

GAS NEWS

Vol. IX No. 4

SOUTHERN CALIFORNIA GAS COMPANY

APRIL, 1932



NOTICE TO STOCKHOLDERS

This issue of GAS NEWS contains a complete financial report of the Southern California Gas Company for the fiscal year ending December 31, 1931

SOUTHERN CALIFORNIA GAS COMPANY

Officers

A. B. MACBETH *President*
A. C. BALCH *Vice-President*
BEN R. MEYER *Vice-President*
T. J. REYNOLDS . . . *Vice-Pres.-General Counsel*
F. J. SCHAFER *Vice-Pres. in charge of*
Manufacture, Distribution & Sales
WM. MOELLER, JR. . . . *Vice-Pres. in charge of*
Natural Gas Production and Transmission
C. L. WHITEHILL *Secretary*
W. E. ROBBINS *Treasurer*

Directors

A. C. BALCH C. O. G. MILLER
JOHN G. BULLOCK R. W. MILLER
GARRETSON DULIN WILLIAM MOELLER, JR.
HAROLD JANSS STUART O'MELVENY
A. B. MACBETH T. J. REYNOLDS
BEN R. MEYER F. J. SCHAFER

General Office

950 South Broadway

F. M. Banks, *General Superintendent of Sales*
R. M. Bauer, *Gas Supervisor and Office Engineer*
S. W. Binckley, *Special Engineer*
R. R. Blackburn, *Supervisor, Personnel, Claims, and*
Safety
A. B. Cates, Jr., *Asst. Auditor, General Accounting*
A. L. Cleveland, *Land and Right-of-Way Agent*
G. A. Detrick, *Auditor*
C. M. Grow, *Manager, New Business Dept.*
F. H. Holden, *Supervisor, Advertising and*
Publication
F. C. Ingram, *Manager, Customers' Dept.*
L. T. Rice, *Assistant Counsel*
E. H. Wetlaufer, *Rate and Appraisal Engineer*

Los Angeles Operating Headquarters

1700 Santa Fe Avenue

H. P. George, *General Superintendent, Natural Gas*
Production and Transmission
Lee Holtz, *General Superintendent, Manufacture*
and Distribution
E. Henderson, *Asst. General Supt., Natural Gas*
Production and Transmission
N. L. Morse, *Supervisor of Purchases*
L. L. Biggs, *Unaccounted for Gas Engineer*
J. W. Cleland, *Civil Engineer*
F. H. Coble, *Meter Shops G.O. 58 Engineer*
C. M. Cole, *Superintendent of Construction*
J. Q. Ewing, *Asst. Auditor, Construction and Stores*
Accounting
E. L. Keasling, *Chief Gas Dispatcher*
G. C. Knox, *General Storekeeper*
G. A. Porter, *Educational Engineer*
L. M. Spencer, *Geologist*
Geo. Wade, *Paymaster*
B. G. Williams, *Measurement Engineer*

Manufacture and Distribution

Central Division

Division Headquarters—Los Angeles

F. S. Honberger, *Acting Division Superintendent*
H. L. Ziegelmeyer, *District Agent, Los Angeles*
A. L. Lynch, *District Agent, Beverly Hills*

Northern Division

Division Headquarters—Glendale

S. C. Singer, *Division Manager*
Eugene Boose, *Division Superintendent*
R. S. Cheatham, *District Agent, Glendale*
W. G. H. Russell, *District Agent, Van Nuys*
G. W. Hackley, *District Agent, Burbank*

Southern Division

Division Headquarters—Redondo

J. F. Murray, *Division Manager*
H. C. Abbott, *Division Superintendent*
Paul Walters, *District Agent, Redondo*
Samuel King, *District Agent, Compton*

Eastern Division

Division Headquarters—San Bernardino

H. C. McAllister, *Division Manager*
J. S. Edwards, *Division Superintendent*
O. Jacobi, *District Agent, San Bernardino*
C. A. Gillespie, *District Agent, Riverside*
Hugo Tieck, *District Agent, Redlands*
R. E. Sams, *Acting District Agent, Banning*

San Joaquin Valley Division

Division Headquarters—Visalia

C. M. Eyman, *Division Manager*
F. H. Biddington, *Division Superintendent*
Geo. W. Wiley, *District Agent*

Production and Transmission

Basin Division

Division Headquarters—Los Angeles

R. L. Cook, *Acting Division Superintendent*

Kettleman Division

Division Headquarters—Avenal

J. W. Farner, *Division Superintendent*

Midway Division

Division Headquarters—Taft

W. C. Cameron, *Division Superintendent*
F. Fischer, *District Agent, Taft*

Ventura Division

Division Headquarters—Ventura

Arthur B. Newby, *Division Superintendent*

GAS NEWS

SOUTHERN CALIFORNIA GAS COMPANY

VOL. IX

LOS ANGELES, CALIFORNIA, APRIL, 1932

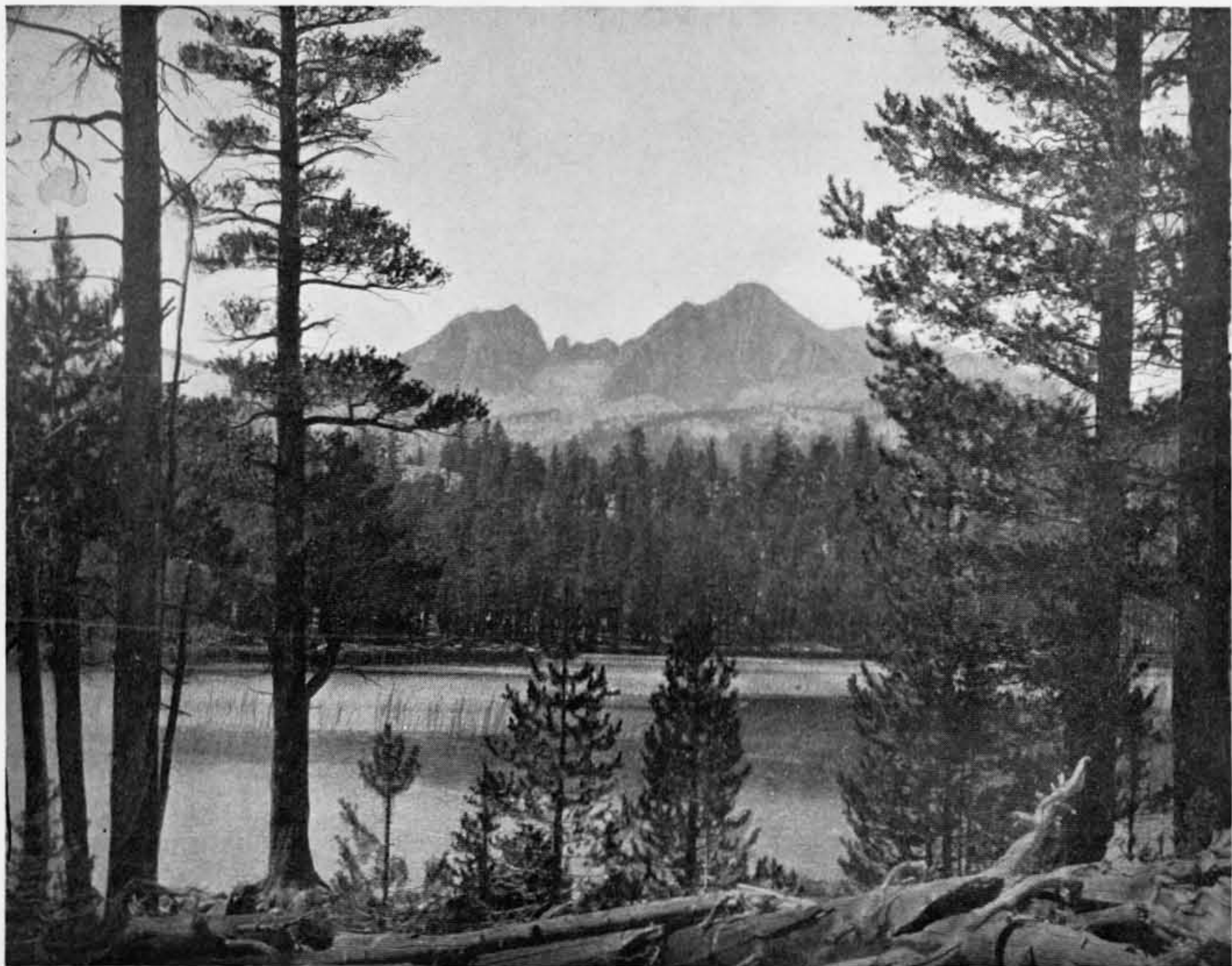
No. 4

TULARE COUNTY—LAND OF GIANTS

Second of a series of articles descriptive of territory served by Southern California Gas Company.

HAD Jack followed the Grapevine — on U.S. Highway Ninety-nine — he would have come eventually to Tulare County. There he would have found two giants: General Sherman tree, largest living thing in the world, and Mount Whitney, highest peak in the United States.

Tulare County has other points of distinction. It is about the size of the State of Connecticut; it is almost exactly in the geographical center of California; it ranks sixth, according to the Department of Agriculture, among the counties of the Nation in agricultural production.



Kaweah Peaks from Moraine Lake, Sequoia National Park.

Of the 3,158,000 acres of the county, 142,564 bear deciduous and citrus fruits, 150,560 are devoted to grain, 47,263 to cotton, 58,851 to alfalfa, and 817,736 acres are pasture land.

The population of the county, according to the most recent count, is 77,375, and is almost entirely Caucasian. There are more than fifteen thousand pupils in the primary and grammar schools, and nearly four thousand in the eighteen or nineteen high schools. There is a Carnegie library in every incorporated town, and the county maintains a system of traveling libraries which visit every community on a regular schedule.

SCENIC GRANDEUR

At this time of the year the visitor is more interested in scenic attractions than in agricultural accomplishment or educational facilities. And Tulare County has much to offer those who are seeking beauty.

In the northeastern portion of the county, on the western slope of the Sierra Nevadas, is Sequoia National Park in which there are



Wild life in Sequoia National Park.

twelve groves of Sequoia Washingtonia (*Sequoia Gigantea*). In these groves are more than a million Sequoia trees, of which at least twelve thousand exceed ten feet in diameter. In the Giant Forest is the General Sherman tree, 279.9 feet in height and 36.5 feet in diameter, the largest living thing and one of the oldest. Here also are the Abraham Lincoln, 270 feet high, and the William McKinley, 290 feet high.

"FOREST PRIMEVAL"

Of these great trees Edmund Mitchell has written:

"There are no living things today on the wide earth like unto these giant Sequoias. In their presence, emblems of permanence, the same yesterday, today and tomorrow, throughout the span of any one single human life, the insignificance of man and all his works stands revealed. There are living



Above—Fig packing plant of Beckwith Company, Reedley. Below—Plant of Lindsay Ripe Olive Company, Lindsay, largest olive packing plant in the world.



General Sherman Tree, Sequoia National Park. Note the horse at the foot of tree. This photograph was made by the U. S. Forest Service especially for GAS NEWS.



Grapes cut and placed on paper in the sun to be dried to raisins.

Sequoias in the National Park whose age certainly exceeds 5000 years. The tiny seed from which these germinated fell at a date before human records begin. The trees were already giants of the forest, well-nigh a thousand years old, when the great Pyramid of Gizeh was being built—the oldest enduring monument reared by mortal hands. When the infant Jesus was cradled at Nazareth, their age was already numbered by

thirty centuries. They have witnessed the coming and the passing of a dozen civilizations from that of Babylon onward; they have lived through all the battles and campaigns chronicled in history; death in their time has mown down twenty thousand generations of men, but they still stand—stalwart, sound to the core, good for another cycle of centuries.”

Another group of big trees is included in Balch Park, a beautiful tract of 160 acres which was presented to the county by Mr. and Mrs. A. C. Balch. Mr. Balch is a Vice-President of our Company. Photographs of



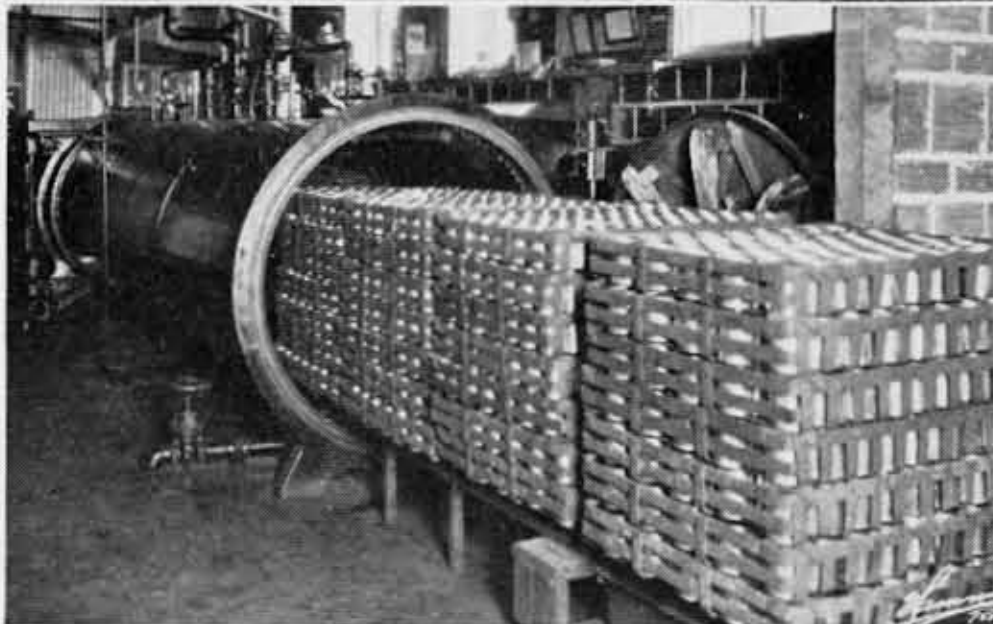
Boswell cotton gin and oil mill, Corcoran.

