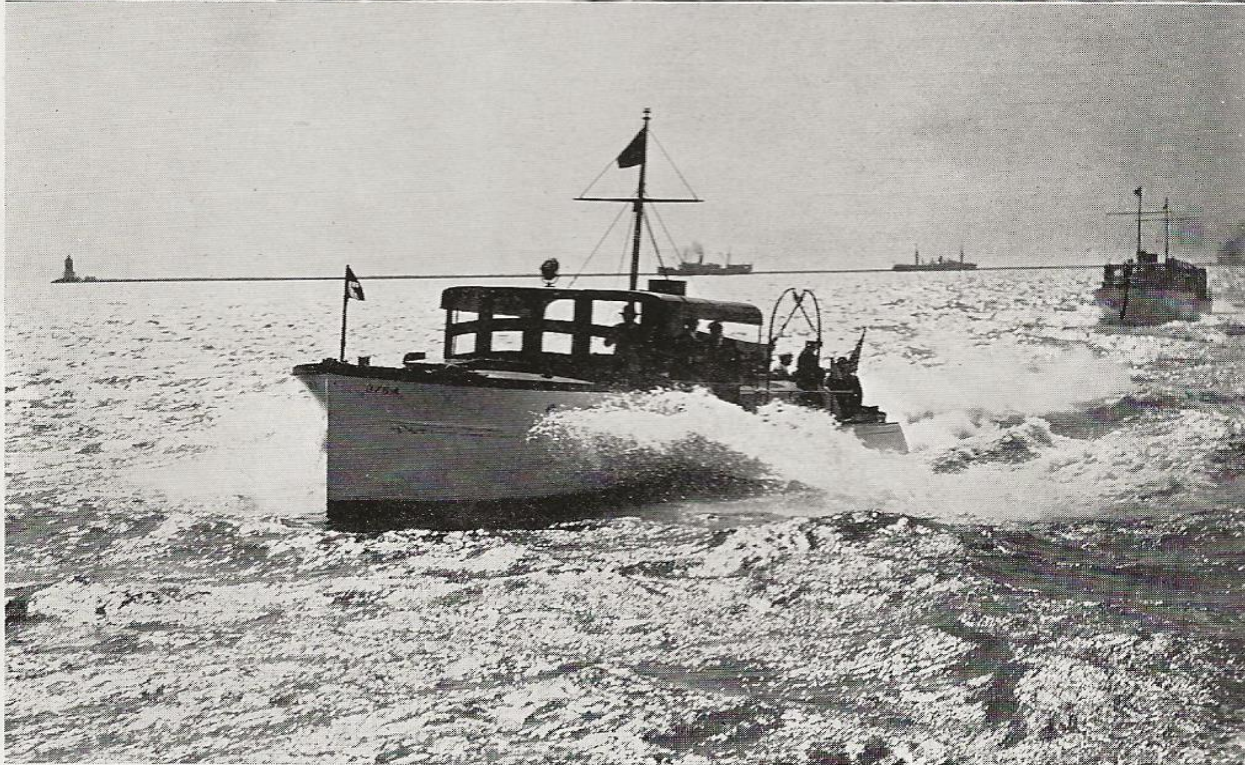
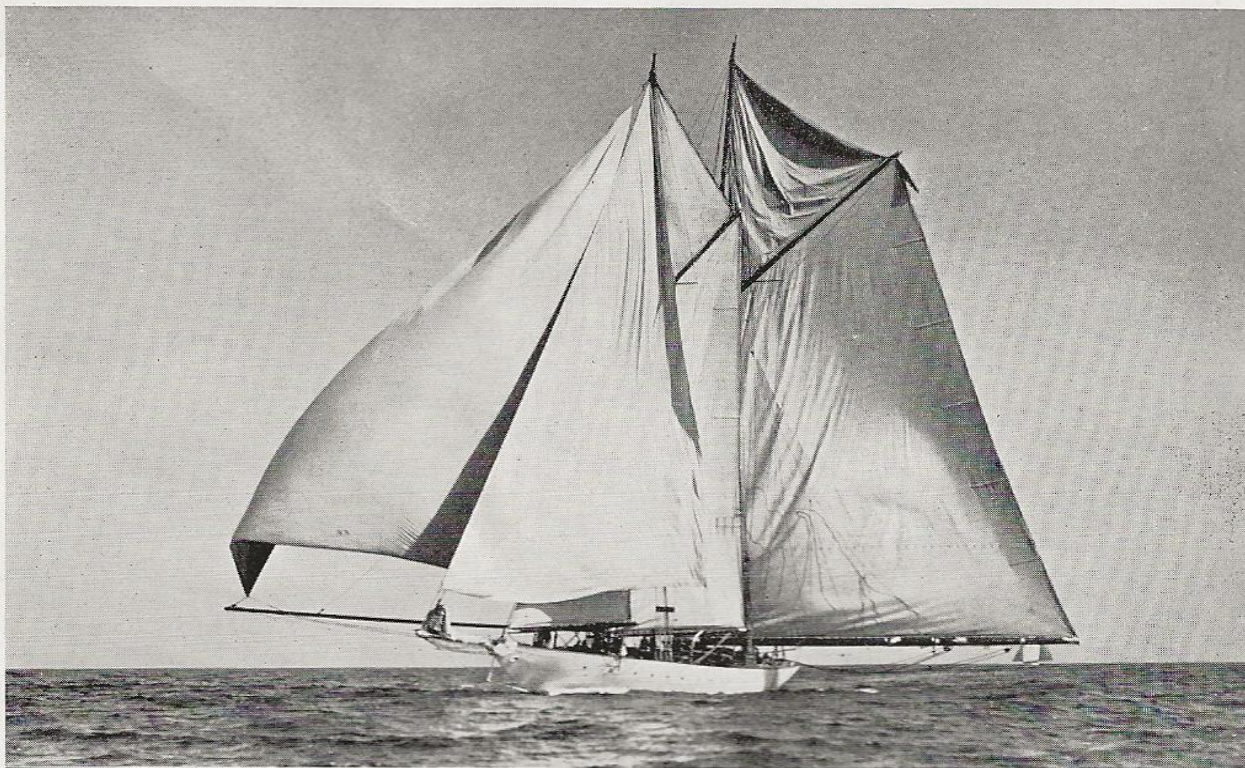
A watercolor illustration of a campsite. In the foreground, there are several colorful items, possibly clothing or gear, including a red hat and a blue garment. In the middle ground, a group of people and animals, including a horse, are gathered near a wooden structure. The background features large, yellowish-orange tents or awnings supported by wooden poles, set against a light, hazy sky. The overall style is soft and painterly.

# UNION OIL BULLETIN

AUGUST 1930

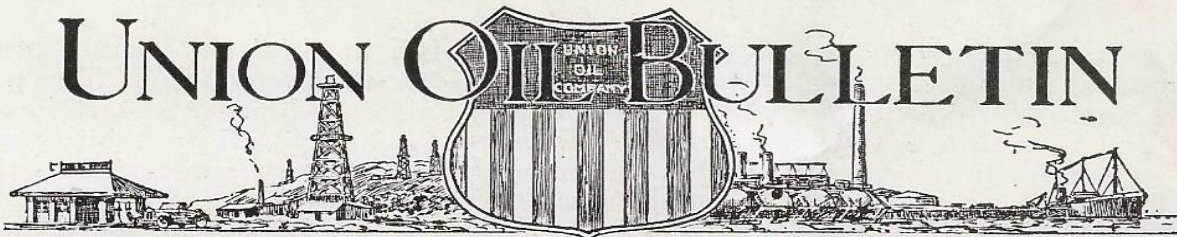


## Seaward Ho!

*For a thrill that has no equal—turn seaward. Open the motor wide, or spread your canvas to the wind—as you choose—but turn to the sea for the sport of sports. Above we present an unusual photograph of Morgan Adams' 136-ft. schooner, "Enchantress," winner of the 1930 Honolulu race, with every inch of canvas spread to catch a capricious breeze.*

*Below—Full speed ahead at sunset in San Pedro harbor.*

# UNION OIL BULLETIN



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VOLUME XI

AUGUST

BULLETIN No. 8

## Looking Into Hydrogenation

ON THE invitation of the Standard-I. G. Company, the Union Oil Company of California, in company with sixteen other major companies of the United States, has subscribed to a preliminary allotment of Hydro Patents Company stock, which permits it to study the hydrogenation process, exclusive rights to which in the United States are held by the Standard Oil Company of New Jersey and the I. G. Farbenindustrie Aktiengesellschaft of Germany.



A. G. Page

At the present time the participating companies have technical representatives in Germany to inspect the three

hydrogenation plants being operated there by the I. G. Farbenindustrie A. G. The investigation of these experts will be exhaustive and will include a thorough study of equipment as well as operating methods. A. G. Page, to whom last April was assigned the investigation of all new processes, is a member of the party.

Hydrogenation, although employed in other industries, has only recently been given serious consideration by the oil industry, because of existing high operating costs and other problems involved. At present it is the belief of a few in the oil industry that the perfection of the hydrogenation process to the point where it can be employed in competition with existing processes, may be just around the corner. Whether such is the case, is expected to be determined through the co-operative means of investigation which has been provided the industry by the Standard-I. G. Company.

The participating companies have six months in which to satisfy themselves as to the merits of hydrogenation, and if within that time they decide to acquire licenses which will permit them to utilize the process, they have the option to do so by right of the purchase of the preliminary allotment of Hydro Patents stock. To acquire the operating license, however, each company must purchase additional shares of Hydro Patents stocks in amounts not less than nine times the preliminary subscription. The initial subscription for our company was 668 shares at \$53.00 a share, or a total of \$35,404. Each share of stock acquired under the license agreement will entitle the subscriber to operate the hydrogenation process at a throughput of one barrel per day.

One of the outstanding virtues accredited to the hydrogenation process is its versatility. By modification of operating conditions the same apparatus can be used for the production of a variety of different hydro-carbon products. It will produce gas oil from residuum or heavy crude with a volumetric yield in excess of 100 per cent; a good grade of gasoline from heavy oils, be they distillate or residual, and lubricating oils of improved temperature-viscosity relationship. It will also produce a kerosene of superior burning qualities. One of the interesting phases of the process is the treatment

of oils high in sulphur to yield products of low sulphur content. The process will also produce hydrocarbon oils from coal, which in all probability will not be economically successful in this country for some time to come.

While the hydrogenation process will produce gas oil from residuum or heavy crude, it remains to be determined whether such an operation is feasible in comparison with simple cracking, or with operations such as that carried on in the Union Oil Company's new Kellogg plant, which latter operation makes possible the varying of the products from the company's raw materials to meet the changing market demands. The ability of the hydrogenation process to compete with existing cracking processes in the production of gasoline from heavy oils is questioned, unless it can produce a premium grade anti-knock gasoline. With reference to the production of lubricating oils of improved temperature-viscosity relationships, it might be well to point out that our own research laboratories have discovered a method by which these same results can be closely approximated.

The future action of the company relative to the exercising of its option to acquire a license to put the hydrogenation process into use will be determined entirely by the investigation now under way.

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## Taxes

It is interesting to note that Union Oil Company of California paid the sum of \$1,430,680.67 in the year 1929, for City and County taxes in the State of California, the same being equivalent to 34 cents per share on the number of shares outstanding at December 31, 1929.



## Union Gets Upper Zone Well at Venice

**T**HAT a good portion of the company's leases in the Venice oil field, totaling more than 800 acres, will be productive, was indicated last month when the company's Del Rey No. 1 was put on production in the upper sand. The well, beamed back, is flowing at the rate of 600 barrels a day from several hundred feet of formation above 4000 feet. Up to the present time it is the biggest upper zone producer in the field. Most of the companies have passed up the top sand as not being capable of commercial production and are trying for the zone lying below 6000 feet, which has been tapped by three or four wells for two and three thousand barrels a day.

