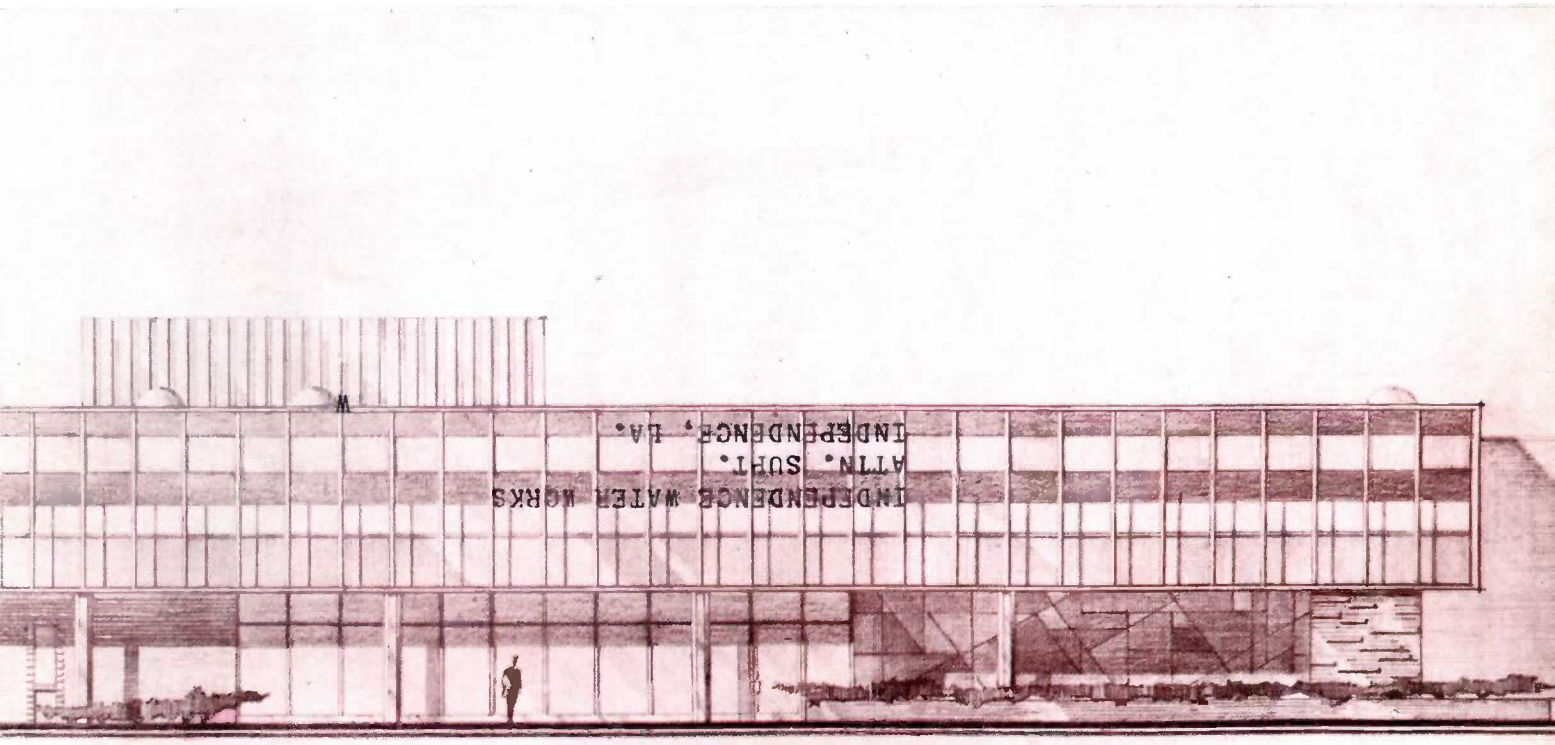
MUELLER
Record
JUNE-JULY • 1960

# PREPARING FOR THE FUTURE

. . . . Page 4



# Recording Our Thoughts

Houston's (Texas) tallest building, the 44-story Humble Oil & Refining Company skyscraper now under construction, will have the city's largest single commercial air conditioning installation, and it will be powered by natural gas.

The skyscraper, will have a total of 4200 tons of air conditioning. Following a new construction trend, the four 1050-ton units and the three gas-fired boilers serving them will be housed above ground level, on top of the six-story garage building located diagonally across the street from the main building.

Houston is one of the centers of gas air conditioning installations. Used in the city's two largest hotels and colleges, as well as in the County Courthouse and many other buildings, gas air conditioning is also used widely in residential areas and small commercial establishments.

— :: —

Gas utility companies throughout the country are joining a new cooperative program to reduce appliance service calls and increase customer acceptance of gas appliances, the A.G.A. reports. A.G.A. announced introduction of its National Appliance Field Observation Program after a year of limited tests by the Customer Service Committee of the Association's Operating Section. The A.G.A. Laboratories in Cleveland will conduct the new program under the supervision of the Operating Section committee.

The program is designed to identify common causes of service calls by collecting and analyzing field observations reported by gas company service departments. A.G.A. will seek to stimulate product improvement by referring its findings to appliance manufacturers and its own Approval Requirements and Research committees.

For those readers who are associated with the water industry, we'd suggest you get hold of WATER NEWSLETTER, a monthly bulletin-type publication sent by Water Information Center, Inc., 60 East 42nd St., New York 17, N. Y. The RECORD uses many items from WATER NEWSLETTER on our "Around the Water Industry" page. You can always count on up-to-the-minute items of interest when your current copy of WATER NEWSLETTER arrives.

— :: —

Last month, we introduced the first of a series of original cartoons drawn by W. A. Fischborn, Miami Beach, Florida. Reader comment has been favorable to date, and we'd like to hear more from you. Finding original material is always a major problem, and we hope you like the cartoons.

— :: —

We are pleased to learn that on April 5, the Board of Directors of the Long Island Water Corporation elected Mr. Leo Louis President of the company, succeeding the late W. Victor Weir. Mr. Louis is also President of the Gary-Hobart Water Corporation, Gary, Indiana.

A graduate of Purdue University, with a Bachelor of Science Degree in Civil Engineering, Mr. Louis has had a distinguished career in the field of water supply. He has been a member of the American Water Works Association since 1941, and has had the honor of serving as an officer in both the Iowa and Indiana sections.

In 1947, he received the Fuller Award from the Indiana Section, AWWA, for meritorious service in the industry.

We join with Mr. Louis' many friends throughout the country in wishing him every success in his association with Long Island Water Corporation.




# MUELLER RECORD

JUNE-JULY • 1960

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Editor
**Jim M. Milligan**

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Quality Products for the Waterworks and Natural Gas Industries

★

OUR COVER *this month is an architect's sketch of the new office building planned for Mueller Co. This is part of a six million dollar expansion program announced on March 25 by the Board of Directors.*

# Contents

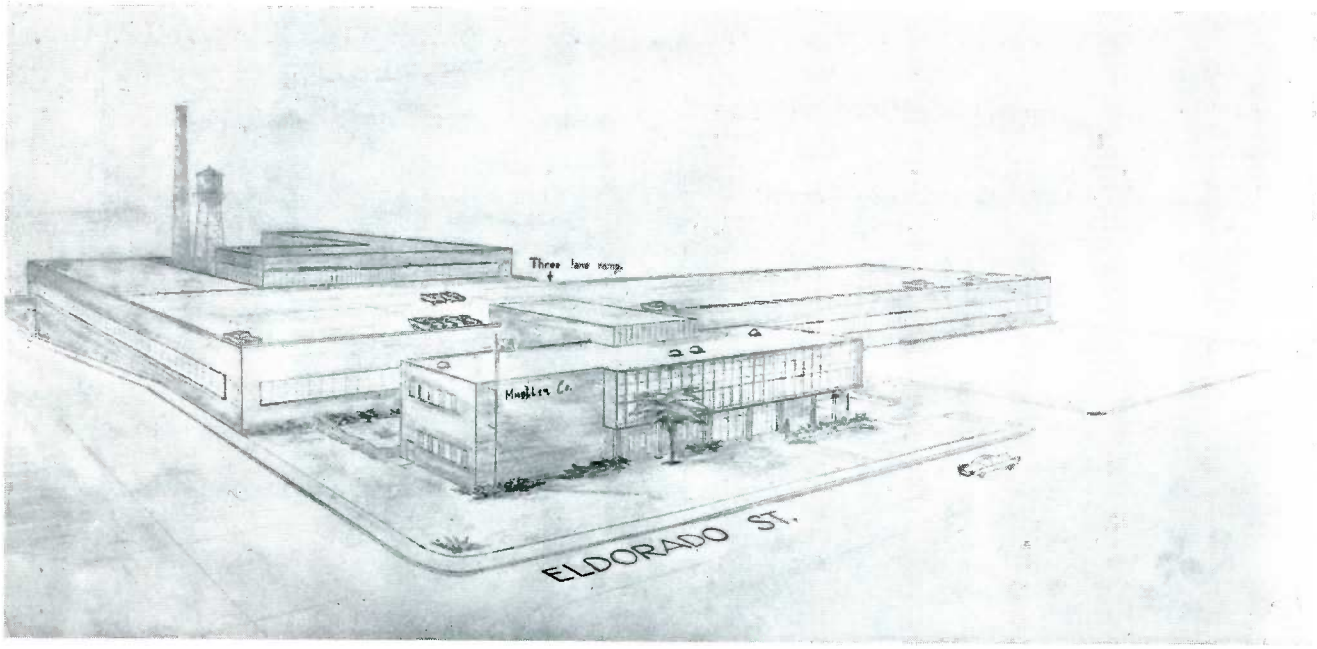


# Preview

**We're just three months away from the big Golden Anniversary MUELLER RECORD. All planning for this issue has been aimed at providing RECORD readers with a magazine the contents of which are quite a departure from our usual format.**

