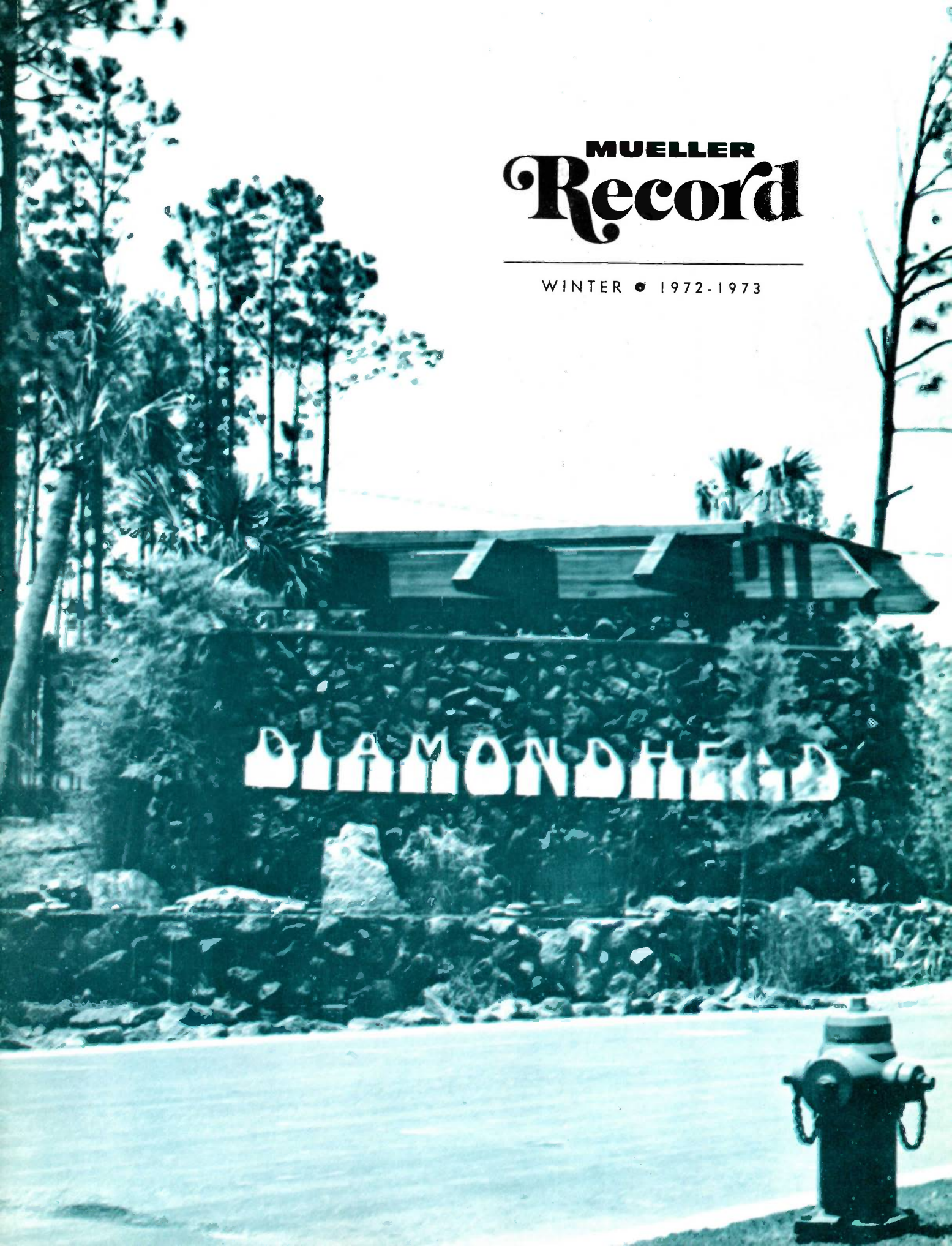

MUELLER Record

WINTER • 1972-1973

MUELLER Record

WINTER • 1972-1973

Contents

OUR COVER displays the striking Polynesian atmosphere of Diamondhead's entrance with its dark volcanic "lava" rock imported from the islands and lush tropical foliage. This gateway leads to the 6,000-acre planned residential community, under development by Diamondhead Properties, Inc., just west of Biloxi, Mississippi. The MUELLER® Modern Improved fire hydrant on the corner fits gracefully into surroundings.

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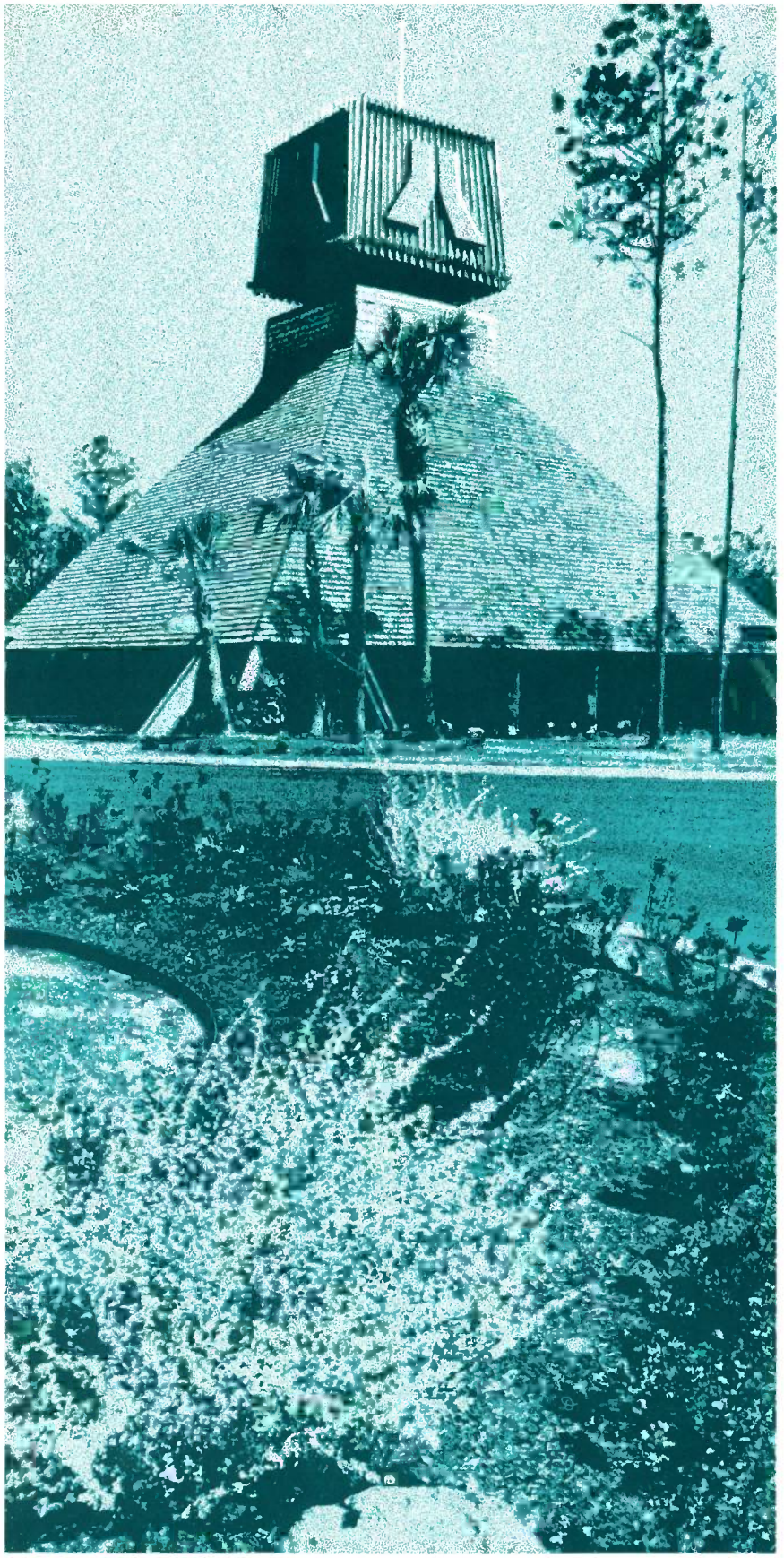
Editor



Diamondhead:

Master Plan For Living

(Our government and many private groups and organizations have shown considerable concern over the need for well-planned housing for our growing and mobile population. Many studies, some costing considerable sums, have been made trying to determine whether new needs for housing can best be supplied through programs to re-build the core areas of our major cities, or in planned development of suburbs, or in the creation of entire new communities some distance from the developed areas. "Contests" have been held to design efficient low-cost housing units that could be the designs of the "future." Many companies, large and small, are involved in this work. We consider it a work of considerable importance to the future of our country and its citizens. We plan to feature some examples of this activity in the *Record*. One example is the work being done by the Diamondhead Corporation, and in particular their first project at Bay St. Louis, Mississippi, about 30 miles west of Biloxi.)

