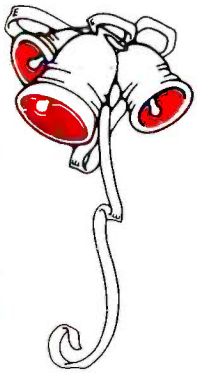
MUELLER RECORD

Vol. XXXIV NOVEMBER • 1947 • DECEMBER No. 3

Season's Greetings



IT IS with sincere pleasure that we again extend to our many friends and customers our best wishes for a most joyous holiday season. We hope that this Yuletide season will bring a re-affirmation of the spirit of the first Christmas: "... and on earth peace, good will toward men."

WE OF MUELLER CO. wish each and every one a very Merry Christmas; and, as the old year ends and a new approaches, we hope that all will enjoy in full measure a happy and prosperous 1948.

MUELLER RECORD

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November ● 1947 ● December
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GENE J. KUHN, Editor

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COVER
Harold M. Lambert Studios
Philadelphia, Pa.

Mostly Personal

PERHAPS IT WAS our recent sojourn to Amarillo by way of attending the convention of the Southwestern Section of the American Water Works Association that got us to thinking of the biggest this and the greatest that, for as anyone can plainly see, Texas is the largest state in the Union (and, in the considered opinion of any Texan, the *best).*

At any rate, in this issue of the *MUELLER RECORD* there are two articles on the world's largest—the world's largest gas field and the world's largest filtration plant. The Mueller Co. has a natural tie-up with the former, for it furnishes line stopper equipment to all the major pipeline companies operating out of the Hugoton gas field, which is located in parts of Kansas, Oklahoma and Texas, and, in addition, supplies the service connections for a high percentage of the consumers who ultimately use gas from the field. In the case of the world's largest filtration plant, Chicago's South District plant, the Mueller Co. was called upon to furnish all the sluice gates that went into its construction.

When we went through the South District Filtration Plant with Robert K. Levey, assistant sales manager of the Mueller Co., we were fortunate to have Carl Riggenbach, assistant engineer in Chicago's department of public works, as our guide. Mr. Riggenbach was assigned to the project at the start, and he knows every inch of the immense plant.

(Continued on Page 16)

LUCIEN W. MUELLER
Chairman
Board of Directors

ALBERT G. WEBBER, JR.
President

J. W. SIMPSON
Executive Vice-President

Name New Top Management Officers

THE ELECTION of Lucien W. Mueller as chairman of the board of directors of the Mueller Co., Albert G. Webber, Jr., as president and treasurer, and J. W. Simpson as executive vice-president was announced October 21 by the company's board of directors.

Mr. Mueller was formerly vice-president in charge of administrative and sales engineering, Mr. Webber was general counsel for the firm, and Mr. Simpson has been vice-president in charge of sales for the Mueller Co. All have been associated with the company for many years. No changes in company policies are contemplated.

Mr. Mueller, a son of the late Philip Mueller and a cousin of the late William E. Mueller, has been associated with the company since his early youth, when he followed the family custom of working at the plant during school vacations.

He received his mechanical engineering degree at Cornell University in 1917, and was commissioned a second lieutenant in Army Ordnance. At the end of World War I, he became permanently employed by the Mueller Co. as superintendent of the foundry division, during which time he instituted new metallurgical processes for casting metals used in the company's products. He then went to the general engineering department, where he designed new machinery and equipment for the shops and foundries, and was elected to the office of vice-president in charge of works management in 1928, in charge of all factory operations and personnel.

In 1933 he supervised the building and organized and put into operation the Los Angeles factory and during the same year, when the Mueller Co. acquired the Columbian Iron Works at Chattanooga, he supervised the rebuilding and reorganizing of the plant there. He continued as works manager in charge of the three Mueller Co. plants in the United States until 1944, when he was elected vice-president in charge of administrative and sales engineering.

Shortly after Pearl Harbor, the Mueller Co. began making munitions and he became assistant chairman of the Shell Industry Integration Committee of the Chicago Ordnance District, continuing in that post until after V-J Day. The research that led to the perfection of a special shell and the development of a new process for manufacturing shells were done at the Decatur plant during that time, such accomplishments winning the coveted Army-Navy "E" award in 1943.

Mr. Webber's association with the company officially began in 1934, when he was named assistant counsel for the Mueller Co. However, his father, who was first engaged as an attorney for the company in 1893 and who became general counsel in 1900, started with the company as an apprentice to Hieronymus Mueller, the company founder, in 1870. He later attended law school and was admitted to the bar.

