



APRIL • 1968

Mueller Record

MUELLER RECORD

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Joe Penne
Editor

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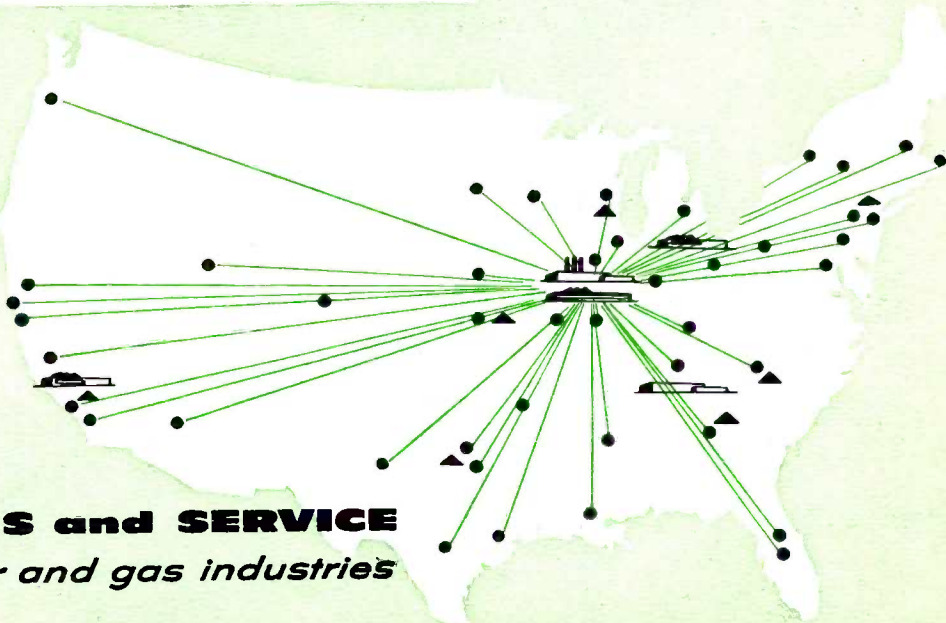
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THE MARK II Oriseal® valve and water go together, but **OUR COVER** shows them in different relationships. Normally, we think of the **MARK II** as having water running through it and as serving as a means of control in a service line. Our photographer switches the situation and places these valves in the middle of uncontrolled water that swirls around them.

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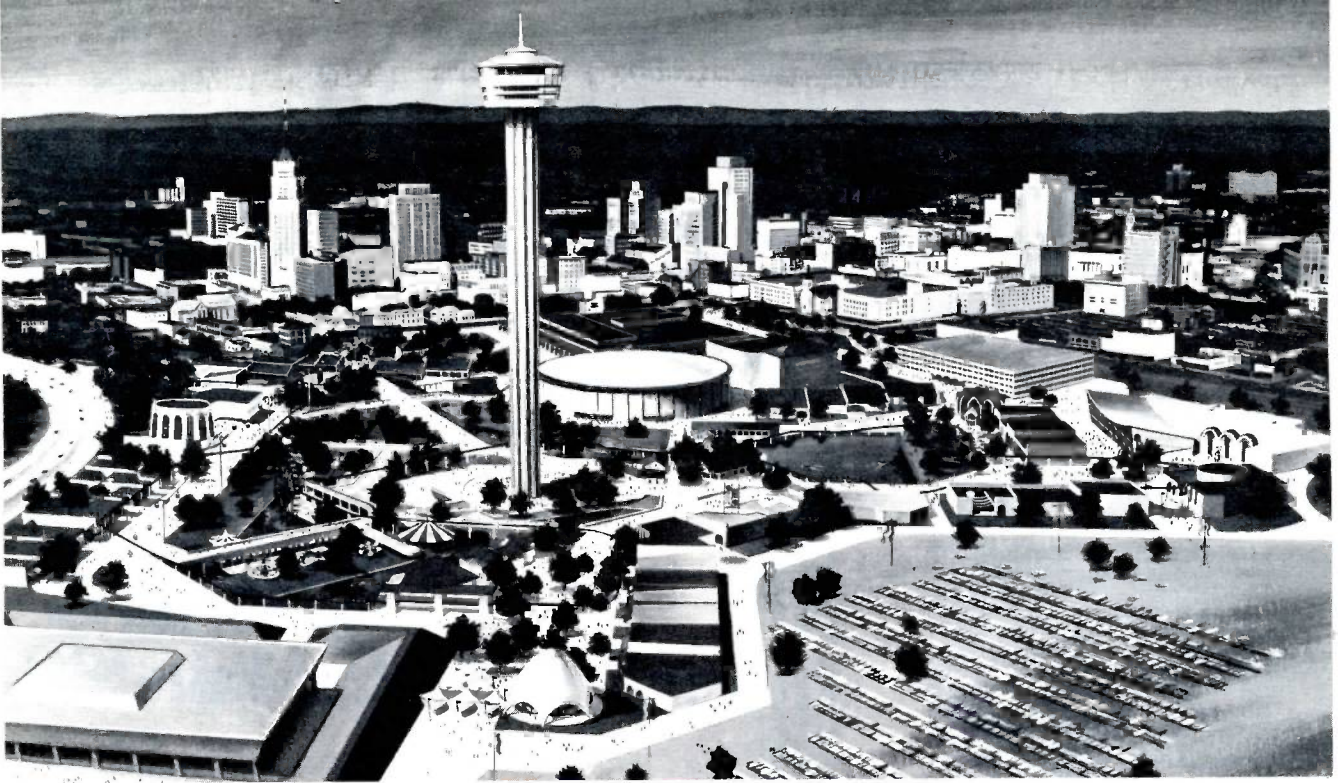
SAN ANTONIO'S SUMMER FORECAST FAIR

Warm Welcome and Sunny Faces Are The Outlook For HemisFair '68

An area destined for blight can become a Fair site—and this is not just a play on words, as proved by San Antonio, Texas, where sights will be fair, indeed, at the downtown site of HemisFair 1968, April 6 through October 6.

Here, all the fascination of a fair with its lights, sounds, color and variety will greet the visitor in a setting of old world charm—in a 92-acre area of the city which had seemed blighted and for which urban renewal was planned until a few years ago when an enterprising private group got an idea and, through private funds, city bonds, State appropriations and Federal money, got it all going.

San Antonio Fair Corp. is renting the urban renewal land, and after the Fair all temporary buildings will be razed to make room for more, new, permanent ones, with plans included for additions to a city-building complex. City bonds have gone for such public, permanent buildings as a convention center dominating the northwest quadrant of HemisFair, a center truly reflecting the city's grace and charm. Among the major permanent structures, the three-building Civic Center constructed by the city at a cost of \$10.5 million, includes a 3,000-seat banquet hall with many meeting rooms, a 2,800-seat theater, and a 93,000-square-foot circular arena. Establishing a pattern for later buildings, the Civic Center, like San Antonio, when the Fair's excitement has died away, will be "ready for tomorrow."



This sketch gives us a concept of the Fair site and shows its location to downtown San Antonio.



Mueller/107® fire hydrants are found on the HemisFair site, including chrome-plated ones which will stand in front of the Civic Center complex. Contrasting the shape of the Mueller hydrant in the foreground is the Tower of the Americas under construction in the background.

Plazas del Mundo is the foreign government sector of the 1968 Texas World's Fair. It houses the official exhibits of many of the participating nations and will feature market areas, entertainment and food from all over the world.



Meanwhile, in preparation for the \$156 million project which is HemisFair, some \$100,000 is being spent to save and restore century-old homes in the area to show what the city was like years ago. Some have been charmingly restored as cafes and shops, into which one may step from the gleaming new pavilions.

HemisFair, then, is the temporary occupant of what was actually an urban renewal area, showing the ultimate that can be achieved by determined Americans when they conceive an idea in celebration of a common history, in preparation for a legacy, and in reaffirming heritage, which is what this International Exposition of 1968 is all about. It is dedicated to "The Confluence of Civilizations in the Americas." This "coming together of people" theme will be accomplished on two levels, that of expected crowds, and a greater concern with "a centuries-deep probe into the diversified cultures of Pan-America." These include "the history, art, religion and socio-economic development of each

of the nations of this hemisphere, and the significant contributions to their development from other continents."

