MUELLER Record

AUGUST • 1956

Recording Our Thoughts

We're considerably proud of our cover this month, for we feel that it falls into the "unusual" category—the type that all editor-photographers enjoy publishing. This one was taken by the MUELLER RECORD editor in Colorado Springs during July.

Our Cover

The oddity, of course, is the fact that parking in front of some hydrants is quite legal in Colorado Springs. To make the picture more interesting, the Fire Chief's car is parked in front of the hydrant-meter area.

When questioned, officials explained that due to heavy tourist traffic in Colorado Springs, parking in front of some hydrants is legal in order that as much space as possible will be available.

Then, too, the hydrant is a Mueller Improved three-way hydrant and borders an alley. This should provide ample access to the firemen's hose even though a car might be parked in the space during a blaze, officials reasoned.

Water Tank Collapses

One night in Clayton, New Jersey, recently, the water tank suddenly split open and dropped 400 tons of water on the area, killing 58 chickens, damaging homes and routing five families from their homes. No one was injured when the 60-year-old, 125-foot high storage tank dumped its ready-made flood.

The rampaging water slashed through homes and gardens. Trees were uprooted and sheds and chicken coops smashed to shreds by the sudden deluge at 1:45 a.m.

The smashing impact of 150,000 gallons of water drove a hole 15 feet deep and 25 feet across at the base of the tower, smashing one concrete support and loosening another. Firemen pumped

(Continued on page 21)

MUELLER Record

August • 1956

WALTER H. DYER, Editor

MUELLER CO.

MANUFACTURERS OF WATER AND GAS DISTRIBUTION AND SERVICE PRODUCTS

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

"Remember, if I sink this . . . it's three beers you owe me."

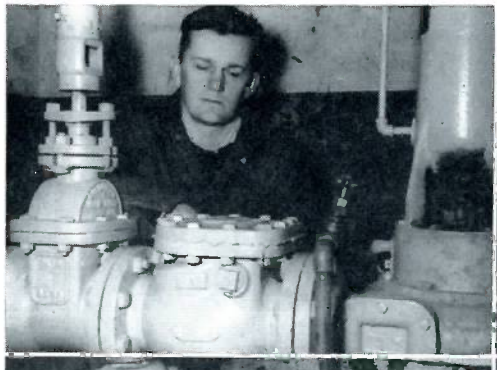
ISLAND HEIGHTS, N. J.

No Repairs Needed For Mueller Valves Through 23 Years

Twenty-three years without needing repairs or replacement parts—that's the performance of Mueller check valves and gate valves which were installed in the sewage treatment plant at Island Heights, New Jersey, in 1933. And now that an addition is being made to the plant, Mueller Co. quite naturally has secured an order covering all valves for the additional installation.

LeRoy J. Evans, our Vice President in charge of Eastern Sales, proudly reports that he sold the original valve order to Island Heights when he was a sales representative in 1933. "We, of course, are pleased to learn from Peter Ostroski, acting superintendent of Public Works in Island Heights, that our equipment has performed such a fine job for them," Mr. Evans said.

Peter Ostroski, acting superintendent of Public Works and sewage plant operator, is shown inspecting Mueller check valves and gate valves in his Island Heights, New Jersey, sewage treatment plant. These valves, showing the inscription "Columbian Iron Works—Division of Mueller Co.", were installed in 1933 and have given perfect service without ever having any repairs or replacement parts needed.



New Improvements For

Clarksburg, W. Va.

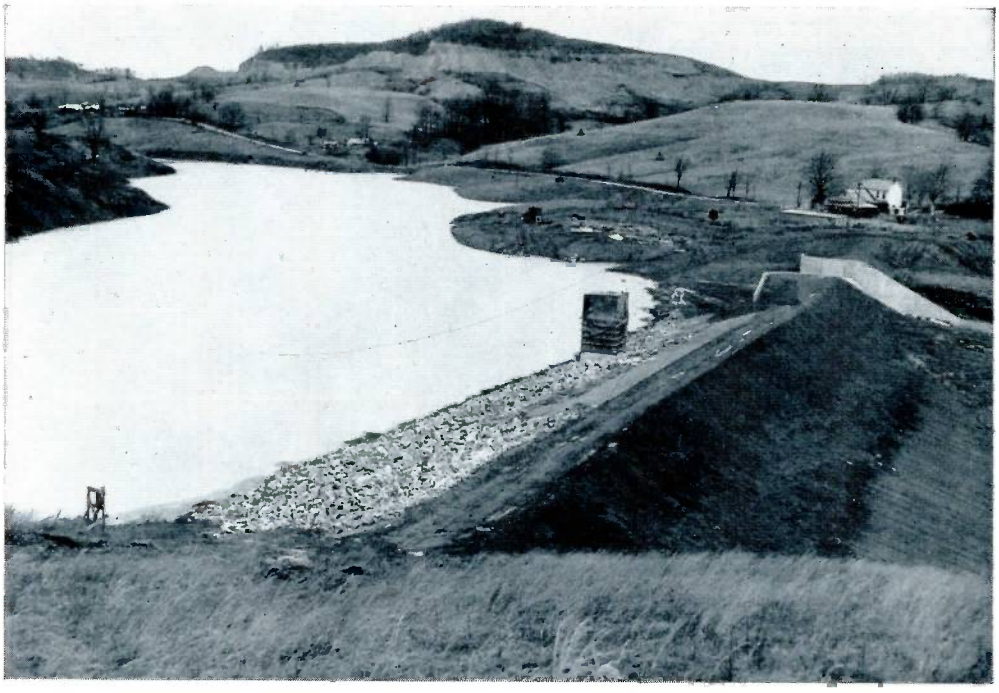
THE Clarksburg, West Virginia water supply system has a long history of satisfactory service to its consumers. However, the dry period of 1953 dramatically pointed up a deficiency of raw water storage and the Water Board has begun extensive improvements designed to enable them to continue their good service.

The firm of Gannett Fleming Corddry and Carpenter, Inc., engineers of Harrisburg, Pennsylvania, was engaged to make a comprehensive study of the Clarksburg system. The following is their findings and recommendations.

Present Water Sources

Clarksburg takes its water from the West Fork River. Water is impounded by four low concrete dams which serve as overflow weirs, with the entire stream flow passing over their crests at all times, except during droughts. During dry periods the gates in the upstream dams are opened allowing the water to pass to the pumping station intake, located at the lowest dam. The filter plant is also located adjacent to the river and the lowermost dam.

Ninety million gallons of water can be impounded below the concrete crest of the lowermost dam; an additional 32 million gallons can be impounded by inserting stop logs one foot high between the piers which were constructed for that purpose on the crest of the dam in 1953. The next dam upstream, built in 1911, is a concrete structure with a maximum height of about 10 feet. Forty-five mil-



THIS VIEW SHOWS the new dam, spillway, gate house and impounding reservoir of the Clarksburg Water Board, which was completed in May.

lion gallons can be impounded below its crest. The third dam, newest of the four, was constructed in 1931 and can impound 90 million gallons of water, forming a pool extending upstream to within a few hundred yards of the uppermost dam, about four miles. The uppermost dam constructed in 1922 in West Milford at a point about 13.5 miles upstream from the pumping station, can impound 110 million gallons of water.

Filter Plant and Pumping Station

The filter plant and adjacent pumping station are near the lowermost dam in the southwest part of the city. Four new filters were added in 1920, and in 1939 four zeolite softeners and three sand filters were added.