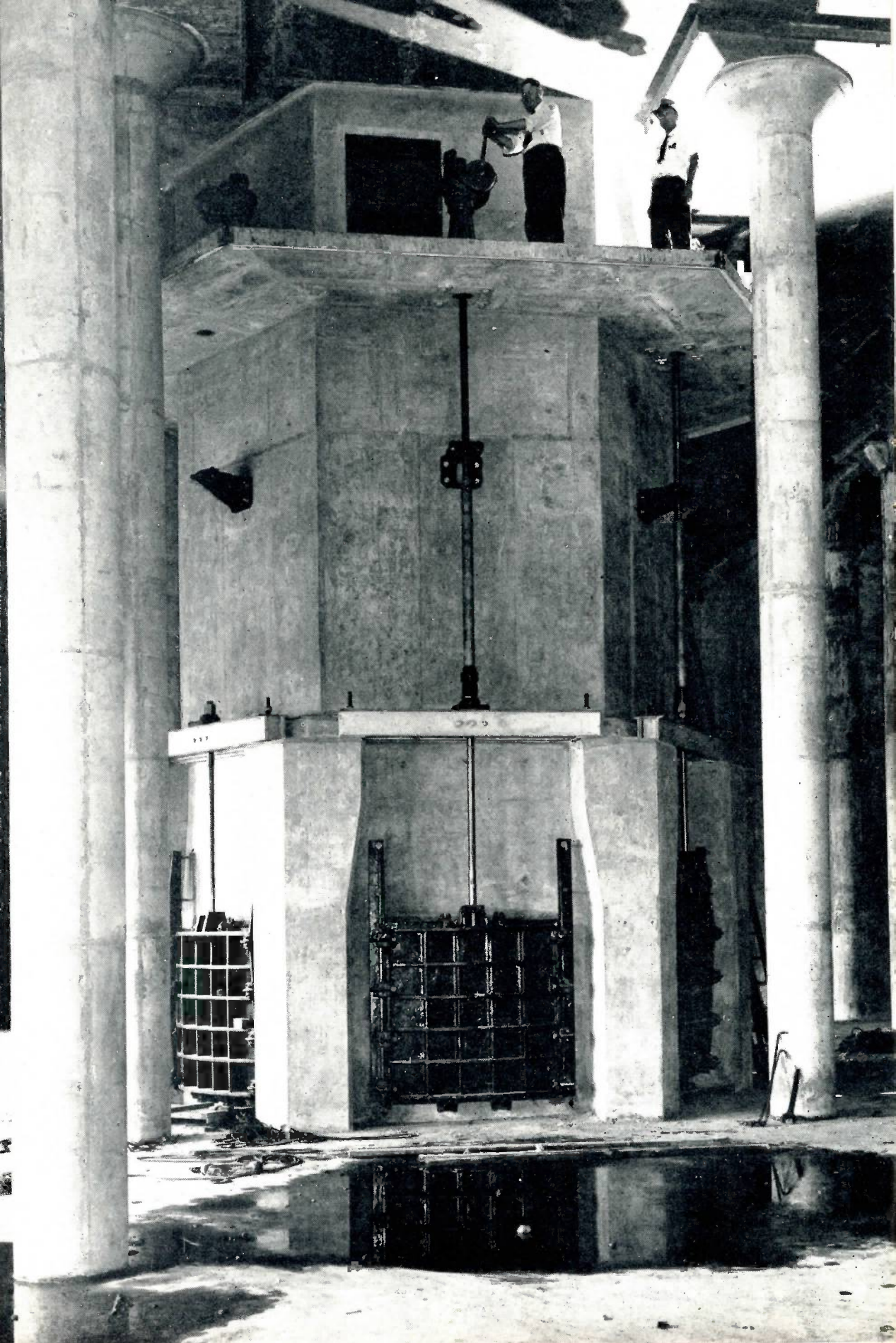
Mr. Webber served as a second class quartermaster in the Navy in World War I, from 1917 to 1919, following his graduation from the University of Illinois school of law, and upon his return from the service he began the practice of law with his father. He was elected to the board of directors in 1944.

Mr. Simpson started to work for the Mueller Co. as a messenger boy under Hieronymus Mueller in 1899. He received consecutively higher promotions until he was serving as assistant to the president, Adolph Mueller, when he was made general sales manager of the company in 1917.

He was elected to the company's board of directors in 1928, and became vice-president in charge of sales in 1929. He continued in the duel capacity of general sales manager and vice-president in charge of sales until the appointment of Hugh L. Baker as general sales manager July 15, 1947.

In his new office, Mr. Simpson will be in a position to lend his judgment to the general management of the business, and also carry out the general policies of the founder and succeeding members of the Mueller organization.

Other Mueller Co. officers are Otto C. Keil, secretary; Robert H. Mueller, chief engineer; Frank H. Mueller, research engineer; and W. H. Hipsher, assistant treasurer. Members of the board of directors are Mrs. Addie E. Mueller, Mrs. Leonore M. Staley, Robert H. Mueller, Lucien W. Mueller, J. W. Simpson, and Albert G. Webber, Jr.



Chicago's South District Filtration Plant

CHICAGO'S $24,000,000 South District Filtration Plant, which serves more than a million and a half persons in an area of 162 square miles, is now about 95 per cent completed, although it has been filtering all of the water used in the district since May, 1947.

Construction of the plant, the world's largest, was begun in 1938, but considerable delay has been experienced in completing the project due to the scarcity of building materials and mechanical equipment during and following the war. The plant was placed in partial operation on October 7, 1945, and the first of the plant's 80 filters went in service February 22, 1947.

The filters are of the rapid sand type, and each filter bed is 25.8 by 53.9 feet, with a sand area of 1,389 square feet. The nominal daily capacity of each is four million gallons, although the units are capable of being operated at a ten-million-gallon rate.

Based on the usual rating of two gallons per minute per square foot of filtering surface, the filter capacity of the plant is 320 million gallons a day. However, the filters are constructed to operate at a four-gallon rate, and water may be passed through the plant at a maximum rate of more than 600 million gallons a day.

During 1946, pumpage for the area served by the plant averaged 339 million gallons daily, and the rate on several hot summer days has been more than 500 million gallons a day for periods of a few hours. The plant serves approximately 53 per cent of the total area of Chicago, plus a suburban area of about fifty square miles.

Controlling the flow of water through the plant are 136 Mueller Co. cast iron sluice gates, which were manufactured at the company's Chattanooga factory. These gates, both motor and hand operated, were furnished in these sizes for the plant: 96x96 inches, 84x84 inches, 48x84 inches, 60x60 inches, 96x84 inches, 24x24 inches, 20x20 inches and 12x12 inches.

Two raw water intakes from Lake Michigan serve the plant. The Edward F. Dunne crib intake, located 3.2 miles off shore from the plant, serves the plant by means of a raw-water tunnel, and the other is the direct lake intake at the east end of the filtration plant.

The low-lift pumping station, which has a pump room 60 feet wide and 300 feet long and a substructure extending twenty-four feet below lake level, has been designed for nine pumps with a total capacity of 850 million gallons daily. The low-lift pumps at the east end of the building lift the water eighteen to twenty feet from the suction header to the raw water conduit, where it divides into three separate flows through the three mixing and settling basins. From the three settling basins, each of which is 138 feet wide and 500 feet long, the water passes to a common settled water header, and then to four settled water laterals which extend through the filter galleries to serve the filters.