Balch Park will appear in the May number of GAS NEWS.

HUNTING AND FISHING

Crystal Cave, Mineral King, and Kern River Canyon afford scenery of unsurpassed grandeur. Hunting and fishing in Tulare County are as fine as can be found anywhere. Roads are good, and excellent camping and lodging facilities are available at most of the beauty spots.

Mount Whitney, reaching 14,501 feet



Above—Tagus Ranch, Tulare, where ten per cent of all the peaches packed in California are produced. On this ranch are six thousand acres in peaches, apricots, cotton, and other products. Left—Sterilizer in plant of Lindsay Ripe Olive Company. Right—Adohr Creamery Company, Tulare.

into the clouds, is located within the boundaries of Tulare County. From Mount Whitney, highest peak in the States, Death Valley, the lowest point, can easily be seen.

FRUIT PRODUCTION

Tulare County is a great fruit country. About forty thousand acres are devoted to oranges, and from six to eight thousand carloads are shipped each year. The export value of the 1930 crop of citrus fruit was in excess of fourteen million dollars. Tulare oranges have consistently won high awards for quality at the National Show at San Bernardino. Peaches in a normal year bring in more than a million and a half dollars, and the annual grape and raisin crop is worth close to three and a half millions. The export value of olives was in 1930 about half a million, while figs brought in more than a third of a million.

The total export value of dairy products, cattle, hides, and tallow in 1930 exceeded seven million dollars. Tulare ranks among the four leading cattle counties of the State. Hogs bring in close to four hundred thousand a year. The export value of poultry



A well laden orange tree, Porterville.

and eggs is more than half a million annually.

Cotton is one of the important crops of the county; soil and climate are said to be ideal. The export value of this crop in 1930 was almost three million dollars.

SUBTROPICAL CLIMATE

The climate of San Joaquin Valley, in which Tulare County is located, is sub-



Acreage planted to watermelons, Porterville.



An orange packing plant in Tulare County.

tropical, as it is in the latitude of Algeria and Southern Spain. Temperature and general climatic conditions show remarkably little variation the year 'round. Professor Alexander McAdie in his report on the climatology of California, wrote:

"Regarding the general climatic features of the San Joaquin Valley, the precipitation is lower than might be expected, there being practically a rainless period from May to September. In some seasons there are afternoon thunderstorms in the foothills and occasional light rains. Of a seasonal rainfall amounting to about ten inches in the central portion of the valley, less than half an inch falls during the months of June, July, August, and September. The month of greatest rainfall is December, with an average of less than two inches. Notwithstanding the somewhat limited rainfall, the valley and foothill regions constitute the chief agricultural regions of the State. Apricots, cherries, almonds, walnuts (Persian or English), peaches, pears, plums, grapes, figs, and olives are grown successfully. Citrus fruits of all kinds flourish in the foothill section. It may also be pointed out that this is the only section of the United States in which raisin-making is carried on. . . ."

NATURAL GAS SERVICE

In an official bulletin issued by the Tulare County Board of Trade, enumerating the resources and advantages of the county, is the statement: "The Southern California Gas Company now supplies the county with natural gas." Headquarters of the San Joaquin Valley Division of the Company is located in Visalia, county seat.

FOOD CRAFT SHOP OPENS

THE Food Craft Shops, a national organization, recently opened its first Pacific Coast Shop with a luncheon in its new headquarters at 718 South Broadway. Present at the dinner were a group of Los Angeles business men, prominent among them many representatives of the local gas companies.

The purpose of the Shops, according to its founder and vice-president, Margaret East-Forbes, is to render a service to women's organizations and clubs, by giving them a dignified place of meeting, helping them raise funds, and pointing out to them the best in foods and household appliances. The artistically decorated room is fitted with attractive wicker chairs and bridge tables, besides a large grand piano.

The Natural Gas Bureau, comprising the three gas companies, the Southern California Gas Company, the Los Angeles Gas and Electric Corporation, and the Southern Counties Gas Company, have sponsored a complete display of gas appliances, including new gas ranges, automatic waterheaters, and gas refrigerators. Besides, the kitchen of the shop itself is completely "gas equipped."

The United States has had several periods of "hard times." Those that stand out in American history began in 1837, 1873, 1893, 1907, and 1929. The panic of 1873 is generally considered to have been the worst for persistence and wide spread effect.

China was the only country that bought more American goods in 1931 than in 1930, reports the Department of Commerce. Our exports to China last year were valued at \$97,880,000.

METER READING AT LAKE ARROWHEAD

WHEN gas was installed in the Lake Arrowhead District in August, 1931, one of the meter-readers in the San Bernardino District was very anxious to have the job of reading that area. He was given the job and for the first few months all was fine, as the weather in the mountains was delightful. Just after the first real storm, it was necessary to read this area and it was then that the meter-reader endeavored to trade with someone else. Each successive month since that time the snow has been deeper and the reading of the meters more difficult, until, on March 1st, it was impossible to read all the meters in this area due to the depth of the snow, which was four feet on the level. In the majority of cases the meters are located alongside the houses and the snow had drifted until it reached the eaves and it was impossible to dig them all out. The meter-reader was equipped with an ordinary shovel and it required considerable effort to get to the meter, even in favorable locations.

At the height of the most severe storms the residents of this area were without electricity, water, and telephone service, but gas service was maintained at all times with no interruptions.

The latest rumor is that the meter-reader who reads this area is endeavoring to trade routes with the reader in Palm Springs—but for the winter only.

BOWL CONCERTS SCHEDULED

THE opening of Hollywood Bowl's eleventh annual season of "symphonies under the stars" has been set for July 5th. The concerts will run continuously for eight weeks and will close on August 26th.

Every effort will be made, according to the management, to make the current season the greatest in Bowl history. Thousands of visitors coming here for the Olympic Games are expected to make the pilgrimage to the Bowl. It is probable that a number of novelties will be provided during the Olympiad, though no additional concerts are planned. Three Europeans are under consideration to conduct the opening week.



Above—Southern California Gas Company car at Lake Arrowhead. Below—The photographer swears that in these shoes is a man reading a gas meter.

PRELIMINARY arrangements for the annual meeting of the Natural Gas Department, American Gas Association, are well advanced, and the several committees in charge are hard at work to make this gathering at Tulsa, Oklahoma, May 9th, 10th, and 11th a conspicuous success.

H. H. Rogers, who is regarded as one of the most prominent oil and gas men in the Southwest, has accepted an invitation to speak on "Oil, Gas, and the Banks in Relation to Public Welfare." Apart from his knowledge of the industry, Mr. Rogers is well-informed on banking practices.

SOUTHERN CALIFORNIA GAS COMPANY
(Incorporated in California)

Balance Sheet, December 31, 1931

ASSETS

Plant Properties and Franchises	\$64,643,280.05
Securities Owned	42,287.50

Current Assets:

Cash on hand and in banks	\$ 776,952.15
Cash on deposit with affiliated company	1,177,146.27
Notes receivable	65,425.04
Accounts receivable, less reserve	1,770,820.12
Materials and supplies (at average cost)	727,818.69
	4,518,162.27
Total current assets	4,518,162.27

Deferred Charges:

Unamortized bond discount and expense	\$1,618,270.33
Prepaid taxes, insurance, and rents	38,263.24
Miscellaneous	70,205.98
	1,726,739.55
Total deferred charges	1,726,739.55
Total	\$70,930,469.37

CERTIFICATE

SOUTHERN CALIFORNIA GAS COMPANY:

We have examined your accounts for the year ended December 31, 1931, and in our opinion the above balance sheet and the accompanying statements of income and surplus set forth, respectively, your financial condition at December 31, 1931, and the results of your operations for the year ended that date.

Los Angeles, March 11, 1932.

HASKINS & SELLS.

SOUTHERN CALIFORNIA GAS COMPANY
(Incorporated in California)

Balance Sheet, December 31, 1931

LIABILITIES

Capital Stock:

PREFERRED:

6% cumulative—old series (authorized, 160,000 shares of \$25.00 each; outstanding, 159,692 shares) . . . \$3,992,300.00

6% cumulative—Series A (authorized, 2,240,000 shares of \$25.00 each; outstanding, 22,268 shares) . . . 556,700.00

Collections on instalment sales—264 shares . . . 5,694.02

Total preferred capital stock . . . \$4,554,694.02

Common (authorized, 1,600,000 shares of \$25.00 each; outstanding, 352,000 shares) . . . 8,800,000.00

Total Capital stock \$13,354,694.02

Funded Debt 27,316,000.00

Current Liabilities:

Accounts and wages payable \$ 613,052.00

Dividends payable 68,235.66

Accrued bond interest 445,266.68

Accrued taxes, including Federal income . . . 1,161,327.93

Total current liabilities 2,287,882.27

Consumers' Deposits:

Guaranty \$ 214,598.35

Construction 1,345,102.98

Total consumers' deposits 1,559,701.33

Reserves:

Depreciation and depletion of properties . . . \$17,040,199.02

Insurance 849,121.77

Contingencies 1,447,839.89

Miscellaneous 203,025.24

Total reserves 19,540,185.92

Premium on Common Capital Stock 2,400,000.00

Surplus 4,472,005.83

Total \$70,930,469.37

SOUTHERN CALIFORNIA GAS COMPANY

Statement of Income

For the Years Ended December 31, 1931 and 1930

	Year Ended December 31,	
	1931	1930
Operating Revenues	\$15,956,581.73	\$16,655,600.92
Operating Expenses and Taxes:		
Operating expenses and maintenance charges, including gas purchases	8,293,240.73	8,741,556.00
Federal, state, and municipal taxes	1,672,666.62	1,729,314.97
Total	9,965,907.35	10,470,870.97
Income from Operations	5,990,674.38	6,184,729.95
Interest and Miscellaneous Non-Operating Income	83,736.59	105,800.94
Gross Income	6,074,410.97	6,290,530.89
Less:		
Interest (exclusive of interest charged to construction)	1,426,436.52	1,331,799.12
Amortization of bond discount and expense	63,511.37	52,591.12
Miscellaneous	17,581.21	33,838.53
Total	1,507,529.10	1,418,228.77
Net Income before Providing for Depreciation, Depletion, and Retirements	4,566,881.87	4,872,302.12
Provision for Depreciation, Depletion, and Retirements	1,798,431.14	1,932,353.07
Net Income	\$ 2,768,450.73	\$ 2,939,949.05

Analysis of Surplus

For the Year Ended December 31, 1931

Surplus, January 1, 1931, as adjusted		\$5,042,453.79
Surplus Credits:		
Net income for the year	\$2,768,450.73	
Construction advances forfeited	271,949.43	
Miscellaneous	40,036.81	
Total	3,080,436.97	
Gross Surplus		\$8,122,890.76
Surplus Charges:		
Dividends on preferred and common stock	\$2,736,707.60	
Discount and expense on bonds retired	887,910.09	
Miscellaneous	26,267.24	
Total	3,650,884.93	
Surplus, December 31, 1931		\$4,472,005.83

NATURAL GAS AIDS CAN INDUSTRY

IN a recent motion picture, Will Rogers, fully clad in knight's armor, was lifted by crane on to his charger.

"Any instructions, Sir?" his valet asked.

"Yes," said Will, "don't sell American Can short!"

A GAS NEWS reporter, accompanied by H. H. Foreman, Industrial Sales Engineer in the New Business Department of the Southern, toured the Los Angeles plant of the American Can Company. At the end of the trip, he said, "Double check, Mr. Rogers!"

Coffee cans, tuna cans, milk cans and sardine cans, pepper cans and large five gallon tins. Tins that rolled through overhead belts, into one line and out the other at the rate of 300 per minute, large tins in smaller orders with delicately colored lithographed exteriors, hand soldered. A new shaped tin to visualize to the demanding public the popular Spanish tamale. A new designed milk can. Machines that tested for imperfections invisible to the naked eye. Men and girls who watched their machines with eagle like eyes and adjusted them with trained fingers. These were but a few of the impressions gained by the two employees from the gas company.