This 250th birthday party of San Antonio, rapidly materializing in the heart of the city, is the first International Exposition ever held in the southern half of the United States. It has been called "the boldest and most imaginative endeavor in the history of the Southwest, when, for six months, it will inform and entertain more than seven million visitors from nations throughout the world."

Predictions are that it will combine "the gaiety of a festival, the vigor and spontaneity of the frontier, the sophisticated adventure of Space Age technology." That it "reflects and lends meaning to our past, appraises our existing accomplishments—and celebrates a future of infinite possibilities." It is heralded as a "six-month-long fiesta along the historic Paseo del Rio," the Venice-like "River Walk" nestled snugly below the hustle and bustle of America's 15th largest city. The Paseo del Rio, an extension of the fabled San Antonio River, will bring Fair visitors by gondola from many points in the downtown business center.

Slightly larger than the 1962 Seattle World's Fair, HemisFair can easily be covered on foot. An intricate system of overhead walks and an abundance of shady rest spots make walking a pleasant experience. The Fair is only a short way from downtown shops and hotels and just 200 yards from the Alamo, the famous chapel that stands in solemn tribute to the 188 immortal heroes who gave their lives for Texas freedom in 1836.

All of the areas of the exposition will be tied together by a 7,000-foot long minirail, a mile of waterways for boat traffic, and several miles of flower-bordered footpaths. Soaring above it all will be 1,400 feet of sky-ride, about 80 feet high. The Minirail will meander delightfully past the front of almost every exhibit on the site and will even visit the interior of a few.

The United States' largest corporations and institutions will sponsor major exhibits at the Fair. In "fantasies of glass, steel and stone, you'll experiment with computers and participate in demonstrations of life in tomorrow's Space Age environment . . . relive exciting moments from history . . . and take a fresh look at the world around you."

Plazas of some 30 foreign nations will be nestled among the shadows of the courtyards in the International Village, Las Plazas del Mundo. Here, visitors will enjoy the hospitality of people from all over the world who bring the best food and entertainment and most authentic exhibits their countries have to offer. Among the nations expected to participate are Belgium, Bolivia, Canada, Republic of China, Colombia, El Salvador, France, Germany, Honduras, Italy, Korea, Mexico, Nicaragua, Panama, Peru, The Philippines, Portugal, Spain, Switzerland, Tunisia and Venezuela.

The basic construction for the International Village was provided by the San Antonio Fair Corp. This area includes 40 buildings or units with 3,000 square feet (minimum) which are of low cost, quick-rise construction. Each nation then was free to design and build its own facade and interior. The Corp. provides one unit rent free, and additional space may be leased by the respective countries. These buildings are easily dismantled so that the site can be cleared after the Fair, making room for other structures.

The private exhibitor buildings, built either by the San Antonio Fair Corp. or the individual corporations, are arranged mainly around the eastern perimeter of the site. Thirty-five private exhibitors are anticipated.

Soaring above the center of the glittering site and dominating it will be one of HemisFair's permanent structures, the 622-foot Tower of the Americas, built with a \$5.5 million general obligation bond issue passed by San Antonio voters. It is the tallest observation tower in the Western Hemisphere, 52 feet higher than the San Jacinto Monument and 67 feet higher than the Washington Monument. Symbolizing HemisFair's theme, it portrays man's desire to go higher and farther in his constant search for achievement and will serve as a permanent reminder of this after the Fair. The Tower's revolving restaurant located at the 600-foot level will seat 312 persons and will make one complete revolution each hour.

Outstanding among the other permanent structures will be the \$6,750,000 United States pavilion featuring a striking new design for a theater structure and a totally new concept in wide-screen motion picture presentation; and the \$10 million Institute of Texan Cultures.



At the United States pavilion, audience and building alike become part of a revolutionary cinema exhibit, as walls lift and screens expand during the course of a specially commissioned motion picture by Academy-Award

winner Francis Thompson, whose movie, "To Be Alive," won an Oscar after being presented at the New York World's Fair. The 20-minute, three-phase movie will examine "The Legacy," "The Harvest" and "The Promise" of American culture.

The Institute of Texan Cultures, with 150,000 square feet making it the largest exhibit building at HemisFair, will house Texas' presentation of its own "Confluence of Civilization." The three-level colonnaded structure of concrete and glass will contain a

CWB Services Fare Well

While the citizens of San Antonio were taking a new approach to an old problem—setting up a World's Fair in an area that had been headed for urban blight, the San Antonio City Water Board made an equally bold move.

The City Water Board (CWB) claims the distinction of being the first municipally-owned utility in the nation to enter the heating and cooling field. In pioneering this exciting new concept in utility service, the Board has once more demonstrated its responsiveness to the needs of the community.

The new central heating and cooling plant adjacent to the HemisFair '68 site is designed to produce steam and chilled water for distribution throughout the Fair area, and for two adjacent hotels.

CWB's entry into this new service was not made just because of the Fair. Most of the biggest users of the service during the Fair are in permanent structures, and when the Fair closes in October they will continue to need chilled water and steam for cooling and heating. These permanent buildings include the Civic Center, historic structures, the Tower of the Americas, Chamber of Commerce building, the Texas pavilion and a Federal structure. In addition, two off-site hotels will remain on the system.

Closing of the Fair will release approximately 3,000 tons of the plant's 10,000 cooling capacity for use by nearby downtown businesses, or additional permanent buildings to be built after the Fair. Already, many private property owners in the area have indicated an interest in connecting to the system for heating and cooling. The CWB expects to spend about \$750,000 for expansion to users outside of the Fair site, bringing the to-

tal cost of the program to about \$6 million.

The masonry and steel plant is of Spanish architecture which harmonizes with the HemisFair area and complements the nearby Civic Center complex. The attractive building, with its arcades and landscaping, offers pools and gardens for viewing by visitors. The cascading waters and reflective pools actually are an ingenious use of water from the cooling towers to create a point of civic beauty from a necessary function.

The distribution and water return system contains about 35,000 feet of pipe, at a cost of about \$1,700,000. Wherever possible, all four lines of the system were laid in a common trench about 12 feet wide and 6 feet deep.

Five 2,000-ton capacity chiller units installed in the central plant will lower the water temperature to 38 degrees Fahrenheit before it enters the distribution system and will chill water in sufficient quantities to generate 10,000 tons of air conditioning. Five 2,910 gpm pumps will circulate the chilled water at pressures up to 150 psi.

The customers on the line will take the chilled water from the mains and circulate it through the air handling units in their buildings. The return water, warmed to about 55 degrees by the air passing over the cooling coils in the building, then goes back to the central plant for recooling.

Permanent buildings' occupants will pay for the chilled water on a metered basis. The balance of that used will be billed to HemisFair which will provide the cost on a space-occupied basis to the nonpermanent exhibitors.

Steam supplied for heating will come from two 1,200 HP natural gas-fired boilers and will circulate at pres-

ures from 150 to 240 psi. The supply mains will deliver the steam to the inside of the customer's building and from there he is responsible for the heat exchange equipment.

CWB General Manager Robert P. Van Dyke says that the area of heating and cooling is as much a part of the municipal utility field as water, electricity or gas and that the new service is natural.

He said: "We felt it was a fertile field for a municipal utility, as large areas are coming into urban renewal. There was a need for centralization of cooling facilities at a reasonable cost. Our expansion to the commercial area goes hand-in-hand with the other city utilities. And the commercial and business people in the community came to us expressing an interest in such a service. The HemisFair area is one of public buildings and reserved for future public buildings, making a need for a public utility service."

Among the advantages Mr. Van Dyke gives for users of the services are: lower capital investments; modern and advanced methods; greater reliability of service; reduced operational, maintenance and staff costs; added safety; minimized building structural loading and vibration problems; greater flexibility for expansion, and predictable costs for heating and cooling.

In addition to housing the heating and cooling equipment, the new plant will contain a production control center to monitor and remotely control both the plant with its distribution system and also the present City Water Board water production and distribution system.

To aid in these controlling operations of both these systems, a large process control computer will be utilized to continually scan the functions and operations of the Board's far-

tasteful and unusual presentation of the ethnic history of Texas culture.

