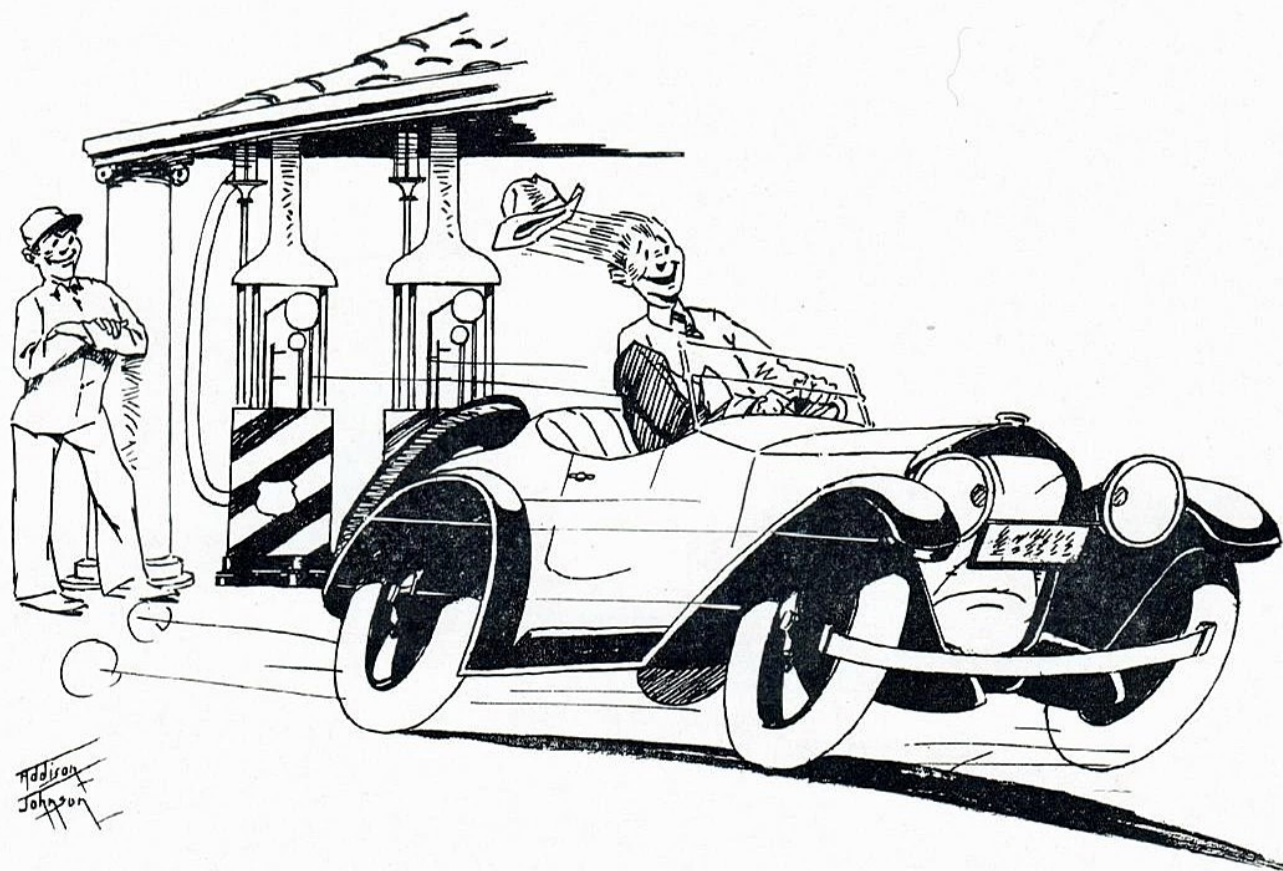


UNION
OIL
BULLETIN

MARCH 1927



Is there carbon in your car?

FILL your tank with Union Ethyl Gasoline and turn carbon into *power!*

Too good to believe? Not at all. Union Ethyl Gasoline is automotive science's latest contribution to motoring satisfaction. It ranks in importance with balloon tires and 4-wheel brakes. It has no substitute; no other fuel is comparable. And it makes carbon a source of power and easier driving.

On sale at your nearest Union Gasoline filling station. Fill your tank *today*. You'll swear by it ever after.

UNION OIL COMPANY

Stop that "knock" with Union Ethyl Gasoline and turn carbon into power.

UNION OIL BULLETIN

EXECUTIVE COMMITTEE* AND OFFICIALS

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*E. W. CLARK	Executive Vice-President
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*L. P. ST. CLAIR	Vice-President
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*CHESTER W. BROWN	Director of Exploration and Production
PAUL M. GREGG	General Counsel

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Address all communications to the "BULLETIN," 802 Union Oil Building, Los Angeles, Calif.

VOLUME VII

MARCH, 1927

BULLETIN No. 1

The Annual Report

Net profits of the company for the year ending December 31st, last, after all charges, including depreciation, depletion and drilling expenditures had been deducted, amounted to \$11,831,618.86, equivalent to 12% on the average outstanding Capital Stock and \$3.12 per share as compared with \$10,513,206.26, equivalent to 11¼% and \$2.78 per share for the year 1925.

Capital Stock outstanding at December 31, 1926, increased during the year \$209,225.00 due to the issuance of 8,369 shares to employees under the offer of July 15, 1925. At December 31, 1926, there were still 11,625 shares subscribed for and unissued to 1,108 employees under this offer. The total number of shares outstanding was 3,788,618 and (exclusive of Union Oil Associates) there were 5,677 stockholders representing an average holding of 286 shares each. The stockholders of Union Oil Associates numbered 3758, the average holding being 575 shares each. Union Oil Associates owns approximately 57% of the stock of the company.

Sales for the year amounted to \$79,943,751.25, an increase of \$5,564,979.05 over the year 1925.

The company's contributions to the Provident Fund amounted to \$501,388.05 for 1926 as compared with \$493,684.49 in the previous year. At December 31st, last, there were 8,927 employees in the company's service as compared with 7,981 at the end of the previous year. Of these employees, 4,256 have entered the Provident Fund, representing 73% of those eligible, as compared with 67% at December 31, 1925. The assets of the Provident Fund at December 31, 1926, amounted to \$3,257,002.07.

At December 21, 1926, 5,973 employees were insured under the Employees' Benefit Fund Plan to the extent of \$8,596,500.00 and 5,306 employees had subscribed for an additional \$10,573,000.00 of Group Life Insurance.

Provident Fund

BALANCE SHEET—DECEMBER 31, 1926

ASSETS

Cash with Union Oil Company of California at 6% and in bank.....	\$	434,652.10
Securities Owned:		
Union Oil Company of California Capital Stock 13,948 Shares at \$45.00.....	\$	627,660.00
Union Oil Associates Capital Stock 9,016 Shares at \$45.00		405,720.00
	<u>\$1,033,380.00</u>	
Common Stocks	328,900.00	
Preferred Stocks	478,340.35	
Bonds	755,087.76	
Mortgages	183,809.11	\$2,779,517.22
Loans to Members.....		19,027.80
Income Accrued		23,804.95
		<u>\$3,257,002.07</u>

LIABILITIES

Accounts Payable		974.11
Members' Credits:		
Members Contributions:		
Less Withdrawals and Death Benefits	\$209,828.92	\$1,323,879.69
Company's Contributions:		
Less Death Benefits and Transfers to Reserve	\$209,828.92	\$1,323,879.69
Reserve		\$2,647,759.38
		608,268.58
		<u>\$3,257,002.07</u>

INCOME ACCOUNT FOR THE YEAR ENDED DECEMBER 31, 1926

Income from Interest, Dividends and Profit on Securities Sold		\$147,457.97
Deduct:		
Expense of Administering Fund.....	\$	7,607.08
Interest at 5% credited to Members Accounts....	95,327.70	102,934.78
Income for the year carried to Reserve.....		<u>\$ 44,523.19</u>

RESERVE ACCOUNT

Credits to Reserve on Members Withdrawals.....	\$	194,080.36
Difference between Cost and Stated Value of Securities:		
To December 31, 1925.....	\$	171,506.69
Year ended December 31, 1926.....	171,912.73	343,419.42
Income Account:		
Balance December 31, 1925.....	\$	26,245.61
Add net Income for year as shown above.....	44,523.19	*70,768.80
Balance carried to Balance Sheet.....		<u>\$ 608,268.58</u>

* NOTE:

Net Income from July 1, 1923 (date of commence- ment of Fund) to December 31, 1926.....	\$	237,717.84
Less Interest at 5% Credited to Members Accounts		166,949.04
Total Net Income to December 31, 1926.....	\$	<u>70,768.80</u>

“Plugging In” on Our Phone System

By W. S. JOHNSTON
Engineering Department



SINCE that memorable day in 1876 when Alexander Graham Bell, back in the City of Boston, spoke into a crude little instrument connected by a wire to a similar instrument across the street and said to his assistant, “Mr. Watson, come here, I want you,” thus sending the first telephone call, the telephone has played a constantly increasing and important part in the business and social life of mankind. The telegraph was already giving valuable service, but



its scope did not permit of its daily use by the general public, its field being quite different from that of the telephone. Previous attempts to develop the telephone had failed, mainly because it was approached as an electrical problem, whereas it was fundamentally a problem in acoustics. Bell was an expert in this science and as such was successful in his attempts, using electricity only as a means to accomplish the desired result.

The next vital step in the development of the telephone was the invention of the switchboard, or exchange, which increased the scope of the apparatus from the limited number that could be served

by a single line, to the possibilities of the vast network of lines and exchanges which now embrace whole continents. In the brief space of fifty years the telephone has grown from two instruments and a wire, to a public service embracing the entire civilized world and with a capital investment running into the billions. The United States alone has approximately seventeen millions of telephones, any one of which can be connected to any other if necessary. These are about two thirds of all the telephones in the world.

It must not be supposed that the invention of the telephone was the sudden result of a brilliant stroke of genius. On the contrary it was the result of patient study and experiment, and its development and perfection during the past fifty years have resulted from the most intensive investigation, research and experiment, combined with a certain amount of inventive genius. The manual exchange, or switchboard, naturally led to the desire for the automatic or machine switching type of apparatus. This was successfully developed in 1889 and first put into commercial use at LaPorte, Indiana, about 1898. Since then it has been improved and perfected until now it is rapidly displacing the manual type of apparatus.

It is pleasant to remember that Alexander Graham Bell displayed business ability fully equal to his scientific and inventive ability, that he became a very

