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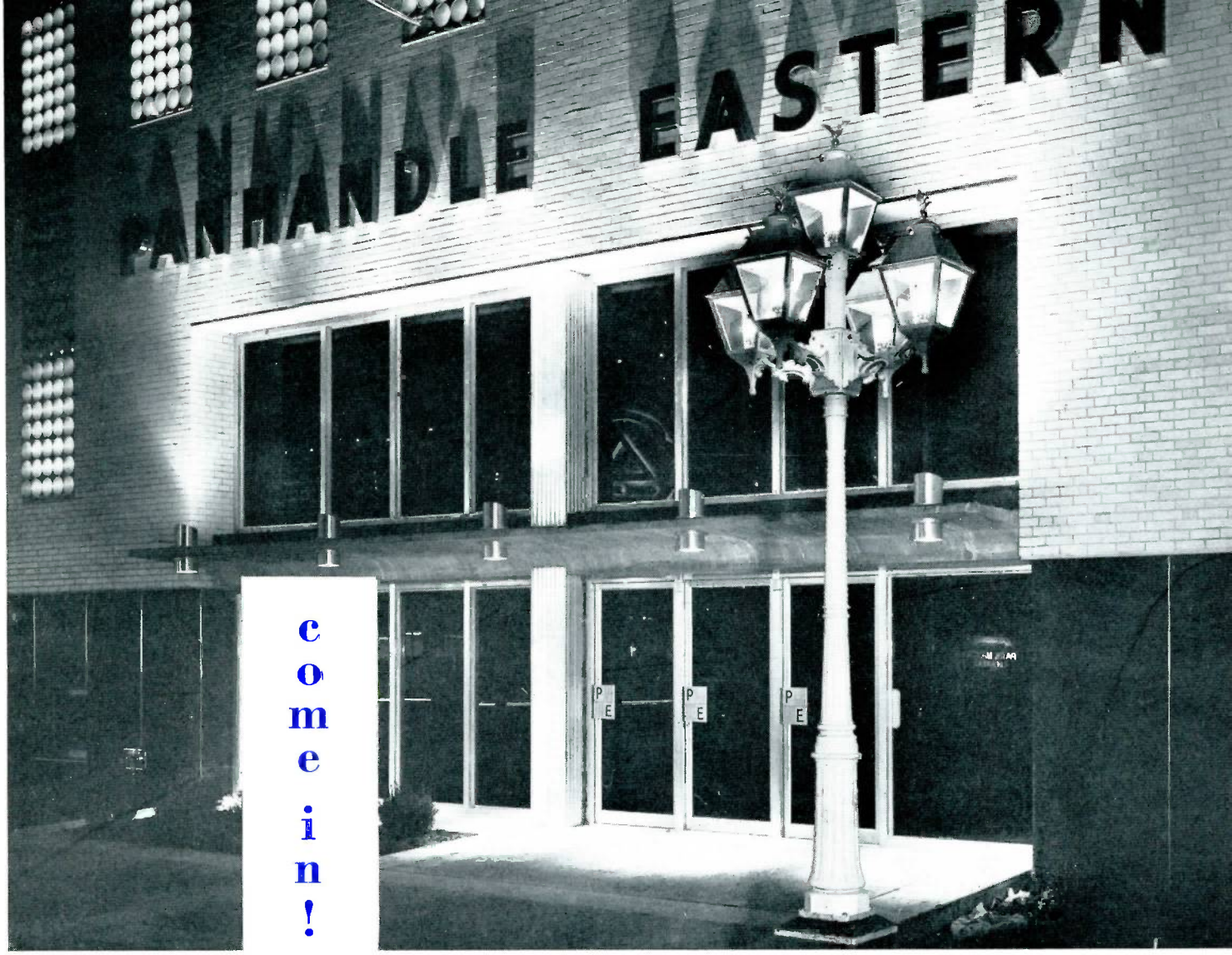
Contents



MEET PANHANDLE EASTERN

Growth, expansion and improvement—these words describe the attitude of management at Panhandle Eastern Pipe Line Co., a pioneer in the transmission of natural gas.

During the past three decades this pipe line venture that began in a western Kansas wheat field, has reached into the homes, businesses and industries of 15 million people in Mid-America and Ontario, Canada.

The most recent project to be added to the company's perpetual growth pattern was the dedication of a multi-million-dollar general operating headquarters building in Kansas City, Mo., in March.

But long before the new office building was completed, Panhandle officials were planning their next expansion—a 94 million dollar pipe line project for Panhandle and its subsidiary, Trunkline Gas Co. This

project, which would boost the company's peak day capacity by 325 million cubic feet, is now pending approval by the Federal Power Commission.

Foresight and planning under the direction of President and Chairman of the Board, William G. Maguire, have made Panhandle one of the largest gas transmission companies in the country and an integral part of one of the nation's most important and fastest growing industries—natural gas.

Panhandle Eastern Pipe Line Co. is 2,700 men and women. Daily these people take as much as 1,425,000,000 cubic feet of gas from 2,600 wells, push it along 8,900 miles of underground transmission lines by means of 459,000 horsepower to more than 1,800 communities in its 13-state service area.

The nerve-center for this gigantic operation is Panhandle's new general operating offices in Kansas City, Mo. Executive offices are in New York City, and the company's production and gas supply department is located in Liberal, Kan.; but at Kansas City the efforts of these 2,700 individuals are woven into a pattern which is dependable and strong.

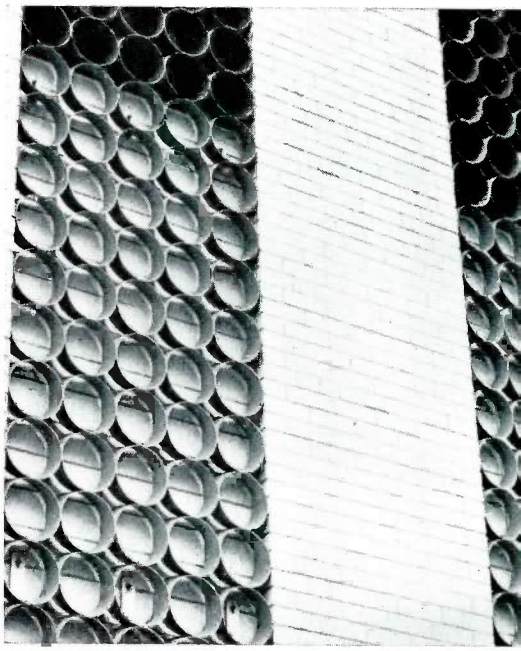
In Kansas City are such departments as Gathering and Transmission, Engineering, Purchasing-Stores, Accounting, Legal, Rates and Economics, and Industrial Relations.

About 450 persons work in these departments in the new two-million dollar office in Kansas City. The five-story, white brick building has approximately 95,000 square feet and is owned by the Kansas City Life Insurance Co. which leases it to the pipe line company.

The handsome and imposing structure has such features as a bubbling fountain in the lobby, gaslights outside the building, gas for both heating and air conditioning, a distinctive sun control system and a microwave communications set-up that links a major portion of the system. A striking sun control system is employed to minimize air conditioning costs. Vertical banks of aluminum tubes cover window areas on four of the five floors. There are about 22,000 of the extruded aluminum tubes, each eight inches in diameter and mounted flush with the edge of the building.

The tubes angle the sun's rays to prevent direct sunlight from falling on office areas. Engineers say that from 8:10 a.m. until 4:30 p.m., throughout the year, a nearly perfect deflection is achieved. Deflection is accomplished by angling the tubes 20 degrees, based on the sun's position at Kansas City.

About 450 persons work in Panhandle's new $2 million operating center in Kansas City. About 22,000 extruded aluminum tubes (below) make an unusual design on the front of the structure while also serving as a sun control system.



The gaslights give the modern building a little touch of the Victorian era. Purposely designed to resemble turn-of-the-century fixtures, the 14 installations are placed near the office entrance and beside the parking area.