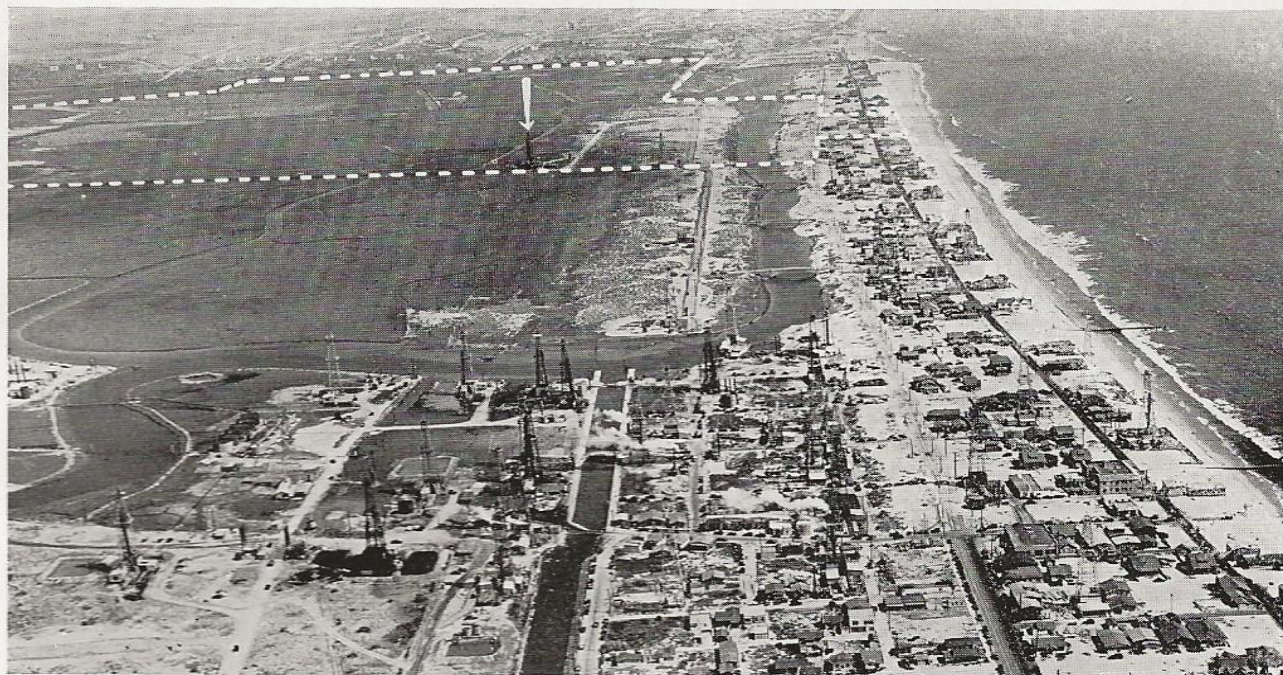
Indications are that the company's well is more favorably located on the structure than any drilled to date. It is in the northwest corner of the 600-acre Del Rey Company lease and

makes it appear as though the entire center portion of the property will be highly productive.

In the interest of conservation, and to protect the property from competitive town-lot drilling, the company late last month acquired fifty acres adjoining the Del Rey property on the west. It also holds 170 acres, acquired the first of the year from the Vidor Syndicate, lying south of the Del Rey lease and extending to the Del Rey hills.

The oil from the upper sand has a gravity of 22.5, while that from the lower zone is slightly better than 24.

A four and one half mile pipe line, connecting with existing facilities, as well as a gathering line in the field, was completed the last week in July and placed in operation by the company.



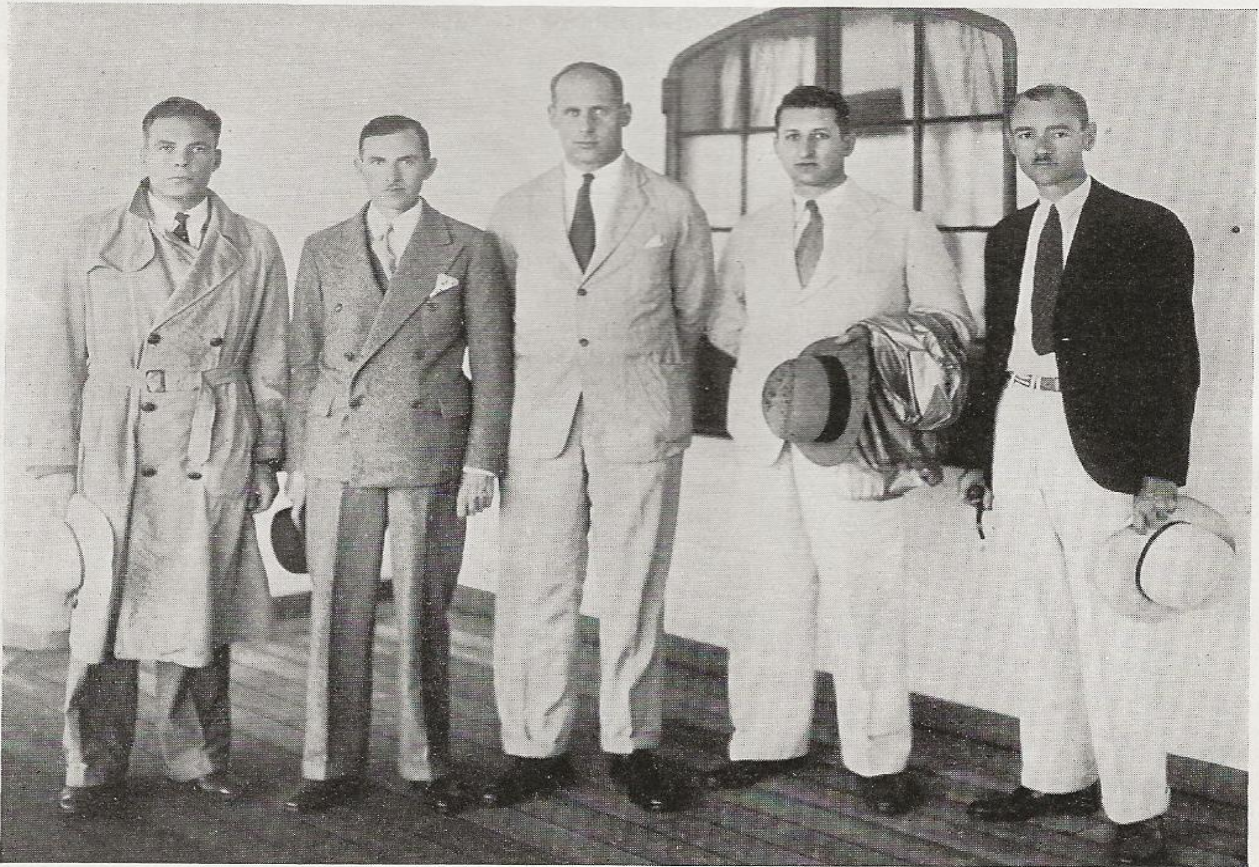
*Aerial view of the new Venice oil field. The holdings of the Union Oil Company are within the area outlined in white. The arrow points to Del Rey No. 1, the company's first well in the Venice field, which is flowing from the upper sand.*

## Surveying Far Eastern Markets

**I**N order to determine the desirability of further expanding the distribution of the Union Oil Company's products in the Far East, three company representatives, J. B. Arthur, manager of fuel oil and asphalt sales; C. J. McKeever, manager export sales, San Francisco, and Arthur C. Stewart, export sales, head office, are at the present time conducting a survey of the market in China and Japan. They sailed from San Francisco on the N. Y. K. motor liner Tatsuta Maru in May and were met at Hong Kong by W. W. Baer, Far Eastern representative at Kobe, Japan and H. R. Greatwood, new Far Eastern representative

of the company at Shanghai. L. C. Hampton, former director of the Atlantic Union Oil Company, Ltd., joined them at that point a few weeks later and will accompany them on their survey.

Several months will be required to complete the trip and it is not expected that the members of the party will return to California prior to November or December. Mr. Hampton will return to Los Angeles with Mr. Arthur, Mr. McKeever and Mr. Stewart, as his work in Australia is completed. Mr. Baer and Mr. Greatwood will remain in the Far East.



*Union Oil Company representatives aboard liner at Hong Kong. From left to right—Arthur C. Stewart, C. J. McKeever, H. R. Greatwood, W. W. Baer and J. B. Arthur.*

## Building Monument to Cotton

*Editor's Note: One of the most interesting industrial enterprises on the North American continent is that of the Compania Industrial Jabonera del Pacifico, S. C. L., at Mexicali, Baja California, operators of one of the largest cotton ginning plants in the world. Union Oil Company lubricants are used throughout. The Bulletin is indebted to Mr. A. P. Araiza, the company's agent at Packard, Mexico, for the information contained in the following article.*

OUTSTANDING as the largest of any of the industrial organizations in the entire Imperial Valley on either the American or Mexican side of the border is the Compania Industrial Jabonera del Pacifico, S. C. L. This company was organized in Mexicali, Baja California, on September 5, 1925, by the Brittinghams, known throughout the Imperial Valley, and has flourished beyond expectations.

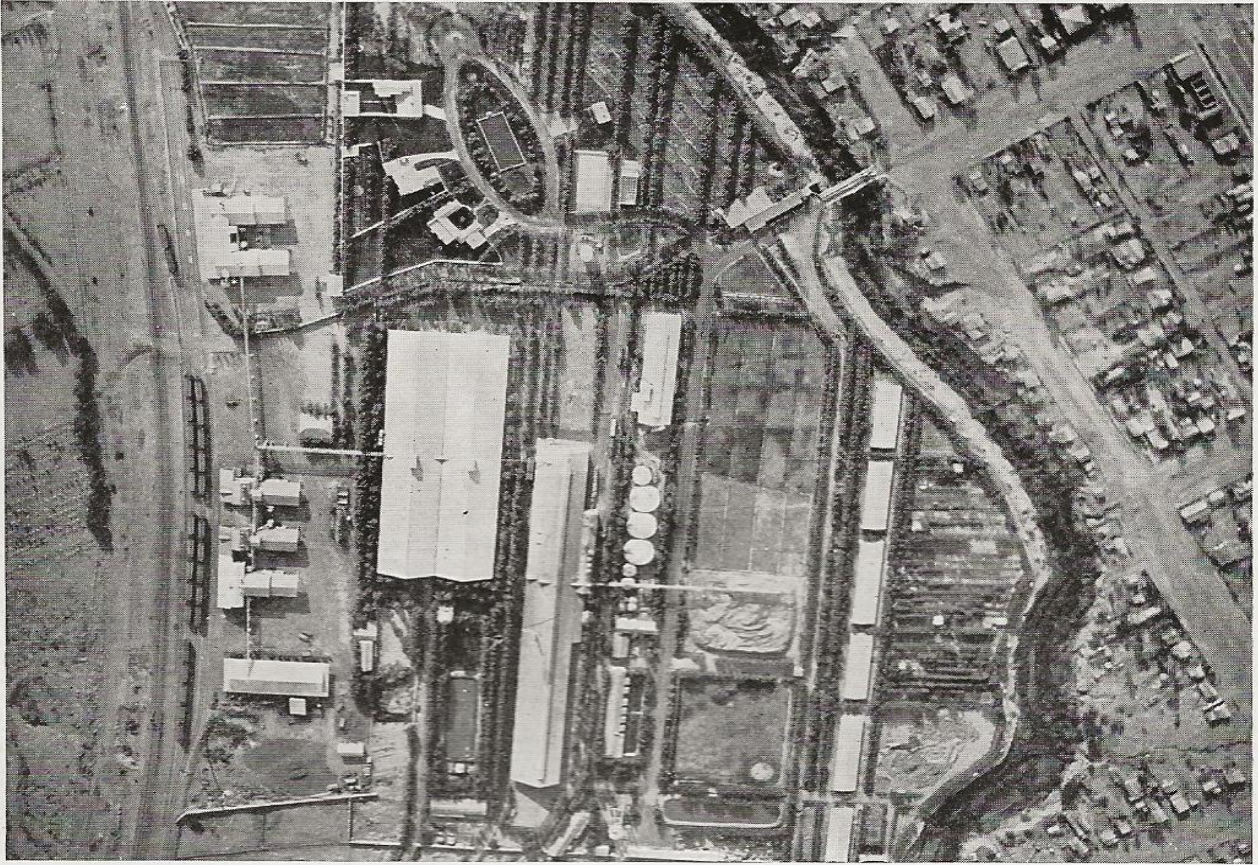
The "Pacifico," as the company is now generally referred to, was taken over on February 24 of this year by Anderson, Clayton and Company, who have their main offices at Houston, Texas, and are considered among the world's largest cotton merchants. The Texas company has in turn enlarged on the vast program originally outlined by the Brittinghams.