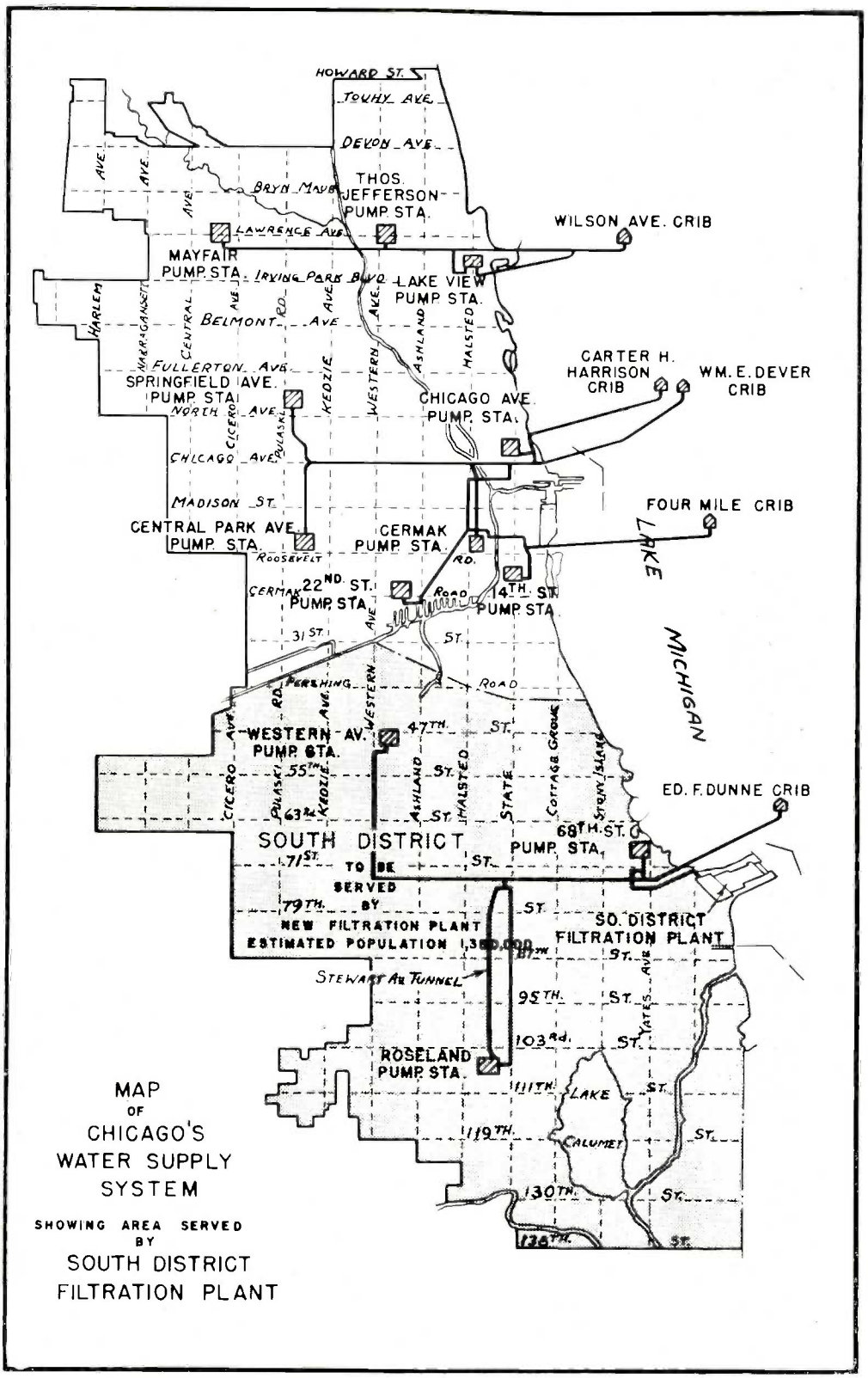
Th filtered water discharges into eight filtered water basins, located beneath the filters. These basins measure 53.3 feet by 320.2 feet, and have a combined capacity of 15 million gallons. Next, the water flows to the two main filtered water reservoirs at the west end of the plant, each of which is 280 by 450 feet, with a combined capacity of 32 million gallons. From the reservoirs the water flows by gravity through the outlet shaft to the southwest land tunnel system and thence to the pumping stations serving the South Water District.

In addition to the low-lift pumping station, three chemical mixing basins, three settling basins, 80 filters and the two filtered water reservoirs mentioned above, the South District Filtration Plant also includes a chemical building, laboratories, administration building, shops and a garage.

Although some difficulty was encountered in selecting a site for the plant, the site finally chosen permitted a layout that would enable water to flow through the plant in a straight line. The site in Lake Michigan, off Rainbow Park, also was a good selection, structurally speaking, for solid rock was only eighteen to twenty feet below the lake level at this location. The filling between the plant and the shore increased the size of Rainbow Park by 110 acres.

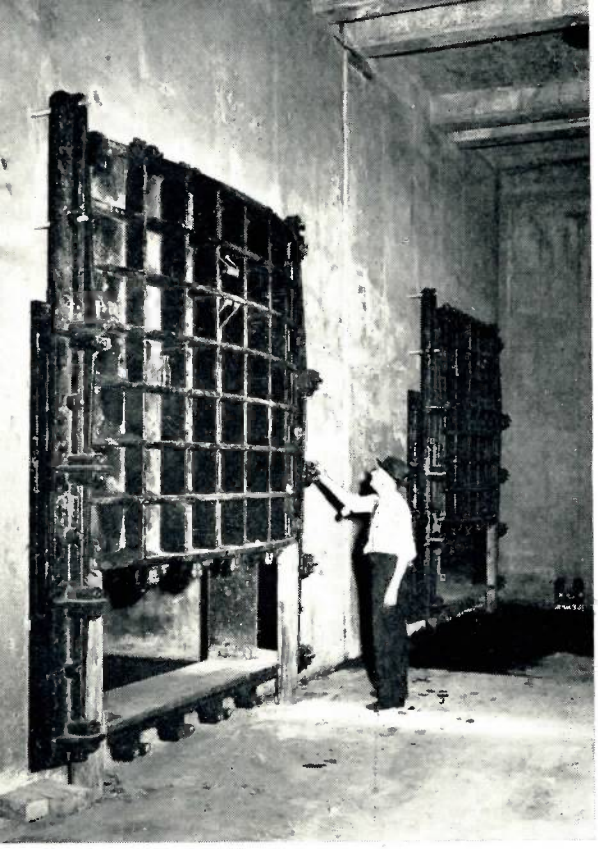
The complete assembly of a 60x60 inch sluice gate on one of the plant's three intake shafts is shown at the left.

