

LOS ANGELES MUSEUM
EXPOSITION PARK

GAS NEWS

VOL. VIII

LOS ANGELES, CALIFORNIA, FEBRUARY, 1931

No. 2



SOUTHERN CALIFORNIA GAS COMPANY

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Ventura Division

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Southern Fuel Company Formed

A. B. MACBETH, President of the Southern California Gas Company, will be President and General Manager of the newly organized Southern Fuel Company. The new Company will bring an additional supply of one hundred and thirty million cubic feet per

day to Los Angeles and the metropolitan district, and will spend approximately seven million dollars in transmission facilities during the coming year.

The engineering details and plans for this project have been developed by William



—Photo courtesy Texas Co.
North Dome, Kettleman Hills, viewed from the air, looking north. This great field, in its initial stages, will be the start of the Southern Fuel Company's 26-inch line to Los Angeles and vicinity. Besides supplying other Pacific Coast gas companies, this field furnishes natural gas to the Southern California Gas Company's 20-inch line running south, and the 10-inch line running northeast.

Moeller Jr., Vice-President in charge of Natural Gas Production and Transmission of the Southern California Gas Company, and A. F. Bridge, Vice-President of the Southern Counties Gas Company, who will act as Assistants to the President. The Engineering Committee for this project is composed of Mr. Moeller, Mr. Bridge, and H. A. Barre and E. Davis of the Southern California Edison Company.

The new line will be approximately 210 miles in length and probably 26 inches in diameter. The actual construction of this project will be under the direct supervision of H. P. George, General Superintendent Natural Gas Production and Transmission, who will be Chief Engineer of the new Company, and B. M. Laulhere, Division Superintendent of the Basin Division, who will be an Assistant to Mr. George.

Capable Leaders

The stock in the new Company is jointly held by the Pacific Lighting Corporation and the Southern California Edison Company.

The Headquarters of the new Company have been located at 740 South Broadway, Los Angeles, and the Directors and Officers chosen from the Personnel of the two interested Companies. These include many of the most outstanding civic and industrial leaders in Southern California. The President will have on his staff F. B. Lewis of the Southern California Edison Company as Vice-President and Assistant General Manager, George C. Ward of the Edison Company, and Franklin S. Wade of the Southern Counties Gas Company as Vice-Presidents, and D. M. Trott of the Edison Company as Secretary and Treasurer. On the Board of Directors are R. H. Ballard, President of the Southern California Edison Company, Addison B. Day, President of the Los Angeles Gas & Electric Corporation, Alexander B.

Macbeth, President of the Southern California Gas Company, Franklin S. Wade, President of the Southern Counties Gas Company, LeRoy M. Edwards, President of the Industrial Fuel Company, and W. C. Mullendore, F. B. Lewis, and G. C. Ward of the Edison Company.

Long Line

An idea of the capacity of the line on which actual construction is to start in April, is gained from the fact that it will handle an amount equal to approximately one-third of the gas now delivered in the Los Angeles metropolitan area. The additional supply of gas from the new line, whose Southern terminus will be in Long Beach, will meet the growing demand in Southern California and furnish fuel to the Southern California Edison Company's Long Beach Plant. Both the industrial and domestic customers on the lines of the several gas companies in Southern California, will benefit from the greater supply of this modern fuel.

Many Problems

The increased supply of natural gas that will result with the completion of the new line, probably December 1st, 1931, will be particularly welcome because of the diminishing gas supply of the oil fields in the Los Angeles Basin. The plans being made are taking into consideration the many problems that are bound to arise as the new line progresses through the rough and rugged Tehachapi Mountains and the congested Los Angeles district.

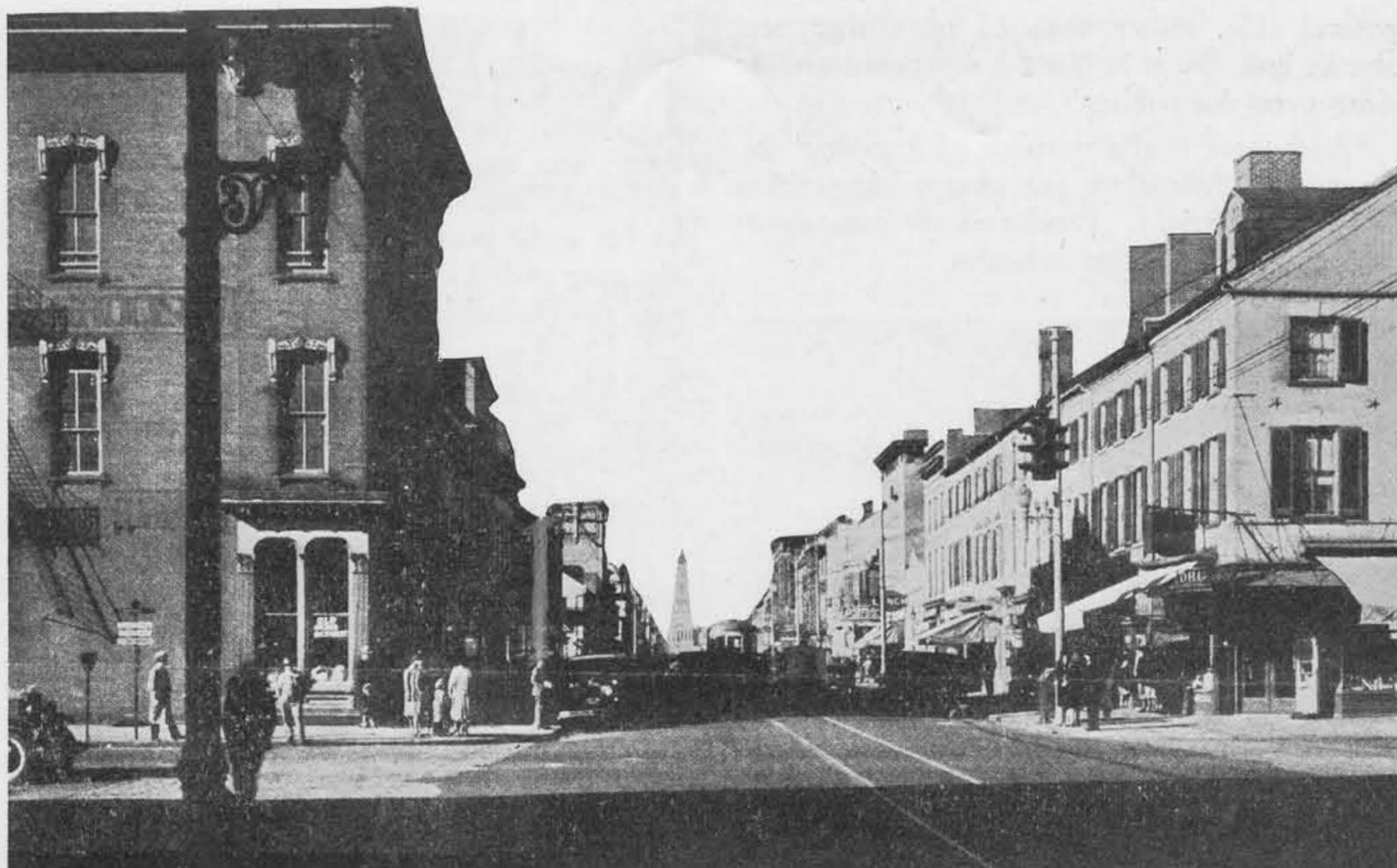
Several members of the Southern California Gas Company's personnel will be on a leave of absence in order to work with the new organization. Besides Mr. George and Mr. Laulhere, K. A. Wilber, J. B. Reddick, William Pipkin, and Frank Bryant will temporarily leave the Southern's ranks to assist in construction work with the Southern Fuel Company.

New Department

MONDAY, January 23rd, the newest department of our Company, the Gas Accounting Bureau, became an actuality.

The Bureau consists of two gas accountants, F. C. Skews, formerly in the Gas Dispatching Department, and P. A. Shimp, formerly in the Auditing Department. All matters pertaining to gas purchases, gas transportation, wholesale

sales, special industrial sales, and inter-Company operations will be handled by the Bureau under the direct supervision of H. P. George, General Superintendent, Natural Gas Production and Transmission. R. M. Bauer, Gas Supervisor and Office Engineer, is assisting in the organization of the Bureau.



Here is the main street of Alexandria, Va., one of the oldest and most historic cities in the country.

Alexandria Sells Its Gas Plant

ALEXANDRIA, Virginia, has had gas for nearly a hundred years. It understands utilities. Recently it sold its municipal gas plant to a private corporation—gladly. The rate dropped from \$1.45 per thousand cubic feet to \$1.15. The heating value jumped from 550 B.T.U. to 600.

Carroll Pierce, mayor of Alexandria, tells the story in the January *Nation's Business*.

Better Service

"We sold our gas plant. That does not mean that we surrendered to 'the interests.' On the other hand, I suspect that our regulation of service will be more effective and our insistence on proper standards a bit more stubborn under the new arrangement. Indeed, I am sure that we are in a more favorable position to demand service than we were before. What's more, we'll get it. The plant will be worth more to us in private hands than it was under municipal management.

"Not that our municipal gas plant was not efficient, conscientious, and courteous," continues Mr. Pierce, "but municipal management toils under handicaps. Gas equipment won't last forever. Mains become rusted, coated,

leaky. The greater the number of consumers, the greater the strain upon capacity. New capital depends upon special appropriations and there are many other purposes—schools, streets, libraries, fire and police protection—always appear to take precedent. Moreover, a municipality can never, I suppose, exploit gas appliances properly. The moment it undertakes to do so, it counters opposition from merchants—and you can hardly blame a taxpayer for not relishing competition from the town hall."

New Prosperity

Mr. Pierce expresses the opinion that the new gas company will contribute materially to the development and prosperity of Alexandria. He sees in it not only a substantial taxpayer, contributing materially to the city's income, but also as a real factor in attracting population and industry.

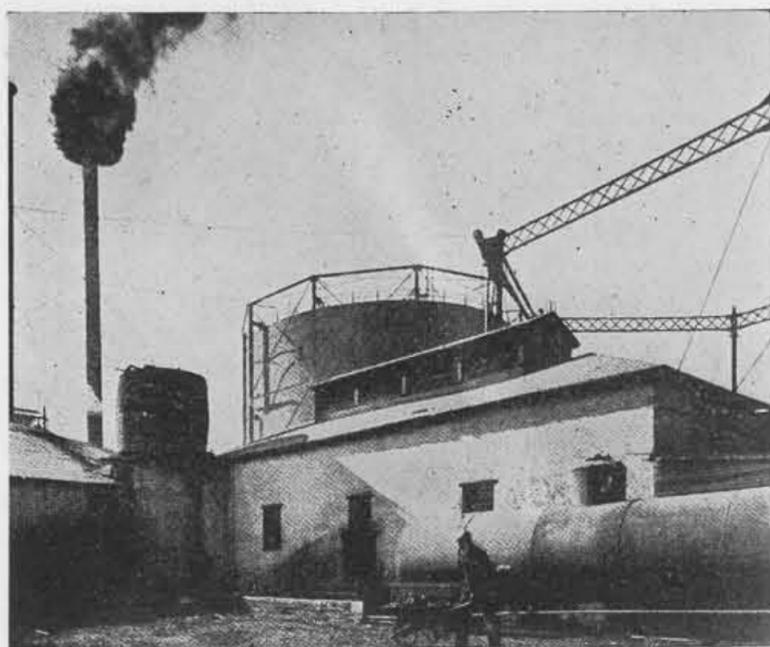
"I cannot see why private operation should be any better for a large city than for a small one," he continues. "Alexandria is entitled to the best, and I believe she's got the best."