Few of the many tourists visiting Mexicali have any idea that it has within its boundaries an enterprise the size of the "Pacifico." One's first impression on arriving at the grounds is that of entering a great park, for there are innumerable trees of great height along both sides of its many roads. Besides being decorative, these trees are equally useful, for their generous shade is a great protection from the hot summer sun. Through one of these tree-lined roads one is first taken to the Company's office building. It is a long, white, picturesque structure of Spanish architecture which has for its front yard or entrance a most attractive garden. This garden is enclosed by an ornamental adobe, tile-topped wall, its only opening being a large,

massive wooden door. At the back of the building is a long, cool corridor with a tile roof which serves as a passageway in going from one office to the other. The offices proper are all interiorly connected and are very neat and pleasing with their white walls and dark-colored metal furnishings.

From the offices one is then taken to the company's cotton gins, the largest in the world, containing fifty stands of eighty saws each, which are the starting point of the plant's activities. The cotton is brought in wagons and by railroad to these gins from the lands that are financed annually by the company. A department is maintained in "Pacifico's" offices for the express purpose of handling the finance work which consists of aiding, in a pecuniary way, all competent growers who are desirous of raising cotton but who have not the necessary capital. Hundreds of thousands of dollars are expended by the company each year in this finance work. In addition to the monetary assistance, the growers are given useful advice by inspectors who work in conjunction with the finance department. "Pacifico" is financing approximately seventy thousand acres this year.

The cotton is taken from the wagons and railroad cars to the ginning machines by means of large suction tubes, and after it is thoroughly cleaned and ginned, it is automatically made into round bales. Although some square bales are made when occasion demands it, most of the bales are round. It will be interesting to note that Anderson, Clayton and Company manufacture and control the



*Aerial view of "Pacífico's" plant at Mexicali.*

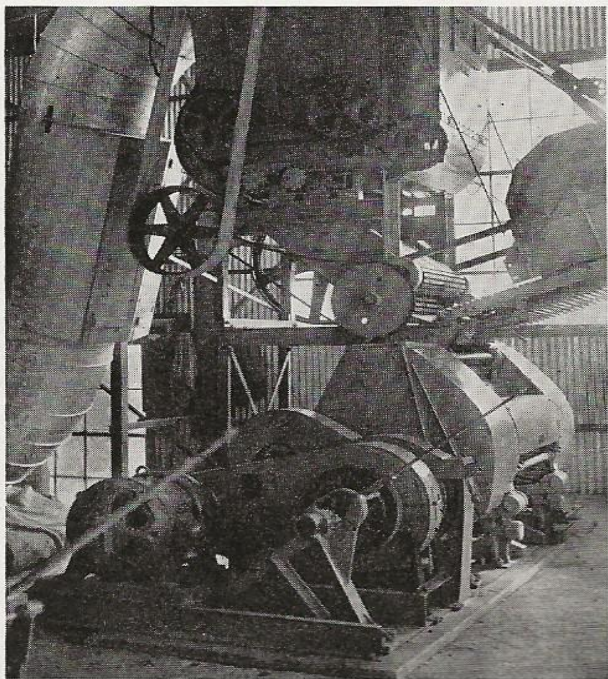
round bale presses which, besides affording a considerable saving on compress charges and greatly reducing fire hazard, preserves the cotton in a much cleaner state than does the other methods generally employed. The unpacking process is also greatly facilitated for the spinner, and the tare weighs but two and a half pounds against twenty-one pounds per square bale. During the picking season these gins, running 24 hours a day, turn out one thousand bales daily.

The seed obtained from the cotton in the ginning is then placed in an enormous seed warehouse by means of conveyors. In this warehouse it is passed through modern cleaning devices after which, again by means of conveyors, the seed is taken into the mill proper where it is processed in order to obtain its by-products.

The seed is first put through the linter machines, which machines are cylindrical saws, with very sharp

teeth. These remove from the seed the small fibre or lint remaining after the ginning. The product resulting, known as linters, is then baled for shipment to the mattress trade, rayon producers and the upholstered furniture factories. From here the seed passes on to what is known as the hulling and separating room. On reaching this department the seed is cracked open, and in this cracked condition goes to the shakers. These machines, as the name of the department indicates, separate the hull of the seed from the meat or kernel by their continual shaking. The hulls being a distinct product in themselves are blown out into the yard by means of a pressure blower through tubes, where they remain until they are disposed of. The meats, however, continue on their journey into the next department which is the oil press room. Here the meats go into the cookers where, with the necessary amount of water added, they are cooked for a





*Latest type cotton gin.*

certain length of time, after which they are automatically taken out and made into slabs covered with a wrapping of camel's hair cloth. These packages are then put in the hydraulic presses where the oil is extracted.

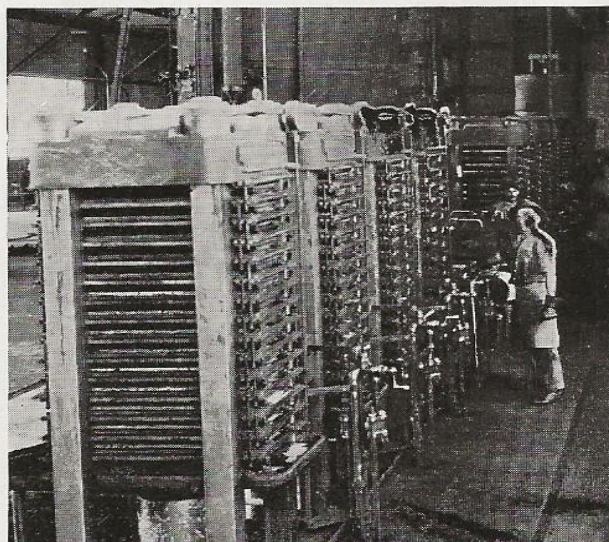
The oil drips down into a slanting tray at the base of each of the twelve presses and then runs into a tube which conducts it to the storage tanks where it is kept until needed. Once the oil extraction is completed, the slabs of dry meat are taken out of the presses and thrown on a conveyor which takes them to the cake room. Since all of the oil is extracted, the remaining slabs are very hard. When these slabs reach the cake room, the camel's hair wrapping is removed. The cottonseed meal cake, as these slabs are called, is either stored in the slab form or broken up and sacked, or again, it may be ground into powder form, known as cottonseed meal, and sacked. Besides these, there are other by-products such as hull fibre, motes and hull bran. On account of its great cellulose content fibre is used in the manufacture of paper, artificial silk, duco paints, lacquer products, and motion picture and kodak films. Much of

this product is consumed in the United States although some has been exported to Germany, and the greater part of the remaining products are disposed of in the United States, with exception of the cottonseed oil.

After going through the mill, one is directed to the company's refinery which is a separate building. In this refinery, which is a comparatively new phase of the business, "Pacífico" uses some of her own oil in the manufacture of compound lard and salad oils. Another refinery, also owned by the company, is operated in Mexico City. The lard and salad oils have been in the market only a very short time. The trade marks of "Copo de Nieve", "Pacífico", "Vegetine" and "Volcan Nevado" are to be found on the market everywhere in the Republic of Mexico.

In a wing of the refinery building is the soap factory. This department has been in operation just a short time and at present only laundry soaps are being made. However, it will be only a matter of time before production of toilet soap begins.

The last of the company's interesting enterprises to be seen are the cattle feeding pens, where cattle and steers, brought from different parts of Mexico, as well as from California, Arizona and Texas, are fattened on the hulls and cottonseed meal produced by the company.



## Reclaiming Worn-out Equipment

A SALVAGE plant that is reclaiming from the junk pile equipment of the field, gas and pipe line departments that will run into several hundred thousand dollars a year, is now being operated by the company at Santa Fe Springs. It represents one of the most advanced steps in salvage work that has ever been undertaken on the coast, and is making possible the restoring to service of equipment that would otherwise be lost to the company.

While a small salvage shop has been maintained at Brea for the past seven or eight years, this is the first time the scope of the work has been made general.

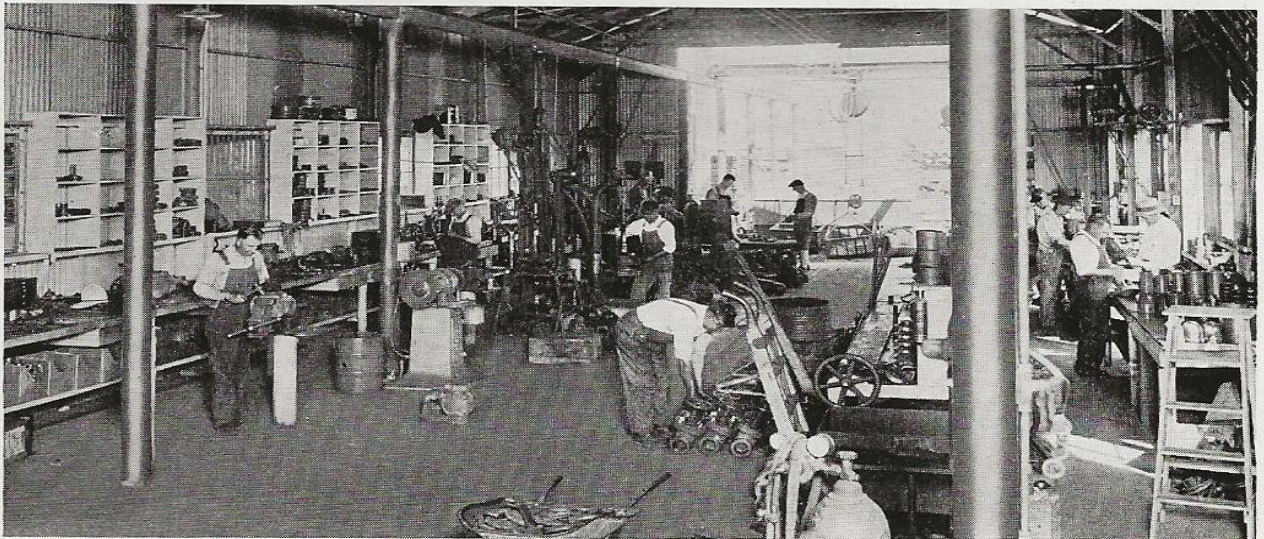
At Santa Fe Springs today acres of drill pipe, casing, rotary equipment and tools, used during the extensive deep drilling operations, which are being brought to a close in compliance with the general curtailment program, await reclamation in the salvage shop.

