

MUELLER
Record
SEPTEMBER • 1958



Recording Our Thoughts

Mr. O. E. Walker, Mueller Co. Vice-President and Works Manager, was named adviser to the Director, Water and Sewerage Industry and Utilities Division, Business and Defense Services Administration, U. S. Department of Commerce on June 26. Mr. Walker was in Washington



Mr. O. E. Walker

for the ceremonies marking his appointment.

He will serve without compensation on loan from Mueller Co. under an arrangement by which industry makes key executives available for six-month tours of duty in government. He also becomes available for the National Defense Executive Reserve, which will be called on to staff an emergency production agency in the event of hostilities involving this country.

As Division Adviser, Mr. Walker succeeds David L. Wright of Badger Meter Mfg. Co., Milwaukee.

The U. S. Department of the Interior has signed a \$100,000 contract with the Fluor Corp. of Whittier, California, for the study of the feasibility of constructing a nuclear reactor saline water conversion plant. When the study is completed, the venture will be undertaken jointly by the State of California and the federal government. The plant is expected to produce ten to twenty million gallons of salt-free water per day. Five additional plants are under consideration, and would be built by the Dept. of Interior's Office of Saline Water.

First bids on the gigantic Saskatchewan dam project were called in during August. The \$182 million multi-purpose dam is to be built on the Saskatchewan River in the west-central part of that province. The dam will be 205 feet high, and 16,700 feet long, making it the largest earthfill in Canada. It will form an eight million acre-foot lake when completed in an estimated six years, and in twenty years will bring up to 100,000 acres under irrigation.

A Communist Party organizer wrote this despairing note to his Kremlin bosses:

"It is becoming increasingly difficult to reach downtrodden American masses. In the Spring they are forever polishing their new cars. In the Summer they take vacations. In the Fall they flock to baseball and football games. In the Winter, I can't get them to leave their warm, cozy homes and new television sets to hear my lectures. How can I make these slaves of Capitalism see how oppressed they are?"

MUELLER RECORD

SEPTEMBER • 1958

Published by
MUELLER CO.

512 W. Cerro Gordo St.
Decatur, Illinois



Editor

Jim M. Milligan



Member:

Central Illinois Industrial
Editors Association
and
International Council of
Industrial Editors



FACTORIES

Decatur, Illinois
Chattanooga, Tennessee
Los Angeles, California
Sarnia, Ont., Canada



SALES OFFICES

New York City
San Francisco



SINCE 1857

Quality Products for the
Waterworks and Natural Gas
Industries



The name MUELLER is a registered
trademark of Mueller Co.

Our Cover this month is a dramatic view of the Florence Station of Metropolitan Utilities District of Omaha, Nebraska. This modern plant is located north of the city, and is bordered on one side by the Missouri River, which can be seen in the upper right-hand corner of the photograph.



Contents

- 4 INTELLIGENT PLANNING MEETS A GROWING CITY'S NEEDS . . .** *as Metropolitan Utilities District's Master Plan progresses.*
- 10 "DO IT NOW" IS SUCCEEDING . . .** *according to a report by AWWA President Lewis Finch.*
- 15 LOOKING BACKWARD . . .** *dips into the pages on MUELLER RECORDS from years back.*
- 16 HERMAN NIEHAUS APPOINTED . . .** *and will travel for Mueller Co. in Indiana and parts of western Ohio.*
- 16 LLOYD GEORGE SUCCUMBS . . .** *after suffering freak accident in Indianapolis.*
- 17 JOHN W. CLAY HONORED ON WEST COAST . . .** *upon his recent retirement.*
- 17 COAST COUNTIES WATERWORKS GROUP CHARTERED . . .** *and new officers are elected.*
- 18 AN ILLINOIS WATER COMPANY ENSLAVES THE "MIGHTY MISS" . . .** *to serve over 250,000 customers.*
- 22 STRICTLY OFF THE RECORD . . .** *brings you two pages of humor to tickle your funnybone.*

Preview

Next month, we take you on a tour of the Institute of Gas Technology, located on Chicago's South Side. This research institution was founded in 1941, and affiliated with the Illinois Institute of Technology.

One of the objectives of the Institute stated by the founders is: to prosecute fundamental and applied research for the gas industry. With this objective in mind, the Institute's facilities were designed to provide the space, equipment and services necessary for research in a variety of fields of interest to the gas industry.

We think you'll enjoy the story. See you next month!

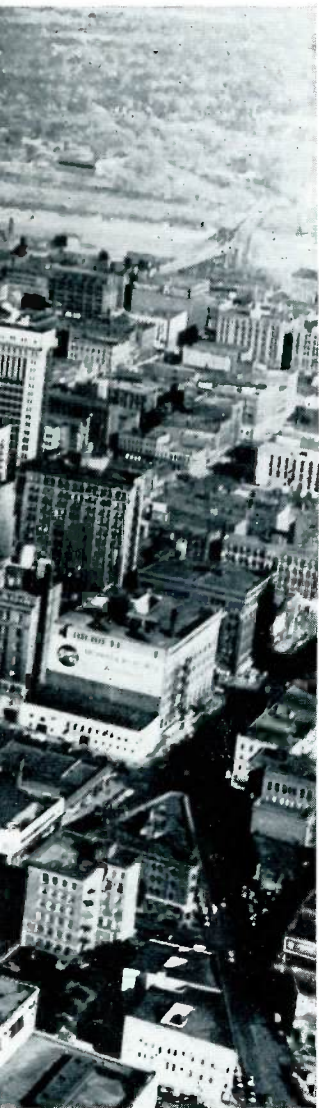


An aerial view of downtown Omaha, the largest city in Nebraska. The city itself comprises fifty square miles, while the metropolitan area extends in a twenty-five mile radius from the downtown section.

Omaha, Nebraska

Intelligent Planning Meets A Growing City's Needs

**Master Plan Now
Underway in Omaha**



Omaha, Nebraska, located in the heart of a rich and resourceful region — the bread-basket of America — is also virtually the geographical center of the United States. The nation's major transportation and communication lines cross in Omaha, making it one of the most important transportation centers of the country.

Because of its fortunate location with relation to the east and west coasts, the city occupies a strategic position with respect to manufacturing and distribution.

Omaha comprises 50 square miles of active, enterprising urban community. It is the largest city in Nebraska and, according to the 1950 census, had a population of 251,117. In 1954, the Omaha City

Planning Commission estimate placed this figure at 270,650. The metropolitan area, which lies within a radius of twenty-five miles of downtown Omaha, contains approximately 390,000 people.

The city has many claims to fame. It ranks as one of the nation's largest grain markets; it is the world's largest cattle market; and it is fast becoming a ranking chemurgy and chemistry center. Food processing is Omaha's largest industry, accounting for approximately 70 per cent of the value of Omaha's manufactured products, and employing 50 per cent of the people engaged in manufacturing. In the food processing field, the meat-packing industry is the largest operation in dollar volume and employment. Seventeen meat-packing plants annually slaughter over four million head of livestock.

Omaha is the home of 38 insurance companies with total employment of over 4,500 people and a combined payroll of over \$16,000,000. The city ranks second in health and accident insurance.

Because of its geographic location at the "Crossroads of the Nation," Omaha is an important point on the air maps. The major airlines serving the city are United and Braniff International. Daily scheduled service totals 42 flights. The city is the fourth largest rail center in the nation, and is served by ten major railroads with a combined operating mileage of approximately 70,000 miles.

Omaha today maintains its importance as a center of activity for the Armed Forces. Most important of its military establishments is the Strategic Air Command, located ten miles south of Omaha at Offutt Air Force Base. Nerve center of global bombing operations of the United States Air Force, the Command has been called the most effective instrument for the maintenance of world peace, and the most potent factor in national defense. A vital element in Omaha's economy, S.A.C. pours over \$35 million annually into the city's business life through military and civilian payrolls, local purchases, and public works expenditures. Approximately 5,000 air personnel and 1,000 civilians are attached to the headquarters. In addition, some 6,200

dependents of military personnel reside in the Omaha area.

An integral part of Omaha's past growth and potential development is the Metropolitan Utilities District, which supplies both gas and water to the city and environs.

A Need Arises

An adequate supply of good water doesn't just happen; it comes about through initiative and intelligent planning. It took a fire that burned down the newly-constructed Grand Central Hotel in 1879 to make Omahans aware of the need for a water system. In 1879, the city of Omaha, with a population of 30,000, was still relying on water from street wells or cisterns.

As a direct result of that disastrous fire, the City Water Works Company, a private enterprise, was organized and, in 1882, began pumping water through mains. The water was pumped from the Missouri River at the foot of Burt Street, and the reservoir was built on Walnut Hill. The system, however, soon proved inadequate.

In 1886, construction was started on a complete pumping and water treatment plant at Florence, north of downtown Omaha. The plant was finished in 1889. Omaha was growing, though; in that same year, the Poppleton Avenue Pumping Station went into operation.

(The Florence Pumping Station, consisting of five settling basins, intake structure, and the Minne Lusa Pump House, was pretty much a little kingdom to itself. Florence, at that time, was a small town; homes were built to house employees of the pumping station, and a few of those houses are still occupied. When people went into Omaha, they usually took the train from Florence, Nebraska, and the trip was somewhat of an event in their lives.)

During these early years, water was not metered, and the waste ran into the millions of gallons. The population was still increasing to such an extent that demands for water became urgent. The pumping, processing and distribution capacity lagged far behind consumption. Financial difficulties dogged the owners, and the City Water Works Company failed.