Gone will be the phony image of early Texans as a "bunch of brawling bumpkins in buckskins" and the false picture of the typical modern Texan as a "loud-mouthed wheeler-dealer in

blue-jeans and big hat." Such myths will be dispelled through a warmly human story of adventurers and entrepreneurs, impoverished peasants and wealthy noblemen, hardy frontiersmen and idealistic scholars. It will be told in individual human terms . . . this

story of the melding of forces to make Texas what it has become.

"Big" is the way we think of Texas—"big" in tradition and "big" in hospitality. And Texas-sized is the invitation to HemisFair.

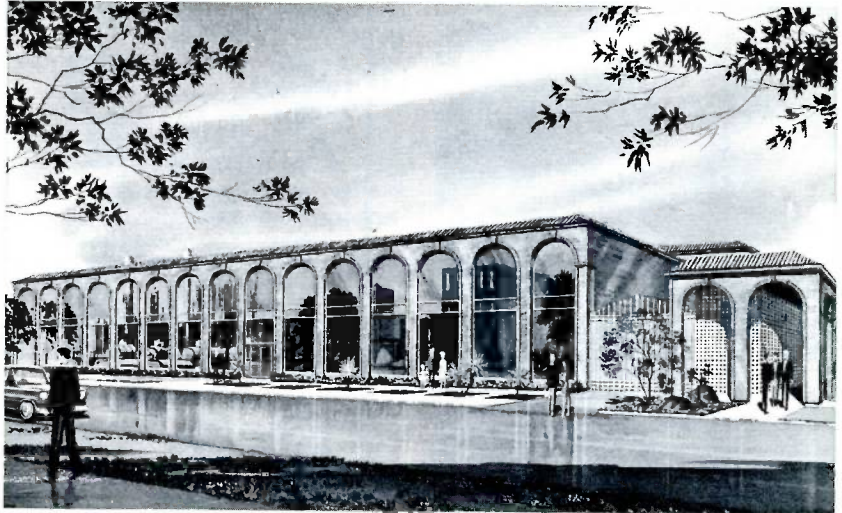
flung facilities and to provide the operator with simultaneous information covering all aspects of the chilled water and steam systems, and the City's water systems. Ultimately the computer will take over the direct operation of all systems under the guidance of the operating personnel.

The central heating and cooling plant is the CWB's most obvious HemisFair activity, both because of cost and uniqueness, but the Board has been active elsewhere as well, having spent nearly \$500,000 on other Fair-related projects.

Richard G. Toler, Manager—Operations Branch, said that as soon as it was apparent that HemisFair was to be a reality, the Board began work replacing all of the mains and hydrants on what is now the HemisFair site. About \$250,000 was needed for the new mains which replaced some dating as far back as 1889. Another \$200,000 was spent during the past three years to recondition or replace the main network surrounding the area of the Fair, in anticipation of the new loads that will be placed on the mains when the millions of people move into San Antonio this summer for the international exposition.

This type of renewal work is not unusual for San Antonio's City Water Board, and it doesn't take a fair or any public display to keep it progressing. As an example, a little more than \$10 million has been spent between 1956 and 1966 on replacement of corroded and inadequate mains.

A preventive program like this, plus innovations like the central heating and cooling business, make it possible for San Antonio's City Water Board to meet the needs of its 140,000 customers and still be able to boast that in San Antonio "Water is cheaper than dirt."

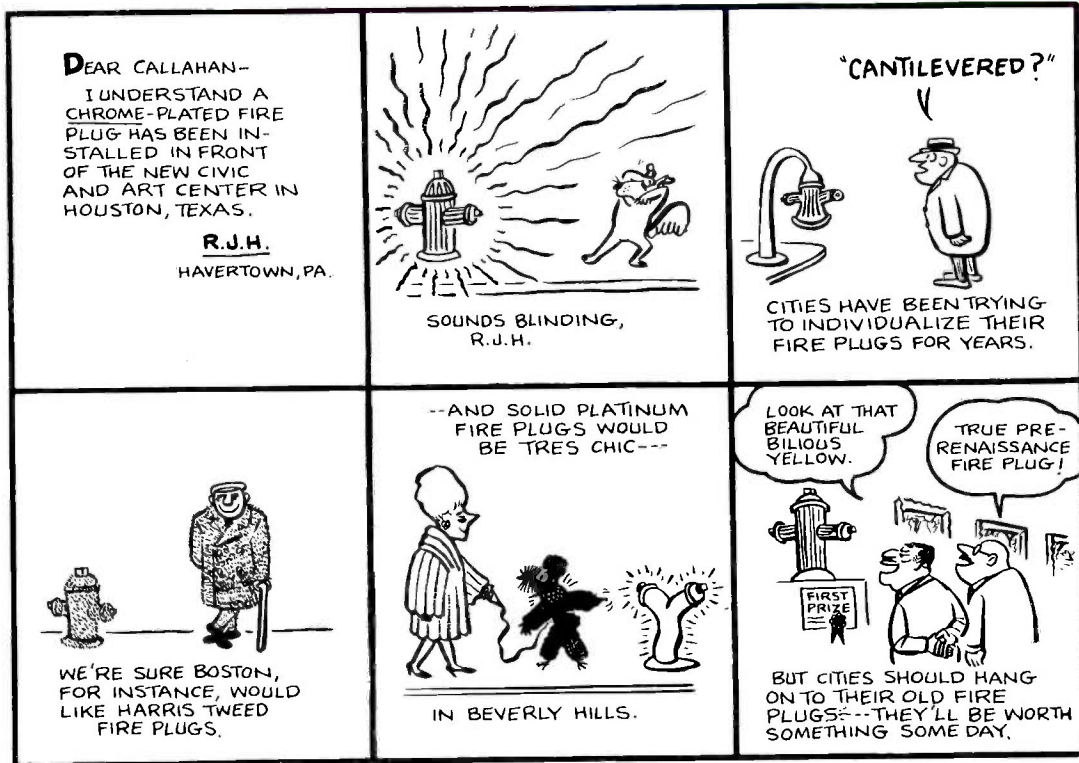


This illustration of the City Water Board's Central Heating and Cooling Plant shows the Spanish architecture, harmonizing with HemisFair structures and complementing the nearby Civic Center complex.



In addition to the regular Mueller®/107 hydrants found at the HemisFair site, three chromium plated hydrants have been installed at the Civic Center complex. Admiring the hydrants are, standing from left: Richard G. Toler, Manager—Operations Branch, City Water Board of San Antonio; Elmer R. Crumrine, chairman, Water Works Board of Trustees, and Robert P. Van Dyke, general manager, City Water Board. Kneeling from left, are: Hunt McKinley, general manager of a water works supply firm in San Antonio, and Ray Roarick, Mueller Co. sales representative.

REFLECTIONS ON WATER



(Drawing Courtesy THE EVENING AND SUNDAY BULLETIN, Philadelphia.)

IT IS ART, BUT IS IT A HYDRANT?

Much is being said about the "modern" designs of fire hydrants today. So much in fact, that it prompted Jerry Callahan of EVENING AND SUNDAY BULLETIN to reply in the editorial pages of the Philadelphia newspaper in the above manner.

We want to thank Leroy J. Evans, former vice president in charge of eastern sales for Mueller Co., for going to the trouble of obtaining the original drawing of this panel from John McCullough, editor of the newspaper's editorial pages.

(Editor's Note: We think that Mr. Callahan's work points out the over-emphasis that might be placed on hydrant design today. Could interests in the aesthetics be replacing those of function and dependability?)

OCEANSIDE SUPERINTENDENT ENDS 42-YEAR CAREER

Robert Weese, retiring water and sewer superintendent for the city of Oceanside, California, is the city's longest-term employee, his 42 years of service extending over half the city's lifetime. Though his March retirement will enable him to travel, it will in no

way limit his lifetime interest in water conservation, an interest which brought an appointment to the State Water Pollution Control Board in 1961, in which capacity he served continuously until recently.

At retirement he was supervising 58 employees, quite a contrast to his start in 1925 when Oceanside had a population of 2,500, with nine city employees, three of them responsible for

all Water and Sewer Department activities.

