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A.W.W.A. OFFICERS NOMINATED ... SEE PAGE 14

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February

Published by

MUELLER CO.

512 West Cerro Gordo Street, Decatur, Illinois

Editor: WALTER H. DYER

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

FACTORIES

Decatur, III. Chattanooga, Tenn.

Los Angeles, Calif. Sarnia, Ont., Canada

SALES OFFICES New York San Francisco

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Our Cover



WITH THE PATIENCE and knowledge that comes only after thirty years experience, Gerald R. St. Pierre skillfully assembles a Mueller B Tapping Machine.

Mr. St. Pierre, who observes his thirtieth year with Mueller Co. on March 19, has spent most of those years assembling the B machine. He has learned how to bring continuing quality to the product on which this company's very foundation is laid . . . the kind of quality that water works men have come to naturally expect from this 100-year-old firm.

Recording Our Thoughts

NEW LOOK FOR AN OLD MAGAZINE

1957

IT IS WITH mixed emotions that we launch the MUELLER REC-ORD on its 47th year as a company publication. This magazine has been calling on customers, employees, and friends since its founding in 1910, and for that reason, we hope you were somewhat startled when this issue arrived.

You see, to make use of a phrase coined a few years ago, the MUEL-LER RECORD has taken on a new look.

The emotional problem we mentioned is the result of desiring to publish a more attractive magazine in this easier to read, standard size, and yet we naturally hesitated to drop the familiarity of a magazine that has enjoyed 46 years of nearly continuous publication.

In the event you are reading the Record for the first time, it formerly was a two-column publication and was 63/4" by 10". The new format is 81/4" by 103/4".

The begining of our 100th year in business seemed like a good time to make the change. We hope you will continue to enjoy receiving Mueller Co.'s oldest "field representative."

From C. R. Cooper, Superintendent and Manager of the Paintsville (Kentucky) City Gas System and Paintsville Water Works, comes this note of humor in the midst of pain and pathos:

"Please send me your complete catalogs for gas and water material that you manufacture. We were completely wiped out of our office records this last week (just prior to February 3) by the largest flood in our history. I couldn't order a thing for the Paintsville City Gas System or Paintsville Water Works from your company as your catalogs went down the drain with the rest of our records.

"However, it didn't get the money we had in the bank so we are still very solvent!"

P.S. "It even washed my favorite fountain pen off."

MUELLER RECORD



This is a rear view of Whittier, California's beautiful new City Hall.

New City Hall Has Nodern Beauty WHEN ONE VISITS the newly erected City Hall in Whittier, California, he is struck by the modern beauty of not only the structure itself, but also its beautifully appointed interior and remarkably colorful and well landscaped ex-

Whittier, Calif., city officials believe attractive facilities have public relations value WHEN ONE VISITS the newly erected City Hall in Whittier, California, he is struck by the modern beauty of not only the structure itself, but also its beautifully appointed interior and remarkably colorful and well landscaped exterior and surroundings. This fine structure was dedicated June 23, 1955, after an expenditure of approximately \$1,000,000 for the property and building. One of its unique features is the main stairway in the foyer having no vertical supports.

(Continued on page 8)

WHITTIER, CALIF. . . .





THESE before and after views dramatically point up the remodeling job that has taken place within the Whittier Water Department. Above is the "before" view of the east side of Pumping Plant No. 2 and Well No. 7 before remodeling. At left is the same view after remodeling.

HERE'S how Whittier's Greenleaf Reservoir appears after ivy had grown to cover the embankment. Notice the dwelling adjacent to the pump house which blends in to make a neat and orderly scene.





AT right is the over-all view of Reservoirs 9, 10, and 11, having storage capacities of 500,000 gallons each for 9 and 10, and ten million gallons for 11.



BELOW, the pump house in which several Mueller 8" and 10" gate valves are installed.



A ten-inch A-2380-6 flanged Mueller Gate Valve, one of several at this installation.



KENNETH R. WARREN, Water Superintendent, stands at the front door of the Whittier's new city hall.



THIS view from Access Road leads to the small reservoir tanks at the top of the hill.



Mueller Co. Enters 100th Year

Company has grown from small gunsmith shop to five plants



ROM A 20' by 40' gunsmith shop near what is today the heart of downtown Decatur, Illinois, to a five-plant company that manufactures one of the most complete lines of water and gas distribution and service products available . . . that is the 100-year growth of Mueller Co.

The firm that was founded in 1857 by Hieronymous Mueller, a German immigrant with a fine inventive talent, has entered its 100th year.

Today, Mueller Co. is a multiplant organization with factories strategically located in Decatur, Chattanooga, Los Angeles, and Sarnia, Ontaria, Canada. Decatur, headquarters for the company, has two plants. Although the birth of the company is officially listed as September 7, 1857, Albert G. Webber, Jr., the fifth president in the company's history, said a number of special events and other means are being devised to observe the centennial.

A letter has been mailed to some 35,000 customers, employees, and friends announcing the start of the second century and pledging Mueller Co.'s leadership, manufacturing skill and tradition to help meet the challenge of the new century. A special advertising program was launched in January with advertisements in several national and regional water and gas trade journals and other national publications such as BUSINESS WEEK. Most of the special centennial ads will also appear in the MUELLER REC-ORD.