**To make certain you receive the special anniversary issue, check your name and address on the back cover of this issue. If any changes should be made, write Editor, MUELLER RECORD, Mueller Co., Decatur, Illinois.**

# PREPARING FOR THE FUTURE . . .




**Artist's sketch of new buildings**

A major modernization and expansion program for Mueller Co.'s main plant in Decatur was announced on March 25 by A. G. Webber, Jr., company president. The board of directors formally approved the program at their quarterly meeting, held March 24 in the company's Chattanooga, Tenn., plant.

The program, the estimated cost of which is more than five million dollars, will replace more than half of the structures in the area bounded by the Wabash tracks on the north, Monroe Street on the west, West Eldorado Street on the south, and Edward Street on the east. The new buildings will be connected to existing facilities west of Monroe by a new underground pedestrian tunnel.

New construction will add 261,500 square feet of floor space, and 43,300 square feet of space will be rehabilitated. Approximately 96,000 square feet of land will be cleared of buildings and left vacant.

Sverdrup & Parcel Engineering Company, a nationally-known firm of engineer-architects in St. Louis, has been engaged to develop the preliminary studies, plans, specifications and cost estimates for the expansion program.

Target date to call for bids is August, 1960, and construction is expected to be completed in 16 to 24 months after bid-letting.

A new, air-conditioned office building of contemporary design, facing West Eldorado Street, will provide space for the company's executive, general administrative and sales offices. The building's exterior will be of brick, accented by using exterior ceramic tile mosaics and porcelain-enamelled panels.

Integrally-designed sunshades also will be featured on the south elevation. Ceilings will have lights recessed in accoustical material, and terrazzo flooring and special wall finishes will be used in the lobby and product display areas.

A steel and brick one-story manufacturing and warehouse building extending from Monroe Street to Edward Street across two existing parking lots will be directly behind, and connected with, the new office building. The building will have many windows, shielded by specially-designed sunshades.

An unusual feature of this 789-foot long building will be a parking area for approximately 450 automobiles on the roof. This area will be reached via a three-lane ramp equipped with snow-melting devices, and one lane will be reversible to provide two "up-lanes" in

the morning and two "down-lanes" in the afternoon.

Direct access to the plant and the office building will be provided from the roof parking area. This building will connect with three existing manufacturing buildings, as well as with the new shipping and receiving building.

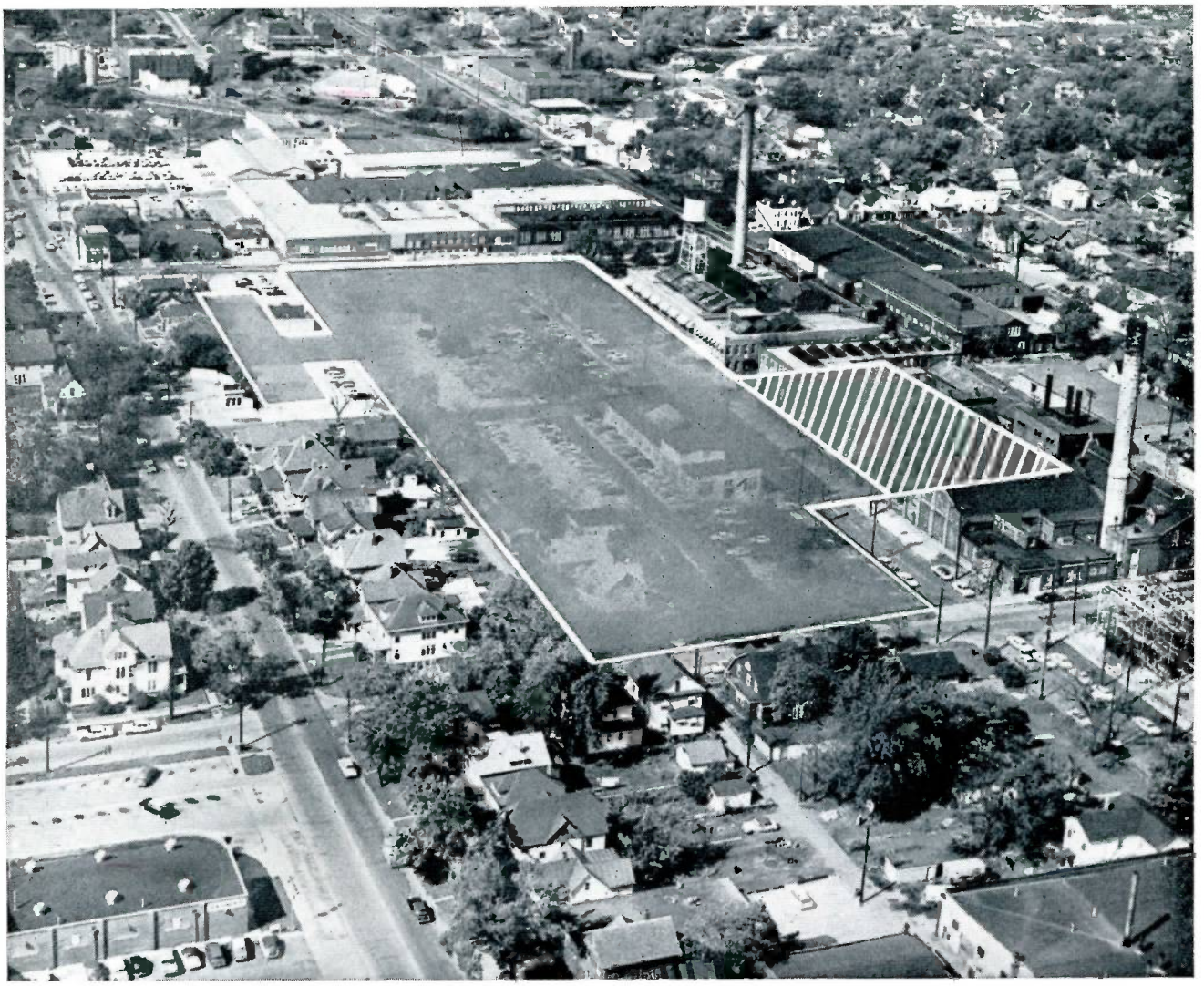
A new two-story shipping and receiving building will handle carton storage and rail and truck shipments. Levelling platforms on the dock at the seven truck doors will permit the use of fork-lift trucks in loading and unloading operations. Suitable provision for rail shipments will be made from the warehouse and also by one or more team tracks outside.

The remainder of the factory will be improved by renovating and expanding the steam-heating system and by installing a new electrical distribution system. Five new sub-stations located throughout the plant will reduce the 4,160-volt distribution current to the required voltage for specific areas and processes.

"The project is not predicated on adding new products, except in the normal growth of the company," said Webber. "Neither will there be any immediate appreciable increase in employment, but that, too, will grow normally with the regular increase in business.

"In brief, the expansion is intended to correct a congested condition in some departments, and at the same time provide space for the normal future growth of the business."

In addition to the cost of new construction and renovation, company officials stated that approximately $1,000,000 will be expended for additional production and material handling equipment.



**The overall expansion program is vividly displayed in the above aerial view. The grayed areas indicate the location of the new factory and office buildings, while the lined area denotes buildings which will be removed to clear an area for future expansion if needed. It is interesting to note that Mueller Co.'s main plant, pictured above, is only five blocks from downtown Decatur.**


# . . . Convention Review . . .

C. F. Wertz, director of the City of Miami Department of Water and Sewers, was installed as president of the American Water Works Association during the group's 80th annual convention held in Miami Beach May 15-20.