In 1896, a group of Omaha men bought the water system. Waste was stopped when meters were installed. Service and rates, however, continued to be unsatisfactory to the customers. A cry went up for city ownership. In 1903, the city formed the Omaha Water Board, but it was not until July 1, 1912, that the water properties were purchased by the city, and the Omaha Water Board took over operations with R. B. Howell as General Manager.

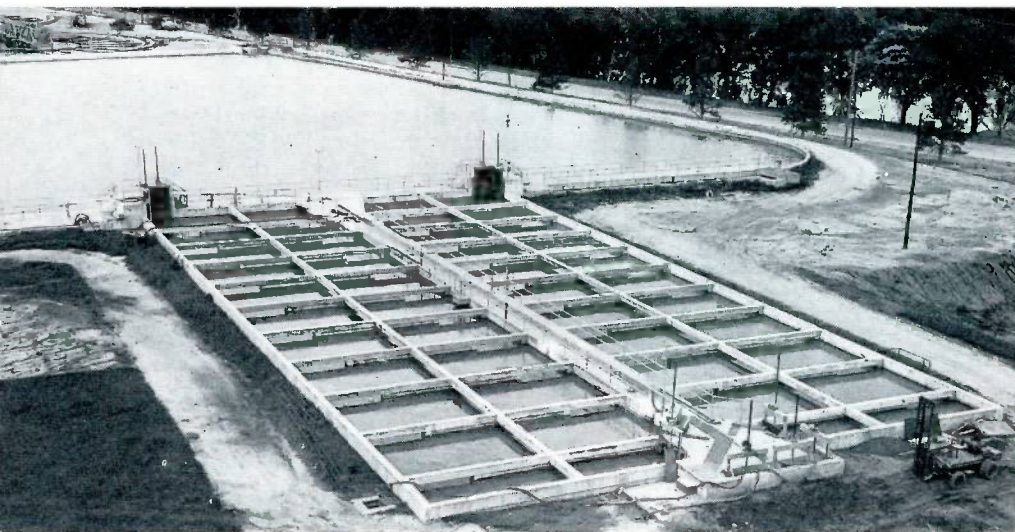
In 1913, by authority of the state legislature, the Metropolitan Water District was formed and given the right to furnish water to consumers outside the city limits. South Omaha, not yet annexed, was receiving water; and, with the annexation of Benson in 1917, the District acquired the Benson Water Works.

In 1922, the District's name was changed to Metropolitan Utilities District by legislative enactment, in order to permit the operation of gas and other public utilities services.

Metropolitan Utilities District of Omaha is independent of the city government, and is operated by a board of six directors who are

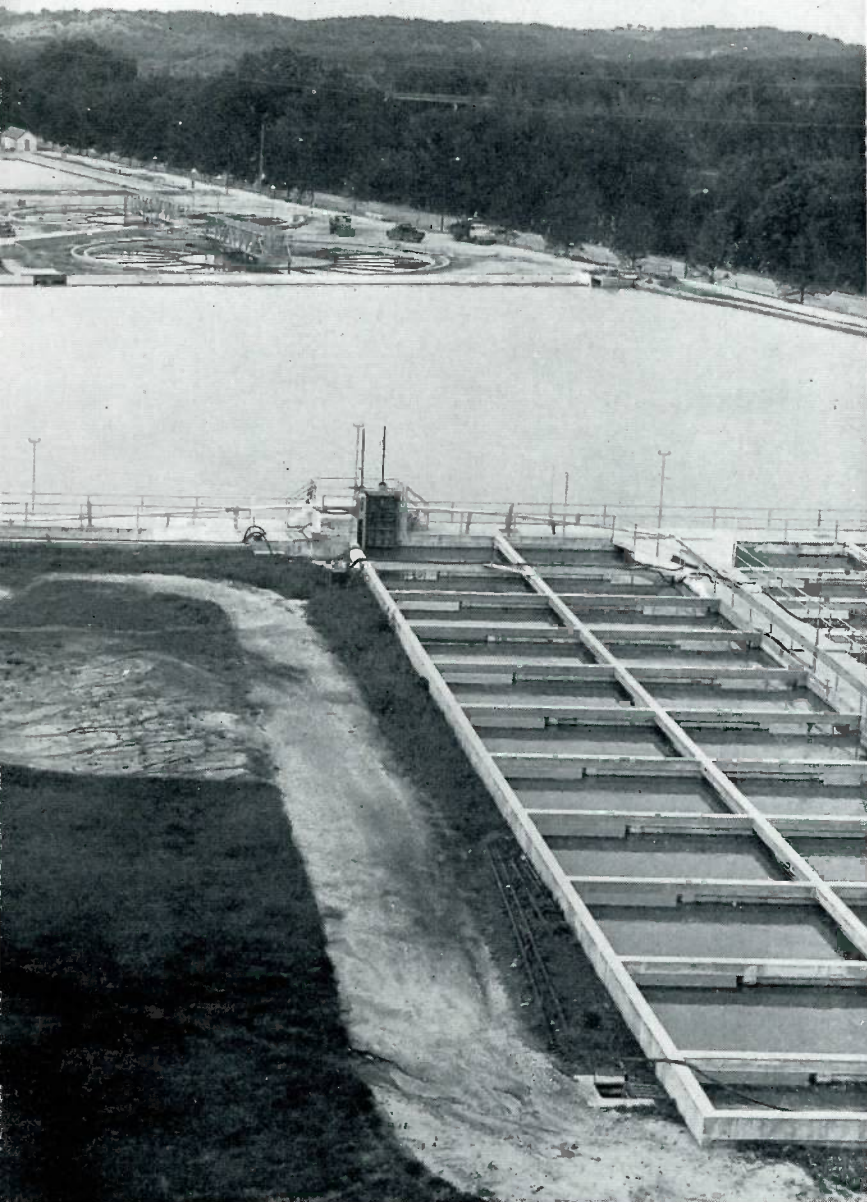
RIGHT: This large basin facilitates extensive sterilization of the water at Florence Station.

BELOW: In these mixing basins, chlorine, and often lime, aluminum sulphate and ferric sulphate are added.



chosen by a vote of the people. This board appoints a General Manager who today has a management team and department heads trained in planning and operations. Nine hundred and twenty-three people are now steadily employed in both the gas and water operations. Today, Metropolitan Utilities District is big business!

The city's complex, efficient water system of 1958 has little in common with the first plant of the '80's, or the plant as it was acquired in 1912. The erection of a filter plant at Florence in 1923 was a major improvement. An example of far-sighted planning is the Field Club Reservoir. Plans for the



load has been reduced due to the effect of the reservoirs on the Missouri above Omaha.

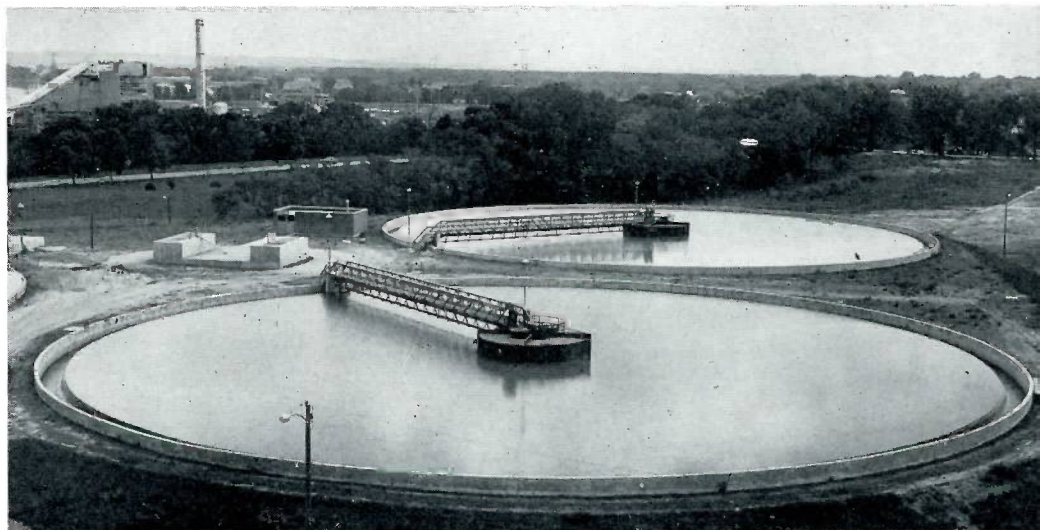
Finished water is pumped into trunk mains and the distribution system at the Florence Station. Water storage totalling 49 million gallons is provided at the Walnut Hill reservoirs and at the Field Club reservoir. Booster stations in various sections of the city maintain proper main pressures in the repumped system which supplies approximately two-thirds of the city's area. Electric motor-driven pumps furnished the basic pumping facilities, supplemented by steam turbine-driven equipment. Combination steam and electric pumping is used at Florence to meet peak demands. These pumps have handled up to 120,000,000 gallons in a 24-hour period.

The manufacture of pure water, and the distribution of it during the past fifteen years to satisfy the demands of growing Omaha has been handled with utmost efficiency by Metropolitan Utilities District. Intelligent planning with an eye to an unpredicted population increase actually began about 1942. Then,

BELOW: In these presedimentation basins, sand and larger silt particles are settled out. All three photos on these pages were taken at Florence Station, which encompasses intake, treatment and pumping processes.

construction of this storage reservoir were made in 1920, and the edifice was placed in operation in June, 1954.