Monopoly and Regulation

"Nor do I fear size. I am one of those simple-minded Americans who believe that growth is the result of honesty and vision, as a

general rule, rather than of mere sharpness. Size in industry is in itself a safeguard and assurance to the public.

"And there is the comfort of knowing that the people themselves are always bigger than their own creations. I welcome the competency that large-scale success indicates.



Alexandria depended upon this municipally owned gas plant until private ownership brought increased facilities.

"Business is never without the check-rein of competition. Whenever any concern cockily presumes to overstep itself in the thought that it has at last become a monopoly, other concerns may be depended upon to quit their patronage.

"When big business, so-called, enters a community, it subjects itself, as in Alexandria, to local regulation which, after all, is more effective and a great deal more satisfactory than any less intimate kind. It is my opinion that business and town government may be depended upon to get along without friction so long as they meet each other in mutual fairness—as business and town government can do today."

To the father of M. B. Moore, who until his recent death was leakage foreman in Glendale, the Southern extends heartfelt sympathy. Three deaths have occurred in the Moore family, and all within a period of 12 days. On January 1st, Mrs. Moore, mother of M. B. Moore passed away; on January 6th, after a short illness, the wife of M. B. Moore died. M. B. Moore, grief stricken, died on January 12th, but six days after the death of his wife. M. B. Moore leaves many friends among the Southern's family.

Retires

C. D. BELL, for thirteen years an executive with the Southern California Gas Company, was recently retired by our Company. Mr. Bell, born in Pittsburgh, Pa., spent many of his early years in the gas industry both in the east and the middle west, being connected with the Philadelphia Gas Company, the Parsons Gas Company, Natural Gas Company in Joplin, Mo., and the Kansas Natural Gas Company. He came from the latter company to the Southern in 1917. He made a host of friends during his years with the Southern.

Bond and Stock Issues

WITH the filing of applications with the State Railroad Commission for Southern California Gas Company bond and stock issues totaling \$15,700,000 the total new financing of three California utilities to be effected early this year aggregates \$67,685,750.

Under pending applications, the Southern California Gas Company proposes to issue \$12,500,000 of 4½ per cent thirty-year first mortgage gold bonds and to sell 32,000 shares of its \$25 par common stock for \$100 a share. The bonds are to be dated March 1, 1931.

During the past two and a half years, the property of the Southern has increased \$15,000,000 and this will be the first issue of stocks or bonds in this period.

Construction Movies

FRIDAY evening, January 23rd, approximately a hundred members of the General Office were privileged to view a three-reel motion picture showing the construction of the Southern's new line from Kettleman Hills. The pictures were shown by W. P. Dawe, Supervisor of Safety, who was responsible for much of the photography. Under Mr. Dawe's direction, these pictures have been shown at the meetings of several societies and service clubs.

The Southern's Plant No. 3 at Slauson and Western Avenues now has an address. It is 5972 St. Andrews Place.

FUEL OIL: Recently released statistics of fuel oil consumption show that natural gas displaced 2,073,241 barrels of fuel oil in California during 1929.

The Boons of Civilization

by H. L. Mencken

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“WHAT we call progress,” said Havelock Ellis, “is the exchange of one nuisance for another nuisance.” The thought is so obvious that it must occur now and then even to the secretary of the Greater Zenith Booster League. There may be persons who actually enjoy the sound of the telephone bell, but if they exist I can only say that I have never met them. It is highly probable that the telephone, as it stands today, represents more sheer brain power than any other human invention. A truly immense ingenuity has gone into perfecting it, and it is as far beyond its progenitor of 1900 as the *Europa* is beyond Fulton’s *Clermont*. But all the while no one has ever thought of improving the tone of its bell. The sound remains intolerably harsh and shrill, even when efforts are made to damp it. With very little trouble it might be made deep, sonorous and even soothing. But the telephone engineers let it remain as it was at the start, and millions of people suffer under its assault at every hour of the day.

The telephone, I believe, is the greatest boon to bores ever invented. It has set their ancient art upon a new level of efficiency and enabled them to penetrate the last strongholds of privacy. All of the devices that have been put into service against them have failed. I point, for example, to that of having a private telephone number, not listed in the book. Obviously, there is nothing here to daunt a bore of authentic gifts. Obtaining private telephone numbers is of the elemental essence of his craft. Such things are swapped by bores as automatically as New Yorkers swap the addresses of speakeasies. Thus the poor victim of their professional passion is beset quite as much as if he had his telephone number limned upon the sky in smoke. But meanwhile his friends forget it at critical moments and he misses much pleasant gossip and many an opportunity for vinous relaxation.

It is not only hard to imagine a world without telephones; it becomes downright impossible. They have become as necessary to the human race, at least in the United States, as window glass, newspapers or bicarbonate of soda. Every now and then one hears of a man

who has moved to some remote village to get rid of them, and there proposes to meditate and invite his soul in the manner of the Greek philosophers, but almost always it turns out that his meditations run in the direction of rosicrucianism, the Single Tax, farm relief, or some other such insanity. I have myself ordered my telephone taken out at least a dozen times, but every time I found urgent use for it before the man arrived, and so had to meet him with excuses and a drink. A telephone bigwig tells me that such orders come in at the rate of scores a day, but that none has ever been executed. I now have two telephones in my house, and am about to put in a third. In ten years, no doubt, there will be one in every room, as in hotels.

Despite all this, I remain opposed to the telephone theoretically, and continue to damn it. It is a great invention and of vast value to the human race, but I believe it has done me, personally, almost as much harm as good. How often a single call has blown up my whole evening’s work, and so exacerbated my spirit and diminished my income! I am old enough to remember when telephones were very rare, and romantic enough to believe that I was happier then. But at worst I get more out of them than I get out of any of the other current wonders: for example, the radio, the phonograph, the electric light, the movie, and the automobile. I am perhaps the first American ever to give up automobiling, formally and honestly. I sold my car so long ago as 1919, and have never regretted it. When I must move about in a city too large for comfortable walking I employ a taxicab, which is cheaper, safer and far less trouble than a private car. When I travel further I resort to the Pullman, by long odds the best conveyance yet invented by man. The radio, I admit, has potentialities, but they will remain in abeyance so long as the air is laden and debauched by jazz, idiotic harangues by frauds who do not know what they are talking about, and the horrible garglings of ninth-rate singers. As for the phonograph, I’ll begin to believe in it wholeheartedly the moment one of the companies produces a good record of the Brahms sextette in B flat, opus 18. I have

searched all the catalogues for it, but so far in vain.

Of all the great inventions of modern times the one that has given me most comfort and joy is one that is seldom heard of, to wit, the thermostat. I was amazed, some time ago, to hear that it was invented at least a generation ago. I first heard of it during the war, when some kind friend suggested that I throw out the coal furnace that was making steam in my house and put in a gas furnace. Naturally enough, I hesitated, for the human mind is so constituted. But the day I finally succumbed must remain ever memorable in my annals, for it saw me move at one leap from an inferno into a sort of paradise. Everyone will recall how bad the coal was in those heroic days. The patriotic anthracite men loaded their culm-piles on cars, and sold them to householders all over the East. Not a furnace-man was in practise in my neighborhood: all of them were working in the shipyards at \$15 a day. So I had to shovel coal myself, and not only shovel coal, but sift ashes. It was a truly dreadful experience. Worse, my house was always either too hot or too cold. When a few pieces of actual coal appeared in the mass of slate the temperature leaped up to 85 degrees, but most of the time it was between 45 and 50.

The thermostat changed all that, and in an instant. I simply set it at 68 degrees, and then went on about my business. Whenever the temperature in the house went up to 70 it automatically turned off the gas under the furnace in the cellar, and there was an immediate re-

turn to 68. And if the mercury, keeping on, dropped to 66, then the gas went on again, and the temperature was soon 68 once more. It would take the limber, vibrant, air-cooled tongue of a Rabbi Stephen S. Wise, nay, of a William Jennings Bryan, to describe my relief and comfort. I began to feel like a man liberated from the death-house. I was never too hot or too cold. I had no coal to heave, no ashes to sift. My house became so clean that I could wear a shirt five days. I began to feel like work, and rapidly turned out a series of imperishable contributions to the national letters. My temper improved so vastly that my family began to suspect senile changes. Moreover, my cellar became as clean as the rest of the house, and as roomy as a barn. I enlarged my wine-room by 1000 cubic metres. I put in a cedar closet big enough to hold my immense wardrobe. I added a vault for papers, a carpenter shop, and a praying chamber.

For all these boons and usufructs I was indebted to the inventor of the thermostat, a simple device but incomparable. I'd print his name here, but unfortunately I forget it. He was one of the great benefactors of humanity. I wouldn't swap him for a dozen Marconis, a regiment of Bells, or a whole army corps of Edisons. Edison's life-work, like his garrulous and nonsensical talk, has been mainly a curse to humanity: he has greatly augmented its stock of damned nuisances. But the man who devised the thermostat, at all events in my private opinion, was a hero comparable to Shakespeare, Michelangelo or Beethoven.

Cash Prizes in Essay Contest

ANOTHER essay contest is announced by the Pacific Coast Gas Association. The subject of the essays is to be, "The Consumer is King."

Good judgment and the practical value of ideas advanced will be considered in judging essays, and exaggeration should be guarded against. If possible, an illustration of an actual experience should be included.

Each essay will be judged according to the following standards: Knowledge of subject 60 per cent; originality and composition 40 per cent. Penmanship, grammatical construction, and neatness will not be considered. Essays should consist of not less than 400 words nor more than 1,000 words.

Thirteen cash prizes will be awarded by the

Association as follows:

First	\$50.00
Second	30.00
Third	20.00
Ten of	10.00 each

Forty additional prizes of \$5.00 each will be awarded for essays drawn by lot, excluding those awarded other prizes.

All employees of the Company are eligible to compete, except officers, officials, general office department heads, and managers of geographical districts and divisions.

Essays written by employees of this Company should be submitted to R. R. Blackburn, Supervisor of Personnel, Claims, and Safety.



Sunset Blvd., Los Angeles, is getting a modern surface. In the right foreground is the cement base; in the background the first layer of material is being applied; and at the left is the finished street.

Natural Gas Makes Highways

UNCLE Walt Wallet, prominent citizen of Gasoline Alley, uttered a profound truth when he said recently that if more people would learn to entertain themselves at home on Sundays, the rest of us could get more pleasure from our automobiles.

