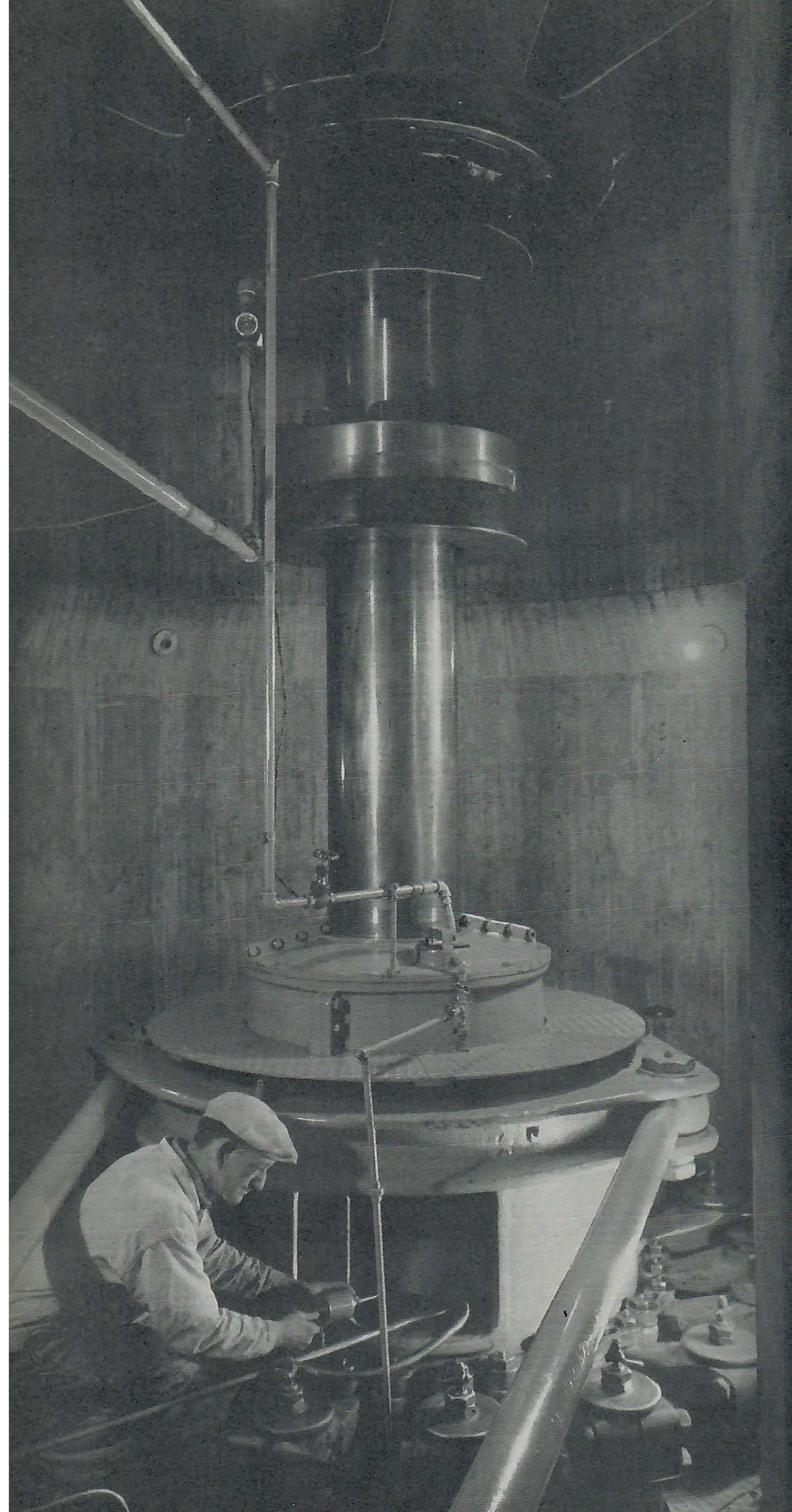


UNION
OIL
BULLETIN

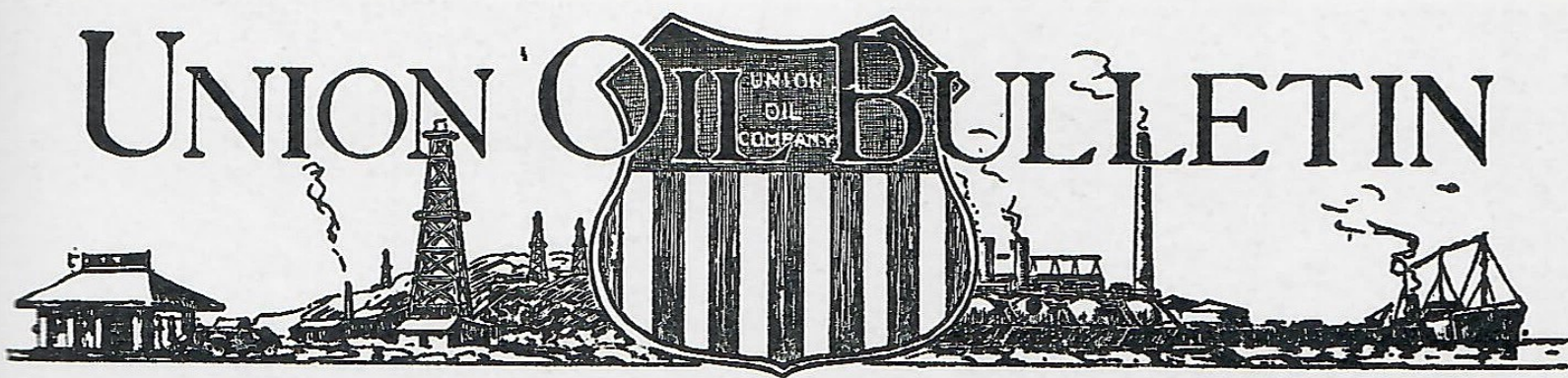
JUNE 1932



**Where
Lubrication
Is of Prime
Importance**

Lubricating
thrust bearing of
11,000 K W
hydro-electric
turbine, Horne
Mesa Dam, Salt
River, Arizona

UNION OIL BULLETIN



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JUNE

BULLETIN No. 6

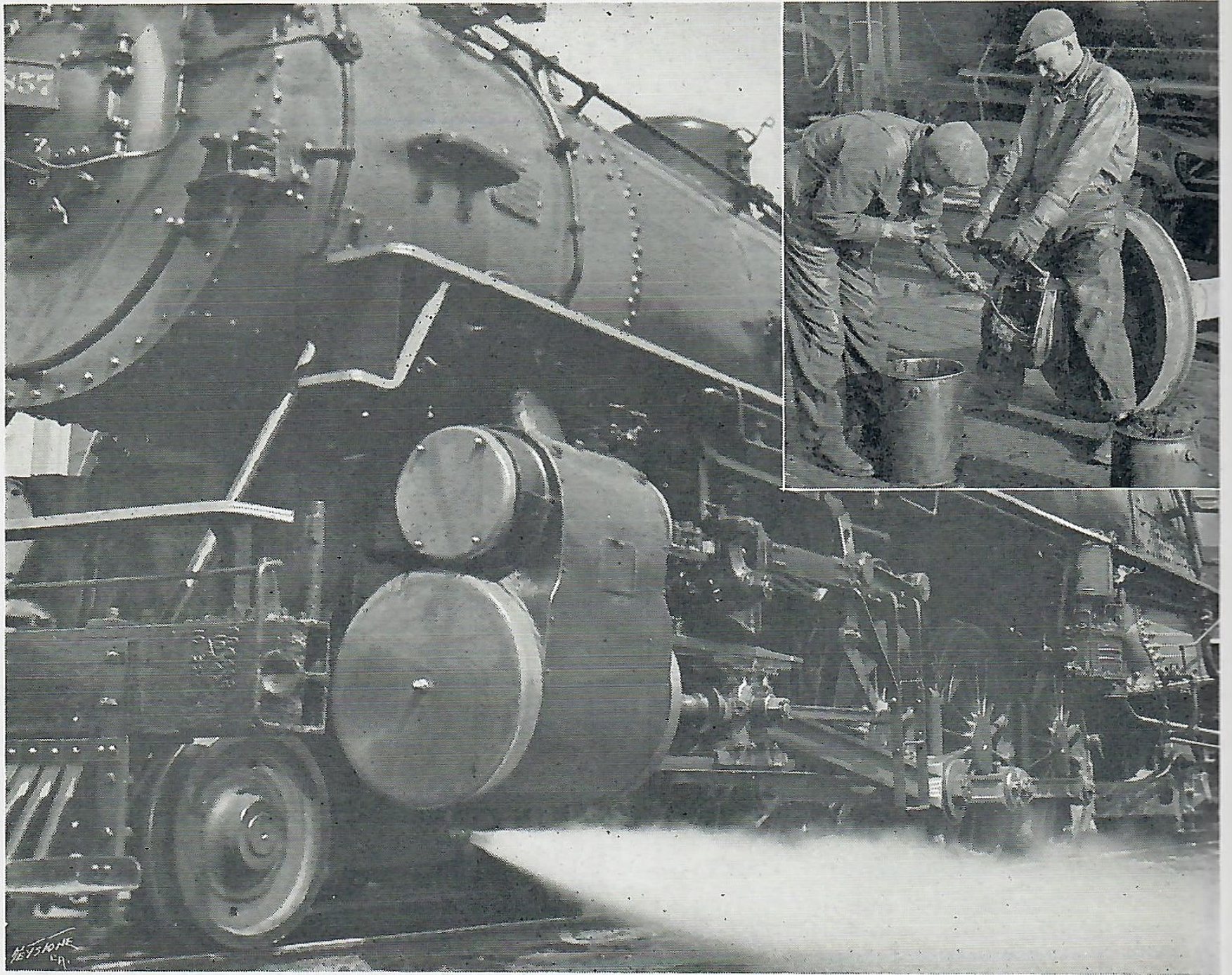
Union Awarded Navy Fuel Oil Contract

NOTICE was received from Washington, D. C., May 23, that the Union Oil Company had been awarded a contract to supply the Navy with 5,027,500 barrels of fuel oil and 164,000 barrels of Diesel fuel oil, the latter for submarines, during the next fiscal year, July 1, 1932 to June 30, 1933. It is believed to be one of the largest, if not the largest, fuel oil contracts ever awarded to a single company. The total cash consideration involved is in excess of \$3,000,000.

The fuel will be used by vessels of the Navy operating in the Pacific. The estimated fuel oil requirements of the Navy for the next fiscal year, on which the company bid, are 5,211,055 barrels, while the Diesel fuel oil requirements are listed at 194,200 barrels. By virtue of its award the company will supply slightly more than 96 per cent of the total.

In connection with the Diesel fuel award it is interesting to note that the company was one of the pioneer manufacturers of Diesel fuel oil on the Pacific Coast and that Union Diesol was used by the Navy submarines last year.

The bulk of the fuel oil will be delivered to naval tankers at Los Angeles harbor. Other deliveries will be made by the company's tankers to naval stations and ships of the fleet at San Francisco, Seattle, Aberdeen, Wash., and Astoria, Ore., Honolulu, and Cavite, the U. S. Asiatic naval base in the Philippine Islands. The Diesol deliveries will be made at Los Angeles and San Francisco harbors.



Oiling the Wheels of Industry

THE importance of the part played by lubrication in the life of modern industry is manifest in the fact that without a regular supply of petroleum lubricating oils and greases virtually all commercial activity would cease. Trains would stop running; automobiles would be permanently parked in garages; airplanes would be grounded and stay grounded; street cars and busses would come to a standstill; there would be no newspapers to read; gas and electric plants would shut down; no radio programs would disturb the ether, and all gasoline, steam and Diesel-powered ships would be docked.

The use of lubricants has grown with the rise of industrialism. In the United States alone, consumption of lubricating oils and greases has increased from a few barrels in 1860 to more than 20,000,000 barrels in 1931. The supply has kept pace with

demand and now considerably exceeds it. Knowledge of the importance of lubrication and its proper use in various types of equipment has spread to the individual who works at or supervises the operation of a machine.

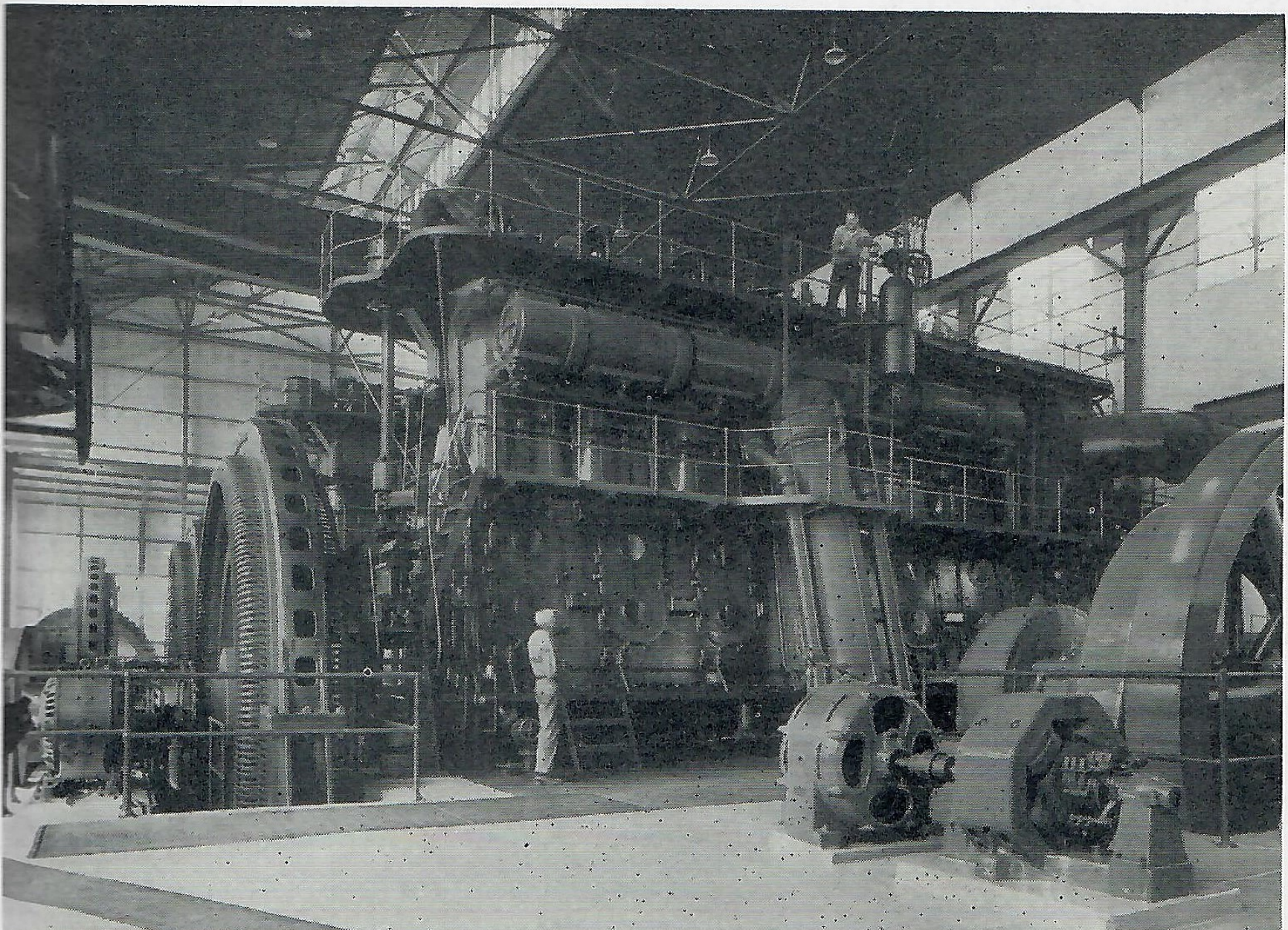
The Union Oil Company today manufactures more than 200 lubricating oils and greases to meet the complex and widely diversified requirements of present day industries. No two plants are alike, even within the same industry. The diversity of equipment, both as to make and age, and the use to which it is put, creates a wide range of lubricating problems. When necessary the resources of the research and manufacturing departments are made available to a single plant to develop a lubricant or lubricants to meet some specific and unusual requirement.