Missouri River water is muddy, as can be expected. The amount of silt and clay removed from the raw water in a normal year, prior to the river improvement program, was approximately as follows: by primary sedimentation processes, 79 percent; by coagulation and secondary sedimentation processes, 19½ percent; and by the process of filtration, 1½ percent. Sediment thus removed has exceeded 22,400 tons in a single 24-hour period—enough to fill 450 railway cars. Under present river conditions, this



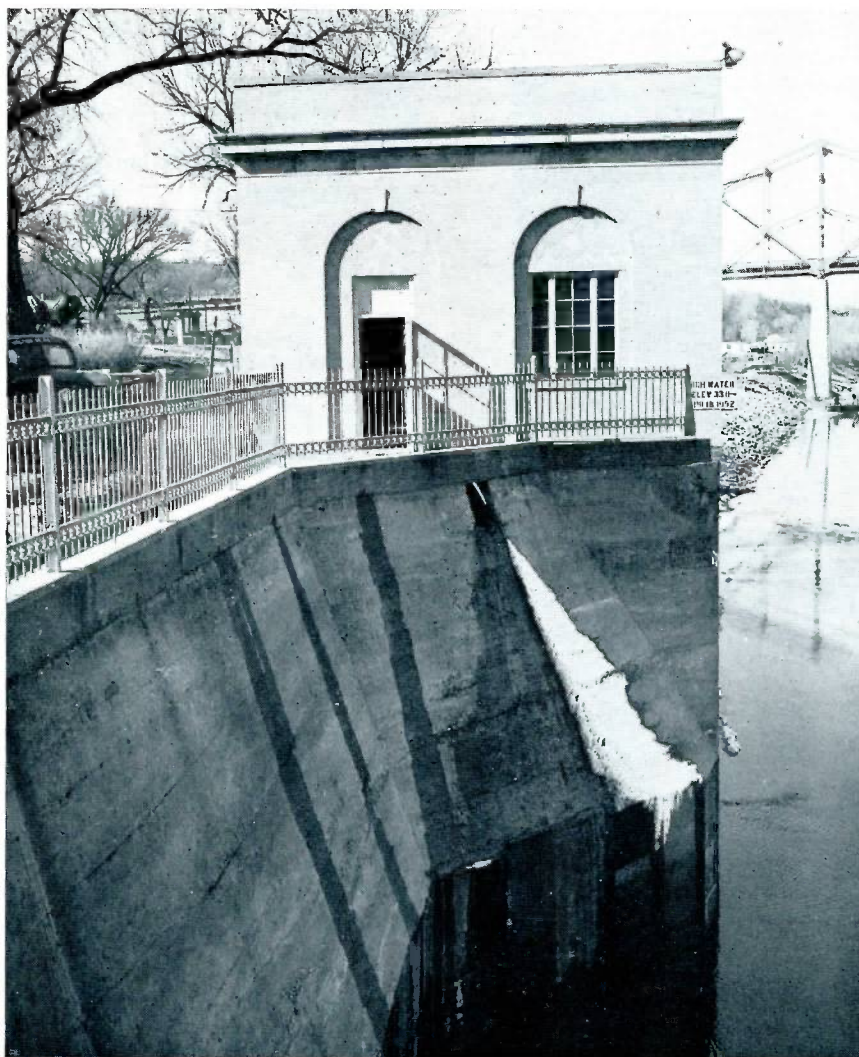
the total annual pumpage from the Florence Station was over eleven billion gallons. By 1952, this figure had increased to approximately seventeen billion gallons. During those ten years, usage increased 54 percent; yet, the customers served increased only seventeen percent—an excellent example of increased demand due to a better standard of living.

Based on an engineering firm's report, made in 1944, a plan was put into action that involved the expenditure of nine million dollars. Added to the recommendations for expansion in 1944 was a major improvement program initiated in 1953 that expanded expenditures



FLORENCE STATION

This photograph shows the high water mark reached during a flood on April 18, 1952. The plaque marking the spot can be seen at the lower right-hand corner of the building.



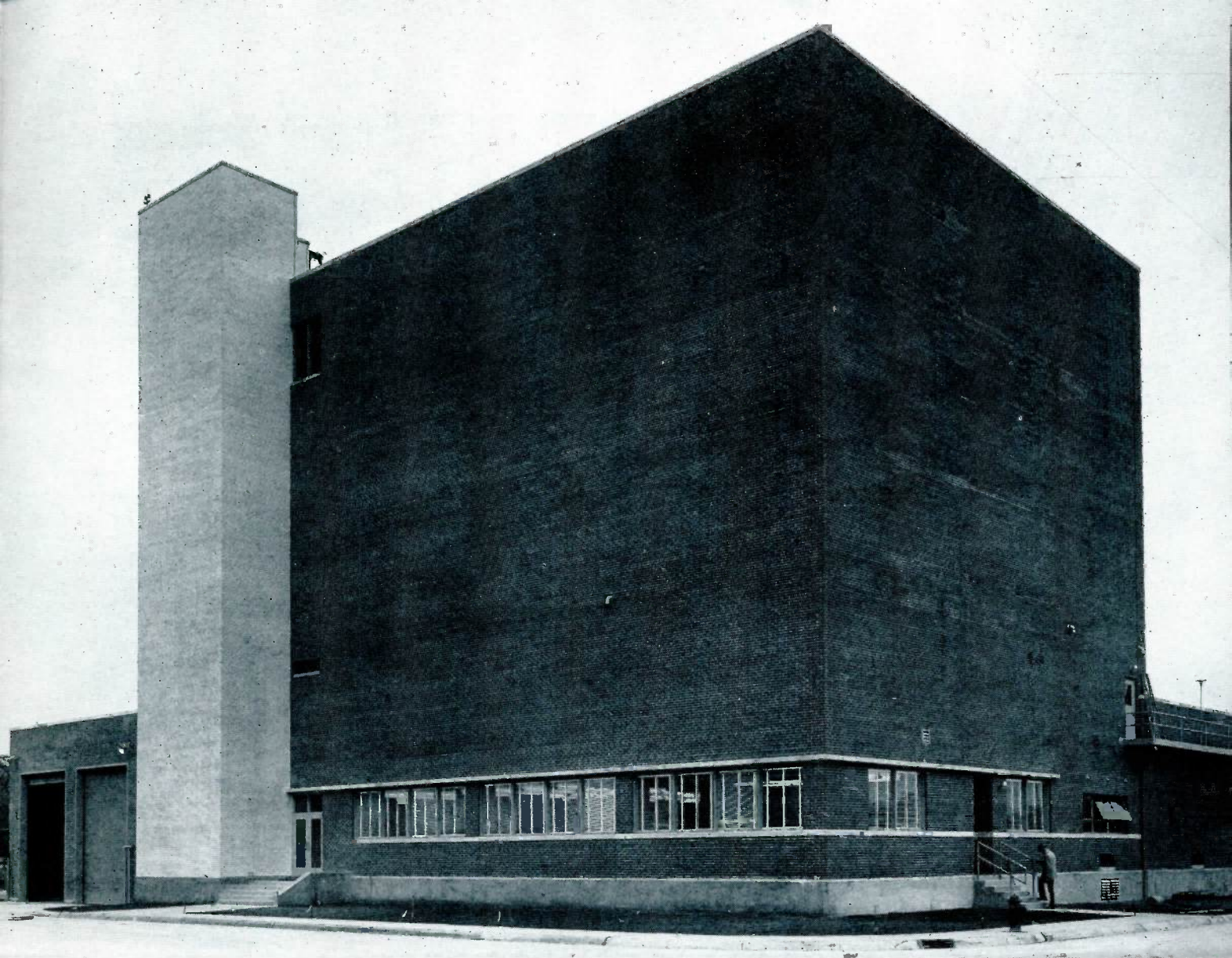
to fourteen million dollars. Target date for project completion was set for 1956.

Improvements included: three presedimentation basins, six additional filter beds, additional pumping facilities and improvements, a chemical building, and four primary treatment basins — all at Florence; and the installation of 48-inch and 54-inch mains. Other improvements have increased the systems daily capacity to 140 million gallons—enough water, it is believed, to serve Omaha's needs until 1965.

What of the future? Population estimates for 20 to 30 years from now stands near the one and one-half million mark.

Along with their engineering firm, Metropolitan Utilities District has come up with what is called the MASTER PLAN, just recently completed. Briefly, its aim is to provide the city of Omaha and possible users in areas outside the city, in Douglas and Sarpy counties, with at least 200 million gallons of water each day. Estimated cost of the MASTER PLAN is twenty-five million dollars, and should be completed by 1980. It consists of two phases of activity.

PHASE ONE includes needed facilities for the distribution of the 140 million gallons of water the recently-completed expansion gave to the city. Improvements must include pipe lines, storage reservoirs and pumping stations. PHASE ONE must be ready for service by



In this Chemical Building of Metropolitan Utilities District are stored all the chemicals used in the treatment process. From the storage hoppers, accurate feeding

machines measure out chemicals at the desired rate. The chemicals are dissolved in water, and the solution flows by gravity to the points of application.

1965, and the estimated cost is \$8,576,100.

PHASE TWO begins with the construction of a new source of supply, and includes all other elements required to pump and distribute 200 million gallons per day from both sources — the Florence Station and the new source. Estimated cost of PHASE TWO is \$13,327,990, and should be started in 1962. The new supply source, as recommended, should be well water. Location is on the Platte River. About 30 wells will be required to pump 60 million gallons daily; each well will range in depth from 60 to 90

feet. The minimum space requirements for all 30 wells would be a strip 1000 feet in width, with wells spaced 1000 feet apart.

