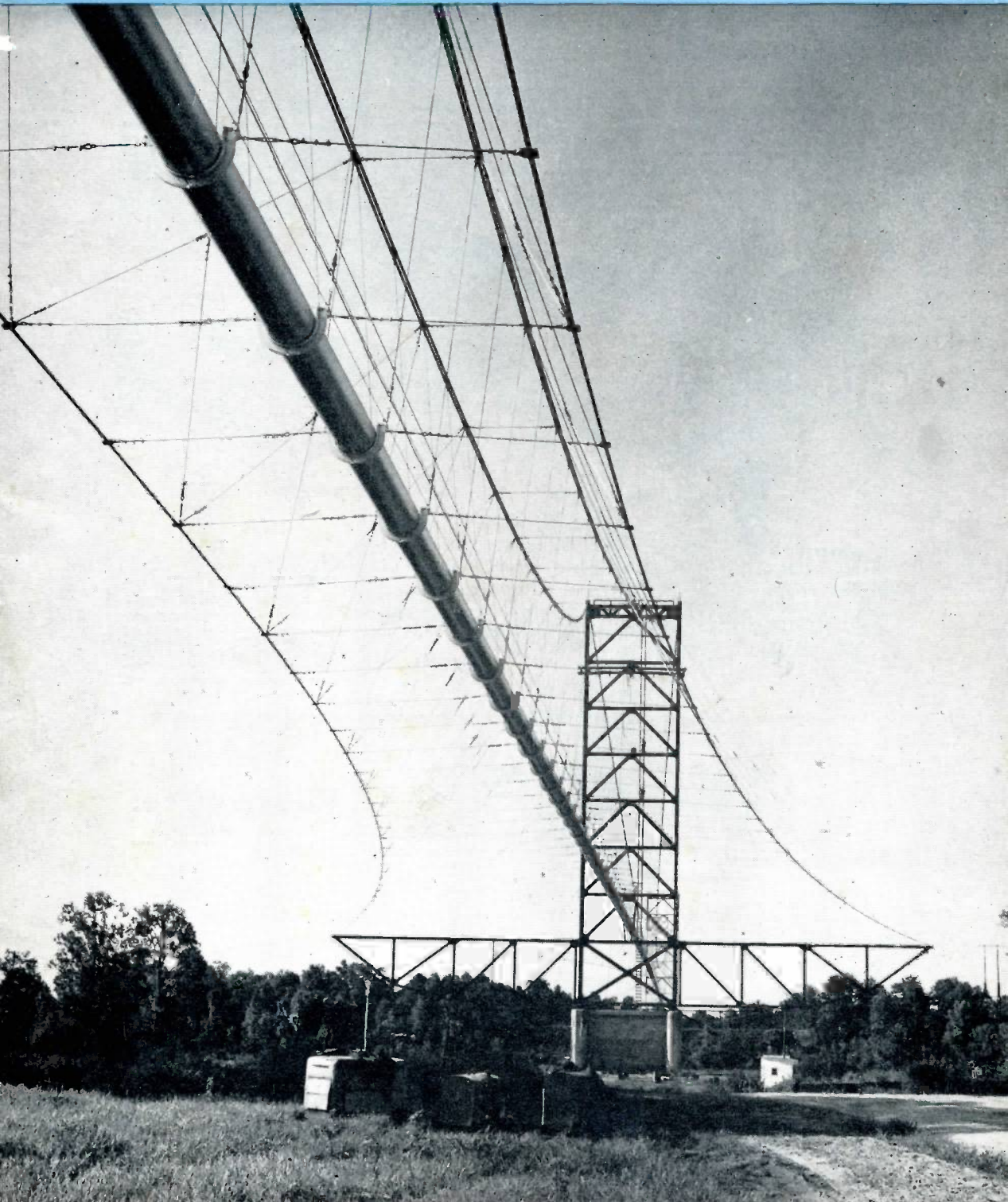


MUELLER *Record*

JULY • 1954



MUELLER



C-1 Drilling Machine

Makes 2" to 12" cuts through gate valves in any size cast iron or steel main — dry or under pressure. Power-operated with H-600 Air Motor or H-602 Gasoline Engine Drive Unit. Hand-operated model also available. Similar machines available in smaller sizes.



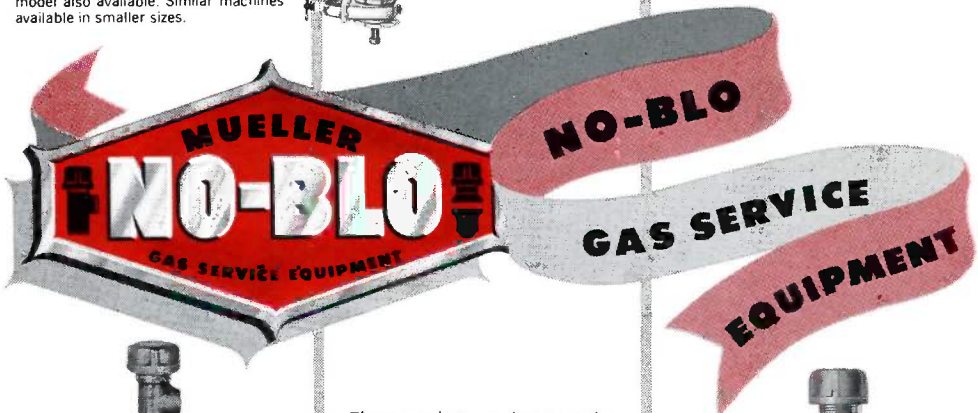
H-17340 Stopping Machine

Used to insert, expand and extract steel wedge line stoppers. Other models available for inserting stoppers ranging from 1/4" through 8" under pressure.



H-17505 Flanged Tee

Used when making a large connection on a steel main. Permits locating valve on lateral line in most convenient place. Drilling and plugging of tee is done under pressure. Sizes 3", 4", 6" and 8".



H-17790 Machine Inserted Service Valve Tee

Designed for inserting directly into steel or cast iron mains under pressure, using the Mueller "B" Tapping Machine. Built-in valve gives complete control of the service at the main. Copper-encased neoprene gasket makes pressure-tight joint against pipe.

These products are just a portion of the complete selection of gas equipment, supplies and specialties offered by Mueller Co., designed and manufactured to traditionally high standards.



H-17490 Save-a-Valve Drilling Nipple

Permits removal of valve when connection is abandoned. Used when making a connection to steel pipe under pressure. Inside thread in nipple permits insertion of a plug under pressure. Completion cap makes double leakproof seal.



H-11170 LubOseal Gas Meter Stop

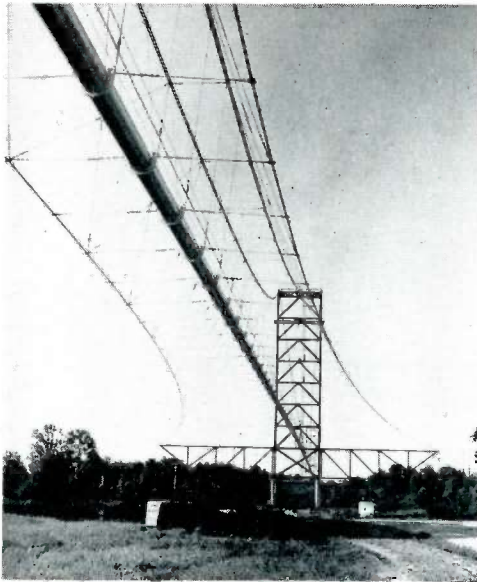
"O" rings are located at top and bottom of precision-ground and lapped key, assuring gas-tight seat. Lubricant is automatically pressure-fed to longitudinal grooves in key, assuring positive lubrication.



H-11104 "O" Ring Seal Gas Curb Stop

Inverted bronze key is precision ground to a gas-tight fit in a heavy cast iron body. Tight seatage is accomplished with stainless steel spring under key plus service line pressure. Seals located above and below gasway give positive assurance against top or bottom leaks.

MUELLER CO.
Dependability Since 1857
 MAIN OFFICE & FACTORY DECATUR, ILLINOIS



THIS MONTH'S COVER

This thirty-inch natural gas pipe line crossing over the Red River near Natchitoches, Louisiana, forms a spectacular web in the sky. The pipe line is the property of the United Gas Corporation. A description of United Gas Corporation's vast operations and the part it plays in the great Gulf South begins on page 4.



July • 1954

WALTER H. DYER, Editor

MUELLER CO.

MANUFACTURERS OF WATER AND GAS
DISTRIBUTION AND SERVICE PRODUCTS

FACTORIES

DECATUR, ILL. LOS ANGELES, CALIF.
SARNIA, ONT. CHATTANOOGA, TENN.

SALES OFFICES

NEW YORK CITY SAN FRANCISCO

TRADE MARK

MUELLER

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Member Industrial Editors Association of Chicago
and International Council of Industrial Editors



JULY • 1954

Recording Our Thoughts

Of all the inquiries received by our Sales Division regarding the advertisements describing our "D-4", "E-4" Drilling Machines and our No-Blo Fittings and the No. 4 Line Stopper Unit, one was of particular interest to the MUELLER RECORD.