Transportation, in all its ramifications, is the most extensive consumer of industrial lubricants. The engines of passenger, freight, and tank ships require oil to properly function. A protecting film of oil must be assured to prevent friction, the heat of which would, within a few minutes, put the engine room equipment out of commission. Bearings must not run dry and melt down; journals need lubrication. Once scored by heat, they would no longer be of service. Valves would stick and cylinders score if the oil pan went dry. Without lubrication no power could be supplied to pumps to load and discharge bulk oil cargoes; Gar Wood and Kay Don could wrap up their speedboats and store them away; the Europa, the Bremen, and the Empress of Britain could have all superstructures stripped away and masts erected for rigging with sails.

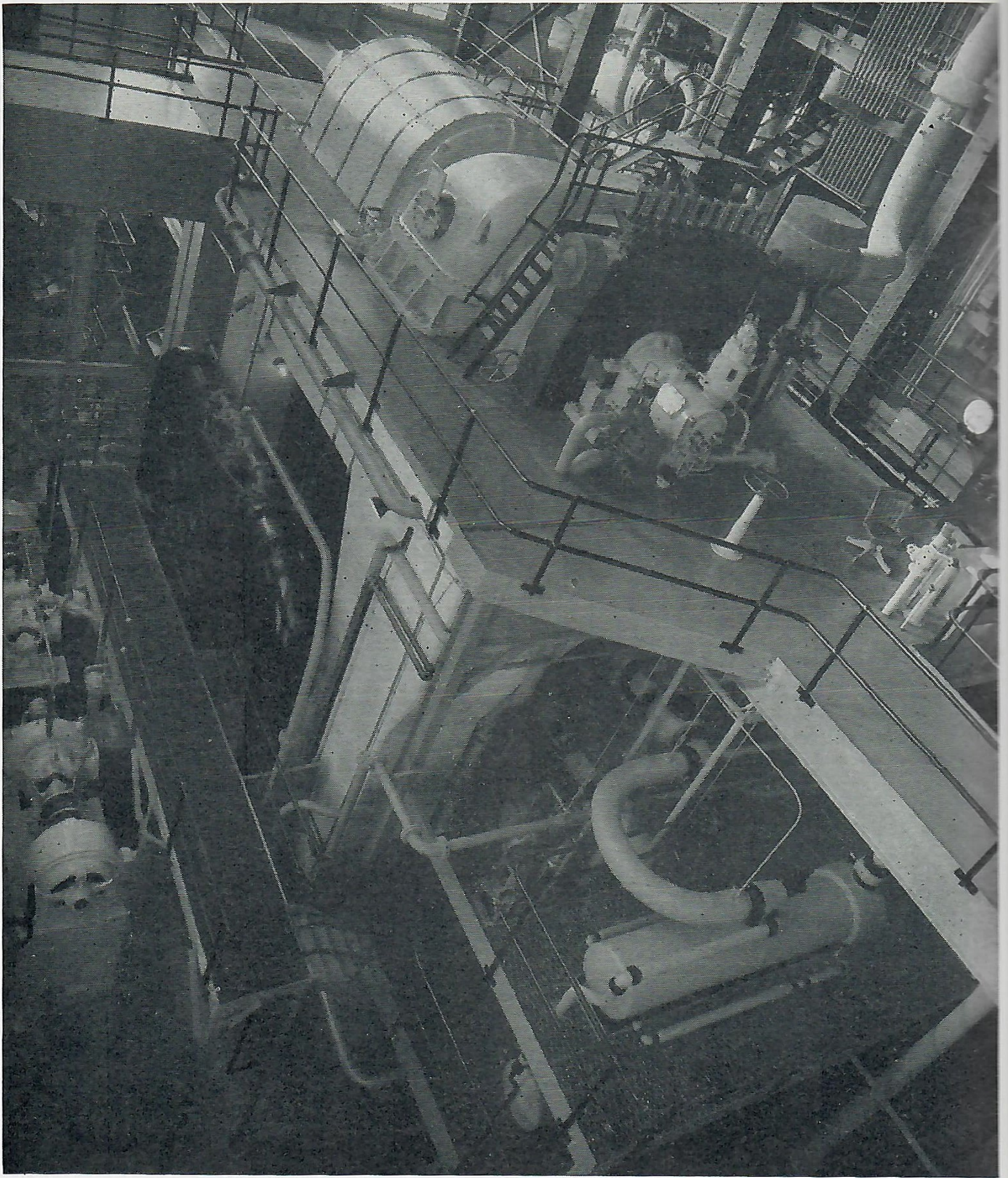
But for the proper lubricants to protect wearing surfaces, the Gold Coast Limited, the Cascade Limited, and the Chief would never leave the yards; the Broadway Lim-



Diesel engine of the M/S Caliche lubricated with Union products.



Four thousand horsepower Busch-Sulzer Diesel engine of the Tuscon Gas and Electric Company which operates a 3750 KW Allis-Chalmers generator.



Twenty thousand KW steam-turbine generator unit of the Central Light and Power Company, Arizona. Lubrication protects the \$2,500,000 plant installation.

ited would have to enter the round-house and stay there. Driving pins must receive a periodic application of a lubricant manufactured to withstand the excessive heat, without losing its protecting qualities, regardless of prevailing temperatures. Journals must be packed with an especially prepared waste saturated with a clinging, heat resisting oil. Steam cylinder working parts need a special oil which will provide

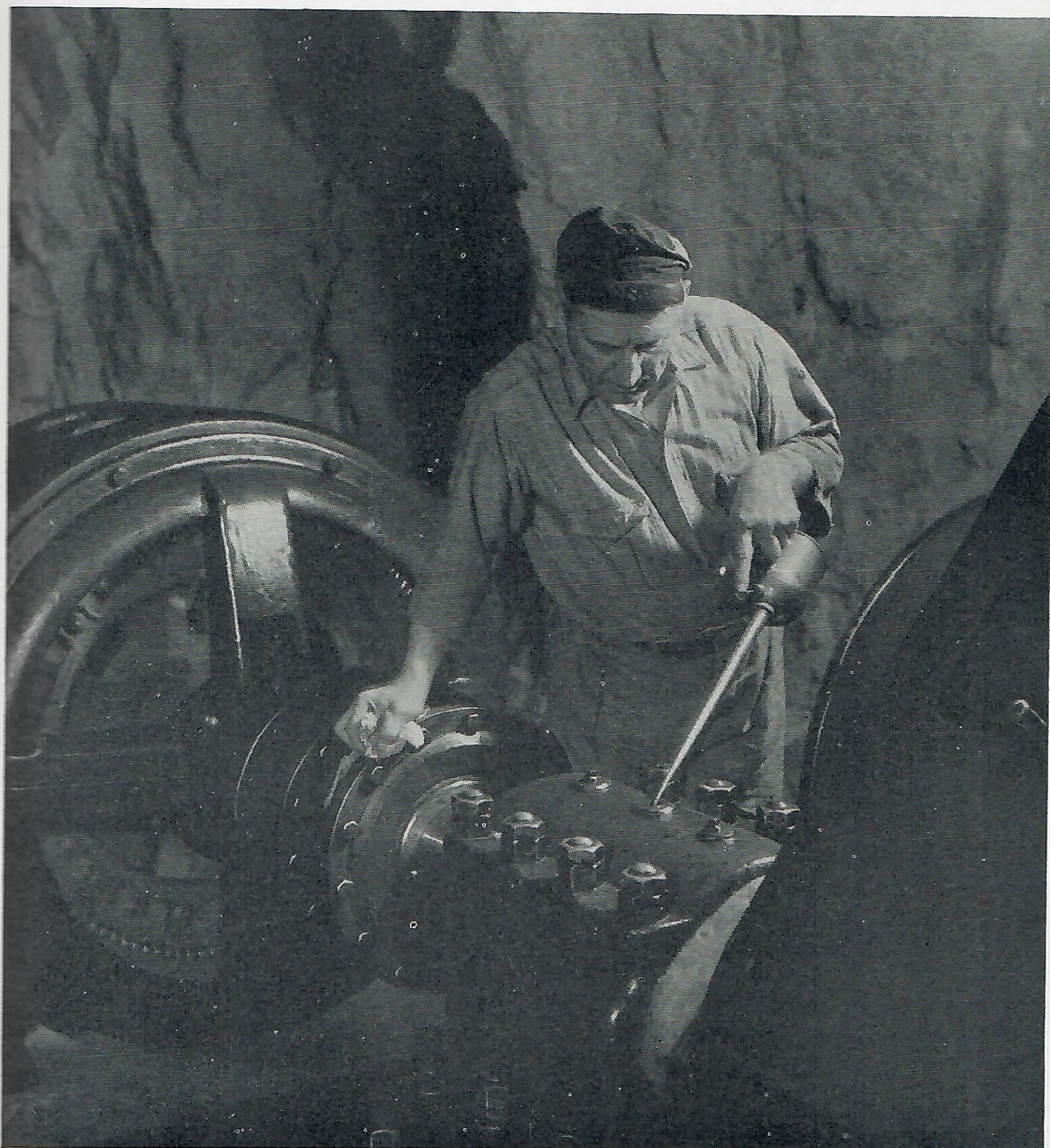
ample protection for the highly finished surfaces and one which will emulsify when it comes in contact with live or condensed steam. Brake mechanisms have to be kept from freezing by lubricating pins and bushings.

Union Locolube has been manufactured to meet the strain placed on a lubricant by the action of the driving rods of locomotives. A journal oil of exceptionally sterl-

ing quality has been developed for use in packed journal boxes. Other products meet a variety of needs of the rail transportation industry, among which are listed the street, interurban, and elevated railways. In the case of busses, the complete line of automotive lubricants is required. The heavy duty and constant strain to which the motors of city, as well as cross-country busses, are subjected demands a crankcase lubricant with more than ordinary stability.

Throughout the world factories and plants depend on a constant supply of lub-

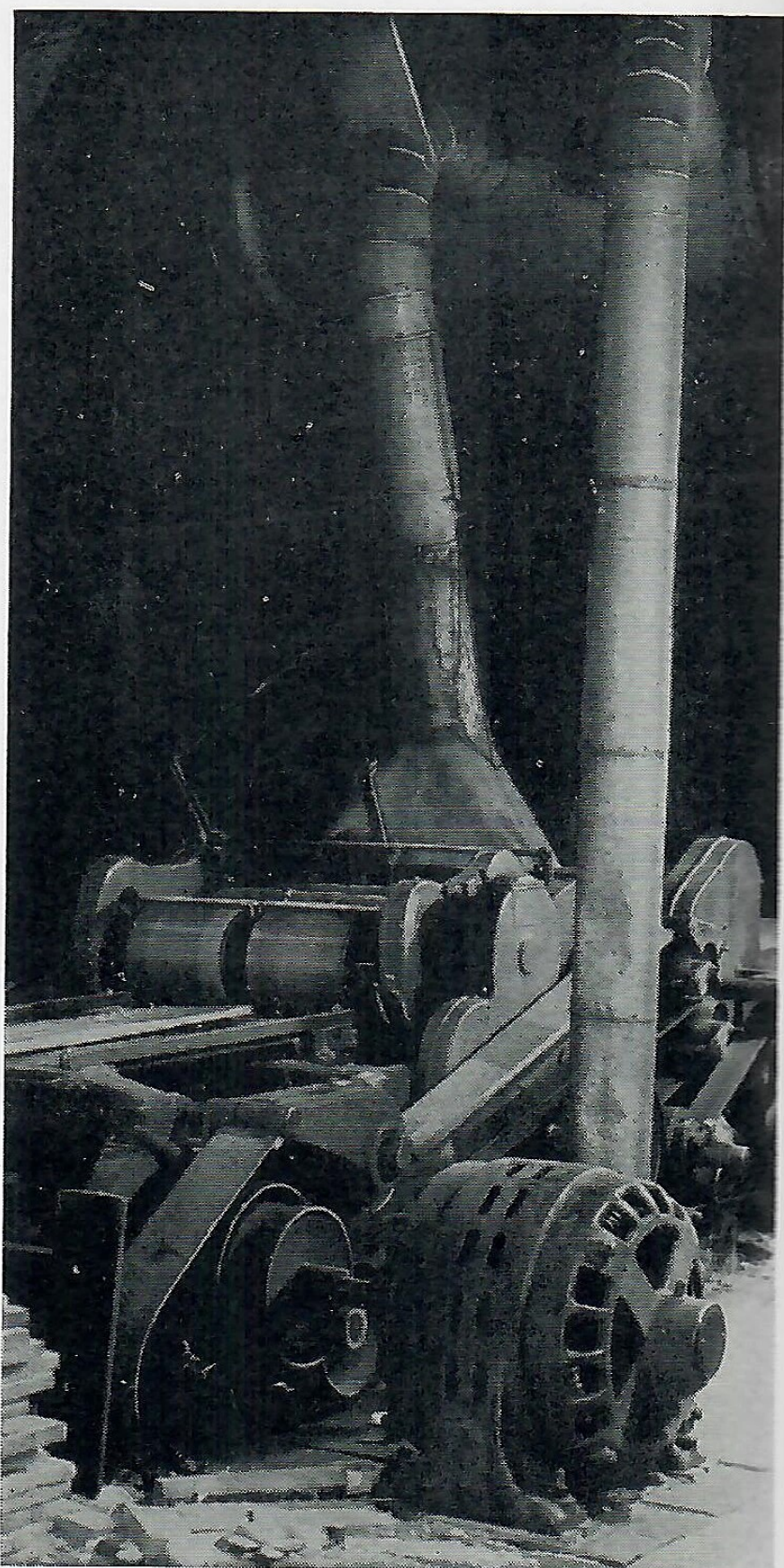
ricating oils and greases for the efficient and continual operation of machinery. Engine room superintendents are critical of lubricants, well aware of what inadequate lubrication or a faulty grease or oil can cost in time, labor, and dollars lost. Electrical and gas plants are large purchasers of petroleum commodities. In the power house oil plays a particularly important role. Water pumps, turbines, bearings of generator installations and exciter motors must have a specific type of oil. Transformers that step the enormous power output of the plant down to a



Main bearing of Worthington Triplex water pump operated on the 800-foot level of the Tom Reed mine, Arizona.

point where it can be easily handled in transmission lines require another kind of oil. The Diesel engines in use in many generating plants have need for a special Diesel engine oil, various grades of which are manufactured by the Union Oil Company. In the engine manufacturing plants, cutting, finishing, and tempering oils are much in evidence. The Union Oil Company has for sale through all its agents a full complement of these oils. It has also a full line of the other oils and greases necessary in the operation of all types of stationary equipment.