This aerial view of Chicago's South District Filtration Plant only partially indicates the size of the project. The structures of the plant cover twenty acres, eight of which are in buildings extending above the finished ground level. Part of the 2,700-foot rock-fill breakwater, which protects the project from wave action, is shown in the upper part of the photograph. Below is the Edward F. Dunne crib, located 3.2 miles off shore, one of the plant's two raw water intakes.



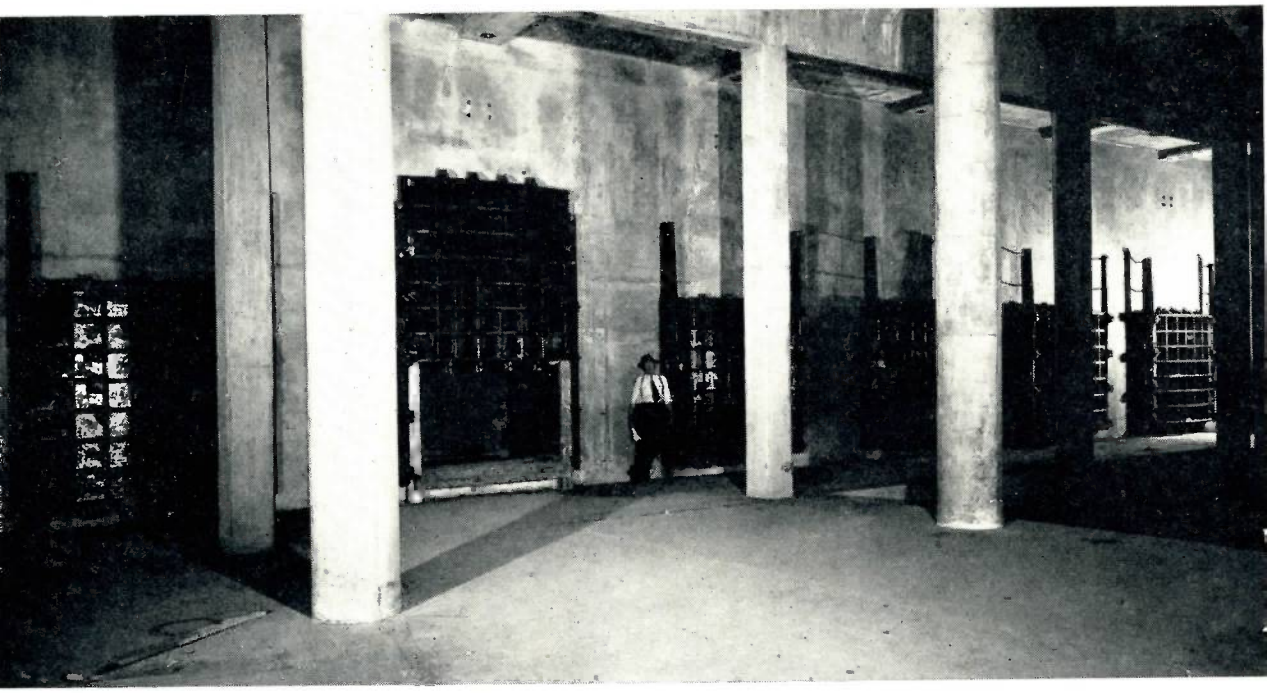
MAP
OF
CHICAGO'S
WATER SUPPLY
SYSTEM

SHOWING AREA SERVED
BY
SOUTH DISTRICT
FILTRATION PLANT



The discharge sluice gates from the filter units measure 96x84 inches. They were photographed from the clear-water header.

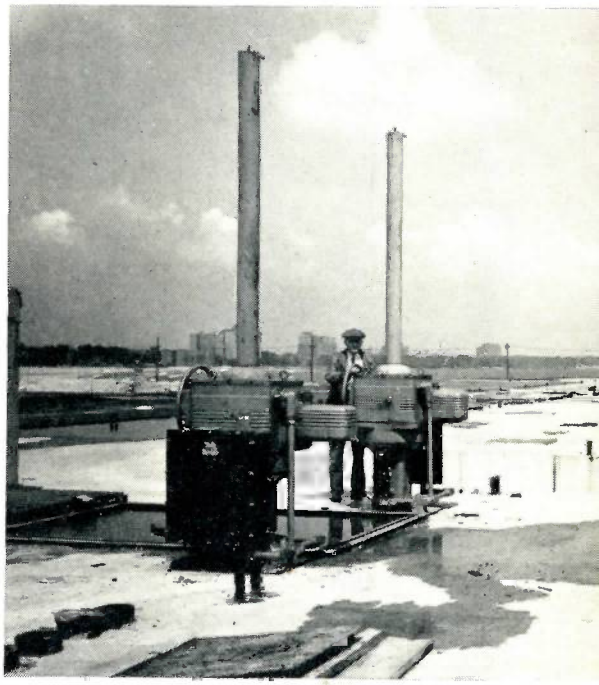
These are 60x60-inch discharge sluice gates from one of the three settling basins. The photograph was taken from the settled water header.



These 84x84-inch sluice gates control the flow of water between the clear water basin and the clear water header.

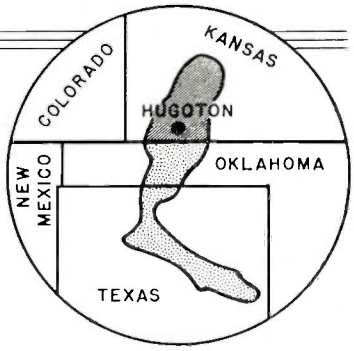
This construction photograph shows a battery of floor stands for the operation of 60x60-inch sluice gates from the settling basins.

This bank of floor stands is for the manual operation of the 84x84-inch discharge sluice gates from the clear water header.



Each of the two 401.7-foot raw-water conduits has a 96x96-inch motor-operated gate connecting to the meter chamber of each mixing basin.