In looking back over the years, Mueller Co.'s growth is traced to the early days in the gunsmith shop where the company's founder was engaged in making guns, keys, repairing sewing machines, and other jobs that came his way.

The turning point in the company's future came in 1871 when Mr. Mueller was appointed plumber for the City of Decatur. That was the year Decatur approved a bond issue to establish a water works.

In those days, the city plumber made service connections from water mains to dwellings and businesses by drilling nearly through a main and inserting a "drive" cor-



AT RIGHT is the entrance to Mueller Co.'s main office in Decatur, Illinois. A part of the main office and executive offices are located on the second floor. Below is a part of Plant I's Manufacturing Division.



Hieronymus Mueller, who founded Mueller Co. in 1857 and served as the company's president until his death in 1900.

poration stop. The stop was secured in the main by a sharp blow with a sledge—providing the blow was accurate. If the stop missed its mark, the plumber became drenched as water flowed from the main.

This hit or miss method challenged Mr. Mueller to devise the Mueller tapping machine which enabled him to drill and tap the main under pressure and insert the corporation stop without loss of water. Mr. Mueller's machine revolutionized the method of making service connections under pressure and established the most successful principle known for machines of this kind.

From this first tapping machine, the company grew with the water industry. Following in the company

FEBRUARY • 1957

founder's footsteps were six sons who entered into the business and eventually became leaders of the firm. Two sons, Henry and Adolph, became presidents. Four sons rose to positions of vice president, and each was head of a division in the company. They are Phillip, Oscar, Fred and Robert.

Two members of the third generation are active in the company. They are Frank H. Mueller, vice president and director of engineering, and Ebert B. Mueller, who has been with Mueller, Limited, a subsidiary in Sarnia, Ontario, as a director and merchandising manager for a number of years.

Another third generation member lives in Decatur. He is Robert H. Mueller, chief engineer at the time of his retirement. Two other third generation members died in recent years. They are Lucien W. (Duke) Mueller, chairman of the board at the time of his death in 1953, and W. E. Mueller who was the company's president when he died in 1947.

Officers of the company today are Albert G. Webber, Jr., President and Treasurer; W. H. Hipsher, Executive Vice President; Leo Wiant, Administrative Vice President; Lyle R. Huff, Vice President and General Controller; Frank H. Mueller, Vice President and Director of Engineering; O. E. Walker, Vice President and Works Manager; LeRoy J. Evans, Vice President in charge of Eastern Sales; and C. H. Martin, Secretary.

WHITTIER, CALIF. . .

(Continued from page 3)

Many of Whittier's citizens are quite conscious of natural beauty and all city departments tend to give considerable thought to neatness and symentry in their operations. One of the more fervent proponents of this tendency is Kenneth R. Warren, water superintendent, who is also in charge of the street department.

Mr. Warren was appointed water superintendent in 1948 following the retirement of M. R. Boen. His preceeding 18 years with the water department in various capacities made him well qualified for the position. He is at present an active member of the American Public Works Association, American Water Works Association, National Association of Cost Accountants, and is a public accountant.

In his planning for the water and street departments, Mr. Warren works very closely with J. S. Sheetz, city engineer, and these two are largely responsible for many modern practices and methods now in practice in the City of Whittier.

The accompanying photographs, we think, illustrate reasonably well the policy of the water department to make and keep all of its facilities as neat and eye-appealing as possible. Such a practice not only adds to the overall beauty of the community but performs an excellent public relations function in that residents who inspect the neat buildings, beautifully landscaped reservoir sites, and neat, clean, pumping facilities, have real confidence in their city's government and appreciate the fact that their wishes for a tidy community are considered and understood.

On the other side of the ledger, Mr. Warren advises that the landscaping and maintenance of reservoir sites is a saving rather than a cost since it reduces fire hazard and does away with the expense of many man-days yearly that had previously been expended in periodic clearing of weeds from the property.

After the initial planting of ivy it was necessary to clear the bare spots of weeds four times during the growing period of approximately 18 months but now there is no maintenance necessary as no weeds can grow and watering is done automatically by a system that is operated by an electric clock controlling 12 control valves that actuate the various groups of sprinklers. Installation of the sprinkling system was done by water department personnel.

Reservoirs 9, 10, and 11 as well as several new wells, some 46,000 feet of water mains from six through 30 inches in size, and many other improvements have been installed with funds provided by a \$2.380,000.00 bond issue approved in 1953 by Whittier's citizens. A large number of Mueller gate valves including 16 inch and 18 inch valves were installed in the expanded system and a 10 inch flanged valve is illustrated doing its job in the picture spread. It is one of several at this installation. We are proud to have had a part in the growth and expansion of this modern water system.

The water department's interest by no means is confined to the appearance of its facilities but most certainly to their efficiency as evidenced by the following facts. In the past few years all 4 inch water mains have been replaced by 6 inch and this is the minimum size now installed in the system.

The system operates at three different elevations and all main reservoirs are equipped with altitude and water level control valves linked with a telemetering system which is completely automatic and includes indicators in the water superintendent's office showing water level at all eleven reservoirs, as well as at main booster stations for automatic control of booster and well pumps.