The existing low lift pumps, which take the water from the river and deliver it to the coagulating basin, consist of: two four million gallon per day single stage centrifugal pumps, each driven by a two-cylinder natural gas engine; one five milion gallon per day single stage centrifugal pump, driven by a six-cylinder natural gas engine; and one four and a half million per day single stage centrifugal pump, driven by a 75 horse power electric motor.

Existing high lift pumps, which take the filtered and treated water from the clear wells and deliver it to the distribution system, consist of: two four million gallon per day, two-stage centrifugal pumps, each driven by a four-cylinder natural gas engine; one five million gallon a day two-stage centrifugal pump, driven by an eight-cylinder natural gas engine; and one four and a half million gallon per day single stage centrifugal pump driven by a 300 horse power electric motor. Part of the natural gas used by the engines is secured from city-owned gas wells and the remainder is purchased from a natural gas public utility.

The most pressing problem at the pumping station, the engineers report, is the need for replacing the natural gas engines, one set of which has been in operation, through expensive repair, since 1916. The consultant firm recommends electric motor driven, centrifugal pumps.

The filter plant and pumping station site is low in elevation and subject to flooding by the West Fork River. It is

HERE, TWO CLARKSBURG Water Board employees are shown operating a Mueller Valve Inserting Machine. The machine is shown with adapter and 8 inch inserting valve.

therefore recommended that all electric motors and switch gear will be placed high enough to escape inundation in the event of a flood, like the one in 1888, which might flood the main engine room floor to a depth of eight feet. Also recommended are two low and two high head electric motor driven pumps, each with a capacity of six m.g.d., to replace the existing gas engine driven pumps. Two sets of the gas driven units will be retained for standby service.

At the present time there is only one raw water line from the pumps to the coagulating basins. Under present pumping schedules, there is a large amount of head lost in the line; when the pumping plant is converted to electric power and the rate of pumping is increased during certain periods in order to take advantage of off-peak power rates, the existing raw water line will not be able to deliver the water to the coagulating basins without causing excessive friction head losses.

The construction of a second line will reduce the friction loss and also insure

FROM UPSTREAM, the side of the spillway, dam, gate house and impounding reservoir are shown under construction.

continuous service to the coagulating basins. The engineers have proposed a new 24-inch raw water line be installed parallel to the existing line, installed so that it can operate independently of or in conjunction with the old line.

In the filter plant existing coagulating basins, apparently designed to provide about six hours detention for a flow of 5.6 million gallons per day, do not achieve this detention period since the water short circuits the baffle system and tends to flow directly from inlets to outlets, delivering a poorer quality of water than desired. An efficient baffle system is proposed to correct the situation.

Hydraulic computations showed that return lines from basins to filters would have enough capacity to meet the proposed demand through filters if they were clean. They have now been cleaned and their capacity increased to 10 m.g.d.

The present wash water pump, driven by a water turbine, is to be replaced by an electric motor driven pump. It is proposed that a vertical 3300 gallon per minute, single stage, deep-well turbine pump be installed in the clear well and be driven by a vertically mounted 40 horsepower electric motor located on the filter operating floor so as to be above flood level. The piping will be arranged so the discharge from the pump will be connected to the existing wash water piping.

Existing chemical feed apparatus is being replaced with electric motor driven, dry type, alum and line feeders. Four dry feed machines are to be installed, one for carbon, one for alum, one for lime and a spare unit.

Storage of Filtered Water in the City

The present system includes tank storage for filtered water totaling 3,060,000 gallons, provided for by six tanks. The tanks do not have sufficient capacity to meet the average daily demand, which has reached almost five million gallons in each of the past several years.

Some of the reasons for including a large amount of storage for filtered water throughout a distribution system included: the insurance that large volumes of water are available to combat fires even though the pumping station or filtration plant may be unable to function at the time; the maintenance of adequate pressures throughout the dis-

tribution system; and the capability of pumping and filtration to take place at an accelerated rate during the night, when favorable power rates are in effect, meeting the consumer demand during the day by drawing from the storage water.

The Distribution System

The Clarksburg system has three million gallons of storage, concentrated at one point and located near the pumping station. If the station is converted to electric power and no more storage is added, the present average daily consumer demand of about five m.g.d. can be met only by pumping at such rates that all the electric power consumed would have to be paid for at on-peak rates. It is more economical to provide additional storage than pay for electric power at on-peak rates. Four million gallons of additional storage for filtered water is recommended. This will enable the city to better serve its largest consumers, including the towns of Nutter Fort, Stonewood, and Anmoore and the industrial plants of the Pittsburgh Plate Glass Company and the National Carbon Company.

The topography of the city is characterized by the courses of the West Fork River and Elk Creek and by the steepness and large differences in elevations of the various districts into which the city is divided.

The location of mains and feeders has been dictated largely by the difficulties of the terrain rather than by the desirability of producing a mutually supporting grid system. As a result there are some areas that are not as well served as desired.

Yield from Present Source

In 1948 the average pumpage reached the highest that has been recorded, 4.95 m.g.d. Since that time it has continued its upward trend. Designed improvements include forming a loop through the western and eastern parts of the town which will support one of the new storage tanks to be placed in each area. Other improvements will strengthen the distribution system to the west of the West Fork River, eliminate local deficiencies in the grid, and relocate lines in dedicated rights-of-way.

The average flow in the West Fork River is about 605 c.f.s.; the average pumpage by the Clarksburg water works in the past few years has been about five m.g.d. or 7.7 c.f.s. There is ample flow, on the average, to easily satisfy the demand imposed by Clarksburg. The problem of water shortage arises during periods of low flow in the streams. During such periods, the demand cannot be met from the current stream flow and hence must be met by drawing upon water stored for that purpose.

The capability of the four reservoirs on the West Fork River was given a severe test during the 1953 dry season. The water level dropped below the crest of Dam No. 1 August 22 and by December 14, for all practical purposes, the reservoirs were empty.

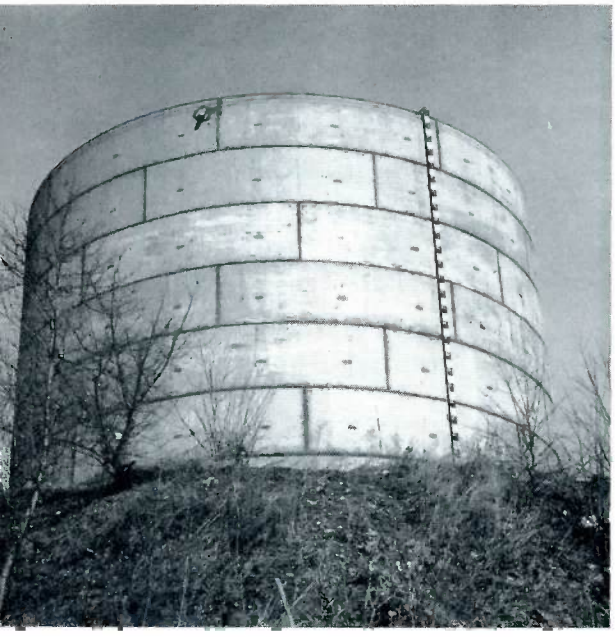
Desired Safe Yield

The recorded figures for the average pumping rate appear to stabilize between 4.90 m.g.d. and 5 m.g.d., but upon analysis a slight increasing trend is revealed. This trend is predicted upon a slight increase in population and only a moderate increase in commercial and industrial activity in the Clarksburg area. On this basis, the pumpage is expected to average about 5.33 m.g.d. in 1960; 5.49 m.g.d. in 1965; 5.65 m.g.d. in 1970; and 5.81 m.g.d. in 1975.