Every class of equipment salvagable is brought into the shop. A tour of inspection was recently conducted through the Northern Division and plans were made to bring old field equipment from as far north as Coa-

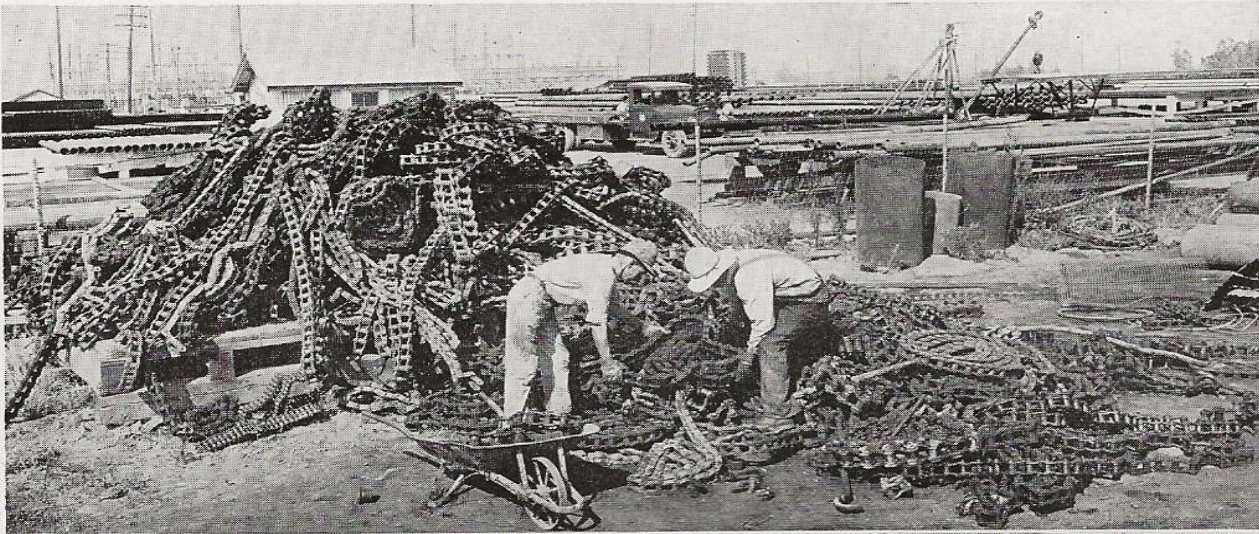
linga to the Springs' shop to be repaired.

The area immediately surrounding the salvage shop has been converted into what from first impressions has all the earmarks of a junkman's back yard. All material destined for the salvage plant is classified as to size and use and heaped in its allotted place in the yard. One corner contains an immense pile of rotary chains of varying lengths, dirty, oil and muck covered, some with broken or warped links, others so completely broken up as to have no value other than to furnish parts for the repair of another section in less worthless condition. Bins have been provided for all types of hand tools, from the small hand stilson to the huge chain tongs. Valves of every size and description are dumped into piles, each pile comprising a separate classification. Pipe fittings from the small half-inch elbow for minor water connections to the eight and ten-inch pipe line connections are segregated as to size, and piled up to await their rejuvenation in the salvage shop.

One of the features of the work done at the shop is the room where

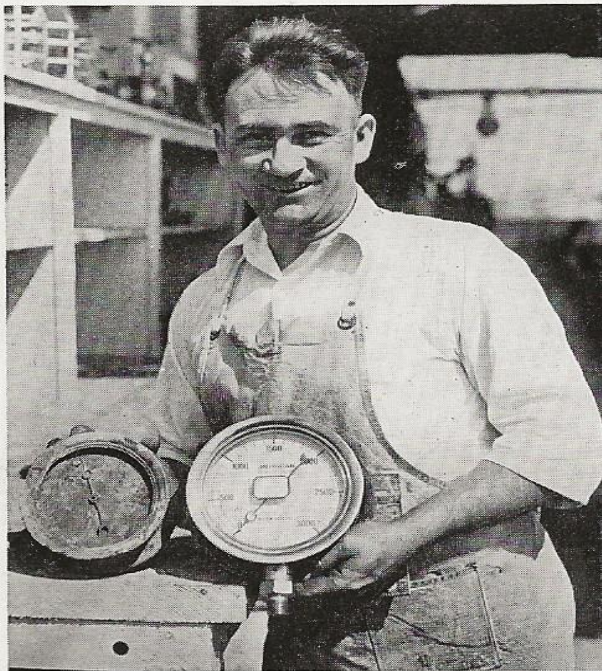


*Interior view of the salvage plant at Santa Fe Springs, where more than \$40,000 worth of equipment from all of the company's field departments is reclaimed each month.*



*A corner of the salvage yard is devoted to castoff rotary chains. The photograph at the right shows a few of the same chains after they had been reconditioned and made ready for service.*

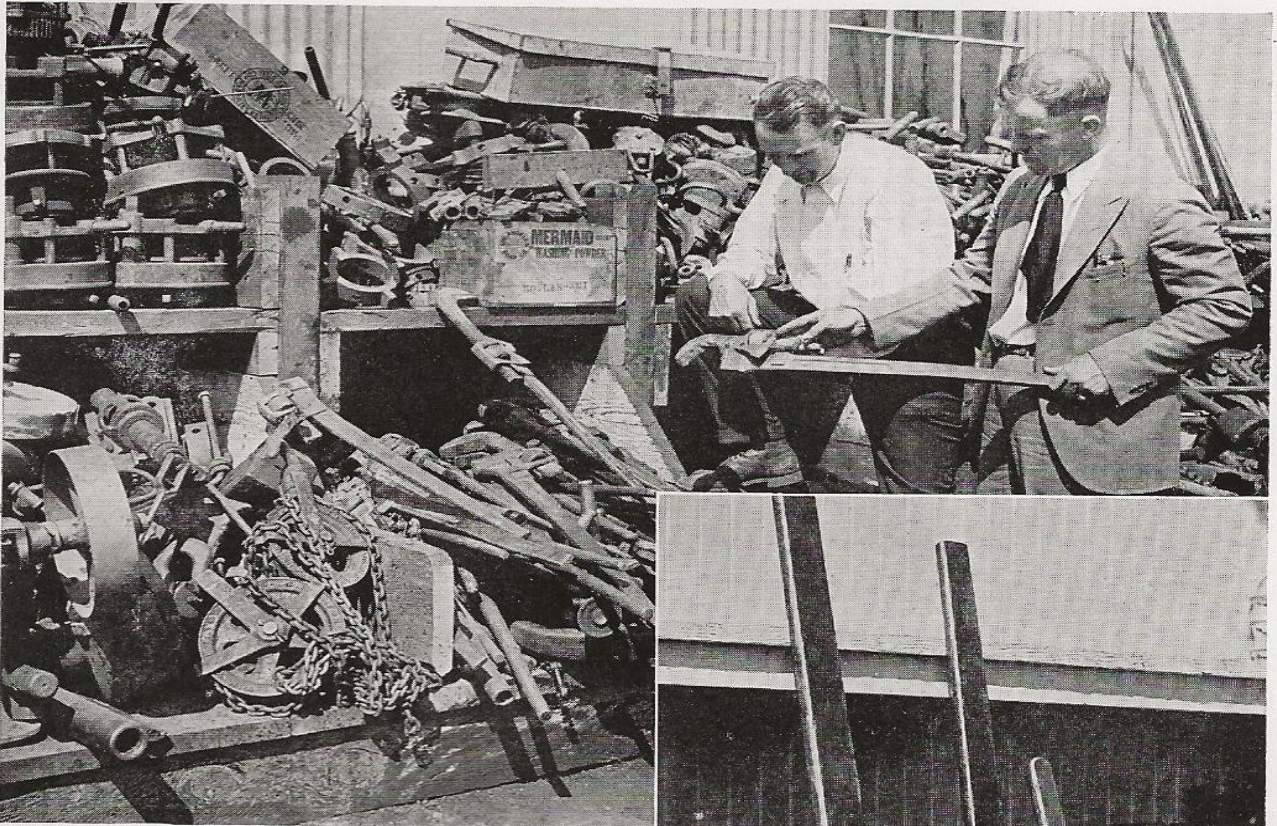
meters, gauges, and all types of intricate measuring devices are cleaned, overhauled, given a new face, recalibrated, brass parts polished or replated, and tested for the rough usage



*Stubb Evans, former naval instrument man, now in charge of the gauge and meter overhaul room in the salvage shop, demonstrates how old gauges are reclaimed.*

characteristic of their function in the field. Overhauling in this department is done chiefly by Stubb Evans, former naval instrument maker, whose long experience in this type of work has particularly fitted him for this job. A great amount of corrugated sheet iron is also reclaimed. Irrespective of its condition, it is washed and cleaned and then run through a "corrugator," which turns out a sheet in virtually the same condition as when new.

A general procedure is followed in routing equipment through the salvage shop. Whether it is brought in by tractor, equipped with a crane; by crane, or wheelbarrow, each assortment is first dumped into a steaming Oakite bath, and remains there several hours, during which all dirt, grease, and other debris is washed off. The cleaned pieces are then removed, allowed to dry, and wire brushed to eliminate any remaining dirt. They

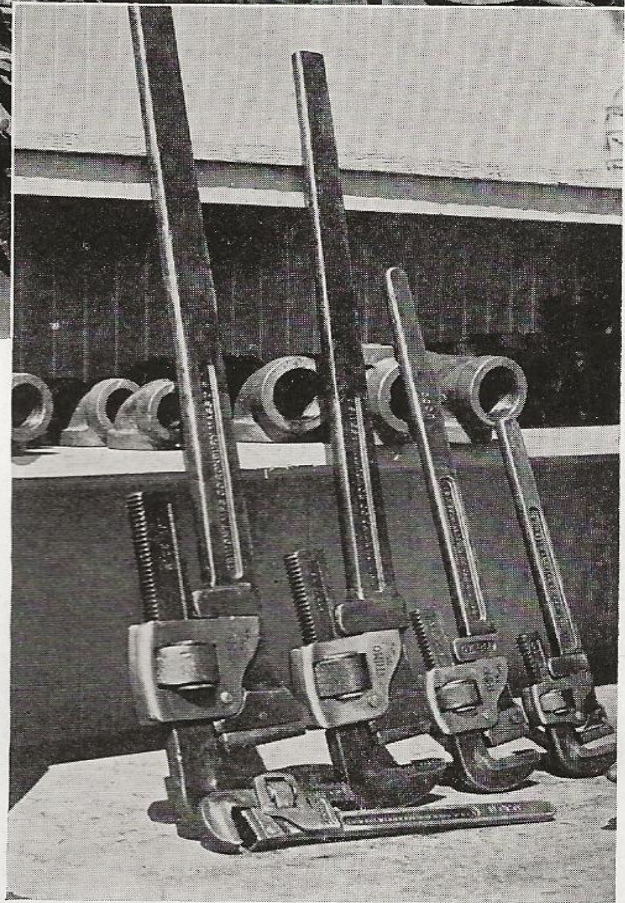


*To all appearances, the wrench which T. C. Ritter, shop foreman, left, and C. W. Froome, tool and equipment superintendent at Santa Fe Springs, have pulled from the pile awaiting rejuvenation in the salvage shop, is beyond hope of repair, but the insert at the right shows what is being done with others in similar or worse condition.*

are then taken by a movable crane in the shop to the machinists, each of whom specializes in repairing certain types of equipment. Repair work on one piece may consist of merely re-threading a single hole in a valve flange, while on another valve a complete overhaul may be necessary.