The needs of the civilian defense program are being considered as the entire system is valved so that any block in town can be isolated without effecting the water supply elsewhere. In the event of a major disaster, well and booster pumps can be operated with either gas or electricity as power.

All key personnel drive radio equipped cars or trucks and the main booster stations are also equipped.

Present storage capacity stands at 24,000,000 gallons in eleven reservoirs, to furnish approximately 6,000,000 gallons per day average use.

Marion B. Cooper Retires

AFTER 40 YEARS service to the City of Augusta, Georgia, Marion B. Cooper has retired as Superintendent of Canal and Water Works.

This engineer—water works official—and professional author of fiction stories and poetry is looking



MARION B. COOPER

forward to an envied retirement. Already the author of ten fiction stories plus some poetry, he will spend his time in Augusta rewriting stories for a New York publishing company.

As a water works man and engineer, he has had a varied career. He completed grade and high school in Augusta and later attended the University of Georgia.

Before becoming a city employee, he was a railroad supervisor for location and construction of railroads.

His positions with the city have included one year in the tax office, 18 years as the Assistant City Engineer and 21 years as Superintendent of Canal and Water Works.

He has been in charge of local planning for four Southeastern Section A.W.W.A. conventions held in Augusta in past years.

each day... 142 billion gallons of water

A hundred years ago, peddlers sold water for a penny a bucket from wagons in the streets. Today, modern, efficient water systems filter, purify and supply 142 billion gallons of water each day to consumers throughout the nation.

America's outstanding water industry has helped make this country a healthier, cleaner, better nation in which to live and work. For the outstanding progress in service and for an unfailing supply of pure, fresh water, Mueller Co. pays tribute to the vital water industry.



Serving 112,000,000

Today, 17,500 American water systems supply water to 112,000,000 homes and industries in the 48 states. An average of 154 gallons of water per person is used

each day for a thousand and one purposes in the average American home.

1



Ville

American Homes and Industries

Today's immense water industry is a far cry from the old oaken bucket of a hundred years ago. But a look backward reveals the remarkable growth and development in the field of water treatment and distribution.

The first public water system was in Boston in 1642; and, 150 years later, only 17 systems were in operation in America. In 1829, water for consumption was first treated, at Lynchburg, Virginia, by settling basins that removed silt from raw water. Fifty years elapsed before the first practical method of water treatment by coagulation, sedimentation and filtration was developed to improve the public water supply of Vicksburg, Mississippi.

Thus, the last 75 years have seen the development of the modern water industry and present-day methods of treatment and distribution.

It was previous to this period that Hieronymous Mueller founded Mueller Co. in 1857 at Decatur, Illinois. He was appointed city plumber of Decatur in 1871, charged with plumbing and adding new services to that city's mains. This led to his invention of the original Mueller tapping machine in 1872, improved models of which are now in use throughout the water industry.

Another milestone for water was the use of 42" metal pipe for service at Newark, New Jersey, in 1892. Wooden mains, the mainstay of early water works, were gradually replaced with long-lasting castiron pipe. Copper pipe, introduced to the industry in 1924, is now widely used to combat corrosion in water systems.

A major step, that guided the development and growth of the industry, was the formation of the

American Water Works Association in 1881. Professional water works men bonded together in an association where they could share experiences and work out common problems for the benefit of all. For 75 years, this organization, which now numbers 10,000 water works men, has led the growth and progress of the industry. Mueller Co. was one of the first five associate members, joining the organization a week after its formation.

The 656 meager water systems, supplying service to 10,000,000 consumers in 1880, multiplied to the modern network of 17,500 systems supplying 112,000,000 homes and industries today.

Electric power producers and industrial users are the largest consumers of water, each requiring 60 billion gallons daily. Individual consumers are least demanding, requiring only 17 billion gallons each day. Five and one-half billion gallons are consumed in rural areas. This tremendous volume portrays the great growth in the service of our water systems, which, just 70 years ago, provided only 40.9 billion gallons of water daily.

Water works construction has kept pace with the growing water need. During the past quarter century, 4,575 water systems greatly expanded their services and 16,000 new systems have been installed. Construction budgets generally have quadrupled, setting an all-time high in 1956 of about \$272,908,000, a 50 per cent increase over 1955's budget. This huge construction program is brought about by a number of major cities modernizing and enlarging their water distribution systems and by the increasing need for extensions of water service to new suburban areas.



What's ahead for Water?



Population and industrial growth indicate a probable 73 per cent increase in water usage during the next twenty years.

Daily usage is expected to reach a staggering 284 billion gallons by 1975, twice the present-day consumption! This increase is created by a population forecast of 206 million in 1975, and an anticipated 50 per cent jump in industrial usage.

Extensive expansion of the water industry is expected to continue, with new construction projects and increased budgets enabling the industry to provide a supply of water adequate for future needs.

New techniques may further aid in supplying water requirements. Replenishing ground water re-

sources by artificial means could store water underground with negligible loss through evaporation. Artificial induction of precipitation may help. Research, in processing sea water, could provide a new source of fresh water.

