

Recording Our Thoughts

ANUMBER OF important changes in the Mrs. America promotion for 1957

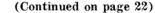
> Our Cover



WHEN NATURAL GAS came to Missoula, Montana this year, Montana Power Company workmen heaved a sigh of relief, and rightly so, for they had just completed a tremendous task. Typical of the terrain where the main is laid is shown on our cover. have been announced by the American Gas Association, chief sponsor of the annual event. Most important of these are the selection of a new location for the Grand Finals, the co-sponsorship of a leading national magazine and the appointment of a special assistant to the Mrs. America campaign.

Fort Lauderdale, Florida, will be the site for the crowning of the next Mrs. America the week of May 7-14. The change from Ellinor Village at Daytona Beach, where for the past three years contestants were housed in identical gasequipped cottages, to the new Beach Club Hotel at Fort Lauderdale, will place greater emphasis on the finals. For the first time, the public will be invited to observe the 49 finalists at their various sewing, cooking, meal planning, and similar homemaking assignments on the stage of the Memorial Auditorium.

The WOMAN'S HOME COMPANION, circulation 4,500,000, has acquired exclusive rights to the name and endorse-





"Boss, here's a copy of that air mail letter you wanted in a hurry."



September • 1956

WALTER H. DYER, Editor

MUELLER CO.

MANUFACTURERS OF WATER AND GAS DISTRIBUTION AND SERVICE PRODUCTS

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Three No-Blo Schools

Gas engineers, foremen, supervisors attend meetings

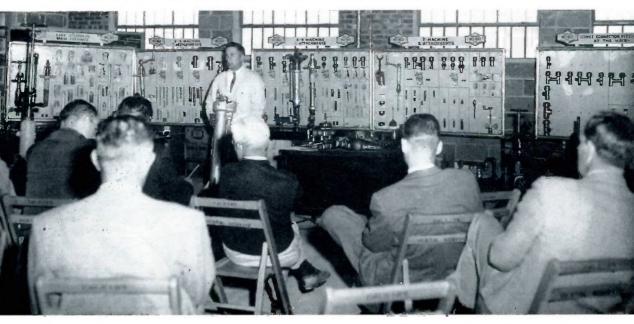
DEMONSTRATIONS of Mueller No-Blo equipment have for several years been presented to gas companies throughout the United States. Demonstrations are designed to illustrate the safest and most economical use of Mueller gas equipment, and are not an effort to merely demonstrate our products.

They have proven to be beneficial and of interest to gas companies which already have seen them. Shown on these two pages are pictures taken at three such demonstrations recently.



EDMUND C. FENSTAD, Mueller sales representative who conducted the No-Blo demonstrations shown here, LeRoy J. Evans, Mueller Co. Vice President in Charge of Eastern Sales, and Herbert T. Huffine, Mueller sales representative, are shown at the New Jersey Natural Gas Company, Asbury Park, N. J., site of a recent demonstration.

THE MUELLER NO-BLO display is shown in the background as Edmund C. Fenstad conducts a demonstration at the New Jersey Natural Gas Company in Asbury Park. Demonstrations are attended by engineers, supervisors and foremen.





HAROLD M. Kopp, gas engineer, Connecticut Light and Power Company, Berlin, Conn., who made arrangements for the No-Blo demonstration and acted as host to the visiting gas companies.

REPRESENTATIVES OF Connecticut Light and Power Co., The Connecticut Power Co., The Greenwich Gas Company, The Housatonic Public Service Co., The Hartford Gas Co., The New Haven Gas Co. and The Bridgeport Gas Co. attend the Mueller No-Blo school sponsored by the Connecticut Light and Power Co.

A SECTION OF the Connecticut Light and Power Co. building where the demonstration was held. The No-Blo school was on the first floor; luncheon was served in the cafeteria on the second floor.

HOST TO ANOTHER No-Blo demonstration was the Long Island Lighting Company at the Glenwood Gas Plant, Glenwood Landing, L. I., New York. At left are representatives from the Long Island firm, Consolidated Edison Company of New York, The Brooklyn Union Gas Company, The Kings County Lighting Company and the Brooklyn Boro Gas Company, who attended the demonstration.

THE GLENWOOD GAS PLANT office building of the Long Island Lighting Company, site of a recent Mueller No-Blo demonstration. A CONVENTION PROGRAM offering a wide range of subjects is reaching completion, according to Ronald A. Malony, President, The Bridgeport Gas Company, Chairman of the American Gas Association General Convention Committee. More than 4,000 delgates are expected to attend the three-day meeting in Atlantic City, October 15, 16 and 17.

General Sessions will be at 10 a.m. each day of the convention. At the openSomeone once said "Nothing happens in business until something is sold." Judson S. Sayre, president, Norge Division, Borg-Warner Corporation, is a salesman. His entire business career has been devoted to organization and distribution. He is most capably qualified to talk on sales and salesmanship.

To complete the program, delegates will be given a first-hand view of the current business outlook by Dr. Martin R.



ing general session, Dean H. Mitchell, President, Northern Indiana Public Service Company, and A.G.A. President, will present a "state of the nation" report. He will recount the progress the industry has made, and express his views of some of the things that can be done by future administrations.

Certainly no problem facing the natural gas branch, and today that comprises about 95 per cent of the gas industry is more important than the coming patterns of regulation. Jerome K. Kuykendall, chairman of the Federal Power Commission will inform the industry of what may lie ahead in regulatory fields.

The gas appliance and equipment manufacturers, also faces problems. Rising costs of materials, lack of a sellers' market, savage competition—these are obstacles in the road for manufacturers and utilities. W. F. Rockwell, Jr., President, Rockwell Manufacturing Company, and President, Gas Appliance Manufacturers Association, will offer a coordinated program of progress designed to benefit the entire gas industry.