The increase in storage necessary to insure a yield of 6.5 m.g.d. can be secured either by increasing the height of the existing dams on the West Fork River or by constructing new dams on tributaries of the river. The average rainfall and runoff are ample for supporting reservoir projects.

After considering several tributaries of the West Fork River and the West Fork River itself, it was found that the most desirable reservoir site is located on Buffalo Creek. Buffalo Creek enters the West Fork River about one half mile upstream from the uppermost dam owned by Clarksburg.

A good site for an earth dam and a reservoir basin are available at a point where the drainage area is about 5.4 square miles, just downstream from the junction of Little Buffalo Creek with the main stream. The configuration of the terrain at this site offers an excellent and economical spillway site, the engineers report. Secondary State Route No. 32, which roughly parallels the left bank of the creek, will require minor increases



THIS MAMMOTH STORAGE tank is one of two 2,000,000 gallon tanks completed in May for the Clarksburg Water Board.

in elevation at two culverts before the reservoir is filled. The area has an average rainfall of 54 inches or more.

The soil in the area is suitable for an earth dam but is limited in depth, a condition typical of the general area. It will be necesary to strip a large area in order to have enough material for the dam.

The principal features of the dam are: an earthen embankment consisting of select material; a concrete spillway capable of discharging a flood which will produce inflow to the reservoir at a maximum rate of 11,600 c.f.s.; a concrete conduit through the bottom of the dam which will pass the stream flow during the construction period and which will become a part of the release works in the completed structure; and a concrete control tower from which sluice gates can be operated, so that water may be drawn from the reservoir at either of two levels. The water will flow by gravity down Buffalo Creek and the West Fork River to the intake at the filter plant.

This project is under construction and is scheduled for completion by the end of the year.

W. J. Hill Appointed Sales Representative

William J. Hill has been appointed sales representative for Mueller Co. in Northern California.

Mr. Hill comes to Mueller Co. from the

William J. Hill

Western Utilities Supply Co. in Seattle, Washington. For the past seven years he has served that company as a sales representative in Oregon and is, as a result, thoroughly familiar with Mueller Co. products.

Prior to assuming his new position, he completed an intensive sales training program at Mueller Co. plants in Decatur and Chattanooga. His new headquarters is Walnut Creek, California.

A Navy veteran of World War II, Mr. Hill is married and has two children.

Little Bobby was called from his play to meet a visitor.

"How old are you, little man?" he was asked.

"I'm at the awkward age," he replied.

"Really," asked the visitor. "What do you mean by the awkward age?"

"Too old to cry and too young to swear," was Bobby's reply.

The Two Bears . . .

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

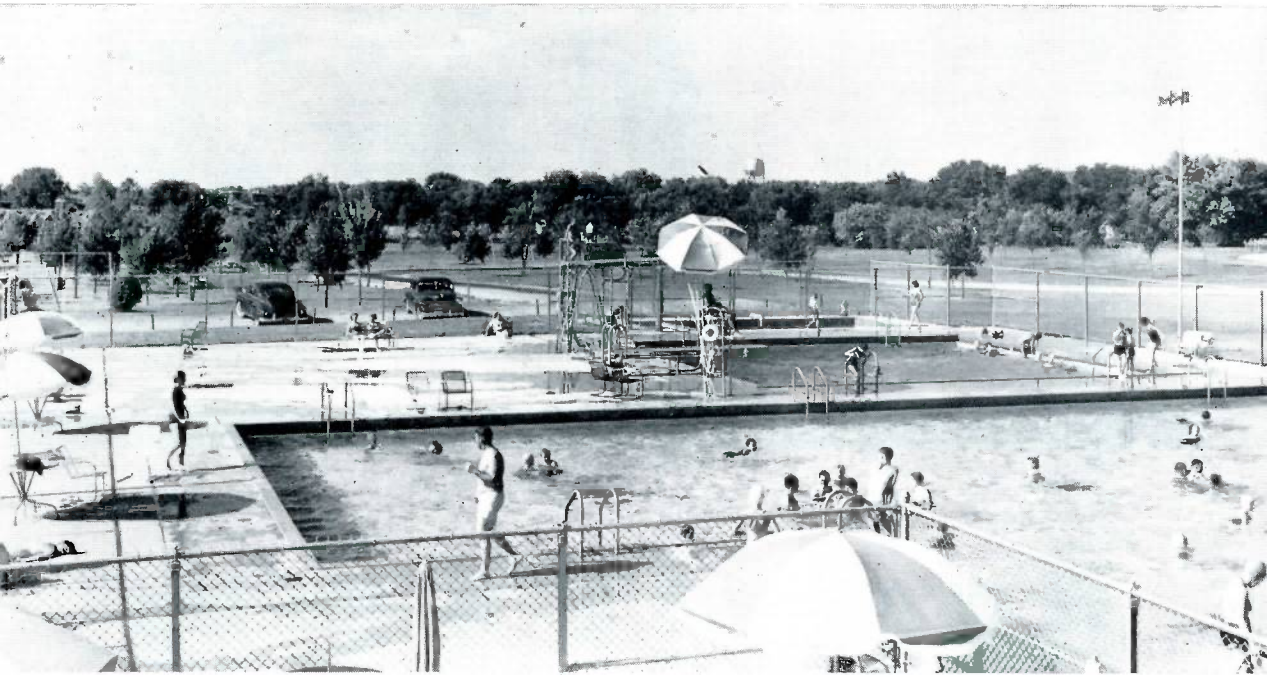
Last month while gathering Mueller Record stories in Colorado, Wyoming and Montana, salesman F. R. (Dick) Seevers headed for Butte, Montana, his next stop, via Yellowstone National Park. Midway through the park, Editor Walter Dyer spotted the cute cub appearing on this page.

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

For a closeup of her reaction, turn the page.

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

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



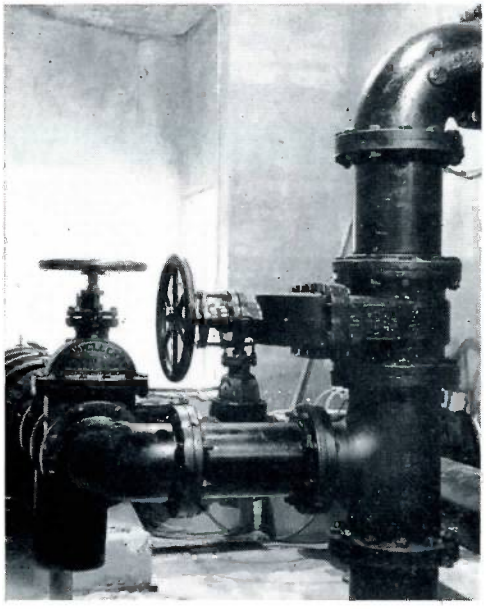
The new Springdale Municipal Swimming Pool, conceded to be the finest in Arkansas.

Mueller Valves Go Swimming In Springdale, Ark.