There are 1,156,262 automobiles in the thirteen counties of Southern California. If these automobiles were closely packed into the smallest possible space, the cussing and horn-blowing could be heard fifty miles at sea on a clear day. If they were placed end-to-end they would reach from here to somewhere or other—we forget just where. The increasing number of Austins makes this calculation too complicated for our one-cylinder slide rule.

The typical Southern Californian is always going places. He may watch the ticker tape until market closing time, and at night pitch his tent on the desert sand like an Arab. Or he may breakfast on a grapefruit from his backyard tree, and break the ice on a mountain stream for his evening demitasse. He may guard the cash register until five, and at night camp on the beach and watch for the phantom sails of Cabrillo's "La Vittoria" and Drake's "Golden Hind." He may aimlessly follow the winding trail of El Camino Real, where the sandaled feet of the padres plodded in the dust.

He may travel south to "Our Mother of Sorrows" or north to "Our Lady of Solitude." Tonight he may sleep in a modern fold-in-the-wall bed, and tomorrow night throw his blankets by the crumbling walls of San Juan Capistrano or San Luis Rey.

Constant Construction Necessary

With 1,156,262 automobiles going places, there is grave danger of them being packed closely into the smallest possible space or placed end-to-end—unless our state, county, and city authorities are constantly building new streets and highways and improving the old. Sometimes, by means of some strange telepathy, the authorities seem to know which highway we have selected for our week-end trip and have accordingly ripped it up ahead of us, but that is beside the point. To make room for the increasing number of automobiles and to open California's scenic spots to comfortable travel—as well as to provide economical commercial transportation facilities—there must be unceasing construction.

Natural Gas Has Useful Part

It is therefore gratifying to know that natural gas is taking its material and useful part in the building of these streets and highways upon

which so much of our pleasure and business depend.

Recently it was the privilege of a reporter for GAS NEWS to visit the plant of the Hollywood Paving Company, where sand, gravel, asphalt, and a little cement go in one end and highly satisfactory paving material comes out the other.

This plant, in which some of our "Roads to Romance" are manufactured, is not picturesque. It is, so to speak, "wearing overalls and covered with sweat." The buildings are of sheet metal and the construction is of a temporary nature, as the plant is sometimes moved to be near the actual paving job. Grace of outline has been sacrificed to utility, but, as we were told in our copy books, it is better to be useful than beautiful.

Plant is Interesting

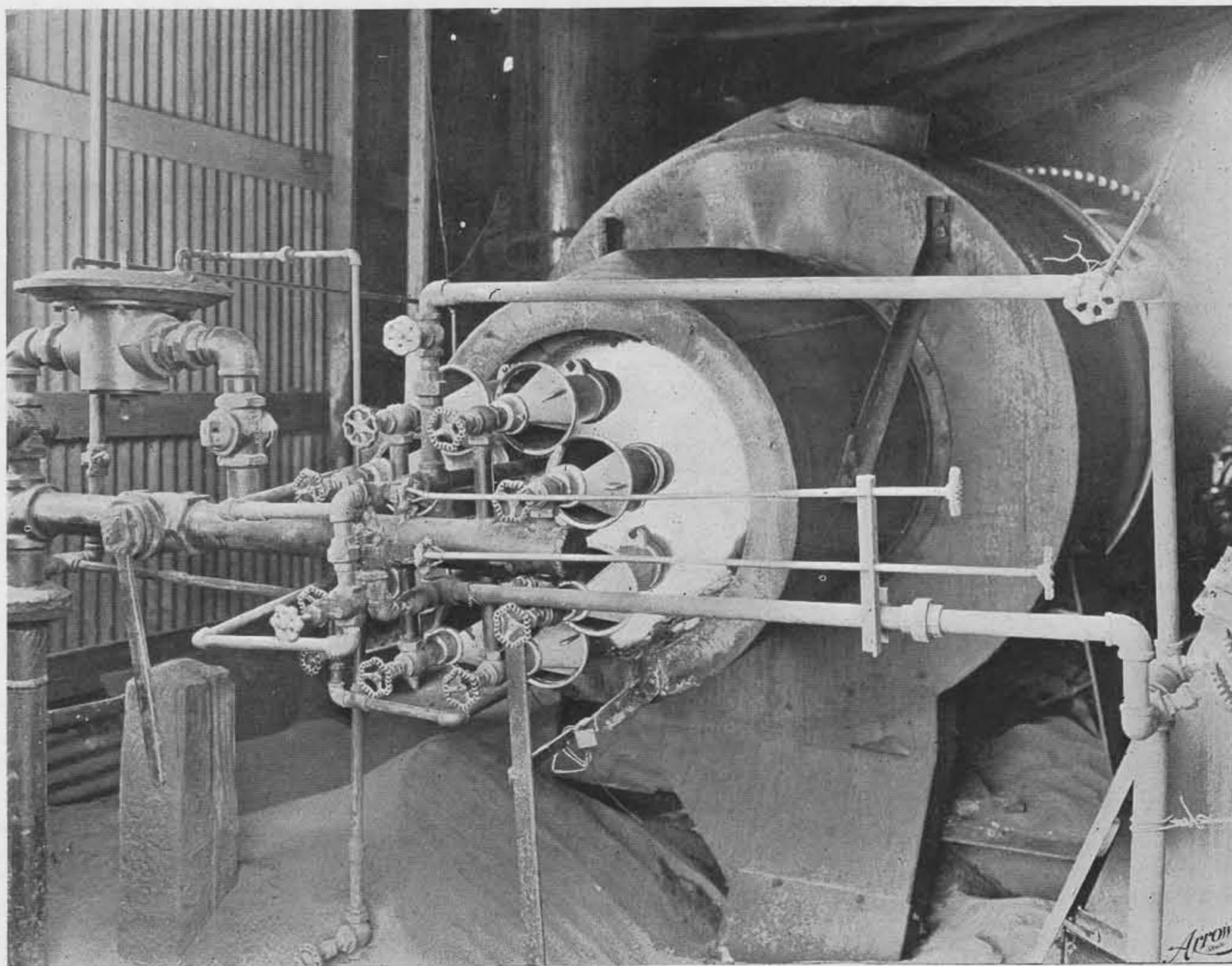
The plant consists of a rotary hopper, steam boiler, asphalt tanks, elevators, mixers, and loaders. All about the plant are piles of sand and gravel, the base materials from which the

paving substance is made.

Mule teams hitched to "fresnos" drag the gravel and sand to a bucket elevator, which dumps the materials into the intake end of the hopper. At the other end of the hopper are eight Nemec burners which shoot eight jets of gas flame into the hopper. Being set on an incline, the hopper forces the mixture toward the heat as it revolves. The first heating at the inlet end of the hopper drives out the moisture, while the intense heat near the burners brings the temperature of the mixture to approximately 380 degrees.

Automatic Heat Control

Before the installation of natural gas equipment, by the New Business Department of our Company, the temperature, which for best results must be exact, was tested by the "spit and sizzle" method and checked by inspectors with thermometers. Now it is controlled exactly by a Partlow control valve, the thermo bulb of which is located at the outlet of the hopper. There is no waste of fuel through over-heating;



A view of the material mixing hopper, showing the installation of eight Nemec burners and the control valve which keeps the temperature exact and constant.

no waste of material through under-heating.

At times the sand and gravel is wet when it is dumped into the hopper; sometimes it is dry. The day before the natural gas equipment was placed in operation at this plant, there was a heavy rain. Some of the material was under two inches of water—yet results were entirely satisfactory even under these trying circumstances.

Patented Specifications Used

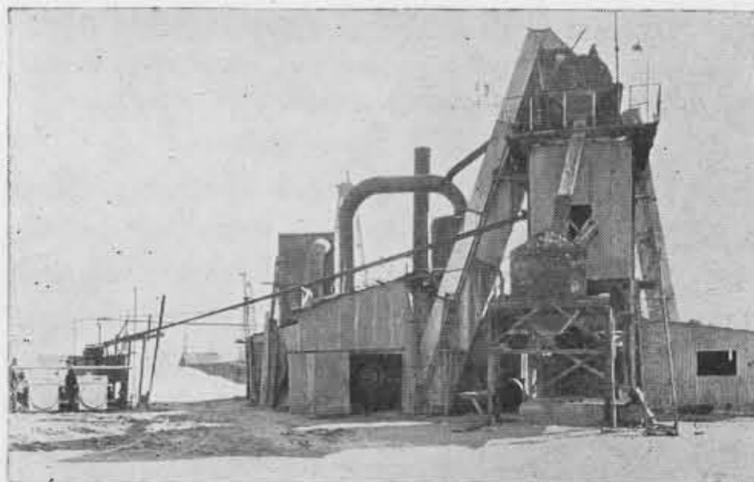
When the mixture of sand and gravel is heated to the proper temperature, it is carried by elevators to the mixing room. Here it is screened and graded and mixed with asphalt pitch and a small amount of cement. There are several patented specifications, but they vary chiefly in the proportions of ingredients and the manner of mixing.

At a temperature of about 350 degrees, the completed paving material is loaded into specially constructed trucks. A covering of canvas is placed over the load and it is quickly carried, smoking hot, to the job where it is to be applied. The capacity of the plant visited is 100 tons of paving material an hour. In addition to furnishing fuel for the mixing hopper, natural gas is used to fire the boiler at this plant.

Material Applied in Layers

The first layer of paving material, of a coarse grade, is spread by workmen over the foundation, which is usually of concrete. It is then rolled into a smooth surface by steam rollers.

After about twenty-four hours, which are allowed to permit the first layer to cool and set, the second layer, of a finer grade, is applied in the same manner. When this is thoroughly set, the street is ready for traffic.



The plant of the Hollywood Paving Co., where natural gas is helping to make some of California's famous highways.

It is claimed that this type of highway construction is unusually durable, and that the surface is rough enough to afford good traction, even when wet. Its increasing use under the heavy traffic conditions of Southern California is evidence that these claims are well-founded.

Natural gas has proved to be the ideal fuel in the manufacture of paving material, at this plant and others, because of positive and automatic heat control, dependability, freedom from smoke and dirt, and low cost per ton of paving material produced.

Architects Entertained

THE Natural Gas Bureau, sponsored by the Southern California Gas Company, the Los Angeles Gas and Electric Corporation, and the Southern Counties Gas Company, is performing a valuable service in the education of various trade and professional groups in the advantageous utilization of natural gas.

Thursday evening, January 22, the Bureau, assisted by the appliance exhibitors and representatives of the three gas companies, was host to architects of Los Angeles, Alhambra, San Gabriel, Pasadena, Burbank, Beverly Hills, San Pedro, Wilmington, and the Santa Monica Bay District. Turkey dinners were served to one hundred and eighty.

Natural Gas Discussed

The dinner was presided over in an informal

way by J. Lyle Vance, Manager of the Exhibit. The speakers of the evening were H. W. Geyer of the Southern Counties Gas Company and R. M. Bauer, Gas Supervisor and Office Engineer of our Company. Mr. Geyer's subject was, "Utilization of Natural Gas." Mr. Bauer's short talk on the history and development of natural gas in Southern California, is included in this number of GAS NEWS. Both Mr. Geyer and Mr. Bauer stressed Southern California's adequate supply of the essential fuel,—natural gas,—and outlined the steps which have been taken by the local gas companies to assure that their facilities shall keep in advance of the demands placed upon them by community and industrial growth.

