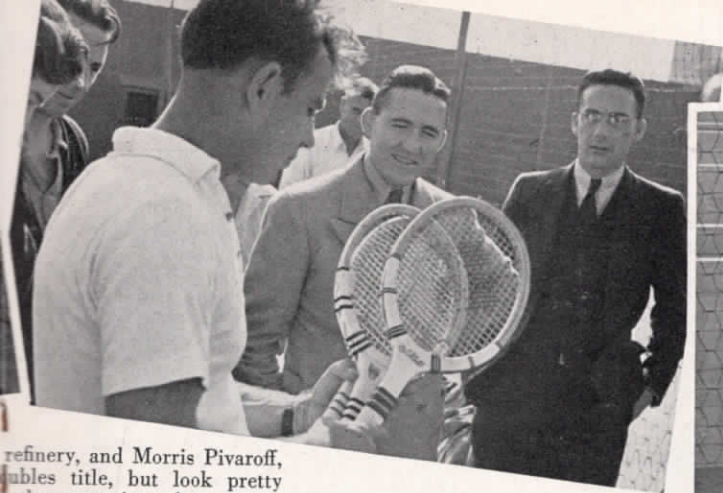


TENNIS TOURNA

THE annual Union Oil Company Tennis Tournament came to a successful close November 27 after five weeks of competition when Al Fierman, of the Los Angeles Refinery research laboratory, defeated George Purington, Union Service Stations, 6-4, 6-4 to win the men's singles title for the third successive time and take permanent possession of the President's Trophy.

Both Fierman and Purington, seeded players, experienced little difficulty in the opening rounds of play, but the final match was a see-saw battle throughout the two sets. Purington, although beaten, displayed perhaps the better form throughout, and by his court strategy gave Fierman a struggle not evidenced by the score, but the steadiness of his opponent overcame his efforts. The match was characterized by the speed of the drives and the accuracy of placement by the contestants.

In what was the most closely fought and uncertain match of the day, Fierman, aided by Morris Pivaroff of the head office credit department, carried off doubles honors when they barely nosed out Purington and his partner, R. D. Gibbs, manager of gas operations, in a three set match. The final scores were 7-5, 5-7, 6-2, and show the closeness of the match.



refinery, and Morris Pivaroff, doubles title, but look pretty that went into the net.

and Cash Belden discuss the with Champ Al Fierman.



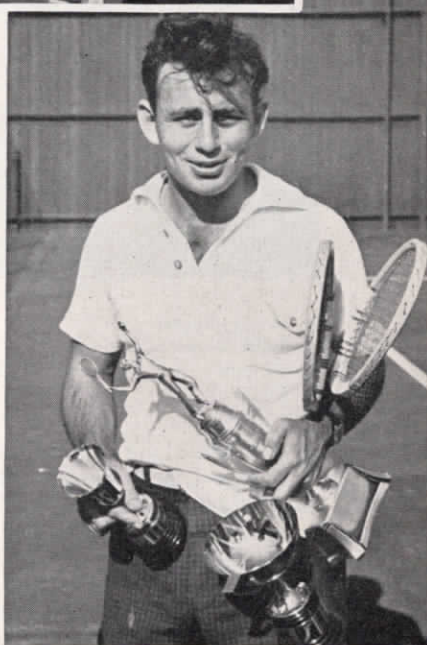
Above: R. D. Gibbs relaxes after a grueling finals match in which he and his partner, George Purington, gave a good account of themselves but had to be satisfied with the "runner-up" trophy.

TOURNAMENT ENDS

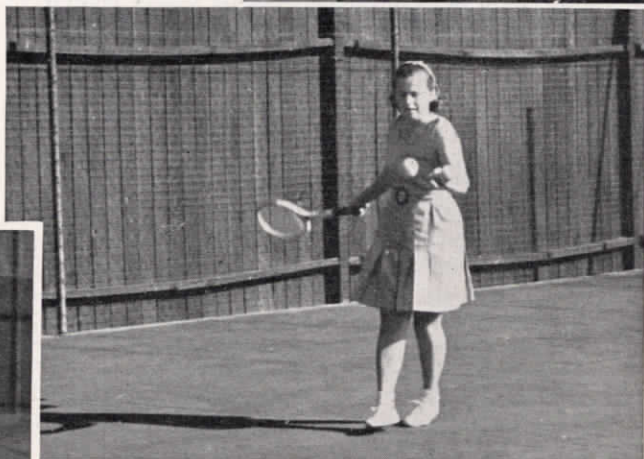
Although not up to the standard of play set in the championship flight, the consolation matches provided many exciting moments. All players were well-matched, and this resulted in close competition throughout the tournament. In the consolation finals K. S. Pattison, southern division sales, defeated T. L. Stromberger, assistant advertising manager by a 6-1, 6-2 score.