Swimming enthusiasts in Springdale, Arkansas, are enjoying the use of one of the finest municipal swimming pools in the state. The pool and surrounding area cost more than $185,000. The main pool is 92′ by 86½′. A separate deep diving pool is 40′ by 40′.

Mueller Co. valves are used throughout the project.

L. M. McGoodwin of Fayetteville, Arkansas, was the engineer on the project. Tune Construction Company, also of Fayetteville, was the general contractor.



Mueller Co. valves were used throughout the Springdale, Arkansas, Municipal Swimming Pool. Above are two of the 8" and 10" valves in use.

Other Mueller Water Works Equipment (a partial list)

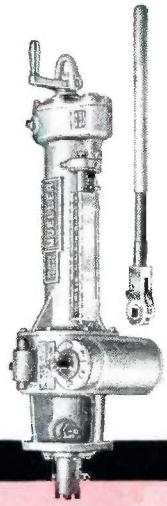
CURB BOXES

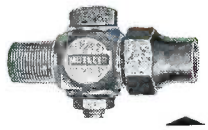
CHECK VALVES

RELIEF VALVES

DRILLING MACHINES

COMPRESSION STOPS





Corporation Stops

Ground key construction . . . designed for insertion into mains under pressure . . . precision fitted and individually lapped into body . . . complete range of sizes . . . variety of inlet and outlet threads and connections.

Drilling Machines

Hand operated or power-operated with gasoline engine or air motor . . . drills 2" through 12" in any type or size main . . . automatic tool feed . . . working pressure to 500 p.s.i. . . . smaller drilling machines available with varying capacities up to 2".

MUELLER®

FOR THE FINEST IN WATER WORKS EQUIPMENT

SERVICE FITTINGS

FLOOR STANDS

GOOSENECKS

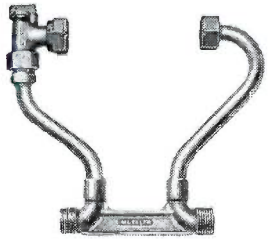
METER STOPS

REGULATORS

SERVICE CLAMPS

BRANCH CONNECTIONS

TAPPING VALVES



Meter Setting Equipment

Relocater yokes designed to raise meter without changing fittings or disturbing piping . . . makes meter easier to read and change . . . piping is rigid even with meter removed . . . complete variety of standard types and sizes available.

Gate Valves

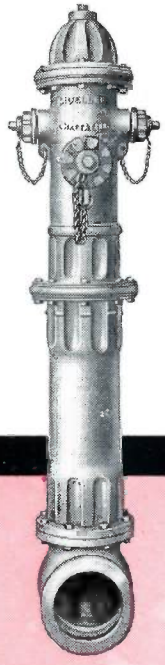
Improved design features "O" ring stem packing . . . lubricated thrust collar . . . no maintenance needed . . . exclusive "four-point-contact" disc wedging mechanism assures positive seal . . . now available with "Ring-Tite" connections for class 150 "Ring-Tite" pipe . . . variety of other connections . . . AWWA.

Inserting Valves

Designed for adding needed control valves without hazardous shutdown . . . quickly installed in line under pressure . . . operated like standard gate valve . . . working parts interchangeable with AWWA gate valve . . . sizes 4", 6" and 8".

Curb Stops

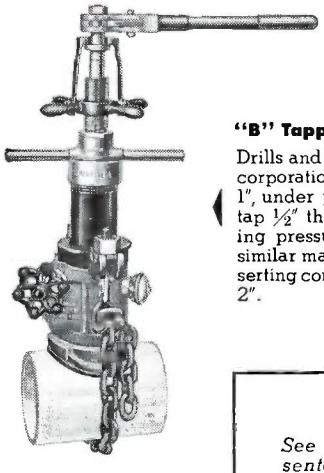
Ground key construction . . . precision fitted and individually lapped . . . proper taper of key assures easy operation and long life . . . inverted key or solid head type . . . complete range of sizes, types and connections.



Demands for better water works equipment to meet growing water works needs, coupled with the Mueller policy of constant product improvement and development, have resulted in the new and vastly improved products shown. These products are just a portion of the complete selection of water works equipment, supplies and specialties offered by Mueller Co. and manufactured to characteristically high standards. All Mueller products are fully tested and warranted.

Fire Hydrants

Improved design incorporates all the latest hydrant features . . . compression-type main valve . . . safety flange and stem coupling . . . "O" ring stem seals . . . self-oiling reservoir . . . double drain valves . . . dry top design . . . now available with "Ring-Tite" inlet connection.

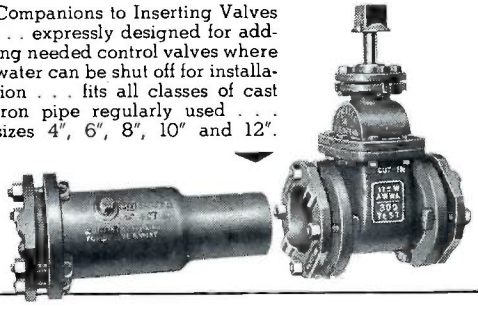


"B" Tapping Machine

Drills and taps mains and inserts corporation stops, ½" through 1", under pressure . . . will dry tap ½" through 2½" . . . working pressure to 230 p.s.i. . . . similar machine available for inserting corporation stops through 2".

Cut-In Sleeves and Valves

Companions to Inserting Valves . . . expressly designed for adding needed control valves where water can be shut off for installation . . . fits all classes of cast iron pipe regularly used . . . sizes 4", 6", 8", 10" and 12".



See your Mueller Representative, Catalog W-96 or write direct today for full information.

MUELLER CO.

Dependable Since 1857

MAIN OFFICE & FACTORY DECATUR, ILLINOIS

New Life for Pearisburg, Va.

By E. L. QUISENBERRY
Town Manager
Pearisburg, Va.

(Reprinted with permission from American City Magazine)

Prior to 1940, Pearisburg was a little, unnoticed, unimportant trading center for a farming area. It had no major industry and apparently little prospect of developing one. For all intents and purposes it had grown about as large as it normally could expect, being impeded by its own limited economic future. It had two paved thoroughfares and one town employee who served as police chief, a water and street superintendent, and a town clerk.

Today, it has a major industry. It also has paved most of its streets and has a well-equipped street maintenance department. It has a municipal refuse collection system, a town manager, a clerk, a two-man police force, a town justice, an attorney, and an auditor.

The Celanese Corporation of America spelled the difference to Pearisburg. Back in 1940 it offered a challenge that the little municipality accepted with enthusiasm. The corporation proposed to build a plant and also to build a number of homes for its employees if the town could guarantee the availability of needed utilities. The Council agreed to offer water and sewerage services to the new residents. The local electric utility guaranteed to have electric power available, and progress in Pearisburg became jet-propelled.

The town promptly retained an engineering firm to prepare preliminary plans for water and sewerage needs. Shortly thereafter it passed a bond issue of $185,000 to cover the cost of a new reservoir for the newly developed area and to provide the needed sewers.

Now the town has 16 miles of streets, a half mile of which, is unsurfaced. The street department is equipped in business-like fashion. An inventory of its major equipment reveals: a 165-gallon tar kettle, a Barber-Greene asphalt pug mill, a Galion tandem roller, a 2-ton dump, an Adams 201 motor grader, a LeRoi Tractair mobile air compressor, and a Tarco "Scotchman" salt spreader.