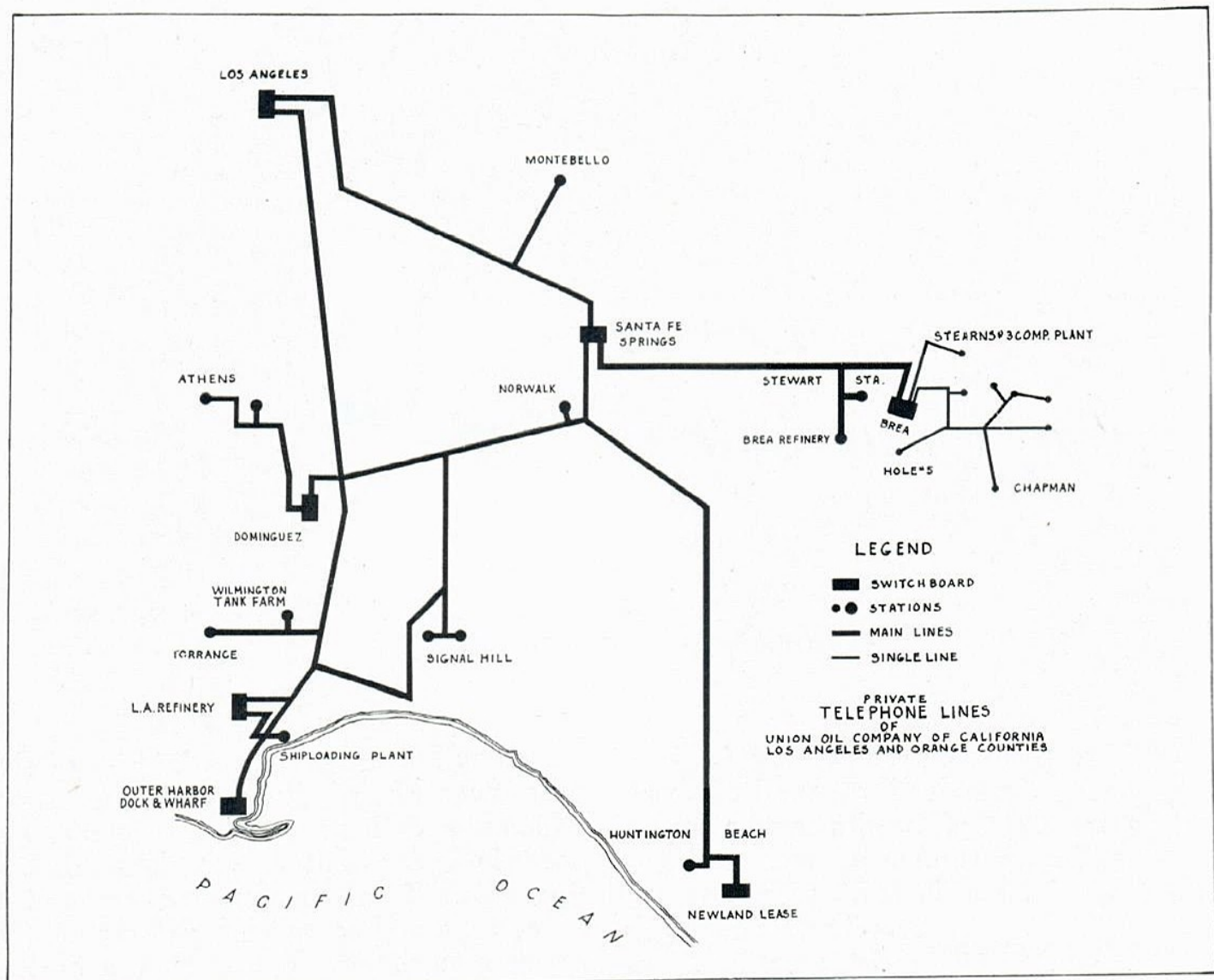


Diagram of the company's telephone system in Southern California.

wealthy man and remained a prominent factor in the great "Bell System" until his death a few years ago. It is also interesting to know that the woman who operated the first exchange is alive and well and still following her vocation, or was a couple of years ago. All this vast development has taken place during the active working life of a single individual.

Service Kept Pace with Company's Growth

From the very beginning of its career the Union Oil Company has made use of the telephone. Like all its other activities the beginnings were rather modest, but they have expanded and grown together as the company grew to its present rank in the business world. It is indeed hard to imagine the possibility of conducting any business today without the aid of the telephone. Where the company's activities are conducted in cities or towns the local commercial telephone service is in use, with all its possibilities of long distance connection to any part of the United States. With this we are all

more or less familiar. However, much of the company's business, especially that of the Field and Transportation Departments, extends into regions where commercial telephone service is not available. There it has been necessary to build and operate its own systems and these naturally are of greater interest. Oleum Refinery has a local exchange serving over one hundred telephones for refinery operation alone and in addition is supplied with long distance service over the Pacific Telephone and Telegraph system. San Luis Obispo has a system about three hundred miles in total length, paralleling the Producers and Lompoc Pipe Lines, without which the pipe lines could hardly be operated.

Perhaps the most interesting development of the company's own lines has been in Los Angeles and Orange Counties. Here the tremendous growth and expansion of the company's business have been reflected in the rapid extension of its privately owned telephone lines. Commercial service has been available in Los Angeles and surrounding towns. For the fields

and the pipe lines, however, a complete system of private lines has been developed. The first line of any length was built to facilitate the operation of the pipe line from the Whittier oil fields to East San Pedro in 1904. This was later extended to Stewart and Brea and a leased circuit from Norwalk to Los Angeles was added, connecting with the main offices.

Then, crowded into the last few years, came with bewildering rapidity the development of oil fields at Santa Fe Springs, Huntington Beach, Signal Hill and Dominguez and the construction of the refinery, the shiploading and bunkering plant at Wilmington. These all demanded telephone service. Lines were rapidly built to meet the increasing requirements. One line was built from Los Angeles to the Shiploading Plant and Refinery at Wilmington in 1921, to which were added in 1923 an additional refinery line and also one to the Outer Harbor Dock in San Pedro. In 1922 two lines were built from Los Angeles to Santa Fe Springs and Norwalk. These were extended to Stewart, Brea and Montebello in 1923 and a line built from Santa Fe Springs to the Huntington Beach Field. The original line to East San Pedro was extended to the Signal Hill Field and to Wilmington in 1922. In 1924 a line was built from Santa Fe Springs to Dominguez Field and the old part of the line to Signal Hill was rebuilt. Numerous field lines were extended to

all parts of the new fields. A private exchange was installed at Santa Fe Springs in 1923, a small switchboard at Huntington Beach the same year and one at Dominguez in 1924.

Department Lines Centralized

As the demand for telephone facilities increased it was found that a number of separate lines operated by different departments could not give the most effective service to the whole company and accordingly on June 1, 1924, the various groups were united in a single system under the supervision of the Engineering Department. Since that time a great many changes have been made, and additions of new and up-to-date equipment have supplied a unified and efficient system, furnishing prompt and satisfactory service. The older lines are being gradually repaired and replaced by new, high class, standard construction.

A privately owned automatic exchange was installed in the Los Angeles Refinery in 1923 equipped for fifty lines. In 1926 this was increased to one hundred lines and overhead cable service installed for the whole refinery. An attendant's cabinet enables the operator to connect the automatic exchange to the company's private line system. The Union Oil Building in Los Angeles has a six position manual switchboard, leased from the Southern California Telephone Company but operated by Union Oil Company. The private lines terminate on this board



A busy moment in the Union Oil Building Exchange.

which makes it an integral operating unit of the Union Oil system. However, it is not permitted to make connections between the private lines and any stations outside the Union Oil Building.

An experienced telephone superintendent is now in active charge of operation, maintenance and construction work, and gives it his close personal attention. Twenty-four hour service is maintained at all exchanges. Two "trouble shooters" are employed, one of whom is on duty on alternate Sundays and both of whom are on call at any hour of the night if needed. A construction crew is maintained for new work and maintenance as required. Delayed calls, from any cause whatever, are tabulated and the party called is located at the earliest possible moment. Reports are received from pumpers and gaugers and relayed to the despatcher. Night operators in the gas division report to the operator at Santa Fe Springs every two hours. Should one fail to report, the operator calls his superior officer who investigates to make sure no accident or other trouble has occurred.

Emergency Calls Given Right-of-Way

Operators have standing orders to clear the lines for emergency calls or special calls for officials of the company. In the event of a pipe line break, fire or other serious accident, the operator promptly notifies the heads of the department concerned and also the Chief Engineer, who arranges for any further attention to the matter. Personal calls over the private lines are permitted to employees between 7:00 P.M. and 7:00 A.M. and between 12:00 M. and 1:00 P.M. Outside toll fees for personal calls are collected by the company's operators and remitted to the head office.

It might surprise many of us to learn that the switchboard operators of the Union Oil Building exchange memorize

the names of the entire personnel in the Main Office and their telephone station numbers, so that they handle all calls without the party calling being required to give a station number. There are 316 stations to remember and over 800 employees. The operators in the field exchanges likewise memorize the names and location of all employees in their districts.

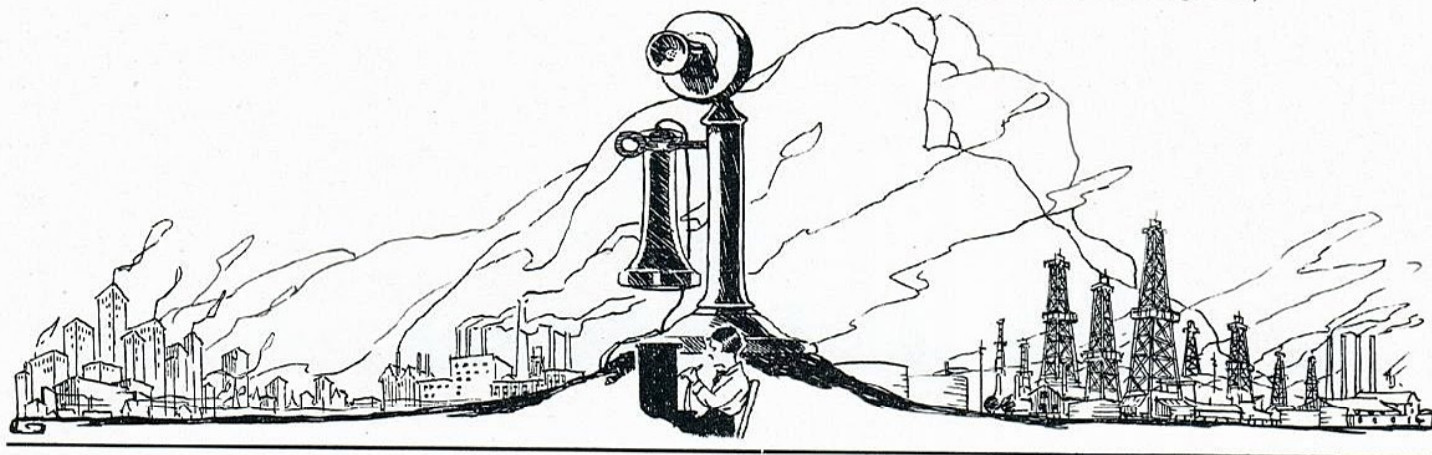
Statistics are rather dry reading and it is not intended to inflict any on the readers of this article. A very few figures however will convey a good idea of the amount of business handled by our telephone system per month.

The exchanges at Santa Fe Springs, Brea and Dominguez handle about 15,000 calls per month. Los Angeles Refinery exchange handles about 40,000 calls per month. Union Oil Building exchange handles about 125,000 calls per month. In addition to these there is a dictograph system in the Union Oil Building used only for head office intercommunicating calls, which handles about 30,000 calls per month. The dictograph embodies features not found in the regular telephone equipment and fills a special place for intercommunication service, thus relieving the exchange of a great deal of traffic. The Union Oil Building dictograph is the largest unit installation of its kind in the world.

Personnel Made of Stern Stuff

Lest we think of the telephone only as a utility, and of its business only as humdrum, work-a-day service, we are reminded that it also has its romantic and even heroic side. Every great catastrophe, whether fire, flood, earthquake, cyclone or blizzard, contributes its tale of devotion to duty, often amounting to actual heroism on the part of telephone employees. Linemen and wiremen working under the most dangerous conditions

(Continued on Page 22)



Properties, Persons and Particulars

Union Oil Company in the Northwest

By HUBERT C. FERRY

Wm. Groundwater, Manager of Transportation, and Hubert C. Ferry, head of our Franchise and Right of Way Department, have just returned from a trip through the Northwest, inspecting present and proposed wharf, dock and distributing station sites, and arranging for the necessary leases, franchises and pipe line rights of way. In the following article, Mr. Ferry gives us a glimpse of our Northwest organization and operations and an introduction to our fellow employees.—The Editor

WHEN WE at Los Angeles think of Portland, Seattle, Vancouver, Spokane, Port Moody refinery and other important points in Union Oil Company parlance, and hear from our representatives at these places, we often form a mental picture of them. Sometimes through maps and photographs we get a fairly accurate conception of the locations, then again we may miss the personalities a mile, especially if they don't agree with our viewpoint. So the purpose of this article is to get us all better acquainted with the Northwest and our fellow employees.

Snow was falling in Portland as we passed through and we were greeted in Seattle with much ice and a chilly blast. It was "unusual weather" for the Northwest, we were informed, and on other occasions and at other places we were reminded of the unusual weather. If Southern California expects to remain original we will have to manufacture a substitute for our famous term "unusual", which seems to have been appropriated by our northern brethren.

At Seattle

Seattle is the headquarters for our northern division; district offices being maintained at Portland, Spokane and Vancouver. In addition to our sales organization headed by V. H. Kelly, Manager of Northern Division, and R. J. F. Federspiel, District Sales Manager at Seattle, we have "Buck" Weaver, Purchasing Department; K. V. Stephens (Steve), Resident Engineer; L. C. Munroe, Traffic Department, and T. F. Thompson, Asphalt Sales. Stratton and Kane, attorneys, provide local counsel.