Such is the MASTER PLAN — the result of planning by far-sighted individuals dedicated to public service. In 1879, the Grand Central Hotel burned down, due to the lack of an adequate water supply. As of December 31, 1957, in-service plant facilities were valued in excess of thirty-six and one-half million dollars. In 1957, the Florence High Service Station pumped 19,222,740,000 gallons of water, with an average daily pumpage of 52,-

665,000. As of December 31, the number of customer billings was 75,911. The distribution system consisted of: 871.30 miles of mains; 7,191 fire hydrants; and 8,984 valves.

Omaha is on the march. It will use more and more water to meet the demands of new industry, increased population, and the rising standard of living. The personnel of Metropolitan Utilities District of Omaha — through sound financing, intelligent planning, and sensible operation — will assure the continued ability to meet any demands placed upon them.



"Do It Now" Is Succeeding

A "Do It Now" campaign, aimed at helping to counteract the slow-down in the nation's economy, as well as to put public water systems in shape to provide improved water service adequate to meet the growing needs of each community, appears to be paying off to the tune of a twenty percent increase in 1958 scheduled water works construction.

A survey covering 180 communities serving some fifteen percent of the nation's population that has public water supply indicated that 54 percent were speeding up projects scheduled for later this year, and twenty-three percent were moving up projects originally scheduled for 1959. This represented the speedup of \$59 million worth of construction, with heavy activity anticipated the last four months of 1958.

The announcement of these results of the American Water Works Association campaign was made by President Lewis S. Finch at a meeting of the Association's executives in New York in early July.

Launched at the Association's annual meeting in Dallas last April, the campaign was triggered by a telegram to President Eisenhower and letters to the governors of the states, asking their help in stimulating each local community to

speed up action on needed construction. In Missouri, Governor Blair responded by declaring June "Water Works Month." In other states, action was taken through public officials directly involved with public supply matters. The indicated result was that overall expenditures for 1958 would be 120 percent of those originally planned. This rate of construction would push the 1958 total above the \$560 million level of last year, behind which it was lagging some twenty percent in the first quarter of this year.

Not only through its 12,500 members, but through all of the 18,000 community water systems which it serves, the AWWA expects to continue its efforts to promote this shot in the arm to the nation's economy. Such a program ties in directly with the Association's present major effort to lead in the industry in correcting basic water system deficiencies which were a direct result of war shortages of materials or the inflated costs of post-war expansion.

Although many business leaders and government officials are predicting a late-1958 upswing in the nation's economic outlook, the positive "Do It Now" program is expected to continue.

PR In Action In Philadelphia

Philadelphia Water Commissioner Samuel S. Baxter has announced that the laying of two twelve-inch mains for a distance of 2,500 feet on Germantown Avenue will be done between the hours of 9:30 P. M. and 6:30 A. M., to avoid inconveniencing the public. All pneumatic-tool operation is scheduled to end at midnight.

The work involved is reconstruction on water mains built in 1852. The new mains will be laid entirely under sidewalks, affecting streets only at crossings or where connections must be made.

Work will be completed on one side of the street before it is started on the other. Old mains will be abandoned when the new ones go into operation.

Short School Credit Given

Those who register and fully attend the first Southeast Texas Regional Water and Sewage Short School to be held at Lamar State College, Beaumont, Texas, August 18 and 19, will receive twenty hours of school credit toward their operator's license requirement, according to an announcement by Henry Wilkens, Jr., Short School president.

The school is affiliated with the Texas Water and Sewage Works Association, and will be conducted in co-operation with the Texas State Department of Health and Texas A&M College Extension Service.



West Texas School To Lubbock Nov. 3-6

Plans have been completed for the 1958 West Texas Regional Water and Sewage Works Short School scheduled to be held in Lubbock's Municipal Auditorium November 3-6.

The school will include both basic and advanced courses in water and sewage. In addition to the workshops conducted jointly with classroom function whenever possible, there will be others dealing with chlorinator repairs, meter repair and maintenance, and laboratory control.

standardize on

MUELLER®

*the complete line of
water service equipment...*

Mueller offers the complete line of water service equipment—a line backed by a century of manufacturing experience and technical “know-how”. Specify Mueller, and you insure longer, more dependable service and reduced maintenance costs. One source of supply can reduce your costs and insure a system of components matched in quality and performance.

**SPECIFY
MUELLER**



**MUELLER CO.
DECATUR, ILL.**

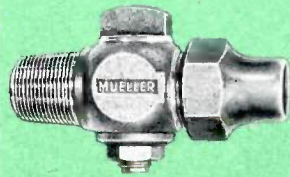
Factories at: Decatur, Chattanooga, Los Angeles;
In Canada: Mueller, Limited, Sarnia, Ontario

ENGINEERED . . .

water service products

CORPORATION STOPS

Quality ground-key construction . . . precision fitted and lapped . . . assures water-tight closure and ease of operation at all times . . . practically any end connection combination to meet every application.



CURB BOXES

Telescopic type—prevents damage to stop or service piping . . . upper section slides in lower section . . . strong phosphor-bronze spring holds upper section in desired position . . . iron to bronze threads assure easy plug or lid removal . . . coated inside and out with tar base enamel to increase resistance to corrosion . . . with or without stationary rod.



SERVICE CLAMPS

For quick, safe connections to any type main under pressure . . . heavily galvanized malleable iron bodies . . . flattened forged steel straps, cadmium plated, give maximum strength and rigidity for long life . . . single or double strap type for 1" to 12" diameter mains . . . full range of tap sizes .

CURB STOPS

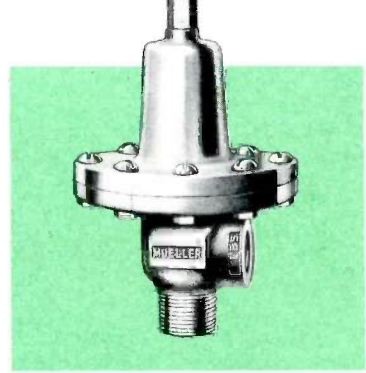
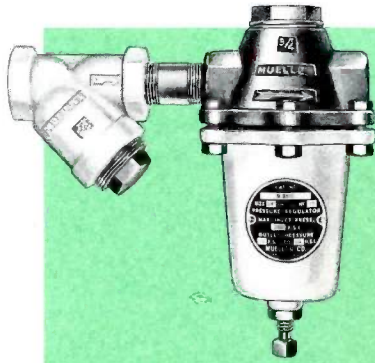
Cast and machined from finest water works bronze . . . inverted key individually ground and lapped, seats with the pressure, assuring water tight closure . . . seating force increases with increase in water pressure . . . various combinations of inlets and outlets for any type of service pipe . . . sizes 1/2" through 2".



MUELLER CO.
DECATUR, ILL.

REGULATORS

Give pipe capacity flow with "minimum fall-off" of reduced pressure... accurately proportioned seat, diaphragm, and spring regulate flow without chattering or flow pulsation... outlet pressure adjustment from 5 p.s.i. to 125 p.s.i. ... for water service.

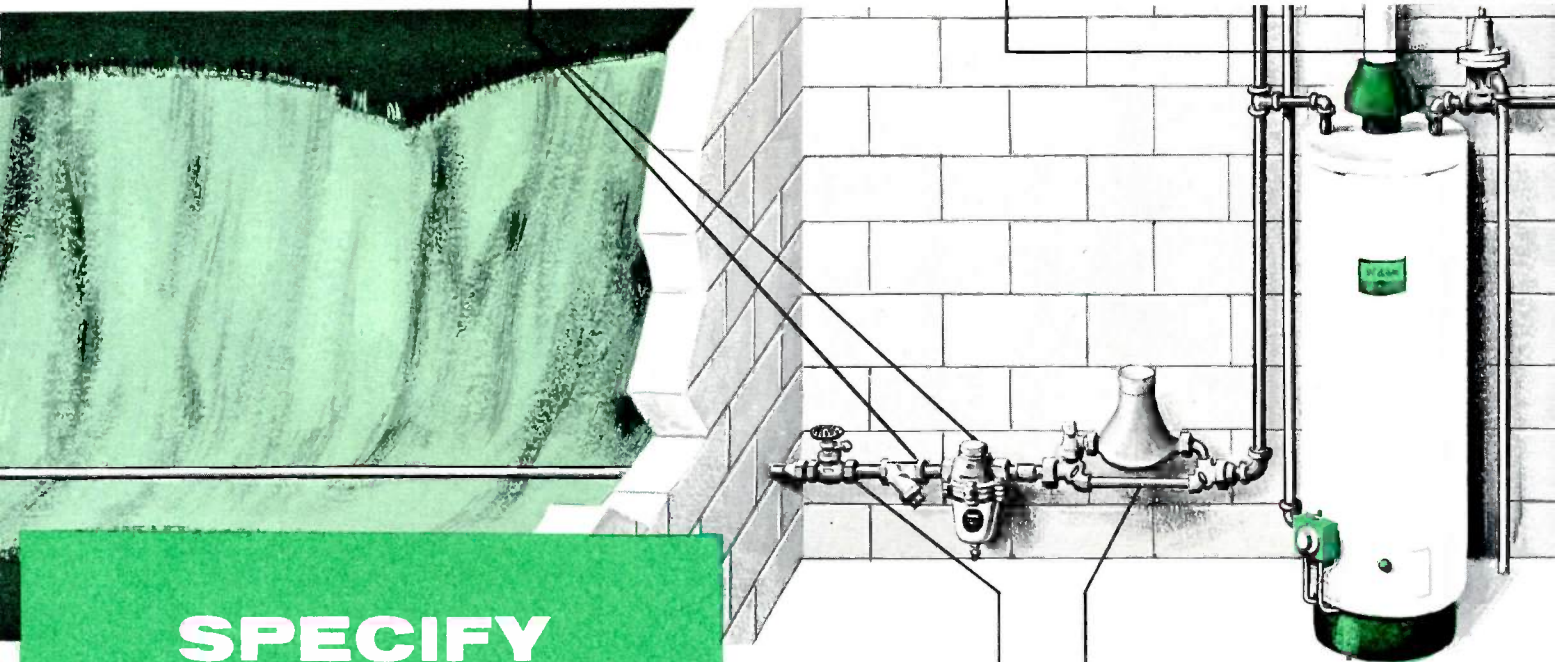


STRAINERS

For water service... galvanized iron or bronze sediment bowl type with clean-out plug gives long life... Y-type strainer with monel screen and clean-out plug—screen area four times pipe area... I.P. pipe connections... wide range of sizes.