The letter was written by Mr. C. Hayashibe who is chief of the Construction Department, Osaka Gas Company, Ltd., Osaka, Japan.

The company is located at No. 1 Hiranomachi 5-Chrome, Higashiku, in Osaka. The firm has two branch offices, one in Kyoto, Japan, and another in Kobe, Japan.

Mr. Hayashibe's letter, a testimonial of the power of American trade journal advertising, reads as follows:

"We have read with great interest your advertisements on your "D-4", "E-4" Drilling Machines and also the No-Blo Fittings and the No. 4 Line Stopper Unit in the April number of GAS JOURNAL and the May number of GAS.

"We shall be much obliged if you would send us catalogs and complete information on these products.

"With anticipation of your kind favor . . ."

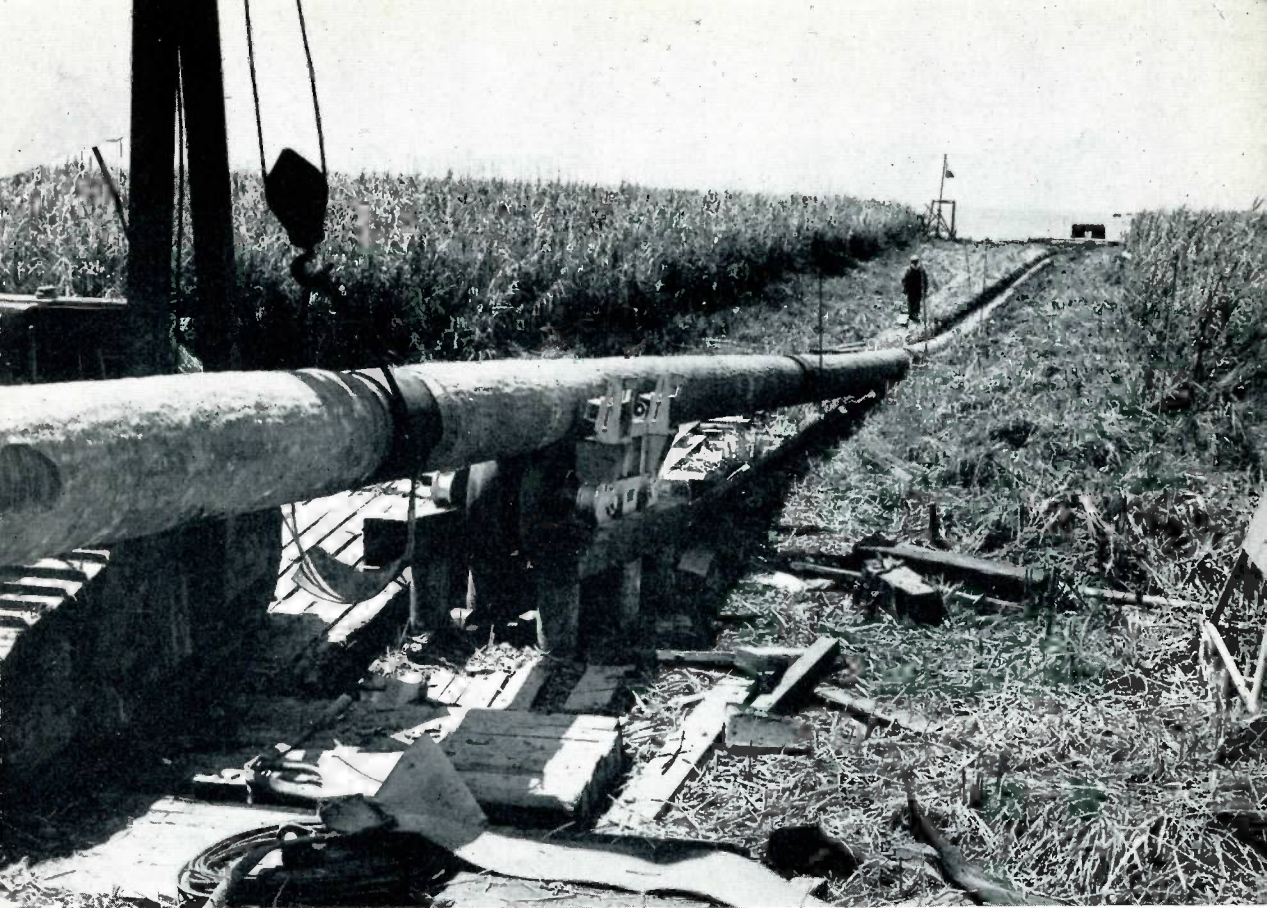
Catalogs and complete information on this equipment have been sent to Mr. Hayashibe. In addition, copies of the May issue of the MUELLER RECORD which dealt in some detail with the No. 4 line stopper unit also were mailed.

* * *

The Pacific Coast Gas Association has chosen a beautiful and appropriate site for its annual convention September 7-10. The P.C.G.A. will go to Vancouver, B C., a picturesque resort area, for its 61st annual meeting. It will be the first time the P.C.G.A. has ever held a convention in Canada.

Vancouver seems particularly appropriate for the event for it was just 100 years ago that the little village which was to become Vancouver was then known as "Gastown."

City officials intend to make the area "Gastown" all over again and hope to help this P.C.G.A. convention be remembered as a pleasant one.



A section of 20-inch natural gas pipe line being laid into the Gulf of Mexico.

A Titan In The Industry

United Gas Corporation Is World's Largest Handler of Natural Gas

FOR THE NATURAL GAS industry, times have changed drastically since the 20's, when gas literally couldn't be given away. Amarillo, Texas, trying hard to make use of gas from the Panhandle field soon after its discovery in 1923, offered natural gas free for five years to any manufacturer, provided he would give employment to 50 people. There were no takers.

Today the nation's industry clamors for this fuel in ever increasing volumes. Most observers agree that natural gas

has been one of the prime magnets drawing industry to the South and Southwest in the last couple of decades. Billions have been spent in the rush to build plants in the area where this economical, versatile "wonder fuel" is available. Still other billions have been invested by the natural gas industry to find and develop adequate gas reserves, to build pipelines, powerful compressor stations and distribution systems, essential for moving gas from wells to eager consumers.

As much as any other resource, natural gas has helped to create the New South—the thriving industrial, commercial and agricultural empire that stretches from the Texas prairies to the Atlantic Ocean.

Virtually all the South's electric power today is generated from gas, and the demand for residential use of the fuel is at a record high. As Lt. General Ernest O. Thompson, chairman of Texas' Railroad Commission, recently put it: "You could not successfully tie the housewife of America to a coal scuttle and an ash can when clean, convenient natural gas is available and her home can be heated and even temperatures maintained by a thermostat on the wall."

The abundance of natural gas and natural gas liquids are largely responsible for the phenomenal development of the South's \$3,000,000,000 petrochemical industry, with its heavy concentration of new plants in the Texas and Louisiana Gulf Coast region from Corpus Christi, Texas, to Lake Charles, Louisiana. About 85 percent of the nation's petrochemical operations are now located in the South, and additional large sums already have been earmarked for more plants and large-scale expansion of present ones.

The South's other newly acquired industries—the steel mills, oil refineries, cement plants, paper mills, and others of various types and sizes—virtually all use natural gas as a fuel because of its premium quality and low cost.

One of the titans of the natural gas industry is the United Gas Corporation. This company's far flung system criss-crosses the Gulf South, an area that reaches from the International Boundary at Laredo, Texas, to Pensacola, Florida, and includes major portions of Texas, Louisiana and Mississippi, plus sections of southern Alabama and northwestern Florida.

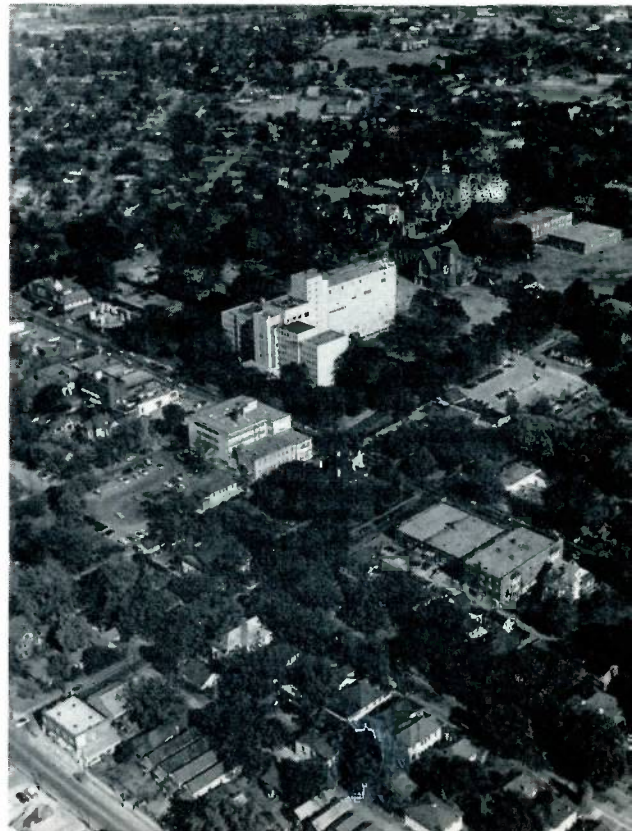
Like most of the natural gas industry, United's most spectacular growth has come in the last 15 years. To meet the ever rising demands of the gas-hungry South, and incidentally strengthening its own position as the world's largest handler of natural gas, United Gas began a three-year, \$250,000,000 expansion program in 1951. The project, one of the

largest expansions by a single company in the history of the industry, involved the laying of 1,735 miles of pipeline of various sizes, including many miles of 30" main transmission lines; construction of new compressor stations, dehydration plants and other facilities.