More than 3100 water utility people from throughout the U. S. and abroad attended the gathering. Mr. Wertz succeeds Lauren Grayson, general manager of the Glendale, California, Public Service Department.

Other new officers installed during the annual banquet on May 19 were John W. Cramer of Lincoln, Nebraska, vice-president, and William J. Orchard, Maplewood, New Jersey, treasurer.

In all, 78 speakers addressed the group during sixteen separate sessions. Included were Mark D. Hollis, assistant surgeon general of the U. S. Public Health Service; Theodore M. Schad, secretary of the U. S. Senate select committee on water resources, and Col. Paul Troxler, US Army Engineer Corps.

A unique "All American Water" ceremony, with 50 U.S. states and four international representatives participating, was an early meeting highlight. Each man poured water from his respective state or country into the Americana Hotel pool. Miss AWWA, Jackie Johnson of Miami, was also crowned during the ceremony.

Mr. Wertz was named director of the Miami department of water and sewers in July, 1955, after serving for 14 years as resident engineer representing Day and Zimmerman, Inc., of Philadelphia, consulting

engineers on a property-management assignment.

He has been a member of AWWA since 1924, and has been active on many of the Association's committees.

The 1961 AWWA conference will be in June in Detroit, Michigan, Philadelphia will be host in 1962 and Kansas City is the location for the 1963 meeting.

### Highlights

In a talk presented to conferees on Wednesday, May 18, Theodore Schad, of the Senate select committee on water resources, stated that "Increasing demands for water and water-related activities as the nation grows will start in the adequacy of the nation's water resources to meet the needs. Demands in some of the more arid parts of the country will exceed the sum total of the available supplies."

In these regions, Mr. Schad points out, water will have to be imported from other river basins, or some uses of water will have to be foregone. Even in the more adequately watered regions, the United States is moving toward a planned sufficiency of water rather than passive enjoyment of almost unlimited quantities of water.

These facts and others are emerging from the water supply-demand studies which are being made for the Senate Select Committee on National Water Resources. This is a temporary committee established to study the nation's water resources and problems, and report to the Senate by next January as to what should be done to assure that the nation's water needs between now and 1980 can be met.

Key to the future sufficiency of water appears to lie in increasing reuse of available water supplies. Primary attention should be given to improving our methods for pollution abatement and increasing river regulation, moving ultimately toward full regulation of stream flows in many of our rivers.

In closing, Mr. Schad said that an early break-through in technique for meeting needs for fresh water through desalinization of ocean water or increasing precipitation through cloud seeding does not appear to be in prospect, although a continued research effort in these fields appears to be justified.

Lauren W. Grayson, in his address which formally opened the convention, stated, "The evaluated deficiencies in our public water supply systems appear to need an expenditure of 5 billion dollars for correction. If these were all completed in—say ten years, the average cost per person would be less than four dollars per year. This would only bring us up to date to 1960, but by then it would be 1970—I am fully convinced that we can, and will, put all of the ingredients together in the proper proportions to create a satisfactory climate so that the objectives of ample water, safe and of high quality, for every person we serve, can be fulfilled. No single idea is sufficient and no two communities are the same; thus, yours is the individual responsibility to cut the pattern for your own utility and service area. This Association's 13,000 members continue to stand ready to help . . . "

Raymond J. Faust, secretary of AWWA, pointed to recent events when he said, "Our industry is disturbed by the half-truths appearing in national magazines. AWWA is planning to tell the real water supply story to the public by means of national articles. We are also planning additional materials for you to distribute locally.

"Such items are valuable and should be used extensively. However, they cannot alone do the job that must be done locally to obtain public support for your program. A regular community relations program backed up by an intensive public information effort immediately prior to a decision on bonds is the only way to success. AWWA can help, but we cannot do your job. That is up to you.

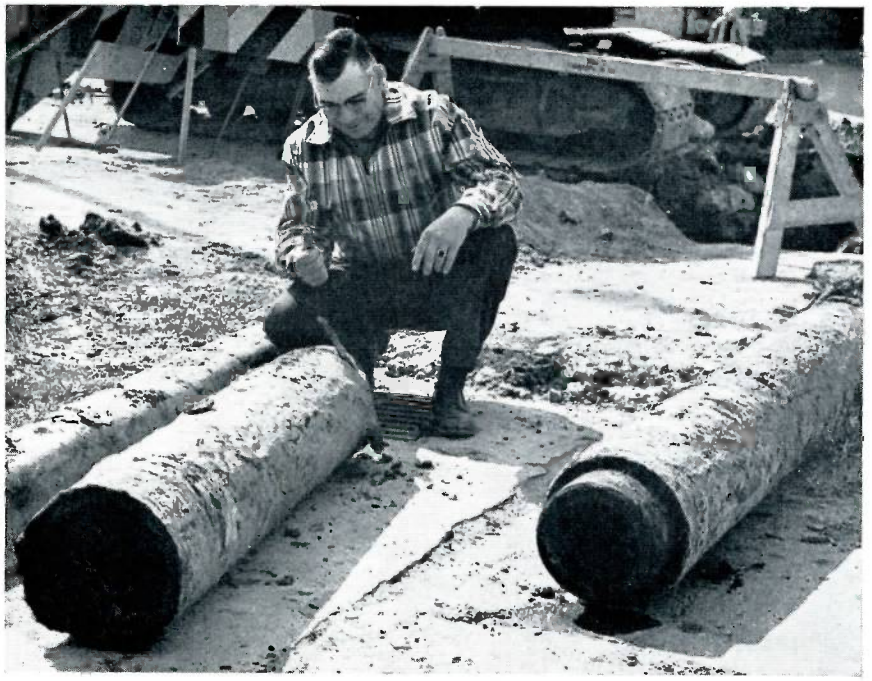
"The water industry has met and conquered many challenges in the past . . . None-the-less, its largest problems still lie ahead. I hope that you are prepared to meet them."