World's Largest Natural Gas Field

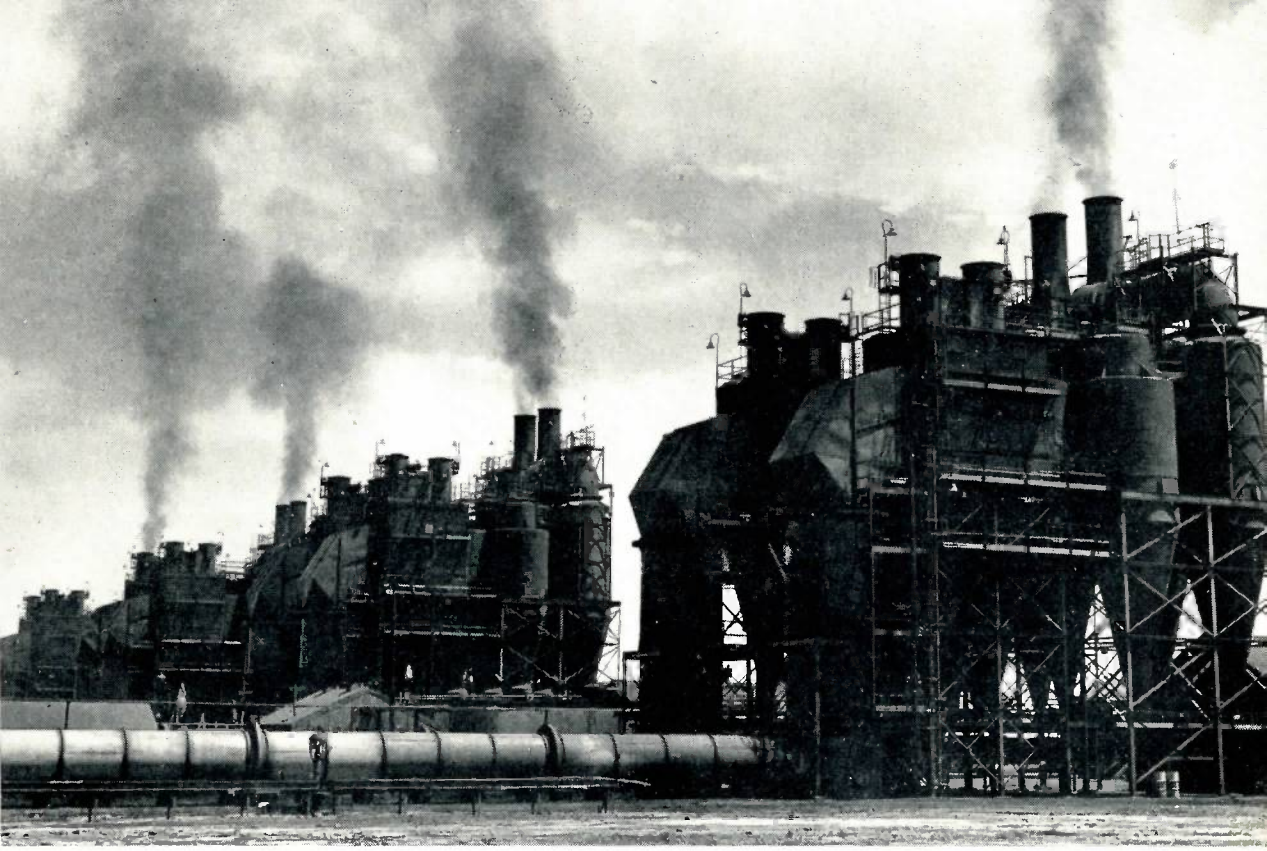


KANSAS, generally referred to as an agricultural state, is providing heat for homes, fuel for cooking, and energy which keeps the wheels of industry humming in nine other states. This immense supply of mineral fuel comes from the world's largest natural gas field, located near Hugoton in southwestern Kansas.

This vast gas area—the world's largest both in extent and in reserves—is twenty years old, and, although not completely drilled up to date, has produced nearly one trillion cubic feet of gas. Natural gas pipelines network the state, providing a cheap and dependable source of fuel to industrial and domestic users. Twenty-four inch pipelines also supply large portions of Colorado, Nebraska, Missouri, Iowa, Illinois, Indiana, Minnesota, Michigan and South Dakota.

It has been conservatively estimated that the gas reserve of the Hugoton pool—so named because the discovery well was within five miles of the city of Hugoton—is between twenty and twenty-five trillion cubic feet, of which thirteen trillion (13,000,000,000,000) cubic feet are located in Kansas. At four

One of the portable jacknife rigs, which have replaced the wooden rigs in the rich Hugoton gas field, is pictured here.



Carbon black is made by burning natural gas with an oxygen supply insufficient to allow complete combustion. Pictured above is a section of the carbon black plant near Ryus, Kansas, one of the largest of its kind in the world.

cents per thousand feet at the well, this represents a value of $520,000,000 to the state of Kansas, with a one-eighth royalty value of $65,000,000.

"Wheat, other agricultural products and livestock generally are looked upon as the principal source of income for southwestern Kansas," said Maurice E. Fager, director of the Kansas Industrial Development Commission. "But natural gas is becoming increasingly important as a chemical, as well as a fuel. While Kansas now has an annual production of approximately 150 billion cubic feet of gas, its value of some 50 million dollars represents but a small fraction of the potential worth which could be realized from chemical utilization. Millions of dollars will be spent in that section of Kansas in the next few months for new industries. A great industrial future is destined for southwestern Kansas, a development that may well challenge the leadership of agriculture in many of the counties."

Natural gas, and the other fuel minerals—oil, natural gasoline, and coal—constitute the largest cash crop from below the Kansas grass roots. Producing oil and gas wells are found over a wide area in 71 of the 105 counties, and active exploration is now under way in twenty other counties. The search for oil and gas always has stirred the ambitions of men. And while assured production continues, experimental drills also are discovering previously untapped sources of gas in reservoirs sufficient for many years to come. The present supply of natural gas is found at 2,800 feet, but recent new wells of 6,000 feet are believed to have tapped a second new field, under the present field, which may open new horizons in the Sunflower state.

The production and sale of natural gas has been one of the major industries of Kansas for the past half century. Commercial production first was developed in Miami County in the year 1860, and the availability of plentiful supplies of natural gas at shallow depths gave rise to the rapid development of eastern Kansas into the principal industrial area

of the state. The tremendous demand created by smelters, cement and brick plants, and lesser industries eventually depleted the eastern fields and new frontiers were sought. This exploration led to the sinking of the discovery well in the rich Hugoton field.