Changes in world affairs that affect America also affect the gas industry. Herman W. Steinkraus, President, Bridgeport Brass Company, and past president, Chamber of Commerce of the United States, will speak on "America's Role In A Changing World." During his term of office, and since that time, Mr. Steinkraus has kept aware of the changing trends on a world-wide basis. Gainsbrugh, chief economist, National Industrial Conference Board.

The Sectional activities also have been planned with a view to bringing delegates up-to-date on problems and progress of their particular branch or branches of the industry.

Capable speakers from within the industry will address meetings of the Accounting Section. An afternoon meeting will be held at the Vernon Room. Haddon Hall Hotel, Monday at 2 p. m. Emmet T. White, Public Service Electric and Gas Company, Newark, will report on the Harvard electronics research project. Carl D. Osterholm, Northern Natural Gas Co., Omaha, will discuss efficient utilization of tax departments. Clyde O. Carpenter, Jr., Knoxville Utilities Board, will speak on policies affecting customer relations and a speaker yet to be named will talk on responsibility reporting and budgeting. R. H. Johnson, The Brooklyn Union Gas Co., will preside at the Monday afternoon session.

Tuesday noon will see the Accounting Section convening for a luncheon meeting in the same location, with E. M. Alt, Northern Indiana Public Service Co., presiding. Reports will be read by E. R. Eberle, Public Service Electric and Gas Co., chairman of the Accounting Section, and by Austin T. Gardner, Delaware Power and Light Co., who will present the Nominating Committee's candidates for section offices. Election of officers will follow.

J. W. Carpenter, Long Island Lighting

MUELLER RECORD

Company, will speak on figures, facts, and folks. The credit picture in the gas industry will be discussed by a panel with F. T. Hager, Philadelphia Gas Works, chairman, and R. B. Mitchell, The Peoples Gas Light & Coke Co., F. J. Maguire, Boston Gas Co., H. S. Hahn, The Ohio Fuel Gas Co., and W. C. Washburn, Equitable Gas Co., as panel members.

Dean H. Mitchell, President of A. G. A., will present the Order of Accounting Merit awards at this luncheon meeting.

Completed plans of the Industrial and Commercial Gas Section's program committee under E. V. Bowyer, Roanoke Gas Company, point to a worthwhile session Tuesday afternoon at the Rose Room of the Hotel Traymore. Lawrence E. Biemiller, Baltimore Gas & Electric Co., will preside as Section Chairman.

The Section's meeting will begin with a luncheon in the American Room of the Traymore at 12:30 P. M. Tuesday in cooperation with the Residential Gas Section. Section chairmen, B. H. Wittmann, The Peoples Gas Light & Coke Co., for the Residential Section, and Mr. Biemiller, for the Industrial and Commercial Gas Section, will preside.

A. G. A. 's Managing Director, Chester S. Stackpole, will present Mrs. America to the luncheon guests and the principal luncheon address will be given by A. W. Conover, Vice President of A.G.A., and President, Equitable Gas Company. Luncheon guests will be shown the new motion picture produced by the *Women's Home Companion*, titled "Trying On Your New Home." This color film features all seven domestic uses of gas.

At the Section's reconvened session in the Rose Room, the first speaker will be Fred A. Kaiser, Michigan Consolidated Gas Co. As Vice President and General Sales Manager of this important utility, he is specially qualified to talk on sales. Joseph J. Famularo, Columbia Gas System Service Corp., will speak on developing manpower.

Roy E. Wright, NEGEA Service Corp., believes the gas industry has made great progress in industrial and commercial gas service. He will tell the delegates about such progress. The session will close with the chairman's annual report and a short business meeting to hear the Many of nation's

Sat OF

gas industry

leaders will speak

during 3-day session

report of the nominating committee and the election of Section officers for the coming year.

The Residential Gas Section will conduct its meeting in the American Room of the Traymore after the joint luncheon. W. H. Kurdelski, Michigan Consolidated Gas Co., will report for the nominating committee and Section officers for the coming year will be elected. B. H. Wittmann, The Peoples Gas Light & Coke Co., will deliver the chairman's report. Cecil M. Dunn, president, Magic Chef, Inc., will invite delegates to consider the customer in an inspirational sales talk. John H. Wall, Vice President, Servel, Inc., will tell what's ahead, now that Servel has gotten the green light.

Mort Farr, one of the nation's outstanding retailers, will speak on a pertinent topic: "What's the Deal."

An outstanding event of the session will be a dramatic and informative presentation "Automatically Yours" featuring the new and revolutionary gas range automatic top burner heat control. The presentation will be staged by Frank H. Trembly, Jr., Director of Sales, and Janet M. Lappin, Home Service Director, Philadelphia Gas Works Div. of U. G. I.

The Home Service Breakfast, a traditional highlight of the conventions, will be given at the American Room of the Traymore at 8:00 a. m. Tuesday, with Mrs. Eleanor V. Wiese, Public Service Electric and Gas Co., and chairman, A.G.A. Home Service Committee, presiding. President Mitchell will extend greetings to the delegates. The breakfast talk will be given by Mrs. Charlotte Montgomery, well-known columnist and consultant. Mrs. Montgomery will tell: "What Mrs. Consumer Wants."

At the Home Service Round Table meeting, Tuesday afternoon at the St.

Dennis Room, Hotel Dennis, Betty Jayne Frahm, Montana-Dakota Utilities Co., will talk on "Operation Billings," and how it was conducted. Alice Strickler, Public Service Electric & Gas Co., will speak on home economics as a career. Margaret Davidson, household editor, *Ladies' Home Journal*, will give an editor's viewpoint on how America lives today. Marjorie T. Chandler, The Consumers' Gas Co. of Toronto, and Sarah Sicker, South Jersey Gas Co., will describe successful programs conducted by their respective companies for business girls and housewives.

J. H. Collins, Sr., New Orleans Public Service Inc., will deliver the chairman's report to open the meeting of the Operating Section in Trimble Hall of the Claridge Hotel on Monday afternoon. H. N. Oldham, Pioneer Natural Gas, Lubbock, Tex., will ask delegates to take a look at what the customer sees in its gas company. A long-range forecast of what's ahead for the gas industry by James Webb, Consolidated Edison Company of New York, Inc., will wind up the Monday afternoon program with a discussion on meter economy with standardization.