The asphalt pug mixer has a capacity of 6 tons per hour. The Tractair mobile air compressor is actually a small tractor with a front-end loader, an underbody blade, and mowing attachments. Pearisburg is not so far south that it does not have to be concerned about ice problems. The Tarco "Scotchman" salt spreader has been keeping streets safe in winter.

Refuse collection and disposal practices also have progressed along lines that reflect good government. Prior to 1941 the town had a partial system of private collectors using open trucks. Today, the system embraces the entire municipality, using modern closed, compactor-type equipment. Currently, the town provides one pick-up per week in residential areas and more frequent service for business areas. The service is self-supporting. There is a charge of 75 cents per month for one pickup per week. A 10-yard Gar Wood Loadpacker does the work.

To dispose of the refuse, the town is currently filling a large sink-hole three miles outside the corporate limits.

The town also has shown progress in its orderly handling of new develop-

ments. Today, its ordinances require a builder to install water and sewer lines, and to grade and surface the streets in accordance with town specifications. This has insured that reliable developers do their work according to commendable municipal standards.

Water supply has advanced to a solid status. The 750,000-gallon concrete reservoir is located high enough in the hills to provide good water pressure. For supply, the water works uses a series of springs in the nearby mountains and one well. A 30-hp Sumo-Submersible pump in the well delivers 115-gallons per minute. The distribution system consists of cast-iron pipe with **Mueller valves and fittings. The hydrants are both Mueller and Mathews.**

The town's new system of sewers provides this sanitation service to all but 10 remotely located homes. The system has one pumping station. An Imhoff tank provides treatment.

Pearisburg, today, has a new non-profit community hospital only five years old. It opened as a 48-bed unit, but 16 beds have been added since then, without extending the building. It is the only hospital in the country that is completely heated in the winter and air-conditioned in the summer by the same heat-pump unit.

To direct recreation, the town has a Park Commission, a non-pay group appointed by the Council. Currently, it has taken a 13-acre plot of ground and has developed picnic areas, recreational facilities in the form of swings, merry-go-rounds, wading pool, and other facilities. A recreational director employed only in the summer season has organized softball leagues for various age groups.

Local citizens raised funds totalling $25,000 for the building of a swimming pool which is also in the area.

Progress still is the keynote in Pearisburg. The city has a new charter, a comprehensive bookkeeping system, and a municipal building, all designed to permit progress to continue since it has brought so many benefits to this little city.

L. W. Meacham Named To L. A. Sales Position

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

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

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

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

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

He is 36 years old and single.

Huntsville

The Mount Vernon Of Texas . . .

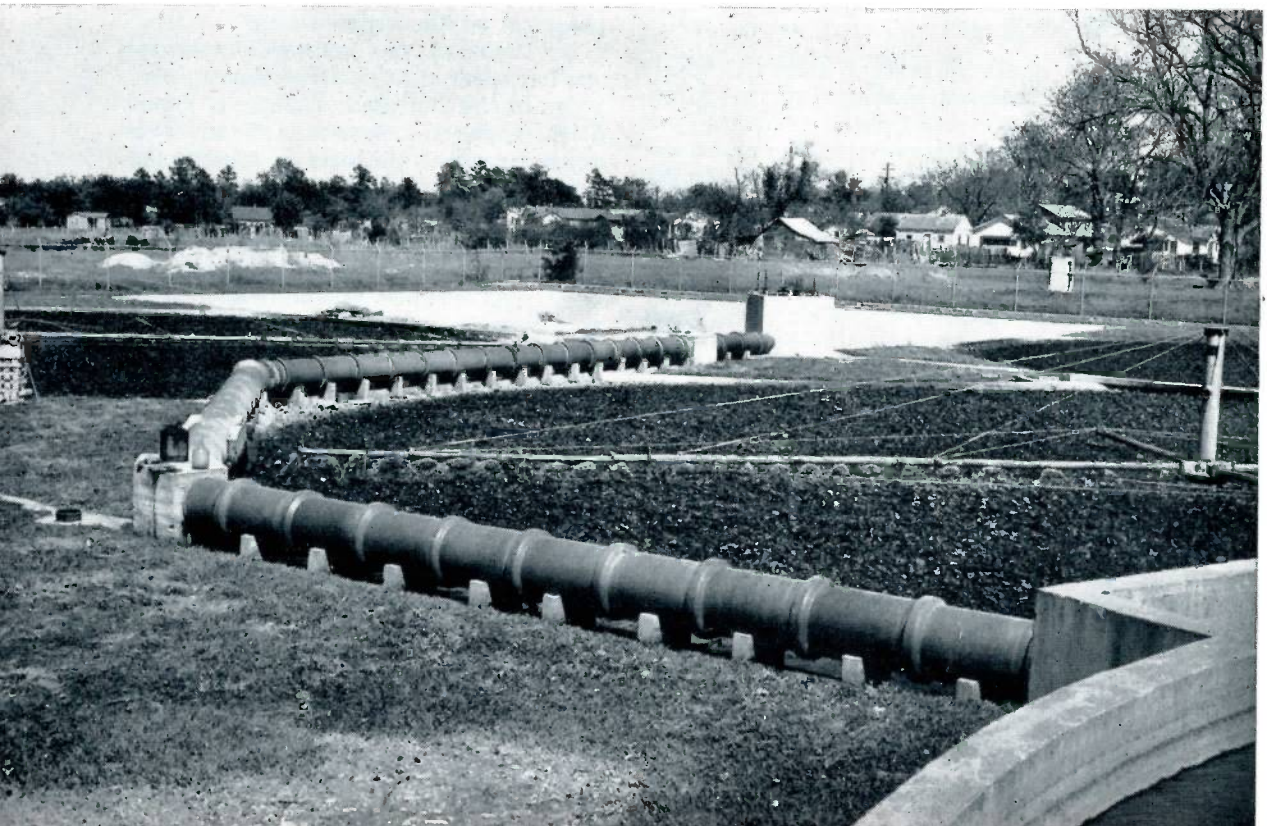
Twin Hills dominate the quiet, pine-shaded city of Huntsville, Texas.