A striking touch greets the visitor at the main entrance, where a

curving stairway leads to a second-floor level reception desk. Within the curve of the stairs is a pool and fountain, the latter bubbling up six or seven feet and falling with a splash.

The next big project, meeting the increased needs of the customers, is a $94 million system-wide expansion for Panhandle and its subsidiary.

The largest single expansion project in the company's 31-year history includes the construction of 300 miles of 30-inch main line pipe and 360 miles of lateral and supply lines. The expansion will be the beginning of Panhandle's fourth main transmission line across the midwest to many of the 86 utility and municipal gas distributors on the system.

Stephen Bergman, Chief Engineer for the company, explained the expansion actually is three interrelated projects. Said Mr. Bergman:

"We will increase our main line capacity with new pipe and additional horsepower at certain compressor stations.

"Our subsidiary, the Trunkline Gas Company of Houston, Tex., also will install new main line pipe and horsepower so it can increase deliveries to Panhandle at Tuscola, Ill., where the two networks intersect.

"Thirdly, we contemplate converting the Howell gas field in south central Michigan to an underground storage reservoir."

Mr. Bergman pointed out that such a massive expansion of facilities has its impact all along the system from the producing areas to the local distribution company which must in turn add new facilities to serve the public.

The speedy growth of Panhandle hasn't been easy during much of its 30 years. Its history is dotted with troubles, disappointments and headaches.

The company's pipe line system, which now could stretch one-third the way around the earth, had its beginnings in the Liberal, Kan. area.

Despite the handicaps of the depression and the uncertainties associated with what was then a new industry of doubtful future, the men of Panhandle were convinced that a long distance pipe line was the answer to supplying the predictable energy needs of the industrial Midwest.

At that time only three or four other companies had attempted long distance transmission of gas to such cities as Denver and Omaha from the Hugoton Field of Kansas.

Panhandle was organized Dec. 23, 1929 as a subsidiary of the Missouri-Kansas Pipe Line Co. and was christened Interstate Pipe Line Co. and a few months later it was changed to Panhandle Eastern. It represented one of the largest natural gas pipe line undertakings in the country at the time of its formation.

The projected Panhandle system was the first routed into the Midwest, and despite depression era problems of financing and sales, the line reached the Illinois-Indiana border by the end of 1931.

Sales resistance was strong because natural gas was new. The idea of a continuous source of heat energy coming from hundreds of miles away was strange to homeowners and industry alike.

In the early days, it was not uncommon for a company employee to wear several hats and perform several jobs—land buyer for pipe line right-of-away, construction helper, and salesman.

Once the pipe line had reached a new community, Panhandle

Backed by a terrazzo chip wall in tones of brown and beige with flecks of white, two young ladies view the reflecting pool in the lobby of the new office building. The circular marble staircase leads from the ground level to the second floor reception area. The opposite wall of the lobby is made of alternating panels of French Rouge Antique and Botticino marble.

The decor of the fifth floor executive offices is of contemporary design, with walls paneled with English oak and narrow heart walnut.

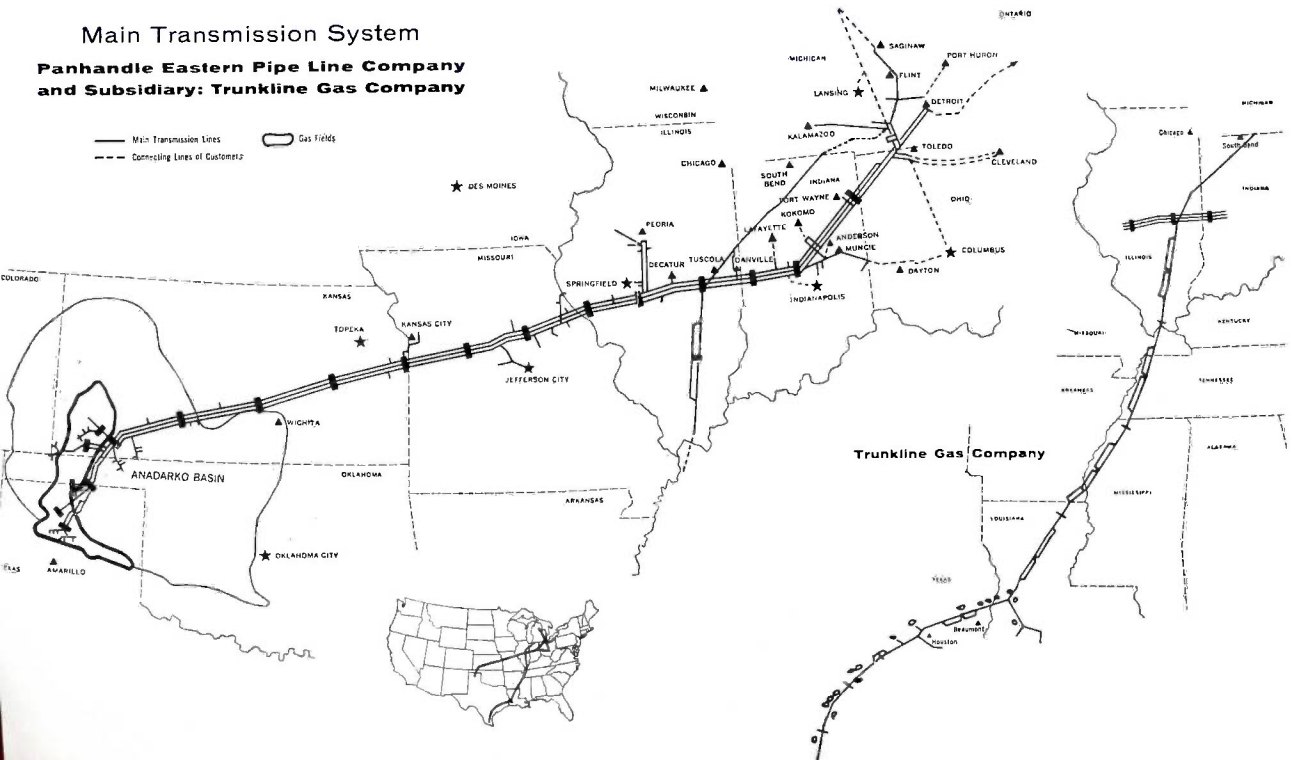
More than 2,700 men and women work in the Panhandle system to assure their millions of customers in 13 states that service is always available.

people would join with representatives of the local utility in making house-to-house sales calls and adjusting burners to use the new fuel.

The first Panhandle pipe line was from Liberal to Rockville, Ind., and represented an investment of 45 million dollars. It had a peak day capacity of 85 million cubic feet—and company reserves were estimated then at 1.5 trillion cubic feet.

By the early days of World War II, the Panhandle system had been extended across Indiana and Ohio and into Michigan, giving Panhandle a transmission system stretching 1,200 miles from the Hugoton Field to central Michigan.

The 15 years since the end of World War II have seen the greatest growth for Panhandle and the gas industry.



By 1949, the company completed construction of its second main line from the southwest, increasing peak day capacity to 500 million cubic feet and boosting investment to $162,000,000.

In 1950, the Trunkline system got its start and by 1955, Panhandle had completed its third parallel main line from Liberal, putting peak day capacity beyond one billion cubic feet.

In 1960 Panhandle-Trunkline delivered in excess of 400 billion cubic feet of gas to such cities as Kansas City, Jefferson City, Springfield and soon St. Louis, Mo.; Peoria and Decatur, Ill.; Indianapolis and Fort Wayne, Ind.; Toledo and Cleveland, Ohio; and Flint and Kalamazoo, Mich. Its service areas also include utilities in Texas, Kansas, Tennessee, Mississippi, Louisiana, Kentucky, Oklahoma and Canada.

Natural gas supplies to meet the demands in these states come from three main sources. Much of it is purchased from independent producing companies, some come from the company's own wells in Texas, Oklahoma, Kansas, Louisiana and the Gulf of Mexico.