Foundation Building Under Difficulties

by E. Henderson

*Assistant General Superintendent, Natural Gas Production and Transmission,
Southern California Gas Company*

When it was found necessary to rebuild the cement foundations for the engines at Station 40, Taft, and still not put the entire station out of service, a real problem presented itself. Mr. Henderson explains how it was done in the following article.

DURING the summer of 1930 a six unit compressor plant was installed in the Buena Vista Hills. This installation is capable of handling, at the present time, all of the local field gas, thus releasing Station 40 from a service which it has performed for 16 years. After such a period of operation considerable repair work in the way of rebuilding and over-



The Southern's Compressor Station 40, Taft.

hauling was necessary. This work has been under way for several months.

Concrete Effected

By far the largest job found to be necessary was that of rebuilding four of the engine foundations. While concrete is assumed to be of a nearly permanent nature, very severe climatic conditions, intense heat from the exhaust lines, and the unstable soil on which the foundations rested, caused a settling and disintegration of the original foundations. Even though Station No. 40 has been relieved of the necessity of handling local gas it is still used during periods of peak demand for boosting Kettleman gas for use in Los Angeles. The entire plant, for this reason, could not be put out of service at one time, as the major portion of the plant had to be held in readiness to operate. The problem of removing and rebuilding the foundations became complicated.

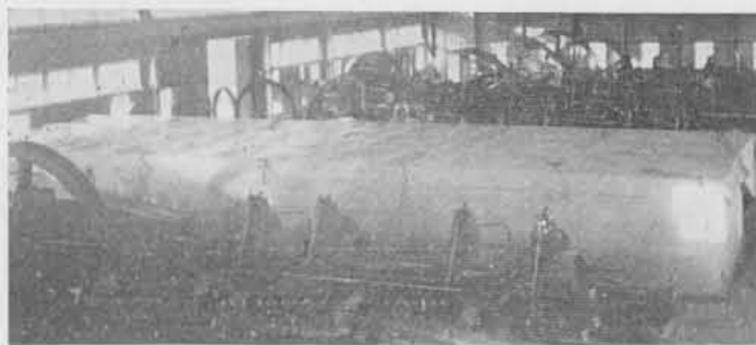
After considerable study, it was decided to

cover each foundation that had to be removed with a large tent and provide blowers to remove the dust from the engine room. This was also to prevent gas leakage from entering the scene of operation.

After the removal of the heavy machinery and the erection of the tent, work was started on the installation of the necessary blowers and the breaking up and hauling away of the concrete. The concrete was broken up by pneumatic tools, air being supplied by portable air compressors of 300 cubic feet per minute capacity, which was sufficient to operate three to four pavement breakers and air hammers. The broken-up concrete was wheeled in barrows to a small dump car in the basin of the engine room, and carried by the dump car to the yard by means of an electric winch and cable. From this point, after a considerable amount of concrete had accumulated, it was loaded by power shovels into dump trucks and hauled away. This work was carried on in three shifts, using about twenty men in all, and about seven days' time was required in removing each of the large foundations.

Continuous Pouring

A new form was built in the same position as the original foundation, and a new one poured. In order to prevent seams or cracks from appearing in the new structure, the pouring was done continuously. Three large mixers and about sixty men completed a foundation of 270 yards in about thirteen hours' time. In addition to the 270 yards of concrete, thirteen



A view of the cement foundation under construction.

tons of reinforcing steel in bars sixty feet long were used. This type of construction makes a foundation sufficiently strong to support the weight which must be carried if there is contact at only two points with the mat on which the foundation rests.

Twenty-eight Days

After pouring the new foundation, two weeks' time was allowed for setting of the concrete before the form was removed and the engine erected. The removal of the form and the erection of the engine occupied another two weeks, making twenty-eight days from the time of pouring until the unit was ready for opera-

tion, which, with the dismantling of the engine and the tearing down of the old foundation, made a total period of six weeks or a little more, that the unit was out of operation.

Two of the large foundations of 270 yards each and one of 200 yards have already been rebuilt. One large foundation will be rebuilt during the month of February.

With the improved materials and construction methods employed in this job no further trouble is anticipated. In addition to the improved methods and materials used, the new foundations will be protected from the intense exhaust heat which undoubtedly caused considerable of the original trouble.

Pacific Coast Gas Companies Grow In 1930

ACCORDING to figures gathered by the Pacific Coast Gas Association for the first nine months of 1930, the gas companies operating in the Pacific Coast states have maintained their sales and revenue nearly on a par with the same period for 1929 in spite of the depressed business conditions and the decrease in both cubic feet sales and revenue occasioned by the introduction of natural gas into Northern California.

Figures for gas manufactured in California show a sharp drop because of the introduction of natural gas in the San Francisco Bay District and a corresponding increase in purchases of natural gas. The statement shows that 85,100,262,000 cubic feet of natural gas were purchased by gas companies for distribution in the first nine months of 1930. This does not include natural gas used for fuel in the oil fields, natural gas used by the oil companies for refinery operation, or natural gas used by the companies themselves for fuel purposes.

There were 36,566 more gas consumers on the Pacific Coast on September 30, 1930, than on September 30, 1929, an increase of 3½ per cent. Most of this gain was in California, as Oregon and Washington figures show a slight decrease in the number of customers.

Gross revenue derived from gas sales during the first nine months of 1930 were \$55,677,156 as compared with \$58,496,269, a decrease of 4.8 per cent. That this is entirely due to the decrease in rates occasioned by the introduction of natural gas in Northern California is shown by

the fact that revenues increased in all other states.

The number of miles of main maintained by gas companies, increased from 21,775 on September 30, 1929, to 23,481 on September 30, 1930. Gains in pipe line mileage increased in all states and reflect the transmission mains constructed by the Pacific Gas and Electric Company to serve natural gas in Northern California, the reinforcement of the Los Angeles supply by pipe lines from Kettleman Hills, and the extensions of the Portland Gas and Coke Company to serve new territory south as far as Albany and Corvallis, Oregon. In Washington, the Washington Gas and Electric Company has made major extensions north from Tacoma to serve Auburn and Kent.

These extensions upon which gas companies have expended more than thirty millions of dollars are ample evidence of the gas industry's support of President Hoover's request that industry do all it can to mitigate the unemployment condition. That employment is steady in the gas industry is also shown by the fact that while 11,913 people were employed in the industry on September 30, 1929, there were 12,081 employed on September 30, 1930. The maximum employment during the year occurred in April when there were 13,337 people on the gas companies' payrolls. This was during the peak of the construction period. This large construction payroll was also included in the \$15,857,277 expended for labor during the first nine months of 1930 as against \$14,980,013 in the same period of 1929.

GAS NEWS

Monthly

Published for the Employees
By the Management of
THE SOUTHERN CALIFORNIA
GAS COMPANY

F. H. Holden
Supervisor of Advertising and Publications

950 South Broadway
Los Angeles, California

Vol. VIII February, 1931 No. 2

IN one of his books, Bruce Barton says that the finest business advice ever spoken or written is: "And whosoever compel thee to go a mile, go with him twain."

There are hundreds,—perhaps thousands,—of golfers who can play the eighteen holes in a few more strokes than Jones. A half dozen strokes,—maybe less,—made the difference between the winner of the recent \$10,000 Open and those who also played.

Every violinist of the Philharmonic can play, without error, all the selections for which Kreisler is famous. To the untrained ear, there would be no difference. With only limited ability and a few years training, any of us could paint a fair copy of the Blue Boy.

There are any number of girls who are ninety per cent as skillful on the courts as Helen Wills. Dozens of pilots are almost as capable as Lindbergh and Hawks. High school boys by the score can run the hundred yards within a fraction of a second as fast as an Olympic champion.

All of which means that there is only a little difference between the ordinary production and the masterpiece—only a little difference between the ordinary performer and the master. Sometimes the master has a little more ability than the rest of us, but more often the difference is in his willingness to study a little harder, to think a little more, to be a little more painstaking, to sweat a little more. He is willing to go the second mile.

The worker who does the required task,—but no more,—is common. He is one of the crowd. He who is willing to go even a tenth of the second, unrequired mile is just that much ahead of competition.

THE strong stabilizing influence exerted by the utilities in their expansion programs during the present economic crisis has been the subject of much editorial comment. The following is from the LaFeria, Texas, News:

"Whatever one may think of public utility methods generally, it can not be denied that during the depression of recent months the utilities have done much toward preventing a worse unemployment situation than has been experienced.

"The BUSINESS WEEK, a leading business periodical, declares that 'more than railroads or any other major group, utilities have proved themselves the real stabilizing factor in a bad year.' Noting that a billion dollars of new capital has gone into utility expansion this year, it adds that 'these great sums, spent in many ways and places, have helped to steady business.'

"It is well for the country that, in spite of all the demagogic attacks made on them of late, the utilities have maintained their courage and faith in America, and have been willing to back that faith by going forward at a time when more timid enterprises stood still or did a backstep."

THE total investment in natural gas securities as given by Natural Gas, the official organ, is \$450,000,000. Up until seven years ago this stock had only a limited number of followers. The development of this branch of the gas industry has been remarkable. The same authority quoted says the investment in natural gas pipe lines is now \$2,250,000,000. The time seems to have passed where doubts were entertained as to the permanency of natural gas.

During the month of October 245 gas wells in the United States were completed, an increase of 37 over the same month in 1929.

NATURAL VERSUS ARTIFICIAL: Eighty per cent of the total marketed gas production of the United States, for 1931, it is estimated, will be natural gas.

AT exactly 10:50 A.M. every Wednesday, thousands of housewives all over Southern California tune in on Radio KFI or Radio KGO to hear the "Woman's Magazine of the Air"; Helen Webster presiding. The program is sponsored by the Pacific Coast Gas Association, of which our Company is a member.