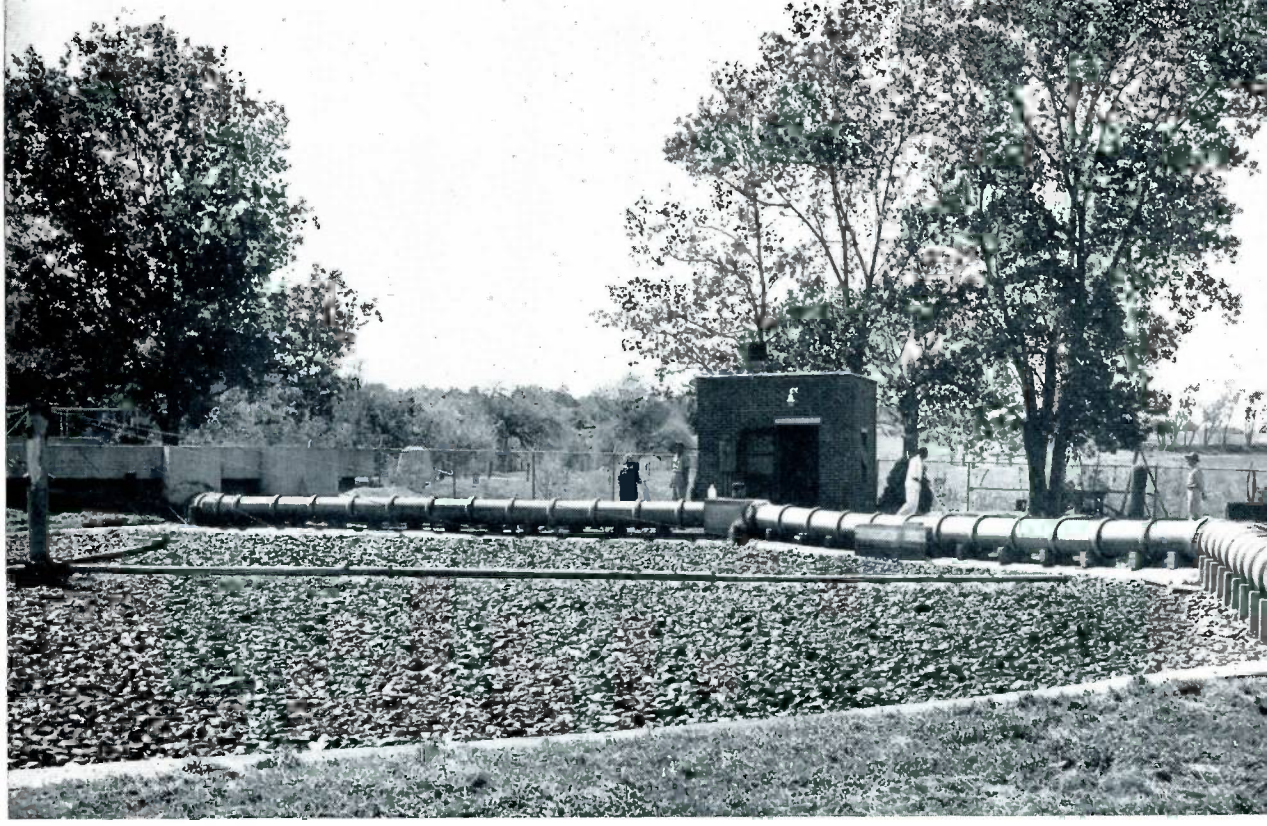
Atop one hill is Sam Houston State Teachers College, the oldest institution of its kind west of the Mississippi. On the other is the main unit of the Texas State Penitentiary, an entirely different type of institution which is nonetheless somehow bent upon the same purpose of its neighbor—building better citizens.

Residents of the 126-year-old city are pridefully aware of the part Huntsville played in the rich history of their state and signs still proclaim it the Mount Vernon of Texas, so called because it was the home of General Sam Houston, the first Constitutional President of the Republic of Texas.

Established in 1830, before the Texas Revolution, the town site was known as the "Athens of Texas" for its many schools. The Huntsville Male Academy was established in 1848; a Presbyterian boy's school, Austin College, was founded in 1849; Andrew Female College, a

A VIEW OF the City of Huntsville sewer system. Sewage is carried to the sewer plant, first to the primary settling basin and then to the secondary settling basin. Sludge is pumped to the digestive tanks while the water goes to the trickling filter beds (shown in the picture) and then into the creek after it has been filtered.





HERE IS THE City of Huntsville sewer plant. Shown are Mrs. Ross, the manager, A. J. Brown, foreman of the distribution system, R. V. Sillers, plant foreman, and a helper. The city and the Texas Prison System have worked out a plan whereby the city gives sewer service to the prison system and in return three convicts are assigned to work at the sewer plant. You will notice that the helper is wearing a convict's uniform.

Methodist institution, was established in 1853; and in 1879, the only college that remains today was founded as Sam Houston Normal Institute, now Sam Houston State Teachers College.

The college is recognized not only as a teachers college, but also in the field of science, business administration, music, industrial arts, and for an outstanding industrial, vocational educational program.

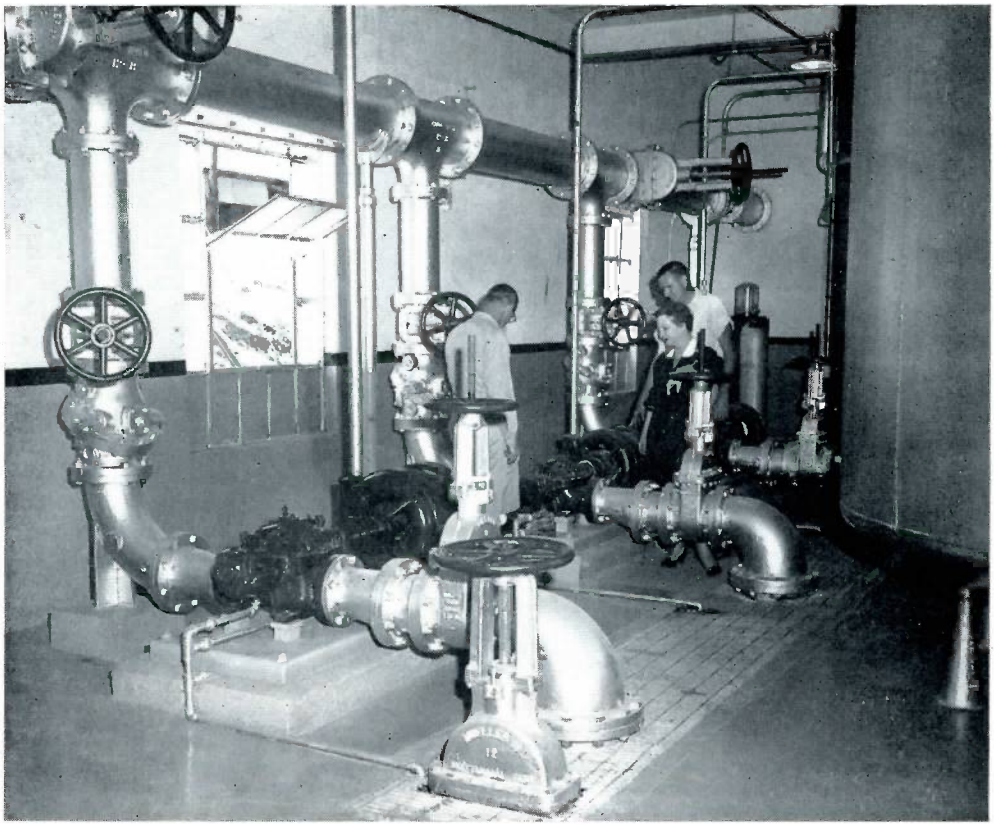
The main unit of the Texas State Penitentiary was located on the hill in 1850. It stands there today, not more than two blocks from the center of town, a massive ivy-covered brick enclosure as quiet as the city itself. Huntsvillians are completely unmindful of the constant flow of peace officers from all parts of the state to the prison for official business, and of the weekend influx of wives, families and sweethearts of the inmates.

Inside the high wall is a chapel, completed in 1955, and built with the proceeds from the annual Texas Prison System Rodeo held every Sunday in October. One of the wildest and roughest exhibitions of the western sport, the prison rodeo was begun for the entertainment of the inmates in 1931. Rapidly, however, the public began seeking admission and two years later wooden stands were built and a small fee charged.

Since that time a mammoth arena and concrete stands have been constructed and the rodeo has gained national recognition. Thousands of people converge on the city every autumn dressed in the colorful garb of the West, coming from every state and some foreign countries.