Section business, including the nomination and election of officers for the Section for the coming year will start the Operating Section's second meeting on Tuesday afternoon. Larry Shomaker, Northern Natural Gas, will talk on gas control and operational planning. Color films on bringing wild gas wells under control will be featured with narration by M. M. Kinley of Houston, Texas, who produced the films.

The General Management Section has secured Raymond Stevens, president of Arthur D. Little, Inc., as speaker at its annual luncheon meeting in the Grand Ballroom of the Shelburne Hotel, on Tuesday. He will discuss the increasing complexity of our industrial society and the need for adopting a research approach to management problems.

John H. Carson, The East Ohio Gas Co., will preside at the meeting and will introduce chairmen of the committees comprising the General Management Section. The election of officers for the coming year will be held Tuesday afternoon.

The Rate Committee will hold an open meeting at 2:30 p.m. Monday in the Brady Room at the Shelburne and the Corporate Secretaries Committee will meet at 2:30 Tuesday in the Mirror Room of the Shelburne.

An outstanding feature of the Convention will be the "Pattern For Progress" luncheon and meeting at 12:30 p.m. Wednesday in the American Room of the Traymore. This special luncheon meeting will be devoted exclusively to an interesting, informative and dramatic presentation of the progress and development of Gas Year-Round Air Conditioning. Leon Ourusoff, Washington Gas Light Company, chairman of the A.G.A. Task Group for Air Conditioning, will preside. An informed, impartial observer's opinion will be presented to the meeting by George T. Taubeneck, Editor and Publisher, of Air Conditioning and Refrigeration News. Mr. Taubeneck will discuss: "Progress and Promise of the Air Conditioning Industry." Karl B. Nagler, vicepresident, The Peoples Gas Light & Coke Company, who has been active in guiding A.G.A.'s research program on air conditioning, will bring delegates up-to-date on that phase of the industry's intensified program. President Mitchell will bring members an industry-wide report on our pattern for progress in this important gas service.

Entertainment has been arranged by the Convention Entertainment Committee, under Hugh L. Wathen, South Jersey Gas Company. On Monday night delegates and guests are invited to the President's Reception at the Auditorium Ball Room. Entertainment and dancing will follow the reception. At 1:00 p.m. Tuesday there will be a style show and luncheon for the ladies at the Renaissance Room of the Ambassador Hotel. The style show will be staged by one of the nation's leading designers and fashion leaders. On Tuesday evening in the Auditorium Ball Room, the committee will present an outstanding program of top variety entertainment acts.

All who have not done so already are urged to make reservations at once through the A.G.A. Housing Bureau, 16 Central Pier, Atlantic City, N. J. Registration can be made on Sunday afternoon and during other days at the Auditorium and at the Traymore and Haddon Hall Hotels. The fee is \$20 per person, with no charge for ladies who are not member company employees.

MUELLER RECORD

Gas -- The Hard Way

NATURAL GAS CAME to Missoula, Montana, in June this year culminating the end of a six-year effort to bring this low-cost convenient fuel to the people of that area.

The delivery of natural gas to Missoula is the responsibility of the Montana Power Company, the utility that also serves the city with water and electricity. (Ed. Note: An overall story on the Montana Power Company, with headquarters in Butte, will appear in a later issue of the Mueller Record.)

The plan to bring natural gas to Missoula began in 1950 when Montana Power Company executed a contract to purchase natural gas in Canada. The six-year delay was due to the necessity of obtaining export permits from the province of Alberta and the dominion government of Canada as well as acquiring import permits from the Federal Power Commission to bring natural gas from Canada into the United States. Montana Power is the first United States gas company to import gas under this permit.

The Dominion permit was issued in September, 1955, and the company, long ready to launch the project, began work on the Western Montana extension, as that line is known, immediately. More than likely, the line would have been completed last winter, had not adverse weather conditions forced a halt and

BUD ANDERSON, left, assistant superintendent, gas operations, Missoula Division of Montana Power Company, and Joe L. Weis, superintendent, gas operations, led the way in Missoula's changeover from manufactured gas to natural gas this year.





THESE TWO SCENES are typical of the path followed by Montana Power Company workmen in laying natural gas mains to Missoula. Locations of the main is shown by the freshly covered earth forming a pathway.

a delay of several months in the longawaited task.

Extension of the main to Missoula and other cities in the Bitter Root Valley was accomplished over some of the most difficult terrain in the Northwest. Our cover picture this month gives some indication of the path workmen followed. Two other photos with this story also point out that the men who installed the mains had tough sledding all the way.

Once in Missoula, Montana Power Company faced a gigantic task of converting from manufactured gas to natural gas. This was completed with a minimum amount of inconvenience to homeowners.

"We had some problems with a few people who were disturbed over the temporary loss of some grass during the installation period," said Joe L. Weis, superintendent, gas operations, "but most folks were cooperative and realized the problems we encountered in bringing gas service to them."

His sentiments were seconded by Bud Anderson, assistant superintendent of gas operations for the Missoula Division of the Montana Power Company.

The thing that amazed most Missoula residents was the quick and efficient man-

ner in which Montana Power Company made the change from manufactured to natural gas. Included in the project was the removal of some 1,800 saddle clamps and swing joint connections. These were replaced entirely by Mueller service tees. An estimated 200 Mueller line stopper fittings ranging in sizes from $1\frac{1}{2}$ " to 4", were used in making the conversion.

Other problems included the moving of some 1,800 meters and raising distribution pressure from 5 to 20 pounds per square inch.

The new distribution system in the bitter Root Valley consists of the following:

8	Mains	Services
Missoula	78.8 miles	65.0 miles
Hamilton	22.0 miles	22.7 miles
Stevensville	6.5 miles	4.14 miles
Corvallis	2.1 miles	1.78 miles
	Old Mains	Old Services
Missoula	43 miles	24 miles

GAS OUTWEIGHS STEEL!