The new lines have increased the maximum delivery capacity of United's pipeline system from approximately three billion to some four billion cubic feet a day. Construction of pipeline across the Southern countryside is no easy matter. Pushing through swamps and dense forests, spanning several wide rivers with suspension bridges, and laying submarine lines beneath others, construction crews completed the major portion of this project in a record-breaking 18 months. A notable phase of the project was the laying of some 25 miles of underwater pipe in the Gulf of Mexico, to open markets for offshore natural gas developed in fields off the coast of Louisiana.

United Gas has invested more than \$500,000,000 in facilities during its 24

Aerial view of United Gas Building (large building) at Shreveport, Louisiana, which houses the general offices of United Gas Corporation, United Gas Pipe Line Company and Union Producing Company.



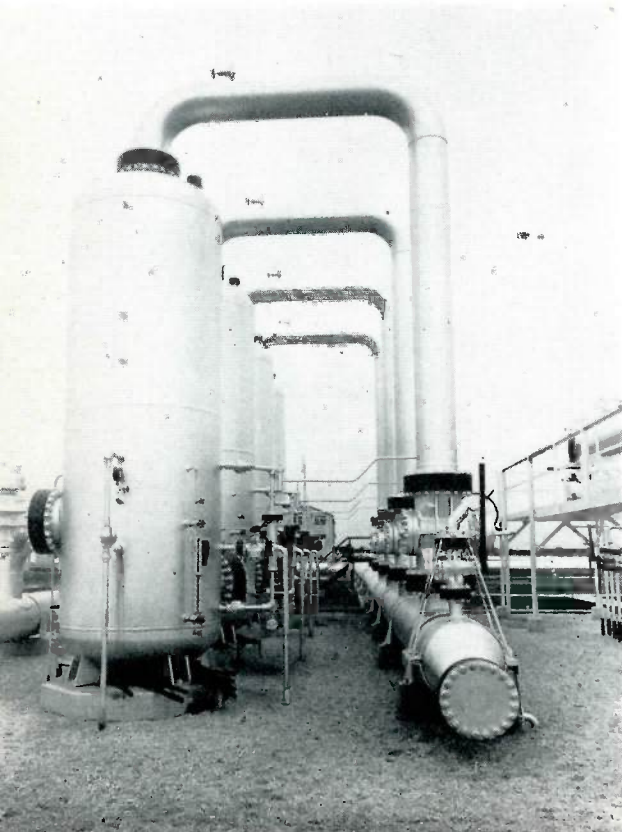
years of operation. The company was organized in 1930, when more than 40 associated companies were welded into United Gas Corporation. Some of the original companies which became a part of United Gas had started out manufacturing gas from coal, a half century before the discovery of oil and gas at Spindletop in 1901 ushered in the petroleum era in the Southwest.

In its first year, United had 100,000 customers and some 8,500 miles of transmission, distribution and field pipe lines. During 1953, the system moved one trillion, 29 billion cubic feet of gas through more than 20,000 miles of lines, supplying fuel for 483 cities and towns and many industrial customers.

United engages in all phases of the natural gas business — production and purchase, transportation and distribution. Union Producing Company and United Gas Pipe Line Company are wholly owned subsidiaries of United Gas Corporation.

Union Producing Company is engaged in the exploration and development of lands for the production of natural gas,

NEW COMPRESSOR STATIONS — Scrubber area at Lafayette Compressor station in the Southwest Louisiana district.



A 14-inch natural gas pipe line being laid in the Gulf of Mexico off the Louisiana shore.

crude oil, condensate and other liquid hydrocarbons. At the end of 1953 Union owned 634 gas wells and had an interest in 514 wells used in gas operations. It also owned 455 oil wells and had an interest in 191 wells used in oil operations.

United Gas Pipe Line Company purchases gas from Union Producing Company and others, operates plants for the extraction of natural gasoline and other liquid hydrocarbons and transports gas to cities, towns, industries and other customers. At the end of 1953 it owned and operated 1,254 miles of field lines and 8,040 miles of main transmission lines.

As of Jan. 1, 1954 the Distribution Division of United Gas Corporation delivered gas to residential, commercial, industrial and other customers in 309 cities, towns and communities and in rural areas in Texas, Louisiana and Mississippi. They own and operate 10,876 miles of distribution mains and service lines and at the end of 1953 served 465,254 customers.

United Gas is one of the biggest boosters of the Gulf South and conducts

MUELLER RECORD

a vigorous program to interest industrialists in locating new plants in the area. The company also sponsors an extensive program of farm youth activities, aimed at helping to develop leadership for the South of tomorrow.

Since 1939, United has carried on a national advertising program pointing to the Gulf South as the ideal region in which to build new plants and factories. The ads have appeared in publications of nationwide circulation, describing the Gulf South as a territory of growing markets, dependable fuel supplies, diversified raw materials and natural resources, deepwater ports, year-round working climate, and an abundance of experienced manpower.

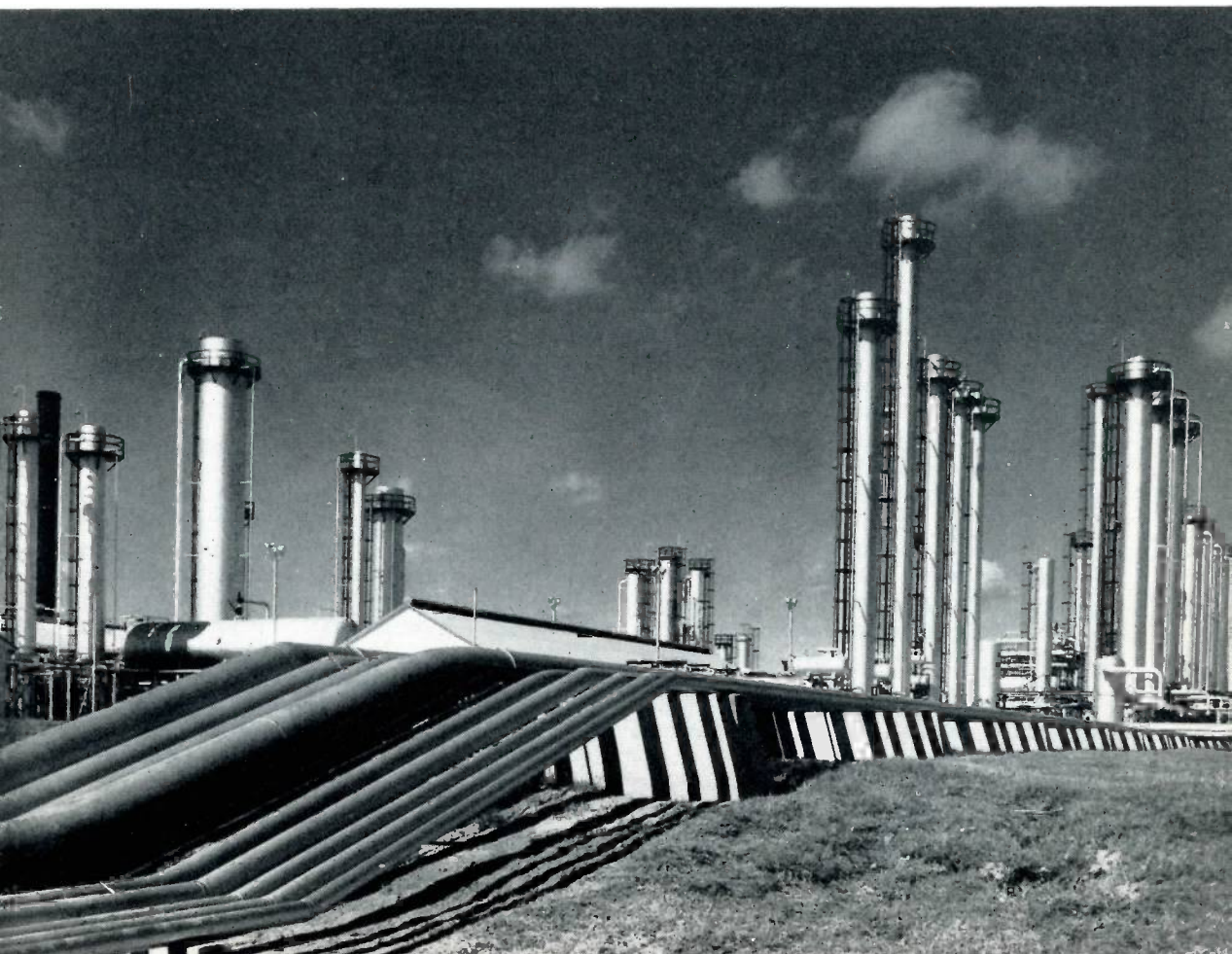
In cooperation with the Agricultural Extension Services in three states—Texas, Louisiana and Mississippi—the company has for many years sponsored a 4-H Junior Leadership Training Program for teen-agers. Many thousands of

4-H Club boys and girls compete annually for expense-paid trips to the national capital and other awards, based on their 4-H records and accomplishments in various activities.