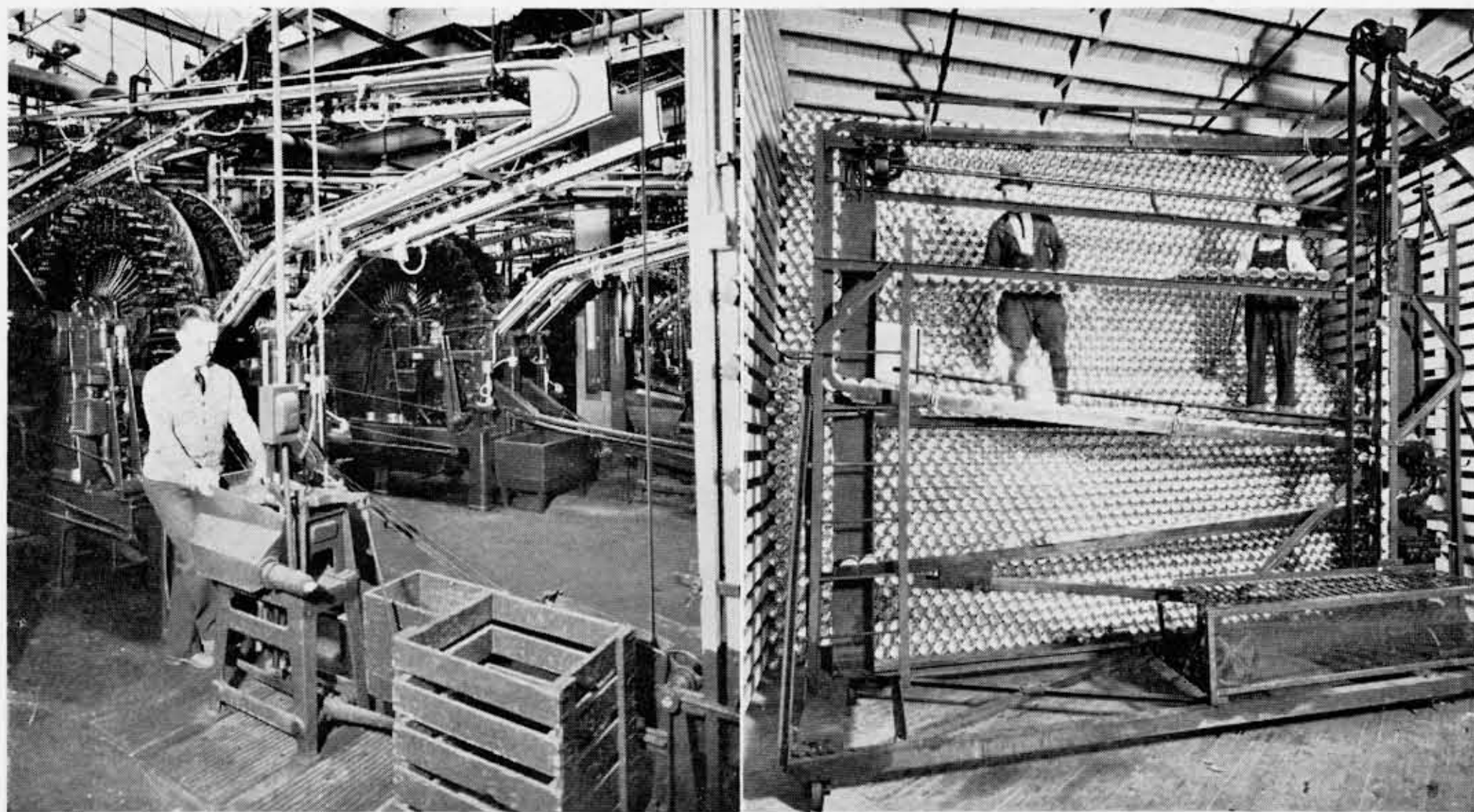
LARGE FACTORY

Machinery valued at over a million dollars, is set up at the American Can Company in Los Angeles, to take care of the canning needs of Southern California. The factory covers approximately 50 acres of ground, and employs about 400 people during a period of average production. There are seven buildings, including the office and warehouse.

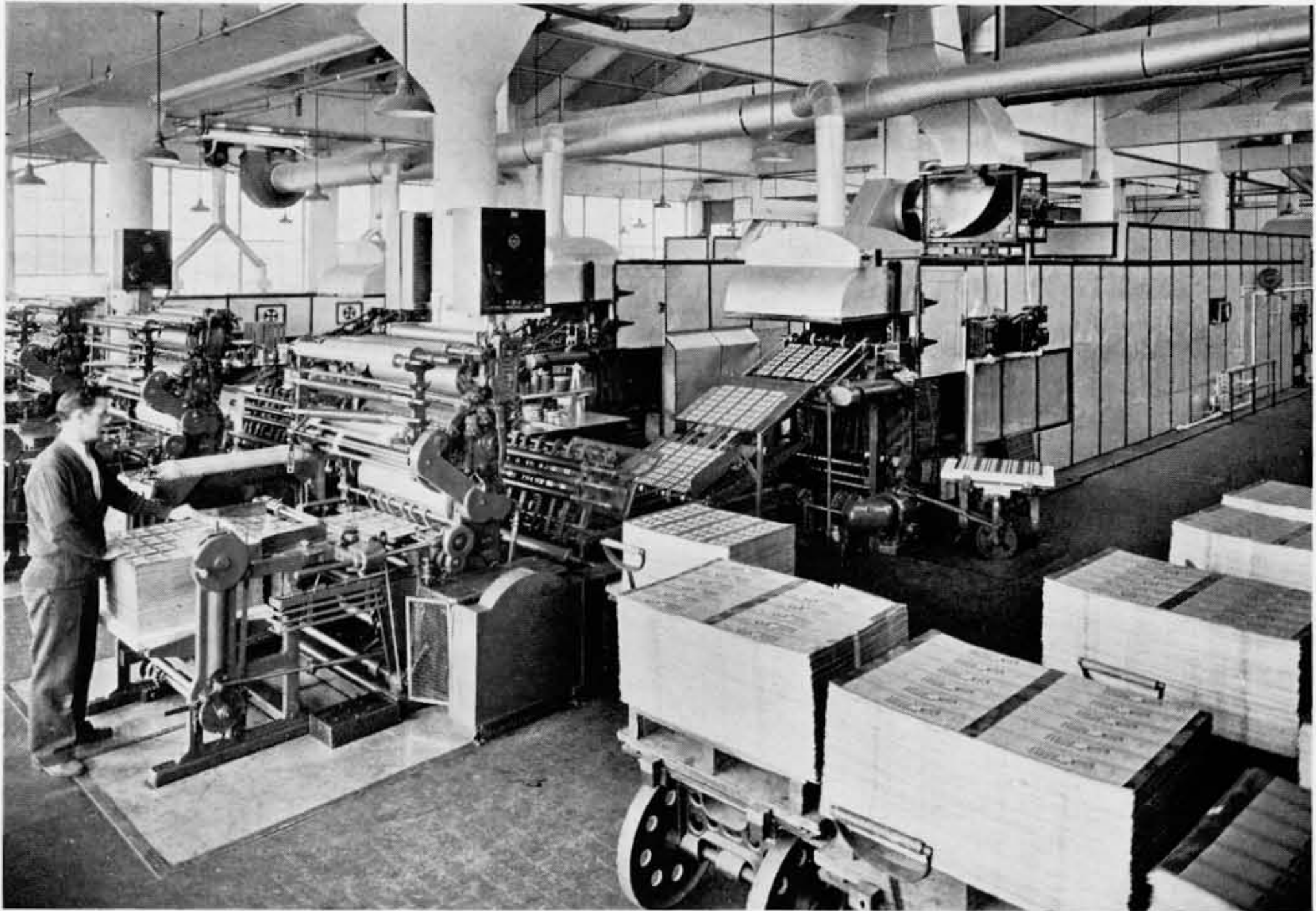
The sheet tin arrives from the east in small but heavy crates, each weighing from 150 to 200 pounds. Each sheet is approximately 26 inches by 32 inches. The sheets are taken to the cutter, a machine consisting of two units, where two cuts are made with one feeding. The strips of tin, cut to size, are taken to the body machine. This machine is arranged to give the maximum number of the can, crimping the edge and soldering the seam. The "body" is now ready for the cap.

CAPS

Caps for the tins are manufactured at the opposite end of the factory, the body and the cap coming together in a single operation. Rough patterns for the caps are



Left—Looking down a battery of testing machines. The workman is checking the machine by hand testing one of the rejected tins. Right—Stacking the cans in a bin, preparatory to shipment.



One of the Lithograph presses, where the tins receive their colorful labels. Note how the freshly printed sheets of tin go into the gas-fired oven for baking.

first automatically cut from the sheets of tin by the stamping machines. The dies are so arranged to give the maximum number of caps from each sheet, leaving a minimum wastage. A second machine stamps out the caps from this pre-cut pattern. Contrary to popular belief, the ends of the cans are not soldered to the "body." A gasket machine applies a special fluid around a seam in the outer edge of the cap, this acting as a gasket in contact with the sides of the can.

Only one end of the can is capped, the other end being left open for the packer, who caps and seals the tin after he has filled it with his product.

The "testing machine" is the last unit to handle the can. In this machine the cans as they revolve on a large wheel, are filled with compressed air and temporarily sealed. Any air leaking from the can, causes it to be rejected, the perfect cans continuing on the conveyor to the packing department.

With the object being to keep them clean and dustless, the cans are packed in both cardboard and paper containers. Spur tracks that bring freight cars to the warehouse

door speed the tins to Southern California packers.

COLORFUL LABELS

Possibly one of the most interesting sections of the factory is the Lithographing Department. Here labels are printed directly on the flat sheets of tin, before being sent to the cutting machine. One, two, and three colors are applied to the tin sheet, producing a brilliant and colorful label. These freshly printed sheets are baked in a long, gas fired oven, and then varnished. The accurate controlability of natural gas is a decided advantage in this important operation.

Coffee tins are different in that they are capped on the top and left open on the bottom. The packer fills through the bottom of the can, the caps being supplied by the can company along with the tins. The little metal key that is fastened to the lid of your vacuum packed tin of coffee is welded to the lid before it is stamped on the can.

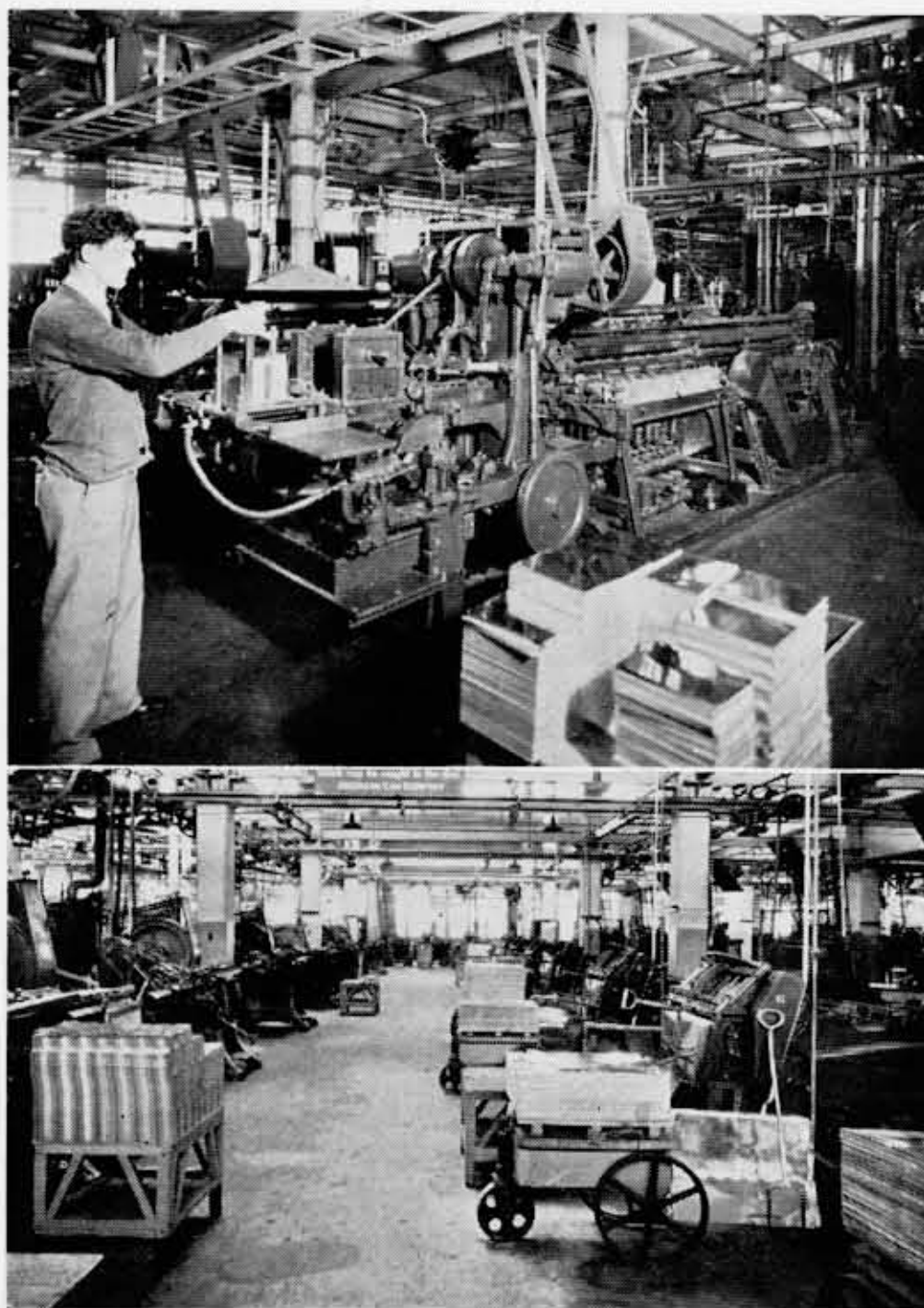
EMPLOYEES' SUGGESTIONS

With an effort to constantly improve the machines, the company more than welcomes new ideas and suggestions from their em-

ployees. It is interesting to note that most of the machines and their improvements have been developed by the employees themselves. In line with new developments, is the constant check of the desires and whims of the buying public. The public is fickle; sardines can not successfully be sold in anything but a flat, rectangular tin. As was pointed out before, tamales are now to be marketed in a tamale shaped tin container. The public is visual minded!

Efficiency is outstanding throughout the factory. Wastage is reduced to a minimum. Trimmings are automatically segregated as they fall from the stamping machines, the larger scraps being sent up stairs for manufacture into smaller size lids, such as tops for spice cans, and the finer trimmings being baled and sent to the San Francisco plant and de-tinned. All cans are constantly checked and inspected in order that they exactly measure up to specifications. An inspector goes from one machine to another with his measuring instruments in hand and his "weather eye" open. All cans are automatically marked with an identification stamp of the factory. The plant is a model of orderliness.

Natural gas from the lines of the Southern plays an important part in the factory of the American Can Company, being used to fire most of the soldering units, and in the large bake ovens of the lithographing department.



Above—The forming machine, where the flat pieces of tin are formed, crimped, and soldered. Below, the presses to the right cut out the rough patterns for the caps from the flat sheets of tin. The presses to the left stamp out the caps from the patterns. A stack of the patterns may be seen to the left.