As our sales force was busy properly introducing Union Ethyl to the populace, Steve took us to Edmonds, about sixteen

miles from Seattle, and showed us our paint shop where old tank cars are made like new. Our cars for transporting gasoline are painted aluminum. The use of coal for fuel in the engines in the Northwest soon discolors the cars as they are pulled through the numerous tunnels, and it requires constant attention to keep our rolling stock in good appearance.

The car is rolled into a closed building, gone over with a sand blast to remove the loose paint, grease and rust, then passed into the steam-heated paint shop where a coat of paint is sprayed on. After stenciling the name, number, capacity and other items on the car, and making necessary minor repairs, it is on its way again. Sounds simple, but it's not quite that easy. Nevertheless, two men turn out one car every three or four days. We are now considering a method of washing our cars, in which event they will be painted every three years.

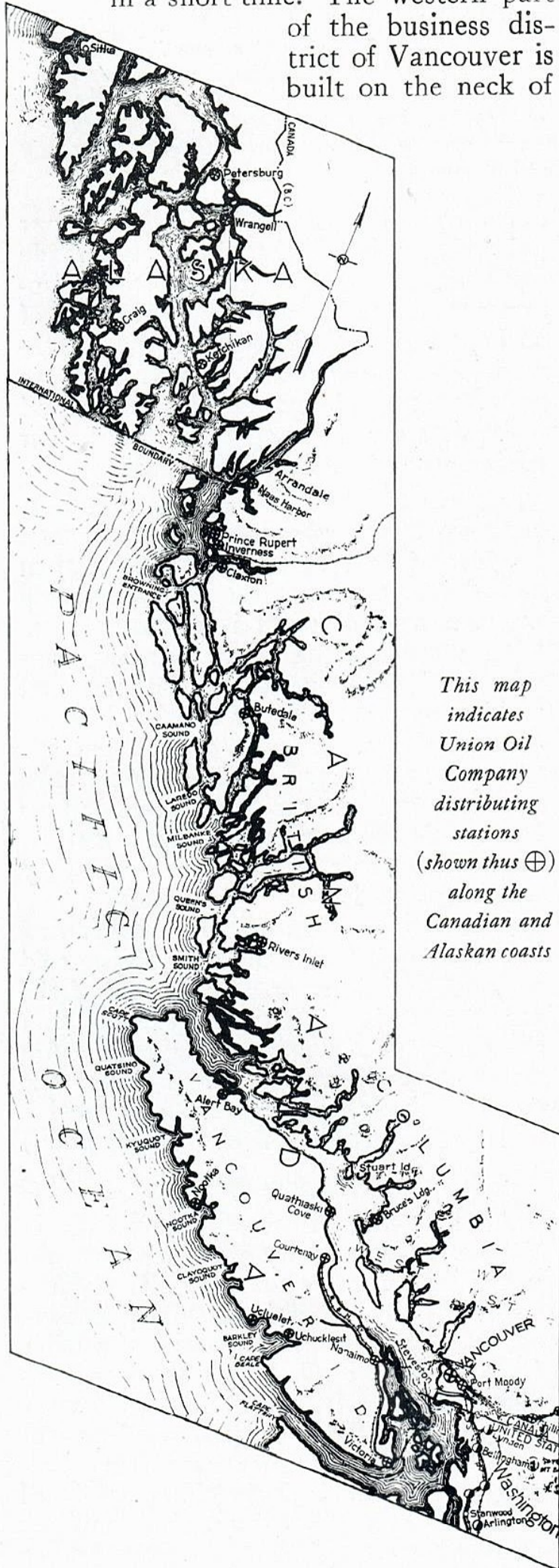
An interesting innovation in expediting the flow of oil from tank cars during cold weather was discovered when one of the cars turned in for painting showed that the customer had apparently built a fire under it to warm the oil. Perhaps the person building the fire once owned a balky mule. (Safety Board, please note.)

Vancouver

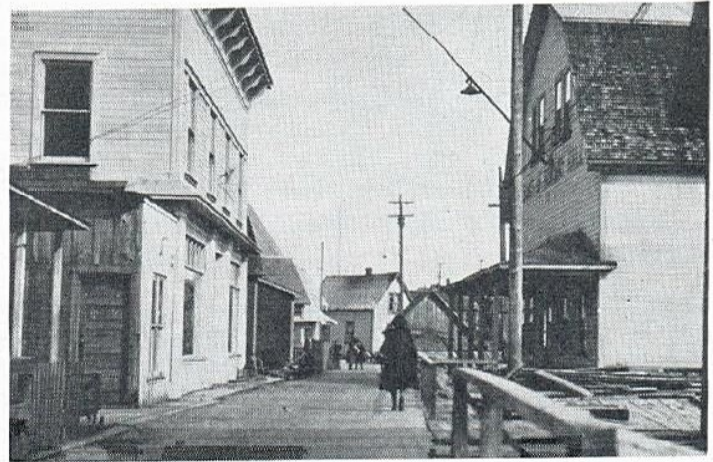
An over-night boat trip landed us in Vancouver, where we were met by our genial district sales manager, R. J. Kenmuir. "Bob", as he is familiarly known, soon made us acquainted with the office force. There is C. R. Gross, with his office next to Mr. Kenmuir's; across the hall H. T. (Sam) Langford, Assistant District Sales Manager, late from Calgary; Fred Ruddock, in charge of fuel oil sales, and Sidney Horton, handling marine matters. Out in the general office

every one is busy and in the far corner partitioned off are two operators of Elliott-Fisher bookkeeping machines, installed at a cost of \$1,500.00 each, which Gross told us would pay for themselves in a short time. The western part of the business district of Vancouver is built on the neck of

a peninsula of which the termination is the world-renowned Stanley Park. At the top and center of the neck is located the famous Vancouver Hotel. It is but



This map indicates Union Oil Company distributing stations (shown thus ⊕) along the Canadian and Alaskan coasts



A street in Petersburg. Most streets are constructed of wood placed on piling. The buildings are also of wood. There is not much danger of destruction by fire as it rains most of the year.

five or six blocks from the hotel to the new Canadian Pacific dock, one of the finest and largest in the world, built at an expense of \$3,000,000.00. Mr. Rudock showed us our pipe lines leading from our marine station, about one-fourth of a mile distant, to the C. P. R. dock, and how they are placed on the dock to fuel five 250-foot vessels at one time with either fuel oil or diesel. These lines cost \$30,000 to install, and are to serve C. P. R.'s and other ships.

Port Moody Refinery

Our Port Moody refinery is located about ten miles northeast from Vancouver on Burrard Inlet which is about a half mile wide at that point; the refinery of the Imperial Oil Company being at Ioco on the opposite side of the inlet. Tom Bolton, recently transferred from Bakersfield, California, drove us over roads covered about ten inches deep with snow to the refinery. The quiet, dark blue waters of the inlet reflected the forest clad and snow covered peaks in all their grandeur. It was a beautiful scene; one of the hundreds that are characteristic of the Northwest. Oil is transported from California in tank ships to Port Moody and here refined for distribution in the Northwest.

Our Alaskan Trade

A trip on the Tanker Olinda to Portier Pass and Nanaimo gave us an excellent opportunity to get acquainted with Captain Powers and his crew.



Ketchikan, Alaska. One of our principal distributing points. Union Oil Company's tanker Radiant at left. The dense forests may be attributed to the average rainfall of 175 inches per year.

Most of the courses taken by boats along the Alaskan Coast are through bays, narrows and channels in which swift currents run during the ebb and flow of the tides. These currents are caused by the great variances between high and low tides. At the equator there is no tide. The farther north, the greater the tides such as those existing at the Bay of Fundy in Nova Scotia, where a difference of sixty feet (equivalent to the height of a six story building) between high and low tide is not uncommon. At some of our stations there is a difference of twenty-five or thirty feet between low and high tide. The ideal timing of a ship's

journey is to take advantage of the tides, sail with them and reach the destination at the slack water which exists at high tide. It is, of course, difficult to effect a safe landing during a heavy tide.

On our journey to Nanaimo we left Vancouver, the home port of the *Olinda*, at 5:45 A.M., to take the best advantage of the tides. Bill (Slim) Lockwood soon poked his head out of the galley and announced breakfast, fit for a king. It included nice pork sausage; great stuff for we who are unused to ocean travel! After lunch Bill Groundwater said, "That sure was good coffee!" Forthwith he was informed that he had been drinking tea. Slim Lockwood apparently had not spent eighteen years in the British Marines without learning to brew a cup of tea with a real kick in it.

On the bridge we watched Captain Powers direct the *Olinda* as she entered and departed from the ports. One could not help being impressed with the quiet, unassuming and business-like manner in which he directed the ship, and it is little wonder that he has traveled the Alaskan Coast for sixteen years without serious mishap. Captain Powers is one who can mingle with and be one of his crew and maintain their respect, truly an executive attribute.

"Naturally you have experienced some exciting and dangerous incidents during



Salmon fishing smacks at Tokeland, Willapa Harbor. Tokeland-Raymond Ferry in background.

your travels on the Alaskan Coast", I suggested as an opening wedge to secure a scoop for this article. "No, we just load at Vancouver and start out for our destination. When we get there we discharge and proceed to the next port," was his quiet reply. "Well where is the most dangerous point on your route, and how about navigating in the fog, isn't that dangerous?"

With that the captain opened up a bit.

"The west coast of Vancouver, between Cape Flattery and Barkley Sound, is the most dangerous part of the Pacific. It is called 'The Graveyard of the Pacific'. Seldom a year passes without the loss of a ship at this point. Not long ago a fishing boat with a crew of several men was lost. The wrecked vessel was discovered, but none of the crew were found.

"These waters are very dangerous to travel, because of tides and exposure to the heavy storms that sweep the Northwest occasionally, and there are few harbors or inlets in which a ship can take refuge.

"On the inside passage, as the route through the Straits of Georgia is called, one of the many difficult places to navigate is through Seymour Narrows. Here a minimum tide of sixteen or eighteen miles per hour flows. The channel is nar-

row, only two or three hundred feet wide, and there is a large rock in the center of it. Unless a boat bucking the tide is capable of sixteen knots she will find herself making about two miles an hour backwards ('astern' in the language of the



Portion of the harbor at Petersburg, our most northern Alaskan station. Note how all the buildings are placed on piling above the water.

mariner). Passenger ships are not allowed to navigate this channel against the tide.

"In the night and in foggy weather great care must be taken while passing through the straits. No search lights are used. A search light in the fog or snow storm is of no use.



It looks as if the Union Oil Company's newly constructed marine station at Nanaimo is in for a good day's business, judging from the flotilla of fishing boats around it. In the back ground is Protection Island on which the famous Nanaimo Coal Mines are located, the largest in B. C.



Union Oil tanks and wharf at Butedale. Capt. Powers, in his 16 years of travel on Alaskan Coast, has never visited this location when the sun was shining.

"After the experienced eye has accustomed itself to the darkness, a very faint difference between the water, which appears a grey color, and the slightly darker banks is noticed. The sky is lighter. The shadows cast by the banks are often deceiving and very treacherous.

"The use of an echo is also resorted to in determining a ship's location. Sound travels approximately 2,200 feet per second. If the echo from a short blast of the whistle is returned immediately, the ship is near shore. The farther from shore the longer the elapse before the echo is heard. When the vessel is in mid-channel it is possible to get a double echo, one from each bank. If it is impossible to get

an echo, the ship may be turned around and at times will then secure an echo.

"The worst enemy of navigation on the Alaskan Coast is the blinding snow storms; fog perhaps is next. During my sixteen years on these waters, I have never seen the sun shine at Butedale. It is either raining, snowing or foggy. At Ketchikan, Alaska, the average rainfall per year is 175 inches. Rivers Inlet is supposed to be the wettest spot on the coast. Three hundred inches is reported to have fallen last year, nearly an inch a day. It is said that they are considering measuring the rainfall in feet and discarding the inches!

"Principal industries along Canadian and Alaskan coasts are lumbering, paper making, fishing and mining. Our various stations are used as distributing centers to these industries."