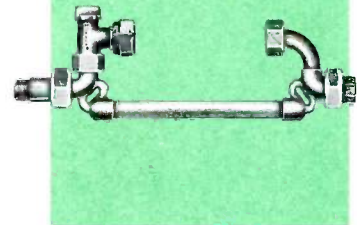
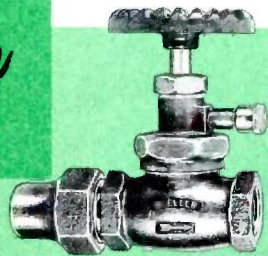
RELIEF VALVES

Monel or phosphor-bronze diaphragms and stainless steel seats assure positive operation at all times... fusible plugs for thermal relief... combined pressure and thermal relief models available... pressure relief to 160 p.s.i. ... thermal relief to 212° F.



**SPECIFY
MUELLER**

...all along the line



ROUGH PLUMBING

Deluxe quality ground key or compression stops with or without drains... Mueller red brass construction... popular lawn and sediment faucets with standard hose threads and handwheels... bronze gate valves... sizes and connections to meet every residential and industrial application.

METER SETTING EQUIPMENT

Mueller engineered meter yokes provide tailor-made installations... reduce installation time and protect meters from piping stresses... copper yokes and relocators with or without stops... iron meter yokes... angle or lock-wing meter stops, ground key construction... meter couplings and meter box covers to complete the installation.

other

MUELLER®

service products



SOLID TEE HEAD CURB STOPS

Solid Tee Head curb stops feature a one-piece key and tee. The combined key and tee provide a much stronger unit. The key and body, cast from waterworks bronze, are precision machined and lapped to assure pressure tightness. The regular or Minneapolis patterns are available in sizes 1/2" to 2" with or without checks and drains.



GOOSENECKS

Three types of connections are available—wiped joint, lead flange, and solder joint. The wiped joint and lead flange goosenecks are available with 2 to 8 branch connections. Corporation stops can be furnished with each gooseneck. Extra Strong or Double Extra Strong lead pipe is used exclusively.



SERVICE FITTINGS

Mueller Co. manufactures a complete array of service fittings. Elbows, tees, corporation stop couplings, branch connections, unions, lead flange fittings and solder nipples and plugs form a complete selection. Sizes are available for every application.



COMPRESSION STOPS

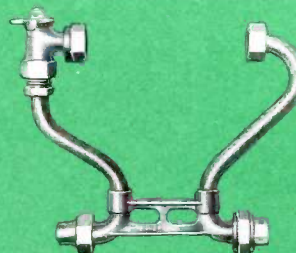
High quality red brass construction. Wheel handles and optional drains make them quite popular for use as meter stops and customer cut-offs just inside the house. Iron or copper pipe connections, sizes 3/8" to 1".

For additional information and service, consult your Mueller Representative or write direct.



MUELLER CO. DECATUR, ILL.

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



COPPER METER YOKES

Especially designed to overcome piping stresses and prevent subsequent damage to the meter. Flexible copper yokes give faster, easier installations even when the service pipe is out of line. Copper yokes are available with or without angle meter stops for 5/8", 5/8" x 3/4", 3/4" and 1" meters.

In the issue of the MUELLER RECORD dated **January, 1934**, we find this humorous anecdote about automobiles:

"Henry Ford tells this story on himself. He was in the habit of driving a Ford car to and from his factory in Detroit and his summer home just outside Detroit. One evening, on his way home, he came across a man on the road who could not get his Ford started. Henry Ford got out of his machine, and in a few minutes managed to get the other machine to move.

"The man, very much pleased, offered Ford two dollars for his trouble, but the money was promptly refused. The man, insisting, said that it would have cost five dollars to be towed back to town.

"'Keep your money,' said Ford. 'I have more than I could possibly spend.'

"'What?' said the man. 'You mean to say you have that much money and you ride around in one of these damn things?'"

We sometimes fail to appreciate what we have in the way of luxuries and even commonplace items today until we read what writers of twenty years ago wrote with such enthusiasm, such as the following from the issue of **January, 1934**:

"From cans we can now go to eating from collapsible metal tubes, the bill of fare including icing for cakes, fish pastes, honey, peanut butter, salad dressings, sandwich dressings and soup pastes. A radio dealer gives a year's insurance on each set against loss or damage by lightning, fire, theft, wind or explosion while in an owner's car.

"A Buffalo (N. Y.) dealer offers to place electric refrigerators in a home without cost for a given period. A trial by the housewife makes the closing of the sale easy.

"A new cigarette lighter, requiring only a few drops of lighter fluid, acts as a match.

"Retreading old tires is now accomplished by vulcanizing a new tread upon the worn surface of the old tire.

"Made of stainless steel, a new flexible, single-row ice-cube tray for mechanical refrigerators is now on the market. A simple flexing of the tray frees the cubes.

LOOKING BACKWARD

"Cupboards, dressing tables and hampers in various styles are now made for bathrooms."

Problems of water waste are not new to the industry, as pointed out by this entry in the **March, 1934** RECORD:

"The estimated average waste of water in New York is 200,000,000 gallons per day."

If you are one of those persons who takes great delight in between-meal snacks, this item from the issue of **May, 1934**, should make you feel good:

"And now comes a doctor who upsets a lot of beliefs regarding health rules which have been accepted since the pilgrims hit our shores. . . .

"He says piecing between meals is not harmful, which we believe. We never could understand why a man should eat at stated intervals, instead of doing as any other animal — grab a snack whenever hungry. Eating habits are "aesthetic and social habits" hedged in by a lot of crazy-shaped dishes for each course, and an army of spoons, forks and "jim cracks" to hamper a good old shoveler who in emergencies can do a first class, though rather noisy job with nothing but fingers and a spoon. . . ."

Remember how much fun we all used to have with such tongue-twisters as "Peter Piper picked a peck o' pickled peppers . . ."? This one, from MUELLER RECORD of **June, 1934**, tops them all: "Sudden swallows swiftly skimming,
Sunset's slowly spreading shade;
Silvery songsters sweetly singing
Summer's soothing serenade.
Susan Simpson strolling sedately,
Stifling sobs, suppressing sighs,
Seeing Stephen Slocum stately,
She stopped, showing some surprise.

'Say,' said Stephen, 'sweetest sigher,
Say, shall Stephen spouseless stay?'
Susan, seeming somewhat shyer,
Showed submissiveness straight-away.

Summer's season slowly stretches,
Soul sought soul successfully.
Six September seasons swelter,
Six sharp seasons snow supplied;
Susan sat in sofa's shelter,
Six small Slocums side by side.

Are you hard on woman drivers? The same issue as above describes one man who wasn't:

"'I'm so sorry,' said the woman. 'It was all my fault.'

"'Not at all, madam,' the man gallantly responded. 'I was to blame myself.'

"'But I insist the fault was mine. I was on your side of the road!'"

"That may be true; but, my dear madam, I am responsible for the collision. I saw you coming blocks away, and I had ample opportunity to dart down a side street.'"

From the July, 1934, RECORD, come a few items for "Believe it or Not":

"You don't have to take our word for it, but here are some geographic oddities that we will wager you were never taught in school. The National Geographic Society is given credit for compiling them.

"The city of Reno, Nevada, is one hundred miles farther west than Los Angeles.

"Jacksonville, Florida, is farther west than Cleveland, Ohio.

"One travels south from Detroit to reach the nearest part of Canada.

"In Panama, the sun rises in the Pacific and sets in the Atlantic—due to a gigantic bend in the isthmus.

"The city of New York lies west of the Pacific — at least, that part that touches Africa."

Herman Niehaus Appointed; Into Indiana, West Ohio

Mr. Herman Niehaus has been appointed Mueller Co. Sales Representative in the state of Indiana and adjacent counties in Western Ohio, effective August 1, 1958. He replaces Mr. Lloyd W. George, who was accidentally killed in Indianapolis, Indiana, on July 1.

Mr. Niehaus, a 1957 graduate of Millikin University (Decatur, Ill.) with a Bachelor of Science degree in Business Administration, is a native of St. Louis, Mo.