The editor of this broadcasted magazine is Benny Walker. His specialty is broadcasting—and the poems and short subjects that he brings before the "mike" have had a noticeable written applause from the radio audience. One of those papers that proved to have special appeal, was the following essay:

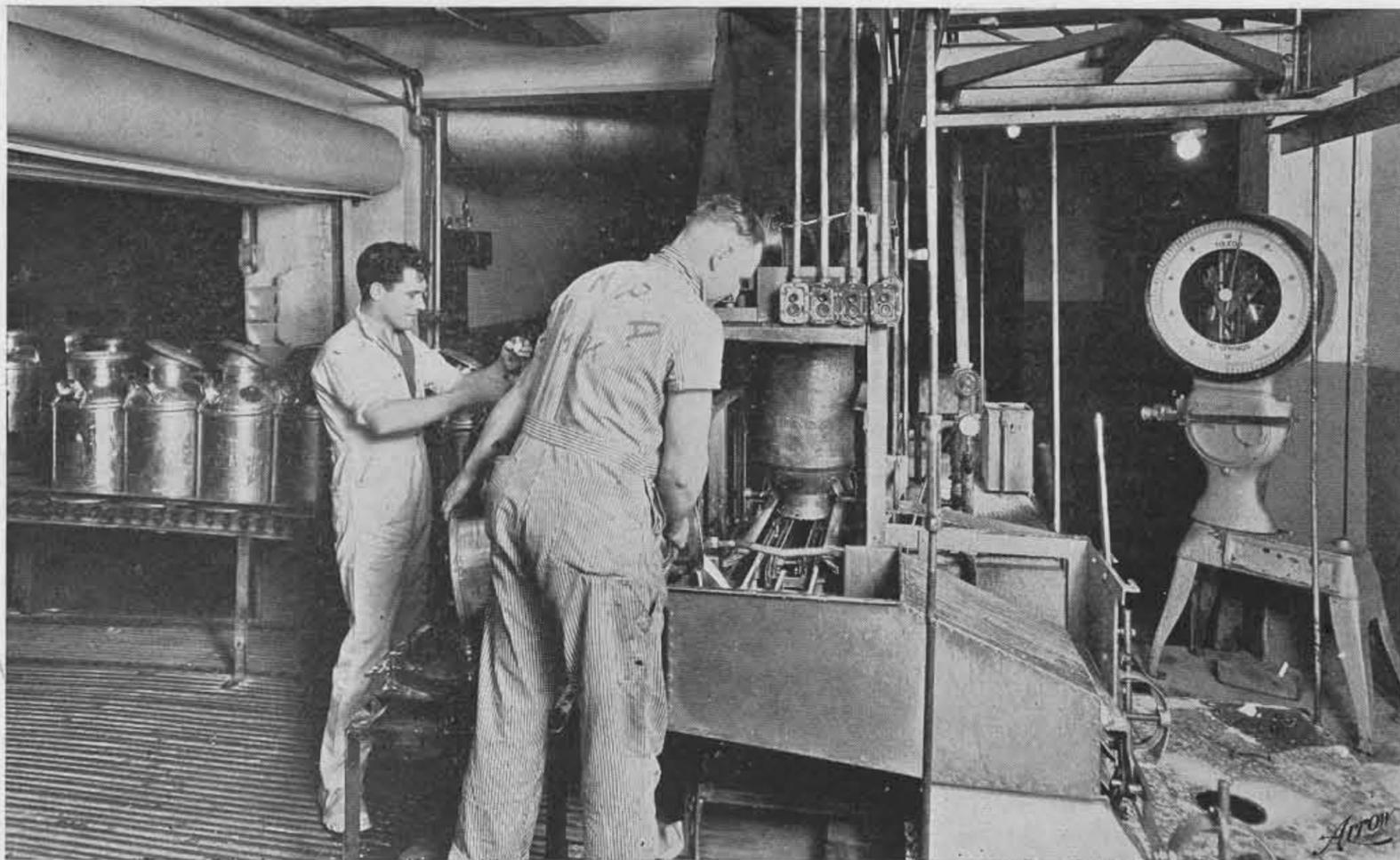
"WHAT is a Friend? I will tell you. It is a person with whom you dare to be yourself. Your soul can be naked with him. He seems to ask of you to assume nothing, only to be what you are. He does not want you to be better or worse. When you are with him you feel as a prisoner feels who has been declared innocent. You do not have to be on your guard. You can say what you genuinely think, so long as it is genuinely you. He understands those contradictions in your nature that lead others to misjudge you. With him you breathe freely, you can avow your little vanities and envies and hates and vicious sparks, your meanness and absurdities, and in revealing them to him they are lost, dissolved in the wide ocean of his loyalty. He understands. You do not have to be careful. You can abuse him, neglect him, tolerate him. Best of all you can keep still with him. It makes no matter. He likes you. He is like fire that purges all you do. He is like water that cleanses all you say. He is like wine that warms you to the bone. He understands, he understands. You can weep with him, laugh with him, sin with him, pray with him. Through and beneath it all he sees, knows and loves you. A friend, I repeat, is one with whom you dare to be yourself."

INJUNCTION: Los Angeles Gas and Electric Corporation has been granted an injunction on the Railroad Commission's recent order for reduction in its rates, the corporation claiming that the new rates are confiscatory. The reduction ordered, which was to have gone into effect January 1, would have meant a cut of \$1,350,000 annually in this company's revenues.

NATURAL gas advances steadily as a fuel. One is led to wonder what the result will be. Wherever the natural fuel is piped there is a demand awaiting it. Its smokeless, ashless, dustless properties at once commend it as the ideal fuel. Its adaptation to furnaces and boilers already installed is another very strong selling point. The City of Denver furnishes a striking illustration of what natural gas may do to other established fuels. Two years ago in anticipation of the advent of natural gas the Public Service Company of Colorado began a campaign for popularizing this fuel. At that time not over 400 residences were heated by gas. In two years' time the number has increased to 8,000. This is about one-sixth of total homes in Denver, exclusive of apartment houses. This tremendous change from other fuels to natural gas has been accomplished despite the fact that natural gas heat is 35 per cent higher than coal. It is expected that within the next few years the majority of Denver homes will be heated with natural gas.

AT the last meeting of the American Gas Association, E. B. Swanson, economic analyst of the Bureau of Mines, Washington, D. C., spoke of the almost incalculable reserves of natural gas in the Kansas, Oklahoma, and Texas Panhandle fields. Millions and billions no longer serve to express the possibilities. The indications are for a development of a supply of 16 or 17 trillion cubic feet. Professor Einstein and some of his followers may comprehend this, but the average mind does not generally concern itself with anything so vast. One gets an inkling of what this all means when told that such a gas reserve as 17 trillions would supply the longer pipe lines now under construction at the rate of 1,250,000,000 cubic feet daily for 37 years.

REDUCED RATES: Reductions which will amount to approximately \$25,000 a year have been made by the Southern California Gas Company in its San Joaquin Valley territory, including Visalia, Exeter, Lindsay, Porterville, Tulare, Strathmore, Hanford, Lemoore, Armona, Dinuba, Reedley, Parlier, Orosi, Cutler, Kingsburg, Corcoran, Riverdale, Sultana, and contiguous territory.



The man to the left is testing the raw milk for its butter fat content. As the other emptys the milk into the receiving tanks, the scales to the right register the weight. An emptied can may be seen starting through the sterilizer.

Marketing Milk With Natural Gas

A GREAT deal of co-operative effort was necessary before you were able to pour the cream on the breakfast bran flakes this morning. Mysteriously, as far as the average milk consumer is concerned, the bottle of milk and cream appears on the doorstep. Little is known of the effort "backstage," and the dairy industry, like other industries, must have the co-operation of hundreds of individuals before its product reaches the final consumer.

This article does not attempt to cover the industry,—it is a short description of an interesting part of the process,—the co-operative marketing of the raw milk to the local creamery through the agency of its co-operative marketing plant.

Shipped by Truck

Within a period of 24 hours raw milk is brought by truck from the many dairy farms surrounding the vicinity of Los Angeles. These farms, some two hundred and sixty in number, and having from 25 to 150 cows each, supply raw milk to their own agency, the Co-operative Dairy Products Association, 1739 Albion Street,

Los Angeles. The fresh milk, transported in large, sanitary cans, is started on its way to the breakfast table the moment it arrives at the plant of the Co-operative Dairy Association. Natural gas, from the lines of the Southern, fires two large boilers that furnish heat and live steam for many uses during the preliminary marketing processes. Adjacent to the Association plant is the Lincoln Ice Company. Here, a 250 H.P. and a 100 H.P. Boiler, under the direction of O. C. Nelson, Engineer for the Ice Company, not only aids in the manufacture of ice but furnishes the live steam to the Dairy Building.

Nickel-lined Tanks

The Co-operative Association is an organization sponsored and operated by dairymen of Southern California. By marketing the milk through a single outlet, greater economy and efficiency is possible. In the early hours of the morning, long before any of us have started for the office, the cans of milk are arriving at the Association plant. The lid is removed from the cans as they are placed directly from the truck

to a moving runway. The cans of milk, lined up on this moving belt, proceed into the building, where workmen, in clean white coveralls, weigh the milk by dumping it into large nickel lined receptacles.

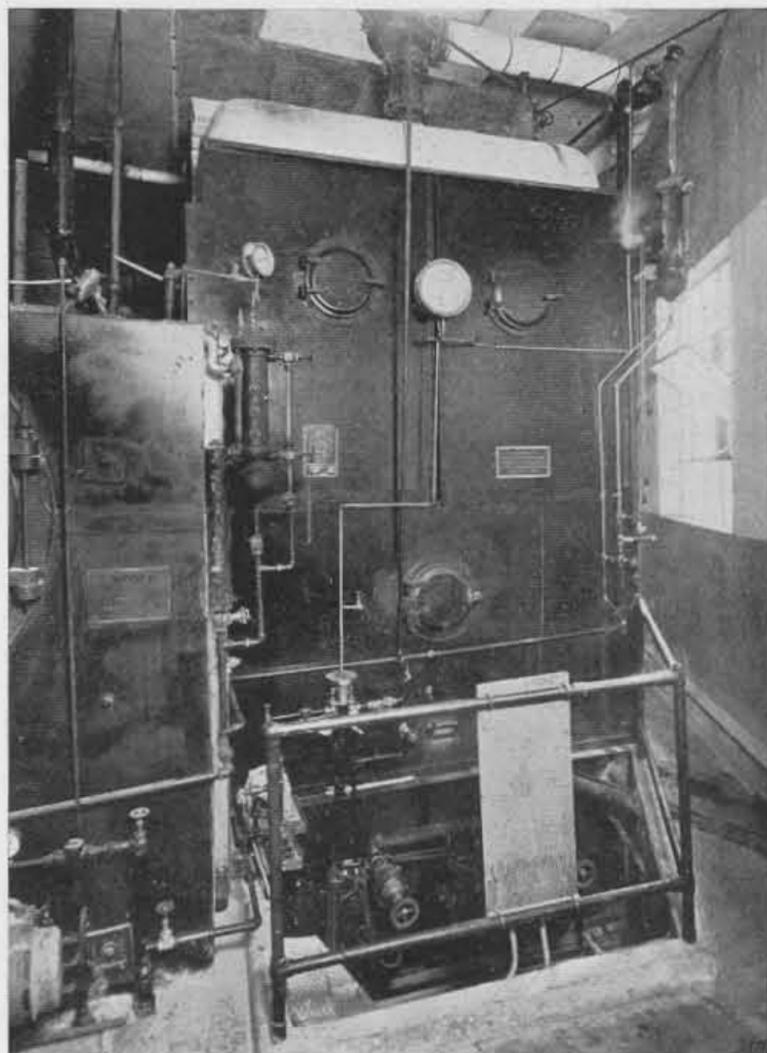
Carefully Checked

A vital part of the milk marketing process is accomplished by the Association in this first step. At this time samples are taken, and the value and quality of the milk carefully determined by its bacteria count and butterfat content. The price the dairyman is paid for his product is determined by the men who make the test for the butterfat content, which is the determining factor. City inspectors are almost constantly on hand to make tests for the bac-

teria count. If the milk from a certain dairy has too high a bacteria count, that farm is placed on a grade "B" basis. The dairyman is immediately notified by the Association of his change in status, and before he can get back the "A" rating for the milk from his farm, he must call on the city inspector who will make another test to see if it again has the lower bacteria count of the "A" grade. It is interesting to know that one of a dozen reasons may cause milk to have the higher count of the "B" rating. A slight fever in one of the cows for example, may cause the animal's milk to have the higher count. According to M. K. Cluff, Superintendent of the Association Plant, the dairymen constantly strive to keep the bacteria count at a minimum.