A fish story may not be amiss at this point. Along the halibut banks of Alaska giant halibut are caught. They are twelve to sixteen inches thick, two or three feet wide and six feet long (all honest fishermen's measurements). The fish are packed in ice on the ship. After they are brought ashore they are frozen and dipped in boiling water for an instant. When taken from the water the freezing air forms a thin coat of ice around the fish. They are then stacked in refrigerator cars like cord wood and shipped direct to New



Inverness, B. C., showing cannery, warehouse and Union Oil dock. Here the water is 1½ feet deep at low tide and 22 feet deep at high tide.

York and Boston for the eastern market.

As we bade our crew good-bye at Nanaimo it occurred to me that some of us who occupy swivel chairs at head office are not so badly off after all.

Vancouver Island

Our hustling agent, J. D. Galloway, at Nanaimo, took pride in showing us the new marine station which we constructed. Here many small fishing craft are fueled with oil. A half mile or so out in the center of the large bay is Protection Island, on which are located the famous Nanaimo coal mines. They are the principal source of support to the city of Nanaimo. The shafts for these mines are sunk, at an angle, six hundred to one thousand feet beneath the ocean.

Return to Vancouver was made via Victoria, the quaint and picturesque capital of British Columbia. Our departure from Vancouver for Seattle was marked by a very cordial get-together party attended by a dozen or so fellows from the office.

At Seattle, K. B. Stevens picked us up and we were off early one morning, bag and baggage in his Engineering Department Dodge sedan, for Tacoma, Olympia,



Totem Poles in front of Indian dwellings at Alert Bay. Looks like a Hollywood movie set!

Aberdeen, Hoquiam and Raymond, viewing our present and proposed wharf and dock locations.

At Hoquiam, due to the soft, marshy soil, foundations are necessary upon



Taken while en route to Nanaimo from Vancouver on forward deck of M. S. Olinda. Bill Groundwater took a turn at the wheel while photo was made.

Left to right: Tommy Wolff, deck hand; Bill Lockwood, cook; Jack MacLurg, radio operator; Al Murchison, deck hand; Bert Sheppard, Mate; H. J. Millman, Second Engineer; George Mellier, Chief Engineer; Captain Frank Powers.

which to place our tanks. These foundations are built by driving forty-foot untreated wood piles, spaced approximately four feet on centers, down to the surface of the ground. A reinforced concrete slab, six inches thick, is placed on top of the piles, and then four feet of good soil on top of the concrete slab.

Emerging on the low and marshy land



Just a little touch of winter at Nanaimo, Vancouver Island. The building is the Union Oil of Canada sales office.

along the coast north of Willapa Harbor, what did we behold among the undergrowth but a large sign inviting our attention to "Hollywood Addition"! Following the narrow board roadways over the marshy lands, which characterize portions of this country, we arrived at Tokeland where a ferry conveyed us up the Willapa River to Raymond.

On the next leg of our journey, between Raymond and Astoria, after passing through heavily timbered virgin country, we came to the cranberry fields of Ilwaco. These little red bushes, barely a foot high, are a source of considerable revenue to the owners as this is the only district on the Pacific Coast where cranberries can be raised.

Our new dock at Astoria, with its pipe line facilities, is a real credit to our Engineering Department.

Portland

Leaving Astoria, with part of its "twenty-three inches of rain during January" still falling, we headed for Portland. Here quite an improvement has been made in filling in our Wilbridge station site with dredgings from the Willamette River.

Our dock at which the company tankers discharge their cargo is about three-quarters of a mile from the station on the Wil-

lamette River. It is different from our other docks in that it has two decks. During the high water in the spring the lower deck is completely submerged and the upper deck is used. At low water the lower deck is put into commission. The height of the dock and the swiftness of the current require that it be heavily braced. It was designed by Captain Crang and looks massive enough to stand a long time.

A curious incident happened to the Standard Oil Company's dock, which is adjacent to ours. Some time ago a small craft caught fire. While burning, it floated down stream and lodged beneath the dock. The fire which resulted entirely destroyed the dock. Now the port authorities require a fence to be built around the dock so that irresponsible small craft when ablaze cannot find their way to such a hazardous position as beneath an oil dock. The fence consists of three by twelve inch strips fastened to the dock vertically on about two foot centers.

After a short and pleasant visit with C. L. Tostevin, District Sales Manager, and his assistants, H. M. Fay, recently of Spokane, and H. H. Brown, we left for Marshfield returning via Roseburg to catch No. 15 southbound.

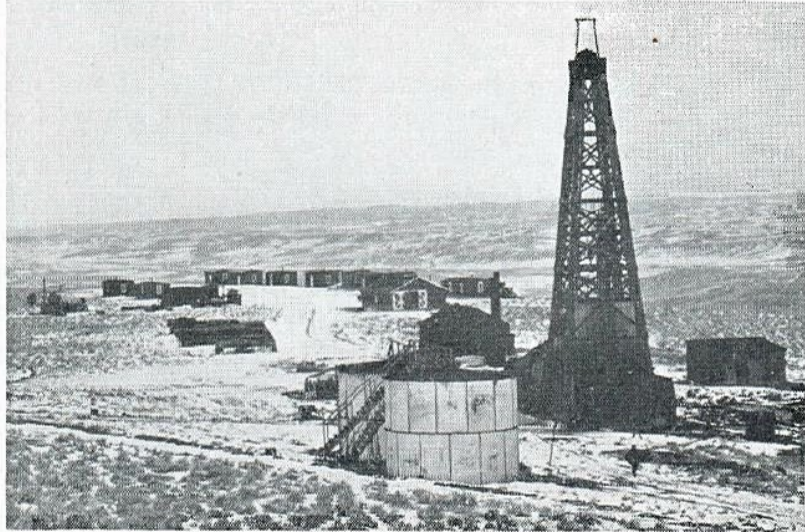
Thus ended one of the most interesting and instructive trips. To know conditions



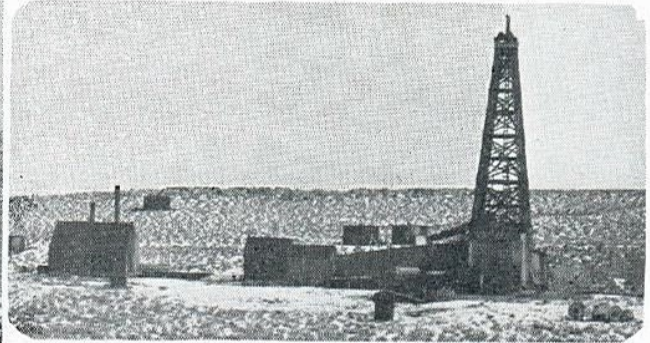
Alert Bay, Vancouver Island, showing Union Oil Company wharf. Fish cannery at right.

on the ground, and better still, the men who make the name Union Oil Company of California and Union Oil Company of Canada possible in the Northwest; to get the human touch; to learn their viewpoint; to show them ours—it's well worth the while.

In the Rocky Mountain Division

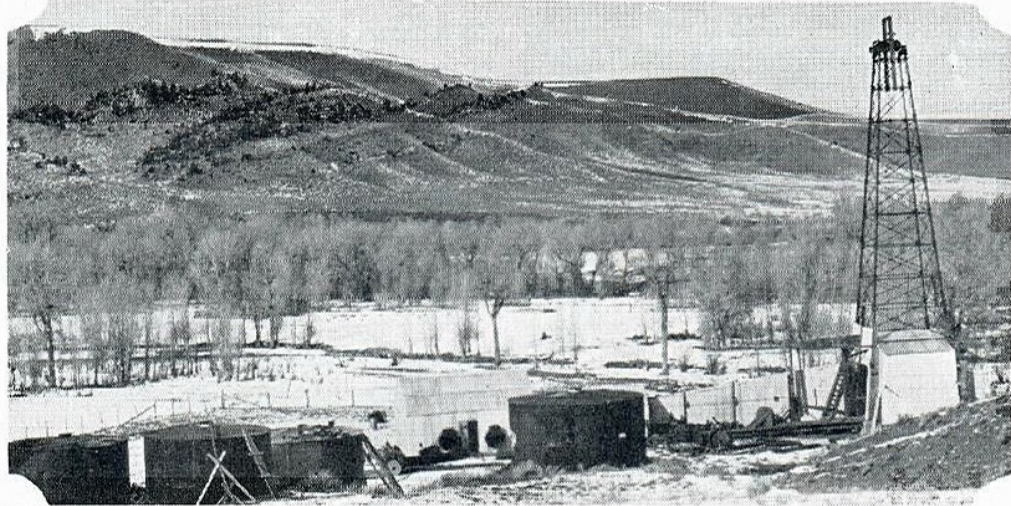


Above—Union No. 1, Lake Creek.



Burnham No. 1, Lake Creek

Right—Taylor No. 1, North Sunshine.



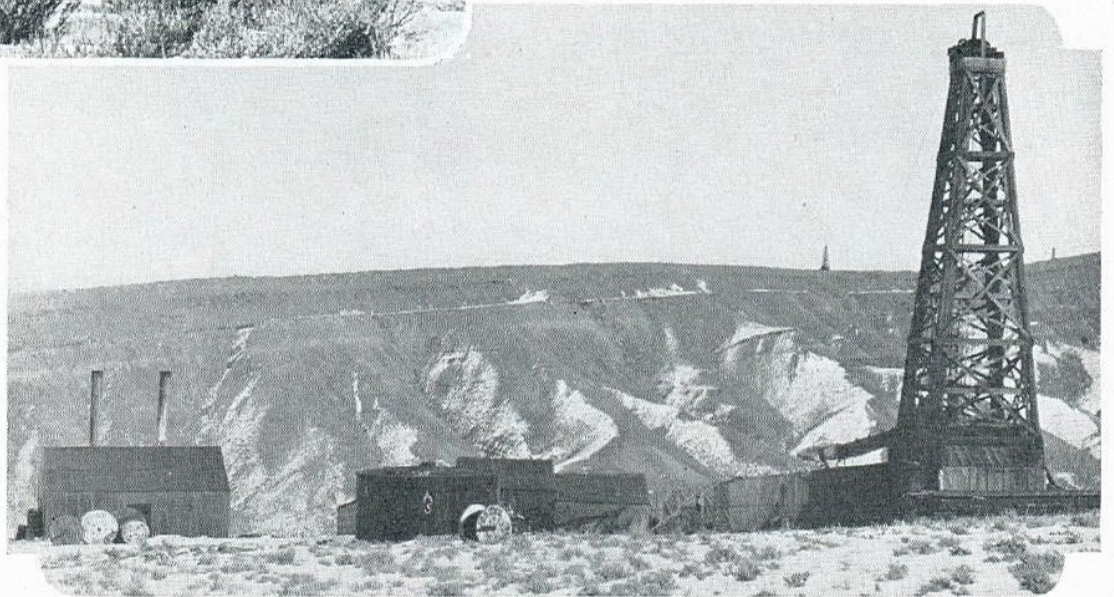
Below — Wolf No. 1 and tank battery, South Sunshine.