Yet, careful planning and allocation of water resources will be required to supply future development of the Nation. Additional water, from deep well sources, will help increase the supply. Efficient water systems, with modern facilities, and utilizing proper service equipment, will deliver water with minimum loss.

The tremendous progress of the water industry is ample proof of its ability to meet the challenge of the future,

MUELLER CO.

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



DECATUR, ILL.

Since 1857

John Schlight Dies Dec. 6



JOHN SCHLIGHT

JOHN SCHLICHT, Treasurer and General Supervisor of Purchasing and Construction for the Hackensack Water Company in Weehawken, New Jersey, died December 6 at the Hackensack Hospital as a result of a heart ailment.

He had served as treasurer of the company since his appointment to the position on November 1, 1947.

A native of North Bergen, New Jersey, Mr. Schlicht attended public schools in that community and lived in West New York and Hackensack before moving to Hillsdale seven years ago.

He was employed by the Hackensack Water Company on August 26, 1915, and advanced steadily up the company ladder. He was appointed Assistant Superintendent of the Pipe System February 23, 1926, and some two years later he also headed up the departments covering service repair and paving functions and service installations.

In 1928, Mr. Schlicht was named Superintendent of Construction. Ten years later, he was placed in charge of Purchasing, Stores and Transportation functions of the Company, in addition to his other duties, and for a short period he also directed the operations of the Meter Shop. His title was changed to General Superintendent of Construction and Service at this time.

Mr. Schlicht continued to exercise general supervision of the Construction, Purchasing, Stores and Transportation Departments following his appointment as Treasurer.

He was a Director and Treasurer of the Hackensack Mutual Savings and Loan Association and a life member of the American Water Works Association.

A Navy veteran of World War I, he is survived by his wife and two children, Patricia Joan, and Second Lt. Roger Schlicht of Fort Leonard Wood, Missouri.

INSTRUCTION NEEDED

The new maid had been instructed to bring her mistress a glass of water. She delivered the drink, carrying the glass in her hand. The mistress exploded, "Don't ever do that again. After this, put it on a tray."

The next morning the maid appeared with a tray and a worried look. "Excuse me, ma'am, but do I give you a spoon with this or do you just lap it up?"

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If it's true that women dress to express themselves, some have very little to say.



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Officers Nominated

Fred Merryfield is candidate for president; W. W., Brush retires, is named treasurer-emeritus

FRED MERRYFIELD, professor of sanitary engineering at Oregon State College and consulting engineer with the firm of Cornell, Howland, Hayes & Merryfield, has been nominated for the office of president of the American Water Works Association. He is currently the Association's Vice President.

His nomination along with those of other officers was made by the AWWA's Board of Directors at its annual meeting January 27-29 in New York. Awardees were determined and honorary members were elected along with other annual business.

The nominee for the office of Vice President is Lewis S. Finch, vice president and engineer of the Indianapolis Water Company. And for the first time since 1922 —excepting for two years while he took time out to serve as vice president and president—William W. Brush, retired editor of Water Works Engineering, is stepping down as treasurer. He is retiring at the age of 82 from a post he has held for 32 years. Mr. Brush has been elected Treasurer Emeritus, and becomes the second officer emeritus in the Association's history. The other was B. C. Little of Rochester, N. Y., who was elected Secretary Emeritus in 1936.

Nominated to succeed Mr. Brush is William J. Orchard, retired general manager of Wallace & Tiernan, Inc.

The new President-elect began his professional career in 1923 in



Following two years of service as a staff officer in the Southwest Pacific during World War II, Mr. Merryfield assumed his present position as professor of sanitary engineer at Oregon State College.

He has served on several committees dealing with stream purification and, when the State Water Resources Board of Oregon was formed, he was elected a member. He is also a member of the Willamette River Basin Committee.

Mr. Merryfield's professional activities include membership in the American Society of Civil Engineers, the Federation of Sewage and Industrial Wastes Associations, the American Society for Engineering Education, and the Pacific Northwest Sewage and Industrial Wastes Association, of which he was chairman.

A member of the American Water Works Association since 1934, he was secretary-treasurer of



FRED MERRYFIELD For President



LEWIS S. FINCH For Vice President



WILLIAM J. ORCHARD For Treasurer

MUELLER RECORD

the Association's Pacific Northwest Section for two 3-year terms and represented that section on the Association's Board of Directors from 1950 to 1953. In 1944 he received the Association's George Warren Fuller Award for his outstanding service to the field of public water supply.

Mr. Finch, nominee for vicepresident, received his degree in civil engineering from Purdue University in 1921, then served as senior engineer for the Milwaukee Sewerage Commission from 1923 to 1925. For eight years following this he served as chief engineer for the Indiana State Board of Health, a position which he held until 1933 when he became a consulting engineer specializing in water works and sewerage. In 1942 he began his association with the Indianapolis Water Company, employed as principal assistant engineer. He became chief engineer of the company in 1944, director in 1948, and vicepresident in 1950; he still maintains these three positions.

Mr. Finch is a former member of the Ohio River Board of Engineers, the Great Lakes Board of Engineers, the Advisory Board to the Indiana Administrative Building Council, and the Indiana Advisory Health Council. At present he is vice- chairman of the Indiana Stream Pollution Control Board.