No—this machine is not manufacturing artificial snow—it is dehydrating skim milk with the aid of natural gas. The sheets of dried skim milk may be seen as they are peeled from the cylinders.



These gas fired boilers furnish live steam to the plant of the Co-operative Dairy Products Association.

Cans Sterilized

After the milk is dumped from the cans, they are placed once more on the belt, when they move through a sterilizer. Plenty of hot water and soap suds, with a finishing bath of live steam, insures the cleanliness of the cans. As they emerge from the sterilizer, the lids,

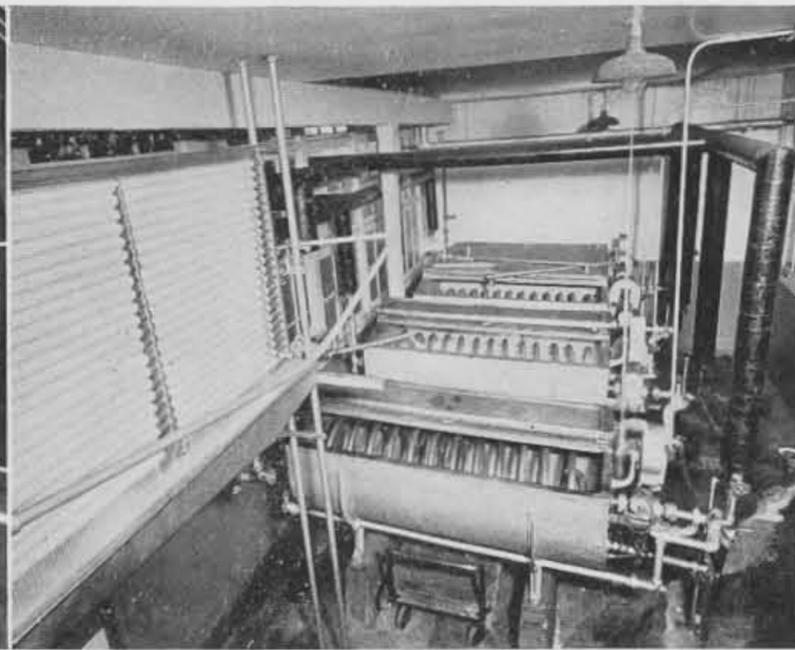
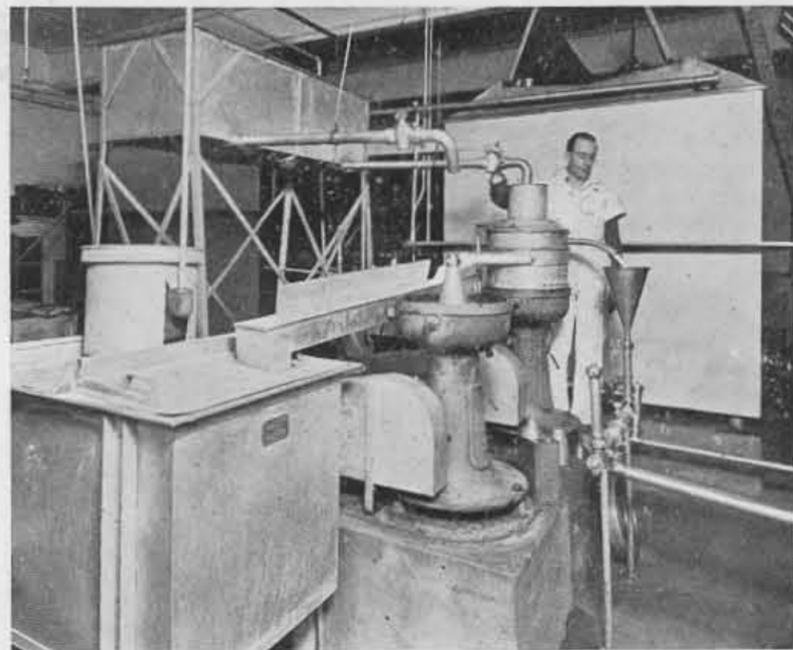
after going through the same cleaning process, are automatically replaced. The cans are removed from the runway when they reach the original starting place on the loading platform.

After the raw milk has been received, weighed, and sampled, it is pumped to the large storage tanks on the floor above. These tanks are also lined with nickel, and cleaned daily with live steam.

In order to separate the milk, it is necessary that it be heated to its natural temperature. At this temperature the bacteria multiply rapidly, hence it is equally necessary that it be cooled again immediately after the separation process. The thick, rich cream, as it issues from the separator, passes over a series of cooling pipes and collects in a trough beneath. From here it runs, through pipes, to metal vats on the first floor. After another sampling, it is placed in milk cans and stored in refrigerated vaults, from where it is issued to the local creameries who send their own trucks to the Association Plant.

Skim Milk Utilized

The remaining portion of the milk, the skim, likewise flows from the separator into vats. In order to fully utilize this less valuable part of the raw milk, one of the most interesting pieces of machinery in the Association plant is in operation twenty-four hours a day. The machine is composed principally of a large vat, and two steam heated cylinders, rotating in opposite directions from each other. The vat, located between them, keeps the skim milk at a boiling temperature. The cylinders, approximately three feet in diameter, are heated by means of



To the left, the separator divides the cream from the milk. The heated cream is cooled as it trickles over the series of cooling pipes shown in the picture to the right. From there it goes into the large metal vats.

steam pressure that enters the cylinders at 70 pounds pressure. The cylinders rotating next to each other, similar to the rubber roll on the housewife's washing machine, forms a "V" bottom for the vat of boiling skimmed milk. As they turn, a small seepage or layer collects on the hot drums and the heat of the metal quickly evaporates the moisture and leaves a thin flaky crust of dried milk. Knives, placed flush to the cylinders, scrape off the dried milk in a thin continuous sheet. The dried sheets of milk drop into a trough, where other knives, on a revolving shaft, act as a pulverizer. In the form of fine powder, the dried skim milk is packed into a large paper lined sacks.

By the use of this modern machine, the Association has been able to utilize the entire raw milk product. Powdered skim milk, besides many other uses, is utilized in the mixing of many patented flours.

It must be remembered that the duties of the Co-operative Dairy Products Association are limited to preparing the milk for the local creamery. The local creamery makes the butter and cheese, pasteurizes the milk and delivers it to the home.

The Association has proved itself through these duties, not only by aiding the dairy co-operators, but by protecting the public through supervised sanitary methods and careful checking of the raw product. The Southern is justly



Empty milk cans have their lids automatically replaced as they emerge from this sterilizer. These cans have been thoroughly cleaned with hot water, soap suds, and live steam.

proud that natural gas, through the New Business Department of our Company, has found its way into the marketing of Dairy Products.

Natural Gas

by R. M. Bauer

Gas Supervisor and Office Engineer, Southern California Gas Company

This short resume of Natural Gas in California was given as a fifteen minute talk before a recent meeting of Los Angeles Architects at the Natural Gas Bureau Headquarters in Los Angeles. Mr. Bauer's speech is not technical and its reading may help you to more clearly visualize this modern fuel and its relation to gas service in the Los Angeles metropolitan area.

IN the brief time allotted to me, I want to tell you about natural gas,—its composition and occurrence in nature, the history and development of the industry, its relation to the gas companies, and to gas service.

Natural gas, a product of carbon and hydrogen, is found in nature as a gas. Casinghead natural gas, which constitutes over 99.5 per cent of our present production, is produced in conjunction with crude oil. It is separated at the mouth of the well by the mechanical operation of what is known as a gas trap. From here it goes to the absorption plant, where

casinghead gasoline is stripped from the gas. The gas companies receive the gas at the outlet of the absorption plants.

Dry natural gas is also found in producing sands which are barren of oil. Buena Vista Hills, Buttonwillow, and Elk Hills,—all in San Joaquin Valley,—are the fields having dry gas reservoirs.

Gas varies in heat content from 950 B.T.U. per cubic foot to 1225 B.T.U. per cubic foot. During 1930, approximately 1125 B.T.U. gas was served to consumers in the Los Angeles metropolitan area. A typical analysis would

be 85 per cent methane, 12½ per cent ethane, and 2½ per cent inerts.

Butane

Recently a liquid petroleum product, commercially called "Butane," has been placed on the market for service to isolated communities. This product is obtained during the treatment of casinghead gasoline. It is stored and shipped as a liquid under 75 pounds pressure. When vaporized it has a heat content of approximately 2950 B.T.U. and is composed of 47.5 per cent propane, 51.5 per cent butane, and 1 per cent pentane.

During the past twenty-one years, marvelous oil and gas developments have taken place in Southern California. Fields have been discovered, and in many cases reached flush production, rapidly declined sharply for some months, and then entered upon a period of gradual and steady decline. Gas conservation during the past eighteen months has materially stabilized and benefitted the entire industry.

First Well

The first producing oil well was drilled in Pico Canyon, near Newhall, in 1870, but it was not until 1894 that natural gas was utilized for fuel purposes.

In 1909, ten large wells were completed in the Buena Vista Hills. These wells were drilled for oil, but encountered gas under very high pressure in the upper sands of levels. With this production began our first problem of utilizing a natural resource, not heretofore produced in commercial quantities in California.

In 1910, a forty-mile transmission line was built to Bakersfield, and in 1912 a one-hundred-and-twenty-mile line was built to Glendale and Los Angeles. This marked the beginning of the vast natural gas industry in California.

As gas developed in other oil fields, transmission facilities were installed to deliver gas to markets readily available. It was in 1915 that the first line from a Los Angeles Basin field, Coyote Hills, was laid to Los Angeles. Developments in the Basin area reached a peak in 1923, with the town lot developments in Huntington Beach, Long Beach, and Santa Fe Springs field. Deeper sand discovery caused a second intensive campaign at Long Beach and Santa Fe Springs during the early part of 1930.

Although Ventura Avenue field was discovered in 1916, it was not until 1925 that this source of supply was connected to the Los Angeles market.

Latest Developments

The latest and most spectacular developments have occurred in the west San Joaquin Valley fields, particularly at Kettleman Hills. This field, now in its initial development stage, is one of the world's greatest. Conservative estimates indicate that sufficient potential gas supply is available to take care of Southern California, San Francisco Bay, and Central California requirements for the next twenty-five years.