In the Pacific Coast area, the lumber and mining industries afford one of the largest outlets for all types of oils and greases. Special efforts to study the needs for lubrication in lumber mills and mining operations and to provide lubricants suited to the demands of western manufacturers have been made by the Union Oil Company. Both the lumber and mining industries are distinctive for the size and variety of equipment used and for the adverse conditions under which operations are maintained. Regardless of the size of logging or mill equipment, a shut-down involves unnecessary expense. A heavy premium is placed on the dependability of the oil or grease used. So varied is the use of lubricants in the lumber industry that an entire line of products has been evolved by petroleum manufacturers. A special saw oil keeps the cross-cut saws free of gum. In the logging operations, the donkey, usually a twin hoisting steam engine with winding drums and boiler mounted on skids for mobility, requires a high grade cylinder oil containing a large percentage of compound. Gears are protected with a heavy gear dope to reduce vibration and wear. Once in the pond, the logs are carried to the log deck by a heavy conveyor chain for which another lubricant is necessary. Head saws run at high speed and maintain a heavy bearing pressure. These bearings must be protected with a heavy red engine oil. On through the process by means of which the logs are cut into finished lumber, the machinery which accomplishes the various stages is dependent to a large extent on adequate lubrication.

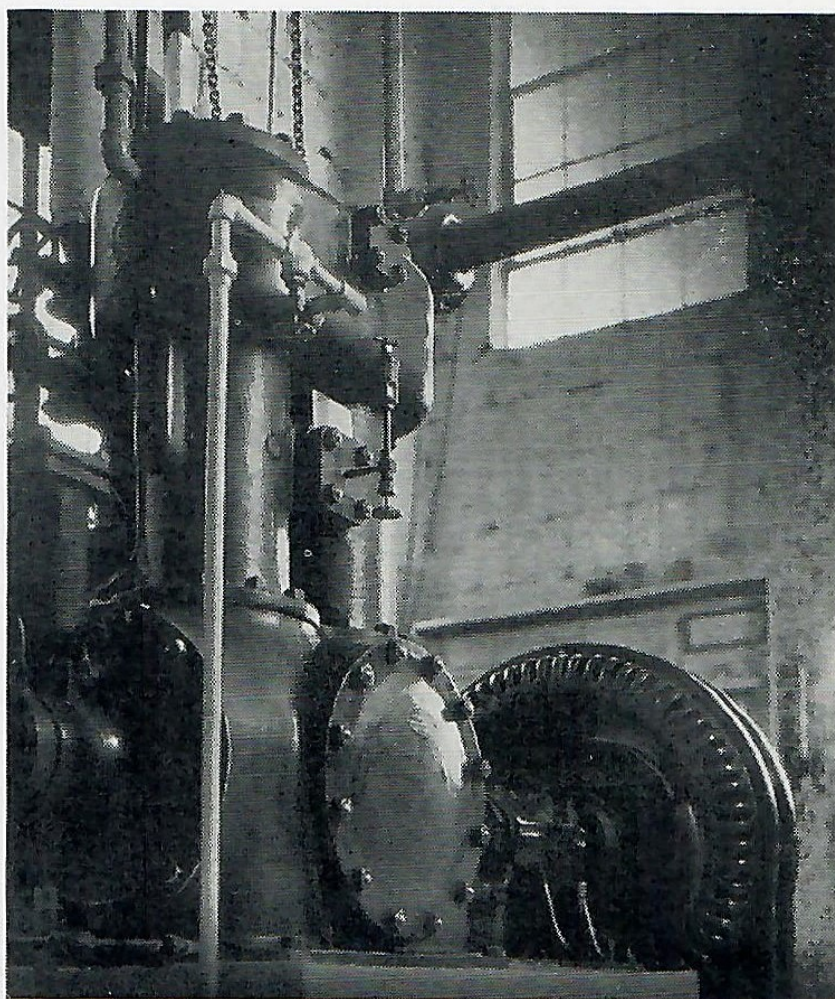


The lumber mills present a variety of lubrication problems. Above is a 30-inch wood surfer in operation.

The copper, zinc, gold and silver recovered from western mines is accomplished with the aid of lubrication. The source of power for the mining and milling operations is usually electricity, transmitted by high tension lines to the site of operations. In the mine itself air compressors, pumps, hoists, and the other necessary equipment must be given special lubrication inspection because the atmosphere in which these machines run is permeated with dust particles which tend to contaminate an oil and cut into finished bearing surfaces. The problem of lubricating an air drill, deemed difficult some years ago, has been solved by the adoption of a unique petroleum product.

For this purpose the Union Oil Company has developed Union Shasta engine and dynamo oil. Union castor machine, heavy, has been found adaptable to the heavier type of machines. The hoist, as one of the most important pieces of equipment in the mine, needs a different type of lubricant. Wearing parts must be given short periodic inspections because of the excessive amount of abrasives present in the air. Once lifted from the deposits, the ore, through a series of operations, is ground to a fine state. The crushers require a lubricant built to meet the specific needs of such equipment. In all the many other refining processes during which the raw ore is converted to metal, the use of lubricants is varied and widespread.

Within the past few years an increasing amount of knowledge of lubrication and its importance has done much to eliminate costly plant and equipment shut-downs. Much of the data on oils and grease has been disseminated through technical and sales organizations within the ranks of oil companies. In the case of the Union Oil Company, a large and competent group of men are employed as lubrication sales engineers. Their services and counsel are proffered without charge to every consumer of industrial lubricants in the company's marketing territory. Each is trained to enter the plant of an operator and advise him as to what lubricant is best suited to the individual needs of the equipment. Each has



45-ton York Ice Machine.

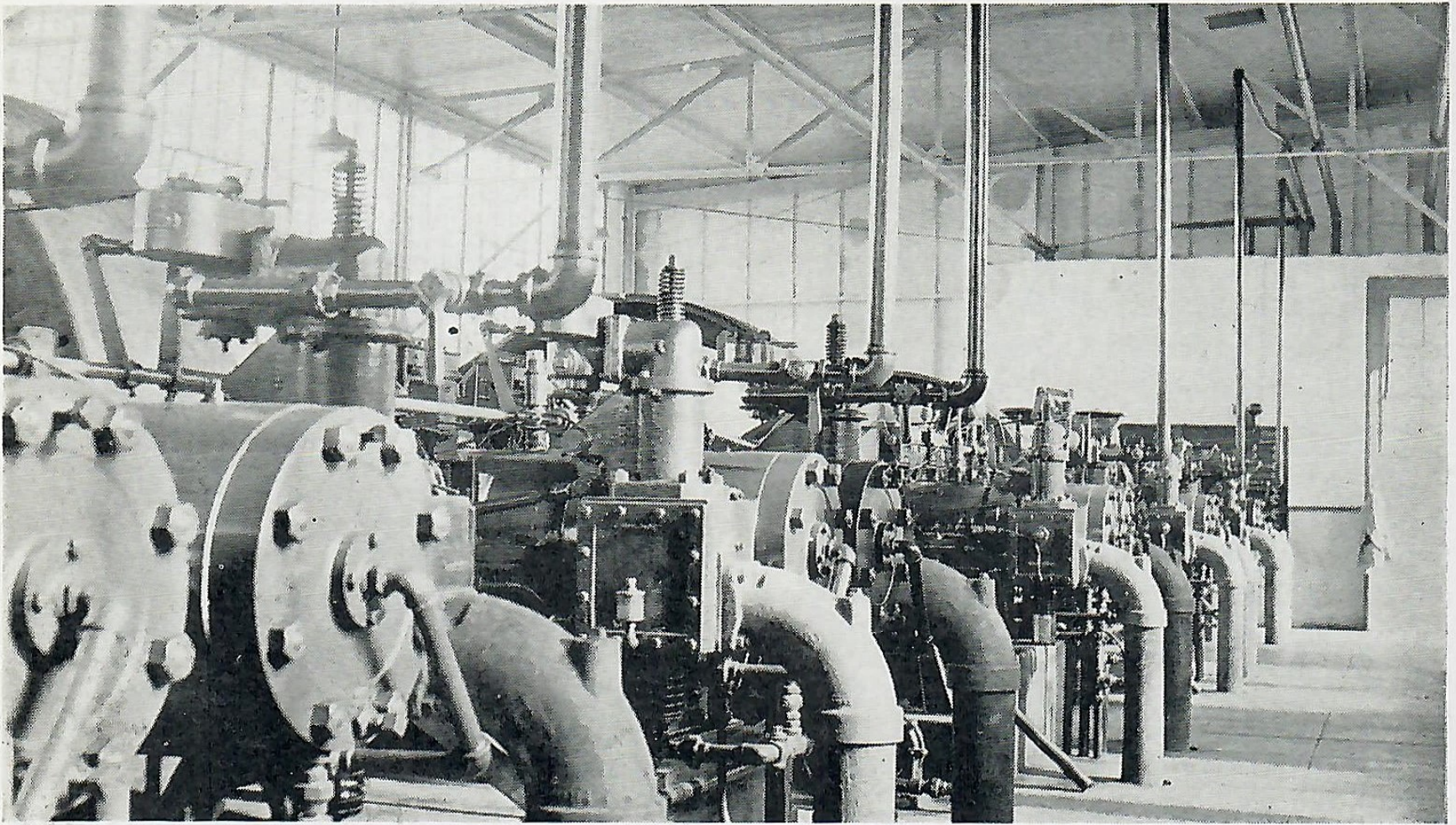
an intimate knowledge of the products which the company manufactures and the purposes for which they are intended. The industrial plant superintendent and the maintenance man on mobile equipment have learned to come to this and similar groups of men with their lubrication problems. A reduction in the time lost and a saving in lubrication cost can in many cases be traced to the recommendation made by a lubricating sales engineer.

Motorite Reduces Plants' Operating Costs

A REDUCTION in the operating costs of the plants operated by the California Domestic Water Company is attributed by its chief engineer, A. J. McDaniels, to the use of Motorite in lubricating the engines and water pumps. He states that he has removed pistons from some of the older engines, after they had been in service for two years, and found very little carbon deposited on the piston heads. He also de-

clares that he has never had a piston ring stick while using Motorite motor oil.

The California Domestic Water Company operates two plants, one at El Monte and the other at Whittier. Water is pumped from their wells at El Monte and flows by gravity, through a 48-inch all steel pipe line, to the booster plant at Whittier, a distance of 14 miles.



Reduced operating costs of the above five 120-horse power Western engines, at the booster plant of the California Domestic Water Company, is attributed by the chief engineer to the exclusive use of Motorite motor oil.

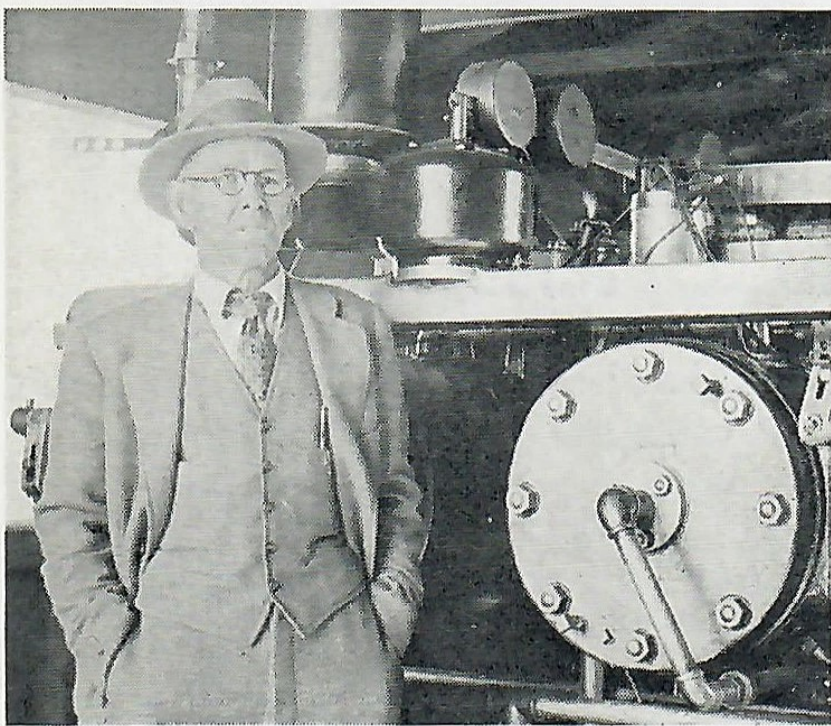
At one time the company had 20 shallow wells at El Monte, and it took the combined output of all these wells to supply the demand. About two years ago, two new deep wells were drilled, and Wintroath pumps were installed in them. These pumps are driven by two, 120-horse power, Commercial gas engines. These engines operate at a speed of approximately 110 RPM. The output of both these wells exceeds the total output of the 20 old wells. If necessary,

1200 inches of water can be pumped. These two plants have the largest capacity in the Southwest.

The booster plant has been in operation about three months. Photographs show part of the installations which consist of three 120-horse power Western gas engines. This unit drives a three stage Fairbanks Turbine pump and can be used to replace any two of the other units in case of emergency. All pumps are manifolded together and can be used in the high pressure line or the low pressure line.

Motorite 20 is used exclusively in these engines and pumps, both summer and winter. Excess oil from engine bearings is drained through pipes in the engine bases and collected at a central point directly below the crank shafts. This oil is picked up at regular intervals and filtered twice, then placed back in service and used over again. Sometimes the oil is used twelve times before being discarded.

Union Cleaning Solvent is used to clean parts of the equipment and Ballroll grease to lubricate the idler pulleys, which are equipped with roller bearings.



Chief Engineer A. J. McDaniels of the California Domestic Water Company.

Company Marketing Solvidor for Home Dry Cleaning



Above is a photograph of the new Union Solvidor which provides a quick and easy method for cleaning clothes in the home. It eliminates wetting the hands in solvent, does not chafe or tear fabrics and makes possible the cleaning of the sheerest and most delicately colored garments. It is effortless to operate, clarifies solvent for re-use and provides a liquid-tight container that is safer to use than home dry cleaning devices now employed. Many of the large department stores are now carrying the Solvidor and they can also be obtained through Union stations.

Auto Polish and the Field Truck

THE conventional mind's eye picture of an oil field truck—noisy, dilapidated, running in spite of mud and rust, and held together by bailing wire—has no reality in the transportation equipment used in the field department of the Union Oil Company. Quite the opposite of this picture is true. Union field trucks, despite the fact they are operated much of the time over unimproved roads, appear as though they had just been driven out of the paint shop or off the show room floor.