Among his professional activities are the following: past-chairman of the District 9 Council of the American Society of Civil Engineers, past-president of the Indiana Engineering Council's Engineering Society, past-president of the Central States Sewage Works Association. past-director of the Federation of Sewage Works Association, president of the Indianapolis Construction League, and vice president of the Indianapolis Scientech Club. He is also a member of the American Society of Civil Engineers, the National Society of Professional Engineers and the Indianapolis Chamber of Commerce.

A member of the American Water Works Association since 1926, Mr. Finch was vice chairman and chairman of the Association's Indiana Section and represented that section as an Association director from 1952 to 1955. He is former



W. W. BRUSH Treasurer Emeritus

chairman of the Committee on Public Use of Watershed Areas, vice chairman of the Committee on Water Works Administration, and is the current chairman of the Committee on Water Main Extension Policies. In 1949 he was awarded the Indiana Section's George Warren Fuller Award.

Mr. Orchard, nominee for treasurer, began his engineering career with the Massachusetts State Board of Health and the Massachusetts Metropolitan Water Commission. He entered the employ of Wallace & Tiernan Company in 1915 and rose to the position of General Manager, which he held until his retirement in 1954. Since then he has been a director of the company and acts as consultant.

A resident of Maplewood, New Jersey, he has been active in his service to the community and the state of New Jersey. For about 25 years he has been chairman of a citizens' group, taking an active and nonpolitical part in helping to elect qualified candidates to public offices. He is president of the Clean Government Republicans, a policymaking group for the Republican Party in Essex County. A member of the Board of Directors of the Orange Memorial Hospital in New Jersey for 25 years, Orchard has served as chairman of the Board for much of that time. During World War II, he was chairman of the War Manpower Commission in the heavily industrialized area of Northern New Jersey. The success of this project was later cited by the federal government as an outstanding achievement.

He has been a member of the American Water Works Association since 1917, and his activities have included membership on many of the Association committees, four 3-year terms as a director of the Association, and the office of chairman of the Associations Finance Committee. In 1937 he was made an honorary member of the Association and he was awarded a John M. Diven Medal in 1954. He became the second recipient of the Harry E. Jordan Achievement Award in 1956, for his outstanding public service in activities beyond the requirements of his profession.

HONORARY MEMBERS

Four honorary members were elected. They are:

ALBERT E. BERRY, director of sanitary engineering for the Ontario Department of Health, Toronto, Ontario. He has been with the Department of Health since 1926 and a member of the American Water Works Association since 1920. He represented the Canadian Section on the Association's Board of Directors from 1937 to 1940 and was the Association's president in 1952. He received the George Warren Fuller Award in 1938, and the John M. Goodell Prize in 1950.

Mr. Berry's award citation described him as one "who is devoted to the advancement of engineered sanitation and whose leadership has been recognized by the Canadian members whom he has served for more than 25 years as Secretary. A gracious gentleman."

CHARLES H. CAPEN, recently retired chief engineer of the North Jersey District Water Supply Commission. Now considered a leading expert on water supply problems in the state of New Jersey, he began his professional career as assistant sanitary engineer for the New Jersey State Department of Health. In 1925 he joined the North Jersey District Water Supply Commission and became chief engineer there in 1942. He remained in that position until his recent retirement. In 1938 he served as chairman of the governor engineering committee to report on water supply for New Jersey and was in charge of an interconnection survey for the state's major water supply systems in 1949.

Mr. Capen has been a member of the Association since 1930 and served on many of the Association's committees. He was chairman of the New Jersey Section in 1941 and his achievements have earned him such recognition as the Section's George Warren Fuller Award, Cornell University's Fuertes Medal, and the Arc Welding Foundation James F. Lincoln Award.

The award citation described him as "one who has served competently and conscientiously in important engineering projects of great value to the users of the service provided."

S. LOGAN KERR, of S. Logan Kerr & Company, consulting engineers of Fluortown, Pa. A member of the Association since 1935, Mr. Kerr is internationally known in the public water supply field and allied professions as an expert on water hammer effect. He has served on several of the Associations committees on this subject and is now chairman of the Association's Special Task Committee to Study Allowances for Water Hammer.

His citation described him as "one who is internationally recognized for his superior competence in the field of hydromechanics. Ever willing to serve in widening the general understanding of difficult hydraulic problems."

45 Years Service

W. A. KUNIGK, recently retired superintendent and chief engineer for the Tacoma, Washington, Water System. Well known in the Northwest for his professional achievements, Mr. Kunigk began his long association with the Tacoma Water System in 1911, on a job which was to last only six weeks. He stayed with the organization for 45 years, however, retiring in 1956 as chief engineer. He helped to develop the Cushman Power Project for Tacoma and was closely associated with the Green River Gravity Supply System, both during its initial design and construction in 1911-1913 and during the later project of reconstructing

1952.