(Continued on Next Page)

The hugh sheltering roof of the Diamondhead administration building gets its design inspiration from the deeply-shaded community buildings of the Pacific Islands. The developers have planned the building complex to become the eventual "city hall" of the community expected to reach 15,000 families.

New construction is seen everywhere in Diamondhead as this planned community attracts vacationers, retirees and commuters. (Below) Mueller Co. Sales Representative John Kirk checks over some Mueller service material used in the community's water system.

Hundreds of "Sold" signs on lots, new construction, a completed $2 million club house facility and golf course, and a quick review of plans all seem to confirm the claim that Diamondhead will be the "South's largest planned residential community."

Located on 6,000 acres of pine-covered rolling terrain overlooking the Bay of St. Louis on the Gulf Coast of Mississippi, Diamondhead expects to attract 30,000 residents and to represent the investment of millions.

Diamondhead is the first but not the only building project for Diamondhead Corporation, Mountainside, New Jersey. This flourishing organization now has projects from West Texas to the Atlantic. The three-year-old firm, with more than $100 million in assets, also has underway: a 9,000-acre project in Pinehurst, North Carolina, which includes a number of this golf center's challenging courses; Falconhead at Ardmore, Oklahoma, containing 3,700 acres; a 1,900- acre development called Lake Forest near Mobile, Alabama; Newport, a 6,000-acre residential-resort-type community near Houston, Texas; Lake Arrowhead, an 8,000-acre development in Cherokee Country, about 55 miles north of Atlanta, Georgia; Mile High, a recreational development of approximately 105,000 acres, 75

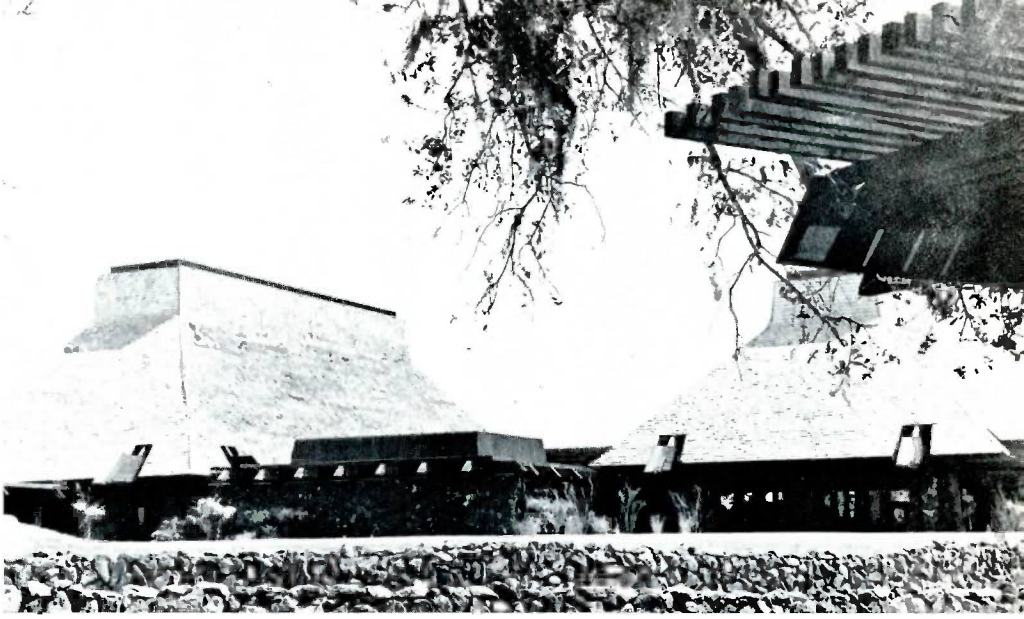
miles east of El Paso, Texas; and Sandpiper Cove, a 45-acre condominium development at Destin, Florida, with approximately 1,100 feet of frontage on the Gulf of Mexico.

The corporation's plans demonstrate the impact of vision and ambition. In the early stages of the development of the Diamondhead project, it was hard to imagine how a city could bloom in the center of this undeveloped, seemingly out-of-the-way site.

It's happening at Diamondhead, however, where the project name comes from the topographical prominence of portions of the 6,000-acre tract, rising almost 50-feet above the low-line Gulf Coast area. Although low compared to Diamond Head on the Island of Oahu, an attempt has been made to tie in Diamondhead on Bay St. Louis with "the islands" through architecture. A strong Polynesian influence is seen in the huge sheltering roof of the Diamondhead administration building and in the design of the club facilities. Lush tropical foliage has been imported to complement the dark volcanic "lava" rock used in the entrance to the community.

The marinas, connected by canals with the nearby Jourdan River and thereby with the Bay of St. Louis and the Gulf of Mexico, are part of the master plan and the emphasis on water and the sea blend with the touch of the islands being sought in the surroundings.

Upon quick examination, it would seem that the Diamondhead development is too far from any major city to attract anyone but those interested in building vacation homes or planning for retirement. However,



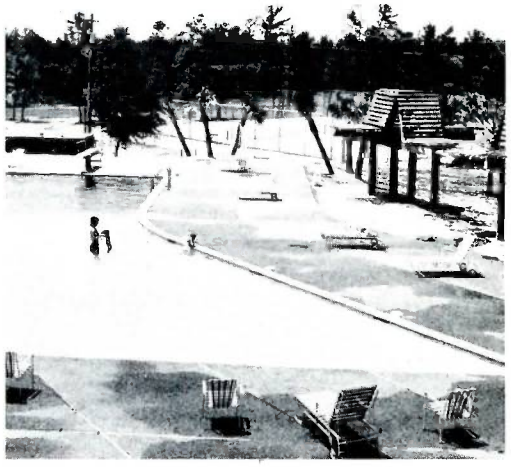
the completion of Interstate 10, which passes through the community, makes the city limits of New Orleans less than an hour away and many of the hundreds of purchasers of property are from that city and may commute regularly.

There is a broad mix of residential lots, ranging from "second home" sites for vacations and weekends to those for luxury homes, offering a golf course fairway only a nine-iron shot from the backdoor. Some lots have an airport taxiway behind them, allowing the family plane to be parked beside the family car.

An architectural committee reviews building plans of individual home owners, functioning to preserve the long-term architectural quality and appearance of the community, thus protecting the property values of the individual owners, as well as those of the developer.

Neighborhood recreation centers, swimming pools, bridle paths, a stable and a shopping area are either completed or planned in convenient locations.

Mid-1971 marked the official dedication of Diamondhead. Since then, the enthusiastic acceptance of this attractive new community by hundreds of purchasers assures the success of Diamondhead as the "South's largest planned residential community".



Country club and golf facilities at Diamondhead are valued at more than $2 million. In the top photo, part of the club is shown, and at the left, above, is the pool decorating the entrance to the club. Above is the huge swimming pool, complete with cabana-like shelters, repeating the Polynesian theme. Natural-weathered cedar characterizes this compact weekend retreat home at Diamondhead (below).

John Thurston

Harlan White

William Murphy

White To Succeed Thurston

Murphy Named Executive Vice President

The Board of Directors of the Mueller Co. early in December announced that John F. Thurston, who has been president and chief executive officer since May 1, 1963, had requested, and had been granted, an early retirement. He retired January 31, 1973.

To succeed Thurston as president, the board elected Harlan A. White, formerly vice president-operations, who has been with Mueller Co. for 17 years.

William E. Murphy, formerly vice president-marketing, was elected to the position of executive vice president. Murphy has been a company executive since 1964.

Both men assumed their new duties on February 1, 1973.

Commenting on Mr. Thurston's request, Frank H. Mueller, chairman of the board, said, "We are sorry to lose Mr. Thurston but we can understand his desire to take early retirement. Under his leadership, during the past 10 years, the company has grown substantially in sales volume, in plant capacity and in earnings. We commend Mr. Thurston for having developed a very capable executive team, and under the leadership of Harlan White, as our new president, and Bill Murphy, as executive vice president, the owners look forward with confidence to continued corporate growth and progress."

Harlan White, newly elected as president, graduated from the University of Illinois in 1947 with a B.S. Degree in Accounting. Prior to joining Mueller Co. in 1955, he was a partner in the Decatur accounting firm of Gauger and Diehl. Starting with Mueller Co. as assistant to the administrative vice president, he successively became assistant works manager, manager of manufacturing, general controller and administrative vice president. In 1968 he was named vice president and general manager of the company's operations in Chattanooga, Tenn., and in 1971 he was elected to the firm's board of directors. In May, 1971 he returned to Decatur as vice president-operations and since then has been responsible for day-to-day operations in all Mueller Co. plants throughout the United States.

White has been active in civic affairs in both Decatur and Chattanooga, having served as president of the Decatur Lions Club in 1963-64 and as president of the Decatur and Macon County United Fund in 1967-68. He is also a member of the American Institute of Certified Public Accountants.