Though natural gas is lighter than air, if last year's production of gas were put on the scales it would weigh two-andone-half times as much as the year's total steel production.

MUELLER RECORD

VITAL Fuel

Montana Power Co., Mueller join to keep gas flowing

A GREAT MANY businesses today are completely dependent upon the successful operation of the gas industry. Stop the flow of natural gas through their life lines, and they will flounder about as helplessly as a stricken ship at sea.

Mueller Co. through the years has achieved an important place in the operation of this sixth largest industry in the nation. Many times the company has joined forces with the gas industry to better serve customers of the utilities.

Recently, Mueller Co. joined with the Montana Power Company in a relatively simple operation—made simple by years of research and experience—and demonstrated how one fitting and some very versatile Mueller equipment can be used to the advantage of the utility and their customers.

The situation was this. A chemical company near Butte was expanding and needed an additional flow of natural gas to continue operations. The increase in volume was to be achieved by an increase in the size of pipe through which the gas was delivered.

After studying the problem, Montana Power Company engineers determined that if the 3" pipe in use was increased to 6" for several hundred feet, the necessary volume could be delivered. It was naturally necessary to make the change without shutting down the line in order that the plant's operations could be continued.

Mueller line stopper equipment was used and a line stopper fitting installed to allow the simultaneous connection of the new 6" line and the isolation of the 3" line. The changeover was accomplished in a minimum amount of time without inconvenience to the chemical company.



A MONTANA POWER COMPANY welder, at right, welds a Mueller line stopper fitting to the line that will increase delivery of natural gas to a chemical company near Butte. At left, William E. Blackman, Montana Power Company foreman in charge of the project, and Mueller Co. sales representative F. R. Seevers, observe the operation.

New No-Blo Trailer

Unit for line stoppers built by Montana-Dakota Utilities Co.

A TRAILER THAT is new and unique has been designed and built by Montana-Dakota Utilities Company to carry and store permanently Mueller line stopper units one, two and three.

The trailer, fourth of its kind to be reported in the MUELLER RECORD, was designed and built "mostly for convenience" in the company's shop in Billings, Montana. The trailer is stored in the shop, ready for use at all times.

All parts of each unit have a place aboard the trailer. It houses line stopper



E. C. NIELSEN, Division Superintendent, Montana-Dakota Utilities Company, Billings, had original idea for the Mueller trailer.

THIS IS THE MUELLER TRAILER built by Montana-Dakota Utilities Company to transport and store permanently Mueller line stopper units one, two, and three.



THIS ATTRACTIVE building is the divisional headquarters for Montana-Dakota Utilities Company in Billings.

fittings from $\frac{3}{4}$ " through 8" sizes. Valves are held in place on special brackets by webbing straps and all exposed facings of the valves are padded with rubber for protection. All equipment is held in place by $1\frac{1}{2}$ " belting and easy release friction catches.

E. C. Nielsen, Division Superintendent in Billings, had the original idea for the trailer and suggested that his staff find a suitable answer for permanent, yet convenient storage of Mueller line stopper equipment. Mr. Nielson found in Park Simpson, foreman of the construction crew, a man capable of creating a new idea for such a trailer. Mr. Simpson designed the trailer in the Billings shop, beginning work on the project last winter. Two other men collaborated with him on the assignment. They are J. W. Leggate, assistant superintendent of gas distribution, and George Hillner, construction foreman.

The most original feature of the trailer as compared to others built for (Continued on page 22)

J. W. LEGGATE, (above), assistant superintendent of gas distribution, Billings Division, and (below) Park Simpson, construction foreman, and George Hillner, construction superintendent. They collaborated to design and built the Mueller trailer.





Officers Nominated

THE GENERAL NOMINATING Committee of the American Gas Association has nominated a list of leading executives as general officers, directors, and section officers for submission at the convention. Association officers and section chairman and vice chairmon will be elected for the 1956-1957 Association year. Directors will be elected for two-year terms expiring in 1958.

Offices to be filled are those of president, two vice presidents, treasurer, 16 directors, and 11 section chairmen and vice-chairmen. The list of nominees follows

- For President-C. H. Zachry, President, Southern Union Gas Co., Dallas, Tex.
- For First Vice-President-A. W. Conover, President, Equitable Gas Co., Pittsburgh, Pa.
- For Second Vice-President-Robert W. Otto, Chairman of the Board, Laclede Gas Co., St. Louis, Mo.
- *For Treasurer-Vincent T. Miles, Treasurer, Long Island Lighting Co., Mineola, New York.

Dean H. Mitchell, President, Northern Indiana Public Service Co., Hammond, Ind., becomes a director upon completion of his present term as Association President. Newly-nominated and re-nominated directors are:

- John B. Balmer, President, John Wood Co., New York, N.Y.
- Everett J. Boothby, President, Washington Gas Light Co., Washington, D. C.
- *F. D. Campbell, President, New England Gas and Electric Association, Cambridge, Mass.
- Marvin Chandler, President, Northern Illinois Gas Co., Aurora, Ill.
- Carl E. Cloud, President, Mid-South Gas Co., Little Rock, Ark.
- *Stuart Cooper, President, Delaware Power & Light Co., Wilmington, Del.

- C. H. Gueffroy, President, Portland Gas & Coke Co., Portland, Oregon.
- J. J. Hedrick, President, Natural Gas Pipeline Company of America, Chicago, Ill.
- Robert A. Hornby, Executive Vice-President. Pacific Lighting Corp., San Francisco. Calif.
- Julius Klein, President, Caloric Appliance Corp. Philadelphia, Pa.
- *Donald C. Luce, President, Public Service Electric & Gas Co., Newark, N. J.
- *Walter T. Lucking, President, Arizona Public Service Co., Phoenix, Ariz.
- George T. Naff, President, Texas Eastern Transmission Corp., Shreveport, La.
- #John C. Parrott, President, Roanoke Gas Company, Roanoke, Va.
- *C. P. Rather, President, Southern Natural Gas Co., Birmingham, Ala.
- *E. H. Tollefson, President, Hope Natural Gas Co., Clarksburg, West Va. *Re-nominated.