Mr. Kunigk's citation describes him as follows: "Of foreign birth, imbued with the true pioneer spirit of the Northwest, self educated, devoted to the advancement of sound engineering and service to his neighbors. A personality highly esteemed throughout the Pacific Northwest, whose competence as an engineer has been widely recognized by professional society."

and extending the system in 1924-

since 1924, he served as chairman

of the Pacific Northwest Section in

1928 and as an Association director from 1929 to 1932. In 1938 he was

awarded the Section's George War-

A member of the Association

ASSOCIATION AWARDS

The Association presented six awards this year. They were the John M. Diven Medal, the John M. Goodell Prize, and the four Division Awards.

THE JOHN M. DIVEN MEDAL is awarded each year for outstanding service to the Association and to the public water supply field. It was presented this year to John H. Murdoch Jr., who retired this month as vice president and counsel for the American Water Works Service Company of Philadelphia. He continues as consultant for the organization, however, and as a director of some of its subsidiaries.

Mr. Murdoch is a graduate of Washington and Jefferson College, and studied law in the office of his father at Washington, Pennsylvania. He became a director of the Citizen's Water Company in that city in 1917 and remained with the organization through the subsequent changes which led to its present position as a member utility in the group controlled by the American Water Works Company. He has been a member of the Association since 1928 and was elected an honorary member in 1950. Last year he received the Management Division Award for his article on the water works profession as a career, which appeared in the December 1954 issue of the Association's JOURNAL.

THE JOHN M. GOODELL PRIZE is awarded annually to the member who has made the most notable contribution to the science or practice of water works development, usually as recorded in the form of a paper published in the JOURNAL. It was presented this year to Thurston E. Larson, Head of the Illinois State Water Survey's Chemistry Subdivision, for his article "Report on Loss in Carrying Capacity of Water Mains," which was published in the November, 1955 issue of the JOURNAL.

Each of the Association's four functional divisions—water works management, distribution, purification, and resources—presents a Division Award each year to the best JOURNAL article in the field of interest which the division represents.

THE DISTRIBUTION DIVISION AWARD went to Jack W. McKay for his article "Development and use of Specifications for Cast-Iron Pressure Pipe and Fittings," which appeared in the July 1956 JOUR-NAL. Mr. McKay is vice president of the American Cast Iron Pipe Company, of Birmingham, Ala.

THE WATER WORKS MAN-AGEMENT DIVISION AWARD was presented to Louis R. Howson for the article "Rates, Revenues, and Rising Costs," which appeared in the May, 1956 issue of the JOUR-NAL. Mr. Howson is a partner in the engineering firm of Alvord, Burdick & Howson, of Chicago, and is currently chairman of the Association's Water Works Practice Committee. A member of the Association since 1916 and an honorary member since 1948, Mr. Howson has served as president, trustee and national director of the Association. He has received several awards, including the John M. Diven Medal and the George Warren Fuller Award.

THE WATER PURIFICATION DIVISION AWARD was presented to John R. Baylis, water purification engineer for the Chicago Department of Water and Sewage, for his article "Seven Years of High-Rate Filtration," which was published in May 1956 JOURNAL. A member of the Association since 1915, and elected an honorary member in 1946, Mr. Baylis has received the Illinois Section's George Warren Fuller Award and the John M. Goodell Prize.

THE WATER RESOURCES DI-VISION AWARD went to Warren J. Kaufman and Gerald T. Orlob, co-authors of the article "Measuring Ground Water Movement with Radioactive and Chemical Tracers," which appeared in the May 1956 issue of the JOURNAL. Mr. Kaufman and Mr. Orlob are on the faculty of the University of California at Berkeley, where Mr. Kaufman is a professor in the Department of Engineering and School of Public Health, and Mr. Orlob is an assistant professor of Civil Engineering.

SCHOLARSHIP AWARDS

The \$1,500 Harry E. Jordan Scholarship Award was presented to two students this year. Herbert Henry Hassis, of Jeffersonville, New York, a senior at Clarkson College, Potsdam, New York, received \$1,000 to begin graduate work in the field of sanitary engineering. A \$500 scholarship went to Wilbert H. Schilmmeyer of Dunellen, New Jersey, who will continue graduate work in sanitary engineering at Rutgers University.

Honoring Wendell R. LaDue Series of Safety Awards Established

A T THE ANNUAL meeting of its Board of Directors, the American Water Works Association established a series of safety awards, which it named in honor of Wendell R. LaDue, superintendent and chief engineer of the Akron, Ohio, Bureau of Water Supply. The awards are intended to encourage safety practices in public water utilities throughout the country and, thus, carry forward the program that was initiated with the development of the AWWA Safety Practices Manual last March.

The new award plan is divided into two parts, one based on activities within the Association's regional sections, and the other giving Association-wide recognition for safety achievements. Because member utilities vary in size from those employing only one staff member to those with 3,500 employees, the section safety award plan consists of three awards: the Award of Honor, the Award of Merit, and the Award of Progress.

Utilities will be eligible for the Award of Progress by demonstrating a prescribed percentage reduction over the previous year's injury frequency rate. To make the competition fair, percentage reductions vary with the size of the utility. For a utility with fewer than 10 employees, a reduction of 50 percent or more is required; for a utility with 10 to 100 employees, a reduction of 30 per cent or more is required; and for utilities with more than 100 employees, a reduction of 20 per cent or more is required.