Depending on its nature and use, a repaired article is subjected to various tests before it is finally approved as in good operating condition. In the case of valves, a device has been rigged up which develops several thousand pounds pressure. Valves must undergo this test before being sent to the warehouse.

When repairing and testing has been completed, the equipment is painted and oiled to prevent rust, and sent to the field storeroom, where it is segre-



gated into bins, marked for use, and is ready to be sent out.

In the process of reconditioning the old equipment, the company in addition to saving many thousands of dollars worth of supplies, is offering employment to a group of trained men, and is considerably decreasing the amount of future expenditures for new equipment.

# Sails Set for Coast Regatta

THE combined regattas of the Pacific Coast Yachting Association and the Southern California Yachting Association, to be held August 3 to 10, with the Newport Harbor Yacht Club in the role of host, will bring together the finest array of sailing and power boats ever assembled on the Pacific Coast.

This is the first time the regattas of the two associations have been jointly held and the largest turnout of yachtsmen in the history of water sports in the West is anticipated. The Pacific Coast championships will be decided in the course of the week of racing, and the quantity as well as quality of the competition is expected to produce some great races. From San Francisco on the north to San Diego on the south, owners of sailing and power craft have signified their intention of participating in the regatta.

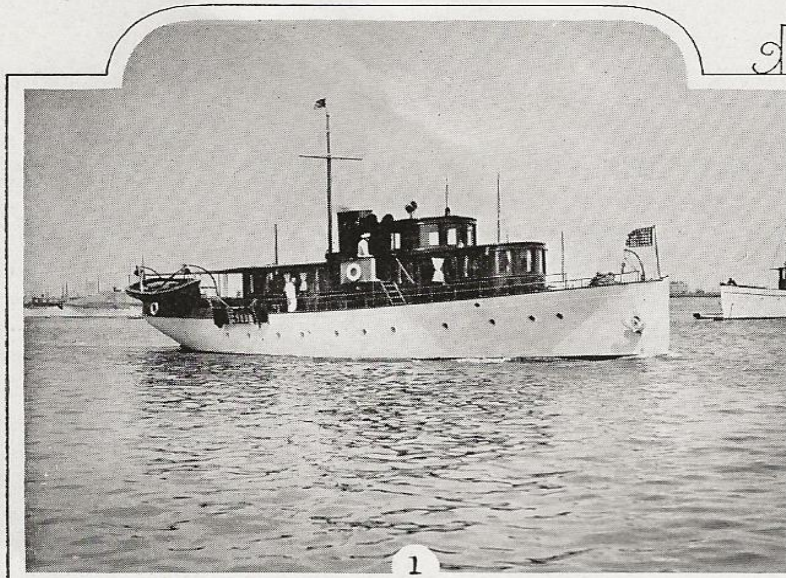
Preparations for a gala week have been made at the various Southern California yacht clubs and a round of entertainment will accompany the races. The harbor of Newport and Balboa is expected to be filled to overflowing with visiting boats. Dredging

of the jetty at the entrance to the harbor has been completed and the largest yachts on the coast can now enter and proceed up the channel without fear of running aground, regardless of tide.

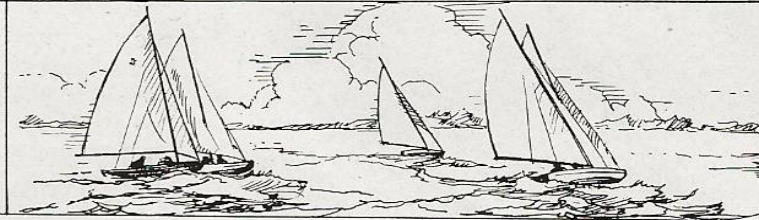
Races will be held throughout the week, most of them featuring the sailing craft, although a representative number of power boats will be on hand to add more color and thrills to the events. Schooner, yawl, ketch, R class, and other large class boats will utilize the course marked off outside the

*The "Wetona," owned by C. L. Reynolds, is one of the Newport Harbor Yacht Club's popular regatta entrants.*

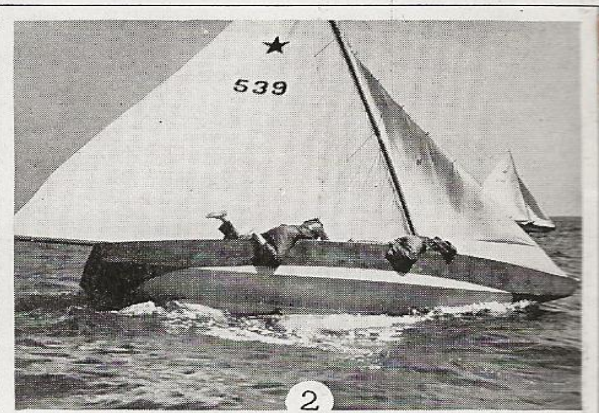
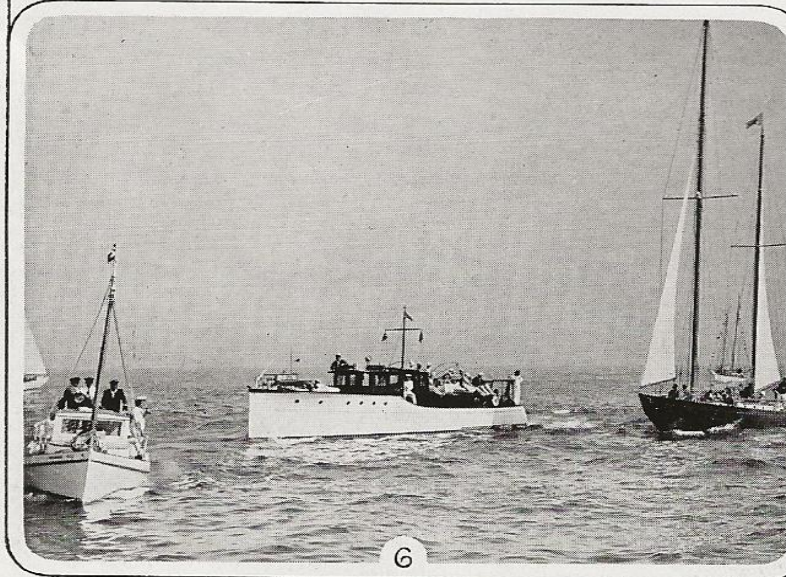




At the anchorage of the California Yacht Club, Los Angeles harbor, where preparations are under way for participation in the regatta.



Following the races off Newport Harbor. In the center is the cruiser "Blue Goose", with the "Vagabond" to its right.

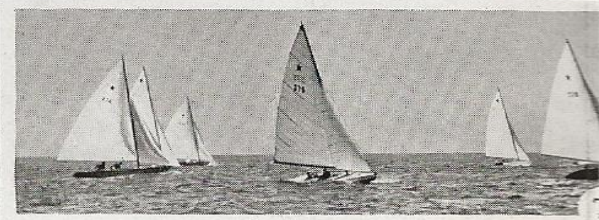


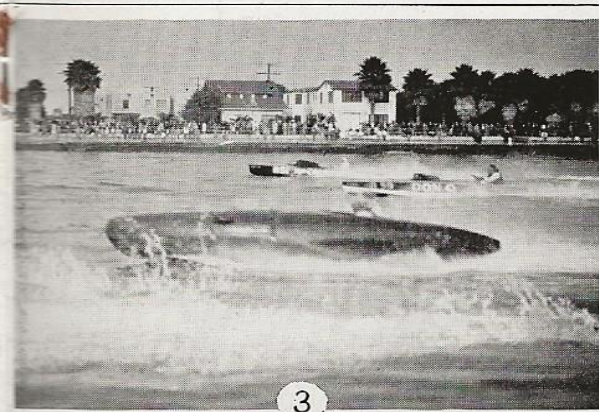
There's action aplenty in the star boat races, as is evidenced by the above photograph.



Lazard Lippman's "Talaya", third prize winner during the regatta.

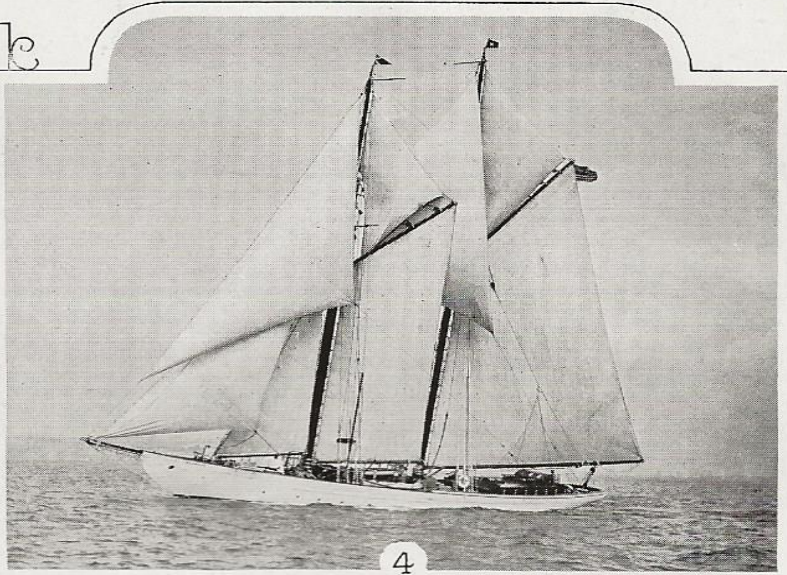
Star boats under way in one of their spirited races during the coming season.





3

Power boats will have a deservedly prominent place on the racing program.

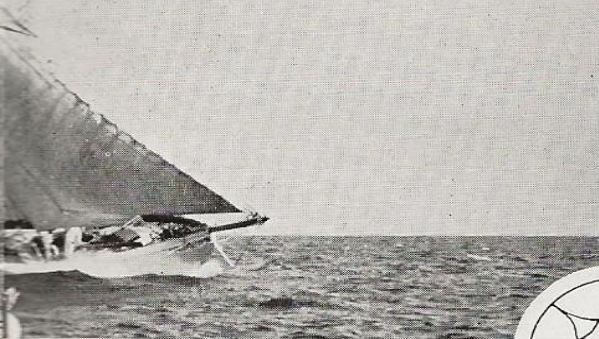


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Cecil De Mille's "Seaward" photographed during run off San Pedro.

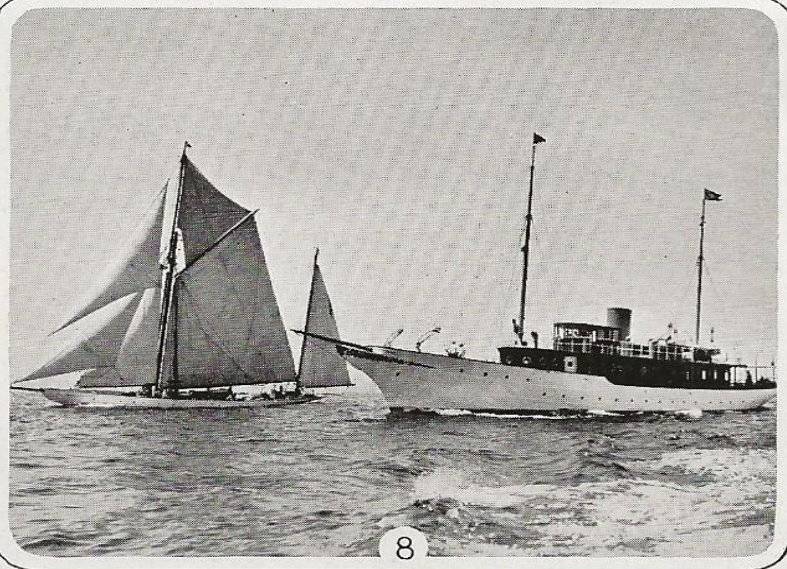
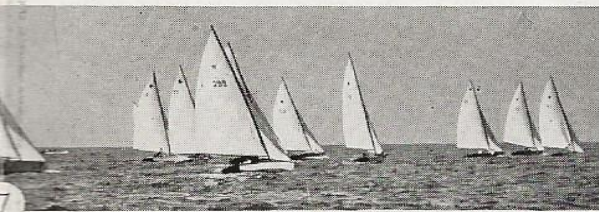


Don Lee's new yacht "Melode" and Walter Home's "Contender", second prize winner 1930 Honolulu race, pass before camera.



of the 1930 Honolulu race, displays her speed practice run.

d races that will be duplicated many times in regatta.