Appointed city water and sewer superintendent in 1938, he dedicated himself to continuing adequate water supply. Upon his recommendation, Oceanside joined the San Diego County Water Authority in 1944, to insure a supply of Colorado River water. The city's present use of 100% Colorado River water reflects the soundness of this decision.

HYDRANT INSTALLED AS FIRE RAGES

Installing a fire hydrant after the fire begins seems about like locking the barn door after the horse has run away, but this wasn't the case recently in Southern California. On the contrary! As it turned out, the availability of a water supply through a Mueller fire hydrant that was installed on the side of a water reservoir while the fire raged nearby, was credited with helping to stop what could have been a major grass and brush fire. Even though a greater disaster was averted, the fire scorched 1,000 acres of undeveloped land and was fought for five days.

Quick thinking by the Brea, California Public Works Department, and quick work by the folks at the Mueller plant in Brea and a Mueller distributor made it possible to have a new hydrant installed about an hour after its need became apparent.

The story goes like this:

Recently the Brea Fire Department received a report of a grass fire in the vicinity of the city water reservoir in Carbon Canyon. Two pumper trucks were dispatched to the scene but before they arrived the command officer realized the proportions of the fire and sounded a general alarm. When the Brea firemen arrived at the scene, which was in Tonner Canyon in Los Angeles County, they found the Los Angeles County Fire Department fighting a blaze that involved about three acres.

The fire spread rapidly to the east and south, and it threatened to enter the City of Brea and other Orange County areas. A request for help went out and nine additional pumper companies from the cities of Orange, Santa Ana, San Clemente, Fullerton and five Civil Defense pumpers arrived, as well as did bulldozers, water tankers and camp crews from the California Division of Forestry.

As the fire grew, it was decided that the firemen would make a stand on a ridge about three-fourths of a mile from the Brea water reservoir. They knew that an adequate water supply was available from the steel tank, providing some means of transferring the water from the reservoir to the fire pumpers could be worked out. Brea Water Department personnel opened valves on the tank, but this was inadequate, so they decided to try a hydrant.

This is where Mueller Co. came into the picture. The Public Works Department called the nearby Mueller plant for help and a hydrant.

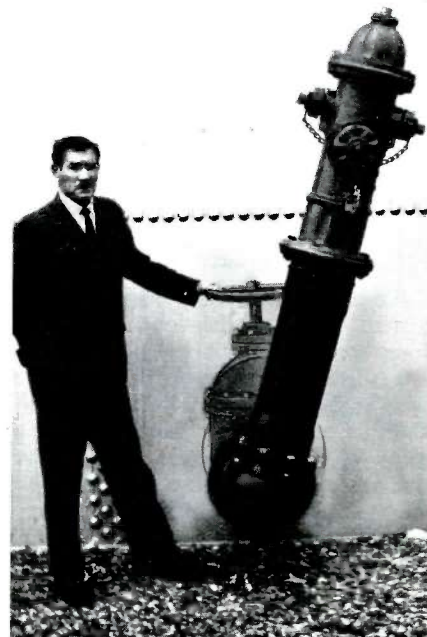
While a distributor in the area was getting a 10" by 6" reducer to go on the 10" gate valve on the side of the tank, the Mueller men were busy converting a hydrant with a 6" mechanical joint inlet to one with a 6" flanged connection so that it could be used with the flanged end on the reducer.

The hydrant's quick installation on the side of the tank provided unlimited water supply for combatting the fire and was the only source that was necessary. A pumper hose was connected to a 4" outlet on the hydrant and run to the pumper truck. One-hundred-foot lengths of 2½" hose extended from all discharge gates on the pumper truck and with this setup it was possible to fill water tanks on six different fire pumpers at the same time. This maximum use was necessary for 12 hours, or until the fire was partially under control.

The hydrant was utilized, however, for the next 72 hours, supplying from one to four trucks at a time.

Brea Fire Chief Kenneth Staggs said that the area burned was confined to undeveloped areas because of the combined efforts of many men and their departments. He also extends much of the credit for successfully fighting the fire to the use of the Mueller hydrant.

He said: "Due to the remote, rough location where this fire originated, if it had not been for the installation of the Mueller Co. fire hydrant on the City of Brea reservoir to provide water, this fire could easily have developed into another major disaster in Southern California."



Gene R. Mills, superintendent of public works in Brea, California, stands beside the Mueller fire hydrant which was mounted on the side of a water tank which allowed water to be drawn quickly to fight a nearby fire. (See story at the left.)

AWWA NOMINATING COMMITTEE REPORT

The nominating committee of the American Water Works Association has designated J. H. Kuranz, manager and chief engineer of the Waukesha (Wisconsin) Water Utility as president-elect in the 1968-69 term. Mr. Kuranz, who has been vice president this year, succeeds H. Christopher Medberry. Mr. Medberry, assistant general manager and chief engineer, San Francisco Water Department, is expected to succeed Henry J. Graeser as president.

Thurston E. Larson, assistant chief and head of the Chemistry Section, Illinois State Water Survey, Urbana, Illinois, has been nominated for the post of vice president of AWWA.

Nominated for a third term as treasurer was Thomas T. Quigley, vice president— Equipment Division of Wallace & Tiernan, Inc.

FORMER SALES REPRESENTATIVE JIM WILLIAMSON DIES

Former Mueller Co. Sales Representative James E. Williamson, died in

February following a long illness. Mr. Williamson retired Dec. 31, 1966 after about 20 years of service as sales representative in the New York City area. At the time of his death he was living in Hempstead, New York.

Just what kind of a person is a water and sewer superintendent?

To a minor segment of the public, he is a man who is never in his office when they try to reach him by phone to register a complaint—they see him as a man who spends most of his time drinking coffee with salesmen and contractors, or attending out-of-town conventions and meetings of all sorts.

To the unsympathetic mayor and city commission, he is a man who never attends the council meetings unless he wants a raise, an expensive piece of equipment, or something else.

To the over-busy city manager, he is a man who can't be found when an irate housewife is on the phone about a washerful of white clothes that have been ruined by rusty water; a man unable to sell enough water during a rainy year to hold off a tax increase the next; a man whose budget never seems to go any way except UP.

To some of his employees, he is a slave driver who doesn't get them a raise as often as they would like, a man who expects them to work while the World Series is on TV.

To his children he is a stranger who comes by the house some time after five o'clock, shaves, showers, changes clothes, kisses them goodbye and says, "I have a meeting to attend."

To his wife he is a man who calls up five minutes before mealtime to tell her he won't be home for lunch, or to ask her to have a white shirt and suit ready in 10 minutes because he has only 15 minutes to get to a meeting. He is a man the phone gets up at all hours of the night and disturbs her

rest and wakes the kids. A man who comes in with wet clothes and muddy boots and tracks up her freshly mopped floors. A man who cannot visit her friends with her on Sunday afternoon because he has to go to the office and work on a report due last Friday. And one who can't take her on out-of-town trips because it is against the rules for her to ride in the city-owned car.

To the State Health Department, he is a man who pays no attention to their recommendations for improving his System; who is late with his reports, and never comes by unless he is in trouble.

To himself, he is a man overworked and underpaid, who does not have enough time with his family, or to hunt and fish as much as he would like—a man who worries about the citizens of his city. He is a man accused of dumping chlorine into the water with a shovel; who is besieged with complaints about "the high water bill this month"; who worries because a duck can't swim in city water; who worries about staying within a budget that was too small to start with; who wonders where he will get the money to buy a new sewer cleaning machine.

He is a man who finally gets to bed about midnight, but as he leaves the house at two a.m. to fix a main break, thinks "Surely, somewhere there is an easier way to make a living!" He knows, however, that he is a man who would not be happy doing anything else. (Sleep, and that long overdue vacation, can be put off, once again, until tomorrow!)

M. E. (GENE) OWEN, WATER AND SEWER SUPERINTENDENT, KINGSVILLE, TEXAS, prepared this article for delivery at a meeting of the Coastal Bend Water and Sanitary Association. Mr. Owen says its primary message was to point out to the members the need for better public relations efforts between the superintendents and their many publics. Mr. Owen spent the first five years of his



work career as a foreman for a company that was building a 30-inch pipeline from Texas to New York. In 1953 he became the assistant water and sewer superintendent in Kingsville and eight years later he was named superintendent. He has been active in many area associations, having been a director of the Texas Water and Sewage Works Association, president and program chairman for the Coastal Bend Water and Sanitary Association, and "Utility Man of the Month for the State of Texas."