Whether or not it was because they played a better game of tennis, the women's singles contestants never lacked a gallery. Eleven of the more intrepid souls braved the early morning chill to vie for the championship cup, and when Bette Robbins, southern division sales, met Angie Copeland, fuel oil and asphalt sales, in the finals it was a high spot of the entire tournament. Before the largest audience to watch any of the matches, Bette emerged with a 6-3, 6-1 win over Angie.

At the close of the final matches W. K. Hopkins, manager of industrial relations and personnel, presented the cups to the various winners. Seventy-six employees engaged in the tournament, and the fine spirit of co-operation and the high level of sportsmanship evidenced throughout made the 1937 matches outstanding in the history of the annual event.



Right: Al Fierman, three-time singles winner of the Union Oil Company Tennis Tournament, takes possession of the President's Trophy, among other things.



Above: Bette Robbins, who again won the women's singles title, keeps her eye on the ball.

Left: Bette Robbins and Angie Copeland, women's singles finalists, pose for the cameraman.





Left: Smoke clouds obscure the further hills as flames ravage South Mountain at Santa Paula. Two oil derricks can be seen through the haze.



Above: Over 12,000 acres were left in this condition when the flames were brought under control.

Below: A few of the men who helped battle the fire. Left to right: J. A. Jones, J. F. Brooks, H. L. Hyde, C. E. Robertson, C. L. Eastburn, Union Oil Company field workers.



FIRE MENACES SANTA PAULA

FLAMES along a fifteen-mile front recently swept over a large area in the vicinity of Santa Paula, burning over 12,000 acres of farm and brush land, destroying a valuable watershed, and menacing the town itself. Although none of the derricks were burned, damage was estimated at \$62,000,000.

Said to have been started by sparks from a bean thresher, the fire was first reported by the Oat Mountain lookout station at 1:28 a.m., and by early afternoon had extended along fifteen miles of the ridge to the south of Santa Paula. Crews were hurriedly organized to combat the flames, and just when it seemed that the blaze might be brought under control an east wind swept it over the crest of South Mountain and down into the oil field where 96 derricks were endangered. Vigorous efforts on the part of the fire-fighting crew and the county fire department brought the conflagration under control on the second day. Over four hundred men fought the flames on the first day, with 200 relief firefighters adding their efforts on the second day of the blaze.

Union Oil Company protective measures

consisted of putting one man on guard at each well, and aiding in supplying men to the general crews. Thirteen men, J. F. Brooks, C. R. Austin, E. L. Gooley, C. L. Eastburn, A. W. Wike, H. L. Hyde, W. J. Smith, Ervin Blackshear, C. E. Robertson, J. A. Jones, Guy Tate, Carl France, and Louis Wagner, were engaged in the first day's battle.

Burning to within a mile of Santa Paula itself, the flames destroyed the South Mountain watershed, leaving a possibility of flood should a heavy rain fall in that area. Because of this it is planned to replace the burned vegetation by re-seeding the land from the air with mustard seed and clover.

While the fire caused extensive damage as it swept down through the oil fields towards Santa Paula, it is felt that the consequences would have been much more serious had it not been for the actions of the quickly organized fire-fighting forces of which Union Oil Company employees formed an important part. Much valuable property lying in the path of the flames was saved by the prompt action of these bodies.



Left: A busy section of the dance floor as seen from the orchestra leader's platform.



Right: Miss Gladys Lindsay, representing the executive department, seems to be enjoying herself.



Right: Annette Frinier is determined to make the fountain pen flow so that she can sign up for the next dance, but Dorothy Howard is not so hopeful about it.



Above: Dorothy Landry Howard, dance chairman, reaches into the box and out come two tickets for the U. S. C. - U. C. L. A. game.

Girls Club Holds Football Dance

The closing of the 1937 football season set the motif for the Union Oil Girls Club dance held December 3 at the Riviera Country Club. Over 550 attended the affair. The door prize of two tickets to the "Biggest

Game"—U. S. C. versus U. C. L. A., in case you didn't know—went to J. C. Radford of the refineries department. Dorothy Landry Howard of the personnel department was chairman of the affair.