**JOHN W. CRAMER**
VICE-PRESIDENT
AWWA

**WILLIAM J. ORCHARD**
TREASURER
AWWA

**President Wertz and Past President Grayson . . .**

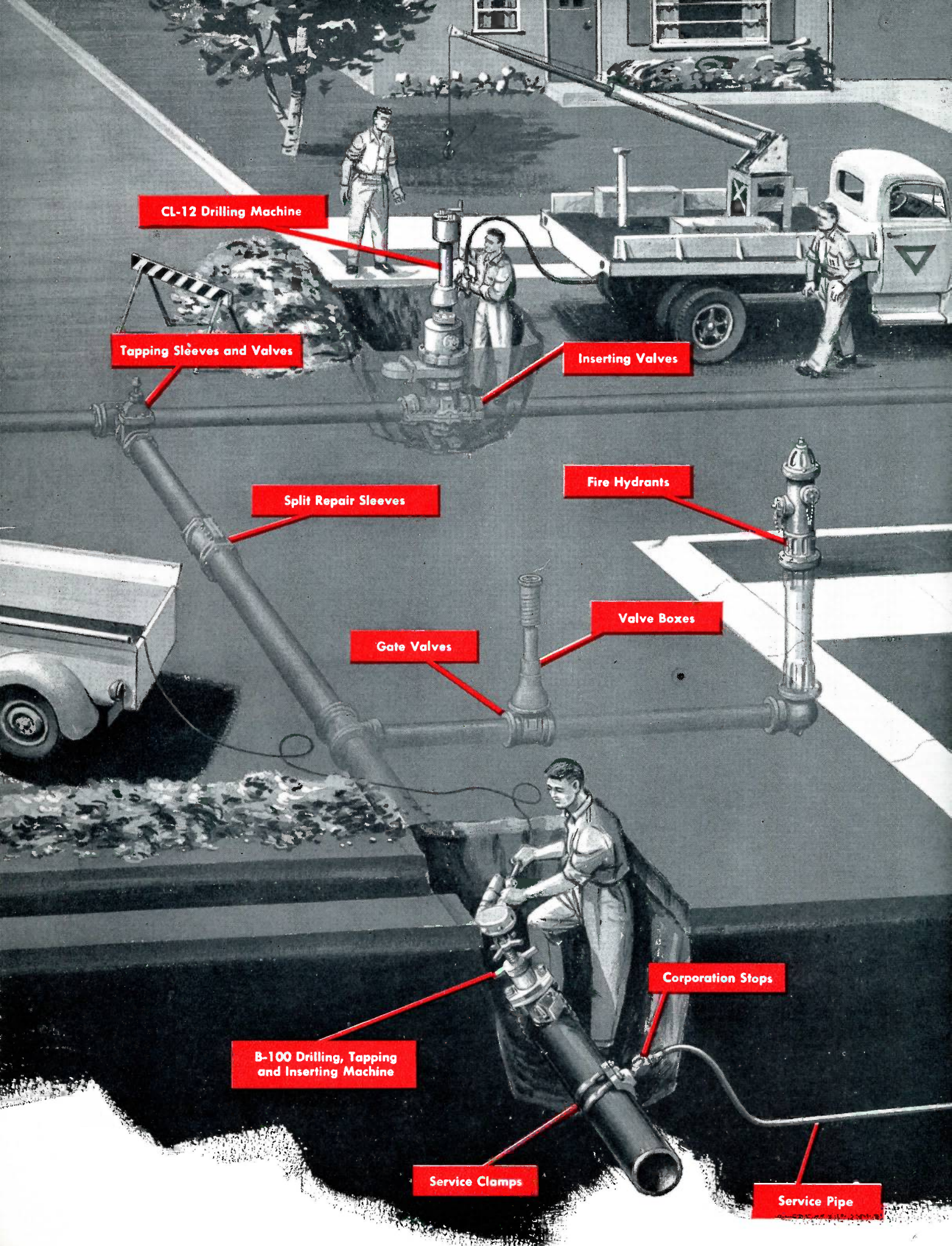
**A TASK AHEAD, AND A JOB WELL DONE.**



Chris LeMay, water department superintendent in DePere, Wisconsin, examines the last of the wooden water mains which were replaced recently.

# DePere, Wisconsin Replaces Remaining Wooden Mains

Anthony Van Remontel, a water department employee, and Superintendent LeMay, display the wooden mains, which are thought to have been in service 75 or 80 years.


CL-12 Drilling Machine
Tapping Sleeves and Valves
Inserting Valves
Split Repair Sleeves
Fire Hydrants
Valve Boxes
Gate Valves
Corporation Stops
B-100 Drilling, Tapping and Inserting Machine
Service Clamps
Service Pipe

# *it's* MUELLER®

## *all along the line*

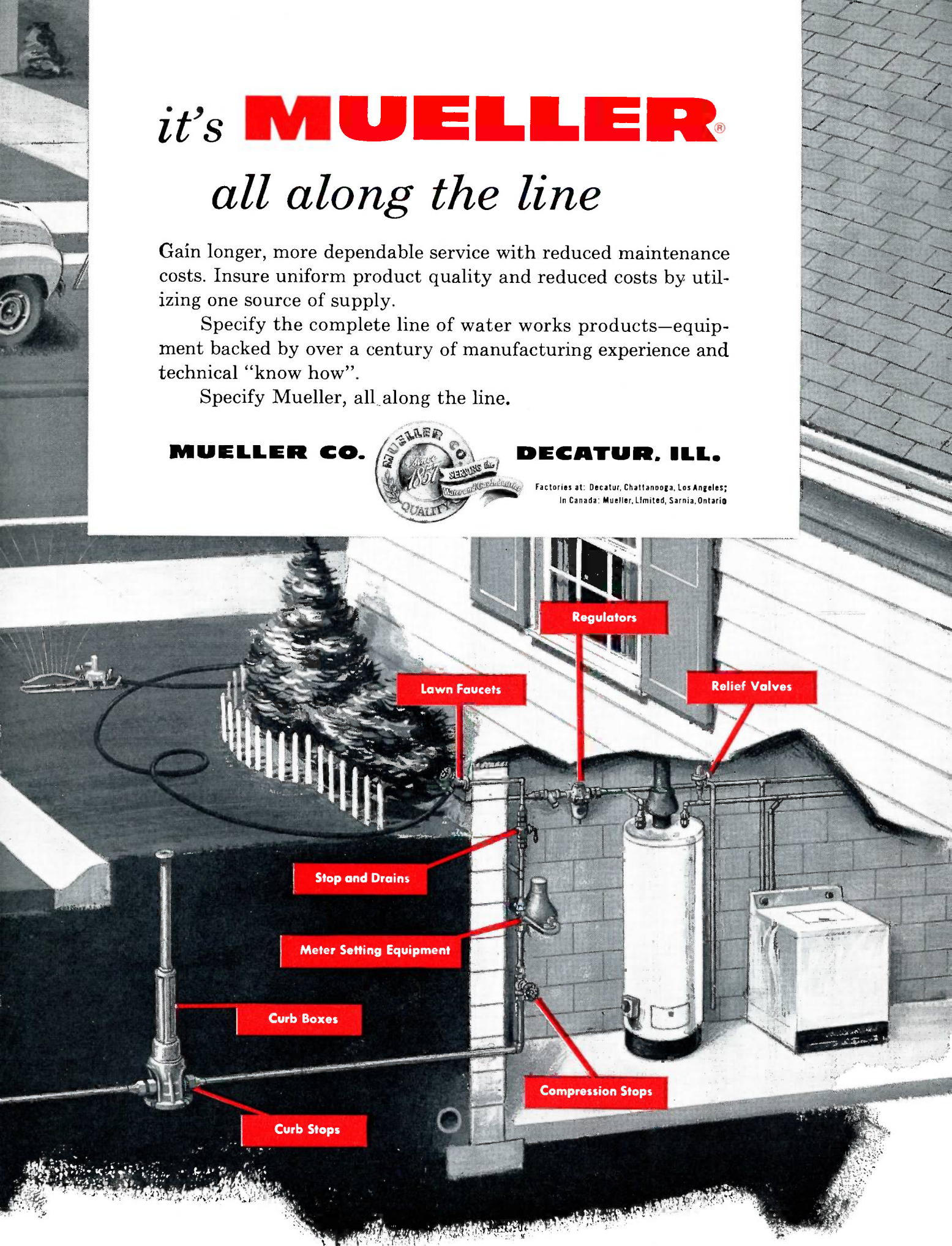
Gain longer, more dependable service with reduced maintenance costs. Insure uniform product quality and reduced costs by utilizing one source of supply.

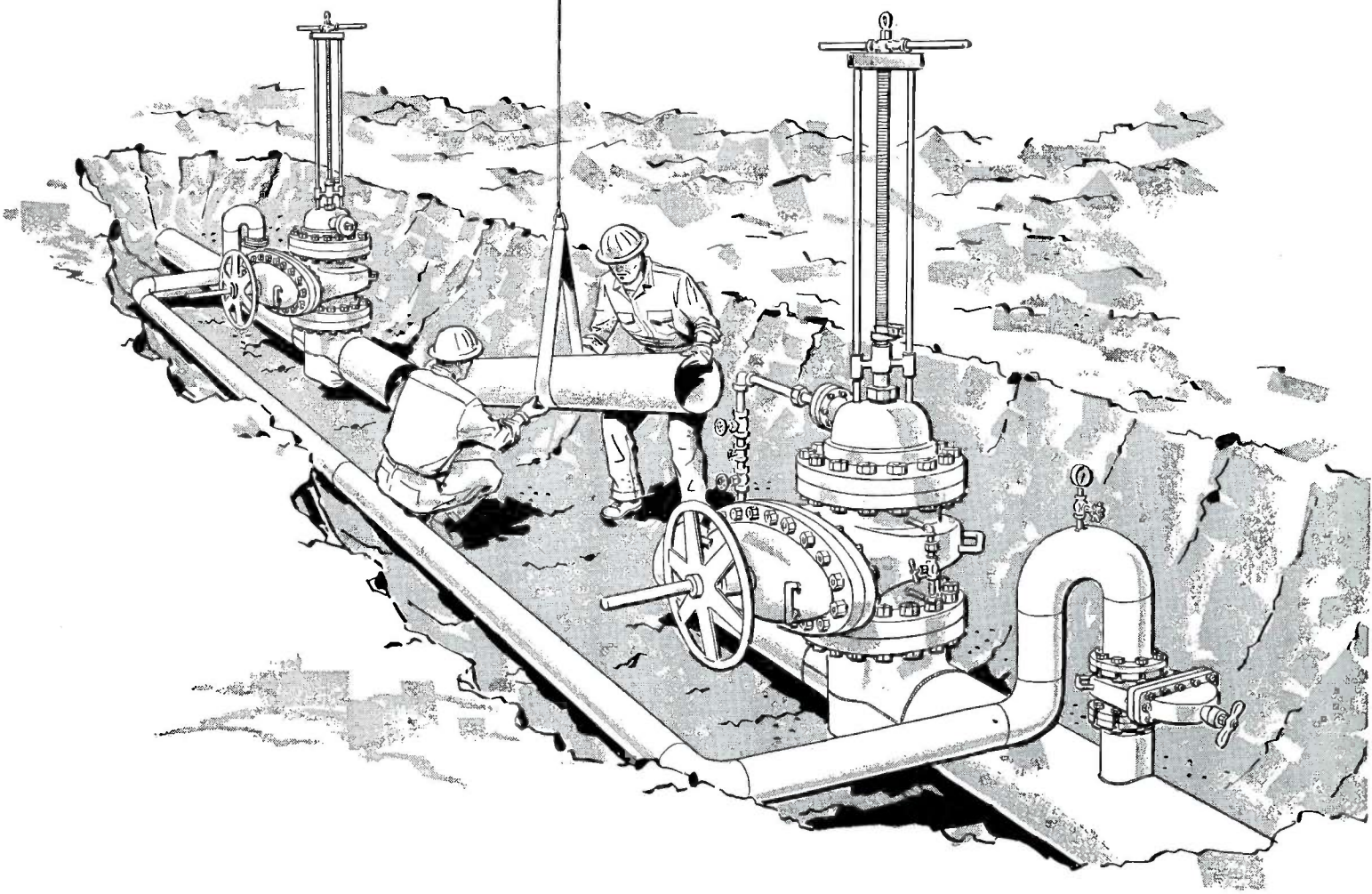
Specify the complete line of water works products—equipment backed by over a century of manufacturing experience and technical "know how".