What Is A Water Supt.?

BY M. E. OWEN

WATER SUPERINTENDENT

KINGSVILLE, TEXAS



"WATER—WHERE AND WHEN YOU WANT IT" could be the motto and goal of every water utility in the country. It is, however, the title of a 10-minute, 16mm color-sound film recently produced by Mueller Co. This phrase well defines the functions and objectives of a water company and aptly describes the theme of the film which is simply—the story of water.

"WATER—WHERE AND WHEN YOU WANT IT" is one of three color-and-sound movies just finished by Mueller Co. The first of these films tells the story of the water industry and the tremendous job being done by all our water companies throughout the country. The other two films tell the part Mueller Co. plays in the distribution and flow control of water and natural gas.

For many weeks, camera crewmen from Pilot Productions, Inc., Evanston, Illinois, traveled around the country shooting actual scenes in Mueller Co. plants, inside water department pump stations, beside a gas company meter station, and at sites where water and gas company crewmen were in action.

"WATER—WHERE AND WHEN YOU WANT IT" was written and produced with the water utility superintendent in mind. It was made particularly for his use in the local community. Throughout the story, the film reemphasizes the big and dependable job done by the water utilities and their employees, and how essential they are to all of us.

It covers water conservation, supply, treatment, distribution, and use in terms which can be easily understood by any audience, providing a ready-made program to fill requests the water superintendent receives from service clubs, PTAs, schools, church groups, district water works associations and other segments of the general public. It is long enough to tell a complete story, yet short enough to permit time for supplemental talks or questions and answers without having a program run beyond a reasonable

time, or the traditional "endurance of the seat of the pants."

The only reference to Mueller Co. is a credit line at the end which reads: "PRESENTED BY MUELLER CO. AS A SALUTE TO ALL WHO ARE CONCERNED WITH PROVIDING THAT VITAL ELEMENT—WATER."

The second film, entitled "WHO CARES . . . ?", is 18 minutes long and tells the Mueller Co. story in sound and color. It tells about the thousands of Mueller employees who *care* about the products they manufacture. It describes the Company, and the *care* that goes into the engineering, manufacturing and sales of Mueller products. And it tells about the history of the Company which was founded by a man who *cares*, and the people who have perpetuated this philosophy of concern for more than a century.

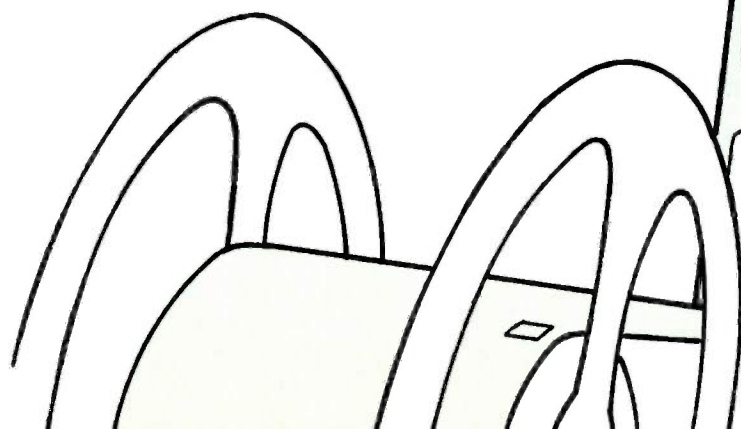
This movie shows manufacturing methods, engineering development and testing, and demonstrates products, all of which makes it of broad interest to Mueller customers, water utility personnel, city councilmen, engineers and members of water works boards.

"KEEPERS OF THE BLUE FLAME" is a 22½-minute film that also tells the Mueller Co. story, but in terms of those associated with the gas industry.

Prints of these films have been made available to all of the Mueller Co. salesmen and requests to use them, or dates for viewing, should be made through the "MAN FROM MUELLER" in your area or the Decatur Sales Office.



MOVIES
by
MUELLER®



Here's How to Play..Hyd(rant)-Go-Seek

"I'll trade you a Mueller/107® with two hose nozzles, and a St. Louis model with a single pumper outlet, for one 'California' type of the EBMUD design," offers one person.

Another replies, "I just got a Columbian Improved, which brings my collection up to 50 pictures."

This strange dialogue could be heard, someday, at a possible future meeting of collectors we have named "HYDRANT HOUNDS."

When we were kids some of us collected and traded airplane pictures that were enclosed with each package of dad's "Wings" cigarettes. A little later, young people traded pictures of sports figures that were included with bubble gum. Even more recently, the hobby of collecting and trading pictures of popular singing groups resulted from the "bonus" photo cards that came with gum.

Nearly everyone is a collector of something or other—stamps, coins, autos, guns or buttons. The newest group we have heard about is made up of a few Texans who photograph and classify different designs, models and manufacturers of fire hydrants.

Every group has a cause it is furthering and in the case of this collection of collectors, the HYDRANT HOUNDS movement is working to "upgrade the status of the common fire hydrant." We speculate that this peaceful group has no quarrel with the quality of today's fire hydrants, but perhaps its members feel that the "Silent Sentinel of the Street Corner" should have equal treatment with that afforded parking meters, historical markers and lamp posts.

We don't know the size of the group or its plans, but we doubt that a march is scheduled at the annual meeting of the International Association of Fire Chiefs and probably no auto "park in" protest in front of hydrants is foreseen. Nothing like this, because all of the "happenings" of this group are planned for fun.

Except for firemen, water superintendents and hydrant salesmen, few people realize the number of manufacturers, types and kinds of hydrants

that are found on corners all over the country.

Perhaps "Hydrant Hunting" is not a new hobby, but Mueller Co. recently got wind of the interest through a letter from Charles Conrad of Amarillo, Texas, who wrote to our plant in Chattanooga asking for literature which could acquaint him with hydrant parts and terminology.

Interest in "Hydrant Hunting" was aroused in Mr. Conrad by his daughter. He says that his daughter was on



a double date in Houston riding with some college friends and as they went around a corner a passenger said, "Isn't that a _____ hydrant?" Miss Conrad reacted with doubts, so they went around the block, stopped, went over to the hydrant, examined it, and sure enough, it was a _____ hydrant. She recounted the story to her father and aroused his interest and he began to notice other hydrants around the community.

A short time later he found himself on a street corner with the city fire marshal, ringing bells for Christmas contributions for the Salvation Army as part of an American Business Club project. Beside them, naturally, was a fire hydrant, and the ensuing discussion strengthened his interest in hydrant seeking.

Mr. Conrad, who doesn't claim to be the originator, says the ground rules for "Hydrant Hunting" are

simple and membership costs nothing. For a collector to "find" a hydrant, the member must photograph it himself and record such data as the time, place and informational material cast on the hydrant body. Pictures may be exchanged but they are simply for furthering one's background. A collector cannot claim any fire hydrants that he did not personally "observe" and record.

A member in Denton, Texas, has a list of 87 fire hydrant manufacturers that he uses as background material. Mr. Conrad says he is trying to get this list because "you can't play the game without a program."

Mr. Conrad stresses the importance of making this a fun project. He says that his collection is a very great conversation subject—especially since there are very few "experts" on hydrants. He says that it is not unusual to have friends call to tell him about an unusual hydrant they saw in Kickapoo or Broken Kneecap, or to ask about the make of a hydrant on a particular corner.

Mueller Co.'s Chief Products Engineer John J. Smith now has a collection of different hydrant photos which numbers 145. This is an accumulation representing about five or six years of travel and work and we figured John's interest was the result of his work with hydrants. We find that there is an interest on the part of others, and who knows what lies in the future of "HYDRANT HOUNDS"?

As you vacation this summer, get off the interstate highways and the super roads and go through the small communities; introduce your family to HYDRANT HUNTING. Instead of trying to keep the kids occupied by having them watch for out-of-state license plates, unusual makes of autos or white horses, have them look for hydrants. Take pictures of the hydrants, record the information you find on them, and write Charles Conrad, 3402 Amherst St., Amarillo, Texas 79109.