United Gas management has profound faith in the continued growth and prosperity of the area which the system serves, the Gulf South. Its efforts are directed not only to keep pace with this growth, but to keep ahead of it.

Marketed production of natural gas has increased more than 400 percent in the past 25 years. In 1952 production of natural gas totaled a record 8.6 trillion cubic feet. Despite this tremendous production, proved recoverable reserves of natural gas increased 6 trillion cubic feet over the previous year as a result of new discoveries and expansions of estimates in known fields through further drilling and exploration.

A view of a United Gas Pipe Line Company gasoline plant at Carthage, Texas.



Introducing:

W. A. Coventry, Asst. Sales Manager, Chattanooga Plant

March, 1923, was an important milestone in the life of Walter A. (Chuck) Coventry.

That was the month that Mr. Coventry, assistant sales manager at our Chattanooga, Tennessee, plant, decided to forego a career as butcher in a Decatur, Illinois, meat market.

After graduation from Findlay, Illinois, High School, he moved to Decatur where he was employed by the market. Shortly after his twentieth birthday, he quit his job and was employed by Mueller Co. He has been with the company ever since.

Mr. Coventry first was assigned to the Assembly Department of Mueller Co.'s Decatur plant where he tested and assembled plumbing and water distribution products. He worked as an assembler from 1923 until 1926 when he was promoted to the Sales Division as a junior sales representative. He was assigned to our Oklahoma and Northern Texas territory.

Success as a sales representative prompted the company to send him on a product demonstration tour throughout the Western United States for several months. After the tour was completed in 1929, Mr. Coventry was named assistant branch manager at our Dallas, Texas, branch office. In 1932, he returned to the main office at Decatur and was placed in charge of the Billing Department. Mr. Coventry headed this department until June, 1937, at which time he was appointed assistant to the assistant sales manager at Chattanooga.

In 1945, he was promoted to his present position of assistant sales manager at Chattanooga. He supervises a staff of thirteen persons and coordinates Chattanooga sales and policy with that of our Decatur, Los Angeles and Sarnia, Ontario plants. He handles a considerable amount of correspondence with our customers and sales representatives throughout the nation.



WALTER A. COVENTRY

Although a considerable portion of the material manufactured at our Chattanooga plant is utilized for the water works industry, much of it is also utilized in the gas industry. Among these are gate valves, tapping sleeves and tapping valves which are designed with the O-ring stem packing and mechanical joints. This makes them ideal for gas installations.

In addition, the fire protection equipment for both American Water Works Association and underwriter approved installations is quite frequently found protecting gas properties.

Mr. Coventry is married and has one son. His hobby is fishing and bowling.



The American Gas Association Committee on Reserves estimates that the proved recoverable reserves of natural gas in the United States at the beginning of 1953 totaled nearly 200 trillion cubic feet. This estimate includes only known reserves in proved fields. Unexplored areas in known fields, new discoveries, Canadian pools and off-shore reserves may bring this total to 500 trillion cubic feet.

FPC Ruling Paves Way for Piping Natural Gas Into Pacific Northwest

The Federal Power Commission has authorized Pacific Northwest Pipeline Corporation of Houston, Texas, to construct a \$160,000,000 pipeline system to transport natural gas from the San Juan Basin in New Mexico and Colorado and other fields along the route to market areas in Colorado, Utah, Wyoming, Idaho, Oregon and Washington.

The Commission at the same time denied other competing applications proposing to import natural gas from Canada to serve some of these same markets in the Pacific Northwest—the one remaining large area in the United States still without natural gas service.

In addition to the Pacific Northwest Pipeline Corporation project, the Commission's opinion and order authorized Colorado Interstate Gas Company of Colorado Springs, Colorado, to construct pipeline facilities which will enable it to transport gas received from Pacific Northwest Pipeline Corporation to market areas in Colorado and Wyoming.

Pacific Northwest will construct 1,466 miles of main line, 106 miles of supply laterals, 327 miles of sales laterals, and 14 compressor stations—eight initially and the other six during the first year of operation. The proposed system will originate at Ignacio, Colorado, on the northern tip of the San Juan Basin, and extend through Colorado, Utah, Wyoming, Idaho, Oregon and Washington with its terminus at Bellingham in northwestern Washington.

The company's market estimates range from 92,585,211,000 cubic feet of gas in the first year to 122,972,337,000 cubic feet in the third year, with maximum day firm sales of 231,300,000 cubic feet the first year and 319,300,000 cubic feet the third year.

Colorado Interstate Gas Company's project will include 365 miles of 22-inch pipe extending from Pacific's system near Rock Springs, Wyoming, to Denver,

Colorado. Total estimated cost of construction is \$23,298,653. Colorado Interstate will transport an average of 110 million cubic feet of gas per day, to be purchased from Pacific Northwest Pipeline Corporation to its Rocky Mountain transmission system, which supplies markets in Colorado and Wyoming.

Commenting on the proposals to bring gas in from Canada, the FPC said that it would not be giving the fullest possible protection to all the prospective customers if the sole source of supply were through importation from a foreign country without some intergovernmental agreement assuring the continued adequacy of its supply.

"Otherwise," the Commission declared, "all control over the production, allocation, and transportation to our border . . . would be in the hands of agencies of foreign governments whose primary interest would of necessity always be in the needs and advantages of their own people, and whose judgements and actions would be essentially dependent upon public opinion within that country, rather than upon the interests of the American consumer."

The FPC said that "regardless of any long and cherished friendly relations with any neighbor nation able to supply such area with natural gas, it would not be in the public interest to permit the importation of its gas as the sole source for the consumers in need of interruptible supply at a reasonable price, which should always be assured by the Commission to the full extent of its powers."

Wife, listening to socialite sing at party: "Isn't she wonderful? I think she should be on the stage!"

Bored husband: "Me too! There's one leaving in 30 minutes and if we hurry, we may get her on it."

New Public Relations Program

A.G.A. Launches Plan To Aid Gas Companies Locally and Improve Status of Industry

American Gas Association has launched a program of new public relations activities to assist gas companies locally and to improve the atmosphere for the gas industry generally.

Supervision will be exercised by the A.G.A. Public Information Committee, Willis M. Kimball, director of information, The Columbia Gas System, Inc., chairman. Remick McDowell, vice president, The Peoples Gas Light & Coke Company, has been appointed chairman of a Public Relations Coordinating Subcommittee to work with Independent Natural Gas Association of America, Gas Appliance Manufacturers Association, Liquefied Petroleum Gas Association, and other gas industry organizations.

Three new major public relations activities and a number of lesser activities are being inaugurated by A.G.A. this year. First of these is a series of regional public relations workshops to stimulate greater local utility action. Company representatives will be encouraged to "let their hair down" at these sessions and work out methods of meeting their individual public relations problems. Initial workshop in the series will be held in New England this June, under joint sponsorship of New England Gas Association, A.G.A., INGAA and GAMA. Additional workshops are under consideration for September and November. It is planned that each session will be held in cooperation with regional gas associations in the area concerned, as well as with INGAA and GAMA. A.G.A. also is making arrangements for the appearance of public relations speakers at national and regional gas industry conferences and conventions.

Special A.G.A. public relations bulletins to member companies will provide an exchange of material, successful

ideas and techniques. Entitled "Intercom" (intercommunication), these bulletins will appear periodically beginning early in May.

A.G.A. also plans to expand its current flow of gas industry information to local companies, including publicity releases, facts, photographs and background material. These will assist local companies in developing their relations with the public, customers, communities, investors, government and labor.

Tentatively planned for 1954 are one or more "how-to-do-it" booklets on the application of public relations techniques to specific gas industry problems.

In preparation for the new activities, A.G.A. is surveying member companies to ascertain their immediate and long-term public relations problems. Information is being collected on the specific public relations activities and requirements of each gas company.