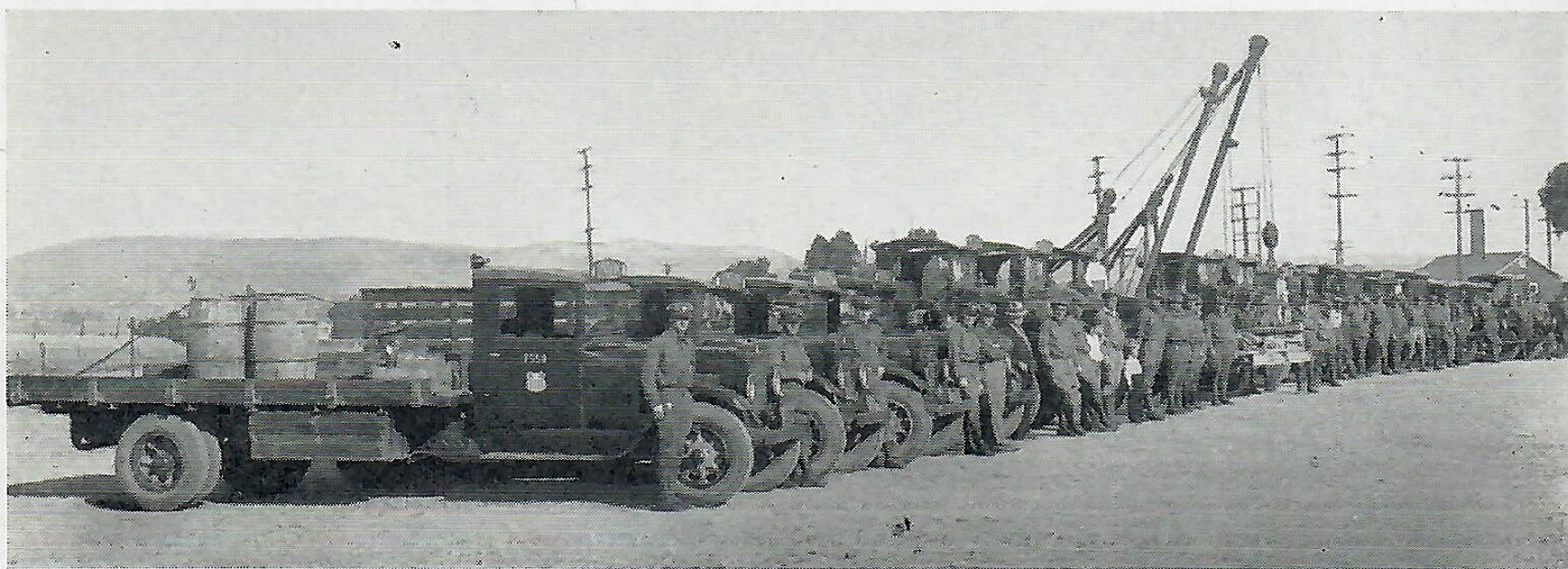
It is difficult to understand how equipment, subjected to such hard usage, can be kept up so well until one has had an opportunity to come in contact with the men who operate the equipment. Then he will realize that his preconceived idea of truck drivers is as far wrong as his preconceived notion of what a field truck would look like. He will find these men clean-cut, with evident care given to their personal appearance.

The modern oil field truck driver is of necessity a man of initiative and alertness, possessing a strong physique. He has under his hand a fast-rolling force, which, out of



Fred Bunkelman, field department truckster, preserving the finish of a new paint job with Union Auto Polish. This truck has seen 53,000 miles of service, and looks like the day it was bought.

control, becomes a hurtling, destructive menace that no ordinary pilot can handle. His job involves the handling of drilling



Lineup of trucking equipment at Santa Fe Springs. Despite the fact these trucks spend most of the time on oil field roads they go out each morning shining as though they had just come out of the show room or paint shop.

and production equipment that may run from five pounds to twelve tons, and from a few square inches in size to the proportion of a 2,000-barrel tank, which is thirty feet in diameter and twenty feet high.

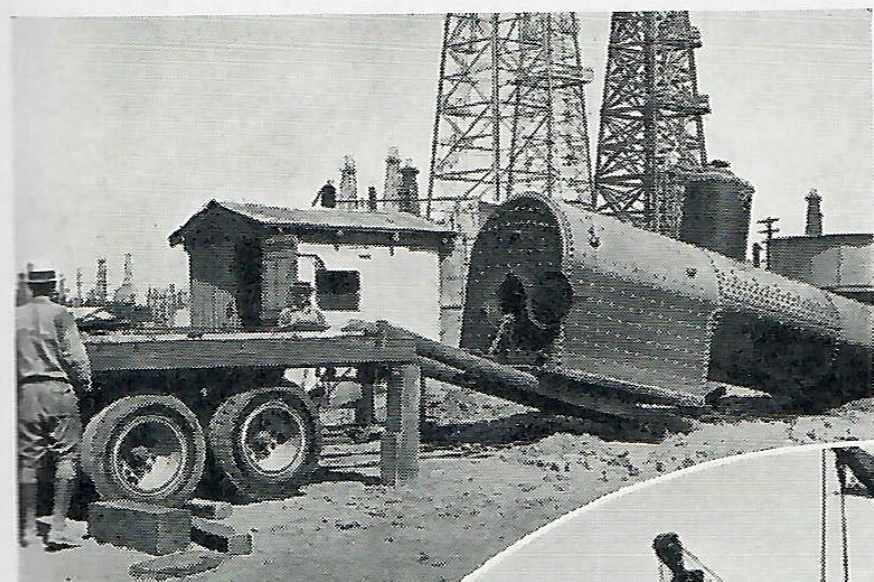
Such consignments may be moved a few miles or several hundred miles. There must be no delay in transit and the equipment must not be damaged. The driver may have a 100-foot asphaltic concrete boulevard in which to swing his truck and trailer, or he may be confined in the space of a cow path running up the side of a mountain. He must take the weather as he finds it: Snow and ice on the Ridge, driving rain on Gaviota Pass, or 120 degrees heat in the lower reaches of the San Joaquin valley are en-

ured with the same efficient indifference.

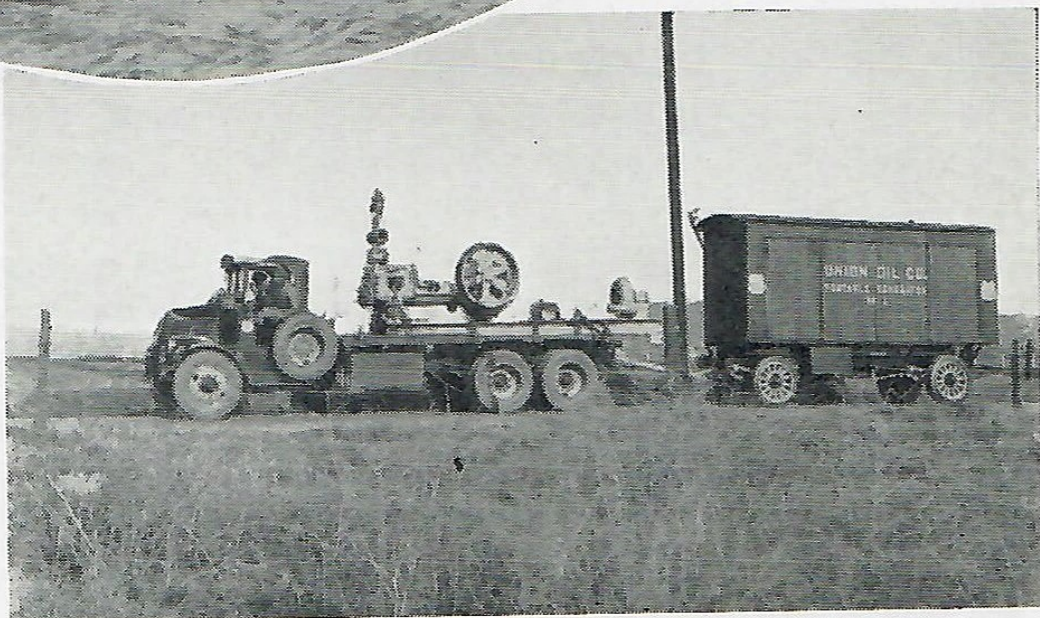
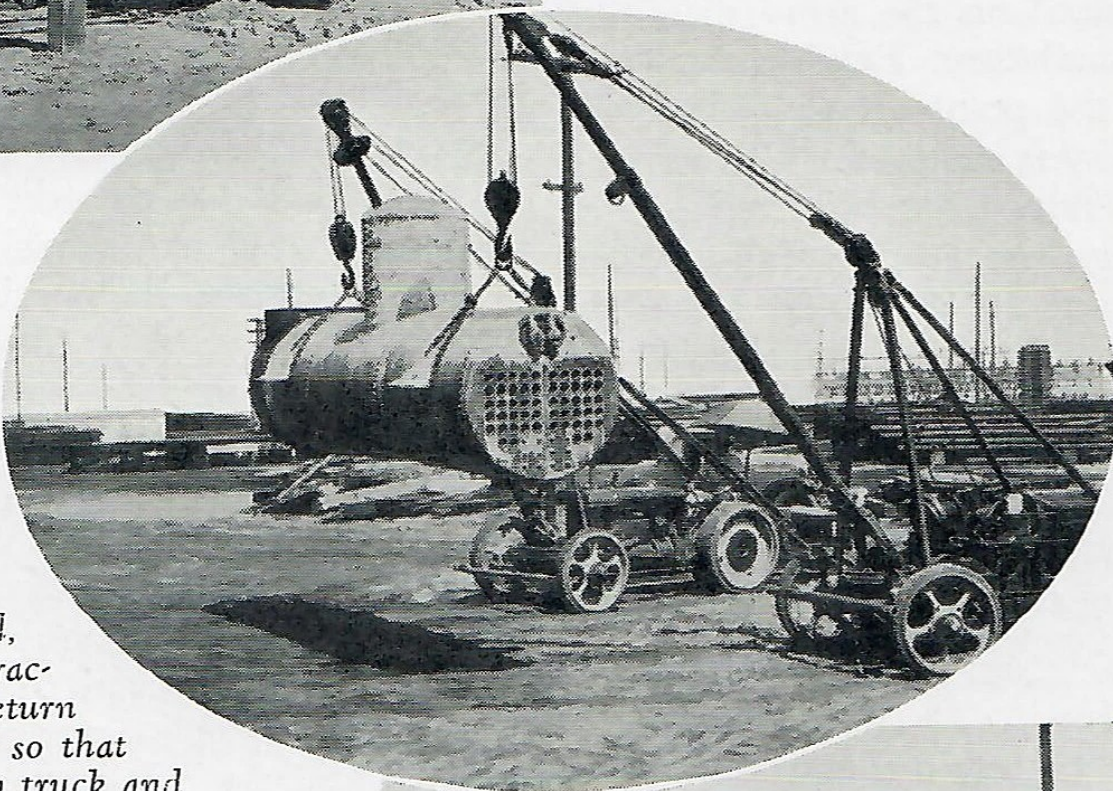
This modern knight of the road is familiar with the names and descriptions of the materials which he transports. He possesses a sense of responsibility and independence developed from the knowledge that when one of the operating departments requires supplies, day or night, and he is intrusted with the job of making the delivery, no excuse is to be offered if his end of the job lags. He is aware that a shut-down caused by failure of new materials to arrive on time is costly in time and money. He finds personal satisfaction in doing his portion of the job well and on time.

Because of the nature of the work done by the transportation department, it is essential that all rolling equipment be in working order virtually all the time. The driver takes special pride in keeping the outward appearance of his charge in good condition. As far as the purchase of Union auto polish is concerned, the field department is one of the specialty department's best customers. Every driver carries a bottle of the polish with him and uses it frequently.

Each truck is kept spotless and well greased, and even minor mechanical difficulties are repaired by the driver when possible. The driver is no less concerned with his per-



The magnitude of the work done by Field Department equipment can be judged from these pictures. Above, locomotive type field boiler being hoisted up skids on to floor of truck. In the oval, winch-equipped tractor is elevating return tubular type boiler so that it can be placed on truck and transported to job. Ten-ton, six-wheel Mack, shown below, is hauling water pump, used with portable drilling rig, and pulling one of generator houses used with same equipment.



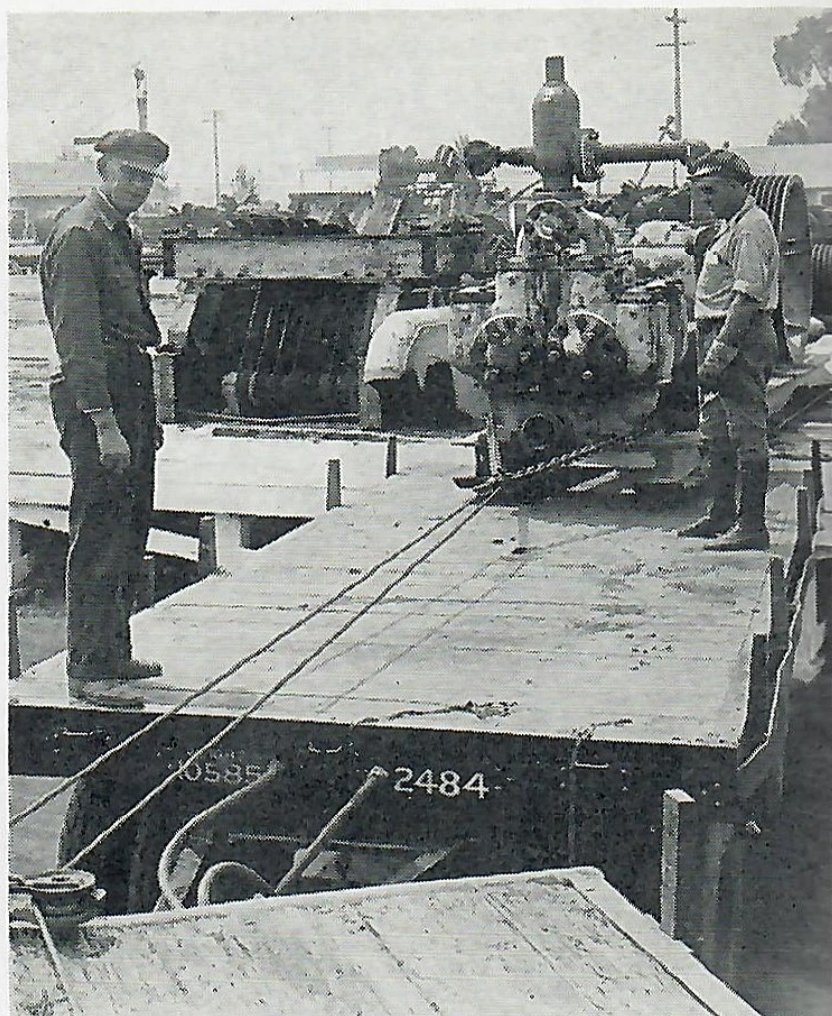
sonal appearance. Tan knee boots, corduroy trousers, khaki wool shirts, with Union emblem over the left pocket, and coveralls, to be used when handling dirty and oily machinery, comprise the raiment of Union's field department drivers.

Safety plays a definite part in the truck driver's thoughts and actions. His cab is equipped with a complete first aid kit and his instructions specify its use in the assistance of the public as well as his own fellow employees. He is a welcome sight to the unfortunate motorist whose own conveyance has momentarily proved inadequate to further forward motion. The driver is never in too great a hurry to change a tire or pull another car out of the mud. That such a service is rendered gracefully and without thought of personal gain is attested to by the letters of appreciation which have been received from motorists fortunate to receive the assistance of a Union Oil truck driver.

Under the immediate supervision of S. H. Grinnell, foreman of transportation and drilling tool maintenance, the trucking division is organized on the army plan that mobility is mandatory. Headquarters are maintained at the point around which the most field activity is centered. Virtually all operations are now being directed out of Santa Fe Springs, the most centrally located field in the southern division. However, this does not detract from the service provided for the northern division fields. An ample amount of equipment is stationed in the valley and coast areas so that field and pipeline jobs can be adequately performed without utilizing commercial service.

One of the features of the department's work is its ability to fit equipment to the job. The little "hurry-up" trucks provide facilities for rush deliveries of small field supplies. For the larger jobs, the three to ten-ton trucks are used. When it is necessary to move field boilers, tanks, and parts of dismantled rigs, the ten-tonners, giants of the highway, are called into service. The two larger types are all equipped with winches for loading and unloading heavy materials.