Specify Mueller, all along the line.

**MUELLER CO.** **DECATUR, ILL.**

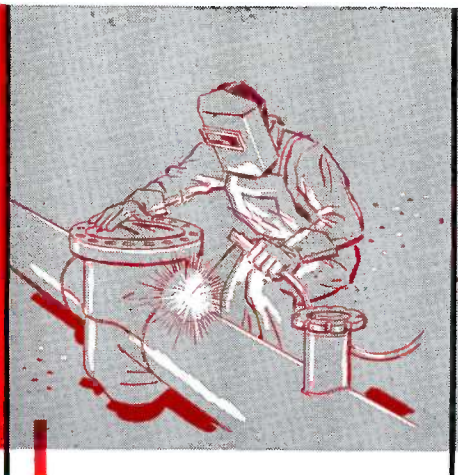
Factories at: Decatur, Chattanooga, Los Angeles;
In Canada: Mueller, Limited, Sarnia, Ontario





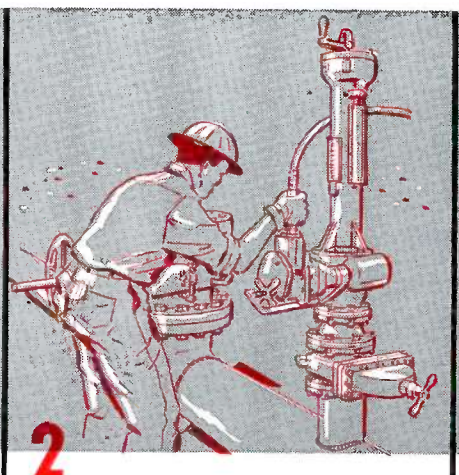
*Stop-off 10" or 12" lines...*

*with a No. 4 SW Line Stopper Unit...*



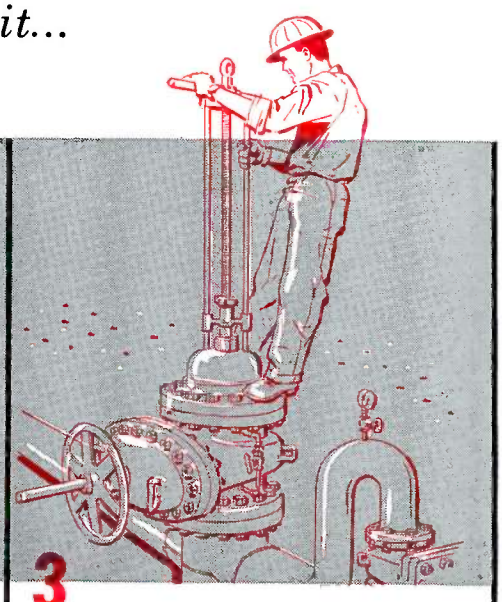
1

**WELD!** Install two Line Stopper Fittings at the ends of section to which work will be done. Install two Save-A-Valve Drilling Nipples on pipe above and below stopper fittings for by-pass line. Test and attach gate valves.



2

**COMPLETE BY-PASS!** Drill through nipples with Mueller C1-36 or CC-36 Drilling Machine. Close gate valves, install by-pass line and place in service by opening Drilling Nipple gate valves.



3

**STOP-OFF!** Cut through Stopper Fittings with drilling machine. Remove drilling machine and attach No. 4 SW Stopping Machine with steel wedge stopper. Expand stoppers.

# Keep it Flowing

*with Mueller® Line Stopper Units!*

- You can provide interruption-free service to customers and *still* make necessary tie-ins, line relocations or pipe line repairs – with Mueller Line Stopper Units. All work is safely completed with the line under pressure and without blowing of gas.
- Flow is maintained with a by-pass line around the section of line being worked on.
- Mueller Line Stopper Units are available for 1½" through 12" lines. Get complete details today!


**COMPLETE LINE WORK!** Make necessary repairs, tie-ins or relocations. Relax stoppers and remove stopping machines. Remove by-pass, insert completion plugs and caps on nipples. Install completion plugs and caps on fittings.

**MUELLER® NO-BLO® Method**

The Mueller NO-BLO® Method and equipment permit the installation of No-Blo fittings into a system under pressure, without escape of gas. Safety is assured and service is *not* interrupted. Call your Mueller Representative or write direct for information.

**MUELLER CO.**

**DECATUR, ILL.**

Factories at: Decatur, Chattanooga, Los Angeles;
In Canada: Mueller, Limited, Sarnia, Ontario

Since 1857

# Lexington's New Operating Center

A centralized location for four departments and increased efficiency for all has been the result of the Charleston Group's (United Fuel Gas Co.) third Operating Center. This one, in Lexington, Kentucky, contains employees in distribution, transmission, communications and transportation.

The Operating Center has proved valuable in many ways since employees moved in. Frank Grant distribution general foreman, states:

"One of the most important things to the 67 men who work here is that we can drive in and out without fighting a lot of traffic like we had to at the locations downtown. It is safer and it is quicker."

With the many separate sections of distribution now having room to work comfortably and efficiently in the new Center, and with other departments serving the Lexington area centralized in one location, the new Operating Center is on the way to helping employees provide better and more efficient gas service to Kentucky customers.

**Donald B. Carter, service dispatcher, works in midst of communications tools—radio, telephone and telemetering.**

**Frank B. Grant, general foreman (standing) and M. N. Tuttle, clerk, work in air-conditioned offices in new Center.**

*This article is reprinted, with permission, from THE PIPELINE, published for the employees of the Charleston Group, United Fuel Gas Co., Richard Haught, Editor.*

Assembly Room holds large groups, like this distribution safety meeting.

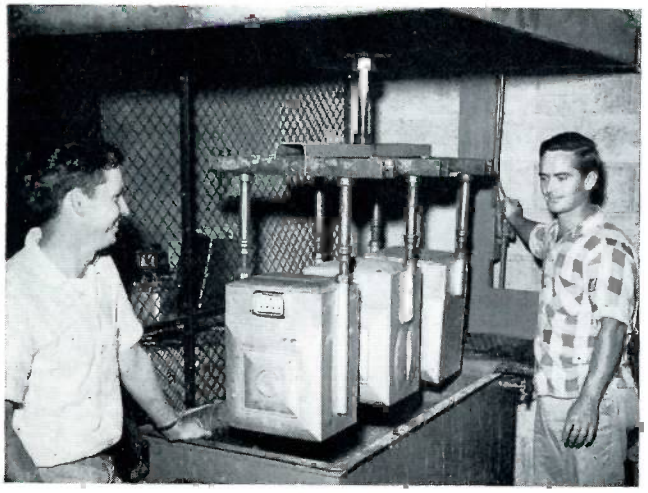
Assembly room is also good spot for small meetings or classes, such as this air conditioning class being taught by Tom Graham from Charleston. Customer service men in recent class, left to right, were Frank B. Hopkins, Herbert L. Hisel, William J. McElhone, Ed S. Rector and Audra L. Moore.

Customer Service men have own room with desks for daily paper work.

Spacious warehouse in new Center begins to get in order a month after move from former crowded quarters. Here, Frank L. Harris, warehouseman (left) and A. B. Hellard, clerk in charge of the warehouse, assemble and store stock items.

Leakage foreman J. G. Mahoney and crew check maps before starting an inspection. Left to right are Caswell McAlister, M. B. Garrison and J. E. Moore, utility men; Mahoney; and John Crane, leakage inspector.