Upon graduation from high school in 1947, he signed a professional baseball contract with the New York Giants, and was assigned to the organization's Erie, Pa., farm club. In 1948, his contract was purchased by the St. Louis Cardinals, and he was sent to Albany, Ga. In 1949, the big first-baseman led the Appalachian League in home runs. The Boston Braves (later the Milwaukee Braves) signed him in 1950, and he was assigned to their



Evansville, Ind., farm club.

The year 1950 also saw his marriage, and entry into the U. S. Army. He was discharged in Jan-

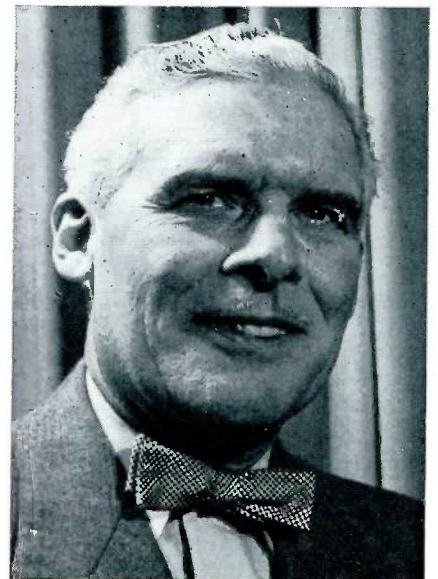
uary, 1952, after spending a year in Korea. More baseball — this time with the Decatur (Ill.) Commodores — preceded his enrollment at Millikin in September, 1953.

Mr. Niehaus joined Mueller Co. on February 3 of this year, and has been undergoing extensive sales training since that time. He, his wife, Pearl, and their four-year-old son, Eric John, will reside in Indianapolis.

Lloyd George Succumbs

We regret to record the passing of Mr. Lloyd W. George, Mueller Sales Representative, on July 1, 1958. Mr. George was electrocuted in an accident in Indianapolis, Indiana, his home.

He joined Mueller Co. in 1930, and was assigned the sales territory of the city of Detroit, and the state of Ohio. In 1939, he was assigned



the state of Indiana and adjacent counties in the western part of Ohio, which territory he served at the time of his death.

For the past several years, Mr. George has resided in Indianapolis. He is survived by his wife, Hazel, and two married daughters.

The Mueller organization is proud of Lloyd George's long association with us, and we shall cherish his memory.

MUELLER RECORD



A cartoon illustration of a man in a suit and bow tie, wearing a hat and holding a briefcase, holding a large banner. The banner contains the text:

**AROUND
THE
INDUSTRY**

John W. Clay Honored On West Coast

More than one hundred friends and associates of Alhambra, California's retiring Water Superintendent, John W. Clay, turned out recently to honor him at a testimonial banquet sponsored by the City Employees Association.

Mr. Clay left his Water Department post after thirty-four years of service, during which time the department progressed to become one of the most modern and efficient in the state.

The banquet program included musical entertainment, and remarks on his recent European trip by former city attorney Emmett Tompkins, who also acted as master of ceremonies.

Following the presentation of resolutions in Mr. Clay's behalf by the Public Utilities Committee and the city, the 70-year-old official was given his retirement pin by Alhambra Mayor Talmage Burke.

Highlight of the evening was the presentation, by city employees, of a 16mm movie camera, screen, light meter and three rolls of film.

Mayor Talmage Burke of Alhambra, California, presents John Clay with his retirement pin at a recent banquet. Roy Moeller, chairman of party arrangements, is at right.



New Officers of the Coast Counties Water Works Organization are, left to right: G. A. Smith, secretary-treasurer; S. T. Eddy, program chairman; John Bader, president; Charles Blodgett, past president; and Jesse Smith, vice-president.

Coast Counties Waterworks Group Chartered; New Officers Named

On May 6, about thirty men met in San Luis Obispo, California, to officially adopt a constitution and by-laws for the Coast Counties Water Works Organization. The dinner meeting was held at the Motel Inn.

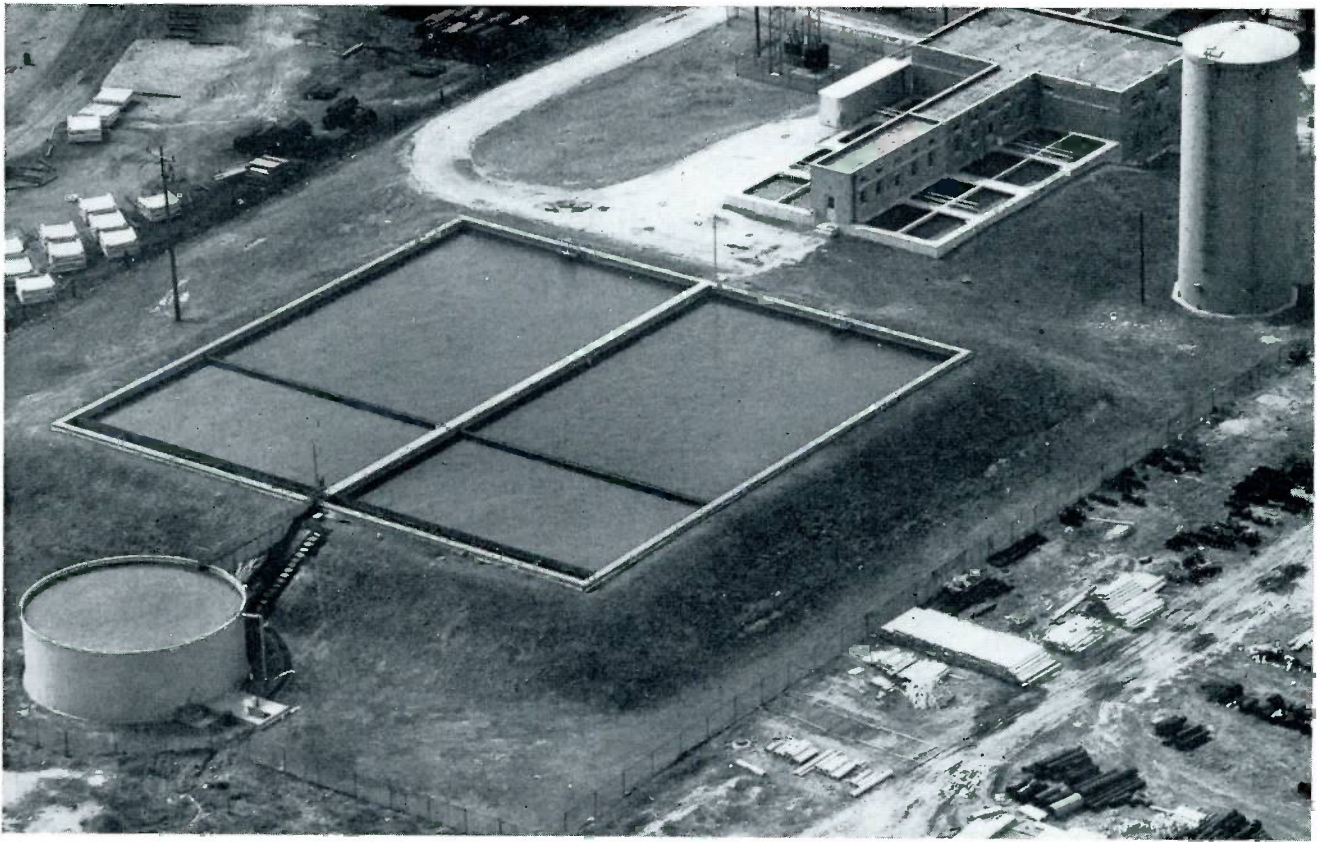
With a common interest in water supply, transmission and reclama-

tion, the men have been actively associated for about two years. Most of them have successfully completed a special course dealing with water at the San Luis Obispo adult evening school.

John Bader of Oceano was elected president of the group. Other elected officers, who will also serve as the board of directors, include Jesse Smith of Santa Maria, vice-president; G. A. "Bill" Smith of Santa Monica, representing Mueller Co., secretary-treasurer; S. T. Eddy, San Luis Obispo County purchasing agent, program chairman; and Charles O. Blodgett, who is a past president of the group.

To assist Eddy with future programs, a committee of two was named: Robert Born, county hydraulic engineer, and Frank Reed, San Luis Obispo.

According to the newly-adopted constitution, the purpose of the Coast Water Works Organization is to advance the fundamental and practical knowledge concerning the nature, collection, treatment and distribution of water, and to keep informed on the most efficient methods of design, construction, operation and management of water works in the coastal areas through the interchange of information, experience and opinion.



The above photograph shows the Granite City Pumping and Purification Plant of the East St. Louis and Interurban Water Co. The round, open tank in the left

foreground is where chemicals are added to raw water as it flows to the purification system.

East St. Louis, Ill.

An Illinois Water Company Enslaves the "Mighty Miss"

***Serves Over
250,000 Customers***

A teacher once asked her class to describe water. One young man replied, "Water is a light-colored liquid that turns dark when you wash in it."

The waters of the great Mississippi River are dark most of the time, and contain a great amount of impurities which must be removed before use. This water preparation is handled efficiently by the East St. Louis and Interurban Water Company, which gathers, processes and delivers sufficient pure water to meet the needs of over 250,000 customers in homes, stores and industrial plants.

Over two hundred people are engaged in this work, and work it truly is. During each twenty-four hours when the river is at zero stage, sufficient water will flow under the East St. Louis Veterans' Memorial Bridge to provide 210 gallons to about 160 million people residing in the United States. This quantity is increased almost three times when the stage of the river is ten feet above zero. From this,

one can readily perceive the shortage of water in so many sections of the country is due to Nature's inadequate distribution rather than a shortage at the source.