A garage is maintained at Santa Fe Springs where the more than 200 pieces of



The ease with which heavy equipment, in this case a 10-ton mud pump, is skidded from platforms on to body of trailer is illustrated in this picture. Winch, operated off motor of truck, furnishes the power.

mobile equipment are kept in good mechanical condition. Twelve expert mechanics perform the minor and major repair and overhaul jobs. A periodic inspection schedule is adhered to on each piece of equipment. Here also the regular repainting and touching up work is done. Due to the efficiency attained by the trucking division tanks and field boilers can now be moved without being dismantled, and correspondingly large pieces of field equipment can be moved a short or long distance with a minimum of effort. Recently 300 tons of field supplies were trucked to Orcutt from the Santa Fe Springs warehouse without a single interruption in transit. The larger trucks carry as much as 19,000 pounds at a single load. On the other extreme, a pipe nipple or a gate valve may be the only item holding down the back end of a "hurry-up" truck.

The modern mammoth, high speed trucks, capable of relatively high speeds, which are equipped with pneumatic tires and air brakes, are a far cry from the five-ton jobs of a few years ago with their solid tires and a top speed of about ten miles per hour.

A New Bid for Business

“I'M late for a party, and my car has a flat tire. What'll I do?”

The Union Service Stations, Inc., attendant at the Wilshire and Wilton station, Los Angeles, who had answered the telephone detected anguish and panic in the voice on the other end of the line.

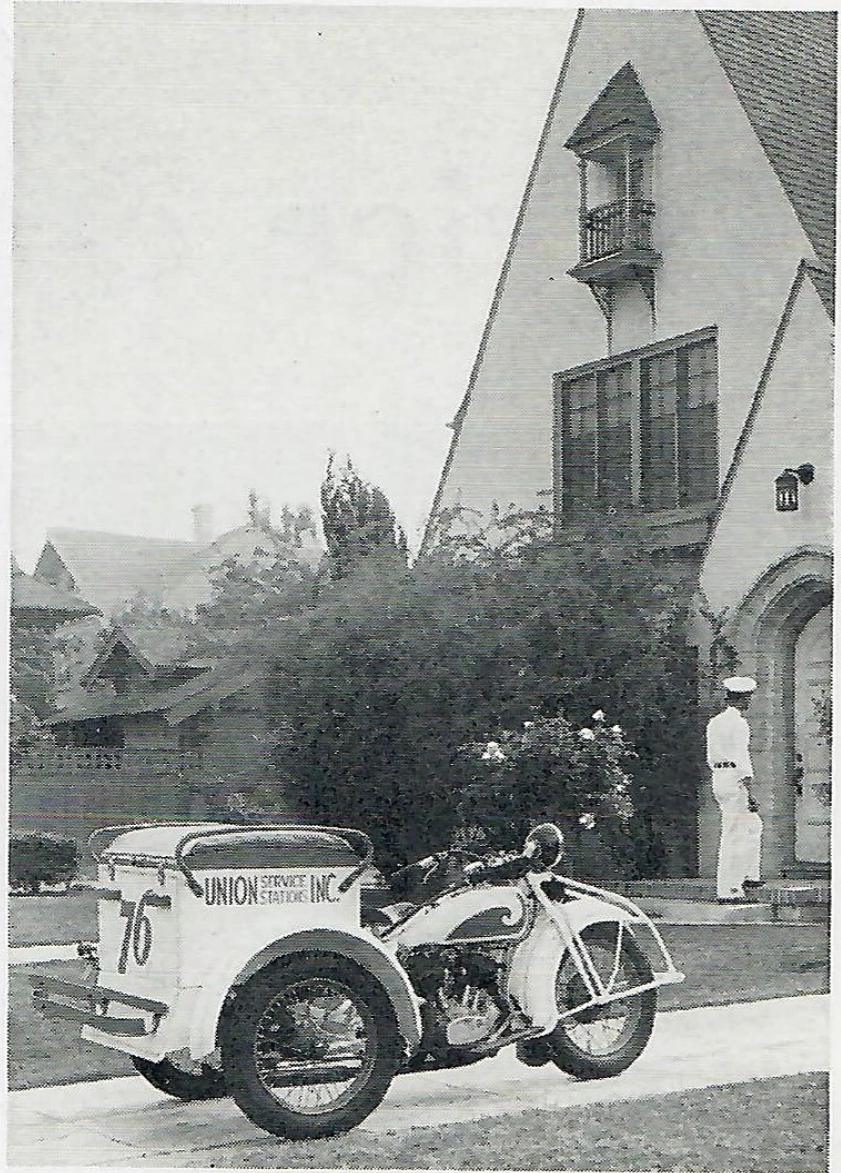
“Don't worry, we'll be right over,” he assured the caller.

“Oh, thanks, but hurry!”

The injunction was unnecessary. Within a few minutes the attendant and a helper presented themselves at the young lady's home, changed tires, and sent her quickly on her way.

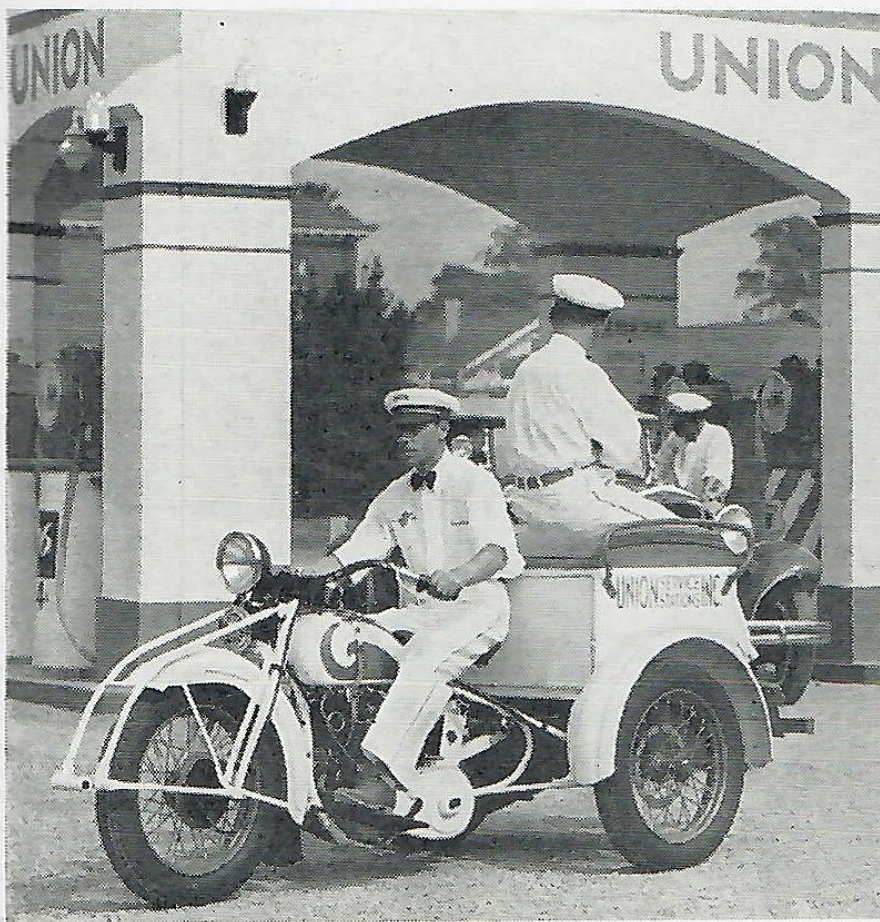
Their speedy arrival had been made possible by a Cycle-car with which Union Service Stations, Inc., is inaugurating a “call-for-and-deliver” service for their customers. The car was placed in operation last month and in a short time has made it possible to serve a number of customers who were unable to bring their cars to the station from their offices or homes. The Cycle-car is now mostly used in picking up customer's automobiles requiring lubrication, washing, polishing, new tires or battery service.

While two men are assigned to the car it can be operated by one man and is provided with a tow attachment so it can be attached to any automobile. It is fully equipped to render emer-



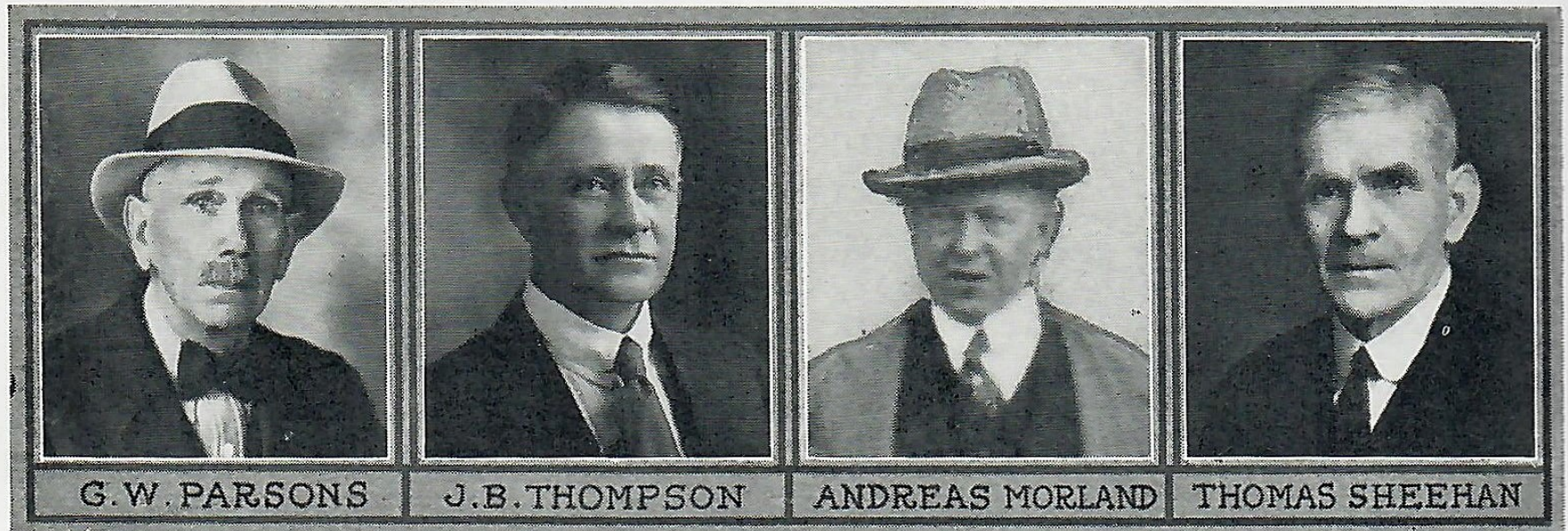
gency service, and also has a compressed air unit which permits the inflation of tires on the highway. The drivers are instructed to render assistance to motorists whenever the occasion demands.

The Cycle-car is painted in Union colors of orange, blue and white, adding greatly to its attractive appearance.



At the left the new Cycle-car is shown leaving the station to call for a customer's automobile. At the right it is being attached to the machine to be towed back to the station.

Service Emblem Awards



They Wear Two Rubies Now

THE month of April was the twentieth anniversary of the period during which Andreas Morland, G. W. Parsons, Thomas Sheehan, and J. B. Thompson were first employed by the Union Oil Company. The service pin of each has been studded with a second ruby in recognition of the long uninterrupted service they have rendered.

On May 13, Lawrence Wolff, assistant manager of fuel oil and asphalt sales, completed twenty years of service with the company.

George Parsons went to work on the pipe line and construction gang at Santa Margarita April 12, 1912. He worked at this location for four years. In 1916 he was transferred to the Santa Margarita pump station as fireman, remaining in that capacity for seven years. Since 1924 he has been stationed at the company's tank farm at San Luis Obispo.

Andreas Morland is at present in command of the Union Oil tanker S. S. Santa Maria. He began his service with the company twenty years ago when he shipped aboard the company's tanker Lansing as an A. B. Seaman. After having, during sixteen years, graduated through the different grades as deck officer of the company's principal tankers, he took command of the S. S. Santa Maria in April, 1928.

The man who filled the first lubricating oil barrel ever sold by the company in the Northwest was Thomas Sheehan, twenty-year employee last April. Those were the days, Sheehan recounts, when J. M. Geary, now manager of refined oil sales, and W. Chaffee were the entire sales force. Sheehan represents the employees' council in the warehouse, and fills the unofficial post of adviser to men new in the service.

Jesse Thompson was first employed as a pumper on the Stearns lease at Brea. Within a short time he was transferred to the compressor plant on the Naranjal lease, where he remained until 1919. For a short time he worked for the gas department. April, 1920, he was again transferred to the field department as pumper on the Stearns lease, the position he now holds.

Serves in Chile

ROBERT GRANT, who is at present in charge of the company's bulk station at Antofagasta, Chile, is a familiar figure to the veteran captains of the Union tankers calling



Robert Grant

at the South American ports. Since his employment in April, 1912, by Duncan, Fox & Co., Ltd., agents of the Union Oil Company, he has been stationed at various Chilean bulk stations. His first post of duty was at Taltal, where he relieved the late Ramsay H. Shankie. In November, 1918, he handed over the station to Michael Globe and had just left for a vacation trip to the south when an earthquake struck the Taltal district,

breaking one of the tanks. On hearing the news he rushed back to Taltal to help prepare the tankage for a delivery of oil, then on its way by tanker. Subsequently he was sent to Tocopilla and later transferred to Antofagasta, where he has been for several years.

Grant is a native of Scotland and served his apprenticeship as an engineer in Aberdeen, known to Scotsmen as the Granite City. He had a long practical experience as an engineer in Canada and the United States before the lure of the nitrate activities in Chile attracted him to the South American republic.

Black Oil and Friday, the 13th

FRIDAY, May 13, Lawrence Wolff, assistant manager of Fuel Oil and Asphalt Sales, completed twenty years of service with the Union Oil Company. On the same day he was



Lawrence Wolff

notified by wire from Washington, D. C., that the company's bid covering the Navy's fuel oil requirements for the Pacific Coast area for the next fiscal year, which he had been instrumental in preparing, was low, placing the company in position to receive approximately a 5,000,000-barrel contract. It was just additional proof, though none was really needed, that in starting to

work for the company on the 13th of May, 1912, he had not cast a jinx on his future activities.

Looking back on events, it would appear that Mr. Wolff was predestined to enter the services of the Union Oil Company: He was born on the site now occupied by a company-owned station at Eighth and Harrison streets, Oakland. Considering the fact that a Christmas vacation trip to San Francisco, while he was still a freshman in Mills Valley High School, resulted two years later in his being taken into the Fuel Oil department of the company, that predestination becomes more apparent.

At the time Mr. Wolff entered the company's service as a junior clerk the Head Office Sales' offices were located in a few small rooms in the Mills Building, where the San Francisco district offices are now maintained. Fuel oil and asphalt then constituted the bulk of the company's sales. Some kerosene was being handled, along with a little gasoline and a small amount of lubricating oils. The Head Office Sales force included

a general sales manager, C. G. Sheffield, J. B. Arthur, now manager of Fuel Oil and Export Sales, then chief clerk, a man who handled kerosene and gasoline, and two stenographers.

Although the passing years have seen asphalt and fuel oil surpassed in precedence by the refined oils, the scope of the department's activities, which Mr. Wolff directs under the supervision of Mr. Arthur, have been broadened until its marketing activities embrace virtually all of the Pacific Ocean countries.

One of the unusual features of Mr. Wolff's service is the fact that during the past 20 years both he and Mr. Arthur have worked almost side by side and have advanced in the department together.