Perhaps you have a club formed already and you have some hydrant hunting hints. Let's hear from you "HYDRANT HOUNDS."



Alabama's capitol in Montgomery.

Montgomery, Alabama

*Challenges
Made--
Obligations
Met!*

A challenge made to its Water Works and Sanitary Sewer Board in 1962 has been more than mastered by the City of Montgomery, Alabama. Its progressive water system is proof. Through a series of improvements, Montgomery now has a water system with capacities exceeding projected needs for years to come.

The challenge was made in the form of a strong statement by J. B. Converse & Co., Inc., in an engineering report which said:

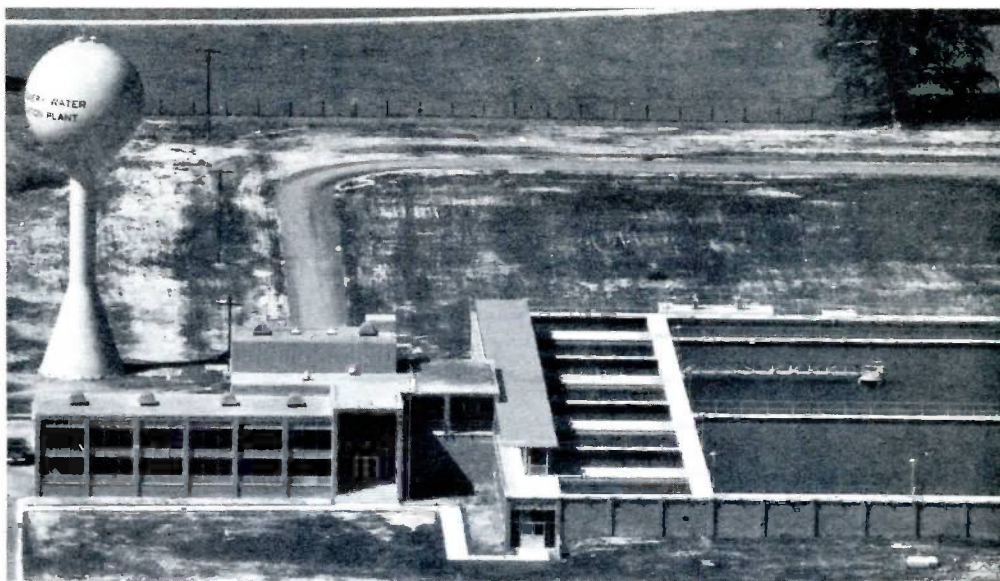
"The City of Montgomery is fortunate in having large volumes of water available for use within or near its boundaries. The Alabama River is on the north, the Tallapoosa River on the east, and the well fields in the northern and western section of the

city can be depended upon to produce water in sufficient quantity to supply the needs of the city for all the foreseeable future. The responsibility for the Board, then, is to prepare this water for use and to deliver it to the people of the city."

The engineering study quoted was brought about by an obvious need for new facilities as this Alabama city grew from a population of 78,000 in 1940 to about 140,000 in the early 1960s. This growing population was leading to demands for water that eventually could not be met by the wells then in use.

The original concept was for new wells in the north and east sections of the city, since these seemed to be the directions urban development was taking. Test wells in these areas brought





The Clarence T. Perry water purification plant has an initial capacity of about 20 mgd, about doubling the former capacities of the Montgomery system.

in water, but not of the desired quality. The alternative was to turn to a surface supply available from the Tallapoosa River which flows near the northeastern edge of the city.

In the days of the Creek Indians in Alabama the clean waters of the Tallapoosa meant a dependable means of transportation and a source of water and food. In the 150 years since the Creeks roamed its banks, the river has provided the residents of Alabama with pleasant fishing waters and a source of electric power. Its service to Alabama now has been extended to supplying Montgomery with much of its water.

Once the new source was established, it was necessary for the Board to provide the proper treatment facilities, and this was done through the construction of the modern Clarence T. Perry Water Purification Plant which was opened about two years ago.

The cost of the plant with its 2½ million gallon underground storage reservoir was nearly \$2½ million, and the total cost of the new expansion, including some 8½ miles of new water mains and a 1,000,000 gallon elevated storage tank, is about \$4 million.

Initial capacity of the plant is 20,000,000 gallons of water per day, which almost doubled the former capacity of the city's water system. Design provisions have been made to allow additions which would give the plant a daily capacity of up to 60,000,000 gallons. Even further, the

plant can be expanded to treat up to 100,000,000 gallons of water daily, enough to serve a city of 1,000,000 people.

Much of the present success and growth of Montgomery's water system is the result of a decision in 1949 to establish a Water Works Board of the City of Montgomery and to transfer the water works property to it. Prior to this transfer, water revenue was used in the general fund to cover the indebtedness of the entire city. When the water works became a public corporation it could sell revenue bonds and from there the expansion began. In 2½ years more than 60 miles of new mains were installed. Reservoirs were constructed. Supply wells were added. The success of the water division led to the Board's acquisition of the city's sanitary sewer system.

An organization's results are due to its leadership and this has been the case in Montgomery. The five-man water works board of business and professional leaders includes: Chairman J. L. Coleman, Vice Chairman O. B. Carr, Secretary Nimrod Frazer, Arnold Blackwell and Richard E. Hanan. The management of the properties is headed by General Manager N. P. Wiley, Jr., and Assistant General Manager W. L. Oswalt. Senior man among the management team is Water Distribution Supervisor Earl S. Jacob, who started with the system in 1926.

Preceding Mr. Wiley was Clarence

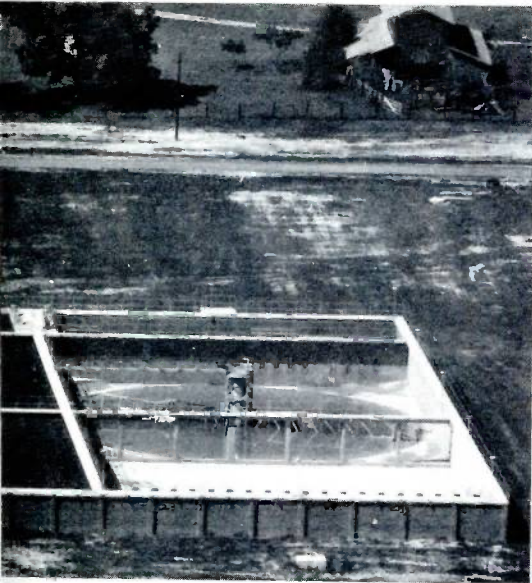
T. Perry who was general manager from 1949 until his death in 1965. Mr. Perry's leadership and his 40 years of service led to the naming of the new purification plant in his honor.

With the available supply of 20 mgd from the Perry Plant and about 25 mgd from the 41 wells, Montgomery had no trouble meeting the peak demands last year, which were about 27 mgd. The engineers anticipate a city population of 266,000 by 1990, and an average daily water supply demand of about 38 million gallons. Water needs have slowly moved upward, accompanying the city's steady growth. In 1951 the daily water usage averaged about 12 mgd. In 1956 it was about 15 mgd and today it exceeds 20 mgd.

Montgomery averages about 1,000 new services a year, having risen from 40,000 in 1960 to about 47,000 last year.

The City's economy is based upon Governmental agencies, primarily because of its being the state's capital and because Montgomery is the site of Maxwell and Gunter Air Force bases. There are many factories and businesses in the city, however, with many related to agriculture. Industrial variety includes production of more than 80 per cent of all reproductions of Victorian furniture made in this country.

The two largest water users in the system are the Air Force installations



at Maxwell and Gunter Fields. Maxwell has an average use of about 1.5 mgd and Gunter uses an average of a half-million gallons a day.

Hilly terrain makes it necessary for the system to maintain four major service areas which are covered by about 550 miles of main and protected by about 3,500 fire hydrants.

Having made sure the water needs of the city would be met for many years, the Board then turned to its other responsibility—the sanitary sewer system. Between 1965 and 1971, about \$12 million will be spent on three new sewage treatment plants and on the remodeling of the present Catoma plant.