# Meter Shop . . .

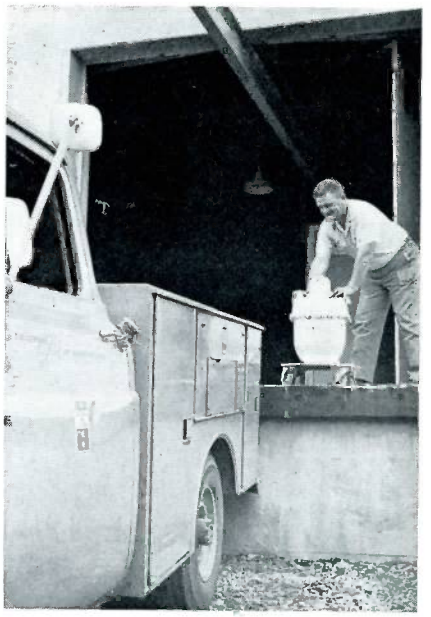


Tin meters go in stripping tank where chemical takes paint off for soldering. Left to right are H. H. Thomas, in charge during Foreman P. J. O'Neill's absence, and A. L. Eades

In-testing and out-testing all domestic size meters with newly-purchased Bell Provers are, from left to right, Albert L. Eades and Ed N. Wilcox, meter repairmen.

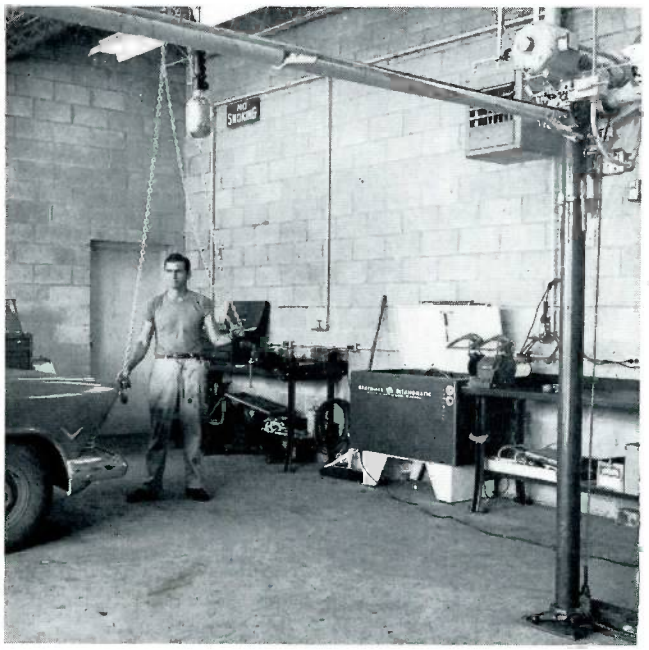
Large meter shop has bench where Leslie Littral, left, and Raymond Wilson repair 240 iron case meters monthly.

New Center feature is paint booth with water carrying off paint as Billy Edwards, meter repairman, sprays meters.



Loading is easy at Center's loading dock where Edwin Doyle, customer service man, moves large meter into truck.

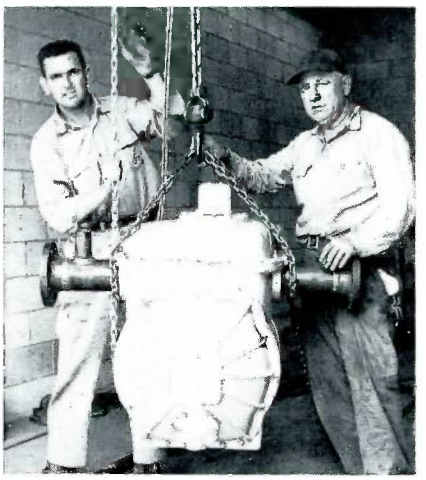
The only shop in the Charleston Group that repairs tin meters has, from left to right, James W. Winans, Preston Van Winkle and Robert R. Wood, meter repairmen, repairing 360 tin meters monthly by soldering all seams.



Allen L. Hyden, auto mechanic, works with valve refacing machine.

Clarence C. Sallee, mechanic's helper, stands with chain hoist in transportation's garage in new Center.

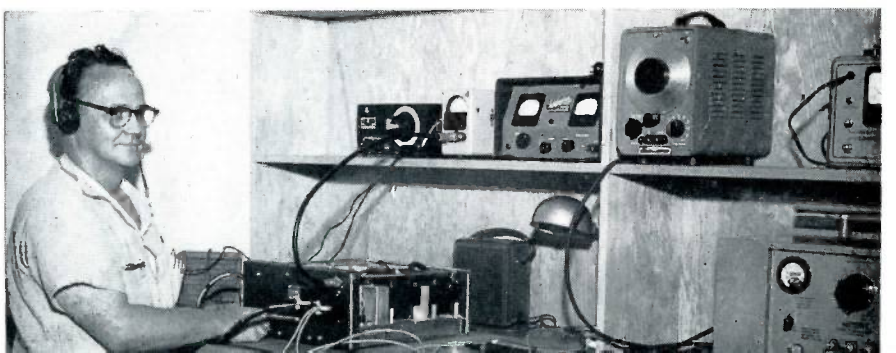
James W. Grant, welder, gets ready to work on flange for large volume meter installation in Center's welding shop.



Overhead crane helps G. T. Sharp, general utility man, left, and Elmer Farris, welder, move meters in welding shop.

Transmission crew, left to right, D. J. Brown and T. J. Moore, utility men, and Harold Fletcher, sub-foreman.

Communications is represented in the new Center by Ernest Renick, electronic technician, who installs and maintains radio and telemetering equipment for transmission and distribution departments in the Lexington, Kentucky, area.




**Mr. E. D. V. Dickey, (left), manager of Citizens Gas Company, and Mr. L. N. Dixon, sales manager for Citizens, give their "'seal of approval" to the cookies being served at a recent function by Mrs. James Scobee, president of the Junior Study Club. The cookies were, of course, products of a gas range.**

*Hannibal, Missouri*

# Citizens Gas In 102nd Year

"On the 20th of December, 1858, the City Council of the City of Hannibal passed an ordinance 'to provide for lighting the city with gas', empowering Thomas A. Harris and his associates to erect the works suitable for the manufacture of illuminating gas, and giving them the exclusive right and privilege of selling and supplying the city and inhabitants thereof with gas for the term of thirty years. At the last session of the legislature of Missouri, the franchises granted by the city ordinance were confirmed, and the company incorporated with a capital stock of $100,000. There is no doubt the stock will be very remunerative and it is now held at par.

"On the first of June, 1859, the works commenced, and at this date, September 1, 1859, are advancing rapidly to completion, under the supervision of John G. Hock, the superintendnt of the company. The buildings are nearly completed and the laying of the pipes in the streets is progressing rapidly, and the work done has been pronounced by competent judges as equal, if not superior, to any on the Mississippi.

"Messrs. Graham & Newman, of St. Louis, have the contract for the construction of the entire works, and contemplate having the city lighted by the first of October, next."

This statement, taken from the Hannibal (Mo.) City Directory of 1859-60, heralded the birth of what is today the Citizens Gas Company.

Hannibal is located in Marion County, Missouri, on the Missouri-Illinois border, on the west bank of the Mississippi River. Like other towns on the Mississippi, it owes its early growth to river trade.

In 1818, a portion of the present site of Hannibal was granted to Abraham Bird of New Madrid, Missouri, in exchange for Mr. Bird's property destroyed by the New Madrid earthquake in South Missouri in 1811.

The growth of Hannibal was put on a sound basis by the formation of the Hannibal Company, which sold property at low prices to early settlers. Flat boats laden with grain and hemp tied up at the waterfront; livestock fattened in the back country was driven to mar-

**Mark Twain Statue**
**Riverview Park**

ket, logs were floated from Wisconsin and Minnesota and converted into lumber; and saw mills flourished, as did packet steamers which arrived daily from St. Louis and from Keokuk, Iowa.

The town began to assume its contemporary character shortly before the Civil War when railroads were built in the west. The Hannibal and St. Joseph Railroad, extending from Hannibal to St. Joseph, Mo., was the first railroad to be built across the state of Missouri. It was in Hannibal that the first railroad mail car was built.

In 1886, the town built the state's first city-owned light and power plant, and in 1889 established the first tax-supported free library in Missouri.

The original gas company was operated under the name of the Hannibal Gas Light & Coke Company. An interesting feature of the franchise referred to earlier in this article is Section 3, in which the city agreed to pay back to the company as a bonus for establishing the works, a sum equal to the taxes levied by the city on the real estate and other gas company properties, for the term of the franchise.