CALIFORNIA FORESTS PAY DIVIDENDS

THE national forests of California have returned to the State and counties a total of \$4,311,456, to and including the fiscal year 1931, in lieu of taxes on Government owned lands within the national forests. This represents 25 per cent of the gross revenues derived by the U. S. Forest Service from the sale and use of resources within the national forests. An additional \$1,629,161, or ten per cent of the revenues, has been spent in co-operation with the State and counties for construction and improvement of trails and secondary roads within the forests, not including co-operative assistance on forest highways which are part of the State highway system. This makes a total

sum of \$5,940,617 returned to California by the Forest Service. This is the largest return received by any State, the second largest being Oregon which has received a total of \$3,784,861. The average annual return to California from the national forests, including all road work, recreation facilities, and indirect benefits, exceeds by \$346,000 the annual taxable value of Government lands administered by the Forest Service.

AT the British Industries Fair, which was held at Birmingham from February 22nd to March 4th, there was an exhibit of gas equipment which was said to constitute a record in the history of the gas industry. Leading British makers sent their latest products. Many full-scale working models were included in the exhibit.

CO-OPERATIVE RANGE SALE PLANNED

As this is written, leading dealers, manufacturers of gas ranges doing business in Southern California, and the gas companies with headquarters in Los Angeles are about to engage in a co-operative sale of modern ranges. The sale will continue for nine shopping days, from March 28th to April 6th. As far as known, this undertaking is unprecedented in the merchandising of gas appliances.

The feature of the sale is a trade-in allowance on the old range amounting to twenty per cent of the purchase price of a new and modern natural gas range. The object of the sale is threefold: to replace a large number of out-of-date and inefficient ranges with modern ranges, to call to the attention of the public, in a striking and forceful way,

the advantages and conveniences of the new natural gas ranges, and to give to business generally a needed stimulus.

Extensive newspaper advertising of the sale will be done by the three gas companies jointly and by them individually. Twenty-four sheet range posters, now being displayed at approximately one hundred fifty outdoor locations, will be posted with streamers announcing the sale. Attractive window posters, counter cards, and other advertising material will be furnished without charge to dealers by the gas companies. Many dealers and manufacturers are planning extensive advertising. Every indication points to successful accomplishment of the objectives of the co-operative sale.

This Latest Model WEDGEWOOD

MARCH 28 TO APRIL 6



Regular price \$97.50

20% Allowance on your present stove \$19.50

Co-operative Range Sale price \$78

An unprecedented opportunity to own the finest of all modern-day Gas Ranges—the new and radically improved Wedgewood. Turn in the stove you are using at present, no matter how antiquated or obsolete, and receive a 20 per cent allowance on this magnificent new 1932 Model Wedgewood. Beautiful in design, its full porcelain, seamless surface is as easy to clean as a dish. It combines a kitchen table and gas range in one. Equipped with large size, 16-inch, fully insulated oven, heat control, porcelain linings throughout, pull-out-drawer broiler, large roll-out ball bearing utility drawers and Rutz lighter. It has an open cooking-top with enameled grates and burners. If you want greater speed, matchless convenience, immaculate cleanliness and highest quality in a stove come and see this marvelous Wedgewood Table Top Gas Range. Three striking finishes to choose from—green and ivory, all ivory or marble.




This stove can be had with Closed Cooking Top at slight additional cost.

This Special Offer Only for 9 Days—March 28 to April 6

DEALER'S NAME

MARCH 28th TO APRIL 6th

Co-operative Range Sale
Nine Big Days

20% Allowance



for your Old Range on a New and Modern Natural GAS Range

Your old range... regardless of age, condition, or type... will be accepted as 20 per cent of the purchase price of a new and modern natural gas range. Leading manufacturers and dealers in Southern California are co-operating in this modern range sale from March 28th to April 6th... nine big days.

Now is the time to have that modern range you have wanted so long. Automatic oven heat control will make your cooking so much easier and better. An insulated and ventilated oven means an added saving, as well as new kitchen comfort... and food retains its tempting freshness and flavor. With all these and other advantages is the unequalled economy of natural gas. Cooking with natural gas costs as little as a fifth of a cent a person a meal.

See your dealer or gas company during the nine big days of this sale, and look for the Blue Star Seal of the American Gas Association Testing Laboratory on the modern gas range you select.



Southern California Gas Company
950 South Broadway

9 BIG DAYS **MARCH 28 to APRIL 6**

Announcement

Co-OPERATIVE RANGE Sale



20% Allowance

for Your Old Range on a New and Modern Natural GAS Range

HAVE A NEW and modern natural gas range in your home! Your gas appliance dealer will allow you 20% for the range you now use—regardless of size or type—on the purchase of a new gas range. For nine days beginning March 28th, this opportunity is available through the active co-operation of leading dealers and manufacturers.

You will have that automatic oven heat control which makes baking consistently better; the insulated oven that saves fuel and keeps your kitchen cooler. Numerous lighting and broiler conveniences are awaiting your inspection. And beauty! The new natural gas ranges have cheerful colors in many combinations, smooth round corners, perfect designing. Such beauty is worth living with.

Visit your gas appliance dealer or gas company immediately. Remember the dates, March 28th to April 6th. Nine big days!



On the gas range you select, when you visit your gas appliance dealer, look for the Blue Star Seal of the American Gas Association Testing Laboratory.

SEE YOUR GAS APPLIANCE DEALER

SOUTHERN CALIFORNIA GAS COMPANY
LOS ANGELES GAS and ELECTRIC CORPORATION
SOUTHERN COUNTIES GAS COMPANY

Examples of newspaper advertising featuring the co-operative modern range sale. Left—An advertisement prepared by a manufacturer for use by dealers. Center—An advertisement of our Company. Right—Newspaper display sponsored jointly by the three gas companies with headquarters in Los Angeles.

HEMET SERVICE EXTENDED

THE following news item was clipped from the *Hemet News*:

"Residents of West Florida and other western sections of the city will soon be served with natural gas. Work of laying four-inch mains as far west on Florida as Lyon street was started this week by the Southern California Gas Company.

"This is the major extension project undertaken by the gas company in Hemet in the past two years. It is understood that the gas company is endeavoring to sign up as many prospective consumers as possible before actually laying the new mains, so that property line connections may be made at the same time the mains are placed below ground.

"The extension of the gas mains will afford service to a large area of the city which has heretofore been without the convenience of natural gas."

NATURAL GAS SERVICE FOR SAN DIEGO

CONSTRUCTION of a 12-inch pipe line from Huntington Beach to La Jolla, roughly seventy-five miles, by Southern Counties Gas Company is scheduled to start next month provided present plans can be carried through. The work will cost approximately \$1,000,000 and will furnish natural gas for San Diego and its surrounding territory. The project is scheduled to be completed by September.

When finished it will mean that from near the Mexican border to within 250 miles of the Oregon state line the state of California will be receiving natural gas from its gas and oil fields for domestic and commercial uses.

At present natural gas is being supplied as far south as San Clemente. The size of the pipe line furnishing the area south of Huntington Beach to San Clemente is too small, however, to handle the amount figured necessary for the San Diego territory, which is covered by the pipe lines of the San Diego Consolidated Gas and Electric Company as far north as Oceanside.

At a recent California Railroad Commission hearing on the question of rates and services, the company was given option to serve natural gas to the city. San Diego strongly urged service of natural gas.

Negotiations with Southern Counties Gas

Company resulted in an agreement to deliver gas to La Jolla. From that point into San Diego and then out again over its territory, the San Diego Company will carry the natural gas furnished by Basin, Coastal, and San Joaquin Valley fields.

San Diego is the last large potential market in the state not now served by natural gas, and with the new service over 95 per cent of California domestic customers will enjoy this high heat natural product.

BAKERY ENGINEERS MEET

OUR Company was well represented at a meeting of the Bakery Engineers' Association, held March 3rd in the auditorium of the Van de Kamp bakery. George H. Heckler of the Hotel and Restaurant Division presided; talks were given by C. M. Grow, Manager of the New Business Department, R. M. Bauer, Gas Supervisor and Office Engineer, and E. M. DeRemer, Industrial Engineer; W. P. Dawe, Safety Supervisor, showed and explained a motion picture entitled, "Meeting the Gas Industry."

The Junior National Convention of the association will be held in June, in Los Angeles.

RADIANT HEAT TRAVELS FAST

ELECTROMAGNETIC waves, whether light, heat, radio or the newly discovered Cosmic rays, travel at the astounding speed of 186,300 miles per second. Multiplied by 3,600—the number of seconds in an hour—and we have a speed beyond human comprehension.

Nothing in all creation seems to travel faster. The flash of light from a powerful searchlight and the heat emitted by the radiant gas furnace in an industrial furnace travel through space at identically the same speed.

Radiant heat, like all the electromagnetic waves, travels in straight lines. It can pass through a perfect vacuum without apparent loss. One of the most impressive examples is the radiation of heat from the sun through nearly ninety-three million miles of virtually perfect vacuum.

Tests have proved that the favorite color of women is red, with violet as their second choice. Men like blue, violet, and green, in the order named.

Meet the
CENTRAL
 Operating
 Division



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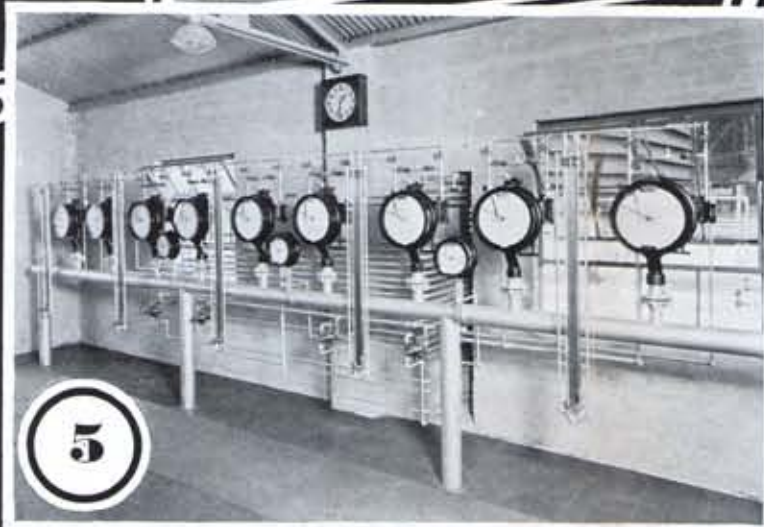
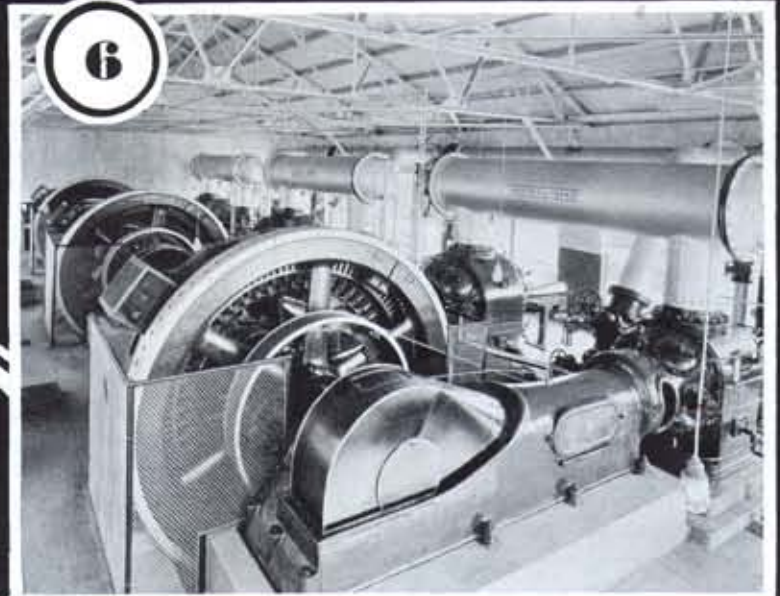
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1. Central Station, showing holders and the oil gas standby generating equipment. (Center.) Lower right is the Distribution Building containing Los Angeles operating headquarters and the main system storeroom. 2. Compressor House No. 2, Central Station. Units are steam driven. The gas may be picked up from the holders or incoming lines and boosted to line pressure. 3. Slauson Station, waterless type 10 million cubic foot holder. 4. Terminal Station at Slauson Station. View shows metering tubes and gauge house and office. 5. Interior gauge house, showing compact layout. 6. Interior compressor house at Slauson Station. Units are driven by 1000 H. P. Synchronous motors.

GAS NEWS

Monthly

Published for the Employees
By the Management of

SOUTHERN CALIFORNIA
GAS COMPANY

F. H. Holden

Supervisor of Advertising and Publications

950 South Broadway
Los Angeles, California

Vol. IX

April, 1932

No. 4

AT the Olympic Games this summer renowned athletes from all the world will meet in contest. The difference between success and failure will be measured in fractions of seconds and in inches. Those who "also run" will be *almost* as good as the winners.

In business we can do our jobs ordinarily well and run along with the crowd. Or we can do them just a little better and be champions. There is an "almost as good" way to type a letter, accept payment for a bill, install an appliance, or answer a telephone. And there is a "champion" way. In every line of endeavor, those who are champions seem to feel that the necessary extra effort is worth while.

A TRAGIC amount of the distress of the past two years has been caused by men who were not faithful to their trusts. But these men were not solely responsible for their defalcations. Their acts were, in a measure, the reflection of popular thinking.

In our schools, our literature, and our newspapers, personal ambition has been extolled and success has been measured by the bank account until we have almost completely forgotten that our national welfare depends upon character. Our business structure rests on credit, and credit rests on confidence, and confidence rests on integrity.