8



*The clubhouse of the Newport Harbor Yacht Club which will be used as headquarters for the regatta.*

breakwater. The skimmers, stars, marions, and snowbirds will race inside on the regular harbor course.

A two and one-half mile course has been laid off for speedboats and cruisers; also a one-mile straightaway.

Sailing races will be held under sanction of the North American Yachting Association and the Pacific Coast Yachting Association. The American Power Boat Association will sponsor all power boat races.

Yachting on the Pacific Coast has gained considerable momentum within the past six years. Interest in boats had just begun to manifest itself in the middle of the last decade when the war caused a suspension of building activity. It was several years after the war before any awakening was noted, but in 1923 participation became more general and now a large number of new boats are launched each year. In 1923 the pleasure fleet in Southern California waters was valued at approximately \$2,000,000. At the present time it is worth ten times that amount, and the number of small yachts and cruisers has shown such a huge gain that complete anchorage facilities are now at a premium.

The Union Oil Company is particularly fitted to service yachtsmen and boat owners on their sojourn in southern waters, one of its most complete and accessible marine service stations

being located in Balboa harbor. Since September, 1926, the company has maintained this station for the benefit of pleasure craft and fishers in the Newport-Balboa district. It was the first station in the harbor to stock the diesel fuel especially developed by the company for the modern high speed diesel engines which power many of the yachts, and is the only station in the bay which can furnish boats with all grades of diesel fuel oil and fuel oil. The company also has marine service stations in Long Beach, San Pedro, and Wilmington, and in addition, refined and fuel oil barges which can deliver a bunker of fuel to yachts tied up in one of the yacht club anchorages. A complete line of gasoline, lubricating oils, and greases are also carried at the marine stations.



*Balboa Marine Station*



## Southland Host to Cirrus Derby Flyers

LED by Lee Gehlbach of Little Rock, Ark., twelve entries in the All-American air derby sat their Cirrus powered planes down on the landing field at Metropolitan airport, Los Angeles, Sunday, July 27, to end the round-the-country westward trek which began six days before in Detroit.

As winner of the first half of the transcontinental hop, and approximately \$1000 in cash awards, Gehlbach was greeted by more than 10,000 people who had gathered to witness the arrival of the contestants from Douglas, Ariz., the last control point of the derby before reaching the Pacific terminal. His speed on this last hop was better than 135 miles an hour. He was closely followed by J. R. Wendell of New Orleans, and Herman Hamer, La Salle, Ind. The other nine remaining contestants continued to arrive at irregular intervals during the afternoon.

Completion of the first half of the reliability tour was the occasion for an air carnival at the airport in which many well known Southern California

aviators and aviatrixes participated. Races for both men and women pilots were held, in addition to stunt and exhibition flying.

After two days of sight-seeing in the South, the contestants hopped their planes from Metropolitan airport the morning of July 29 on the return to Detroit, which took them over a northern route via Ogden, Utah; Omaha and Lincoln, Nebraska, and Chicago. On the return flight Gehlbach maintained his lead to win by a time margin of four hours.

The Union Oil Company supplied the Ethylized aviation gasoline and oils used by the derby ships during the time they were in the company's marketing territory, on request from the Cirrus officials. The first Union fuel was pumped into the tanks of the planes at Douglas, Arizona. From there until they had passed beyond the confines of the company's distribution system in Nevada on their eastward half of the hop, the pilots purchased Union gasoline exclusively.



*Cirrus derby planes lined up at Metropolitan airport for take off on return flight to Detroit. Insert—Lee Gehlbach, winner of the flight, in his bullet-nosed craft.*

## Loynes Builds G-2 Racer



**A** NEW and probably the fastest speedboat ever constructed on the Pacific Coast, a brain child of Dick Loynes of Long Beach, who holds virtually every major trophy and speed record in the 151 class, is on its way east to be entered in the famous American Gold Cup race to be held at Red Bank, New Jersey, August 16, and in the President of the United States' Cup race to be held on the Potomac river, Washington, D. C., September 15.

The new craft, a G-2 class boat, with a piston displacement of 625 cubic inches, was launched July 10, after having been under construction since the first of the year at the yards of Fellows and Stewart, Wilmington, Calif., boat builders.

Loynes has christened his new racer, the "Californian," in honor of his state, and if she lives up to his expectations for speed and endurance will be the first Pacific Coast craft to win the coveted American Gold Cup and President's Cup. In time trials in Long Beach Harbor, following its launching, she far exceeded Loynes' specifications which called for a sustained speed of 60 miles an hour for 90 miles. The exact time made during



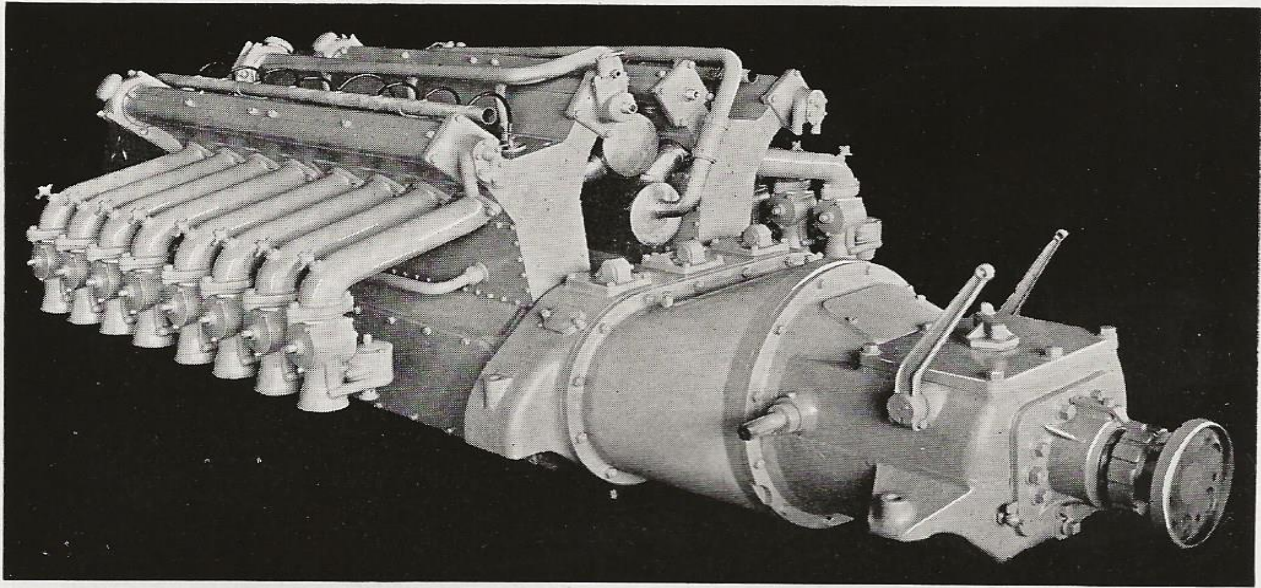
the trial runs is one of Loynes' most closely guarded secrets.

The sixteen cylinder "V" type motor which powers the racer was designed by Loynes and built under his supervision. It has sixteen intakes and sixteen carburetors, one for each cylinder. It is capable of developing 400 horsepower at 4300 revolutions—the average racing speed of the motor.

In order to withstand the heavy pounding at high speed in long race, such as is the 90-mile American Gold Cup event, the hull of the boat has been carefully fashioned from the finest seasoned lumber, ash going into the keel and fir into the frames. Planking is of young cedar. She is steel ribbed. The boat is 26 feet long and has a six-foot beam. From bow to stern the fine, sweeping lines are indicative of great speed and have been drawn to reduce as much wind and water resistance as possible.

Built to maintain a sustained speed for long distances, the "Californian" is also capable of exceptionally high speeds for sprints, a combination which Loynes expects to bring victory in the two national contests.

Since his entry into speedboat rac-



*The 16-cylinder, 400-horsepower motor which powers the "Californian." Note the carburetor for each cylinder.*

ing activity in 1924, Loynes has used Union Oil Company products exclusively. In past eastern triumphs, of which he has had many, he has sent Union Ethyl gasoline to the location of the races and has already made arrangements for shipment to the East of several hundred gallons of fuel for the coming national classics.

In 1924, with the assistance of Verne Walker, Loynes reorganized motorboat racing in California, effecting classifications based on horsepower of the motors that completely changed competition rules. Following these changes, the 151-class hydroplanes came into prominence and Loynes began his exploits in both Pacific Coast and Eastern racing circles with Smiling Dan II, Smiling Dan III, and more recently, Miss California, which

have placed him at the top as international champion in the 151 class.

In addition to more than fifty smaller trophies, Loynes has in his possession the famous Elgin trophy, emblematic of world's speed supremacy in the 151 class, the Royal Poinciana, International Rudder, and the Charles A. Lindbergh trophies, and the \$5000 Cuban Gold Cup. He has to his credit world records in the following event: five miles in competition, both limited and unlimited class, twenty miles in competition, two and one-half miles in competition, six miles in competition, one mile straightaway, and the nautical mile straightaway.

Loynes also took "Miss California" on his invasion of the East this year, and will drive her in 151 class events at various Atlantic Coast and Midwest events.

## New Cover Series for Bulletin

ON the cover of this month's issue appears the first of a series of outstanding paintings to be presented the Bulletin for reproduction by the Stendahl Art Galleries, located in the Ambassador hotel, Los Angeles. The first of this series, particularly appro-

priate at this time because of the Company's growing interest in the Far Eastern markets, is by Don Sayre Groesbeck. It is hoped through this series to stimulate greater interest in fine paintings as well as to cultivate a keener appreciation of them.

Groesbeck, painter and etcher, bon vivant and famous raconteur, is one of the most colorful personalities in the art world. An insatiable thirst for knowledge, an unconquerable curiosity and an almost morbid zest for new experiences have led this man repeatedly to the farthest corners of the earth.

His adventurous life is reflected in his work: it is rich, varied, picturesque, and never superficial. With almost uncanny introspection he visualizes the essence of whatever country he studies, whichever people he paints. His intuitive perception is fortunately matched by his complete expressiveness in every way—personally and artistically. He can tell of his experiences with a vividness which leaves his audience breathless, and not because he is a good actor, but because he is so enthusiastic, so wrapped up in his tale, that he re-lives it himself.