L. A. Plant Holds Tournament

Thirty-four entrants provided plenty of competition and fine tennis for the first annual Los Angeles Plant Tennis Tournament held on the Griffith Park courts during the month of November. Competition in both singles and doubles was held. Winner of the plant singles title was L. G. Stave, tank truck salesman, who, at the same time was playing through four rounds of the annual company tournament at the Los Angeles Tennis Club. Runner-up for the singles title

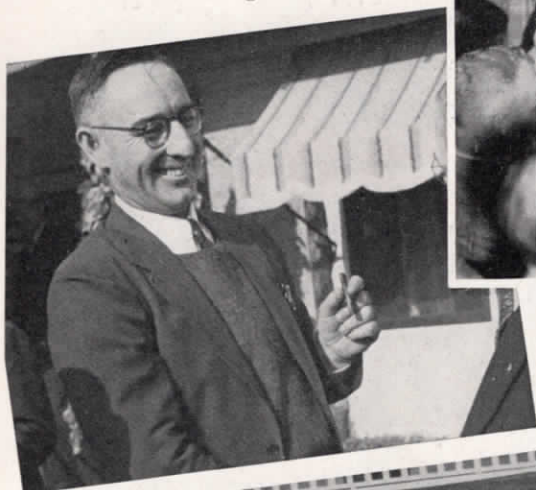
was Don Carr, also a tank truck salesman. Doubles honors went to Stave and his partner, Dick Hall, dockman, with second place title going to Carr and Art Roseman, assistant Superintendent of the plant. Trophies were awarded at the banquet for L. A. plant employees held December 4 at McDonald's. The trophies were replicas of products manufactured at the plant, for the most part Triton cans. L. C. Hampton, superintendent, made the presentation.

CHRIS RECTOR HONORED—

Below: Employees of the operating departments surprised Chris Rector at the Dinner Bell Tavern recently, where, with R. D. Gibbs as master of ceremonies, he was presented with unique tributes of their regard.



Above: In sealed Triton cans Chris found a moving picture camera, projector, and screen. Here he is shown taking his first shot.



Right: Joe Neuls, entomologist, is just wondering if his electric razor did a good job.



Left: Chap Perry, Clare Gard, and Harold McCarty watch for the birdie.



Below: Clarence Peck relates to L. H. Tanquary a new version of the old yarn about the traveling salesman.



Above: Bill Hay, Charlie Miller, and Vivian Washbon, renew old acquaintances.



—BY FELLOW EMPLOYEES



Left: Mrs. Ada Juhl who took care of the arrangements. Who says a woman can't keep a secret!

Right: Lyman Scheel, Henry Brett, and Bill Hopkins, take part in the post mortem.



Right: Homer A. "Cy" Delaney exhibits his profile for the camera-man.



Right: R. N. Brown is telling how completely Chris was surprised.



Above: The Keans brothers, Reg and Harold, found an opportunity to become acquainted again.



Above: Among the delegates from the head office were Ed Ragatz and Earl Gard. They evidently enjoyed the affair.



Above: The serious expressions here would indicate that Henry Grinnell (left) is discussing an over-expended A. F. E. with Roy Hornidge.



Left to right: J. T. Howell, O. I. Wooldridge, Union Oil Company, Assistant Chief Berkholz and Chief W. R. Williams, Fresno Fire Department.

HOWELL ADDRESSES FRESNO MEETINGS

There were recently staged at Fresno, under the direction of Chief W. R. Williams of the Fresno Fire Department, two joint meetings of city firemen and Union Oil Company employees, to hear and see John T. Howell, fire protection engineer, in an exposition of the fundamentals of fire and fire prevention.

Chief Williams is a staunch advocate of closer co-operation between civic fire-fighting forces and those of the petroleum industry. He arranged these meetings in order to give his men and Union Oil Company men an oppor-

tunity to hear Howell's paper on "Causes, Prevention, and Control of Petroleum Fires." This paper had been presented a short time previously at the annual congress of the National Safety Council in Kansas City, Mo., and was hailed at that time as the finest thing of its kind ever presented before that body.

O. I. Wooldridge, district sales manager of Union Oil Company at Fresno, and Assistant Fire Chief Berkholz, led the lively discussions that followed the Fresno meetings, both of which were well-attended.

FIELD DEPARTMENT TRANSFERS



K. R. Evans

Field department transfers effective December 1 last month brought Dean H. Sheldon from the coast division at Santa Maria to the head office, and took K. R. Evans, assistant engineer, from the head office to the Santa Maria field. Evans, in his new location, will serve as assistant to B. R. Griffith, district engineer. Sheldon has been assigned to general engineering duties at the head office.



Dean H. Sheldon

SERVICE STATION DANCE

Lured by the promise of a good time and generous money prizes—twenty bucks, no less—approximately three hundred employees of Union Service Stations and their friends attended a "Hard Times Dance" at the Riverside Drive Breakfast Club, December 16.

In perfect harmony with the spirit of the affair and the current "business recession," the costumes of the dancers adequately refuted statements that the depression is over.

It was after the judging, however, that the real significance of "hard times" became evident. An impressive roster of arbiters passed on all costumes, and their combined good judgment selected Mr. and Mrs. Alfred Muhlethaler as the best-dressed couple, D. C. Worth as the best-dressed man, and Mrs. Tony Carleton and Mrs. Douglas Joy as the best-dressed ladies—the two ranking so highly in the

judges' estimation that it was impossible to make a choice between them.