The stability of our Nation depends upon

intangible ideals, not upon factory production, the export of wheat, or the condition of the stock market. When men like Lincoln are our national idols, the Nation is safe; when men of ruthless selfishness are our popular heroes, the Nation is headed toward disaster. All the legislation that can be enacted and all the bank balances that can be piled up won't change this simple fact.

INTEGRITY is more than abstention from stealing and lying; it is a willingness and desire to give full value for value received. Morally there is little difference between the criminal and the person who through legal means tries to get something for nothing.

It is much easier to point to a fault than it is to find the cause or to suggest a remedy. But there is something wrong with our schools if they graduate men and women whose code is "It's all right if you can get away with it."

W. B. STOREY, President of the Atchison, Topeka and Santa Fe, told the Advertising Club of Los Angeles that before the war the railroads were headed toward government ownership, but that after they had been managed for two years by the government, the people were glad to see them returned to private hands. Mr. Storey told of government owned barge lines in the East which, although they pay no taxes and are operated in government constructed waterways, are considerably in the red. The deficit, the speaker stated, must be made up out of taxes.

The California earnings of the Santa Fe, said Mr. Storey, were last year several hundred dollars less per mile of line than the taxes paid. The figures he quoted were approximately as follows: Earnings, \$1,200 per mile. Taxes, \$1,500 per mile.

Since the World War, Mr. Storey stated, the railroads of the Nation have spent approximately seven billion dollars on improvements and betterments. One of the problems of the railroads is to meet the competition of truck and bus lines which operate on publicly owned highways and without government regulation as to rates and service. Steamship lines which use the government owned Panama Canal are also serious competitors of the railroads.

I HAVE before me a copy of what I must assume are more or less confidential instructions to its representatives from one of the largest, if not the largest, manufacturer of electric ranges in the country. It begins:

We are frequently asked to assist in meeting the alleged competition of gas—both manufactured and natural—when the selling of—ranges is involved. Our initial work is usually directed toward the establishment of an electric cooking consciousness. Just as it is easier to control an active boy, if he is given something new to think about, rather, than tell him not to think about the old, so we all as individuals can forget our misinformation, or incomplete information, much more easily if we have positive, aggressive, and new information to take its place.

You notice that we speak of gas as an alleged competitor above, because, as one of our men has aptly put it, the gas range is a substitute for, and not a competitor of the electric range.

AIN'T THAT SOMETHING?

But mark this. This document refers to a recent test made at Purdue University on the thermal efficiency of all kinds of fuel showing the following:

Electric	83.3%
Gas	51.0%
Gasoline	40.3%
Coal	5.3%
Kerosene	33.5%

Okay! But why didn't Mr. Range Manufacturer tell the complete story? Only half of it is very misleading (as is the whole set of instructions for that matter).

The above Purdue tests are described in Purdue University Bulletin No. 339, entitled "Fuels Used for Cooking Purposes in Indiana Rural Homes." On page 27 there is a comparison of the costs (Table XII) showing the amount of fuel consumed in preparation of a meal with these same fuels. It's a different story. Look at it.

Kerosene	\$.14 per gal.	\$0.027
Gasoline17 per gal.	0.031
Coal	7.50 per ton	0.040
Electricity03 per K.W.H.	0.064
Artificial Gas ...	1.50 per M. (550 B.t.u.)	0.037

Nuff sed!

In my time I've sold a thousand and more electric ranges. There's nothing better where

gas service is not available, but I never felt it necessary to use half-truths and false inferences to do the job. I wish there was room to print the entire thing. I'll be glad to send copies on request, however.

If this is a sample of what's coming when the "million this year" campaign gets going, it is time that the gas business started to organize to protect both its load and the public which seems too prone to fall for anything because it's electric.—Touchstone in *Gas Age-Record*.

PLANS for a nation-wide Mother's Day Campaign to obtain better maternity care for expectant mothers are taking concrete form among women's clubs, church and civic organizations, health departments, medical societies, and nursing groups, according to details which have been made public by the Maternity Center Association, 1 East 57th Street, New York City.

Last year the Campaign sponsored by the Association culminated in a meeting of prominent citizens which included Mrs. Herbert Hoover, Mrs. Theodore Roosevelt, Sr., Mrs. Charles A. Lindbergh and many of the most eminent physicians of the country. They voiced an indignant protest against the high maternity death rate in this country, and demanded America provide its mothers with more adequate maternity care, by means of which, authorities maintain, 10,000 of the 16,000 mothers who die annually in childbirth could be saved.

Mrs. John Sloane, president of the Maternity Center Association, in a recent letter expresses surprise that the campaign last year interested fully as many men as women, and indicated that special efforts are to be made in 1932 to awaken prospective fathers to the fact that a well baby and a healthy mother require more than simply to let nature take its course.

"The Maternity Center Association," states Mrs. Sloane, "will be glad to help local organizations everywhere to call the attention of their communities to the vital need for adequate maternity care. Mother's Day is Sunday, May 8th. Material for speeches, programs for women's clubs, outlines for church services and other helps for local campaigns are available free of charge to anyone interested in improving conditions in their locality."

WEATHER PROFITS

"THE weather man says it is going to be fair, so you had better take your umbrella." Colonel H. B. Hersey, Meteorologist of the Los Angeles office of the Weather Bureau, smilingly quoted this hoary wheeze which, like so many of our familiar sayings, is founded on misinformation.

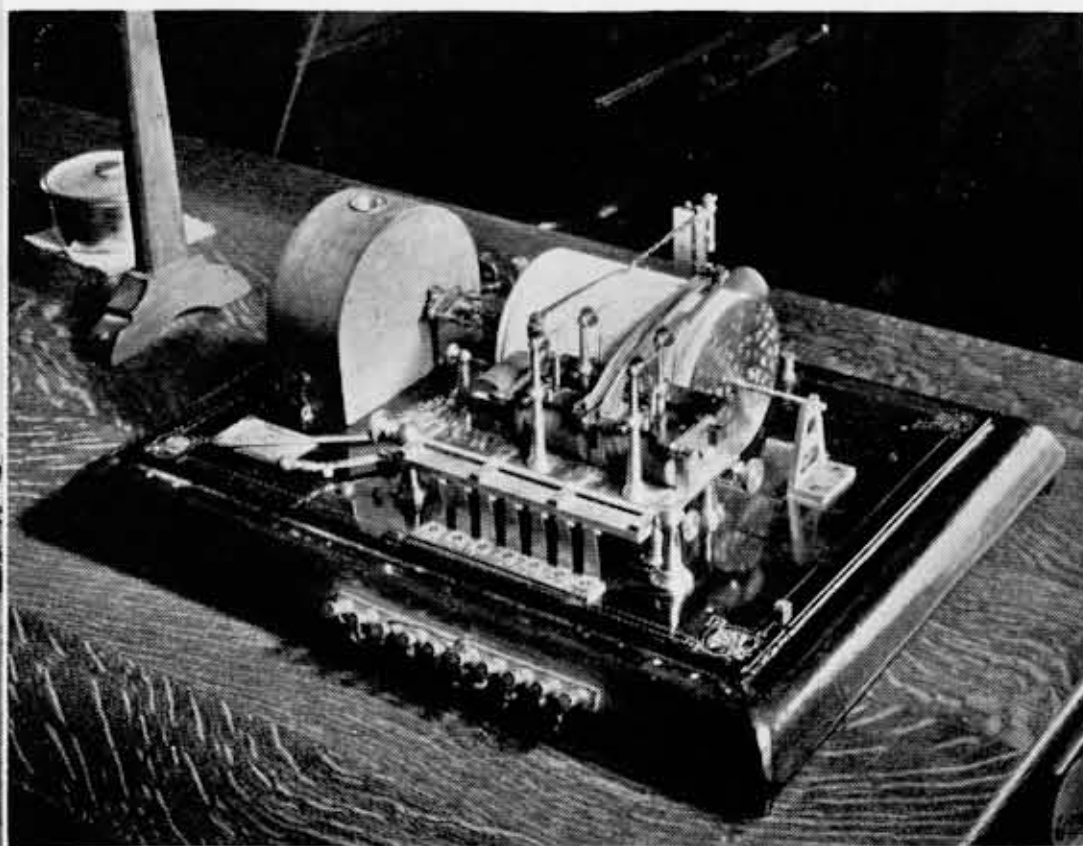
For countless centuries soothsayers have attempted to foretell the weather, and in almost every locality there is at least one individual who has gained a measure of fame for his alleged ability to predict the weather by the feel of his bones, the appearance of the sky, or the books of his ancestors. But great industries whose profits depend upon a foreknowledge of the weather look to the scientists of the Weather Bureau for their information. Meteorology, the science which treats of the heat, moisture, winds, and storms of the atmosphere, is the baby of the sciences, explained Colonel Hersey. When astronomy was twenty times older than meteorology is now, astronomers believed that the sun revolved around a stationary earth. A meteorologist is in no sense a "weather prophet." He is an investigator,

seeking to discover, by observation of phenomena and study of the limited records existing, the laws which control weather. His forecasts are based on a scientific interpretation of the available information. The Weather Bureau is not infallible, but a careful check of its forecasts with the weather for the periods covered shows a verification of between eighty-five and ninety per cent! Undoubtedly the meteorologist will in time be able to forecast weather with the same accuracy with which an astronomer today calculates the occurrence of an eclipse.

A VETERAN

Colonel Hersey is a veteran of the Bureau, having given forty-nine years to it. His career has been one of unusual interest, and of valuable service to science and to his country. He helped Roosevelt to organize the Rough Riders and was a major in that organization. He has held the post of Adjutant General. In 1906-07 he was a member of a party which attempted to reach the North Pole by dirigible. The base camp of the party was located within five hundred miles of the pole. During the World War, Colonel Hersey was in charge of the training of all American balloon pilots.

The work of the Weather Bureau began in 1870 as a function of the Signal Service of the War Department. In 1891 the Weather Bureau of the Department of Agri-



Left—Instrument tower of the Los Angeles Office of the Weather Bureau. Right—Recording instrument in the office of the Bureau which records temperature, wind velocity and direction, rainfall, and duration of sunlight.



Teletypewriter on which weather reports for the guidance of aviation are sent and received.

culture was organized, and the Signal Service was relieved of its meteorological duties.

FORECASTS AND MAPS

Probably the Bureau is best known for its daily forecasts and weather maps. These are based upon observations of weather conditions taken daily at eight a.m. and eight p.m., seventy-fifth meridian time, at approximately three hundred stations in the United States, Canada, Alaska, and the West Indies, supplemented by reports from ships at sea and from other countries. Telegraphic reports of these observations are sent promptly to the central office at Washington, D.C., and to forecasting centers. Experts interpret the observations and chart them. Within two hours, forecasts are telegraphed to nearly two thousand principal distributing points, where they are further disseminated by telegraph, telephone, radio, and mail.

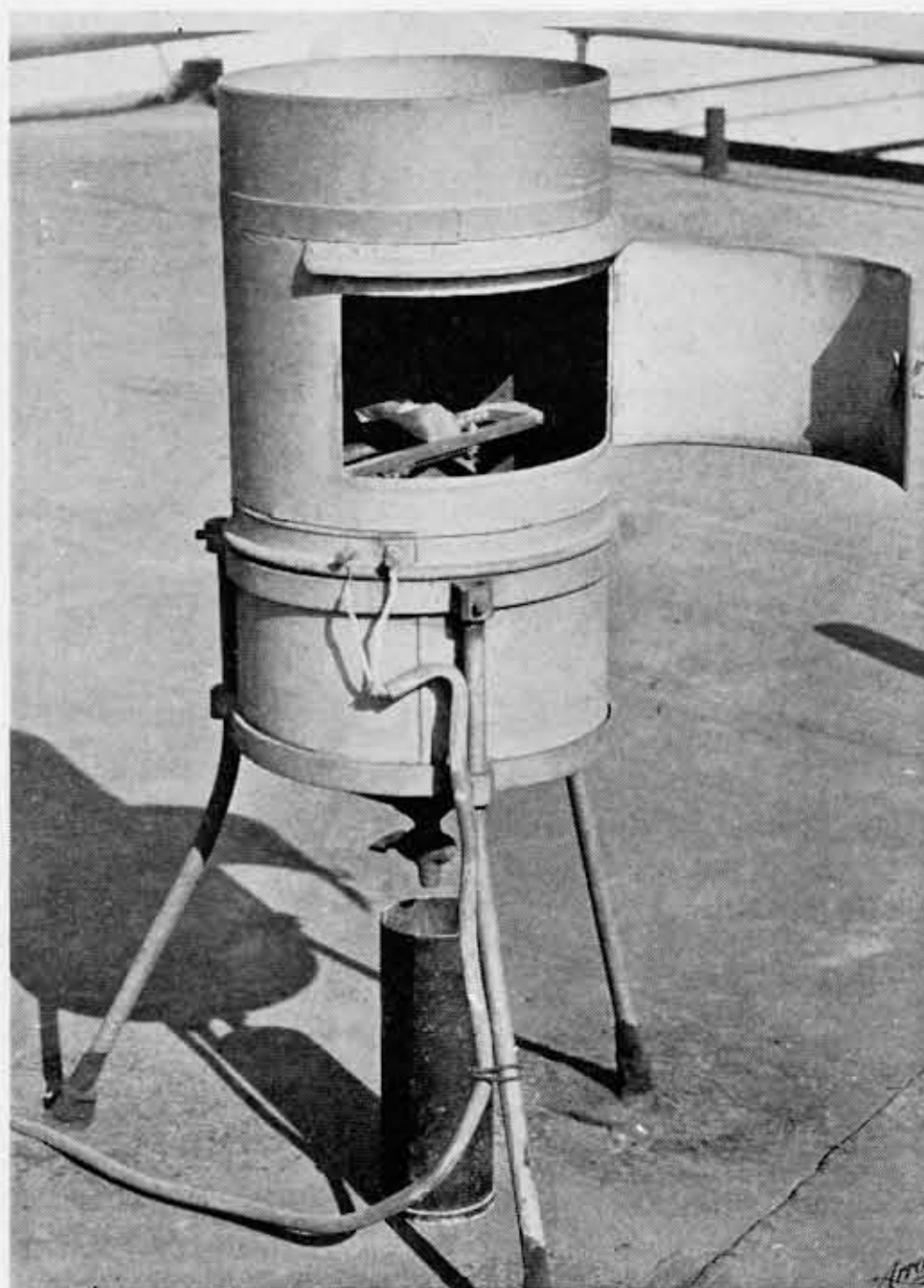
Weather maps are mailed directly after the morning forecast is dispatched. Solid lines on these maps, called "isobars," are drawn through points that have the same atmospheric pressure. Dotted lines, called "isotherms," are drawn through points that have the same temperature. The direction of the wind at each station is indicated. The state of the weather is shown by symbols. The centers of areas of low pressure, or general storms, are indicated on the map by the word "low" and the centers of areas of high pressure are marked by the word "high."