William E. Murphy, prior to joining Mueller Co. in 1964, had spent 7 years in public accounting and 15 years as an officer and director of the Charles J. Webb Co. in Philadelphia, Pa. He started with Mueller Co. as assistant to the president and in 1965 was named vice president-marketing. In this capacity he was responsible for the direction of Mueller Co.'s field sales organization throughout the U.S., as well as for the supervision of the company's advertising, sales promotion, market research and export departments. Murphy was elected to the firm's board of directors in 1971.

Murphy has been active in industry affairs, currently serving as a director of the Gas Appliance Manufacturers Association and a member of the managing committee, operating section, of the American Gas Association. In Decatur civic affairs he is a past president of the United Way of Decatur and Macon County and is currently first vice president and a director of the Decatur Chamber of Commerce. He is also a member of the American Institute of Certified Public Accountants.

Paul Weir Retires In Atlanta

"Temporary" Job Lasted 44 Years

Paul Weir

"Paul Weir!"

When that name is mentioned the next response is: "City of Atlanta Water Department."

To Atlantans, members of the American Water Works Association and suppliers of the water industry, the name of Paul Weir is synonymous with the Atlanta water system.

After the initial response, the name "Paul Weir" brings recollections of a warm smile, youthful enthusiasm, a hearty handshake and a man's overwhelming desire to talk about the city water system's many improvements and the accomplishments of Atlanta.

To recount just a few of the changes or the growth of the City and the water department, during the 44 years Paul Weir was associated with both of them, would fill a book. His "official" status with the water department ended with his retirement in January but his enthusiasm for the city he loves and the department he built will continue.

The *"Atlanta Journal"* wrote in an editorial on the anniversary of Mr. Weir's 40th year with the water department: "The Weir career is remarkable for its longevity but even more remarkable for its progress. Mr. Weir keeps an eye on our water and all things connected with it including the Chattahoochee (River) from the mountains to the sea. He never lets pass an opportunity to improve and enlarge his department and with it the city of which it is part."

On June 1, 1928, an energetic red-haired Irishman accepted a temporary two-week job with the Atlanta Water Department to relieve a filter plant operator on vacation. For Mr. Weir the two-week stay lasted 44 years.

He was born March 17, 1906 in New York, moving to Atlanta as a young man. He entered Georgia Tech as a transfer student from Hamilton College, New York, gaining his degree in Civil Engineering in 1928.

He progressed through various jobs as engineer, and plant superintendent in the water department to become general manager in 1947. During his 44 years of dedicated service and unequaled leadership, the Atlanta Water Department has increased in value from $75,000,000 to a $300,000,000 utility serving as many as 700,000.

Mr. Weir is a past president of the A.W.W.A. and holds an honorary life membership. He received the Fuller Award and Goodell Award from A.W.W.A. and has been named one of the Top Ten Public Works Men of the Year in the U.S.

His personal accomplishments have been many but water supply has been his life. His flair for the dramatic and love for things dealing with water can make a trip to the Hemphill Pumping Station as romantic and exciting as a stroll through Underground Atlanta on Saturday night.

At a luncheon honoring Mr. Weir upon his retirement, he said: "My life with the waterworks has been a work of love and devotion." The depth and strength of these two qualities are obvious in the successes of the department he guided and built.

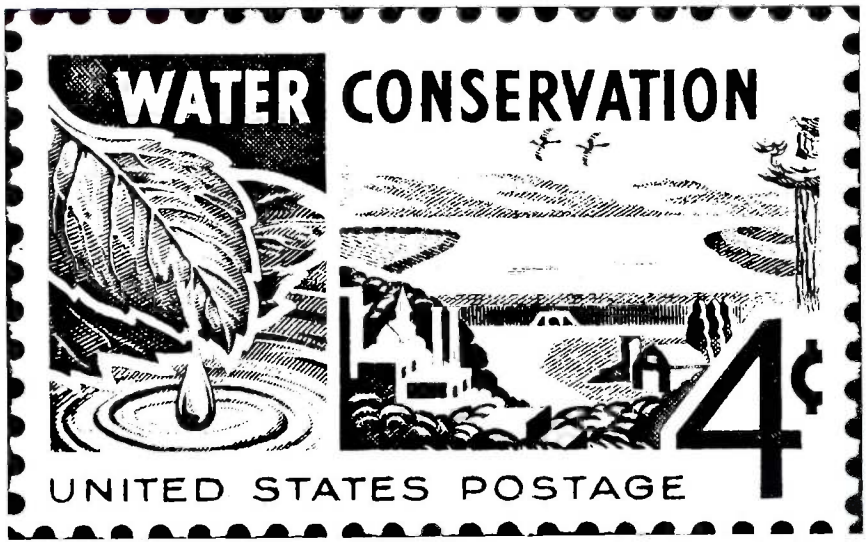
Succeeding Mr. Weir is the capable William T. Bush, assistant general manager of the department since 1963 and a career-long employee. His business-like approach and keen mind assure the continued success and growth of Atlanta's outstanding water department.

STAMPS RECOGNIZE WORLD'S WATER SUPPLY

For years stamps from the U.S. postal service were limited in design, drab in color and interest in the mails was in service. Today, new stamps are issued often with wild colors, commemorating events, seasons, heroes and industry, and interesting to more than philatelists.

Water supply, something taken for granted for centuries, has also become the subject of stamp issues, and conservation, desalination and construction are pictured on stamps from around the world, indicating, perhaps, some of the new emphasis being placed on it. For your interest, we have assembled a small selection of stamps to illustrate how a few countries have commemorated the significance of the water supply industry.

(1)

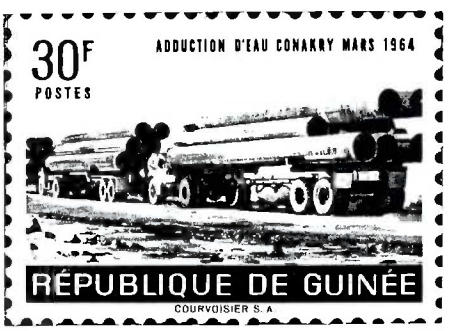


United State's entry in this gallery of postal "water miniatures" is the 4-center issued in 1960 to stress the importance of water conservation and to commemorate the 75th Watershed Congress at Washington, D.C. (1)

(2)

Water conservation is fine where there is water — but where there is no fresh water, the problem is not conservation, but just *water*. Seawater desalination plants have appeared on stamps of countries dependent on the sea for their water supply. The one on the left depicts the desalination plant at Nouakchott in the Republic of Mauritania. (2)

The completion, in March of 1964, of the water pipeline to Conakry, the capital of the African Republic of Guinea, called for a five-stamp commemorative issue depicting the work involved in the enterprise. Three stamps show (from left to right) pipe sections on truck trailers, the completed pipeline crossing the mountains, and the last stamp shows the new waterworks at Conakry. (3)



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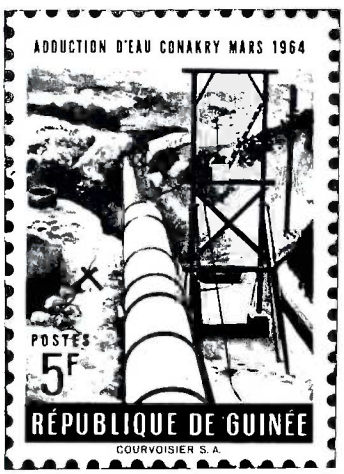
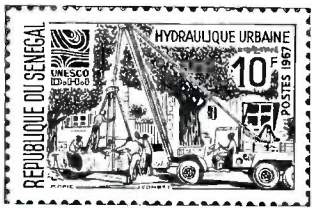
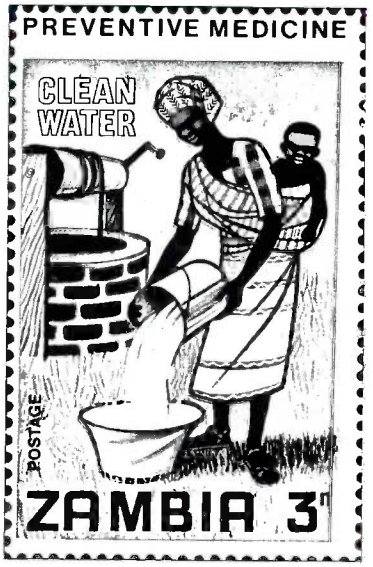




(4)

(5)

(6)



(7)

From Senegal comes a stamp showing laying of urban water pipes (4), while Morocco depicts the "other end" of the industry: the main sewer in the Moroccan city of Fes. (5) This stamp was issued to publicize the 50th Congress of Municipal Engineers at Rabat, Morocco, March, 1970.