#Nominated to serve out term of Robert W. Otto, expiring October, 1957. SECTION OFFICERS-To hold office one year:

ACCOUNTING SECTION

- For Chairman:-W. D. Sweetman, Superintendent, customers accounting department, The Peoples Gas Light & Coke Co., Chicago, Ill.
- For Vice-Chairman:-D. W. Peterson, secretary and treasurer. Minneapolis Gas Company, Minneapolis, Minn.

GENERAL MANAGEMENT

SECTION

- For Chairman:-Leslie A. Brandt, Vice President, The Peoples Gas Light and Coke Company, Chicago, Ill.
- For Vice-Chairman:-John H. Wimberly, President, Houston Natural Gas Corp., Houston, Tex.

(Continued on page 21)



The Two Bears . . .

This is the story of the two bears. Also appearing in the "skit" are a Mueller sales representative and the editor of the Mueller Record.

Last month while gathering Mueller Record stories in Colorado, Wyoming and Montana, salesman F. R. (Dick) Seevers headed for Butte, Montana, his next stop, via Yellowstone National Park. Midway through the park, Editor Walter Dyer spotted the cute cub appearing on this page.

Standing nearby was Mamma Bear, a good deal more stern looking than the bottom right photo indicates. Keeping the right rear door of the car open, Editor-Photographer Dyer moved in close enough for these shots of Baby Bear. Suddenly Mamma had enough of it.

For a closeup of her reaction, turn the page.





Do you recall the song Phil Harris made famous a few years ago about the preacher and the bear? It ended with this line: "Lo'd, if you can't help me, please don't help that bear!" That possibly was the thought of Dyer and Seevers as the car door was quickly shut with Mamma Bear close behind.

She stood on her hind legs and gave a close look through the back window. That's what she was doing when this picture was taken.

MUELLER RECORD

Gas Growth Seen In FPC Report

NATURAL GAS PIPELINE facilities estimated to cost more than \$461,400,000 and designed to add more than 2¼ billion cubic feet of daily delivery capacity to the nation's individual transmisson systems were authorzed by the Federal Power Commission during the year ended June 30, 1956, according to Chairman Jerome K. Kuykendall.

The new facilities authorized during this 12-month period included nearly 4,400 miles of pipelines and approximately 255,000 horsepower in compressor units, he said. The statistics include only facilities authorized for interstate natural gas pipeline companies and do not cover certificates issued to independent producers.

Mr. Kuykendall said that major projects-those estimated to cost \$700,000 or more each-accounted for approximately \$444,000,000 of the total construction cost. These major projects will increase the daily delivery capacity of the individual transmission systems involved by more than 2,187,000,000 cubic feet of gas per day, and include construction of about 3,700 miles of pipeline and nearly 247,000 horsepower in compressor facilities. The larger projects are expected to benefit 170 cities of 50,000 population or over in 31 states and the District of Columbia, as well as numerous smaller communities.

El Paso Natural Gas Company, of El Paso, Texas, received the largest single authorization during the 12-month period for a substantial increase in system deliverability. The El Paso project includes 413 miles of 34-inch main line loops in New Mexico and Arizona, 132 miles of miscellaneous supply lateral lines in Texas, and 60,610 horespower in new and existing compressor stations. Estimated to cost \$184,603,000, the project is designed to increase El Paso's system capacity by 455 million cubic feet of natural gas per day for service to existing wholesale customers primarily in California.

Mr. Kuykendall pointed out that while

there are slight decreases in total mileage, horsepower and estimated cost of the facilities authorized during this period when compared with the preceding 12 months, the projects approved during the later period will increase the daily delivery capacity of the individual transmission systems by approxmately 500, 000,000 cubic feet per day more than those authorized a year earlier. The facilities authorized during the year ended June 30, 1955, included more than 4,900 miles of pipeline and 260,000 horsepower in compressor capacity.

During the approximate 141/2 year period since the certificate provisions of Natural Gas Act became effective (February 7, 1942), the Commission has authorized a total of nearly 69,000 miles of pipeline and more than 4,600,000 horsepower in compressor units. Total estimated cost of these facilities exceeds \$5,300,000,000. Major facilities authorized over this period are designed to add nearly 26 billion cubic feet of daily delivery capacity to the individual systems involved. Mr. Kuykendall noted, however, that the quantity of this additional natural gas to be delivered directly from the transmission facilities to the nation's markets is somewhat lower because in some cases the same gas is transported through facilities of two or more pipeline systems.

In this respect, he again stressed the continuing development and operation of natural gas storage areas nearer the ultimate markets, thus enabling pipeline companies to utilize the maximum capacity of their systems during the warmer periods and reducing the need for additional transmission facilities in winter peak periods. These storage operations, which he said act to stabilize supply and insure continuity of service, consequently are becoming an increasingly important factor, but one which is not reflected in the estimates shown as additional capacity being made available to markets.

In addition, Mr. Kuykendall commented on the efforts of pipeline companies to exchange gas with each other and make available excess pipline capacity during temporary periods negating the need for additional capacity to be installed and more efficiently utilizing the capacities already in service.

ROBERT J. CUTTING has been appointed auditor of the American Gas Association. The appointment fills a new office in the gas industry trade association. Mr. Cutting was educated in New York City and Queens County schools and was graduated from Pace College where he majored in accounting and business administration. For the past two and one-half years he was employed by the Set-Up Box Manufacturing Company of Brooklyn as office manager and accountant. Previously he had spent seven and one-half years in the motion picture industry.