MOVEMENT OF STORMS

As far as we here are concerned, low pres-

sure or storm centers *always* move in a general direction from west to east. These areas range in diameter from seven hundred to fifteen hundred miles. Winds blow spirally inward, counter-clockwise, toward and around the center of a low area, and from the center of a high area they blow spirally outward, clockwise. Low areas are generally warm and stormy, while high areas are generally clear and cold. Some experience and a consideration of other factors are, of course, necessary to forecast weather conditions with a fair degree of accuracy, but these few suggestions will make the daily weather maps more interesting to those who are not already familiar with them.

The meteorological work of the government was intended originally as a protection to navigation. The resolution of the House of Representatives, which in 1870 authorized the work, instructed the Secretary of War to provide for "giving notice on the northern lakes and on the seacoast, by mag-



Rain gauge on the roof of the Central Building, Sixth and Main streets, Los Angeles. Through the open door of the gauge can be seen the cup which fills, tips, and sends an electrical message to the recording instrument. Amount of rainfall is checked in the tube shown below the gauge.

netic telegraph and marine signals, of the approach and force of storms." Today storm warnings are displayed at more than four hundred points along the Pacific, Atlantic, and Gulf coasts and the shores of the Great Lakes. During recent years few storms of danger to maritime interests have occurred for which warnings have not been issued at least twelve hours in advance.

Another valuable service of the Weather Bureau is to the commerce of the air. The Department of Commerce supervises the transmission of airways reports, which are made by leased teletype lines. These reports cover general conditions of air and weather.

SERVICE TO FRUIT GROWERS

Fruit growers of California owe a great debt to the Weather Bureau. In the Pacific States are some four million orchard heaters in use, in the operation of which the growers depend largely upon the Bureau's warnings. California's annual citrus crop is estimated to be worth approximately one hundred million dollars, and more than a hundred thousand citizens depend upon it for their livelihood. The safety of this industry rests to a very considerable extent upon bulletins issued by the Weather Bureau. Rain forecasts are of especial value in the raisin growing sections of California, as the crop while drying is extremely susceptible to injury by rain.

Radio is now indispensable in the functioning of the Bureau's services. There are now about three hundred broadcasting stations co-operating with the Bureau. Forecasts are broadcast from these stations at least once daily. Warnings of cold waves or of approaching dangerous weather are sent out when received.

BENEFITS TO GAS INDUSTRY

The natural gas industry of Southern California is materially assisted by the Weather Bureau in preparing for the sudden changes in temperature which are typical of this section. Not only are the daily weather maps studied by company engineers who are trained to interpret them, but special reports are obtained from the Bureau by telephone. At any time, information may be secured as to weather conditions, present and expected, in any section served by the company.

On the roof of the Central Building at Sixth and Main streets are the instruments of the Los Angeles office of the Weather Bureau. These include wind velocity and direction indicators, thermometers, sunshine indicator, and rain gauges. They are electrically connected with recording instruments in the office of the Bureau, several floors below.

During the past winter we have been more interested in the rain gauge than in any other instrument. As rain falls into the gauge, it fills a small cup which in the accompanying photograph may be seen through the open door of the gauge. This cup is accurately balanced so that when it has received one-hundredth of an inch of rain, it tips and empties itself into the reservoir below. In tipping it makes an electrical contact which sends a message to the recording instrument in the office. After a storm, the reservoir is drained into the tube which is shown under the gauge in the photograph. In this tube the depth of water is multiplied ten times, and an accurate checking measurement is made.

The other instruments, with the exception of the sunshine indicator, are more or less familiar. The sunshine indicator is a little device which accurately measures the duration of sunlight, and which faithfully sends its messages to the recording instrument in the office.

WEATHER PROFITS

We cannot control the weather. We have to take it as it comes. But our lives have been made much safer and our incomes immeasurably more secure by the scientists of the Weather Bureau who are able to tell us, with a high degree of accuracy, the weather that may be expected. They have transformed many of our weather hazards into weather profits.

"One of the most serious brakes upon returning prosperity, one of the many causes of our present situation, and one of the factors which must be considered in any general movement toward better things, is the fear of further infiltration of governmental dictation into the life and labors of the American people."

C. E. GROESBECK

President, Electric Bond and
Share Company.

HERE CALIFORNIA'S PROGRESS BEGAN

ON Lankershim Boulevard opposite Universal City is a tiny park, usually unnoticed by the hurrying traveler. It was at this place that John C. Fremont and Andres Pico, on January 13th, 1847, signed the treaty, sometimes called the "Cahuenga Capitulation," which ended the rule of Mexico in California. Since that date there have been no military battles on California soil.

Robert Glass Cleland, eminent California historian, says that as the result of that treaty: "Cities were to spring up where sleepy pueblos had previously stood. The untouched resources of the generous earth—its mines, its forests, its leagues of uncultivated soil—were to be made to serve the needs of all mankind. A new day was about to dawn on the Pacific slope."

But today there is little about Campo de Cahuenga—with its adobe walls, its lazy fountain, and its drooping pepper trees—to remind the visitor that here California's progress began. Instead, perversely, there seems to have lingered within its walls something of the languorous spirit of old Mexico.



Campo de Cahuenga, where the "Cahuenga Capitulation" was signed, January 13th, 1847, by John C. Fremont and Andres Pico.

WINTER SPORTS FOR THIS SUMMER

TWO localities in the national forests now have plenty of raw material for winter sports in the summer of 1932, according to reports received by S. B. Show, regional forester for California. The high country in the Shasta National Forest, which culminates in Mt. Shasta at an elevation of 14,161 feet, and the Palisade Glacier country at the head of Big Pine Creek in the Inyo National Forest are two localities accessible to motorists. The supervisor of the Inyo Forest reports that there are now drifts from 45 to 50 feet deep at Twin Lakes near Mammoth with many buildings entirely buried. On the Mammoth Summit above Twin Lakes on the Sierra Divide, the snow was too deep for measurement as the apparatus could only reach to a depth of 15 feet. Forest officers fear that buildings at Mammoth may be crushed by the weight of the snow which is reported to be packed tightly by two days of

rain in February. There is a possibility, according to the rangers, that some of the trans-Sierra trails will not be free of snow this summer.

Fifteen per cent of the farms in the United States have gas engines for farm work, and 4.1 per cent have electric motors, according to census figures recently made public by the Department of Commerce. Fifty-eight per cent of the farms in the country have automobiles.

Biscuits mixed, cut, and ready to bake have been introduced. The housewife can keep them in her gas refrigerator until meal time, place them in the oven of her gas range for ten or fifteen minutes, and they are ready to serve.

Savings deposits in the Pacific states gained \$17,000,000 during the year ending June 30, 1931, although national totals declined.

NATURAL GAS JOINS THE BAND

THEIR factory is a simple, inconspicuous, two story, red brick building, standing just off Washington Boulevard, on Raymond Street in Los Angeles. There are no tall stacks, noisy machinery, or large steam boilers. The employees are not working on a quantity-per minute basis; are not rushed for time. They are a group of craftsmen with the sole object of making the best trombone and cornet possible. And in making these fine band instruments, the F. E. Olds and Son organization has found natural gas an important part of the process. Besides heat treating parts of the instruments and specially made tools in natural gas fired furnaces, two gas fired torches were recently installed in the factory by the New Business Department of our Company.

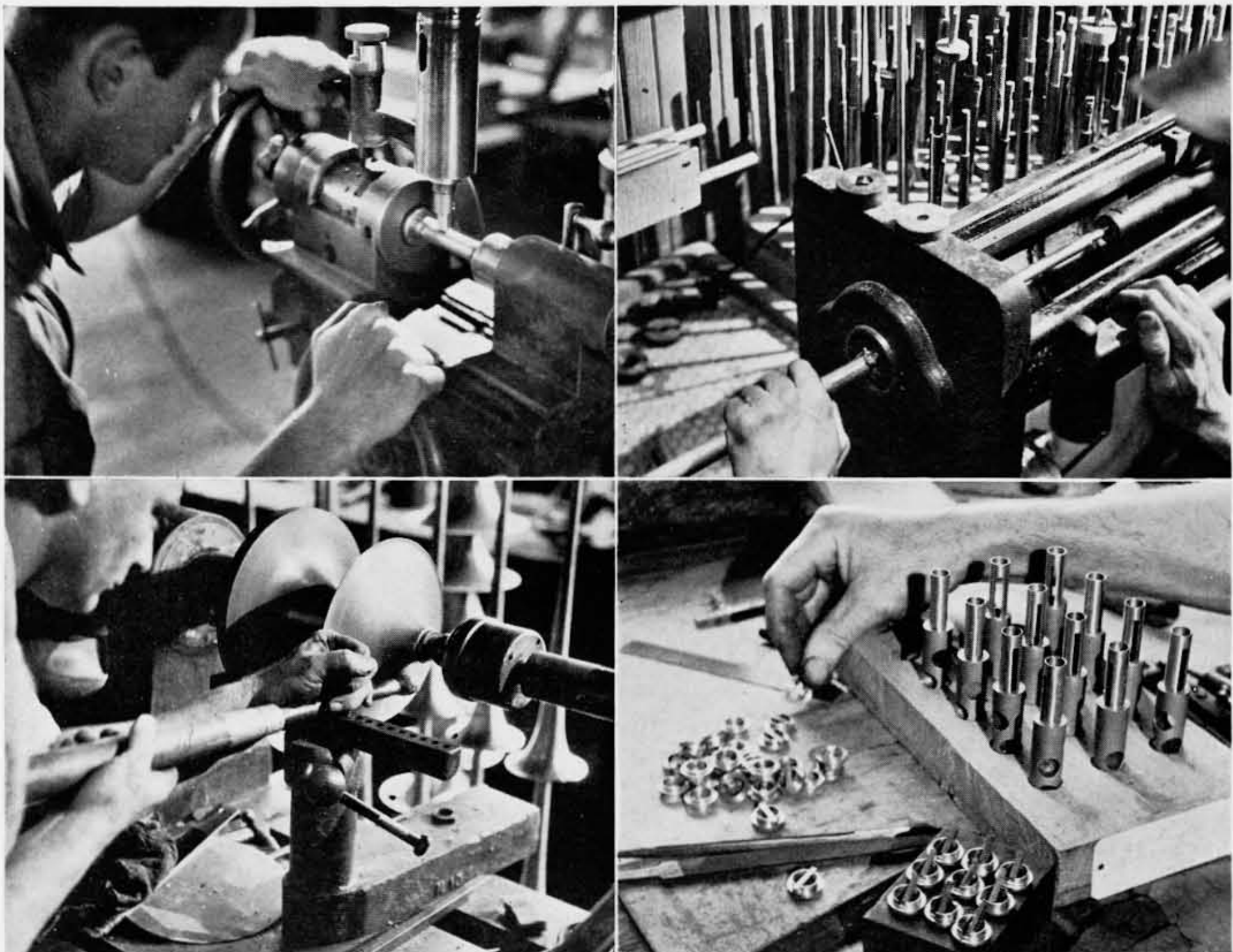
From the east comes german silver tubing and sheets of flat brass. From this material

the company builds and brings to perfection the entire instrument. Trombones and cornets are made exclusively in the small plant. A special department is operated to repair and service band instruments.