1971 is important for another reason. The Jones Bluff Lock and Dam is scheduled for completion at that time, opening the Alabama River to navigation and recreation. It will also mean the opening of another avenue for industrial development for Montgomery.

The Water Works and Sanitary Sewer Board and its management were challenged in 1962 to implement a workable program which meant undertaking a tough but necessary task. It was a strong challenge and one that required large expenditures and thorough planning. The administration is overcoming obstacles as it works toward its objectives and in so doing, it fulfills its obligations to Montgomery's citizenry.



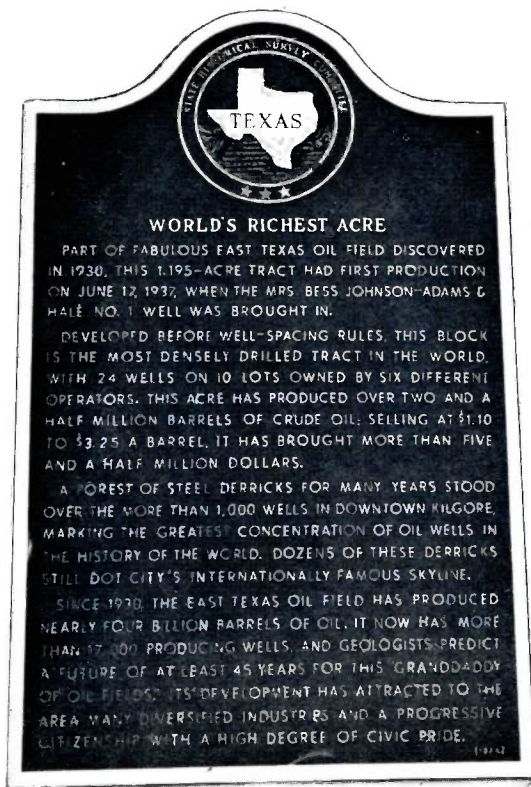
Water Distribution Supervisor Earl S. Jacob started with the system in 1926 and is recognized as one of the area's distribution "experts."



Discussing Mueller fire hydrants in front of the Water Works and Sanitary Sewer Board offices are, from left: Mueller Man Dave Resler, Assistant General Manager W. L. Oswalt and General Manager N. P. Wiley, Jr.



The "World's Richest Acre" is in downtown Kilgore and oil derricks are as much a part of the city as street light poles and fire hydrants.



BOOM TOWN TO

**Kilgore Is Capital
Of Nation's
Largest Oil Field**

The oil derricks in Kilgore, Texas, particularly those in the "World's Richest Acre", tell the city's story in themselves.

They remind everyone of Kilgore's sudden transition from a quiet farming village in 1929 to the bustling movie-type of boom town it became when oil was discovered in 1930.

After the big strikes of the early '30s, when life became more orderly, derricks almost seemed to grow out of the ground and the hundreds of steel towers in the "iron forest" of Kilgore impress upon the people the dependence upon oil and oil-related businesses in the 1940s and 1950s.

Today the derricks are slowly being dismantled over those wells which are no longer producing. As they come down they are gradually telling the 12,000 residents of Kilgore that oil is becoming less important and that manufacturing, business and education are the keys to the city's future.

In spite of this change that is occurring in Kilgore and East Texas, it is impossible to forget the importance of oil. The East Texas Oil Field area, which includes Kilgore, was discovered in October of 1930, and since that time 30,150 wells have been drilled in this reservoir which stretches into five counties and is 43 miles in length and from three to nine miles in width. About half of this area is producing through 17,000 wells which are still pumping or flowing. So far, about

four billion barrels of oil have been taken from this area and estimates claim that about another 1.7 billion barrels remain to be taken from the earth in the future.

The "World's Richest Acre" is in the heart of the business district of Kilgore. Upon this 1.19 acre tract there were 24 wells drilled in 1937, producing more than 2½ million barrels of crude oil and about \$5½ million. More than 1,000 wells once were drilled within the comparatively small corporate limits of Kilgore, marking the greatest concentration of oil wells in the world's history. Many of these towers of history remain and visitors still can see the terrazzo floor of a bank that was demolished to allow drilling.

Oil is not dead in the area but the leadership of Kilgore and nearby cities is not waiting for the "wells to run dry" before they begin taking action.

Cities of Gregg County—Longview, Kilgore and Gladewater have formed an industrial development commission that is working to bring industry to the area. They have taken the unselfish attitude that the entire county ultimately will benefit from the particular gain of one or the other. The Sabine River is in this area and it has

been called the richest undeveloped asset in East Texas. Great hopes for industrial development are contained in this 9,700 square mile valley. The East Texas "Community of Cities" is expected to share in the growth of the area, with a predicted population increase of 27 per cent by the year 2020.

The population of Kilgore and Gregg County advanced in one great leap after the oil discovery but now it has settled down to a steady rate of about five per cent a year. During the early oil days, 1930-40, Kilgore increased by 688 per cent to a population of about 6,700. Today it numbers about 12,000 and by 1985 experts expect it to grow to about 15,000.

Since 1950, Kilgore has had more than \$25 million in new construction. 1966 was a record year with \$2.3 million in construction and 1967 saw more than \$2 million started. The present industry in Kilgore produces items ranging from ceramic bathroom fixtures and ladies apparel and a variety of other oil field and building products.

One of the busiest places is Kilgore College, which has been growing continuously since its beginning in 1935. A new library, auditorium, administration building and dormitories have

MODERN CITY

Ascending the stairs of a valve pit are, from left: Water Superintendent Mike Albert, Mueller Sales Representative Frank Kuenstler and Kilgore City Manager R. V. Derrick.



been erected in recent years to accommodate the enrollment which stands at more than 2,500 for this two-year college.

Leading the activities in Kilgore are Mayor Foster T. Bean, Commissioners Bob Bustin, Frank Green, James Earl Mankins, J. A. V. Griffin and City Manager R. V. Derrick. The manager's name seems to be a natural for this city of derricks but he has been in Kilgore only four years, coming there from Hillsboro, Texas.

The Water Department is under the experienced guidance of Mike Albert who has been with the city about 33 years. He came to Kilgore during the peak of the oil boom. Mr. Albert planned to run a grocery store and

speculate in oil, but instead he went to work for the city and today he runs the department which has about 4,000 water meters and pumps an average of about 1.5 million gallons a day (mgd).

The Kilgore water system has been growing steadily and in 1967 two new wells were added to its system. There are now nine wells which can produce about eight mgd—or about double peak demands of recent years.

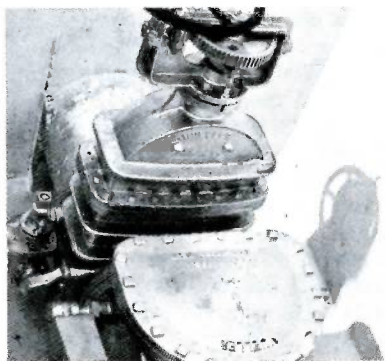
Water, as always, was important to the development of Kilgore. In fact water, and the need to discover it, led to the birth of the Texas petroleum industry. Today about 30 per cent of Texas is under lease for oil or gas exploration and since 1928, Texas has

been the nation's No. 1 oil producing state—and it all began with the need for water.

In 1894 a crew of men were drilling for a water well for the City of Corsicana, but at the 1,027 foot mark, up spurted a greasy, gooey, unlovely liquid that wasn't marketable in the area. This discovery of "Texas Gold" annoyed the drillers and they had to ease off the oil to continue their drilling until they struck water at the 2,400 foot level! In that manner, unlooked for, unwanted, oil came to the surface, and with it came the state's first commercial oil field. Out of it came cities like Kilgore, which are stable, productive, and willing to find new ways to expand.



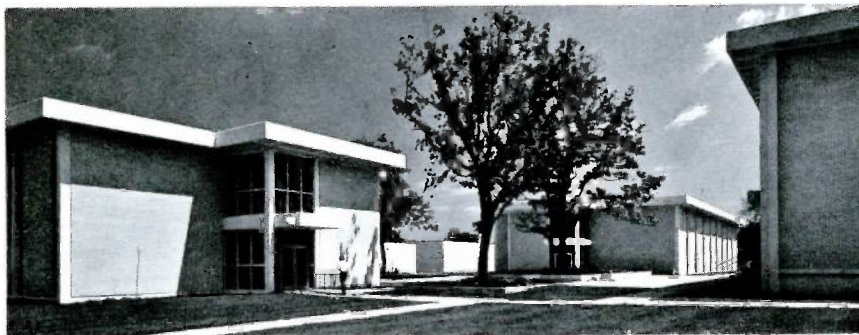
Oil and water have been important to Kilgore. This picture shows the two working side-by-side.