ROY GENE McMULLEN, Kingsville, Texas, a student at Texas College of Arts and Industries, has been awarded the \$1200 fellowship for the current school year. The award, formerly sponsored by the Natural Gas Department of the American Gas Association, is now under A.G.A. sponsorship.

The twenty-two year old student was

Around the

graduated in June from Texas A and I College with a degree of B.S. in Chemical Engineering. Under the fellowship he will work for his Master's degree in Engineering, doing research work either in adapting gas jet compressor work to field operations or measurement of twophase metering.

ALLEN D. SCHRODT, formerly Sales Coordinator, Southern Union Gas Company, Dallas, Texas, has been named Director of the Promotion, Advertising and Research (PAR) Program of the American Gas Association. Mr. Schrodt has assumed his new duties at A.G.A. Headquarters in New York City. He succeeds Otto E. Zwanzig, who resigned as director of PAR to become General Sales Manager of the British Columbia Electric Company, Ltd., in Vancouver, B. C.

L. W. Meacham Named to Sales Post

L. W. (Bill) Meacham, Jr., joined Mueller Co. in the Los Angeles plant May 25 as Assistant to E. George Baker, Assistant Sales Manager. He spent several weeks of intensive training in the Chattanooga and Decatur plants before assuming the position.

Mr. Meacham, a native of Detroit, Michigan, received a Bachelor of Science degree from Ohio State University in 1946, where he majored in business administration, with emphasis on marketing. He was a member of Alpha Tau Omega, social fraternity, and served as president of the organization.

Mr. Meacham is a veteran of two and one half years in the Army, serving two years in the European Theatre of Operation, where he took part in the invasion of Normandy. He was a Technician Fourth Grade.

He completed work on his degree immediately after his discharge from the Army, and worked several months in Los Angeles before accepting a position as sales representative doing sales promotion work for a company in Columbus, Ohio. Mr. Meacham spent seven years with the company, being promoted to sales supervisor a year and a half before resigning.

Prior to accepting the position with Mueller Co., Mr. Meacham was employed by Headquarters Air Material Command at Wright-Patterson Air Force Base in Dayton, Ohio.

He is 36 years old and single.



L. W. MEACHAM, Jr. MUELLER RECORD

Gas Industry

THE GAS INDUSTRY recently honored the man generally regarded as having done more than any other individual to establish the present system of testing and standards in the gas appliance field. He is Raymond Mower Conner, who retired July 31 after 41 years in the industry. Conner directed the American Gas Association Laboratories from the time of their establishment in 1925 until 1947. Since 1947 he has been a consultant at the laboratories in Cleveland.

At a testimonial dinner in Cleveland, Ohio, Chester S. Stackpole, Managing Director of the American Gas Association, and H. Leigh Whitelaw, Executive Vice President of the Gas Appliance Manufacturers Association, termed Conner's pioneering an essential factor in the vast expansion of gas utility operations and appliance manufacturing. The influence of Conner's contributions. Whitelaw commented, extends far beyond the gas trade "because he broke new ground in the whole broad field of product testing and industrial self regulation, which today are protecting and benefitting the American consumer in countless applications."

Awards were presented to Conner by AGA and GAMA, and also on behalf of the Pacific Coast Gas Association, which he served before joining the national association.

THE DISCOVERY and production of natural gas have increased dramatically during the past decade, W. F. Rockwell, Jr., President of the Gas Appliance Manufacturers Association, said recently, Rockwell, who also is President of the Rockwell Manufacturing Company, was the principal opening speaker at the 63rd annual convention of the Pacific He said the Coast Gas Association. American natural gas industry has embarked on a seven-billion dollar, fouryear expansion program which inevitably will strengthen the nation's economy and standard of living.



W. R. LEOPOLD, JR.

W. R. Leopold Named Manager of Mueller Engineering Division

W. R. LEOPOLD Jr. has been appointed Engineering Division Manager of Mueller Co. The position is a new one. Frank H. Mueller is Vice President and Director of Engineering.

The author of a number of technical articles published in several leading national trade magazines, Mr. Leopold comes to Mueller Co. from the Lycomning Division of Avco Manufacturing Corp. in Stratford, Conn., where he was Group Project Engineer in charge of Research and Development.

He holds a Bachelor of Science Degree in Mechanical Engineering from the Illinois Institute of Technology in Chicago and a Master of Science Degree in Mechanical Engineering from the Stevens Institute of Technology in Hoboken, N. J.

Besides his position with Avco, he also has been Project Engineer for Wright Aeronautical, Woodridge, N. J.; Assistant Head of the Design and Development Division for the N. W. Kellogg Co., Jersey City, N. J.; head of a group working on mechanical and electro-mechanical devices for the Eclipse Pioneer Division of Bendix Aviation Corp., Teterboro, N. J.; and Senior Project Engineer for Barium Steel Corp., New Rochelle, N. Y.

Mr. Leopold is a member of the American Society of Mechanical Engineers and the Society of Automotive Engineers.

Gas Into Northwest

Mrs. America turns on blue flame to mark fuel's arrival

A BIG BLUE GAS FLAME turned on by Mrs. America has given the Pacific Northwest vivid and official notice that it has been linked to the nation's vast natural gas resources.

At ceremonies on Sauvies Island in the Columbia river a 1,487-mile pipeline from the San Juan Basin in New Mexico was joined to the Portland Gas and Coke Company's distribution system serving Oregon and Washington.

Howard Pyle, deputy assistant to President Eisenhower, and a former Governor of Arizona, told an audience of 500 business, government and community leaders at the ceremony that with the introduction of natural gas, "Oregon and Washington can look forward to phenomenal industrial expansion."

When the \$400-million natural gas pipeline project eventually is completed at the Canadian border—with feeder operations of gas also available from Canadian fields—the Pacific Northwest will have virtually doubled its power potential. The natural gas supply here will then exceed the energy output of all the hydro-electric projects in the three Northwest states.