When the prize-winners lined up to receive their awards, Earl Evans, superintendent of field No. 205, stepped forward and assumed a position on his hands and knees. He then solemnly invited each winner to be seated upon his back, and receive the requisite number of "bucks."

The Hard Times dance marked the first time that the service station organization has entered the field of social activity and the success of the event has led to plans for making the dance an annual affair.

That the dance was acclaimed as one of the most outstanding that has been given recently by any employee group is due largely to the efforts of Frank Sheehan, manager of service station No. 122, who was in charge of arrangements for the affair.

Below: Mr. and Mrs. Douglas Joy pose with "Junior," who seems to be coming apart in their hands. Mrs. Joy won one of the prizes as the best-dressed lady at the dance.



Below: Earl Evans, superintendent of field No. 205, prayerfully hopes that Mr. and Mrs. Alfred Muhlethaler do not have to go through life wearing the same clothes in which they won the prize as best-dressed couple, but L. B. Patterson, personnel supervisor, southern region service stations, gives both his blessing.



Above: All of the dancers watch the birdie for a moment.



Right: Frank Sheehan, manager of Union Service Station No. 122, and chairman of the dance, is evidently pleased with its success.



UNION GUN CLUB'S—



Left: Signing up at the entry desk for another chance at that Thanksgiving turkey.

Below: The ladies were not only just as enthusiastic but were also as accurate as the mere men.



Above: "Bee" Burgess exhibits interest in a fine high-power rifle.

Right: L. J. "Jake" Jacobson arrives with the targets for one of the special events.



Below: Pete Conner shatters a clay bird as nonchalantly as he carves a barbecue steak.



Above: Dugie Kimmell can't bear to look while Howard Said is shooting, so he turns a smile at the photographer.

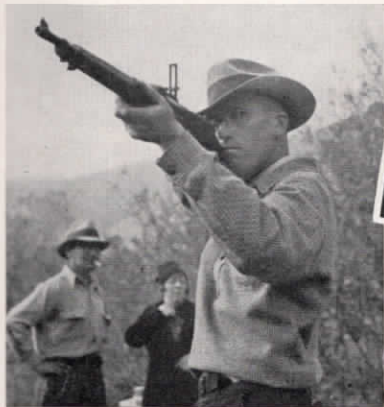


Above: One of the attractions of the show was this young acrobat who could see all the events at the same time from his elevated stance.

—ANNUAL TURKEY SHOOT

Right: The trap-shooters attracted a large gallery throughout the day.

Below: Jim Hill, club president, takes a sight with his high-power rifle.



Right: "John D." Rockfellow is somewhat startled and surprised to find that he has actually hit a clay bird.



Above: Fred Gale, one of the turkey winners, shows another high-power rifle technique.



Left: Ray Gale must be shooting at a far-distant target. Observe the gentleman in the rear with the field glasses.



Above: A group of experts compare weapons.

Below: "Swede" Larson can't be bothered with such an insignificant detail as a trigger.



DIVISION MANAGERS MEET

IN ANNUAL convention, division managers and other sales executives convened at Oleum refinery on Monday, November 29, where two days were spent in an interesting study of the plant. Under the direction of N. F. Myers, assisted by C. F. Adam and Tom Ott, the group numbering about thirty were treated to a fine exposition of the intriguing processes that are everyday routine at the refinery. Alternating between the research laboratory and the various operating units, the methods by which Union Oil Company products are segregated, refined, packaged and shipped, were clearly defined, and such incidentals as might have escaped observation were brought out vividly in a series of excellent talks by Messrs. Myers, Adam, Ott, and their aides.

This trip to Oleum proved to be one of the most interesting yet experienced by the visitors, since it furnished an opportunity to view the newly constructed crude distillation unit, and permitted them to witness the propane

solvent refining plant making Triton. It was, in fact, productive of much information that should be of direct service to them in their own processes, and proved beyond question that the boys at Oleum are fine hosts.

Following the Oleum interlude, the group converged on Los Angeles, and engaged in an intense three-day business session, at which J. B. Williams, manager of operations, officiated as chairman, and H. D. Seeley, assistant to the manager of properties and facilities, acted as secretary.

During this particular session, much time was devoted to the discussion of methods of sales promotion, and sales education. The group was fully occupied with matters of business until Friday evening, when they were entertained at the home of A. C. Stewart, manager of Union Service Stations.

Beginning Monday, December 6, the division managers began a fresh series of private meetings that kept them busy for another week.