By 1915, when the company's sales headquarters were moved from San Francisco to Los Angeles, and two years before he attained his majority, Mr. Wolff had graduated from a clerical position and had been given general jurisdiction over the fuel oil sales in the San Francisco district. He remained in this capacity until 1921 when he was transferred to Head Office Sales in Los Angeles as assistant manager of Fuel Oil and Asphalt Sales. Last year, although his title remained unchanged, his duties in the department were greatly broadened.

May—Fifteen Years

| | |
|--------------------------|--------------------------|
| Dike, H. A. Jr..... | Panama Sales |
| Faria, Joe | Oleum Refinery Mfg. |
| Gallagher, Patrick | So. Div. Gas |
| Hadewig, E. P..... | So. Div. Transp. |
| Jones, Harry T..... | M. S. "Redline" Marine |
| Mann, Clyde H..... | Head Office Credit Sales |
| Ralph, William R..... | Los Angeles Sales |
| Traylor, John W..... | So. Div. Field |

May—Ten Years

| | |
|--------------------------|---------------------------|
| Behm, Ruth, Mrs..... | Head Office Compt. |
| Blokland, W. J. Jr..... | Portland Sales |
| Busse, Edw. C..... | Head Office Transp. |
| Conn, Jerry | So. Div. Field |
| Everett, Frank | So. Div. Gas |
| Foster, Wesley L..... | Oleum Refinery Mfg. |
| Froome, George | So. Div. Field |
| Gray, Muriel E..... | San Francisco Sales |
| Hancock, H. W..... | So. Div. L.A.P.L. Transp. |
| Hall, H. A..... | Oleum Refinery Purchasing |
| Hellwig, Wm. A. Jr..... | Los Angeles Sales |
| Hinton, Howard | So. Div. L.A.P.L. Transp. |
| Ingram, John | Oleum Refinery Mfg. |
| Jiminez, Luis | L. A. Refinery Mfg. |
| Jones, John L..... | Oleum Refinery Mfg. |
| Judd, Arthur L..... | So. Div. Field |
| Lawrey, Cyril T..... | Vancouver Sales |
| Lilly, Lewis M..... | Portland Sales |
| McAninch, Frank | No. Div. P.P.L. Transp. |
| McCallum, Alexander..... | Vancouver Sales |
| McNichols, Wm. H..... | L. A. Refinery Mfg. |
| Mary, John M..... | Oleum Refinery Mfg. |
| Madsen, Carl F..... | L. A. Refinery Mfg. |
| Mealing, Francis C..... | Vancouver Sales |
| Nelson, Nels M..... | Oleum Refinery Mfg. |

May—Ten Years (Continued)

| | |
|------------------------|-------------------------|
| Olsen, Nellie Mrs. | Head Office Compt. |
| O'Shaughnessey, H. H. | Prod. P. L. Purchasing |
| Reed, Harry R. | Seattle Sales |
| Rinehart, Fayne E. | Fresno Sales |
| Ruddock, Ruby M. Miss. | Head Office Sec. |
| Seibert, Peter | Fresno Sales |
| Smith, Everett | Oleum Refinery Mfg. |
| Steinkruger, Frederick | Mexico Field |
| Van Marter, C. H. | Oleum Refinery Mfg. |
| Van Neman, P. D. | No. Div. P.P.L. Transp. |
| Venner, Sidney W. | So. Div. Compt. |
| Walker, Doris J. Miss. | Head Office Purchasing |

April—Fifteen Years

| | |
|---------------------|------------------------|
| Chandler, A. W. H. | Head Office Treasury |
| Clemens, S. N. | No. Div. Field |
| Daugherty, Nash | Sacramento Sales |
| Epson, John | So. Div. Field |
| Godfrey, C. F. | So. Div. Field |
| Hinton, Carl E. | No. Div. Field |
| Kelly, Mary | Los Angeles Sales |
| Nightengale, P. Sr. | L. A. Lubricating Mfg. |
| O'Leary, John M. | No. Div. Field |
| Pearcy, Robert | So. Div. Field |
| Ramsey, Harold H. | Head Office Sales |
| Reddick, Henry V. | No. Div. Field |

| | |
|-------------------|-------------------------|
| Rico, Bert E. Jr. | So. Div. Field |
| Rojas, John G. | Santa Fe Springs Pur. |
| Seelye, J. H. S. | Head Office S. F. Sales |

April —Ten Years

| | |
|---------------------|--------------------------|
| Battisfore, H. E. | No. Div. P.P.L. |
| Boyle, James E. | Seattle Sales |
| Chambers, Edward C. | San Diego Sales |
| Cole, Warren C. | Seattle Serv. Sta. Sales |
| Ellis, Chas. T. | Portland Sales |
| Faria, Frank A. | Oleum Refinery Mfg. |
| Fellows, T. R. | Los Angeles Sales |
| Forsman, T. W. | Seattle Sales |
| Hannagan, Wm. C. | So. Div. Field |
| Hodgskins, Geo. H. | Santa Paula Ref. Mfg. |
| Hutton, Elmer W. | Head Office Sales |
| Kennedy, C. L. | So. Div. Field |
| Knutsen, R. B. | Los Angeles Marine |
| Knutsen, T. E. | Cathwood Marine |
| Mallory, Clyde B. | Seattle Sales |
| Matzinger, Emma | Los Angeles Sales |
| Oglesby, Walter T. | Los Angeles Sales |
| Pawsey, George H. | Oleum Ref. Mfg. |
| Pearcy, Roy H. | So. Div. Field |
| Peck, Cloyd R. | So. Div. Field |
| Pereira, A. R. | Oleum Ref. Mfg. |
| Peterman, K. O. | Oleum Ref. Mfg. |
| Reynolds, Chas. B. | Los Angeles Sales |
| Smith, Z. F. | Phoenix Sales |
| Tate, Guy | Ventura Field |

Akron Uses Liquid Gas for Cooking

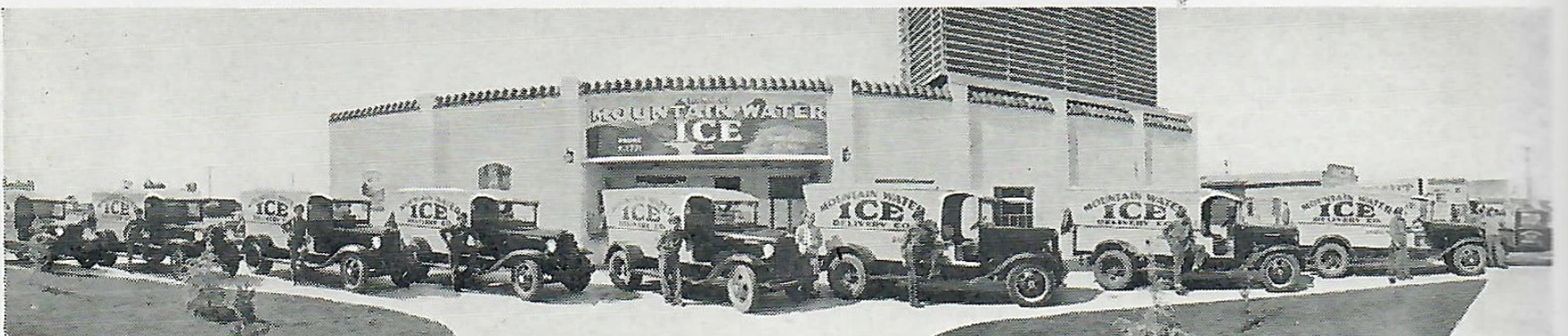
MEALS for the 89 officers and men of the crew of the Navy's largest airship, Akron, now on the West Coast, are cooked with liquid gas, such as is now being manufactured by the Union Oil Company in its new plant at the Los Angeles refinery.

Light, high-pressure cylinders, designed for the purpose, will store approximately a 12-day supply of liquid gas. The specially built range weighs only 110 pounds. Cast and sheet aluminum predominate in the range, with other metals, including chromium plated steel, nichrome, stainless steel, magnesium, cast iron and bronze, used in lesser proportions.

The range is flame-proof, having no open

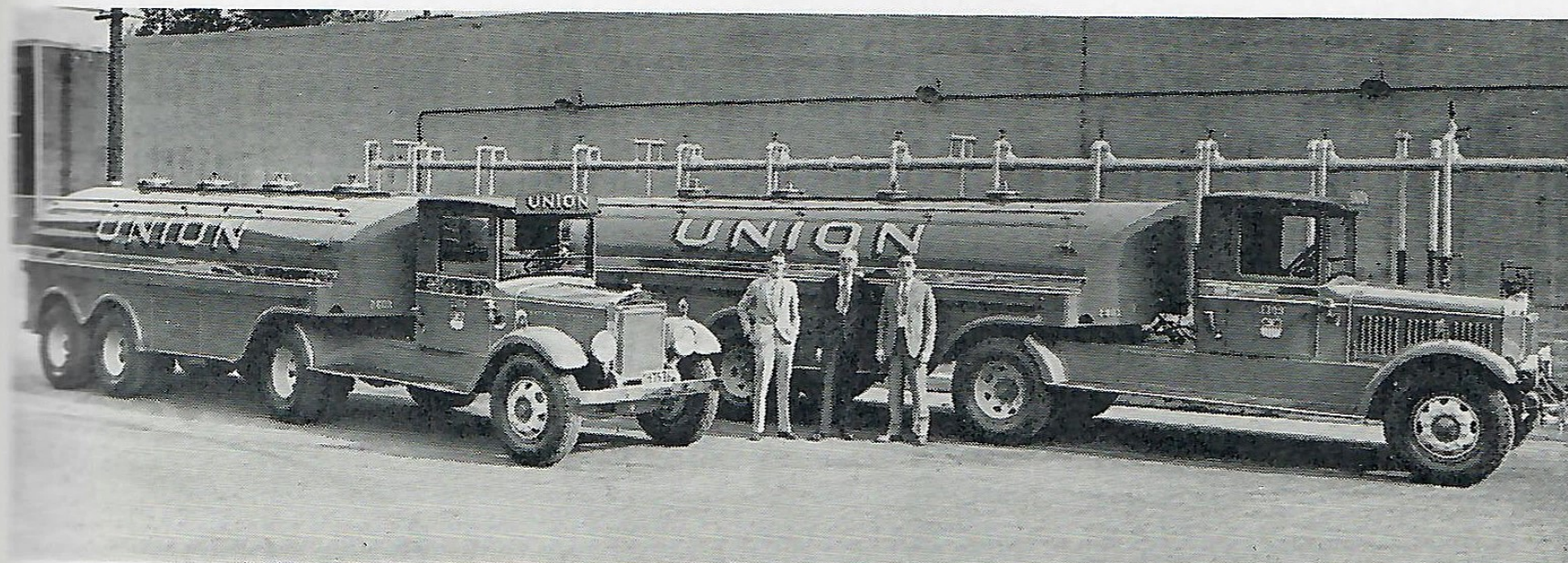
flames exposed to the air of the galley. The air for the burners enters through flame-proof gauze which excludes the flame from the galley itself. The two large ovens of the range are thermostatically controlled so that a predetermined heat may be maintained. The top of the stove is solid cast aluminum with iron plates directly above the burners. Each top burner is provided with a flueway so that from front to rear the entire top of the stove is hot enough for cooking purposes. On the left section of the stove is a compartment which holds two large stock pots for use in preparing large quantities of food and keeping them heated and ready to serve.

New San Diego Ice Company Selects Union Lubricants

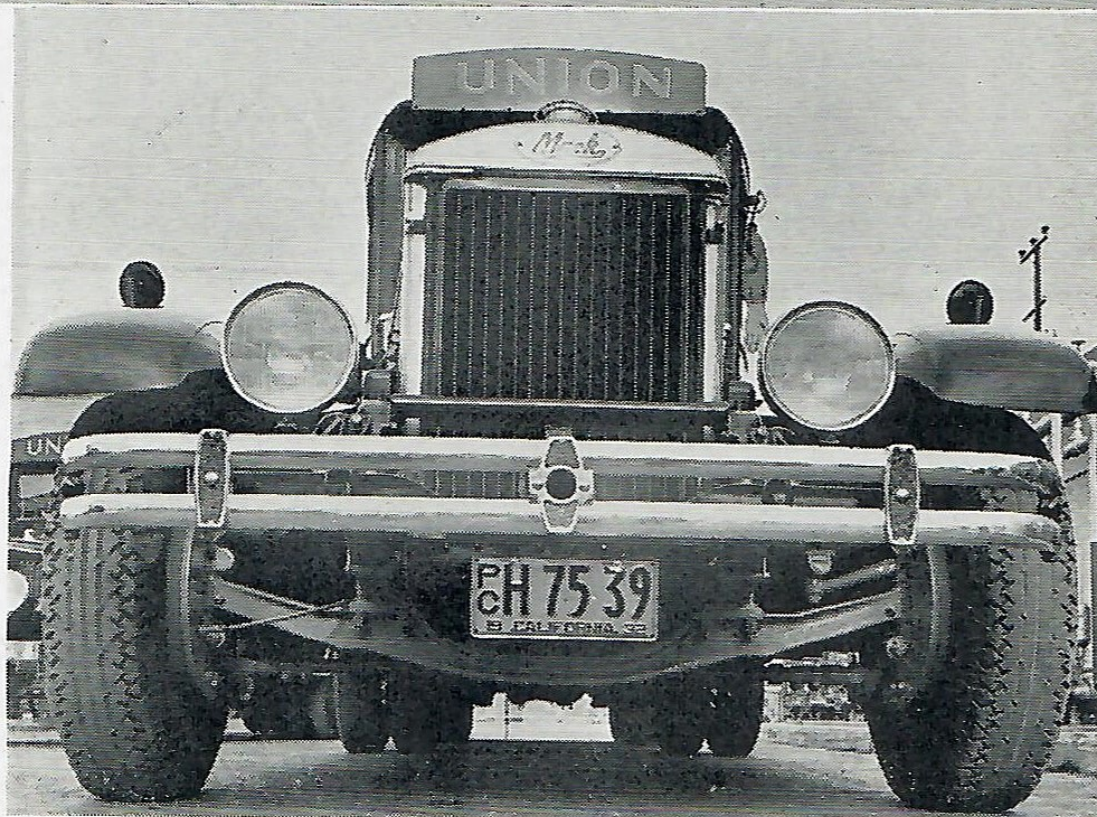


The trucking fleet and plant of the Montana Water Ice Company, 3802 El Cajon boulevard, San Diego, shown above, are lubricated exclusively with Union products.

New Sales Trucks in Service



At the top you see the two new Mack trucks with LaPeer semi-trailers just before they went into service in Los Angeles area. J. W. Sinclair, superintendent automotive equipment, C. G. Bussey, supervisor Los Angeles garage, and Eugene Power, manager properties and facilities, are shown in the picture. At the right is snail's eye view of front end of the new Mack semi-trailer.



SUPPLEMENTING the various types of delivery equipment already in service, four new trucks, in all of which are combined the characteristics of utility and beauty, last month were added to the sales department facilities. One of the trucks augments the San Francisco district fleet; the other three are in service in the Los Angeles area.

The new trucks, two of which are the semi-trailer type and two six-wheelers, are distinctive in the Union colors of red with gold trim and lettering outlined in black. Wheels are brilliant yellow in color. The semi-trailer type boast of highly polished nickle surfaces which add much to their appearance. All four trucks are Mack. The semi-trailers are LaPeer. The six-wheelers, numbers of which are 1106 and 1107, have respective gasoline capacities of 2672 and 2425 gallons. The semi-trailers, carrying numbers 1108 and 1109, with trailers numbered 2800 and 2801, have respective capacities of 3552 and 3339 gallons.