The assembling of acreage for the first well was begun early in 1926, when the late R. M. Crawford, large land holder, farmer, real estate operator and legislator, drove to Tulsa, Oklahoma, to interest some of the oil and gas companies there in exploring the county for oil and gas. That year 23,000 acres were leased, and on November 12, 1926, the first well was staked. The drilling contract was under the direction of W. M. McKnab and W. L. Sidwell, independent operators from Winfield, Kansas. Their drillers were George Buzzard and Jack Finch. The first gas showing was at about 1,700 feet. struck March 25, 1927. After this, interest picked up and the result was a great boom in leasing and its associated activities.

The Hugoton *Hermes* reported that on May 20, the thickest gas sand and pay strata ever to be discovered was between 2,620 feet and 2,730 feet. The flow of gas increased daily as the drill went deeper and deeper.

Then one day a major set-back occurred. The gas escaping from the wellhead caught fire about midnight on June 12. The heat was so intense that it appeared to be a giant blast furnace, and the derrick and all materials near it soon were reduced to blackened rubble.

The well burned for more than a week before it was extinguished. When drilling was resumed, pay dirt was struck at 1,700 feet and again at 2,600 feet, and the Hugoton gas field was born.

The fire had proved to be a beacon light by night and people came from far and near in the great southwest to see a sight they never had witnessed before. The fire seemed to inspire men to rapid growth in development. Leasing soon reached a frenzied pace. Drilling and pipe lining became a new activity in the county. Locations for wells spread over the county like water on a bathroom floor. There were no dry holes. Everyone began to wonder, "Just how extensive is this new gas field?"

Even today there are no dry holes in the Hugoton field, although a few boundary wells prove to be rather small. Today, there are approximately 1,500 gas wells producing from the field, and of this number, 817 are in Kansas. During the past two decades, with all of the further development in the field, Hugoton has remained in the center of the proven area.

More than 80,000 million cubic feet of gas was produced from the Hugoton field in 1945—62 per cent of the total gas production of Kansas for that year. This represents an amount sufficient to serve an average city of 15,000 population for 100 years at the present rate of utilization.

Gas throughout the Hugoton field is uniformly sweet and the British thermal unit content averages 1,000 to 1,025 per cubic foot. Gasoline content is reported to be about 0.4 gallon per 1,000 cubic feet.

Nearly all wells are drilled with rotary tools to the top of the first production zone where casing is set and cemented; a portable spudder is then moved in to drill through the producing formations and complete the well. No tubing is used as the wells make very little if any water and do not require frequent "blowing." An important part of the development of the Hugoton field is the equipment used. As in oil drilling, the original drilling rigs were of wooden construction hand built—a far cry from the jack knife portable rigs of today. A gas well in the Hugoton field now can be drilled to a total depth of approximately 2,800 feet in 10 to 15 days.

This great reserve of gas, and its low price, are commanding more and more the attention of industrialists, and many new industries are being attracted by this marvelous gas reserve.

Carbon black is made by burning natural gas with an oxygen supply insufficient to allow complete combustion. The most common method of production is the one that results in "channel black." Carbon black is used extensively in the rubber industry, and is also used in paints, inks, and polishes. Kansas has

three carbon black plants in the Hugoton gas field, one being the largest in the world.

During the war years, ammonia was produced from Kansas natural gas at a large government plant near Pittsburg. Today, that plant has been converted to peacetime production of ammonium nitrate fertilizer. Six dollars' worth of this fertilizer, when applied on land in western Kansas, increased the yield of sugar beets by $50 an acre.

The whole industrial structure of the United States has its foundation upon heavy chemicals, and compressed gases are generally considered as constituting heavy chemicals. There is a close relation between these materials and various industries such as petroleum refining, glass and ceramics, soap, leather, rubber, textiles, paper and pulp, dyes and dye products, paints and varnishes, vegetable and animal oils, explosives and plastics. These relations all show absolute dependence upon the heavy chemical industry.

The Kansas Industrial Development Commission has had a research project underway at the University of Kansas for some time, based on determining the various chemicals that can be taken from natural gas.

Gas production from the Hugoton field should show a marked increase, due to greater domestic and industrial demands, and the proposed erection of high synthenization plants in the area to produce gasoline and chemicals from natural gas.

With great natural resources present, and greater ones in prospect, and with a people in whom the pioneering spirit still persists and grows, southwestern Kansas seems assured of a bright future.

B. F. Kitchen to Retire After Forty-five Years

Robert H. Morris, Navy Vet, To Sales Territory

Robert H. Morris recently was assigned the sales territory of Georgia and Florida, succeeding Bert F. Kitchen, who will retire December 31 after more than forty-five years of service with the Mueller Co.

Mr. Morris was graduated from the University of Illinois in 1940 with a bachelor of science degree in commerce and law, and was associated with the firm of Gauger and Diehl, Decatur, certified public accountants, before reporting for active duty in the Navy in April, 1943.

He was commissioned with the rank of ensign and saw considerable combat duty as the navigation officer of an LST. He also served as operations officer at Southampton, England, during the time it was being bombarded by rocket bombs prior to the invasion of Normandy. He was a lieutenant at the time of his release to inactive duty in January, 1946.

Returning to Decatur, he again joined the firm of Gauger and Diehl, leaving to start his own business. He is married and the couple has three children, all girls. He will make his headquarters in Jacksonville, Florida.

Mr. Kitchen first started with the Mueller Co. on July 20, 1902, as a machine hand in the factory and with the exception of two months in 1904 he has been with the company continuously since then. He was promoted to foreman of the assembly department, and in 1921 he became one of the company's salesmen, a position he has held since.

Robert H. Morris

Off the . . Record . .

Critic: "That's an impressive statue, but isn't that an odd posture for a colonel to assume?"

Sculptor: "Yes, as a matter of fact, it is. But that isn't my fault I had the sculpture half way completed when the committee decided it couldn't afford a horse for him."

"O, King Solomon," the messenger breathlessly exclaimed, "five hundred women wait without."

"Without what?" the king inquired.

"Without food or raiment," the messenger replied.

"Feed 'em and bring 'em in," the king commanded.

An American resident in China remonstrated with her houseboy for taking her linen into her bedroom without knocking.

"That's all right, Missy," said the boy. "Every time come, lookee in keyhole. Nothing on, no come in."

Teacher: "How many sexes are there?"

Little Boy: "Three."

Teacher: "What are they?"

Little Boy: "The male sex, the female sex, and the insects."

Papa Bear: "Somebody's been drinking my whiskey."