The population of East St. Louis in 1885 was about 12,000. Water for domestic use was obtained principally from wells and cisterns. The City Water Company was formed, and work was started on the provision of an adequate water supply. A site was selected near the bank of the Mississippi about one mile north of Eads Bridge, where a building was constructed to house a steam pump and boilers. The following year, 1886, 156 homes and industries were receiving water pumped directly from the river through about five miles of pipe lines. In 1887, two masonry basins were constructed to hold eight million gallons of water, and another pump was installed. This addition to the plant made it possible to draw water from the river and pump it directly to the settling basins. The second pump then forced the liquid through the distribution lines.

Throughout this period of time, the country was developing and growing at a rapid rate, and East St. Louis was no exception. In 1890, its residents numbered 15,000; the water system had 847 taps for consumers on its system. The supply facilities were again increased by the installation of two modern pumping engines in a newly-constructed building. During the next decade — to 1900 — the population had doubled, reaching 30,000, and the water system had 3,763 taps. In anticipation of future growth, substantial improvements and additions were made in 1900, utilizing the latest developments in the science of water treatment. A battery of eighteen sand filters was installed in a new building and, adjacent to that building, a clear water basin was built to hold one and one-half million gallons of finished water.

It is significant to note that, at the turn of the century, not too many complete water systems were in existence throughout the country, while East St. Louis had a complete system for converting river water to a degree of clarity

and had utilized each element in the science of water treatment that had been developed up to that time.

Improvements and additions were continued as the city grew; and, in 1915, the water companies of Granite City, East St. Louis and Belleville were combined to form the East St. Louis and Interurban Water Company. Since that date, system improvements have been made consistently, and all possible treatment methods have been utilized where practical.

During 1955, an average of 36 million gallons of water was processed and pumped each day into a system of 700 miles of lines — to twenty cities, towns or villages in St. Clair and Madison Counties.

Treatment of river water is much the same everywhere. The raw water is turbid, colored, and filled with bacteria. Coagulated chemicals speed the settling process, sand and graded gravel filters further the process, and the liquid then proceeds to a storage reservoir. Chlorine is used to destroy remaining bacteria.

The Chouteau Island raw water station of the East St. Louis and Interurban Water Company is located on the bank of the Mississippi about three miles downstream from the confluence of the Missouri River. Water flows from the river through steel grating and revolving screens. Then a large pump,

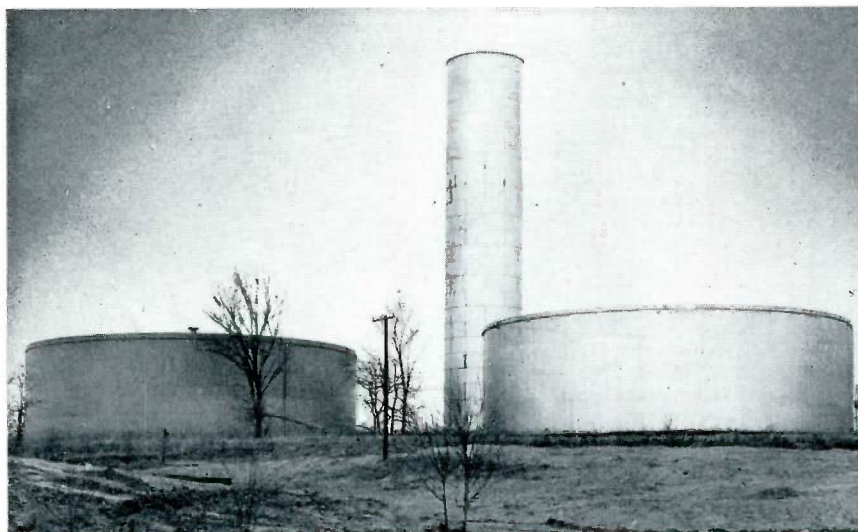


FRANK J. MC ANDREW
Manager

with a capacity of 30 million gallons per day, elevates the water 90 feet into two tanks. The two-fold purpose of the tanks is obvious. They provide initial settling facilities, and facilitate the flow.

From the tanks, the water enters a 54-inch diameter line on its way to the treatment plants. About 80 percent of the raw water is procured from this plant. An auxiliary raw water plant is located in East St. Louis, and it provides the remainder of the supply.

These storage tanks hold four million gallons of water for use in the Belleville area. The standpipe provides pressure in the system.





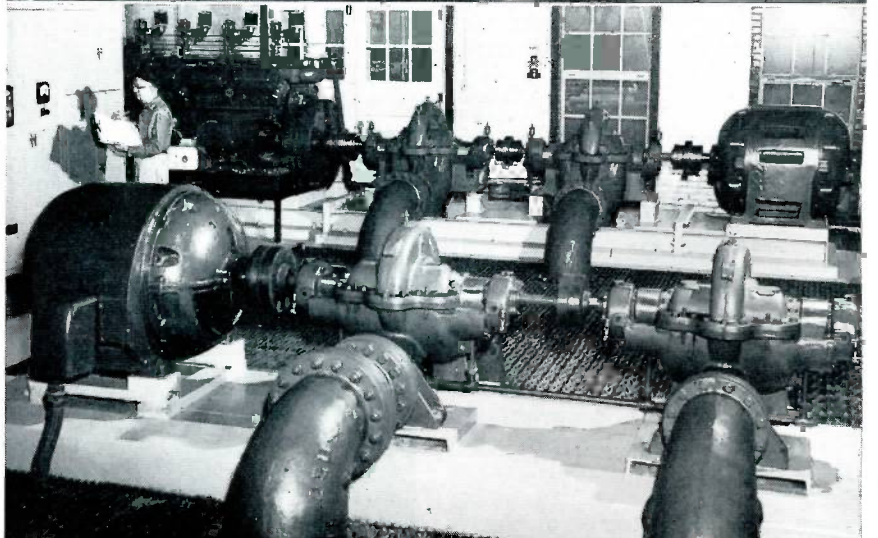
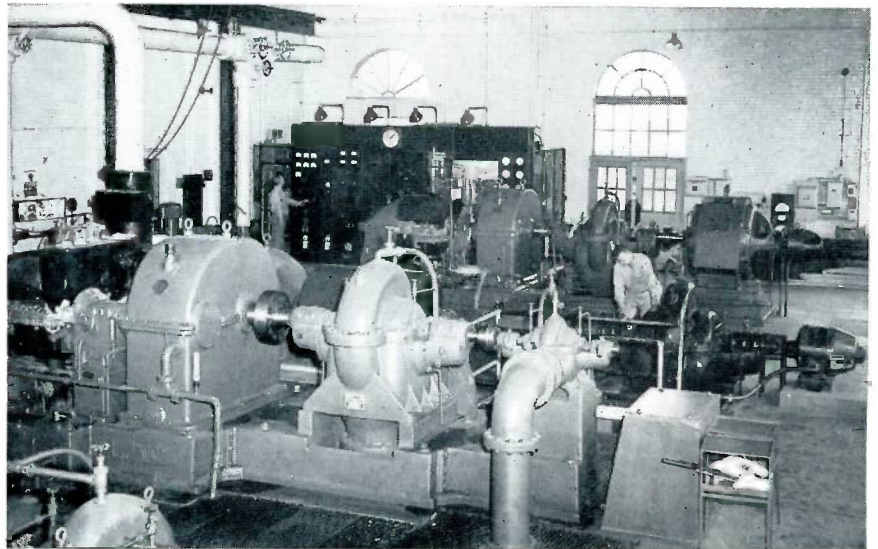
Aerial view of main pumping and purification plant at East St. Louis. In the upper background, four circular filters near completion. They added ten million gallons

per day to the capacity of the plant when they were completed.

A complete purification and pumping plant is located at 24th and Logan Streets in Granite City. It was placed in service in 1950. In 1953-54, an addition was built to meet increased demand. This plant now has a normal rated capacity of ten million gallons per day, and it primarily supplies Granite City, Madison and Venice, Illinois. The raw water supply is taken from the Chouteau Island station. A storage tank of 500,000 gallons capacity is connected to the distribution system near the Granite City plant.

The larger of the two purification plants is located at North Front Street in East St. Louis. Raw water is received from the Chouteau Island and East St. Louis plants, and is completely processed at this installation. The normal capacity of the filters here was 36 million gallons per day, divided into 42 units. In 1956, however, the capacity was increased to 46 million gallons. From the filters, the water

Above right: steam turbine pumping and generating units in Main Station, East St. Louis. Below right: pumping units at Edgemont Station. These units deliver water to storage tanks in Belleville to fulfill demands in areas of high elevation.



flows to clear water storage reservoirs having a total capacity of 5,250,000 gallons. Here, final chlorination takes place. Centrifugal pumps, connected to steam turbines, facilitate the flow into the distribution system. The installed pumping capacity is 85 million gallons per day. The size of the distribution pipes in the system ranges from two-inch to 36-inch lines.

The city of Belleville, and surrounding towns of Swansea, O'Fallon and Shiloh, and Scott Air Force Base, are located at a higher elevation than East St. Louis; thus, repumping is necessitated. This is accomplished at Edgemont Station.

Water flows from the East St. Louis system into large storage tanks, pumps take the water from storage and deliver it into three pipelines which extend to the distribution systems in the several areas served. Stabilization of pressure in Belleville is accomplished by two storage tanks of four million gallons capacity, and an elevated tank of one-half million gallon capacity. An automatic pump station located at the storage area draws water from the tanks and pumps it into the system when the need arises.