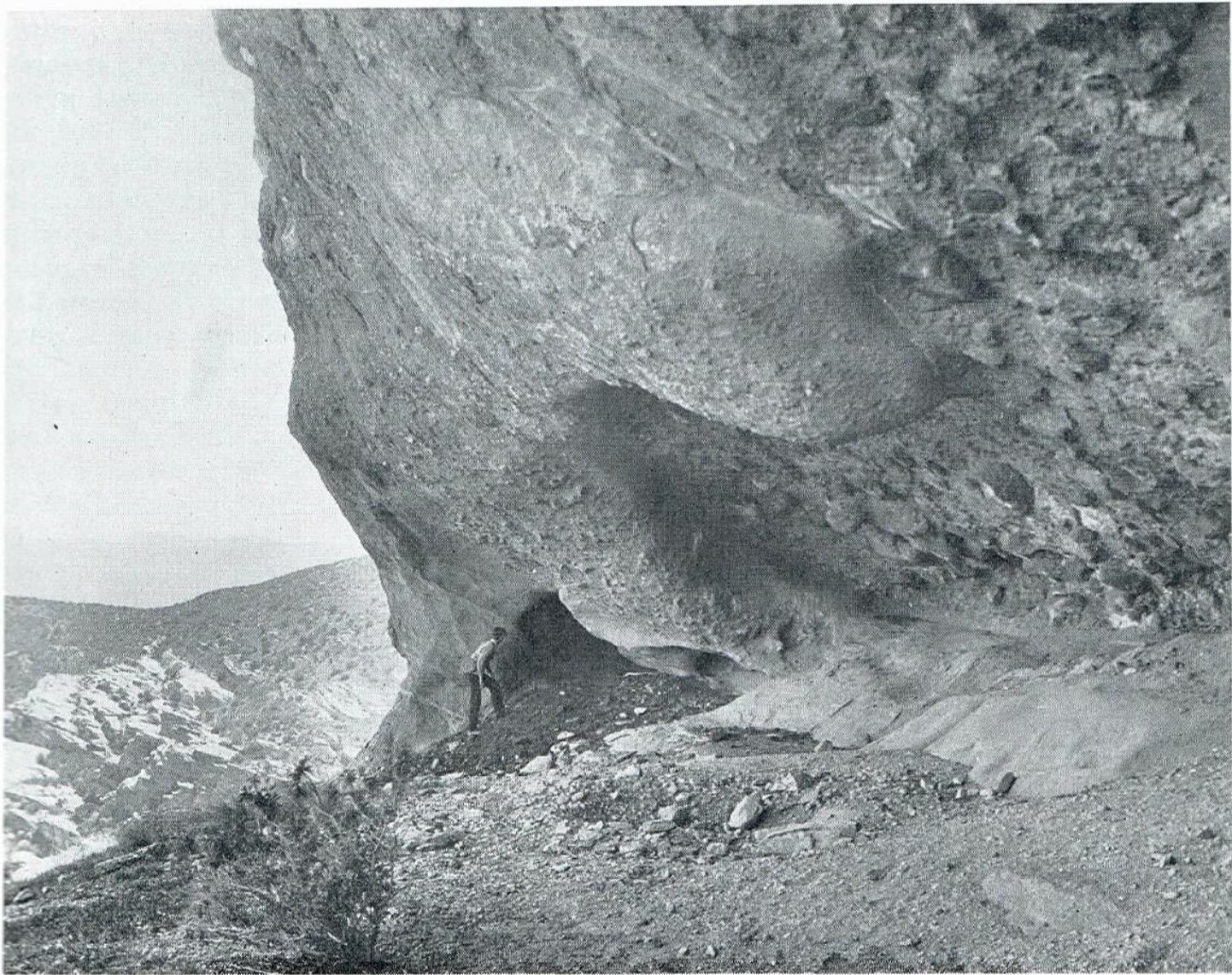


Above — Lakota Sand Wall Rock in South Sunshine.



Right—State No. 1, Lake Creek.





This cave in the Vasquez Stronghold overlooks the entire valley.

The Vasquez Stronghold

Natural Fortress of the Last of
California's Bandits

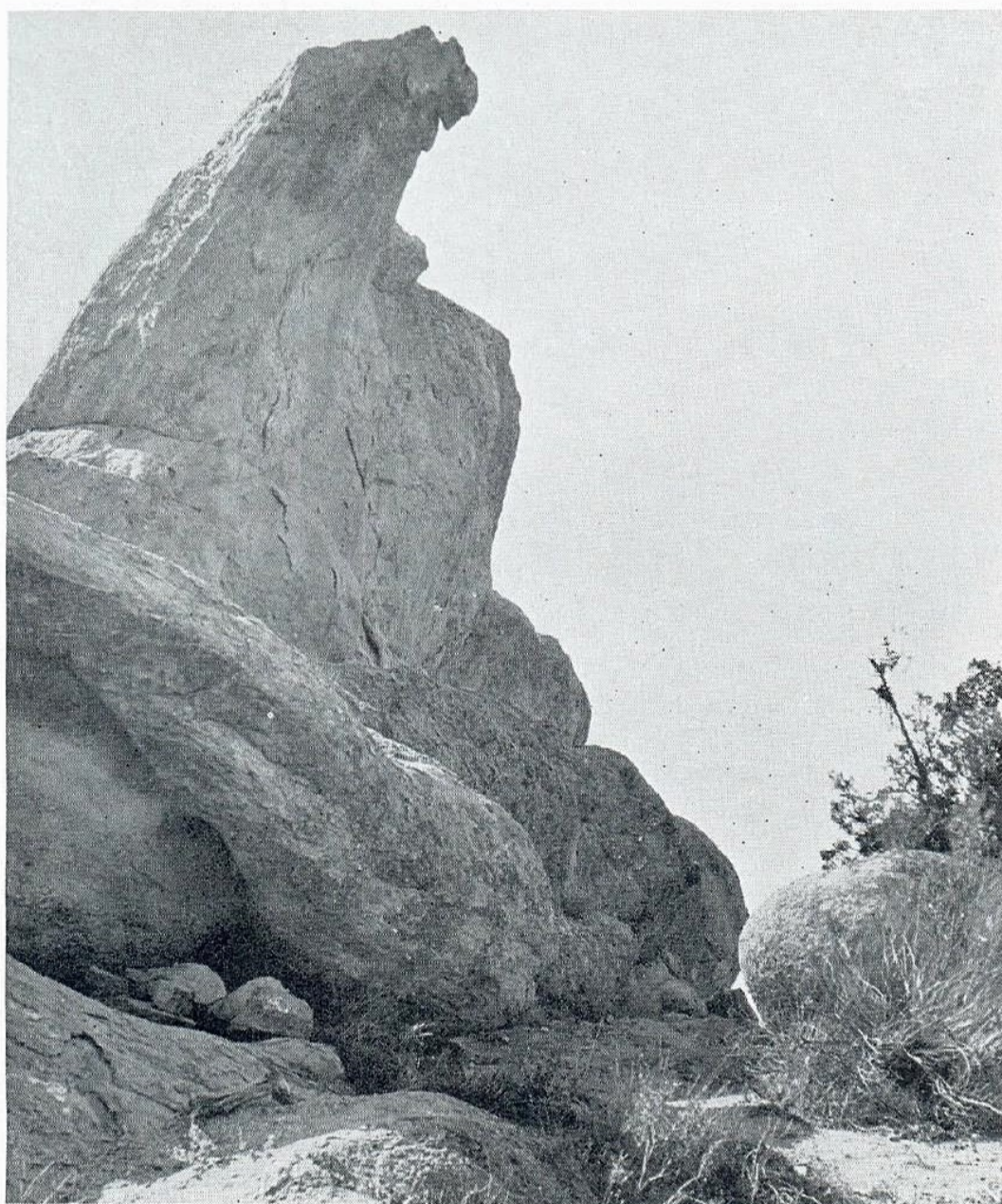
By DONNA E. COLLISTER

"I'LL be dry in the Vasquez Stronghold," remarked the driver, burrowing more deeply into his upturned collar to shut out the chilling clutch of the early spring storm. We had come out through Hollywood, San Fernando, Newhall and Saugus; out through the broad, rich valley that forms the lower part of Mint Canyon and were whipping up a good stiff grade when a country school house appeared at the right—the land mark we were seeking.

Under master hands the car swerved sharply from the paved highway onto a good dirt road and we sped along smoothly for two miles further, when suddenly the outposts of the Vasquez Stronghold came defiantly in silhouette

against the sky, thrust up like ribald fingers, mocking at the storm which seemed no more able to gain entrance to the redoubtable natural fortress than had the numerous sheriff's posses in the days when the romantic robber chief spread terror and glamour up and down the length of California.

Presently we were on the level floor of the mesa which gives footing to the fastness. The sky overhead was clear and the evening sun was making a brilliant exit in the west. Somebody quickly set up a table in the snug shelter of the great overhanging rocks—for we traveled with all the comforts of the modern camper—and somebody else heaped wood in a natural fire place which had



One of Vasquez' vantage points.

probably served Vasquez and his men many times as they cooked their favorite frazada, or meat stripped from the ribs of a young cow, by throwing it directly on live coals.

A crack in the rocks made a chimney of nature's own perfect masonry, which carried the smoke entirely away, and the walls of stone soon began to throw out the heat most comfortably while the coffee boiled and the steak, well larded with strips of bacon, broiled and sizzled on the ends of sharpened sticks.

Darkness came with the suddenness of a shot from one of Vasquez's pistols, but twenty billion more stars than I ever saw before made the night whitely luminous. In the friendly, flickering circle of the campfire we lay and traced the eerie outlines of the high flung crags that had given Vasquez his great advantage over his pursuers. Just above us stretched the highest point in the entire stronghold,

a point affording complete panoramic view of mile upon mile of the surrounding country. Here and at other similar points of vantage Vasquez was accustomed to place trusted outlooks to sight approaching horsemen from afar. Once warning had been given it was impossible to find even a trace of the outlaws. It was only when Vasquez trusted himself to a man-made shelter that he was captured. This happened in 1874 and he was hanged in 1875.

Vasquez—the Man

Tiburcio Vasquez, born in Monterey in 1839 of mixed Indian and Mexican blood, began his career of crime at the age of fifteen, being in jail many times before he came brilliantly into prominence as a matchless highwayman during the period from 1863 to 1874. Though described unflatteringly by more than one man, the ladies seemed to find him a singularly romantic figure. Slender and striking he certainly was and a magnificent horseman, and there are many tales of his chivalry as well as of his murders and robberies. He, as well as the handsome Joaquin Murieta, is invested with something of the charm of Robin Hood among the Mexican people, many of whom suffered really great wrongs at the hands of our government's representatives just after we acquired California.

As in the fire light we mused over the exploits of the dashing bandit whose quick shooting, hard riding and organizing ability made him a hero of fifty years ago, another band of thieves of quite a different nature descended upon us—

trade rats and kangaroo rats bent on sharing our supplies. After we had sent them scampering and completed our work of salvage, we found our respective blankets and curled up snugly on the warm rocks, disdaining the use of a tent.

Sleep, a truly gorgeous sunrise, breakfast and we were off to explore. Indian pottery, baskets, arrowheads, mortars and pestles and other relics are still to be found in some of the caves that honeycomb the canyon walls. These were among the objects of our search. Vasquez's canyon has more than one sister canyon, some branches intercommunicating. Without a doubt the famous bandit and his men knew every in and out and could make good speed even at night, but we found ourselves in more than one uncomfortably precarious cul-de-sac as we strove to thread our way through the maze of more or less steep and rugged little canyons and gorges that lead up to the ridge we planned to cross to get over into Soledad Canyon.