A one-man water supply industry —a water carrier—is pictured on a 1970 stamp of Chad (6), a reminder to us that what one takes for granted is still only a dream for another. A domestic water supply industry—the home-side well— is shown on a 1970 stamp of Zambia, part of a set issued to publicize preventive medicine. (7)

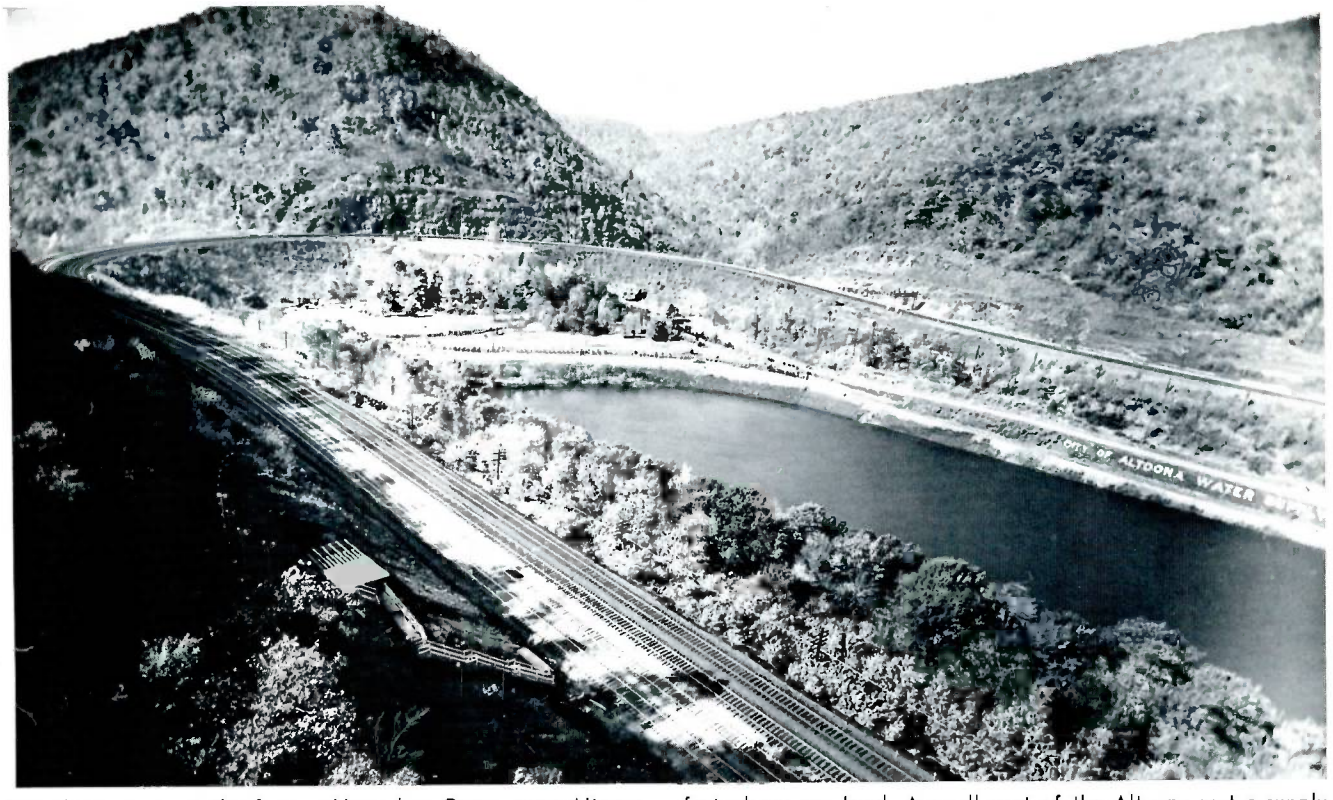
In 1972, two countries issued stamps to commemorate anniversaries of waterworks. The pair of stamps on the upper right was issued by Surinam for the 40th anniversary of the nation's waterworks. (8) The stamp in the middle, the latest addition to the "postal water gallery", was issued a short time ago by Uruguay for the centenary of the Montevideo waterworks. (9)

We'll close this gallery with a representative of one of many stamps issued to commemorate or publicize irrigation systems. It was issued in 1961 by Japan to publicize the Aichi irrigation system, Kiso River. (10)

(8)

(9)

(10)



The sharp curve of the famous Horseshoe Curve, near Altoona, Pennsylvania, is easily seen in this photo. Over the three-mile curve the tracks go from an elevation of 1,450 feet to 1,725 feet above sea level. A small part of the Altoona water supply storage system is between the main lines of the Penn Central.

Altoona, Pa.

Water Conservation Adds To Water Supply

For generations railroading has appealed to all ages and the thrills related to the sights and sounds of a steam locomotive have led to the legends of Casey Jones, Kate Shelley, who ran through a storm to flag the Midnight Limited before it tumbled into Honey Creek, and John Henry, the mighty tunnel-digger.

However, their devotion to railroading didn't exceed that of Jim Marks who was so enthralled by the excitement of Horseshoe Curve near Altoona, Pennsylvania, that he willed his remains to be strewn to the winds along one of railroading's most famous landmarks.

This engineering wonder, opened in 1854, was built by men with picks, shovels, horses and drags, and made it possible to surmount the biggest obstacle in the Westward March of the Pennsylvania Railroad. The great three-mile curve added distance to the run but it also made the climb up the mountain possible.

Although the motive power of the Penn-Central Railroad around Horseshoe Curve has switched from the hissing and puffing of the steamers to the humming, plodding of the diesels, Horseshoe Curve remains an attraction to tourists as well as rail buffs.

But the change in motive power has changed railroading in Altoona and hundreds of jobs have disappeared over the past 25 years. Community leaders didn't just accept this decline in jobs. They went to work to create new ones. Since 1946 more than 40 industrial expansions and new plants were built in the Altoona area as the result of the city's industrial development program. These well-diversified plants developed approximately 10,000 new jobs to shore up a sagging economy.

U.S. census figures show a population decline of about 6,000 persons from 1960 to 1970 but the nearly 65,000 citizens recorded in the 1970 census are looking for economic conditions to continue improving along with living conditions, government services, and utilities, among other things.

"Improvements" has been a popular word at the city water department headed by Robert Goodfellow, superintendent.

A $6 million expansion program which includes a new water treatment plant at Lake Altoona, several miles of transmission mains to complete a loop around the city and a renewal of several sections of large pipe were completed in 1972. The cost of the program is shared by the Altoona Water Authority, the Commonwealth of Pennsylvania and Federal funds.

The water authority sold about $1,100,000 in bonds for its portion which is primarily for the costs of the transmission lines. The $4,761,000 cost of the treatment plant will be paid primarily by the State as part of a major water reclamation program underway. Located west of Altoona, in the Horseshoe Curve section, the plant is being built in the vicinity of the three dams which store the city's water supply. It is being constructed as an "Operation Scarlift" project — a conservation-reclamation program aimed at eliminating the scars of unrestricted coal mining in the Comonwealth of Pennsylvania.

At present, mine drainage and runoff from the Glen White Run and Kittanning Run is being diverted, by means of a channel, from the city's water supply. This water percolates from the mine areas and comes boiling down from the mountains looking clear and pure, but is high in acid, discouraging plant and fish life.

The new plant is unique in the fact that it will treat the acid mine waste material and also provide potable water to augment the existing water supply of Altoona. There are other plants in use treating mine water for stream release and there are those producing potable water, but the one in Altoona is believed to be the first dual operation. The operation will employ a two-stage lime neutralization-soda ash softening process. It will have a 15 million gallon a day (M.G.D.) capacity, with about 10 M.G.D. going into the reservoirs and the remainder being released into local streams to improve their quality.

Construction of the plant, under the direction of consulting engineers Gwin, Dobson and Foreman, Inc., Altoona began in April of 1971. The city of Altoona will be responsible for maintaining and operating the plant while the Department of Environmental Resources will carry out the necessary research to determine the proper operating procedure.

In addition to the treatment plant, about 3.5 miles of 24, 16 and 8-inch ductile iron pipe have been installed to carry the water from the new plant, to renew some old pipe and to complete a loop around the city to five service areas. Contractors on the pipe work were Frank Kukurin & Sons, Inc., of East McKeesport, Pennsylvania.