The East St. Louis and Interurban Water Company maintains the very latest in equipment and methods to assure a safe, adequate water supply. Their modern laboratory serves as a control center, where many tests are made and recorded each thirty minutes.

The company's transportation fleet consists of nearly forty trucks and cars. During the course of one year, this fleet travels in excess of 400,000 miles on service calls and construction assignments. Some of the units are equipped with two-way radios for increased efficiency.

The East St. Louis Purification Plant has recently received an addition. Four self-contained purification units were installed, utilizing the latest developments in purification plant design which mixes, coagulates, settles and filters water in one unit.

The development of the service rendered by the East St. Louis and Interurban Water Company—from a single pump on the bank of the river in 1885 to the modern, inte-

grated system of today — is typical of the growth of our nation during a similar period, and reflects the initiative of the waterworks industry as a whole.

The facilities presently serving the system consist of two raw water pumping plants, two complete purification and pumping plants, and three booster stations. In these plants are a total of 23 pumping units and 58 filtering units. In addition, basins, a number of tanks, boilers to generate steam, and much auxiliary equipment are required

to insure the preparation and continuous delivery of sufficient pure water through over 700 miles of pipelines.

While great progress has been made in the waterworks industry, river water has continued to present nearly insurmountable problems to those utilities forced to use such a supply source. The progress made by the East St. Louis and Interurban Water Company has been commendable in the face of these problems, and the company richly deserves recognition of its efforts.

Aerial view of Chouteau plant, where a 30-million-gallon pump elevates water ninety feet into the two storage tanks seen at the upper-right.



A joint checking account is never overdrawn by the wife—it is just underdeposited by the husband.

Inflation: When you take your money out in a shopping bag and bring home your purchases in your pocket.

You will live longer if you don't drink, smoke, gamble or stay out late. Anyway, it will seem a lot longer!

Business is like an automobile; the only way it will run by itself is downhill!

A young man had to rush his wife to the hospital, but they didn't quite make it in time. The baby was born on the lawn outside the hospital. In time, a bill came and among the items listed was one which read: "Delivery Room, \$35.00."

The new father indignantly returned the bill, pointing out the injustice and demanding an adjustment.

The bill came back with the following revision: "Greens Fee, \$35.00."

One morning before breakfast a woman was rummaging through her husband's desk and came across a card with "Helen Gray, Belmont 4421" written on it. When her husband came down to breakfast, she asked: "What's this card?"

"Don't worry about that," he said. "It's a horse I bet on."

"So Helen is a horse, eh?" she exclaimed. "And what is this telephone number?"

"That's Belmont Park, and the odds are forty-four to one. See?"

So he got away with that and went to work. That night, when he came home, his wife was waiting at the door.

"Hello, darling," he said gayly. "Did anything happen today?"

"Nothing," she said sweetly, "except that your damned horse called!"

A woman driver is a person who drives like a man — only she gets blamed for it.

It is wondered why the government is withdrawing two-dollar

Strictly

OFF THE RECORD

bills from circulation, just at a time when a two-dollar bill comes in so handy for buying a dollar's worth of groceries.

Good vacation advice: Every time you feel the need of exercise, lie down and rest until the feeling goes away.

Middle age: When you divide your time between worrying how your children will turn out and when they'll turn in.

A Princeton psychologist declares that men know more about women than vice versa. Much of what men know, however, consists of what the women told them, and probably isn't so.

This is the time of year when people load up their cars with children, relatives, the cat and dog, the radio, the T.V. — and take it all with them. This is that famed American institution known as "getting away from it all."

A cranky old man invested in one of the new hearing aids that are almost invisible. A few days later he returned to the point of purchase to express his delight.

"I'll bet your family likes it, too," said the salesman.

"Oh, they don't know I've got it," said the old man. "And am I having a ball! In the past two days I've changed my will twice."





Johnny, who had acquired the habit of using profane language quite extensively, was warned by his mother never to say such words again, or she would pack his clothes and turn him out.

Johnny promised his mother that he wouldn't but it was not very long until she heard him swear. She immediately packed his clothes and put him out of the house.

The boy stood on the steps for approximately an hour, while his mother watched him from the window. Finally, she opened the door and asked him why he did not leave. He replied as only a five-year-old can.

"I was wondering where the hell I'll go."

Did you hear about the first grade teacher who sent her morning attendance report to the principal marked, "Help! They're all here."?

Gent weeping copiously in his Scotch and soda: "For twenty wonderful years my wife and I were deliriously happy."

"Then what happened?" asked the bartender.

"We met!"

Husband-hunting is probably the only sport in which the animal that gets caught has to buy a license.

Today's teen-agers have adopted a new form of 3-R's—reeling, 'rithing and rhythematics.

I often try to argue with my wife, but every time I do, words flail me.

Reputation is character minus what you get caught at.

The lovely young model was looking very glum. "What's the matter, Tina?" asked the photographer.

"It's my boyfriend," said Tina. "He's lost all his money."

"Ah," said the photographer sympathetically. "And I bet you're sorry for him."

"Yes," said Tina wistfully. "He'll miss me."

SEPTEMBER • 1958



NOTICE TO POSTMASTER

If for any reason delivery is impossible please return promptly to sender.

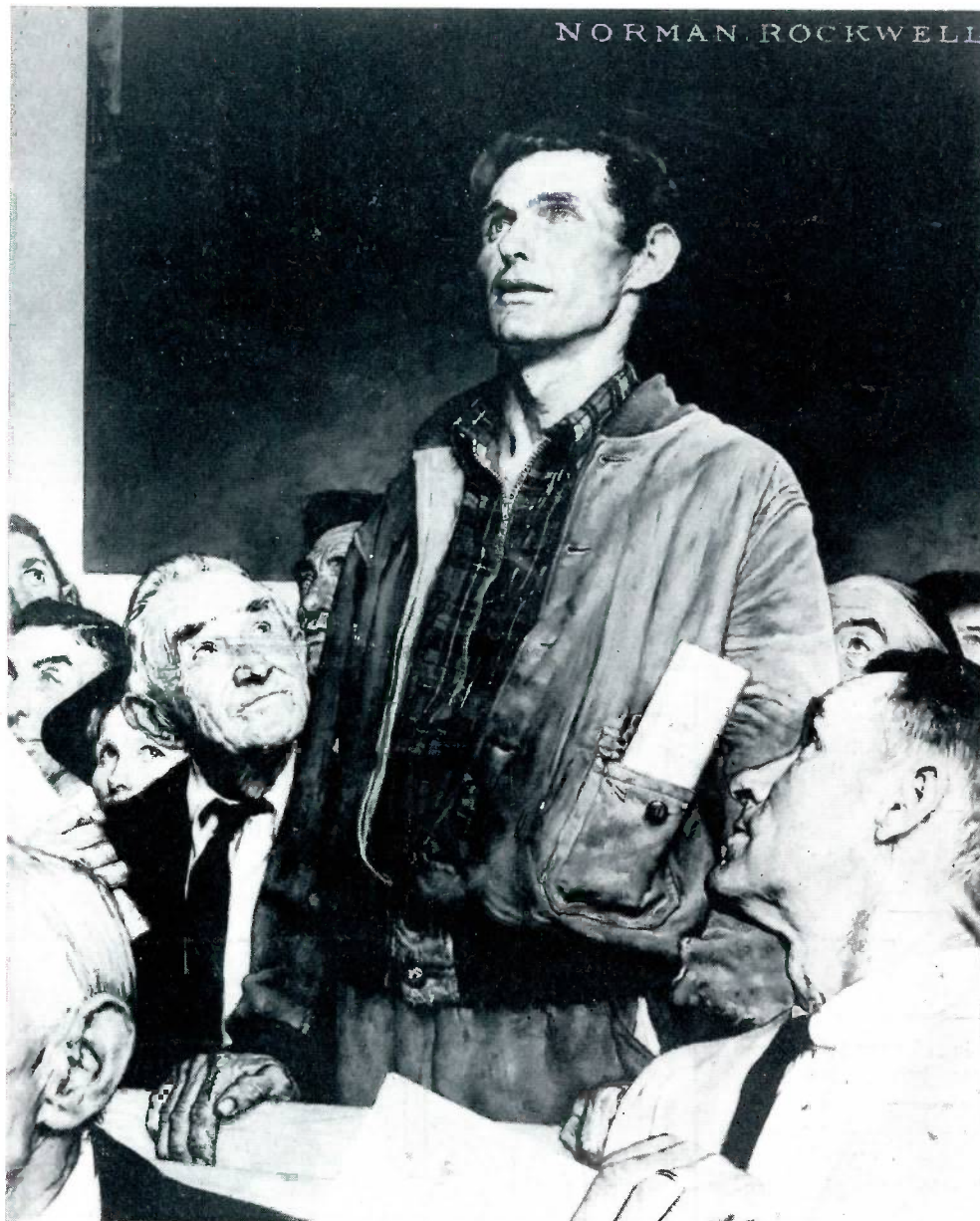
If forwarded to a new address, notify sender on FORM 3547. Postage for notice or return guaranteed.

MUELLER CO., DECATUR, ILLINOIS

BULK RATE
U. S. POSTAGE
PAID
DECATUR, ILLINOIS
Permit No. 1

MRS. WILLIAM E. MUELLER
380 SELBY LANE
ATHERTON, CALIF.

MF



Free speech is one of the many rights we enjoy in this blessed land. Protect them—both the right and the land—by investing in United States Savings Bonds today.