Besides Trunkline, the subsidiaries are Anadarko Production Co. and Century Refining Co. Trunkline is primarily a 1,300-mile transmission organization, Anadarko is a production organization.

A major portion of the oil and gas supplies that are used by Panhandle comes from the organization's own wells in the Kansas-Oklahoma area, or from its subsidiary, Trunkline Gas Co. of Houston, Texas.

Panhandle Eastern has more than 8,900 miles of underground transmission lines which service 1,800 communities from Liberal, Kansas to northern Michigan and the Province of Ontario, Canada.

W. G. Maguire
President, Board Chairman

Anadarko is Panhandle's gas and oil exploration subsidiary and has its headquarters in Liberal. Anadarko was formed in July, 1959, by Panhandle to explore more efficiently and to develop hundreds of thousands of acres in Kansas and neighboring states.

Anadarko has 674,000 acres of land under lease and has programmed the drilling of 65 wells this year. Last year Anadarko drilled 48 wells, of which a third were located in Kansas.

Century Refining Co. operates a refinery at Shallow Water, Kan. It is the only refinery between Wichita and Denver and provides an important market for crude oil produced in southwest Kansas.

Acquired by Panhandle in March of 1957, Century represents a seven-million-dollar investment. The refinery turns out some 20 products, including premium gasoline, liquified petroleum gases and high quality fuels.

Approximately half of the crude oil refined at the subsidiary comes from Panhandle's own oil production in the Elkhart, Kan., and Liberal areas.

Although not a large refinery, Century has capacity to process about 36 million gallons of gasoline annually.

Oil and gas production from Michigan have taken on increased importance the past year. The Michigan division now produces from six separate fields in the southeastern portion of the state. In 1960 the company increased its acreage holdings in the Michigan Basin from 115,000 acres to 477,000. The company has 43 oil wells and 23 gas wells in the state.

Ninety billion cubic feet of gas were produced last year in Panhandle's own fields, while Anadarko produced six billion cubic feet from reserves.

Panhandle Eastern had its beginning in the Liberal area and today, 32 years later, Liberal can still be called the "beginning" of Panhandle. It is at Liberal where much of the gas enters the system and it is at the Liberal booster station where the gas gets its first "big push" through the miles of pipelines in the system, and begins its 15 mph underground march to Michigan.

Constructed in the fall and winter of 1930-31, this first main line booster station on the company's 1,200 mile transmission to Michigan today represents an 11 million dollar investment.

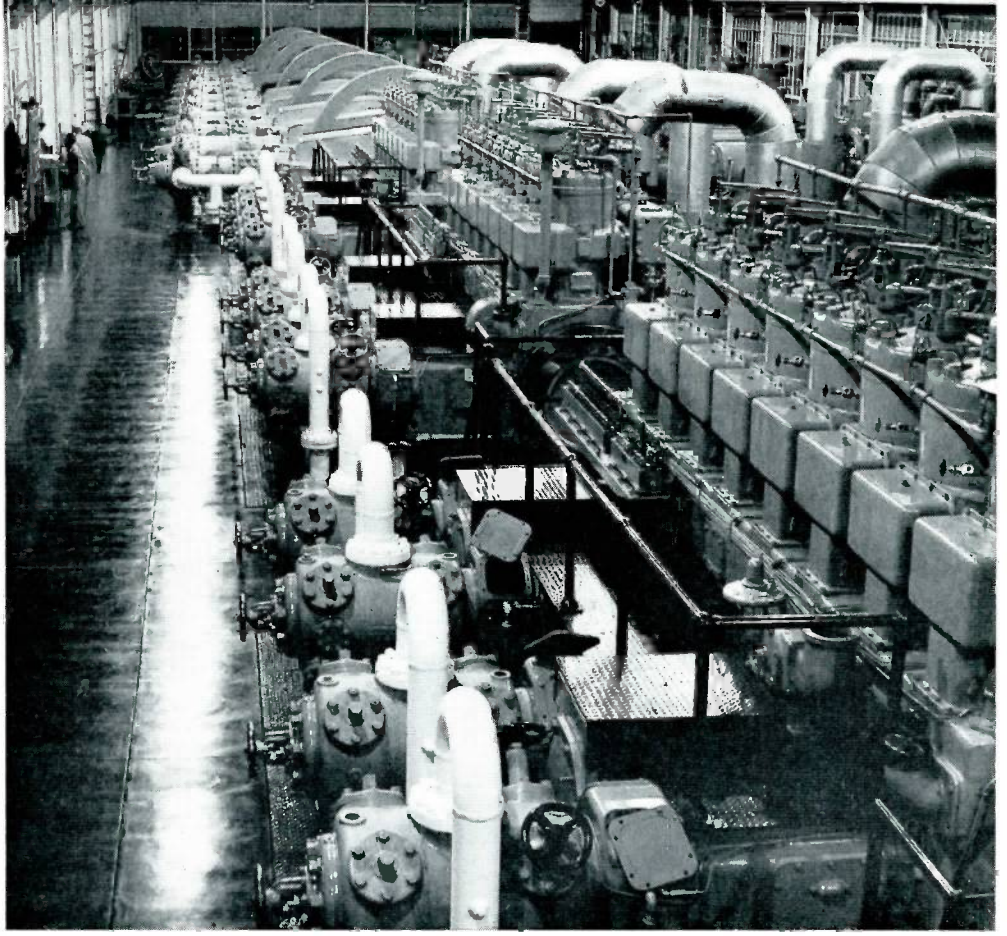
Fifty-eight men tend the station which houses compressors which have more than 33,000 horsepower. Natural gas moves through the pipe line by a differential in pressure and the power that creates the pressure—as much as 900 pounds per square inch—comes from these giant compressors.

More than 30 miles of piping, ranging from ½ inch to 26 inches are needed to handle the flow of gas in and out of the station and the necessary supporting facilities such as water, air and lubrication.

Natural gas is fed into the station from a network of more than 2,000 miles of field gathering lines connected to hundreds of wells in Kansas, Oklahoma and Texas.

The compressor station at Liberal is the first of 13 along the system that pushes this "stored sunshine" along at the rate of 15 miles an hour. In order to keep these pipe lines filled with gas, Panhandle has become one of the biggest users of gas supplies from the Hugoton Field, recognized as the world's largest dry gas reservoir.

The first well in the huge field was drilled 4½ miles west of Liber-



The compressor station at Centralia, Mo. is one of 13 main-line stations that pushes the gas along at a rate of 15 MPH. The compressor stations in the system have a capacity of 459,000 horsepower and handle as much as 1,425,000,000 cubic feet of gas in a day.

al in 1920. Since then it has grown to include 4,100,000 acres and 6,200 wells.