Gas service to the Los Angeles area is rendered by three distributing companies: Los Angeles Gas and Electric Corporation, Southern California Gas Company, and the Southern Counties Gas Company. The Southern California and the Southern Counties also have transmitting divisions. In addition there are two purely transmitting companies: Ventura Fuel Company and the Industrial Fuel Supply Company. All the companies mentioned are subsidiaries of the Pacific Lighting Corporation.

To render service to 785,000 customers, 672,500 of this number being in Los Angeles County, the gas companies have invested \$175,000,000 in plants and properties. Some of the major items of property are 11,032 miles of mains ranging in size from 2 inches to 30 inches, one hundred and twelve million, five hundred thousand cubic feet holder storage, 75,000 horsepower in compressors, one hundred and twenty-five million cubic feet capacity oil gas manufacturing plants.

100% Natural Gas

Prior to 1914, gas manufactured from oil was served in Los Angeles and adjacent communities. The twenty-two million five-hundred thousand cubic feet of natural gas from Buena Vista Hills was mixed with oil gas to raise the heat value in Los Angeles. As fields continued to spring up and the supply of natural gas increased, the communities adjacent to the fields were served with straight natural gas. Mixed gas service was continued in Los Angeles until January 27, 1927, when 100 per cent natural gas service was instituted.

In 1930, Butane gas service was started in many of the smaller communities remote from natural gas transmission lines. The expansion of this type of service is rapidly being carried out.

No paper on the subject of gas would be complete without a few statistics. California ranks first in the number of natural gas cus-

tomers, and second in natural gas production in the United States. During 1930, five hundred and fifty-four million, six hundred and thirty-seven thousand cubic feet were produced and three hundred and twenty million, nine hundred and ninety-two thousand cubic feet utilized for all purposes. At the present time about three hundred and fifty million cubic feet a day are being delivered to the Los Angeles metropolitan area,—190,000 from Kettleman Hills and Ventura Avenue fields, and 160,000 from Los Angeles Basin fields.

In conclusion, I want to leave with you three thoughts:

First,—Adequacy of potential or future supply. As stated previously, the west San Joaquin Valley fields have a minimum future life of twenty-five years; Ventura Avenue field will last for many years; Basin fields will settle to steady production with excellent possibilities for deeper zone production, starting, perhaps, in 1935.

Second,—Adequacy of supply for domestic and commercial users in the Los Angeles Basin district. During an average day like today,

(January 22, 1931) this class of users will consume about two hundred million cubic feet. The rest of the usage, one hundred and fifty million cubic feet, is for industrial and electric generating plant, and company use. The generating plant and the large industrial users receive surplus gas at very low rates with the provision that oil fuel will be maintained as a standby. In case of extreme peak weather or breakage in a large line, these consumers are requested to utilize oil and to release the gas for domestic purposes. To take care of the normal growth in business and the decline in Basin fields, the Southern Fuel Company, a newly organized company, is beginning the construction of a 210 mile transmission line, probably 26 inches in diameter, from Kettleman Hills to Los Angeles and Long Beach. This will add one hundred and thirty million cubic feet a day to the Los Angeles metropolitan area supply by December 1st.

Third,—Natural gas, the essential fuel, is the cheapest, cleanest, and most efficient fuel to be had today. Specify it in your new homes—your new buildings!



Twenty-six inch pipe is Big pipe! The picture shows an arc welder in action.

Accidents Don't Happen...They're Caused!

by W. P. Dawe

Supervisor of Safety, Southern California Gas Company.

IT is generally accepted that only 2% of all industrial accidents are NOT preventable. Let that sink in a minute, before we add the second thought, that the remaining 98% can be prevented by a careful analysis and study of their basic causes.

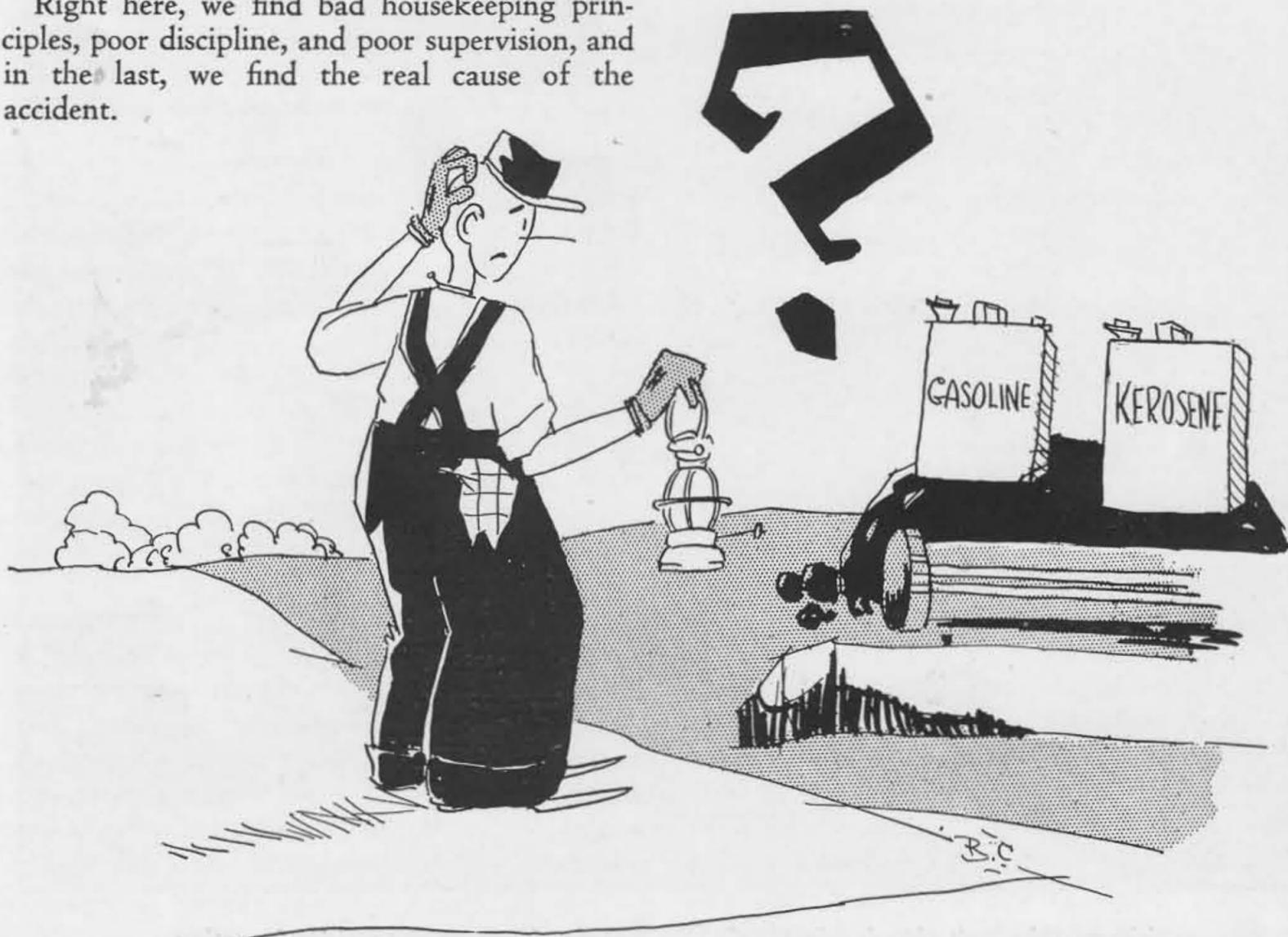
Basic causes are first causes. Just what does that mean? As an example, let us put it this way—if an employee slips and falls on the plant floor, and thereby sprains his left ankle, there are several things to think about. First, the injury—sprained left ankle; second, the cause of the injury—fall; third, what caused the fall or accident—he slipped. Well, what caused him to slip? He stepped on some waste under which lay spilled oil. There's no use asking who threw the waste on the floor or left the oil, but why were they left there? Were there no containers for waste? Oh yes, but employee's don't take the time to go to a container.

Bad Housekeeping

Right here, we find bad housekeeping principles, poor discipline, and poor supervision, and in the last, we find the real cause of the accident.

When men and women find employment in industry today, they are credited with a fair allowance of common sense, and so, very often, it is taken for granted that they will not do some of the careless little things, that often cause serious accidents. Hence, no stress is placed upon this when a person is employed, and it is not easy to catch the offender afterward. However, bad housekeeping practices can be corrected so easily that it is surprising that we have overlooked this fact.

The careful analysis of hundreds of accident reports has disclosed the fact that, of the 98% of preventable accidents, only 10% are due to physical causes, that is, physical hazards which may be unguarded or ineffectively guarded, poor housekeeping, defective equipment, unsafe building conditions, improper working conditions, improper planning, improper dress or apparel, that is, no goggles, gloves or masks, or unsuitable clothing. In the 88%, which is called supervisory, we find faulty inspection, inability of employee—meaning inexperience,



unskilled, ignorant, having poor judgment, poor discipline, lack of concentration, unsafe practices, mentally unfit, and physically unfit.

We speak of waste of material, waste of time



There is something wrong here, for this method of lowering pipe invites accident. These men should take the pipe off their shoulders at the same time, and lower it with their hands.

and money, but few of us realize the waste of human energy, due to time lost on account of accidents. When we speak of human energy lost, we refer not only to productive hours, but to the hours which should be given to healthful recreation and enjoyment. Most of this loss can be prevented if, in our accidents, we seek to find out the real cause and correct the conditions.

Dodging Responsibility

When we have a task to do, we should find out as much as we can about it and do it with all the ability we have.

If we make a mistake, admit it and be big enough to take the consequences.

We grow by trying, but our trials are not always successful, so that at some time all of us make mistakes.

Each of us feels, perhaps, that his own special work is a world of its own, independent of others, but really we are interdependent—our work, our relationships dovetail, and an error in any part, sooner or later, affects the whole organization.

To each of us has been given a definite responsibility. If we fail to carry our bit of the burden, we are throwing more upon some one else. If we deny our share of responsibility for errors, we are simply making some one else pay the penalty for our lack of thought.

To the conscientious person, it is disheartening and almost discouraging to be shunted from pillar to post when he sets out to find the source of an error or misinformation, but we have this cheering thought; the employee who repeatedly dodges his responsibility is building

a slippery little slide that will land him at the bottom with such a jolt that he will wonder what happened, and others will wonder why it didn't happen before.

Let this thought sink in: Responsibilities gravitate to the man who can shoulder them; power flows to the man who knows how, and the man who knows how, is not the one who, in the phrase of the day, passes the buck to some one else.

Safety First

The words "Safety First" are simply two words which stand for a great principle, but count for nothing unless we understand its full meaning and live up to the spirit of it. If we believe in that principle; if we believe it is better to live a comfortable life without being



crippled or maimed; if we believe it is better to be careful than crippled; if we believe in that, then we must rally to the support of that principle not only by being careful ourselves, but by bringing our fellow employees to the support of that principle. That can best be accomplished by continuously talking Safety in a serious minded way to men with whom we come in contact in our daily work, impressing upon them the idea of carefulness and pointing out clearly the unsafe things you know in your own mind that cause accidents.