Company records show that gas was first turned on in October, 1859, and an early bill shows that the first rate was $3.50 per 1,000 cubic feet.

At the turn of the century, a disastrous fire consumed most of the company's records. Almost simultaneously, the name of the firm was changed to the Citizens Gas Company of Hannibal.

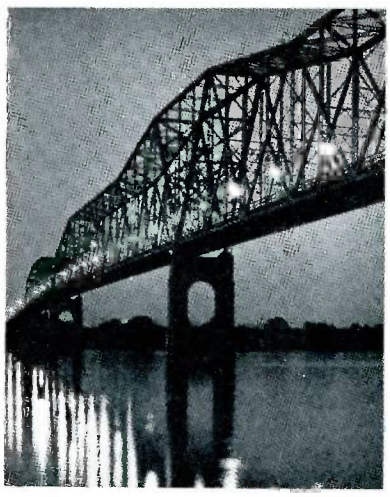
The change to natural gas came in September, 1931, with supplies coming from Panhandle Eastern Pipeline Company.

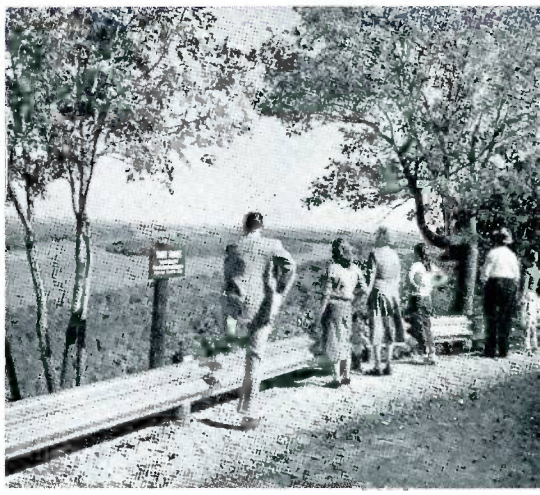
At the turn of the century, there were approximately 36 miles of pipe in the distribution system. This had grown to 75 miles by 1958. The volume of gas supplied to customers increased greatly—from 444,000 therms used by about 3,400 customers in 1930, to 14,529,000 therms used by about 6,750 customers in 1958.

Citizens Gas Company has had a steady growth. It has shared this advantage with Hannibal, boyhood home of the renowned MarkTwain. Hannibal is still popular with tourists. It was there, in 1844, that John Clemens built the house that has been immortalized as the "boyhood home" of Tom Sawyer adventures.

Citizens Gas Company, now in its one-hundred first year of service to the residents of Hannibal and surrounding areas, has been made unique by its age, and outstanding by its advances in service. To the many congratulatory messages received by its management, we are pleased to add our own.

**Free Mississippi River Bridge**



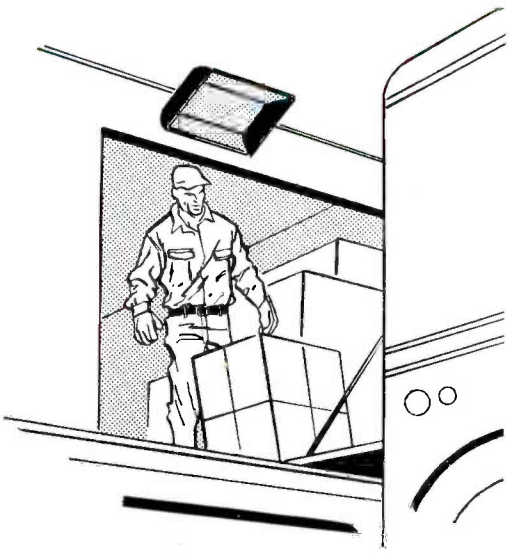


**View from State Highway 79**

**Aerial View, Downtown Hannibal**

**Interior, Mark Twain Museum**

# THE BLUE FLAME GOES INFRA-RED



Today, gas is performing modern magic everywhere.

An example? Take a demonstration recently viewed by crowds at the Brussels World Fair and elsewhere:

A chunk of raw steak is hung in an open space. Exposed to cold winds, and with no fire or cooking appliance under it, the steak suddenly begins to sizzle in mid-air! In minutes, it is done to a turn.

The explanation? A set of modern radiant gas burners, placed many feet away. Only a dull glow from the burners gives evidence of gas combustion—there is no visible flame. But invisible rays, emitted from the burners in a powerful stream, travel through the air without affecting it or being affected by it. Focusing on the steak — an opaque object—the rays heat and cook it swiftly, faster than could be done by an open fire!

The magical rays are called "infra-red," because they are waves of energy with frequencies below those of red light, at the bottom of the visible spectrum. Like light, infra-red rays travel in a straight line, may be reflected, and behave like light in other ways. For instance, the demonstration described could be made even more impressive by placing the burners behind panes of glass—lenses which would focus the infra-red rays more powerfully still, like rays of the sun through a burning-glass!

As a matter of fact, the infra-red rays generated by gas radiant burners are exactly the same as those by which the earth gets most of its heat from the sun—another type of "radiant burner."

A stove or fire does most of its work of cooking or keeping people warm indirectly, through processes of heat conduction and convection. (Conduction is the transmission of heat through metal or other substances. Convection is the transference of heat by the movement of air or liquids.) Some of the heat, however, normally is given off in the form of infra-red radiation—the radiated heat which makes it so pleasant to toast in front of a fireplace—or even an ordinary gas radiant space heater.

Thus, infra-red rays themselves are not new. What is comparatively new is our method of converting the energy content of gas into the specific forms of infra-red radiant heat—in such a way that we can "aim" it in any desired direction!

The secret of the gas infra-red burner lies in a special gas combustion process.

Certain materials, when heated to the proper temperature, will emit large quantities of infra-red radiation. (For an analogy, compare this to the incandescent filament of an electric bulb, which emits bright visible light when heated).

Well - known among successful processes is that developed by the engineer Gunther Schwank, of Cologne, Germany. The widely-used Schwank burner utilizes a plate of ceramic material perforated by numerous, tiny, evenly - spaced holes. A gas-air mixture flows through the holes, which serve as burner ports, and is ignited on the surface of the plate. Thus diffused, the gas burns without visible flame, without requiring additional air from the atmosphere, and with conversion of heat energy chiefly into infra-red radiation.

Other types of infra-red burners

employ similar principles, though details may vary. In one industrial burner design, for example, the gas-air mixture is forced through the pores of a special brick. In another successful design, a catalyst assists the flameless combustion of the gas.

For the new gas infra-red burners, which can "spot" heat exactly where it is needed — and only where it is needed—the practical applications are almost limitless.

Let's look at just a few.

Men, working on docks or loading platforms outdoors, or in huge, drafty factory buildings or warehouses, can be kept warm and comfortable in spite of the chilly atmosphere around them, even in midwinter. Tools and machinery are made warm to the touch, though the air remains cold.

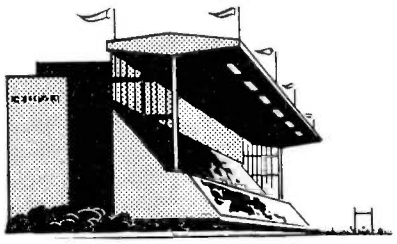
Patrons at sidewalk cafes—or patio guests — can be kept cozy even on nippy days, by gas radiant heaters placed inconspicuously overhead.

Spectators at football games and other outdoor events can dispense with lap robes, and even shed overcoats, given the benefit of strategically placed gas infra-red heaters.

Pavilions, circus tents and concert sheds, too often cold and damp, can be turned into warm and pleasant shelters. Cathedrals and airport hangars have one thing in common — high ceilings making them almost impossible to heat. Both can be made comfortable without excessive cost, by infra-red gas heating.

In commercial establishments and in homes, infra-red gas ovens and rotisseries speed baking and roasting, improve flavor and evenness of cooking, and allow kitchens to remain miraculously cool.

Industrial applications provide an even huger field. Thousands of processes require controlled, precisely directed, economical heat, for which gas infra-red burners are an ideal source.



Typical uses today include heat treating of metals; paper, paint and textile drying or finishing; thawing of boxcar loads; ceramic glazing and glass work, foundry work; grain and lumber drying; curing of masonry and other materials; and an inexhaustible list of other processes requiring application of heat to surfaces.

In all of these uses and many more, the efficiency of gas radiant heating—which expends fuel energy only on the object to be heated, not in heating up air or other objects needlessly—may cut fuel bills as much as 50 per cent. For some uses, savings could be even higher.

Gas infra-red burners today are considered among the most revolutionary and promising of the recent advances in gas appliances and utilization.