Headquarters Naturally Fortified

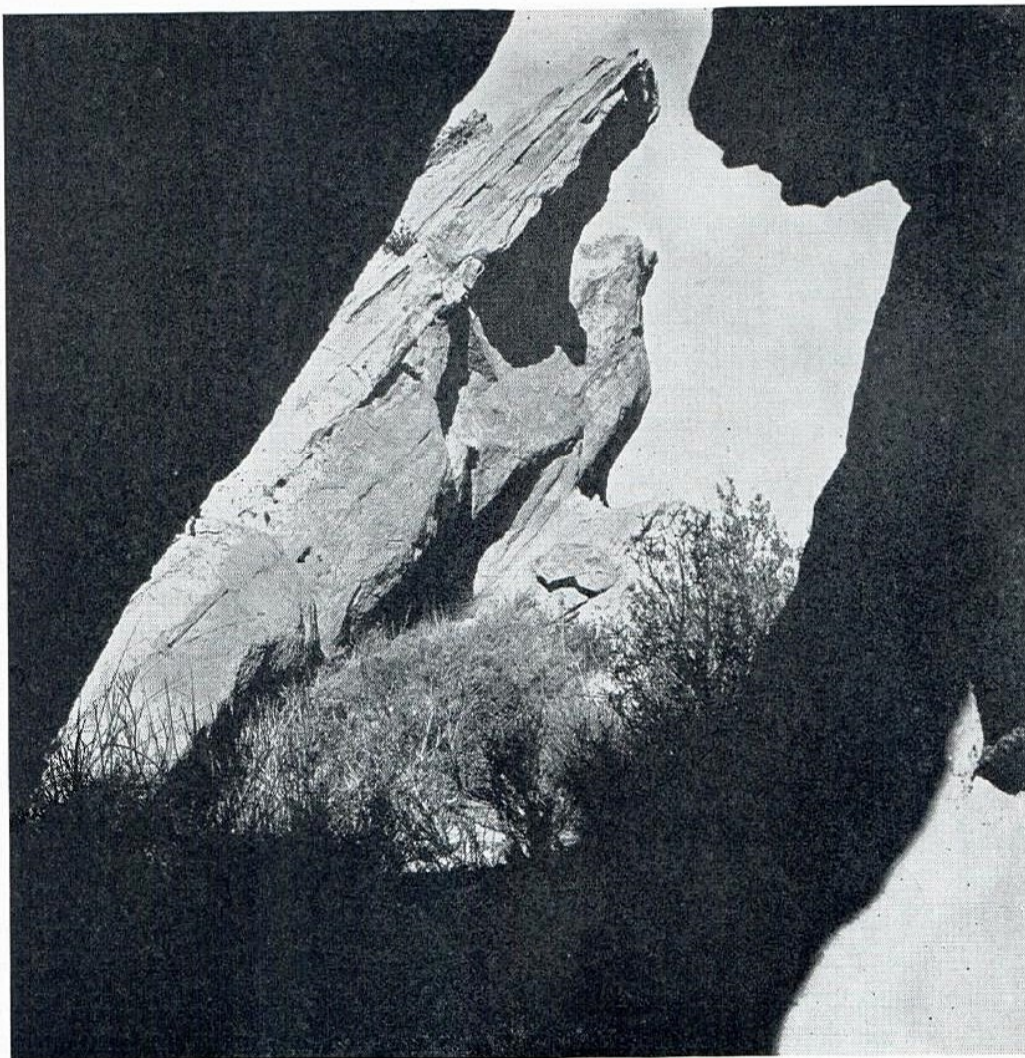
With every step the value of the position to Vasquez and his followers became more evident. His stronghold was absolutely impregnable, a natural fortress located within fifty miles of Los Angeles and so placed as to be ideal headquarters for bands preying on up-state travel in the days when the stage coach was in its heyday.

For another reason the old stronghold was a fitting lair for Vasquez, who is accused of close affinity with the evil one. It is really a part of the San Andreas Fault, the seat of California's earthquakes. What could be more appropriate then, than it should shelter the fiery bandit whose havocs were little

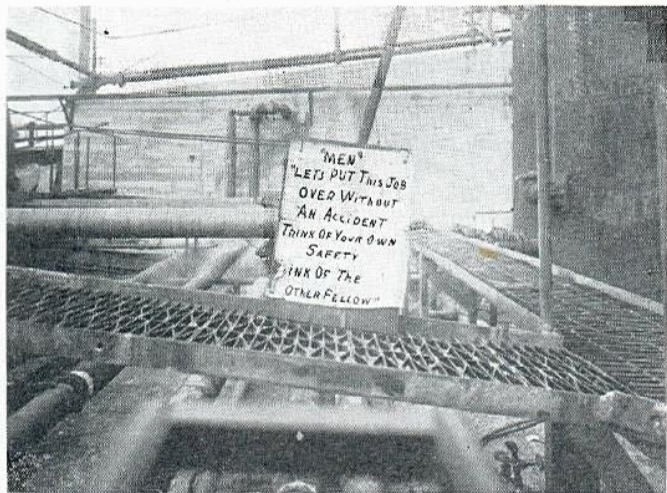
short of earth shaking disasters?

The formation of the Vasquez Stronghold is very obviously of hard sand stone. In the last upheaval caused by the continued cooling of the earth, instead of rising straight and true, the sandstone buckled and slipped and now stands at an angle of about forty-five degrees like a falling wall braced from below. And it is braced none too well, for at times it still slips. All the Vasquez rocks slant in the same direction, giving the place an odd unnatural appearance. Disintegration is busily making endless pockholes and little caverns.

Relatively few people invade the famous old fastness. One or two attempts to put the canyon under cultivation have failed, for water, abundant in the time of Vasquez, has now dwindled to an inadequate seepage of doubtful purity and visitors must carry canteens. Spiders, trade rats, kangaroo rats, rabbits, foxes and coyotes have the run of the outlaw's den, while eagles and hawks wheel about the lookout—at command of Vasquez's ghost, perhaps. Who knows?



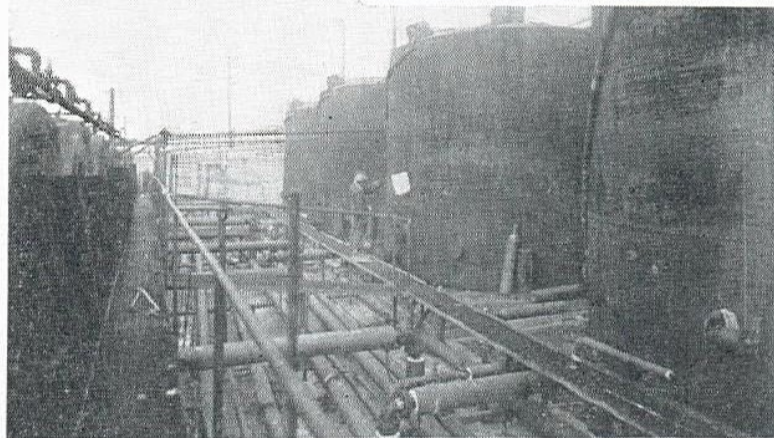
Looking out of one of Vasquez' caves.



Above—Sign that helped the Engineering Department put over two NO ACCIDENT jobs at Oleum. Torn and dirty—but respected by every man.



Above — Research Laboratory, Oleum Refinery, where sign was first used.



Left — Tempering tank installation job and sign that helped engineers think SAFETY.

Do You Believe in Signs?

By KYLE J. LUTZ, Safety Engineer, Oleum Refinery

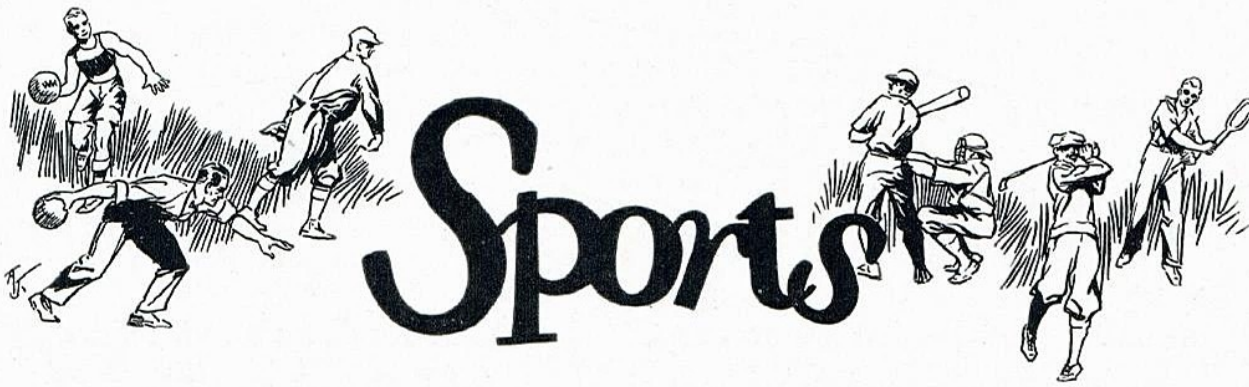
LAST SPRING when the Oleum Research Laboratory building was started things were developing just splendidly for Old Man Carelessness to reap a bumper crop of accidents. The men of the Research Department could not wait for the new building to be completed, but were forced to use their new experimental stills. They had pipefitters, painters and machinists working to keep the stills going while construction was yet under way.

Oleum Engineering Department had pipefitters, carpenters, boilermakers and laborers working on the building. These crews were crowding each other for working room. Safety on this job appeared a hopeless task. A sign reading "MEN, LET'S PUT THIS JOB OVER WITHOUT AN ACCIDENT—THINK OF YOUR SAFETY—THINK OF THE OTHER FELLOW" was made and put up in a conspicuous place. Result: Not a day lost due to accidents on the entire construction, equipping and finishing of the structure.

About the time this building was completed, work was started on the installation of four new steel tempering tanks in the asphalt department. From a safety standpoint the conditions were the very worst. These tanks were erected in a hole in front of the Unolox stills which were kept running. There were also hot asphalt lines running through this area. A good share of the work was done by a contractor whose men were not familiar with refinery construction. The Safety Sign was transferred from the Research Laboratory building and placed on this job. Result: Job recently completed without a lost time accident.

Over ninety percent of refinery accidents can be prevented, as proven by above practical application of the word "THINK."

Great credit is due H. L. Smith, Resident Engineer, and Bill Clark, his chief aid, also to each and every foreman, subforeman and man in Engineering Department who helped put these jobs over without an accident.



PHOENIX BOWLING CHAMPS

The first annual play-off for the Bowling Championship of the company was held on Tuesday, February 8th, and proved a huge success. The affair was arranged by the Insurance and Personnel Department at Head Office and brought out an



Left to right—H. F. Nelson, Captain; W. T. Lee, R. Anderson, R. J. Finerty, W. C. Sweeney, Wm. Vale

entry list of nine teams. The play was held simultaneously at various points, the scores being wired in after each game to the Headquarters at Angeles Bowling Alleys, Los Angeles. As excellent scores kept coming in the interest was maintained till the last wire arrived assuring Phoenix Sales District of the Championship, and proud possessors of the Major F. R. Burnham Trophy and individual medals for the first year.

The score by games of all entrants in the play-off were as follows:

	(1)	(2)	(3)	Total
1. Phoenix District	888	901	932	2721
2. Head Office	901	881	865	2647
3. Spokane District	894	806	929	2629
4. Oleum Refinery	846	832	894	2572
5. Colorado District	829	832	851	2512
6. Dominguez Field	835	850	819	2504
7. San Francisco	826	786	827	2439
8. Los Angeles Refinery	739	773	817	2329
9. San Jose District	697	715	709	2121

In addition to the trophy and medals for the winning team it was decided that the high man of the tournament be rewarded for his efforts, and through the instrumentality of Gerald G. Blue a bowling ball was presented to H. F. Nelson, captain of the Phoenix team, who turned in the magnificent total of 640 pins, or an average of slightly over 213 per game. Some bowling!

The success of this initial championship tournament should insure a greatly increased entry list

next year, and from all reports Phoenix will have to go some to retain her laurels.

SEATTLE WINS HOOP CHAMPIONSHIP

The Seattle Union Oil basketball team has won the championship of the Class A Commercial League without losing a game. A series of championship playoffs between six city leagues will be staged during the next two months to determine the city champions. The Seattle boys will also meet the Portland Union Oilers some time this month, which promises to be a sure-fire scrap.

PRESIDENT'S CUP

Arrangements are being made for the playing of this event. Some of the districts have not as yet been able to play their championship rounds, owing to bad weather conditions, but it is hoped that the month of March will be a little less severe and all districts will be able to complete their games.

Districts will be advised later regarding the final play-off.

OAKLAND TEAM ISSUES CHALLENGE

Manager Ed Hayes and Captain Jack Silva of the Oakland District basketball team, by virtue of their showing in the Alameda County League, announce their desire to meet any company aggregation on the coast, winners take all. To quote the captain: "Our gang is 'Anti-knock', believe in 'Service' and apply it with 'Speed and Power.'"

FERRY WINS AT HEAD OFFICE

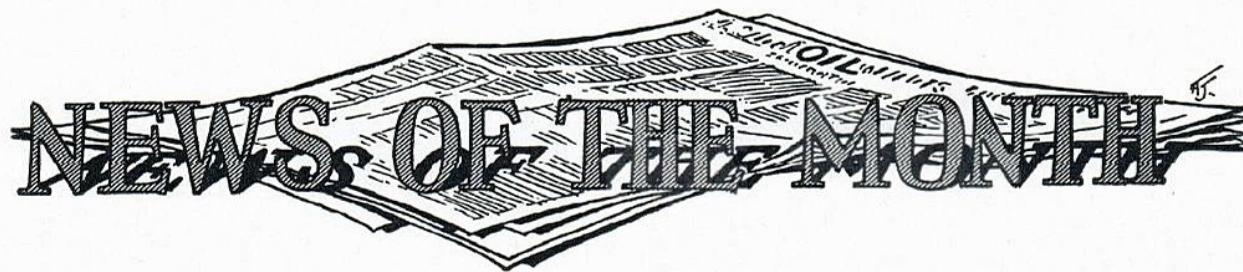
The winner of Head Office Championship Flight was H. C. Ferry, who defeated W. L. Stewart, Jr., in the finals by 6 and 5. Thirty-six holes constituted this game. Eighteen holes were played on the San Gabriel course and eighteen at Hollywood. Ferry played an excellent brand of golf throughout the tournament and was deserving of victory.