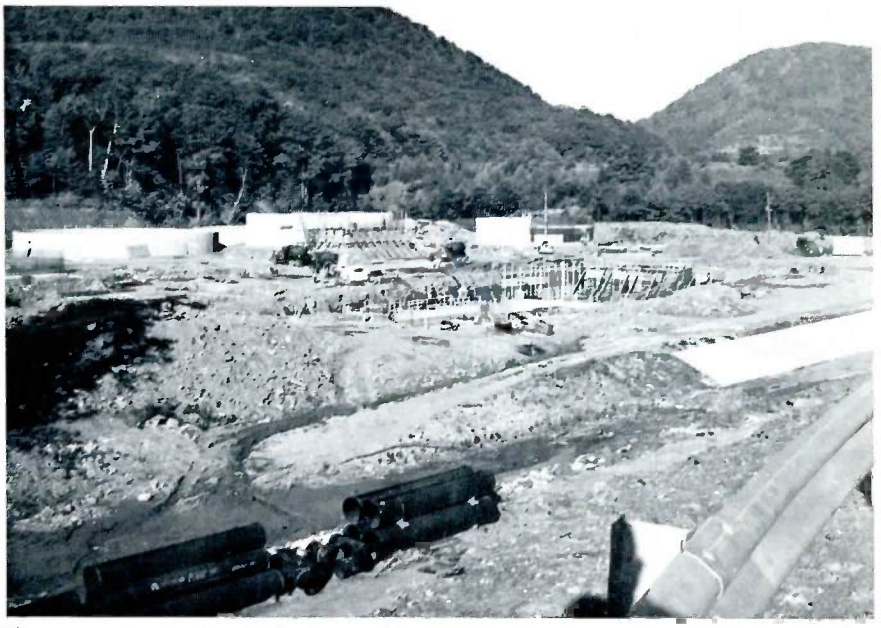
According to Superintendent Goodfellow the new supplies should meet the needs of the community for many years. During the last century there were a number of periods, however, when the availability of "good" water was uncertain.

The earliest known water system of Altoona consisted of four wells which were really walled springs. Many of the homes built in the 1850s that could afford cellars found upon excavation that the area abounded in springs and most home owners built spring water troughs, using them for refrigeration purposes as well as water sources.

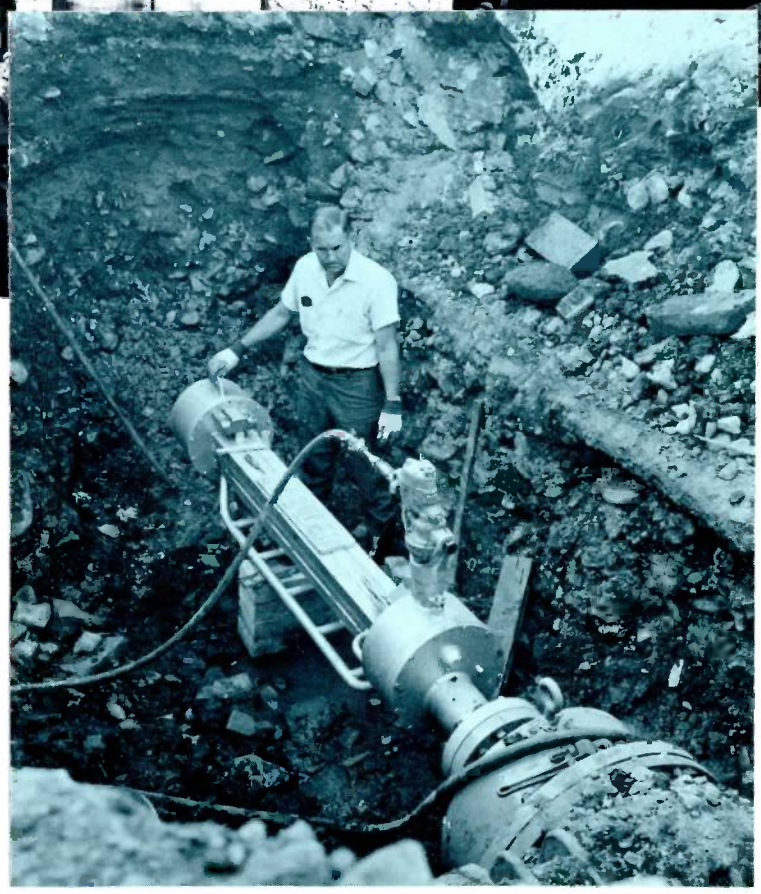
The well system was in use until 1859 when the Altoona Gas and Water Company was formed by private parties. The town was growing fast and demand existed for a sufficient supply of water to meet the rapid growth. In the meantime, a large dam was built to operate a saw and grist mill at the foot of Brush Mountain. The new water company purchased the dam and water rights in 1859 and proceeded to lay nearly 34,000 feet of 12-inch water main into the city to a distribution reservoir.

Water service was furnished first to consumers on Dec. 15, 1859 when the town's population numbered 3,591. In 1871 an act was passed by the legislature authorizing the city of Altoona to borrow money to form a municipal water company and in 1872 it purchased the Altoona Water Company.

As the city grew the demand for water increased and in 1886 the Kittanning Point reservoir was completed and the city had two collecting reservoirs and two distributing reservoirs. Impounding Reservoir was completed in 1895, and, in addition to its storage capacity, it served to collect the overflow of water from Kittanning. In the early 1900s the water board decided to build Lake Altoona as another impounding and



This new water treatment plant near Altoona is unique because it will treat acid mine water and make it potable for use in the city's system and use the rest of its capacity to treat mine waste water for release into local streams to improve their quality.



In the upper left photo, Mueller Co.'s Southeast District Sales Manager Robert L. Burdick and Altoona Water Superintendent Robert Goodfellow intently watch work underway in a ditch. Similar activity catches the attention of, from left, Lynn Ashley of Gwin, Dobson & Foreman, Inc., Paul Poknis of Frank Kukurin & Sons, Inc., and Dick Kahl, Mueller Co. sales representative. The object of their attention is a 24-inch cut being made in a water main with a Mueller machine operated by Guy Pruett, a Mueller technician, supervising the use of the equipment.

supply reservoir. The city then had a sequence of catch basins in the Horseshoe Curve area that saved all water from the area except that which was bypassed or overflowed from Lake Altoona.

A filled Kittanning Point Reservoir released water into the Impounding Reservoir and when that was filled its overflow went into the lake reservoir. Water needs were pretty well met until 1929 when the city went through a period of heavy annexation and the new areas were added to the city water system. These annexations meant a number of small private water companies were acquired, the water quality varied between areas. It took several years to bring about the changes needed to merge these many separate operations into a single efficient operation.

Utilizing WPA forces during the 1930s, most of the necessary work was done by the time World War II began. In 1955 the Altoona Water Authority was created and the first major thing it did was to begin work on Mill Run Dam. This 81 foot deep dam formed a lake with 726,100,000 gallon capacity, about doubling storage.

In 1967 wells were drilled as an alternate source of water in case the reservoirs ever reach low levels. With the addition of the new treatment plant and the availability of treated mine water that was lost for many years, Superintendent Goodfellow and Bureau of Water and Parks Director Eugene J. Duncan are optimistic about Altoona's future.

The water system served about 21,300 customers last year, down about 500 from two years earlier. This decline reflects the reduction in population the last 10 years, and a cut in services because of urban renewal and redevelopments. With a two billion gallon storage capacity, a new treatment plant and improved mains, the water needs will be met.

LEA(R)NING TOWER OF YPSILANTI

"Wanna buy the Brooklyn Bridge?"

"No!"

"How about the Ypsilanti, Michigan, Water Tower?"

Right now there are several thousand interested in buying a share of the Ypsilanti tower, but the water department isn't concerned and the folks at the alumni relations office for Eastern Michigan University in

Ypsilanti are elated about the prospects.

The City Council recently gave the university permission to sell bogus stock in the famed seven-story water tower located next to the school's campus. The "stock offering" is merely a technique to raise money from the 40,000 alumni of Eastern Michigan University.

The water tower, erected in 1887 as part of the city's original water system, has been the subject of many campus jokes and this 147-foot campus landmark stands as a symbol of the university to many who are now far from this city of some 20,000 outside of Detroit.

After using conventional direct mail appeals to the alumni for many years, it was decided that the annual approach needed a new twist—something different — to spark alums who merely gave a small donation once a year and then forgot about the school.

Lonny J. Head, director of alumni relations for Eastern, and Lauren R. Januz, president of Januz Direct Mail Corporation, Chicago, worked out the idea of selling the non-negotiable stock certificates and the accompanying promotional material.

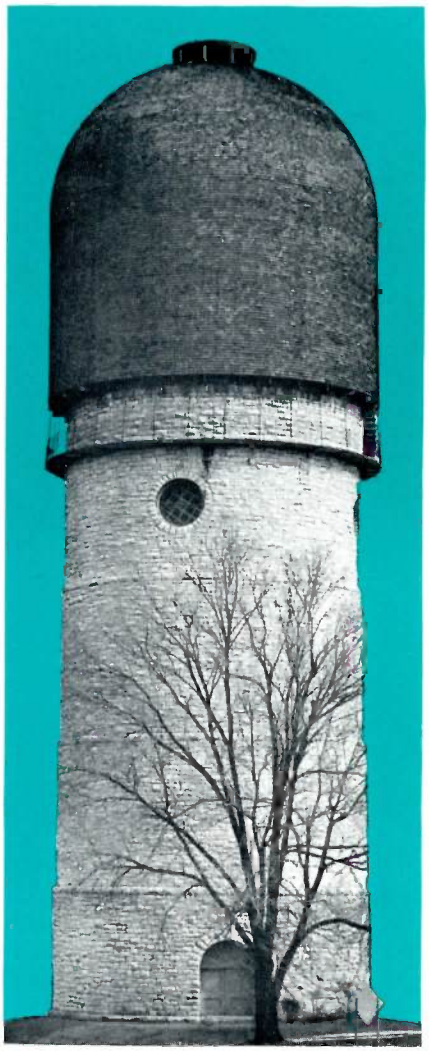
The bogus stock is issued in three different classes. Common goes to those contributing from $1 to $25, preferred is purchased for $25 to $100 and a blue chip share is given for a contribution exceeding $100.