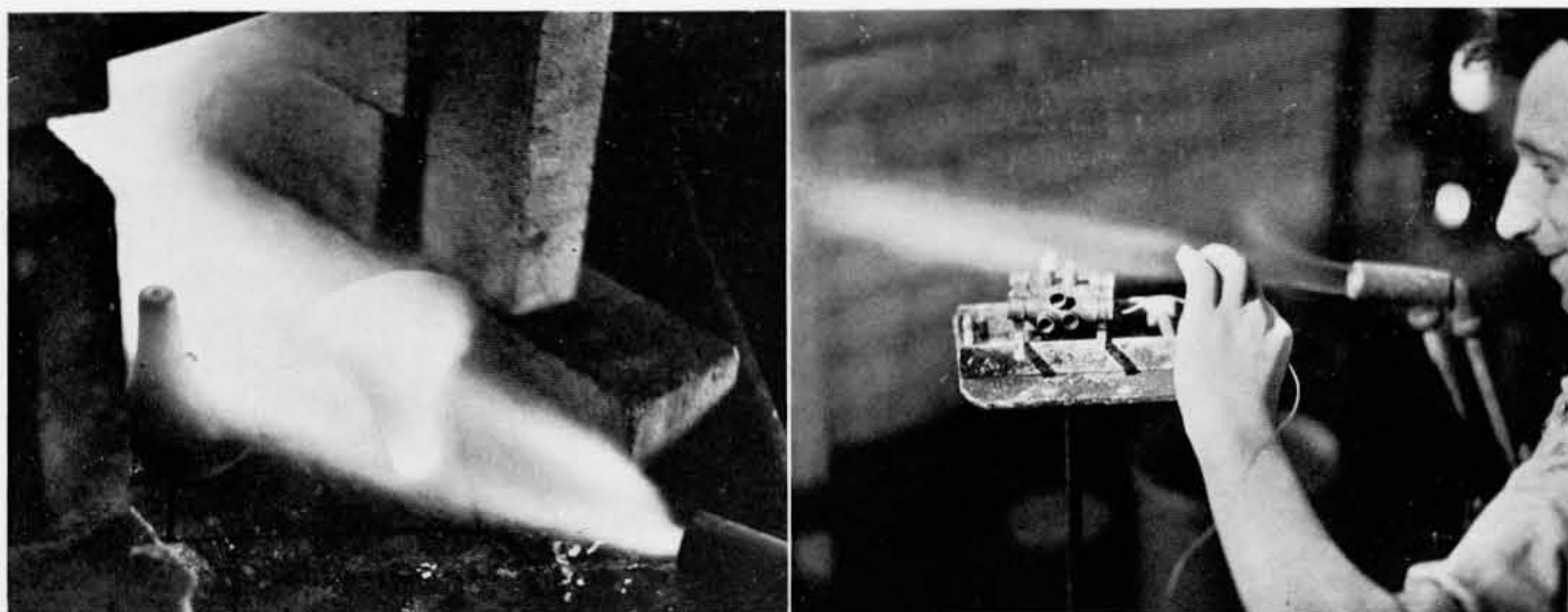
CARE IN DETAILS

Exactness is possibly the most important factor in the manufacturing process for the workmen use their micrometers to measure thousandths of an inch. The first step in the building of the trombone is the drawing of the tubing to its right length, width, and thickness. A machine draws it out, the same as we might stretch a rubber hose. The simile is not perfect, however, for the stretching of the metal tubing is a much slower process!

The tubes that make the trombone "slide" must fit to a fraction of a hair, for the



Upper left—Drilling the valves for a cornet. Right—Drawing the tubing to its proper size. Lower left—making the "bell" by spinning it on a mandril. Right—assembling the small parts.



Left—Annealing the "bells" in a gas-fired furnace. Right—Silver soldering with a gas-fired torch.

suction of the one tube inside the other must hold the slide in place. A man who is expert in this one thing,—the straightening of the tube,—sees to it that it is perfect. A GAS NEWS reporter watched him at work. A thin hair was placed under a tube lying on a flat steel surface. When the hair jerked out, the tube could be heard as it hit the surface of the steel plate. That tube was straight! If the tube had not been perfectly straight, the man would have worked it with his hands, and by some clever twist brought it into line.

"BELLS" FROM SHEET BRASS

The bell of the cornet or trombone is spun over a mandril, different size mandrils producing bells of different diameters. They are then hand scraped, to give them tone. To take out any stresses and strains the bells

are annealed in a natural gas fired oven.

In the assembling of the instrument, the soldering must be of the highest quality. In order to produce strength, lightness, and rigidity, the highest grade materials, tools, and solder, must be used. Two natural gas fired torches are used with a special sterling silver and brass solder. Ordinary soldering with the common solder of lead and tin would not withstand the constant handling to which a musical instrument is subjected. A "one piece instrument" is the result of this careful soldering process.

The final steps in the making of a fine trombone or cornet, is its engraving and burnishing. Beautiful designs are carefully engraved across the bell or over the entire instrument. The more expensive instruments are hand burnished. This process is an unusually slow one, for the worker must rub



Left—The engraver putting a design on the "bell" of a nearly completed cornet. Right—The burnisher's job is a slow one. Note how small is the point of his burnishing tool.

the blade of his burnishing tool over the entire surface of the instrument. Slowly and surely as he works the highlights stand out and the instrument takes on a mirror-like finish. And when the burnisher sets the instrument aside, it is completed,—soon to reach the hands of an appreciative musician.

FEDERATED WOMEN'S CLUBS ENTERTAINED

APPROXIMATELY one hundred and twenty women of the Federated Women's Clubs were recent guests of the Natural Gas Bureau at the Architects Building, 5th and Figueroa Streets, Los Angeles. E. A. Kern, Sales Supervisor, represented the Southern California Gas Company, and acting as host told the ladies of the functions of the Natural Gas Bureau and the willingness and desire of the local gas companies to co-operate with the customers in the solution of their appliance problems.

Following the delicious luncheon, served by the Elite Catering Company, Miss Jessica Taylor of the Los Angeles Gas and Electric Corporation spoke to the group on "How to Select Modern Gas Equipment for the Home." Her talk was illustrated with lantern slides.

The Natural Gas Bureau of Los Angeles, composed of the three gas companies, the Southern California Gas Company, the Los Angeles Gas and Electric Corporation, and the Southern Counties Gas Company, maintains a permanent exhibit of modern gas appliances at the Architects Building. Through the entertaining of different groups, such as the Federated Women's Clubs, the Bureau has been able to tell about the many advantages of natural gas and modern natural gas appliances.

On March 22, 1912, the Riverside Press said: "Southern California Gas Company is engaged in laying gas lines in Highgrove." The item was quoted just twenty years later in their "Twice Told Tales."

It is reported that the Payne Furnace and Supply Company will build a one-story addition to their factory in Beverly Hills. Seven thousand feet of additional floor space will cost approximately \$7,000, it is stated.

CITY RAILWAY IN RED

SAN Francisco's Municipal Railway ran in the red \$511,730 in 1931. It will fall \$626,900 short of the amount necessary to meet its requirements in 1932. Rerouting and wage economies can be made, however, which will save \$196,000 a year and cut the 1932 deficit to \$430,900.

These figures were made known a few days ago in a report made by the State Railroad Commission to the San Francisco Board of Public Works.

The report advises that fares must be raised or losses made up from year to year out of taxes. Taking money out of taxes may be justified on the ground that the railway "is a civic asset which produces indirect and intangible benefits to the taxpayer."

The depreciation fund is reported to be quite insufficient to take care of needed repairs and replacements. "It will be necessary," says the Commission, "for the city to provide means of replenishing the depreciation fund or face the alternative of seeing the property gradually deteriorate to a condition which will inevitably seriously impair the service."

Like all utilities, the railway cannot stand still. It will take more money to add to and better its service in the years to come. For the next five years the Commission estimates the railway will require \$712,000 for new car barn facilities, new shops and garage space, additional motor coaches and track connections necessary for rerouting cars and making connections with the Market Street Railway lines.

In addition there will be required during the five-year period \$1,072,000 for replacing worn-out cars and tracks, \$514,770 for bond redemption.

Where the new money will come from no one presumes to say. To an outsider it looks like either increased fares, increased taxes or a bond issue.—*P. G. and E. Progress.*

Los Angeles Gas and Electric Corporation is planning the construction of an additional unit to their Seal Beach plant. The estimated cost of the project is said to be \$3,500,000.

The largest oil refinery in the world is in Curacao, Dutch West Indies. It has a daily capacity of 295,000 (42 gallon) barrels.

DIVISIONAL MEETINGS INAUGURATED

AT the February Department Head Meeting, F. J. Schafer, Vice-President in charge of Manufacture, Distribution, and Sales, announced that such meetings would in future be limited to three or four a year, and that Divisional Meetings would be inaugurated.

The plan provides for eight meetings a year in each division, and all employees not on duty will be urged to attend. A program will be arranged and a speaker provided by the Personnel Department. W. P. Dawe, Safety Supervisor, will attend all meetings and will give a short talk on safety. An executive of the Company from the Central Office will be present at all meetings. On some occasions he will be the speaker, but ordinarily he will be simply a guest.

EASTERN

At the Eastern Division meeting, 113 employees attended; H. C. McAllister, Division Manager, presided. Mr. Dawe complimented the personnel on their safety record and urged continued co-operation. A motion picture, "Adventures in Alaska," was exhibited by Mr. Dawe.

Lee Holtz, General Superintendent, Manufacture and Distribution, as the principal speaker of the evening told of his journey to the convention of the American Gas Association in Atlantic City, and of his inspection of various gas industries enroute. The meeting adjourned at eight-fifty-five, and coffee and sandwiches were served.

SOUTHERN

The meeting of the Southern Division was held March 16th at the Tamarind Street school in Compton. All employees of the division, except those who were on duty or ill, attended. J. F. Murray, Division Manager, chairman of the evening, directed attention to the need of general education in the work and policies of the Company. Mr. Dawe gave an interesting talk on safety practices and exhibited a motion picture travelogue.

Commercial developments of the gas industry were discussed by F. M. Banks, General Superintendent of Sales, and the operations of several large eastern companies recently visited by Mr. Banks were described.

Guests of the evening, in addition to the speakers were Mrs. Dawe and R. R. Blackburn, Supervisor of Personnel, Claims, and Safety. After the meeting there were light refreshments.

BASIN

Tuesday evening, March 15th, the Basin Division meeting was held in the South Whittier School, Santa Fe Springs, R. L. Cook, Acting Division Superintendent, presided. One hundred-three employees were in attendance. Mr. Dawe gave a short talk on safety and exhibited an entertaining motion picture. The guest speaker of the evening was B. M. Lulhere, Superintendent of Construction, Southern Fuel Company, who told of the production and transmission of natural gas, and of extensive construction recently completed. As is the usual procedure, light refreshments were served after the meeting.

NORTHERN

The Northern Divisional meeting was held Tuesday evening, March 22nd. Approximately one hundred fifty employees were present. S. C. Singer, Division Manager, presided; E. H. Wetlaufer, Rate and Appraisal Engineer, was official guest from the Central Office.

W. P. Dawe, Safety Supervisor, spoke briefly on safety, stating that in reduction of accidents the Northern Division is first in the system with a record of 462 days without a lost-time accident. He called attention to the fact that in 1931 our Company had the finest safety record on the Coast, and had been asked to lead in the accident prevention program of the annual convention in Spokane of the Pacific Coast Gas Association. An interesting travelogue motion picture was shown.

R. R. Blackburn, Supervisor of Personnel, Claims, and Safety, was presented to the meeting.

Lee Holtz, General Superintendent, Manufacture and Distribution, was the speaker of the evening. He told of the educational program planned by the Company and of the classes in public relations and appliance care and adjustment which will be instituted. His chief topic was the

convention of the American Gas Association held last fall in Atlantic City and an account of his inspection of various gas utilities while enroute to and from the convention.

In Boston, stated Mr. Holtz, there are 21,000 gas refrigerators in use, and in New York City 120,000, with 6,000 being sold a month. He told of his visit to the factory where Electrolux gas refrigerators are manufactured, and of experiments in air conditioning equipment being conducted there.

Mr. Singer complimented the committee, composed of Mary Burr, R. F. Ogborn, and Walter Pieper, which arranged the meeting, and stated that the next meeting of the division will be in charge of Anne Lang of Burbank, O. D. Smith of Van Nuys, and Walter Pieper of Glendale.

Refreshments were served after the meeting.

VENTURA

On Wednesday evening, March 23, the personnel of the Ventura Division met at the Athene Club House, Ventura. Arthur B. Newby, Division Superintendent, in a brief address outlined the benefits to be derived from such gatherings. Increased good-fellowship within the organization, better understanding by employees of Company policies, and more thorough knowledge of safety practices were the good results anticipated by Mr. Newby. W. P. Dawe stressed the need for continuous co-operation to maintain the high safety record of our Company. This need was emphasized by Mr. Newby as chairman, and some specific directions were given. An educational motion picture, "Meeting the Gas Industry," and a travelogue were displayed by Mr. Dawe.

The official guest from the Central Office and the principal speaker of the evening was E. Henderson, Assistant General Superintendent, Natural Gas Production and Transmission. Mr. Henderson told of the present and future sources of natural gas, and of the problems involved in transmission and meeting peak demands. The history and features of the Ventura Avenue, Kettleman Hills, Buena Vista, and Elk Hills fields were discussed by the speaker, and provisions for storage to meet the peak demands of future winters were outlined.

The chairman described tests of A. O.

Smith enameled pipe, and Mr. Henderson stated that our Company was the first to experiment with this pipe. Light refreshments were served after the meeting.

MIDWAY

The Midway Division met Thursday evening, March 24th, in the Women's Club Building, Taft. Mr. Dawe presided at the request of W. C. Cameron, Division Superintendent. The chairman gave a short talk on safety, calling attention to the splendid safety record of our Company and the obligation which such leadership entails.

F. J. Schafer, Vice-President in charge of Manufacture, Distribution and Sales, was present as an official representative from the Central Office. J. H. Ragsdale, Industrial Engineer of the Midway Division, explained the various types of burners best adapted to natural gas, and described the types frequently found in oil field installations. He stated that the cause of an industrial complaint can often be traced to poor burner equipment.

A travelogue motion picture was exhibited by Mr. Dawe.

The relationship of employees to the public was discussed by F. M. Banks, General Superintendent of Sales. The speaker stated that each employee should have a knowledge of the gas industry and our own Company so that questions can be answered intelligently. Mr. Schafer closed the meeting by emphasizing that the purpose of the Division Meetings is educational, and that they afford a real opportunity to every employee. Refreshments were served after the meeting.

SAN JOAQUIN VALLEY

On Friday evening, March 25th, a meeting of the San Joaquin Valley Division was held. C. M. Eyman, Division Manager, presided. Guests were F. J. Schafer, F. M. Banks, W. P. Dawe, C. B. White, Research Engineer of the Central Division, and L. L. Meier of the American Stove.

The division orchestra played a special song composed by Messrs. Norton and Harmonson, and everyone joined in the singing. Emily and Marion Brooks entertained with songs and dancing, accompanied by Mrs. Brooks.

F. J. Schafer explained the purpose of the Divisional Meetings, stressing their educational value. Mr. Banks, who was formerly

Manager of the division, urged co-operating of all departments in furthering sound public relations. Mr. Banks also gave an interesting account of the annual convention of the American Gas Association in Atlantic City and of his visits to eastern gas companies.