Earlier this year, the A.G.A. Board of Directors, in a special resolution, requested all member companies to take any steps necessary to preserve and strengthen the private enterprise system. The extent to which these companies would use an advertising mat service on the private enterprise theme is being studied.

Two current A.G.A. activities are playing an important role in assisting gas utilities. The School Education Program will be continued throughout 1954. About 10,000 of the initial teachers' kits, "Natural Gas—Science Behind Your Burner", have been distributed to schools throughout the country. Contents have been carefully evaluated by National Science Teachers Association and have been widely acclaimed by teachers and school principals. A new

booklet entitled "Experiments with Gas" also is now available.

Another major A.G.A. tool for developing better public relations is the new customer training program, "Principles of Customer Relations." This is a complete packaged program for training utility company employees in courteous and efficient treatment of customers. The course is based upon years of research and study by joint Customer Relations Committees of American Gas Association and Edison Electric Institute accounting groups.

Specific steps are now being taken to coordinate present and new A.G.A. projects with the public relations programs

of Gas Appliance Manufacturers Association, Independent Natural Gas Association of America, Liquefied Petroleum Gas Association, and regional gas associations. Agreement upon over-all policies and objectives will permit coordinated attacks by all segments of the industry on their major public relations problems.

A.G.A.'s new public relations activities, as well as current public information work, are financed this year from the Association's membership dues fund. A.G.A.'s school activities are financed by the PAR fund. Current and authorized A.G.A. projects specifically directed toward improved public relations total about \$150,000 this year.

Lon W. Woodson, Mueller Co. Sales Representative In West Texas, Dies

Lon W. Woodson, Mueller Co. sales representative, died July 6 at his home in Lubbock, Texas, after an illness of several months. He was 43 years old.

Although in poor health, Mr. Woodson remained active in his work until recently. His wife, Margaret, assisted him during the early days of his illness and did much of the paper work from their home. She made a number of trips with him this year driving much of the way during his regular calls on our customers.

Mr. Woodson, a native Texan, joined Mueller Co. as sales representative on July 1, 1950. Through the past four years of association with our firm, he has represented Mueller Co. in the West Texas area.

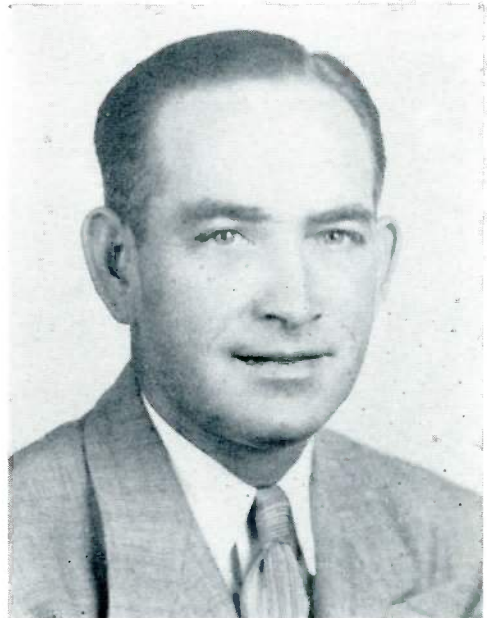
Prior to his association with Mueller Co. he was for several years a sales representative for Well Machinery and Supply Company of Fort Worth, Texas.

He was born December 22, 1910, at Burleson, Texas. Besides his wife, he is survived by a married daughter.

Funeral services were held July 8 at Ballinger, Texas. Burial was in the Ballinger cemetery.

We at Mueller Co. join Mr. Woodson's many friends in sorrow over his passing.

His fine record as a sales representative spoke for him professionally. His keen wit and warm personality made many friends for him and for Mueller Co.



LON W. WOODSON

All Hands On Deck!

A Leak in the Lake

Seven endless minutes, a professional deep sea diver and a crew of rugged linemen.

That's what it took to repair an Ohio Fuel Gas Company pipeline on the bottom of Senacaville Lake in weather only one degree above freezing early this year.

When it was over, the diver was near collapse from numbing cold and exhaustion.

It all started when Ohio Fuel inspectors spotted a leak in the gas main that feeds Quaker City, Bethesda and Barnesville. It was about 300 feet from shore on the northwest section of the lake.

Norman E. Staley, a professional diver from Templeton, Pa., was contacted.

Ohio Fuel crews from Cambridge and Barnesville met Staley at the nearby lake to assemble his diving barge.

Among them were W. E. Beale, Ohio

(Continued on page 21)

LEAK IS LOCATED by Dale Davis, Ohio Fuel employee from Old Washington, who noticed bubbling on surface of Senacaville Lake. Line which was to be repaired lies in 16 feet of water.



HIGH WINDS churn lake and buffet diving raft as Ohio Fuel Gas Company employees fashion windbreak to ward off near freezing wind.



THE PAT
with a heavy
Staley, Temp
will be used



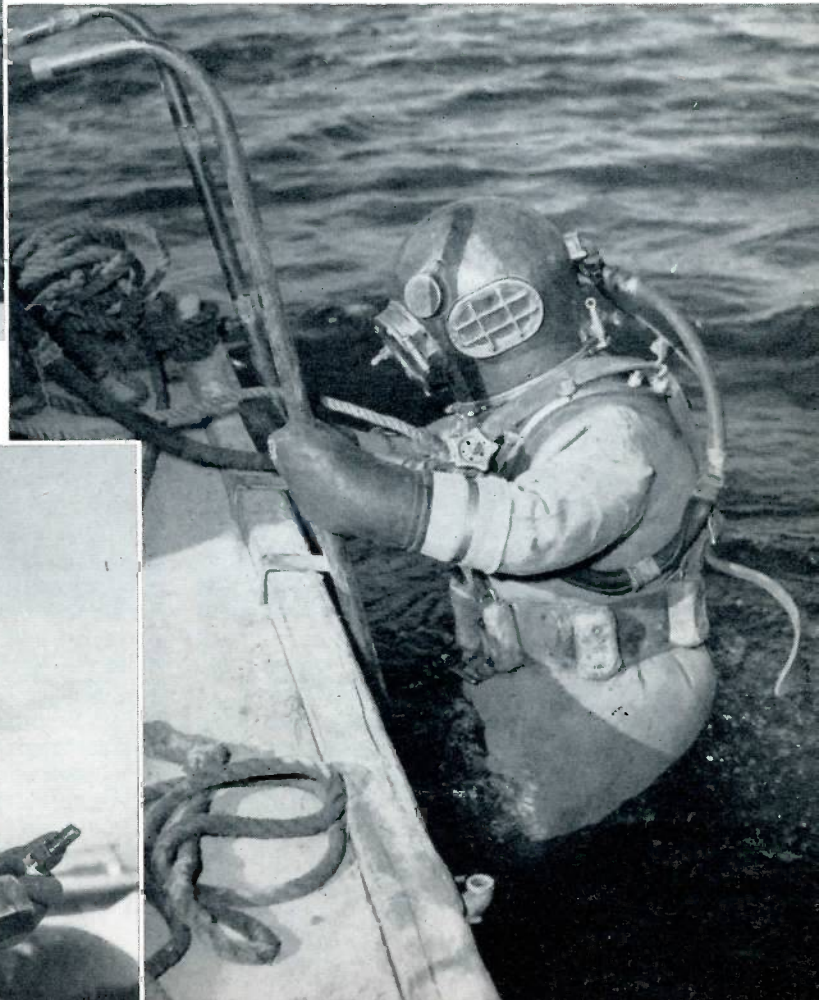


TENSE MOMENT is caught by camera above as diver, weak from cold and exhaustion, almost tumbles back into lake. He was grabbed by workers on barge. Left to right are: Robert Savage of Cambridge, James Upton of Cambridge, the diver—Norman Staley, and Everett Campbell of Cambridge.



HERE'S THE START of seven freezing minutes for Diver Norman Staley. Staley sang at the top of his voice while working—because it's lonesome, and helps keep him warm.

... called a "pit-hole saddle," is a clamp
 rubber and steel gasket. Diver Norman
 ... ton, Pa., examines it prior to diving. It
 ... repair leak.





Shown with the United Pipe Line Contractors' "trouble-shooting" truck in front of the Beloit, Wisconsin, firm are, left to right, Clif Auer, Mueller Co. sales representative; E. "Gene" Alters, a partner, and his son, J. "Jack" Alters, who is associated with the company.

Trouble Shooting Truck

When E. "Gene" Alters and R. "Bob" Soehnlén joined forces three years ago to organize the United Pipe Line Contractors, they brought some new and refreshing ideas to the water and gas industries on how to get a job done quickly and efficiently.

Located at 822 Broad Street, Beloit, Wisconsin, they now have a firm that employs about forty men. The company is prepared to work on anything from city gate stations through the laying of new lines or the replacement of old ones to making hookups and the lighting of customers' appliances.

Both men have worked for contractors throughout the Midwest on gas, water and sewer jobs and their combined work records bring more than twenty-five years experience to their customers.