The Northwest is the last major geographical and population area in the U. S. to have access to natural gas. The main pipeline was brought over mountains, deserts, plains, rocky wastelands and irrigated farm lands—across Colorado, Wyoming, Idaho and finally down the old Oregon trail blazed by 19th century American pioneers.

Co-hosts were Ray C. Fish, chairman, Pacific Northwest Pipeline Corp., and C. H. Gueffroy, president, Portland Gas and Coke Company. The gas industry was represented by Dean H. Mitchell, president, and C. S. Stackpole, managing director of the American Gas Association, and Harold Massey, managing director of the Gas Appliance Manufacturers Association.

It was estimated that the first residential supply of natural gas will be available about Sept. 1, with communities in the Willamette Valley near Portland and Vancouver, Wash., across the Columbia from Portland, the first to take deliveries.

The Canadian natural gas industry not only will meet more than 20 per cent of the Dominion's fuel requirements in the next 10 years, but also will find American markets, particularly in the Northwest, Middle West and Great Lakes area, and help the continent as a whole to expand its fuel reserves.

This forecast was made by H. Leigh Whitelaw, executive vice president of the Gas Appliance Manufacturers Association.

Recalling that in the early 1900's a prominent Austrialian official had visualized the twentieth century as "belonging to the United States," Whitelaw said, "the continuing upcurve of your technological accompliment indicates that the twenty-first century will be the Canadian Century."

"If this eventuates, there is little doubt that the Canadian gas industry will have been an important factor," Whitelaw said.

The GAMA official pointed out that Alberta gas reserves have more than tripled in the past five years, and estimated that the Province will account for a reserve of 60 trillion cubic feet by 1980. This, he said, would outstrip the rate for all areas in the United States combined during a comparable period from 1925 to 1955.

The Canadian industry, he added, will benefit from the early experience of the United States which once allowed unmeasured volumes of gas to burn up at the source because "markets were not ready, long distance high-pressure pipelines had not been developed, and the important technology of recycling gas to the producing levels as an oil drive had not been achieved."

Now, he said, gas is a decisive modernization factor in 36,000,000 American homes and a vital tool in more than 26,000 different industrial processes.

Canada's potential as a source of natural gas, with exploration proceeding in Ontario, New Brunswick, Nova Scotia and elsewhere, should enable it to rival, if not eclipse, America's gas industry record, Whitelaw said. At present, he added, American gas is being delivered to Ontario. Future expansion of the fuel exchange between the two countries, he said, will enable both to make a sizeable and significant contribution to balanced trade.

Officers nominated . . .

(Continued from page 14)

INDUSTRIAL AND

COMMERCIAL SECTION

- For Chairman:—J. Robert Delaney, manager, Gas Sales, The Cincinnati Gas & Electric Company, Cincinnati, Ohio
- For Vice Chairman:—Roy E. Wright, Director of Gas Sales, NEGEA Service Corp., Cambridge, Mass.
- OPERATING SECTION
- For Chairman:—Grove Lawrence, Vice President, Southern California Gas Co., Los Angeles, Calif.
- For Vice Chairman:—Victor F. Bittner, Assistant Chief Technical Engineer, The Peoples Gas Light & Coke Co., Chicago.
- For Second Vice Chairman:—Herbert C. Jones, Gas Engineer, New England Electric System, Gas Div., Malden, Mass.

RESIDENTIAL GAS SECTION

- For Chairman:—W. D. Williams, Vice President in Charge of Sales, New Jersey Natural Gas Co., Asbury Park, N. J.
- For Vice Chairman:—A. G. Bur, Vice President in Charge of Sales, Wisconsin Public Service Corp., Green Bay, Wisc.

. . Borrowed Wit . .

The dilapidated old car wheezed up to the toll gate at the Sunshine Bridge out of St. Petersburg, Fla.

"One dollar and seventy-five cents," said the attendent.

"Sold," answered the driver wearily.

The collection department of a finance company tried a new method on a slow-paying account.

"Dear Mrs. Jones,," the letter began. "What would your neighbors think if we came to your town and repossessed your car?"

In time the letter came back with a message scrawled at the bottom. "I have taken this matter up with my neighbors." it said, "and they think it would be a lousy trick."

Two men at a county fair were fascinated by a booth where little celluloid balls bobbed on top of water jets. Prizes were offered if anyone could shoot one of the balls off its perch. One man spent six quarters in a vain attempt to pick off one ball. Finally his friend pushed him aside and picked up the gun. He took a single shot. All six balls disappeared.

As they walked away, laden with prizes, the unsuccessful one marveled. "How did you do it?", he asked.

"It's just knowing how," explained the winner. "I just shot the man working the pump."

An elderly couple had been sitting in front of the evening fire a long time without speaking. At last the husband inquired, "What are you thinking about?"

To which the wife replied—"I was just thinking how long we have lived together and that it couldn't go on forever like this and that the time will soon come when one of us will have to go."

"Yes," assented the old man, "but it is of no use to worry about that now, Mother."

"No," was the calm reply, "but I was just thinking that when it does happen, I would like to go to California to live."

Recording Our Thoughts . . . (Continued from page 3)

ment of "Mrs. America," and will join with the gas industry in its search for the nation's outstanding homemaker. The January issue of Companion will announce the start of the 1957 campaign and will include an entry blank for women wishing to enter the contest.

A.G.A. has appointed Thomas .T Fagan to assist during the coming campaign. He will work closely with gas companies and leading industries who are co-sponsors of the contest. Gas companies in all 48 states and the District of Columbia will conduct local and statewide contests prior to the Grand Finals. The national search for the nation's number one homemaker places the emphasis on homemaking abilities rather than beauty. Any American woman who is married and managing a home is eligible to enter.

The present Mrs. America, Mrs. Cleo Maletis of Portland, Oregon, is a graduate home economist and the mother of three boys. Her prizes, totalling more than \$15,000, include a complete New Freedom Gas Kitchen and Laundry, a DeSoto automobile, a trip to Europe with her husband, a selection of modern, fully automatic gas appliances for her home, and a host of other top prizes.