Groesbeck does not confine his adventures to observance and recordance of strange lands and customs and people—he has experimented with every medium of graphic art; oil painting, water color, dry point, etching, lithography. His latest and most constant love is the monotype, of which this month's Bulletin cover is an example, and even within this medium he plays with methods of varying it that produce the most delightful results. A monotype is an original oil painting which derives its name from the method of its production. The process is simply a transfer of the paintings to paper from the plate upon which it is first executed. A single transfer only is possible from one plate which is usually of copper or zinc. Any non-absorbent surface, without either etched line or drawing to aid the design, may be used, and while the paint is still wet, the paper is laid upon it and the whole run through a press. The painting is thereby completely transferred to the paper, and the combination thus formed is known as a monotype. Groesbeck, however, uses neither copper nor zinc for plate, nor does he apply the paint in an ordinary manner. With his usual originality he

insists on using a white porcelain plate, and painting not with a brush but with his fingertips and the palm of his hand, skillfully rubbing on his colors. The process is one peculiar to and characteristic of him, although from pictures seen in Russia, it was evidently used centuries ago by painters there.

There is a quality of tone in even his most brilliantly colored paintings that can only be accounted for by the use of his fingers in place of the brush—a softness which gives the impression, almost, of water colors. The subjects of his exhibition at the Stendahl Galleries, where his works are constantly featured—are as varied as their locale. While most of the monotypes are vividly visible memories of his sojourn in Siberia, there are equally colorful scenes from Korea and Japan. In fact, the former newspaper artist's ability to portray such widely diverse themes is truly remarkable—snowy hillsides, gay tea girls, sombre seas, clamoring markets, sheltering churches, and the series of remarkable Russian peasant characterizations—anything he attempts is glorified through his art.

When it is known that the nature of the medium—pigment and oil—limits the time of painting practically to minutes, since to make a successful monotype all of the paint must be wet at the time of transfer, it will be seen that the artist must of necessity be a rapid painter and a sure draughtsman to achieve good results; that his conception and his ability to render it shall be closely in accord to insure to his effort that individual charm which is the peculiar property of a good monotype. The very rapidity with which the actual painting must be done gives a spontaneity which is especially notable in Groesbeck's monotypes. His Russian characterizations particularly achieve a degree of human analysis that would do credit to a lengthily considered work, and at the same time, from a purely aesthetic standpoint, his pictures are powerful in decorative appeal both in color and design.

# NEWS OF THE MONTH

## GARMAN HONORED

R. W. Garman, manager gas operations of the Union Oil Company, was elected to the presidency of the California Natural Gasoline Association at its yearly election meeting in June. Mr. Garman succeeds R. E. Beckley, stepping from the position of vice-president which he has held for the past year.



R. W. GARMAN

Organized in 1925 as a medium for the discussion and exchange of ideas on matters pertaining to production and utilization of natural gasoline, the association has grown in size and influence and at present lists approximately 600 members on its rolls. Monthly meetings are held in which papers are read and discussed on topics of importance to the industry.

Through the work of the association, various gas operations have been standardized, and considerable assistance has been rendered the Bureau of Standards. A monthly report is also made of gas production and distribution, which is of importance to the oil and related industries. In addition, much experimental work is sponsored by the association.

## FUEL OIL FOR NAVY

Seventy-five thousand barrels of fuel oil, destined for the U. S. Naval base at Cavite, Philippine Islands, will be loaded aboard the Santa Maria, Aug. 11, at the company's dock at San Luis Obispo. It will mark the first trip of a Union Oil tanker to the Philippines and will be the initial delivery of fuel oil to the Navy under the 2,000,000-barrel contract for the present fiscal year. The round trip will take approximately 65 days.

## 1638 EMBLEM AWARDS

Figures compiled by the Insurance and Personnel department reveal the fact that approximately one-sixth of the employees of the company have been on the payroll for ten years or more. Up to June 30, 1930, the report shows that 1638 service emblems for from 10 to 35 years' employment had been issued as follows:

Thirty-five years, one; 30 years, four; 25 years, 10; 20 years, 136; 15 years, 333, and 10 years, 1154.

## A MARINE LUNCHEON

The "Bilge Club" of San Pedro provided a marine setting for the luncheon of the "Unionaires" on July 12, attended by approximately 80 girls. Following the luncheon they were taken on a motor boat trip around the harbor. The girls in charge of the affair were Louise Stoughton and Julia Campbell. William Groundwater, manager of transportation, assisted by A. O. Pegg, Capt. Halvorsen and Mr. McLean, acted as hosts.

The table decorations and place cards were in keeping with the marine setting, as was also the skit, "Barnacle Bill, the Sailor," presented by Nancy Slater and Hazel Bartcherer.

The officers of the "Unionaires" for the coming year, as announced at the luncheon, are: President, Ruth Carpenter; vice president, Margaret Kearney; secretary, Ione Warner, and treasurer, Louise Stoughton.

The retiring president was presented with a handsome rhinestone bracelet and a corsage of gardenias. The next affair of the club will be a swimming party and weiner bake at Santa Monica, August 14.

## YOUTH MUST BE SERVED



Hugh Guthrie and his Union-made tub.

Union motor spirit cans have uses in the Antipodes other than being merely containers of gasoline, as may be observed from the above photograph.

While on a cruise off the New Zealand coast in his father's 45-foot yacht, Hugh Guthrie, the fine specimen shown above, demanded a fresh water bath on the high seas and wasn't content until his dad, H. D. Guthrie of the firm of Guthrie, Bowron and Company, Ltd., booster and user of Union products, had fashioned a private tub for him from one of the fuel cans aboard. His oggling would indicate that he is more than pleased with the new arrangement. Hugh had reached the hoary age of six months when the picture was taken.

## Portable Island Fills Gasoline Marketing Need



*The advantageous uses to which the portable islands can be put are shown in the accompanying photographs. At the top, an island in front of a refreshment stand on the highway, and left, an independent dealer's location converted from a two to a three drive station.*

More than a year ago, realizing the economic need for a compact reseller unit that could be installed in small areas and in out-of-the-way places, where expense of the regular stations would not be justified, the petroleum marketers on the Pacific Coast developed the "portable island," a miniature service station, complete in all essentials. The Union Oil Company was one of those to take the lead in this type of installation, and at present these units are to be found in virtually every section of the Coast. They are inexpensive to construct and easy to install.

The portable island adopted by the company is mounted on a base twelve feet long and two feet wide, contains two clear-vision gasoline pumps, oil tanks, and air and water connections. The island is covered with an imitation tile canopy. Fuel tanks are buried nearby in accordance with city or county

specifications, and the air compressor is located close to the unit. It is equally as easy to dismantle as it is to install. Once torn down it can be trucked from one location to another without great cost or labor.

In the cities the island is used as an auxiliary unit for service stations, in parking stations, on corners and small lots where lack of room makes the installation of service stations impossible, and in garages.

It is proving especially valuable in the suburban areas where there is need for gasoline and oil service, but where the expenditure of a large sum of money for a standard service station would not be advisable.

### F. O. MARTIN RESIGNS

F. O. Martin, a member of the geological staff of the Union Oil Company since 1919, has resigned his position, effective August 1, to enter business for himself. During a major portion of the time he has been with the company he has carried on exploration work in South America, principally in Colombia, where the company has acquired extensive holdings. He has written a number of articles on geological work in Colombia, many of which have appeared in the Bulletin.



### Selling Motorite in Neon

*The Union Oil Company's new Neon sign, located on top of the Wilshire Arts building, Wilshire and Western Avenue, Los Angeles, one of the world's busiest traffic intersections, has attracted considerable attention in the Southland and has done much to further Motorite sales in the Los Angeles district. An actual count of cars reveals that an average of 2,100,000 automobiles, exclusive of busses, pass this intersection each month.*

## Institute Test Shows Efficiency of Western Oils

By E. W. HUTTON

*Assistant Manager Lubricating Oil Sales, Union Oil Company*

Automobile oils, manufactured by reputable refiners, have varying characteristics, according to the source of the crude oil from which the finished product is made and the methods of refining. We of the Pacific Coast are particularly fortunate in having a type of crude oil that when properly refined will produce one of the most satisfactory motor oils that can be secured.

Carbon has long been the nemesis of all lubricating oil salesmen, for the reason that unintelligent operation of an internal combustion engine may cause excessive amounts of carbon to be formed when even the highest type of lubricating oil is used. One indisputable fact remains and this is that all oils leave a residue after being exposed to the terrific temperatures encountered in the lubrication of internal combustion engines.

Pacific Coast lubricating oil causes much less trouble in respect to carbon formation than oils produced in other sections of the United States. In support of this statement we might refer to a series of tests recently conducted by the Mellon Institute of Industrial Research (See S.A.E. Journal of Nov., 1929, pp. 489-494). These tests, made in eighteen motor coaches owned and operated by a public utility company, determined beyond a doubt that oils, such as the Pacific Coast produces (naphthenic oils) are superior to the paraffin-base oils in coaches of this type for the particular reason that the amount of carbon residue from naphthenic oils is considerably less than from the paraffin-base oils and is much more easily removed.

A striking comparison is made in one of the tables in the Mellon Institute report,

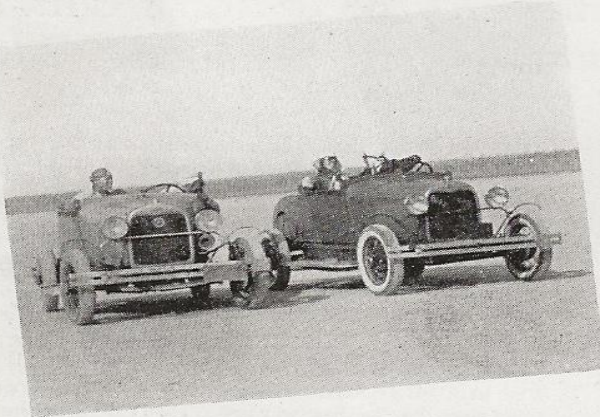
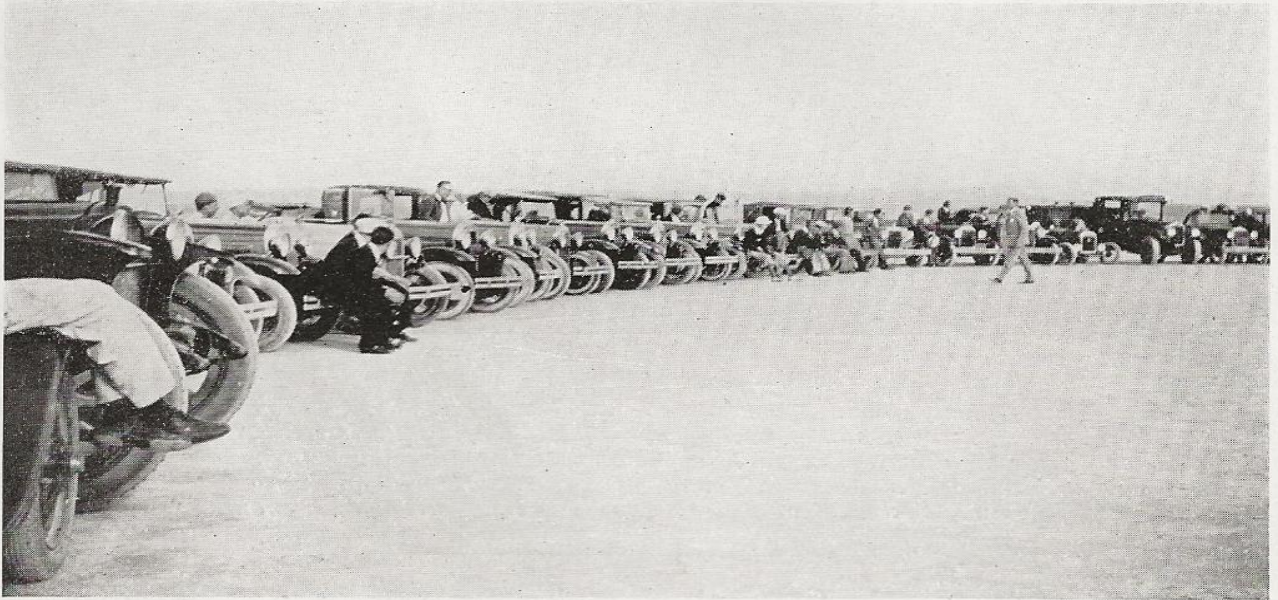
wherein it is shown that the miles run per port clean-out were 1,556 when the naphthenic oils were used, whereas only 314 miles and 401 miles respectively were obtained with the use of two grades of paraffine-base oils. This fact alone clearly justifies our claims that Motorite oils form very little carbon and such carbon is "fluffy" and soft and blows out through the exhaust manifold.