The semi-trailers have been placed on a transport basis in the Los Angeles area, each

covering a half of the city. They are controlled by a central dispatcher and are routed from one dump location to the next. Each truck operates on two 8-hour shifts daily. The two are dumping a tremendous volume of gasoline per month and have proven invaluable in assisting distribution of gasoline. When emptied, the trucks are taken to the nearest substation for refilling instead of being returned to a central base, the manner in which other equipment is handled.

G. Lance Golf Champion

Playing par golf throughout the tournament, G. Lance, employee of Union Service Stations, Inc., last month won the 1932 Southern California golf championship of the Union Oil Company, defeating R. D. Gibbs in the final round.

Lance is one of the finest golfers ever listed in the company ranks. He is former open state champion of Minnesota and during the company tournament played a game that left no doubt in the minds of his opponents as to his ability.

The preliminary flights were won by R. W. Spawr, Ray Judy, C. A. Steiner, and H. B. Dean.

Alhambra Fire-Fighters Laud 76 Gasoline



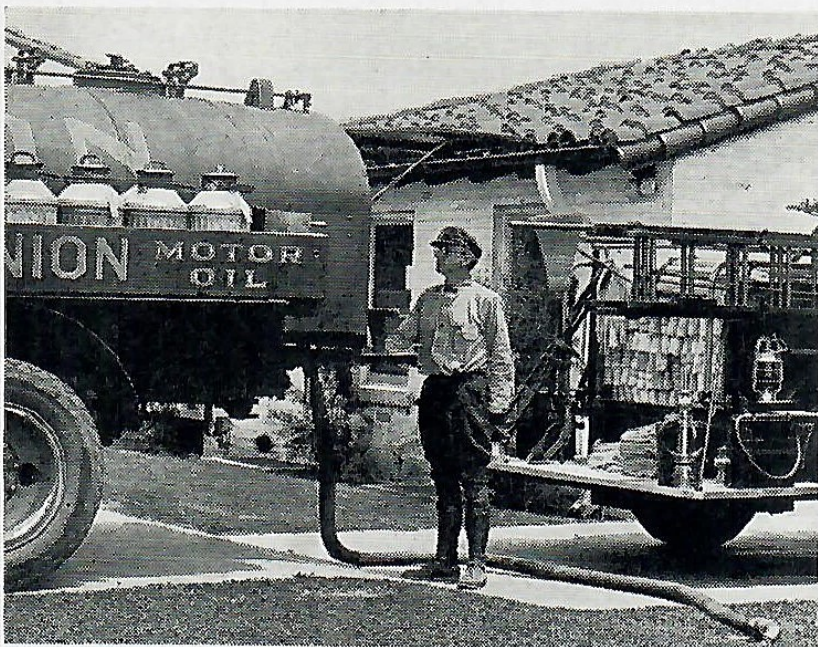
Here you see a portion of Alhambra, Calif., fire fighting equipment photographed in front of central fire station.

Ranked as one of the most efficient independent city fire departments in the West, the Alhambra, Calif., fire fighting force last month passed the rigid periodic inspection of the National Fire Underwriters with a high average; both personnel and equipment being given unusually prominent rating.

In the quick starting and power tests, the

equipment, fueled exclusively with Union 76, showed up particularly well, according to Frank A. Bovet, chief of the department. During the pumping tests, the full power of the motors was generated, with all pumps developing above normal capacity. The performance of the equipment was especially gratifying and was due in a large measure, Chief Bovet said, to the gasoline used.

The Alhambra fire department is equipped with four modern pumping units, ladder truck, three auxiliaries, ambulance and the chief's car. Chief Bovet is president of the Southern California Fire Chiefs' Association.

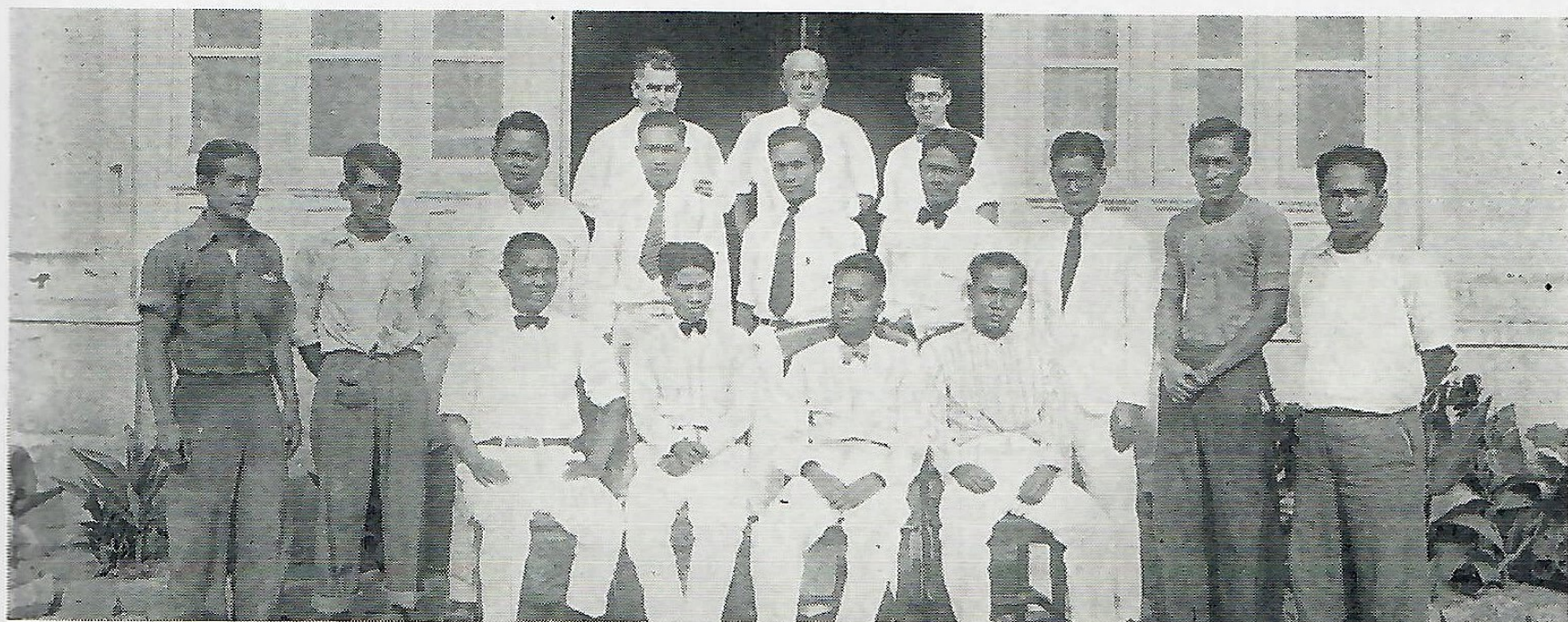


Union tank-truck salesman releasing valve to dump 76 gasoline into storage tank maintained at Alhambra, Calif., fire station at Sixth and Valley Boulevard.

Praised for Accident Aid

C. R. Brown, tank truck salesman, in the Portland District, is praised by two residents of Dallas, Oregon, for the prompt assistance given them following an automobile collision on the Pacific Highway during which they were injured. C. Burkes, one of the two men assisted, in writing of the aid rendered by Brown said: "Several persons stopped, among them Mr. Brown. He cleared the highway traffic and took us ten miles to a doctor and then drove ten miles out of his way to take us home."

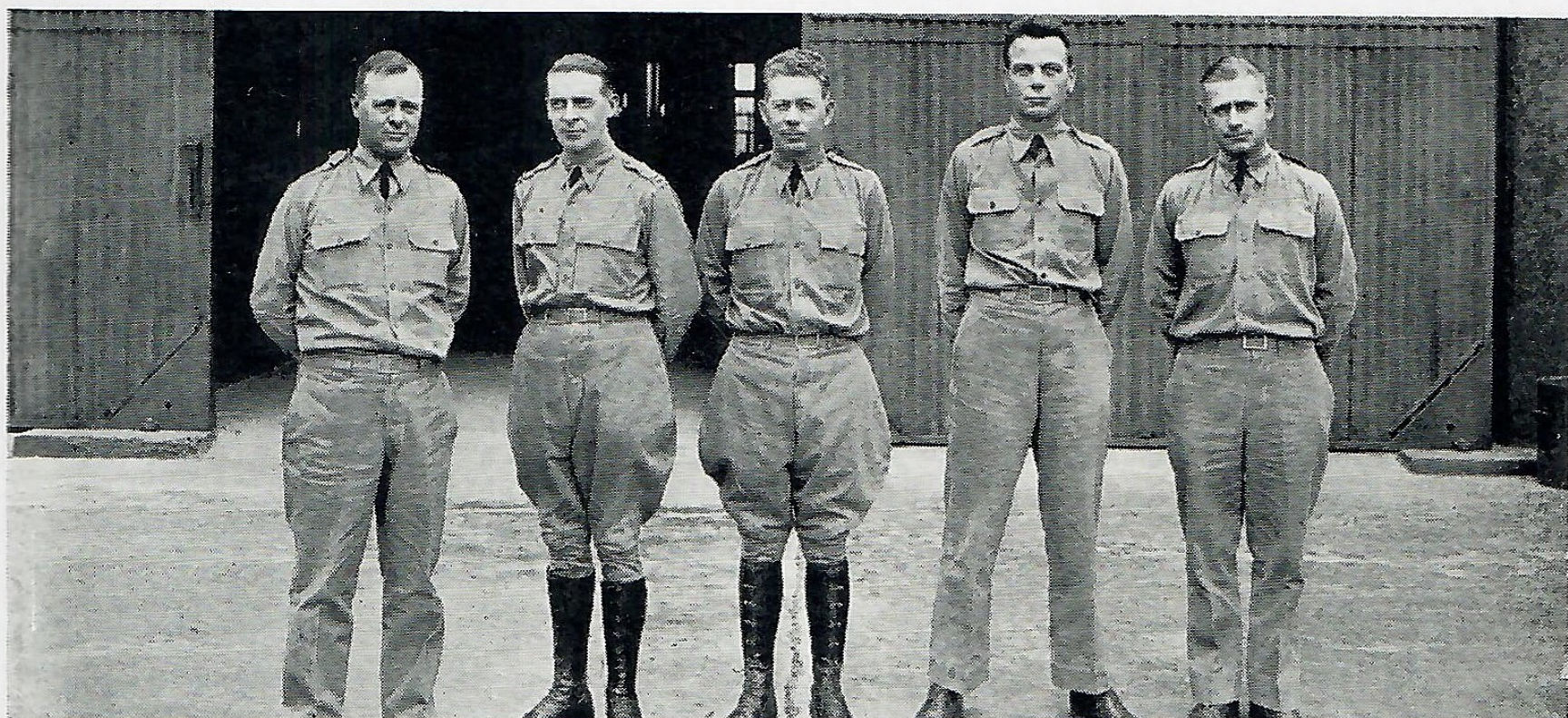
Union Products in the Philippine Islands



INCORPORATED a year and a half ago, December 31, 1930, P. M. Bennett, Inc., headed by P. M. Bennett, sales agent for the Union Oil Company in the Philippine Islands, has successfully promoted the sale of Union products throughout the Islands. In addition to building up wholesale and retail trade the firm has been awarded valuable government contracts, including the requirements of the U.S. Navy for commercial and aviation gasoline and the U. S. Army for both domestic and fighting grades of aviation gasoline. The photograph above shows Mr. Bennett, center in the back row, and members of his office and sales staff. W. S. Grant, special representative of the Union Oil Company in the Philippines is at Mr. Bennett's left. On the extreme right is Mr. Rocha, chief clerk.



Above is one of the P. M. Bennett, Inc., delivery trucks used in Manila.



Officers of the Army Corps stationed at Nicholas Field, Manila, from left to right: Maj. W. B. Duty, Capt. J. F. Doherty, Capt. J. H. Davidson, 1st Lieut. D. B. Phillips and 1st Lieut. U. G. Ent.

California Oilfield Summary for April

According to figures collected by the American Petroleum Institute Pacific Coast Office, the total production of Crude Oil in California for April amounted to 15,524,444 barrels, an average of 517,481 barrels per day. This is an increase of 15,032 barrels per day over March production.

Total stocks of crude and all products in Pacific Coast territory increased during the month

887,796 barrels. The total stocks at the end of the month were 171,376,783 barrels. The total stock increase for 1932, up to April 30, 1932, was 1,540,834 barrels.

Twenty-four wells were completed during the month with an initial daily production of 26,038 barrels, compared with 16 wells completed during March with an initial production of 2,788 barrels.

TOTAL STOCKS HELD BY CALIFORNIA OIL COMPANIES, BOTH INSIDE AND OUTSIDE THE UNITED STATES

| | Apr. 30, 1932 | Mar. 31, 1932 | Apr. Stock Increases | Apr. 30, 1931 |
|---|--------------------|--------------------|-------------------------|--------------------|
| Heavy Crude and all grades of Fuel, Gas and Diesel Oils | 98,116,932 | 97,992,316 | 124,616 | 102,768,208 |
| Refinable Crude | 42,434,600 | 42,154,553 | 280,047 | 43,918,675 |
| Finished Gasoline, Engine Distillate and Natural Gasoline | 18,442,175 | 17,646,369 | 795,806 | 17,556,041 |
| Crude Gasoline and Naphtha Distillates.. | 4,491,020 | 4,809,449 | †318,429 | 3,152,147 |
| All Other Stocks | *7,892,056 | **7,886,300 | 5,756 | ***9,674,378 |
| TOTAL ALL STOCKS..... | 171,376,783 | 170,488,987 | 887,796 | 177,069,449 |
| †Decrease. Bbls. of Coke included..... | *662,291 | **659,420 | | ***706,799 |

Weatherman and Calendar Didn't Agree on Spring



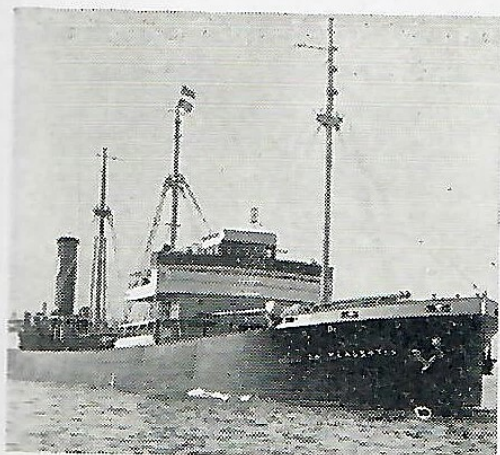
Although the calendar said it was spring, the Province of Alberta, Canada, the latter part of April, was swept by a blizzard that the oldest inhabitants declared was the severest they had ever experienced. In the upper photograph residents of Calgary are shown digging out after the storm. On the right a Union truck is shown in front of commission agency in Wembley, Northern Alberta. This picture was taken April 23.



Safety At Sea

By Capt. Hans J. Gunther, Master SS La Placentia

WITH the exception of blowdown (repair) periods a tanker is always at sea. In other words regular sea watches are kept at all times. A tanker's voyage ordinarily starts



when bulk cargo is first loaded. The preparation for such operation comes, therefore, at the end of the preceding voyage. Such preparation having been completed, the oil is pumped into the vessel.