Left to right, back row: S. D. Herkner, division sales manager, central division; H. D. Seeley, assistant to manager of properties and facilities, meeting secretary; H. H. Ramsey, division sales manager, northern division; J. B. Williams, manager of operations, meeting chairman; W. A. Newhoff, manager of refined oil sales; A. C. Stewart, manager of Union Service Stations; R. Cubicciotti, manager of lubricants and special products; A. P. Bennett, division sales manager, Union Oil Company of Canada, Ltd.; W. F. Lewis, operating manager, southern division; and T. A. Power, division accountant and operating manager, Union Oil Company of Canada, Ltd. Front row: O. J. McGuire, operating manager, northern division; Roy Linden, division sales manager, southern division; M. W. McAfee, division manager, southern division; V. H. Kelly, director of sales; F. W. Pemberton, division manager, central division; O. Berg, Jr., division manager, northern division; R. J. Kenmuir, division manager, Union Oil Company of Canada, Ltd.

TIME MARCHES ON!



Shown here is the Stockton High School football team, vintage of 1906, on which S. D. Herkner, now division sales manager at San Francisco, is billed as tackle, halfback and fullback. Sid is shown at the extreme left in the back row—and also, in a more recent picture, in the inset at right.

Introducing—

T. H. Stevens, assistant division accountant for the Canadian division at Vancouver, B. C. "Tommy" began his career as an articled clerk in a firm of average adjusters at Lloyd's, in



T. H. Stevens

London, England, and, coming in contact with commercial firms from all parts of the world conceived a desire to travel. After an adventurous career in widely scattered sections of the globe he landed at Nanaimo, B. C., and some time later, in 1922, to be exact, became warehouse and office man with the Union Oil Company of Canada. Since that time he has risen steadily to the post he now occupies, assistant division accountant.

Anderson Wins Tourney

Seven strokes separated A. W. Anderson, Comptroller's department, from his nearest rival when he toured the municipal links in a snappy 77 to win the golf championship of the



A. W. Anderson

Supreme Pyramid Sciots' convention held in Long Beach recently. Anderson is a member of Huntington Park Lodge 48 of the organization.

He has long been known as an ardent golfer, and is always on hand at Union Oil Company tournaments where he consistently plays a good game—as might be expected from the score with which he won the Sciots' tournament.

Twenty Years



George N. Bailey
Mfg., Oleum



A. D. Gassner
Sales, No. Div.

Service Emblem Awards



EVERY month there are listed in the last few pages of The Bulletin the names of the employees who have devoted ten or more years of their lives to Union Oil Company. These men are occupied in every diversified phase of our business, represent every worthwhile type of humanity, and yet it is a safe bet that they are all actuated by precisely the same aspirations and ambitions. Men who stick to their jobs through long years are not normally exerting themselves for personal aggrandizement, or for mere gratification of some selfish whim. Altruism is the motive behind this type of continuity—adequate provision for families and dependents, and future security for families and dependents. These are the aims that promote sustained enthusiasm, and sustained effort. And that in toto is the reason we should especially recognize the old-timers. Sustained application for a worth-while objective is always worthy of recognition.

This month the roster is composed of sixty-nine employees, ten of whom have completed twenty years of service.

GEORGE N. BAILEY

Heading the twenty-year list, at least alphabetically, is George N. Bailey, lead fitter at the Oleum refinery, who was first employed in the old construction department at that point. Transferred to the manufacturing department after about three months of construction experience, George was quickly appointed asphalt stillman, in which position he remained for about a year. His bent for mechanics, however, finally took him into the pipe shop as a fitters' helper, and in 1931 he received a first-class fitter's rating, and has since also qualified as a first-class combination welder, through spare time study.

George occasionally serves as foreman of the pipe shop in Mike Del Monte's absence. In his moments of leisure he is addicted to fishing and hunting in almost any form, but still believes that his greatest enjoyment is derived from home study or the perusal of a good book.

A. D. GASSNER

Nell, Belle, Jack and Duke are names vividly associated in A. D. Gassner's mind with the

Twenty Years



G. R. McConnell
Field, So. Div.



H. O. Lester
Mfg., L. A. Refy.

early days of his Union Oil Company employment. To these romantic names answered the four-horse team with which he delivered products from the Willbridge plant in one of the old tank wagons back in 1917. Nell and Belle, in the manner of their sex, led the equine parade with Jack and Duke, also in the manner of their sex, following docilely behind. In 1918 he lost his teams by transfer and retirement and took over one of the new horseless wagons.

Since the beginning of the motorized era "Dee" has worked on almost all of the routes out of Portland, has gained an extensive knowledge of the surrounding country, and made many friends among the residents of the territory. Although he takes great pride in his record of developing sales, he is more interested in watching new developments in delivery equipment.

Dee has an unusual fondness for flowers, animals, and birds, and this is well demonstrated in his home life. Flower gardens entirely surround the house and the bird sanctuary which he has built, and a dozen or more chipmunks in a well-appointed outdoor cage eagerly await his return from work every evening.