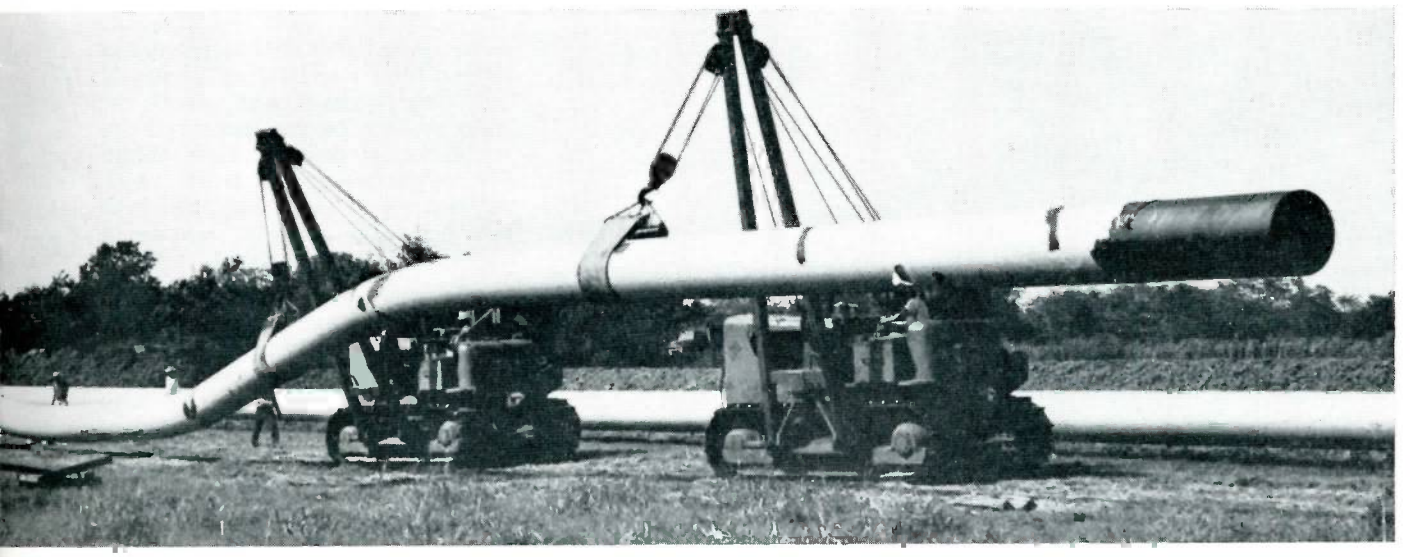
Of its proved acreage, about 2½ million acres are in Kansas, one million are in Oklahoma and 600,000 are in Texas. If superimposed on the state of New Jersey, the field would cover about 80 per cent of the state. It is about five times the size of Rhode Island.

Daily production from the field amounts to more than two billion cubic feet, or enough natural gas in a single day to serve the needs of a city of 15,000 for 2½ years.

Even though an adequate supply of gas seems available, the demand keeps increasing and the producers, pipe line companies and suppliers continually are moving ahead to keep pace with the swiftly-moving gas industry.

Panhandle Eastern is growing and expanding as it has in the past, so that it may continue to carry its share of this gigantic load.

A long section of 30-inch pipe, bent to fit a canal crossing, is moved into place by tractors for laying at a point near Greenville, Miss. This is part of Trunkline Gas Co. which runs from the Gulf Coast to Tuscola, Ill.



"THIS IS YOUR INDUSTRY" SERIES

THE FUEL OF A 1001 USES

Natural gas has the capacity to do just about everything!

That goes for hatching chickens or making locomotives. For wherever heat is needed, industry has found that natural gas is the most reliable and easily controlled fuel.

Industry has learned too, that natural gas is a versatile tool.

It can be used to cut, bake, harden, purify and perform dozens of other chores faster and more economically. Natural gas, in fact, has more than 26,000 adaptations of over 2,500 individual uses in the production and fabrication of almost every item required in the daily life of the nation.

Modern homes, for example, are actually houses that gas built. Window glass, asbestos, cement blocks, bricks, bathroom fixtures, lumber and even the kitchen sink are processed by the magic blue flame.

And industry is constantly finding new jobs for gas.

Steel mills have recently increased production and lowered costs by adding natural gas to a blast furnace. This boosts steel production and sharply cuts coke use. Electric furnace steelmakers are also experimenting with adding natural gas and oxygen during melt-down to increase furnace output.

Natural gas, however, is more than an industrial tool.

Scientist, chemists and engineers have recently developed entirely new roles for gas.

Today, for instance, when a girl dons a sweater to bring her warmth, it is as likely to have come from the chemists vats as from the sheep man has herded for centuries. The sheer hose she wears to feel and look her best are more likely to evolve from a chemical factory than from nature's miraculous but not-so-efficient silkworm. The purse she carries is probably made of plastic. And somewhere along the line—either in production or as a raw material and quite likely both—natural gas plays a vital role in making these and hundreds of other items. For gas is a basic ingredient in nearly the entire roster of things we refer to as synthetics.

While attaining growing importance as a raw material, natural gas has taken on a multitude of jobs in the pioneering probes of unknown worlds.

The "skin" of a missile must be heat treated to withstand temperatures of thousands of degrees. Nose cones must be conditioned to re-enter the earth's atmosphere. Rocket components must be tested for heat resistance. The same gas that gives instant response and precise control for baking a cake is the ideal fuel for these tasks.

Rocketry and space exploration have job openings for lightweight, portable power units. Scientists are developing revolutionary units to fill this need.

Ultimately, as additional technical advances reduce costs, and increase productivity, these devices will open a whole new vista of jobs for natural gas. They can be adapted to fork-lifts, eliminating exhaust fumes and noise in warehouses and other closed areas. Some researchers even foresee the day when such devices will be used to power the all-gas home, generating electricity for TV sets, radios, fans, etc.

These and other developments have made gas a prime contributor to our high standard of living. It keeps Americans supplied with the most modern conveniences by helping industry produce more things for more people at lower costs, plays a major role in thousands of new products and aids science in excursions to other worlds.

As the field of application widens, more and more industries are turning to natural gas. Utilities deliver gas to more than 140,000 industrial plants, compared with 22,000 in 1932. Since then, industrial consumption moved from 4.5 billion therms to over 47 billion therms—half of all natural gas used in the nation.

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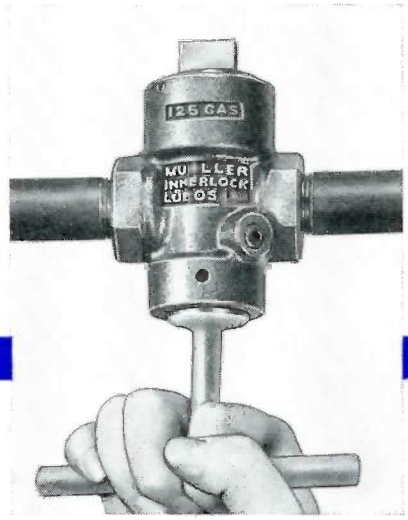


Anybody turns it off . . .

. . . quickly and easily with a common wrench. To avoid creating a dangerous situation, this stop can not be turned on with any tool normally found in the home.

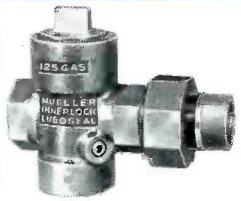
Service man turns it on . . .

. . . with a twist of a special wrench available only to authorized personnel. Service is quickly restored when it is safe to do so and stop is automatically reset for future shut-off use.

Mueller LUBOSEAL Stop incorporates features and quality that assures safe, dependable service *today . . . and many years from now* . . . GAS TIGHT — O-ring seals at top and bottom of key and precision key lapped into body prevents leakage into atmosphere or through port. Large sealing surfaces protected by false key and body ports. EASY TURNING — Entire sealing surface is lubricated each time stop is turned off or on by four vertical grooves in key. Grease storage under pressure by O-rings assures perfect lubrication over long periods. Independent port permits easy relubrication of entire stop. FULLY TESTED — Before shipping, each stop is individually tested with 125 p.s.i. air pressure while submerged in non-corrosive liquid. Stops are tested in both "off" and "on" positions.