As Mr. Alters, whose responsibilities include the making of and setting up all contracts and handling office business, says, "We are specialists in the field of

city distribution problems in both low and high pressures where service must be maintained." Mr. Soehnlén supervises all field work.

To enable their firm to perform quick and efficient service for water and gas customers, they set aside one of their many trucks and equipped it for trouble-shooting. It is completely equipped with Mueller Co. material, and enables the company to tackle any kind of a water or gas job and take care of it within the size and limitations of the equipment.

"We feel this truck which is equipped with most Mueller equipment is a vital necessity in our field of operation," Mr. Alters said. "We have many other trucks equipped with Mueller material and machines to handle smaller main and normal service tie-ins in the low pressure field," he added.

This trouble shooting truck has been in existence the past year and it is believed to be the only one like it in exist-

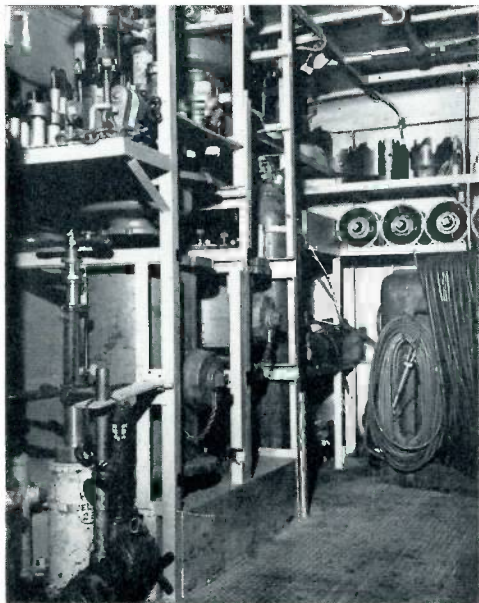
tence. The service offered is especially good for small water systems that haven't been able to take full advantage of all Mueller Co. equipment. It is a simple matter for United Pipe Line Contractors to rush in and insert gate valves in a distribution system giving quick and efficient service. The company keeps all Mueller valves and fittings for the gas industry in stock. There is no delay in their service, thanks to this novel idea. They have the equipment and the know-how to get a job done.

Included in the truck's equipment for the gas industry is a complete set of Mueller No. 1, 2 and 3 line stopper equipment as well as our service line stopper. United Pipe Line Contractors can work on from 3/4 inch to eight inch cast iron or steel pipe. They can make connections up to two-inch at 1,200 p. s. i. with our DH-2 machine and can make connections through standard valves up to 500 p. s. i. in 12-inch pipe with a C-1 drilling machine.

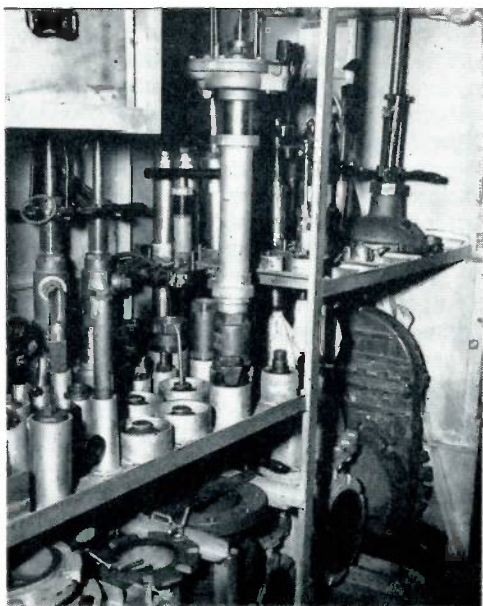
(Continued on page 21)



This photo shows our large and small adapters for valve inserting equipment, our C-1 machine adapters and miscellaneous equipment.



Mueller equipment in the photo above includes upper left, B machine and equipment; upper center, E-4 machine equipment and C-1 machine adapter; upper right, C-1 machine shellcutters; right center, steel wedge line stoppers; lower left, No. 3 steel wedge line stopper equipment and air motor; center, inserting valve equipment.



In left center is our No. 1 line stopper unit equipment while the D-4 machine and equipment is at center. Our No. 3 line stopper unit completion machine is at upper right while below the shelves, left to right, are our C-1 machine adapters, gate valve for No. 3 line stopper unit and our slide valve for valve inserting unit.

A. G. A. Prepares for 36th Annual Meeting Oct. 11-13 in Atlantic City

Authoritative speakers on many subjects of great interest to the entire gas industry are being scheduled for the thirty-sixth annual convention of the American Gas Association to be held October 11-13, at Atlantic City, N. J. The various Section programs are taking final form and outstanding events are being arranged for the General Sessions on each of the three mornings of the Convention.

Members of the General Convention Committee, which is headed by Everett J. Boothby, president, Washington Gas Light Company, have expressed confidence that the coming convention will be one of the most successful in the history of A.G.A.

The Convention Entertainment Committee, with L. R. Quad, Public Service Electric and Gas Company, Newark, New Jersey, as chairman, met at A.G.A. Headquarters on June 25. The following executives have agreed to serve on the entertainment committee: R. R. Blackburn, Southern California Gas Company; M. J. Harper, Rockwell Manufacturing Company; Theodore H. Kendall, South Jersey Gas Company; Robert C. LeMay, Sels Corporation of America; and Daniel E. Maloney, The East Ohio Gas Company. Other committee members are: Joseph T. McKay, New Orleans Public Service, Inc.; L. T. Potter, Lone Star Gas Company; John H. W. Roper, Washington Gas Light Company; J. Gordon Ross, Rochester Gas & Electric Corporation, and Howard T. Scranton, Transcontinental Gas Pipe Line Corporation.

Entertainment plans include the president's reception, entertainment and ball on Monday evening; a ladies' party and reception on Tuesday afternoon and a program of excellent entertainment on Tuesday evening.

General Sessions will be held in the Ballroom Auditorium at 10 a. m. each morning. The reception and ball and the entertainment also will be staged at the auditorium.

The Operating Section will hold afternoon sessions Monday and Tuesday at Trimble Hall, Hotel Claridge, which has been designated as headquarters for the Operating Section. The program for the meetings will feature a demonstration on remote control of pipelines. A simulated pipeline system will be set up with an off-stage control room to be viewed by use of closed-circuit television hook-up. Valves, meters and other equipment will be operated by remote control. Panel discussions on customer service, quality control and other pertinent topics will be included. Papers on off-shore drilling and safety codes will be presented. Officers will be elected and the Operating Section's Award of Merit will be bestowed at these sessions.

The Hotel Dennis has been designated as headquarters for the Residential Gas Section but the Section will hold its meeting in the Ballroom of the Auditorium at 2 p. m. Monday. Walter H. Kurdelski, Michigan Consolidated Gas Company, chairman of the Residential Section, will preside.

The Accounting Section, with Paul E. Ewers, Michigan Consolidated Gas Company, as chairman, has arranged programs for meetings at the Viking Room, Haddon Hall on Monday and Tuesday. The Chalfonte-Haddon Hall Hotel is headquarters for the Accounting Section.

The Home Service Breakfast will be held Tuesday morning, October 12, in the American Room, Hotel Traymore. Mary E. Huck, The Ohio Fuel Gas Company, chairman of the Home Service Committee, will preside. The afternoon meeting of the Home Service Committee,

featuring the annual round table discussions and promotional highlights, will take place Tuesday afternoon at the St. Dennis Room, Hotel Dennis.

The General Management Section, will have headquarters at the Chalfonte-Haddon Hall Hotel. The Section will sponsor its annual luncheon meeting in the Carolina Room, Chalfonte Hotel, on Tuesday noon. A prominent speaker will address the management segment of the industry.

The Shelburne Hotel will be headquarters for the Industrial and Commercial Gas Section. The Section plans to hold its annual luncheon in the Rose

Room, Hotel Traymore, at 12:30 on Tuesday, October 12. An afternoon meeting will follow with inspirational talks on subjects of interest to management and members of the industrial and commercial departments of member companies. Election of officers, reports and other business will round out the afternoon meeting.

A general luncheon meeting will be staged at the auditorium on Wednesday, following the General Session. After luncheon an inspirational meeting will be held, with addresses by some of the industry's finest orators as the final highlight of the thirty-sixth annual convention.

T. T. Arden Is GAMA President-elect; Hunt Bill Unanimously Condemned



T. T. ARDEN
GAMA President-elect

Forecasts of a favorable sales year despite a slow start, and determination to actively combat adverse gas legislation highlighted the 19th annual convention of the Gas Appliance Manufacturers Association held recently in Chicago.

The 315 convention registrants unanimously approved a resolution condemning the Hunt Bill, now before the U. S. Senate Commerce subcommittee,

that would prevent the expansion of the natural gas pipeline into the Northwest, the one section of the country that does not have access to this fuel.