HARRY O. LESTER

Considerable prior railroad experience was of decided help to Harry O. Lester when he was first employed by Union Oil Company in 1917 handling the loading and dispatching of tank cars, for through his knowledge of transportation he was able to introduce to the company the system of combining clerical details with the duties of loading and shipping, thus saving time and trouble on the part of both shipper and receiver.

Harry was transferred from Brea to the Los Angeles Refinery at the time the plant was built in 1919, and on July 1 of that year shipped the first tank car of gasoline from the new refinery. From head car loader he moved up to shipping clerk and from this post was promoted to his present one, carloader foreman.

Harry and President Roosevelt are both victims of the same fatal fascination—stamp collecting, and although Harry hasn't the opportunity to indulge his hobby as much as he'd like, he has built up a collection of perforates that would make any devotee envious.

GEORGE RAY McCONNELL

George Ray McConnell first was employed by Union Oil Company some time before 1908 as extra roustabout on a spare time basis, and then as a full-time roustabout. In 1913 he went into the teaming business on his own, but returned to the company in 1917 in the pipeline department. Transferring to the field department he drove the oil supply wagon for three years supplying the pumping and drilling wells at Richfield, and then worked as a derrickman and tool-dresser in the same field, later becoming a driller.

Another transfer brought him to the Huntington Beach-Long Beach production department as a well-puller.

The sea, the mountains, the country, and the bowling alleys all in their turn consume his spare time, with deep-sea fishing getting the biggest share. Deer hunting, however, has a sort of fascination that he finds difficult to resist, and an alfalfa ranch at Norwalk gives him an opportunity to display his talents as an agriculturalist. In the evenings, when he really has time to *spare*—or *strike*—he may be found

Twenty Years



M. J. Michel
Sales, Cent. Div.



M. J. McGarigle
Sales, Cent. Div.



Isaac Mayfield
Field, So. Div.

in the local bowling alley, practicing up for the Union Oil Company league.

M. J. MCGARIGLE

The location of Matthew J. McGarigle's first job with the Union Oil Company was at San Diego, where he was engaged as a warehouseman in 1917. He remained four years in the southern city, and in 1918 was appointed to the position of warehouse foreman, a position he held until 1921 when he entered the service station department.

During the next seven years he filled the jobs of service station superintendent and service station inspector both at Los Angeles and San Diego, then was transferred to Sacramento where he was re-assigned to the duties of plant superintendent in 1928. In 1932 he was again moved, this time to Fresno, where he is now plant superintendent.

Much of McGarigle's time with the company has been devoted to the training of men, and it is a never-ending source of delight to him to follow the careers of those men who received their first training under him. Baseball is his paramount spare time interest, and he can always be found engrossed in box score statistics during the playing season.

ISAAC MAYFIELD

Isaac Mayfield's employment record began the last day of 1917 when he started to work on the G & L lease near Brea as a boiler cleaner. After about a year of being on the inside looking out he transferred to the roustabout gang for two years and eventually became a member of the well-pulling crew.

Since then he has worked in the field department continuously, holding at various times such positions as pumper, well-puller and der-

rickman. Except for about ten months his entire employment career has been on the Stearns and Brea leases.

As is common with so many men who work outdoors, Mayfield's hobby likewise keeps him in the open either in pursuit of game or fish, and he is no slouch when it comes to bringing home what he started after—a full bag or a full creel.

MAX J. MICHEL

Max J. Michel was first employed at San Jose back in 1917 when that point was a district headquarters, and for over twelve years progressed through the ranks until he was finally transferred to San Francisco as a member of the sales promotion department.

After spending some time in San Francisco, the call to San Jose became pretty strong again and he was transferred back. He is now plant clerk at the San Jose sub-station.

Max is one of the best known employees in the district, and is held in high regard by all those who know him.

Although a graduate of Santa Clara University law school, Max is a rabid University of California football fan, and, while his associates claim there are times when he does not use good judgment in his wagers, none can contest the fact that he came out just a trifle ahead during the past season. His hobby, so he says, consists in enjoying life by any means and he finds a combination of good literature, good music, outdoor life contribute generously to his success in living.

YANCY PAULSON

All of Yancy Paulson's twenty years with Union Oil Company have been spent in the gas department, which he joined as a roustabout in

Twenty Years



Yancy Paulson
Gas, So. Div.



G. E. Reed
Trans., No. Pipe Line



V. H. Taylor
Safety, Head Office

1917, and in which he has risen to the position of plant operator A as he receives his third award for service.

From roustabout in the Orcutt field Paulson moved up to pipe-fitter helper and from there to pumper, which position he held when he was called to the colors. On his return he was again made pumper, and since that time has held the positions of fireman, operator, inspector, and operator A, coming from the Orcutt absorption plant to the Bell absorption plant in the process.

Aside from occasional trout fishing trips and long auto rides, which are minor activities, Yancy spends his spare time in the cultivation of roses, and has developed many beautiful specimens that are the envy of all his horticultural friends.