Iron Body—Bronze Key • Straight Way • Flat Head • Tamperproof • Working Pressure to 125 p.s.i. • Size ¾" only

H-11190 Innerlock LubOseal Stop
Inlet: Inside I.P. thread
Outlet: Inside I.P. thread



H-11191 Innerlock LubOseal Stop
Inlet: Inside I.P. thread
Outlet: Insulating Union

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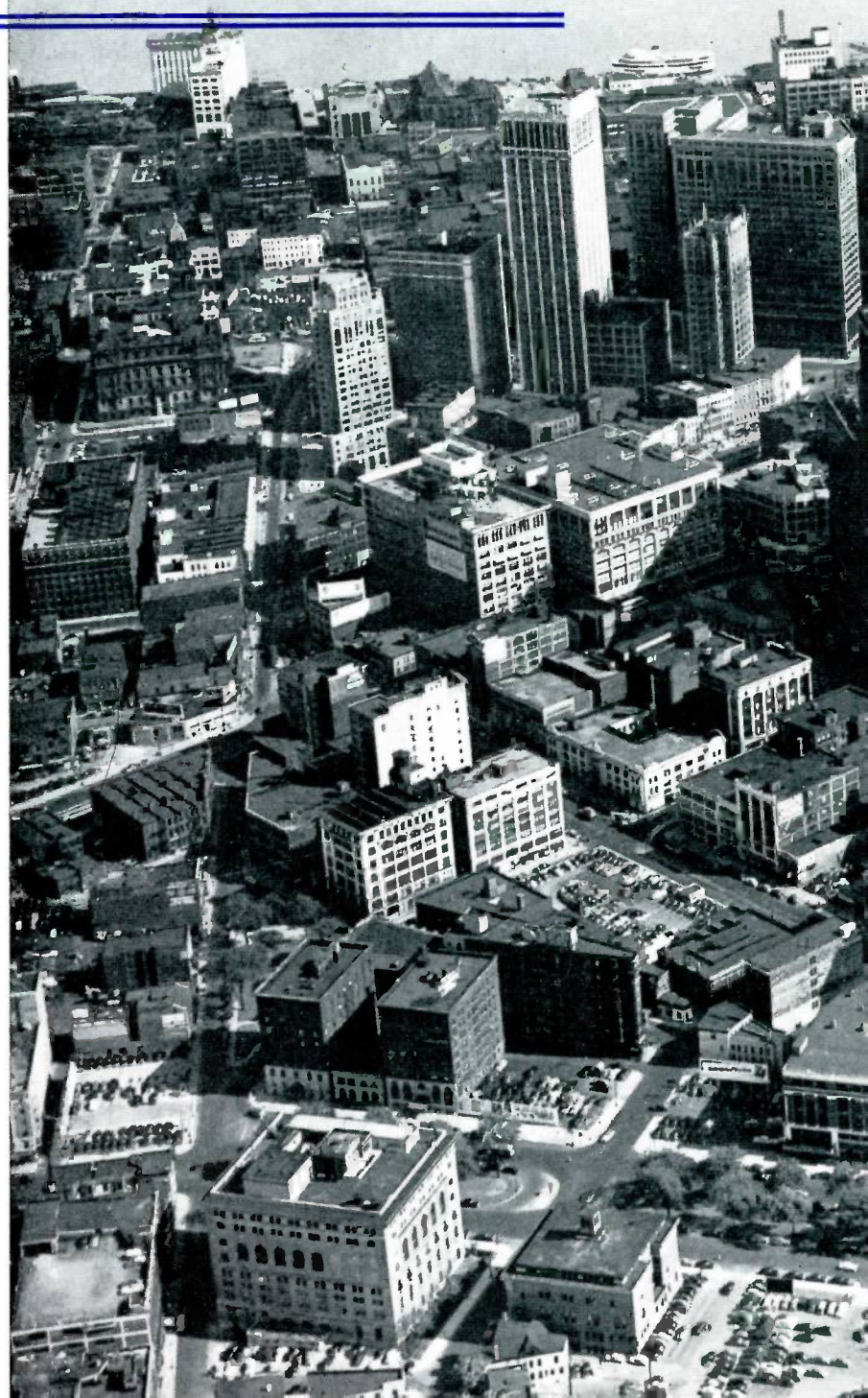

Sidelights And Highlights Of the AWWA Conference

Friday, June 2, 1961

.....arrived early this morning in Detroit, and began work on my assignment relating to radio and television coverage of the eighty-first annual conference of the American Water Works Association.

.....visited the several Detroit radio and T.V. stations, and found them receptive to convention news

....They agreed to assign personnel to cover all major events.

.....next on the agenda was a visit to magnificent Cobo Hall, scene of the various meetings, social events and manufacturers' exhibits.

.....met Eric Johnson, AWWA's new Advancement director, in the AWWA press room...looks like this room will see plenty of activity during the week.

.....looked out over the exhibit area from a window in the press room, and noticed that many manufacturers have begun setting up.

.....this afternoon, met with other

members of the AWWA press room staff: Larry Keller, Detroit Dept. of Report and Information; Jake Jacobs, the Buchen Co. (Chicago); Dean Kearsh, J. Walter Thompson Co. (New York); and Art Brigham, Washington Suburban Sanitary Commission (Hyattsville, Md.) ....put together press kits for members of the Detroit news media and business publications.

.....At 5 P.M., AWWA held a press party for the purpose of introducing press room staff to local news media.

Saturday, June 3, 1961

.....today was a rather quiet one .....chief project was to make final plans for arrival of Senator Robert Kerr on Sunday, and to arrange a Monday press conference for him....The press room staff helped Arne Gubrud, assistant Advancement director for AWWA, complete preparation of abstracts of convention speeches.

Sunday, June 4, 1961

.....The exhibit area was officially opened at 1 P.M., although many conventioneers arrived at noon for their first glimpse of the displays .....long lines at the convention registration desk by noon..... aisles in exhibit area were jammed by 3 P.M.....heard that AWWA officials expect a record attendance at this meeting.

.....Senator Kerr, chairman of the Senate Select Committee on National Water Resources, arrived shortly after noon.....first major social event, the "Meet and Greet" party is scheduled for 8 P.M. tonight in Cobo Hall..... convention itself will get underway tomorrow morning with a 10 A.M. session.....hospitality suites of the manufacturers were opened at 5 P.M. today.

Monday, June 5, 1961

.....AWWA President C. F. Wertz addressed the convention on "AWWA Progress," a presidential review of the distance traveled by the industry and its association in the past 40 years, and a look at the present position of both..... Senator Kerr press conference a tremendous success....attended by all local news media, business press personnel, and editors of trade journals.

Senator Robert Kerr

.....Leading the questioning of the Senator were Virgil Langworthy of WATER AND SEWAGE WORKS, William S. Foster of AMERICAN CITY, and Dr. Morris Cohn of WATER WORKS ENGINEERING.

.....Senator Kerr addressed the convention at 11 A.M., stating, "I sometimes refer to you as 'hydronauts,' because you are leading us on the way to new frontiers in the field of water resources development, just as our astronauts stand on the threshold of the future exploration of space....We are going to make greater progress in conservation and development of our water resources in the next few years than ever before. Your members have performed a great public service in providing good water to our

cities and towns and industries in the past, and I am sure that you will meet the challenge of our new goals and aspirations in the future ....you hydronauts, I am sure, will be more interested in the recent report of the Senate Select Committee on National Water Resources on which I had the privilege of serving as Chairman. Between May of 1959 and January of this year, the Senate Committee undertook one of the most comprehensive studies ever made of the water resources of this Nation. Your own organization was represented at several of the hearings, and your studies on water resources policy and on various technical aspects of municipal water supply were made available to the committee....Your brains, experience and leadership can insure success for your own areas and for our country. I salute you, hydronauts of the sixties, as you successfully strive to construct a more powerful and triumphant nation."

.....We learned early this afternoon that Griffin, Georgia, has been named winner of the first International Advancement competition. The entry from Aurora, Illinois placed second, and third place went to the Dominguez (Calif.) Water Corp.

.....At 8:30 tonight, the annual awards reception was held in Cobo Hall.

Tuesday, June 6, 1961

.....Norman Billings, chief of the Hydrology Division of the Michigan Water Resources Commission, delivered a paper at 2 P.M. on "Water Resources and Problems of Michigan." In his talk, he said, "Possibly, the greatest water resources problem—and the one most widely shared by other states—is the failure of the public to recognize signs of trouble and to act wisely to avoid it. A flood on the Mississippi differs greatly from a flood on a Michigan stream, but the solution of either problem involves the same difficulty of convincing the public that something should be done....The widespread availability of good ground water resources has led to a disregard for the importance of planning and managing this resource. It is becoming increasingly clear, however, that future development of ground water supplies will depend more and more on careful, scientific study of Michigan's complex geology.