(See story on Page 9)

The resolution said that most of the opposition to the expansion of the gas network comes "from branches of the coal industry which have virtually priced themselves out of other domestic and industrial fuel markets." It urged the Federal Power Commission to act favorably on applications now filed with it to extend natural gas pipelines to the Northwest from Canadian and domestic gas fields.

T. T. Arden of Lynwood, Calif., now serving as first vice president of GAMA, was elected president to succeed Sheldon Coleman of The Coleman Co., Wichita. The entire slate of new officers, division and group chairmen and vice chairmen will assume their duties next October. Arden is executive vice president of the Grayson Controls division of Robertshaw - Fulton Controls Co.

Also elected to GAMA office were W. F. Rockwell Jr., president of the Rockwell Manufacturing Co., Pittsburgh, first vice president; and A. B. Cameron, president of the Ruud Manufacturing Co., Pittsburgh, second vice president.

Lyle C. Harvey, president of Affiliated Gas Equipment, Inc., Cleveland, was re-elected treasurer.

On Two Jobs

Southern Union Co. Uses Our No. 4 Line Stopper Equipment

Mueller No. 4 line stopper equipment, recently perfected for use on ten and twelve inch lines, was used June 8 and 9 by Southern Union Gas Company in Port Arthur, Texas, on ten-inch steel main to shut off 150 p. s. i. Two individual jobs were completed on the same line several miles apart.

The first job was near the regulator station where Southern Union Gas Company receives gas from United Gas Pipe Line Company for the purpose of

A Mueller C-1 air power operated drilling machine is making cut in ten-inch Mueller line stopper fitting.



Old tees and gate valve being removed from stopped off line. Note temporary bypass line in left of picture.

A 90 degree ell being installed in stopped off line.

(Photos by John J. Smith)



supplying Port Arthur and the surrounding area.

An existing gate valve and tee connection was to be removed and a welded 90 degree ell installed in its place. To accomplish this task it was necessary to construct a separate four-inch bypass line to carry the load while the line was stopped off.

Only one fitting was used since a plug valve in the pipe line regulator station was utilized for the shut off on the opposite end. A positive shutoff was obtained and the entire job completed with no difficulties.



Mueller H-17445 completion machine assembled on line stopper fitting for insertion of the completion plug in the top of the fitting.



Two line stopper fittings have been installed (on the second job) and the line stopped off. In this view a plain section of pipe is being cut for removal.

The second job consisted of placing a new plug valve in the same ten-inch steel main on the outskirts of Port Arthur. Two stoppers and fittings were used on this job. Existing old gate valves in the branch lines enabled a new regulator station to be placed in operation to serve as a by-pass during the stop off operation. The newly installed plug

valve serves as a by-pass and positive line block around the new regulator station. This shut off also was obtained under 150 p. s. i. with a positive shutoff obtained on both stoppers.

This view shows plug valve being installed in open section of the line.



Gas Industry Facts . . .

With the rapid spread of natural gas transmission systems into new areas and with additional lines into areas already receiving natural gas, the gas utility industry is adding gas househeating customers at a rate of nearly 1,200,000 a year. It is estimated that by 1956, the industry will serve more than 16,100,000 dwelling units with gas househeating. This means that one out of every three dwelling units in the nation will be using gas for space heating.

* * *

Although the United States probably is the greatest producer of natural gas in the world, with deposits in 26 different states, geologists continue to discover this valuable fuel in remote corners of the earth. An extensive deposit of oil was found in Umiat, in the southeastern section of the Naval Petroleum Reserve in the Arctic Circle. One large natural gas field also was found there. However, because of the great expense involved in transporting oil and natural gas from Northern Alaska, the Navy believes that at least four fields the size of the Umiat deposit that could produce at least 100,000 barrels daily would be needed to make the venture profitable.

* * *

Nearly thirty years ago the gas industry became one of the first self-regulating industries in the nation when it voluntarily established the American Gas Association Testing Laboratories at Cleveland, Ohio. Today nearly 5,000 individual models of gas appliances and equipment are tested each year at the A.G.A. Laboratories in Cleveland and Los Angeles. The first laboratory was established in 1925 and had five employees. Today more than 150 employees are working in these laboratories helping to make sure that gas appliances tested are safe, durable and efficient. About 95 percent of the gas appliances sold today have been tested and approved in the gas industry's laboratories. These appliances carry the A.G.A. Seal of Approval, the certification trade-mark signifying that appliances meet American Standards requirements.

Television and electric lighting are being improved by gas heat. Glass is a relatively poor heat conductor and is highly susceptible to breakage when submitted to uneven thermal stresses caused by failure to balance heat input with varying thicknesses of glassware. This shrinkage has been minimized by long heat-treating cycles with gas as a fuel, thus helping to produce better television tubes and fluorescent lamps.

* * *

Gas plays an important part in guarding the health of the public. It is used extensively in state and national health laboratories in testing and analyzing health cultures submitted by physicians where the presence of disease-bearing bacteria is suspected. Gas is employed in more than twenty different processes utilized in chemistry, physics, microbiology and serology. The Bunsen burner, one of the first practical applications of gas, still remains one of the most efficient implements in laboratory operations requiring exact heat to make accurate tests.

* * *

Modern welding techniques used in the construction of high pressure natural gas pipelines have greatly lessened the chance of serious line failures. Standardized welding procedures and rigid inspections now eliminate faulty welds prior to testing, long before the lines are placed in operation. Large diameter gas pipelines are built by welding forty-foot lengths of pipe end to end.

Safe operation of the line depends to a large extent on the strength and excellence of these welds. So workmanship in welding must approach perfection at all times. Each welder must "sign" his work by making his identifying mark on the finished weld. All his welds are checked and a percentage of them is checked by X-Ray. An X-Ray laboratory is set up at the construction site so photo negatives can be made of the welds and then quickly developed. Faulty welds can then be spotted and replaced. A welder can be fired for two or more faulty welds on one job.

Leak in the Lake

(Continued from page 12)

Fuel's southeast division superintendent; Ross Mitchell, district foreman; James F. Parks, Robert Savage, Everett Campbell, James Upton, all of Cambridge; Clarence Orr and Bill Douglas of Barnesville, and Dale Davis and Ed DeVold of Old Washington.

Gusts of wind up to 30 miles an hour had churned ice from the lake surface into pieces no larger than ice cubes. The barge was nearly swept away by the wind on the first try at launching. Four anchors were used to hold it in place.

An air pump, used to supply oxygen to the diver, froze. Ohio Fuel crews used an auxiliary hand pump. Even then there was danger that moisture in airlines might freeze and cut off the supply of air to the diver.

At 12:08 p. m. diver Staley slipped into the water.

Muck from the bottom of the lake prevented him from seeing. He had to "feel" for the leak in the pipe.

"It's only a small hole," Staley's voice called over the two-way telephone unit.

The patch, a "pit-hole saddle" with a rubber gasket, was quickly lowered to the diver, along with a wrench. The saddle would seal a band of rubber and steel around the pipe when it was tightened.

The boat crew waited. Then they heard Staley singing over the telephone.

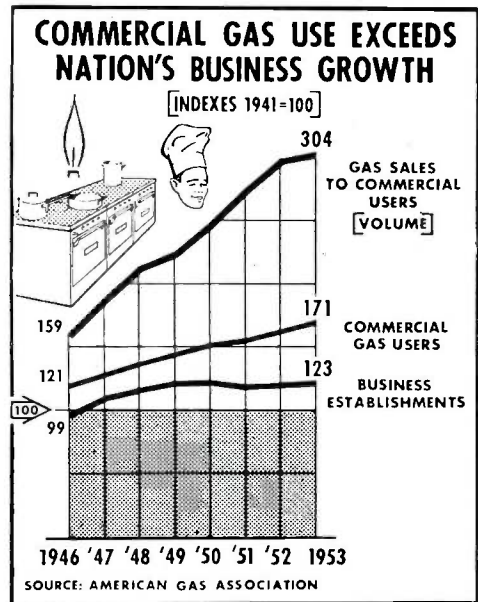
Minutes ticked by as the wind whistled around a protective piece of canvas on the barge. Suddenly, the telephone quit. Deck crews pumped frantically to make sure Staley had air.

Then the bubbling in the lake stopped, the phone started working again, and Ohio Fuel deckhands heard Staley say:

"She's ok now. I'm coming up."

At 12:15 p. m. his diving helmet appeared and he was hoisted onto the barge. Weak from cold and exhaustion the 38-year-old Staley almost tumbled back into the frigid water. Crew members pulled him to safety.

On Ohio Fuel's records this was jotted down: "Leak repaired. No interruption of service."



IN the postwar period the number of commercial gas customers in the United States rose at a faster rate than retail business establishments. Volume of commercial gas sales has tripled since 1941. Much of this utility gas growth was in the food service field, which has become the nation's fourth largest industry. Americans spend more than \$15 billion per year on meals consumed outside the home. Nine out of ten of these meals are cooked with gas.