GEORGE E. REED

George E. Reed was literally baptized in oil the first night he started to work as a station gauger at Port San Luis twenty years ago. A break in a suction line had covered the old road to the station with oil, and since this was before the invention of the detour George waded through the petrolic product to arrive on time.

He worked at the Port station until he joined the army, and on his return was sent to the old "Thelma" heating station as engineer, whence he was later transferred to Avila as fireman. After a short period as fireman he became station gauger, and as such experienced the most exciting moments of his career during the tank fire at the Avila Refinery. Following his experience at Avila he worked in various capacities at Antelope, Summit, McKittrick, and Coalinga and returned to San Luis Obispo

in 1924 as dispatcher, the position he now holds.

Union Oil Company is accessory to one of George's hobbies—that of growing ornamental trees and shrubs in five-quart Triton cans. His other recreational pursuits are trout-fishing in the mountain streams, sea-fishing at Avila, clam-digging, and abalone-hunting, none of which, however, has any particular attraction unless he is accompanied by his son, Don.

VERNON H. TAYLOR

After attending the University of California, Vernon H. Taylor left and accepted a position as routine inspector at the Oleum Refinery. That was in 1917, and a short six months later he had enlisted in the army. On his return from service he again was employed at Oleum, this time entering the laboratory as chemist. Some time after he went to Brea refinery in the same capacity, and in 1921 was transferred back to the Los Angeles Refinery as stillman.

Four years in experimental work in the research and development department followed this job, and in 1926 he returned to the L. A. Refinery as cracking plant foreman, then held successively such jobs as treating foreman, cracking foreman, distillation foreman, and assistant to the superintendent of operations there.

In July of this year Taylor came to the head office as safety engineer, the position he now holds.

Many and varied interests occupy his spare time, and we are told that he has a thoroughly analytical mind, plays a steady game of bridge, serves a mean ping-pong ball or badminton bird, and is a gardener of no mean ability.

Twenty Years—December, 1937

Bailey, G. N., Mfg., Oleum Refy.
 Gassner, A. D., Sales, No. Div.
 McConnell, G. R., Field, So. Div.
 McGarigle, M. J., Sales, Cent. Div.
 Mayfield, I., Field, So. Div.
 Michel, M. J., Sales, Cent. Div.
 Lester, H. O., Mfg., L. A. Refy.
 Paulson, Y., Gas, So. Div.
 Reed, G. E., Transp., No. Pipe Line.
 Taylor, V. H., Safety Bd., Head Office.

Fifteen Years—December, 1937

Church, J. L., Exploration, Head Office.
 Anderson, M., Field, So. Div.
 Anderson, S. H., Sales, Cent. Div.
 Bartella, F. O., Mfg., L. A. Refy.
 Beck, A. H., Gas, So. Div.
 Blevans, H. L., Sales, Cent. Div.
 Boothe, J. F., Field, So. Div.
 Fowler, R., Field, So. Div.
 Francis, F., Field, So. Div.
 Gambetti, V., Transp., No. Pipe Line.
 Grinsfelder, S., Field, So. Div.
 Grizzle, M. E., Gas, So. Div.
 Home, R. A., Mfg., Oleum Refy.
 Jarvis, A. G., Mfg., Oleum Refy.
 Johnson, F. E., Field, So. Div.
 Jones, P. W., Sales, Cent. Div.
 Jones, T. O. M., Mfg., L. A. Refy.
 Kies, R. E., Field, So. Div.
 Lewis, B. C., Sales, Cent. Div.
 Lowrey, E. W., Mfg., Oleum Refy.
 Murphy, I. E., Transp., No. Pipe Line.
 Myracle, A. C., Field, So. Div.
 Offley, A. D., Sales, So. Div.
 Paull, R., Field, So. Div.
 Pepper, C. J., Gas, Valley Div.
 Reid, F. J., Sales, Vancouver Div.
 Ridenous, J. T., Field, So. Div.
 Slauter, L. B., Field, So. Div.
 Stevens, T. H., Sales, Vancouver Div.
 Tavera, T., Mfg., L. A. Refy.
 Taylor, R. H., Sales, So. Div.
 Thomas, E. C., Mfg., L. A. Refy.
 Walthall, C. B., Field, So. Div.
 Wood, C. A., Sales, No. Div.
 McCullough, T. H., Purch., Head Office.
 McCartney, E. R., Development, Head Office.
 Geithner, R., Marine, Cent. Region.

Ten Years—December, 1937

Achey, F. B., Field, So. Div.
 Brant, H. E., Field, So. Div.
 Chess, M., Sales, Cent. Div.
 Coon, K. G., Sales, So. Div.
 Ferrell, G. F., USS, So. Region.
 Garner, E. H., Transp., No. Pipe Line.