As these new devices with their almost magical capabilities come into widening use, they are helping to win new thousands of converts to the convenience and economy of gas.

# IN MEMORIAM

The industry was saddened to learn of the death of two fine men associated with the Atlanta Gas Light Company recently.

Mr. Robert Glenn Cushing, Atlanta Division Engineer, passed away early the morning of February 18 after a prolonged illness. He joined Atlanta Gas Light Company on June 3, 1940 as a junior engineer, and was assigned to Augusta. A year and one-half later, he was called to active duty with the Army, and served four years with the engineers and artillery.

Upon his return, he went back to Augusta as a division engineer. In 1948 he was transferred to Atlanta as division engineer.

Mr. Edward O. Werba, Chief Engineer, died the morning of March 5 after an illness of several months.

Mr. Werba joined Atlanta Gas Light Company in the summer of 1927. During his 32 years of service, he was actively involved in the company's engineering work during the firm's growth from about 40,000 customers to more than 375,000 customers.

From 1942 to 1944, he was assistant manager of the Mobile Gas Company, then an affiliate of Atlanta Gas Light. In 1951, he was promoted from division engineer to assistant chief engineer. He became Chief Engineer in 1952.

We all join in expressing our deepest sympathy to the families of these two men.

# Strictly Off the Record

"Dear," the little woman reported, "a man came yesterday gathering contributions for the old clothes drive."

"Did you give him anything?" the husband inquired.

"Yes, Henry," she replied. "I gave him that ten-year-old suit of yours and that dress I bought last month."

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Golfer: "Caddy, why do you keep looking at your watch?"

Caddy: "It ain't a watch, sir, it's a compass."

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Small girl, as golfer in sand trap pauses for breath: "He's stopped beating it, Mummy, I think it must be dead."

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One Saturday afternoon, the locker room boy answering the telephone heard a female voice say, "Is my husband there?"

The boy promptly answered, "No, ma'am."

"How can you say he isn't there before I even tell you who I am?"

"Don't make no difference, lady. They ain't never nobody's husband here."

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"Really, I can't play golf," said the dumb blonde. "I don't even know how to hold the caddie."

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Mistress: "Marie, when you wait on the table tonight for my guests, please don't spill anything."

Servant: "Don't you worry, ma'am; I never talk much."

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The honeymoon is really over when he phones to say he'll be late for dinner . . . and she's already left a note saying it's in the refrigerator.

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The newlyweds were driving away from the church in the limousine. The groom pulled the bride toward him, put his arm around her shoulder, kissed her, and said, "Now, Honey, about that nonsense of you quitting your job . . . "

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"Jack, dear," said the bride, "let us try to make the people believe we've been married a long time."

"All right, honey," replied the recent groom "but do you think you can carry both suitcases?"

WHY SO QUIET, ALICE?

Jimmy Durante bet on a horse at Santa Anita and the nag lost by inches.

"What that horse needed, bragged an ex-jockey, "was my riding."

"What he needed," corrected Durante "was my nose."

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A man wrote to a country hotel to ask if his dog would be allowed to stay there. He received the following answer:

"Dear Sir: I have been in the hotel business for over 30 years. Never yet have I had to call in the police to eject a disorderly dog in the small hours of the morning. No dog has ever attempted to pass off a bad check on me. Never has a dog set the bedclothes afire through smoking. I have never found a hotel towel in a dog's suitcase. Your dog is welcome

P.S. If he will vouch for you, you can come too.

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Explorer (just back from Africa): "I brought back six tigers, two leopards and a potfer."

Friend: "What's a potfer?"

Explorer: "To cook the meat in."

"Gus," called the new hunter, "are all the rest of the boys out of the woods yet?"

"Yep," said Gus.

"All six of them?"

"Yep."

"And they're all safe?"

"Yep," said Gus, "They're all safe."

"Then, by golly," said the hunter, "I've shot a deer."

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Young Wife (at post office window): "I wish to complain about the service."

Postmaster: "What is the trouble, Madam?"

Young Wife: "My husband is in Albany on business, and the card he sent me is postmarked Atlantic City."

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Henpeck: "Haven't I always given you my salary check the first of every month?"

Mrs. Henpeck: "Yes, but you never told me you got paid on the first and the fifteenth, you embezzler!"

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The husband and wife were in the midst of a violent quarrel and hubby was losing his temper.

"Be careful," he said to his wife, "You'll bring out the beast in me."

"So what!" replied the spouse. "Who's afraid of mice?"

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The boys at the roundhouse observed that one of the crew was unusually glum, and asked what was bothering him.

"I think my wife is tired of me," he replied.

"What makes you think so?" inquired a marital-wise friend.

"Every day this week," he answered, "she has wrapped my lunch in a road map."

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Being a husband is like any other job—it makes it a lot easier if you learn to like your boss.

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The over-the-road driver rushed to the dispatcher's office immediately upon arrival. "What did my wife say when you told her I'd be late?" he inquired.

Dispatcher: "All she said was: 'Can I depend on that?' "

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The brash young man and his girl friend were returning to their seats in the theatre after the intermission.

"Did I step on your toes as I went out?" he asked the man at the end of the row.

"You certainly did," replied the other, rather expecting an apology.

"All right, Mary, this is our row," said the young man without so much as batting an eye.

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The club bore was boasting of his ability to distinguish between different beverages. Finally, one of the listeners took a flask from his pocket and asked the connoisseur to taste and tell him what it was. The man took a mouthful and promptly yelled, "Great Scott, that's gasoline!"

"I know," came the curt reply, "but what brand?"

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An automobile salesman was pushing what he thought was a red hot prospect for a new car. The prospect, though, kept insisting he couldn't afford one.

"Listen," he said, "I'm still paying installments on the car I swapped for the car I traded in as part payment on the car I'm two payments behind on now."

ACQUAINTANCE: A person whom we know well enough to borrow from, but not well enough to lend to.

ADOLESCENSE: The period when a girl begins to powder and a boy begins to puff.

ADOLESCENT: A teen-ager who acts like a baby when you don't treat him like an adult—or,
A person old enough to stay up for the late programs on TV and young enough to enjoy them.

ADVERTISING: That which makes you think you've longed all your life for something you never even heard of.

ADVERTISING MAN: Yessir, no-sir, ulcer.

ADVICE: Something which we give by the bushel but take by the grain.

AGE: That which makes wine worth more and women less.

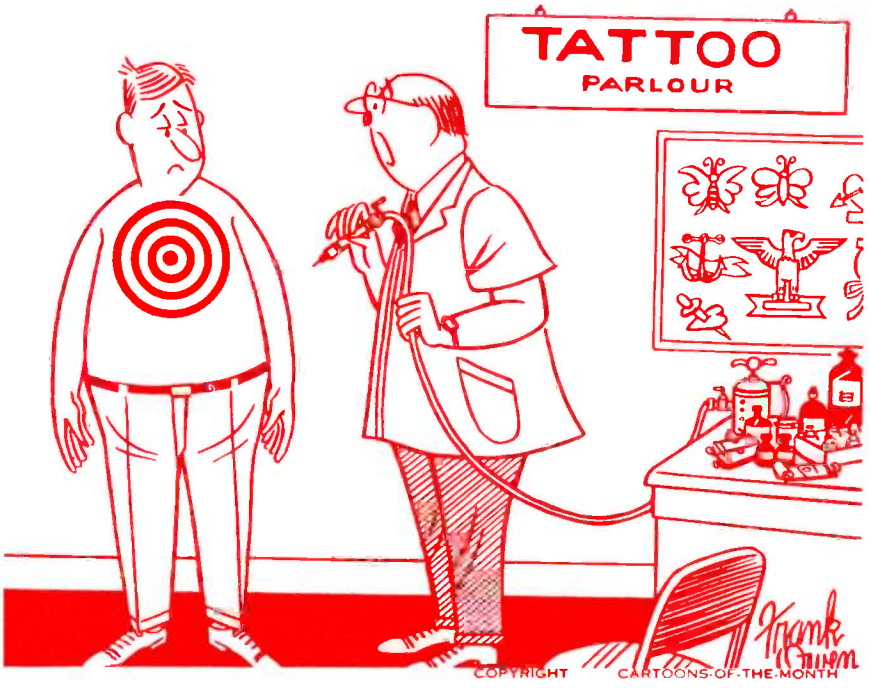
AIR TRAVEL: Seeing less and less of more and more.

ALIBI: Slip cover.

ALIMONY: One man war debt.

ANT: A small insect that, although always at work, still finds time to go on picnics.

ARCH CRIMINAL: One who robs shoe stores.




"On the other hand, your wife choosing this design and buying a rifle may have no connection at all!"

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