Trouble Shooting Truck

(Continued from page 15)

They are able to make farm taps off transmission lines using either the DH-2 or E-4 machine and can make service connections using the E-4 or B or H machine using service tees, service valve tees, curb valve tees or machine inserted valve tees.

For the water works industry, the company can do valve inserting operations for four, six and eight inch cast iron pipe. They can make a lateral connection through tapping sleeves and valves or standard valves up to 12-inch. In addition they can make service connections with the B or E-4 machines and could do line stopper work if the occasion ever arose.

They have a complete compliment of equipment and can do every operation for which Mueller equipment has been designed.

For the past four years gas utility companies have added new customers at a rate of more than 900,000 annually. Customers served with natural gas now aggregate more than 20,600,000 and comprise about 72 percent of the nation's gas utility customers.

Around the Gas Industry

The General Management Section of the American Gas Association will hold its first annual spring conference early next year. Howard B. Noyes, senior vice-president, Washington Gas Light Company, and chairman, A.G.A. General Management Section, has announced the appointment of an Arrangements Committee to plan the program for the initial meeting of the section. W. B. Tippy, vice-president, Commonwealth Services, Inc., New York, will serve as chairman of the Arrangements Committee. He will be assisted by John H. Carson, vice-president, The East Ohio Gas Company, Cleveland; Leslie A. Brandt, vice-president, The Peoples Gas Light & Coke Company, Chicago; Elmer L. Ramsey, asst. vice-president, Laclede Gas Company, St. Louis; and Lester J. Eck, vice-president, Minneapolis Gas Company.

* * *

The American Gas Association has just issued its Annual Report for 1953 to its member companies and individual members. The report is an attractive, 32-page, illustrated, two-color presentation of the achievements of the Association during 1953 under the leadership of Frank C. Smith, president, Houston Natural Gas Corporation, and 1953 president of A.G.A. In his introductory message in the report, Mr. Smith pointed out that the major objective of the Association during his term in office had been the marshalling of the full strength of the industry and applying that combined force and effect toward the accomplishment of its goals.

* * *

Five national and regional associations combined to hold a pioneer event on June 16—the first joint regional conference on gas industry public relations. The all-day meeting in Boston, Mass., presented high spots of the public relations plans of American Gas Association, Gas Appliance Manufacturers

Association and Independent Natural Gas Association of America. Co-sponsors with these three national groups, were The New England Gas Association and Liquefied Petroleum Gas Association of New England, Inc. The Boston conference considered gas industry public relations programs as they benefit New England distributing utilities. However, many items on the program are of direct interest to gas companies in other sections of the country. Staged as a pilot-plant operation, the conference will be followed by similar regional meetings throughout the country during the next year.

* * *

Current legal problems of the gas pipeline and distribution companies were analyzed and discussed recently at New York City by an outstanding array of professional and executive talent at a five-day symposium jointly sponsored by the American Gas Association and the Practising Law Institute. The seminar attracted an enrollment of more than 250 participants, representing Federal and State Commissions, legal counsel, production, transmission and distribution companies in the gas industry, accountants, allied trade associations and other interested groups. Delegates come from every section of the United States to exchange experiences and techniques and to take home better understanding of many controversial and perplexing problems affecting the gas industry.

* * *

The Mexican government has been in the gas business, particularly in natural gas exploration and production work since 1944. Most of the production is in northeastern Mexico, in the neighborhood of the Rio Grande River Valley. Housewives in Tia Juana were ready to launch a minor revolution last year, when for a period of about ten days, their gas jets spurted water. Seems that someone had hooked a water line into a gas pipe and the water backed up the gas lines, bringing to real life, the oft-used gag of cartoonists about un-handly husbands doing home plumbing. The government's prosecuting attorney promised to investigate and punish the guilty parties. Not with a firing squad, we hope.

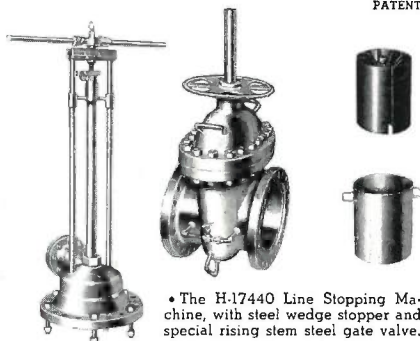
MUELLER®

NO. 4

LINE STOPPER UNIT

PATENTED

Stop off 10" and 12" steel lines safely, under pressure, with the Mueller No. 4 Line Stopper Unit. Equipped with series 40 flanges, the No. 4 Unit is designed for working pressures of 500 psi and temperatures up to 250° Fahrenheit with an adequate factor of Safety.



• The H-17440 Line Stopping Machine, with steel wedge stopper and special rising stem steel gate valve.

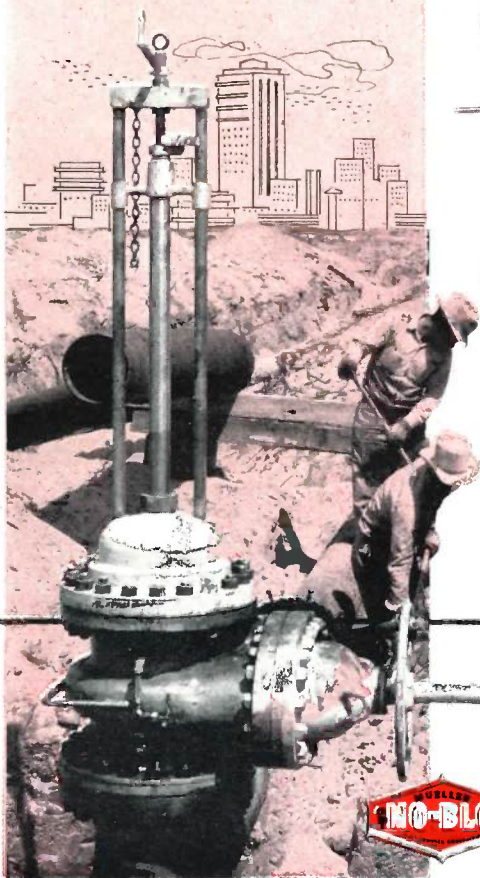


• The H-17445 balanced pressure Completion Machine.



• The H-17257 Line Stopper Fitting, sizes 10" and 12", complete with "O" ring type, balanced-pressure completion plug. Spring-loaded ball check valve in completion plug, activated by the inserting or extracting tools, assures equal pressure on both sides, allowing easy insertion and extraction of the completion plug.

Write for complete information on the No. 4 Line Stopper Unit.



MUELLER CO.

Dependable Since 1857

MAIN OFFICE & FACTORY: DECATUR, ILLINOIS

MUELLER®

INVERTED KEY

GAS CURB STOP

Permanently

**GAS-TIGHT...
EASY TURNING...
WITHOUT SERVICE**

1. Large, bronze cap — down-pressure on cap unseats key for easy turning . . . skirt shears ice or other foreign material.

2. Shear-resistant silicon bronze pin — securely anchors cap to key.

3. "O" ring seal — provides positive seal at top of key.

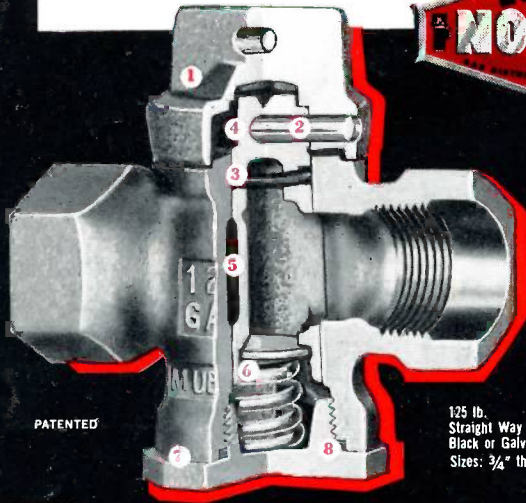
4. Heavy bronze key — inverted type . . . accurately machined . . . ground and lapped to gas-tight fit.

5. False ports in both body and key — protect ground key surfaces when stop is closed.

6. Stainless steel spring — allows key to be unseated for easy turning . . . reseats key.

7. Heavy cast iron body with malleable bottom plug — close-grained grey iron gives maximum strength and corrosion resistance.

8. Neoprene impregnated cork gasket — provides positive seal at bottom of stop . . . prevents leakage along line.



PATENTED

125 lb.
Straight Way
Black or Galvanized
Sizes: 3/4" thru 2"



Inverted key curb stop with long Dresser Coupling Ends, Style 90. (Especially designed for installing in a line without a curb stop or to replace existing curb stops.)

Gas curb stop keys must fit the body intimately to be gas-tight at present service pressures. Normally this would mean a stop that is difficult to operate or a lubricated stop requiring periodic servicing. However, Mueller Co. has developed the inverted key curb stop, with the features shown, that is gas-tight at 125 psig — yet turns easily without lubrication or periodic servicing!

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Dependable Since 1857

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