FRASER VANCOUVER CHAMP

Jack Fraser was successful in gaining the title of Vancouver District Champion by defeating A. T. Martin in the finals. Fraser had an up-hill struggle throughout the tournament, as he was low handicap man and in each match had to give a generous number of strokes. He is expected to stand hot favorite for President Cup honors.

PETROLEUM LEAGUE CHAMPIONSHIP PLAY

The Union quintet will play the winners of the second half of the Los Angeles Petroleum League Basketball schedule, a series of three games beginning March 10th for the league championship. Standard, Pan American and General Petroleum are tied for first place in the second section, and the result of this three-cornered play-off, which will determine Union's opponents, is awaited with interest.



NEWS OF THE MONTH

CHANGES IN SALES STAFF—SOUTHERN DIVISION

James B. Williams, formerly Special Agent at Pasadena, was recently promoted to Assistant District Sales Manager in the Los Angeles District. Mr. Williams has been connected with the company since March, 1909, and well merits the advancement.

Arthur P. Sutliff, formerly salesman at Pasadena, succeeded Mr. Williams as Special Agent.

JANUARY CRUDE PRODUCTION

The total production of crude oil in California for January amounted to 20,184,872 barrels, an average of 651,125 barrels per day. This is a decrease of 2,970 barrels per day under December 1926 production.

Total stocks of crude and all products in Pacific Coast territory increased during the month 2,714,831 barrels. The total stocks at the end of the month were 148,327,007 barrels.

One hundred and three wells were completed during the month with an initial daily production of 46,370 barrels, compared with 72 wells completed during December, 1926, with an initial production of 51,034 barrels.

Complete details of production and development by fields for December will be found on page 23.

VALLEY EMPLOYEES DANCE

More than five hundred guests of the Field, Pipe Line and Sales Departments attended the Fourth Annual Dance of the Valley Division on February 18th. This happy reunion of company employees was a truly family affair, due largely to the efforts of Division Superintendent C. L. Woods and District Superintendent H. I. Sargent, who are always successful in keeping alive the friendly spirit of the Valley Division.

Novelty favors were distributed to all comers and prizes were awarded holders of lucky numbers. Buffet supper was served at 11:30 P.M. Dancing was so popular that it was necessary to hold the orchestra over time.

LECTURES ON ETHYL

The San Francisco sales staff recently had the pleasure of listening to an inspiring talk on Ethyl Gasoline by Mr. Maxwell of New York, Vice President of the Ethyl Gasoline Corporation, given before the regular meeting of the San Francisco Chapter of the Society of Automotive Engineers. Representatives of all competitive oil companies, their engineers and chemists took advantage of the invitation extended to them to attend and hear the story of the development of Ethyl Gasoline.

THIS MONTH'S COVER

The seascape appearing on this month's cover was painted especially for the Bulletin by T. H. McKay.

STERN LEASE DEVELOPMENT

Four new wells have been started on the company's Stern lease in the Brea-Olinda field, augmenting the intensive development of reserves in that district.

Stern No. 6 is drilling around 2,000 feet. Construction crews have completed derricks for Stern No. 5, No. 7 and No. 8.

COMPANY TO TEST UTAH STRUCTURE

The company has entered the southeastern Utah fields and will start a test on the Lisbon structure in San Juan county as soon as material can be moved to location and rig erected. The structure is in the La Salle national forest district, near the Elkridge dome.

E. H. Spiker, Superintendent at Fort Collins; W. G. Gallagher and Sam Grinsfelder, geologists, made the location.

RECLAMATION PROJECT FOR OLEUM

The company has made application to the War Department for a permit to dredge an area approximately 700 feet wide by 1500 feet long to a depth of 25 feet below mean low water in San Pablo Bay, and to deposit the dredged material behind a bulkhead to be constructed immediately west of the refinery at Oleum for the purpose of reclaiming the area shoreward of the bulkhead.

ORCUTT ONE TIME WEATHER PROPHET

The following item recently appeared in the Ventura Free Press:

"Thirty years ago almost to a day, W. W. Orcutt, now vice-president of the Union Oil Company of California and J. Irving McKenna, now a leading attorney, established an office of the United States weather bureau at Santa Paula, and were flying signals for the ranchers of this section."

JANUARY U. S. PRODUCTION

Following is the gross estimated production of crude oil in the United States for January:

	Barrels
California	20,184,872
Texas	20,026,790
Oklahoma	18,285,900
Arkansas	4,140,770
Kansas	3,653,045
Eastern States	3,355,750
Mountain States	2,579,575
Louisiana	2,025,015
Total	74,251,717
December	74,342,750

PHOENIX PLANS GOOD TIMES

The employees of the Phoenix district have organized a "Unoco" Club, with C. T. Johnson, Assistant District Accountant, as its first president. The club is planning many enjoyable "get-together" parties for its roster of members, which includes practically every employee in the Phoenix organization.

PERSONNEL REPRESENTATIVE AT WILMINGTON

For the purpose of co-ordinating all phases of personnel work in the Harbor District, L. H. Battersby has been appointed Personnel Representative with his office in the Los Angeles Refinery. This appointment is made to serve all departments in that district; to relieve Superintendents, and Freemen of interviewing and analyzing applicants for employment, and of all detail and correspondence regarding personnel matters.

Hereafter, all questions relating to medical attention, Employees' Benefit Fund, medical examination of new employees, Employees' Insurance, Provident Fund and any other matters concerning the welfare of the employees in the Harbor District should be taken up with Mr. Battersby and all accidents involving personal injury should be immediately reported to him to insure that the best medical attention be procured without delay.

A graduate of Swathmore College, Mr. Battersby has been associated with personnel work in various types of organizations for fourteen years. He is an athlete of the old school, and splendidly equipped to take over his new duties with the company.

NEW PATENT ENGINEER

Philip Subkow has been appointed Patent Engineer, succeeding Charles L. Stokes, resigned, according to an announcement by R. E. Haylett, Technical Assistant.

Graduating from Lehigh and John Hopkins Universities in chemical engineering, Mr. Subkow was for many years with the firm of Marks & Clerk, nationally known patent attorneys, and for two years was examiner in the U.S. Government Patent Office at Washington.

L. C. MONROE TRANSFERRED

L. C. Monroe, Traffic Department, Los Angeles, has been transferred to Seattle as Traffic Representative. Mr. Monroe will act as contact man between the Traffic Department and the various railroad and steamship companies in the north, and will handle transactions with the northern offices of the Sales, Purchasing and Engineering Departments.

A CHALLENGE

Oakland District claims the championship in forwarding monthly sales figures to Head Office. For the past four months, these telegrams have been sent the first working day after the close of the preceding month's business, and is a record hard to equal.

NEW PRODUCTION

The month of February witnessed the completion by the company of four new wells, representing a total increase in the daily average production of 758 barrels. The new producers and their initial daily yields are: Callender No. 15, 550 barrels; No. 16, 109 barrels; Blunck No. 2, 82 barrels and Johnson No. 1, 17 barrels.

CAREFUL DRIVERS REWARDED AT FRESNO

Fresno motorists who are accustomed to obey the traffic laws are finding that it pays in more ways than one, for they may find themselves in possession of tags entitling the owner to five gallons of Union Ethyl gasoline. The plan was worked out by H. F. Warner, District Sales Manager at Fresno, and Captain J. P. Murphy of the Fresno Police Department. Motorists who continue to break the

laws will continue to pay the fines, but for the thirty days ending March 18, those motorists who show a disposition to abide by the law, will receive tags, good for five gallons of Union Ethyl gasoline at any garage or service station in Fresno handling Union motor fuel. Five drivers are being singled out each day, and given a tag that reads:

"The police officer who presents this card to you has observed your compliance with a safety measure which is essential to safety of pedestrians and others. In recognition of the excellent example you thus afford other motorists, this award is made."

FRESNO AUTO SHOW EXHIBIT

Resplendent under the glow of a flood-light, Union-Ethyl proclaimed her capabilities to the throngs attending the recent Fresno Auto Show from the attractive booth shown in the accompany-



ing photograph. District Sales Manager H. F. Warner supervised the preparation of the exhibit, which attracted much attention during the four days of the show.

SHE'S A PERFECT LADY

Sad, too, the fate of Sammy Sand,
From good old town of Bethel;
He tried to steer with just one hand
When he went out with Ethyl.

T. "Union Oil" Harrison,
Santa Paula Chronicle

Sports

(Continued from Page 19)

SOUTHERN DISTRICT GOLF LADDER

L. I. Messinger still holds top place on the Ladder.

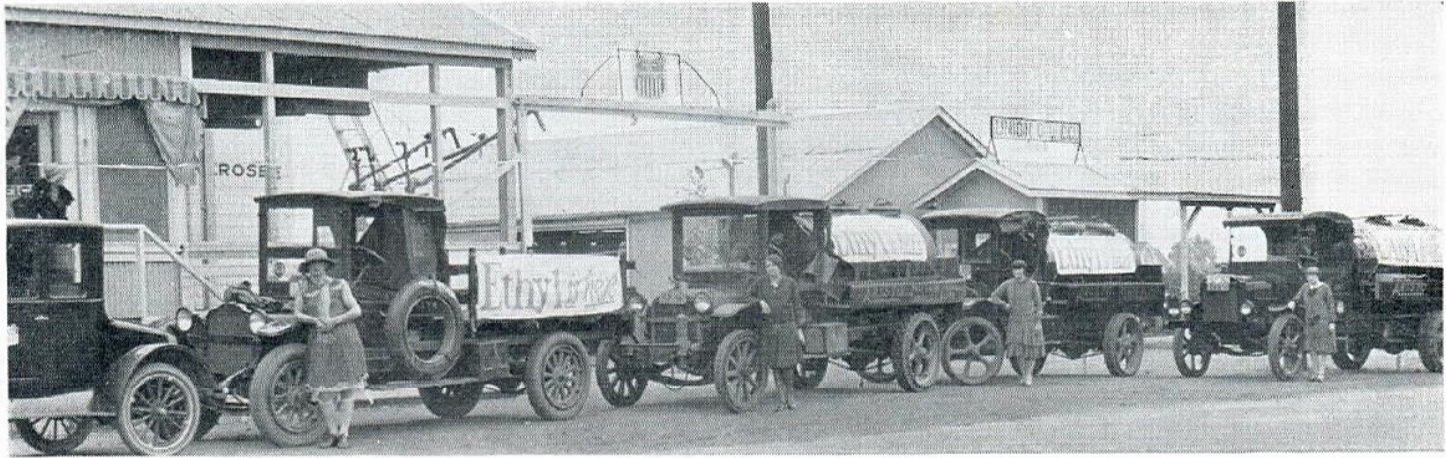
A number of matches were played during February. Gerald G. Blue and C. S. Morgan tied for top honors in progress. Both advanced ten places.

BASKETBALL IN NAPA VALLEY

Coached by Cliff Harris, Agent, the Union hoopers at Napa are developing into strong contenders for the Napa Valley Championship play, to be staged soon.

UNION VS. ASSOCIATED

A twenty-man-team golf match between these two organizations will be played March 6th at Palos Verdes. Inter-company matches are gaining in popularity and other games are being arranged.



WHEN "ETHYL" ARRIVED AT LODI

In submitting this photograph of the recent "Ethyl" parade at Lodi, California, Don Ensminger, District Sales Manager at Stockton, kindly calls our attention to Miss "Ethyl", extreme left, typified by Percy Weston, Agent, Lodi.

COMPANY ADDS TWO NEW DIRECTORS

AMENDMENTS of the articles of incorporation and the election of two new directors were the highlights of the annual meeting of the company's stockholders held March 1st.