.....Tonight was one to be long-remembered in the social sphere of AWWA conferences. At 7:30, convention delegates began filing into the nearly 10,000-seat Cobo Hall Arena to enjoy a carnival, complete with Ferris Wheel and other rides. An authentic carnival atmosphere stimulated conventioneers for a long evening of fun and frolic.

Wednesday, June 7, 1961

.....At 9:30 this morning, AWWA President-Elect John W. Kramer stepped to the rostrum to point out "What AWWA Does For You." In his opening remarks, he described the American Water Works Association as an educational and professional organization. He pointed out that recent and growing demands for more services have brought AWWA to an impasse. It is asked to provide training for operators and managers, to engage in research, perhaps to test and certify the quality of products, to provide more and better standards, to provide public relations aids and

(Continued on page 17)

Honorary Membership Awards

Four leaders in the water works field were awarded honorary memberships in the AWWA at the organization's annual conference in Detroit.

Mr. Eckert

Mr. Griffin

Otto Elis Eckert, General Manager of the Board of Water and Electric Light Commissioners, Lansing, Mich., received his membership for his exemplary performance as a water utility manager, which has given leadership and inspiration to countless water works men over the years.

Attmore E. Griffin, Water Treatment Consultant, Pompton Plains, N. J., was cited for his long-time participation in and encouragement of research in the water works field and his generous expenditure of time on Association affairs.

Ray Lyle Derby, Principal Sanitary Engineer, Los Angeles Department of Water and Power, was honored for his outstanding contributions to the art of water treatment control and his years of unselfish effort in the improvement of methods of analysis and the control of cross connections.

The citation for **Fred Merryfield,** Professor of Sanitary Engineering, Oregon State College, Corvallis, Ore., read: For his tremendous contribution as an inspiring teacher, an accomplished engineer and a selfless leader, who has spared no effort or energy in his personal and professional objective of water works advancement.

Mr. Derby

Mr. Merryfield

Peace Through Water?

One of the most stimulating events of the recent AWWA convention, at least in the eyes of this writer, was a press conference held for Professor Rolf Eliassen of M.I.T. Thursday morning, June 8. The conference, scheduled by AWWA's capable new Advancement Director Eric Johnson, was attended by members of the Detroit news media; the AWWA press room staff; writers from business publications; and editors of the trade journals which serve the waterworks industry.

An hour earlier, Professor Eliassen had delivered a paper, outlining progress made in saline-water conversion.

In one of the more humorous moments of the press conference, one of the questioners said: "Professor Eliassen, President Kennedy has stated that a significant technological breakthrough in saline-water conversion could be more dramatic and important to mankind than even the current Russian space advances. Do you agree with this statement?" The professor smiled coyly but warmly, and answered: "I'd better agree. I've had a part in the preparation of some of his speeches on saline-water conversion!"

Of major interest, however, were Professor Eliassen's comments immediately following this banter. He used the phrase "Peace Through Water" in describing a conversation he had recently with an Indian official. This official said, in effect: "Give to India one good water supply in each town, and we will defeat Communism." As Dr. Eliassen pointed out, Communism thrives on hunger and disease. A reliable water supply in each town would lessen the incidence of disease and sickness; a healthy population is physically able to produce the food to overcome national famine.

A healthy and well-fed population is more reasonable, and not so easily receptive to Communist propaganda experts who thrive on the ignorance of the discontent.

In effect, Dr. Eliassen was pointing to a major technological advance in saline-water conversion by this country as a major weapon of foreign policy. Remember: one of the chief objections in other countries to our foreign aid program has been the feeling that we were "patronizing" foreign populations—taking advantage of their lack of technological skill and productivity.

Place yourself in India. Imagine that you are a man in his thirties or early forties, with a strong desire to provide for your family. Due to a polluted water supply, you are surrounded by disease, and even you are physically unable to work. Certainly you would be impressed, perhaps deeply so, by the knowledge that Russian dollars are pouring into your country to provide hydroelectric projects and other technical advances. Would you not be more impressed, however, if American technology was able to provide you with the health necessary to provide for yourself and your family? Dr. Eliassen believes successful and economical desalinization would be a tremendous boon to mankind.

In keeping with the general theme of the AWWA conference, Dr. Eliassen claimed that there is no shortage of water; rather, there is a shortage of the quality of water people wish to drink. He noted that the "split system" of water supply is gaining in acceptance. Under this system, brackish water suitably treated is used for industrial purposes and for such home consumption as lawn watering, and potable water is used by the same community for human consumption.

Dr. Eliassen feels that the public is generally aware of current water problems, but is seriously uninformed about brackish water and desalinization. He suggests that water is a tremendous sociological problem, and looks forward to the day when people who are located in an area of inadequate water supply must change their "water habits."

This writer is grateful for the insight into the importance of desalinization given on June 8 by Dr. Eliassen. We urge you to read his report in full in a future issue of the AWWA JOURNAL.

. . .Jim Milligan

(Continued from page 15)

industry promotion, and to expand its publications efforts. Mr. Cramer stressed that some of these things AWWA cannot do under its present status as an educational-professional organization; some it cannot fund at its present level of dues income. He added, and stressed, that to alter either of these materially would be a step requiring mature thought and consideration.

According to Mr. Cramer, all of these pressures brought into being the Aims and Objectives Committees, created in 1958 under AWWA President L. S. Finch. These thirteen committees looked into every aspect of the Association's operations to determine: (1) what the members really want, (2) whether they are willing to pay for it, and (3) how the cost should be distributed.

The Aims and Objectives Committee finished its work and reported to the AWWA Board in January of this year. The report recommended sweeping changes involving much increase in the services performed by AWWA, with the additional operations funded by an increase in dues from $500,000 to one million dollars per year. The additional money was proposed to come principally from increases in dues rates paid by utilities and manufacturers. The report recommended employment of a management consultant to examine the report itself and the overall operations of AWWA, and to make independent recommendations on the entire matter.

The Board has authorized retaining a consultant, and it is hoped that their report will be available by January, 1962.

In closing, Mr. Cramer stated he personally favors the proposed program. He feels that AWWA must preserve its educational-professional status, but must also expand its activities to enable it to remain the spokesman of the water industry.

.....At 4 P.M., persons attending the Resources Division meeting on Supply heard a unique discussion by Harry N. Lowe, Jr., deputy chief of the missile and space Office of the U. S. Army Corps of Engineers Research and Development Laboratories. The subject of Mr. Lowe's talk was "Water Supply on the Moon."

Mr. Lowe asserted that a reliable water supply is of vital importance to our accelerated program of reaching the moon with men and materials during the 1960's. The possibility of natural water sources on the moon may be of some hope, according to Lowe, but no conclusive evidence of the existence of such sources has as yet been obtained. He pointed out that sustained manned operations on the moon will have to be based initially on a system of recycling and reuse of water, so that the need for resupply of water from earth will be greatly reduced or eliminated.

Thursday, June 8, 1961

.....of major interest on this morning's agenda was a 9:30 address by Rolf Eliassen, Professor of Sanitary Engineering at the Massachusetts Institute of Technology. His "Task Group Report on Progress in Saline Water Conversion" was well-received both by delegates attending the session, and by personnel of various news media attending a press conference held for Professor Eliassen at 10:30 A.M.

Mr. Eliassen said that, on one hand, his committee feels that the amount communities are willing to pay for good stored water transmitted over long distances will gradually diminish as familiarity with the use of demineralized brackish water becomes more general; on the other hand, the committee warns that saline-water conversion is not the only answer to all hopes for adequate water supplies in the future.

Professor Eliassen stated firmly that research and development must continue on a broad scale in many other directions. He included: conservation in agriculture, municipal and industrial uses of water; the reclamation and reuse of existing water sources; and the search for new sources.

John M. Divan Medal

Mr. Finch

Lewis S. Finch, Vice-President and Chief Engineer, Indianapolis Water Co., was the choice for the John M. Diven Medal this year. He was cited for his tireless and unselfish efforts in the successful launching and carrying forward of the Association's Advancement Program, and for his inauguration of the review of the AWWA's aims and objectives.