Mama Bear: "Somebody's been drinking my gin."

Baby Bear: "Hic."

Two old maids were heading for California. Their train passed through an orange grove, where one of them noticed a sign.

"Did you ever?" exclaimed Harriet. "Look at that sign. It says 'Sunkist Navels.' "

"Dear me!" replied Mary, "this must be Hollywood."

Rose's are red,
Violet's are blue,
Lillie's are white.

I know because I saw them on the clothesline.

As he paid his bill, the departing hotel guest turned and shouted to a bellhop:

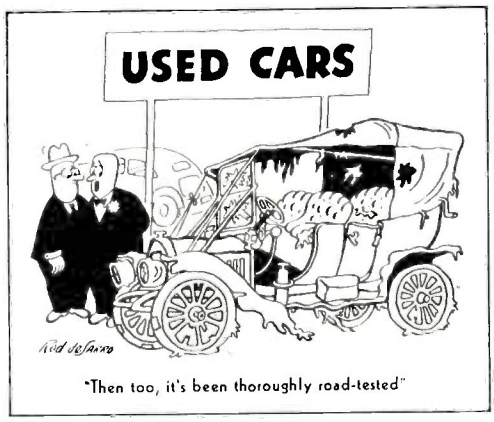
"Quick, boy, run up to 826 and see if I left my pajamas and razor up there. I've just six minutes to catch my train!"

Four minutes later the bellhop was back, all out of breath. "Yep, they're up there," he said.

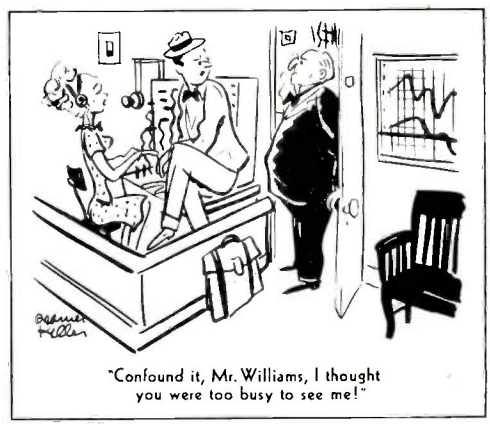
The only passenger in the elevator was a red-haired sailor. The pretty girl operator called: "Up! Up! Anybody going up? Please, won't somebody go up?"

Pat: "I'm Irish and proud of it."

Donald: "I'm Scotch and fond of it."



"Then too, it's been thoroughly road-tested"



"Confound it, Mr. Williams, I thought you were too busy to see me!"

Patrick O'Sullivan had overworked his elbow a little too much at the neighborhood tavern, and as he was walking down the street he came face to face with the parish priest.

"What have you been drinking, Patrick?" the priest demanded.

"Three Fathers, brother," Patrick solemnly confessed in a rich, bourbon brogue.

The portly Negro woman was the mother of fifteen children and was expecting the sixteenth. At a loss as to what name she would give the new arrival, she consulted the dictionary, and after much deliberation she decided to call the baby "Opium."

Speculation naturally arose as to the reason for this choice. When asked for an explanation, she replied:

"I looked in the dictionary, and there it was, 'Opium: from a wild poppy.' "

Two matrons were discussing a mutual friend.

"What's bothering Sally?" asked one. "She looks simply furious."

"Oh, she's trying to reduce and she just weighed herself on one of those scales with the new speaking attachment."

"But what happened?"

"Well, when she stepped on the scales, the voice said, 'One at a time, please.' "

Lady (holding a cookie above the dog): "Speak! Speak! Speak!"

Dog: "What'll I say?"

"Can't you even forget business while we take in a movie?"

"I just dropped in to tell you how much I benefited from your treatments," said the young man.

"You're no patient of mine," said the doctor, eyeing him sourly.

"No, but my uncle was."

Prosecutor: "Now tell the court how you came to take the car."

Defendant: "Well, the car was parked in front of the cemetery. So naturally I thought the owner was dead."

"How did you enjoy your trip south, Mrs. Gildpurse?"

"Not very well. Those damp airs gave me rheumatism."

"That's strange. The fruit didn't bother me."

First Old Maid (excitedly): "Oh, Agatha, I'm going out with a used car salesman."

Second O. M.: "What's the difference, as long as he's healthy?"

As one wire-haired terrier said to the other, "Heard from your beau lately?"

"Yes, indeed," was the reply. "I had a litter from him Tuesday."

Wife: "Well, what excuse have you for coming home at this hour of the night?"

Husband: "Well, my dear, I was just playing golf with some friends."

Wife: "What, at 2 a. m.?"

Husband: "Yes, we were using night clubs."

He: "It will be simple for us to marry, dear. My father's a minister."

She: "Okay, let's give it a try. Mine's a lawyer."

MOSTLY PERSONAL

(Continued from Page 1)

Still on the subject of size, we've cut this issue of the *MUELLER RECORD* to sixteen pages, exactly half the number we usually publish. By so doing in this particular issue we hope to cut down the amount of competition we ordinarily would furnish at this season with the Christmas mail. It will also enable us to conserve a dwindling stock of paper, which still is in short supply. But the next issue will have its full complement of pages.

* * *

The Southwestern Section convention was highly successful, we thought. Registration was high, the meetings interesting and well-attended, and Amarillo proved to be an excellent host city. One of the entertainment highlights of the convention was a barbecue at Mayor Lawrence R. Hagy's ranch, located, the

Mayor Lawrence R. Hagy, left, who was host to delegates at his ranch outside Amarillo, is shown with N. V. Moss, city manager.

map in the convention program said, twenty-six miles from Amarillo. The speedometer said more. However, we enjoyed the mayor's hospitality, so we won't quibble. An interesting sidelight of the convention was the announcement, which coincided with the closing day's sessions, of the acceptance by N. V. Moss of the job as Amarillo's city manager. Mr. Moss had been acting city manager since last year. He started with the city of Amarillo as a police clerk, and during the nineteen years he has been with the city he has worked in almost every department. He was at one time superintendent of the water department.

Since the appearance two issues ago of an article on the relationship of fluorine in water to dental decay, we've been having some interesting correspondence with Dr. Frederick S. McKay of Colorado Springs, who commenced the study of mottled enamel (dental fluorosis) back in 1908. It was also Doctor

Dr. Frederick S. McKay

McKay who called attention to the low decay rate in mottled teeth in 1925.