One of its big sales points is that there are guaranteed dividends. According to the letter to alumni: "Your satisfaction in knowing how much you've done for your University and its students will be beyond price—and your towering aspirations to do good will be fulfilled."

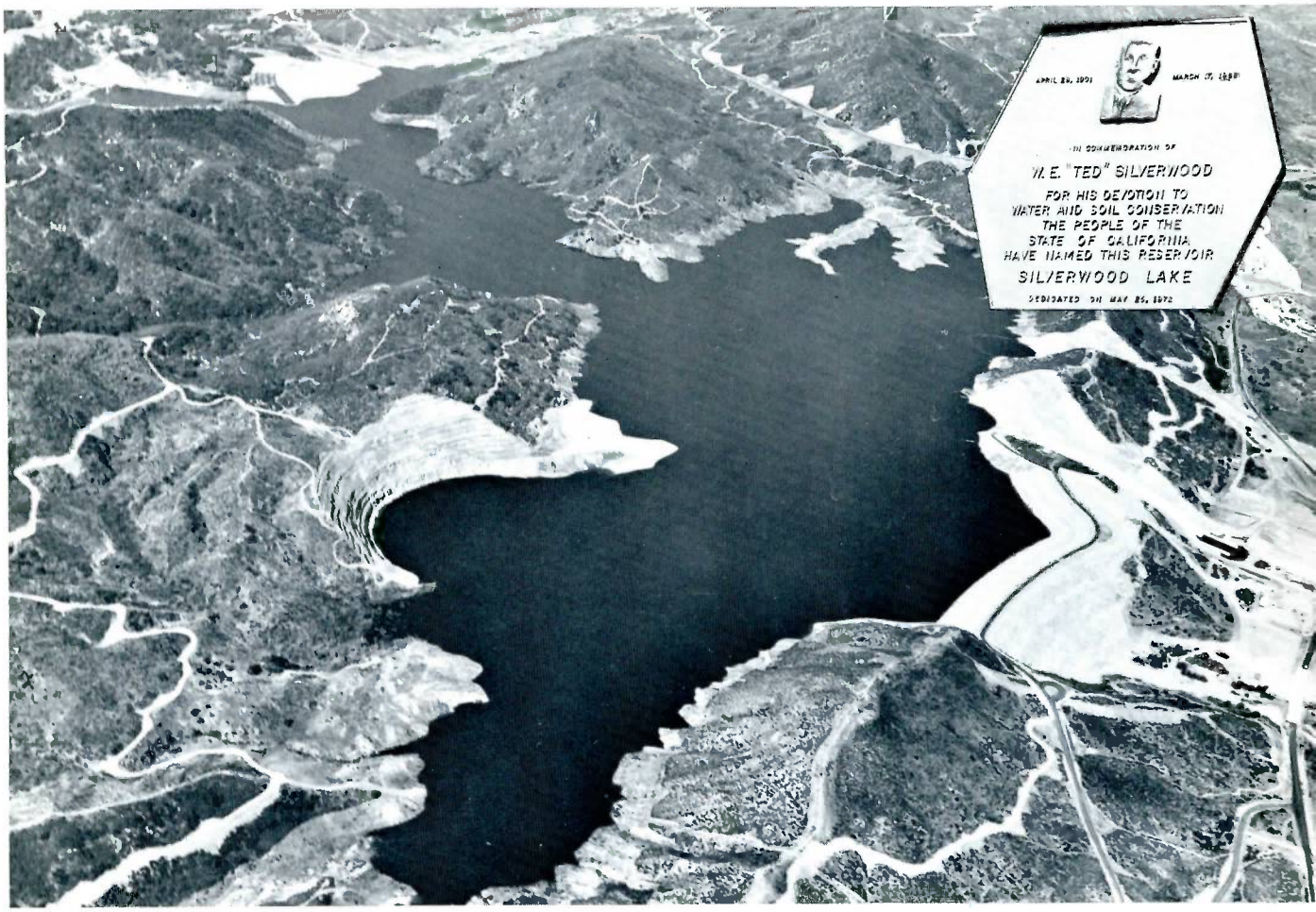
The water tower has a new role currently but it has been an important part of the city water system and served the University and the community well for 85 years. Stock is being sold in the tower, and there are no plans to take it out of service.

Bruce Jones, superintendent of the Ypsilanti Water Department, said the reservoir has a storage capacity of 250,000 gallons in the steel tank that is 40 feet in diameter and 27 feet deep. The masonry walls supporting the tank are made of "Joliet Stone", laid to a thickness of three feet, four inches at the ground line and two feet thick at the base of the tank. The enclosed tank has a dome roof shingled with cedar shakes.

In the first annual report of the Ypsilanti water commissioners in 1890, the cost of the tower and reservoir was listed at slightly more than $21,000. This year, the alumni office at the university hopes the bogus shares of stock in the tower will be worth more than that to its fund-raising project. A real tower of learning!



The Ypsilanti water tower is a city landmark and a symbol of the Eastern Michigan University campus. As a fund-raising project, the university is selling bogus stock in the water tower to its alumni.



Silverwood Lake, behind Cedar Springs Dam, is an important facility in the California State Water Project. The inset shows a plaque honoring W. E. "Ted" Silverwood, a California conservationist after whom the lake is named.

Silverwood Lake Is Major Step In California State Water Project

(Photos and project material provided by Thomas V. Chandler, program planning and public information officer, San Bernardino Valley Municipal Water District.)

Another significant step toward the completion of the gigantic California State Water Project was taken this summer with the dedication of Silverwood Lake now impounded behind Cedar Springs Dam.

The project, the largest single water resource development in the United States, is expected to satisfy the growing water needs of the state until 1990. The availability of Northern California water to southern areas such as San Bernardino and Riverside counties is achieved with the opening of Silverwood Lake.

The people of California have located themselves and their industries in such a way that 80% of the water needs of the state occur in the southern two-thirds of the state, while 75% of the water supply is in the northern one-third of the state. California's water supply is adequate, but some of it needs to be redistributed, an alteration that is being done through the State Water Project.

This need to redistribute the water dates back many decades, but the State Water Project became a viable undertaking in 1960 when the voters of the state approved the California Water Bond Act, a measure which made available construction financing.

Initial facilities of the Project, which is now 99% complete or underway, include 18 reservoirs, 15 pumping plants, five power plants and 580 miles of aqueducts.

Oroville Dam, north of Sacramento, was the key unit of the Project. Completed in 1967, the dam conserves the water drained from

a 3,600 square mile area, as well as providing a large measure of protection to the Sacramento Valley from periodic floods. In addition, millions of visitors will enjoy the recreational opportunities it provides.

Water from this 3.5 million acre-foot reservoir will replenish the supplies of water all along the system. Thirty-one public agencies in many parts of California have contracted to buy the water supplies they need for the people in their local areas. The first water was delivered in 1962 and the availability has been expanding ever since.

The project's water for people south of the Tehachapi Mountains assures them of the additional supplies they will need for their homes, offices and the industries that serve them. This area south of the Tehachapis, especially around the San Bernardino Valley, will utilize the water now available in Silverwood Lake.

Ground was broken for Cedar Springs Dam on Nov. 9, 1968 and on Jan. 22, 1972 the first northern California water splashed into Silverwood Lake. Water deliveries were made first to the Crestline-Lake Arrowhead Water Agency in May and by late summer water started through the San Bernardino Tunnel to Devil Canyon Power Plant, and on to the San Bernardino Valley Municipal Water District whose facilities were about ready to make distribution within the San Bernardino Valley.

About 1500 people attended the dedication of this newest of State Water Project facilities which was made ready for interim recreational use on May 25. The California Department of Parks and Recreation will operate the facilities at Cedar Springs Dam until the permanent recreation plan for operation is completed. The Department of Water Resources will maintain the lake level at elevation 3303 feet, providing a water surface of 650 acres, 475 of which will be available to the public. The State Department of Parks and Recreation has allocated nearly $7 million to develop permanent recreation facilities at Silverwood Lake with its 13.6 miles of shoreline. The dam forming the lake is 213 feet above streambed, 2,250 feet long and 42 feet wide at its crest.

Don R. Bauer, forest supervisor of the San Bernardino National Forest, said, "Perhaps the most significant 'conservation first' idea represented by Cedar Springs Dam-Silverwood was that it would be the first major reservoir in Southern California to be designed and planned for multiple use with primary emphasis on natural resource protection and public use for the enduring benefit of all the people."