The Award of Merit was established for utilities which employ fewer than 50 people and is award-



WENDELL R. LADUE

ed to utilities of that size which have had no lost-time injuries during the year. It serves as an interim award and offers a basis for presentation of the Award of Honor, which is the top award.

Basically, the Award of Honor is presented to utilities which attain a frequency rate of 10 or less. Because such a frequency rate would be no great achievement for the smaller utilities, however, their Award of Honor is presented on the basis of the number of Merit Awards earned. A utility employing 1 to 9 employees receives an Award of Honor when it has earned five Awards of Merit; a utility with 10 to 19 employees must have four Awards of Merit; a utility with 20 to 29 employees must have three Awards of Merit; a utility with 30 to 39 employees, two Awards of Merit; and a utility with 40 to 49 employees, one Award of Merit. For utilities employing more than 50 people, the Award of Honor is attained by a frequency rate of 10 or less.

The Association awards for safety will be awarded only to sections awardees, and only three such awards will be presented each year. The award committee has yet to determine the exact criteria by which the awardees will be determined, but the member utilities will again be classified according to size: Those employing fewer than 10 people; those employing 10 to 100 people; and those employing more than 100 people. One award will be presented in each class annually.

Wendell R. LaDue, in whose honor the awards were named, has been instrumental in making the water works field safety conscious through his leadership in the development of the Association's present safety program. A member of the Association since 1934, La-Due served as the Association's president in 1947 and is now chairman of the Committee on Water Works Administration and a member of the Board of Directors. He has been active in the development of Akron's successful and widely recognized municipal safety program and has received several awards from the Association for his outstanding work in the field of public water supply. It was because of these many achievements that the Association named the new awards in his honor.

Curb Stone Reflections

Newspaper reporter tells in layman language the simplicity of making an inserting

valve installation

(Editor's Note: The following story was written by a reporter on the staff of the MILFORD CABINET PRESS, Milford, New Hampshire, and concerns the simplicity with which an inserting valve installation can be accomplished. Although the trained water works man may have to read with a "tongue in cheek" attitude, due to the layman's language, we nonetheless believe that the writer's curb stone observations make worthy reading).

UNDER EVERY CITY lies a network of pipes to carry water into houses, to carry wastes from houses, to drain the streets, to provide fire protection. Milford, New Hampshire is no different. Part of the responsibility of the Public Works Department is to keep those pipes in working order and to make sure that they are operating efficiently and well.

Water mains travel along most of Milford's streets, at a depth of about six feet. Occasionally those mains develop leaks: then they must be shut off and repaired. Occasionally, too, new houses are built which require water service. Then the mains must be shut off and the new entry line put into the main. Because of the need to shut off the water from time to time, there are at many street corners, far under the street, gate valves, which be hand operation can be opened or closed.

Street Resurfaced

Recently Union Street was resurfaced. In connection with the job, done by a local contractor, the Public Works Department replaced many of the gate valves along the street's water mains. The reason? Many of the valves, quite old now, were not functioning properly. Some were jammed, some were broken, some were ready to break the next time a shutoff was attempted. The valve at the corner of Elm Street and Union Street was in particularly bad condition, and only with special care (reported in a Cabinet and Journal some weeks ago) was it closed satisfactorily when the need arose in recent weeks.

Valves Replaced

There was a time, not long ago, when to replace a water main valve, the water had to be shut off from the main, the pipes severed, and the new valve put in. This required the shutting off of water service from all the houses down main from the valve, and was an involved process. Nowadays valves can be placed in a water main. The operation was devised by Mueller Co. in Decatur, Illinois. Some larger cities have their own equipment to perform the operation. Many small cities and towns in New England, however, call on the Warren Company in Framingham, Mass., to do it for them. They were until recently the only group in New England which had the equipment to replace valves in live mains. Now a man in Marlboro, Mass., has purchased the equipment and has gone into the business, but has yet to make a major installation.

Milford has called on the Warren company several times lately. Four gate valves have been replaced along Union Street by the company. The outside firm was called in when the Public Works Department decided that other methods would not work well. (Among them, the attempted freezing of the line, using dry ice, when a line had to be worked on and the valve would not work).

A couple of weeks ago the Warren Company using two men, put a valve in the Willow Stret branch of the Union Street main in about four hours. We visited the scene from time to time, and found it a little hard to break away. The process began about 9 a.m., when the Public Works payloader began excavating the place where the valve was to be placed. A hole about eight feet long, five feet wide, and seven feet deep, was dug, the gravelly earth loaded onto town trucks and hauled to the town barn for out of the way storage until it should be replaced in the hole when the job was done.

The hole was finished about 10 a.m., and left the Willow Street water line well exposed. Then the Warren men wire-brushed the iron pipe clean at the point where the valve was to be, and, by means of a small crane on the back of their truck lowered a heavy casting into the hole which was fitted around the water pipe, tightened by bolts, and then leaded to the pipe. The casting was the casting for the valve. The casting was in place by 11 a.m.

Metal Gadget

Then, a heavy metal gadget that looked like a gigantic lozenge-box, round on both ends, thin, perhaps a foot wide was lowered into the hole. This was bolted to the top of the casting fixed to the pipe, and was a slide valve which would hold back the water from the main when the main was cut to make way for the valve. Then a long conning-tower kind of thing like a huge chessman, was lowered into the hole, and bolted to the slide valve. That was the boring mechanism, which soon was put into use.