After the meeting, wives of men of the division joined the gathering. Refreshments prepared by ladies of the Company were served on tables attractively decorated with wild flowers. Dancing followed.

CENTRAL

A meeting of the Central Division was held Wednesday evening, March 30th, at the Cabrillo Club, Los Angeles. F. S. Honberger, Acting Division Superintendent, opened the program with an explanation of the purpose of the Division Meetings, stressing the need for continuous effort toward improvement of public relations through better understanding of the details of our work and the Company's policies. H. P. George, Chief Engineer of Southern Fuel Company, was introduced to the meeting.

The Sharkey Oil Stabilization Act, which will be presented to voters on May 3rd, was discussed by W. P. Dawe. The purpose of the act, explained Mr. Dawe, is to protect California's greatest resource and to conserve it properly for use by this generation and those to follow. The Company, stated the speaker, makes no attempt to dictate how its employees shall vote, but each employee is urged to study the Sharkey Act and to exercise his franchise on May 3rd, in accordance with his best judgment.

A motion picture of the construction of the Lake Arrowhead line was exhibited and explained by Mr. Dawe. The measures which were used to protect the men and the forest through which the line was constructed were particularly interesting. Although this undertaking was an unusually hazardous one, it was completed without a single lost time accident or the slightest danger to the forest.

Mr. Holtz, who has given much of his time to the Divisional Meetings of March, discussed his visits to eastern gas companies enroute to and from the convention of the American Gas Association. The officials of eastern companies are well acquainted with the activities and developments of our Company, said Mr. Holtz, and a keen interest in them was displayed. He found that ap-

pliance manufacturers are devoting their facilities to increasing the usefulness and simplicity of gas appliances and measuring instruments. Various methods of handling meter shut-offs were outlined, and laughter was caused by the statement that in Chicago meter shut-offs are padlocked. Mr. Holtz found that the standards of meter accuracy maintained by our Company rank high in the industry.

The value of close understanding between executives and employees was stressed by Mr. Holtz, and the A. O. Smith organization was cited as one in which such an understanding exists to an unusual degree; the worth of the Divisional Meetings in developing closer acquaintance was pointed out.

After the meeting light refreshments were served.


DEVELOP NEW ROTARY DRIER

CERTAIN definite advantages are claimed for the new "Type L" rotary drier recently developed by the Louisville Drying Machinery Company, Louisville, Kentucky, for the purpose of overcoming various mechanical defects inherent in the usual double shell drier. Among other features this unit applies the principle of the high-efficiency steam tube drier to a direct-heat machine. It is now fired with natural gas and showing unusual efficiency in operation.

This drier is of the direct-heat, rotary, tubular type in which the customary central tube is replaced by a number of specially shaped, box-like conduits, longitudinally attached to the inside of the drier shell. The unit consists essentially of a steel shell supported on tires and rollers. Within the shell are the several longitudinal conduits, so supported as to permit free lengthwise expansion. They are closed at the feed end but connected with ports in the periphery of the shell. A refractory or refractory-lined casing surrounds the feed end of the shell and connects the ports with the furnace. The operating data and heat balance for this installation show exceptional thermal efficiency. It has been pointed out that the job being done by this five-foot machine would require a six-foot concentric-tube drier.



NEWS FROM THE SOUTHERN

SOUTHERN

A car drove swiftly up to the home of Marie Walters, three passengers alighted and were ushered mysteriously into the house. A few moments later another car drove up to the curb, two girls stepped out, walked leisurely to the door and rang the bell.

The house was darkened; not a sound was heard. It appeared to the invited guests that no one was home. In a few minutes, however, a lady appeared at the door, apologized for the absence of the hostess and ushered the guests into a dimly lighted room to remove their wraps.

After a few moments the girls were led to a darkened room which was suddenly flooded with light and voices cried out, laughingly, "Surprise! Happy Birthday, Ethel! Surprise!" Upon recovery, the much surprised guest of honor, Ethel Wright Steigh, opened her eyes and beheld a table beautifully decorated in pink and black with a huge birthday cake with pink candles in the center. Clustered around were her friends, Vera May, Jane McLaughlin, Billie Walters, Lila Howell, Ruth Young, Mrs. Walters, and the hostess, Marie Walters, who helped her spend a most enjoyable evening.



EASTERN

W. M. Jacobs was recently appointed to the position of Assistant Industrial Engineer of the Eastern Division, replacing J. L. Richardson, who is no longer with the Company.

Mr. Jacobs was transferred to San Bernardino from the New Business Department in Los Angeles. We hope Mr. Jacobs will like San Bernardino and enjoy his new duties.

At the annual Bosses Night given by the young business women of San Bernardino, H. C. McAllister, Division Manager, and Oliver Jacobi, District Agent, were special guests of the club members employed by the Southern California Gas Company. The toast given by the club president was warmly responded to by Mr. McAllister.

Riverside Office employees were awarded a Gold Seal Honor Roll Certificate by the directors of the Riverside Welfare Association for having made one hundred per cent contributions in the first and second years of the existence of this worthy organization.

Howard McCook, bookkeeper in the San Bernardino Office, has recently changed his form of exercise by purchasing a Curtis Wright airplane. Instead of taking his usual morning exercise of punching the bag, he is now taking short flights over the city.



VENTURA

The Ventura Division extends its congratulations to R. D. Yarbrough, oiler, Station number 50, who on March 3rd married Miss Louise Newman. The ceremony was held at Santa Barbara. The newlyweds visited San Francisco, Oakland, and the Sacramento Valley on their honeymoon.

Compressor Station Number 50 have a basketball team entered in the Ventura City League. Although the boys' record is not phenomenal they are proving to be a tough hurdle for the leaders. The following men represent the "Gassers"; Captain James Hendrix, Frank Aultman, Jimmie Anderson, Ralph Books, Fred Anderson, Tommy Armstrong, Iver Rydberg, Don Weidel, and Joe Plum.

The Ventura Division welcomes the following new men to the Newhall District, Ventura Division: H. J. Arbuthnot, Assistant Foreman; J. Roseman; Richard Hosken, and Harry Gavin.

Congratulations are extended to Glen Drye, oiler, Station Number 50, who became the father of a seven and one-half pound daughter. Little Wanda Lee joined the Drye family February 2nd.



John D. Baxter, formerly Division audit clerk in Glendale, has been transferred to the Taft Office.

We introduce our new salesman, Vernon T. Keene, working in the Antelope Valley District.

Lois Nilson entertained the girls of the Glendale Customers' Department at a hard times party on the night of March 15th. Mae Weight won first prize for the most dilapidated costume, and Mary Burr and Lillian Lewis tied for second place. Table decorations were green in celebration of St. Patrick's day.

The Northern Division has piled up a record of 459 days without a lost-time accident. This tops our previous record of 420 days.

Dr. Milton Metfessel of the University of Southern California has conducted some tests which indicate that sixty-five per cent of the knowledge of the normal person is assimilated through his eyes, and twenty-five per cent through his ears. Nose, tongue, and fingers are responsible for ten per cent of his knowledge.

It is reported that 50,000 New Yorkers spend \$3,000 every day to telephone for the correct time.

RENDERS RIDDLE IN RHYME

TREVOR T. WHITE of the Taft Office sent in the following clever solution of the detective problem in the March GAS NEWS:

In San Francisco Mr. Roberts lives,
And half way East the brakeman does
reside.
Dame Fortune to the brakeman's neighbor
gives
A sum which just by three one can divide.

Now Mr. Johnson makes just seven "grand,"
Which obviously will not divide by three,
And from the facts we thus far have at hand
'Tis plain *he* can't the brakeman's neighbor
be.

So Mr. J's from Denver, palpably,
Which leaves the brakeman's neighbor,
Mr. Sharp;
'Cause Mr. Roberts we know lives by the sea.
'Tis immaterial who now plays the harp.

The brakeman's name is Johnson 'cause we
know
'Tis like the Denver resident's. So fact
by fact
Is brought to light by each deductive blow.
The mystery clears though we must still
use tact.

The fireman's name begins with "R" or "J"
Because we're told that "Sharp's the taller
man."
Subtract the brakeman, taking "J" away,
We find his name is Roberts in our plan.

With brakeman Johnson, fireman Roberts
fixed,
A little child can hardly now get mixed.

Yours truly,

California cotton growers should be glad to know that the 1931 sale of cotton goods was 117 million yards ahead of 1930, according to the Association of Cotton Textile Merchants.



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.

"Why do they have knots on the ocean instead of miles?"

"Well, you see, they could not have the ocean tide if there were no knots."

He: "What was the name of that last piece you played?"

She: "Silk Stockings."

He: "Gosh, it sure did have lots of runs."

Jerry: "I hear you've been studying for months how to increase your salary. How did it turn out?"

Freddy: "Poorly. The boss was studying at the same time how to cut down expenses."

Prof.: "In which of his battles was Alexander the Great killed?"

Frosh: "I think it was his last."

He (shyly): "I'm going to steal a kiss."

She: "Well, let the crime wave begin."

"How about some nice horseradish?" said the grocer to the bride.

"Oh, no, indeed; we keep a car."

Passerby: "What, digging up this street again?"

Foreman: "Sure, the contractor used to be a surgeon and it seems that three steam shovels are missing."

Papa: "Bobby, if you had a little more spunk, you would stand better in your class. Now, do you know what spunk is?"

Bobby: "Yes, sir; it's the past participle of spank."

Of the 20,000 old-style razors in Alabama, 500 are used for shaving and the rest for social purposes.

As the legend goes, an Irish policeman was taking an examination for promotion:

Question: What is rabies, and what do you do about it?

Answer: Rabies is Jewish priests, and you can't do nothing about it.

The law professor was delivering the last lecture of the term. He told the students with much emphasis that he expected them to spend all their time preparing for the examination.

"The examination papers are now in the hands of the printer," he concluded. "Now, is there any question you would like answered?"

Silence prevailed for a moment, then a voice piped up: "Who is the printer?"

A colored boy was strolling through a cemetery reading the inscriptions on the tombstones. He came to one which read, "Not dead, but sleeping."

Scratching his head, the Negro remarked: "He sure ain't foolin' nobody but hisself."

One reason why more people enjoy baseball is that you don't have to have a college education to get seats to the big game.

"One of my ancestors won a battle in the Crusades by his skill in handling the artillery," said the baron.

"But, my dear baron," said his friend, "at the time of the Crusades gunpowder had not been discovered."

"I know that as well as you do, and so did my ancestor."

"How did he win the battle, then?"

"He brought the artillery to bear on the Saracens; and they, seeing the guns, supposed that powder had at last been invented, and fled in dismay."

FOUR MEN

*It chanced upon a winter's night,
safe sheltered from the weather,
The board was spread for only one,
yet four men dined together.*

*There sat the man I meant to be
in glory spurred and booted,
And close beside him to the right,
the man I am reputed.*

*The man I think myself to be,
a seat was occupying
Hard by the man I really am,
who to hold his own was trying.*

*And, though beneath one roof we met,
none called his fellow brother;
No sign of recognition passed—
they knew not one another!*

"I say, Bill," said a bricklayer to his mate, "what's a cosmopolitan?"

"Well," was the careful reply, "if there was a Russian Jew living in Scotland with an Irish wife smoking Turkish cigarettes at a French window in a room with a Persian carpet and a German band was playing 'The Dear Little Shamrock' after a supper of Dutch cheese made into Welsh rarebit—you'd be quite safe to say that chap was a cosmopolitan."

Lecturer (waxing eloquent): "When the great plenipotentiary arrived home from his foreign mission he fell on his face and kissed the pavement of his native city. Was that emotion or was it—"

Voice from the rear: "A banana skin?"

The newly elected president of a banking institution was being introduced to the employees. He singled out one of the men in the cashier's cage, questioning him in detail about his work, etc.

"I've been here forty years," said the cashier's assistant with conscious pride, "and in all that time I made only one slight mistake."

"Good," said the president. "Let me congratulate you. But hereafter be more careful."

SOUTHERN CALIFORNIA GAS COMPANY

Cities, Towns and Communities Served

Central Division

Bandini
Beverly Hills
Los Angeles
Maywood
South Gate
Vernon
Westwood

Eastern Division

Alberhill
Alessandro
Alta Loma
Arlington
Banning
Beaumont
Bloomington
Colton
Corona
Crestmore
Cucamonga
Del Rosa
Elsinore
Fontana
Grant
Guasti
Hemet
Highgrove
Highlands
Lake Arrowhead
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

Delano
Fort Tejon
Grapevine
Greely
Highland Park (Kern County)
Lebec
McFarland
McKittrick
Rosedale
Shafter
Tehachapi
Wasco

Northern Division

Alta Canyada
Burbank
Canoga Park
Chatsworth
Eagle Rock
Flintridge

Girard
Glendale
Granada
La Canada
La Crescenta
Lancaster
Mojave
Montrose
Newhall
North Hollywood
North Los Angeles
Pacoima
Palmdale
Reseda
Roscoe
San Fernando
Saugus
Sunland
Sylmar
Tujunga
Universal City
Van Nuys

San Joaquin Valley Division

Armona
Caruthers
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
Moneta
Norwalk
Palos Verdes
Redondo Beach
Rivera
Santa Fe Springs
Torrance
Walnut Park

SILENT

*as the
Mountain Peaks*



ELECTROLUX

THE *Gas* REFRIGERATOR

MOST ECONOMICAL FOR THE HOME

The Gas Refrigerator has no moving parts, and is absolutely silent. Two or three pennies a day is an ordinary operating cost, the most economical refrigeration for the home. Terms as low as \$5 down and \$7.50 a month (25 cents a day). See the display at our nearest office.

**Southern California
Gas Company**