ABANDONED PLANTS: In authorizing the Coast Counties Gas and Electric Company to abandon its Pittsburg, California, manufactured gas plant, the State Railroad Commission gave notice to the Company that the Commission will not fix gas rates in the future to produce a return on the "present value" basis of property which has been abandoned under a plan of amortizing the investment therein and is no longer in service.



NEWS FROM THE SOUTHERN



Young John Creahan Kern, son of J. E. Kern, Sales Supervisor in the New Business Department, is literally, "sitting up and taking notice."

Frank E. Burton, member of the Distribution Department, was married during the early part of January.

The latest reports state that Lou Dell, the grandfather, is doing fine! Jack Leon, 7 pounds, arrived December 19, 1930. He is the young son of Leo H. Dell. Lou,—the grandfather,—is happy, hence the unusually proud smile the last few days.

Ernest Schnell of the Distribution Department passed away at his home January 6th. Mr. Schnell was employed as a watchman at the time of his death. Sincere sympathy is extended the bereaved relatives from his many friends at the Southern.

CONSERVATION LAW: California's gas conservation law has been held constitutional by the District Court of Appeals of Los Angeles. Temporary restraining orders issued earlier in the year against Santa Fe Springs operators will stand.

Elephants ordinarily sleep while standing. They have been known to remain standing even after death.

EASTERN

A new service has been installed on South "E" Street in San Bernardino, for the Claude Neon Electric Sign Company, to be used for glass furnaces and heat.

Several employees of the San Bernardino Office motored to the mountains December 11th, to take part in the snow carnival. Mr. George Merkle and Walter Lier of the Engineering Department were hosts over the weekend to a number of Hollywood celebrities. Skiing, skating and other winter sports were indulged in. Mr. Lier formerly resided in Switzerland and is an expert on the skis.

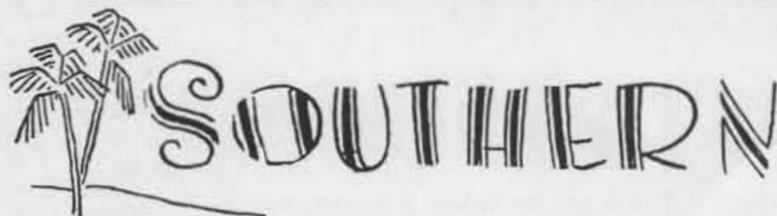
The San Bernardino Office presented R. E. Sams, former Chief Clerk of that office, with an attractive fountain pen desk set as a token of remembrance. Mr. Sams has been transferred to the Banning District, where he has been promoted to Acting District Agent. E. A. Stowe will fill the position vacated by Mr. Sams and we wish each every success in his new position.

Dr. S. W. Cummings, father of Ivan Cummings of the Redlands Office, passed away January 1st.

Dr. Cummings, one of the most widely known Baptist leaders in the state, had been failing in health since last autumn. A major operation was necessary during the holiday season, and complications resulted in his death shortly after the New Year had been ushered in. With him at the time were his wife, his daughter, and seven sons.

Dr. Cummings was head of the Department of Religious Education, University of Redlands.

UNDER CONSTRUCTION: Gas lines under construction in the United States have a total capacity of almost 500,000,000 cubic feet of natural gas a day.



The members of the Redondo Office were greatly surprised last week when Eugene Pettengill of the Collection Department passed out candy and cigars announcing his marriage to Miss Eleanor Atherton. The ceremony took place in Yuma, Arizona, during August.

Marie E. Walters, order clerk at Redondo, recently entertained several employees of the Redondo Office with a dancing party at the Rainbow Gardens.

The call of the snow-capped mountains lured many of the employees of the Southern Division from their warm sunshiny climate this month. Paul W. Walters, District Agent at Redondo, and Albert Meddlcott, meter reader, enjoyed the hiking and fun at Mount Baldy, while Big Pines enticed Eddie Florentine, order collector, and Mildred Barker of the Gardena Office. Doris Dearwester, H. C. Fortner, and Eugene Pettengill of the Customers' Department at Redondo, and Bill Hand of the New Business Department at Los Angeles spent the week-end with friends at Lake Arrowhead.

Excitement reigned supreme recently at the home of Louis Field, Jr., member of the Distribution Department, when a fire broke loose in the front part of the house. With the able assistance of the Redondo Beach Fire Department the angry flames were quenched and

peace and quiet were restored. The fire originated in the Christmas tree.

THE following letter of appreciation was received from Dr. Gustav A. Briegleb, Minister St. Paul's Presbyterian Church.

Dear Friends:

May I take this opportunity of expressing the appreciation and thanks of our congregation, as well as myself, for the wonderful kindness shown to our church in installing radiators in store buildings we are to use for the next four months, during the time our new edifice is under construction.

To Mr. Schafer we owe a debt of gratitude, and also I believe to Mr. Warren and Mr. Ziegelmeier.

With kindest regards, I am,

Very cordially yours,

G. A. BRIEGLER.

The Southern's trio, Lou Dell, Supervisor of employees, D. H. Wheaton, Sales Supervisor, and John Michelmore, member of the Engineering Department, have been doing a great deal of entertaining. They received a hearty welcome, when they sang their "Barnacle Bill" number at a recent meeting of the Glendale Kiwanis Club in Palmdale. The members of the Glendale organization, of which S. C. Singer, Manager of the Northern Division, is Secretary, were guests of the Palmdale group.

The trio, with William Stone, of the Measurement Department replacing Don Wheaton, sang for the Canadian Society at the Alexandria Hotel, Los Angeles, January 10th.



Rough and tough, is this bad, bold, "Barnacle Bill." He is Lou Dell, Supervisor of Employees. The "fair young maiden" is John Michelmore, of the Engineering Department. They are the principals of the Southern's talented trio, that have entertained before many of our Company's Department Head Meetings and several service clubs in Southern California. William Stone of the Measurement Department, not pictured here, is the third regular member of the trio.



FROM THE COMPRESSORS



Occasionally something which appears on this page is original. If it is not, we include it because we think it is good. Any editor who sees something of his here should accept the compliment as payment for our borrowing what he has borrowed before us.

Private advices from New Haven are to the effect that Yale officials are not very busy denying reports that Chapel Street is to be rechristened Rue de Vallee.

Mary: "Joe treats me with a sort of half aloofness."

Ann: "Well half aloof is better than none."

The professor who sent his wife to the bank and kissed his money goodbye, wasn't so absent-minded at that.

"Here's something queer," said the dentist, who had been drilling and drilling into a tooth. "You said this tooth had never been filled, but I find flakes of gold on the point of my drill."

"I knew it," moaned the patient. "You've struck my back collar button."

"Do you want gas?" asked the dentist as he placed the patient in the chair.

"Yes," said the absent-minded professor. "About five gallons—and take a look at the oil."

Lady: "What time does the next train come in?"

Old Station Agent: "I've told you five times, madam, that it arrives at 4:44."

Lady: "I know it, but my little boy likes to see your whiskers wobble when you say 4:44."

The Accused: "I was not going forty miles an hour—not twenty—not even ten—in fact, when the officer came up I was almost at a standstill."

The Judge: "I must stop this or you will be backing into something. Forty shillings."

Manager: "I'm afraid you are ignoring our efficiency system, Smith."

Smith: "Perhaps so, sir, but somebody has got to get the work done."

"Which way was I walking when I met you?"

"Why, north, professor."

"Ah!" he replied. "Then I've had lunch."

First Tourist: "I thought you said if I was sociable to the Judge that he'd let me off."

Second Tourist: "Well, didn't it work?"

First Tourist: "Sure did—in reverse. I said: 'Good morning, Judge. How'saboy, today?'"

"And what did he say?"

"He said: 'Fine—ten dollars.'"

Then there's the Scotchman who was nibbling on a frankfurter and chewed off his thumb before he realized it.

"Really, Bill, your argument with your wife last night was most amusing."

"Wasn't it, though? When she threw the axe at me I thought I'd split."

Despite the popularity and use of vacuum cleaners and carpet sweepers, 37,000,000 brooms were manufactured in the U. S. in 1929. Some one asked "what are they used for." Well, a woman can't chase a dog or a cat or threaten a tramp with a vacuum cleaner or carpet sweeper, can she?

Englishman (eating a fish cake for the first time)—"I say, old chap, something has died in my biscuit."

Lodger—"Something must be done to this room, Mrs. Jones. I actually saw a couple of rats fighting in that corner last night."

Mrs. Jones—"Well, what do you expect to see fight for two shillings a night—a couple of Carneras?"

"That's getting out of a tight place," said the tourist as he crossed the border from Scotland into England.

"Come at once. Our baby swallowed a dime," an excited Scotchman telephoned a doctor.

"How old is it?" asked the doctor.

"1894," answered the Scot promptly.

Trusty: "I'll do anything I can, Warden."

Warden: "Well, don't put yourself out."

It is easy to identify the owner of the car: he is the one who, after you pull the door shut, always opens it again and slams it harder.



"My heart is with the ocean," cried the poet, rapturously.

"You've gone me one better," said his seasick friend, as he took a firm grip on the rail.

SOUTHERN CALIFORNIA GAS COMPANY

Cities, Towns and Communities Served

Central Division

Beverly Hills
Los Angeles
Westwood

Eastern Division

Alberhill
Alessandro
Alta Loma
Arlington
Banning
Beaumont
Bloomington
Colton
Corona
Crestmore
Cucamonga
Del Rosa
Elsinore
Fontana
Grant
Guasti
Hemet
Highgrove
Highlands
La Sierra
Loma Linda
March Field
Mentone
Mira Loma
Norco
Palm Springs
Pedley
Perris
Redlands
Rialto
Riverside
San Bernardino
San Jacinto
Wineville
Yucaipa

Midway Division

Arbuckle
Delano
Greely
Highland Park (Kern County)
Lebec
McFarland
McKittrick
Rosedale
Shafter
Tehachapi
Wasco

Northern Division

Alta Canyada
Eagle Rock
Burbank
Flintridge
Girard
Glendale
Granada
La Canada
La Crescenta
Lancaster
Mojave

Montrose
Newhall
North Hollywood
North Los Angeles
Owensmouth
Pacoima
Palmdale
Reseda
Roscoe
San Fernando
Saugus
Sunland
Sylmar
Tujunga
Universal City
Van Nuys

San Joaquin Valley Division

Armona
Corcoran
Dinuba
Exeter
Farmersville
Hanford
Kingsburg
Lemoore
Lindsay
Parlier
Porterville
Reedley
Riverdale
Strathmore
Tulare
Visalia

Southern Division

Artesia
Bellflower
Clearwater
Compton
Downey
El Segundo
Gardena
Hermosa Beach
Hollydale
Home Gardens
Huntington Park
Hynes
Lawndale
Lomita
Lynwood
Manhattan Beach
Maywood
Moneta
North Long Beach
Norwalk
Palos Verdes
Redondo Beach
Riverside
Santa Fe Springs
South Gate
Torrance
Vernon
Walnut Park

Turlock-Madera Division

Madera
Turlock

HELEN WEBSTER . K F I . K G O . WEDNESDAYS, 10:50 A. M



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