First the slide valve was opened, the the boring mechanism lowered (inside its water-tight tube) to contact with the water main. Then the boring mechanism was hooked up to a gasoline engine, and the engine started. Onlookers were told that inside the conning tower, the bit was cutting into the water main, that soon a very small hole would be made, and then a hole large enough for the valve would be cut.

When the hole was cut, (the operators knew it was through the pipe when the cutter met no further resistance), the boring unit was withdrawn again into its conning housing, the slide valve closed, and the conning tower removed from the top of the slide valve housing. On the street level, a box about eight inches square and two feet high was broken open, revealing the new valve which now must be placed in the hole in the pipe, which, onlookers were assured, was just the right size for Willow Street's four-inch main, even though no one could see it to test it, because "the machine does things right." That was about 12:15 p.m.

Valve Inserted

The valve was inserted into a new conning-tower, and the assem-

bly was lowered into the pit and bolted to the slide valve. The slide valve was pulled back (filling the conning tower with water, inundating the valve, all according to plan) and, in a process no eye could see, the valve was lowered into place in the Willow Street main. What next occurred we cannot tell, for it was time to get back to the Cabinet Press and get a 14-page paper distributed, but we presume that once the valve was in place the conning-tower was drained and removed, the slide valve was unbolted and loaded onto the truck, and the valve apparently having been screwed into place. was leaded to the casting which had first been placed on the pipe. For when we returned a little later the valve and its housing shined prettily in the sun. The town-trucks were on their way to fill in the hole, leaving only a turn-off-tube through

which the new valve might be operated from street level. The Warren Company truck had started on its way back to Framingham, Mass., and water service had not been interrupted a minute. It was then about 2 p.m.

Today there is an untarred hole marking the place at the corner of Willow Street and Union Street where the new valve rests, six feet under the street, ready for the next emergency. Down and up street the water courses, into bathrooms and kitchens and outside spigots. Faces are washed, water is drawn for cooking, and when summer comes lawns will be watered and cars laundered, so it will be without interruption for some time to come -all because of a process which, if a person had not seen it (or read this) he might not have known had occurred at all.-A. H.

How's That Dept.?



An employee of the water department in a large Southeastern metropolitan district came across this sign recently. It was placed there by a construction laborer for a housing developer. Mueller Southeastern Sales Manager A. D. Parks and Sales Representative R. C. Sponsler saw the sign in the office of one of our customers and asked that it be sent to the Mueller Record for publication.

RoyAbel Heads Decatur Factories

ROY ABEL, WHO joined Mueller Co. in December, 1955, as Assistant to O. E. Walker, Vice President and Works Manager, has been appointed Decatur Factory Manager. Mr. Walker, when announcing the promotion, said Mr. Abel will be in charge of factory operations at both Plant I and Plant 4.

Before joining the 100-year old company, Mr. Abel served as a consultant for Mueller, Limited, a subsidiary of Mueller Co. at Sarnia, Ontario, Canada.

He was graduated from Ohio State University in 1943 with a degree of Bachelor of Industrial Engineering and joined the Firestone Tire and Rubber Company after graduation. He was with Firestone until he entered the Navy as an Ensign during World War II.

Mr. Abel became a field representative for the James F. Lincoln Arc Welding Foundation of Cleveland, Ohio, in October, 1946, and in April, 1947, he was employed as a Methods Engineer for the Lincoln Electric Co. in Cleveland. He later was named an assistant to the President of Wagner Awning and Manufacturing Co.



ROY ABEL

Mr. Abel is a member of the American Institute of Industrial Engineers, the Institute of Management Science, the Illinois State Chamber of Commerce and the Decatur Association of Commerce.

Men who claim they "sleep like a baby" probably don't have one.

LONG IDENTIFIED with water service to the City of Cincinnati, Ohio, to other municipalities in the area, and to industrial users, the Byrnes Conway Company of Cincinnati is now ready to specialize in the rapid installation of inserting valves.

The company, which in recent years has had the contract to do all water service work for the City of Cincinnati, has purchased Mueller Inserting Valve Equipment, and now can insert valves without a shutdown of service or loss of water.

The purchase consists of special H-810 equipment for 4", 6", and 8" mains for installing Mueller H-800 inserting valves. Byrnes Conway Company already owned a Mueller C-1 power-operated drilling machine, one of two machines adapted for use with the H-810 equipment. The hand-operated CC-1 machine also is used with the H-810 equipment.

In addition to serving the City of Cincinnati, Byrnes Conway Company also maintains a water branch installation service and a service for emergency calls on a 24-hour basis that is available to water plants ranging from the milliondollar variety down to the small village in Cincinnati's Tri-State area.

TWO RECENT assignments successfully carried out by the Byrnes Conway Company took place in the Village of New Richmond, Ohio, and in Wyoming, Ohio. These three pictures show workmen in action with their new

In Cincinnati, Ohio

Byrnes Conway Expands Service



Mueller valve inserting equipment. A total of eighteen valves were installed in renovating the New Richmond system.



MUELLER RECORD