AWWA Publications Award

Claud Robert Erickson, Mechanical Engineer, Board of Water and Electric Light Commissioners, Lansing, Mich., received the AWWA Publications Award for the paper "Submersible Water Well Pumps," published in the September, 1960 issue of Journal AWWA. This paper provides a brief, readable, yet comprehensive survey of one of the new tools of the industry.

Mr. Erickson

John W. Cramer, President

.....The wind-up social event of the convention is scheduled for tonight at 6:30 P.M.—the annual Banquet and Ball. John W. Cramer will receive the gavel, while outgoing President Caesar Wertz receives the well-deserved plaudits for piloting the AWWA to another great and progressive year of service to its members, its industry, and the country.

.....It is now 3 P.M. Thursday. I am seated at the Mueller Co. exhibit. I believe there is nothing quite so depressing as the last few hours of a wonderful convention. Only a few waterworks people remain here in Cobo Hall; most have returned to their hotels to rest for the big banquet and dance, or are preparing to attend the last open session of the week at 3:30.

Many of the manufacturers have begun to disassemble their exhibits.

Amiable Tom Davey, who has been supervising the routine necessary security arrangements throughout the Hall this past week, is making his final round of the exhibit area.

We understand that this conference has set a new attendance record—more than 3,600 registrants. This is a fitting tribute to the hard work and planning of the people from the Michigan Section, the excellent speakers, and the hard-working officers and staff of AWWA. Congratulations to all who had even the smallest part in making this eighty-first annual conference a success.

(NOTE: The papers excerpted in this article will appear in their entirety in future issues of the AWWA JOURNAL.....Jim Milligan, Editor)

Caesar Wertz, Past-President

Mueller Co. Promotes Two In Sales Division

Two promotions in a Sales Division reorganization have been announced by Mueller Co.'s Vice-President and General Sales Manager Dan R. Gannon.

J. F. Kellett, formerly Manager of Mueller's Chattanooga Sales Office, has been named Sales Manager-Inside Sales with headquarters in Decatur.

A. D. (Del) Parks, formerly Assistant Sales Manager-Outside Sales, has been named Sales Manager-Outside Sales.

Mr. Kellett joined Mueller Co. as a billing clerk in Chattanooga in 1947. He was transferred to Decatur in 1957 to become Assistant to the General Sales Manager and Field Sales Manager. A year later he returned to Chattanooga as Manager of the Sales Office.

Mr. Parks joined the company in 1935 as a messenger and after various assignments was transferred to the Sales Division in 1945. In 1953 he became section sales manager and then in 1957 he was transferred to Headquarters Sales as Assistant Field Sales Manager.

AWWA DIVISION AWARDS

Mr. Tuepker

Five division awards were made this year at the AWWA Conference in Detroit in June.

PURIFICATION DIVISION AWARDS went to Jonathan L. Tuepker, Superintendent of Purification, and Herbert O. Hartung, Executive Vice-President, St. Louis County Water Co., University City, Mo. The awards were made for their paper "Effect of Accumulated Lime-Softening Slurry on Magnesium Reduction." This paper makes available to the field the results of some useful in-plant research on treatment procedures, thereby enriching not only the literature, but the art of water purification.

Mr. Hartung

DISTRIBUTION DIVISION AWARD was presented to Robert F. McCauley, Associate Professor, Civil and Sanitary Engineering, Michigan State University, East Lansing, Mich. It was for his paper "Use of Polyphosphates for Developing Protective Calcite Coatings." This paper is valuable not only for its clear exposition of an important research project, but also for the fact that it introduces a practical means of protecting water distributions systems from the ravages of corrosion.

Mr. McCauley

RESOURCES DIVISION AWARD went to Louis Koenig, Research Consultant, San Antonio, Tex., for his paper "Survey and Analysis of Well Stimulation Performance." This report fills a long-felt gap in the literature of the field, providing an evaluation of past experience with this new application.

Mr. Koenig

MANAGEMENT DIVISION AWARD went to William R. Seeger, General Manager and Chief Engineer, Marin Municipal Water District, San Rafael, Calif., for his paper "Duties and Responsibilities for the Water Utility Manager." The paper translates good management principles and the aims of the AWWA Advancement Program into the everyday activities and decisions of a water utility manager. In so doing, it makes a real contribution to the industry's effort to promote good utility management.

Mr. Seeger

Officers, past and present, of the New Mexico Water & Sewage Works Association are: from left, front row: John V. Lunsford, John L. Allison, John W. Clark, and Melvin Smith. Back row: M. A. Thomas, T. O. Price, M. H. Alexander, Henry U. Gaines, Ernest Martinez, Frank L. Bromilow and Farrell McLean. The election was held in conjunction with the Annual Short School in Las Cruces, N. M. under the auspices of New Mexico State University.

Citations Given and Officers Elected for Water & Sewage Works Association at---

New Mexico Short School

Melvin W. Smith, left, Water Superintendent at Albuquerque, is congratulated by Farrell McLean upon being presented the gavel as incoming president of the association. Mr. McLean, Water Superintendent at Carlsbad, holds a placque honoring his services as president during the past year.

Ted Price, right, President of the Southwest Section, accepts the Charles G. Caldwell Award from Mr. Caldwell as Mr. McLean applauds. Mr. Price is Water Superintendent at Clovis and President-Elect of the group. The award is given each year to the section having the most certified water and sewage personnel on its roster.

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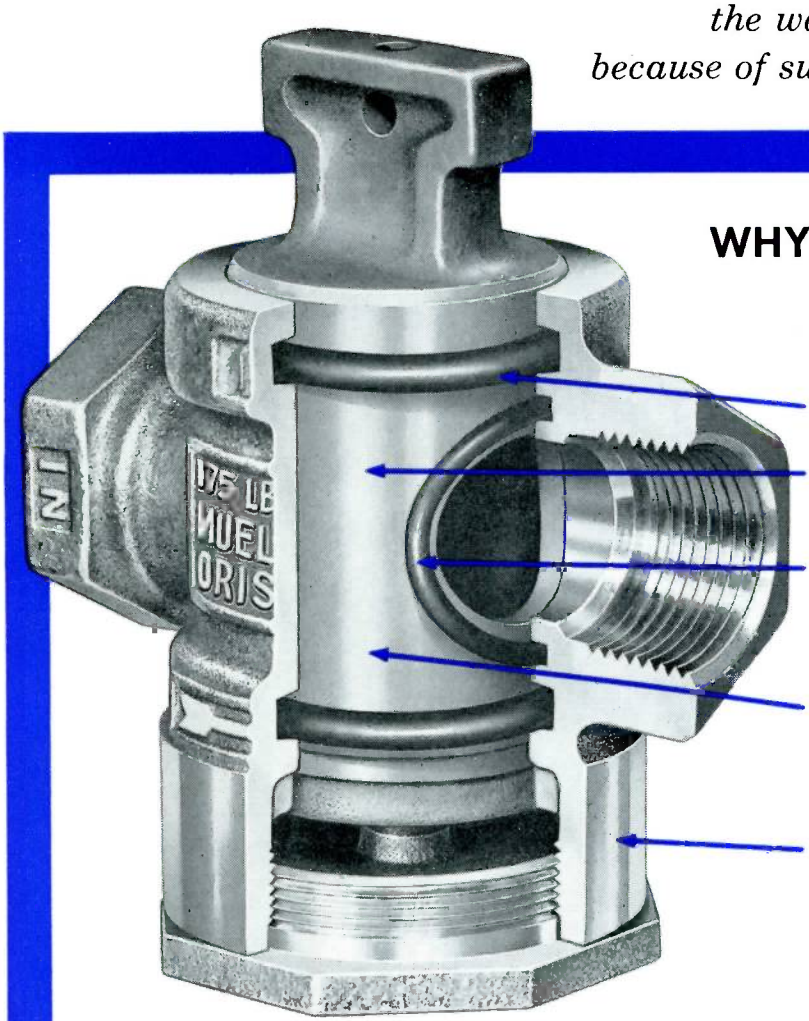

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Strictly Off the Record

With both motors of his plane hopelessly on fire, the pilot showed classic courage. As he donned a parachute he shouted to the passengers: "Don't anybody panic. I'm going for help."