It should also be noted that in the report of the aforementioned tests it is shown that consumption was approximately the same

with the three oils and lubrication of all parts was entirely satisfactory.

Much more can be said regarding the formation of carbon deposits in an internal combustion engine but space does not permit. Perhaps in future issues we may go further into this subject. One thought should be borne in mind, and that is that lubricating oils must be carefully refined by very elaborate equipment to insure a minimum of carbon and we are not too modest to state that Motorite is such a product.

## Fords Demonstrate Speed on Desert Lake



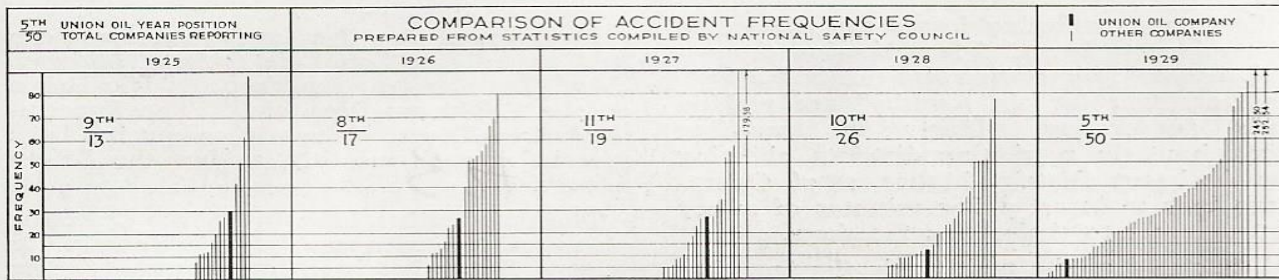
Muroc Dry Lake is being used as a speed course on which stock Fords, equipped with special racing heads, are proving that one can never tell by a car's size how fast it will run. In the photograph at the top the cars are lined up for one of the races. Bottom, left—Off from a standing start. Both cars attained a speed of 90 miles an hour before the quarter-mile mark was passed, and the one on the right, equipped with a Riley head and using Union Ethyl and Motorite, reached a top speed of 97 miles an hour to win the race. Bottom, right, Ford coupe turning in a 91-mile-an-hour performance.



# SAFETY IN THE UNION



## Consistent Effort Brings Results Manufacturing Record Improves



Each line on this chart represents the accident frequency record of the manufacturing department of some oil company. The heavy line in each year-group is that of Union Oil Company of California. In five years the Company's position has dropped from ninth among 13 to fifth among 50 companies reporting. The actual accident frequency has been reduced from 30.3 lost-time injuries per million man hours to 6.4, a reduction of 79 per cent. During the first half of 1930 the rate was further reduced to approximately 3.0.

### REFINERIES COMMENDED

Los Angeles, California,  
July 24, 1930.

L. G. Metcalf, Manager of Refineries  
Building.

#### Refineries Accident Report

I have studied with much interest the comparison of accident frequencies pictures in Safety Board Bulletin No. 5 of July 12, 1930, and I note that our refineries are placed fifth among fifty companies reporting to the National Safety Council. I am informed also that for the period of 1930 so far reported, the accident record of our refineries is even better than that of 1929.

I congratulate you and your organization on the showing you have made. Would it not be an achievement if you could lead all companies in this regard?

Yours very truly,  
(Signed) W. L. Stewart, Jr.,  
Vice President.

WLS.JR:H

### 1930 Will be Better

The conclusion of the intensive drilling campaign at Santa Fe Springs has had its effect on the accident rate of all departments involved in field operations. Particularly noticeable, of course, is the rate in the Department of Exploration and Production. For 1929 the accident rate averaged 61.9 lost-time accidents per million man hours as compared with 43.4 in 1928 when the second Santa Fe Springs campaign was just getting under way. During the first six months of this year employment in the Field Department fell some 25 per cent and the accident rate showed an even greater decline. This condition held for practically all companies operating in California. Rapid increase in personnel inevitably means hiring green help. In spite of every conscientious effort to keep safeguards abreast of machinery design, accidents will happen when untrained men work with heavy equipment.

The time will probably come when this problem will be differently handled. It will

be found cheaper to give new men a certain amount of deliberate instruction and training. We have today certain drillers who make an effort to instruct their new "rough necks." The results are most interesting. These drillers actually have fewer accidents among their men. A chart kept in the field safety office at the Springs shows the number of accidents in every drilling crew. The number charged against individual drillers varies greatly but so does their general efficiency, and in about the same way. It will only be necessary to recognize and encourage these A-1 drillers, then to use them as trainers, sending the new men first to the best drillers and later passing them on to the second string drillers. The oil fields have seen far greater innovations in the past five years.

Company marketing forces are taking the safety idea to heart. Flags bearing the notation that "This station has not had a lost-time accident for six months" are making their appearance. Marty is travelling throughout the marketing districts, showing the Assistant District Managers of Operations how to insert a few minutes of safety instruction into their sales meetings.

The proof of the pudding is the fact that after climbing steadily upward for five years the accident rate in the marketing stations has fallen off nearly 20 per cent in the past six months. It is during this period that the effort toward safety education has been under way.

#### SAFETY AND EFFICIENCY

*Occasionally we find a man who disapproves of using safe practices in his work because he thinks it interferes with the progress of the work to be done and hampers efficiency. This is not true. In fact the opposite is true, for safety promotes efficiency. Safe practices establish a uniform method of doing work and such uniformity increases efficiency to a noticeable degree.*

A year of rigid enforcement of the "No smoking—No open fires" rule in the oil fields has proved a success. One after another the major companies have adopted the rule. On Union Oil Company properties there has been little difficulty in adhering to so obvious a safety measure.

*Si Delaney says he is going to raffle off his double-barreled cast to some pee-wee golf course for a hazard.*



J. W. BENNETT

the first twenty years were the hardest!

If the gods are good to J. W. Bennett, Construction Superintendent in the Central Division, he will soon add another gold star to his safety flag. Two years of no lost time accidents in the building of marketing stations is something to be proud of. Here today and there tomorrow, with a nucleus of trained foremen and mechanics and always a green crew of workmen, it is not as easy as it might seem. Give the old boy a hand,

Meetings of pipe line employees have been held recently at San Luis Obispo, Midway, Kern, Tar Canyon, Junction and Rio Bravo on the Producers Pipe Line. The Superintendent or Assistant Superintendent has been present at each meeting, as has the Safety Supervisor.

The purpose has been to discuss problems of operation with particular reference to safety. There has been little formality. The men sitting around in a group have talked things over and notes have been made of suggested improvements.

To the Los Angeles Pipe Lines goes the credit for inaugurating this type of meeting. The geographical layout of the southern line makes it possible to get all engineers off duty and all gang foremen together at one place and time. The Brea office has been the meeting place and not a month has been missed for the past year.

Safety records grow out of this sort of interest.

Kyle J. Lutz, safety supervisor at Oleum Refinery, is another sojourner in the hospital, Samuel Merritt Memorial, Oakland, being his present address. Internal complications which caused Kyle's incarceration are said to be clearing up. Chris Stamm says he thinks Lutz bit off some of that fiery red mustache he has taken such pride in growing.

Jack Leslie, recently employed as night wharf man at the Portland, Oregon, plant, was drowned on the night of July 18. Arriving at the dock late for the start of his shift, Leslie drove onto the dock in violation of Company orders. In passing some barrels stored on the dock, the wheel of the closed car struck a valve and the car caromed off the dock.

# REFINED AND CRUDE



Statistics show that half the married people in the United States are women.

\* \* \*

Also, that the influence of heredity is vastly more pronounced than that of environment. This is true of the entire animal kingdom; even the horse seems to take after his fodder.

\* \* \*

*And now that we have figured the lost time in most other operations, perhaps some kind statistician will figure out exactly how much time is lost in figuring lost time.*

\* \* \*

Another thing we have often wondered about is this: If, as the psychologists tell us, there is no such thing as pain, what is it that certain people so frequently give us in the neck?

\* \* \*

Pending your answer, we relate the following classic from College Humor:

He: This, my dear, is the Suez Canal.

She: Suez you?

He: Yeh. Suez me.

\* \* \*

*Our esteemed friend, Sandy McPherson, inadvertently swallowed his collar button last week and was rushed to the hospital for an X-ray examination. The pictures failed to reveal the location of the button, and it is feared the poor fellow may have to buy another one.*

\* \* \*

And remember: Two can live cheaper than one can play miniature golf.

\* \* \*

A retailer wrote to the wholesale house ordering a supply of goods. In reply the firm wired "Cannot send goods until last consignment paid for." Immediately came this from the retailer: "Cancel order, cannot wait so long."—Orcadian.

\* \* \*

*Quite a traffic jam occurred on Broadway the other day, when a woman driver signalled that she was about to turn to the right, and actually did so.*

\* \* \*

Incidentally, when a motorist stops, looks, and listens, there is usually something wrong with his motor.

\* \* \*

Household hint: To clean phonograph records, use a good coarse grade of sandpaper.

\* \* \*

*The novice at trout fishing had hooked a very small trout, and had wound it up till it was tight against the tip of the rod. "What*

*shall I do now?" he yelled excitedly, and his more experienced friend replied, "Quick, climb up the rod and stab him."—Patton's Monthly.*

\* \* \*

A golf ball is that small indented object which remains on the tee, while a perspiring citizen fans it vigorously with a club.

\* \* \*

"And," says the Annapolis Log, "an excellent time to kill two birds with one stone would be during a saxophone duet."

\* \* \*

*Then there was the fellow who went to the chiropodist to see a man about a dog.*

\* \* \*

"Tom," said Bill, as he caught up with him on the way back to the hunting lodge, "are the rest of the men out of the woods yet?"

"Yes."

"And are the six of them quite safe?"

"Yes, quite safe," said Tom.

"Then," said Bill, his chest swelling, "I've shot a deer." —College Humor.

\* \* \*

"You might just as well take back this package marked C. O. D.," said the lady to the delivery man, "it was salmon I ordered."

\* \* \*

*An English cub reporter, frequently reprimanded for relating too many details and warned to be brief, turned in the following: "A shocking affair occurred last night. Sir Dwight Hopeless, a guest at Lady Panmore's ball, complained of feeling ill, took a highball, his hat, his coat, his departure, no notice of his friends, a taxi, a pistol from his pocket, and finally his life. Nice chap. Regrets and all that."*

\* \* \*

An irate fan who had watched his home team go down to defeat, stopped the umpire as he was leaving the field. "Where's your dog?" he commanded.

"Dog?" ejaculated the ump. "I have no dog."

"Well," said the grouchy one, "you're the first blind man I ever saw who didn't have a dog."

\* \* \*

*In conclusion we would endeavor to impress you with the importance at this time of applying yourselves assiduously to your allotted tasks—even the mosquito has to go to work before he gets slapped on the back.*

\* \* \*

And remember there is no such thing as a noiseless typewriter—they all chew gum.



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