In 1955 the revenue from the rodeo was $163,802.27. The money is used for the benefit of the inmates—for dentistry needs, hearing aids, artificial limbs, artificial eyes, eye glasses, etc.

A little more than a mile west of Huntsville is Wynn Prison Farm for men, and on the other side of town, a mile or so south, is Gorie Farm for women. With the two farms and the factories inside the walls of the main



THESE ARE HIGH lift pumps which pump Huntsville's water from Zeolite softening units to the distribution system. The source of water is deep wells. Water is pumped from wells through an aerator to the raw water tank, then through the softening units to the soft water reservoir and into the distribution system. Shown are Mr. Sillers, Mrs. Ross, and George Barsdon of the distribution system department.

unit the prison is almost self-sufficient and is self-supporting. O. B. Ellis is general manager of the prison system, and makes his home in Huntsville.

Huntsville's most famous "son" actually was born in the State of Virginia. Sam Houston first came to Texas in 1832. By 1836, he had practiced law, attended two conventions at San Felipe as a delegate, was chosen commander-in-chief of the Texas Army, signed the Texas Declaration of Independence, defeated Santa Anna at the Battle of San Jacinto, and was elected President of the Republic of Texas. Later, he became a United States Senator and also served as Governor of Texas.

He made his home on Raven Hill, outside Huntsville, where he lived, when he wasn't serving in some state or national office, until his death in the "Steamboat House" in 1863. The house, as well as another in which he lived, are among the relics preserved in Sam Houston Park and Museum, adjacent to Sam Houston State Teachers College.

Today, Huntsville, county seat of Walker County, has a population of 10,608, and is steadily growing. A good deal of farming is done in the county, but timber accounts for the major portion of income. Approximately 42 per cent of the county's area is forest covered, made up mostly of pine, some of which is milled into lumber while the rest is reduced to pulp for the manufacture of paper.

A good gauge of Huntsville's growth is the addition of water meters during the past several years. Thirty years ago the Water Department had 300 customers and a monthly revenue of $1,800. Now their customers total 2,500 and the

monthly income is $14,000. Huntsville's source of water is from deep wells and due to mineral content requires water softening facilities. It is pumped from wells and run through an aerator, then to the plant where it is softened and put in the system.

City Comptroller and Manager of Utilities for the City of Huntsville is Mrs. Kate Barr Ross, who came to work as City Secretary in 1926. She was made City Comptroller in 1934 and appointed Manager of Utilities in 1940. City Engineer N. B. Davidson, who has worked in some 20 or 30 cities, commended Mrs. Ross recently when he said, "I have never seen a city administration function as efficiently or one as well organized as the city administration under the management of Mrs. Ross." She, however, insists she could not have done the job so well without the able assistance of all the other employees.

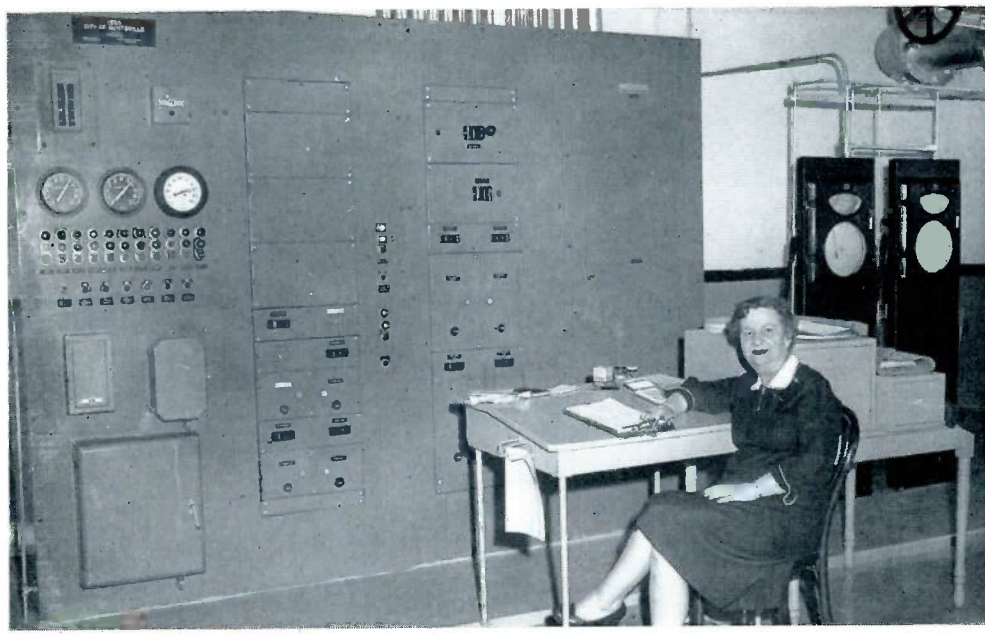
In 1940 when Mrs. Ross took over the management of the plant, 300,000 gallons a day were pumped. Now, the plant is pumping approximately 1,500,000 per day. The major increase is due primarily to furnishing water to the prison and college.

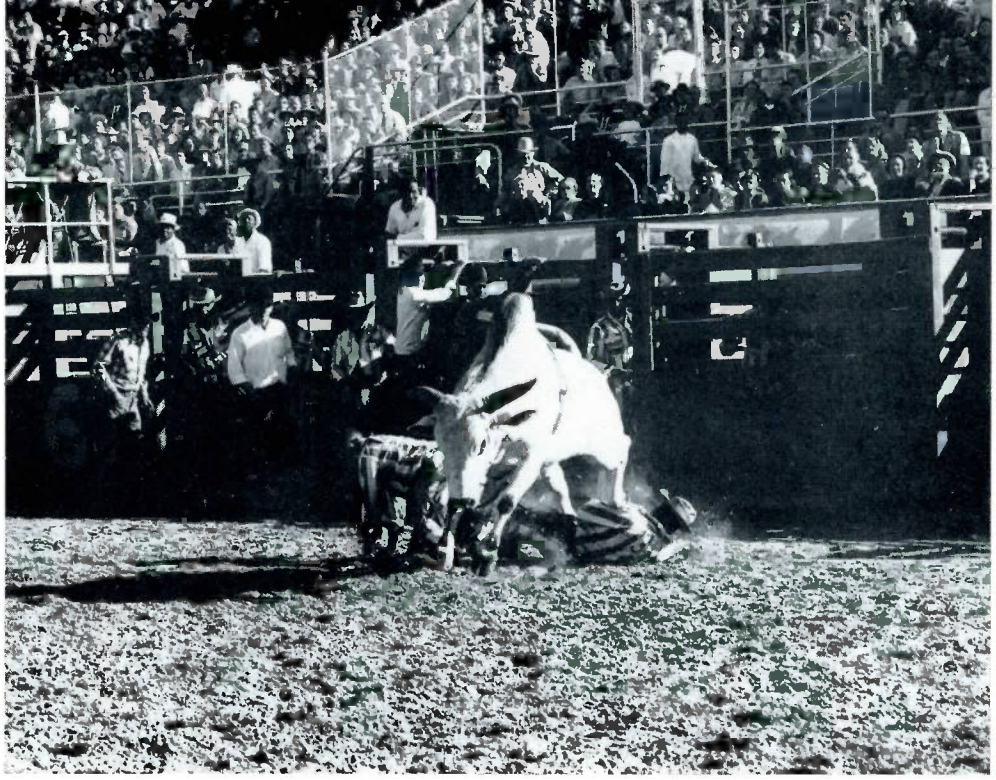
A native of Huntsville, Mrs. Ross attended college there before accepting a teaching position in Sugar Land, Texas, where she was married. When her husband died in 1923, she returned with an infant daughter to make her home with her father.