The amendment of the articles of incorporation, which was carried by unanimous vote of the stockholders, gives the company the right to issue stock in exchange for or purchase of properties when authorized by the affirmative vote of two-thirds of the entire board of directors, and also to sell stock to the stockholders at a price to be fixed by the affirmative vote of two-thirds of the entire board.

The new directors are Stanley W. Morshead, of San Francisco, and Malcolm McNaghten, president of the Broadway Department Store, who replace F. W. Wickersham and George W. Davidson.

The meeting was presided over by W. L. Stewart, President, and was largely attended.

Official acts of the Board of Directors for the past year were ratified by the stockholders.

Preceding Union Oil stockholders meeting the annual meeting of the Union Oil Associates was held, at which all of the directors were re-elected, except that Ernest H. Lockwood of Pasadena was elected to fill the vacancy caused by the death of E. F. Powers of Denver.

"Plugging In" on Our Phone System

(Continued from Page 6)

suffer the greatest hardships in restoring service in such emergencies. Operators sitting calmly at their switchboards plugging in calls shouted in frantic tones while their whole world seems to be going up in smoke, or crashing about their ears, remain at their posts while line after line goes out of service, and in many cases do not leave until taken out by their rescuers. Probably no more terrifying sight was ever witnessed in California than the great reservoir fires at San Luis Obispo and Brea in April, 1926. At Brea the fire came within a half-mile of the office and it was necessary at one time to wet the roof, but the operators showed no signs of flinching. On account of the excessive traffic the working shifts were shortened but service was uninterrupted. While the fire was in progress company officials conversed from Brea to San Luis Obispo with others in the head office listening in.

The field of the telephone is constantly expanding. In its various forms it is now an absolute essential in civilized life. It even had its prototype in the drum signals of African natives and the fire or smoke signals of the American Indians. The American continent was spanned by the first commercial telephone in 1915, the Atlantic Ocean in 1927; this latter feat however making use of the wireless. What the future has in store only a prophet may foretell.

California Oil Statistics, January, 1927

Prepared by American Petroleum Institute, Pacific Coast Office

PRODUCTION

Figures of production and stocks are in barrels of 42 Gals.

DISTRICT	BARRELS PER MONTH	DAILY AVERAGE		
		Jan. 1927	Dec. 1926	Jan. 1926
Kern River.....	410,327	13,226	12,329	11,953
Mt. Poso.....	6,983	225	...	...
McKittrick.....	163,990	5,290	5,373	5,611
Midway-Sunset.....	2,804,775	90,477	90,229	92,744
Elk Hills.....	1,064,069	34,325	34,612	30,220
Lost Hills-Belridge.....	149,377	4,819	4,902	4,388
Coalinga.....	616,785	19,896	19,395	18,951
Wheeler Ridge.....	32,641	1,053	985	953
Watsonville.....	1,733	56	58	58
Santa Maria.....	143,862	4,641	4,786	5,192
Summerland.....	4,260	137	130	129
Ventura Avenue.....	1,672,863	53,963	52,878	31,454
Ventura-Newhall.....	170,731	5,507	6,119	5,894
Los Angeles-Salt Lake.....	53,827	1,736	1,831	1,845
Whittier.....	60,992	1,967	1,931	2,120
Fullerton (Brea-Olinda).....	781,596	25,213	26,776	14,061
Coyote.....	475,109	15,326	15,688	17,152
Santa Fe Springs.....	1,385,438	44,692	43,436	49,351
Montebello.....	542,255	17,492	17,411	17,721
Richfield.....	630,989	20,354	18,758	12,818
Huntington Beach.....	2,859,859	92,254	94,442	46,003
Long Beach.....	2,869,492	92,564	94,324	111,608
Torrance.....	799,286	25,783	26,291	30,694
Dominguez.....	572,291	18,461	19,659	23,549
Rosecrans.....	371,085	11,970	12,622	23,553
Inglewood.....	1,226,347	39,560	39,554	57,033
Newport.....	1,005	32	70	93
Seal Beach.....	312,905	10,094	9,507	...
TOTAL.....	20,184,872	651,125	654,095	615,147
December, 1926.....	20,276,950	654,095		
Decrease.....	92,078	2,970		

STOCKS

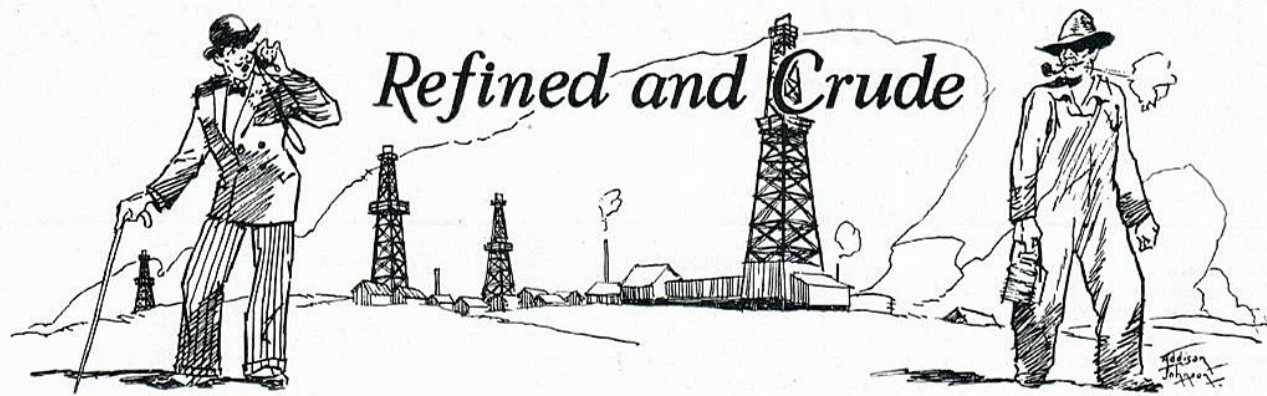
	Jan. 31, 1927	Dec. 31, 1926	Jan. Stock Increases	Jan. 31, 1926
	Heavy Crude, heavier than 20° A. P. I., including all grades of fuel.....	89,390,079	88,707,499	682,580	87,380,630
Refinable Crude, 20° A. P. I., and lighter.....	31,176,493	30,835,057	341,436	43,802,077
Gasoline.....	13,369,861	11,673,563	1,696,298	10,252,936
Naphtha Distillates.....	3,983,435	3,832,042	151,393	6,702,299
All Other Stocks.....	10,407,139	10,564,015	*156,876	10,256,439
TOTAL ALL STOCKS.....	148,327,007	145,612,176	2,714,831	158,394,381

*Decrease

DEVELOPMENT

DISTRICT	New Rigs Up	Active Drilling	Completed	Daily Initial Output	Active Producing	Abandoned Drillers	Wells Producers
	Kern River.....	4	8	4	535	1,344	1
Mt. Poso.....	1	4	..	..	1	..	..
McKittrick.....	2	2	1	20	312	..	..
Midway-Sunset.....	18	32	16	1,632	3,011	1	..
Elk Hills.....	..	..	..	..	246	..	..
Lost Hills-Belridge.....	1	2	1	20	313	..	..
Coalinga.....	..	6	..	..	957	2	1
Wheeler Ridge.....	1	1	..	..	28	..	..
Watsonville.....	..	..	..	..	6	..	..
Santa Maria.....	1	4	..	..	223	2	..
Summerland.....	1	1	1	25	131	..	..
Ventura Avenue.....	7	32	4	9,265	81	..	..
Ventura-Newhall.....	3	35	3	345	518	2	..
Los Angeles-Salt Lake.....	..	..	..	..	371	..	..
Whittier.....	..	..	1	60	184	4	1
Fullerton (Brea-Olinda).....	4	15	2	900	444	..	..
Coyote.....	..	3	..	..	211	..	..
Santa Fe Springs.....	..	4	..	..	346	..	2
Montebello.....	3	5	..	..	186	..	..
Richfield.....	15	24	10	3,716	198	1	4
Huntington Beach.....	24	73	48	21,864	491	..	..
Long Beach.....	4	19	5	2,318	714	6	17
Torrance.....	3	4	..	..	652	1	3
Dominguez.....	2	6	..	..	75	..	..
Rosecrans.....	..	4	1	344	134	1	..
Inglewood.....	1	..	2	433	211	1	..
Newport.....	..	..	1	15	9	..	..
Seal Beach.....	21	22	3	4,878	8	..	..
Miscellaneous Drilling.....	16	141	..	..	..	13	..
January.....	131	447	103	46,370	11,405	35	28
December.....	82	468	72	51,034	11,333	19	18
Increase.....	49	21†	31	4,664†	72	16	10
Average for year 1925.....	105	417	79	42,247	11,393	28	12
Average for year 1924.....	103	510	103	42,412	10,903	28	21
Average for year 1923.....	111	759	82	114,690	8,928	..	24
Average for year 1922.....	115	605	67	43,700	9,410	..	17
Average for year 1921.....	90	536	57	15,631	9,425	..	14

†Decrease



A black hand letter addressed to a wealthy match and cigarette man demanded \$25,000; otherwise they would kidnap his wife. Through error the missive was delivered to a poor laborer by the same name who replied: "I ain't got no money but I'm interested in your proposition."

* * *

Sunday-School Teacher: "And Belshazzar was in the midst of his riotous orgy when looking up he saw the handwriting on the wall. Now, can any of you little girls and boys tell me what words he saw?"

Bright Boy: "Watch your coat and hat."

* * *

The surest things in life are the expenses you hadn't counted on.

* * *

Macgregor—"Are ye the mon who cut ma hair last time?"

Barber—"I don't think so, sir. I've only been here six months."

* * *

Mother—Why are you beating Willie like that?

Willie's Father—You see, tomorrow afternoon he will bring home his school report and I have to go away before breakfast in the morning.

* * *

Two men who had traveled were comparing their ideas about foreign cities.

"London," said one, "is certainly the foggiest place in the world."

"Oh, no, it's not," said the other. "I've been in a place much foggier than London."

"Where was that?" asked his interested friend.

"I don't know where it was," replied the second man, "it was so foggy."

"My dear young lady," said the clergyman, in grieved tones as he listened to an extremely modern young woman tear off some of the very latest jazz on the piano, "Have you ever heard of the Ten Commandments?"

"Whistle a few bars," said the young lady, "and I think I can follow you."

* * *

Jones: "Did anyone remark on the way you handled your new car?"

Smith: "One man did, but he didn't say much."

Jones: "What did he say?"

Smith: "Twenty dollars and costs."

* * *

"Why didn't you answer when the elevator man said 'up?'"

"I thought that he was having indigestion."

* * *

The following sign is posted by the roadside as you enter a western town. It says:

4,076 people died last year of gas.

29 inhaled it.

37 put a lighted match to it.

And 4,000 stepped on it.

* * *

Jones (who had called around to see if his friend had recovered from a wild night): "Is Mr. Wizzy up yet?"

Landlady (sternly): "Yes he got up, drank his bath and went back to bed."

* * *

Boston Child: "I want to be read to."

Nurse: "What books do you want to be read to out of?"

Child: "Robinson Crusoe."

Nurse goes out and returns with "Swiss Family Robinson."

Child: "What did you bring me that book to be read to out of from for?"

Cottonwood Trees

*Red firelight on the Sioux tepees,
(Oh, the camp-smoke down the wind!)
Red firelight on the cottonwood trees
That clap, clap, clap in the dry night breeze.
(Oh, the camp-smoke down the wind!)*

*Red-skinned braves in the circling dance;
(Oh, the bright sparks toward the stars!)
The moccasined feet that stamp and prance,
And the brandished knife and the lifted lance.
(Oh, the bright sparks toward the stars!)*

*Eagle plumes in the swirling troop,
(Oh, the wild flame leaping high!)
And the painted bodies ramp and stoop
To the drum's hot thump and the vaunting whoop.
(Oh, the wild flame leaping high!)*

*Back where the darkness drops its veil
(Oh, the sad smoke drifting low!)
The far wolves howl and the widows wail
For the graveless dead on the grim war trail.
(Oh, the sad smoke drifting low!)*

*Night on the plains, and the dreams it weaves,
(Oh, the embers black and cold!)
Where painted ghosts with the step of thieves
Dance to the clap of the cottonwood leaves
(Oh, the embers black and cold!)*

—BADGER CLARK.