Now seventy-three years old, Doctor McKay is still engaged in active dental practice there, and he is still very active in establishing that a low decay rate is associated with the use of fluorine in water in childhood.

"Just last week," he wrote in his most recent letter, "I completed a survey of school children in a city in this state where the water had 1.4 parts per million of fluorine, and the over-all average of decayed teeth among the natives was 1.9—that is, the average number of decayed (or filled) teeth is 1.9 per person. The average in Madison (non-fluorine), Wisconsin, for eighth grade pupils is 9. The average for the same grade in the city just surveyed is 1.7."

* * *

Paul Trumbower, secretary of the borough of Hellertown, Pennsylvania, made the following complaint to his friend of long-standing, LeRoy J. Evans, New York, eastern sales manager, regarding an article on counterfeiting in the last issue:

"This article did not mean much, as I have no money, good or bad," he said.

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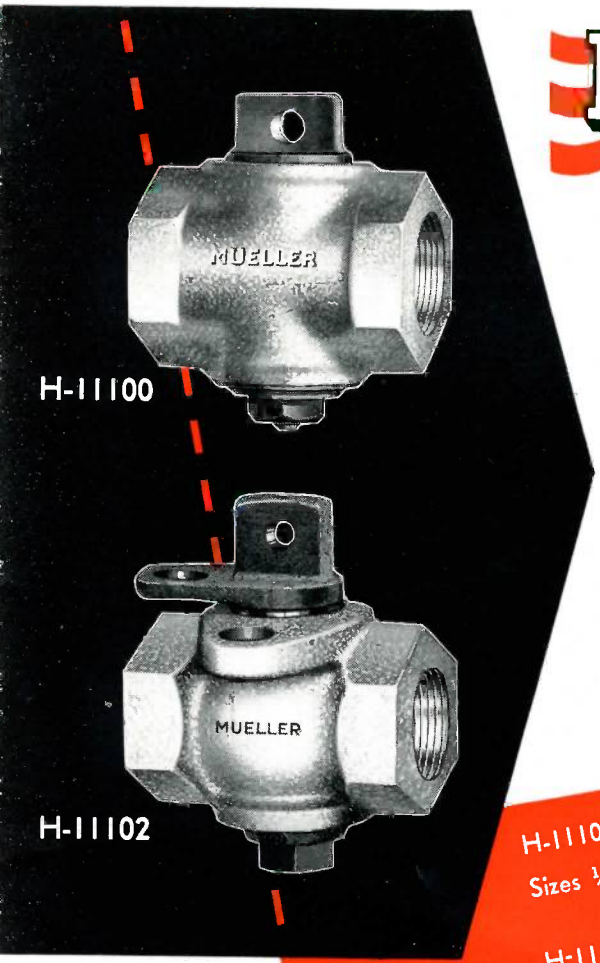
MUELLER IRON BODY GAS STOPS ARE HEAVILY GALVANIZED BY THE HOT DIP PROCESS



H-11100

H-11102

Mueller Co., employs every modern means to produce iron body gas stops which will give lasting service. The gray-iron body castings have heavy sections to give them maximum strength. These bodies are heavily galvanized by the HOT DIP process so as to provide protection even under the most corrosive soil conditions. (Also furnished in black.)

The high quality bronze key is accurately ground and lapped into its own particular body to assure easy turning and a leak-proof seal. Every stop is subjected to a high air pressure test while submerged in water. It is no wonder they last so long and give such solid satisfaction under severe service conditions.

H-11100 Flat Head Straight Way Stop.
Sizes ½" - ¾" - 1" - 1¼" - 1½" - 2" - 2½" - 3" - 4".

H-11102 Flat Head Straight Way Stop with Lock Wing.
Sizes ½" - ¾" - 1" - 1¼" - 1½" - 2" - 2½".

Many other styles and sizes are available. Order your requirements and we will gladly ship from stock.

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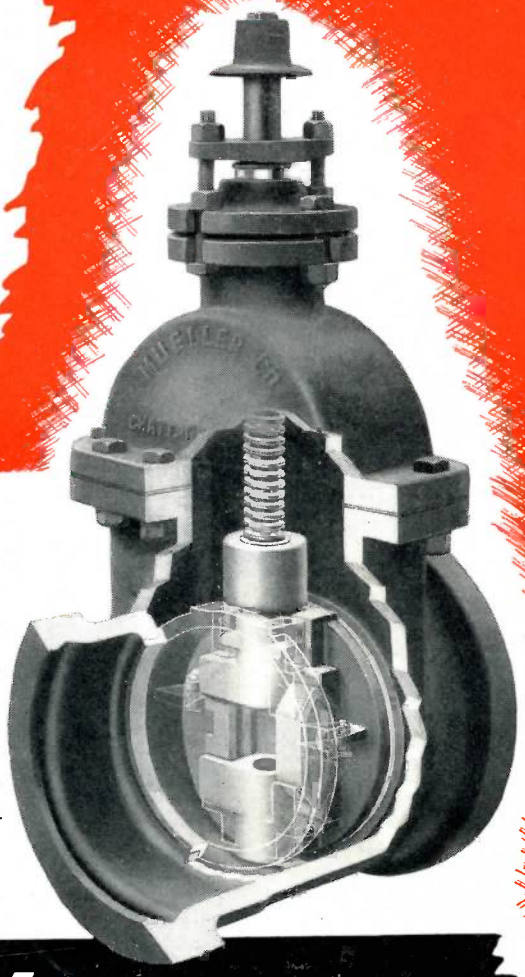

Mueller Gate Valves offer a low cost method of controlling water in a distribution system as they provide the means for a positive shut-off, are easily installed, and are adaptable to meet the demands of most operating conditions. They may have rising or non-rising stems, open either right or left, and due to their exclusive construction features, they will operate with equal efficiency when installed vertically or horizontally.

because 4 POINTS *insure it!*

The Gate Assembly contains the 4 POINT WEDGING MECHANISM. When the valve is closed, pressure is applied at 4 POINTS near the outer edges of the discs. This prevents warped or sprung discs and prevents any chance of leaking. Before you replace any old valves or install new ones, be sure you know all about this superior Mueller Gate Valve. Write us for full information.

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