"My husband wouldn't chase after another woman," declared the lady, "He's too fine, too decent, too old."

"My wife says if I don't give up golf she'll leave me."

"I say, that's hard luck."

"Yes, I'm going to miss her."

The newlyweds were driving away from the church. The groom pulled the bride toward him. put his arm around her shoulder, kissed her and said, "Now, Honey, what's this nonsense about you quitting your job?"

Then there was the ill-tempered highway engineer who always built cross roads.

She insisted on taking along about every garment she had and they arrived at the station loaded with baggage. "I wish," said the husband, "that we had brought your piano."

"Oh, quit being funny." she said frigidly.

"I'm not being funny," was the reply. "I left the tickets on it."

Cosmetics: Woman's means of keeping men from reading between the lines.

Mountaineer's wife to druggist: "Now, be shore an write plain on them bottles which is fer the horse and which is fer my husband. I don't want nothing to happen to that horse before spring plowing."

Reporter (to city editor); "Here's the perfect news story."

City Editor: "Man bites dog?"

Reporter: "No . . . the bull threw the salesman."

"You've been charged with fighting," said the judge. "Have any explanation?"

"Well, your honor," said the defendant, "I was in a phone booth talking to my girl when this guy comes up and wants to use the phone. He opens the door, grabs me and tosses me out on my ear."

"Then you got angry?" asked the judge.

"Yes, a little," answered the man, "but I didn't get real mad until he grabbed my girl and threw her out too."

"I repeat, 'Sticks and stones will break my bones, but — — "

Posing the father and his college-age son for a picture, the photographer suggested that the boy stand with his hand on his father's shoulder.

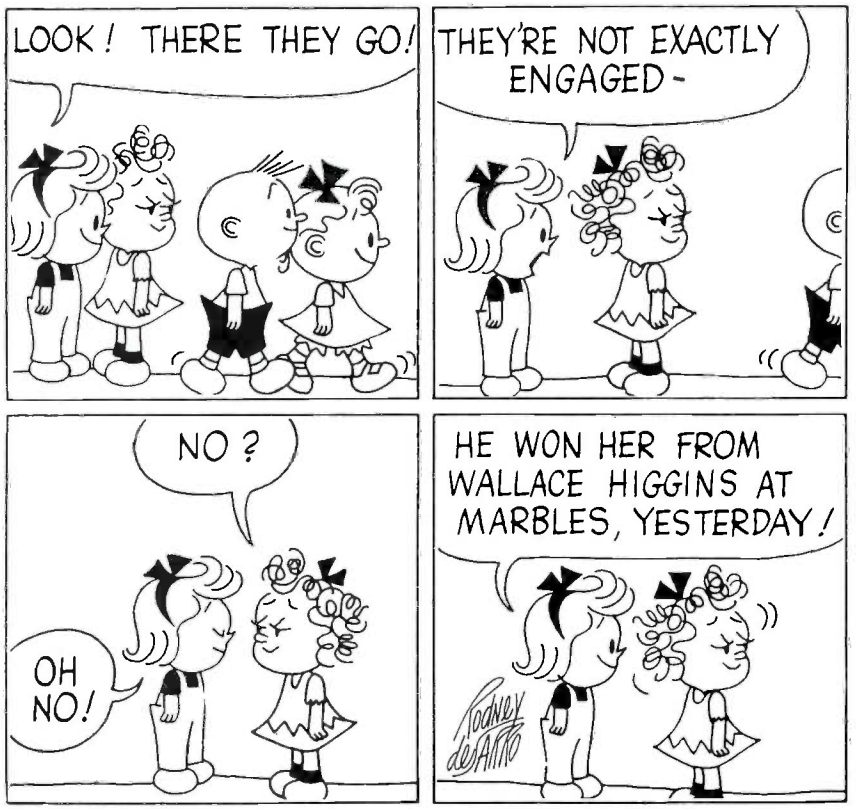
"If you want it to look natural," said the long-suffering parent, "could he put his hand in my pocket?"

"Should I marry a man who lies to me?"

"Lady, do you want to be an old maid?"

A salesman is a man with a shine on his shoes, a smile on his face, and a lousy territory.

small shots



A salesman was explaining to his buddy the reason for his sudden affluence.

"I sell ladies' stockings. Sometimes if the woman of the house is really interested, I put them on for her," he said.

"You must sell plenty that way," the friend commented.

"No," said the salesman, "my legs look lousy in women's stockings."

An insurance man walked into a lunch-room and, taking his place on one of the vacant stools, ordered bread and milk. The fellow sitting on the next stool asked:

"On a diet?"

"No. Commission."

A wife in a small town said to her husband. "Last year for Christmas we sent mother a chair. What do you think we ought to do for her this year?"

"The husband snorted loudly, "Electrify it."

ARGUMENT: Where two people are trying to get the last word in first.

ASHTRAY: Something for a cigarette butt when there is no floor.

AUCTION: A place where, if you aren't careful, you'll get something for nodding.

BABY: Morning caller, noonday crawler, midnight bawler—or, Something that gets you down in the daytime and up at night.

BABY SITTER: One who accepts hush money.

BACHELOR: A guy who is footloose and fiancee-free.

BACHELOR GIRL: A girl who is still looking for a bachelor.

BACHELOR'S LIFE: Just one undarned thing after another.

BAGDAD: What mother did when she met father.

BALDNESS: Hair today and gone tomorrow.

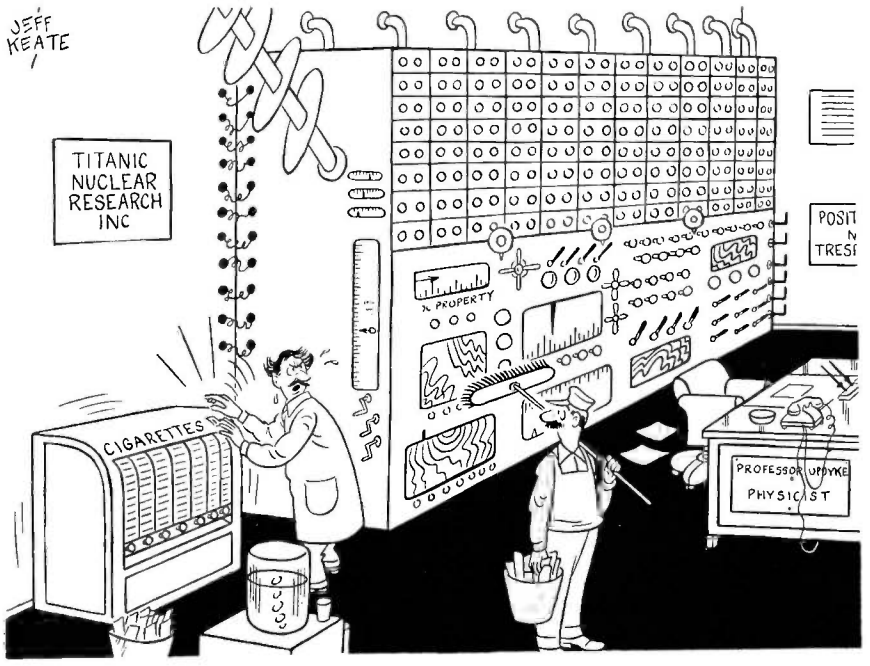
BATHING BEAUTY: A girl who is worth wading for.

BEAUTY: A pretty effective substitute for brains.

BEAUTY CONTEST: Lass roundup.

BEAUTY SHOP: Where men are rare and women are well done.

BIGAMIST: 1. a man who keeps two himself, 2. a person who took one too many, 3. one who marries twice in a wifetime.



"Say, Hanson, how do you work this confounded machine?"

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