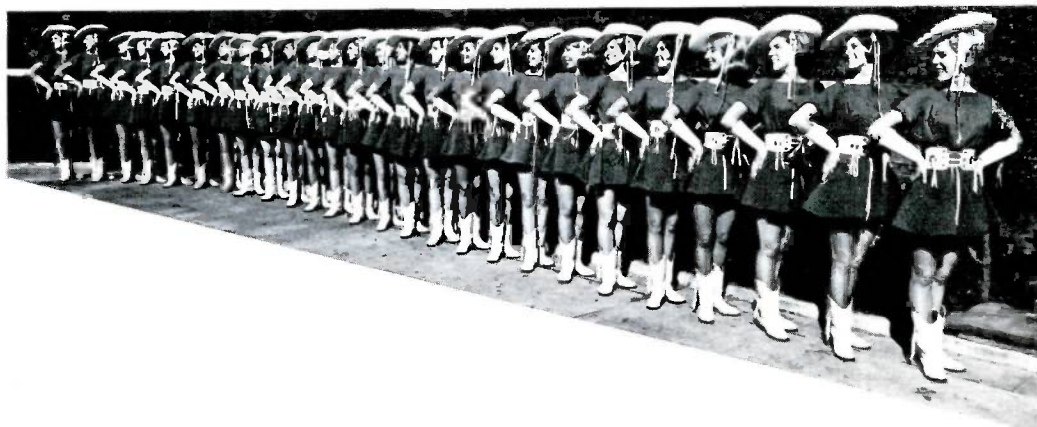
A Mueller 20-inch check valve and gate valve are on the transmission main that runs from the reservoir.



Crewmen work to revive a well that has quit producing. This operation was taking place beside Kilgore's largest motel, indicating the priority and value given to oil in the community.



The campus of Kilgore College is new and attractive (above), but when it comes to beauty and design all eyes turn to the famed Rangerette drill team of Kilgore College, which has appeared from coast to coast on television and at sporting events.



"My husband," explained Mrs. Smith, "is an efficiency expert for a large company."

"Imagine that!" exclaimed Mrs. Brown. "But what exactly does an efficiency expert do?"

Mrs. Smith gave the matter a moment's thought. "Well, you see," she said, "if women did it, it would be called nagging."

* * *

"Say, Joe, you drink quite a bit. Tell me, does your tongue burn after you've had a few?"

"I don't know. I've never been drunk enough to try to light it."

* * *

Latest driving maneuver to be classified by traffic engineers is the O-turn. It was invented by the lady who made a U-turn, and then changed her mind

* * *

A tomcat and tabby were courting on the back fence when the tomcat leaned over to her and said, "I'd die for you, you beautiful thing."

The tabby gazed at him longingly and asked: "How many times?"

* * *

Teacher (on phone): "You say that Billy has a cold and can't come to school? Who is this speaking?"

Voice: "This is my father."

* * *

The room was dimly lit, misty and pungent with the odor of incense. The old wrinkled gypsy woman looked up from her crystal ball and croaked, "I'll answer any two questions you have for \$50."

"Isn't that a little high?" asked the customer.

"Yes," she replied. "Now what is your second question?"

* * *

There's nothing like a dish towel for wiping the contented look off a husband's face.

* * *

Two co-eds were talking of the future.

"I'm going to be an air hostess."

"Might be a good idea, but wouldn't you meet as many men doing something else?"

"Could be, but not strapped down."

* * *

A stenographer was explaining to the typewriter repairman what was wrong with the machine. The man asked her specifically which keys would not work.

"Oh," she answered, "all them little swear words in the top row."

Strictly

Off the Record

The president of a large company was traveling to a nearby city on an early morning train. He entered the dining car, found a seat and summoned the waiter and said: "I'd like to try that \$6 breakfast my men show on their expense report when they ride this train."

* * *

The employee's pay envelope, through error, contained a blank check. Gloomily he handed it to his wife and said: "Just as we thought, my deductions have finally caught up with my salary."

* * *

A dyed-in-the-wool baseball fan was persuaded by friends to go to the horse races. Being a beginner he picked a 50-to-1 long-shot and put \$2 on the nose. Coming into the stretch the long-

shot horse was neck and neck with the favorite. As they neared the wire for a photo finish, the baseball man hollered, "Slide, you bum, slide!"

* * *

First teacher: "How many students are there in your school?"

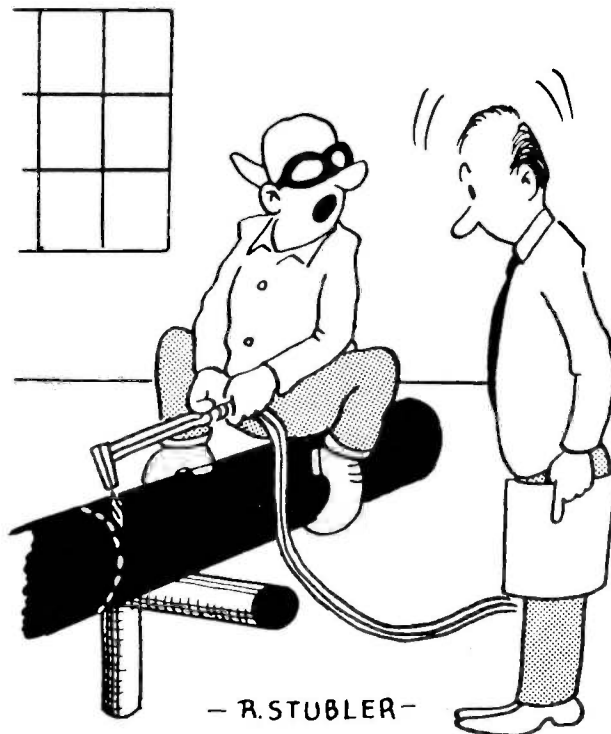
Second teacher: "About one in every ten."

* * *

Little boy (watching his father put on a tuxedo): "Daddy, don't wear that suit. It always gives you such a headache the next day."

* * *

Two Martians land on earth. One walks up to a fire hydrant and says, "Take me to your leader." The other Martian says, "What are you talking to him for? He's only a kid."



- R. STUBLER -

"Relax—I've got my goggles on!"

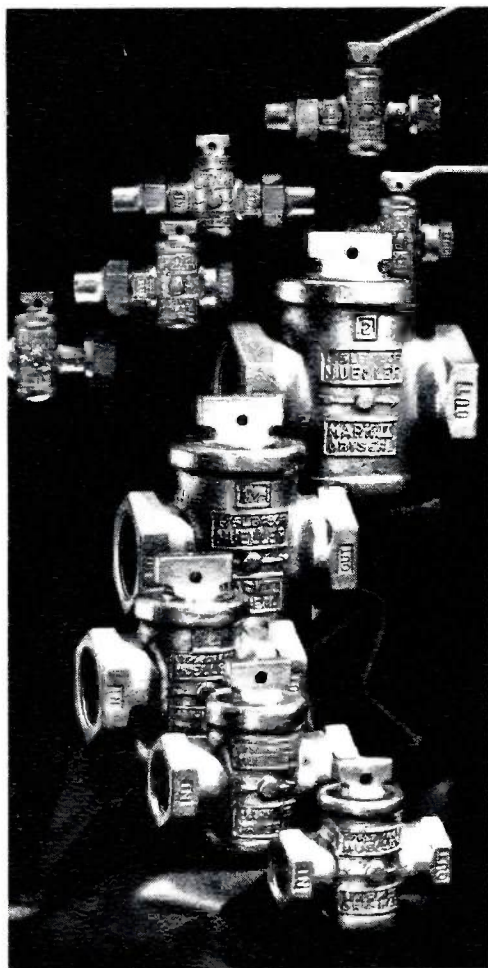
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