Among her many experiences as a lady in charge of water and sewage works, one of unusual interest took place during the war when German prisoners camped near Huntsville. Mrs. Ross was supervising a bridge building job, with the German POWs as builders. They insisted on going on strike and singing. Mrs. Ross said she repeatedly told them, through an interpreter, to stop singing and work. They placidly refused, and she ordered them removed by armored cars back to the camp. They were surprisingly co-operative afterward, she remembers.

Mrs. Ross is an avid bridge player and often goes to state and regional duplicate bridge tournaments. She is a member of the Methodist Church, Daughters of the American Republic and Daughters of the Republic of Texas. She is also Walker County Chairman for the National Foundation for Infantile Paralysis.

MRS. ROSS sits in front of the control board at the City Water Plant. The plant is automatic and the switch board controls all the wells, pumps and softening units.





One of Huntsville's most famous events is the annual Texas Prison System Rodeo. People from throughout the United States and many from abroad attend this colorful affair. These photos show two cowboy convicts bite the dust, but not until they gave their respective mounts a display of real riding talent.

. . . Laughs Like That . . .

The new minister was enthusiastic about foreign missions, and one of his first tasks was to call upon parishioners whom he knew to have money and enlist their support.

"I'm sorry," replied a wealthy farmer, "but it's no use asking me. I don't believe in foreign missions."

"But surely," the minister persisted, "you know we are commanded to feed the hungry."

"That may be," came the grim reply, "but can't we feed 'em on something cheaper than missionaries?"

The inmate had his ear pressed up against the wall. "Listen!" he whispered.

The new attendent listened intently, then finally confessed: "I don't hear a thing."

"I know," the inmate said darkly. "It's been like that all day."

Traffic cop—"What's your name?"

Truck driver—"It's on the side of me truck!"

Traffic cop—"It's obliterated."

Truck driver—"Yer crazy. It's O'Brien."

Policeman (after the collision)—"You saw this lady driving toward you. Why didn't you give her half of the road?"

Motorist—"I was going to—as soon as I discovered which half she wanted."

A tramp called at a home and asked for a handout.

"And how would you like a nice chop?" asked the kindly housewife.

"That all depends," said the tramp. "Is it pork, lamb, or wood?"

Young Actor: "I've got a job at last, Dad. It's a new play, and I play the part of a man who has been married 20 years."

Father: "Splendid. That's a start anyway, my boy. Maybe one of these days they'll give you a speaking part."

"You seem to have plenty of intelligence for a man in your position," sneered a lawyer, cross examining a witness.

"If I wasn't under oath I'd return the compliment," replied the witness.

The young man who had been calling frequently at last spoke to Mabel's father about marrying the daughter.

"It's a mere formality, I know," he began, "but we thought it would be pleasing to you if it were observed in the usual way."

"And may I inquire," the father asked, "who suggested that asking my consent to Mabel's marriage was a mere formality?"

"Mabel's mother."

Be careful about calling yourself an "expert". One definition is that an "ex" is a has been, and a "spurt" is a drip under pressure.

For a camera bug's birthday, a woman decided to present him with 50 flash bulbs. She knew little about cameras, and before wrapping each bulb in gold paper, she carefully tested it in her husband's camera. She was delighted that every bulb "worked", and happily sent them off to her friend—who still hasn't had the heart to tell her the facts about cameras.—White Plains, N. Y. Reporter Dispatch.

Recording Our Thoughts

(Continued from page 2)

out the water to reach shut-off valves feeding the tank.

Mayor Clarence Edwards said engineering experts were flying to the scene to inspect the tower and advise on whether to raze it or not. The Mayor assured residents there would be plenty of water available as the Clayton pump produces 400 gallons a minute. The community also has emergency access to the water facilities of neighboring Glassboro.

News In Photos

THE FOUR WINNERS of the Goodell Prize, awarded at the 75th anniversary meeting of the American Water Works Association convention in St. Louis during May, are shown with two other well known water industry personalities. From left are C. L. King, H. S. Swanson, Samuel B. Nelson, H. J. Chapton, E. D. Nelson and W. S. Wilkinson. Goodell Prize winners were Mr. King, Mr. Swanson, Mr. Chapton and Mr. (E. D.) Nelson. Samuel Nelson is Chief Engineer of Water Works and Assistant Manager of the Los Angeles Department of Water and Power. Mr. Wilkinson retired from the department six years ago, but for many years was Structural Engineer in charge of the Structural Design Section of the Water Design Division. The four awardees are employed in the Water Design Division. The inset photo is of F. G. Gordon, winner of the Diven Award. He is Assistant Chief Engineer of the Department of Public Works in Chicago.

CLOSE-UP SHOWING a Mueller CC drilling machine in operation at Big Spring, Texas. An eight-inch cast iron line will be tied into an eight-inch line already in use without taking the pressure off the line. Also shown are a Mueller eight-inch tapping sleeve and tapping valve.

Perhaps this cool snow scene will help you withstand the usually warm temperatures experienced at this time of year. Guy Weeden, city engineer at Sidney, New York, submitted this print for publication. Mr. Weeden is quite a photography fan, and we think you'll agree that this work is excellent, if this colorful picture can serve as an example of his ability.

Proof Of The Pudding

When the City of Alpena, Michigan purchased Mueller valve-inserting equipment last February (they already owned a Mueller CC drilling machine), city officials had to wait less than a month to prove that their purchase was a wise one.

The last of March a main broke in a busy downtown area, and where normally a large area of the city would have been without water service, it was only necessary to close service over a small area.

Reported Earling Olsen, Superintendent of the Water Department, to Mueller Midwest Sales Manager Bill Augustine and Sales Representative Jack Rubicam who earlier were on hand to demonstrate the correct use of the equipment, "I'd like to let the MUELLER RECORD readers know how much we like this equipment." That, of course, is exactly what we are doing.

Photos accompanying this article were taken by Morris Olsen, Alpena's Superintendent of Public Works. Neil Jackson is the City Manager.

THE FIRST STEP, after readying a main, in installing an inserting valve is leading on the sleeve of the valve, as shown here. This is a six inch inserting valve sleeve on a job in Alpena, Michigan.

MUELLER CO.'s CC Drilling Machine, with adapter, is mounted on a gate valve to make the cut in the main to put the inserting valve to use. Shown are Mueller Co. Sales Representative Jack Rubicam and Joe Sobeck of the Alpena City Water Department. Working conditions were difficult as the temperature was a cold 50 degrees.

COMPLETING THE installation, the men are shown here tightening the angle packing screws on the inserting valve. Lending a hand is Mr. Rubicam at left. Superintendent of Water, Erling Olsen, is in the center, with Mr. Sobeck at right. The toe of the boot, far right, belongs to Mueller Co. Central Sales Manager Wilson R. Augustine.

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2" Operating Nut or Handwheel
Hub, Flanged, Spigot, Universal, Screwed, Mechanical Joint or "Ring-Tite" Ends
Sizes 2" through 48"

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