Silverwood Lake is named in honor of the late William Edward "Ted" Silverwood of Redlands, California. He worked long and diligently to promote soil and water conservation and to bring water to Southern California. The dedication booklet for the lake said of Mr. Silverwood: "Few men have dedicated themselves to the basics of life —soil and water—without eventually wearing out their enthusiasm, but Ted Silverwood established a level of effectuation and achievement that will provide encouragement for all to follow. His vision and dedication played an important and indispensable part in securing the approval and construction of the State Water Project."

Formal dedications usually mark the finish of a project. For Silverwood Lake, it is certainly not an end. It is the beginning of a new era of recreational opportunity, a new source of water for thirsty Southern California and a new and very beautiful addition to the mountain environment.

Mrs. Constance Silverwood is shown with the plaque honoring her late husband during the dedication of Silverwood Lake. At the left is Mrs. T. N. Spencer, daughter of the Silverwoods, and at the right is Jack A. Beaver, General Manager of the San Bernardino Valley Municipal Water District.

The restored East Family Dwelling House at Shakertown now serves as a lodging site for overnight visitors and those attending meetings at Pleasant Hill. The Shaker community was divided into communal groups of 30 to 100 members and each "family" was self-sufficient, managed its own plantation and had its own buildings and industries.

At Shakertown, Kentucky

"They Make You Kindly Welcome"

Moved by the same diligence and resourcefulness that led to the founding of the Shaker religious society at Pleasant Hill, Kentucky, a group of private citizens returned to the site a century later to restore this serene village to the quiet simplicity it once enjoyed.

At Shakertown you can now re-live the story of a search for the perfect society by a devout, industrious and visionary people. They lifted their hands to work and their hearts to God, as their society prospered, waned and died. The perfect society eluded them just as it has others, but some of the buildings and perhaps a bit of the spirit of the Shakers can be enjoyed on a walk through Shakertown on a late afternoon in September.

The term Shakers stems not only from the dancing and ecstatic experiences which marked their common worship, but perhaps especially from their belief that when the Holy Spirit was present, He made Himself known by shaking the whole community in a kind of prophetic earthquake.

The United Society of Believers in Christ's Second Appearing had its origin in the 18th century English Quaker Church. Its founder Mother Ann Lee was born in Manchester, England, 1736, the daughter of a blacksmith. The shaping of the Shaker beliefs found its beginnings in her own pathetic and sad life. As she scanned the spiritual world for inner peace she received visions and eventually formed the opinion that Christ would reappear in the female form. She gained disciples as a prophetess and through revelations she led eight of them out of England to America where she had been promised by God that the "millennial church would be established."

The pacifist Shakers established a mother colony in New Lebanon, New York. The death of Mother Ann in 1784 gave them new zeal and they were determined to do missionary work by spreading out to other parts of the country.

Pleasant Hill was founded in 1805, seven miles from the village of Harrodsburg, which was the first permanent town in Kentucky. Growing at a remarkable pace, the original 140 acres soon became a domain of 4,369 acres of Blue Grass land high above the Kentucky River on a limestone plateau.

In this near-Utopian setting, the Shakers used their ingenuity and energy to build an economically thriving agricultural community. In spite of harassment from their jealous neighbors, the land produced its maximum, trade was established with the "outside world" and work began in 1809 on some permanent masonry buildings.

In 1833 the first central public waterworks west of the Allegheny Mountains was built by the Shakers. Old Shaker journals list the beginning of the water works construction in September 1831, when the spring was dug out and prepared to furnish water for the force pumps. The journal reads: "April 20th, 1833, the frame house containing the reservoir was raised; also we commenced laying down the lead pipes to convey the water from the reservoir to the families."

Machinists in Cincinnati made the pumps to lift the water 120 feet uphill for a quarter of a mile to the wooden tank, holding 4,482 gallons.

Within 30 years of their settlement the Shakers had constructed 20 or more major buildings and almost 500 members were at work in the fields or in the shops. Shaker furniture, especially their straight, plain chairs, baskets, harnesses and saddles, rope and other cordage, flat brooms, clothing and clothes pins were among their best-known products. Their garden seeds were popular all over the country, along with the medicinal herbs that were sought by many.

The Civil War to the pacifist society was a time of horror. They could not understand the killing and fighting and as troops from both sides passed through their village they cared for them and fed them until the village's food supplies were exhausted.

The ravages of the war began a decline of the Shaker settlement that lasted about 40 years. Since one of the tenets of the church was complete celibacy, they were unable to propagate their faith and had to recruit converts or adopt orphans. In addition, the influences of the "world" were encroaching upon the community, bending the once-rigid gospel order.

Plagued by spiritual decay and financial ineptitude, the Society began to sink into debt, and in 1896 the Believers mortgaged 3,300 acres of land. By the end of the century, time ran out for the Pleasant Hill families and on Sept. 12, 1910, twelve aged Shakers turned over the remaining property to a "friend" in return for their perpetual care that continued until 1923 when the last one died.

In the 50 years following the dissolution of the Society, the property was sold off from time to time in single tracts in private transactions and the village buildings and farm fell into the hands of 11 separate owners.

A dozen years ago Pleasant Hill was a sleepy little crossroads 25 miles south of Lexington on U.S. 68. There was a country store with a gas pump outside and a car repair shop nearby. Farm tenants lived in the rear of some of the large buildings and a couple ran a small dining room in one of the large three-story red brick buildings. The old Shaker graveyard was a thicket of cane and underbrush. The local Baptists used the large frame Shaker Meeting House for Sunday worship. Trucks and automobiles sped through the center of the village usually at about 40 miles an hour. Unemployment in this rural area was high.

Early in 1961 a group of interested citizens decided to acquire and restore the community. They formed a nonprofit, nonstock education institution, elected a Board of Trustees and began raising money to buy property.

Three earlier attempts to preserve the Village had been futile and for a time it looked like the latest would fail for lack of funds. Finally in 1963 a master plan was prepared and presented to the Economic Development Administration of the U.S. Department of Commerce. A long-term loan of $2 million was obtained because the area had a high level of unemployment and was eligible for Federal help.

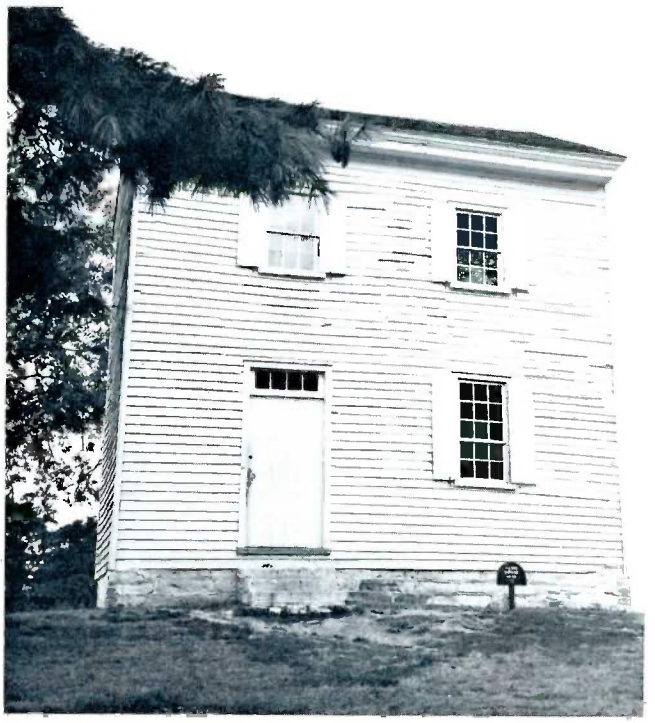
In the next three years, major land acquisitions were made and 21 contracts for restoration construction were completed. In April 1968, the partially-restored village was opened to the public. Since that time, "Friends of Shakertown" have been generous and work continued on full restoration. In another year, the staff expects most of the buildings to be restored and then they will turn their efforts toward the reconstruction of buildings where only foundations remain.

Two broad objectives, as set down by the Trustees, outlined the purpose of the total program: (1) "To preserve and maintain the site of the Shaker Society which once existed at Pleasant Hill; to protect its buildings, its countryside, and the records and articles pertaining to its buildings, and (2) To use the buildings and grounds to further the interest of the public in historic preservation and to sponsor continuing programs of an educational and cultural nature."

In addition to the exhibits and the restored structures themselves, these goals are being achieved by offering an education center for seminars, symposia and conferences in the fields of education, arts and business, and making dining and overnight accommodations available for visitors.

The trustees have 2,250 acres of the surrounding original Shaker farmland, including 27 buildings, plus roughly a one-mile radius of farmland surrounding the village site in this tract, the Shaker river landing on the Kentucky River nearby, and the limestone spring which supplied the central water works.