More gas reserves discovered

Gas reserves are being discovered in increasing quantities on the North and South American continents outside of the United States. In Canada, known, marketable reserves in Alberta, the largest gas producing province, are above 16 trillion cubic feet. Estimates indicate a forecast of more than 100 trillion cubic feet of reserves for the entire Dominion are not considered out of order. A conservative estimate places total reserves of natural gas in North and South America outside of the United States and Canada at more than 4 trillion cubic feet. Proved reserves in Mexico are now totaling around 1.2 trillion cubic feet and known reserves in South America today are over 2 trillion cubic feet. Since these figures are based on proven reserves, the ultimate reserves in this hemisphere probably would be much higher than this estimate.

RECORD GAS RESERVES

Proved recoverable reserves of natural gas at the beginning of 1956 amounted to 223.7 trillion cubic feet, a new high record. This was an increase of 12 trillion cubic feet over reserves at the beginning of 1955, and it marked the second greatest increase in reserves of any year since official estimates were initiated in 1945. This increase was achieved in the face of the greatest peak production of natural gas in the history of the industry.

New No-Blo Trailer . . . (Continued from page 13)

similar purposes, is that it has racks enabling the equipment to remain upright. This eliminates much heavy lifting for workmen. At one time, a rack on top for a protective canvas was considered. It later was decided to forego this idea and instead keep close tab on equipment after each use making certain it is properly cleaned and ready for immediate use.

"There's no need to have a check list for this trailer," Mr. Leggate explains. "If there's a vacant spot, then you know something is missing. It's easy to determine what that equipment is," he said.

It cost Montana-Dakota Utilities Company between \$1,000 and \$1,250 to design and build the trailer, which incidently can be adapted to include 10" and 12" fittings.

The trailer is used only in the Billings division which includes south central Montana and northwestern Wyoming. However, other divisions have heard about the trailer and plans have been forwarded to several of them.

Mueller Co. has arranged with Montana-Dakota Utilities Company to make blue prints of this trailer available to any gas company desiring to adapt the trailer for that company's particular needs. Requests for blue prints may be directed to the Editor, Mueller Record, Decatur, Illinois.



The completion of two major natural gas transmission lines, the Pacific Northwest and the American-Louisiana lines alone will add nearly 4,000 miles to the nation's natural gas system. New natural gas gathering, transmission, storage and distribution mileage will total nearly 30,000 miles this year. This will mean that the natural gas industry's total system will aggregate more than 475,000 miles. With the inclusion of more than 50,000 miles of manufactured and mixed gas distribution mains, more than half a million miles of pipe are being utilized to carry gas from wells to customers' appliances in the United States.

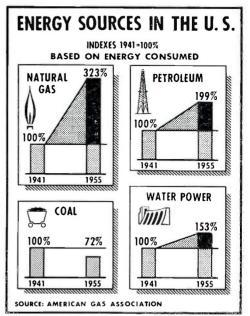
The gas utilities in 1955 sold more than $66\frac{1}{2}$ billion therms of gas to more than 29 million customers. A therm is equal to about 100 cubic feet of 1,000 btu natural gas. In 1956 it is expected that the industry will sell over 70 billion therms or about 7 trillion cubic feet of gas to more than 30 million customers. A decade ago, sales amounted to 26 billion therms or approximately 2.5 trillion cubic feet, since more than 3 billion therms sold in 1946 were manufactured and mixed gas with less than 1,000 btu heat content.

Last year, in October, the United States launched the world's largest ship. This was the U.S.S. Saratoga, built in the New York Naval Shipyard in Brooklyn, New York, The United States Ship, Saratoga, measured 1,039 feet or the equal of about 5 city blocks, from bow to stern. The S.S. United States and the S. S. America could be placed on her 252-foot-

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wide flight deck with room to spare. Gas played an important part in the construction of the Saratoga. Over 80 million cubic feet of gas were used in the forging, heat treating and melting of metals, food preparation and heating of water used during the construction of the Saratoga, according to records of the Brooklyn Union Gas Company.

There are still some 30 cities in the United States where gas is still used to some extent for street and interior illumination. According to one of the gas industry magazines, the prize for nostalgic qualities must go to Riverside, a suburb of Chicago. In this village about 31 miles of its street remain lighted with gas. According to the village manager, this tradition is not likely to change. Each time talk arises of changing to electricity a storm of public opinion develops. The lamps date back to a few years after the end of the Civil War. As a gesture to modernity, a mechanical means has been installed which turns the gas lights on and off each day. The clock mechanism is wound once a week by hand.



LAST year's consumption of natural gas was more than 10 quadrillion \mathbf{L} B.t.u. of energy, over 23 per cent of the nation's total energy consumed and triple its use a little more than a decade ago. This amount of energy is sufficient to make 265 million automobiles or the total United States output of cars for 41 years at the present rate of production. Sizes ¥"and 1" Pressures to 1200 p.s.i. No-BIO® Steel Valve. For high pressure service lines. Machined from steel forging. Available with threaded or welding inlets and outlets. "O" rings around stem and in cap prevent leakage to the outside. Metal to metal line contact of stem and seat assures gas-tight shutoff. The No-BIo Steel Valve can be completely reconditioned under full line pressure without escape of gas by using the Mueller E-4 Drilling Machine and gate valve. Easily operated from above ground through curb box.

POSITIVE CONTROL at the curb

Inverted key curb stop

MUGULA

Positive shut-offs are assured with precision ground key which is individually lapped into the stop body. This assures pressure tightness at the port and prevents leakage through the stop when closed. Key is firmly seated with spring pressure and line pressure. "O" ring seals at top and bottom of key prevent leakage to outside. Light down pressure on shut-off rod unseats key for easy turning. A wide selection of inlets and outlets will easily adapt it to any type of service line.

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Contact your Mueller Representative or write direct for complete information.



Sizes 4"through 2" Pressures to 125 p.s.i.

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