Hausmann, E. G., Field, So. Div.
 Larson, W. J., Field, So. Div.
 Lease, H. G., Sales, No. Div.
 Lentz, W. H., Transp., No. Pipe Line.
 Lockridge, V. O., Field, So. Div.
 Henderson, J. R., Compt., Head Office.
 Marcos, A. A., Mfg., Oleum Refy.
 Monday, G. E., Constr., Cent. Div.
 Nelson, H. M., Mfg., L. A. Refy.
 Pires, A. L., Mfg., Oleum Refy.
 Robinson, F. E., Mfg., Oleum Refy.
 Robinson, L. R., Transp., No. Pipe Line.
 Sheather, A. M., Mfg., L. A. Refy.
 Siqueiros, E., Mfg., L. A. Refy.
 Snow, W. O., Mfg., L. A. Refy.
 Van Ness, E., USS, So. Region.

**It Weighs 175 Pounds!**

When Maurice K. Hopkins, field operator in the gas department at Dominguez, went swordfishing for the first time in his life he hooked a 175-pound Marlin and brought it to gaff after a battle of two hours and twenty minutes. And the photograph above proves it, too.

REFINED AND CRUDE

By Richard Sneddon

The man who said eternity is too vast for the human mind to conceive evidently never bought an automobile on one of these long term contracts.

And we can't quite decide whether Junior's violin playing is improving or we are just getting used to it.

On the other hand, one of the most even-tempered men we ever knew was a pumper out at Santa Fe Springs. He was mad all the time.

We asked him one day if he had any organic ailments, and he snarled, "No, I'm not the least bit musical."

Which recalls, for no particular reason, the fellow who grouched all during the summer vacation because two big tree-covered mountains completely shut off his view of the scenery.

Now by way of a little diversion, a familiar verse as the stenographer might pick it up from your dictation:

*Liza Grape men altry mindus
Weaken maka Liza Blime
An departing Lee B. Hindus
Footbrin Zona Sands a time.*

And while we are in the mood, another beautiful thing we picked up somewhere:

There was a young man of Calcutta
Used Triton as you would use butta
It softened his snore
From a thunderous roar
To a soft oleaginous mutta.

Which explains why the death rate among scribes is still one for each individual.

There may be no truth to this yarn, but one of our operatives reports that after the Chris Rector party a short time ago Frick Gibbs asked Chris, "How about a little piscatorial diversion next week-end?" and Chris replied, "Sorry. I can't do it. I'm going fishing."

Then there was the poor lad who was born in Pittsburgh and didn't see the light of day until he was nine years old.

And when John Howell asked a nameless oil producer, "What kind of fire protection do you have here?" you could have knocked him over with a Foamite extinguisher when the aforesaid oil producer answered laconically, "Oh, sometimes it rains."

Speaking of the weather, did we ever forget to tell you about the tourist who landed in Kansas just in time to experience one of the state's most effective cyclones? After it was all over, he crawled out of the storm cellar, preened his feathers, and remarked, "I think you guys out in this part of the country overdo the ventilation business altogether."

Again diverging from the main topic we have always been much intrigued by Mark Twain's contention, during the reign of the Shakespeare-Bacon controversy, that the famous plays were not written by William Shakespeare at all, but by another man of the same name.

And among the unusual accidents of which we hear from time to time, perhaps the most extraordinary was the one that just occurred a short time ago. One of the thriftier Union Oil Company employees decided to make his own Christmas cards this year, and in the process absentmindedly stuck a brush loaded with gold paint in his mouth. He is now suffering severely from a consciousness of inward guilt.

Another thrifty individual had a loaf of stale bread left over, and bought a turkey so that he could use up the loaf for dressing.

The most distressing situation, however, that has ever come the way of our one good ear, is the case of the maid who worked for a highbrow family, and simply wore herself out running back and forth between the dictionary and the keyhole.

"No," said Alice Kroeger to the sad-faced applicant, "I'm sorry, but we have all the men we need." "Gee!" expostulated the lad, "Seems like you could take me on—the little I do."

And says the Pershing Square denizen to his new-found friend, "Where you from?" "Oshkosh" was the explosive answer. Whereupon the interrogator remarked sympathetically, "That's a bad cold you got, neighbor."

Our first Christmas present this year, by the way, was a slip-on sweater, and we have since been wondering if it is a plot to pull the wool over our eyes.

"Which tooth troubles you, Sam," asked Doc Rohrer of his colored patron, and the latter promptly replied, "Lower five, sah."

Saying which we conclude another year of intense but futile activity, and as we stand wobbling on the threshold of 1938, here's hoping that during the next twelve months our readers everywhere—all four of them—may enjoy the rest and relaxation they so richly deserve, and need, after partaking of this literary debauchery.