The brave adventure of the Shakers is over at Pleasant Hill, but the story of their life and labor remains in this restored village to remind us of a way of life that sought dignity in work, tranquility in the spirit, and excellence in everything. These cherished goals of long ago could provide some of the solutions to our most pressing problems today.



The water house was part of the first public waterworks west of the Allegheny Mountains.

WHAT'S NEW and NEWS FROM MUELLER

A HYDRANT SALESMAN'S DREAM

The newest use for fire hydrants comes to us from Dick Seevers, Mueller Co. sales representative living in Colorado. While Dick was in Lander, Wyoming, recently he went by a city park and saw a hydrant salesman's dream — fire hydrants used as fence posts. Dick admits that the first look "gave him a shock", but then goes on to explain how the obsolete hydrants are used. He said the lower barrels were cut off to the desired length, a loop brazed to the operating nut and the hydrants set in the ground like a post. A chain is threaded through the loops and "wow, what a fence," Dick adds.

BEAUTY IS IN THE EYE OF THE BEHOLDER

Firemen and hydrant salesmen are not the only ones able to recognize the hidden beauty of a well-turned lower barrel or the full firm lines of a pumper nozzle. Dick Kitchen, Mueller Co. district sales manager who lives in Dallas, recently was elected to membership in F.H.A.P. and at this point he realized there were many who recognized the aesthetic values of hydrants. F.H.A.P. is the Fire Hydrant Appreciation and Preservation Society and membership means that the holder "is to be recognized as a connoisseur of artistic form and creative design, lending support and encouragement to those of us who are dedicated to the appreciation and preservation of the FIRE HYDRANT as a true art form." The attractive membership certificate is signed by Harvard O'Neille, FHAP Founder, and has a red seal affixed that says, "That Type of Thing, Inc., Texas."

The whole idea seems to be tied to a FHAP-OUT at the 3015 Art Gallery, 3015 Sale Street, Dallas, where a popcorn preview featured the work of two artists who used hydrants in photography, prints, drawings and paintings. Harvey Bourland of the gallery, told a Dallas newspaper columnist that it had long been his opinion that "the common fire hydrant is, indeed, far from common and is in fact a neglected art form."

The columnist did a little research and found that of the 14,556 hydrants in the Dallas system, there were 47 different designs.

There were to be some examples of "outstanding" hydrants at the show, and, according to the paper's column, Mr. Bourland said, "We had planned to serve champagne punch from a fire hydrant fountain but agreed that such use would be demeaning and beneath the dignity of the hydrants which we have on hand."

Columnist Dick Hitt said, "I was going to go until he got to that part. I'm trying to avoid fringe groups and anyone who would abandon the chance for champagne from an eight-inch main is some kind of fanatic. At any rate it's a new milestone for me: the first time I ever gave a group a fire plug in the ol' column."

At Mueller Co. we'd like to tip our bronze weather caps to all of the Fhappers around the world and may their main valves always open easily.

JACK CHILTON REJOINS MUELLER

Jack L. Chilton, who left Mueller in 1968 after about nine years with the firm, has rejoined the company as sales representative in the northeastern portion of Texas.

He first joined Mueller Co. in 1959 and after 18 months in the sales training program Chilton moved to Atlanta, Georgia, and represented Mueller Co. in that state until mid-1968 when he left to enter another field.

In Texas, Chilton succeeds Frank L. Kuenstler, who resigned after 18 years with the company to become a vice president for Trans-Tex Supply Company, Arlington, Texas.

RETIRED SALESMAN RECEIVES NORTHWEST SECTION AWARD

F. V. (Doc) Martin, a Mueller Co. sales representative in the northwest until he retired early in 1972, was honored recently by the Pacific Northwest Section, American Water Works Association.

The Powell-Lindsay Section Activities Award was presented "in recognition of outstanding service and exceptional devotion to the activities of the Pacific Northwest Section." The Powell-Lindsay award began in 1950 and is given annually to two members of the section.

In the photo, Collie Martin accepts the award for his father from

Section Chairman Al Benedetti. Doc was out of the city when the award was presented at the section's annual banquet in Portland. Collie is an engineer with Cornell, Howland, Hayes & Merryfield.

Doc joined Mueller Co. in 1949 and traveled Washington and Oregon until late 1970 and he then called on customers only in Washington until his retirement early in 1972.

DEL PARKS ELECTED TO W.W.E.M.A. BOARD

A. D. (Del) Parks, general sales manager for Mueller Co., was elected to the board of directors of the Water and Wastewater Equipment Manufacturers Association, Inc., recently at the group's meeting in Chicago.

WWEMA represents manufacturers of pipe, hydrants, valves, brass goods, meters, pollution control equipment, and sewage treatment products.

Ten men were nominated this year to fill five openings on the board. The board is made up of 15 delegates from member companies with five usually being elected to three-year terms each year. Del, however, was elected to a one-year vacancy, resulting from an unexpired term.

Del started with Mueller Co. in 1935 in the factory and then entered sales training in 1945. Since that time he has served as a Mueller sales representative, district sales manager and been manager of the company's outside sales force since 1957.

PAUL WATTS ELECTED BY ILLINOIS A.W.W.A.

Paul B. Watts, a Mueller Co. sales representative in the Chicago area, has been appointed junior trustee of the Illinois Section, American Water Works Assn. He was named at a Board of Trustees meeting to fill a vacancy created by a business transfer. Paul has lived in the Chicago area since graduating from Bradley University, Peoria, in 1949, working for consulting engineers and contractors before joining Mueller Co. in 1955. For the past five years he has served on the section Education Committee and also served as the chairman of the Entertainment Committee in 1964. He currently lives in LaGrange Park near Chicago.

JAMES WOLF SUCCEEDS PAUL CAHO IN BREA SALES OFFICE

Paul G. Caho recently retired as Brea (California) sales office manager, completing more than 26 years of service with Mueller Co. He was succeeded by James R. Wolf who has been in the West Coast Sales Office since 1953.

Caho

Wolf

Caho joined Mueller Co. in Decatur in 1946 as an accountant and was transferred to the west coast plant in 1947 as chief accountant. He later was promoted to plant controller and then assumed the sales office duties in 1957.

Wolf had been sales office supervisor in Brea and served as acting sales office manager earlier this year while Caho was on a leave of absence for health reasons. When Caho decided to retire Wolf was promoted to the manager's position. His broad range of sales office experience makes him well qualified to assume his new duties.

HYDRANT APPEARANCE IS IMPORTANT

The appearance of hydrants, as well as their dependability and low maintenance, is important and this fact led to the introduction of the MUELLER® Modern Improved Fire Hydrant. Checking over this new MUELLER design are, Robert Lee, manager of the Medford, Oregon, water utility, (right); and Russ Luttrell, Mueller Co. sales representative in Oregon. According to the *Medford Mail Tribune,* the new fire hydrants were installed to replace obsolete, lower capacity hydrants. "The new hydrant features a low profile, modern appearance, and retains the efficient, reliable and low maintenance features of newer hydrants of traditional design included within the system," it said. According to the newspaper article, hydrants installed prior to 1920 are being replaced whenever major repair is required or when flow requirements necessitate a greater capacity hydrant. Lee said a number of the older hydrants still function properly but are not acceptable according to current standards because they lack the larger pumper connection. Currently there are 1,036 fire hydrants in the Medford system, increasing by 30 or 40 each year as new developments occur.

BILL BOARDMAN COVERS CONNECTICUT

William Boardman recently was appointed sales representative for Mueller in Connecticut.

Bill was born in Liverpool, England and received his education in India, North Wales, and Preston Technical College in Preston, England. He came to the United States in 1966 and is now an American citizen. He has a background in both engineering and sales work and since he joined Mueller Co. he has gone through an intensive sales training program to familiarize him with Mueller products for both the water and gas industries. Bill is married, has two daughters and enjoys tennis and flying.

Now from Mueller®

Stop bell-joint leaks in cast iron mains with CARSON® BELL-JOINT REPAIR CLAMPS

All ductile iron for total compatibility with cast iron

Carson Bell-Joint Repair Clamps, a proven line now available from Mueller, provide a fast and economical way to stop leaks in bell-joints in old cast iron pipe lines and distribution mains.

Quick and easy to install, an unskilled workman can install even the largest size Carson clamp without interruption of service using only a ratchet wrench.

A specially formulated, highly resilient Neopress® gasket is confined between the front ring of the clamp and the joint of the bell, providing a leak-tight seal with high resistance to subsequent cold flow or creep. Adjustable ring segments permit the clamp to fit tightly around both the pipe and the bell, even on old, irregular surfaces. Properly adjusted, Carson clamps provide uniform 360° compression of the gasket insuring a positive seal.

All metal components of Carson Clamps are ductile iron, assuring electrolytic compatibility with cast iron pipe. Accelerated electrolysis test results confirm the minimized galvanic corrosion with Carson Bell-Joint Clamps.

To find out more about renewing your old cast iron systems, contact your Mueller Representative.

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