It is now the duty of the deck officer on watch to see that the oil flows freely into the tanks; that all pipe and hose connections are tight and that his men are so stationed that corrections can be made instantly if anything goes amiss. He must personally make sure that the oil enters the tanks at the same rate it is pumped from shore. To ascertain this he must know the approximate capacity of each tank in at least one foot intervals. If the oil does not enter the tanks at the same rate as pumped from shore, the cause should be determined at once.

Leaky connections must be rectified at once and, if necessary, loading operations suspended until leaks have been stopped. Leaky connections, no matter how small, have been the cause of many accidents.

For instance: After disconnecting a hose, a man stepped in a small pool of oil on deck, slipped and broke his leg. Oil has been permitted to run into scuppers which did not lead directly overboard and caused dangerous gases. Oil escaping into the harbor has caused pollution of tidal waters and fines have been imposed on the guilty vessels.

As the loading progresses the safety rules, as laid down in the Union Oil Company Marine Regulations, must be strictly adhered to. But this does not mean that the watch officer shall not be on the alert for other hazards and conditions which are not incorporated in the above mentioned regulations.

To tabulate all hazards and conditions is an impossible task, therefore the watch officer must use his head and his own initiative to eliminate such potential hazards and if in doubt should call his superior officer and then be guided by his advice.

I again call attention to the fact that the watch officer is responsible not only for safe loading, but for the safety of the entire ship. A great responsibility rests with him and therefore his place is on deck, and not in his room or engaged in other business not connected with the

supervision of operations in progress during his watch.

A great danger is the overflowing of cargo tanks. Numerous accidents involving loss of life and property have been caused by this. Serious fires, endangering not only the ship, but whole harbors, have been caused by this lamentable condition. The pipe line arrangement on modern tankers is so constructed that ninety-nine times out of one hundred an overflow of oil is rank carelessness on the part of the man responsible for the loading. It is almost criminal, considering the loss of the oil, the fire hazard, the work of cleaning up and the time wasted, in addition to making the vessel subject to a heavy fine for release of oil on tidal waters.

Accidents of this kind, fortunately, have been rare in the last few years, but it has taken untiring efforts and even the use of disciplinary measures to educate our personnel that overflow can and must be prevented.

Of necessity certain work must be undertaken while the vessel is in port. It is also the duty of the watch officer to see that such work is performed in a safe manner and that the prescribed safety rules are observed.

The engineer officer must see that his men work in a safe manner and if, as is often the case, part of his men are employed outside the engine or fireroom, he is responsible for their behavior and observance of safety rules.

After the vessel is safely loaded it must be prepared to leave and proceed to sea. I am sorry to say that many accidents occur during mooring and unmooring of the boat, mostly through the carelessness of the men themselves, or through lack of proper supervision. This has led to the observation that more accidents happen to the deck personnel while the ship is in port and, in contrast, more to members of the engine and steward's departments while vessel is at sea.

But let us return to ship and cargo. After the gauges are taken, the ullage plugs and tank tops must be put in place. Great care should be taken during this work. Many times the tank tops are dropped, thereby creating the possibility of a spark when metal strikes metal. Tank tops should always be laid down.

Another hazard to the men themselves consists of unequal distribution of weight and letting go before the tank top rests completely on the coaming. In my personal experience several rupture cases and many a smashed and bruised finger has been the result of careless closing of tank tops.

In harbors where tow boats are required, the watch officer must never permit tow boats to make fast alongside before loading is completed and all tank tops laid down.

The bonding cable used to ground possible stray currents in the wharf piping shall be the last connection with the wharf to be removed with the exception of the mooring lines.

It is obvious that any accident or injury at sea, no matter how small, is usually twice as grave and expensive in its consequence as the same kind of accident or injury occurring ashore. The reason for this usually is the lack of facilities to remedy such occurrences. Further, the invaluable assistance of the shore organization is not available except in a roundabout way, until the vessel arrives in port. By stating the foregoing I want to bring home the point that while at sea we must be doubly careful.

Apparently there is no danger attached to routine work, but in reality danger lurks in every corner. Many and serious are the injuries to the eye caused by flying particles of rust, and all too many are the serious wounds caused by small scratches not properly treated.

Accidents in the engine room at sea consist mainly of falls and burns. Happily the wearing of rubber-heeled shoes in the engine room, which was the cause of many a bad fall and consequent injury, is now forbidden by company orders and accidents of this nature have greatly declined. The danger of burns will remain as long as steam or any kind of extreme heat is used and can only be combatted by educating the men—bringing home to them the fact that every accident is a loss to everybody concerned.

In the steward's department the chances of getting hurt are far greater at sea than in port. This is due to the fact that the vessel is continuously in motion and naturally increases the danger in bad weather. Pots and pans in the galley have a tendency to move about and when secured by brackets the contents are apt to spill over. The oil in the carburetor of oil burning ranges must be watched closely to prevent overflow. In short, in bad weather it is necessary for the entire personnel to be doubly cautious. Unfortunately this is not always done and serious injuries have resulted. A perusal of accident reports will confirm my contention.

Smoking while lying in bed, leaving burning pipes, cigars or cigarettes in unoccupied rooms are other hazards and have caused many fires. Any man found doing this should be reported to his superior who will then take action accordingly. But, whatever this action may be, it must assure cessation of this insane practice. The man making hourly inspection during the night must pay particular attention to these hazards and report, should he discover any, immediately to the officer on watch.

Bad weather has always been and always will be a source of accidents. During storms the greatest care must be exercised by all members of the crew. Even to attempt to enumerate the various hazards would be futile. The only rule during such time is—Caution! Be careful!

Should an accident resulting in injury occur while at sea, don't fail to get first aid treatment at once. Remember the saying "that an ounce of prevention is worth a pound of cure." Tell your men and keep on telling them how to work safely.

As the tanker nears port preparations for

mooring and discharging must be made. The same precaution as in un-mooring the ship must be taken, and when the vessel is moored the first act should be connecting the bonding cable. After hoses are connected, the discharging of the oil begins.

Now we encounter a condition which, if not closely watched, constitutes a grave hazard and that is the gauging of cargo tanks by shore employees. These men sometimes may be careless, spilling oil on deck and throwing the rags they have used for cleaning their hands and equipment in any odd corner. In vessels with between-decks this is a dangerous practice. The watch officer or a competent man, say the quartermaster, should always accompany these men and see that they observe safety rules.

The company's rules pertaining to discharging of cargo must be strictly adhered to, including the stretching of fire hose, placing of gas mask and lifeline and the displaying of danger signs.

During the period of discharging, the vigilance of both the deck as well as the engineer officer must not relax for a moment. All too often, after everything has been running smoothly for hours, accidents have happened, such as the bursting of cargo hose, breaking down of pumps, improper operation of a valve ashore, etc. Such accidents, if not observed immediately, may have grave consequences. The men in engine and fireroom are apt to relax and not give the proper attention to their respective duties. This applies to a greater extent during night hours. The officers by their own conduct must impress their men. Caution them against possible break downs and their consequences. After all, a machine can not think. That part is reserved for the human element.

After the cargo is discharged, the ship returns to sea for the homeward passage. The problem now confronting us is that of ballasting. Varying conditions which are encountered have made a strict rule for ballasting impracticable. So we must look for greatest safety accompanied by economy. To find this happy combination we must study the ship and its action in all kinds of weather and find the most safety and speed with the least wear and tear on hull and machinery. It should be borne in mind that too much ballast may be as harmful as too little ballast. Therefore the once established rule for ballasting should be adhered to when conditions permit.

Returning to port, preparations have to be made for mooring ship and loading. They are practically the same as on leaving, only in reversed order. The fight for safety and against accidents must never cease. It is up to us as leaders to set an example. It is up to us to watch the new man and educate him in safety principles. At times this may be trying and discouraging, particularly with unresponsive material, but let us persist and follow the course we have laid. One accident prevented as a result of our safety campaign should make us feel that our efforts have not been in vain.

INDUSTRIAL RELATIONS NEWS

Health As An Asset

This article is based on suggestions of one of the Company's physicians who is an expert in diagnostic work

THERE is a great deal of truth in the old adage of prevention being better than cure, and, although all of the employees of the company, after a year's service are entitled to care and treatment of any non-industrial sickness or accident through the Employees' Benefit Plan, other factors arise which often entail financial loss and physical suffering. It is felt that a noticeable proportion of these conditions could be saved if the employees were to take more individual care of their health.

A strong, healthy body and a mind capable of work constitute a form of wealth that few take into consideration until some untoward illness or accident impairs their working capacity and shortens the period of useful activity or even terminates it altogether. Many people give their bodies far less intelligent care than they give their automobiles. It is not desirable, of course, to become too self conscious or overprotective, but it is desirable that many of the fundamental rules of hygiene be followed, some of which are listed below and can easily be adopted:

1. Keep busy—most people who are sufficiently occupied are more likely to keep well than those who are idle.

2. Eight to nine hours of sleep in each twenty-four.

3. Some daily or frequent exercise, preferably as recreation—a game or some form of competition where mental relaxation or change is assured. It is far better to take a little exercise each day than to have an over abundance one day a week, which is so often the practice. Many employees are inclined to take no exercise during the week and then play too many holes of golf or too many sets of tennis on a Saturday or Sunday, doing themselves more harm than good.

4. Simple, wholesome food of a mixed type, tending to moderation, and avoiding fads and fancies. Selected diets are indicated only in special conditions and a

healthy routine is far more important than fussing over types of food in the majority of cases.

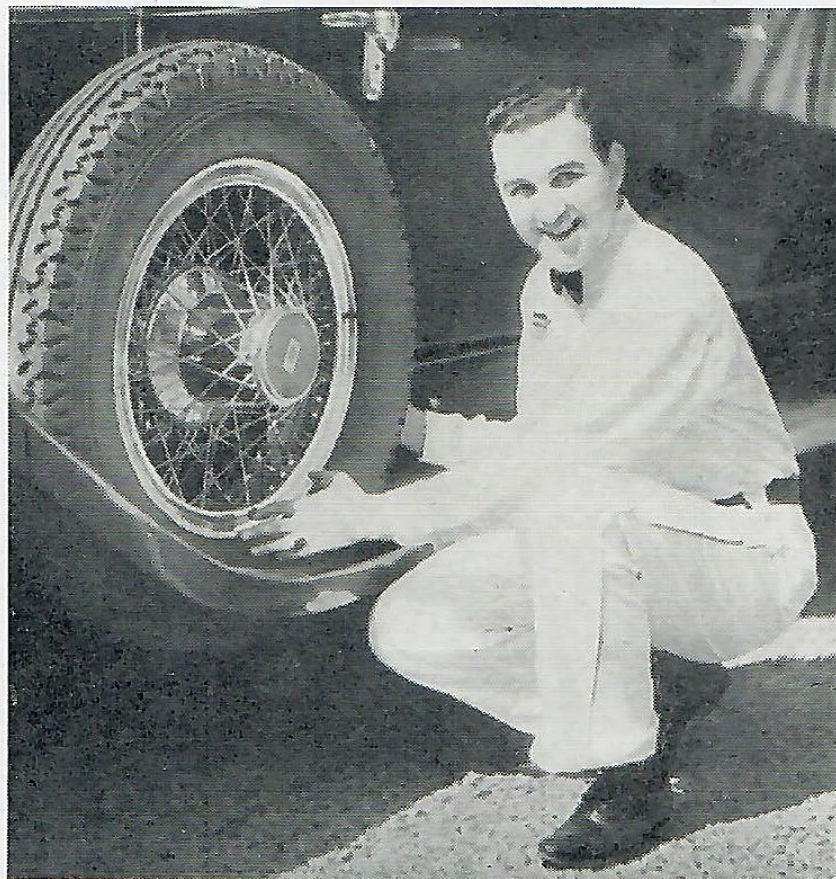
5. Fresh air in abundance, avoiding over heated and stuffy quarters.

6. Drink at least six glasses of water each day.

7. The use of cathartics or enemas should be avoided. A healthy routine as outlined will bring about a regularity of habits and normal functioning of the body.

8. A periodic physical inventory will do much to avoid over wear of any one part or organ, and will bring to light improper habits and places where poison is undermining the health, such as abscessed teeth, chronic infected tonsils, sinuses, etc., which if taken care of in their early stages may prevent serious damage later.

He Made the Sale



C. A. Zinkand, assistant manager of Union Service Stations Inc., station No. 208, Polk and Geary streets, San Francisco, is here shown with one of set of Firestone tires he sold A. M. Rosenstern, Bay City capitalist, for his Rolls Royce.

REFINED AND CRUDE



By RICHARD SNEDDON

With another presidential election in the offing, now is the time that factions speak louder than words.

* * *

By the way, do you remember the good old days when a policeman's shadow was enough to frighten a criminal?

* * *

The world, after all, is neither round nor square—it's crooked.

* * *

The rows of figures that are to be found ornamenting the highways of California are not statues as we first suspected. They are merely specimens of the genus homo known as hitch hikers.

* * *

They may be readily identified by the size and elevation of the thumb.

* * *

Most of them are hitch hiking from Los Angeles to San Francisco, so that they can then hitch hike from San Francisco to Los Angeles. Can you imagine anything more fascinating?

* * *

Science tells us that none of the anthropoid apes can emit musical sounds. 'Zat so?

* * *

And Judge says, "A station announcer is a fellow who comes into the waiting room and keeps calling the names of stations until you've listened long enough to miss your train."

* * *

The most enjoyable moment in any show is just after the curtain goes up, and just before everybody starts to cough.

* * *

While Junior's definition of a neighbor is: "A woman who borrows things."

* * *

We met our old friend Angus McBagpipes the other day with all the fingers of his right hand bandaged up. He explained that while in a cigar store a short time previously he was reaching for some money to buy a smoke when the cash register closed on his fingers.

* * *

Angus, by the way is one of these Scotchmen who pays as he goes—unless, of course, somebody happens to go with him.

A well known chemist states that the public health is constantly menaced by the presence of impurities in the air. It is obvious that the chemist has purchased a radio.

* * *

It is said the English people have no sense of humor, and yet we are told that somewhere over there they are erecting a statue of the Prince of Wales on horse back.

* * *

Isn't it lucky the Prince never took up aviation?

* * *

"Sure," said the old sailor, "I know the fellow well. He used to sleep in the next bunk to me at church."

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And the Olympic visitors who wish to see the Hollywood movie crowd, should pop into Reno on the way out here.

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It takes 333 silk-worms to make one pair of chiffon hose. Another worm works eight hours to get the wherewithal to pay for them.

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The fellow who kicks like a steer if his wife keeps him waiting five minutes for dinner, is the very same bird who will sit on a wet rock in a trout stream for a whole day in order to catch a couple of undernourished minnows.

* * *

You know it's a funny thing about this golf business—the more your game depreciates the higher it goes above par.

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At one of the beach towns the other day a girl landed a fish weighing 130 pounds. It stands five feet six inches high, wears plus-fours, and always takes a cigar to the girl's father when it makes a call.

* * *

And if you can't find it in the dictionary, the atlas, or the Encyclopaedia Britannica, don't be discouraged, try the drug store.

* * *

Finally, don't jump at conclusions. Maybe the magazines in the dentist's waiting room are put there to indicate how long the dentist has been practicing.

305-foot Horse Mesa Dam on Salt River, 43 miles east of Phoenix, Ariz., one of three major dams of the Salt River Project.

It stores 245,000-acre feet of water and operates a power plant with a capacity of 43,000 h.p.



